

ATIC Board Agenda for Wednesday, November 13, 2024

1. Administrative

- 1.1. Self-Introductions
- 1.2. Modifications to and Acceptance of Agenda Draft
- 1.3. Acceptance of Minutes from October 9, 2024, Board Meeting
- 1.4. Treasurer's Report (Ron Schott)
- 1.5. ATIC Board Membership Considerations
 - 1.5.1. ATIC Broadband Providers Working Group Meeting & Next Steps
- 1.6. Review of Outstanding Action Items as Documented in October 9, 2024 Minutes

2. Informational Presentations

- 2.1. None Scheduled

3. Activity Reports

- 3.1. Arizona Broadband Office Report (Sandip Bhowmick)
 - 3.1.1. Broadband Grants, Rural Community Outreach & Projects
 - 3.1.2. Digital Equity Initiatives & Opportunities
 - 3.1.3. ACA Broadband Strategy & ATIC Role/Support
- 3.2. Arizona Broadband Stakeholder Network (Steve Peters)
 - 3.2.1. AZBSN Digital Access Task Force Updates
 - 3.2.2. AZBSN Leadership Group, Committees & Initiatives
 - 3.2.3. Outreach Activities with Newsletters & Webinars
- 3.3. Technology in Education/eLearning
 - 3.3.1. Arizona Technology in Education Association (AzTEA) (Nan Williams)
 - 3.3.2. Greater Arizona Educational Leadership (GAZEL) (Steve Peters)
 - 3.3.3. Sun Corridor Network (SCN) (Laura Etter)
- 3.4. Arizona State Library (Holly Henley, Mala Muralidharan)
- 3.5. Telehealth (Michael Holcomb)
- 3.6. Government Affairs
 - 3.6.1. Arizona Broadband Policy Update (John Kelly, Mark Goldstein)
 - 3.6.2. Federal Broadband Policy Update (Nicole Umayam/NTIA, Mark Goldstein)

4. Information and Action Plans

- 4.1. ATIC Website & Teleconferencing (All)
 - 4.1.1. AZBSN Communications & Newsletter
- 4.2. ATIC Mailing List & CRM (All)
- 4.3. New Business and Motion Considerations (All)

5. Events Attended and Upcoming Meetings

6. Announcements

7. Adjourn

ATIC Board Meeting Minutes

November 13, 2024

Attendees:

ATIC Board Members:

Mark Goldstein, Henry Goldberg, Oris Friesen, Ron Schott, John Kelly, Kirk Busch, Jerry Crow, Brian Daly, Laura Etter, Heather Floyd, Rob Gallegos, Holly Henley, Erin Lorandos proxy for Sandip Bhowmick, Andy Phelan, Dario Solis, Nan Williams.

ATIC Associates & Guests:

Steve Peters (Coordinator, AZBSN Digital Access Task Force), Mala Muralidharan (E-Rate Administrator for Public Libraries, Arizona State Library), Nicole Umayam (Federal Program Officer for Arizona BEAD and Digital Equity Programs, NTIA), Kevin Sievert (Sr. Broadband Strategy Manager, Calix), Caroline Klebacha (Compliance Specialist for Broadband Projects, Arizona State Historic Preservation Office), Heather Whittemore (Commercial Account Manager for SLED & GEM, Wecom Fiber), Gordon Fuller (Creative Technologist and Disability Advocate working on Smart Cities), Ean Bradley (CEO and Founder, Judy.ai), Kealoha (Liaison to Planned Systems.org and Co-Founder of Fullervision.AI).

Quorum Met with 16 ATIC Board Members Present including 1 proxy (Quorum = 10). A replay of the meeting is available at <https://youtu.be/3T0ztYIEAQw>. Many thanks to Nan Williams and the Arizona Technology in Education Association (AzTEA, <http://aztea.org/>) for the use of their Zoom Video account for video conferencing and dial-in capabilities and to the Arizona State Library for providing additional support.

The next ATIC Board Meeting is scheduled for Wednesday, January 8, 2025, virtually. The schedule of ATIC Board Meetings for the balance of 2025 can be found towards the end of these minutes.

1. Administrative

1.1. Self-Introductions

See the list of attendees above.

1.2. Modifications to and Acceptance of Agenda Draft

MOTION: To accept the Agenda

MOVE: Henry Goldberg
SECOND: Ron Schott
Passed Unanimously

1.3. Acceptance of Minutes from October 9, 2024, Board Meeting

Oris Friesen writes the draft minutes, after which they are reviewed carefully by Henry Goldberg, and Mark Goldstein does a final edit of the draft minutes before issuing them to the Board as a draft for review, comment, and approval. For this meeting due to Oris having a medical appointment, Henry wrote the draft minutes and they were edited by Oris with final editing by Mark.

MOTION: To accept the Minutes

MOVE: Jerry Crow
SECOND: Heather Floyd
Passed Unanimously

Historical minutes from past Board Meetings from 2023 and 2024 can be found on the website at <https://www.arizonatele.org/board-minutes.html>.

1.4. Treasurer's Report

Ron Schott, Treasurer, circulated via email the Desert Financial Credit Union statement with account and transaction details for Board reference, which are included at the back of these Minutes. Ron reported that current funds on hand total \$6202.14. Ron noted that all bills have been paid except for an outstanding reimbursement to Mark for Web hosting. Ron also reported at the last meeting that he had submitted the annual E-Filing report to the IRS, and it was approved.

Mark recapped briefly that the two biggest expenses paid recently were: the Directors & Officers Insurance for \$933 (which was the same amount as the previous year, and the Board agreed that ATIC should have this particularly if we undertake projects); and our annual membership dues for the Arizona

Technology Council of \$500 (Mark provides broadband and other technology sections for the Arizona Technology Council (AZTC) Public Policy Guide, Ron and John Kelly, ATIC Lobbyist also participate actively in the Public Policy Committee, and ATIC Board members receive discounted fees for AZTC events).

Steve Peters had nothing new to report on the AZBSN financial situation. He had reported in the past that he has been in discussion with some people about securing some funding for AZBSN. He also noted that there are no funds remaining in the Arizona Broadband Stakeholder Network account and no new sponsorship funding has been contributed. Steve had previously clarified that there is about \$2,000 remaining in the account to cover AZBSN expenses but no funds available to pay his monthly salary. He hopes to have a proposal ready in the near future and engage in concerted outreach to get some more funding.

Steve launched a sponsorship drive earlier to raise further funding (<https://www.arizonatele.org/funding-request-2020.html>) and needs to become more active in securing some sponsorship renewals and new sponsorships.

At the July 10th ATIC Board Meeting, Mark provided a brief overview for new attendees of the funding relationship among AZBSN, ATIC and GAZEL. AZBSN was created jointly by ATIC and GAZEL. Steve's monthly salary of \$2500 flows through GAZEL to AZBSN. It was noted by Steve Peters that there exists a draft Memorandum of Understanding (MOU) between ATIC and GAZEL on AZBSN developed in 2020. One of the decisions that was made was to let the finances of AZBSN operate under the management of GAZEL. However, the GAZEL Board has not met for some time and is not effectively acting in an operational or governance capacity.

In the past ATIC has contributed to Steve's salary and AZBSN expenses but does not have sufficient funds to continue such contributions. Mark has noted at previous meetings that the ATIC bank balance has been drifting down, but with remote ATIC Board meetings we no longer have to pay for lunches for attendees, a significant recurring expense. Mark has commented in the past that ATIC needs to pursue its own funding, which would include sponsorships. ATIC needs to initiate a financial campaign for sponsors and other sources of funding to support and undertake new projects. Mark noted that in the past ATIC has been paid to host rural broadband workshops, produce election debates, and has pursued various projects when it had more funds.

