OMB Number: 4040-0004
Expiration Date: 04/31/2012

Application for Federal Assistance SF-424

Version 02

*1. Type of Submission	*2. Type of Application	*If Revision, select appropriate letter(s):
☐ Preapplication	☐ New	
☑ Application	☐ Continuation	* Other (Specify)
☐ Changed/Corrected Application	☑ Revision	

*3. Date Received: 4. Application Identifier:

5a. Federal Entity Identifier:	*5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:	7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: NY State Office of Cyber Security & Critical Infrastructure

* b. Employer/Taxpayer Identification Number (EIN/TIN):	*c. Organizational DUNS:
14-601-3200	167372437

d. Address:

*Street1: 30 South Pearl Street, P-2
Street 2:
*City: Albany
County:
*State: NY: NEW YORK
Province:
Country: USA: UNITED STATES *Zip/ Postal Code: 12207-3425

e. Organizational Unit:

Department Name:	Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mr. First Name: William
Middle Name:
*Last Name: Johnson
Suffix:

Title: Assistant Deputy Director

Organizational Affiliation:

*Telephone Number: (518)474-4755 Fax Number:

*Email: william.johnson@cscic.sta

OMB Number: 4040-0004
Expiration Date: 04/31/2012

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type: A. State Government

Type of Applicant 2: Select Applicant Type: - Select One -

Type of Applicant 3: Select Applicant Type: - Select One -

*Other (specify):

*10. Name of Federal Agency:
Department of Commerce

11. Catalog of Federal Domestic Assistance Number:

CFDA Title:

*12. Funding Opportunity Number: 0660-ZA29

*Title:
Recovery Act - State Broadband Data and Development Grant Program

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):
State of New York

*15. Descriptive Title of Applicant's Project:
Broadband Mapping for New York State

Attach supporting documents as specified in agency instructions.

OMB Number: 4040-0004
Expiration Date: 04/31/2012

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of: 21

*a. Applicant

*b. Program/Project: All

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:

*a. Start Date: 10/01/2009

*b. End Date: 09/30/2014

18. Estimated Funding ($):

*a. Federal	$7,610,138.00
*b. Applicant	$1,907,487.00
*c. State	
*d. Local	
*e. Other	
*f. Program Income	
*g. TOTAL	$9,517,625.00

***19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on
☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
☑ c. Program is not covered by E.O. 12372

*20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)

☐ Yes ☑ No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)

☑ **I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: Mr.

*First Name: Thomas

Middle Name:

*Last Name: Duffy

Suffix:

*Title: Deputy Director

*Telephone Number: 1-518-474-4755

Fax Number:

*Email: thomas.duffy@cscic.state.ny.us

*Signature of Authorized Representative: Thomas F Duffy

Date Signed: 07/01/2010

OMB Number: 4040-0004
Expiration Date: 04/31/2012

Application for Federal Assistance SF-424

Version 02

*Applicant Federal Debt Delinquency Explanation

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 0348-0044

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. SBDD	11.558	$	$	$ 7,610,138.00	$ 1,907,487.00	$ 9,517,625.00
2.						0.00
3.						0.00
4.						0.00
5. Totals		$ 0.00	$ 0.00	$ 7,610,138.00	$ 1,907,487.00	$ 9,517,625.00

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1)	(2)	(3)		Total (5)
a. Personnel	$ 3,155,527.00	$ 937,846.00	$	$	$ 4,093,373.00
b. Fringe Benefits	1,602,265.00	393,641.00			1,995,906.00
c. Travel	119,995.00	0.00			119,995.00
d. Equipment	374,400.00	180,000.00			554,400.00
e. Supplies	39,400.00	0.00			39,400.00
f. Contractual	1,718,551.00	396,000.00			2,114,551.00
g. Construction	0.00	0.00			0.00
h. Other	600,000.00	0.00			600,000.00
i. Total Direct Charges *(sum of 6a-6h)*	7,610,138.00	1,907,487.00	0.00	0.00	9,517,625.00
j. Indirect Charges	0.00	0.00			0.00
k. TOTALS *(sum of 6i and 6j)*	$ 7,610,138.00	$ 1,907,487.00	$ 0.00	$ 0.00	$ 9,517,625.00
7. Program Income	$ 0.00	$ 0.00	$	$	$ 0.00

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8. SBDD	$ 1,907,487.00	$	$	$ 1,907,487.00
9.				0.00
10.				0.00
11.				0.00
12. TOTAL *(sum of lines 8-11)*	$ 1,907,487.00	$ 0.00	$ 0.00	$ 1,907,487.00

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$ 0.00	$	$	$	$
14. Non-Federal	0.00				
15. TOTAL *(sum of lines 13 and 14)*	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16.SBDD	$	$	$	$
17.				
18.				
19.				
20. TOTAL *(sum of lines 16-19)*	$ 0.00	$ 0.00	$ 0.00	$ 0.00

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges: $ 9,517,625

22. Indirect Charges:

23. Remarks:

ASSURANCES - NON-CONSTRUCTION PROGRAMS

OMB Approval No. 0348-0040

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

4. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. 6101-6107), which prohibits discrimination of the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VII of the Civil Rights Act of 1968 (42 U.S.C. 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. 276a to 276a-7), the Copeland Act (40 U.S.C. 276c and 18 U.S.C. 874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333), regarding labor standards for federally-assisted construction subagreement.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in flood plains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.) Related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance will Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. 2131 et seq.) Pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

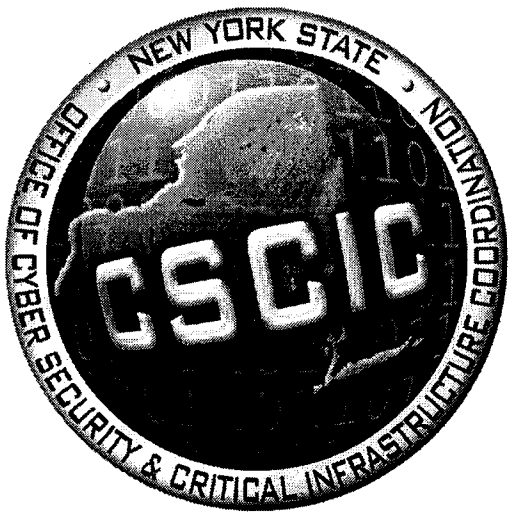
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4801 et seq.) Which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
Thomas F. Duffy	Deputy Director
APPLICANT ORGANIZATION	DATE SUBMITTED
NY State Office of Cyber Security & Critical Infrastructure	July 1, 2010

State of New York
Supplemental Request for State Broadband Data and Development Funds



Submitted July 1, 2010 by the New York State Office of Cyber Security and Critical Infrastructure Coordination, Governor Paterson's Designated SBDD Grantee.

Project Abstract

VISION: Every New Yorker should have access to affordable, high-speed broadband. New York's holistic statewide strategy for broadband is focused on infrastructure build-out, digital literacy, online government services, and economic and workforce development.

The New York State Office of Cyber Security and Critical Infrastructure Coordination, as Governor David A. Paterson's designee to receive funding under the program, seeks additional funds for broadband mapping and other State Broadband Data and Development program activities. Repeated data updating under the broadband mapping program, previously awarded at $2,048,101 for 2 years, will be continued for 3 additional years at a cost of $2,416,759. The funds will be used to collect and map broadband availability data obtained from broadband providers, with updates delivered to the NTIA twice annually. Additional funds are requested for completion of address point data to support more granular reporting of broadband availability to the NTIA, in the amount of $1,565,207. Funding to accelerate the implementation of all Leading Practices identified by NTIA beginning in Year 2 is requested at $90,135. Mapping activities are being conducted primarily in-house. Data being mapped is gathered from each of the broadband providers operating in the State and is verified by the State using secondary sources. The data is then converted into mapping representations for delivery to NTIA and for public access on the New York State Broadband Map website. The mapping is essential to understanding where broadband services exist or are lacking, the distributions of technologies and speeds of existing broadband across the State, and levels of competition in the consumer marketplace for broadband services.

New York seeks $1,084,087 for State Broadband Capacity Building. To drive the State's broadband vision and meet its strategic goals, the funds will be used to support the New York State Broadband Program Office. The Program Office will be the State's primary resource for broadband development and deployment policy, oversight and communication with State and local governments, vendors, and citizens. With dedicated staff and resources, New York State can ensure that every New Yorker has access to affordable high-speed Internet service.

New York also seeks $1,205,465 to work with the New York Library Association in implementing *New York Libraries: Leading the Way to Digital Literacy*. This new program will leverage the State's approved Digital Literacy Standards to develop curriculum that would be used statewide by library staff to train the public. The program will provide 48 train-the-trainer workshops over four years to 1,440 library staff (10% of all librarians in the State) from all 755 public libraries across suburban, rural and urban regions. Librarians will then be prepared to train the public in their local communities based on the State's digital literacy standard.

Finally, New York State is requesting $1,249,300 to issue subgrants to eligible community organizations, including community colleges and other not-for-profit organizations, for the purpose of digital literacy training, subsidized computer ownership, and subsidized Internet service plans. Based on the results of a commissioned statewide Broadband Adoption Study, at least twenty community service organizations, geographically dispersed across the State, will be selected to receive grants of up to $50,000 each. Partnerships will be created with major broadband providers, computer vendors, and community based institutions to keep equipment and Internet service plan costs as low as possible and thereby provide a very cost efficient network of community-supported sites for free public access to the Internet in areas where broadband adoption rates are lowest.

Revised Form 424

Please see accompanying Form 424 submission

Detailed Budget

Please see accompanying spreadsheet

Budget Narrative

1. Data Collection, Integration, Verification and Display

Ongoing Broadband Mapping

Please note that although CSCIC's proposed Address Data Development activity is considered to be part of the Data Collection, Integration, Verification and Display project, we have provided a separate budget narrative for that portion of the project to present an adequately detailed discussion of those elements. This first section of the budget narrative discusses the only the ongoing broadband mapping program and is followed by a separate budget narrative for Address Data Development.

a. Project Staffing

CSCIC determined at the outset of this project to provide staffing primarily with in-house positions, six of which were created as new positions. The State's ongoing hiring freeze and substantially tightened controls over filling any vacancies have presented challenges. We were successful in establishing and filling the six new positions, but not without unplanned delays. In addition, we now realize that our original staffing plan was not fully adequate to meet the demands of the program and we propose a revised staffing plan to address this concern. In particular, the core activities of data collection, data integration, data verification, preparation of maps for review, and other related data processing activities all required greater levels of effort than originally anticipated. Outreach and coordination with providers has also been resource-intensive, but we believe that ongoing relationship-building will continue to improve the efficiency of this task for subsequent rounds of data collection from providers.

CSCIC proposes to continue the funding of the six positions created at the outset of this project through the full five year performance period of the grant award. It had been originally anticipated that three of the six positions would end prior to the five year term of the project, but it is now clear that we are under-resourced to carry out all elements of the program successfully. We propose to add a total of four new positions under this supplement grant request. Two of these are student intern positions with variable part-time hours to augment our permanent GIS professional staff.

One new position will be a Senior Technical Manager which we propose to add in Year Two. The Senior Technical Manager position will be created as a State position with qualifications in GIS, project management, supervision, and IT. There are new provisions in Civil Service law that can be used for a position of this type. This position will assume some of the responsibilities currently handled by a contracted Project Manager, but at lower cost. The contracted PM will be discontinued in Year Two. During Year Two, the Senior Technical Manager will be responsible for early implementation of Leading Practices and will also oversee the GIS technical work performed by GIS staff on the Broadband Mapping Team to improve efficiencies, further automate workflows, and ensure that Leading Practices are properly embedded in our procedures. For Years Three through Five, we propose to fund the Senior

Technical Manager 50% with the broadband mapping funds and 50% with the requested funds for Address Data Development so that the geoprocessing of addresses can be tightly integrated into the broadband mapping workflows.

For the Leading Practices implementation, it should be noted that CSCIC is not waiting until award of the supplemental grant funding to begin this work – we will begin immediately so as to effect these improvements as quickly as possible. Early efforts are being done in good faith on the presumption that we will be "made whole" with the addition of the new Senior Technical Manager position after award of the supplemental funds.

The other new position will be a mid-level administrator to perform grants management and reporting tasks for all components of this supplemental SBDD funding request. The position will be funded 50% from the Technical Assistance request and 50% from the Programs to Increase Computer Ownership and Internet Usage request. Both of these projects involve subrecipients and will require significant administrative effort.

CSCIC is committed to creating and filling State jobs as opposed to hiring contractors to provide those services, since the cost for contracted staff has proven to be significantly higher. Generally, we use contractors for short-term activities or when specialized capabilities are needed.

The chart below summarizes the existing (light fill) and proposed new positions (dark fill):

Position	Year 1	Year 2	Year 3	Year 4	Year 5
Project Director					
Project Manager (PM) – Contractor					
Senior Technical Manager					
Outreach Coordinator					
GIS Technical Staff #1					
GIS Technical Staff #2					
Data Analyst					
IT Application Developer (4 FTE over 5 yrs)					
IT Infrastructure Support (4 FTE over 5 yrs)					
GIS Student Interns (2 @.5 FTE)					
Grants Administrator					

b. Project Contracting

Although CSCIC is performing the broadband mapping primarily as an in-house effort, a portion of the proposed budget is for contracts to supplement CSCIC's activities.

In the previous SBDD award to CSCIC, a contracted Project Manager was budgeted for the first two years. This individual has been hired and is working in-house to assist our in-house Project Director, Robert Gehrer. The contract term, which started in April, 2010, can last for up to 15 months. At this point in time, the contracted PM is handling the majority of the reporting requirements as well as project budgeting and tracking of activities. At this time the Project Director is responsible for overseeing the daily activities of the GIS Team, including statistical and spatial analyses, development of data confidence scales, overall technical direction, and other related activities. Given the increasing burden of PM tasks on the Project Director, it has become clear that we need a Senior Technical

Manager to assume daily technical management and ensure that all technical work continues to progress smoothly and efficiently. Technical activities will continue to evolve and we anticipate needing a Senior Technical Manager for the duration of the grant performance period. CSCIC proposes to end the services of the contracted PM as soon as practical in Year Two. The Project Director and Senior Technical Manager will assume most of the tasks currently handled by the PM during Year Two, with reporting and grants management tasks to be assigned to the new Grants Administrator.

