

U.S. DEPARTMENT OF COMMERCE

Performance Progress Report

2. Award Or Grant Number
42-50-M09065

4. Report Date (MM/DD/YYYY)
07/30/2010

1. Recipient Name
Executive Office of the Commonwealth of Pennsylvania

6. Designated Entity On Behalf Of:

3. Street Address
Commonwealth Avenue 207 Finance Building

8. Final Report? Yes No
9. Report Frequency
 Quarterly
 Semi Annual
 Annual
 Final

5. City, State, Zip Code
Harrisburg, PA 17120

7. Project / Grant Period
Start Date: (MM/DD/YYYY)
01/01/2010

7a. End Date: (MM/DD/YYYY)
12/31/2014

8. Reporting Period End Date:
(MM/DD/YYYY)
06/30/2010

9a. If Other, please describe:

10. Broadband Mapping

10a. Provider Table

Number of Providers Identified	Number of Providers Contacted	Number of Agreements Reached for Data Sharing	Number of Partial Data Sets Received	Number of Complete Data Sets	Number of Data Sets Verified
101	101	72	18	53	57

10b. Are you submitting the required PROVIDER DATA by using the Excel spreadsheet provided by the SBDD grants office? Yes No

10c. Have you encountered challenges with any providers that indicate they may refuse to participate in this project? Yes No

10d. If so, describe the discussions to date with each of these providers and the current status

Yes, the Pennsylvania Broadband Mapping team has encountered challenges with some providers operating within the state that have either refused to participate in the project or have not responded to repeated contacts from the project team. More specifically, as of June 30, 2010:

- 10 of 101 (10%) of the broadband providers contacted had not responded to repeated contacts by the project team. These companies are reflected on the attached spreadsheet, with a notation of either "No response" (under the Contact? column).
- 9 of 101 (9%) of the broadband providers contacted had explicitly indicated to our outreach staff that they would not participate in the program. These companies are reflected on the attached spreadsheet, with a notation of "Refuse to participate" (under the "NDA?" column). These nine (9) providers who have refused to cooperate are listed below, along with contact information, a brief overview of the discussions to date, and details on the reason(s) for not cooperating, where available.

1USA.com

P.O. Box 2600, West Lawn, PA 19609-0600, (610) 678-2300

Following written communication, 1USA.com was contact on four separate instances. They indicated that they provide dial-up and DSL ISP services and will soon provide 4G Wimax service. They indicated that they currently do not have a Broadband Service Area Map, and do not have the resources to produce the requested data.*

DBSi

No Address Listed – Recent Bankruptcy, (610) 691-8811

It was discovered that DBSi filed for bankruptcy since we started communicating with them.

Evenlink

650 Champ Avenue, Sunbury, PA 17801, (717) 376-2030

Following written communication, Evenlink was contacted by telephone on two instances. They indicated that they lack the internal resources to provide data.*

NEP Datavision

720 Main Street D, Forest City, PA 18421, (570) 785-3131

Following written conversations, NEP Datavision was contacted by telephone on five instances...(CONTINUED-SEE WORD DOCUMENT FOR FULL TEXT)

10e. If you are collecting data through other means (e.g. data extraction, extrapolation, etc), please describe your progress to date and the relevant activities to be undertaken in the future

The Pennsylvania project is collecting source data directly from broadband service providers and community anchor institutions. Where the source data for provider coverage has gaps, we intend to fill the gaps with Telogical/Centris market intelligence information/data. Where the source data for community anchor institutions is lacking, we are leveraging data elements from other sources. For example, for K-12 Schools, we are utilizing current and historical data from the Pennsylvania Technology Inventory (PATI), a survey administered annually by the Pennsylvania Department of Education, which includes detailed Internet connectivity information, to populate Pennsylvania's Community Anchor Institution database.

The project continues to work closely with the Commonwealth's Geospatial Technologies Steering Committee, relevant state agencies/offices (e.g. Department of Health, Department of Education, Pennsylvania Emergency Management Agency, Governor's Center for Local Governor Services, State System of Higher Education, Public Utility Commission, etc.), and other external partners (e.g. Economic Development Districts, Pennsylvania Commission for Community Colleges, etc.) to seek out additional data sources and partners to augment the data collection and verification efforts.

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

Following the secure collection of data on broadband availability by census block and street segment (as appropriate) directly from providers, Pennsylvania's project employs a multi-prong approach to ensure the data is accurate and complete.

