



Journey to Digital Inafa'maolek: Guam's Path to Digital Inclusion

Office of Infrastructure Policy and Development, Office of the Governor of Guam



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Internet For All

1 Executive Summary

In the vastness of the Pacific Ocean, the island of Guam, an unincorporated territory of the United States, emerges as a testament to resilience, unity, and evolution. Its history is a rich tapestry of cultures, forged by the perseverance of its indigenous people and the influences of various settlers and conquerors throughout the millennia. Today, Guam stands not only as a strategic crossroad but also as a vibrant mosaic of backgrounds and ethnicities, where each individual thread interweaves to form the complex and beautiful fabric of the island's community.

The journey of Guam has been one of transformation. From its earliest Chamorro settlers to its more contemporary influences, the island has always been a crucible for change, adaptability, and innovation. In this melting pot of cultures, the essence of the island remains in the spirit of *Inafa'maolek*, the CHamoru concept of restoring harmony and balance, promoting mutual respect and working collaboratively for the common good.

Guam lies in the Micronesian region of the Western Pacific, offering a rich diversity of topography that ranges from lush tropical jungles to serene beaches, symbolizing the diversity and resilience of its people and culture.

Guam is the largest and southernmost island in the Mariana Islands archipelago, located in the Micronesian region of the Pacific Ocean. It lies at a latitude of 13.28 degrees North and a longitude of 144.47 degrees East. The total area of Guam, including its outlying islands, is approximately 214 square miles (549 square kilometers), making it a small yet strategically significant location in the Pacific.

The island is composed of 19 villages, each with a distinct character. Hagåtña, the capitol, stands as a testament to Guam's history and evolving identity. In the north, villages like Dededo and Yigo are rapidly growing population and economic centers, while the southern villages like Umatac and Malesso are small and retain a more traditional, tranquil way of life.

The CHamoru people, the indigenous inhabitants of Guam, are the bedrock of the island's culture. Their customs, language, and traditions, from the vibrant Gupot CHamoru (CHamoru Fiesta) to the ancient art of seafaring, are integral to Guam's identity. Additionally, the island is a vibrant mix of ethnic groups including Filipinos, Chuukese, Koreans, and others, contributing to Guam's rich cultural tapestry. Influencing Guam's diversity is the U.S. relationship with Compact of Free Association (COFA) that encompasses neighboring island states including Republic of Palau, Federated States of Micronesia, and the Republic of the Marshall Islands. The COFA agreements allow citizens from these islands unrestricted entrance into Guam for employment, education, primary and mental health services.

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Guam's political structure as a territory of the United States presents unique challenges and opportunities. This relationship, rooted in a complex historical context including Spanish colonization and a pivotal role in World War II, has shaped Guam's modern identity and its geopolitical significance.Guam operates under a territorial government, mirroring the U.S. system with executive, legislative, and judicial branches. This political structure underscores Guam's existing relationship with the United States, a bond forged through historical events and its current status as a U.S. strategic location west of the International Dateline.

Island leaders Governor Lourdes A. Leon Guerrero and Lt. Governor Joshua Tenorio have spoken out strongly in support of programs that promote digital equity for all of Guam's residents. "We are committed to ensuring digital equity for all residents of Guam. Access to reliable and affordable digital resources is not just a convenience; it's a necessity for education, business, and personal growth", noted Governor Leon Guerrero. "Our goal is to bridge the digital divide and provide every individual on our island the opportunity to thrive in the digital age."

In this digital age, the pursuit of Digital Equity is not merely a technological goal but a moral imperative for Guam. This plan seeks to ensure equitable access to broadband services across all strata of society. The plan inherently recognizes that the internet is a gateway to opportunities, and essential for the growth and the empowerment of every individual who calls Guam their home.

Provided is a brief summary of each of Guam's 19 villages, highlighting their unique landscapes, historical significance, and major events:

- 1. **Hagåtña**: As the capital city, Hagåtña is the administrative and commercial hub of Guam, rich in historical sites like the Plaza de España and the Dulce Nombre de Maria Cathedral Basilica, reflecting its Spanish colonial past.
- 2. **Agana Heights**: Nestled atop a hill overlooking Hagåtña, Agana Heights is known for its panoramic views. It's home to the Governor's complex and reflects a blend of modern and historical elements.
- 3. **Asan-Maina**: Known for Asan Beach, a historical landing site during the liberation of Guam, Asan-Maina is a combination of two villages, offering scenic coastal views and war memorials.
- 4. **Barrigada**: A central village known for its residential areas and the Guam International Airport. Barrigada's higher elevations provide sweeping views of the island.
- 5. **Chalan Pago-Ordot**: This village combines two communities, showcasing lush vegetation and the Pago Bay overlook. It's steeped in history with ancient latte stones and remnants of World War II.
- 6. **Dededo**: As the most populous village, Dededo is a commercial and residential hub. It features the Micronesia Mall, Guam's largest shopping center, and diverse cultural influences.
- 7. **Hågat**: Hågat is located on the southwestern side of the island and is part of the Haya (Southern) District. Old Hågat was built between 1680 and 1684 and was designed by the



infamous Spanish Governor Don Jose Quiroga as a settlement for rebellious islanders whose homes had been destroyed. Many of its first citizens were brought from the interior village of Fena, which had also been wiped out. In July of 1944, the village of Old Hågat was totally destroyed by the American invasion. After the war, new Hågat sprang up in a location further south and is one of the villages in the south that is now experiencing development and commerce.

- 8. **Humatak**: Historically significant as the site of Magellan's landing in 1521, Umatac is known for its annual Discovery Day festival and the picturesque Umatac Bay surrounded by cliffs and Spanish-era forts.
- 9. **Inalahan**: A village that preserves CHamoru culture, known for its traditional architecture, ancient latte sites, and the Inarajan Pools, natural bathing spots surrounded by unique rock formations.
- 10. **Malesso**: Merizo (or Malesso) is a quaint village known for its historic sites, such as the Merizo Bell Tower, and its proximity to Cocos Island, a popular day trip destination for its beaches and snorkeling.
- 11. **Mangilao**: Hosting the University of Guam and Guam Community College, Mangilao is an educational center. It's known for beautiful limestone forests and the annual Mangilao Donne' (hot pepper) Festival.
- 12. **Mongmong-Toto-Maite**: This tri-village area is centrally located and features a mix of residential and commercial areas. It's known for its community spirit and close-knit neighborhoods.
- 13. **Piti**: Home to the Guam National Wildlife Refuge, Piti offers natural beauty and historical sites like the War in the Pacific Park. It's also known for its diving spots and the Piti Bomb Holes.
- 14. **Santa Rita-Sumai**: Originally a village for refugees post-World War II, Santa Rita is now home to the U.S. Naval Base Guam. It offers breathtaking cliffside views and historical significance in Guam's liberation.
- 15. **Sinajana**: Located in central Guam, Sinajana is known for its hilly terrain, providing a cooler climate. It has a strong community feel and is known for its sports programs.
- 16. **Talo'fo'fo'**: Known as "God's Country" for its natural beauty, Talofofo features the Talofofo Falls and the Talofofo Caves. It's a village rich in natural landscapes, farming and indigenous history.
- 17. **Tamuning-Tumon-Harmon**: A commercial and tourism center, Tamuning hosts Tumon Bay, Guam's famous tourist district with hotels, beaches, and entertainment, blending modernity with traditional culture.
- 18. **Yigo**: As Guam's northernmost village, Yigo is a mix of residential areas and natural landscapes. It hosts Andersen Air Force Base and is known for its rural charm and lush greenery.
- 19. Yona: Yona is located on the southeastern side of the island and is situated on a plateau overlooking the Pacific Ocean and is part of the Haya (Southern) District. Yona is well known to islanders because of Manenggon, the infamous concentration camp where the Japanese imprisoned the Chamorros before the American invasion.¹



¹ <u>https://mcog.guam.gov/villages-list</u>

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Each of these villages contributes to the rich mosaic that is Guam, offering a blend of history, culture, and natural beauty, integral to Guam's modern community.



² https://en.wikipedia.org/wiki/Villages_of_Guam#/media/File:Guam-administracja.png





This report endeavors to shed light on Guam's journey towards digital equity. It reflects the island's commitment to ensuring that its tapestry of cultures, traditions, and backgrounds are given equal access in the digital age. As we delve into the findings and recommendations, our approach is guided by the strength in our diversity, the unity in our purpose, and the vision of an inclusive, connected, and empowered Guam.

In an increasingly connected world, the digital realm has shifted from being a luxury to a fundamental necessity. Guam, with its unique geographical and socio-economic challenges as well as its potential, exemplifies this transition. As we progress through the 21st century, the paramount importance lies in ensuring that every Guam resident can access digital resources, tools, and opportunities equitably.

Recent events have amplified the significance of digital equity in Guam. The devastation of Typhoon Mawar in May 2023, caused significant infrastructural damage, and left many residents isolated both physically and digitally. This recent natural disaster highlighted the need for resilient digital infrastructure. Additionally, the COVID-19 pandemic accelerated our shift into the digital age, moving work, education, and communication online. This transition exposed the disparities in the community to equitable access to digital resources. Even prior to these events, areas in Guam grappled with inadequate broadband access, with many households lacking essential digital tools.

The Guam Digital Equity Plan was developed against this backdrop. The plan serves as both a response to recent adversities and a forward-looking blueprint for ensuring no one is left behind in the digital age. The vision is to transform Guam's digital connectivity into a bridge that unites communities, fosters education, facilitates business, and promotes inclusive growth.

The plan reveals a detailed strategy tailored to Guam's unique ecosystem, with the objective of achieving digital equity for all islanders. Key elements include:

- Enhancing and maintaining resilient digital infrastructure, ensuring consistent connectivity across the island.
- Ensuring accessibility and affordability of high-speed internet and digital tools for all residents, with provisions tailored to those most in need due to socioeconomic disparities.
- Fostering digital literacy across demographics, establishing programs to help residents navigate the digital world confidently and safely.
- Bolstering digital capabilities of key community institutions, ensuring uninterrupted services even during crises.
- Developing a digitally proficient workforce through training programs and partnerships, positioning Guam as a hub for digital talent.

Guam's unwavering dedication to digital equity is evident. This comprehensive plan aims to empower every resident, with a specific focus on those from the covered populations prioritized by the State Digital Equity Planning Grant. We want the Guam community to harness the digital world's potential.





2 Introduction and Vision for Digital Equity

2.1 Vision

In crafting Guam's Vision for Digital Equity, we envision a future where every individual, from each of the covered populations, enjoys equal access to the opportunities and benefits of the digital world. Our vision is rooted in inclusion, fairness, and empowerment. It encompasses a commitment to serve individuals living in low-income households, veterans, incarcerated individuals, individuals with a language barrier, aging individuals, individuals who belong to a racial or ethnic minority, individuals with a disability, and individuals living in rural areas. We want to ensure that no one is left behind.

Guam, like many other regions, faced unexpected challenges during the onset of the COVID-19 pandemic, particularly when stay-at-home and work-from-home orders were implemented. This abrupt transition away from traditional in-person interactions affected many sectors, including commercial, tourism, education, healthcare, and the delivery of essential services, revealing areas of vulnerability on the island. The impact of Typhoon Mawar on communication systems and Wi-Fi availability further highlighted these challenges, emphasizing the importance of addressing them. As a result, there emerged a clear and pressing need for Guam to focus on ensuring equitable access to broadband, improving digital literacy, and optimizing the use of digital tools in key areas.

The impact of these challenges was particularly pronounced among socioeconomically disadvantaged communities in Guam and members of the covered populations who are prioritized under the Digital Equity program. Many lacked the essential digital resources necessary for work, education, accessing vital services, and participating in civic and social life. Without intervention, the repercussions of this digital divide threaten to exacerbate and widen socioeconomic disparities in Guam. Fortunately, Guam's community members were not idle in the face of these challenges, as many actively sought solutions.

Our Digital Equity Plan lays the groundwork for Guam's journey towards a more inclusive digital future.

In Guam, every person, irrespective of their background, resources, circumstances, identity, or community, will enjoy equitable access to the digital world. This includes:

- 1. Access to affordable and reliable internet at home;
- 2. Access to affordable devices that cater to their needs;
- 3. Opportunities for digital literacy and technical support;
- 4. Resources and knowledge to ensure online safety for themselves and their families;
- 5. Online local government resources that are inclusive and accessible to all.

Guaranteeing access empowers the people and communities of Guam to connect both locally and globally. This will open doors to the full spectrum of economic, educational, health, social, civic, and cultural advantages of digital inclusion.

Our focus on securing access, affordability, and widespread adoption underscores our fundamental belief: There is room in Guam's economy and community for everyone to succeed.

To achieve these objectives, Guam will adhere to the following principles:





- Pursuing a data-driven, informed and transparent methodology: Embrace a digital equity perspective in infrastructure projects and other initiatives, prioritizing investments that have the most significant impact. We will continue to gather and share data with our partners to refine our objectives and strategies.
- Enhance and bolster the existing support networks within our community: Foster partnerships, mutual learning, and collaborative efforts; augment capacity, and supply the necessary tools and frameworks to aid in connecting individuals. Target our efforts towards reaching those who are most in need through a strategy that is both location and community-focused.
- Capitalize on building relationships for opportunity: Prioritize digital equity investments and collaborations that build on existing relationships or are spearheaded by individuals and communities facing greater challenges in accessing and adopting digital technologies.

To accomplish these goals, Guam will:

- Foster innovation: Encourage and learn from diverse strategies across different areas and communities, acknowledging that the path to digital inclusion varies and that each covered population has unique needs.
- Amplify our message: Share a wide array of stories through various mediums to highlight the real effects of the digital divide on individuals and communities, the endeavors towards digital inclusion, and the transformative impact of achieving digital equity via access and adoption.

2.2 Alignment with Existing Efforts to Improve Outcomes

Broadband today matters to every Guamanian as much as electricity and water. Striving for broadband equity is more than a policy goal; it's a personal journey that touches every aspect of our lives. This program is not about numbers or lofty ideals; it's rooted in the real experiences, opportunities, and the essence of our community.

Education, earning potential, the modern job market, cultural preservation-being part of a global society through high-speed internet access impacts us all everyday.

Consider a young individual in Guam embarking on their career, full of innovative ideas yet constrained by sluggish internet, which prevents them from presenting their work, launching a business, or even losing out on job opportunities due to inadequate connectivity. Broadband equity focuses on converting potential into tangible outcomes. Broadband serves as the crucial element that enables these opportunities, turning dreams into concrete successes.

For our students, equal access to broadband unveils a vast realm of educational possibilities. Picture classrooms and households transformed by connectivity which eliminates obstacles to learning, expands our children's viewpoints, and equips them for a future in which they thrive globally.

Digital equity ensures our elders can access telehealth services, keeps families connected across distances, and in times of crisis, strengthens Guam by enabling us to share vital information and support each other online.





From an economic perspective, equal access to high-speed internet will revolutionize opportunities for Guam. It opens avenues for local businesses to grow through e-commerce and digital marketing, leveling the playing field with global competitors.

For our local economy, this means job creation, investment, and sustainable growth. With our visitors in our tourism sector coming from connected countries with the type of broadband Guam has never had, it's imperative that we keep pace. It's about ensuring Guam's vibrant participation and competitiveness in the digital world economy.

Take an area like Balajadia Road in Yona for example, where the median speed for internet has been 11 Mbps Download and 2.09 Mbps upload according to data from 2015 to today.³ Even in an area like E. Achote Ct. in Liguan Terrace, Dededo, where the speeds are five times higher⁴, it can still hold us back. In a world where 100Mbps is considered basic and Gigabit speeds are increasingly common, Guam's existing infrastructure is unacceptable for 21st Century progress. Speed leads to access. Access leads to equal opportunity.

Factors such as geographical isolation, a small customer base, high deployment costs, and the financial burden on individuals have resulted in Guam's current impaired connectivity status. These obstacles to innovation limit opportunities and adversely affect our island. It is imperative that we take action during this once-in-a-lifetime funding opportunity. We need to address these challenges immediately.

The Office of Infrastructure Policy and Development was established via Executive Order 2022-11 in April 2022, and is the Government of Guam's first foray into digital equity and inclusion. This initiative represents a historic moment for the island, as it is the first-time community stakeholders have come together to craft a strategy aimed at ensuring all of Guam's residents have access to high-speed broadband, digital tools, and the skills necessary to leverage them.

Recognizing the vital role of digital equity and literacy in shaping the future, various local and regional entities, including villages and organizations, have begun to recognize and prioritize this key issue. The Office has engaged with these stakeholders and service organizations to identify their needs. As a result, we have compiled a comprehensive list of significant projects to consider during the Capacity Grant phase. These projects will be evaluated through a proven subgrant process.

