Q4-2013 Arizona
Supplemental Answers Document

This attachment to our Q4 PPR details progress made against all goals, objectives, and milestones detailed in the approved Project Plan. Included is a description of each major activity / milestone planned for completion and current status.

Task	Year 4, Q4 (Oct 1 – Dec. 31, 2013) Primary Milestone(s)	Complete By	Q4 Response	Corresponding Primary Activities
Capacity Building				
1.1	Continuously Update activities related to Digital Arizona Council (DAC)	Ongoing	Postponed through Q4	Maintain schedule & activities related to Digital Arizona Council (DAC) including various Task Groups. The DAC meetings continued to be canceled by the Chairman through the end of Q4. We have retained an independent market research firm to interview council members and survey other stakeholders about their opinions on the future of DAC. This report will be completed and published on-line in Q1 of 2014. The preliminary results indicate a strong desire to continue the DAC function and agreement that the statewide Strategic Broadband Plan should be implemented. The council members believe that new governance processes and more formal authority would be useful to its functioning. The decision about resuming DAC meetings is likely to be made in Q1 2014.
1.2	Identify set of tasks related to purpose of Digital Arizona Council (DAC) Strategic Plan - Work includes use of data from the mapping project to create and maintain a Statewide Strategic and Tactical Broadband plan, with emphasis on Broadband deficit areas of the State.	Ongoing	Current as of Q4	The Strategic Plan was updated in Q1. The plan continues to be communicated with each region of the State via the Digital AZ portal www.digitalaz.gov . We will continue to communicate updates and changes to the Plan as it evolves. The updated version is posted to the Digital AZ portal (AZ Broadband Strategic Plan). The three versions continue to stand in DRAFT form until the Digital Arizona Council decides to adopt or approve, (1) a full unabridged version, (2) a condensed version, and (3) an executive summary version. We continue to maintain a relationship with the AZ Department of Transportation (ADOT), the AZ Department of Education (ADE), regional Councils of Government (COGs), regional government consortiums and others to pursue the vision of Digital Arizona Highways SB1402. We continue to serve as Subject Matter Experts (SMEs) to support the Governor's Office of Education Innovation (GOEI) in support of Arizona Ready (Arizona's Education Reform Plan) regarding a statewide education network initiative to improve digital capacity infrastructure to AZ schools. This alliance and collaborative effort will continue indefinitely as the AZ education network initiative continues to be developed. We are currently analyzing statewide K-12 digital connectivity levels and the approximate cost of delivering adequate capacity.
1.2	ASET Team and Digital Arizona Council (DAC) Task Group Formalize and Maintain a Statewide Digital Arizona Broadband Plan	Ongoing	Current as of Q4	The continued coordination and feedback between regions of the state and the current DRAFT version of the Strategic Plan will continue to be coordinated through the DAC, DigitalAZ.gov, COGs, and other interested parties. ASET and the Council will continue to periodically update the plan and send the updates to other Stakeholders. Current versions of the plan are available to the public on our website .

