U.S. DEPARTMENT OF COMMERCE	2. Award Or Grant Number
Performance Progress Report	29-50-M09022
	4. Report Date (MM/DD/YYYY)
	10-28-2011

1. Recipient Name	6. Designated Entity On Behalf Of:	
Missouri Office of Administration	Missouri	

3. Street Address	8. Final Report?	9. Report Frequency
301 West High Street, HST Room 280, P.O. Box 809,	⚪ Yes ⦿ No	⦿ Quarterly ⚪ Semi Annual ⚪ Annual ⚪ Final

5. City, State, Zip Code		
Jefferson City, MO 65102-0809		

7. Project / Grant Period Start Date: (MM/DD/YYYY)	7a. End Date: (MM/DD/YYYY)	7b. Reporting Period End Date:	9a. If Other, please describe:
11-01-2009	10-30-2014	09-30-2011	N/A

10. Broadband Mapping   10a. Provider Table

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

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

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

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

At this point we have five (5) providers that are not participating. They are:

Birch Telecom of Missouri Inc. Will not cooperate until mandated by FCC. Too costly

Pixius Communications Will not cooperate. They claim information is available on ID Insight

Ionex Communications, Inc. Affiliated with Birch Telecom above

Poplar Bluff Internet, Inc (SEMO). Will not cooperate until mandated by FCC.

SEMO Communications Inc. Will not cooperate until mandated by FCC.

We have asked their respective associations to aid in gaining their cooperation as well as pursuing publicly available maps of their service area and representing their service delivery in that manner.

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

We continue our public-based search and collection of provider information. All mapped resources are being geo-registered and heads-up digitized. We completed an air-card assessment of wireless coverage for a limited area and continue to analyze this information to gain a better understanding of wireless boundaries and their representation within the mapping. We started integrating census data (housing units, population, demographics, etc.) to start the transition to adoption-based mapping and to support our Regional Technology Planning Teams. Interviews and surveys continue to be used in field work elements to collect detail in selected blocks about service provision. We are finishing collecting base work related to measuring and modeling accuracy in order to establish confidence measures for the various technology type maps. We continue to encourage residents to visit the Missouri Ookla speed test site through distribution of postcards at various events (County Fairs, Regional Fairs, State Fairs). We are currently evaluating the purchase of price data from Telogical to help inform our approach to adoption issues in Missouri. We are also discussing using sporting events to collect information and conduct surveys as well as using various associations to target certain groups (i.e. Agriculture: Missouri Corn Growers; Missouri Soybean Association; Missouri Farmers Association). We are evaluating the purchase of ESRI Business Analyst to support the Regional Technology Planning Teams Strategic Planning efforts.

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

We are using a convergence of evidence approach to both determine coverage consistency as well as provide a measure of confidence for these areas and boundaries. The actual verification activities can be broken down as follows:

1. Provider validation – provider review of boundaries - Data call #4 is completed. 101 providers now mapped.

2. Lab-based verification – Using publicly available data and maps; tower locations and service parameters; Still working on receiving Form 477 information; marketing materials of providers; web crawling results; new 2010 Census data at the block level.

3. Field verification – field-based observation, interviews, and measures; Air-cards; Moving away from Community Anchor Institution calls into a more collaborative relationship with statewide associations (i.e. Fire Marshal; State Police Chiefs Association; State Sheriffs Association, Missouri Municipal League); Completed both residential (9,747) and business surveys (1,100+); and state / regional / county fair booths with surveys, postcards, and pin-mapping.

4. Consumer feedback – updates on broadband coverage through web-mapping portal is occurring; State 'Speed Test' results as well as the FCC Speed Test site.

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

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

1. Provider validation – provider review of submitted areas and boundaries for the April 1 submission is completed and integrated into the final October 1, 2011 submission.

2. Lab-based verification – Initially independently completed by GeoDecisions / CBG and the University of Missouri. These are then compared and fed back into each others systems to cross-validate information on individual providers.

3. Field verification – field-based observation and measure have been completed by GeoDecisions /CBG and The University of Missouri. The customized Missouri Ookla site data continues to collect data.

4. Consumer feedback – Citizen residential sampling and survey strategy completed. 76,760 surveys distributed with minimum of 10% return within all regions except one (18 of 19). 9,747 residents completed the survey. Online survey of Businesses completed with 1,100 surveys completed yielding important information with regards to business need and use. We also obtained 1053 new surveys and 390 pin points from Fairs.

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

N/A

Staffing

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

14.33 FTE are currently funded with federal dollars.

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

N/A

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

Fully staffed we will have 15.26 FTE. This number is expected to vary due to work loads within the University, subcontractors, field effort timing, and Regional Technology Planning Team coordinators and Regional Planning Council staff working on the project.

