

## Q4-2012 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. Red indicates modified wording in project goals, objectives or milestones.

Task	Year 3, Q4 (Oct 1 – Dec 31, 2012) Primary Milestone(s)	Complete By	Q4 Response	Corresponding Primary Activities
<b>Capacity Building</b>				
1.1	Continuously Update activities related to Digital Arizona Council (DAC)	Ongoing	Current as of Q4	Maintain schedule & activities related to Digital Arizona Council (DAC) including various Task Groups.
1.2	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	<p>The Strategic Plan was completed in Q4. The plan was communicated with each region of the State via the Digital AZ portal <a href="http://www.digitalaz.gov">www.digitalaz.gov</a> and DAC Council presentations and ASET Sponsored AZ Digital Summit (discussed below). We will continue to communicate updates and changes to the Plan as it evolves (NOTE: as of this reporting, the plan is being updated to include "Alternate Viewpoints" as expressed to us by COX and the AZ-New Mexico Cable Communication Association by way of official letter. The updated plan versions will be posted to the Digital AZ portal by Feb. 7<sup>th</sup>, 2013 <a href="#">AZ Broadband Strategic Plan</a> ). The Digital Arizona Council (DAC) was presented with the final DRAFT version during its November 8<sup>th</sup> 2012 council meeting. The council decided not to conduct an "Approval" vote at that time and requested the above mentioned modifications. Three versions will continue to stand in DRAFT form until the Council decides to adopt or approve, (1) a full unabridged version, (2) a condensed version, and (3) an executive summary version.</p> <p>We have closely supervised, monitored and validated ongoing contract work related to the Strategic Plan and updated versions throughout its several iterations. The DAC and ASET continue to maintain partnerships with the AZ Department of Transportation (ADOT) and the AZ Department of Education (ADE) to pursue the vision of Digital Arizona Highways SB1402. We have also garnered support from the Governor's Office and the AZ Department of Education, specifically regarding the education initiatives related to a statewide digital capacity infrastructure improvement initiative. These conversations</p>

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				will continue into Q1 2013, more details will follow. The Council (supported by ASET) continues to explore multiple public and private funding opportunities to enable the build-out of conduit infrastructure statewide. We have received much interest especially from infrastructure contracting firms based out-of-state.
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	<p>DAC Task Group members are finalized the DRAFT version of the Statewide Strategic Broadband Plan, which was presented to the DAC for review during its Nov 8<sup>th</sup>, 2012 meeting. The continued coordination and feedback between regions of the state and the DRAFT version of the Strategic Plan will be coordinated through the DAC and DigitalAZ.gov.</p> <p>The first release of the Statewide Digital Arizona Strategic Plan was reviewed by the Council and published on the AZ Broadband Web Portal early Q4 2012. ASET and the Council will continue to periodically update the plan and send the updates to other Stakeholders. Current versions of the plan will be available to the public at <a href="http://www.digitalaz.gov">www.digitalaz.gov</a>.</p>
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	<p>To date, we have facilitated 35 Task Group meetings with over 70 members from regions of the state participating across the categories of Health, Education, Policy, Economic Development, Strategic Plan and Provider Issues. The DAC held its 6<sup>th</sup> public meeting in Q4.</p> <p>During this meeting, the DRAFT Strategic Plan was presented, discussed and digested. The DAC members decided rather than approve the plan by vote during the meeting, they would like to have a few additions or changes made to the plan. As a result, the updated plan will be presented to the DAC during the February 7<sup>th</sup> 2013 meeting. This version will include the "Alternate Viewpoints" section documenting the views of COX and the AZ-New Mexico Cable Communication Association.</p> <p>On a policy and facilitation basis and as part of SB1402, Digital Arizona project stakeholders continue to communicate with out-of-state funding sources on a potential project to connect the City of Payson back to the Phoenix area with high capacity</p>

