

U.S. DEPARTMENT OF COMMERCE

Performance Progress Report

2. Award Or Grant Number

78-50-M09055

4. Report Date (MM/DD/YYYY)

03-27-2012

1. Recipient Name

Virgin Islands Public Finance Authority

6. Designated Entity On Behalf Of:

N/A

3. Street Address

32-33 Kongens Gade,

8. Final Report?

- Yes
 No

9. Report Frequency

- Quarterly
 Semi Annual
 Annual
 Final

5. City, State, Zip Code

St. Thomas, VI 00802-0000

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

01-01-2010

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

12-31-2014

7b. Reporting Period End Date:

03-31-2012

9a. If Other, please describe:

N/A

10. Broadband Mapping

10a. Provider Table

Number of Providers Identified	Number of Providers Contacted	Number of Agreements Reached for Data Sharing	Number of Partial Data Sets Received	Number of Complete Data Sets	Number of Data Sets Verified
8	8	0	8	0	0

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

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

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

WIRESLINE- Innovative Communications - The Territory's single wire line provider offered data during direct interviews in 2009. Innovative provided broadband capacity available at remote switch locations but declined to provide middle mile information. Innovative have been unresponsive since. New discussions with the provider promise better cooperation going forward.

WIRESLESS - The three fixed wireless providers offered data by direct interview in 2009. All provided transmitter locations, as well as service level data by location.

- Broadband VI - Continues to exchange data upon request
- Smartnet (Alliance Data Services) - Has become unresponsive to requests for updates during this quarter
- Choice Communications (Atlantic TeleNetwork) - Initially offered an RF coverage map; Since March 2011, the team has declined to respond to new requests, objecting to repetitive (semi-annual) queries. Choices argue that its FCC reporting is sufficient. The VIPFA/viNGN team continues to ask them to reconsider.

WIRESLESS MOBILE - AT&T Mobility - Previously, local agency personnel were unable to provide technical detail. Using contact information provided by SBI, we succeeded in collecting information from the national offices of the provider. Coverage and performance assertions need to be verified.

- Sprint Nextel Corp - Previously, local agency personnel were unable to provide technical detail. Using contact information provided by SBI, we succeeded in collecting information from the national offices of the provider. Coverage and performance assertions need to be verified.
- Innovative Communications - Has begun advertising availability of mobile data service throughout the Territory; VIPFA has not succeeded in engaging them in the project to date but will continue to try.

SATELLITE - HughesNet and Starband market through local agents who provide ground station equipment. They have shared information. viNGN has not held direct discussions with the satellite provider.

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

- Using the analytic tool made available by the Utah team along, with satellite identification provided by the local HughesNet and Starband dealers, we determined the possible effect of shadowing by the mountainous terrain and have reported coverage accordingly using service levels as advertised by the local dealers.

- The DSL coverage was plotted using a 12,000 foot radius of effectiveness from each remote switch facility location reported by the incumbent wire line carrier, as opposed to using a direct measurement of individual loops for propagation quality.

- Because of limited provider data, the extrapolation of tower heights has been calculated trigonometrically, as opposed to by direct measurement.

- Data from Community Anchor Institutions comes from the analysis of data received from the IT departments within the individual institutions. GPS location data was taken during the initial on-site verifications.

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

- Provider Portal - VIPFA/viNGN will be deploying a secure web application to the provider, which will allow them to further validate the data they have supplied at a granular level. They will be able to request modifications to their coverage area, as well as update the supporting broadband attribution.

- Crowd Sourcing - The release of the public interactive map will allow the capability of collecting additional speed test results, as well as direct feedback from the public. This information will be cross-referenced with each provider's coverage footprints and attribution, with discrepancies or questions presented to the provider to ensure correct representation of their coverage.

- CAI Portal - VIPFA/viNGN will be releasing a web application to maintain the Community Anchor Institution (CAI) inventory and further verify broadband availability, including collecting speed test results.

- 3rd party data analysis to determine feasibility

- Middle Mile and Last Mile Inspection Plan - VIPFA/viNGN is in the process of establishing a verification plan for middle mile and last mile locations.

- Verify Community Anchor Institution Service Levels: Direct inspection was used to establish Community Anchor Institution GIS/GPS location data. Printed surveys will be distributed to collect broadband service data. These surveys will also be available on-line on the viNGN web site.