10n. Staffing Table

Job Title	FTE %	Date of Hire
Project Director - MU	60	12/01/2009
Administrative Assistant Mapping - MU	25	12/01/2009
Temporary Technical - MU	75	12/01/2009
Temporary Technical - MU	65	01/10/2011
Undergraduate Student Assistant Technical - MU (n=6)	90	05/17/2010
Undergraduate Student Assistant Service - MU (n=6)	90	12/01/2009
Graduate Research Assistant - MU	20	08/22/2011
Program Manager - Research Specialist Senior Mapping - MU	75	12/01/2009
Research Specialist Mapping - MU	100	12/01/2009
Research Specialist Mapping - MU	58	12/01/2009
Research Specialist Mapping - MU	33	01/03/2011
Geographic Information System Specialist - MU	45	12/01/2009
Administrative Assistant - MU	17	12/01/2009

Undergraduate Student Assistant Service - MU (n=4)	60	05/16/2011
Geospatial Extension Specialist	50	12/01/2009
Graduate Research Assistant - MU	50	01/03/2011
Project Director - GeoDecisions	8	01/01/2010
Project Manager - GeoDecisions	22	01/01/2010
Developer - GeoDecisions	15	05/03/2010
Network Analyst - GeoDecisions	10	05/03/2010
Geographic Information System Analyst - GeoDecisions	35	01/01/2010
Technical Architect - GeoDecisions	10	05/03/2010
MoBroadbandNow Director	100	12/01/2010
MoBroadbandNow Assistant Director	100	12/01/2010
Regional Planning Commissions / Councils - RTPT Coordinators	100	10/01/2010
Regional Planning Commissions / Councils - RTPT Coordinators	100	10/01/2010
Regional Planning Commissions / Councils - RTPT Coordinators	20	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
University of Missouri	Mapping: Support to the State of Missouri to include public source data collection, integration, mapping, database construction for community anchor points, independent quality control, communications, field verification, lab verification, and maintenance	N	Y	12/01/2009	11/30/2011	1,693,253	292,207
GeoDecisions and CBG Team	Mapping: Support to the State of Missouri to include NDA work, data collection, integration, mapping, database construction, quality control, communications, field verification, lab verification, website development and transfer, and maintenance; Planning	N	Y	12/01/2009	11/30/2011	2,262,936	0
Environmental Systems Research Institute (ESRI)	Architecture and support for Web Mapping applications and services; Installation of Web Mapping Services for Broadband Map	N	Y	05/02/2011	05/02/2012	0	65,000

Regional Planning Councils	Aid in the hosting and facilitation of regional technology planning teams and sector development as well as residential survey and business survey support.	N	Y	10/01/2010	03/30/2012	647,000	0
Not Selected	State-based Address Points Mapping	N	N	01/02/2012	12/31/2012	340,000	529,067

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Funding

10p. How much Federal funding has been expended as of the end of the last quarter? $516,265   10q. How much Remains? $6,057,117

10r. How much matching funds have been expended as of the end of last quarter? $1,643,346   10s. How much Remains? $0

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	$1,466,615	$623,726	$2,090,341	$43,500	$43,193	$86,693
Personnel Fringe Benefits	$6,648	$100,746	$107,394	$15,458	$8,226	$23,684
Travel	$0	$0	$0	$1,088	$5,059	$6,147
Equipment	$0	$32,600	$32,600	$0	$1,750	$1,750
Materials / Supplies	$0	$0	$0	$70,198	$8,218	$78,416
Subcontracts Total	$4,943,189	$886,274	$5,829,463	$386,021	$1,576,901	$1,962,922
Subcontract #1	$1,693,253	$292,207	$1,985,460	$117,360	$564,067	$681,427
Subcontract #2	$2,262,936	$0	$2,262,936	$189,261	$909,634	$1,098,895
Subcontract #3	$0	$65,000	$65,000	$0	$65,000	$65,000
Subcontract #4	$647,000	$0	$647,000	$79,400	$38,200	$117,600
Subcontract #5	$340,000	$529,067	$869,067	$0	$0	$0
Construction	$0	$0	$0	$0	$0	$0
Other	$156,930	$0	$156,930	$0	$0	$0
Total Direct Costs	$6,573,382	$1,643,346	$8,216,728	$516,265	$1,643,346	$2,159,612
Total Indirect Costs	$0	$0	$0	$0	$0	$0
Total Costs	$6,573,382	$1,643,346	$8,216,728	$516,265	$1,643,346	$2,159,612
% Of Total	80	20	100	8	20	26

Hardware / Software

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

10v. If yes, please list

Servers and other hardware for support of the state's Broadband Mapping portal has been purchased. Accounting is in the process of moving this cost from the State to the University as the determination of where to host the services changed in mid-stream when the State decided to move all image services and many map services to the University's geospatial data clearinghouse. Software was also acquired (ArcGIS10, ArcServer10, etc.)

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

Waiting to see if scaling will be necessary for the Broadband Mapping application or MoBroadbandNow website.