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				<p>broadband backhaul connectivity through the laying of conduit facilitated by this recently passed AZ legislation.</p> <p>In addition, the ASET Broadband Team's Leadership Activities continue to include Manager Meetings, Budget Approval, Broadband Team Management (Personnel Review, Policy etc.), planning and logistics for DAC meetings including the creation and maintenance of materials including a new brochure, posting and distribution of DAC minutes and materials on <a href="http://www.digitalaz.gov">www.digitalaz.gov</a>, state agency coordination with ADOT, Department of Education, and all agency CIOs, including coordination with E-Rate with Broadband Plans which includes the updating of content on the Digital AZ website. Additionally, the project team continues to work on our contractor outreach efforts to the rural Councils of Government (COGs) including rural municipal governments and large-scale fiber construction contractors.</p> <p>ASET and DAC supported the efforts of Arizona Telecom &amp; Information Council (ATIC) regarding legislation to create the AZ Broadband Infrastructure Office. This plan has been slightly modified as reported previously. We are now exploring the potentiality of a public-private partnership (PPP) formation as a structure to create a public/private stand-alone Office to support the long term sustainability of our efforts well past the federal grant expiration date. This PPP would be supported by alternate funding mechanisms described in other areas of this report.</p>
2.0	ASET Team supports Task Groups - These Task groups of Digital Arizona Council (DAC) target various aspects of Broadband Policy and issues and work to eliminate barriers or improve the likelihood that Broadband Infrastructure may be more easily deployed	Ongoing	Current as of Q4	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 will be managed.
2.0	Ongoing Contractor work includes work on barriers to Broadband development in Arizona such as state and local government policies and regulations, Right of Way permitting, state and local tax issues. Digital Arizona Council (DAC) will identify legislative or regulatory changes to eliminate or	Ongoing	Current as of Q4	<p>Our ROW study contractor continues to provide policy recommendations. These recommendations are the basis of discussions with broadband stakeholders throughout the state.</p> <p>We continue to develop economic and deployment modeling tools based on</p>

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	mitigate barriers.			capabilities developed in-house in concert with our state land GIS resources, our contractors and the Microsoft provided models mentioned in previous quarterly reports. We believe these tools now integrated with our state broadband map during Q4, will add significant value to the strategic work of the Digital Arizona Program, ATIC, and ATII. We have the opportunity to use these tools with communities statewide to help them understand the benefits of digital inclusion at local levels.
2.0	ASET team provides continuous support for the discovery or maintenance of policies (i.e., Right of Way) documentation to further the cause of Infrastructure deployment.	Recurring	Current as of Q4	<p>We have developed an updated detailed planning, staging and scheduling tool labeled the "Prioritization Matrix". This tool supports evaluation and assists in determining prioritization of the future statewide conduit build out initiatives and the proper sequencing and staging these initiatives under the SB1402 framework. This updated decision matrix assists the decision making process by focusing on 87 road segments rather than individual communities as the basis for evaluation on both empirical (data driven) and qualitative levels.</p> <p>Within the high level objectives, 9 key priorities are identified to assist the gathering of vital information within over 59 key data elements. The resulting informative picture will assist in determining a "staged" build out approach.</p> <p>We attached a copy of the tool to our Q3 PPR submission.</p>
3.0	Rural/Tribal Economic Development and Tribal Broadband Task Group Support Actives - define needs and promote solutions for Broadband in Rural areas, especially with Economic Development and Business Groups who have unique needs.	Multiple Recurring Meetings	Continuing	<p>We continue to reduce some of the physical on-site meetings in favor of a comprehensive outreach by utilizing our web-portal and remote conferencing that have proven to be extremely effective in stimulating interactions and discussions around broadband adoption and rural infrastructure build out throughout the State.</p> <p>We have an active rural outreach task group. We continue supporting the work of Task Groups in two non-profit entities (ATIC, ATII) that are working on Broadband related rural economic development (Strategic Plan, Event Planning). These activities include the planning for four regional summits in addition to one already completed statewide Summit held on November 13, 2012. This summit was titled Arizona's Digital Connections</p>

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				<p>Summit 2012. It was held at the Mesa Convention Center and attended by local government officials, stakeholders, and industry experts.</p> <p>Additionally, we are conducting outreach to Tribal and rural communities via a combination of formal meetings such as the Tribal Telecomm Conference, February 11-13 and through region specific web content at <a href="http://www.digitalaz.gov">www.digitalaz.gov</a> . Our policy advisor will be a panelist at this event.</p>
3.0	<p>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.</p>	Recurring	Current as of Q4	<p>The ASET team continues to attend, lead or coordinate forums and educational events geared to remote areas. We have given informational and educational presentations to rural and metro Councils of Government (MAG, CAAG, NACOG, WACOG, and SEAGO-area stakeholders) as well as actively participated in ATIC board meetings. We participated in the AZ Ready Council meeting in Oct. We also met with the Governor's chief of Staff to discuss the Digital Arizona Project SB1402 legislation in conjunction with an in person meeting with a National Middle Mile fiber contractor/operator. This meeting and introduction also included the Director of the AZ Department of Transportation and his Deputy, the State CIO and his Deputy as well as project staff.</p> <p>These discussions have developed into strong relationships as we move to implement SB1402 and specifically the coordination of a privately funded proposed physical infrastructure build out from Phoenix to the Nevada border.</p>
4.0	<p>Intergovernmental Broadband &amp; 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.</p>	Recurring	Current	<p>We continue physical and virtual visits with county officials and technical personnel. As noted above, we are 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 also deepening our relationship with ADOT at the regional level. 3 of the 4 rural COGs continue to support and champion our community outreach efforts. The county managers in the fourth rural COG area are directly supporting our activities. These relationships established the firm foundation needed to implement our Technical Assistance and Local Planning</p>