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1.3	Capacity Building - continuous use of Broadband Team, including Staff support of DAC and to actualize Contracts for Broadband Policy work. As part of Capacity Building, Broadband Team definitions and Various Tasks to accomplish and support ASET's Broadband Requirements. Tasks will be performed and accounted for with Allocations for Capacity Building	Recurring	Current as of Q4, except for Cancelled DAC Mtgs.	The DAC Chairman continues to communicate to us that he intends to continue council meetings in future quarters. Membership in the DAC and its mission statement may be modified going forward to reflect the feedback received from the independent research study that will be published in Q1 2014. On a strictly policy and facilitation basis, as part of SB1402, Digital Arizona project stakeholders continue to communicate with out-of-state funding sources regarding a potential infrastructure project to connect the City of Payson back to the Phoenix area with high capacity broadband backhaul connectivity through the laying of conduit facilitated by existence of SB1402. Digital Arizona project stakeholders are also in communication with other providers who are considering the use of SB1402 for several large scale fiber-build projects. ASET Broadband Team's Leadership Activities continue to include Manager Meetings, Budget Approval, Broadband Team Management (Personnel Review, Policy etc.), distribution of DAC materials on www.digitalaz.gov, state agency coordination with ADOT, Department of Education. Additionally, the project team continues to work on our contractor outreach efforts to the rural Councils of Government (COGs). As subject matter experts we are involved in supporting the AZ Ready review and planning about how to potentially better integrate E-Rate application coordination across the State in order to increase E-Rate funding levels for additional broadband access and possible infrastructure builds.
2.0	ASET Team to Identify Broadband Policy Needs and required changes via a Task Group - This Task group proposes policies (i.e., Right of Way) that help to either eliminate barriers or improve the likelihood that Broadband Infrastructure may be more easily deployed.	Ongoing	Current as of Q4	Our Vertical ROW and Longitudinal Highway ROW studies have been made public by means of our web portal. With the passage and signing into law of SB1402 – Digital Arizona Highways Act, we continue to implement opportunities that the new law affords, and are creating a framework wherein the activities enabled by this legislation can be managed or continued through the establishment of an administrative team to oversee these details long-term. Additionally, we continue to support the Arizona Telecommunication and Information Council (ATIC) in an effort to engage broadband stakeholders, including communities and providers.
3.0	ASET team to provide continuous support and Outreach to Digital Arizona Council (DAC) Task Group activity - including Outreach to Economic Development, Tribal, and Rural Business Development groups, to promulgate best practices and policies to the local level and align local and State Strategies.	Recurring	Current as of Q4, except for DAC Task Groups	The project team continues to coordinate forums and educational events geared to remote areas. We are actively engaged in supporting the Governor's Office of Education Innovation and their team in providing analysis on K-12 broadband needs for Common Core assessment and the delivery of on-line educational content. We are serving as SMEs regarding the AZ Education Network, which is currently being considered for funding by the Governor's office. These discussions included development of existing network analysis and possible ways of incentivizing new infrastructure creation in the rural areas of the state necessary to assure statewide K-12 and higher education institutions have sufficient digital capacity

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				to meet future educational and testing needs.
4.0	Intergovernmental Broadband & Economic Development Task Groups - These Task Groups may coordinate intergovernmental Broadband needs, including Counties, Cities, Towns, and School Districts as they work toward funding Broadband in their jurisdictions.	Recurring	Current as of Q4	We continue focusing our efforts on the rural Councils of Government (COGs) as a centralized coordination point for this outreach effort. These organizations continue to be effective in reaching further into the depths of rural Arizona and also deepening our relationship with ADOT at the regional level. The rural COGs continue to support and champion our community outreach efforts. The county managers in the Southeast region of the state (SEAGO area) are directly supporting our activities through the Cochise County Government. The focus of the rural outreach efforts has been on creating local cross disciplinary dialogue about the needs for better internet to serve education, health care, public safety, and economic development interests within each community and the avoidance of silo'd solutions.
5.0	Impact regional and National Policy: Support Personnel costs associated with outreach activities to various US regional and National professional Stakeholder Communities as required, to facilitate partnerships in Policy solutions, Broadband projects, and dissemination of Best Practices.	Multiple Recurring Meetings	Current as of Q4	Our additional outreach efforts continue to include significant discussions on the value of combining state resources in planning the implementation of FirstNet in concert with Arizona's SBI program. In states with low-density rural populations and vast geographic areas, the sharing of resources for the implementation of both programs is critical. We continue the process of merging much of the planning and outreach efforts between the two programs. We are also participating in Western States Consortium of SBI recipients.
Technical Assistance Project				
6.0	The following are Institutional (non-State) and Local providers of Broadband technical support. Dollars will be pass thru from ASET to these institutions. Matching is illustrated here as being from "Travel". Matching could also be from local Personnel allocations or from Other (Cash, local Contracts, etc.). ASET will also provide pass thru value from its "Matching" in-kind sources.	Ongoing	Current as of Q4	As discussed in previous reports, the continued use of letters of agreement for our TA contracts has proven to be very effective. We have begun the second round of the TA program, which will provide technical assistance to new communities within each of the regions. We have received letters of support for using the state right-of-way for broadband development from the executive directors of the COGs. We have also received letters of support from southeast Arizona, Cochise County, along with Graham, Greenlee and Santa Cruz Counties. We have continued the second round of TA activities during Q4 and will continue overseeing the management of this program to the 4 rural COGs (NACOG, WACOG, CAAG, and SEAGO [Cochise County Governments]).
6.0	Implement multiple community broadband planning tools, design of sustainable governance & funding models, SB1402 implementation with third parties	Ongoing	Current as of Q4	We continue to develop planning tools accessible through our mapping portal, including video tutorials on their use. These tools continue to be put to use. They continue being used in regional and local community capacity planning and technical assistance work being performed by the regions' consultants