Mark indicated previously that he feels bound to initiate a campaign to address this issue by reaching out to members in the commercial broadband arena.

1.5. ATIC Board Membership Considerations

Mark Goldstein reviewed at the July 10th Board Meeting some recent changes to the ATIC Board membership noting that Mike Keeling has retired and resigned from the Board, Janet Major has retired from the U of A and has been replaced by Michael Holcomb, Interim Director of the Arizona Telemedicine Program. Dario Solis of ASU, Tamara Rosenberg of Resound Networks, and Brian Daly, Assistant Vice President for Wireless Technology and Standards at AT&T, have been added to the Board in 2024.

This brings our current Board membership to 29. Our bylaws allow for 30 Board Members plus 5 officers, and so there is still capacity for up to 6 additional Board members.

As discussed at the September 11th Board Meeting, Mark has sent e-mails to seven people explaining ATIC's mission, inviting them to become engaged with ATIC activities, and if engaged be nominated later for ATIC Board membership. The seven people (including the first five who are from tribal organizations since we would like tribal representation on the Board) he e-mailed were:

Brian Fickett/Tohono O'odham Utility (<https://toua.net/>, brian.fickett@hq.toua.net)

Brent Nelson/Navajo Nation Department of Diné Education
(<https://www.navajonationdode.org/>, brentnelson@nndode.org)

David McLevain/Fort McDowell Yavapai Nation (Land Use Manager,
<https://fmyn.org/>, dmclevain@fmyn.org)

Sonia Nez/Navajo Nation Broadband Manager (<https://www.navajo-nsn.gov/>,
sonianez@navajo-nsn.gov)

Mikhail Sundust/Gila River Telecommunications, Inc. (Digital Connect Initiative (DCI) Executive Director, <https://gilarivertel.com/>, msundust@gilarivertel.com)

Mignonne Hollis/Arizona Regional Economic Development Foundation (AREDF,
<https://www.aredf.org/>, hollism@aredf.org)

René Guillen/Deputy Director of the League of Arizona Cities & Towns
(<https://www.azleague.org/>, rquillen@azleague.org)

Mark reported that he has heard back only from Mignonne Hollis (who presented at the recent Institute for Digital Inclusion Acceleration Digital Inclusion Summit). She is interested in joining the ATIC Board. Mark plans to try again to contact the other six people on the above list for a response.

There has also been some discussion about René Guillen. Steve Peters commented that René had attended an AZBSN task force meeting, and Steve will be discussing with him what AZBSN can do to help local governments.

Mark is also planning to reach out to the following in the near future about the ATIC Board:

Jeff Mirasola/Lumen Technologies (jeff.mirasola@lumen.com) about staying on the Board (he has not been attending Board meetings) or providing a replacement.

Joy Whiting/Apache County Superintendent of Schools
(joy.joywhiting@gmail.com)

RJ Huskey/Hozho Cybersecurity (Native American, <https://hozho-cybersecurity.square.site/>, rj@gohozho.com, 602-999-9369)

Shaun Story/Calix Networks (shaun.story@calix.com): Mark had spoken to him in the past about the possibility of becoming a sponsor of ATIC and/or AZBSN.

Arizona Association for Economic Development (AAED, <https://aaed.com/>). Kirk Busch reported that he has reached out to Karla Moran, President of AAED and is waiting for a response, but it may be difficult for her to join a Board because of her employment with SRP.

Mark is still working on the list of potential Board members and will add Cox and AT&T to the list of organization to contact about representation since they have been in the past.

Kirk Busch had committed to updating the ATIC Board Members webpage by the December Board meeting, which will include deleting people who are no longer on the ATIC Board, adding new members to the Board, and including the bios submitted for Board members. This update has not yet been done. Kirk has prepared a Google Sheet (online spreadsheet) identifying the current ATIC Board members with their organizational affiliations and e-mails, and sent the link for this to Oris, Mark, and Henry for review. Phil McKeown of McKeown Marketing (<https://www.mckeown.marketing/>), Kirk's web assistant, will update the ATIC Board Members webpage under his direction with Mark conferring as needed.

1.5.1. ATIC Broadband Provider Working Group Meeting and Next Steps

As reported previously, an outcome of the January 2022 ATIC Board meeting was to create an ATIC Broadband Provider Working Group whose

function would be to provide a platform for providers to share information, meet & network, and engage on policy issues since there is no telecom service provider trade association in Arizona. The goal of this working group was to focus on addressing common issues and opportunities for the broadband service providers in Arizona. The group was launched on April 6, 2022, with a hybrid gathering hosted at Big Data Southwest's DataCenter & SmartCity IoT Infrastructure Summit

Mark had started a Slack channel populated with a list of about 160 provider representatives across about 80 companies from his spreadsheet. He noted that the Slack Channel never took off as he had hoped and we have been notified that Slack intends to delete all content older than 90 days, which in our case is all content. So, the channel ceases to exist.

Kirk Busch has reserved a breakout room on the afternoon of December 5, 2024, to again engage a potential ATIC Broadband Provider Working Group, onsite and virtually, at this year's 4th annual Big Data Southwest's National AI Data Center Summit (<https://www.bigdatasw.org/>, #AZDC24, #AIDC24) to be held on December 4-5 at the San Marcos Golf Resort in Chandler. Kirk noted that the Arizona Broadband Providers Break Out Session will be held late afternoon onsite and virtually with separate free registration on the site. Mark will coordinate the program for this working group and begin to socialize this event. The ATIC/AZBSN discount code is AZBSN24 for a half off the \$495 fee for a day pass at \$247.50. Details and registration at <https://www.bigdatasw.org/>

1.6. Review of Outstanding Action Items as Documented in the July 10, 2024, Minutes

Nothing to report

2. Informational Presentations

2.1. None were scheduled.

3. Activity Reports

3.1. Arizona Broadband Office Report (Sandip Bhowmick)

Mark noted that Sandip Bhowmick, State Broadband Director at the Arizona Commerce Authority (ACA) State Broadband Office, was unable to be present, and Erin Lorandos, ACA Digital Equity Program Manager, will present on State Broadband Office activities regarding the BEAD and Digital Equity programs (which they administer for Arizona).

The State Broadband Office completed on November 7th the “Market Sounding Period” in which they requested feedback from potential BEAD applicants (ISPs, local governments, tribal communities, non-profit organizations) on the State Broadband Office’s proposed project areas to be bid on when the BEAD grants application RFP is issued. The project areas are the groupings of unserved/underserved locations, which were finalized after the State Challenge Process. The Market Sounding period helps to ensure the BEAD Program is designed effectively to meet the needs of all Arizona communities. See details and related resources at <https://www.azcommerce.com/broadband/arizona-broadband-equity-access-deployment-program/market-sounding/>.

Arizona has been allocated \$993 million for the BEAD grants program to serve the finalized project areas, but some of these funds will be spent by ACA on staffing and resources needed to manage the BEAD process. The State Broadband Office BEAD Initial Proposal Vol. II describes how the BEAD subgrantee application process will be administered. There are high-cost areas where the cost to deploy fiber is over a specified threshold. In the non-high-cost areas the solutions must be fiber only. In the high-cost areas, alternative technologies (e.g. fixed wireless, satellite) can be bid and the matching funds requirement may be modified.