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				<p>efforts which will be discussed in a later section.</p> <p>Conversations continue with stakeholder groups like the Arizona Telecommunications and Information Council (ATIC). ATIC aggressively assisted with our outreach efforts. Additionally, the Arizona Department of Education continues to support our plan to get high capacity broadband into rural Arizona in support of their education reform plan which is highly broadband dependent. The Governor's Office has joined this discussion and is working closely with ADE and our team continuing our statewide coordination approach to facilitate the broadband capacity goals required to improve education, curricula, testing, and reporting processes, specifically the implementation of "Common Core Assessment".</p>
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	<p>Our additional outreach efforts at the federal level and with other states continue to include significant discussions of the value of combining state resources in planning the implementation of FirstNet in concert with Arizona's SBI program. It is clear to us that in states with low-density rural populations with vast geographic areas; the sharing of resources for the implementation of both programs is an absolute necessity. We continue the process of merging much of the planning and outreach efforts as these efforts reach the same rural audiences along the same rural highways and require agreement and support from the same rural decision makers.</p> <p>We continue to believe that the eventual building of the required networks for both FirstNet and general expansion of broadband capacity can benefit enormously from sharing these resources as they are built and the impact of SB1402.</p>
<b>Technical Assistance Project</b>				
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,	Ongoing	Current	<p>As discussed in previous reports, the use of letters of agreement for our TA contracts has proven to be very effective.</p> <p>We continue overseeing the ongoing management of the TA program to the 4 rural COGs (NACOG, WACOG, CAAG, and SEAGO). The first two agreements were</p>

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	etc.). ASET will also provide pass thru value from its "Matching" in-kind sources.			<p>awarded in Q4 and consultants were identified by the respective COGs to assist in the Technical Assistance work. We had many conversations with the COGs and their identified consultants regarding effective choice of deliverables and measures of success relating to those deliverables.</p> <p>Our two legal intern-level data analysts continue to facilitate data gathering related to decision matrix ROW availability and planning requirements, including project prioritization, stakeholder/community entity research, impact reporting, and other required project data analysis. They are currently assigned workstations located within the Right of Way department at the AZ Department of Transportation (ADOT). Both ASET and ADOT will ultimately benefit from this research as we prioritize implementation of SB1402.</p>
6.0	Implement multiple community broadband planning tools, design of sustainable governance & funding models, SB1402 implementation with third parties	Ongoing	Current	<p>As mentioned previously, the ASET team, GIS team at ASLD, ATIC, and our contractors have developed a constellation of planning tools accessible through our mapping portal including video tutorials on their use. These tools are already being put to early use by the rural planning committees that the COGs have stood-up as a result of the Technical Assistance program. They will be used extensively in regional and local community capacity planning and technical assistance work to be performed by the consultants and the Digital Arizona team for both planning local and statewide programs.</p> <p>As mentioned previously in this report preliminary conversations have begun with third parties about the establishment and funding of a Public-Private Partnership (PPP) as a long term home for the Digital Arizona program.</p>
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)	Ongoing	Continuing to Q4	<p>The ATI Institute continues to manage the Technical Assistance (TA) process under direction of ASET.</p> <p>Examples of the TA and LRP Letters of Agreements and Exhibits were attached to Q3's PPR.</p>
<b>Local Planning Project</b>				



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7.0	Implementation of detailed broadband use case and demand aggregation analysis in selected rural communities and other associated tasks	Ongoing	Current as of Q4	We have been actively 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 in their communities.
7.0	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	<p>The Prioritization Matrix tool described previously in this report supports evaluation and assists in determining prioritization of the future statewide conduit build out initiatives and the proper sequencing and staging these initiatives under the SB1402 framework.</p> <p>We attached a copy of the tool to our Q3 PPR submission.</p>
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 as of Q4	<p>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 three agreements executed during Q3 are now being implemented in Q4. Each award was for \$30,000 for a total of \$90,000 across the 3 COGs. It is anticipated that a similar \$30,000 award will be allocated directly to the county managers within the Southeastern Arizona Government Organization (SEAGO) region, which will complete equal distribution of the funds across the four rural COGs.</p> <p>We expect to see deliverable associated with these executed agreements during Q1 2013.</p> <p>Examples of the LRP and TA Letters of Agreements and Exhibits were attached to our Q3 2012 PPR.</p>
<b>Mapping Task</b>				
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.
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 Broadband speed performance data for both fixed location services and mobile services.