- Speed Testing: User initiated speed tests will be offered, in conjunction with on-line end user surveys, based on the State Broadband Map. Test results will be keyed to each user location (by census tract or estate boundary precision) when each user locates its position with a mouse click on the State Broadband Map.

- Automated Performance Testing: Automated performance testing will be conducted on a 7 x 24 basis with a 200 user sample to determine the time-related traffic patterns and to benchmark actual versus advertised performance.

10g. Have you initiated verification activities? Yes No

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

- Verify Community Anchor Institution Service Levels: The Governor of the U.S. Virgin Islands has hosted direct meetings with the major Community Anchor Institutions/Anchor Tenants to highlight the benefits of the project and to further stimulate interest in the project. Printed surveys were distributed during these meetings. Participants were also contacted by phone as a follow up.

- Verification of User Experience: An on-line interactive survey is available on the viNGN web-site. A similar on-line survey is available as part of the State Broadband Map web site.

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

For each of the following verification activities, the revised, projected time line for beginning and completing these activities will be determined in collaboration with the Supplemental funding/Phase II contractor. The VIPFA/viNGN team is awaiting the NTIA/NIST team's official approval to move forward to contract with a Supplemental funding phase/Phase II contractor. Until a Supplemental funding/Phase II contractor can be engaged, all data collection, data verification, data assessment and data upload activities are on hold.

- Provider Portal

- Crowd Sourcing

- CAI Portal

- 3rd Party Data Analysis

- Middle Mile and Last Mile Inspection Plan

Staffing

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

To date, 0.67 jobs have been created or retained as a result of this project.

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

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

The VIPFA/viNGN team is awaiting the NTIA/NIST team's official approval to move forward to contract with a Supplemental funding phase/Phase II contractor. Until a Supplemental funding/Phase II contractor can be engaged, all data collection, data analysis, data upload and data verification activities are on hold. The start of Phase II of the project is expected to result in an increase in part-time positions. The VIPFA/viNGN teams plans to begin Phase II activities during Quarter 2, CY 2012, if it receives official approval from NTIA and NIST to move forward to contract with the lead project implementation contractor.

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

1 FTE

10n. Staffing Table

Job Title	FTE %	Date of Hire
Project/Program Manager	17	10/01/2010
GIS Team Leader/Analyst	17	10/01/2010
GIS Program/System Administrator	17	10/01/2010
Account/Compliance Staffer	17	10/01/2010
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Sub Contracts

10o. Subcontracts Table

Name of Subcontractor	Purpose of Subcontract	RFP Issued (Y/N)	Contract Executed (Y/N)	Start Date	End Date	Federal Funds	In-Kind Funds
Stratum Broadband	Initial Mapping and Planning Support	N	Y	07/28/2009	01/04/2012	1,294,854	0
Various Professional Services Contractors	Mapping, Data Gathering, Legal and/or Advisory Services	Y	N	07/28/2009	12/31/2014	1,553,880	0
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Funding

10p. How much Federal funding has been expended as of the end of the last quarter? \$1,354,927 10q. How much Remains? \$1,654,579

10r. How much matching funds have been expended as of the end of last quarter? \$293,103 10s. How much Remains? \$525,611

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	\$0	\$0	\$0	\$0	\$0	\$0
Personnel Fringe Benefits	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$75,355	\$0	\$75,355	\$0	\$0	\$0
Equipment	\$85,417	\$695,000	\$780,417	\$0	\$0	\$0
Materials / Supplies	\$0	\$0	\$0	\$0	\$0	\$0

Mapping Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
Subcontracts Total	\$2,848,734	\$0	\$2,848,734	\$1,354,927	\$0	\$1,354,927
Subcontract #1	\$1,294,854	\$0	\$1,294,854	\$1,294,854	\$0	\$1,294,854
Subcontract #2	\$1,553,880	\$0	\$1,553,880	\$60,073	\$0	\$60,073
Subcontract #3	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #4	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #5	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$123,714	\$123,714	\$0	\$293,103	\$293,103
Total Direct Costs	\$3,009,506	\$818,714	\$3,828,220	\$1,354,927	\$293,103	\$1,648,030
Total Indirect Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$3,009,506	\$818,714	\$3,828,220	\$1,354,927	\$293,103	\$1,648,030
% Of Total	79	21	100	82	18	100