The Office of Infrastructure Policy and Development is tasked with the strategic distribution and management of Digital Equity federal funding aimed at enhancing digital equity. It is essential to approach this task with a strategic mindset and pragmatic approach. The strategy involves a thorough understanding of Guam's digital ecosystem, the identification of key areas that require development, and a structured plan to ensure the efficient and effective use of funds.

To address the digital divide in Guam and support the development of Digital Equity (DE) Capacity Grant projects, a strategic approach was devised. This strategy aims to ensure that



³ Ookla Fixed Broadband Speedtests by H3 Resolution 8 Bins (2015 – 2023)

⁴ Ookla Fixed Broadband Speedtests by H3 Resolution 10 Bins (2015 – 2023)



efforts to bridge the digital divide are both impactful and equitable, focusing on the most urgent needs and promising opportunities for digital inclusion.

Use of BEAD Funds

- 1. **Infrastructure Prioritization:** The BEAD program mandates a clear priority on funding deployment projects that physically expand broadband access to unserved and underserved areas, along with connecting Community Anchor Institutions (schools, libraries, healthcare facilities, etc.) Non-deployment funding can only be considered once these infrastructure needs are addressed and budgeted for.
- 2. **Guidelines and Scoring:** The National Telecommunications and Information Administration (NTIA), which oversees the BEAD program, mandates that Broadband Offices must establish specific approved non-deployment project scoring criteria for the use of non-deployment funds. Projects must align with these guidelines and demonstrate how they address digital equity challenges. Scoring rubrics are used to evaluate proposals on their potential impact.
- 3. **Community Needs Assessment:** A thorough understanding of local digital equity gaps is essential. Projects should be grounded in data-driven evidence of specific community needs. This often involves surveys, focus groups, and partnerships with organizations directly serving impacted populations.
- 4. **Subgrant Programs:** Guam may establish subgrant programs to distribute non-deployment funds. Each subgrant will likely have additional requirements and eligibility criteria for digital equity projects.

Specific Conditions May Include:

- Target Populations: Projects might be required to focus on specific demographics disproportionately affected by the digital divide, such as low-income households, seniors, people with disabilities, or communities of color.
- Measurable Outcomes: Projects should have clear goals and metrics to measure their effectiveness in addressing digital equity challenges.
- Sustainability: Plans for how digital equity initiatives will be sustained beyond the initial BEAD funding period are often a priority.
- Partnerships and Collaboration: Demonstrating strong partnerships with community organizations and other stakeholders can strengthen project proposals

Assessment of Digital Needs

The first step involved a comprehensive assessment to understand the scope and specifics of the digital divide within Guam. This gap assessment prioritized identifying areas with the least digital access, focusing particularly on rural and underserved communities. By pinpointing these areas, the strategy aims to direct resources and efforts where they are most needed, ensuring that the digital equity initiatives have a meaningful impact.

Engagement with Stakeholders

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Recognizing the importance of local insights and collaboration, the strategy included active engagement with a variety of stakeholders who are already tangentially, if not directly, involved with equity. Local government units, non-profit organizations, educational institutions, and community leaders were all integral to this process. Stakeholders include the Office of the Governor and its divisions including the Bureau of Women's Affairs; Bureau of Statistics and Planning, Office of Homelessness and Poverty Prevention, DISID, Guam Department of Public Health and Social Services, Guam Memorial Hospital, Guam Regional Medical Center, Seventh Day Adventist Clinic, SelectCare, Department of Youth Affairs, Department of Corrections, University of Guam, Guam Community College, Trades Academy and others. Through collaboration, these stakeholders provided valuable perspectives on the specific digital needs of their communities and encouraged the development of potential projects that align with the overarching goals of digital equity. This collaborative approach ensures that the initiatives are grounded in local realities and needs.

2.2.3 Coordinating Digital Equity and Other Broadband Funding

Integrating the Digital Equity (DE) program into Guam's Broadband Equity, Access, and Deployment (BEAD) program creates a strategic pathway towards a digitally inclusive society on the island. This plan is underpinned by the vision of ensuring that every resident of Guam enjoys comprehensive digital access, enhanced digital literacy, and access to necessary digital tools, thereby fostering an environment where everyone can thrive in the digital age.

Guam's unique geographical isolation, diverse cultural landscape, and varied socio-economic backgrounds present specific challenges in achieving digital access and literacy. These challenges necessitate a tailored approach to ensure that digital advancements are equitable and reach every segment of the population, especially those identified as part of the covered populations such as low-income households, individuals with disabilities, aging individuals, those with language barriers, incarcerated individuals, racial or ethnic minorities, veterans, and residents of rural areas.

Population

With approximately 85.3% of Guam's population identifying as part of a racial or ethnic minority group⁵, the plan emphasizes the importance of cultural and linguistic inclusivity in digital initiatives.

Guam's total population of 153,836 individuals reveal a significant portion of the inhabitants identify with ethnic groups that are considered minorities in the United States. Notably, 70,809 people identify as Native Hawaiians or other Pacific Islanders, with the largest group within this category being the CHamoru, accounting for 50,420 individuals. This reflects the indigenous culture and heritage that are central to Guam's identity. Additionally, the Chuukese community comprises 10,274 individuals, further underscoring the island's Pacific Islander diversity.

The Asian demographic is also notably substantial, with 54,586 individuals identifying as part of this group. Filipinos represent the majority of this category, with 44,793 individuals,

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https://data.census.gov/table/DECENNIALDPGU2020.DP1?g=040XX00US66&d=DECIA%20Guam%2 0Demographic%20Profile&tid=DECENNIALDPGU2020.DP1



highlighting the significant Filipino influence on the island's culture and society. The next largest Asian group are Korean residents, although much smaller in number at 3,438, contribute to the multicultural tapestry of Guam. Furthermore, the census data indicates that 4,522 residents identify as Hispanic or Latino, adding another layer to the island's ethnic diversity.

The White population on Guam is recorded at 10,491, while those identifying as Black or African American number 1,340. These figures illustrate how Guam's population predominantly consists of individuals who would be classified as minorities in the broader context of the United States, offering a unique perspective on the island's demographic composition.

This diversity is a testament to Guam's rich cultural mosaic, where a majority of its residents represent groups that are minorities at the national level, highlighting the island's distinct identity within the Pacific region.

Communities

The integration plan outlines a multifaceted approach focusing on enhancing digital infrastructure and ensuring its accessibility to all, including remote and rural areas. This includes fostering digital literacy and skills through funding educational and training programs tailored to equip residents with the competencies needed to effectively utilize digital resources. Special emphasis is placed on reaching underrepresented communities, ensuring that vulnerable groups are not left behind in the digital transition. Community-centric solutions and local involvement are key strategies in addressing the diverse digital needs of Guam's communities.

Isolated communities are a significant concern in Guam. The island's history with land boundaries presents unique challenges. Highly disputed and blocked physical access paths impact infrastructure and reliable communication. Even roads that are too narrow lead to extreme deficiencies. This includes issues like undefined street names and house numbering. Moreover, geographical barriers further complicate these challenges. Given this context, it's crucial to make a concerted effort to include digitally cut-off areas in all communication efforts.

These communities are not made up of homesteaders choosing lives of seclusion. Instead, there are pockets of vulnerable members of our communities throughout the island, some completely unidentified by existing funding maps that are severely in need of assistance. These residents go to great lengths, financial expense and personal hardship to participate in work, school, and civic life. To address their needs, we are collaborating with village mayors and stakeholders. Our goal is to ensure these communities are identified, their needs assessed, and that they have access to programs designed to assist them.

Funding for Opportunity and Empowerment

Economic growth and employment opportunities are also highlighted as critical outcomes of enhancing digital skills and access. The plan underscores the importance of sustainability in digital infrastructure and the long-term impact of digital literacy initiatives. Challenges such as affordability, accessibility, and the security and privacy of digital services are recognized as essential considerations in this comprehensive approach.

This comprehensive plan not only addresses the immediate need for improved digital infrastructure but also ensures the long-term empowerment of every Guam resident to participate fully in the digital world. It represents a pivotal moment for Guam, reflecting the island's commitment to a more connected, inclusive, and digitally empowered future. Through





this initiative, Guam aims to overcome its unique challenges and leverage its diverse cultural strengths, ensuring that its journey towards digital equity sets a precedent for inclusivity and resilience in the digital age.

Guam is set to enhance its broadband infrastructure with nearly \$200 million in federal funding from the BEAD and other broadband programs, demonstrating a significant investment in digital connectivity. Our BEAD and DE programs operate in close coordination, even sharing an office, ensuring cohesive and efficient allocation of resources across all segments of Guam's population. This integrated approach is bolstered by additional funding anticipated from the Digital Equity Act administered by the NTIA and various other funding sources.

- BEAD The approximately \$156.8 million allocated from BEAD funding will first target the deployment of infrastructure to residences across the island lacking or with inadequate connectivity. This initiative aims to make affordable access available to those currently without it, thereby achieving our digital equity goal of ensuring access for all. Subsequently, the focus will shift to homes considered to be underserved. In directing BEAD infrastructure investments, OIPD will employ a digital equity perspective, prioritizing households without access to devices and considering additional factors such as income levels, disabilities, educational achievements, and identified gaps in programs and resources from the digital equity asset inventory.
- Broadband Infrastructure Program (BIP) The \$11.4 million project was authorized by the U.S. Department of Commerce, National Telecommunications and Information Administration (NTIA) under the Broadband Infrastructure Program to expand network infrastructure and broadband services to Southern Guam. The project recently broke ground in the village of Piti and will install buried fiber optic cable and 5G to increase the current availability of broadband services to residences, businesses, and community anchor institutions in Southern Guam. This includes bringing qualified "served" speeds of at least 100/20 Mbps to more than 1,500 locations. Two buried, interconnected yet physically diverse rings of fiber totaling 72.7 miles will be constructed with 26 wireless towers across the South that will be upgraded for 5G capabilities to quickly deliver internet to homes. Following the completion of the buried Middle Mile, the project will extend high-speed broadband services to locations in the south through a mix of Fixed Wireless Access, Fiber-to-the-Home, and Fiber-to-the-Building.
- USDA Reconnect 3 The \$29.7 million proposed project has been broken into two proposed funded service areas (PFSA): North Guam PFSA and South Guam PFSA. The North Guam PFSA includes portions of the village of Yigo. According to the 2010 census, most of the population of Guam is in the northern region of the island, including Yigo. The South Guam PFSA includes the villages of Hagat, Santa Rita, Talofofo, Inalahan, Malesso and Yona. The proposed grant service area is home to a number of remote workers requiring higher than qualified broadband speeds to work efficiently from home, including thousands of U.S. active duty Air Force, Navy, Army and Marine personnel and dependents based on the island, an aging population segment lacking reliable access to telehealth, college-age students lacking efficient broadband access to streaming coursework which hinders opportunities to pursue higher education, and small businesses needing broadband access to sustain their operations.





The Digital Equity Plan process has highlighted a significant challenge for Guam in closing its digital divide, especially when compared to the funding received by the states and Puerto Rico. Guam was allocated just \$150,000 for this process, a fraction of the amount awarded to other U.S. territories and states.

The outreach and engagement efforts made during the planning process have underscored the critical role of adequate staffing in addressing the digital divide. Key staffing needs identified include digital navigator positions to guide residents in accessing and using digital resources, workforce development planning, instructors for digital skills training in various formats and locations, technical support personnel, and coordinators for forging and maintaining partnerships across organizations. These roles are essential for facilitating the widespread adoption of digital technologies and ensuring that all residents have the skills and support needed to fully participate in the digital world.

Given the limited initial funding, the Office of Information and Policy Development (OIPD) in Guam recognizes the need to leverage additional resources to meet these challenges. To this end, OIPD is committed to working closely with partners both within and outside the territory to identify opportunities for matching funding and integrating digital inclusion activities into existing programs and resources. This collaborative approach aims to maximize the impact of available funding and create a sustainable model for digital equity in Guam, ensuring that the benefits of digital technology are accessible to all its residents.

2.3 Strategy and Objectives

Residents in Guam face difficulties in affording home internet service, with more than 20% of the population falling below the poverty rate. The island must prioritize efforts to enhance affordability, especially for vulnerable groups where cost remains an accessibility barrier. This will involve initiatives to boost enrollment in the Affordable Connectivity Program (or its replacement program) for qualified households, exploring ways to create a new local broadband subsidy program, engaging carriers to lower pricing without reducing quality or speed, using community anchor institutions to create a network of free Wi-Fi hotspots throughout the island, and exploring ways to launch a free islandwide Wi-Fi system.

The OIPD and its collaborators will seek out partnerships to investigate further policy interventions to enhance availability and affordability; online accessibility and inclusivity; digital literacy; cybersecurity and online privacy enhancement; and device availability and affordability.

The following are some of Guam's overarching strategies for driving towards the vision as outlined in section 2.1.

Measurable Objectives:

1. Increase Broadband Availability & Affordability:





- Increase broadband coverage to reach 98% of households and businesses across Guam by 2029. According to the 2020 U.S. Census, 85.9% of households currently have a broadband internet subscription.⁶
 - Through public-private partnerships, provide basic, free wireless broadband to all members of covered populations on the island.
 - Through the BEAD program, promote the availability of low-cost internet service subscriptions and middle-class affordability options and other reduced cost internet subscription plans offered by local carriers.
 - Using community anchor institutions, develop a network of free Wi-Fi hotspots throughout the island.
 - Continue to promote the use of the FCC's Affordable Connectivity Program (ACP) or its replacement.
 - Stand up a local subsidy program to defray the cost of broadband plans for the nearly 30,000 people or 20.2% of the population in households on Guam with income below the poverty level⁷.
 - Increase the number of homes that have consistent and reliable Wi-Fi access to enable the seamless use of wearable medical devices and other new technologies which are needed for the aging population, veterans, disabled and members of every other covered population.
 - Improve the ability of doctors to perform remote patient monitoring and check-ups by increasing the number of homes that have consistent and reliable Wi-Fi access.

Key Performance Indicators (KPIs):

- Percentage increase in broadband coverage.
- Average cost reduction of broadband plans, currently at \$112.17 per month not including router or other fees.
 - Short term goal: \$75 per month for the average household.
 - Long term goal: \$30 per month or less for the average household.
- Percentage increase in households with broadband internet access.
 - Work with local carriers to determine increases in subscription numbers after BEAD infrastructure buildout.
- Successful implementation of a network of free Wi-Fi hotspots at community anchor institutions. Short term: 5 CAI hotspots by the end of 2024. Long term: All CAIs by the end of 2029.
- Successful implementation of free islandwide Wi-Fi using public-private partnerships.
- Increase in the availability of remote patient monitoring and wearable medical devices.

2. Online Accessibility & Inclusivity:

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 $[\]frac{https://www.census.gov/newsroom/press-releases/2023/2020-dhc-summary-file-guam.html#:~:text=1}{6.1\%25\%200f\%20homeowners\%20and\%2034.0,had\%20a\%20broadband\%20internet\%20subscription.}$

https://www.census.gov/newsroom/press-releases/2023/2020-dhc-summary-file-guam.html#:~:text=1 6.1%25%20of%20homeowners%20and%2034.0,had%20a%20broadband%20internet%20subscription



- Ensure all public facilities, including schools, libraries, and government buildings, are equipped with accessible internet facilities. These facilities are currently without accessible internet tools and equipment with the exception of two ADA compliant workstations at the Hagåtña library location.
- Develop and implement web accessibility guidelines to ensure online services are usable by people with disabilities.
- Use workforce development programs to provide training and support for web developers and content creators to produce accessible digital content.
- Ensure that English learners are provided with translation services/materials needed to utilize online services.

KPIs:

- Increase in the number of public facilities with internet accessibility to include the adoption of accessible programs, platforms and software.
 - Short term goal: Double the access at the Guam Public Library from 2 to 4 workstations by the end of 2024.
 - $\circ~$ Long term goal: Accessibility in all government of Guam public facilities by the end of 2029.
- Percentage increase in accessible online services.
- Increase in the number of individuals trained in creating accessible digital content.

