| U.S. DEPARTMENT OF COMMERCE | | | | | | 2. Award Or Grant Number 24-50-M09019 | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------|----|----------------------------------|---|------------------------------------------------|-------------------------------------------|--------------------|--|
| | | | | | | | 4. Report Date (MM/DD/YYYY) 01-27-2012 | | |
| Recipient Name Maryland Broadband Coopera | ive, Inc. | | | | | 6. Designate | ed Entity | On Behalf Of: | |
| 3. Street Address 212 West Main Street, Suite 30 |)4. | | | | | 8. Final Report? 9. Report Frequer Quarterly | | | |
| 5. City, State, Zip Code Salisbury, MD 21801 | , | | | | | Yes No | | Semi Annual Annual | |
| 7. Project / Grant Period Start Date: (MM/DD/YYYY) | | Date: (MM/DD/YYYY) | R | b. Reporting Period End Date: | : | 9a. If Other | , please | Final describe: | |
| 11-01-2009 10. Broadband Mapping | | -2014 10a. Provider Table | 12 | 2-31-2011 | | | | | |
| Number of Providers Identified Providers Contacted 0 Number of Agreements Reached for Data Sharing 0 Number of Providers Data Sets Verified 0 O O O O O O O O O O O O O O O O O O | | | | | | | | | |
| activities to be undertaken in the future In order to support the NTIA's and FCC's focus on community anchor institution (CAI) data collection, we have re-doubled our efforts to collect comprehensive and accurate data by working directly with the Counties. We sent letters to each County Executive articulating the need for the CAI data requested and explaining the potential opportunity costs to the County from not being fully represented in the CAI census. This effort received excellent support from several counties. We were able to improve data quality on over 1200 CAIs and submitted the largest and most accurate CAI data to date on September 30. In the coming quarter we will re-visit the need for help on CAI reporting with the unresponsive counties. 10f. Please describe the verification activities you plan to implement A maximum of fifteen data checks are conducted on each of the provider-submitted broadband availability data, as listed below. Different versions of data verification tests are conducted on submissions from wireline broadband providers versus wireless providers, because of the differing submission geometry. Those tests listed in bold below have the greatest explanatory value. 1) Maximum down/upload speeds reported by provider 2) Typical down/upload speed from 2010 speed test 4) Speed tests match reported typical speeds or are within 1 speed tier 5) Census blocks/coverage areas verified by 2010 FCC and MBBMI speed tests 6) Census blocks/coverage area reported to project, but no tract reported directly to FCC 7) Tracts reported directly to FCC, but no census blocks/coverage area reported to project, but no tract reported directly to FCC 9) Total number of unserved area locations reported per provider 10) Of census blocks reported as served, how many have zero population based on 2000 census data? 11) Web search verification 12) Census blocks that are outside Cable Franchise Boundary 13) Census blocks that are outside DSL boundary | | | | | | | | | |