Erin stated that the next phase is the BEAD pre-registration process. It is mandatory for all applicants wanting to participate in the BEAD program to pre-register: they must provide detailed financial information to verify qualifications; demonstrate managerial and technical capabilities; and ensure compliance with federal, state, and local laws and standards. It is strongly recommended that BEAD applicants complete pre-registration by December 20, 2024, when the BEAD Subgrantee Application Process opens. Responding to a question from Mark, Erin added that pre-registrations will also be accepted during Round 1 of the application process. The State Broadband Office is now answering questions on the pre-registration process and is posting the pre-registration process webinar recordings on the ACA Website.

The BEAD subgrantee application process opens on December 20th with what is called Round 1. In Round 1, applicants will focus on serving the project areas with fiber (FTTH) solutions for all unserved/underserved households in a project area, which is the preferred technology solution where economically feasible. Depending on how that works out in covering the unserved/underserved households, subsequent Rounds will be held where applicants propose alternative technology solutions to serve locations that are too expensive to serve with fiber. Round 1 will close by the end of April 2025, and Round 2 will start in mid-May 2025. Erin noted that the State Broadband Office will answer questions on the BEAD pre-registration and application process, and can be

contacted by e-mail at broadband@azcommerce.com.

There followed a number of comments and questions on the BEAD process. Henry Goldberg commented that he attended a Fiber Broadband Association webinar today that indicated there will be major problems with workforce shortages in construction, technicians, and permitting for BEAD deployments because of the large number of broadband infrastructure projects (private sector and federal/state government-funded projects) upcoming around the country. This is expected to result in substantial delays and higher costs in executing broadband infrastructure deployments. Henry asked whether BEAD applicants are required to specify in the pre-registration and application processes that they have the necessary workforce to implement their proposed BEAD projects. Erin messaged the State Broadband Office BEAD team to respond to this important question, and their response was that applicants need to certify that they can meet the workforce and permitting requirements specified in the NTIA BEAD NOFO and Arizona BEAD Initial Proposal Vol. II in their applications, and that application guidance should be released soon for public viewing. Erin noted that the State BEAD Final Proposal is not due until August 2025 and actual deployment won't start until after NTIA approval of the Final Proposal. Henry commented that it is an important issue to consider because BEAD applicants' cost estimates may understate the actual costs significantly if they encounter workforce shortages that result in cost overruns. See Section 3.6.2 (Federal Broadband Policy Update) for Nicole Umayam's further comments on this workforce issue from NTIA's perspective.

Kevin Sievert of Calix asked if the post Arizona Challenge Process for the final determination of the unserved/underserved locations has been approved by NTIA, and Erin responded that this has not been approved yet.

Kevin Sievert agreed that the workforce issue raised by Henry is an important one because it is an area that is very concerning compared to the availability of fiber and equipment in the supply chain which will be managed. He stated that ISPs will talk about their workforce internal capabilities and their partnerships during the pre-registration processes in states.

Kevin Sievert emphasized that from his discussion with different states there is a major issue about the sufficiency of BEAD funding allocations to serve all the unserved/underserved households in each state. Prior to joining Calix, he was the North Dakota Broadband Director, and North Dakota did receive much more than enough BEAD funding to deploy fiber to all its unserved/underserved locations. However in states such as Texas and New Mexico, they received much less BEAD funding than needed to serve 100% of the unserved/underserved locations in their states. In Texas (where he lives), the Texas State Broadband Office has told him that they were allocated about 1/3

the funding required to build fiber or fixed wireless networks to serve all their unserved/underserved locations. The New Mexico Broadband Office only received a BEAD funding allocation sufficient to serve all the unserved locations, and will have a lot of underserved locations that cannot be served with their funding level. There are a number of other states (he doesn't know about Arizona) which are not in as extreme situation as Texas and New Mexico, where it will not be feasible to serve all their unserved and underserved locations. He believes these states with shortfalls in BEAD funding allocations should focus on building the best fiber and fixed wireless networks they can with the funding available, but not be expected to serve all their unserved/underserved locations. Henry Goldberg commented that the fundamental mission of the BEAD program is to serve 100% of the unserved and underserved locations in the country, and the challenge for the State Broadband Offices is to determine what percentage can be served with fiber and what percentage is served with alternative technologies (such as fixed wireless and LEO satellite) with the funding they have been allocated and there may be a significantly lower percentage of fiber than originally expected. Kevin responded that NTIA does not want to discuss the problem with achieving the "Internet for All" noble goal because it would be a "black eye" for them, and Henry replied that if it is true that various states' funding allocations are inadequate to serve 100% of the required locations then this should be discussed publicly by NTIA not just in private conversations. See Section 3.6.2 (Federal Broadband Policy Update) for Nicole Umayam's further comments on this issue from NTIA's perspective.

Eean Bradley asked if there is funding for workforce training in the BEAD funding allocation for Arizona, and Erin responded that if there are funds leftover after covering all the state's unserved/underserved households then the remaining funds can be allocated to serve the underserved Community Anchor Institutions and for workforce training. Steve Peters commented that there are a number of organizations that will be addressing broadband workforce development needs: the Wireless Infrastructure Association, community colleges, and companies involved with training programs. Kevin Sievert noted that there are a lot of public-private partnerships (e.g. with community colleges, universities, private companies) around the country on workforce certifications such as for fiber installation technicians. Erin added that the ACA has a workforce development person who will be assisting the State Broadband Office, and the ACA website acknowledges various Arizona workforce development programs. Gordon Fuller expressed his concern about the vision for the future after BEAD and Digital Equity Program funding is exhausted, and there is a need to consider the role of philanthropy for workforce training and digital equity. He added that the Navajo Nation is training its people to be infrastructure workers.

Regarding the Digital Equity Capacity Grants program, the Arizona Commerce Authority (ACA) released in the past the approved and accepted version of Arizona's Digital Equity Plan addressing specific barriers faced by Arizonans to bridging the digital divide. NTIA has provided Arizona with \$16.1M for digital equity capacity grants in the first round. You can download the Digital Equity Plan at <https://www.azcommerce.com/broadband/arizona-digital-equity-program/>.

As has been reported previously, Erin stated that ACA has submitted their Digital Equity Capacity Grants application to NTIA on how the Digital Equity Plan capacity grants process will be implemented, but this application has not yet been approved and NTIA has not provided a timeline on when this will be approved. Erin hopes it will receive NTIA approval by the end of 2024 so that the State Broadband Office can move on to implementing the Digital Equity Capacity Grants application process early in 2025. The first round of applications will be for the \$16.1 million allocation, and 2nd and 3rd rounds will follow but they don't know the amounts that will be allocated to Arizona for those rounds (they will be smaller allocations than for the 1st round).

The NTIA Digital Equity Competitive Grants Program is a separate national digital equity grants program where eligible entities applied directly to NTIA for larger grants. The applicants need to align with the ACA Digital Equity Plan, but the application process was separate from that. The State Broadband Office provided two resources to support Arizona entities applying for the Digital Equity Competitive Grants Program: 1) created a database of organizations interested in applying for that program so they can connect with each other; and 2) ACA wrote a combined overall letter of support to NTIA (as NTIA has permitted) for all Arizona entities deemed qualified to apply for a Digital Equity Competitive Grant. Any entities who wished to be included in this ACA combined letter of support had to contact the ACA by September 18th because the application deadline for the Digital Equity Competitive Grants Program was September 23rd.

