

A Voyage to Digital Equity in the Commonwealth of the Northern Mariana Islands

CNMI DIGITAL EQUITY
FIVE-YEAR PLAN

BPD

CNMI OFFICE OF THE GOVERNOR
BR  **ADBAND**
POLICY & DEVELOPMENT

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY.....	3
2. INTRODUCTION AND VISION FOR DIGITAL EQUITY.....	5
• 2.1. VISION.....	5
• 2.2. VULNERABLE POPULATIONS.....	6
• 2.3. ALIGNMENT WITH EXISTING EFFORTS TO IMPROVE OUTCOMES...	9
• 2.4. STRATEGY AND OBJECTS.....	11
3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS AND ASSETS.....	15
• 3.1. ASSET INVENTORY.....	15
• 3.2. NEEDS ASSESSMENT.....	29
4. COLLABORATION AND STAKEHOLDER ENGAGEMENT.....	40
• 4.1. COORDINATION AND OUTREACH STRATEGY.....	40
• 4.2. DIGITAL EQUITY CORE PLANNING TEAM.....	40
• 4.3. WEEKLY STAKEHOLDER MEETINGS.....	42
• 4.4-5. COMMUNITY AND ORGANIZATION OUTREACH SURVEY.....	42
• 4.6. ONGOING ENGAGEMENT.....	43
5. IMPLEMENTATION.....	44
• 5.1. IMPLEMENTATION STRATEGY & KEY ACTIVITIES.....	44
• 5.2. EVALUATION AND SUSTAINABILITY.....	47
• 5.3. TIMELINE.....	48
6. CONCLUSION.....	49
7. APPENDICES.....	50

1. EXECUTIVE SUMMARY

In the dynamic landscape of the digital age, where information and opportunities surge like currents across the Marianas Trench, the concept of digital equity emerges as the Commonwealth of the Northern Mariana Islands' (CNMI) northern star. Embracing the rich heritage of our traditional art of island navigation, this digital equity 5-year plan emerges as the compass, guaranteeing fair and inclusive access for every resident of the Commonwealth of the Northern Mariana Islands (CNMI).

Imagine the CNMI's diverse archipelago, as seen in the picture on the bottom right, each island representing communities and individuals with varying levels of digital access, resources, and opportunities. Just as our ancestors navigated the challenges of reaching distant islands, today's global society faces the imperative to bridge the digital divide. This analogy serves as a metaphorical voyage into the heart of digital equity, highlighting the need to build bridges that connect isolated islands, fostering an inclusive digital ecosystem where everyone can harness the benefits of the digital era.

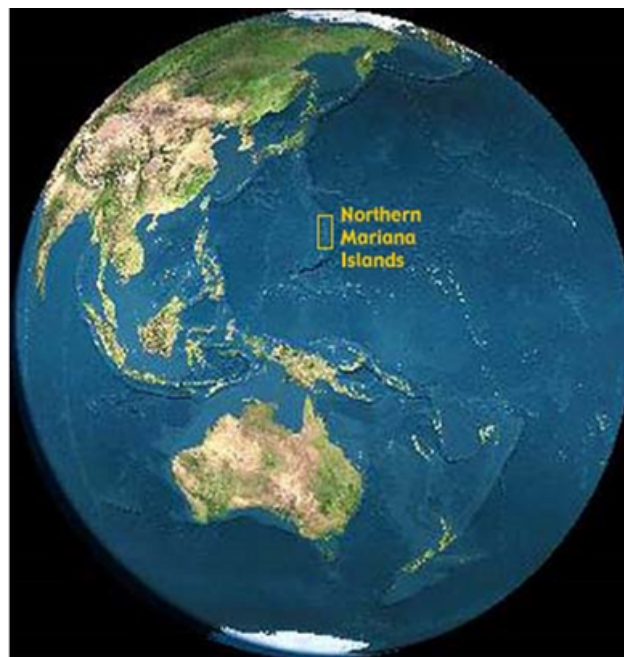
Just as our ancestors learned to adapt and innovate their navigation techniques, addressing digital equity requires creativity and forward thinking. The CNMI Broadband Policy and Development (CNMI BPD) Office, along with diverse organizations, and the community can work together to implement policies, initiatives, and programs that level the digital playing field. You will find throughout this 5-year plan, the clear need for investing in broadband infrastructure, providing affordable devices, and offering digital literacy programs in the CNMI.