CSCIC is contracting with a university partner, the Center for Technology in Government (CTG), part of the University at Albany, for the crowd-sourced speed data collection. This work is commencing now under the initial SBDD grant award with initial crowd-sourced speed data to be delivered to CSCIC at the beginning of August for use in verifying provider data and coding typical (tested) broadband speeds for the September 1, 2010 broadband data delivery to NTIA. The initial contract engagement between CSCIC and CTG was for one year, with four optional one year extensions for continued hosting of the speed test website by CTG. It was envisioned that the management of the speed test tool and outreach to targeted communities of consumer testers would be assumed by CSCIC after the first year. However, we now believe it will be preferable for CSCIC to devote all in-house resources to the direct mapping efforts and coordination of the three additional SBDD projects and to continue contracting with CTG for the management and targeted outreach for continued speed testing over the life of the grant performance period. The contract value of this engagement in Years Two through Five has been adjusted for this change in strategy. We believe that this change is not only the most appropriate use of the respective talents of both CSCIC and CTG, but is cost-effective, as well. CTG specializes in applied research in technology innovation to improve the effectiveness of government and they are excited to be gaining experience in how best to employ social media.

Collection of broadband pricing information is not something that CSCIC believes should be conducted in-house. First and foremost, we believe that from the perspective of the broadband providers, there is high sensitivity as to how their pricing data may be represented by the State. We do not want to risk the trust and cooperation we have worked hard to build with providers with any suggestion that we have misrepresented their broadband pricing. We further believe that pricing has many complexities including packaging of broadband service in a variety of combination bundles with TV, telephone, and cellular phone and data services; limited time offers; rebates; contract commitments for one or two years; variations in available service offerings within a provider footprint; incentive offers to switch from other providers; group pricing plans; targeted discounts, and other uncontrolled variables. The risk is high that we may incorrectly characterize a particular provider's pricing plans, or fail to include their most recent price offering, or otherwise cause perceived harm in displaying inaccurate data, and in doing so, may easily spoil our cooperative relationship with them. Accordingly, we are willing to collect pricing data for NTIA, but only through a third party and not for inclusion in our State broadband map. We propose to contract with CTG or another third party to gather pricing information primarily from pricing descriptions posted on provider websites. The data will be collected "as is", that is, with whatever bundling or contract commitment or rebates that are indicated by the providers, and delivered to NTIA. Neither CSCIC nor CSCIC's third party contractor will attempt to determine the equivalency of pricing between different broadband providers.

c. Equipment and Software

Much of the equipment and software needed for this project was funded in the initial grant award. However, since we are proposing additional new staff, we will need to purchase computers, software, desks, and basic office supplies for each of these new employees. We have also included funds to replace desktop workstations purchased in the initial year under the grant, consistent with CSCIC's 3-

year life-cycle replacement for PCs and workstations. Proposed funds are also included for other IT equipment maintenance charges, routine upgrades, software maintenance renewals, etc. that are anticipated for the remainder of the grant performance period.

The State broadband map website that will be launched later this summer will be hosted in the State Data Center operated by the NYS Office for Technology. The State's Chief Information Officer has agreed to partner with CSCIC on the hosting of this important application and funds for the OFT hosting charges are split evenly between the mapping grant request and the grant funds being sought for State Broadband Capacity Building.

d. Travel

Our proposed budget includes in-state travel funds to facilitate in-person community engagement with stakeholder groups across the State. We anticipate participating in an average of 8 events per year, with each event to be attended by at least two staff from the CSCIC team. We intend to rotate staff on these trips so that all can participate and hear, first-hand, from those impacted by our work or interested in learning more about what we are doing. Nearly all of this travel will be to events that are already happening, such as regional planning meetings, conferences held by industry or government sector organizations, public forums held by elected officials, etc. We will seek speaking opportunities at these events and will remain available throughout the event to meet and talk with attendees. We see these community engagement opportunities as another feedback loop that will improve the quality of our broadband map and enhance community understanding of the "broadband landscape".

Funds are also being allocated for out-of-state travel for two members of the CSCIC broadband mapping team to attend the National States Geographic Information Council (NSGIC) conferences (both the Annual and Midyear) every year for the remaining years of the SBDD program. The NSGIC events are very important opportunities to find out how the work is unfolding in other states and to engage with NTIA on national strategy discussions that will help strengthen the SBDD program.

e. In-Kind Match

CSCIC is using primarily in-kind hours of other CSCIC staff that are not directly funded with the grant as the basis for our 20% match. In order to have accurate time records, CSCIC has created a Time Tracker application where all staff performing in-kind work in support of the SBDD program record their actual hours worked, including activity codes linked to different grant funds (i.e. activities supported with Planning funds vs. activities for mapping). Time records are certified by the reporting individual to be an accurate representation of their hours worked.

In addition to in-kind hours, CSCIC's proposed 20% match also includes a pro-rated portion of the contract cost of our ESRI software license enterprise agreement, based on the number of GIS workstations deployed to the broadband mapping team as a percentage of all GIS workstations in CSCIC. In our initial grant award, a portion of the NAVTEQ contract on streets and address data maintenance was included in our match calculation, but since we now propose a new project to create address data in part via additional contractual services with NAVTEQ, we have removed this from our proposed match calculation.

Two other items previously included in CSCIC's 20% match have also been removed in this supplemental grant proposal: the qualifying activities that CSCIC undertook to generate predictive broadband mapping between February and August, 2009, and the value of the TeleAtlas wire centers file which

CSCIC has been licensing for use in broadband mapping but now proposes to replace with an in-house created file.

In our original SBDD grant award, our approved budget included a 10% Administrative charge applied to all of the other grant funds. Please note that we have since proposed amending our budget to remove this charge and we reallocate the funds to other categories. This supplemental grant funding proposal does not include a 10% Administrative charge. Tasks which were previously included in this Administrative charge, such as activities of Counsel's office on NDAs and contract documents, will instead be tracked individually as in-kind match.

Address File Development

CSCIC began a statewide Streets and Address Points data project nine years ago. This activity has evolved and the focus has gradually shifted from maintaining address ranges on street segments to building address point locations, with a long-range goal of eventually having a database containing all of the State's address points located with latitude/longitude coordinates and attributed with the official E-911 addresses. These points work in conjunction with street data for a "cascading" geocoding method that first seeks to match an input address with an address point. If no match is found, the geocoder then cascades to an interpolated location using the address ranges on the appropriate street segment.

Address points have been created in the past seven years for just over 4 million addresses, which is roughly half of the estimated statewide total. It should be noted, however, that many of the points that have been created are in the State's urbanized areas through joint efforts with the more progressive and better funded counties. It may be said that the "low fruit" has already been harvested and that what remains, in rural counties with scarce resources, will require greater effort per-point than the address points previously created. It should also be noted that in the two most recent State fiscal years, and most acutely in the current fiscal year, CSCIC has had to absorb across-the-board budget cuts which have negatively impacted progress on further address data points. Without the injection of new funding resources that CSCIC seeks with this proposal, it would be very difficult to anticipate the eventual completion of statewide address points.

This proposal will complete the address point creation within four years, with priority activities in counties with the greatest percentage of large Census Blocks. Funding from NTIA will enable CSCIC to re-energize an existing program by rededicating staff for outreach and partner engagement and to add sufficient staff resources to process the anticipated influx of new address data obtained from the counties to build out our Address Point data through our existing contract with NAVTEQ. Multiple existing activities are leveraged with this approach to produce authoritative address point data that will meet the needs of numerous county agencies including, most importantly, E-911 dispatch. In addition to its use for improved broadband mapping, the data will also be used by other State and local agencies for geocoding and many other applications. This will be a *"build once, use many"* project that embodies statewide GIS coordination principles.

New York has invested a total of $7.7 million over the past nine years in the development and maintenance of our Streets and Address Points data. It is not possible to isolate the costs for address points as a component to the total cost, since all of the coordination effort with local stakeholders encompassed addresses as referenced in street segment address ranges as well as at separate address points. Notwithstanding the practical difficulties in attempting to compute our invested cost per point, it is clear that New York is able to leverage our substantial prior financial investment as well as our "coordination investment" in building relationships with authoritative local officials to complete the

build of statewide address points. With CSCIC's proposed in-kind match contributions included, our NTIA supplemental grant request for address point development would be attributable to less than 19% of the total cost for this data build, statewide. Our proposed cost, including CSCIC's match, of $1,776,096 to create the estimated four million remaining address points under this proposal is approximately $.44 per point. Equally significant is that CSCIC is committed to sustaining the program with the cooperation of local government partners after the NTIA funding ends.

a. Project Staffing

CSCIC's existing in-house Streets and Address Points team consists of a Senior GIS Manager and three GIS technical staff, one of whom works on a reduced, 80% schedule. Another of the GIS technical staff will be retiring this summer and under the current retirement incentive plan the vacant position must be eliminated. We propose to establish two new GIS technical positions, for a net increase of one additional GIS technical staff on the Streets and Address Points team for the 4-year duration of the grant performance period. A 50% share of the Senior Technical Manager position discussed under broadband mapping budget narrative will also be funded with the Address Data Development grant for Years Three through Five and will provide part-time technical oversight to the Streets and Address Points team, as needed and appropriate for greatest production efficiency. This will ensure that all address-related geoprocessing, including the technical oversight of workflows in the creation of the address point data and integration of address-based broadband mapping are tightly integrated.

b. Project Contracting

CSCIC proposes to amend an ongoing contract between CSCIC and NAVTEQ for this project. The existing contract is for maintenance activities on the New York State Streets and Address Points data, but the terms of the contract will be expanded and modified to include accelerated processing of address points and the creation of an Alternate Addressable Units table for assigning multiple address units to single address points, where applicable. The contract currently obligates NAVTEQ (and their subcontractor, GIS Solutions, Inc) to integrate address edits and updates into the New York State Streets and Address Points data within limited timeframes based on information that CSCIC gathers from authoritative local government partners. Contract terms provide for per edit costs on a sliding scale with reduced unit costs when higher quantities of edits are supplied to NAVTEQ. Edits are supplied weekly to NAVTEQ. In addition, NAVTEQ incorporates edits derived from field verification, high resolution orthoimagery or other qualified sources into the New York State Streets and Address Points data. The contract amendments will retain the quarterly delivery cycles but will expand the data integration services to include expedited processing of address points and to specifically include production of the Alternate Addressable Units table. NAVTEQ will provide, in addition to these data processing services, expanded licensing terms for use of the address points by NTIA and the stakeholder local government partners, as well as broadband providers, during the term of the contract. Contract language will also provide for, at a minimum, perpetual use licensing of the address points and ownership of the Alternate Addressable Units table after the term of the contract is completed. Contract language already permits the licensed data content to be shared with all members of the NYS GIS Data Sharing Cooperative (open to all government, not-for-profit, and academic organizations) and this provision will continue in the amended contract.

Given the very short timeframe available for developing this project proposal, we have not completed our negotiations on contract terms and pricing with NAVTEQ, but based on initial discussions we are including a contract budget estimate that both CSCIC and NAVTEQ believe is reasonable and achievable.

Another contract for this project will be used to create a public version of CSCIC's existing online Map Maintenance Notification and Tracking (MMNT) application. MMNT is currently used by authenticated local government officials to notify CSCIC of needed edits and corrections to the Streets and Address Points data and to provide for status tracking of edits and notification when corrections are completed. This application will be converted into a streamlined, publicly accessible crowd-sourcing application that will serve as a trigger mechanism to notify authoritative local partners that edits may be needed. CSCIC will still rely on verified edits obtained from authoritative sources in feeding data to NAVTEQ for processing. The conversion and adaptation of MMNT into a public crowd-sourcing application will be performed as a one-time contracted task.

The existing MMNT application also needs to be upgraded to incorporate needed enhancements requested by our local government and E-911 partners. This upgrade will provide for improved user experience and an updated online training module. Self-paced online training is an element of CSCIC's strategy to expand the engagement of partners using the online tools.

CSCIC wishes to reserve the option for two potential additional contracts. One would be for as-needed consulting services, on an hourly basis, with an individual who has extensive knowledge of detailed address and local coordination issues across the State. The other potential contract would be with Cornell University for consulting, based on their recent work in inventorying housing units as an accuracy check on Census Master Address File data. This expertise may benefit CSCIC in identifying new addresses with utility company records and property tax assessment data. Both of these potential engagements are believed to be important in tapping into the deepest available knowledge so that our project has the highest odds for success.

c. Equipment and Software

An upgraded server is needed to support MMNT, the online training module, and public crowd-sourcing applications for the duration of the project.

Equipment and software will be needed for the two new positions being created. Equipment needs include GIS workstations, software, furniture, and basic office supplies. Furniture and software for one of the new positions will be redeployed from the retiring employee; however the existing GIS workstation will need to be replaced as it has surpassed our 3 year replacement cycle.

d. Travel

In-state travel is needed for face-to-face coordination with counties. It has been our experience that best coordination results occur when we send our team to meet with counties on their "home court". This demonstrates our commitment to working with them, builds trust, and enables them to include all of the likely stakeholders. Partnerships are not built on one meeting alone but typically require 2-3 meetings with each group of stakeholders; therefore we anticipate 10-15 in-state trips per year for the duration of the project. Travel to most locations in the State can be accomplished as day trips, but overnight travel is needed for trips to Long Island and western New York.

e. In-Kind Match

CSCIC proposes to meet the 20% non-federal match requirement through the in-kind services of the members of CSCIC's Streets and Address Points team that are not directly funded with the grant. This will include the Senior GIS Manager and two GIS technical staff. Other CSCIC staff in other functional areas, including IT Support, Counsel's Office, Administration, etc. that contribute efforts directly related

to this project will also be counted towards the in-kind match and will keep track of their time using CSCIC's Time Tracker application for accurate time-recording of in-kind services.