Quality Assurance/Quality Control (QA/QC) – Pennsylvania's QA/QC process screens and compares the data received from providers against the requirements set forth in the NOFA's Technical Appendix and subsequent clarification.

Data Validation via Market Intelligence Sources - Pennsylvania is utilizing Telogical/Centris (wireline) and American Roamer (wireless) market intelligence data as independent sources to conduct analysis against data provided directly by broadband service providers. Where discrepancies exist, further evaluation and due diligence is warranted.

Data Validation Using State Supplied Data Points - data collected by Pennsylvania state government, relative to Act 183 of 2004's requirement to build and maintain an Inventory of Broadband Services, will be used as an additional source to validate provider reported coverage data, recognizing that the aim of Pennsylvania's broadband mapping project is to accomplish the parallel goals of the SBDD program and Act 183 of 2004.

Field Validation - Broadband technicians are visiting designated locations to perform site verification. These evaluations will determine whether the information supplied by providers is accurate, including:

1. Wireline Provider Validation:

- a) Verify existence of circuit infrastructure feeding the area (copper, fiber, cable)
- b) Inspect local distribution huts, where allowed, for existence of the equipment the provider stated they have at those facilities
- c) Witness Access Circuit speed tests, where allowed
- d) Measure distance from DSLAM where applicable and determine access speed capability with an accuracy within 500 feet using mapping software
- e) Collect site pictures
- f) Enter all requir...(CONTINUED-SEE WORD DOCUMENT FOR FULL TEXT)

10g. Have you initiated verification activities? Yes No

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

Following the secure collection of data on broadband availability by census block and street segment (as appropriate) directly from providers, Pennsylvania's project employs a multi-prong approach to ensure the data is accurate and complete.

Quality Assurance/Quality Control (QA/QC) – Pennsylvania's QA/QC process screens and compares the data received from providers against the requirements set forth in the NOFA's Technical Appendix and subsequent clarification.

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- c) Witness Access Circuit speed tests, where allowed
- d) Measure distance from DSLAM where applicable and determine access speed capability with an accuracy within 500 feet using mapping software
- e) Collect site pictures
- f) Enter all required...(CONTINUED-SEE WORD DOCUMENT FOR FULL TEXT)

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

As described in the previous section, manual verification activities were conducted for the May 31, 2010 data submittal to the NTIA. Pennsylvania's consultant, Michael Baker Jr., Inc. is deploying process called SEAS (System for Evaluation and Assessment Statistics) to automate and enhance those validation processes, calculate confidence level and statistical modeling of the data per provider at the census block and road segment level. Evaluation of reported fixed wireless coverage utilizing line of sight analysis, as described in 10f above, will also be implemented. Deployment is planned for the October 2010 delivery to the NTIA.

Maps of completed Provider service areas and data will continue to be furnished back to the Providers for confirmation of the processed/aggregated information and feedback integrated into each Provider's dataset. In addition, aggregated broadband coverage maps will be provided to the regional Economic Development Districts and other partners for review and feedback for their jurisdictions. This stakeholder validation will be conducted for subsequent semi-annual data updates.

Staffing

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

The project peaked at full staffing during the quarter ending June 30, 2010 at 9.88 FTEs during development and validation of the May 31, 2010 broadband mapping submittal to the NTIA.

10k. Is the project currently fully staffed? Yes No

10l. If no, please explain how any lack of staffing may impact the project's time line and when the project will be fully staffed

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

As indicated in 10.j. above, the project peaked at full staffing during the quarter ending June 30, 2010 at 9.88 FTEs during development and validation of the May 31, 2010 broadband mapping submittal to the NTIA. It is not planned that staffing for semi-annual map updates will require the same level of staffing.

10n. Staffing Table

Job Title	FTE %	Date of Hire
State Project Manager	1	01/01/2010
Program Manager	0.82	01/27/2010
Administrative Manager	0.01	01/27/2010
Collaboration Mgr	0.29	01/27/2010
IT Manager	0.06	01/27/2010
Data/Mapping Manager	0.6	01/27/2010
GIS Specialist	2.61	01/27/2010
Software Developer	0.65	01/27/2010
Field Manager	0.3	01/27/2010
Outreach Associate	0.05	01/27/2010
Sub - Field Technician	1.53	03/03/2010
Sub - Software Developer	0.67	05/03/2010
Sub - Telecom Consultant	0.17	02/18/2010
Sub - Sr. GIS Analyst	0.05	04/12/2010
Sub - GIS Programmer	0.05	03/08/2010
Sub - GIS Technician	0	
Sub - Sr. Consultant	0.35	02/01/2010
Sub - Plan/Collaboration	0.68	02/01/2010

