TERRITORY OF AMERICAN SAMOA

BROADBANDiNEI
FIVE-YEAR ACTION PLAN

AUGUST 2023

Note: The American Samoa BROADBANDiNEI Five-Year Action Plan is Addendum 1 to the 2021-2026 American Samoa Territorial Broadband Strategy (2021-2026 ASTBS) and reflects priorities, strategies, collective needs and opportunities identified through local coordination with regards to providing affordable, accessible, secure, equitable, internet-for-all. The concept of broadband information Network for Expansion and Inclusion (BROADBANDiNEI) focuses on an island wide initiative aimed to encourage the immediate transition to all things digital thereby fostering a more efficient, productive, and resilient American Samoa. This includes an overarching framework for the application and implementation of broadband. At a territory level, this initiative is to be led by the BCORD Office working in collaboration with government, private sector, organizations and community-at-large to adopt BROADBANDiNEI to promote the fast-track adaptation of broadband-anchored services and processes.

Broadband Steering Committee

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Wallon Young	ED, American Samoa Power Authority
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Talauega Samasoni Asaeli	Director, Department of Education
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This document was compiled by SH3 Resource Development, LLC (SH3) on behalf of the Territory of American Samoa.

Cover and Page 1 images: A view of Aunuu Island from Auasi village on Tutuila Island. Photos by H. Porter.

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BroadbandiNei Internet for All

1 Executive Summary

The Territory of American Samoa is taking a parallel approach to develop this detailed strategic plan for broadband deployment and digital equity, in alignment with the 2021-2026 Territorial Broadband Strategy (2021-2026 ASTBS). This document known as the American Samoa BROADBANDiNEI (**i**nformation **N**etwork for **E**xpansion and **I**nclusion) 5-Year Action Plan (BroadbandiNEI 5-Year Action Plan) will focus on key strategic goals, challenges, opportunities, and strategies for the implementation of the Broadband Equity Access and Deployment (BEAD) and the Digital Equity Act (DEA) programs in American Samoa. The BEAD and DEA programs require an understanding of the current broadband environment, needs and opportunities, local coordination and engagement, and analytics to make universal access to affordable, quality, reliable broadband across all seven (7) islands of American Samoa.

The vision of the 2021-2026 ASTBS is for American Samoa to have affordable broadband internet access, have a qualified IT workforce and IT infrastructure with policies and regulations to support and secure business innovation and development, and improve technology literacy and quality of life. In alignment with the overall vision of the 2021-2026 ASTBS, the mission of the American Samoa BROADBANDiNEI 5-Year Action Plan is to improve the affordability, accessibility, adoption, governance and security of broadband for all residents of American Samoa. The American Samoa BROADBANDiNEI 5-Year Action Plan has four goals and 10 key objectives, further discussed in Section 2.

The American Samoa BROADBANDiNEI 5-Year Action Plan prioritizes infrastructure deployment that provides reliable high-speed Internet access to all residents of American Samoa, focusing on unserved and underserved areas. All of American Samoa "lacks access to reliable broadband service offered with... a latency sufficient to support real-time, interactive applications." Therefore all Broadband Serviceable Locations (BSL) in American Samoa are, by strict application of Title 47 USC 1702[1], unserved, rendering all 11,807 households also unserved. American Samoa will strive to provide support for broadband deployment to as many unserved locations - defined as those without any broadband service at all or with broadband service offering speeds below 25 megabits per second (Mbps) downstream/3 Mbps upstream; and underserved locations - defined as those with broadband service offering speeds below 100/20 Mbps - as possible. American Samoa's ultimate territorial goal is to upscale high speed internet connectivity to 100/100Mbps island wide.

The American Samoa BROADBANDiNEI 5-Year Action Plan summarizes key challenges for the deployment of broadband in American Samoa outlined in Section 3 and Section 4, and inventoried tools and resources at American Samoa's disposal for achieving widespread broadband access.

Broadband touches all aspects of the community by providing a new foundation for innovations, economic development, healthcare, education, public safety, entertainment, and many other possibilities. The American Samoa BROADBANDiNEI 5-Year Action Plan was developed with input from organizations, community advocates, subject matter experts and multitude of

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[1] Title 47 USC 1702 (a)(1)(A)(ii)

public-and-private partners islandwide. Engagement activities, priority strategies and an implementation plan to achieve the goals and objectives of this plan are outlined in Section 5.

American Samoa recognizes that the deployment of broadband will only be achieved through parallel and combined approaches to provide affordable and accessible high speed broadband infrastructure, adequate access to devices and the digital literacy skills to meaningfully use the internet and its many services. The American Samoa BROADBANDiNEI 5-Year Action Plan was developed in parallel with the American Samoa BROADBANDiNEI Digital Equity plan.

The American Samoa BROADBANDiNEI 5-Year Action and Digital Equity plans recognizes the efforts of our local community, various broadband working groups, Broadband Steering Committee (BSC), and partnerships and is confident that our resources combined will edge us closer to achieving internet-for-all for American Samoans.

2 Overview of the Document

The Territory of American Samoa is taking a parallel approach to develop this detailed strategic plan for broadband deployment and digital equity, in alignment with the 2021-2026 Territorial Broadband Strategy (2021-2026 ASTBS). This document known as the American Samoa BROADBANDiNEI (**i**nformation **N**etwork for **E**xpansion and **I**nclusion) 5-Year Action Plan (BroadbandiNEI 5-Year Action Plan) will focus on key strategic goals, challenges, opportunities, and implementation strategies for the implementation of the Broadband Equity Access and Deployment (BEAD) and the Digital Equity Act (DEA) programs in American Samoa. The BEAD and DEA programs require an understanding of the current broadband environment, local coordination and engagement, and analytics to make universal access to affordable, quality, reliable broadband across all seven (7) islands of American Samoa. The development of this document was facilitated by SH3 Resource Development, LLC (SH3) on behalf of the American Samoa Government (ASG).

2.1 *2021-2026 Territorial Broadband Strategy (ASTBS)*

The 2021-2026 ASTBS was developed through an extensive process including over 100+ working stakeholder meetings and discussions, public webinars, community engagement and the collective input of the ASTBS Working Group, inclusive of members from the public and private sectors, civil society, non-profit organizations and the community-at-large. The ASTBS is a roadmap of strategies and actions to create an environment ready for broadband-related implementations in American Samoa.

The ASTBS identifies five critical elements as part of its roadmap to implementation.

Access - While broadband internet is now available to over 90% of local residents through BLAST, it is inaccessible to some remote residents due to geographic and topographic constraints. Under this element, efforts address the need for residents to have access to fixed terrestrial broadband service at high-speed as defined by the FCC 25/3 Mbps capacity to afford them opportunities to access services and information. The ASTBS is proposing the adoption of 100/100 Mbps as the local definition of "high-speed" internet.

Affordability – High-speed internet costs are still too expensive for most users. The income per capita in American Samoa is $11,000. Currently shared residential internet access of 25/3 Mbps costs $55 per month; 50/5 Mbps costs $85 per month and 100/10 costs $130 per month. This element presents strategies and initiatives to address broadband affordability concerns.

Capacity Building – Integrating digital inclusion strategies into community and economic development efforts is a priority of the ASTBS. This element addresses strategies and initiatives to encourage increased levels of broadband adoption and usage to enhance people's knowledge and application of broadband.

Inclusion, Equity and Diversity – The ASTBS is committed to help drive lasting reform and champion a more connected, equitable, and just digital world. This element ensures that all broadband initiatives foster a culture of inclusion and assures all users feel supported, embraced and heard.