2. State Broadband Capacity Building

New York State Broadband Program Office

a. Project Staffing

The New York State Broadband Program Office is currently managed by a full-time consultant serving as the Director. There is also a full-time Administrative Assistant who is providing administrative support to the Director and the Program Office. This project contains a request for two additional staff members: a Project Manager and an Outreach Coordinator (75%). With increasing demands placed on the Program Office, it has become clear that additional staff is not only warranted, but necessary to continue performing vital functions. New full-time State positions will be created to reduce reliance on temporary contract staff to leverage resources in the most effective manner. The proposed new positions will perform functions listed in the project narrative. Titles and annual salaries are in alignment with New York State Civil Service guidelines for State service.

b. Project Contracting

It is not anticipated that any contracts will need to be executed for this project.

c. Equipment and Software

The standard equipment, computers, and software for office use will be provided as an in-kind match for all proposed staff additions, along with appropriate office space.

As stated in the original planning fund grant proposal, approximately $10,000 is requested for software. Due to the large number of federal and State agencies, inter-agency project teams, and the four technical committees of the New York State Broadband Development and Deployment Council, project based collaborative software applications will be required.

The New York State broadband map website scheduled to be launched in late summer 2010, will be hosted in a State Data Center. CSCIC and CIO/OFT will be partners for hosting this vital application. Funds for hosting the website will be divided evenly between CSCIC's request for funding under the Data Collection, Integration, Verification, and Display category, and CIO/OFT's request for funding for the State Broadband Capacity Planning category.

The Broadband Program Office will be required to analyze and present the findings of Adoption Rate Studies, Broadband Availability Maps, and a tremendous amount of data. To adequately display and present results, an interactive display map, with associated software will be highly beneficial in measuring and reporting results of various efforts to address findings contained in studies and reports.

d. In-Kind Match

CIO/OFT is using existing staff hours and the value of office space, computers, and equipment for existing and proposed Broadband Program Office staff for the required 20% match. One hundred percent of the hours allocated to the Program Office Director and Administrative Assistant will go towards fulfilling the 20% match obligation. This will exceed the 20% match required for receiving grant funds under this category.

3. Technical Assistance

New York Libraries: Leading the Way to Digital Literacy

a. Federal Funds

Project costs are divided as follows:

- Development of the curriculum/course guides/instructional materials are estimated to cost $15,000. A curriculum development consultant would be engaged to work with the NYS Library and a Project Advisory Committee of Librarians to develop a suitable curriculum and other instructional materials for the train-the-trainer Digital Literacy workshops.
- The cost of providing 48 regional train-the-trainer workshops over four years on the Digital Literacy Standards is estimated to be $600,000 or $12,500 per workshop. The cost per workshop covers the cost of instructor/trainer, facility rental, workshop supplies and a $325 stipend for libraries that send staff to workshops to cover travel costs and substitute staff to cover shift during their absence from the library. This is especially crucial for small libraries with less than 10 full-time staff. The workshops would be full-day workshop and contain six hours of instruction and a working lunch with speaker.

Cost Breakdown per Workshop:

$1,250 Instructor fee.
$500 Facility rental or set-up fee.
$500 Lunch/beverages for 32 people (attendees, instructor, NYLA rep).
$500 Workshop supplies/flip charts/markers/slides, publicity etc.
$9750 30 stipends of $325 for each library to cover staff travel ($165) and cost of substitute staff ($160 = $20/hr x 8 hrs).
$12,500 Total cost per workshop

Personnel costs to administer the project over four years are estimated to be $306,800. These costs include salary and benefits for a Project Administrator ($47,200 per year or $188,800) and Project Assistant ($29,500 per year or $118,000). The Project Administrator would be responsible for administering/coordinating all aspects of the project from arranging for the curriculum development, selecting train-the-trainer instructors, overseeing arrangements for workshop locations/dates, grant reporting and website development. The Project Assistant would be responsible for providing majority of administrative support to the Project Administrator, especially with making the arrangements and publicizing the workshops, attending the workshops and handling registrations, and insuring instructional materials are provided to all libraries.

The project budget also includes 50% of the cost for a mid-level administrator position at CSCIC for Years Two through Five to perform grants management and reporting tasks for all components of this supplemental SBDD funding request.

Travel costs are estimated to be $9,600 for the Project Administrator or Project Assistant to attend all 48 workshops to insure that everything runs smoothly and materials distributed and participant surveys/feedback is collected.

Project specific supplies are estimated to be $2,000 and purchase of two computers $2,400 for use by the Project Administrator and Assistant.

The cost of creating and maintaining a Digital Literacy reference website is estimated to be $10,500. The website would be a resource tool for all information regarding the standards, the dates/locations of the workshops, and downloadable workshop handouts and other instructional materials.

The printing of handouts, course guides/instructional tools to give to workshop attendees to take back to their libraries is estimated at $21,600.

b. Local Match

In-kind match will be provided by each of the 755 libraries in the State based on the value of 1 day of contributed staff time (8 hrs @ $10/hr, plus 18% fringe) per year dedicated towards this project.

c. NYLA In-kind

Executive Director (10%) would provide overall project oversight and fiduciary control. $43,896
Administrative Assistant (15%) would provide supplemental secretarial project support. $21,240
Finance Manager (10%) would handle invoices/payments and financial reporting. $18,880

d. Timeline

The Project would run over four years and the first four months of the project (Sept – Dec. 2010 - assuming Sept. 2010 award date) will be the start-up and planning phase when the Project Staff is hired, the train-the-trainer curriculum developed, and the regional workshops dates, locations and instructors identified and announced. The train-the-trainer workshops will be held during the subsequent 44 months of the grant award (Jan 2011-Sept. 2014). Ideally, at least 12 workshops per year would be held.

4. Programs to Improve Computer Ownership and Internet Usage

NYS Computer Subsidy and Digital Literacy Outreach Program

a. Project Staffing

This project contains a request for partial funding for two separate positions: Grant Coordinator (25%), and Outreach Coordinator (25%). New State positions will be created to reduce reliance on temporary contract staff and leverage resources in the most effective manner. The proposed new positions will perform functions listed in the grant narrative. Titles and annual salaries are in alignment with New York State Civil Service guidelines for State service.

The project budget also includes 50% of the cost for a mid-level administrator position at CSCIC for Years Two through Five to perform grants management and reporting tasks for all components of this supplemental SBDD funding request.

b. Project Contracting

Contracts with grant sub-recipients will be need to be executed for this project.

c. Equipment and Software

The standard equipment, computers, and software for office use will be provided as an in-kind match for all proposed staff additions, along with appropriate office space.

The Broadband Program Office will be required to analyze and present the findings of Adoption Rate Studies, Broadband Availability Maps, to determine eligible communities to receive grant funds. Specialized software may be required to purchase to analyze this data.

d. In-Kind Match

CIO/OFT is using existing staff hours and the value of office space, computers, and equipment for existing and proposed Broadband Program Office staff for the required 20% match. In addition, the value of partner subsidies and computer equipment pledged to support the goals and deliverables of this project will be used as an in-kind match.

Project Narrative

1. Data Collection, Integration, Verification and Display

$2,048,104	Previous award for Years One and Two of broadband mapping
$500,000	Previous award for five years of Planning activities
$2,416,102	Funding request for three additional years of broadband mapping (previous +18%)
$1,565,207	Funding request for partial development of address points
$90,135	Funding request to implement Leading Practices in Year Two (10% of Yr 2 award)
$6,616,668	**Sum of previous awards and additional funding requests**

a. Currently Funded Activities

The New York State Office of Cyber Security and Critical Infrastructure Coordination (CSCIC) is conducting the broadband mapping program in-house as an inherently governmental function consistent with its core mission responsibility for statewide geospatial coordination. The SBDD funding award of October 26, 2009 has created six new full-time jobs at CSCIC for broadband mapping. The initial on-time delivery of broadband mapping data was made on March 31, 2010 which included more than 700,000 records depicting broadband availability from 68 cooperating providers. Additional provider participation is anticipated for subsequent deliveries. A key ingredient for success has been our underlying principle of treating providers as valued partners and offering substantial flexibility to ease their burdens on participation. The CSCIC broadband mapping team is applying extensive GIS experience, capabilities, and data resources to produce high quality broadband mapping from provider-supplied data. Ongoing verification steps include use of automated business rules and comparisons with other GIS data, and will soon include targeted collection of crowd-sourced speed tests coupled with a short questionnaire. The CSCIC Director is a member of Governor Paterson's Broadband Development and Deployment Council and the mapping efforts are tightly integrated with the work of the Council. Funds awarded for SBDD planning purposes are being used for additional mapping support to the Council as well as a targeted study of broadband adoption issues, a series of summit meetings to assess industrial broadband needs, and partial funding support to a Broadband Program Office reporting to the State CIO, who chairs the Council.

b. Repeated Data Updating

New York is a challenging State for broadband mapping with many extremes: we have the country's densest urban area as well as the largest publicly protected area in the contiguous US, the six million acre Adirondack Park. Broadband services are offered by the country's largest broadband providers as well as some very small, "mom and pop" telcos that have been in family ownership for generations and serve only a few hundred connections. Overall, New York has a very high rate of household wireline broadband availability at more than 96%, but our population of approximately 19 million residents in 7.7 million households tends to obscure the fact that a rate of 4% Unserved means that more than 700,000 New Yorkers lack household access to broadband (this exceeds the entire population of neighboring Vermont, as well as three other States, the District of Columbia, and all four US Territories), and these Unserved households are widely scattered across the State. Fifteen percent of the area of New York consists of lands where development cannot occur and will therefore never need household broadband. These "excluded areas" further fragment the State's low population areas and heighten the need for accurate broadband mapping so that scattered pockets of Unserved will be correctly delineated.

In spite of these challenges, CSCIC successfully completed the initial delivery of broadband mapping data to NTIA and our procedures are in place and working effectively. Much of the workflow identified in our initial SBDD proposal proved sound, although there were revisions and "lessons learned" that are being applied as we move forward. Proposed changes and improvements are discussed below.

i. Data Gathering Methodology

CSCIC understands that maintaining the trust and cooperation of broadband providers is the most important ingredient for program success. This starts with Non-Disclosure Agreements (NDAs), and we developed our model NDA in dialog with several provider representatives. To date 74 NDAs are in place with 4 more currently in progress. Four providers decided to forgo the NDA and have supplied their data without it. We anticipate signing additional NDAs with several providers who did not participate in our first data collection cycle, as well as resellers who we will now include as a Leading Practice.

Our data gathering experience from the first cycle showed that the four largest providers, representing more than 95% of the total data records submitted to NTIA, supplied data to us already aggregated to Census Blocks or street segments. Thirty-two mid-size providers supplied us with address-specific data that we geocoded and aggregated to Census Blocks and street segments, amounting to roughly 3% of the total aggregated data records. Twenty providers, generally small, independent telcos, did not provide any electronic data but instead marked up hardcopy maps that we created for them in what we have been calling the "Sharpie method". Although this method generated less than 2% of the total data records, it was employed by nearly 30% of cooperating providers in the first data collection cycle and has become a very significant part of our workflow. While their data volume is very low, these small providers are particularly relevant to the overall understanding of broadband availability gaps, since they typically offer DSL service at the fringes of broadband availability.

Our original proposal described three options for provider submission of broadband availability data, ranging from supplying address-specific data to CSCIC where aggregation would be performed in-house (Option 1), a CSCIC web service for providers to perform the aggregation without having us possess their confidential data (Option 2), to provider aggregation without CSCIC involvement (Option 3). The first cycle showed virtually no demand for Option 2, which will be dropped from future data collection cycles. More significantly, we had not even contemplated the need for the "Sharpie method" which was the result of very productive interaction with the New York State Telecommunications Association. As we move forward with a shift to address-specific data as the primary data collection target, we will need to

modify our procedures. First, while our NDA does contemplate the delivery of address-specific data to CSCIC, the subsequent provision of such address-specific data to the NTIA requires CSCIC to obtain written consent from each provider whose data is to be delivered to the NTIA. Second, we will need to modify our outreach strategy to clarify the shift to address-specific data, with an explanation of the benefits of more accurately depicting broadband availability. Third, we will need to revise our "Sharpie method" to include address points on the hardcopy maps and develop new mark-up procedures. We propose to implement these changes and Leading Practices in Year Two, with priority for address-specific data on blocks greater than two square miles.

Broadband speed data was problematic in our first data collection cycle. Typical speeds were omitted by many providers in their availability data. Maximum advertised speeds, where provided, were unreliable in some instances due to the large geographic collection units which falsely indicate that those speeds are available throughout the cellular market area. For these reasons, we concur with the Leading Practice of gathering maximum advertised speed at the Census Block and street segment level and we will begin requesting this information from providers in Year Two. Independent from that effort, CSCIC is working with the Center for Technology in Government (CTG), part of the University at Albany, to conduct a targeted outreach campaign using social media networks to gather consumer-level broadband speed test data. Through this effort we also expect to identify CLECs and resellers who were unknown to us. This work will be commencing soon with crowd-sourced speed data available in August for use in verifying the second round of provider data.

CSCIC is also considering the use of our new crowd-sourcing speed test application as a means to collect the broadband connection information at Community Anchor Institutions. We anticipate targeted use of the application to particular communities, such as town clerks, who can then run the speed test tool to gather the data needed on broadband service at the town hall.

ii. Process for Data Integration

CSCIC is integrating the data at two levels. First, the raw provider data is loaded into CSCIC's GIS environment. The process of converting the data into GIS format is performed using CSCIC's own geocoding database consisting of streets and address data maintained by CSCIC in partnership with local governments across the State, thus ensuring the highest possible geocoding accuracy. The geometry of streets and Census Blocks have been realigned to match CSCIC's high-resolution orthoimagery. This means that the resulting GIS data representing broadband availability is of particularly high spatial quality. Second, CSCIC is able to compare and reconcile the broadband data through overlays and comparison with any of more than 500 other layers of GIS data that CSCIC has available internally as part of its core mission of statewide GIS coordination. The broadband data for New York State is truly integrated into a comprehensive statewide GIS.