Add Row Remove Row

Sub Contracts

10o. Subcontracts Table

Name of Subcontractor	Purpose of Subcontract	RFP Issued (Y/N)	Contract Executed (Y/N)	Start Date	End Date	Federal Funds	In-Kind Funds

Michael Baker Jr. Inc.	Outreach, data collection, integration, analysis, verification, website development and hosting, and other broadband mapping-related services over the term of the 2-year broadband mapping project	Y	Y	01/27/2010	12/31/2011	\$1,547,700	\$0
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Funding

10p. How much Federal funding has been expended as of the end of the last quarter? \$340,565 10q. How much Remains? \$1,405,108

10r. How much matching funds have been expended as of the end of last quarter? \$511,050 10s. How much Remains? \$50,400

10t. Budget Worksheet

Mapping Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
Personal Salaries	\$142,202	\$103,401	\$245,603	\$31,180	\$103,401	\$134,581
Personnel Fringe Benefits	\$55,771	\$40,554	\$96,325	\$10,585	\$40,554	\$51,139
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$0	\$0
Materials / Supplies	\$0	\$0	\$0	\$0	\$0	\$0
Subcontracts Total	\$1,547,700	\$0	\$1,547,700	\$298,800	\$0	\$298,800
Subcontract #1	\$1,547,700	\$0	\$1,547,700	\$298,800	\$0	\$298,800
Subcontract #2						
Subcontract #3						
Subcontract #4						
Subcontract #5						
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$417,495	\$417,495	\$0	\$367,095	\$367,095
Total Direct Costs	\$1,745,673	\$561,450	\$2,307,123	\$340,565	\$511,050	\$851,615
Total Indirect Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$1,745,673	\$561,450	\$2,307,123	\$340,565	\$511,050	\$851,615
% Of Total	75.66	24.34	100	19.51	91.02	36.91

Hardware / Software

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

10v. If yes, please list

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

Not applicable to the Pennsylvania project.

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

10y. If yes, please list

Telological/Centris Wireline Market Intelligence Database
American Roamer Wireless Market Intelligence Data

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

10aa. If yes, please list

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

As indicated in response to 10.d., we had several Broadband Providers who have refused to participate or have not responded to our continued outreach. For those companies who have indicated that they are resource-constrained, Pennsylvania, acting through its vendor, Michael Baker Jr., Inc. will continue to identify ways to partner with providers and provide the resources, expertise, and hands-on assistance necessary to the produce acceptable maps of their service areas from the data/format the provider has available.

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

In accordance with Pennsylvania's work plan, the data collected through the SBDD program will be made available to the public online via a searchable and interactive interface. The beta version of this mapping tool, which is currently undergoing review and testing, is available at <http://www.bakerbb.com/pabroadbandmapping/index.html>.

11. Broadband Planning

11a. Please describe progress made against all goals, objectives, and milestones detailed in the approved Project Plan. Be sure to include a description of each major activity / milestone that you plan to complete and your current status

FALL 2010 BROADBAND SUMMIT—Via email transmitted by NTIA on April 14, 2010, the Commonwealth received authorization to proceed with the facilitation of a statewide Broadband Summit in Harrisburg, PA. We expect attendance of up to 300 attendees representing a wide range of individuals and entities interested in broadband issues from adoption to implementation of broadband-dependent applications to infrastructure deployment challenges. Invitees will include providers and technology companies; government officials; education entities; health care providers; economic developers and technology associations; public safety entities; local governments; and non-profits. Among various objectives, the Broadband Summit will enable the Commonwealth to:

- (1) Create a forum to begin and support a sustainable dialogue among broadband providers, users and government organizations;
- (2) Determine how to approach and best address broadband challenges in a coordinated fashion; and
- (3) Provide a shared learning opportunity to identify and leverage broadband best practices across our State.