3. Digital Literacy:

- Launch digital literacy programs targeting various covered populations, with a focus on seniors, underserved, disabled, minority and rural residents and incarcerated communities. Bring programs to these covered populations where they gather at senior centers, cultural facilities, Mayor's offices, public housing institutions and other places.
 - No digital literacy programs currently exist on the island as we envision them. At least one of Guam's carriers offers online privacy training to senior citizens several times a year.
- Increase the portion of covered populations equipped with basic digital skills.
- Collaborate with educational institutions to integrate digital literacy curriculum in schools, starting from primary level onwards with a focus on people living below the poverty level and in rural areas, minorities and English learners.
- Collaborate with the Department of Corrections and Department of Youth Affairs to initiate digital navigator programs that focus on allowing incarcerated individuals to obtain access to educational and social resources needed for successful reintegration into society.
- Establish evening/weekend classes for aging persons, adult English learners, veterans, minorities, disabled, disadvantaged and rural persons at community centers, public housing centers and libraries to teach basic to advanced internet skills.
- Work with local educational institutions to develop online tutorials and modules accessible to all members of the covered populations, allowing them to learn at their own pace.

KPIs:





- Number of digital literacy programs launched that cater to members of the covered populations.
 - Short term goal: Digital literacy programs in 3 government facilities by mid 2025.
 - Long term goal: Digital literacy programs in all senior centers, libraries, public housing, Department of Corrections and Department of Youth Affairs by the end of 2027.
- Integration level of digital literacy into educational institutions.
- Number of incarcerated adults and youth who participate in digital skills learning programs.
- Percentage increase in the covered populations with basic to advanced digital skills based on the number of participants who have successfully completed digital literacy courses.
- Number of persons from covered populations who have completed online tutorials.
- 4. Cybersecurity and Online Privacy Enhancement Goals:
 - Ensure all government websites and digital platforms adhere to top-tier security and privacy standards. Some government websites currently do not have these tools in place.
 - Work with the Office of Technology, Department of Homeland Security and others implement mandatory annual cybersecurity training for all government of Guam employees and contractors. There currently is no mandate for cybersecurity training.
 - Initiate a combined public awareness campaign by 2025, targeting members of the covered populations, educating them about the importance of cybersecurity and online privacy.
 - Launch cybersecurity awareness campaign.
 - Incorporate online privacy education into the standardized cybersecurity curriculum for all educational institutions in Guam by 2027. There is currently no standardized cybersecurity curriculum in schools.

KPIs:

- Increase in the number of government websites that adhere to top-tier security and privacy standards.
- Successful implementation of annual cybersecurity training for government of Guam employees and contractors by 2025.
- Increase in the awareness of cybersecurity and privacy tools available among the covered populations. Percentage of the population covered by the combined awareness campaign.
- Number of professionals trained in combined cybersecurity and online privacy programs.
- Participation counts in annual cybersecurity and privacy workshops and conferences.
- Online privacy education standardized cybersecurity curriculum available in all educational institutions.

5. Device Availability & Affordability:

• Establish technology lending programs in libraries, village community centers and other community anchor institutions, providing access to devices for those who can't afford them. Currently no CAIs have device lending programs.



• Establish a process to collect and disseminate refurbished computers that are more than 5 years old but are in good working condition to non-profit and community organizations. Those organizations would be expected to distribute the computer devices to those most in need from the various covered populations. This process currently does not exist.

KPIs:

- Number of community anchor institutions lending devices to members of covered populations.
- Increase in the percentage of low-income and other covered households with at least one internet-enabled device. According to the 2020 US Census, in Guam, 95% of households owned a computer and 85% had a broadband internet subscription.⁸
- Availability and uptake of refurbished/discounted/free devices.

6. Maximizing Affordable Connectivity Program (ACP) Participation (or its replacement program):

- Implement a comprehensive outreach campaign to inform eligible individuals and households about the Affordable Connectivity Program, highlighting its benefits and application process.
- Streamline and simplify the application process by collaborating with federal partners (SNAP, free lunch program, etc.) to automatically enroll eligible participants.
- Partner with relevant agencies (Public Health, GHURA, Guam Housing, Guam Department of Labor, etc.) to include ACP program information during the onboarding process for various programs.
- Simplify the application process by providing multiple options for submission, including online, phone, and in-person assistance at community centers, Mayor's offices and other government offices.
- Collaborate with local community organizations, schools, and businesses to raise awareness and facilitate application assistance events.
- Track and report the number of eligible applicants who successfully enroll in the Affordable Connectivity Program.

KPIs:

- Reach and engagement metrics of the outreach campaign.
- Percentage increase in the number of applications submitted compared to the previous period.
- Number of successful enrollments in the Affordable Connectivity Program. Currently 1,276 eligible Guam residents enrolled in the program.
 - Short term goal: Increase participation by 20% by the end of 2026.
 - Long term goal: Increase participation by 100% or more by 2026.

By focusing on these measurable objectives and their associated KPIs, Guam can work toward realizing its vision of digital equity, ensuring that all members from covered populations have equal access to the opportunities and benefits offered by the digital world. Regular monitoring, assessment, and adjustments to these goals and objectives will be crucial for achieving sustained



⁸ <u>https://www.census.gov/library/stories/2022/10/2020-island-areas-computer-internet-use.html</u>



progress in digital equity across the territory. Note that all projects and programs are subject to funding availability.

3 Current State of Digital Equity: Barriers and Assets

3.1 Asset Inventory

The purpose of this section is to catalog the applicant's unique assets that promote digital equity for each of the State's covered populations, including current resources, programs, and strategies. Both publicly and privately funded assets should be included. The asset inventory should also include existing digital equity plans and programs among municipal, regional, and Tribal governments.

The asset inventory will identify the resources available to implement the Digital Equity Plan and to address the needs and gaps to achieve the State's goals and objectives for digital equity.

Efforts have been underway to understand Guam's digital equity landscape, with a focus on identifying both challenges and resources available. OIPD has, over the course of the past year, been actively meeting with stakeholders and collaborating with various partners to gain comprehensive insights into the digital equity hurdles and resources on the island. The Office will continue to enhance data gathering techniques to enable a more detailed analysis of the needs of specific population segments, thereby shaping more effective digital equity strategies.

In the course of planning for Digital Equity and the BEAD initiatives, OIPD has prioritized community engagement. Through listening sessions and diverse outreach approaches, the program has gathered valuable insights and direct feedback from local residents and supporting organizations. This qualitative data, complemented by quantitative information on broadband adoption and affordability, brings to light the experiences and perspectives of those directly impacted, ensuring their voices are integral to the development and refinement of Guam's digital equity plans.

The Guam Office of Infrastructure Policy and Development undertook a comprehensive approach to catalog the island's digital equity assets, resources, and programs. This included organizing community listening sessions through village town halls and small group discussions with key stakeholders from a wide range of organizations, such as nonprofits, government agencies, higher education institutions, and community groups. The Office's efforts were further extended through participation in partner events and conferences, social media, talk radio appearances, as well as through analyzing the responses to press releases and social media. Additionally, we evaluated various federal programs that support digital equity, adding to the depth of their analysis and understanding.

Asset Inventory

Guam is making significant strides in advancing its digital equity by compiling a comprehensive inventory of digital equity assets, strategies, and initiatives. This endeavor involves aggregating and showcasing the resources available to benefit targeted populations, which in turn enhances the island's digital equity landscape. The foundation of this comprehensive inventory is the data collected from the Guam Islandwide Digital Inclusion survey. This survey successfully gathered







valuable insights from over 100 local organizations and resources, providing a clear picture of the digital needs and opportunities within the community. This information is crucial in guiding the development and implementation of effective digital equity strategies across Guam.

The Office of Infrastructure Policy and Development has worked to match the survey findings to the specific needs of the populations they are designed to serve. A key part of the Office's strategy was to engage with a wide range of stakeholders, community groups, and local leaders across Guam. This engagement aimed to gain a deeper insight into the island's digital resources, how to leverage them more effectively, and to identify areas where there are gaps in these assets. OIPD is dedicated to filling these identified gaps and continuously works to overcome challenges and barriers in achieving digital equity.

Needs Assessment

With the goal of 98% islandwide adoption of broadband in the home by 2029, OIPD conducted a comprehensive community engagement strategy wherein community members and stakeholders had the opportunity to share their biggest barriers to broadband, to collect information on the barriers Guamanians face, specifically covered populations, when accessing broadband. The results of the needs assessment emphasize that the most significant barriers to internet adoption are the availability of broadband service, affordability and the need for digital skills to effectively utilize the internet. These findings will guide OIPD's efforts to develop targeted tactics and objectives that respond to the specific needs of these covered populations and to help achieve digital equity throughout Guam.

Coordination and Outreach Strategy

Core to OIPD's coordination and outreach strategy is an inclusive engagement model that aims to facilitate stakeholder and community engagement by promoting robust outreach and input, specifically targeted to covered populations. The model has four primary components - community meetings, partnership roundtables, data collection, and public comment - that were crucial to its implementation. These components were designed to gather data and feedback from community members and organizations to further improve the Digital Equity Plan.

Implementation Strategy

The strategy for implementation by the Office is informed by data and feedback from community members and organizations. Consequently, OIPD is set to launch a Digital Navigator program specifically targeted at several of the covered populations. This program is focused on fostering solutions rooted in community needs, tackling the digital divide in a manner that is tailored to the specific requirements of each community, and ensuring access to high-speed internet and digital skills training across all communities.

The plan involves establishing a comprehensive network of digital navigators across the island, each dedicated to meeting the unique needs of their community. These navigators will play a key role in enhancing individuals' capacities by offering digital skills training, resources for obtaining devices, and making digital access more affordable. A significant aspect of their role includes removing barriers for individuals, with a special focus on assisting underrepresented groups and those in covered populations.







3.1.1 Digital Inclusion Assets by Covered Population

Digital inclusion is a key facet of modern society, enabling citizens to partake in the plethora of opportunities provided by the internet. As Guam seeks to be at the forefront of digital development in the Pacific, a clear understanding of the digital inclusion assets available to its diverse population is critical. This section focuses on such assets by examining the resources available to different population groups in Guam.

During our outreach and engagement efforts, Guam identified several networks that provide direct support and have established relationships with the targeted populations. While many of these networks are not consistently engaged in digital inclusion efforts, or only participate intermittently due to limited resources, their strong connections with the individuals and communities we aim to reach position them perfectly to carry out digital inclusion programs and education.

1. Individuals from Rural Areas

The Consumer Financial Protection Bureau (CFPB) considers Guam to be a rural area in its entirety along with several other U.S. territories.⁹ These territories comprise areas that the U.S. Census Bureau treats as counties and that are neither metropolitan statistical areas or micropolitan statistical areas adjacent to metropolitan statistical areas.

Free islandwide Wi-Fi

To address the pressing issue of broadband affordability on the island, the Leon Guerrero-Tenorio Administration strives to introduce free islandwide wireless data service on Guam. Achieving free islandwide internet access is a realistic target that can be accomplished by setting up a mesh network of complimentary Wi-Fi hotspots at Community Anchor Institutions across the island or from another method not yet determined. The Office is investigating the possibility of sponsored free Wi-Fi, which would rely on advertisements for funding, thereby eliminating the need for end-users to pay any fees. The Office has initiated discussions with key stakeholders regarding this initiative and aims to roll out a pilot program at the Guam Public Library in Hagåtña within the upcoming months.

Implementing free islandwide Wi-Fi has raised concerns about competition with existing internet carriers. To address that concern, OIPD has a plan to address affordability without undercutting carriers.

This free service is designed to meet essential internet needs without competing with Guam's internet carriers. Offering speeds of up to 30Mbps for downloads and 2Mbps for uploads, this service would be tailored to provide a basic yet vital internet connection to everyone on the island.

The need for such a service is rooted in the persistent issue of affordability as a barrier to internet access. Despite our efforts to expand broadband infrastructure, the reality is that for some residents, no price is affordable enough. This is evidenced by the notably low uptake rate

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https://www.consumerfinance.gov/compliance/compliance-resources/mortgage-resources/rural-and-un derserved-counties-list/#:~:text=These%20lists%20include%20the%20following.and%20the%20U.S.%2 oVirgin%20Islands.



of the Affordable Connectivity Program (ACP) in Guam, the lowest in the nation, which signals a significant affordability gap. Our conversations with stakeholders have further highlighted this challenge.

Moreover, this service isn't just for residents. It presents added value for visitors to Guam, enhancing their experience and potentially boosting our tourism sector employment, and economic development. These users are not prospective customers for home broadband service. In times of emergencies, such as natural disasters where conventional internet services might be disrupted, this network could become a critical tool for communication and coordination.

The implementation of a free, islandwide wireless service is a commitment to ensuring that every resident of Guam, regardless of their financial situation, has access to the digital world. It's an investment in our community's inclusivity, emergency preparedness, and overall quality of life.

Telecommuting

The ability to work from home online offers numerous advantages, including improving access to employment for those in poverty, with limited access to transportation to enhancing mental health and reducing environmental impact. For populations facing significant barriers to traditional employment—including those in poverty, disabled individuals, veterans, rural residents, and minorities—remote work presents a crucial avenue for economic empowerment and inclusion. It provides access to job opportunities that were previously out of reach due to physical, logistical, or socio-economic constraints. For instance, disabled individuals and veterans who might find commuting challenging can now engage in meaningful employment from the comfort of their homes, thus enhancing their independence and financial stability.

Beyond individual financial benefits, remote work contributes to improved mental health by offering a better work-life balance, reducing the stress associated with commuting, and allowing for a more flexible schedule that can accommodate personal and family needs. This flexibility is particularly beneficial for minorities and those in poverty, who may have additional family or community responsibilities. On a larger scale, the shift towards remote work has external benefits that impact the entire community. With fewer people needing to commute, there's a noticeable reduction in traffic congestion, which in turn lowers vehicle emissions, contributing to a cleaner environment. This decrease in road traffic can also lead to fewer traffic accidents, reducing the overall burden on the island's healthcare and emergency services. Therefore, the promotion of remote work on Guam not only fosters economic and social inclusion for traditionally underserved populations but also contributes to broader societal and environmental benefits, illustrating a multi-faceted approach to sustainable development and community well-being.

Incorporating the critical challenge of transportation access further underscores the benefits of remote work on Guam, especially for those in poverty. Limited access to reliable transportation is a significant barrier to employment for many individuals living in poverty. Remote work eliminates the need for daily commuting, directly addressing this obstacle and opening up employment opportunities for those who previously found it difficult or impossible to maintain a job due to transportation issues.

Education





The Guam Department of Education's Five-year Strategic Plan¹⁰ prioritizes individuals from rural areas through Strategic Priorities in the areas of Curriculum, Instruction and Assessment; Family and Community Engagement; Student Behavior, Discipline and Safety; and Facilities and Maintenance. These strategies include:

- Strategy 3.1: Implement new and/or improve current evidence-based intervention projects and activities at all grade levels that support the success of all students in particular, students with special needs, English learners, students from diverse cultures, students experiencing homelessness, students living in poverty, students in the LGBTQ community, and other students with diverse backgrounds and untapped potential.
- Strategy 3.2: Provide instructional staff with ongoing training, resources and support to increase their capacity and enhance their skills to work with all students, in particular students with special needs, English learners, students from diverse cultures, students experiencing homelessness, students living in poverty, students in the LGBTQ community, and other students with diverse backgrounds and untapped potential.
- Strategy 6.5: Strengthen the technological infrastructure to support the upgrading and availability of computer and technology hardware and connectivity needs of the system

2. Individuals who belong to a racial or ethnic minority

In the 2020 United States Census¹¹, the largest ethnic group on Guam were the native Chamorros, accounting for 32.8% of the population. Asians, including Filipinos, Koreans, Chinese, and Japanese, accounted for 35.5% of the population. Other ethnic groups of Micronesia, including those of Chuukese, Palauan, and Pohnpeians, accounted for 13.2%. Ten percent of the population were multiracial, (two or more races). European Americans made up 6.8% of the population; 1% are African Americans, and 3% are Hispanic; there are 1,740 Mexicans in Guam, and there are other Hispanic ethnicities on the island.

The Guam Office of Infrastructure Policy and Development (OIPD) has taken significant strides in conducting a digital equity asset inventory, focusing particularly on individuals who belong to racial or ethnic minorities. This endeavor involved engaging with a diverse array of ethnic groups on the island, from Filipino business leaders to student group leaders from various islands attending the University of Guam. These interactions played a crucial role in shaping the discussion about digital equity and the pathways to achieving it on the island.

Currently, it is observed that there are limited digital inclusion resources on Guam specifically tailored to these ethnic minority groups. However, the dialogue with representatives from these communities has opened up a vista of potential digital equity initiatives. A key outcome of these discussions is the identification of community meeting points as Community Anchor Institutions under the BEAD program. Some of these locations are set to be transformed into Wi-Fi hotspots, a move that will significantly enhance internet accessibility for these communities.