In-person community engagement has also become part of our data integration protocol. Our initial experience, at the *North Country Broadband Summit* on May 21, 2010 in Lake Placid, NY, proved to be highly valuable in hearing directly from Town Supervisors and provider representatives who were at the event. We were able to clarify several data issues as a result of face-to-face discussions. CSCIC will participate in a second event scheduled for July 20, 2010 at the New York State Telecommunications Association Broadband and Network Committee meeting. CSCIC will budget for additional in-state travel and will seek to leverage other events and conferences for in-person community engagement.

Although the subject of Census geography updates has not been raised by NTIA in the supplemental grant guidance, we believe this will be very important for data integration next year as the Census

Bureau releases updated Census Blocks, Block Groups, and Tracts from their 2010 Decennial Census. Discussions with our State Demographer lead us to believe that as many as 5000 changes in Block-level geometry and Block IDs will need to be reconciled with our other map layers to effect a smooth transition to the new data. CSCIC is prepared to undertake this effort.

The shift to address-level data collection does not change how the data will be represented on the State broadband map. Unless NTIA further clarifies the definition of confidential data, CSCIC will display broadband availability data as aggregations to Census Blocks or street segments. CSCIC is currently designing and building the publicly-accessible online broadband mapping website with launch planned in August, 2010. The site will contain both mapping and non-mapping content with the goal of "demystifying" factual broadband information to the public. Data downloads and web services of the broadband map layers will allow the information to be easily integrated into other mapping applications, such as county-level map browsing sites.

CSCIC will adopt the Leading Practice of preparing our final semi-annual data submittals in the recommended geodatabase format.

iii. Verification Methodology

CSCIC's data verification methodology is built on a combination of automated business rules, GIS analysis of provider data, the upcoming use of crowd-sourced data being collected by our university partner, and provider feedback loops.

An initial set of automated business rules has previously been provided to NTIA. CSCIC will be expanding the rules in subsequent data cycles. The use of GIS data for verification has also been valuable. Provider data can be quickly checked against provider footprint boundaries to identify disparities. In the first data collection cycle, for example, one provider supplied us with geographic coordinates for their middle-mile points which when analyzed with GIS were found to be in error. After discussions with the provider, they supplied us with street addresses which we geocoded and then returned corrected coordinates to the provider. Similar GIS-based verification checks can be performed against excluded areas, water bodies, known locations of Community Anchor Institutions, etc. Without GIS methods, errors such as these would be very difficult to detect.

Beginning with the second data verification cycle this summer, we will use crowd-sourced speed test data being collected by our university partner, CTG. On a weekly basis, CTG will supply us with the addresses of speed data collected so far, which CSCIC will geocode to show where additional data is needed, sorted by provider. CTG will then locally target their marketing and outreach for additional speed tests using social media tools and networks of contacts. After data collection, CTG will perform statistical analysis to indicate the confidence levels of the speed samples by provider. CSCIC will be able to use the resulting data to report typical (tested) speeds for provider data. A short questionnaire accompanies the speed test for identification of street address, provider (the drop-down list will be limited to the names of companies offering service at the given zip code), and broadband technology. This ancillary data will facilitate verification of provider data as well as data collected previously for Community Anchor Institutions.

Feedback to providers has always been part of our procedures. We have been generating maps, in pdf format, which we email to providers for their review and correction. We have also been discussing data issues with providers whose records have presented any difficulties to us. Our goal is to make the process smoother and easier for subsequent data cycles, based on early resolution of data problems.

We are contemplating the use of a separate instance of our online State Broadband map, with authenticated login by individual providers, as a replacement for pdf provider review maps in the future. It should also be noted that our NDA contains language committing CSCIC to offering providers five business days to review any map created from confidential data prior to its publication.

In addition to provider review of maps, we are also building a feedback loop into our State broadband map website for the public to report errors, identify broadband "dead zones", and to take our speed test. Errors reported on provider data will be conveyed to providers as part of our normal provider feedback process.

c. Leading Practices Implementation

CSCIC agrees to implement all Leading Practices not already incorporated into our workflows. Our budget proposal includes a 10% increase in the previously approved grant award for Year Two to begin implementation of Leading Practices as quickly as practical. We offer the following comments:
Method of Submission: CSCIC will begin submitting data to NTIA in the geodatabase format in Year Two.
Address Level Data: We agree to collect this data, beginning in Year Two for Blocks over 2 sq mi.
Speed Geography: CSCIC will request maximum advertized speed at the Block and street segment level.
Typical Speed: CSCIC is working with a university partner to collect crowd-sourced speed test data which will be combined with FCC crowd-sourced speed test data for analysis and integration.
Resellers: We agree to collect data from these providers, beginning in Year Two.
Integration of Public Data Sources: CSCIC works closely with the NYS Public Service Commission and will explore further opportunities to gather additional provider data. CSCIC already has experience running automated scripts to mine information from the public websites of providers.
Free Public WiFi: We are interested in gathering this information and will explore crowd-sourcing and other sources of information on free WiFi hot-spots for display on our State broadband map.
Pricing: CSCIC recognizes that this data is important to NTIA but we have concerns about impacts on our relationships with cooperating providers. Our proposal is to collect this data through a third party for delivery to NTIA, but not for inclusion on the State broadband map. Please see our Budget Narrative, Section 1.b. *Project Contracting* for a more complete description of CSCIC's proposal on this activity.
Data Confidence Scales: We have already begun work on this and will further develop confidence scales and attribute codes to assign to each data record prior to submission to NTIA.
Ongoing Verification Activities: A crowd-sourcing application will be launched soon for targeted collection of crowd-sourced speed test data. Our State broadband map will also have error-reporting.
Surveys: CSCIC has no plans for any survey efforts beyond a short, 3-question form accompanying the crowd-sourced speed test application. We believe that our questionnaire adds value to the test data.
In-Person Community Engagement: We strongly support this activity and have already participated in one such forum on May 21, 2010 in Lake Placid, NY. Additional travel funding is proposed.
Provider Feedback: Procedures for provider feedback and review of map data are already incorporated in CSCIC's workflows and are also a provision of our NDA. In-person community engagement provides another channel for feedback from providers as well as other stakeholders.
Small Providers: We are already offering greater flexibility to small providers, with excellent results.
Methodology: CSCIC is already providing detailed data accompanying our data submission to NTIA.
Potential Additional Leading Practices: CSCIC is interested in discussing other potential Leading Practices with NTIA including the delineation of excluded areas to avoid exaggerated mapping of unserved areas for wireline broadband; in-fill processes for coding Blocks likely to have unreported broadband availability (such as identification of populated blocks within the footprint of a confirmed DSL provider and within range of a DSLAM); and development of State-owned provider footprint boundaries which are valuable for data integration, verification, and State broadband map purposes.

d. Address File Development

Funds Requested: $1,565,207

CSCIC is extremely well positioned to leverage nine years of experience in building and maintaining streets and address data in partnership with local governments across the State and with commercial partners. Our Streets & Addresses Data Manager, Ms. Cheryl Benjamin, is one of the country's foremost experts on address data[1] and will lead the proposed effort to complete the address point data collection for New York. CSCIC's evolving efforts to date have resulted in a high-quality street network database under active maintenance with local governments who report *authoritative* edits and updates to CSCIC using a custom web-based reporting tool. Edits are managed by CSCIC and performed on the database by a contracted partner (NAVTEQ and their subcontractor GIS Solutions, Inc), with QA/QC handled by CSCIC and coordinated with local authorities. Originally the program was designed to maintain address ranges on street segments, but emphasis has shifted over time from address ranges to address points. Progress has been gradual, with approximately half of the State's 8 million address points created to date. Many of the areas where address points have not yet been built are rural areas where the frequency of Census Blocks over 2 square miles is greatest. The opportunity to leverage and accelerate CSCIC's existing program is perfectly aligned with NTIA's priority for address points.

CSCIC's proven program relies on multiple levels of coordination between the State, local officials, and contractors. Local participation and "buy-in" is the key to program success since street and address changes originate from local government actions, such as approval of subdivision plans and building permits. Our experience has shown that among the various local government stakeholders including county planning departments, real property offices, assessors, highway departments, law enforcement, economic development, and others, the most important by far is the county E-911 office. E-911 offices require an accurate, up-to-date address database to support emergency dispatch. They cannot and will not rely on data of unknown quality. Increasingly, E-911 dispatch uses GIS to show the location of 911 callers and to provide routing directions for optimum response times. CSCIC understands that a sustainable program of address data maintenance must be based on cooperation and collaboration with county E-911 offices. Address point files must be built and approved for full counties in order to meet E-911 requirements. Data edits must be verified as authoritative, although modern, web-based tools for public reporting of edits can (and will) be implemented to serve as triggers for authoritative review.

CSCIC proposes to create, in addition to the address points, a table of Alternate Addressable Units, with a many-to-one relationship to address points. The AAU table is needed to identify individual dwelling units that may exist at a single address. These can be multi-family homes, apartment complexes, storefronts with apartments overhead, malls with multiple business tenants, office parks, etc. Each Alternate Addressable Unit represents a separate potential broadband connection and this table will make it possible to properly map address records and correctly compute subscriber rates.

CSCIC is developing a detailed, phased project approach to complete the build of address points, including the creation of an Alternate Addressable Units table, with initial priority on those counties with the highest number of households in Census Blocks over 2 square miles. Initial details on our plan are described in the Budget Narrative and we welcome the opportunity to discuss our plan further with NTIA. Beyond broadband mapping, the resulting statewide address points will be widely shared with State and local government agencies across the State via CSCIC's existing GIS Data Sharing Cooperative.

[1] Ms. Benjamin's expertise, experience, and stature in this area resulted in her being the invited keynote speaker at the 2009 URISA/NENA Addressing Conference; see her keynote abstract and bio at: http://www.urisa.org/workgroup/testgroup.

2. State Broadband Capacity Building

NAME: ***New York State Broadband Program Office***
The New York State Broadband Program Office is the State's primary resource for broadband development and deployment policy, oversight and communication with State and local governments, vendors, and citizens.

FUNDS AWARDED: $140,000 (from $500,000 Planning funds previously awarded)

FUNDS REQUESTED: $1,084,087

PROBLEM:
The NYS Broadband Program Office performs several important functions to serve a variety of purposes as it relates to broadband for the State of New York. In addition to being the single point of contact for the State on all issues related to broadband, the Program Office is a facilitator and conduit for the State to secure federal funds to ensure every New Yorker has access to affordable high speed Internet service. It also provides the support functions to facilitate the work of the NYS Broadband Development and Deployment Council.

The New York State Broadband Development and Deployment Council (Council) was established by Governor David A. Paterson in June, 2009 under Executive Order No. 22. Oversight for New York's broadband strategy is performed by the Broadband Development and Deployment Council. Governor David A. Paterson appointed 13 individuals to serve on the New York State Broadband Development and Deployment Council. The appointees reflect a variety of backgrounds, including private industry and municipal and State government, each a proven leader or expert in broadband technology and strategy. The Council's primary goal is to provide strategic direction and oversight to ensure all New Yorkers have access to high-speed Internet networks and are able to participate fully in today's digital age.

The Council is tasked with developing strategies to increase broadband infrastructure, expanding digital literacy and adoption rates, improving access to online government services, fostering economic development and leveraging federal stimulus funds and public private partnerships to meet the State's broadband goals. The Executive Order also encourages public private partnerships, economic development and the creation of world-class, high-capacity and high-speed broadband networks. Four Technical Committees support the work of the Council: Digital Literacy and Adoption; E-Government Expansion; Economic Development and Infrastructure; and Planning and Policy.

The Broadband Program Office is currently staffed with a Director and one Administrative Assistant. With increasing demands on the office, added responsibilities, and more than $5M in New York State appropriated Universal Broadband grants to oversee, the Program Office is short on resources to fulfill its responsibilities and primary mission to be the single point of contact in the State for all broadband related issues. There are multiple concurrent projects being managed by the Program Office, as well as coordination of meetings of the Broadband Development and Deployment Council, and inter-agency coordination of broadband projects. The Broadband Program Office Director is an ex-officio member of all four Technical Committees of the Council, and the Program Office is the single entity responsibility for maintaining Broadband Development and Deployment Council records, tracking comments and ex-parte communications with federal agencies, and leading broadband grant project teams.

Being the single point of contact for broadband issues for the State is an important role of the Program Office. With increasing responsibilities and limited resources to manage the office, public outreach is often difficult to coordinate and conduct. As is often the case, staff members from other areas of CIO/OFT and other State agencies fill this void, creating an inconsistent response to broadband projects that deserve the full attention of dedicated staff members. This realignment of other State employees also places other State services and projects at risk for not being completed on time.

SOLUTION:

The proposed solution for addressing the challenges to consistently fulfill the increasing responsibilities of the NYS Broadband Program Office is to increase the number of staff members in the Program Office. The solution includes adding a Project Manager, Project Coordinator, and Outreach Coordinator to existing staff. This would also alleviate the demands on the Program Office Director, who can redirect efforts previously spent on other activities to strategizing and prioritizing the project portfolio and leveraging the additional staff as efficiently as possible. Additional staff members would organize and realign functions of the Broadband Program Office into the following functions:

Proposed State Broadband Office Structure

Broadband Program Office Director and Administrative Assistant

1. Plan and implement State broadband task forces and advisory boards.
2. Collaborate with broadband project sponsors to ensure any potential conflicts are resolved, to maximize funds coming to the State.
3. Remain engaged in State, multi-state, federal, and international discussions on broadband related issues, including issues of broadband, digital literacy, and the National Broadband Plan.
4. Develop plans and strategies to lead and implements State provisions of the FCC's National Broadband Plan.
5. Deliver Broadband policy speeches on behalf of New York State CIO and the Governor's Office.
6. Serve as single point of contact for the Executive Chamber and Congressional Delegation in all matters related to broadband development and deployment in New York State.
7. Develop and maintain relationships with all interested stakeholders and broadband decision makers.
8. Review and recommend changes in laws, rules, programs and policies of New York State to develop streamlined permitting process for broadband projects, advance financing opportunities for broadband infrastructure build out and development, and create and implement local broadband project guidelines.
9. Provide oversight for NYS Universal Broadband Grants.