Infrastructure – One of the key elements to American Samoa's e-Resilience is infrastructure. This element addresses the ongoing need to improve, upgrade and maintain American Samoa's physical telecommunications infrastructure.

ASTBS Priority Strategy 1 and 2 proposed to establish a territorial Broadband Coordination, Opportunities, Redevelopment and Deployment Office (BCORD Office) and the American Samoa BROADBANDiNEI respectively.[2]

2.2 *Governor Lemanu P.S. Mauga - Executive Order 007-2023*

In March 2023, Governor Lemanu P.S. Mauga signed Executive Order 007-2023 that established the BCORD Office, housed within the American Samoa Department of Commerce (ASDOC). The BCORD Office will work collaboratively with both public and private sectors to develop and recommend structural and non-structural territorial strategies to achieve functional affordable universal access to broadband in American Samoa. EO 007-2023 also established the Broadband Steering Committee (BSC) to provide strategic and technical guidance to the BCORD Office. The Office of the Governor serves as co-chair of the BSC. Governor Lemanu recognizes that access to affordable broadband is essential to the prosperity and quality of life of the people of American Samoa.

2.3 *Complementary Approach to BEAD and Digital Equity*

The American Samoa BROADBANDiNEI 5-Year Action Plan will guide and inform priorities for the BEAD and DEA programs administered by National Telecommunications and Information Administration (NTIA) established under the Infrastructure Investment and Jobs Act (IIJA). The American Samoa BROADBANDiNEI 5-Year Action Plan and the American Samoa Digital Equity Plan (ASDEP) will guide and inform priorities for the BEAD and DEA programs. The coordination of the plans will result in complementary ASDEP and American Samoa BROADBANDiNEI 5-Year Action plans.

2.3.1 BEAD

The BEAD Program provides $42.45 billion to expand high-speed Internet access by funding planning, infrastructure deployment and adoption programs. NTIA allocated $37.6M to American Samoa ($25M initial funding + 12.6M additional funding) to expand high-speed internet access by funding planning, infrastructure deployment and adoption programs. The funding prioritizes unserved locations without internet internet access or that only have access

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[2] The ASTBS Priority 1 - *Establish the Territorial Broadband Coordination, Opportunities, Redevelopment and Deployment Office (BCORD Office)...inclusive of a Territorial Broadband Coordinator supported by a Territorial Broadband Advisory Council. The BCORD Office will lead the coordination, identification, development and protection of territory-wide projects and innovative initiatives to improve government services and performances through information technology. They will also coordinate and drive broadband planning, policy, funding, and initiatives to build American Samoa's e-Resilience. This office can be housed in the Governor's Office or as done in many US jurisdictions, the DOC. The ASTBS Priority 2: The ASTBS proposes the adoption of BROADBAND iNEI (information Network for Expansion and Inclusion), an island wide initiative aimed to encourage the immediate transition to all things digital thereby fostering a more efficient, productive, and resilient American Samoa. This includes an overarching framework for the application and implementation of broadband. At a territory level, this initiative is to be led by the CORD Office working in collaboration with government, private sector and various organizations to adopt BROADBAND iNEI to promote the fast-track adaptation of broadband-anchored services and processes.*

under 25/3 Mbps and underserved locations only have access under 100/20 Mbps. Funding under the BEAD Program is designed to be sub-granted to eligible sub-grantees.

2.3.2 Digital Equity

The Digital Equity Act provides $2.75 billion to establish three grant programs to ensure that all people and communities have the skills, technology, and capacity needed to reap the full benefits of our digital economy. The first part of NTIA's execution of the Digital Equity Act is to fund digital equity planning efforts. The NTIA has yet to make American Samoa's full allocation. American Samoa will standby to address critical issues of equity and opportunity such as affordability, access to devices, training and skills, cybersecurity, safety and privacy, and the accessibility of government services as part of its overall approach to digital equity. There is also a significant amount of assessment to be done to create measurable objectives to advance digital equity and create impact on territorial economic development, education, health, civic engagement, and essential services. American Samoa is working towards the completion of our Digital Equity Plan.

2.4 *Defining Our Approach - Foundational Elements*

The 2020 Census Bureau Survey indicates that 31% of American Samoa households did not subscribe to the internet at home (69% broadband subscription)[3]. According to the 2021-2026 ASTBS household survey, over 60% of people indicated their reason for not having internet access at home is related to affordability, access and literacy. Taken together, broadband affordability, access and literacy reflects the complexity of our small island community, culture, geographical isolation and many socio-economic factors that impact our use of broadband. The American Samoa BROADBANDiNEI 5-Year Action Plan focuses on foundational activities that address affordability, access and literacy. Specifically, this plan will also focus deployment and implementation on:

- Expand high-speed internet access by funding planning, infrastructure deployment and adoption programs;
- Prioritizes unserved locations without internet access or that only have access under 25/3 Mbps and underserved locations only have access under 100/20 Mbps;
- Under‑served and unserved "covered populations" of incarcerated, seniors, low‑income, rural, disabled, low literacy, Veterans, minorities;
- Identification of barriers to digital equity faced by each of the covered populations, including economic, learning, access to devices, and IT support;
- Setting measurable objectives and goals for decreasing these key barriers to digital equity; and
- Setting measurable objectives for assessing the impact of digital equity on key sectors, including education, economic, workforce, health, civic and social engagement, and essential services.

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[3] US Census Bureau (2020)
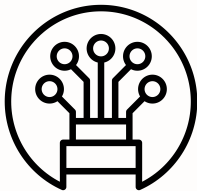https://www.census.gov/data/tables/2020/dec/2020-american-samoa.html

2.5   Vision of the BROADBANDiNEI

The overall vision of the 2021-2026 ASTBS is for American Samoa to have affordable broadband internet access, have a qualified IT workforce and IT infrastructure with policies and regulations to support and secure business innovation and development, and improve technology literacy and quality of life.

> *In alignment with the overall vision of the ASTBS 2021-2026, the mission of the American Samoa BROADBANDiNEI 5-Year Action Plan is to improve the affordability, accessibility, adoption, governance and security of broadband for all residents of American Samoa.*

2.6   Goals and Objectives

Complementary to the 2021-2026 ASTBS, the American Samoa BROADBANDiNEI 5-Year Action Plan adopts the goals in the ASTBS in this strategic plan. The American Samoa BROADBANDiNEI 5-Year Action Plan prioritizes infrastructure deployment that provides reliable high-speed Internet access to all residents of American Samoa. Broadband touches all aspects of the community by providing a new foundation for innovations, economic development, healthcare, education, public safety, entertainment, and many other possibilities. American Samoa has four goals and 10 key objectives.

Goal 1: AFFORDABLE BROADBAND ACCESS - Improve the quality of life afforded through services and access to affordable broadband & internet service

American Samoa's unique geography requires a wide range of broadband infrastructure and technologies to support its digital growth.

The American Samoa BROADBANDiNEI 5-Year Action Plan carries forward ideologies and actions to maintain and improve the quality of life by realizing a broadband driven economy that is dynamic, enterprising, self-sustaining, culturally appropriate and responsive to changes and fluctuations in the global economy.

Under this goal, efforts address the need for residents to have access to affordable broadband service at high-speed 100/20Mbps capacity to afford them opportunities to access services such as virtual learning, telehealth, digital economy, research and development, video conferencing, teleworking and access to information.