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				and the Digital Arizona team for both planning local and statewide programs.
				In Q4 we have asked for and received a proposal from the Arizona State University (ASU) GIS team to develop a dramatically improved Java-based "front-end" to our broadband planning mapping tool. This new software will simplify the ease of use and the learning curve required to use the planning tool, and will provide role-based and individual authorization for use of the tool. It will be able to segregate proprietary mapping data layers from public data layers and can remember, recreate, and extend previously stored searches and analysis. We expect to execute a contract with ASU to develop this capability in Q1 2014.
				We continue to explore the long term potential of assisting ROW owners in their efforts to monetize existing ROW assets throughout the State. The target entities include Railroads, Power Utilities, Pipeline, and Canal operators.
				Our legal intern-level data analyst continues to facilitate data gathering related to the decision matrix ROW availability and planning tool we developed. He is assigned a workstation located within the Right of Way department at the AZ Department of Transportation (ADOT). The project will benefit from this research as we prioritize implementation of SB1402 and ROW owned by others.
				We are also using the data and analysis tools created under our program to support analysis and planning for the AZ Ready program effort and the Governor's Office of Education Innovation (GOEI). This includes potentially identifying proximity of schools, other CAIs, student populations, and community populations to potential highway ROW for understanding demand aggregation possibilities to create incentives for private sector investment for constructing fiber assets.
6.0	Technical Assistance for Local Communities. Via Letters of Agreement they will supply matching dollars as their portion (ASET to manage portfolio of Contracts) three to four Contracts will total 80K per year as pass thru via ATI Institute to entities.	Ongoing	Current as of Q4	The ATI Institute continues to manage the Technical Assistance (TA) process under direction of ASET. As round one has ended, we have moved into round two funding efforts. We plan to award a total of $90,900 during round two. Funds will be directed to new communities within the COGs for specific Technical Assistance efforts. As of December 31, we have received invoices from two of the COG regions and have expended $16,650 on Round 2 Technical Assistance activities. Invoices, received in January from the remaining COGs will be paid in Q1 2014.
Local Planning Project				
3.0	Implementation of detailed broadband use case and demand aggregation analysis in selected rural communities and other associated tasks	Ongoing	Current as of Q4	We continue recommending and supporting rural broadband committees to engage local education, healthcare, public safety, and economic development professionals in arriving at jointly created solution for aggregating local demand as a principle method for driving an increase in broadband capacity

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				in their communities.
				Business case analyses (BCA's), as part of the round one LRP agreements with the COGs have been completed with CAG, NACOG, and WACOG and Cochise County Government Association. Round two funding has begun. We plan to distribute $130,000 during round two. Funds will be directed to new communities within the COGs for specific Local and Regional Broadband Planning efforts.
				It is our intention to circulate the reports generated for each of the COG regions with all the other regions throughout the State. A joint meeting was held with all COG leaders to discuss the impact of Round 1 findings and to share best practice ideas that were discovered during the regional work. This meeting demonstrated a significant commitment on the part of regional leaders to actively pursue creating solutions for expanding broadband availability within all of the regions and an understanding that they would need to take the lead over time in creating solid working relationships with broadband providers in their respective regions and communities.
4.0	Implement detailed decision support MATRIX for determining prioritization of SB1402 (AZ Digital Highways Act of 2012) rollout options and other associated tasks	Ongoing	Current as of Q4	We continue to develop the road priority Decision MATRIX to support critical decision making and planning to facilitate investment decisions by communities and providers for expanding broadband capacity. During the market analysis we did for GOEI we discovered that certain road segments will need to be divided between rural portions and urban portions, because to not do so skewed the school density counts on those road segments and, therefore, the market density analysis in those cases.
				This tool continues to support general evaluation for possible 1402-based projects and produces detailed criteria for cost and ROI forecasts for specific road segments in support of GOEI project plan. This will assist us and others in determining prioritization of the future statewide conduit build-out initiatives based on understanding of population densities, income levels, existing competition, existing ROW and facilities, and a deeper understanding of future CAI bandwidth needs, etc., to assure the proper sequencing and staging of private and public funding initiatives.
				As mentioned previously, we continue working to develop a GIS database framework for the gathering and sustainment of this information and are improving the usability and capabilities of this tool.
				We are moving forward on contracting with the Arizona State University Institute for Social Science which has agreed to assist us in developing an improved GIS platform, as mentioned earlier.