Public and Intergovernmental Outreach *(Outreach Coordinator)*

1. Prepare annual report for review and approval by the Broadband Development and Deployment Council, and distribution to interested broadband stakeholders.
2. Develop and maintain collaborative relationships with local, State, and federal government entities and lawmakers, State agencies, and commercial broadband providers.
3. Collaborate with NYS Office of Cyber Security and Critical Infrastructure (CSCIC) to collect data, map broadband availability, and analyze results.
4. Plan, coordinate, and deliver comprehensive technical presentations and policy workshops around the State, regarding federal grant opportunities and New York State Broadband strategy.
5. Keep New York State citizens informed about broadband activities in the State, as well as federal activities.

6. Write and publish fact sheets, executive summaries, news bulletins, and Broadband Annual Report (on behalf of the Governor and sent to the State Legislature) describing federal, State, and local Broadband initiatives across the State.
7. Engage other State agencies to support CIO/OFT broadband efforts, as well as the activities of the Broadband Development and Deployment Council.
8. Serve as point of contact for New York State citizens for broadband related activities.
9. Collaborate with federal agencies to maximize federal broadband funding opportunities for the State.

Coordination ***(Project Manager / Project Coordinator)***

1. Plan and coordinate quarterly Broadband Development and Deployment Council meetings.
2. Support activities and efforts of the Broadband Development and Deployment Council.
3. Refer projects, issues, and items requiring the attention of the Broadband Development and Deployment Council to appropriate technical teams, and track progress until complete.
4. Track federal funding opportunities related to broadband infrastructure build out and digital literacy initiatives.
5. Manage submission of reports to the federal government for any broadband related federal grants awarded to CIO/OFT, and coordinate and support the submission of reports for other State agencies receiving awards.
6. Coordinate broadband projects across the State, factoring in geographical dispersion, digital literacy gaps, and broadband availability.
7. Collaborate with CIO/OFT business units on all broadband related federal (FCC and NTIA) public comments and ex-parte communications.
8. Coordinate State agency grant submissions to maximize grant opportunities.
9. Update and maintain New York State's Broadband Federal Stimulus Website: www.nysbroadband.ny.gov, a portal for New York State project sponsors, individuals, and businesses to keep abreast of federal and State programs investing in broadband, as well as New York's Broadband Strategy.
10. Measure results of broadband investments by commissioning broadband studies such as adoption rate studies and institutional needs studies.
11. Publish technical reports and research documents on broadband related activities.
12. Perform Project Management functions for all broadband projects.
13. Coordinate accurate reporting of project status for all federally funded broadband projects
14. Maintain an electronic repository of all broadband related files, documents, spreadsheets, and presentations, including appropriate access for authorized individuals, and confidential protection of certain information.
15. Maintain a physical repository of original documents related to:
    a. FCC, NTIA, RUS and all broadband related federal filings
    b. Original documentation related to the activities and functions of the Broadband Development and Deployment Council, including meeting roll call information, meeting minutes, and non-disclosure agreements
    c. Provide administration and auditing support for NYS Broadband Grants.
    d. Provide post-grant guidance to NYS Broadband Grant recipients.
    e. Develop RFP's for NYS Universal Broadband Grant fund distribution.

OUTCOMES AND BENEFITS:

By increasing staff in the New York State Broadband Program Office, several important functions will consistently be performed, the capacity of the Office to handle additional demands on the office will

increase, and New York citizens will be aware of the benefits of broadband, and informed about federal, State, and local opportunities for funding and digital literacy training. Staff will be dedicated to managing and coordinating broadband projects, tracking additional grant opportunities, and addressing low adoption rates across the State. The initial NTIA Planning Fund Grant Award provided funding for the commission of an Adoption Rate Study. The results of this study will be analyzed, and a plan to support broadband infrastructure and low adoption rates will be developed and proposed for implementation.

COST:
The cost of the additional staff to level out the workload and demands of the Program Office, increase outreach efforts, and expand the functions of the office totals $1,084,087. The proposed new positions include funding for one Project Manager, one Project Coordinator, and one Outreach Coordinator. The total funding request of $1,084,087 includes funding for these positions for the four year grant period. A 20% match is provided by the cost of current State employees, office equipment and facilities, and Consultant resources.

SBDD PURPOSE:
This project proposes to serve two vital SBDD purposes: State Broadband Capacity Building and Programs to Improve Computer Ownership and Internet Usage. The project proposes to perform all of the activities listed in the Grant Guidance document. This project expands both the capacity and reach of the Program Office by adding essential staff members. The charter of the Program Office includes the coordination and management of State resources for all broadband projects. This includes the project proposed for funding under the Computer Ownership and Internet Usage program area.

3. Technical Assistance

NAME: ***New York Libraries: Leading the Way to Digital Literacy***
Through a sub-recipient award to the New York Library Association, this program will provide "train the trainer" workshops on Digital Literacy for library staff across the State who can then train the public.

FUNDS REQUESTED: $1,205,465

PROBLEM:
According to a recent study conducted by the Bill & Melinda Gates Foundation, 38% of the general public has no Internet access at home. Their only access to the Internet is their local public library. Since the late 1990's, public libraries in New York State have been an important provider of digital literacy training to the general public of all ages, offering a variety of classes that show people how to use this technology to search, identify, and utilize accurate information related to such topics as job resource tools, current health information, as well as basic word processing.

Currently, library-sponsored digital literacy classes are not taught according to approved standards or with a consistent curriculum. For example: a person taking a class about word processing in a public library located in New York City might learn digital literacy skills in accordance to a different standard than a person taking the same word processing course in a public library in upstate New York. A person taking such a course would not have the same competencies as someone else in a neighboring community, thereby diminishing the value of the skills learned for potential employers or for educational institutions. Additionally, consistent, standardized digital literacy instruction would

maximize the utilization of broadband use benefits and opportunities and help the general public see the value of having Internet access at home.

SOLUTION:
In 2007, the New York State Office for Technology (OFT) created the NYS Council for Universal Broadband (replaced in 2009 by Governor Paterson's Broadband Development and Deployment Council) with multiple sub-committees to help create broadband capacity around the State. This Council created a *Universal Broadband Strategic Roadmap* that recognized the need to develop and adopt statewide digital literacy standards and supporting programs that provide digital literacy training to all areas of the State, with an emphasis on targeted unserved and underserved populations, in order to increase household Internet adoption rates.

In 2008, the NYS Council for Universal Broadband formally adopted *New York State Digital Literacy Standards* (see attached) and formed a partnership with the New York Library Association (NYLA) to distribute, publicize, and promote training for the new standards.

The New York Library Association proposes to implement this key component of the State's *Universal Broadband Strategic Roadmap* through a SBDD funded project entitled: *New York Libraries: Leading the Way to Digital Literacy*. The project will entail the following:

1) Develop the curriculum/course guide for workshop instructors to utilize in teaching the Digital Literacy Standards to librarians,
2) Organizing and scheduling 48 regional training workshops on the Digital Literacy Standards over four years,
3) Train a total of 1,440 library staff (10% of all librarians in the State) from all 755 public libraries across suburban, rural and urban regions, using a "train-the-trainer" approach,
4) Develop a reference website for information on the standards, training sessions, curriculum, Q & A, etc, and
5) Provide handouts and other teaching tools for "train-the-trainers" to take back to their libraries to hold training sessions on digital literacy standards for the remainder of their staff and eventually the public.

OUTCOMES AND BENEFITS:
The project *New York Libraries: Leading the Way to Digital Literacy* would be evaluated annually according to outcome-based evaluation (OBE) techniques. Several outcomes/benefits are expected from this project. They are:

- Digital literacy training throughout New York State would be standardized, with training participants exposed to consistent course content;
- 48 regional train-the-trainer workshops would train a maximum of 1,440 library staff from all sections of New York State and from all types of public libraries: rural, urban, and suburban; about 10% of the librarians in the State.
- All 755 libraries in the State would receive copy of standards, curriculum/course guide and teaching tools to utilize at their library for training staff and the public.
- A reference website on Digital Literacy Standards would be created.
- A component of the NY State Universal Broadband Strategic Roadmap would be implemented;
- The National Broadband Plan is supported;

Project Integration into Statewide Leadership Initiatives:
New York Libraries: Leading the Way to Digital Literacy is a project that will enhance and expand multiple existing statewide broadband initiatives.

The *NY State Universal Broadband Strategic Roadmap* (see plan at (http://www.oft.state.ny.us/assets/documents/Final_Broadband_Strategy_June2009.pdf) adopted in June 2009 outlines State broadband objectives including the development of digital literacy standards and the delivery of digital literacy training through community anchor institutions, including libraries (see pages 36-37).

In 2009-2010, the NY State Education Department developed and adopted a Statewide Education Technology Plan which outlined recommendations for schools and libraries regarding their technology capacity and capabilities. Teaching digital literacy according to standards was one of the Plan's recommendations (see more info at www.emsc.nysed.gov/edtech).

COST:

1) Development of the curriculum/course guides/instructional materials are estimated to cost $15,000.
2) The cost of providing 48 regional train-the-trainer workshops is estimated to be $600,000 - $12,500 per workshop (includes instructor fee, workshop supplies, and a $325 stipend for libraries that send staff to workshops to cover travel expenses and cost of substitute staff to cover shift during their absence from the library).
3) Personnel costs to administer the project are estimated to be the following:
    - NYLA would hire a Project Administrator at a cost of $47,200 per year (including benefits) for 4 years, or $188,800 – Such person would manage all aspects of the project including a periodic evaluation, and fulfill all required reporting requirements.
    - NYLA would also hire/assign Project Assistant to supplement administrative support to the Project Administrator at a cost of $29,500 per year (including benefits) for total of $118,000.
4) Travel costs (at federal rates) for the Project Administrator/Project Assistant are estimated to be $9,600.
5) Project-specific supplies are estimated to be $2,000 for the 4 years and the purchase of two computers ($2,400) for the Project Administrator and Project Assistant.
6) Website development costs and maintenance are estimated to be $10,500.
7) Printing of handouts, course guides/instructional tools to give to workshop participants to take back to their libraries is estimated to be $21,600.
8) A mid-level administrative position at CSCIC is funded 50% by this project.

The in-kind match will be provided by NYLA (includes staff time and benefits) and contributed time from library staff at each of the libraries in the State.

SBDD PURPOSE:
The project addresses the Technical Assistance category by providing "technical expertise to local institutions" through the publication and dissemination of State approved Digital Literacy Standards and "include activities such as train-the-trainer" professional development to library staff who would attend regional workshops on the State digital literacy standards and then return to their libraries to train both library staff and the general public on those State standards

4. Programs to Improve Computer Ownership and Internet Usage

NAME: ***NYS Computer Subsidy and Digital Literacy Outreach Program***
New York State is requesting funds to issue subgrants of up to $50,000 each to at least 20 eligible community organizations for the purpose of digital literacy training, subsidized computer ownership, and subsidized Internet service plans.

FUNDS REQUESTED: $1,249,300

PROBLEM:
New York State's deliverables to the NTIA to develop a National Broadband Map are currently underway. Initial analysis has identified a broadband availability rate in the mid ninety percentile. Based on national studies, and smaller adoption rate studies in New York City and other areas of the State, the "take rate," or the percentage of households that choose to subscribe to broadband is much lower. While there are several grant programs and broadband infrastructure projects underway to address the lack of broadband availability in the State, there are a very limited number of programs to address low adoption rates. Furthermore, many programs address the issue on a much larger scale, which discourage smaller local community service organizations from applying for these funds. The most effective way to address affordability issues, and other barriers of entry to the Internet, is at the local community level, where these needs can be addressed directly with individual citizens. There are several problems which affect broadband adoption rates. In repeated broadband adoptions studies (NTIA, FCC National Broadband Plan, and Pew Center for States) cost and digital literacy are the most pervasive issues underlying lowering Internet adoption rates.

SOLUTION:
The NYS Computer Subsidy and Digital Literacy Outreach Program proposes to partner with the broadband vendor community to offer reduced and subsidized Internet service rates to eligible individuals. The program will also provide digital literacy training and computers to eligible individuals upon the completion of a certified digital literacy course. Subgrants of up to $50,000 each will be awarded to eligible community service organizations, including community colleges and other not-for-profit organizations, for the purposes of providing the subsidies and computer equipment at the local level. Community organizations eligible to apply for the subgrants will be areas of the State in which Internet adoption rates are the lowest, and in which affordability and lack of digital literacy are identified issues.

To leverage grant money as much as possible, partnerships will be created with Internet service providers, computer resellers, and Certiport, a nationally recognized digital literacy certification center: http://www.certiport.com/Portal/desktopdefault.aspx?page=common/pagelibrary/mos2007.html
NYS CIO/OFT has experience administering grants, and administered $5M in competitive grants 2008, and is scheduled to issue another RFP for infrastructure build-outs specifically totaling $7.5M in 2010.

OUTCOMES AND BENEFITS:
This project will enable New York State to close the digital divide in the areas where digital literacy training is most needed. It will also address a major barrier to entry to Internet subscribership and affordability. By leveraging grant dollars with discounts provided by Internet service providers and computer resellers, individuals will be able to leave digital literacy training centers with a computer to

use newly found skills, and a subsidized Internet service rate to tap into the resources of the Internet – including public benefits, job boards, job training, and entrepreneurial activities.

One New York program, *Computers for Youth*, claimed great success in launching a local effort to improve adoption rates in New York City and other urban areas. In Atlanta, 29% of households had Internet access before the group started work. After they completed their program, 61% of households had access. The co-founder of the program, Elizabeth Stock, said "The relevance of broadband, as well as digital literacy, accounts for more of why people are adopters than does cost. Even without addressing cost, you can have a pretty big impact." By incorporating solutions to both the digital literacy and cost elements, the proposed program can increase adoption rates even more.