Key Objectives:

- ❖ Ensure that all unserved and underserved areas are served with at least a minimum capacity of 100/20mbps by 2028. (Access)
- ❖ Deploy high speed broadband capacity to as many locations by 2028 (Access)
- ❖ Increase household enrollment in the Affordable Connectivity Program (ACP) (Affordability)
- ❖ American Samoa to have Affordable residential high speed broadband internet of 100/20 Mbps ranging between $50-$100 by 2028. (Affordability)
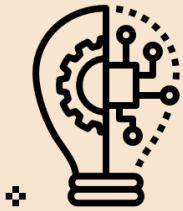
Goal 2: RESPONSIBLE GOVERNANCE AND STRONG INSTITUTIONS - Develop an organizational, program and technical infrastructure that include governance, policies and regulations, collaborations and partnerships permitting American Samoa to become an effective part of the global digital village.

The 2021-2026 ASTBS will initiate, develop and advance broadband-related policies, programs and initiatives that support and foster collaboration amongst sectors. Our goal is also to strengthen the implementation and revitalization of local, regional, national and global partnerships for responsible governance and strong institutions in telecommunication.

The American Samoa BROADBANDiNEI 5-Year Action Plan will aim to further responsible governance for the deployment, implementation, utilization and adoption of broadband.

Key Objectives:

❖ Explore options for alternative governance framework to regulate broadband in American Samoa.

Goal 3: TECHNOLOGY LITERACY - Promote technology literacy at all levels

Technology literacy is defined as the ability of individuals to responsibly use appropriate technology tools to: access and integrate information; and construct and communicate knowledge to improve learning and support lifelong learning.

The American Samoa BROADBANDiNEI 5-Year Action Plan will leverage existing programs and partnerships with community stakeholders to increase technology literacy, access to devices and adoption rates.

Key Objectives:

❖ Increase broadband household adoption (69% household subscription) (Adoption)
❖ Increase the percentage of residents with access to internet-capable devices (Adoption, Equity)
❖ Increase technology adoption and household adoptions within covered populations (Adoption, Equity)

Goal 4: CYBERSECURITY - Enable American Samoa to securely participate in national, regional and global information infrastructure

Information, data and network security is a priority of the ASTBS. American Samoa shall strengthen its cybersecurity to respond to growing global threats and safely and securely protect its citizens from those attacks. In addition, with cybersecurity crimes new laws, policies and regulations shall be in place to protect consumers from potential attacks.

The American Samoa BROADBANDiNEI 5-Year Action Plan prioritizes data security and online safety and privacy of users in American Samoa and shall work to strengthen its cybersecurity capacity.

Key Objectives:

❖ Ensure a territorial cybersecurity risk management plan is in place and/or updated
❖ Ensure that ISPs, eligible entities have an operational cybersecurity risk management plan in place prior to offering service over a BEAD-funded network

3 Current State of Broadband and Digital Inclusion

3.1 Existing Programs

With guidance from the BSC, the BCORD Office supports territory-wide efforts on broadband based on the goals and priorities identified in the ASTBS to increase the affordability, availability, adoption and effectiveness of broadband internet. Through partnerships and collaborations, the BCORD Office encourages investment in opportunities for broadband programs and initiatives that focus on improving the quality of life for the people of American Samoa. American Samoa BROADBANDiNEI 5-Year Action Plan takes into account initiatives and projects funded by ARPA, Capital Projects Fund and other local and federal funding. Table 1. includes a list of activities conducted by the BCORD Office.

Table 1: Current Activities that the Broadband Program/Office Conducts

Activity Name	Description	Intended Outcome(s)
Coordination of territory-wide broadband initiatives[4]	The BCORD Office supports territory-wide efforts on broadband to increase the affordability, availability, adoption and effectiveness of broadband internet. Through partnerships and collaborations, the BCORD Office encourages investment in opportunities for broadband programs and initiatives that focus on improving the quality of life for the people of American Samoa.	Identify and develop partnerships and collaborations for broadband initiatives in American Samoa.
Administers the BEAD and DE Programs	BCORD and the Office of the Governor are responsible for administering and oversight of BEAD and DE Programs once established.	Develop a process to implement and administer the BEAD and DE programs.
BroadbandiNEI ARPA Projects	BCORD manages the BroadbandiNEI ARPA Grants that were awarded to eligible entities to deliver high speed internet service that reliably meets or exceeds symmetrical	Assistance provided to ISP for necessary network repair and upgrade to support high speed internet in American Samoa.

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[4] ASTBA P.5.1. *Coordinated Broadband-Related Economic Development initiatives through the Broadband CORD Office:* Economic growth requires a well-coordinated multisectoral approach with multisectoral solutions. The ASTBS fully endorses the establishment of the CORD Office to lead and coordinate broadband efforts across the territory, including BROADBAND iNEI, an initiative mandating that all ASG departments and authorities adopt policies that will promote the fast-track adaptation of broadband-anchored services and processes into their operations by 2025.

	up/down speeds of 100Mbps prioritizing under-served areas. ● ASTCA - Domestic submarine cable repair ● ASTCA - 5G Network Upgrade ● Bluesky - 5G Network Upgrade	
Capital Fund Project: Innovation and Technology Campus[5]	A $14.3 grant from the Department of Treasury to develop the American Samoa Innovation and Technology Campus.	Create a suitable space for digital opportunity growth equipped with technology and broadband to support innovation, economic growth in various sectors.
Broadband Related Grant Opportunities	BCORD Office provides technical assistance and explores funding opportunities for broadband adoption, digital equity, digital literacy and application of broadband	Identification of grant opportunities; Successful grant applications
Broadband Steering Committee	BCORD with the Office of the Governor convenes the BSC to obtain and gather strategic and technical feedband and guidance on broadband priorities, efforts; appropriate policy recommendations and request for assistance	A transparent process for identifying broadband priorities, strategies, objectives into territorial BEAD efforts.
BCORD Core Working Group	BCORD hosts weekly meetings with the Core Working Group to collect input on the BEAD planning process	Obtaining feedback from members of core working group for the action plan
Local Coordination and Outreach	BCORD hosts in person and virtual Office Hours and Webinars (TalaTek) to collect	Helps to clarify questions and concerns;

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[5] ASTBS *P.5.3 American Samoa Innovation & Technology Campus:* Officially designate Tafuna/Lion's Park Government Housing land as a future site of the American Samoa Innovation & Technology Campus. Doing so clears a path for development plans, including the identification of development financing resources or investors. This development project shall be coordinated with the Department of Education's current effort to expand and improve its Career & Technical Education (CTE) program. The Innovation & Technology Campus shall act as the catalyst for the growth of the ICT and related industries, prioritize workforce development opportunities in CTE; and set the standard in our region for connected communities.

	input and provide updates about BEAD and progress of the American Samoa BROADBANDiNEI 5-Year Action Plan	Provides information to stakeholders and partners. Opportunity for community to provide input, ask questions and BEAD
Road Shows (Stakeholder Engagements)	One-on-one meetings with ISPs, targeted populations to collect input on the American Samoa BROADBANDiNEI 5-Year Action Plan	Local community have an opportunity to provide input into the action plan and territorial broadband programs

Table 2: Current and Planned Full-Time and Part-Time Employees

Current/ Planned	Full-Time / Part-time	Position	Description of Role
Current	FT	Territorial Broadband Coordinator	Leads the BCORD office and oversees programs under BCORD's direction
Current	FT	Broadband Program Assistant	Provider overall program administrative, fiscal and clerical support
Future	FT	Digital Equity Coordinator	Coordinates Digital Equity Specific projects, including DE Planning and DE project implementation
Future	FT	Outreach Coordinator	Coordinates Outreach Activities under BCORD Programs
Current	PT	Director of Commerce	Provides executive level support and guidance for BCORD and Broadband Programs and co-chairs the broadband steering committee.
Current	PT	Assistant Director of Commerce	Provides executive level support and guidance for BCORD and Broadband Programs, directly supervises BCORD
Current	PT	Chief Information Officer (Office of the Governor)	Provides technical expertise and guidance to the BCORD and Broadband Programs. Acts as an active member of Broadband Steering Committee and core working groups.
Current	PT	Chief Information Officer (American Samoa Community College)	Provides technical expertise and guidance to the BCORD and Broadband Programs. Acts as an active member of the broadband steering committee and associated working groups.