Mark Goldstein reported at a previous meeting that he worked with a number of our key broadband and digital equity stakeholders in crafting a set of updated state and federal broadband and digital equity policy recommendations for inclusion in the Arizona Technology Council's 2025 Public Policy Guide which is now available for download at <https://www.aztechcouncil.org/public-policy/>. Mark provided a draft at the July 10th ATIC Board Meeting and gave special thanks to Sandip Bhowmick and Keith Watson from ACA, John Kelly of Triadvocates, Steve Peters from AZBSN, and Mala Muralidharan of the Arizona State Library, Archives and Public Records (ASLAPR) for their contributions. See "AZTC State & Federal Broadband Policy Brief 2025 Draft V2D.docx". Mark noted that the Public Policy Guide discusses the issue of what happens after the digital equity funding is exhausted since this will be an ongoing need unlike the broadband

infrastructure that will be completed under the BEAD program.

Steve Peters has previously expressed concern about the lack of a long-term continuity plan for digital equity funding, after the Digital Equity Capacity Grants and Competitive Grants funding is exhausted. Steve has talked to Local First Arizona Economic Resource Center about helping communities write grant applications to various funding sources, and they did an ACA presentation in August for applicants to the Digital Equity Capacity Grants program. Mark added that the Arizona Economic Resource Center provides free grant writing consultants for communities or non-profits that don't have such resources, but he has not seen them write broadband or digital equity grants. Steve also commented that organizations applying for Digital Equity Program funding will have significant reporting requirements, which may prove difficult for smaller organizations. Steve has spoken with larger entities about assisting smaller entities with addressing these reporting requirements, but Mark noted that Nicole Umayam of NTIA indicated subgrantee reporting may not be a big problem because most of the reporting requirements will be managed by the ACA. AZBSN and ATIC may consider how to participate in the Digital Equity Capacity Grants program.

The State Broadband Office has about eight staff members, but the tribal liaison resigned in the past and they are also in the midst of hiring a budget & compliance manager.

3.1.1. Broadband Grants, Rural Community Outreach & Projects

The content for this section is included above in Section 3.1.

3.1.2. Digital Equity Initiatives & Opportunities

The content for this section is included above in Section 3.1.

3.1.3. ACA Broadband Strategy & ATIC Role/Support

The content for this section is included above in Section 3.1.

3.2. Arizona Broadband Stakeholder Network (Steve Peters)

3.2.1. AZBSN Digital Access Task Force Updates

Steve Peters, Coordinator of the AZBSN Digital Access Task Force reported at a previous meeting that the Task Force continues to meet every Thursday morning at 8 am with some breaks planned over the upcoming holidays. In addition to presentations at meetings, the AZBSN Task Force regularly

receives briefings from the Arizona State Broadband Office, the State Library, Arizona Department of Education, and others involved in broadband and digital equity work in the state. Steve sends out a newsletter after every meeting that recaps the most recent meeting and conveys information about upcoming events, policy reports, and other relevant information as well as links to recordings and transcripts of the weekly Task Force meetings. Steve reported in the past on the agenda changes for the weekly ABSN meetings: there will be more focus on feature programs and less on weekly updates if not needed.

Steve reported on upcoming AZBSN presentations in November:

- 1) Frank Martinez will provide an overview of the “Connected Nation” non-profit organization on November 14th;
- 2) The City of Tucson Fire Department Deputy Chief will present on November 21st on their new 911 program, in which 911 callers that do not have an emergency that requires fire or police response will be connected to a doctor via telemedicine;
- 3) Steve is in conversation with the Arizona Office of Economic Opportunity (AOEO, <https://oeo.az.gov/>) about doing an AZBSN presentation on their workforce development activities.

Steve is also planning to hold a Workforce Development Forum. René Guillen, Deputy Director of the Arizona League of Cities & Towns, suggested this is important particularly for training people to deploy broadband networks.

A discussion of the election implications for the NTIA BEAD program and other federal broadband programs will be held in the near future by people closely following federal government activities. Steve will be talking to Brian Daly, Assistant Vice President of Wireless Technology & Standards at AT&T, about discussing the spectrum implications following the election.

Steve will eventually organize a Public Broadband Networks Forum. Gigi Sohn, former nominee to be a Commissioner of the Federal Communications Commission and currently Executive Director of the American Association for Public Broadband (<https://www.aapb.us/>), will speak about public networks as a forum panel member. The term public broadband networks encompass municipal networks, co-ops, open access networks, tribal networks, public-private partnerships and other community- and member-owned broadband networks focused on ensuring universal, robust connectivity at affordable prices. Public networks are growing fast (there are about 600 nationally), and they are eligible for BEAD money (Sandip Bhowmick will be on the panel to discuss this).

Steve has said in the past that AZBSN will also discuss the key issues of sustainability of funding and low-cost broadband solutions (which will involve the Sun Corridor Network and The Final Mile Project).

Steve will be holding an open discussion at an upcoming AZBSN meeting about what is next for AZBSN. Steve has asked in the past for other suggestions for AZBSN sessions. Mark had responded that Brian Daly of AT&T could give an update on wireless trends and FCC activities in this area (Steve replied that Brian has presented to AZBSN in May on 5G and 6G standards directions.). Mark also suggested another session could be on agricultural broadband technology applications (agtech).

The Governor's Office has moved the Maggie Farry coordinated broadband and digital equity working group and workshops to ACA. Steve wants to talk with Sandip about how to collaborate with them. Mark noted that Steve Zylstra of AZTC is a member of the working group.

Steve has noted that Arizona's Community Colleges need to include digital equity in their plans and that he will be meeting with Pima Community College representatives on this in the near future.

3.2.1.1. Updates to AZBSN Task Force Report

Steve said at a previous meeting that Karen Ziegler and John Kelly had been unable to get traction on the proposed project. So, there has been no progress on working on an update to the November 2020 AZBSN Digital Access Strategy Report and there is nothing new to report. This item will be retired as no action appears pending.

3.2.2. AZBSN Leadership Group & New Initiatives

Steve said at a previous meeting he will report on these topics after an updated plan has been issued.

Mark Goldstein urged Steve to initiate some action on re-constituting the AZBSN Leadership Team and involve some additional people to generate strategic and operational plans as well as assist in making this happen so the full load is not carried only by Steve. Steve agreed.

3.2.3. Return to Outreach Activities with Newsletters & Webinars

No new action to report in this area.

3.3. Technology in Education/eLearning

3.3.1. Arizona Technology in Education Association (AzTEA) (Nan Williams)

Nan Williams serves as Executive Director of AzTEA (<https://aztea.org/>) and sits on the EDTech Committee for the Arizona Department of Education (ADE) which is rewriting the Educational Technology standards this year. She is also participating in the ADE Technology Task Force on the Digital Learning Subcommittee and she is part of the ISTE policy group on digital equity access. She has also been working with the Arizona Rural Schools Association and their Final Mile Project (<https://www.finalmileproject.com/>).

Nan reported that AzTEA held their Fall conference at the Gilbert Global Academy on October 26th and is working on their Spring conference to be held in April 2025. AzTEA will be holding a cybersecurity summit on February 26-27, 2025.

Nan reported at the July 10th ATIC Board Meeting that as part of being a member of CoSN, AzTEA supports technology leaders such as CIOs, CTOs and coaches to become Certified Education Technology Leaders (CETL). The first cohort has 17 CETL-certified folks going through the process (<https://www.cosn.org/careers-certification/>), and a cohort of ISTE Certified Educators in collaboration with the Wyoming Department of Education (WDE) completed the process in September.

3.3.2. Greater Arizona Educational Leadership (GAZEL) (Steve Peters)

The GAZEL Board hasn't met since early 2022 and needs reactivation and refreshing to further operationalize GAZEL. Steve has been in touch with existing Board members in an effort to revitalize the Board as a functional entity. The Board still needs to acquire Directors & Officers (D&O) insurance for good governance and proper protections especially if funded projects are to be undertaken.