Broadband is a critical engine for communities to enhance social and economic well-being and a vital resource to educate our youth, create jobs, promote public safety, and deliver essential services such as healthcare. Universal broadband capabilities enable citizens, businesses and visitors to enjoy the resources available through the Internet. While the promise of broadband is great, the reality has yet to meet the promise in New York State. Broadband has not fully arrived for all New Yorkers.

The New York State Universal Broadband Strategic Roadmap is a comprehensive and balanced mix of broadband infrastructure expansion and effective community outreach programs to stimulate demand, promote digital literacy, and educate disadvantaged, disenfranchised, and uninformed populations for sustainable adoption.

Specific goals of the State's broadband strategy include:

- Provide all New Yorkers access to high speed, affordable broadband services from anywhere, at anytime, by anyone;
- Close the digital divide and increase digital literacy levels by providing training and educational opportunities, in unserved and underserved, urban and rural communities;
- Foster economic development and build stronger public/private partnerships;
- Accelerate the use of State e-government services offered over the Internet to citizens, businesses, and visitors;
- Create jobs through innovative community-based digital literacy and technology training programs to increase household technology adoption rates;
- Achieve and maintain speed and coverage goals aligned with State and federal policies to achieve and sustain competitive advantages; and
- Align State strategies with the principles and program goals of the American Reinvestment and Recovery Act (ARRA) of 2009 to optimize funding that stimulates the New York State economy.

While building infrastructure to increase broadband availability is important, ensuring citizens using technology can improve their quality of life is equally important. If broadband is available, but not affordable, its full value to New Yorkers cannot be achieved. Similarly, if broadband is available and affordable, but citizens have not been exposed or educated to its capabilities and benefits, the State's vision cannot be realized. Technology adoption and cultural barriers must be overcome. Computer ownership and network connection adoption rates of 100 percent are relatively easy in affluent communities. The challenge is to bring the benefits of this technology infrastructure, and the increasingly rich educational, health, government, training/retraining and entertainment capabilities to all New Yorkers.

To determine eligible communities targeted to receive funds in this proposal, New York State will leverage previously awarded federal grants to create synergy among grant goals. Using planning funds provided by NTIA for the first round of funding in 2009, New York State will commission an Adoption Rate Study to measure adoption rates in the State using a comprehensive questionnaire and survey process. In addition, New York State is seeking data from the FCC to analyze adoption rates directly from broadband service providers. Using the data from one or both of these methods, a threshold will be established and the results of the adoption rate data will be analyzed to determine which areas of the State that have the lowest adoption rates.

To be a full participant in both the Information Age and the Innovation Economy, access to affordable high speed broadband Internet service is critical for individuals and businesses. Although broadband infrastructure has been deployed throughout New York State, there are still communities where access to broadband is neither affordable nor available to citizens and businesses. The case for investing in broadband as an economic development strategy for encouraging commerce and revitalizing areas across the State is increasingly clear. We believe this funding request will go a long way to help New York State close the digital divide and create the "e-citizens" that are so vital to today's society and economy.

COST:
The primary cost of this program is the disbursement of at least twenty $50,000 or smaller sub grants to community organizations in targeted areas of the State where broadband adoption rates are lowest. Additional expenses for this project are staff to administer the grants, and perform the outreach required for working with individual community organizations.

SBDD PURPOSE:
This project proposes to serve two vital SBDD purposes: Programs to Improve Computer Ownership and Internet Usage, and State Broadband Capacity Building. The project proposes to perform the activities listed in the Grant Guidance document. This project expands both the capacity and reach of the Program Office by adding essential staff members to administer the grant program and outreach to work with local community service organizations. The charter of the Program Office includes the coordination and management of State resources for all broadband projects.

5. New York's Comprehensive Approach

"In building the New Economy, we cannot afford to leave any part of New York State without modern, high-speed connection to the Internet. The Internet is essential not only for jobs and business opportunities, but also for public safety, education and access to health and other services. In these challenging fiscal times, we must take every opportunity to maximize federal stimulus funding opportunities to help make necessary investments to strengthen our communities and grow our economy, especially providing affordable access to high-speed Internet service throughout New York."
--Governor David A. Paterson

New York State is pursuing a comprehensive strategy to realize the vision of having affordable, high-speed broadband for all New Yorkers and to promote the efficiencies of online government and engaged "e-citizens". Governor David A. Paterson has included Universal Broadband among his Administration's priorities. In June, 2009, via Executive Order #22, Governor Paterson established the Broadband Development and Deployment Council and appointed 13 members from both government and industry to prepare strategic recommendations on broadband. The Council replaced and codified the prior activities of an ad hoc Universal Broadband Council organized in 2007 under the direction of the State CIO. The Council created four Technical Committees to pursue specific actions in the following areas: Digital Literacy and Adoption; E-Government Expansion; Economic Development and Infrastructure; and Planning and Policy.

The Council recently approved and published its first Annual Report for the 2009-10 fiscal year (April 1, 2009 through March 31, 2010), citing the following major achievements to advance broadband capabilities for all New Yorkers:

- The Council developed and recommended statewide digital literacy standards to the NYS Department of Education to provide statewide minimum computer proficiency skills for all schools;
- The State's Broadband Program Office was established to oversee all of the State's broadband planning activities and projects, and to coordinate all federal and State broadband grant programs. The Broadband Program Office submitted 22 NYS grant applications for $775 million for Round 1 Stimulus Funding;
- New York State was awarded $2.5 million, one of the largest grants from the federal stimulus State Broadband Data and Development Program (SBDD), to map the State. New York's broadband mapping efforts, started by the former Broadband Council two years ago, were already ahead of most states;
- New York State public and private organizations were awarded $77.5 million in federal stimulus broadband grants;
- Governor Paterson established the Innovation Matching Grant Fund, which awarded $4.95 million in matching funds to private broadband grant applicants. This program provide a 10 percent match for every stimulus dollar the federal government awards through competitive grants to research facilities, municipalities, and businesses in New York State; and
- The *New York State Universal Broadband Strategic Roadmap* was enhanced and published to incorporate the federal stimulus funding criteria and priorities.

The Council's full Annual Report is available at:
http://www.cio.state.ny.us/assets/documents/2009BroadbandAnnualReport.pdf

Publishing the *New York State Universal Broadband Strategic Roadmap* ranks at the top of the accomplishments. The *Strategic Roadmap* is a vital tool for any organization, public or private, seeking to develop broadband connectivity or applications in the State. The goals set forth in the *Strategic*

Roadmap will be achieved by executing sound fiscal management practices, leveraging existing State-owned and privately held assets, exploiting State procurement models for cost-efficiency, engaging in State agency program collaboration, championing public/private partnerships whenever feasible, and insisting on supplier diversity to deploy broadband services. The *Strategic Roadmap* is available at: http://www.cio.state.ny.us/assets/documents/Final_Broadband_Strategy_June2009.pdf.

The projects proposed in this SBDD Supplemental Grant application all work seamlessly within the State's comprehensive strategy. The broadband mapping program is already providing high value in presenting a detailed view of the State's broadband landscape. What is being revealed with the mapping is that although New York has a high overall rate of household broadband availability at over 96%, the Unserved population exceeds 700,000 New Yorkers who are widely scattered across the State in pockets of broadband availability gaps. The mapping is also bringing into focus the levels of competition among broadband providers, broadband technologies that are deployed across the State, broadband service speeds, and more. This mapping informs the efforts of the Broadband Development and Deployment Council as they pursue strategic initiatives.

Key among those initiatives is to address digital literacy. Broadband adoption rates in New York are far lower than the rates of household broadband availability and if we are to close the Digital Divide, we must pursue actions that address barriers to wider broadband adoption. The State's high population and diversity of demographic characteristics underscore the importance of addressing digital literacy issues. Our proposal to make the New York Library Association a sub-recipient of funds in the Technical Assistance category will directly address digital literacy by training librarians across the State with our newly adopted Digital Literacy Standards. Librarians will then be well positioned to assist and train the segment of the public who rely on public libraries to access the Internet.

New York's proposed project under Programs to Improve Computer Ownership and Internet Usage will provide multiple subawards of up to $50,000 each to community organizations in targeted areas of the State where adoption rates are lowest. The funds will subsidize the purchase of computers and broadband connections to provide community-based training and access to the Internet through organizations that are already established and dealing with targeted populations.

Finally, we propose to integrate these programs through a professionally-staffed Broadband Program Office. The Office will serve as the central point of coordination for all of the activities occurring with both State and federal funding resources to bring New York into the forefront of the digital age.

All of the projects are State led, working with a suite of partner organizations that bring representatives of key stakeholder organizations "to the table" to develop solutions that will truly fit our unique environment and circumstances. Where possible, any contract engagements to support project activities are awarded to entities found within the State, such as the University at Albany's Center for Technology in Government. New York is also leveraging the SBDD funds to create high-tech jobs in New York to carry out the program actions.

The evidence of need for broadband actions in New York is strong, and we believe that by bringing together the stakeholders, coordination structure, and resources that have been organized by Governor Paterson with the funding available under the SBDD, we can make substantial progress in realizing New York's vision for universal broadband.

Letters of Support

Letters are included on the following pages from:

Governor David A. Paterson
New York State Telecommunications Association
New York State Library Association
New York State Education Department

STATE OF NEW YORK
EXECUTIVE CHAMBER
ALBANY 12224

DAVID A. PATERSON
GOVERNOR

June 24, 2010

Anne Neville, Program Director
State Broadband Data and Development Program
National Telecommunications and Information Administration
Department of Commerce
1401 Constitution Avenue, NW
Washington, DC 20230

Dear Ms. Neville:

I am pleased to offer this letter of support for supplemental grant funding to the NYS Office of Homeland Security's Office of Cyber Security and Critical Infrastructure Coordination (CSCIC).

I have been a staunch advocate for all New Yorkers to have access to affordable, high-speed Internet. My Broadband Development and Deployment Council is working to develop policies and plans that will help enable our State to fully participate in modern, e-government services.

A critical component to realizing this vision is a clear understanding of where broadband availability gaps exist, the types of broadband services available to our citizens, and the levels of competition from providers across the Empire State. The broadband mapping being prepared by CSCIC is bringing these facts into focus for the first time. The mapping will enable the policy-makers on my Council to formulate targeted strategies and recommendations for closing the digital divide. I am also pleased that we will soon launch our State Broadband Mapping website, where citizens will be able to explore the details on broadband availability across the State and be able to make informed choices on broadband services.

The supplemental grant funding we are requesting will enable us to continue the broadband mapping and will also provide essential support for dedicated staffing of my Broadband Program Office as well as support for a new digital literacy program to be undertaken in collaboration with the NYS Library Association.

As the NTIA evaluates our application for supplemental funding under the Program, we convey our strong support for the value of the program in general, and the importance of the grant funding in these challenging fiscal times.

Sincerely,

David A. Paterson

David A. Paterson

NEW YORK STATE TELECOMMUNICATIONS ASSOCIATION, INC.
20 CORPORATE WOODS BOULEVARD
ALBANY, NY 12211
(518) 443-2700 • FAX: (518) 443-2810
www.nysta.com

June 23,2010

Anne Neville, Program Director
State Broadband Data and Development Program
National Telecommunications and Information Administration
Department of Commerce
1401 Constitution Ave, NW
Washington, DC 20230

Dear Ms. Neville,

I am pleased to offer this letter of support for supplemental grant funding to the NYS Office of Homeland Security's Office of Cyber Security and Critical Infrastructure Coordination (CSCIC) for their work in preparing broadband maps for New York.

The membership of the New York State Telecommunications Association (NYSTA) includes both large and small telecommunications providers operating throughout New York, including all of the smaller rural incumbent local exchange carriers (ILEC's) operating in the state. We have enjoyed a very cooperative relationship with CSCIC in the work accomplished to date in this program as evidenced by CSCIC's willingness to explore and develop alternative solutions in meeting the goals of the project. As an example, we worked with CSCIC to develop a more flexible and cost effective method of reporting broadband service availability that was easier for our smaller rural ILEC members and we look forward to continuing our successful collaboration with CSCIC.

Please do not hesitate to contact me should you have any questions concerning this recommendation.

Sincerely,

Robert R. Puckett
President

New York Library Association

The Voice of the Library Community

6021 State Farm Road, Guilderland, NY 12084
518-432-6952 / 518-427-1697 FAX
info@nyla.org www.nyla.org

June 23, 2010

William Johnson
Assistant Director
NYS Office of Cyber Security
& Critical Infrastructure Coordination
30 South Pearl Street
Albany, New York 12207

Dear Mr. Johnson:

The New York Library Association looks forward to working with New York State and specifically the Office of Cyber Security & Critical Infrastructure Coordination in implementing a digital literacy initiative entitled "New York Libraries: Leading the Way to Digital Literacy" as part of your application for a State Broadband Data and Development Grant.

The New York Library Association was established in 1890 and is the oldest state library association in the nation. NYLA represents over 4,000 public, college, school and special librarians and libraries from around the state.

NYLA has the experience and organizational capacity to provide training on a statewide basis as well as the expertise in digital literacy that would enable us to fulfill our role in CSCIC's grant application.

NYLA holds an annual conference every year that brings together over 1,000 library staff and trustees to a three day event that offers over 100 educational workshops and 150 exhibitors. In addition, we hold dozens of regional workshops around the state in partnership with libraries, community colleges and other institutions.

Librarians and libraries play a key role in bridging the digital divide and are a community resource for all types of literacy training, especially helping those in underserved areas to access the internet and maximize the potential benefits it can provide.

Sincerely yours,

MICHAEL J. BORGES
Executive Director

THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12230

Deputy Commissioner for Cultural Education
Tel: 518-474-5978
Fax: 518-474-2718

June 21, 2010

Mr. Michael Borges, Executive Director
The New York Library Association
6021 State Farm road
Guilderland, New York 12084

Dear Mr. Borges,

The New York State Library, a component of the State Education Department, commits its partnership support for an application submitted by the New York Library Association entitled **"New York Libraries: Leading the Way to Digital Literacy"** as part of the New York State Office of Cyber Security & Critical Infrastructure Coordination's application for the State Broadband Data & Development Grant Program.