Hardware / Software

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

10v. If yes, please list

The contractor has purchased equipment and software to perform the Phase I Broadband Planning and Mapping tasks, as outlined below:

- Equipment: HP Z400 workstation with MS Windows OS and ESET NOD 32 AntiVirus
- Application Software: ESRI ArcEditor and ESRI ArcGIS Data Interoperability Single Use License

The contractor has also provided equipment for hosting the State's/Territory's website display, as outlined below:

- Equipment: HP DL 180 GS Server with RedHat Linux OS and Apache Server
- Application Software: contractor-developed software

During Quarter 1, CY 2011, viNGN purchased the following hardware and software to bring the development and production environments for data mapping in-house:

Software:

ESRI ArcInfo.....\$11,382.00

ESRI ArcGIS Data Interoperability Single Use License.....\$ 2,032.00

2 ESRI ArcGis Server License Development.....\$ 32,520.00

These products are directly attributable to performing work on the project and providing a test and staging area for data before making it available to the NTIA and the public.

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

The purchase of the following software and hardware was proposed to supplement provider verification activities:

- Equipment: Server for operating the Speed Test and Performance Probe
- Application Software for operating the Speed Test and Performance Probe: Visual Software - MyConnection Server and MySpeed module with 200 Probe agents for operating the verification probe

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

10y. If yes, please list

The Google Earth and CAD data provided as In-Kind contributions from WAPA have all been received and used extensively during the identification and location of anchor tenants, towers, and other points of interest.

Avensa MAPdataUSA was purchased at the beginning of the project as an aid in Broadband Planning.

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

10aa. If yes, please list

Updated Detailed Project Plan: An updated Detailed Project Plan, dated September 1, 2011, was submitted to NTIA/NIST for approval with the submission of the Corrective Action Plan (CAP) response on October 3, 2011 as Annex 23A. The Detailed Project Plan includes time lines for verification activities and other supporting milestones which must be updated. The NTIA Federal Program Officer has provided initial feedback on the Detailed Project Plan, and the VIPFA/viNGN team will revise the Detailed Project Plan, based on the recommendations and other feedback received during Quarter 2, CY 2012. After the Detailed Project Plan is approved, project milestones can be addressed specifically in future quarterly reports.

Performance Probe: The implementation of the performance probe for controlled verification has been deferred until viNGN completes the purchase of the hardware and licensing of the software that is necessary to operate the probe. During the initial phase of this process, the VIPFA/viNGN team anticipates that the "busy hour" and the actual rates stratified throughout the region will be determined.

User Speed Tests: The State Broadband map website was launched during October 2010, excluding the user speed test facilities. Once viNGN completes the purchase of the hardware and licensing of the software necessary to operate the speed test, installation can begin. Analysis of collected data will be used to verify performance levels advertised by providers.

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

Provider Data Privacy: All providers are uncomfortable with user and physical plant information being made available publicly, as this information is considered core to maintaining their competitive advantage and protecting customer data. They are also very concerned about the extent to which their service area data is made public due to competitive issues. To date, each has required that their respective data sets that are shared with VIPFA/viNGN's contractor be held off-island to avoid the risk of public disclosure due to the Territory's transparency policies. Ongoing engagement with the management of these businesses is critical to minimizing the commercial mistrust.

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

The indirect benefit of the SBI-SBDD program is quite apparent. Since the program has been underway, consumers are paying more attention to the speed of the services offered. As a consequence, the advertised speeds of the last mile broadband service providers have doubled nearly across the board. Further, the consumer base is more educated.

The VIPFA/viNGN team anticipates that the U.S. Virgin Islands will become more competitive with the expansion of broadband services. Any assurances that the NTIA can provide to the last mile service providers about the security of the data that they provide to the SBDD program and the importance of providing quality data would be very beneficial in supporting the Territory's efforts in becoming more competitive.