To assist with the implementation of the Summit, we have retained the services of Penn State University (PSU) to assist with event coordination and services. We have also formed a partnership with the PSU College of Communication. This will help promote the event, foster a more structured learning environment for participants, and assist with program design and agenda development, and identification of speakers and panelists. Summit website is live: <http://www.programs.psu.edu/broadband2010>

We have secured participation at our September 20-21 event from state regulators (PA Public Utility Commission), from industry associations (NCTA, Pennsylvania Telephone Association, PA Cable Association), and from several broadband providers (Verizon, Clearwire, CenturyLINK, AT&T, etc). We are thrilled to have significant FCC representation thus far...(CONTINUED-SEE WORD DOCUMENT FOR FULL TEXT)

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

No serious issues have been encountered thus far, although it is worth noting that activity will soon ramp up with the commencement of the Regional Working Group and the broadband adoption effort. Currently, the SBDD effort rests primarily with two individuals (Luc Miron from the Governor's Office of Administration and Sue Suleski from the Department of Community & Economic Development). If funded, the Commonwealth's request for the "Capacity Building" component of our supplemental grant request will help alleviate some of the resource and capacity challenges brought upon by our ambitious agenda.

11c. Does the Project Team anticipate any changes to the project plan for Broadband Planning? Yes No

11d. If yes, please describe these anticipated changes. Please note that NTIA will need to approve changes to the Project Plan before they can be implemented

Pennsylvania submitted a supplemental application on June 30, 2010 and awaits an award decision from NTIA. Aside from the additional components and enhancements detailed in that proposal, Pennsylvania anticipates no other changes to the Broadband Planning project plan, unless the outputs of the Broadband Summit dictate otherwise.

As stated above, the outputs and recommendations from the Fall 2010 Broadband Summit will serve to inform the remainder of the Commonwealth's SBDD broadband planning activities. The Commonwealth understands that the NTIA will need to formally approve further aspects and activities of the planning grant.

Funding

11e. How much Federal funding has been expended as of the end of the last quarter? \$0

11f. How much Remains? \$500,000

11g. How much matching funds have been expended as of the end of last quarter? \$0

11h. How much Remains? \$0

11i. Planning Worksheet

Planning Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
Personal Salaries	\$0	\$0	\$0	\$0	\$0	\$0
Personnel Fringe Benefits	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$0	\$0
Materials / Supplies	\$0	\$0	\$0	\$0	\$0	\$0
Subcontracts Total	\$500,000	\$0	\$500,000	\$0	\$0	\$0
Subcontract #1	\$100,000	\$0	\$100,000	\$0	\$0	\$0
Subcontract #2	\$400,000	\$0	\$400,000	\$0	\$0	\$0
Subcontract #3						
Subcontract #4						
Subcontract #5						
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0
Total Direct Costs	\$500,000	\$0	\$500,000	\$0	\$0	\$0
Total Indirect Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$500,000	\$0	\$500,000	\$0	\$0	\$0
% Of Total	100	0	100	0	0	0

Additional Planning Information

11j. Are there any additional project milestones or information that has not been included?

We eagerly await final review and determination by NTIA of our Amended and Supplemental Mapping and Planning grant request. Implementation of future planning activities will be impacted by adjudication of our request.

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

The SBDD grant was awarded by NTIA on January 13, 2010. No hurdles have been encountered in large part because:

1. Recurring bi-weekly touchpoint calls with NTIA allow us to gain timely and direct input from the NTIA program office thereby averting any serious issues; and
2. The Commonwealth convenes a series of standing bi-weekly meetings between the project staff and the Secretary of Administration, state CIO, an interagency project oversight committee (OA, DCED, PUC and Governor's Office), and the selected vendor. These overlapping sets of meetings serve as an additional layer of oversight and control over the project, to further ensure that progress is achieved and issues are addressed.

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

We have appreciated the opportunity to engage in bi-weekly dialogue with Anne Neville, Phil English and Andrew McRae on the mapping and planning efforts. It is extremely useful to gain direct and timely input from the Program Office. We would like to continue these touchpoint calls with NTIA if there is mutual interest to do so.

As our planning for the Fall 2010 Broadband Summit progresses, we will provide you with updates and present NTIA with any issues or challenges associated therewith.

12. Certification: I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purpose set forth in the award documents.

12a. Typed or Printed Name and Title of Authorized Certifying Official

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

12d. Email Address

12b. Signature of Authorized Certifying Official

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

Performance Progress Report
OMB Approval Number: 0660-0034
Expiration Date: 08/31/2010

10. BROADBAND MAPPING

10d. If so, describe the discussions to date with each of these providers and the current status.

Yes, the Pennsylvania Broadband Mapping team has encountered challenges with some providers operating within the state that have either refused to participate in the project or have not responded to repeated contacts from the project team.