All of New York State's citizens will benefit from this proposal as it will stimulate workforce development and economic growth through the development and delivery of digital literacy skills to the general public.

Sincerely,

Jeffrey W. Cannell
Deputy Commissioner for Cultural Education
New York State Education Department
Cultural Education Center
Room 10A33
Albany, NY 12230

GRANTEE NAME:	(NY) CSCIC Broadband Mapping Project

Directions: For exch sheet, please edit the cells that are empty, not the cells with the grey background.

PLEASE ENTER YOUR EXISTING, APPROVED BUDGET BELOW. It should match your current SF 424.

EXISTING BUDGET	Federal	Match	Total
Personnel Salaries	$760,954	$190,238	$951,192
Fringe Benefits	$337,204	$84,301	$421,505
Travel	$28,823	$7,206	$36,029
Equipment	$176,842	$44,211	$221,053
Supplies	$4,800	$1,200	$6,000
Subcontracts	$1,239,478	$309,869	$1,549,347
Construction	*0*	*0*	*0*
Other	$0	$0	$0
Total Direct Costs	$2,548,101	$637,025	$3,185,126
Total Indirect Costs	$0	$0	$0
Total Costs	$2,548,101	$637,025	$3,185,126
% Federal Share	80.00%		
% Applicant Share		20.00%	

PLEASE DO NOT ENTER TEXT BELOW. It will populate automatically after you complete the other sheets.

REQUESTED BUDGET	Federal	Match	Total
Personnel Salaries	$3,155,527	$937,846	$4,093,373
Fringe Benefits	$1,602,265	$393,641	$1,995,906
Travel	$119,995	$0	$119,995
Equipment	$374,400	$180,000	$554,400
Supplies	$39,400	$0	$39,400
Subcontracts	$1,718,551	$396,000	$2,114,551
Construction	*$0*	*$0*	*$0*
Other	600,000	$0	$600,000
Total Direct Costs	$7,610,138	$1,907,487	$9,517,626
Total Indirect Costs	$0	$0	$0
Total Costs	$7,610,138	$1,907,487	$9,517,626
% Federal Share	79.96%		
% Applicant Share		20.04%	

(NY) CSCIC Broadband Mapping Project	Fed Request as % of total project cost: 80%					79.96%	
NEW FEDERAL REQUEST ONLY	Project Yr 2	Project Yr 3	Project Yr 4	Project Yr 5	Total		Projects
Personnel Salaries							Mapping
Project Director	0	78,272	80,620	83,038	$241,930		Address Points
Outreach Coordinator	0	47,604	49,032	50,503	$147,140		Digital Literacy
GIS Personnel 1 (GIS Tech)	0	49,974	51,473	53,017	$154,463		[redacted]
GIS Personnel 2 (GIS Tech)	0	49,974	58,517	60,273	$168,764		
GIS Personnel 3 (Data Analyst)	0	68,366	70,417	72,530	$211,313		Computer Ownership
IT Infrastructure Support	0	40,620	33,471	25,103	$99,194		[redacted]
Application Developer	0	40,620	33,471	25,103	$99,194		
Sr. Technical Manager - Leading Practices	54,571	84,312	85,576	86,879	$311,338		
Summer Student Interns (2 @ $15 per hr)	0	12,000	12,000	12,000	$36,000		
GIS Personnel 4 (GIS Tech - Address Points Project - G20)	42,610	58,517	72,008	74,169	$247,304		
GIS Personnel 5 (GIS Tech - Address Points Project Outreach - G17)	36,389	49,974	58,536	60,292	$205,190		
Project Administrator - Digital Literacy Project	40,000	42,000	44,100	46,305	$172,405		
Project Assistant - Digital Literacy Project	25,000	26,250	27,563	28,941	$107,753		
[redacted]	66,375	68,366	70,417	72,530	$277,688		
	81,000	83,430	85,933	88,511	$338,874		
	60,750	62,573	64,450	66,383	$254,155		
Outreach Coordinator - Computer Ownership(25% Allocated)	20,250	20,858	20,858	20,858	$82,823		
	0	0	0	0	$0		
	0	0	0	0	$0		
	0	0	0	0	$0		
Total	426,944	883,708	918,441	926,434	$3,155,527	$3,155,527	
Fringe Benefits							
Project Director	0	42,243	43,511	44,816	$130,570		
Outreach Coordinator	0	25,692	26,463	27,257	$79,411		
GIS Personnel 1 (GIS Tech)	0	26,971	27,780	28,613	$83,364		
GIS Personnel 2 (GIS Tech)	0	26,971	31,582	32,529	$91,082		
GIS Personnel 3 (Data Analyst)	0	36,897	38,004	39,144	$114,046		
IT Infrastructure Support	0	21,923	18,064	13,548	$53,535		
Application Developer	0	21,923	18,064	13,548	$53,535		
Sr. Technical Manager - Leading Practices	29,452	45,503	46,186	46,889	$168,029		
Summer Student Interns (2 @ $15 per hr)	0	6,476	6,476	6,476	$19,429		
GIS Personnel 4 (GIS Tech - Address Points Project - G20)	22,996	31,582	38,863	40,029	$133,470		
GIS Personnel 5 (GIS Tech - Address Points Project - G17)	19,639	26,971	31,592	32,540	$110,741		
Project Administrator @ 18% Fringe Rate - Digital Literacy Project	7,200	7,560	7,938	8,335	$31,033		
Project Assistant @ 18% Fringe Rate - Digital Literacy Project	4,500	4,725	4,961	5,209	$19,396		
[redacted]	35,823	36,897	38,004	39,144	$149,868		
	43,716	45,027	46,378	47,769	$182,890		
	32,787	33,770	34,783	35,827	$137,168		
Outreach Coordinator - Computer Ownership(25% Allocated)	10,929	11,257	11,257	11,257	$44,699		
	0	0	0	0	$0		
	0	0	0	0	$0		
	0	0	0	0	$0		
Total	207,041	452,388	469,906	472,931	$1,602,265	$1,602,265	
Travel							
In-State	16,400	22,865	21,865	20,865	$81,995		
Out-of-State	5,000	11,000	11,000	11,000	$38,000		
Total	21,400	33,865	32,865	31,865	$119,995	$119,995	
Equipment							
NYSOFT Hosting of CSCIC Mapping Application ($29,000 per year)	29,000	58,000	58,000	58,000	$203,000		
Workstations - Mapping Project & Address Points (11 @ $3,000 each)	9,000	18,000	6,000	0	$33,000		
Telecom Services - Mapping and Adddress Points	0	6,000	6,000	6,000	$18,000		
Furnishings = $2,000 per person for 4 additional staff members	4,000	4,000	0	0	$8,000		
Software Annual Support	0	20,000	20,000	20,000	$60,000		
MMNT upgrade server hardware & data storage	30,000	0	0	0	$30,000		
Oracle license for MMNT(Production and QA)	20,000	0	0	0	$20,000		
Two PCs @ 1200 ea. - Digital Literacy Project	2,400	0	0	0	$2,400		
	0	0	0	0	$0		
	0	0	0	0	$0		
	0	0	0	0	$0		
Total	94,400	106,000	90,000	84,000	$374,400	374,400	
Supplies							
Office Supplies per year - Mapping Project (13 positions @ $300 each)	900	3,300	3,300	3,300	$10,800		
Office Supplies - Digital Literacy Project	500	500	500	500	$2,000		
Design and Printing of Curriculum/Course Guides, etc. - Digital Literacy Project	5,400	5,400	5,400	5,400	$21,600		
[redacted]	5,000	0	0	0	$5,000		
	0	0	0	0	$0		
	0	0	0	0	$0		
	0	0	0	0	$0		
Total	11,800	9,200	9,200	9,200	$39,400	39,400	
Subcontracts							
CTG Speed Data Verification Project (Continued Years 2-5)	0	40,000	40,000	40,000	$120,000		
CTG Speed Data Verification Hosting (Continued Years 2-5 - SOW Part B)	0	7,079	7,346	7,626	$22,051		
Broadband Price Gathering and Verification	0	20,000	20,000	20,000	$60,000		
NAVTEQ Address Point Processing & Alternate Addressable Units Table	110,000	145,000	70,000	35,000	$360,000		
Create Public Version of MMNT	0	70,000	0	0	$70,000		
Programming Upgrades to MMNT	50,000	0	0	0	$50,000		
Upgrade Web-based MMNT Training Tool	0	16,000	0	0	$16,000		
Consulting Services for Assessment Data Processing from Cornell Program on Applied Demographics	20,000	40,000	0	0	$60,000		
Consulting Services for Utility Data Processing	0	35,000	0	0	$35,000		
Website Design and Maintenance - Digital Literacy Project	2,625	2,625	2,625	2,625	$10,500		
Curriculum Development Consultant - Digital Literacy Project	15,000	0	0	0	$15,000		
SUBGRANTS to Local Community Organizations (<$50K each)	450,000	450,000	0	0	$900,000		
	0	0	0	0	$0		
	0	0	0	0	$0		
	0	0	0	0	$0		
Total	647,625	825,704	139,971	105,251	$1,718,551	1,718,551	
Construction	0	0	0	0	$0		
Other					$0		
Digital Literacy Workshops - Digital Literacy Project	150,000	150,000	150,000	150,000	$600,000		
	0	0	0	0	$0		
	0	0	0	0	$0		
Total	150,000	150,000	150,000	150,000	$600,000	600,000	
Total Direct Costs	1,559,210	2,460,864	1,810,383	1,779,680	$7,610,138	7,610,138	
Total Indirect Costs	0	0	0	0	$0		
Total Costs	1,559,210	2,460,864	1,810,383	1,779,680	$7,610,138		

(NY) CSCIC Broadband Mapping Project								
PROPOSED MATCH FOR NEW FEDERAL FUND REQUEST	Project Yr 2	Project Yr 3	Project Yr 4	Project Yr 5	Total			
Personnel Salaries								
Sr. Attorney G-25 (2%)	1,616	1,664	1,714	1,766	$6,760			
Program Technology Analyst 6: SG M-5 (5% of Yrs 3-5)	0	6,581	6,779	6,982	$20,342			
Program Technology Analyst 5: SG M-4 (10% of Yrs 3-5)	0	11,841	12,196	12,562	$36,599			
Project Director (25%)	0	25,331	25,331	25,331	$75,992			
GR-27 Manager Info Tech Services 1 (5%)	4,694	4,835	4,980	5,129	$19,637			
Gr-25 ITS 4 Database (5%)	4,235	4,362	4,493	4,628	$17,717			
Information Technology Specialist II: SG 18 (10%)	5,479	5,643	5,813	5,987	$22,922			
Information Technology Specialist III: SG 23 (5%)	3,682	3,792	3,906	4,023	$15,404			
Project Manager - Streets & Addresses Data (20%)	20,164	20,769	21,392	22,034	$84,360			
Gr-23 Information Technology Specialist-3 (10%)	7,287	7,505	7,730	7,962	$30,485			
GR-16 Mapping Technician 3 (10%)	5,735	5,907	6,084	6,267	$23,993			
NYLA Executive Director (10%) - Digital Literacy Project	9,300	9,300	9,300	9,300	$37,200			
NYLA Secretarial Support (15%) - Digital Literacy Project	4,500	4,500	4,500	4,500	$18,000			
NYLA Finance Manager (10%) - Digital Literacy Project	4,000	4,000	4,000	4,000	$16,000			
NYS Library Staff - Publicity and Curriculum Development - Digital Literacy Project	6,000	6,000	6,000	6,000	$24,000			
NYS Library Staff - 755 New York State Public Libraries (1 Librarians est @ $10 per hour) - Digital	60,400	60,400	60,400	60,400	$241,600			
Administrative Assistant - Computer Ownership (100%)	59,000	60,770	62,593	64,471	$246,834			
	0	0	0	0	$0			
	0	0	0	0	$0			
	0	0	0	0	$0			
	0	0	0	0	$0			
	0	0	0	0	$0			
Total	196,092	243,201	247,211	251,342	$937,846	937,846		
Fringe Benefits								
Sr. Attorney G-25 (2%)	872	898	925	953	$3,649			
Program Technology Analyst 6: SG M-5 (5% of Yrs 3-5)	0	3,552	3,659	3,768	$10,979			
Program Technology Analyst 5: SG M-4 (5% of Yrs 3-5)	0	6,391	6,582	6,780	$19,753			
Project Director (25%)	0	13,671	13,671	13,671	$41,013			
GR-27 Manager Info Tech Services 1 (5%)	2,533	2,609	2,688	2,768	$10,598			
Gr-25 ITS 4 Database (5%)	2,286	2,354	2,425	2,498	$9,562			
Information Technology Specialist II: SG 18 (5%)	2,957	3,046	3,137	3,231	$12,371			
Information Technology Specialist III: SG 23 (5%)	1,987	2,047	2,108	2,171	$8,314			
Project Manager - Streets & Addresses Data (12%)	10,883	11,209	11,545	11,892	$45,529			
Gr-23 Information Technology Specialist-3 (10%)	3,933	4,051	4,172	4,297	$16,453			
GR-16 Mapping Technician 3 (10%)	3,095	3,188	3,284	3,382	$12,949			
NYLA Executive Director (10%) - Digital Literacy Project	$1,674	$1,674	$1,674	$1,674	$6,696			
NYLA Secretarial Support (15%) - Digital Literacy Project	810	810	810	810	$3,240			
NYLA Finance Manager (10%) - Digital Literacy Project	720	720	720	720	$2,880			
NYS Library Staff - Publicity and Curriculum Development - Digital Literacy Project	3,238	3,238	3,238	3,238	$12,953			
NYS Library Staff - 755 New York State Public Libraries (1 Librarians est @ $10 per hour) - Digita	10,872	10,872	10,872	10,872	$43,488			
Administrative Assistant - Computer Ownership (100%)	31,842	32,798	33,781	34,795	$133,216			
	0	0	0	0	$0			
	0	0	0	0	$0			
Total	77,702	103,127	105,291	107,521	$393,641	393,641		
Travel								
In-State	0	0	0	0	$0			
Out-of-State	0	0	0	0	$0			
Total	0	0	0	0	$0	0		
Equipment								
ESRI Enterprise License Agreement (Yr 2 = 20% of $100,000, Yr 3-5 = 40% of $100,000)	20,000	40,000	40,000	40,000	$140,000			
Value of Computer Equipment from Vendors (Computer Ownership)	10,000	10,000	10,000	10,000	$40,000			
	0	0	0	0	$0			
Total	30,000	50,000	50,000	50,000	$180,000	180,000		
Supplies								
	0	0	0	0	$0			
	0	0	0	0	$0			
	0	0	0	0	$0			
Total	0	0	0	0	$0	0		
Subcontracts								
	198,000	198,000	0	0	$396,000			
	0	0	0	0	$0			
	0	0	0	0	$0			
Total	198,000	198,000	0	0	$396,000	396,000		
Construction	0	0	0	0	$0			
Other								
	0	0	0	0	$0			
	0	0	0	0	$0			
	0	0	0	0	$0			
	0	0	0	0	$0			
Total	0	0	0	0	$0	0		
Subtotal Direct Costs	501,794	594,329	402,503	408,862	$1,907,487	1,907,487		
Subtotal Indirect Costs	0	0	0	0	$0			
Total Costs	501,794	594,329	402,503	408,862	$1,907,487			