Table 3: Current and Planned Contractor Support

Current/ Planned	Time	Position	Description of Role
Current	PT	Strategic Industry Consultant -	Retained resource for subject matter expertise in telecommunications and internet policy for the region.
Current	PT	Strategic Industry Consultant -	Retained resource for subject matter expertise in telecommunications and internet policy for the region.
Current	PT	Strategic Industry Consultant- Information Technology	** This is a voluntary position ** providing information technology subject matter expertise as well as telecommunications and internet policy expertise.

Table 4: Broadband Funding

Source	Purpose	Total	Expended	Available
ARPA (ASG)	BROADBANDiNEI Program (BCORD)	$10,000,000		
BEAD Planning (NTIA)	BEAD Planning Funding (BCORD)	$1,244,300		
DE Planning (NTIA)	Digital Equity Planning (BCORD)	$150,000		
BEAD Allocation (NTIA)	BEAD Program Allocation (BCORD)	$37,564,827		
Capital Projects Fund (U.S. Treasury)	Technology & Innovation Park (ASDOC)	$14,285,714		
Connecting Minority Communities (NTIA)	A'oa'oga Aso Nei (ASCC)	$2,994,869		
Affordable Connectivity Program (FCC) [PROPOSED]	Establish an outreach program for ACP (BCORD)	$342,760		
TOTAL FUNDING		**$66,582,470**		

3.2 *Partnerships*

Table 5: Partners

Partners	Description of Current or Planned Role in Broadband Deployment and Adoption
American Samoa Government (ASG)	The strategic role of ASG is to create conditions to utilize broadband to develop and diversify our economy, creating new and higher-paying jobs and entrepreneurial opportunities driven by and through telecommunications and broadband initiatives and infrastructure in American Samoa; Improve access to and quality of health care through telehealth; Improve access to and quality of education through distance learning; Improve efficiency and effectiveness in the delivery of government services to residents through online platforms and interfaces; and Support social and personal development of residents. ASG to meet this objective will create and implement policies that will support the development of these opportunities and continue to support implementation of strategies as listed in the ASTBS. ASG will create an economic development plan and programs to encourage and facilitate private business links with local institutions and private sectors for partnership and collaboration. ASG will aggressively pursue an investment in regional assets-education, research, physical infrastructure, institutions for collaboration.
American Samoa Community College (ASCC)	As the sole institution for higher education with a total student enrollment of 1,000+ students, ASCC's strategic role will focus on the use of ICT to improve learning through integration in the classroom, integration to develop programs for the workforce skills and collaboration for research and development with the private sector to develop innovative products, processes and services. ASCC will leverage its resources (faculty, staff, students, laboratories, classrooms, land and computer systems) and assets to attract private capital investment. According to EDA, several trends are driving the push for higher skills: technological change, globalization and demographics. ASCC will continue to partner with ASG departments such as the Department of Education and private businesses to develop an ICT education and training program and small business incubation center for credits, degrees, certification and professional development. ASCC will continue to create programs that will enable the export of its expertise through its telecommunications infrastructure. As appropriate, ASCC will partner with private and public sector agencies to encourage and market their entrepreneurial skills and products through ICT. ASCC and DOE will join with its partners to link economic development and workforce development.
ASG Technology Office	The ASG Technology Office under the Office of the Governor was established and established as a result of the current

	administration's priority to promote the increased use of technology in government and to enhance the services offered to the citizens of American Samoa. This office plays a crucial role in leading and administering cybersecurity initiatives to guarantee the secure and resilient operation of government systems and infrastructure. In addition to fostering innovation, enhancing network security, leveraging data-driven approaches, and facilitating technology integration, the ASG Technology Office is a leader in protecting vital information assets against cyber threats. By collaborating closely with the Broadband Coordinating Office, Technology Office will not only work to ensure that government operations are not only technologically advanced through increased bandwidth and technology, but also work to protect American Samoa from cyber threats and vulnerabilities, thereby enhancing the lives of citizens via safe and improved government services.
ASG Department of Education (DOE)	The DOE's strategic role is to build upon the goals and objectives as outlined by the Educational Technology Division. The mandate of the Educational Technology Division (ETD) is to implement its revised plan based on the criteria of the No Child Left Behind program, the criteria of the Schools and Libraries Division of the Federal Communications Commission (FCC) and any other technology related funding. The DOE will continue to work with ASCC, private schools to implement an awareness campaign to educate the public about broadband and technology practices, and acceptable conduct within the workplace.
American Samoa Telecommunications Authority (ASTCA)	The strategic role of ASTCA as a semi-autonomous agency of the ASG is to maintain its telecommunications network; support technology for broadband connectivity to encourage competition, maintain affordable pricing, provide quality of service (QoS) and encourage investment in advanced telecommunications capabilities. ASTCA will continue to maintain and sustain the physical telecommunication infrastructure to provide security and redundancy from major disasters and terrorist activities. ASTCA will continue to be a leader in developing and strengthening the public service telecommunications infrastructure and providing training and technology transfer to integrate into the education system. ASTCA will also focus on telecommunications regulations and policies to assist them in competitive grants and access to various markets and business investors.
ASG Department of Commerce (DOC)	The strategic role of the DOC is to continue its refinement of the Comprehensive Economic Development Strategy (CEDS) and the Territorial General Plan to assure consistency under the guidelines of the U.S. Economic Development Administration (EDA) on priorities and sharing of resources as well as the resolution of outstanding issues and concerns regarding the development of the four growth industries in Fisheries and

	Agriculture, Telecommunication and Information Technology, Manufacturing and Visitor. DOC will allocate and maintain the necessary resources to develop a systematic method to record, track and analyze data related to GDP and other economic indicators properly measure and guide the Territory's economic growth. Many investors who support new business ventures require market studies, cost-benefit, and risk analysis reports and business plans. Reliable information will assist potential investors on the benefits versus the risk of investing in American Samoa.
ASG Department of Treasury	The strategic role of the American Samoa Department of Treasury is to maintain and operate the systems that support the American Samoa Governments enterprise resource planning infrastructure. Treasury has the largest government network, spanning over seven physical locations across five ASG departments and offices, with approximately 350 direct end users to its systems. These critical government services include the financial system, payroll, taxes, customs, human resources, fixed/real assets, procurement, government email, and end user authentication. Treasury will provide support and guidance as a stakeholder from the perspective of a government agency leveraging broadband infrastructure to operate an enterprise wide area network.
Chamber of Commerce (The Chamber)	The strategic role of the Chamber is to elevate its efforts in pursuing active opportunities for public-private partnership with regards to ICT and eCommerce activities and policies that will create conditions and opportunities for the private businesses. The Chamber will represent the private sector with regards to government policies in the ICT field. The Chamber will also provide an informal briefing on any barriers created by government policies to the business's attraction and development of the economy.
Bluesky Communications (Bluesky)	The strategic role of Bluesky is to seek public-private partnership with regards to the effective use of technology for education, health and government service. As the only Competitive Local Exchange Carrier (CLEC), Bluesky will seek opportunities to partner with other carriers for more bandwidth to improve its service to the community.
Feleti Barstow Public Library (FBPL)	Feleti Barstow Public Library's (FBPL) top priority is digital inclusion. FBPL realizes the collaborative efforts of the ASTBS Working Group must be leveraged to accomplish this feat as we all have a vested interest in developing the community's digital skill sets. While many issues surround the digital divide, FBPL recognizes access, devices, and content as three areas that may significantly impact our communities. As we increase our e-content; we would like to ensure access is equitable in the territory so that it's citizenry may participate and function