More specifically, as of June 30, 2010:

- **10 of 101 (10%) of the broadband providers contacted had not responded to repeated contacts by the project team.** *These companies are reflected on the attached spreadsheet, with a notation of either “No response” (under the Contact? column).*
- **9 of 101 (9%) of the broadband providers contacted had explicitly indicated to our outreach staff that they would not participate in the program.** *These companies are reflected on the attached spreadsheet, with a notation of “Refuse to participate” (under the “NDA?” column).*

These nine (9) providers who have refused to cooperate are listed below, along with contact information, a brief overview of the discussions to date, and details on the reason(s) for not cooperating, where available.

1USA.com

P.O. Box 2600, West Lawn, PA 19609-0600, (610) 678-2300

*Following written communication, 1USA.com was contact on four separate instances. They indicated that they provide dial-up and DSL ISP services and will soon provide 4G Wimax service. They indicated that they currently do not have a Broadband Service Area Map, and do not have the resources to produce the requested data.**

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No Address Listed – Recent Bankruptcy, (610) 691-8811

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650 Champ Avenue, Sunbury, PA 17801, (717) 376-2030

*Following written communication, Evenlink was contacted by telephone on two instances. They indicated that they lack the internal resources to provide data.**

NEP Datavision

720 Main Street D, Forest City, PA 18421, (570) 785-3131

Following written conversations, NEP Datavision was contacted by telephone on five instances. On the final telephone conversation, they indicated that they will not provide their information because they believe that Commonwealth is just going to use the stimulus money to overbuild the Commonwealth of PA.

Smoothstone IP Communications

401 S Fourth Street, Louisville, KY 40202, (800) 773-2037

Following written communication, Smoothstone IP Communications was contacted by telephone and they indicated that they will not be participating. They indicated that they are a managed provider with Tier 1 support from AT&T, Verizon, and Sprint.

STi Wireless

1490 N Hermitage Rd, Hermitage, PA 16148, (724) 962-6004

Following written communication, STi Wireless was contacted by telephone and indicated that they do not have the time or resources to provide us with the requested data.*

Telnes Broadband

2210 Hewitt Avenue, Suite 403, Washington DC 98201, (860) 787-5136

Following written communication, Telnes Broadband was contacted by telephone and indicated that they do not have the resources to prepare the data that we are requesting.*

Wireless PA Internet Access

326 Vanyo Road, Berlin, PA 15530, (814) 267-6311

Following written communication, Wireless PA Internet Access was contact by telephone on two instances. In both instances, the owner cited issues related to the implementation of the Commonwealth's telecommunications statute as his reason for not cooperating. Attempts by state agency staff to resolve the apparent misunderstanding were unsuccessful.

World ConnX

PO Box 363, Titusville, PA 16354, (814) 827-6761

Following written communications and several voice messages, World Connx indicated via email "I have forward this communication to our attorneys since you have threaten to have the state list us as "uncooperative providers" to the public. Our customer list and network design is not any business of yours or the state. Since NO STATE MONEYS are invested in our business If the state chooses not to list us that is fine with us. As stated to your company in phone conversations. We are not interested in this survey, since we have had to compete with state moneys in the past."

* NOTE: For those companies who have indicated that they are resource-constrained, Pennsylvania, acting through its consultant, Michael Baker Jr., Inc. will continue to identify ways to partner with providers and provide the resources, expertise, and hands-on assistance necessary to the produce acceptable maps of their service areas from the data/format the provider has available.

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

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- a) Verify existence of circuit infrastructure feeding the area (copper, fiber, cable)
- b) Inspect local distribution huts, where allowed, for existence of the equipment the provider stated they have at those facilities
- c) Witness Access Circuit speed tests, where allowed
- d) Measure distance from DSLAM where applicable and determine access speed capability with an accuracy within 500 feet using mapping software
- e) Collect site pictures
- f) Enter all required documentation in electronic data collection program
- g) Determine Elevation (measurement relative to grade)

2. Wireless Provider Testing:

- a) Obtain GPS coordinates of each test site
- b) Perform Internet speed test at selected test sites using SpeedTest.net
- c) Document all test results in the electronic data collection program

Wireless Coverage Analysis – Utilizing the existing PAMAP LiDAR to generate an effective terrain model, fixed Wireless coverage will be evaluated using line-of-sight methods, with key inputs being transmitter location and, where available, data on spectrum power levels and other relevant transmission factors provided by carriers and/or supplemented by data available from public web sites and other sources. Data will then be input to a contour calculation tool to provide estimates of fixed wireless broadband coverage areas. This dataset is used as a source to determine gaps in provider wireless service area coverage.