Moreover, there are plans to develop these meeting points into multifaceted digital learning centers. These centers will not only provide access to digital devices but will also offer digital



¹⁰ https://www.gdoe.net/District/2584-GDOE-Strategic-5-Year-Plan-2022.html

https://www.census.gov/newsroom/press-releases/2023/2020-dhc-summary-file-guam.html#:~:text=1 6.1%25%200f%20homeowners%20and%2034.0,had%20a%20broadband%20internet%20subscription



literacy courses, catering to the varying skill levels within the community. In addition, they will host online safety courses, equipping community members with the knowledge to navigate the digital world securely.

The Guam Department of Education's Five-year Strategic Plan¹² prioritizes individuals from racial and ethnic minorities through Strategic Priorities in the areas of Curriculum, Instruction and Assessment; Family and Community Engagement; Student Behavior, Discipline and Safety; and Facilities and Maintenance. These strategies include:

- Strategy 3.1: Implement new and/or improve current evidence-based intervention projects and activities at all grade levels that support the success of all students in particular, students with special needs, English learners, students from diverse cultures, students experiencing homelessness, students living in poverty, students in the LGBTQ community, and other students with diverse backgrounds and untapped potential.
- Strategy 3.2: Provide instructional staff with ongoing training, resources and support to increase their capacity and enhance their skills to work with all students, in particular students with special needs, English learners, students from diverse cultures, students experiencing homelessness, students living in poverty, students in the LGBTQ community, and other students with diverse backgrounds and untapped potential.

This approach to digital equity, centered on community-based assets and needs, presents a holistic model for addressing the digital divide. By focusing on both infrastructure (like Wi-Fi hotspots) and educational resources (like literacy courses), the initiative aims to empower these minority communities with the tools and knowledge necessary to fully participate in an increasingly digital world.

3. Veterans

Guam, in its pursuit of digital equity for its veteran population, faces a unique set of challenges and opportunities. OIPD has met with the Guam Veterans Affairs to find out some of the most pressing concerns the island's veterans face when dealing with the digital world. In addition, OIPD has engaged directly with veterans who have questions about digital equity programs and how they can benefit from them.

The following are a list of resources that veterans living on Guam can currently access:

- Guam Veterans Affairs Office (GVAO) The Guam Veterans Affairs Office administers three (3) major programs and other veterans' functions including disability services, information & referral, support services. The agency coordinates veterans' affairs programs in the Territory, offers informational and advisory services to all veterans, active-duty personnel and their dependents and assists in presenting claims against the United States on their entitlements under federal laws. GVAO also offers counseling, home/hospital visits, health services, and burial benefits.
- VA Guam Community Based Outpatient Clinic (CBOC) The clinic offers caregiver support, geriatrics care, LGBTQ+ veterans care, patient advocates, primary health, telehealth, women's veteran care, and online portal coordinator to assist with the management of appointments and records, refill prescriptions, and communication with a veteran's health care team.



¹² https://www.gdoe.net/District/2584-GDOE-Strategic-5-Year-Plan-2022.html



- VA Pacific Islands Health Care System (VAPIHCS) is working towards the completion of the Guam CBOC Annex, which will be adjacent to the Guam Regional Medical City in Dededo. The VA Annex will feature primary care services, prosthetics, lab, and in-person mental health services. Independent of the expansion of the Guam CBOC, VAPIHCS is also working to reach veterans in other ways. Several "community call" events have been held on Guam, aimed to reach veterans in their communities and provide vaccines, PACT Act enrollment, health screenings, and other important care.
- Naval Hospital Guam The hospital comprises the main hospital in Agana Heights, and two branch clinics, medical and dental, on Naval Base Guam. The hospital offers a broad range of medical services to veterans that include family practice, OB-GYN, pediatrics, general surgery, anesthesia, internal medicine, psychiatry, psychology, occupational health and preventive medicine, emergency medicine, dental surgery, urology, otolaryngology, optometry, acute care, physical therapy, Dietician, Health Promotions and social work services.
- Guam Department of Labor, American Job Center, Disabled Veterans Outreach Program (DVOP) specialists are trained staff members who serve eligible veterans and other eligible persons exclusively. DVOP specialists apply a case management approach and access a broad network of providers and resources to assist eligible veterans to achieve their training and employment goals.

To achieve the goal of digital equity for veterans, OIPD's collaboration with existing veterans service organizations will be central. Here are some strategic initiatives that could be implemented to address gaps and barriers for veterans, ensuring they have equal access to the digital world:

- Working through BEAD to expand digital infrastructure development. This includes expanding high-speed internet access across the island, especially in more rural or unserved/underserved areas where many veterans reside. Efforts will focus on making connectivity affordable and reliable.
- Establishing comprehensive digital literacy programs tailored for veterans. These programs will address basic computer skills, personal internet safety, and how to leverage technology for everyday tasks. Special emphasis will be on accommodating veterans with disabilities, ensuring that these programs are accessible to all. There will also be specific focus on instruction for how to apply for health, disability and other benefits.
- Providing assistive technologies for veterans with disabilities. This could range from voice-activated systems and screen readers to customized hardware that caters to physical limitations.
- Setting up a dedicated Digital Navigator program and community engagement and support center where veterans can receive support and training in digital skills. This center can act as a hub for learning, social engagement, and accessing online services. They can also serve as a point of contact for veterans needing assistance with technology-related issues.
- Collaborating with local carriers, technology companies and non-governmental organizations to bring in expertise, funding, and resources. These partnerships can facilitate the provision of free or discounted hardware, software, and training programs specifically designed for veterans.



When designing digital services, the specific needs of the veteran community will be considered. This includes ensuring that government websites and digital services are user-friendly, accessible, and tailored to veterans' needs, such as healthcare, employment, and social services.

Conducting regular research to understand the evolving digital needs of veterans and soliciting their feedback on existing services is important for continuous improvement. This data-driven approach ensures that strategies remain relevant and effective.

By implementing these initiatives, Guam can take significant strides towards achieving digital equity for its veteran population. The aim is to create an inclusive digital environment where veterans can harness the benefits of technology, enhancing their quality of life and integration into the digital age.

4. Aging Population

Guam, in its commitment to achieving digital equity for its aging population, encounters a distinctive array of challenges and opportunities. The Guam Office of Information Policy and Development (OIPD) has consulted with agencies and organizations focused on the needs of the elderly to identify the key issues this demographic encounters in navigating the digital landscape, including the Guam Department of Public Health and Social Services, the Guam Legal Services Corporation and Guam Department of Labor. Moreover, OIPD has directly engaged with members of the aging community who have inquiries about digital equity programs and their potential benefits.

The objective is to guarantee that all individuals within the aging population, regardless of their age, physical capabilities, or socio-economic background, have equitable access to the digital realm. This includes not only access to digital devices and high-speed internet but also the skills required to utilize technology efficiently and securely. Below are some of the programs currently available to the aging population on island.

- Guam Department of Public Health and Social Services, Division of Senior Citizens, Bureau of Program Administration and Development (BPAD): In accordance with the Older Americans Act of 1965 as amended, the Guam State Office on Aging (SOA) implements and coordinates the provision of services to older individuals age 60 years of age and older. In fulfilling its assigned mandate, the BPAD:
 - Identifies and uses all possible resources towards promoting, maintaining, and protecting the total well-being of older individuals including their dignity, values, and cultures;
 - Advocates to ensure that older individuals enjoy their well-deserved rights and benefits;
 - Ensures that each and every older individual who is capable of self-care with the appropriate supportive services will be afforded the maximum independence and dignity in a home environment;
 - Strives to remove individual and social barriers to economic and personal independence;
 - $\circ~$ Ensures that a continuum of care for the vulnerable older individual is provided; and
 - Requires quality services to be provided for senior citizens' programs and activities.



To ensure quality services, BPAD conducts monitoring, evaluating, assessing, and providing technical assistance to various organizations contracted to provide these services, as practicable. BPAD staff drafts, negotiates and ensures the contractual compliance of 10 programs.

- Guam Mayor's Offices, Senior Centers: Distributed across the different villages in Guam, the senior citizen centers are gathering places for many of the island's *manamko*. The offices are a vital link to Guam businesses and non-profit organizations that provide educational and enrichment activities to this population. Numerous senior and community centers across the island at times host local businesses who offer digital literacy programs to our island's *manamko*. ¹³
- Guam Department of Labor, Senior Community Service Employment Program (SCSEP)¹⁴: SCSEP is a federally funded employment training program under the U.S. Department of Labor (USDOL). The SCSEP is designed to be used in conjunction with other programs and services. These programs are provided by government and not-for-profit agencies to create holistic services that maximize goals and skills of SCSEP participants to achieve their employment goals. Goals are achieved through a combination of work training experience and traditional training. To be eligible SCSEP applicants must be 55 years of age or older at the time of enrollment, have a family income of no more than 25% over the Federal poverty level, be a Guam resident, currently unemployed, and have a barrier to employment.

With advancements in technology, we can create new opportunities for older persons to maintain their autonomy, health, and well-being. The rise in new assistive technologies has demonstrated the potential to benefit healthy aging and longevity by enabling people to live healthier, more fulfilling lives at all ages.

The intricate nuances of digital equity and its profound impact on the elderly and the pivotal role of digital literacy in enhancing the lives of our senior citizens is of vital importance.

Promotion of Continued Independence: Digital technologies fortify the independence of senior citizens. These innovations facilitate safer and prolonged autonomous living for elders, spotlighting the utility of personal monitoring devices in summoning medical assistance and maintaining familial connections.

Enhancement of Social Connectivity: Digital Equity explores how technology serves as a conduit for communication and social interaction, thereby mitigating isolation among the elderly. Our public health and social services can investigate the pervasive issue of loneliness and depression stemming from physical and mobility constraints that sever ties with friends and family.

Achieving Digital Inclusion: The quintessential challenge of digital inclusion for older adults is an ongoing challenge on Guam. One must analyze the barriers such as access, installation, knowledge, design, and trust, proposing comprehensive solutions that encompass affordable high-speed internet, accessible devices, and supportive infrastructure.



¹³

https://www.guampdn.com/multimedia/gta-hosts-its-sixth-mobile-man-mko-workshop-in-tamuning/co llection_ffe47a54-b8df-11ee-8f29-cf4fd161de3c.html

¹⁴ <u>https://dol.guam.gov/employment-and-training/scsep/</u>



Empowerment through Technological Integration: Digital inclusion of senior citizens should be holistic in nature; the amalgamation of health monitoring systems, social robotics, virtual reality, telemedicine, smart home technologies, and IoT devices can significantly uplift the lives of the elderly and their caregivers.

Advancing Health and Well-being: Incorporating Digital Equity can lead to an in-depth examination of how technological progress can forge new pathways for maintaining autonomy, health, and well-being in the aging populace. This encompasses an exploration of how these advancements can foster healthy aging and longevity.

5. Persons with Disabilities

Guam's commitment to individuals with disabilities includes a variety of programs and resources provided by nonprofits, educational institutions, and government agencies, all aimed at enhancing digital equity:

- HireGuam¹⁵ The Vocational Rehabilitation (VR) program administered through the Guam Department of Labor provides vocational and rehabilitative services to individuals with disabilities to help them prepare for, secure, regain or retain employment. Vocational rehabilitation services can reduce and/or remove barriers to employment. To be eligible for VR services, a person must have a physical or mental impairment that creates a substantial impediment to employment; be able to benefit from VR services in terms of employment; and require VR services to prepare for, enter, engage in, or retain employment. Priority is given to those individuals who have the most significant disabilities.
 - Vocational Rehabilitation Transition Youth Services assist students with disabilities to train for a job, continue their education, or find a job after high school. In this program, youth have the opportunity to participate in sponsored career counseling, work readiness training, and fully integrated work experiences in the community. These services are delivered while youth are still in high school and establish the foundation for a seamless transition to individualized training, education, and employment.
- University of Guam CEDDERS: The Center for Excellence in Developmental Disabilities Education, Research, and Service creates pathways for individuals with developmental disabilities and their families, promoting well-being and community integration. CEDDERS also lends specialized equipment to the deaf community and others.
- Department of Integrated Services for Individuals with Disabilities (DISID): Established in 1997, DISID serves as the primary agency offering a range of programs and services promoting independence and community inclusion for people with disabilities.
- iCanConnect: This program, administered by the Helen Keller National Center in Guam, provides free equipment, software, and training for individuals with combined hearing and vision loss, facilitating their communication with the broader community. It is part of a federal initiative to ensure modern technologies are accessible to all.
- Autism Community Together (ACT): ACT is a local nonprofit support group for individuals with autism and their families, offering various forms of assistance and community engagement.



¹⁵ <u>https://www.hireguam.com/vosnet/default.aspx</u>



- Catholic Social Service Community Habilitation Program: The Community Habilitation Program is an independent living skills training and day program for individuals 18 and over, with severe disabilities. The program provides at least six hours of daily services to adults needing independent life skills training and other services to engage in socialization and integration in the community.
- The Guam Department of Education's Five-year Strategic Plan¹⁶ prioritizes students with disabilities through Strategic Priorities in the areas of Curriculum, Instruction and Assessment; Family and Community Engagement; Student Behavior, Discipline and Safety; and Facilities and Maintenance. These strategies include:
 - Strategy 3.1: Implement new and/or improve current evidence-based intervention projects and activities at all grade levels that support the success of all students in particular, students with special needs, English learners, students from diverse cultures, students experiencing homelessness, students living in poverty, students in the LGBTQ community, and other students with diverse backgrounds and untapped potential.
 - Strategy 3.2: Provide instructional staff with ongoing training, resources and support to increase their capacity and enhance their skills to work with all students, in particular students with special needs, English learners, students from diverse cultures, students experiencing homelessness, students living in poverty, students in the LGBTQ community, and other students with diverse backgrounds and untapped potential.
- Senior Community Service Employment Program (SCSEP): A federally funded program providing employment training for seniors, including those with disabilities.
- Disabled Veterans Outreach Program (DVOP): DVOP specialists provide case management and a network of resources to assist eligible veterans, including those with disabilities, in achieving their training and employment goals.
- Guam Legal Services Corporation, Disability Law Center: This organization serves as the designated Protection and Advocacy System in Guam, addressing the civil rights and legal needs of individuals with disabilities.
- Guam Regional Transit Authority's (GRTA) ADA Paratransit Service: GRTA offers paratransit services to individuals whose disabilities prevent them from using standard public transit, ensuring greater mobility and access.
- Guam System for Assistive Technology (GSAT): Administered by the University of Guam's CEDDERS, GSAT offers services to assist children and adults with disabilities in living productive, independent lives. It provides awareness, acquisition assistance, and various state-level activities like the Akudi Program, GREES, a Lending Library, and a Demo Center.

The OIPD will continue collaborating with key stakeholders to roll out strategic digital initiatives for the island's disabled community. The primary objective is to guarantee inclusivity and accessibility for Guam's disabled community, thereby supporting their rights and opportunities in the digital realm. This effort underscores the importance of equal access to technology and information, aiming to remove barriers and foster an inclusive environment for all residents.

6. Economically Disadvantaged Population



¹⁶ <u>https://www.gdoe.net/District/2584-GDOE-Strategic-5-Year-Plan-2022.html</u>



Of the 145,543 people in households for whom poverty status is determined, 29,408 (20.2%) households in Guam had income below the poverty level. Additionally, 21.8% of households received benefits from the Supplemental Nutrition Assistance Plan (SNAP).

Guam, like many other islands and states, faces the challenge of ensuring digital access for households living below the poverty level. Addressing this issue requires a multifaceted approach that leverages both local initiatives and federal programs. One key element in this strategy could be the effective utilization of the Federal Communications Commission's (FCC) Affordable Connectivity Program (ACP). This program provides a monthly benefit of up to \$30 to eligible households, which can significantly reduce the cost of broadband services.

As our office is also tasked with administering the BEAD program, we are working hand in hand to address the issues of affordability and accessibility through program funding and requirements. Under the BEAD Notice of Funding Opportunity, subgrantees (typically carriers) receiving BEAD funds for broadband infrastructure are obligated to provide a "low-cost broadband service option" aimed specifically at low-income households, available for the entire lifespan of the network assets. Our proposed low-cost service option in Guam ranges from \$30 to \$65 per month based on a 2% affordability standard. Our aim is to strike a balance between affordability and the long-term financial viability of BEAD-funded projects.

In Guam, we rely on federal poverty guidelines, which indicate that a two-person household has an annual income of \$20,440.¹⁷ When it comes to ensuring affordable broadband access, we adhere to the National Governors Association (NGA) recommendation, which suggests that no more than 2% of disposable income should go towards broadband service.¹⁸ This calculation aims to ensure that broadband service remains accessible and affordable for low-income households in Guam, promoting digital inclusion and equitable access to online opportunities.