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

10y. If yes, please list

N/A

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

10aa. If yes, please list

The residential survey is complete with 9,747 respondents statewide (averaging 12.7% return). The on-line business survey has over 1,100 responses. The Regional Technology Planning Teams has engaged over 400 people across 18 of 19 regions of the state in a statewide discussion and assessment of broadband needs and strategies to date.

10bb. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing
Turn-over within the Regional Technology Planning Teams has hindered some sectors in some regions. These were then back-filled as it took some time to locate new leads.
We were really struggling with the mapping and representation of blocks greater than 2 sq miles. This was especially true if all road segments within the block are served. We developed an approach that has recieved favorable review from both the public and providers and have now rolled that out to the MoBroadbandNow websites and Regional Technology Planning Teams.
The new FCC breaks at 4M-1M do not coincide with the current data model. Thus any mapping that we do in response to inquires is very inaccurate as it relates to this break. We have asked NTIA if the data model will change. We are waiting for a decision.

10cc. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project
The entirety of the State's match has been used up-front to cover year 1 and a portion of Year 2 costs associated with the mapping and planning elements of the award. Match used were actual State dollars allocated for the purpose of supporting the mapping and planning aspects of the NTIA proposal. No data match was calculated. Some state personnel salary is still being used as part of this match but is now classified as overmatch and is not being reported within this framework.

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
All but one Regional Technology Planning Team is in place. The one entity that did not want to participate we are working with the state association to enter into contract with to gather that information.
The two pilot RTPT's are assembling their comments to the SWOC (Strengths, Weaknesses, Opportunities, and Challenges) assessment. These have been compiled for one pilot and a draft of the Strategic is almost complete. Some time was spent in development of a Strategic Plan outline and template so as to maintain consistency among plans.
Residential surveys have been collected for all 19 regions (n=9747). Only one region did not reach the target of 400 surveys (298). We believe that this data set represents the largest rural sample of broadband interest to be collected. Business surveys have reached 1,100. The sample numbers will support splitting of these samples into sector groups such as agriculture, manufacturing, technology, etc. The second round of meetings to review the regional needs assessment (residential surveys; business surveys; and sector discussions) has taken place and the resulting SWOC analyses have been drafted. These will be distributed early in Q4 for review. Once comments are received, the draft Strategic Plan for each region will be drafted and distributed.
Needs assessments for 17 of 19 regions are completed. The final 2 regions are lagging due in one case a sampling error in the mail out of residential surveys. This was discovered once the initial surveys were compiled. Another mailing of 760 surveys was sent to targeted zip codes within one county. 103 surveys were returned and the new compilation will be completed shortly. The other region was one in which we did not have a cooperating RPC and it has taken longer to compile this information.
The 2011 Broadband Summit planning is underway. The Summit is set for November 17, 2011 in Jefferson City, MO. Speakers, panels, and topics have been outlined and a program developed.

11b. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing
Not enough discussion time within meetings: We have streamlined the presentation materials to enable more time for discussion with the regional representatives in the second set of meetings.
Presenting a common context: Standardized the type of information presented from the residential surveys and business surveys. Discussions and relevance to the region is then discussed against this context.
A ton of material collected: Created a common format for the SWOC analysis presentations as well as a Regionally-Based Strategic Plan outline and template. Basic graphics and maps have been designed and will be turned over to students to complete the assembly of the documents graphics. Leads for each RPC are conducting the drafting of the plans.
Provider dissatisfaction with portrayal of coverage within 2-sq mile blocks: Created a GIS-based compilation of footprints that more effectively shows coverage in our rural areas.

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

N/A

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?

The Missouri MOBroadbandNow Program Office is continuing participation within Regional Technology Planning Team meetings as well as interfacing with local governmental officials (Commissioners, etc.) to gain their future support.

The Technical Support focus is changing based on conversations and needs voiced in the RTPT meetings. There is a great need to briefs on the technology so as to be able to state in layman's terms the choices and pros and cons of the various technology choices available for broadband. We are also starting to compile a frequently asked questions file.

Missouri's broadband website is continuing to serve the data. We will be updating these files with the Oct 1 submission early in Q4.

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

There is a current development of a cadastral mapping standard that incorporates an element of addressing. We believe that we can now proceed with the final development of a contracting mechanism for the rural addressing component of this work. Our plan was to have two groups under contract in Q4-2011. We will probably be late with this milestone and will have achieved this sometime in Q1 of 2012. Once the contracting mechanism is in place we can accelerate the contracting aspects with local government partners to get back on schedule.

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

N/A

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 Tim Haithcoat	12c. Telephone (area code, number, and extension)
	12d. Email Address Tim.Haithcoat@oa.mo.gov
12b. Signature of Authorized Certifying Official Submitted Electronically	12e. Date Report Submitted (Month, Day, Year) 11-22-2011