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				<p>Our Arizona specific speed test functionality will be fully operational along with a detailed voluntary survey in Q1. Technical implementation delays precluded us from standing up the speed test as planned in Q4.</p> <p>We have partnered with the Arizona State Lottery and the AZ Department of Education to assist in expanding the scope and reach of the Speed test across the State. The Lottery website receives multiple-millions of hits to its home page on a weekly basis. The Lottery Director has agreed to post a link to the AZ Speed Test on the Lottery Home Page across the top banner in one of the most prominent positions allowing for easy recognition. The AZ Department of Education will use emails and web links to solicit all state education personnel and their friends and family to take the AZ speed test.</p> <p>In addition, we have received agreement from the State Public Information Officer (PIO) to advertise and invite all State employees to participate in the speed test from their homes. This invitation will be sent by email during Q1.</p> <p>We continue to improve upon the development of a stand alone Planning specific version of our State Broadband Map called the “<b>Community Broadband Planning Map Tools</b>”. These tools can be found on our Broadband Portal <a href="http://broadbandmap.az.gov/CommunityPlanningMap/">http://broadbandmap.az.gov/CommunityPlanningMap/</a>. These tools are freely available to the general public but will prove most useful for planners, economic development organizations, and others. These tools continue to be updated with valuable datasets including demographics, economics, statistics, 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.</p> <p>We continue to develop video step-by-step tutorials to be used as training tools for how users can analyze any planning scenario. Please view this video library by clicking here: <a href="http://www.youtube.com/user/ArizonaBroadband">http://www.youtube.com/user/ArizonaBroadband</a></p>

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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 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 database, (2) Creation of code to match Ookla Speed Test Results with Survey Results, (3) Re-direction the DNS, (4) Installation of Survey Monkey on the AZDOA/ASET webserver.
3.5	ASET Y3 Phase 3 Project Management.	Ongoing	Current	We continue to manage the overall Mapping, Capacity Building, Local Planning, and Addressing programs for effective results.
<b>Addressing Tasks</b>				
3.6	Addressing Initiative tasks.	Ongoing	Current as of Q4	<p>The integration of existing and new address data into the overall mapping effort to improve the accuracy of the Broadband map data continues.</p> <p>We are exploring the possibility of improving the accuracy of our addressing data by blending 911 address data available to us with the currently available sources such as NAVTEC.</p> <p>In Arizona, TIGER files and commercially available data sets are accurate within major urban areas, but they often lack spatial accuracy, current road segments, or address attributes in many of the rural parts of the state. While the quality of data received from the providers can be problematic, the address data available to perform address matching also creates a high rate of “no matches” when used for geocoding purposes. To reduce this critical problem, the SCO and ADOA State 911 State Office are developing accurate and current street centerlines address ranges and (as possible) address point locations for Arizona’s 15 counties.</p> <p>Our project is 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 standard. This standard anticipates NG911</p>

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				<p>and has additional attributes which support AZ Broadband Mapping geocoding activities. A study is being conducted to assess the quality of existing county address data and determine the most cost effective methodology to convert and standardize existing county address databases for all county addresses. To date, a statewide, geocodable street network schema has been developed, and data has been collected, processed and assembled from local 9-1-1 sources. The appended statewide road network and is being evaluated for geocoding rates and accuracy. This is the first time such a locally-based network has been assembled in Arizona and it will be used for the AZBB Spring 2013 submittal process. The insights gained into multi-agency coordination, collection, pre-processing, appending and quality control will be used to further develop and refine a sustainable workflow for maintaining statewide geocodable street network and address point files. Earlier work has shown that geocoding success rates increase when available address data is supplemented with county address data for Broadband mapping purposes. The geocoding 'hit' rate should continue to increase as counties partner with the state to participate in improving Arizona street centerline and address data.</p> <p>The AZBB Address Project is repurposing an existing server to assist rural counties in hosting their address and street centerline data. This new secure server will allow counties, to contribute and access street centerline and address data as a backup for their own purposes and for use by the AZBB Mapping Project. The project now annually collects existing street centerline and address data from county 9-1-1 and GIS offices. New agreements with counties and tribal governments will improve the quality of this data over time as participation expands.</p> <p>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 any other approved purposes.</p>