Mark Goldstein stated that GAZEL needs to be reinvigorated including its interaction with ATIC on the AZBSN Digital Access Task Force. Steve stated he is looking into reactivating the GAZEL Board and is talking to past GAZEL Board members to come up with a plan as well as engage new Board members.

3.3.3. Sun Corridor Network (SCN) (Laura Etter)

The Sun Corridor Network (SCN) is Arizona's Research & Education Network supporting the state universities, education, healthcare, government and CAIs. Laura Etter's contact points are: Sun Corridor Network - <https://suncorridor.org/> and Laura@suncorridor.org. Laura summarized current SCN activities and achievements.

Derek Masseth, Executive Director of SCN, has just been appointed to the Internet2 Board of Trustees. Laura provided the link to the article on this: <https://suncorridor.org/sun-corridor-networks-derek-masseth-appointed-to-internet2-board-of-trustees/>.

SCN has been working on their agriculture CBRS project in Yuma County to enable farmers to have Wi-Fi in the fields to do real-time analyses. On November 12th, SCN and the University of Arizona were in Yuma to do a demonstration of this project.

The SCN eduroam project, which enables a single Wi-Fi Internet access sign-on for universities, schools, and libraries, is progressing with Vail School District in Tucson joining by moving that to their primary SSID.

The Maricopa County Broadband Initiative grant managed by ASU, SCN, and the Institute for Digital Inclusion Acceleration has just completed two years of operation, and was recognized with the National Sustainable IT Award in Austin, TX.

SCN has been involved with the deployment of middle-mile fiber from Phoenix to Las Vegas with Zayo, which will enable connecting last-mile providers to required middle-mile connectivity. The state's I-17 middle-mile fiber project is finalizing its IDA & IRU, and SCN will see what their role is and how they can engage with others. Mark had asked at the last meeting about the progress on deploying middle-mile fiber along I-40 from Flagstaff to New Mexico, and Laura replied that she thinks this is in the works but has not started and referred questions on this to Sandip Bhowmick

In August, SCN hosted the Wild West Summer Camp which involves Arizona, Nevada, and Utah. The purpose was to review best practices and apply them to the introduction and deployment of broadband technology. There is a particular focus on collaborating on providing connectivity in northern Arizona and southern Utah rural areas.

Laura attended several events recently: the AzTEA CIO/CTO Forum; the Arizona STEM conference at the Arizona Science Center where Laura,

Michelle Simon and Kelly Mukherjee presented on their broadband activities in the state and coordination of their efforts; and she met Steve Zylstra of the Arizona Technology Council at an election event who congratulated SCN on their work (based on feedback from Mark Goldstein).

At a previous board meeting Henry Goldberg reported that he met with Kelly Chung Mukherjee, who manages the Maricopa County Broadband Initiative and its broadband mapping portal AZ-1 as discussed by Laura Etter at the February ATIC Board meeting. Kelly suggested that she could include ATIC and/or AZBSN as a supporting resource/partner listing on the AZ-1 portal if we send her the organization's logo and a brief description of what the organization does to support broadband and digital inclusion in the state. Henry e-mailed Mark and Steve Peters about this, and the ATIC logo and description have been added to the AZ-1 resources section.

3.4. Arizona State Library (Holly Henley, Mala Muralidharan)

Mala Muralidharan reported on Arizona State Library activities.

Mala recently attended the E-Rate State Coordinators national training in Nashville organized by ALA and the E-rate task force. They visited the State Library of Tennessee where they saw robots replacing books on bookshelves.

Mala discussed issues and opportunities with E-Rate following the election. It is expected that E-Rate will endure since it has been widely supported through several Congresses as an important program. The E-Rate program currently connects more than 132,000 schools and libraries and reaches over 95% of all K-12 students, bridging the digital divide for millions of students and residents of communities. E-Rate is funded by the Universal Service Fund (USF), and it is not yet known the form the USF will take in the future or how it will be funded as that is being debated.

The new FCC Chair will be appointed as a result of the election: it will change from the current Jessica Rosenworcel (a Democrat) to a Republican, and Brendan Carr, a sitting Republican Commissioner seems the most likely choice. The 5 FCC Commissioners will then consist of 3 Republicans and 2 Democrats. Two Republican commissioners, Brendan Carr and Nathan Simington, have previously opposed allowing Wi-Fi on school buses and hotspots lending to be considered as eligible services for E-Rate funding.

The new E-Rate Cybersecurity Pilot Program (under the "Learning Without Limits" new initiative) had 23,000 applications requesting \$3.7 billion in funding (in the Phase 1 expression of interest for this program), yet there is only \$200 million available under the program so it is vastly oversubscribed. Most

applicants lack the budget and personnel to provide robust cybersecurity for their schools and libraries, so they will likely need to seek funding outside of the E-Rate program. The 2025-26 E-Rate cycle eligible services list was released on October 25th and does not include cybersecurity except for the basic firewalls that were previously eligible.

Funds for Learning has published their annual E-Rate 2024 Trends Report based on a survey of over 2300 participants. The E-Rate priorities in order of priority are as follows:

- 1) Bridging the digital divide is the top priority. E-Rate is essential for providing high-speed Internet to enable equitable educational opportunities for rural and economically disadvantaged schools and libraries.
- 2) There is a pressing need for cybersecurity as well as redundancy in E-rate networks. In the past, the E-rate program has not allowed funding for redundancy in E-rate networks even though Internet outages can disrupt critical educational activities.
- 3) There is a substantial need for off-campus connectivity. E-Rate funded services such as Wi-Fi on school buses and mobile hotspots lending would be significant solutions in this area. However, there are a number of administrative burdens about the proposed hotspots lending program that should be addressed: individuals must sign a waiver that a hotspot is the only way they can get Internet connectivity at home, and documentation must be retained for ten years; if a hotspot is not distributed or not used at home, service providers can terminate it; Chromebooks that are Wi-Fi enabled are not allowed rather the hotspot must be a separate device from the computer.
- 4) The “Eyes on the Board Act” introduced by Senator Ted Cruz in October 2023 would require schools receiving E-Rate funding to block access to certain social media because he believes they can be distracting and addictive. Mala commented that schools and libraries don’t have the methodology to do this, and that currently E-Rate requires schools and libraries have Children’s Internet Protection Act (CIPA) software to filter access to obscenities and harmful sexual content. The schools and libraries are not responsible for how hotspots loaned to students are used at home and can’t block such access, though Kajeet and other censored hotspots do a minimal amount of CIPA-like filtering.

See Mala’s written report on Arizona State Library activities below.

ATIC Board Meeting November 13, 2024, Mala Muralidharan, State Library Report

Last week I was at Nashville for training E-Rate State Coordinators helping Public Libraries apply for E-Rate, While we were there we were fortunate to receive a behind the scenes tour of the State Library of Tennessee. One of the fascinating things we witnessed was the robotic retrieval and replacing books. [The Library Where Robots Pick the Books.](#)

Endurance of E-Rate : The E-rate program's resilience since 1996 under various governments and Congresses is a testament to the importance and need for reliable internet access in education arena. Currently, the E-rate program connects more than 132,000 locations and reaches over 95% of all K-12 students, bridging the digital divide for millions. But these are the current concerns -

1. The legality of USF is still being questioned through court hearing
2. FCC chairmanship will change and we may have Brendan Carr leading the charge the balance of power in the commission will shift to 3:2 Republican as the result of resignations, term expirations, and new appointees.
3. As the balance of power shifts within the FCC, the most significant E-Rate change is likely to involve the eligibility of school bus Wi-Fi and hotspots, the two newest E-Rate eligible services that had been strongly opposed by the two Republican Commissioners, **Brendan Carr and Nathan Simington.**
4. Cybersecurity Pilot has been highly oversubscribed Educational entities requested significant funding as part of the pilot program 23,000 applications requesting \$3.7 billion in applications, yet only \$200 million is available for distribution—a fraction of what is needed. This high demand illustrates the unique challenges that schools and libraries face in cybersecurity. Most applicants lack the budget and personnel to implement robust cybersecurity measures, making them especially vulnerable.