Automated Validation Processing - All of the above verification data sources will be integrated into a GIS and software programs, utilized to auto-compare the validation layers against the Provider data. Areas of discrepancy will be flagged for reporting the data confidence level.

Provider Validation – To further ensure accuracy, maps of completed provider service areas and data are supplied back to the providers for validation of the processed information.

Stakeholder Validation - In addition, aggregated broadband coverage maps will be provided to the regional economic development districts for review and comment relative to their jurisdictions. Finally, once the interactive coverage maps are published online, individuals will have an opportunity to query the coverage map and provide direct feedback on the accuracy of the data represented.

Development of automated validation processes is currently underway to assist validation processing that has been conducted for the May 31, 2010 data submittal to the NTIA which is described in 10.h. below. The software will auto-join and query the Validation data against the Provider data. Identified areas of discrepancy will be flagged for reporting the confidence level of the data per provider at the census block and road segment level. The plan is to then input these unit confidence levels into a statistical model to develop confidence levels for each of the broadband service providers.

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

Stakeholder Validation: Maps of completed Provider service areas and data were furnished back to the Providers for confirmation of the processed/aggregated information. Feedback received in time was integrated into the each Provider's dataset for the May 31, 2010 data submittal to the NTIA. Subsequent feedback will be integrated for the October 2010 updates.

Service Area Validation Data: The Telogical/Centris wireline service area data is tabular and contains a separate record for each provider/technology of transmission combination with an associated census block or TIGER road segment, depending on the whether the size of the census block area ($=/ < \text{ or } > 2 \text{ sq. mi.}$). This data was exported into an ArcGIS data format. The American Roamer wireless service area data is already in an ArcGIS data format. The validation data was then joined to the Provider service area data by census block or TIGER road segment ID. Any database records in the Provider or Validation tables that could not be joined were output to a separate layer that indicates the areas of discrepancy between the two datasets. The joined tables were then queried to detect any speed discrepancies which were also output to a separate discrepancy layer.

Field Validation Data: The field data elements were also collected in tabular database format, and represent a specific lat/long spatial location for each record. This data was also exported into an ArcGIS data format, joined to the provider data, and queried to validate pertinent attribution. Again, records not joined and/ or with detected attribution discrepancies were output to separate GIS layers.

Validation Reporting: The validation results recorded in the GIS discrepancy layers created in the previous process were entered into a validation results spreadsheet, along with the total number Provider records, and validation records for that Provider. These numbers were then calculated to determine:

- Percent of Provider records that match the validation records.

- *Percent of validation records that do not match the Provider records.*

The validation percentages described above include the results of the Service Area Validation Datasets, and were included in the "Notes" column of the Broadband Mapping Project Provider Status spreadsheet, included as Attachment B to the May 31 data delivery letter. The validation results for these datasets were reported in narrative format. In addition, advertised speed discrepancies were also recorded in the "Notes" column.

11. BROADBAND PLANNING

- 11a. **Please describe progress made against all goals, objectives, and milestones detailed in the approved Project Plan. Be sure to include a description of each major activity / milestone that you plan to complete and your current status**

***FALL 2010 BROADBAND SUMMIT**—Via email transmitted by NTIA on April 14, 2010, the Commonwealth received authorization to proceed with the facilitation of a statewide Broadband Summit in Harrisburg, PA. We expect attendance of up to 300 attendees representing a wide range of individuals and entities interested in broadband issues from adoption to implementation of broadband-dependent applications to infrastructure deployment challenges. Invitees will include providers and technology companies; government officials; education entities; health care providers; economic developers and technology associations; public safety entities; local governments; and non-profits. Among various objectives, the Broadband Summit will enable the Commonwealth to:*

- (1) Create a forum to begin and support a sustainable dialogue among broadband providers, users and government organizations;*
- (2) Determine how to approach and best address broadband challenges in a coordinated fashion; and*
- (3) Provide a shared learning opportunity to identify and leverage broadband best practices across our State.*

To assist with the implementation of the Summit, we have retained the services of Penn State University (PSU) to assist with event coordination and services. We have also formed a partnership with the PSU College of Communication. This will help promote the event, foster a more structured learning environment for participants, and assist with program design and agenda development, and identification of speakers and panelists.