	responsibly in the digital age. The role of FBPL will be determined by our community.
ASG Department of Health	The Department of Health (DOH) functions as the territorial public health agency in American Samoa. DOH's mission is to effectively and efficiently deploy available public health, human and material resources: to PROMOTE physical and mental health; to PREVENT disease, injury, and disability; and to PROTECT individual rights to access quality and affordable health care services for all residents of American Samoa. The strategic role of the DOH is to facilitate the use of telehealth within DOH clinics, LBJTMC as well as necessary off-island specialists for services.
LBJ Tropical Medical Center	The Lyndon B. Johnson Tropical Medical Center (LBJTMC) shall work hand-in-hand with DOH and other healthcare providers on island to facilitate, coordinate and conduct telehealth on and off island. LBJTMC is the only hospital in American Samoa, and is located in Faga'alu, Ma'oputasi County. It has been ranked among the best hospitals in the Pacific. It is home to an emergency room and there are doctors on duty at all hours. It is a 150-bed facility. It includes TB, leprosy and obstetric units. LBJTMC is also one of the first hospitals to conduct telehealth in the early 1990s. With increased bandwidth capacity, the LBJTMC is in a position to expand its telehealth services to include many specialty areas and services including but not limited to like tele-ultrasounds, telepathology, teledentistry and teleneurology.

3.3 Asset Inventory

3.3.1 Hawaiki Cable

American Samoa has struggled to reap the benefits that modern broadband services have to offer. Like many remote locations, internet connectivity has been intermittent, slow, expensive and poor quality. In 2015, the US Department of Agriculture's (USDA) Rural Utility Service (RUS) funded the Broadband Linking American Samoa Territory (BLAST), installing fiber-to-the-premise (FTTP) infrastructure connecting all homes and businesses to the local fiber-optic network. American Samoa invested over $90 million in BLAST to replace its copper infrastructure with a fiber-optic network capable of delivering high speed, voice, video, data and cellular backhaul service throughout its islands of Tutuila, Aunu'u, Ofu, Ta'u, and Olosega. American Samoa further capitalized on BLAST upgrades by replacing the Territory's 2G network with 4G LTE (long-term evolution) technologies. The ASG followed with a $30M investment to launch the Hawaiki Submarine Cable (Hawaiki Cable) in 2018, connecting American Samoa to the global community via the availability of 200+ Gbps off-island bandwidth capacity. The Hawa`iki Cable is a 15,000 kilometer (9320 miles) high-capacity underwater cable connecting Australia and New Zealand to the mainland United States, American Samoa, and Hawai`i. These investments enable an ecosystem for digital innovations to thrive, positioning American Samoa for e-Resilience.

3.3.2 BLAST

The Broadband Linking the American Samoa Territory(BLAST) is a 90+ million-dollar project and is one of the region's only true fiber-to-the-premise networks in the territory. BLAST converted the islands' legacy copper network into an advanced FTTP infrastructure. Completed in 2015, the Broadband Linking the American Samoa Territory (BLAST) project replaced the territory's copper infrastructure with a fiber optic network capable of delivering high-speed data, voice, and cellular backhaul services. The project was funded through a combination of USDA RUS grant and loan.

3.3.3 ASH Cable

The Samoan American Samoa Hawaii Cable (ASH Cable) was an international fiber optic cable between American Samoa, Samoa and Hawaii and connects Samoa to the existing global telecommunications infrastructure networks. The ASH/SAS became operational in 2009. In 2018-2019, they upgraded from 1Gbps to 100Gbps (install capacity).[6] The ASH/SAS Cable consists of two cables installed between Samoa, American Samoa and Hawaii. The direct link to Hawaii via ASH/SAS has since been disconnected. However, the link between American Samoa and Samoa provides inter-island communication, as well as enabling users in Samoa to access the ASH cable capacity and connect to the global networks.

3.3.4 Microwave connection to outer islands

The primary backhaul system between Tutuila and the Manua islands consists of fiber-optic cables and satellite connections. In 2021, the undersea fiber-optic cable linking the Tutuila and Manu'a Islands failed, completely stranding the Manu'a Islands from all telecommunication services. Microwave links are in place providing a steady 1Gbps backhaul with 500Mbps at four 9's availability, over 90+miles long distance.

3.3.5 O3B

O3b Trunk system provides high speed international connectivity via O3b's Medium Earth Orbit (MEO) satellites. O3b provides 1.2Gbps internet capacity for the Samoan archipelago and provides a safety net in the event of a failure of its submarine fiber system. In June 2016, NWS signed a contract with SES Government Solutions for a complete managed service that uses a satellite constellation with the newest O3b Medium Earth Orbit (MEO) communications link with a high-bandwidth and low latency. This technology has the capability of providing fiber-like connectivity via satellite.

3.3.6 Satellite Earth Stations

Samoa Technologies (also known as Samoa Tech or STI) is a privately held diversified telecommunications, broadcasting and media, consulting, and aircraft leasing company. STI operates a Satellite Earth Station in American Samoa which provides 24/7 linkage to/from the

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[6] Accessed
https://telco2.atlassian.net/wiki/spaces/PACPUB/pages/140410888/ASH+Cable+American-Samoa+Hawaii

outside world for voice, data and video; radio broadcasting station KSBS and mobile communications in American Samoa.

3.3.7 FirstNet

FirstNet Network is a mobile network dedicated to First Responders and will prioritize these users during traffic congestion. To ensure on-going communications for First Responders during disasters including the COVID-19 pandemic, 23 FirstNet sites have been launched and operational with users assigned cell phones and devices by the ASG Territorial Emergency Management Coordination Office / Emergency Operations Center (TEMCO / EOC) provisioned under the FirstNet Network.

3.4 Needs and Gaps Assessment

American Samoa's needs and gaps are extensively covered in its ASTBS. The following section augments the information from the ASTBS with additional information required for the purposes of the 5 Year Action Plan.

We observe that significant information about American Samoa's needs and gaps will continue to be gathered not only during the plan development but throughout the working course of BEAD. As a result many elements of this section will be subject to rapid change.

3.4.1 Latency

All of American Samoa "lacks access to reliable broadband service offered with... a latency sufficient to support real-time, interactive applications." Therefore all Broadband Serviceable Locations in American Samoa are, by strict application of Title 47 USC 1702[7], unserved. The real impacts of high latency are poor-quality performance or near-unusability of real-time interactive applications based in the cloud. Some examples include map applications, including the FCC Affordable Connectivity Program signup website and the FCC National Broadband Map, both of which draw from a number of APIs that are based in the Continental United States to the degree that the impacts of latency are multiplicative in real-time use. Data analysis and processing applications like Tableau or Power BI (applications which we think are the perfect model of real-time, interactive applications,) are impacted to the point of being unworkable with even moderately sized datasets. Application development is affected by lengthy commit times and serious effects on Continuous Integration and software testing. Research applications are hampered.

The effects of Latency aren't always clear to non-technical users; since American Samoa's download and upload speeds are usually quite poor also, it is natural for users to blame application stutters and failures on poor and inconsistent bandwidth. While this is sometimes the case, it is the observation of BCORD that high latency to the nearest application servers is just as frequently to blame for these problems.