11. Broadband Planning

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

The primary goal of the Broadband Planning continues to be the establishment of the process for deploying a comprehensive broadband, middle mile network in the U.S. Virgin Islands (USVI). Funds awarded through the Broadband Technology Opportunities Program (BTOP) supported the regional launch. The newly-established viNGN public-private partnership will oversee the deployment and operation of the middle mile network. Included amongst the key stakeholders are the Community Anchor Institutions (CAIs)/anchor tenants and local service providers who have been brought together through the U.S. Virgin Islands Broadband Coalition. Projects identified during the SBDD Phase II planning process are the following:

1. Smart Grid Support Analysis, in coordination with the U.S. Virgin Islands Water and Power Authority (WAPA);
2. Assessment of the use of broadband technology by the Public Safety/First Responders sector of the Government of the U.S. Virgin Islands;
3. Street addressing, in coordination with the U.S. Virgin Islands' Office of the Lieutenant Governor (LGO); and,
4. Data collection, verification and probe activities.

Preliminary meetings have been convened with the U.S. Virgin Islands' Office of the Lieutenant Governor as the VIPFA/viNGN team awaits approval of procurement documents to support the selection of a vendor to provide consulting services for Phase II of the program. In addition to the planning activities listed above, substantial planning efforts have been made in ensuring the selection of a new mapping partner to continue the program through December 2014. VIPFA also continues to work with NTIA to finalize the Detailed Project Plan.

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

The absence of street address-based geographic data in the Territory has been a limiting factor. The need is being addressed by an on-going project in the Lieutenant Governor's Office, with support from the U.S. Geological Service (USGS). A data sharing arrangement with USGS has been established. In the interim, an effort is being made to use available LGO Estate boundary GIS data and overlay it with a Census Block data layer for positioning needs. Residents of the Territory identify their location by historic Estate boundaries. Thus, the layering described above can be used to accurately pinpoint their respective position. The U.S. Census Bureau entered into an agreement with the LGO to recognize these Estate boundaries and released a new Sub-Minor Civil District shapefile set in the Census 2010 TIGER/Line files during June 2011.

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

As outlined above, changes to the draft Detailed Project Plan will be completed, based on the initial feedback received from the assigned NTIA Federal Program Officer.

Funding

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

11f. How much Remains? \$0

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

11h. How much Remains? \$0

11i. Planning Worksheet

Personal Salaries	\$0	\$0	\$0	\$0	\$0	\$0
Personnel Fringe Benefits	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$0	\$0
Materials / Supplies	\$0	\$0	\$0	\$0	\$0	\$0
Subcontracts Total	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #1	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #2	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #3	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #4	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #5	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0
Total Direct Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Indirect Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$0	\$0	\$0	\$0	\$0	\$0
% Of Total	0	0	0	0	0	0

Additional Planning Information

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

VIPFA/viNGN is prepared to move forward with a new mapping partner who will be under contract for the purposes of implementing this program through December 2014; however, the team is still awaiting the official approval to move forward from NTIA and NIST. The VIPFA/viNGN team will work with the new contractor to refine the milestones and targets.

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

The Virgin Islands Public Finance Authority/Virgin Islands Next Generation team submitted a Corrective Action Plan (CAP) on October 3, 2011 which was accepted. The stop work order was lifted and work began in earnest to hire additional staff to ensure the successful implementation of all of the BTOP programs.

The project team continues to address some of the other challenges that are highlighted in this report, with the support of the U.S. Virgin Islands' Office of the Governor and the Office of the Lieutenant Governor. Further, active and ongoing program management and oversight have resulted in the project team sourcing the inputs required, including appropriate software and hardware, and producing the "deliverables" required, per the terms of the grant award.

The stop work order was lifted as of October 17, 2011, and the project team continues to focus on ways to accelerate the implementation of the Supplemental funding phase of the project and to meet its expenditure and performance indicator targets.

As described above, VIPFA is working with NTIA to refine the Detailed Project Plan, in order to move forward with a new mapping vendor and to revise time line targets included in the Detailed Project Plan to ensure that they are realistic.

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

The SBI-SBDD planning process and the information gathered during that process have been very beneficial to the development of a geographically diverse and competitively-positioned Comprehensive Community Infrastructure proposal and construction plan.

The impact of the accomplishments achieved under Phase I of the SBDD project extends well beyond the program's direct goals. The planning and mapping activities will be part of an ongoing quality control program for the viNGN network.

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

Vicki Johnson

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

3407141635

12d. Email Address

vjohnson@usvipfa.com

12b. Signature of Authorized Certifying Official

Submitted Electronically

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

06-14-2012