Summit website is live: <http://www.programs.psu.edu/broadband2010>

We have secured participation at our September 20-21 event from state regulators (PA Public Utility Commission), from industry associations (NCTA, Pennsylvania Telephone Association, PA Cable Association), and from several broadband providers (Verizon, Clearwire, CenturyLINK, AT&T, etc). We are thrilled to have significant FCC representation thus far; we have received commitments from Jamie Barnett (Ret. Adm.), John Horrigan, Jon Peha, and Deputy General Counsel Julie Veach. The NTIA will be represented in a session on broadband adoption (Laura

Breeden) and we have asserted a request to have Asst Secretary Larry Strickling deliver a keynote address.

The outputs and outcomes of the Fall Summit will serve to inform the remainder of the Commonwealth's SBDD planning activities.

OTHER ACTIVITIES - *As part of the original SBDD grant, the Commonwealth also proposes to implement Regional Working Groups and perform an assessment of broadband adoption. But these activities will be initiated later this fall immediately after our Summit. We feel that the Fall Broadband Summit will help inform the process and we intend to seize upon the energy and momentum of the Summit to move into the other aspects of our planning effort.*

Provider List

COMMONWEALTH OF PENNSYLVANIA



Summary Table (data accurate as of June 30, 2010)	
Broadband Providers Identified?	101
Broadband Providers Contacted? ¹	101
Agreements Reached for Data Sharing (NDA, etc)? ²	72
Partial Data Sets Received?	18
Complete Data Sets Received?	53
Data Sets Verified? ³	57

¹ 10 of 101 (10%) of providers have not responded to contacts made by the project team

² 72 of 101 (72%) of providers have agreed to participate; 9 of 101 (9%) of providers have refused to participate; and 29 of 101 (29%) of providers have elected to share data without executing a formal NDA.

³ Represents the number of data sets that have undergone full verification. 71 of 71, or 100%, of the data sets received have passed through the Quality Assurance/Quality Control (QA/QC) process.

Provider List

COMMONWEALTH OF PENNSYLVANIA



Provider Name	Contacted?	NDA?	Partial Set?	Complete Set?	Verified?
1USA.COM	Yes	No - Refuse to participate			
Adams CATV Inc.	Yes	Yes - NDA executed	No	Yes	Yes
Airband	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Armstrong Utilities	Yes	Yes - NDA executed	No	Yes	Yes
AT&T - PA	Yes	Yes - NDA executed	No	Yes	Yes
Atlantic Broadband	Yes	Yes - NDA executed	No	Yes	Yes
Beacon Technologies	Yes				
Beaver Valley Cable Co.	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Blue Ridge Communications	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Borough of Kutztown	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Buffalo Valley Telephone Company	Yes	Yes - NDA executed	No	Yes	Yes
CATV Service, Inc.	Yes	Yes - NDA executed	No	Yes	Yes
CATV Service, Inc.	Yes	Yes - NDA executed	No	Yes	Yes
Cavalier	Yes - No response				
CaWinet	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
CenturyLink Inc. (formerly EMBARQ)	Yes	Yes - NDA executed	No	Yes	Yes
Chilitech Internet	Yes	Yes - NDA executed	No	Yes	Yes
Citizens Cable Communications	Yes	Yes - NDA executed			
Citizens Telephone of Kecksburg	Yes	Yes - NDA executed	No	Yes	Yes
Clearwire	Yes				
Coaxial Cable Television Corp	Yes	Yes - NDA executed	No	Yes	Yes
Comcast	Yes	Yes - NDA executed	No	Yes	Yes
Conestoga Telephone	Yes	Yes - NDA executed	No	Yes	Yes
Consolidated Communications	Yes	Yes - NDA executed	No	Yes	Yes
Conterra dba: DETEL	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Conxx	Yes	Yes - NDA executed	No	Yes	QA/QC
Cricket	Yes	Yes - NDA executed	No	Yes	QA/QC
D&E Communications	Yes	Yes - NDA executed	No	Yes	Yes
DBSi	Yes	No - Refuse to participate			
Evenlink	Yes	No - Refuse to participate			
EZ Links Communications	Yes	Yes - non-NDA agreement reached	No	Yes	QA/QC
Fairpoint Communications	Yes	Yes - NDA executed	No	Yes	Yes
Frontier Communications	Yes	Yes - NDA executed	No	Yes	Yes
Full Service Network	Yes				
Gap CableTV	Yes	Yes - non-NDA agreement reached	No	Yes	Yes