BEAD infrastructure subgrantees are also encouraged to engage in any future broadband subsidy programs if the Affordable Connectivity Program's funding is exhausted and not renewed.

In addition, the Leon Guerrero-Tenorio Administration is currently working on a plan to utilize federal Temporary Assistance for Needy Families funding for a local subsidy program for internet services and this could include funding of certain devices to qualified households, depending on availability of funds.

Guam is progressing towards achieving total digital equity, with a number of key assets currently aiding economically disadvantaged populations, including but not limited to:

- FCC's Affordable Connectivity Program (ACP): This program offers subsidized internet connections and devices for individuals facing financial hardships, ensuring they have access to essential digital resources.
- Guam Community College Digital Skills Bootcamps: These are intensive training sessions designed to quickly equip individuals with vital digital skills. This program is particularly beneficial for those looking to secure employment in the technology sector.
- Guam Community College Continuing Education and Workforce Development Program (CEWD): The mission of CEWD is to meet the community's needs by offering courses



¹⁷ <u>https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines</u>

¹⁸ <u>https://www.nga.org/wp-content/uploads/2021/10/NGA-Broadband-Affordability.pdf</u>



and training that complement the College's academic, technological, and occupational programs. The CEWD provides various courses outside the regular academic schedule, focusing on personal enrichment, skill training, and computer software applications. It also hosts conferences and workshops for skill and knowledge enhancement. These courses are tailored to those looking to improve workplace skills or seeking employment, varying in length based on the skills taught.

- Guam Housing Corporation: Established in 1965, this organization focuses on providing mortgage financing for first-time homeowners in the low to moderate-income range. It also owns houses and apartment units to offer rental opportunities to families with similar income levels.
- Guam Housing and Urban Renewal Authority (GHURA): GHURA aims to improve the living conditions of Guam's people by addressing slum and blight conditions, community redevelopment, and ensuring safe and sanitary housing for low to moderate-income families. It leverages both federal and local programs and encourages private enterprise participation in these efforts.
- The Guam Department of Education's Five-year Strategic Plan¹⁹ prioritizes individuals from rural areas through Strategic Priorities in the areas of Curriculum, Instruction and Assessment; Family and Community Engagement; Student Behavior, Discipline and Safety; and Facilities and Maintenance. These strategies include:
 - Strategy 3.1: Implement new and/or improve current evidence-based intervention projects and activities at all grade levels that support the success of all students in particular, students with special needs, English learners, students from diverse cultures, students experiencing homelessness, students living in poverty, students in the LGBTQ community, and other students with diverse backgrounds and untapped potential.
 - Strategy 3.2: Provide instructional staff with ongoing training, resources and support to increase their capacity and enhance their skills to work with all students, in particular students with special needs, English learners, students from diverse cultures, students experiencing homelessness, students living in poverty, students in the LGBTQ community, and other students with diverse backgrounds and untapped potential.

In addition to continuing to coordinate with the programs listed above, the OIPD will work with GHURA and Guam Housing to set up technology centers equipped with internet devices, digital tools and navigators to allow economically disadvantaged populations to access healthcare, education and other government and civic services online. Additionally, access to free and/or reduced cost internet will allow more of this population access to the digital world.

These assets play a significant role in ensuring digital equity across Guam. The focus remains on ensuring these resources are accessible to all citizens, regardless of socioeconomic status, to include them in the digital revolution.

7. English as a Second Language

In Guam, according to the 2020 US Census, among the population 5 years and over in households, 57.3% spoke a language other than English at home. Of those who spoke a language other than English, 65.9% spoke English "very well" and 42.8% spoke Philippine languages.



¹⁹ https://www.gdoe.net/District/2584-GDOE-Strategic-5-Year-Plan-2022.html



Several of the island's agencies are dedicated to providing adult education and literacy services, with a special emphasis on English as a Second Language (ESL) programs. The Guam Community College stands as the primary institution responsible for these educational offerings. It administers a variety of adult education programs that include Basic Skills, English-as-a-Second Language, Adult High School, and Literacy courses. These services are designed to assist adult learners in achieving their lifelong educational goals, which often include completing secondary education and making a successful transition either to employment or to further education in post-secondary career and technical programs.

According to the Workforce Innovation and Opportunity Act (WIOA), Title II Adult Education & Literacy, adult education and family literacy encompass a range of instructional and educational services below the postsecondary level. These services are aimed at enhancing an individual's abilities in reading, writing, and speaking in English, as well as improving their mathematics skills. These competencies are crucial for obtaining a secondary school diploma or its equivalent, transitioning to postsecondary education and training, and securing employment. The program activities under this category cover a broad spectrum, including adult basic education, literacy, workplace adult education and literacy activities, family literacy activities, English language acquisition, integrated English literacy and civics education, workforce preparation activities, and integrated education and training programs.

The Guam Department of Education's Five-year Strategic Plan²⁰ prioritizes individuals from rural areas through Strategic Priorities in the areas of Curriculum, Instruction and Assessment; Family and Community Engagement; Student Behavior, Discipline and Safety; and Facilities and Maintenance. These strategies include:

- Strategy 3.1: Implement new and/or improve current evidence-based intervention projects and activities at all grade levels that support the success of all students in particular, students with special needs, English learners, students from diverse cultures, students experiencing homelessness, students living in poverty, students in the LGBTQ community, and other students with diverse backgrounds and untapped potential.
- Strategy 3.2: Provide instructional staff with ongoing training, resources and support to increase their capacity and enhance their skills to work with all students, in particular students with special needs, English learners, students from diverse cultures, students experiencing homelessness, students living in poverty, students in the LGBTQ community, and other students with diverse backgrounds and untapped potential.

The OIPD plans to work with the educational institutions to ensure expansion of digital literacy programs and online services tailored specifically to meet the needs of residents who either have English as a second language or low literacy.

8. Incarcerated Persons

In Guam, significant efforts are being made to enhance digital equity for incarcerated individuals, including those at the Department of Youth Affairs (DYA) and the Department of Corrections (DOC). These efforts aim to provide digital access not only for legal and administrative purposes but also for education, health, and maintaining social connections.



²⁰ https://www.gdoe.net/District/2584-GDOE-Strategic-5-Year-Plan-2022.html



There are approximately 800 adult incarcerated persons in Guam and approximately 25 incarcerated youths at any given time.

At DYA, there is an ongoing program that allows digital access for families to stay connected with their incarcerated loved ones. Recognizing the importance of education in rehabilitation and reintegration, DYA is looking to expand this program. One of their key aspirations is to facilitate online educational courses, including the possibility of using platforms like Zoom, Google Meets, etc. This would enable young inmates to virtually attend classes in their home schools, thereby continuing their education without missing out on critical subject matter. Such initiatives are vital in ensuring that young individuals in detention can keep up with their academic progress and stay engaged with their educational communities.

Meanwhile, at the DOC, officials currently provide online access to public defenders and legal assistance, a critical component of ensuring justice and fair representation. However, there is a growing recognition of the need to broaden this digital access. The proposed expansion includes providing inmates with opportunities for online education, enabling them to pursue academic or vocational training. Additionally, there's an emphasis on facilitating access to health resources, which could include telehealth services or online health information. Another important aspect is allowing inmates to maintain social connections, which is crucial for mental health and successful reintegration into society post-incarceration.

The expansion of digital access in these correctional facilities represents a significant step towards holistic rehabilitation. By providing educational opportunities, health resources, and means to stay socially connected, Guam's correctional institutions are not only addressing the immediate needs of the incarcerated but also laying the groundwork for their successful reentry into society. These initiatives highlight the role of digital equity in supporting the overall well-being and future prospects of incarcerated individuals.

9. Native or Tribal Organizations

There are no native or tribal organizations on Guam that have published a digital equity plan.

3.1.2 Existing Digital Equity Plans

Refer to Section 3.1.2 of the State Digital Equity Plan Guidance.

Catalog digital equity plans and programs instituted by municipalities, regions. Be sure to note gaps in existing programs.

Equal access to digital resources is a necessity. The Guam Digital Equity Plan stands as a groundbreaking testament to this belief, marking its distinguished position as the island's inaugural initiative in this domain.

This historic plan was realized through the vision and commitment of the Leon Guerrero-Tenorio Administration, who recognized the widening gap between the digitally privileged and the underserved. Backed by the Digital Equity federal grant program, Guam has been able to ambitiously address the disparities in digital access and literacy.

The core mission of this plan is holistic in approach. It is not only about establishing robust digital infrastructure but also ensuring that every resident, irrespective of age, location, or socioeconomic background, can leverage the benefits of the digital age. In a world where





opportunities—be it in education, healthcare, or commerce—are becoming intricately woven with online platforms, this plan ensures that no one in Guam remains in the digital shadows.

By harnessing the funds from the federal grant program, Guam has underscored its commitment to its citizens. It serves as a paradigm for digital inclusivity, indicating how strategic funding and vision can translate into tangible societal benefits.

3.1.2 Existing Digital Equity Programs

Refer to Section 3.1.3 of the State Digital Equity Plan Guidance.

In addition to the relevant requirements above, States may also choose to include information or resources related to digital inclusion, including existing state policies, mapping, or other technological resources used to inform broadband-related activities, studies and best practices, or outreach endeavors.

While the Government of Guam previously had no policies specifically directed at digital equity, the Office of Infrastructure Policy and Development forged ahead, launching a digital navigator pilot project in August 2023 in cooperation with the Seventh Day Adventist Clinic, a nonprofit healthcare organization.

As part of this initiative, an OIPD staff member was stationed at the Guam Seventh Day Adventist Clinic for a period of approximately one month. The primary role of this staff member was to function as a digital navigator, a critical position designed to assist clients with the clinic's online check-in system.

This pilot project had several key objectives. Firstly, it aimed to facilitate smoother and more efficient clinic visits for patients by guiding them through the online check-in process. This was particularly important for those who were either unfamiliar with or hesitant about using digital platforms for healthcare services. The digital navigator, through hands-on assistance, helped bridge the gap between digital healthcare services and patients' ability to access them.

Moreover, the project sought to gather valuable insights into the digital habits and challenges faced by the clinic's clientele. The staff member engaged with clients to understand their reasons for not previously using the online system. This included probing into whether they had internet access at home, and if not, exploring the underlying reasons. These interactions were invaluable for identifying barriers to digital access, such as lack of internet connectivity or digital literacy skills. The feedback collected during this pilot is expected to inform broader strategies for improving digital access and literacy, not only within the healthcare sector but across various services and communities in Guam.

Overall, this pilot project represents a significant step in understanding and addressing the digital divide in Guam. It underscores the importance of direct engagement and personalized support in helping community members navigate and embrace digital tools, particularly in essential services like healthcare.

3.1.3 Broadband Adoption

Refer to Section 3.1.4 of the State Digital Equity Plan Guidance.

[Identify and detail the assets in the state/territory]

In spite of the high cost of broadband service in Guam, according to the latest US Census Bureau information, roughly 86 percent of homes in Guam have a broadband internet subscription.





Guam's internet service providers contribute to the island's digital equity goals through various public outreach programs which include but are not limited to the following:

Docomo

Docomo Pacific is involved in two key programs: the FCC's Affordable Connectivity Program, which assists eligible subscribers, and the Lifeline Assistance Program, aimed at supporting low-income households. They also provide a Wi-FI Starter Pack, known as WiSP, at a monthly cost of \$35, which comes with a complimentary device. Furthermore, the company extends special discounts to the island's elderly community, referred to as *manamko*.

GTA

Mobile *Manamko* Workshops: GTA conducts the "Mobile *Manamko* series" in the villages of Dededo, Agana Heights, Inalahan, Yigo, and Mangilao. These workshops are designed to teach senior citizens how to use technology including digital devices. The free workshops are open to individuals 60 years old or older.

GTA launched Girls Code in 2020 to empower young girls ages 12 to 16 and spark their interests in science, technology, engineering, and math (STEM). Girls Code offers workshops that teach students the basics of coding and computer science.

GTA supports Guam veterans through its support of USO Guam as a gold sponsor. For more than 15 years, GTA has provided comprehensive telecommunication services to keep military service members connected to their families off-island.

In the aftermath of Typhoon Mawar in May 2023, GTA contributed to recovery efforts by donating prepaid cards and power banks to individuals staying in the island's largest typhoon shelter. This support aimed to help those most in need stay connected to their loved ones during the challenging post-typhoon period.

GTA also participates in the FCC's Affordable Connectivity Program, offering eligible recipients \$30 off of their monthly internet service subscription.

3.1.4 Broadband Affordability

Refer to Section 3.1.5 of the State Digital Equity Plan Guidance.

[Identify and detail the efforts in the state/territory]

States may identify and detail the efforts in the State, which include, but are not limited to the following:

• The number of residents eligible for the ACP, the percentage of eligible residents who have accessed the ACP, and the steps taken to increase enrollment in the ACP;

- Discount or subsidized broadband service and equipment programs;
- Utility assistance programs for consumers with limited incomes; and/or

• Provider agreements and contracts that are near expiration (i.e., provide the opportunity for new agreements and contracts that provide more affordable broadband services).



In August 2023, the Office of Infrastructure Policy and Development received a grant of \$383,000 for Affordable Connectivity Program (ACP) outreach. Following this, the Office has actively increased its staff focus and marketing efforts to maximize awareness among eligible residents of Guam. To achieve this, the Office has organized village town hall meetings, set up information desks in shopping centers across the island, and participated in cultural events. Additionally, the Office has utilized social media, radio, and newspaper ads. The staff have also collaborated with local carriers to further promote the program's benefits. Guam's Food Stamp Program, operating under SNAP has 73,316 eligible members who also qualify for the Affordable Connectivity Program (ACP). Since 2018, ALL of Guam's public school students are eligible for the United States Department of Agriculture National School Lunch Program and School Breakfast Program, making all of these households eligible for the ACP.²¹

Currently, just 1,190 households are enrolled in ACP, representing an enrollment rate of approximately 1.62 percent of qualified recipients.

Additionally, the Office has been proactively exploring various funding options to provide broadband internet and devices to the target groups. Guided by the Leon Guerrero-Tenorio Administration, a collaborative effort is underway with the Guam Department of Health and Social Services. This collaboration aims to repurpose existing Temporary Assistance for Needy Families (TANF) funds for this initiative. We anticipate the program's rollout in the third quarter of 2024. Tentatively named the Guam Digital Access for Families program, it is expected to benefit around 20,000 families across the island. The exact amount of financial support each qualifying family will receive is still under consideration at the time of this report.

3.2 Needs Assessment

Refer to Section 3.2 of the State Digital Equity Plan Guidance.

[Identify baseline and barriers to digital equity]

During the outreach and engagement phase, numerous barriers were identified that the people and communities of Guam consistently encounter. A common sentiment among community members and targeted groups is that while broadband access is viewed as crucial, the reliability of the existing infrastructure is lacking. These challenges were particularly pronounced among certain groups.

- In every village across the island, some areas experience poor service, while others have no service at all. The condition of internet connectivity in Guam, worsened by Typhoon Mawar in May 2023, led to widespread frustration. Residents face numerous issues including no connectivity, slow internet speeds, and inadequate bandwidth for handling multiple devices and applications. Months later, many consumers have reported experiencing multiple daily service interruptions.
- Affordability remains a major hurdle. Individuals report challenges in understanding the array of available options and pricing, and in obtaining services that meet their needs or preferences without exceeding their budget. Financial constraints are more acute within the covered populations, who generally earn less, further compounding digital equity problems.



²¹

https://www.postguam.com/news/local/free-school-meals-continue-for-gdoe-students/article_08159ab 8-ba80-11e9-b01c-576f29abc9e9.html



- Concerns about internet safety are widespread, highlighting particular anxiety for the well-being of older adults and children, who are often seen as more susceptible to scams and cyberattacks. This has led to a uncertainty about how to effectively protect elderly parents or children online. The data reveals a significant level of concern surrounding online security, with numerous individuals admitting to feeling uncertain about their capacity to secure their personal information against online threats.
- Educational efforts in digital hygiene are essential, involving a comprehensive set of guidelines and tools designed to safeguard individuals' digital identities and their data. Additionally, these efforts aim to protect people's well-being from the negative impacts of continuous exposure to digital environments, a concern particularly relevant for children and the elderly.
- There exists a recognized need for the development of digital literacy programs, particularly among older adults and other specific groups. Insights from direct interaction with these communities indicate a demand for digital literacy programs that are adapted to their unique needs. In addition, the importance of public access to the internet and digital devices, along with the provision of inclusive, supportive environments, is emphasized for these groups. These individuals are often less likely to have home internet access, face challenges in acquiring sufficient devices, or lack the financial means to purchase devices and possess limited digital skills. Tailoring support services, such as digital navigation or skills training, by individuals who share similar life experiences, could be especially beneficial for groups like older adults, veterans, and those navigating reentry or recovery.
- While the advantages of accessing government services online are widely acknowledged, many face difficulties utilizing these resources due to lack of home internet access or the inaccessibility of websites, ADA compliant forms, or unclear procedures which are only available to sighted English-speakers. The issue is exacerbated when the lack of reliable and affordable home broadband forces users to primarily rely on mobile phones when accessing these services, as many sites are not optimized for mobile use.