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7.0.	ASET will Manage a program of Local Broadband Planning funding to Local communities and Stakeholder groups. Matching will be provided by recipients. Total funds to pass through to local recipients will equal up to 250k through years 3-5.	Ongoing	Current	Through our Outreach contractors, ASET identified several recipients (COGs) and related community entities within those COGs, for local planning fund contracts to support local capacity building. The work contracted for in all four Round 1 agreements has been completed. Each round-one award was for $30,000 for a total of $120,000 across the recipients. With these agreements, we have substantially completed our goal of equal distribution of round one LRP funds across the four rural COG regions. Round 2 efforts have been contracted for and were approximately 36% complete at the end of Q4. As of December 31, we have received invoices from two of the COG regions and have expended $24,000 on Round 2 LRP activities. Invoices, received in January from the remaining COGs will be paid in Q1 2014.
Mapping Task				
3.2	Update and Deliver Broadband and Community Anchor Databases.	Ongoing	Current	We continue to track Broadband services by Community Anchor Institutions in the State and the actual speeds and costs of their Broadband services. For Arizona we have expanded the definition of CAI to include a significant number of commercial institutions which either have a significant broadband demand, or provide Wi-Fi or other internet access to the public. As part of our support of GOEI, as described earlier, we are deepening our assessments of the current level and cost of broadband services being provided to Arizona schools both before and after eRate discounts. We are learning that Arizona schools are at 100th of the speeds provided to schools in a comparable state, such as Utah, at 10 times the cost per mbps.
3.3	Update the Arizona Broadband Map (including community economic and census data for purposes of community broadband planning).	Ongoing	Current	We are continuously updating the Arizona Map with additional actual measured and surveyed broadband speed performance and cost data for both fixed location services and mobile services. Our Arizona specific speed test functionality is fully operational along with a detailed voluntary survey. This data is being added to the Arizona Broadband Mapping Tool for web-based access by stakeholders. We continue to improve on the development of a standalone planning-specific version of our State Broadband Map called the "**Community Broadband Planning Map Tools**". These tools can be found on our Broadband Portal http://broadbandmap.az.gov/CommunityPlanningMap/ These tools are freely available to the general public and are proving most useful for planners, economic development organizations, and others. These tools continue to be updated with valuable datasets including demographics, economics, statistics, middle-mile route maps from selected providers, and many other functions which will be used by a wide array of planners, developers, and public/private stakeholders in efforts to determine factual representations of actual community specific circumstances. As mentioned earlier, we will be contracting with