Provider List

COMMONWEALTH OF PENNSYLVANIA



Provider Name	Contacted?	NDA?	Partial Set?	Complete Set?	Verified?
Getwireless.net	Yes	Yes - non-NDA agreement reached	Yes	No	QA/QC
Hancock Telephone Company	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Hickory Telephone Company	Yes	Yes - NDA executed	No	Yes	Yes
HydroSoft Internet	Yes				
Innernet	Yes - No response				
Ironton Telephone Company	Yes	Yes - NDA executed	Yes	No	Yes
Keystone Community Network	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Keystone Wireless (DBA: Immix)	Yes - No response				
Kuhn Communications, Inc.	Yes	Yes - non-NDA agreement reached	Yes	No	QA/QC
Lackawaxen Telephone Company	Yes	Yes - NDA executed	Yes	No	Yes
LANtek	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Laurel Highland Telephone	Yes	Yes - NDA executed	No	Yes	Yes
Level 3 Communications	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Matrix Businesss Technologies	Yes				
MetroCast	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Navpoint	Yes - No response				
NEP Datavision	Yes	No - Refuse to participate			
Netcarrier	Yes				
Netconex	Yes	Yes - non-NDA agreement reached	Yes	No	QA/QC
Noroc Broadband	Yes - No response				
North Penn Telephone Company	Yes	Yes - NDA executed	No	Yes	Yes
North-East PA Telephone	Yes	Yes - NDA executed	Yes	No	Yes
One Communications	Yes	Yes - NDA executed	Yes	No	QA/QC
PA Online	Yes - No response				
PAETEC	Yes				
Palmerton Telephone Company	Yes	Yes - NDA executed	Yes	No	Yes
Pennsylvania Telephone Company	Yes	Yes - non-NDA agreement reached	Yes	No	Yes
Pitcairn Cable	Yes	Yes - NDA executed	Yes	No	QA/QC
Pulsenet	Yes - No response				
Pymatuning Indep. Tel. Company	Yes	Yes - NDA executed	Yes	No	Yes
QCOL (Somerset Cable TV)	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Raystown Wireless	Yes - No response				
RealLinx	Yes				
Service Electric	Yes	Yes - non-NDA agreement reached	No	Yes	QA/QC
Shen-Heights TV Associates, Inc.	Yes	Yes - NDA executed	Yes	No	Yes
Smoothstone IP Communications	Yes	No - Refuse to participate			

Provider List

COMMONWEALTH OF PENNSYLVANIA



Provider Name	Contacted?	NDA?	Partial Set?	Complete Set?	Verified?
Snip Communications	Yes - No response				
South Canaan Telephone Company	Yes	Yes - NDA executed	Yes	No	Yes
Sprint Nextel Corporation	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
StarLinX Technical Services	Yes	Yes - non-NDA agreement reached	No	Yes	QA/QC
STi Wireless	Yes	No - Refuse to participate			
Sting Communications	Yes	Yes - non-NDA agreement reached	No	Yes	QA/QC
TDS Telecom	Yes	Yes - NDA executed	No	Yes	Yes
Tele-Media	Yes	Yes - NDA executed	No	Yes	Yes
Telnes Broadband	Yes	No - Refuse to participate			
Time Warner	Yes	Yes - NDA executed	No	Yes	Yes
T-Mobile USA, Inc.	Yes	Yes - NDA executed	No	Yes	Yes
TowerStream	Yes - No response				
USA Choice Internet	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
USA Digital Communication	Yes	Yes - non-NDA agreement reached	Yes	No	QA/QC
Venus Telephone Corporation	Yes	Yes - NDA executed	No	Yes	Yes
Verizon Wireless	Yes	Yes - NDA executed	No	Yes	Yes
Verizon-North	Yes	Yes - NDA executed	No	Yes	Yes
Verizon-PA	Yes	Yes - NDA executed	No	Yes	Yes
Wave2Wave / RCN	Yes	Yes - NDA executed	No	Yes	Yes
WaveCrazy	Yes				
West Side Telecommunications	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
WestPAnet	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Windstream	Yes	Yes - NDA executed	Yes	No	Yes
Wire Tele-View Corp.	Yes	Yes - non-NDA agreement reached	Yes	No	QA/QC
Wireless PA Internet Access	Yes	No - Refuse to participate			
World ConnX	Yes	No - Refuse to participate			
XO Communications	Yes				
Youngsville Television Corp	Yes	Yes - non-NDA agreement reached	No	Yes	Yes
Yukon Waltz Telephone Company	Yes	Yes - NDA executed	Yes	No	Yes
Zito Media	Yes	Yes - non-NDA agreement reached	Yes	No	Yes