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[7] Title 47 USC 1702 (a)(1)(A)(ii)

3.4.2 Deployment Gaps

While virtually all of American Samoa is listed as served (but underserved) according to the FCC National Broadband Map, there are clearly deployment gaps causing many areas to be irregularly served, underserved, or not served in actuality–in conflict with the facts presented on the map. When surveyed about the possible uses of BEAD, ISPs have indicated that service "to the curb" still needs build-out in many cases, and that there are regions of the island that have poor terrestrial middle mile.

While there is clearly a current problem with acceptable latency on the undersea connections back to the United States, there are also questions about how much actual bandwidth running through American Samoa's ocean envelope via the Hawaiki cable is actually available to serve the American Samoan public. With a single geographic cable running onto and off the island, there is also an extreme lack of redundancy should any section of the Hawaiki route be compromised due to a climatological emergency or an act of sabotage or war.

3.4.3 Affordability Gaps

Residential

American Samoa has some of the least affordable internet access in America by any dimension. American Samoa residents pay far more for home internet services than residents in Hawai'i and even residents in small-town Idaho.

ISP Name	Technology	Download Mbps	Upload Mbps	Price, April	US Dollar per Mbps (Down)
American Samoa / ASTCA	Fiber	25	3	$55.00	$2.20
American Samoa / ASTCA	Fiber	100	10	$130.00	$1.30
American Samoa / Blue Sky Gold	Fixed Wireless	15	5	$79.00	$5.27
American Samoa / Blue Sky Platinum	Fixed Wireless	30	10	$99.00	$3.30
Hawaii / Oahu / Hawaiian Telcom	Fiber	1000	500	$75.00	$0.08
Ziply Fiber Idaho	Fiber	50	50	$20.00	$0.40

As can be seen in the table above, residents of American Samoa pay far more per Mbps on even the least expensive plan than the standard rate in Hawaii, which currently trends to around $.10 per Mbps of download speed. Even with the very rural Idahoan ISP cited, residents pay far less than a dollar per Mbps of download–and this is on a symmetrical plan with Fiber service.

If American Samoa were to adopt a basic affordability standard of $50-$100 dollars per month for residential 100/20 Mbps service, we can easily see from the table above that *no* provider offers *any* plan that approaches satisfying the standard. In fact, no American Samoa ISP even offers a package that stands as "served" broadband. Thus, in reality, **zero** locations in American Samoa have access to affordable broadband today.

Business

Anecdotally speaking, businesses pay a very large amount for internet service, to the degree that certain businesses and especially startups are disadvantaged on a global economic basis. The team is continuing to communicate with businesses through the American Samoa Chamber of Commerce to understand what businesses pay for broadband.

The impact of high prices and poor internet service on the tourism industry is of special concern for American Samoa. While tourism is currently only recently reopening due to COVID, future impacts upon tourism regrowth (and, in particular, certain forms of tourism including economic-related tourism) could have an outsized economic impact for the territory. One particular impact of the high costs of internet service on tourism in American Samoa is that, due to remoteness of the reopening tourism industry, the only cost-effective way for small businesses to market themselves is via the internet. High costs of internet service prevent or limit this generally high-bandwidth activity. The team is pursuing additional details of the impacts from the American Samoa Visitors Bureau and American Samoa International Airport.

3.4.4 Underserved Gaps

As they stand July 2023, the FCC Broadband Maps[8] indicate that 100 percent of American Samoa is Underserved; they are lacking any mass-marketed service with speeds of 100Mbps download/20 Mbps upload advertised speeds. The exact number of Underserved locations unknowable due to current map defects and apparent misunderstandings on the part of the Internet Service Providers as to the rules of data collection, but our team estimates that the majority of Broadband Serviceable Locations in American Samoa are Underserved rather than Unserved. The BCORD Office will continue to evaluate the details of this statistic over the course of plan development.

3.4.5 Community Anchor Institution Gaps

American Samoa is evaluating the number of Community Anchor Institutions locally that:

- ❖ Exist but are not mapped on the National Broadband Map
- ❖ Are mapped on the National Broadband Map as Unserved (gigabit access)
- ❖ Are mapped on the National Broadband Map as Served (gigabit access,) but do not actually have such access
- ❖ Are mapped on the National Broadband Map as Served (gigabit access,) but do not have an affordable available service
- ❖ Are mapped on the National Broadband Map as Served (gigabit access,) and are today affordably and reliably served with gigabit access.

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[8]

https://broadbandmap.fcc.gov/area-summary/fixed?version=jun2022&geoid=66&type=state&zoom=9.81&vlon=144.736012&vlat=13.443636&br=r&speed=25_3&tech=1_2_3_4_5_6_7_8

The first four categorizations are clearly gaps, although it remains to be determined whether BEAD can be used to address any or each of these gaps. Future applications of Digital Equity programming might also be appropriate for addressing these gaps.

The project team will not be able to complete this effort without the v2 version of the National Broadband Map service data. Once it is completed, the project team will develop action plans for each category of Community Anchor Institution Gaps.

3.4.6 Access Gaps

While many residents of American Samoa do not have access to a qualified computing device from which they could constructively use the internet, this lack of access pales in comparison to the general housing situation of many residents. Housing is relatively expensive and eternally in short supply in American Samoa, and residents are frequently settled into living situations that are not conducive to work.

These conditions can be especially punitive to certain members of large families, who may not have quiet, private, safe, clean, air-conditioned, and powered conditions during the day or night at which they could productively engage in digital commerce, digital communication, and digital citizenship. Similar gaps in access to safe, effective workspaces appear throughout the Pacific islands including Hawaii, and no Broadband plan that fails to address these conditions would be complete.

3.4.7 Digital Equity Gaps

Precise gaps in American Samoa digital equity have not yet been enumerated, although they are currently being assembled through our ongoing outreach to the public. Formal enumeration will begin with the commencement of the NTIA Digital Equity awards for territories.

Our expectation at this time is that there are significant gaps in Digital Equity. We mention affordability above, but there will likely also be observable gaps in digital inclusion, device availability, digital literacy, and digital cultural inclusion including poor online accessibility through indigenous languages. The project team also anticipates finding poor working conditions in which digital access might suffer from a lack of quiet, secure, clean, and powered spaces available for residents to work in.

3.4.7 Information Gaps

There are real gaps in what information is shared to the BCORD Office, especially with respect to undersea fiber optic cable operators and from the Internet Service Providers.

The lack of an operational and complete National Broadband Map from which the team could draw actual working knowledge is also a significant Information Gap.

As of April, 2023, BCORD Office is exploring mechanisms through which providers wishing to participate in BEAD programs might be asked to communicate the details of their infrastructure. A Memorandum of Understanding (MOU) is under development that will fulfill the Special Award Conditions of a previous local subgrant that was awarded to both local ISPs, and this MOU will attempt to obtain significant information in an attempt to improve BCORD's awareness for planning.

The BCORD Office is not aware of any agency it might have with respect to improvements of the National Broadband Map.

4 Obstacles or Barriers

4.1 Affordability

In 2018, American Samoa invested $36M in a combination of loans and capital improvement funds to procure 200+Gbps off-island bandwidth capacity via the Hawaiki Submarine Cable (Hawaiki Cable). The procurement of the Hawaiki Cable was initially loaned through the ASG Employee Retirement Fund. The American Samoa Economic Development Authority (ASEDA) has since reimbursed the ASGERF and taken ownership of the cable transition. It is anticipated that the first payment of the loan to ASEDA by the American Samoa Telecommunications Authority will be by 2024. The monthly cost is projected to be between $300,000-$750,000. This is unaffordable and will most likely cause the price of high speed internet to remain unaffordable or increase.