3.2.1 Covered Population Needs Assessment

Refer to Section 3.2.1 of the State Digital Equity Plan Guidance.

Disabled Individuals: Achieving digital equity for Guam's disabled population means understanding and addressing the specific needs and challenges they face in accessing and benefiting from digital resources. Here are some of the fundamental needs of Guam's disabled population in the pursuit of digital equity:

Accessible Internet Infrastructure: Reliable and affordable high-speed internet coverage, throughout the island. Some disabled individuals might have limited mobility and the ability to access online services is crucial to their well-being.

Affordable Assistive Technologies: Devices like screen readers, speech recognition tools, braille e-readers, and other specialized hardware and software can be expensive. Making these more affordable or available through subsidies is critical.

Customized Devices: Making readily available devices adapted to specific disabilities, such as computers that can be operated through eye movement, specialized keyboards, or tablets with large icons and text for those with visual impairments.





Training and Education: Programs tailored to teach digital literacy skills to the disabled. These programs need to take into account different disabilities and offer personalized training. Educators and trainers equipped with the knowledge and tools to teach digital skills to disabled students.

Content Accessibility: Websites, applications, and digital content adhering to accessibility guidelines, ensuring they're navigable by screen readers, have alternative text for images, etc. Availability of content in multiple formats, such as text, audio, and video, to cater to different needs.

Support Services:Technical support and helplines equipped to assist disabled users in navigating digital challenges. Online services like counseling, therapy, or medical consultations optimized for disabled individuals.

Awareness and Advocacy: Public awareness campaigns to enlighten the broader community about the importance of digital equity for the disabled. Advocacy for stronger regulations and policies ensuring digital accessibility.

Physical Infrastructure: Physical access to places where digital resources are available, like libraries or community centers, is essential. This includes wheelchair ramps, tactile pathways, and accessible public transport.

Affordability: Programs or subsidies ensuring that disabled individuals, who often face economic disadvantages, can afford internet services, devices, and other digital resources.

Community and Peer Support: Establishing online platforms where disabled individuals can share experiences, tips, and offer mutual support in navigating the digital world both locally and nationally.

Feedback Mechanisms: Channels where disabled users can provide feedback on digital services, websites, apps, and content, ensuring that their needs are continually met.

Job Opportunities: Digital platforms and employers adopting inclusive practices, so disabled individuals can also benefit from online job opportunities.

Addressing these needs requires a multi-faceted approach, collaboration between public and private sectors, and continuous engagement with the disabled community to ensure solutions are effective and relevant.

All of the initiatives stated above are dependent upon adequate funding opportunities.

Incarcerated Individuals: To comprehensively address the digital needs of incarcerated individuals in Guam, the Office of Information Policy and Development (OIPD) embarked on multiple stakeholder consultations. Collaborations encompassed the Department of Youth Affairs, the Department of Corrections (DOC), Guam Superior Court, Guam Supreme Court, Guam Department of Education, and Guam Legal Services, among others. The imperative is clear: a multi-pronged strategy is essential to address the challenges faced by the incarcerated individuals of Guam.

Opportunities Identified:



- Telehealth Services: To ensure incarcerated individuals have access to critical health services.
- Essential Services Access: Including access to social and welfare services.
- Employment Re-entry Programs: Facilitating their transition back into the community.
- Education: Ensuring continuity in their learning and development.
- Civic and Social Engagement: Granting them opportunities to stay informed and connected.

Department of Corrections needs:

With the anticipated launch of the Adult Correction Management System, funded through the Edward Byrne Memorial Justice Assistance Grant (JAG) Program, there is much optimism. Yet a robust supporting infrastructure is required. This includes:

- Reliable internet connectivity across all 18 housing units.
- Essential computer hardware provisioning.
- Dedicated education classrooms for continuous learning.

There is an ongoing exploration for introducing a secure inmate email system akin to the federal Bureau of Prisons, and the vision extends to internet kiosks for easier commissary orders. Notably, virtual interactions between attorneys and inmates have begun, facilitated through platforms like Zoom, and supported by equipment provided by the Court.

Challenges at the Department of Youth Affairs:

During our deliberations, the extent of challenges became evident.

These ranged from:

- Inadequate internet infrastructure, limiting even administrative functions.
- A dearth of computer resources for the incarcerated youth, creating barriers to consistent education.

Department of Youth Affairs needs:

- Zoom subscriptions for in-classroom learning for seamless transition back into the classroom. There's a compelling need to ensure these young individuals have digital bridges to their regular educational classrooms. This is paramount until physical reintegration is possible.
- Electronic ankle monitoring system that will allow children in the corrections system to continue to live at home with their families.
- Computer equipment for learning, family communication, counseling and telehealth.
- Tools like FaceTime that are crucial to fostering connections between incarcerated youth and their families and guardians.

Our intensive engagement with stakeholders has highlighted the immediate necessity for a comprehensive strategy addressing the digital disparities faced by Guam's incarcerated population. Progress is occurring, but several critical areas, like robust internet connectivity and advanced inmate communication infrastructure, are necessary to realize the envisioned reforms.

Additionally, working through the BEAD program, we have identified DYA and DOC as community anchor institutions and we anticipate funding will be used to provide these





institutions with gigabit internet service, allowing many of the programs envisioned to become a reality. All the initiatives listed above are dependent upon funding availability.

Veterans: Guam's veterans, like many other veterans globally, have distinct needs arising from their experiences in service and the specific socio-economic challenges they face post-service. When discussing digital equity for Guam's veterans, several focal points emerge that must be addressed to ensure they can effectively and confidently navigate the digital landscape.

- Access to Reliable Internet: Many veterans may reside in areas with limited or no high-speed internet access. Ensuring widespread, high-speed, and reliable connectivity is a foundational step toward achieving digital equity.
- Digital Literacy Training: Some veterans, especially older ones, may not be as familiar with modern digital tools, platforms, or technologies. Customized digital literacy programs can bridge this gap, empowering them to utilize digital resources confidently.
- Adaptive Technologies: Veterans with disabilities may require assistive technologies like screen readers, voice-activated systems, or specially designed hardware to access digital content effectively.
- Telehealth Services: For those veterans who may have mobility issues or reside in remote areas, telehealth can be a helpful tool. It offers them access to medical consultations, mental health support, and other health services without the need for physical travel. Medical wearable devices can help track their health and alert medical professionals when attention is required.
- Online Employment and Training Opportunities: Digital platforms that provide job training, skill development, and employment opportunities can be invaluable for veterans transitioning to civilian roles or looking for new career paths.
- Mental Health Resources: Digital platforms offering counseling, mental health resources, and support groups can assist veterans, especially those dealing with PTSD or other service-related traumas.
- Benefits Navigation: User-friendly platforms that help veterans understand, apply for, and manage their benefits can simplify what is often a complex and daunting process.
- Cultural and Community Building Platforms: Digital spaces where veterans can connect, share their experiences, and foster a sense of community can be instrumental in their post-service integration.
- Feedback Mechanisms: Platforms or systems where veterans can provide feedback about their digital experiences, needs, and challenges can ensure continuous improvement in services tailored for them.
- Cybersecurity Training: Given the sensitive nature of some of the information veterans might access or share online, it's essential to equip them with knowledge about online safety practices.
- Affordable Digital Devices: Subsidies or programs that provide veterans with affordable or free digital devices can ensure they are not left out due to financial constraints.

Ensuring digital equity for Guam's veterans requires a multifaceted approach that not only focuses on infrastructure but also on education, health, employment, and community building. It's essential to engage with the veteran community actively, understand their unique needs, and co-create solutions that truly cater to them.

Individuals who Belong to a Racial or Ethnic Minority: Guam is populated by various racial and ethnic groups, each possessing its own unique set of challenges and needs. In the



pursuit of digital equity for Guam's racial and ethnic minorities, it's crucial to recognize and address these specific concerns. Here are some of the unique needs of these communities:

- Linguistic Accessibility: Different communities have distinct languages and dialects. To ensure digital equity, platforms and digital tools must offer content in multiple languages, or at the very least, provide translation options.
- Local Content: Empowering communities to create and share their own content can ensure a richer, more diverse digital landscape. Training and resources should be provided to promote local content creation that resonates with specific ethnic groups.
- Community-Centric Training: Digital literacy training programs tailored to the nuances of each community can be more effective. Such programs should consider cultural practices, prevalent occupations, and specific community needs.
- Affordability: Economic disparities among racial or ethnic groups might hinder their access to digital devices and services. Initiatives to provide affordable or subsidized devices and internet access are crucial.
- Geographical Accessibility: Certain minority groups may reside in areas with limited digital infrastructure. Efforts must be made to extend reliable and high-speed internet connectivity to these areas.
- Representation: Members of racial and ethnic minorities should be actively involved in decision-making processes related to digital initiatives. Their inclusion ensures that strategies and implementations genuinely reflect community needs.
- Safety and Privacy: Due to potential discrimination or biases, members of minority groups may have concerns about online safety and privacy. Education about safe online practices and robust privacy policies are essential.
- Diverse Educational Resources: Digital educational content should reflect the history, stories, and contributions of various ethnic groups, ensuring a broader and more inclusive understanding.
- Access to Government Services: Ensuring that minority groups can effortlessly access government services online, such as health, social services, and legal aid, tailored to their needs, is pivotal.
- Collaborative Platforms: Digital platforms that foster collaboration and community-building among different racial and ethnic groups can promote understanding and unity.

Addressing the unique digital needs of Guam's racial or ethnic minorities requires a holistic and inclusive approach. Through continuous engagement, listening to community voices, and co-creating solutions, true digital equity can be achieved for all.

In our efforts to hear from a wide range of voices, we engaged with community members from the Philippines, Palau, Chuuk, Pohnpei, Kosrae, the Marshall Islands, and other groups. We are dedicated to creating a digital equity plan tailored to the unique needs of these diverse communities. Our aim is to revolutionize how individuals of all ages in these communities use technology to enhance their lives.

Our strategies for engaging these communities are varied and inclusive. For instance, we plan to utilize the Palauan cultural Abais, central gathering spaces, as Community Anchor Institutions. These will serve as locations for Wi-Fi hotspots and venues for digital literacy workshops, helping to improve technological skills. Similarly, the Chuukese Community of Guam's meeting spot will be used to conduct online safety courses. Additionally, we encourage all these cultural



groups to establish online community connection points, contributing to Guam's digitally inclusive environment. This approach ensures that each community's unique needs and cultural contexts are respected and integrated into our broader digital equity plan.

Individuals Living in Rural Areas: Under specific federal programs and guidelines, every resident of Guam is considered to be a "rural resident." This categorization is not based on the traditional understanding of 'rural', which often denotes sparse population, vast open spaces, or agricultural landscapes. Instead, it's a product of federal policies designed to address the unique needs and challenges of the island.

This designation has significant implications for Guam. For one, it affects the flow of federal funds, ensuring that the island can access resources earmarked for rural development. These funds play a pivotal role in bolstering essential services, infrastructure, and initiatives, tailored to meet the unique needs of Guam's residents.

3.2.2 Broadband Adoption

Refer to Section 3.2.2 of the State Digital Equity Plan Guidance.

Broadband adoption, distinct from broadband access, pertains to the number of households and businesses that actively subscribe to and utilize broadband services. While accessibility is about the infrastructure and its reach, adoption is concerned with ensuring residents are actively using and benefiting from these services.

As of 2023, approximately $85\%^{22}$ of the occupied households in Guam have adopted home broadband services. This number compares to the national average of $90.1\%^{23}$ indicating a gap in home broadband adoption rates.

Guam's identified needs toward broadband adoption include:

- Digital Literacy Training A significant portion of non-adopters cite lack of digital skills as a reason for not having an internet subscription at home.
- Affordability Broadband services, while available, are often too costly for certain segments of the population, inhibiting adoption.
- Relevance and Utility- Some residents do not see the direct benefits of broadband services in their daily lives or think cellular phones are a sufficient way to connect to the internet.

Increased emphasis on multi-sector strategies to broadband adoption (e.g., from educational, agricultural, economic development, and telemedicine perspectives).

To encourage people to adopt a broadband internet subscription, OIPD will employ several methods:

• Affordability and Pricing Plans: Through the BEAD program, carriers will be offering a low cost option as well as a middle class affordable option for monthly internet service.

https://itif.org/publications/2022/12/05/state-of-us-broadband-in-2022-reassessing-the-whole-picture/

²²

https://data.census.gov/table?g=040XX00US66&d=DECIA+Guam+Demographic+Profile&tid=DECEN NIALDPGU2020.DP4



These offerings paired with programs like ACP should put the cost of internet service in range of all Guam residents.

- Awareness and Education Campaigns: With the BEAD program, the OIPD will launch educational campaigns about the benefits of broadband internet, such as improved access to information, entertainment, telemedicine, remote work, and online education. Use this campaign to showcase success stories and testimonials from satisfied customers to build trust and illustrate the practical benefits of having a broadband connection.
- Improved Infrastructure and Accessibility: Through the BEAD program we will see the island's internet infrastructure extending its reach into areas that currently are dead zones or only offer very slow or limited internet service. Ensuring reliable and high-speed service can make the subscription more appealing.
- Digital Literacy Programs: Conduct or sponsor digital literacy programs to help people, especially in older age groups, become more comfortable with using the internet and understanding its benefits.

3.2.3 Broadband Affordability

Refer to Section 3.2.3 of the State Digital Equity Plan Guidance.

States may identify and detail the needs and gaps in the State, which includes, but is not limited to the following:

Many Guam residents lack access to a computing device for constructive internet use. Challenging living conditions, such as lack of quiet spaces, can inhibit digital activities.

Digital access gaps on the island include affordability, digital inclusion, device availability, digital literacy, and cultural inclusion. Guam's diverse population, including various minority groups, experience these digital access gaps.

This requires a nuanced understanding and targeted strategies for our diverse community.

To address the high costs of connectivity the OIPD plans to create a network of free wireless hotspots using Community Anchor Institutions; continue to promote the FCC Affordable Connectivity Program, encouraging eligible families to take advantage of the \$30 per month benefit; and explore the creation of local subsidies to defray the cost of internet subscriptions such as the partnership with the Guam Department of Public Health and Social Services.

Through BEAD, the OIPD is establishing a low cost and middle class affordability standard that aligns with Guam's economic landscape. Our proposed low-cost service option in Guam ranges from \$30 to \$65 per month. The Office also plans to work with policymakers to establish preferential pricing for community anchor institutions like libraries and health centers. BEAD funding will be utilized to improve and expand existing broadband infrastructure.

Through the BEAD program funding, OIPD will prioritize deployment of infrastructure development benefitting anchor institutions. Through our extensive outreach efforts, the Office has collaborated closely with many of these institutions to identify and address their specific needs.

Utilizing FCC Affordable Connectivity Program (ACP) outreach funding, the Office will continue to promote the ACP to increase enrollment. ACP currently provides up to \$30 off per month for internet service to eligible recipients. Promotional outreach efforts to date have included collaboration with relevant Government of Guam agencies such as the Guam Housing and





Urban Renewal Authority and Guam Department of Public Health and Social Services, and businesses such as local carriers and non-profit organizations.

4 Collaboration and Stakeholder Engagement

As the application windows open for the Digital Equity Capacity Building Grant Program and the Digital Equity Competitive Grant Program, our outreach strategy will prioritize unearthing and championing opportunities from within our local community. This phase is set to commence sometime in 2024.

Objectives:

- 1. To ensure optimal community participation in the Digital Equity grant application process.
- 2. To facilitate collaborative project efforts that promise maximum public benefit.
- 3. To endorse project sustainability and long-term viability.

The activities related to our Digital Equity initiative unfold through a series of interconnected steps, each ensuring the objective of serving the Guam community efficiently and transparently.

Our journey begins with the transition from planning to implementation. Here, we finalize and wrap up any outstanding activities from the planning phase of our Digital Equity initiative. This might entail facilitating necessary follow-up meetings to make sure we've left no stone unturned. As we embark on this phase, we expect to wrap up any ongoing explorations and set a clear path forward.