Projects	Match
Mapping	20.04%
Address Points	
Digital Literacy	
Computer Ownership	

(NY) CSCIC Broadband Mapping Project

NEW FEDERAL REQUEST ONLY	Project Yr 2	Project Yr 3	Project Yr 4	Project Yr 5	Total	
Personnel Salaries						
Project Director (75% funded - 25% Match)	0	78,272	80,620	83,038	$241,930	
Outreach Coordinator	0	47,604	49,032	50,503	$147,140	
GIS Personnel 1 (GIS Tech)	0	49,974	51,473	53,017	$154,463	
GIS Personnel 2 (GIS Tech)	0	49,974	58,517	60,273	$168,764	
GIS Personnel 3 (Data Analyst)	0	68,366	70,417	72,530	$211,313	
IT Infrastructure Support	0	40,620	33,471	25,103	$99,194	
Application Developer	0	40,620	33,471	25,103	$99,194	
Sr. Technical Manager - Leading Practices (66% Yr2, 50% Yrs3-5)	54,571	42,156	43,421	44,723	$184,870	
Summer Student Interns (2 ea. @ $15 per hr)	0	12,000	12,000	12,000	$36,000	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	54,571	429,585	432,422	426,291	$1,342,868	1,342,868
Fringe Benefits						
Project Director	0	42,243	43,511	44,816	$130,570	
Outreach Coordinator	0	25,692	26,463	27,257	$79,411	
GIS Personnel 1 (GIS Tech)	0	26,971	27,780	28,613	$83,364	
GIS Personnel 2 (GIS Tech)	0	26,971	31,582	32,529	$91,082	
GIS Personnel 3 (Data Analyst)	0	36,897	38,004	39,144	$114,046	
GIS Personnel 3 (Data Analyst)	0	21,923	18,064	13,548	$53,535	
IT Infrastructure Support	0	21,923	18,064	13,548	$53,535	
Sr. Technical Manager - Leading Practices (66% Yr2, 100% Yrs3-5)	29,452	22,752	23,434	24,137	$99,774	
Summer Student Interns (2 ea. @ $15 per hr)	0	6,476	6,476	6,476	$19,429	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	29,452	231,847	233,378	230,069	$724,746	724,746
Travel						
In-State	813	4,967	4,965	4,965	$15,710	
Out-of-State	0	6,000	6,000	6,000	$18,000	
Total	813	10,967	10,965	10,965	$33,710	33,710
Equipment						
NYSOFT Hosting of CSCIC Mapping Application ($29,000 per year)	0	29,000	29,000	29,000	$87,000	
Workstations - Mapping Project (9 @ $3,000)	3000	18,000	6,000	0	$27,000	
Telecom Services - Mapping and Adddress Points (9 Positions @ $40 per month, 2 Blackb	0	5,040	5,040	5,040	$15,120	
Furnishings = $2,000 per person for 3 additional staff members	2000	4,000	0	0	$6,000	
Software Annual Support	0	20,000	20,000	20,000	$60,000	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	5,000	76,040	60,040	54,040	$195,120	195,120
Supplies						
Office Supplies per year - Mapping Project (8 positions @ $300 each)	300	2,700	2,700	2,700	$8,400	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	300	2,700	2,700	2,700	$8,400	8,400
Subcontracts						
Project Manager $85 per hr @ 1,000 hr (3 months)	0	0	0	0	$0	
CTG Speed Data Verification Project (Continued Years 2-5)	0	40000	40000	40000	$120,000	
CTG Speed Data Verification Hosting (Continued Years 2-5 - SOW Part B)	0	7,079	7,346	7,626	$22,051	
Broadband Price Gathering and Verification	0	20000	20000	20000	$60,000	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	0	67,079	67,346	67,626	$202,051	202,051
Construction	0	0	0	0		
Other					$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	0	0	0	0	$0	0
Total Direct Costs	90,135	818,218	806,850	791,691	$2,506,894	2,506,894
Total Indirect Costs	0	0	0	0	$0	

(NY) CSCIC Broadband Mapping Project - Address Points						
NEW FEDERAL REQUEST ONLY	**Project Yr 2**	**Project Yr 3**	**Project Yr 4**	**Project Yr 5**	**Total**	
Personnel Salaries						
GIS Personnel (GIS Tech - Address Points Project - G20)	42,610	58,517	72,008	74,169	$247,304	
GIS Personnel (GIS Tech - Address Points Project Outreach - G17)	36,389	49,974	58,536	60,292	$205,190	
Sr. Technical Manager- Leading Practices (50%)	0	42,156	42,156	42,156	$126,468	
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	78,998	150,647	172,700	176,616	$578,962	578,962
Fringe Benefits						
GIS Personnel (GIS Tech - Address Points Project - G20)	22,996	31,582	38,863	40,029	$133,470	
GIS Personnel (GIS Tech - Address Points Project Outreach - G17)	19,639	26,971	31,592	32,540	$110,741	
Sr. Technical Manager- Leading Practices (50%)	0	22,752	22,752	22,752	$68,255	
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	42,635	81,304	93,206	95,320	$312,466	312,466
Travel						
In-State	4,500	6,000	5,000	4,000	$19,500	
Out-of-State	0	0	0	0	$0	
Total	4,500	6,000	5,000	4,000	$19,500	19,500
Equipment						
Upgrade existing server hardware & data storage	30,000	0	0	0	$30,000	
Oracle license for MMNT(Production and QA)	20,000	0	0	0	$20,000	
New Workstations - 2 @ $3000 each.	6,000	0	0	0	$6,000	
Telecom Services - Mapping and Adddress Points (2 Positions @ $40 per month)	0	960	960	960	$2,880	
Furnishings - 1 @ $2,000 ea.	2,000	0	0	0	$2,000	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	58,000	960	960	960	$60,880	60,880
Supplies						
Office Supplies per year - 2 @ $300 ea.	600	600	600	600	$2,400	
	0	0	0	0	$0	
Total	600	600	600	600	$2,400	2,400
Subcontracts						
NAVTEQ Address Point Processing & Alternate Addressable Units Table	110,000	145,000	70,000	35,000	$360,000	
Create Public Version of MMNT	0	70,000	0	0	$70,000	
Programming Upgrades to MMNT	50,000	0	0	0	$50,000	
Upgrade Web-based MMNT Training Tool	0	16,000	0	0	$16,000	
Consulting Services for Assessment Data Processing from Cornell Program on Applied Demographics	20,000	40,000	0	0	$60,000	
Consulting Services for Utility Data Processing	0	35,000			$35,000	
					$0	
Total	180,000	306,000	70,000	35,000	$591,000	591,000
Construction	0	0	0	0		
Other					$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	0	0	0	0	$0	0
Total Direct Costs	364,734	545,511	342,466	312,496	$1,565,207	1,565,207
Total Indirect Costs	0	0	0	0	$0	
Total Costs	364,734	545,511	342,466	312,496	$1,565,207	

(NY) CSCIC Broadband Mapping Project (Technical Assistance)

NEW FEDERAL REQUEST ONLY	Project Yr2	Project Yr 3	Project Yr 4	Project Yr 5	Total	
Personnel Salaries						
Project Administrator - Digital Literacy Project	40,000	42,000	44,100	46,305	$172,405	
Project Assistant - Digital Literacy Project	25,000	26,250	27,563	28,941	$107,753	
Grants Administrator - Digital Literacy Project (50%)	33,188	34,183	35,209	36,265	$138,844	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	98,188	102,433	106,871	111,511	$419,002	419,002
Fringe Benefits						
Project Administrator @ 18% Fringe Rate - Digital Literacy Project	7,200	7,560	7,938	8,335	$31,033	
Project Assistant @ 18% Fringe Rate - Digital Literacy Project	4,500	4,725	4,961	5,209	$19,395	
Grants Administrator - Digital Literacy Project (50%)	17,911	18,449	19,002	19,572	$74,934	
	0	0	0	0	$0	
Total	29,611	30,734	31,901	33,116	$125,363	125,363
Travel						
In-State	2,400	2,400	2,400	2,400	$9,600	
Out-of-State	0	0	0	0	$0	
Total	2,400	2,400	2,400	2,400	$9,600	9,600
Equipment						
Two Computers for Project Administrator and Assistant	2,400	0	0	0	$2,400	
	0	0	0	0	$0	
Total	2,400	0	0	0	$2,400	2,400
Supplies						
Office Supplies	500	500	500	500	$2,000	
Design and Printing of Curriculum/Course Guides, etc.	5,400	5,400	5,400	5,400	$21,600	
	0	0	0	0	$0	
Total	5,900	5,900	5,900	5,900	$23,600	23,600
Subcontracts						
Website Design and Maintenance - Digital Literacy Project	2,625	2,625	2,625	2,625	$10,500	
Curriculum Development Consultant - Digital Literacy Project	15,000	0	0	0	$15,000	
	0	0	0	0	$0	
Total	17,625	2,625	2,625	2,625	$25,500	25,500
Construction	0	0	0	0	$0	
Other						
Digital Literacy Workshops	150,000	150,000	150,000	150,000	$600,000	
	0	0	0	0	$0	
Total	150,000	150,000	150,000	150,000	$600,000	600,000
Total Direct Costs	306,124	294,092	299,697	305,552	$1,205,465	1205465
Total Indirect Costs	0	0	0	0	$0	
Total Costs	306,124	294,092	299,697	305,552	$1,205,465	

(NY) CSCIC Broadband Mapping Project - Capacity Building						
NEW FEDERAL REQUEST ONLY	**Project Yr 2**	**Project Yr 3**	**Project Yr 4**	**Project Yr 5**	**Total**	
Personnel Salaries						
Project Manager	81,000	83,430	85,933	88,511	$338,874	
Outreach Coordinator (75% Allocated)	60,750	62,573	64,450	66,383	$254,155	
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	141,750	146,003	150,383	154,894	$593,029	$593,029
Fringe Benefits						
Project Manager	43,716	45,027	46,378	47,769	$182,890	
Outreach Coordinator (75% Allocated)	32,787	33,770	34,783	35,827	$137,168	
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	76,502	78,798	81,161	83,596	$320,058	320,058
Travel						
In-State	7,500	7,500	7,500	7,500	$30,000	
Out-of-State	5,000	5,000	5,000	5,000	$20,000	
Total	12,500	12,500	12,500	12,500	$50,000	50,000
Equipment						
Hosting State Map Application (50% with CSCIC)	29,000	29,000	29,000	29,000	$116,000	
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	29,000	29,000	29,000	29,000	$116,000	116,000
Supplies						
Interactive Map Display Board for Broadband Program Ofc	5,000	0	0	0	$5,000	
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	5,000	0	0	0	$5,000	5,000
Subcontracts						
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	0	0	0	0	$0	0
Construction	0	0	0	0		
Other					$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	0	0	0	0	$0	0
Total Direct Costs	264,752	266,300	273,044	279,990	$1,084,087	1,084,087
Total Indirect Costs	0	0	0	0	$0	

(NY) CSCIC Broadband Mapping Project - Plans to Improve Computer Ownership						
NEW FEDERAL REQUEST ONLY	**Project Yr 2**	**Project Yr 3**	**Project Yr 4**	**Project Yr 5**	**Total**	
Personnel Salaries						
Outreach Coordinator (25% Allocated)	20,250	20,858	20,858	20,858	$82,823	
Grants Administrator (50% Allocated)	33,188	34,183	35,209	36,265	$138,844	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	53,438	55,041	56,066	57,122	$221,667	221,667
Fringe Benefits						
Outreach Coordinator (25% Allocated)	10,929	11,257	11,257	11,257	$44,699	
Grants Administrator (50% Allocated)	17,911	18,449	19,002	19,572	$74,934	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	28,840	29,705	30,259	30,829	$119,633	119,633
Travel						
In-State	2,000	2,000	2,000	2,000	$8,000	
Out-of-State	0	0	0	0	$0	
Total	2,000	2,000	2,000	2,000	$8,000	8,000
Equipment						
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	0	0	0	0	$0	0
Supplies						
Office Supplies per year	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	0	0	0	0	$0	0
Subcontracts						
SUBGRANTS to Local Community Organizations (<$50K each)	450,000	450,000	0	0	$900,000	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	450,000	450,000	0	0	$900,000	900,000
Construction	0	0	0	0	$0	
Other						
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
	0	0	0	0	$0	
Total	0	0	0	0	$0	0
Total Direct Costs	534,278	536,746	88,325	89,951	$1,249,300	1,249,300
Total Indirect Costs	0	0	0	0	$0	