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				ASUs GIS program in the next quarter to write a new Java-based front-end to the planning map tools that will be significantly easier to use than the present user interface. Video step-by-step tutorials to be used as training tools for how users can analyze any planning scenario are available here: http://www.youtube.com/user/ArizonaBroadband. In addition, we will update these tutorials to reflect the capabilities of the new user interface when it becomes available.
3.4	Maintain the Hardware, Software, Communications and Data Infrastructure to Support Processing and Delivery of the Arizona Broadband Services and Community Anchor Databases and the Operations of the Arizona Broadband Map.	Ongoing	Current	We continue to keep the Broadband Map servers and software working at a high level of reliability. As reported (Q4 2012) as a result of our expanded Broadband Map, State Specific Speed Test, and Website functionality, we have improved upon and upgraded certain database and server processes, including: (1) Creation of a survey database, (2) Creation of code to match Ookla Speed Test Results with Survey Results, (3) Re-direction of the DNS, (4) Creation of a survey using Lime Survey associated with a SQL database on the AZDOA/ASET webserver. In this quarter, we have added additional survey and speed test capability for mobile devices (IOS and Androids). The speed test uses Mobile Pulse's speed test capability and then hands off the data to our survey website and asks mobile users to complete a mobile version of our survey. As the mobile speed and survey data is captured, it will be integrated with other speed and test survey data.
3.5	ASET Y4 Phase 3 Project Management.	Ongoing	Current	We continue to manage the overall Mapping, Capacity Building, Local Planning, and Addressing and Technical Assistance programs for effective results.
Addressing Tasks				
3.6	Addressing Initiative tasks.	Ongoing	Current as of Q4	The Arizona Broadband (AZBB) Mapping Project, through the AZBB Address Project, is continuing to obtain existing address and road network data. By helping to accurately develop new address and road network data, this information will be used to improve the accuracy of our overall Broadband mapping records. A consultant TerraSystems Southwest(TSSW), was contracted with to provide GIS services for developing improved address data for the AZ Broadband Mapping project. TSSW assessed existing address data and helped develop contract requirements to assure contracts for newly developed 9-1-1 address data can be used to better identify levels of broadband services available at the street address level throughout the state. Currently, two 9-1-1 contractors have been selected and work continues to progress in developing 9-1-1 data for Navajo, Apache and La Paz counties. We continue working to assure that street centerlines and address data, for the three counties that still need this data, are developed to meet our state 9-1-1 GIS standards. This standard anticipates NG911 and has additional attributes which support AZ Broadband Mapping geocoding activities. Additionally, ADOT is initiating its own programs at the request of the

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				USDOT to further improve its centerline and address data. Agreements have been made to share this improved information with our 9-1-1 and Broadband programs. We continue to collect and assess the quality of existing county address data to determine the most cost effective methodologies to convert and standardize existing county address databases into a statewide database. To date, statewide, geocodable street network and address schemas have been developed, and data has been collected, processed and assembled from local 9-1-1 and GIS office sources. The appended statewide road network has been evaluated for geocoding rates and accuracy. This is the first time such a locally-based network has been assembled in Arizona and it was used in the Spring 2013 AZBB data submittal process and will continue to be incorporated in new submittals throughout the remaining period of the grant. The insights gained into multi-agency coordination, collection, pre-processing, appending and quality control has been used to develop and refine a sustainable workflow for maintaining statewide geocodable street network and address point files. Meetings will continue to be scheduled and additional agreements developed with counties and local government to obtain maintained address and road network data on an ongoing basis. The Arizona State Cartographer's Office (SCO) signed an agreement with ADOT to partner on the development and maintenance of road network data which meets FHWA, Broadband mapping, 9-1-1 and MAP-21 requirements. As part of the agreement with ADOT, and in working with our 9-1-1 community, we have begun dialogues with the Bureau of Indian Affairs (BIA) State Office and have begun to obtain road and address data BIA has on file. In addition, our program is continuing to coordinate with the Department of Interior (DOI) Geographic Information Officer (GIO) regarding the importance of obtaining BIA roads data. The DOI GIO agreed to facilitate obtaining the data. These efforts are now providing more areas containing accurate road centerlines and facilitate business requirements to continuously improve and provide annual updates of road network and address data for the Broadband project on an ongoing basis. Most recently we have obtained road network and address data from the Gila Salt River Indian Community. We continue to work with other tribes in the state to obtain equivalent data. It is anticipated implementing new agreements with counties and tribal governments will improve the quality of this data over time as participation increases. The repurposed server is the Arizona Geospatial Clearinghouse (AZGEO) which not only acts as a repository for geospatial (address ranges, points, road networks and other data) to support the activities of this project, but is combined with additional data to encourage participants to contribute and engage on a long-term transactional basis. The agreement with ADOT is providing additional funding for

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				AZGEO development. Additional long-term sources of funding continue to be sought to maintain AZGEO in the future. An AZGEO implementation plan has been finalized and presented to the Arizona Geographic Information Council (AGIC) for approval. When AGIC approves the plan, the next steps will be to obtain approval from Arizona Strategic Enterprise Technology (ASET) CIO and the participating state and county agencies to implement and institutionalize the plan which includes both governance structure and budgets to manage and administer AZGEO.

Street centerline and address data developed for the AZBB Mapping Project will also be made available to state and county agencies to locate and geocode address data to assist state, county and municipal first responders and for other approved purposes. |