Once we've laid the groundwork, our attention shifts to project onboarding. At this juncture, we launch an open and transparent intake process, the primary goal of which is to identify projects that resonate with our vision and criteria for digital equity. In supporting the teams behind these selected projects, we not only aim to enhance their chances of securing competitive awards but also ensure that the various projects work in harmony. This collaborative approach amplifies the public value derived from each Digital Equity grant. A critical aspect of our support is emphasizing project sustainability, a testament to our commitment to ensuring the long-term success of these efforts.

Parallel to these activities is our focus on communications and public relations. We are keen on ensuring adherence to the NTIA guidelines, especially when it comes to sharing the finalized components of the Guam Digital Equity Plan with the public. In terms of communication, our strategy is twofold: digital channels and traditional media. Our digital presence, through regular website updates and consistent social media engagement, offers an immediate avenue for community interaction. Meanwhile, our approach to traditional media, which involves the timely release of press statements at crucial junctures, ensures that various media outlets always have the most accurate and up-to-date information. Furthermore, to enhance our bond with the community, we're dedicated to organizing interactive platforms such as webinars, Q&A sessions, and virtual town halls. These platforms will be tailored to address questions, concerns, and to harvest valuable feedback.

This leads us to another pivotal aspect of our initiative: the feedback mechanism. We believe in the value of community insights and aim to establish a systematic feedback loop that empowers community members and stakeholders. By regularly revisiting the feedback received, we aspire to continuously fine-tune our strategies, ensuring they're in sync with the community's desires and dreams.





In sum, our mission with the Digital Equity initiative is holistic. By actively interacting with the Guam community, upholding transparency, and nurturing collaborations, we're on a path to sculpt a robust Digital Equity landscape, benefiting every resident of Guam.

4.1 Coordination and Outreach Strategy

1. Guam's Collaboration with Key Constituencies:

a. Community Anchor Institutions: Continue to engage with leaders of key community institutions, such as libraries, healthcare providers, and cultural centers to develop projects such as digital navigator programs that serve the covered populations. These institutions play a central role in community development and are a vital communication channel. We plan to use our anchor institutions to promote digital equity and adoption efforts through the activation of free Wi-FI hotspots at many of these locations and availability of devices. A full list of Guam Community Anchor Institutions is available in the Appendix of this document.

b. Mayors Council of Guam: Continue to collaborate closely with local government bodies like the Mayor's Council of Guam and individual village mayors and their staff to ensure that digital initiatives align with the island's larger development goals and that resources are utilized efficiently. Mayor's Offices and the Senior Centers they oversee will be utilized for digital navigation programs, cybersecurity and personal safety training and outreach.

c. Local Educational Agencies: Continue discussing digital equity initiatives with the Guam Department of Education, Department of Youth Affairs, University of Guam, Guam Community College and other educational organizations to ensure digital resources are effectively reaching students and teachers. Keep lines of communication open to take advantage of things like excess laptops, Wi-FI on school buses and other ways to effectively reach target audiences.

d. CHamoru Cultural Entities: Continue to work with *CHamoru* cultural and heritage organizations such as the Department of CHamoru Affairs, Guam Museum, Pacific Historic Parks, University of Guam and others to develop projects that enhance, preserve and promote local culture. Potential projects include making available QR codes at all parks and historical sites that link back to text and video about that site as well as digitizing historical photos and documents. Maintain open dialogue with representatives of the CHamoru cultural entities on Guam to ensure that digital equity initiatives respect cultural values and traditions.

e. Nonprofit Organizations: Leverage the grassroots reach and expertise of NGOs that are active in promoting community welfare, development, and digital education. We will have an action plan in place to be able to activate digital tools and technology in times of emergency, such as after a typhoon, earthquake, or other natural or manmade disaster. The following is just a handful of possible collaborators:

• Guam Women's Chamber of Commerce (GWCC): Empowers women entrepreneurs and professionals while promoting economic development in Guam. They offer various programs and resources that could be beneficial for digital education initiatives.





- Guam Federation of Teachers (GFT): Represents public school teachers in Guam. Collaboration with GFT could be crucial in promoting digital education initiatives within the school system.
- Guam Contractors Association (GCA): Represents the construction industry in Guam. They could partner on initiatives to provide digital skills training for their members and close the digital divide in the construction sector.
- Guam Chamber of Commerce: The Guam Chamber of Commerce is a leading business organization on the island. They can be a valuable partner in advocating for policies that support digital equity and inclusion for businesses in Guam.

f. Organizations Representing Diverse Populations: Continue to collaborate with organizations that represent marginalized groups, including those with disabilities, aging populations, non-English speakers, veterans, and incarcerated individuals. Their input is vital in shaping inclusive digital initiatives. Some potential collaborators include the following organizations:

- Guam Developmental Disabilities Council: Advocates for the rights and inclusion of people with disabilities in Guam. Their involvement is essential in developing accessible digital tools and resources.
- AARP Guam: The Guam chapter of AARP focuses on serving the needs of the island's aging population. They can provide valuable insights into the digital needs of older adults.
- Guam Department of Education, Special Education Section: Provides resources and support for students with disabilities in Guam's public schools. Collaborating with them can ensure inclusive digital education for all students.
- GALA Guam: An organization that advocates for the LGBTQ+ community in Guam. They can help ensure that the digital equity plan is inclusive of all sexual orientations and gender identities.
- Office of Homelessness and Poverty Prevention (OHAPP): OHAPP is the lead agency for coordinating homeless programs for the Government of Guam and works with other GovGuam agencies and the Guam homeless coalition to further efforts.

g. Civil Rights Organizations: Work closely with entities advocating for rights and inclusion, ensuring that the digital equity plan adheres to the principles of justice and fairness. Some civil rights organizations on Guam include:

- American Civil Liberties Union (ACLU) of Guam: Works to defend the civil liberties of all Guam residents. Their participation can help ensure that the digital equity plan is fair and protects the rights of all individuals.
- Guam Bar Association: Represents the legal profession in Guam. Their expertise can be valuable in ensuring the legal compliance of the digital equity plan.
- Micronesian Area Research Center (MARC): Conducts research on social, cultural, economic, and environmental issues in Micronesia. Their research can provide valuable insights into the digital needs of Guam and the broader region.

h-i. Workforce and Adult Education Entities: Partner with agencies overseeing workforce development and adult education, aligning digital equity goals with the state's labor market and lifelong learning objectives.



- Guam Community College
- University of Guam
- GCA Trades Academy
- Guam Department of Labor

j. Public Housing Authorities: Continue to collaborate with the Guam Housing and Urban Renewal Authority and the Guam Housing Corporation to ensure that residents in public housing have access to quality digital resources and connectivity. Possible projects discussed include the creation of resource libraries equipped with laptops and hiring digital navigators to assist residents with applying for federal assistance programs and jobs as well as being a place for students to do homework. Continue to encourage public housing residents to sign up for the ACP program (or its replacement).

k. Partnerships: Foster inter-sectoral collaborations, combining expertise from various entities mentioned above for a holistic approach.

- 2. External Collaborators for Plan Development:
 - Collaborators for the plan development include but are not limited to, the Mayors' Council of Guam, Guam Public Libraries, University of Guam, Guam Department of Education, Guam Community College, St. Johns School, local telecommunication companies, Guam Department of Youth Affairs, Guam Fire Department, Guam Department of Public Health and Social Services, Guam Urban Housing and Renewal Authority, Guam Housing Authority, Guam Memorial Hospital Authority, Guam Regional Medical Center, Seventh Day Adventist Clinic, SelectCare, Department of Integrated Services for Individuals with Disabilities (DISID), Guam Visitors Bureau, Guam Airport Authority, Guam Behavioral Health and Wellness Center, Guam Department of Veterans Affairs and Guam Department of Agriculture. These entities were instrumental in the ideation and development phase of the Digital Equity Plan.
- 3. Coordination and Outreach Strategy:
 - Opportunities for public comments will be made available through town hall meetings, online feedback forms, social media and stakeholder workshops.
 - Continuous engagement will be ensured through quarterly review meetings, feedback loops, social media and website.
 - Specific outreach initiatives will target covered populations, ensuring their unique needs are addressed and feedback is incorporated.

4. Implementation Strategy through Partnerships:

- Workforce Agencies & Organizations: Partner with local workforce agencies and boards to integrate digital skills training into employment programs, ensuring a tech-savvy workforce for Guam's future.
- Labor and Community Organizations: Engage with unions and community groups to ensure that the working population, especially those in sectors not traditionally associated with tech, are not left behind.



• Institutions of Higher Learning: Collaborate with universities, community colleges, and training providers to develop and implement digital literacy programs, research on digital equity, and initiatives promoting digital innovation.

To further enhance the impact and outreach of Guam's Digital Equity Plan, the strategies outlined will be integrated with funding and initiatives from the Broadband Equity, Access, and Deployment (BEAD) Program. By aligning the island's digital goals with broader economic development, health, and education goals, Guam aims to achieve holistic development that is both digitally inclusive and sustainable.

5 Implementation

5.1 Implementation Strategy & Key Activities

An implementation strategy that is holistic and addresses the barriers to participation in the digital world, including affordability, devices, digital skills, technical support, and digital navigation. The strategy should (a) establish measurable goals, objectives, and proposed core activities to address the needs of covered populations, (b) set out measures ensuring the plan's sustainability and effectiveness across State communities, and (c) adopt mechanisms to ensure that the plan is regularly evaluated and updated.

• An explanation of how the implementation strategy addresses gaps in existing state, local, and private efforts to address the barriers identified pursuant to Section IV.C.1.b.i, item 1, of this NOFO (Statutory Requirement 1).

Individuals Who Live in Covered Households:

Through OIPD's outreach, we have found that barriers to digital equity among this population include financial constraints, lack of access to technology, and limited digital literacy. Creating a digital equity implementation strategy for individuals living in covered households (i.e., households under certain social or economic thresholds) in Guam involves a comprehensive approach focusing on outcomes that enhance digital inclusion and literacy.

To address affordability, the OIPD plans to utilize the BEAD buildout of the fiber network to provide designated community anchor institutions with gigabit internet service. Through this effort, the CAIs would then be used to create a network of free Wi-FI internet hotspots available to all Guam residents, particularly targeting individuals who live in covered households. Additionally, the BEAD program offers a low cost option available to those homes that would qualify for the FCC Affordable Connectivity Program (ACP) that gives eligible homes \$30 off of a monthly internet subscription. OIPD was awarded an ACP outreach grant to promote the program to eligible households and will continue to encourage uptake of that program.

As mentioned previously in this report, OIPD is working with the Guam Department of Public Health and Social Services to initiate a local subsidy program for internet services and possibly devices utilizing Temporary Assistance for Needy Families (TANF) program. The details of this potential program are still under development.

The OIPD plans to offer tailored digital literacy programs, including basic computer skills, internet safety, and application usage to this population of island residents. We also plan to



partner with local employers and educational institutions to create opportunities for internships, job placements, and further education, leveraging newly acquired digital skills.

We can accurately measure successful outcomes of these programs through increased digital literacy rates, enhanced access to affordable high-speed internet and digital devices, improved employment opportunities through digital skill acquisition, and enhanced educational outcomes for children and adults in these households.

Aging Individuals:

Creating a digital equity implementation strategy specifically tailored for aging individuals in Guam involves addressing unique challenges and barriers that this demographic faces in the digital world.

Through our discussions with members of this community, their families and the organizations that serve them, we have found that there is a great need for digital navigator programs to allow seniors to fully unlock the potential of the internet and all it has to offer in terms of healthcare, education, social activities, familial connections and more, as well as cybersecurity and online personal safety training to keep them safe from predators that seek to take advantage of the island's seniors. Some of our seniors would benefit from one-on-one training outside of a group setting because they may perceive embarrassment for not knowing how to use some forms of technology.

Reaching Guam's seniors involves a holistic approach that addresses key areas such as affordability, access to age-appropriate devices, digital literacy training tailored for older adults and technical support.

OIPD believes in setting clear, achievable targets for improving digital access and skills among aging individuals. We can do this by teaming with mayoral offices, senior centers, healthcare providers and other community anchor institutions to establish senior-friendly training programs, providing easy-to-use devices, and creating accessible support systems. We can track the effectiveness of these programs by the number of seniors who enroll in these targeted programs.

Workforce training programs should encourage the recruitment and training of seniors and can be readily evaluated for effectiveness based on the number of seniors enrolled in these programs.

The OIPD will conduct periodic evaluations to assess the effectiveness of the strategy in meeting its objectives and will create avenues for ongoing feedback from aging individuals to continuously refine and improve the strategy.

This strategy aims to empower aging individuals in Guam with digital tools and skills, enhancing their ability to participate fully in the digital world. It emphasizes the importance of accessibility, tailored education, and ongoing support to ensure that older adults are not left behind in an increasingly digital society.

Individuals with Disabilities:

Developing a digital equity implementation strategy for the disabled community in Guam involves creating a comprehensive plan that addresses multiple aspects of digital inclusion. The



OIPD has been working to understand the current local and private digital inclusion efforts in Guam and working to identify the gaps, especially those affecting the disabled community.

When we talk about the disabled community, it encompasses a wide range of needs and varies considerably from person to person. Through private discussions and inclusion in conferences aimed at serving this community, we have worked to understand some of the specific digital needs and challenges facing this community.

To meet the needs of the disabled, the OIPD is implementing a multifaceted approach:

Working with government and nonprofit agencies that serve the community, the OIPD will ensure the disabled have access to affordable internet service, access to devices needed to connect to the internet, digital skills training, technical support, and assistance with digital navigation when required.

The OIPD has identified specific objectives to achieve these goals such as the development of training programs, device distribution initiatives, and support services. Additionally, OIPD has identified a project to upgrade all government websites to be accessible through needed upgrades and through initiatives such as fillable forms and online payments and registration.

Skills Training: Work with educational institutions to ensure that workforce training programs incorporate opportunities for persons with disabilities.

Develop tailored digital literacy programs for the disabled, taking into account different types and severities of disability.

Through this process there will be a regular schedule for evaluation of the strategy's effectiveness and updating mechanisms. This can be measured in how many disabled are enrolled in workforce programs or hired for technical positions. We will ensure the strategy is flexible to be able to adapt to the changing needs and technological advancements. We will also establish channels for continuous feedback from the community to identify areas for improvement.

This comprehensive strategy aims to not only bridge the digital divide for the disabled community in Guam but also to ensure that the efforts are sustainable, effective, and continually responsive to the community's evolving needs.

Veterans:

The Office of Information and Policy Development (OIPD) is taking proactive steps to address the digital divide faced by veterans as they navigate an increasingly digital world. In collaboration with Digital Equity programs, the OIPD is working diligently to ensure that veterans have the necessary access, skills, and resources to thrive in a digital-centric society.

To meet the needs of veterans, the OIPD is implementing a multifaceted approach:

Access to Technology: The OIPD recognizes that access to affordable and reliable internet and devices is a fundamental requirement for veterans to engage in the digital realm. Through partnerships with Digital Equity programs, the OIPD is working to secure funding and resources to provide veterans with access to broadband services and refurbished devices, such as laptops and tablets, bridging the digital gap. Additionally, we intend to make awareness of the Affordable Connectivity Program (ACP) a key component to outreach efforts. The ACP provides







a \$30 discount for monthly internet service for Veterans who receive pension benefits or through other eligibility.

Digital Literacy Training: Many veterans may not be familiar with modern technology or lack digital literacy skills. The OIPD has developed plans to make available a resource library with digital navigators on duty to assist veterans in applying for benefits, reaching family members and former colleagues or applying for jobs. These programs will empower veterans with the knowledge and skills required to effectively use digital tools and services, from online job searches to telehealth appointments.

Job Placement and Economic Opportunities: Recognizing the importance of employment in veterans' lives, the OIPD will use its planned resource library to connect veterans with online job platforms, remote work opportunities, and digital job training programs. This initiative aims to empower veterans to secure meaningful employment and financial stability.

Telehealth and Mental Health Support: In an era of telehealth services, the OIPD will work with partners to ensure that veterans have access to the necessary tools and training to engage with healthcare providers digitally. Additionally, the OIPD supports the development of digital mental health resources to address veterans' unique mental health needs.

Community Engagement: Digital Equity programs foster community engagement by creating spaces where veterans can share their experiences, learn from each other, and build a sense of camaraderie in the digital world. The OIPD supports such initiatives, recognizing the importance of peer support.