| 14) Wireless broadband presence and speed systematic field sampling 15) Map review via web conference with broadband service provider 10g. Have you initiated verification activities? No | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------|--|--|--|--|
| 10h. If yes, please describe the status of your activities | | | | | | |
| We have completed the verification tests as noted in the Submission Summary Whitepaper for round 4 and vand improve the tests for round 5. | we plan to r | eview, modify, | | | | |
| The ESRGC, in partnership with the Center for GIS at Towson University and as a subcontract to the SBI grams Maryland Broadband Cooperative, conducted a number of verification and validation tests on the provider-sus availability data. In the event that inconsistencies or errors were found, any changes were made to the providenthis data delivery round were noted in the "Read Me" text file. As expected, we were able to continue modifying data as a result of our testing/research during the 4th round of data submissions in October 2011. 10i. If verification activities have not been initiated please provide a projected time line for beginning and completing such | ubmitted bro der-submitte ing provide | oadband ed data during | | | | |
| NA | | | | | | |
| Staffing | | | | | | |
| 10j. How many jobs have been created or retained as a result of this project? | | | | | | |
| For 4Q 2011, we are reporting 8.95 FTEs created or retained using ARRA funds. With the student field verif we returned to our normal staff complement. We had hoped to begin hiring State Broadband Capacity Build 4Q 2011; however as discussed later, this has been impossible. | | | | | | |
| 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 staff We had hoped that the project would have been able to begin the hiring process for Capacity Building staff but Unfortunately, our intended state partners, the Department of Information Technology (DoIT), has still not ta fulfilling their responsibilities to the Capacity Building project making it impossible to proceed with necessary forward progress, we asked the NTIA to relieve us of the grant responsibility of partnering with DoIT until sufficiently state partner, is able to provide the support and focus required of this important effort. NTIA unders undertook to follow their internal procedures for seeking a resolution to this type of problem which is not united and of 4Q 2011, there has been no resolution to the Capacity Building problem. | by the end of ken any step of hiring. In of the that stood our conduct to Mary | eps toward order to make DoIT, or other oncerns and | | | | |
| 16 | | | | | | |
| 10n. Staffing Table | | | | | | |
| Job Title | FTE % | Date of Hire | | | | |
| GIS Manager | 75 | 11/09/2009 | | | | |
| Senior GIS Specialist | 100 | 12/01/2009 | | | | |
| GIS Analyst | 100 | 11/09/2009 | | | | |
| GIS Specialist | 100 | 11/09/2009 | | | | |
| T Tech/Specialist/Web 70 11/09/2009 | | | | | | |
| Programmer | 60 | 11/09/2009 | | | | |
| Project Manager | 80 | 11/09/2009 | | | | |
| Director | 60 | 11/09/2009 | | | | |
| Writer/Research Assistant | 50 | 11/09/2009 | | | | |
| SBCB PM | 100 | 4/01/2012 | | | | |
| SBCB Staff Analysts (2) | 100 | 4/01/2012 | | | | |

Remove Row

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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 |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------------|------------|------------|---------------|---------------|
| Salisbury University | Overall Project technical lead, provide all GIS services, Broadband Demand Forecasting. | N | Υ | 11/01/2009 | 10/31/2014 | 2,121,160 | 0 |
| Towson University | Support data development, verification, and application development. | N | Y | 11/01/2009 | 10/31/2014 | 1,444,606 | 0 |
| TCC-Lower Easter Shore | Broadband Planning coordination and management in the 4 counties of the Lower Eastern Shore. | N | Υ | 11/01/2009 | 10/30/2012 | 94,869 | 0 |
| TCC-MidShore | Broadband Planning coordination and management in the 5 counties of the Mid and Upper Eastern Shore. | N | Υ | 11/01/2009 | 10/30/2012 | 113,069 | 0 |
| TCC-Southern MD | Broadband Planning coordination and management in the 3 counties of Southern MD. | N | Y | 11/01/2009 | 10/30/2012 | 87,311 | 0 |
| TCC-Western | Broadband Planning coordination and management in the 3 counties of Western MD. | N | Y | 11/01/2009 | 10/30/2012 | 71,613 | 0 |
| MD Department of Information Technology (DoIT) | State Broadband Capacity Building Support | N | N | 09/28/2010 | 10/31/2014 | 51,209 | 0 |
| | | | | | Add F | Row | Remove Row |

Funding

10p. How much Federal funding has been expended as of the end of the last quarter? \$1,702,405 10q. How much Remains? \$3,053,363

10r. How much matching funds have been expended as of the end of last quarter? \$506,143 10s. How much Remains? \$687,023