To successfully utilize and adopt broadband, the cost of high speed internet has to be affordable. American Samoa median household income is $22,000 compared to the US median of $52,000. As indicated in Section 3.4.3 American Samoa has some of the least affordable internet access in America by any dimension. American Samoa residents pay far more for home internet services than residents in Hawai'i and even residents in small-town Idaho. In a survey conducted by the ASTBS Working Group, >30% of households indicated the reason they do not have internet access at home is due to cost.

4.2 Digital Literacy (Skills)

Digital literacy encompasses the skills required to use technology safely, effectively and responsibly. As technology and broadband continues to become more and more ingrained in daily life, the importance of learning digital literacy skills is becoming increasingly apparent. However, gaps in digital skills will be a barrier to adoption and utilization of broadband territory-wide.

4.3 Adoption

For the >30% of American Samoans who do not currently have broadband service at home, financial concerns - monthly cost of $50+ and also the cost of devices - are large barriers to non-adoption. In addition, the functionality of devices and computers also make adoption less of a priority. American Samoa recognizes the need to educate, train and provide opportunities to build not only skills but also to inform the public about the value of broadband.

4.4 Public Resource Availability (what services does ASG offer to the public, that are commonly offered elsewhere online)

Unique barriers exacerbate American Samoa's efforts to enhance our competitive advantage, create economic opportunities and attract investment. One of the main barriers is the slow transition from manual, error prone processes to automated digital workflows. This lag prevents opportunities to capitalize on new technologies, improved data collection and analytics, and an expedited transition from a cash to a digital economy. With the technical infrastructure in place, creating a digital ready ecosystem for economic development in American Samoa is necessary to sustain an economic base and maximize our competitive advantage in regional and global markets. Priority P.5.2 of the ASTBS aims at efforts to transition American Samoa towards

e-governance.[9] The American Samoa BROADBANDiNEI 5-Year Action Plan recognizes the need to make public resources available and accessible and encourages the adoption of the BROADBANDiNEI as an island wide initiative aimed to encourage the immediate transition to all things digital thereby fostering a more efficient, productive, and resilient American Samoa. This includes an overarching framework for the application and implementation of broadband. At a territory level, this initiative is to be led by the BCORD Office working in collaboration with government, private sector and various organizations to adopt BROADBAND iNEI to promote the fast-track adaptation of broadband-anchored services and processes.

Institute the ASG BROADBAND iNEI Policy: To pursue this, the American Samoa BROADBANDiNEI 5-Year Action Plan endorses the BROADBAND iNEI policy requiring all government departments and authorities to adopt policies that will promote the fast-track adaptation of broadband-anchored services and processes into their operations by 2025. The adoption of a BROADBAND iNEI policy would ensure American Samoa's competitiveness by requiring all users – leaders, directors, managers and staff to commit to transitioning to a new, digital age, ensuring American Samoa remains competitive to access opportunities for economic growth that would otherwise be unavailable or inaccessible to our people. Each department will conduct a thorough service and process review to determine (1) what processes can be digitized, automated, or transitioned to be delivered online; (2) how those processes can be transitioned with minimal risk, impact or disruption to current operations and (3) needed resources required to successfully complete transition. Each department is to review and adjust all budgets to account for the implementation of strategies and plans. The BROADBAND iNEI policy shall also require all vendors conducting business with ASG to adjust accordingly.

4.5   Labor and workforce

High level of labor shortage is anticipated for broadband-related projects, especially in technical systems, network and engineering support. Labor shortages may lead to delayed deployment as well as higher cost than anticipated if labor has to be sourced across state lines to address gaps. Historically, American Samoa has continued to be challenged with building local qualified workforce in IT.

4.6   Legislative

American Samoa does not have legislation and administrative rules relevant to broadband deployment.

4.7   Supply Chain

Supply chain issues with regards to parts, maintenance and technical support (timezone) is an ongoing challenge for American Samoa and the Pacific Region overall. This is an issue not just for construction and related materials, but more broadly as well in terms of supply chain and the recruitment of workforce. Quality assurance can be an issue, but by and large, the islands have generally done a good job of vetting the quality, appropriateness, and cost of items procured outside of the US market. As a matter of practicality, it is often quicker and cheaper to procure and ship materials from the Asia-Pacific side of the Pacific compared to the US mainland. American Samoa is eager to develop new paradigms and flexibilities to counter supply chain challenges.

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[9] 2021-2026 ASTBS

4.8 Absence of Physical Address System

American Samoa is one of the few remaining areas in the United States that does not have a physical address system. This has resulted in significant inequities and disadvantages for the local population and business. Without physical addresses, business operations, government services, and emergency response are hampered. In contrast to the majority of the United States, residents of American Samoa lack access to essential and quality services that depend on physical locations such as direct mail delivery to residential homes and commercial offices, 911 emergency services, and identifying locations where government can provide services, as American Samoa has discovered through the FCC Broadband Mapping process, in identifying underserved and unserved broadband serviceable locations. In addition, residents of American Samoa are unjustly excluded from access to certain application and enrollment processes of federal programs, access to certain online banks or banking services, and ability to purchase certain software licenses such as Microsoft or Adobe, that all require physical addresses. To bridge the divide, a robust GIS mapping initiative and a well developed physical address system are required. The solution to this challenge will empower the local community and build a physical address system along expectations of local capacity development with the necessary skills in GIS mapping and physical addressing.

5   Implementation Plan

5.1   Stakeholder Engagement Process

Information, discussions and data were compiled and analyzed to reflect a current environmental scan, market trends, and realities. The American Samoa BROADBANDiNEI 5-Year Action and Digital Equity lans adopted the established vision, goals and formulated specific objectives according to priorities and needs of the BEAD program. To best inform this plan, the BCORD Office and BSC took a holistic and inclusive community approach, and sought input from various stakeholders through:

Working Group Weekly Meeting: The BCORD Office held 20+ one-hour virtual sessions focused on vision and goals building, understanding ideologies, concepts and frameworks on broadband and its applicability in various markets and industries in American Samoa.

BEAD Office Hours: The BCORD Office hosts weekly office hours to address questions or concerns in relation to broadband and BEAD/DE Programs.

Broadband Steering Committee Meetings: The Office of the Governor and the BCORD office has convened the BSC to gather input and guidance on specific priorities, actions and recommendations for broadband use and adoption.

TalaTek: Talanoaga Fa'aTekonolosi (TALATEK) is a webinar series / public forum of pertinent topics on the use of broadband and technology applications in American Samoa. TALA-TEK featured speakers and experts at the local and community, national and global levels. Topics include but are not limited to: cybersecurity, telehealth, distance education, eCommerce, trades and technologies and many more. The BCORD office has hosted public / virtual forums on Cybersecurity, Telehealth, Digital Economy and BEAD/DE.

Household Survey: The BCORD Office will conduct a post-COVID broadband household survey to gather information to understand what changed in the landscape, opportunities, challenges, usage, quality, affordability, access to broadband in American Samoa. The Household Survey will be conducted in both English and Samoan.

Road Show Meetings: Road Show Meetings are one-on-one meetings with eligible entities, community members and stakeholders to gather.

5.2   Priorities

Table 6: Priorities for Broadband Deployment and Digital Inclusion

Priority	Description
Underserved and unserved areas	The highest priority of the BEAD Program is to ensure that all unserved and underserved areas have the required infrastructure to access affordable high speed internet. As estimated 100% residences in the fabric are considered unserved and 100% residences considered underserved due to latency and high cost designation. Accordingly, American Samoa intends to prioritize the deployment of infrastructure to

	unserved locations first, followed by infrastructure updates for underserved locations.
Digital Equity	Digital equity programs are priority in both BEAD and DE programs. To succeed in a digital world, people must be equipped with the necessary skills to operate devices and technologies. Education and training is vital to bridging the digital divide.
Affordability Programs	American Samoa will ensure effective use of funds by prioritizing programs that support broadband affordability and cost savings. American Samoa may partner with organizations or ISPs to promote ACP adoption, while ensuring sub-grantees offer low-cost plans to eligible American Samoans.
IT/Cyber Workforce Development	American Samoa's IT workforce remains small, with development a priority to ensure a qualified and reliable workforce can support American Samoa's broadband infrastructure.