By partnering with Digital Equity programs, the OIPD aims to bridge the digital divide for veterans and empower them to fully participate in the digital age. Through access, education, support, and opportunities, this collaborative effort seeks to ensure that veterans can thrive in a digital world while preserving their well-being and quality of life.

Individuals who Belong to a Racial or Ethnic Minority: The island's historical tapestry is woven with threads from various racial and ethnic backgrounds, each contributing to its unique identity. As we transition into an increasingly digital age, it's paramount that Guam's digital equity discussions reflect this diversity.

Racial and ethnic minorities often face unique challenges in accessing digital resources. These disparities can arise from socioeconomic factors, cultural nuances, or a combination of both. To address this in Guam, it's crucial to ensure these communities are not merely subjects of discussion but are active participants in shaping the digital future.

Including minority voices in the digital equity discourse involves multiple steps:

- Representation: This starts with ensuring that individuals from all racial and ethnic backgrounds are adequately represented in decision-making forums, committees, and working groups focusing on digital inclusion.
- Cultural Sensitivity: Digital solutions should cater to the linguistic, cultural, and social needs of different communities. For instance, digital platforms in multiple languages or platforms that recognize and respect cultural nuances can play a pivotal role in enhancing accessibility.
- Targeted Outreach: Specific initiatives can be designed to understand and address the unique challenges faced by minority groups. Surveys, focus groups, or community



interactions can provide insights into the specific barriers these communities face in accessing digital resources.

- Education and Training: This includes the creation of tailored training programs to bridge any knowledge gaps, ensuring that everyone, irrespective of their ethnic background, can confidently navigate the digital world.
- Infrastructure Accessibility: Ensuring that digital infrastructure, like internet connectivity, is evenly distributed and easily accessible across areas inhabited by minority communities.
- Collaboration: Partnerships with community leaders, cultural organizations, and local influencers can help effectively disseminate information and resources related to digital equity.

By ensuring that Guam's racial and ethnic minorities are at the forefront of digital equity discussions, the island can pave the way for a truly inclusive digital transformation. Such inclusivity will uphold Guam's rich cultural diversity and ensure that every resident, irrespective of their background, benefits from the digital age's opportunities.

Incarcerated Individuals:

Developing a digital equity implementation strategy for incarcerated individuals in Guam requires a careful balance between providing digital access and maintaining security and rehabilitation goals. The Office of Infrastructure Policy and Development has been working with the Guam Department of Youth Affairs and the Guam Department of Corrections to determine the barriers facing the island's incarcerated population and what programs are needed to provide digital equity to this community.

Department of Youth Affairs:

Barriers to our island's incarcerated youth population range from lack of access due to structural inefficiencies at the housing facilities to lack of resources that allow for online educational training and instruction to lack of devices to allow for regular familial communication. There may also be cultural barriers that exist, including a lack of translation services for these individuals. In addition, parents or guardians of incarcerated youth may not have access to the internet at home, making communication between family members difficult.

Department of Corrections:

Barriers to our island's adult incarcerated population include access to the internet and access to technology and devices necessary for a number of key needs such as education, behavioral health and wellness, healthcare, legal services, family communication and more.

With the significant number of incarcerated individuals facing mental health challenges, it's crucial that Digital Equity (DE) initiatives collaborate closely with the Guam Behavioral Health and Wellness Center (GBHWC) programs. This partnership aims to leverage digital resources to enhance the continuity of care for those incarcerated. By integrating digital equity resources, such as telehealth services and online mental health support programs, we can ensure that individuals in custody receive consistent, quality mental health care. This effort not only aids in their rehabilitation but also prepares them for a smoother reintegration into society upon release. The collaboration underscores a holistic approach to addressing the mental health crisis within the correctional system, recognizing the vital role of digital access in supporting health and rehabilitation services.







For patients returning to the community from a period of incarceration, care providers have noted that patients often face barriers to getting ongoing and familiar treatment after release. In addition, formerly incarcerated patients often experience financial barriers finding these resources in the general community. Digital equity resources can reduce the financial burden upon release, thus reducing the loss of contact and sudden end of care.

OIPD will work with DOC officials to create secure digital learning centers, offering certified digital training courses that will help to prepare inmates for reintegration into a digital society. Digital literacy courses will be created and tailored to varying skill levels, focusing on vocational and life skills training.

Devices such as tablets with monitored access will be provided to inmates to use for educational and recreational purposes. This may also tie into a fee-based online commissary system that DOC was working to implement that would allow inmates to purchase toiletries and other goods online. DOC officials have also shared that they are working to implement inmate email utilizing systems available nationally to incarcerated inmates.

OIPD plans to establish a system for collecting feedback from participants and staff to continuously improve the program. The program should be flexible to adapt to changing technology landscapes and evolving rehabilitation needs.

The OIPD will also maintain open communication channels with correctional facility administrators, policymakers, and the public about the program's progress and impacts. Through these efforts, the Office can help to raise awareness about the importance of digital literacy for rehabilitation and reintegration of incarcerated individuals.

Through BEAD program funding, as designated community anchor institutions, both the Department of Youth Affairs and the Department of Corrections will see improvements in internet connectivity within their facilities and between buildings. This will allow for incarcerated individuals to use the internet for education, healthcare, social and family services. OIPDs plan to create a tapestry of free Wi-Fi hotspots throughout the island should also allow their families the opportunity to have greater access to them, increasing overall well-being with the potential to assist in rehabilitation.

The OIPD will work with DYA and DOC to ensure that educational opportunities and communication are provided in the language most comfortable for the inmate whenever possible.

These strategies recognize the unique challenges and opportunities of providing digital access and education to incarcerated individuals in Guam. They aim to equip them with necessary digital skills, aiding in their rehabilitation and smooth reintegration into society post-release. The plan balances the need for security within correctional facilities with the goal of reducing recidivism and promoting successful reentry through digital empowerment.





5.2 Timeline

Refer to Section 5.2 of the State Digital Equity Plan Guidance.

Our digital equity activities will encompass a range of initiatives aimed at enhancing connectivity and digital literacy among our target populations. Our focus will include the key elements listed in this section.

Each of these elements will play a critical role in our overarching strategy to foster digital inclusion and ensure that all members of our community have equitable access to the digital world.

Note: The order of priority of the non-deployment digital equity projects below, if funded through BEAD, will be determined by NTIA-approved scoring criteria and selected through an independent evaluation process.

DRAFT TIMELINE

YEAR	ACTIVITIES
2024 Year One of Digital Equity Implementation:	 Distribute Digital Equity Capacity Grant Funding: NOFO release TBD (anticipated in Q2 2024). This formula grant will support our broader objectives in advancing digital equity across our communities. Develop subgrant templates and procedures to assist with the procurement process. Launch Workforce development program study. Continuation of the FCC's Affordable Connectivity Program Promotion and Enrollment (or replacement program): We will persist in our efforts to promote and enroll more households in the Affordable Connectivity Program, ensuring wider access to affordable internet services. Digital Equity projects potentially utilizing non-deployment funding including free Wi-Fi and digital navigator initiatives. Launch Workforce Development Program Study Launch Satellite pilot project (Hagatna Library) Evaluation and Expansion of Digital Literacy Programs: Our team will continue to assess the current inventory of digital literacy programs and explore opportunities for introducing new, innovative programs tailored to evolving community needs. Community Anchor Institution Hotspot Deployment: In collaboration with CAIs, determine technology needed and





	 capability for hosting Wi-Fi hotspots. These locations will serve as hubs for internet access to covered populations and digital literacy training. Launch Free Community Internet Service Pilot Program: Work with community partners to develop and launch a free community internet service pilot program. Broadband Device and Service Subsidy Program Development: Work with DPHSS to develop a program model utilizing other federal funding for subsidizing broadband devices and services, making them more accessible to underserved populations. September 2024, tentative BEAD program initial funding release.
2025	 Workforce Development: Coordination with University of Guam, Guam Community College, Guam Department of Labor, GCA Trades Academy and other educational institutions to create curriculum tailored to meet tech workforce development needs. Focus on the inclusion of target covered populations by seeking them out through government, nonprofit and private sector organizations. Continuation of the FCC's Affordable Connectivity Program Promotion and Enrollment (or replacement program): We will persist in our efforts to promote and enroll more households in the Affordable Connectivity Program, ensuring wider access to affordable internet services. Launch Cybersecurity, Online Safety, and Privacy Initiatives: Identify and collaborate with key partners to launch a comprehensive campaign focused on cybersecurity, online safety, and privacy education tailored to our veterans, aging persons and others. Community Anchor Institution Hotspot Deployment: In collaboration with CAIs, begin initiating Wi-Fi hotspots. (Minimum 5 activated by end of the year) Launch Digital Navigator Programs: Our team will explore various options and identify partners to provide robust technical support services, aimed at assisting community members in navigating and resolving technology-related
	issues. Potential areas include mayoral offices, library, public housing, public health, Department of Corrections, Department



2026



 of Youth Affairs and more. Launch Device Lending Program through CAIs: Identify partners for device lending programs utilizing refurbished computers, tablets and other equipment. Broadband Device and Service Subsidy Program Development:
 Continue to work with DPHSS to develop a program model for subsidizing broadband devices and services, making them more accessible to underserved populations. Exploring Assistive Technology Opportunities and Funding: Identifying opportunities for assistive technology will be a priority, along with sourcing funding to support these initiatives. This will enhance digital accessibility for individuals with disabilities. Increase the number of ADA compliant workstations at the Hagatna library. Establish System for Feedback Collection: Establish a system for collecting feedback from participants and staff to continuously improve programs. DE programs should be flexible to adapt to changing technology landscapes and evolving needs. Ensure that all KPIs, goals and strategies are being met and are on a successful trajectory.
 Launch Workforce Development for Digital Equity focused on target populations: Foundational Vocational Digital Skills Training Career-Specific Digital Upskilling: Courses teaching software, coding, data analysis, cybersecurity, etc., tailored to in-demand jobs. Focus on certifications, apprenticeships, and direct connections to employment opportunities. Targeted Skill Set Training: Technology and Software: Programming languages, digital marketing tools, cloud computing platforms, project management software, data visualization tools, data analysis tools, statistical analysis skills, ability to extract insights from data and translate them into actionable information. Soft skills such as collaboration, communication, critical thinking, problem-solving, and adaptability enhanced and applied in a digital context.
 Continuation of the FCCs Affordable Connectivity Program





	 Promotion and Enrollment: Track and report the number of eligible applicants who successfully enroll in the Affordable Connectivity Program. (20% increase from 2024) Continue to expand the network of CAI Wi-Fi hotspots throughout the island. Ongoing Coordination of Digital Equity with Infrastructure Planning: Continue integrating digital equity considerations into every stage of infrastructure planning and implementation. Selection of Technical Assistance Advisors: Identify advisors to gather and provide guidance on best practices for digital skills training and the utilization of online public resources. Follow up on the impact of the BEAD program on the average cost reduction of broadband plans. Digital Navigators: Continue to monitor current Digital Navigator programs and assess the need for expansion. Launch Digital Device Lending program: Assess the need for additional lending programs/digital library programs. Broadband Device and Service Subsidy Program Development: Continue to promote program for subsidizing broadband devices and services, making them more accessible to underserved populations. Cybersecurity and Online Safety Campaign Planning: Lay out a comprehensive plan for a campaign focused on cybersecurity and online safety targeting covered populations.
2027	 Grant Assistance: Provide support to local organizations in applying for Digital Equity Capacity and Competitive Grants. Continue to expand the network of CAI Wi-Fi hotspots throughout the island. Identification of Additional Funding and Policy Development for Sustained Affordable Access: Seek further funding opportunities and develop policy initiatives to maintain affordable access. Advocacy for Broadband Affordability and Digital Equity Program Policies: Promote policy initiatives that support broadband affordability and the sustainability of digital equity programs. Launch of the Cybersecurity and Online Safety Campaign: Kick off the campaign focusing on cybersecurity and online safety.





	 Collaboration with Government Agencies for Online Public Resources: Work closely with government agencies to ensure online public resources are inclusive and accessible. This includes fillable forms, online payment and other updates. Promote benefits of broadband internet to increase the number of households with monthly internet subscriptions. Continue Workforce Development programs for Digital Equity focused on target populations: Foundational Vocational Digital Skills Training Career-Specific Digital Upskilling: Courses teaching software, coding, data analysis, cybersecurity, etc., tailored to in-demand jobs. Focus on certifications, apprenticeships, and direct connections to employment opportunities. Targeted Skill Set Training: Technology and Software: Programming languages, digital marketing tools, cloud computing platforms, project management software, data visualization tools, data analysis tools, statistical analysis skills, ability to extract insights from data and translate them into actionable information. Soft skills such as collaboration, communication, critical thinking, problem-solving, and adaptability enhanced and applied in a digital context. Broadband Device and Service Subsidy Program Development: Continue to work with DPHSS to subsidize broadband devices and services, making them more accessible to underserved populations. Re-evaluate achievements and work on areas of digital equity that have revealed themselves naturally through the course of the program. Begin last phase of marketing and publicity campaign, spread word success stories, programs that began under the IFA initiatives, and ensure the people of Guam are informed of the progress made from the beginning to final push.
2028	 Continue collecting feedback from participants and staff to continuously improve programs in order to adapt to changing technology landscapes and evolving rehabilitation needs. Continue to monitor all existing workforce development, digital navigator and other programs.





	 Continue to expand the network of CAI Wi-Fi hotspots throughout the island. (Targeting all CAIs by end of year) Continue to research new funding opportunities to expand/create new DE opportunities for the covered populations. Broadband Device and Service Subsidy Program Development: Continue to work with DPHSS to subsidize broadband devices and services, making them more accessible to underserved populations.
2029	 Continue to monitor all existing workforce development, digital navigator and other programs. Continuation of the FCCs Affordable Connectivity Program Promotion and Enrollment: Track and report the number of eligible applicants who successfully enroll in the Affordable Connectivity Program. (100% increase from 2024) Continue collecting feedback from participants and staff to continuously improve programs in order to adapt to changing technology landscapes and evolving rehabilitation needs. Broadband Device and Service Subsidy Program Development: Continue to work with DPHSS to subsidize broadband devices and services, making them more accessible to underserved populations. Continue to research new funding opportunities to expand/create new DE opportunities for the covered populations. Conduct program closeout activities.

The structured goals listed above form the blueprint of our commitment to enhancing digital inclusion in Guam, ensuring that every resident has the opportunity to access and effectively utilize digital resources and services. All program implementation is dependent upon adequate funding.

6 Conclusion

Our comprehensive strategy for achieving digital equity in Guam, as elaborated in this report, encompasses a multifaceted approach. This includes the implementation of digital navigator programs, workforce development initiatives, the establishment of a widespread network of Wi-Fi hotspots through Community Anchor Institutions (CAIs), the introduction of digital





device distribution and lending programs, as well as the creation of new government programs that subsidize internet subscription services for those most in need.

Our digital navigator programs are essential for guiding community members through the myriad aspects of digital access and literacy. These navigators will be placed in key areas to assist individuals in navigating affordable, robust broadband internet services, and in choosing internet-enabled devices that align with their specific needs. They will also be poised to assist users to essential digital literacy training, cybersecurity training, and quality technical support, ensuring comprehensive digital inclusion.

The workforce development component of our plan is aimed at equipping our community with the necessary digital skills for the current and future job markets, including advanced training in fields like coding, web development, accessibility training, digital marketing, and data analytics. This prepares our residents for emerging employment opportunities within the digital realm and ensures our workforce remains competitive and adaptable.

Additionally, by leveraging CAIs like libraries, community centers, and schools, we will be establishing a network of Wi-Fi hotspots to provide consistent internet access across the island. This network is vital for enabling activities such as telehealth, online education, e-employment, digital banking, and access to public e-services, especially for our most vulnerable community members.

Another pivotal aspect of our approach is the digital device distribution and lending programs. These programs are designed to provide direct access to necessary technology for those who cannot afford it, thus bridging the digital divide more effectively. By ensuring that all community members have access to the required devices, we enable fuller participation in the digital world.

Furthermore, the creation of government programs to subsidize internet subscription services for those in greatest need represents a significant step towards digital equity. These subsidies will ensure that financial constraints do not prevent individuals from accessing the internet, thereby promoting greater inclusivity and access for all members of our community.

Incorporating these elements into our digital inclusion strategy creates a holistic and proactive approach. It addresses immediate community needs while laying a foundation for sustainable, long-term digital empowerment. Through these efforts, we aim to ensure that every member of our community can fully participate in, and benefit from the digital world, today and into the future.

7 Appendix

Appendix A: Guam Local Coordination TrackerAppendix B: Guam Community Anchor Institution List