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 | \$222,714 | \$74,000 | \$296,714 | \$130,882 | \$13,063 | \$143,945 |
| Personnel Fringe Benefits | \$89,086 | \$22,521 | \$111,607 | \$51,952 | \$4,290 | \$56,242 |
| Travel | \$17,619 | \$0 | \$17,619 | \$6,938 | \$0 | \$6,938 |
| Equipment | \$70,000 | \$115,811 | \$185,811 | \$15,150 | \$70,811 | \$85,961 |
| Materials / Supplies | \$20,847 | \$0 | \$20,847 | \$6,276 | \$0 | \$6,276 |
| Subcontracts Total | \$3,992,088 | \$0 | \$3,992,088 | \$1,424,438 | \$0 | \$1,424,438 |
| Subcontract #1 | \$2,121,160 | \$0 | \$2,121,060 | \$637,478 | \$0 | \$637,478 |
| Subcontract #2 | \$1,444,606 | \$0 | \$1,444,606 | \$635,231 | \$0 | \$635,231 |
| Subcontract #3 | \$51,209 | \$0 | \$51,209 | \$0 | \$0 | \$0 |
| Subcontract #4 | \$94,869 | \$0 | \$94,869 | \$27,455 | \$0 | \$27,455 |
| Subcontract #5 | \$280,244 | \$0 | \$280,244 | \$124,274 | \$0 | \$124,274 |

| Mapping Budget Element | Federal Funds Granted | Proposed In-Kind | Total Budget | Federal Funds Expended | Matching Funds Expended | Total Funds Expended |
|------------------------|-----------------------------|---------------------|-----------------|------------------------------|----------------------------|-------------------------|
| Construction | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other | \$343,414 | \$980,834 | \$1,324,248 | \$66,770 | \$417,979 | \$484,749 |
| Total Direct Costs | \$4,755,768 | \$1,193,166 | \$5,948,934 | \$1,702,405 | \$506,143 | \$2,208,548 |
| Total Indirect Costs | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total Costs | \$4,755,768 | \$1,193,166 | \$5,948,934 | \$1,702,405 | \$506,143 | \$2,208,548 |
| % Of Total | 80 | 20 | 100 | 36 | 42 | 37 |

Hardware / Software

We purchased the Dell Workstation and the ESRI ArcInfo Software in a previous quarter. There were no additional hardware purchases in 4Q 2011.

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

We have not purchased the servers, licenses or additional storage, because the project schedule does not call for their acquisition as yet.

10y. If yes, please list

We had originally planned to purchase wireless coverage areas from a vendor. We have not purchased this data and do not plan to as we have received that information from the providers themselves. We have purchased other data sets that we did not realize that we would need when the proposal was submitted. One example is the Maryland Property View data set which provides a centroid location for every property in Maryland. This has aided in the accuracy of our geocoding and assigning end users to the correct block. We have also acquired historical speed test sample information for the state of Maryland for 2009. In 2Q 2011, we purchased additional data from DirectMail.com, focused on government service providers. We did not make any additional data purchases in 4Q 2011.

10aa. If yes, please list

NA

10bb. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing The data validation and verification process listed above does an admirable job of mitigating obstacles by triangulating the data accuracy and completeness in many indirect ways, thus gaining a good sense of data confidence, or not. Collecting community anchor data has presented several obstacles. 1) Confirming participation is often problematic because many CAIs do not feel comfortable providing the requested data. This is the lesser obstacle, as the team strategy is to communicate the purpose and value of participating in the project. 2) We are often unable to identify the contact that has access to the requested data. This is the larger obstacle due to the specific technical of the information we are seeking, and the large number of facilities targeted for data collection. Our revised strategy has been to contact County Executives directly and communicate the opportunity costs in terms of lost federal funding if the CAI are not counted in the census. The results have been encouraging. We have improved data quality for over 1200 CAI for the September 2011 submission which was our most comprehensive and accurate to date. Last guarter we believed the State Broadband Capacity Building project would get underway as we completed a complicated document negotiation process with our State of Maryland partners (DoIT). However, it is now clear that DoIT's BTOP commitments and lack of organizational focus on Capacity Building makes it impossible to move forward without a material change to the grant structure. We will request the NTIA to allow us to begin hiring staff and pursuing the goals of the Capacity Building project on our own, even without the official endorsement and support of a specific state department. Our goal is to make sure the work gets accomplished, (due to delays caused by DoIT we are now almost 1 year behind schedule), and when DoIT, or other suitable State department, is ready to participate we will happily bring them on board.