With this overwhelming response, this indicates a clear need for additional funding and support to help safeguard students and data. With cybersecurity threats showing no signs of slowing, investment in cybersecurity in the educational space remains crucial.

E-Rate 2024 Trends Report prepared annually by Funds for learning

The Trends Report 2024, prepared by an analysis of the survey of over 2,300 participants, offers insights into the E-rate program's critical role in U.S. schools and libraries, emphasizing areas where the program continues to drive meaningful impact and where there is room for enhancement.

The Report is available at <https://www.fundsforlearning.com/e-rate-data/trendsreport/> (I am quoting a lot from the report to stay accurate)

On November 5, 2024, Funds For Learning (FFL) met with representatives from the Federal Communications Commission, including staff from Chairwoman Rosenworcel's office and the Wireline Competition Bureau, to present the findings of the 2024 E-rate Trends Report. The highlights are:

Bridging the Digital Divide

An impressive 94% of respondents underscored the importance of the E-rate program in meeting their connectivity goals. For many rural and economically disadvantaged schools and libraries, E-rate is essential in providing high-speed internet, enabling equitable educational opportunities. In these underserved communities, E-rate funding has helped bridge the digital divide, allowing institutions to support students and patrons effectively.

Pressing Need for Cybersecurity and High-Availability Internet and redundancy

Survey results showed a strong demand for expanded E-rate support in cybersecurity and internet redundancy. Approximately 97% of respondents indicated that cybersecurity services should be eligible for E-rate funding. Many institutions face rising costs related to technology needs, including security measures that are now essential for maintaining safe and uninterrupted service. FFL highlighted the value of E-rate's potential to cover dual connections or redundancy options, as even brief internet outages can disrupt critical educational activities.

Expanding E-rate to Address Off-Campus Connectivity

As FFL discussed with the FCC, the need for off-campus internet access is substantial, with 69% of respondents supporting expanded funding to bridge the "homework gap" for students who lack internet access at home. E-rate-funded solutions for off-campus Wi-Fi, particularly on school buses and through mobile hotspots, would be a vital step in ensuring that every student has access to the tools they need to succeed, regardless of their home environment.

A Path Forward

Based on applicant feedback and emerging needs, FFL proposed several recommendations to the FCC, including:

- adjusting funding caps to match inflation,
- expanding coverage to support cybersecurity, and
- exploring off-campus connectivity solutions.

These recommendations reflect the commitment to ensuring that the E-rate program evolves to meet the changing landscape of digital education.

The Eyes on the Board Act, which U.S. Senate Commerce Committee Ranking Member Ted Cruz (R-Texas) **introduced** in October 2023, would require schools receiving federal broadband funding through the E-Rate program to block access on subsidized services, devices, and networks. Sen. Cruz. *"Addictive and distracting social media apps are wreaking havoc on our kids—the very least we can do is restrict access to social media at school so taxpayer subsidies aren't complicit in harming students."* While existing law requires schools collecting **E-Rate subsidies to certify that software is in place blocking or filtering access to obscenity, child pornography, and other harmful sexual content** – under the Children's Internet Protection Act

(CIPA, there is currently no provision requiring schools to block access to distracting and addictive social media apps or websites.

End of State Library Report

3.5. Telehealth (Mike Holcomb)

Mike Holcomb Interim Director of the Arizona Telemedicine Program (ATP, <https://telemedicine.arizona.edu/>) and recently elected to ATIC's Board replacing Janet Major of the U of A, was absent, and there was no report.

3.6. Government Affairs

3.6.1. Arizona Broadband Policy Update (John Kelly, Mark Goldstein)

John Kelly began by stating that he sees a lot of uncertainty about the future shape of federal BEAD, Digital Equity, and USF programs following the election. For example, the likely new FCC Chair Brendan Carr has been outspoken about Starlink LEO Satellite service being more readily included as a technology option under BEAD funding protocols.

John reported on the results of the Arizona election. The State Legislature has retained and slightly expanded Republican majorities: the Senate now has a 2-vote Republican majority and the House has a 3-vote Republican majority. So, it is no longer possible to have one-vote stoppages as in the previous Legislature.

The State Legislature leadership will be as follows: Warren Petersen will continue as Senate President; Steve Montenegro will be House Speaker; Michael Carbone will be House Majority Leader and Julie Willoughby will be House Majority Whip. John commented that Jeff Weninger, one of the most technologically sophisticated representatives and very interested in broadband, AI, cryptocurrency, was re-elected to the House.

A lot of Senate Committee leaders have already been appointed. The Senate Commerce Committee has been eliminated and combined with the Science Committee. The Senate Transportation and Technology Committee, which dealt with infrastructure issues, has also been eliminated. So there will be questions on the jurisdiction of the Senate Committees on which issues they will take up.

There is a lot of education to do. Of the 90 members of the State Legislature, 18 are brand new (never having served in the body before) and another 9 have served less than a year previously.

Kevin Sievert asked about whether NTIA would seek to claw back BEAD funding from states based on their previous allocations being more than adequate or inadequate as he discussed in Section 3.1, and John referred this question to Nicole Umayam, Arizona's NTIA representative. Nicole responded that the funding follows the states' Initial Proposals approval, the states only have access to 20% of their funding allocations in the one-year period between the Initial Proposal approval and the Final Proposal submission, and the remaining 80% of their BEAD funding will be provided after NTIA approves their Final Proposals. The U.S. Department of Commerce is not expecting clawbacks from state BEAD funding allocations, but there are certainly significant uncertainties going forward with the changes in governmental leadership.

John noted Governor Hobbs Executive Order on the Talent Ready AZ Initiative (<https://osi.az.gov/priorities/talent-ready-az>) on workforce development to coordinate her cabinet's resources on connecting Arizonans to the education/training they need to secure good-paying jobs and fill growing industry needs in nine different sectors such as advanced manufacturing and cybersecurity. The problem with workforce development efforts is that funding goes to various entities such as workforce boards and community colleges. John commented that this workforce development coordination through a workforce cabinet in the state government is definitely needed to be more effective for the overall needs of the state going forward. The Governor is also proposing for federal funding coming to the state under various programs (e.g. the Inflation Reduction Act, CHIPS and Science Act, BEAD and other broadband programs) that up to 1% of the funding be set aside for workforce development. So, from Arizona's BEAD funding, there would be some funds available for training the broadband deployment workforce needed.

3.6.2. Federal Broadband Policy Update (Nicole Umayam/NTIA, Mark Goldstein)

Nicole Umayam, NTIA Federal Program Officer for the Arizona BEAD and Digital Equity Programs, provided an update on what is happening with these programs. Note this supplements the information on the Arizona BEAD and Digital Equity programs activities discussed in Section 3.1 (Arizona Broadband Office Report).

NTIA has approved 55 of the 56 state/territory BEAD Initial Proposals (the last state still waiting for approval is Texas which should happen soon). States have one year after their Initial Proposal is approved to submit their

Final Proposal to NTIA on how the BEAD funding will be spent. Arizona is required to submit its Final Proposal by August 1, 2025.