5.3   Planned Activities

American Samoa's primary activities are to complete and submit the required 5-Year Action Plan, Initial Proposal, State Challenge Process and Subgrantee Application Process.

5.3.1 Initial Proposal

American Samoa's Initial Proposal will include details on BEAD funding use, design of challenge and competitive process for sub awards. The Initial Proposal is intended to provide a process for utilizing federal funds to accomplish the goal of ensuring every resident has access to reliable, affordable, high-speed internet. Under the BEAD program, Eligible Entities will have 180 days from receipt of the Notice of Available Amounts to develop and submit an Initial Proposal, which will, among other things, describe the competitive process the Eligible Entity proposes to use to select subgrantees to construct broadband projects. Prior to submission to NTIA, the Initial Proposal must be made available for public comment and must incorporate local coordination feedback for the Assistant Secretary's review…

5.3.2 Challenge Process

The Challenge Process is required before allocating BEAD funds. The Challenge Process defines how the FCC accepts challenges to data underlying the Broadband Serviceable Location Fabric from stakeholders. Challenges can be made based on whether a particular location or community anchor institution is unserved or underserved. Challenges are submitted to the NTIA through the BCORD office…

5.3.3 Subgrantee Application Process

The BCORD will establish a competitive process for selecting subgrantees. The process will include requirements, eligibility criteria, eligible program and initiatives and other potential opportunities for subgrantees application…

5.3.4 Final Proposal

The Final Proposal is due to NTIA no later than twelve months after the approval of the Initial Proposal. The Final Proposal will detail funding allocation strategies, a timeline, accountability measures, stakeholder engagement, workforce development strategies, service plan for unserved and underserved areas and other required strategies. It will also detail the challenge process and subgrantee processes.

5.3.5 Monitoring and Evaluation

The BCORD will establish a process to monitor and provide oversight for program administration for subgrantees within the performance period for the BEAD Program.

5.4 Key Execution Strategies

The American Samoa BROADBANDiNEI 5-Year Action Plan adopted the following objectives described in Section 2. To achieve the goals and objectives detailed in Section 2, the American Samoa BROADBANDiNEI 5-Year Action Plan will take comprehensive approaches to barriers in deployment and adoption of broadband.

- ❖ Access
  - ➢ Ensure that all unserved and underserved areas are served with at least a minimum capacity of 25/3 and 100/20 Mbps respectively by 2028.
  - ➢ Deploy high speed broadband capacity to as many unserved locations by 2028
- ❖ Affordability
  - ➢ Increase household enrollment in the Affordable Connectivity Program (ACP)
  - ➢ American Samoa to have Affordable broadband of less than $50 by 2028.
- ❖ Adoption
  - ➢ Increase broadband household adoption (69% household subscription)
  - ➢ Increase the percentage of residents with access to internet-capable devices
  - ➢ Increase technology adoption and household adoptions within covered populations
- ❖ Cybersecurity
  - ➢ Ensure a territorial cybersecurity risk management plan is in place and/or updated
  - ➢ Ensure that ISPs, eligible entities have an operational cybersecurity risk management plan in place prior to offering service over a BEAD-funded network

The BCORD office is also responsible for developing strategies to conduct an efficient challenge process and ensure equitable subgrantee award process. Key strategies to include:

- ❖ Complete challenge process before subgrantee process
- ❖ Complete challenge process as part of the subgrantee process
- ❖ Define funding allocation requirements prioritizing unserved, underserved project
- ❖ Identify and discussion options for local 25% matching requirements
- ❖ Prevent duplication of efforts and funding
- ❖ Ensure subgrantee align with all program requirements

5.5 Estimated Timeline for Universal Service

Section 3.3.1 includes various programs that contribute to American Samoa's access to universal high speed internet. American Samoa's target timeline for universal service access to high speed

internet is 2028. As previously outlined in Section 4, there are many barriers and challenges to achieving universal service including supply chain, affordability, access, adoption, utilization and workforce issues.

5.6 Estimated Cost for Universal Service

In addition to current anticipated funding listed in Table 4, American Samoa will leverage other available resources to support universal service access. The territories including American Samoa received approximately a quarter of the base allocations given to states for BEAD fundings. American Samoa is anticipating not having sufficient funding to deploy broadband to be able to serve all unserved and underserved populations and achieve meaningful use of broadband. American Samoa does aim to be able to deploy broadband and be able to close the digital divide in as many locations as possible. American Samoa plans to engage further with community partners, service providers and all stakeholders in the next phases of the BEAD and DE funding process to provide a more accurate estimate of costs to achieve universal service.

5.7 Alignment

The American Samoa BROADBANDiNEI 5-Year Action Plan is Addendum 1 to the 2021-2026 ASTBS and reflects priorities, strategies, collective needs and opportunities identified through local coordination with regards to providing affordable internet for all.

- ❖ The 2021-2026 ASTBS was developed through an extensive process including over 100+ working stakeholder meetings and discussions, public webinars, community engagement and the collective input of the ASTBS Working Group, inclusive of members from the public and private sectors, civil society, non-profit organizations and the community-at-large. The ASTBS is a roadmap of strategies and actions to create an environment ready for broadband-related implementations in American Samoa. The strategies and actions documented in the American Samoa BROADBANDiNEI 5-Year Action aligns with efforts in the ASTBS pathway to expand American Samoa's digital footprint through broadband-related resources and initiatives.
- ❖ The American Samoa BROADBANDiNEI 5-Year Action Plan was developed concurrently with the American Samoa Digital Equity Plan (ASDEP) to guide and inform priorities for the BEAD and DEA programs. The coordination of the plans will result in complementary ASDEP and American Samoa BROADBANDiNEI 5-Year Action plans. The ASDEP goals and objectives mirror those of the BEAD Plan but prioritizes covered populations as defined by NTIA.
- ❖ The American Samoa BROADBANDiNEI 5-Year Action Plan is also aligned with other territorial priorities to improve American Samoa's digital footprint in the areas of economic and workforce development, education, health, civic and social engagement, and the delivery of other essential services.
- ❖ The American Samoa BROADBANDiNEI 5-Year Action Plan supports workforce development to build American Samoa's technical community and support opportunities for digital equity.

5.8 Technical Assistance

As appropriate, American Samoa will request technical assistance to ensure that all Initial and Final Proposal requirements are fully met. We may require technical assistance for the implementation of projects and to support compliance and regulatory efforts.

6 Conclusion

The American Samoa BROADBANDiNEI 5-Year Action Plan guides and informs priorities for broadband deployment and digital equity as defined by the BEAD and DEA programs. The coordination of the plans will result in complementary Territorial Digital Equity and Five-Year Action plans that bring affordable, accessible broadband and digital equity to American Samoa. The American Samoa BROADBANDiNEI 5-Year Action Plan focuses on foundational activities that address affordability, access and literacy. The goals, objectives and approaches for broadband deployment and digital equity included are strategic to address the needs and gaps in our local community. It also reflects priorities, strategies, collective needs and opportunities identified through local coordination. The strategies and actions documented in this plan creates a pathway to expand American Samoa's digital footprint through the deployment of broadband, broadband-related resources and initiatives.

7 Appendices

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