10cc. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project
On January 11th we hosted our 2nd Regional Broadband Mapping Grantee meeting at Towson University. The meeting was attended
by 29 staff from DC, DE, MD, NJ, PA, and VA. Everyone discussed their successes and challenges openly and candidly. We found
that there were several best practices we could share on a state-to-state basis to solve individual issues and deficiencies. We are
currently using this new forum to organize a meeting with a large provider to discuss data quality and the value to them and us from
their submitting address level data to each state's broadband mapping group. In 4Q 2011, we have assisted several counties and
cities by providing excellent maps that are being used by county planners and economic development professionals

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

Completed:

- Initial Meetings with Regional Council Leadership
- Format Design for the Stakeholder Meetings
- Format Design for the Summit Meetings (General Public Meeting)
- First Stakeholder Meeting for Southern Maryland
- First Stakeholder Meetings for Lower and Upper Eastern Shore
- Second Stakeholder Meeting for Southern Maryland
- First General Public Meeting for Southern Maryland

Second General Public Meeting for Southern Maryland

- First General Public Meeting for The Lower and Upper Eastern Shore Scheduled
- Second Stakeholder Meetings for Lower and Upper Eastern Shore Scheduled
- Third Stakeholder Meeting for Southern Maryland
- First Stakeholder Meeting for Western Maryland
- Fourth Stakeholder Meeting for Southern Maryland
- First General Public Meeting for Western Maryland
- Second Stakeholder Meeting for Western Maryland
- Third Stakeholder Meeting for Lower Eastern Shore of Maryland
- Preliminary Draft of Regional Plan Template
- Third Stakeholder Meeting for Western Maryland
- Fourth Stakeholder Meeting for Lower Eastern Shore of Maryland
- Second Stakeholder Meeting for Upper Eastern Shore of Maryland
- The All-Region Online Survey of Stakeholders (Replaced with Google Docs)

11c. Does the Project Team anticipate any changes to the project plan for Broadband Planning?

- The Preliminary Draft of Regional Plan Template Circulated to All Regions
- Fifth Stakeholder Meeting for Southern Maryland

Next Three Months:

No meetings are planned. The team is utilizing Google Docs to conduct the collaborative writing process with all four Regional Planning teams.

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

As previously reported, we are advancing with an outline that is acceptable to the regional teams. Indeed, the first draft template has been delivered to the stakeholder team in Southern MD.

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

Yes No

| be implemented | | |
|----------------------------------------------------------------------------------------|-----------------------|-----|
| NA | | |
| Funding | | |
| 11a. How much Federal funding has been expended as of the end of the last guarter? \$0 | 11f How much Pemains? | 0.2 |

| The now much rederal funding has been expended as of the end of the last quarter? \$0 | | | | | | | |
|-----------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|--|
| 11g. How much matching funds have been expended as of the end of last quarter? \$0 11h. How much Remains? | | | | | | | |
| 11i. Planning Worksheet | | | | | | | |
| Personal Salaries | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |

| 11i. Planning Worksheet | | | | | | |
|---------------------------|-----|-----|-----|-----|-----|-----|
| Personnel Fringe Benefits | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Travel | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Equipment | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Materials / Supplies | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Subcontracts Total | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Subcontract #1 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Subcontract #2 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Subcontract #3 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Subcontract #4 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Subcontract #5 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Construction | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total Direct Costs | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total Indirect Costs | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total Costs | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| % Of Total | 0 | 0 | 0 | 0 | 0 | 0 |

Additional Planning Information

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

No.

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

Not at this time.

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

Not at this time.

| 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) | | | | | |
| Andrew Van Dopp | 410-341-6322 | | | | | |
| | 12d. Email Address | | | | | |
| | dvandopp@mdbc.us | | | | | |
| 12b. Signature of Authorized Certifying Official | 12e. Date Report Submitted (Month, Day, Year) | | | | | |
| Submitted Electronically | 02-16-2012 | | | | | |
| | | | | | | |