The ACA State Broadband Office had proposed 66 project areas for BEAD funding to cover all the unserved/underserved locations in Arizona to get feedback on during the market sounding period. Results of the State Challenge Process have been submitted to NTIA, and NTIA is in the last stages of considering whether the process was managed properly according to the way it was described in the BEAD Initial Proposal. As soon as the NTIA Assistant Secretary approves this, the list of unserved/underserved locations will be published on the ACA website, which must be done before the BEAD Round 1 application process begins

With the change of administration after the election, work at NTIA will continue as planned and they don't expect any changes to significant parts of the BEAD program. By the end of 2025, every dollar in the BEAD program will be allocated for deployments in alignment with the approved Final Proposals. There have been a lot of questions around elements of the BEAD program such as the low-cost service requirement for affordability for low-income households and satellite service policies. NTIA has specified guidelines over time that states have included in their Initial Proposals. It is unlikely Congress will change how states select technology solutions as they specified in their Initial Proposals. Regarding comments in the Chat about permitting issues, Nicole mentioned that NTIA has constructed a federal permitting map and there are other NTIA resources related to permitting.

Nicole stated that NTIA is committed to 100% coverage of the unserved and underserved households. The priority will be on using fiber to serve as many locations as economically feasible with the funding available. In Arizona's Initial Proposal Vol. II, the priority order for technology solutions is: 1) fiber (FTTH); 2) fixed wireless using licensed spectrum; 3) fixed wireless using unlicensed spectrum; 4) LEO Satellite. She does not expect to see major changes to Arizona's Initial Proposal.

The Department of Commerce (of which NTIA is a part) is working on transition documents and sharing them with forthcoming agency review teams employed by the Department. Regarding appointment of the new Secretary of Commerce and the new Assistant Secretary who is the administrator of NTIA after the election, Nicole noted that under the Biden administration the new Secretary was nominated at the end of January and confirmed in March. Assistant Secretary positions are filled later, and the new Assistant Secretary administering NTIA will sign off on all BEAD issues.

She commented that NTIA positions (such as her position) are scheduled BEAD employees so are not likely to be terminated.

Nicole addressed the Digital Equity program at the previous ATIC Board Meeting. NTIA is still reviewing Arizona's Digital Equity Capacity Grants application to implement its Digital Equity Plan. She expects that to be approved before the end of 2024. The NTIA Digital Equity Competitive Grants application window has closed and there were a lot of national applications for the \$1.25 billion funding available. Tribal entities have a set aside for the Capacity Grants and Competitive Grants, with the tribal capacity grants having a timeframe of September 28 - February 7 for planning and implementation.

There were questions and discussion on the BEAD program following Nicole's presentation.

As discussed in Section 3.1, Henry Goldberg asked Nicole about the expected broadband deployment workforce shortages around the country that could result in problems selecting applicants for BEAD awards and delays in BEAD deployment implementations. Nicole responded that NTIA has been studying the broadband workforce gaps for the past two years. There is a lot of concern in Arizona about such gaps, and there have been various steps take to address this such as: training and getting ready fiber technicians and local government permitting workforces; the Governor's workforce initiatives; and ACA coordinating with NTIA to think through strategies. In terms of the BEAD funding allocation to Arizona, there is nothing that pairs funding for workforce development with funding available for broadband deployment. The BEAD subgrantee applications themselves will describe workforce expenses as part of their overall bid. Arizona expects its full \$993 million BEAD allocation to be used for deployment costs and nothing is likely to be left over for workforce training but the Governor's new Executive Order (as discussed by John Kelly in Section 3.6.1) could change that. Nicole is certain that the ACA will support broadband workforce development but she is not sure how the resources will be allocated for that. She agrees that broadband workforce is a huge concern, particularly for local governments having adequate permitting workforces since major broadband infrastructure developments may be new to them. Henry also asked about whether potential BEAD applicants must specify workforce availability in the pre-registration phase, and Nicole responded that the BEAD NOFO requires certifications for all compliance areas including workforce but they don't have to lay out detailed plans in the pre-registration phase.

As discussed in Section 3.1, Kevin Sievert commented to Nicole that some states (such as Texas where he lives) did not get anywhere near the BEAD funding required to serve 100% of their unserved and underserved locations so the “Internet for All” goal will not be achievable for them. Nicole responded that the BEAD funding is not sufficient for fiber solutions everywhere and leaves it to the states to determine which technology solutions they fund to achieve 100% coverage in the Final Proposals. Nicole added it will be interesting to see how each state does this, and there are a lot of uncertainties such as workforce availability, supply chain availabilities/costs, and permitting delays. Kevin continued saying Texas only received 1/3 of the funding required for 100% coverage so this will not be feasible for them, and states where the funding level will be tight must decide what technology solutions to support. There is a tradeoff between “Internet for All” vs. the quality of technology solutions used. He is getting concerned that states will be downgrading project areas to be served by unlicensed fixed wireless for example rather than the higher-quality FTTH, hybrid fiber/coax, and licensed fixed wireless solutions. Nicole responded that the BEAD funding level was established under the Infrastructure Investment and Jobs Act (IIJA), and the allocations, challenge processes, and deployments come at later points in time so it is difficult to coordinate all of this so the funding is sufficient to meet the goals of the program. Nicole added that this is a complex process but BEAD funds can’t be used for non-reliable broadband services.

Kevin further commented about satellite services saying they were removed from being reliable broadband services for BEAD because of their limited bandwidth provided, reliability-of-service issues, and coverage. He stated that they should generally not be used for BEAD-funded services except in very remote areas. Nicole replied that satellite services are an area of debate, but the Arizona Initial Proposal Vol. II does allow satellite to serve some of the high-cost locations. Mark Goldstein added that the Arizona Initial Proposal has a scoring process for evaluation of alternative technology solutions, and it will be a tough process for states to balance the 100% coverage goal, funding available, mix of technologies, and how far you can get beyond serving the unserved locations to all of the underserved locations. Ron Schott commented that one of his daughters lives in Asheville, North Carolina, which was devastated by the recent hurricane, and required Starlink LEO satellite service to get Internet service (as well as cellular phone service). Mark replied that Starlink offers direct-to-cellular service for emergencies like this but satellite service can’t provide the Internet bandwidth that fiber and fixed wireless services can. Kevin replied that in an emergency restoration situation, satellite service is needed but it doesn’t offer sufficient bandwidth for streaming. Mark disagreed with Kevin on his streaming comment, saying that Starlink offers something around

100/20 Mbps service which is adequate to support streaming. Gordon Fuller also commented that some people on the Navajo Nation had difficulty with satellite service meeting all their needs.

Mark noted at a previous ATIC Board Meeting that NTIA released a report on greater federal interagency coordination on federal broadband programs, which was in response to a Government Accountability Office critique of the need for better coordination to maximize the effectiveness of taxpayer dollars allocated to these programs. The NTIA report landing page can be found at <https://www.ntia.gov/report/2024/proposals-improve-broadband-program-alignment-report> and downloaded from there.

4. Information and Action Plans

4.1. ATIC Website & Teleconferencing (All)

As noted previously by Mark and Steve, the ATIC website is aging a bit so this is an opportunity to clean it up and restructure it. The website is shared with AZBSN.

The website needs to be leveraged to publicize the AZBSN Digital Access Task Force Report recommendations as well as using it for communications and public engagement, such as newsletters. Kirk noted that he will continue to promote ATIC/AZBSN on LinkedIn and elsewhere.

Kirk Busch needs to update the website regarding board members who have left and new members who have been added. There are four people listed who are no longer ATIC Board members: Bill Bolin, Matt Dostal, Janet Major, and Mike Keeling. There are four new people that must be added as new ATIC Board members: Mike Holcomb, Dario Solis, Tamara Rosenberg, and Brian Daly. Kirk had committed to update the ATIC website by the September Board meeting, but his update has not yet been done. Kirk has prepared a Google Sheet (online spreadsheet) identifying the current ATIC Board members with their organizational affiliations and e-mails, and sent the link for this to Oris, Mark, and Henry for review and for working purposes until the website is updated. Phil McKeown of McKeown Marketing (<https://www.mckeown.marketing/>), Kirk's web assistant, will update the ATIC Board Members webpage. The bios (as either a pdf or link to their LinkedIn profile) for all ATIC Board members must be added where they are not currently present. Kirk had in the past e-mailed ATIC Board members to submit their bios.

4.1.1. AZBSN Communications & Newsletter

Mark at a previous meeting suggested that we should think about how to

leverage some of the information sessions from AZBSN Digital Access Task Force meetings.

There remains a continuing need for volunteers to work
(1) on regular maintenance of the Weebly ATIC website and
(2) on providing a regular newsletter about all that's going on in the broadband world.

4.2. ATIC Mailing List & CRM (All)

Steve is discussing with Mark and Kirk Busch subscribing to a CRM/E-mail management service to meet the needs of the AZBSN Task Force that ATIC could consider utilizing as well.

4.3. New Business and Motion Considerations (All)

ATIC vs. AZBSN Roles and AZBSN Governance.

The GAZEL Board has not met for some time and is not effectively acting in an operational capacity with respect to AZBSN and ATIC.

5. Events Attended and Upcoming Meetings

As reported in Section 1.5.1, Kirk Busch has reserved a breakout room on the afternoon of December 5, 2024, to again engage a potential ATIC Broadband Provider Working Group, onsite and virtually, at this year's 4th annual Big Data Southwest's National AI Data Center Summit (<https://www.bigdatasw.org/>, #AZDC24, #AIDC24) to be held on December 4-5 at the San Marcos Golf Resort in Chandler. Kirk and Mark noted that the Arizona Broadband Providers Break Out Session will be held late afternoon onsite and virtually with separate free registration on the site. Mark will coordinate the program for this session and begin to socialize this event. For those interested in attending the entire summit on December 5th, the ATIC/AZBSN discount code is AZBSN24 for a half off the \$495 fee for a day pass at \$247.50. Details and registration at <https://www.bigdatasw.org/>. Kirk reported that the Wall Street Journal will be covering this summit, AI will be discussed with its associated power requirements, a US Department of Energy expert will discuss small modular nuclear reactors use for supplying energy for data centers, and there will be a number of workforce development presentations. Mark reported that he is inviting Sandip Bhowmick and Nicole Umayam to participate in the Broadband Providers Break Out Session, and there will be updates and open discussion there.

The Governor's Celebration of Innovation will be held tonight (November 13th) at Café Lux in Scottsdale.

Ron Schott stated that the Arizona Technology Council Cybersecurity Breakfast Forum will be held on December 4th.

Mark will deliver a presentation “Satellite Communications and Earth Observations Deep Dive” virtually on December 11th for the IEEE Computer Society Phoenix Chapter. Program details and free registration will be at a link to be provided.

6. Announcements

7. Adjourn

At 2:04 pm.

Upcoming ATIC Board Meetings

Upcoming ATIC Board Meetings for 2025 are scheduled for the second Wednesdays of the month (except August and December) from 12:00-2:00 p.m. and will be held fully virtually until further notice. Board Meetings are open for all to participate. Please plan to join us.

- January 8, 2025, from 12:00-2:00 pm
- February 12, 2025, from 12:00-2:00 pm
- March 12, 2025, from 12:00-2:00 pm
- April 9, 2025, from 12:00-2:00 pm
- May 14, 2025 from 12:00-2:00 pm
- June 11, 2025, from 12:00-2:00 pm
- July 9, 2025, from 12:00-2:00 pm
- No Board Meeting in August (Summer Break)
- September 10, 2025, from 12:00-2:00 pm
- October 8, 2025, from 12:00-2:00 pm
- November 12, 2025, from 12:00-2:00 pm
- No Board Meeting in December (Happy Holidays!)

ATIC Special and Public Meetings

AZBSN Digital Access Task Force continues to hold meetings every Thursday morning (except holidays) at 8:00 a.m. See the Planning page at <https://www.arizonatele.org/covid19-planning.html> for details.

Also see AZBSN Task Force information and related resources at <https://www.arizonatele.org/covid19-about.html>.

Future AZBSN newsletter, webinars, and roundtables are under development.

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4 holiday scams to avoid

Dashboard

Accounts

Checking
\$1,123.22

ATIC 434041
****04081-0400

▲ \$1,123.22
\$1,123.22

Savings
\$5,078.92

ATIC 073206
****04081-0000

▲ \$5,078.92
\$5,103.92

▲ Available Balance

Quick Links

- Credit Card Login
- Investments (Raymond James)
- Mortgage Loans (MLDS)
- Identity Secure
- Mobile App 101

Last 15 days

- Logged in 1 time

Next 15 days

There is no activity scheduled for the next 15 days.

Link External Accounts

[external accounts image](#) **Get Started**

Important Information

Understanding Medicare

Desert Financial Credit Union

Arizona Telecommunications And Information
 ATIC 434041 *****04081-0400

Transaction History

Statement Period: **All Dates** | Date of Statement: **11/11/2024**

Posted Transactions (93)

DATE	DESCRIPTION	AMOUNT	BALANCE
10/22/24	LUMENCENTURYLINK SPEEDPAY 333235786	-\$31.04	\$1,123.22
09/23/24	LUMENCENTURYLINK SPEEDPAY 333235786	-\$25.30	\$1,154.26
08/22/24	LUMENCENTURYLINK SPEEDPAY 333235786	-\$25.30	\$1,179.56
07/22/24	DRAFT #2229 TRACER 60420072	-\$500.00	\$1,204.86
07/22/24	LUMENCENTURYLINK SPEEDPAY 333235786	-\$25.30	\$1,704.86
07/17/24	DRAFT #2230 TRACER 60361962	-\$933.00	\$1,730.16
07/09/24	ONLINE BANKING TRANSFER FROM 0000	\$2,000.00	\$2,663.16
06/24/24	LUMENCENTURYLINK SPEEDPAY 333235786	-\$25.30	\$663.16
06/11/24	ONLINE BANKING TRANSFER FROM 0000	\$500.00	\$668.46
05/13/24	CENTURYLINK AUTO PAY AZ TELCOM INFO COUNCIL	-\$26.92	\$188.46
04/23/24	DRAFT #2228 TRACER 58733152	-\$10.00	\$215.38
04/16/24	DRAFT #2227 TRACER 58589343	-\$155.45	\$225.38
04/10/24	CENTURYLINK AUTO PAY AZ TELCOM INFO COUNCIL	-\$26.01	\$380.83
03/12/24	CENTURYLINK AUTO PAY AZ TELCOM INFO COUNCIL	-\$26.87	\$406.84
02/12/24	CENTURYLINK AUTO PAY AZ TELCOM INFO COUNCIL	-\$25.77	\$433.71
01/10/24	CENTURYLINK AUTO PAY AZ TELCOM INFO COUNCIL	-\$26.01	\$459.48
12/12/23	CENTURYLINK AUTO PAY AZ TELCOM INFO COUNCIL	-\$26.27	\$485.49
11/10/23	CENTURYLINK AUTO PAY AZ TELCOM INFO COUNCIL	-\$26.27	\$511.76