As we formulated our strategy, we identified three core principles encapsulated in the "3 A's": Affordability, Accessibility, and Adaptability. These overarching principles align with the comprehensive framework of our Digital Equity Plan, which comprises our five key pillars: Health Outcomes, Educational Outcomes, Economic and Workforce Development, Essential Services, and Civic and Social Engagement. The targeted beneficiaries encompass eight vulnerable populations, namely individuals in low-income households, Aging individuals (Manamko), incarcerated individuals, veterans, individuals with disabilities, those facing language barriers, individuals belonging to racial or ethnic minority groups, and those residing in rural areas.



1. EXECUTIVE SUMMARY

The Commonwealth of the Northern Mariana Islands faces a few challenges in achieving digital equity due to its location, diverse population, and vulnerability to natural disasters in the rapidly changing digital landscape. The islands are situated in the Northwestern Pacific Ocean is around 3,700 miles west of Hawaii and 1,300 miles from Japan. (Please refer to the maps below.) Providing equal access to digital resources and technologies is a significant challenge. Additionally, the CNMI is susceptible to typhoons and other natural disasters that can disrupt transportation and communication.



To address these challenges, the CNMI BPD Office must prioritize the digital equity needs of all individuals living on the islands, recognizing the importance of inclusive access to broadband technology and resources. With a population of approximately 47,329 people¹, most residents live on three islands, namely Saipan, Tinian, and Rota, while some live in the northern islands, making all CNMI residents rural inhabitants according to the National Telecommunications and Information Administration's (NTIA) definition of a covered population. Regardless of their location or background, it is essential to prioritize digital equity for all residents.

¹<https://www.census.gov/programs-surveys/decennial-census/decade/2020/2020-census-results.html>

2. INTRODUCTION AND VISION FOR DIGITAL EQUITY

2.1. VISION

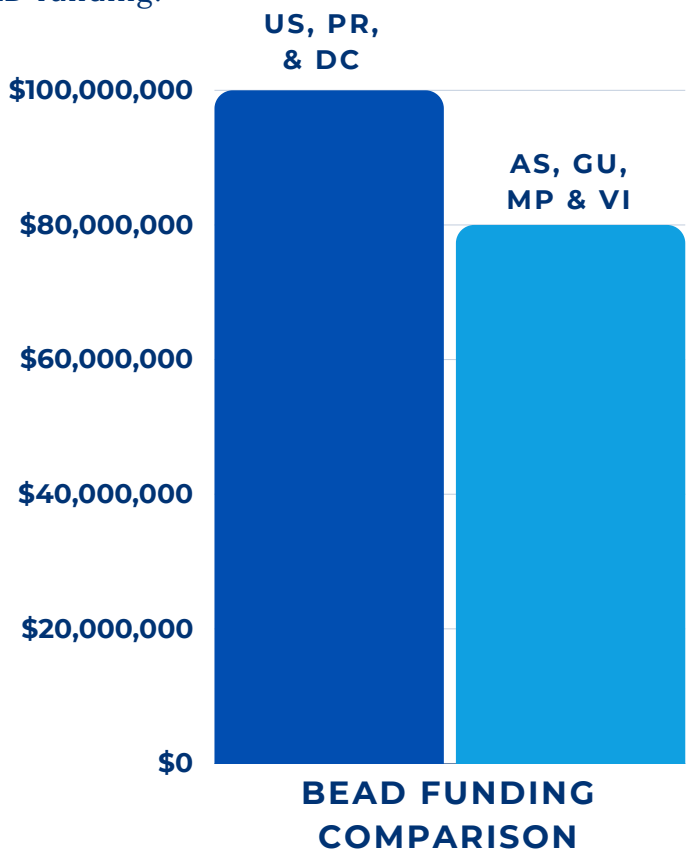
The vision of the CNMI Broadband Policy and Development Office is to:

“BE THE COMPASS THAT NAVIGATES THE CNMI’S VOYAGE INTO THE NEW DIGITAL WORLD WHERE DIGITAL AFFORDABILITY, ACCESSIBILITY, AND ADAPTABILITY ARE A COMMON WEALTH FOR ALL.”

The CNMI Broadband Policy and Development Office is dedicated to advancing the realization of CNMI's Digital Equity Vision, specifically designed to meet the unique needs of the region. This vision navigates the CNMI towards a comprehensive and context-specific understanding of "digital equity", aiming to identify challenges and mobilize resources to help overcome the ocean of digital divide, ensuring that all individuals of the CNMI possess the essential tools and knowledge to be successful in their voyage into the digital landscape.

Although the CNMI, along with Guam, American Samoa, and the US Virgin Islands, is slated to receive digital equity funding over the next three years, it has been allocated a comparatively smaller sum for identical tasks than some other grantees. Furthermore, although the CNMI is set to receive over \$80 million for the implementation of the BEAD program, this amount falls short of the pre-allocation level of \$100 million granted to every State, Puerto Rico, and Washington DC for the same initiative. **Figure 1**, located below, showcases this distinct contrast in BEAD funding.

Despite the financial limitations we are facing, as showcased in Figure 1, our commitment to meeting all the requirements of the DE Planning grant remains unwavering. We are determined to make the most of the allocated resources and advance digital equity initiatives in the CNMI. We remain resolutely focused on this goal and are dedicated to ensuring maximum impact to help us overcome challenges and achieve our objectives.



2. INTRODUCTION AND VISION FOR DIGITAL EQUITY

2.2. VULNERABLE POPULATIONS

As per the United States Census Bureau's data for 2020², the Commonwealth of the Northern Mariana Islands (CNMI) recorded a population of 47,329. During the decade leading up to 2019, the median household income witnessed a notable growth, rising from \$23,839 (adjusted for inflation) in 2009 to \$31,362 in 2019. In terms of housing, the total number of units was determined to be 18,290.

Over the years, there has been a positive shift in certain economic indicators. The percentage of families in poverty decreased from 44.4% in 2009 to 33.7% in 2019. The homeownership rate also showed a slight increase, reaching 29.0% in 2020, up from 28.3% in 2010.

The demographic landscape experienced changes as well, with the average household size in CNMI increasing from 3.22 in 2010 to 4.15 in 2020. These shifts reflect evolving patterns within the community.

The 2020 Island Areas Censuses³ provided valuable insights into technology usage, capturing data on computer and internet use. Among all households in CNMI, 96.7% possessed at least one type of computer, and 84.0% had a broadband internet subscription.

Further exploration into computing devices revealed that out of the total of 13,810 individuals with one or more types of computing devices, 8,684 owned desktops or laptops. Interestingly, 13,556 individuals owned smartphones, and 6,888 had tablets or other portable wireless computers.

In terms of internet subscriptions, data indicated that out of 12,012 households with an internet subscription, the majority (11,336) relied on cellular data plans, with 3,210 exclusively using this type of plan. Additionally, 8,605 households had broadband such as cable, fiber optic, or DSL, with 641 having no other type of internet subscription. A smaller number (151) utilized satellite internet service, with only 1 relying solely on this type. Thirteen households reported having other services with no additional internet subscription.

Despite these technological trends, 730 households had internet access without a subscription, and 1,540 households reported having no internet access at all. These statistics highlight the diverse technology landscape within CNMI, reflecting variations in connectivity and device usage across the community.

²<https://www.census.gov/programs-surveys/decennial-census/decade/2020/2020-census-results.html>

³<https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/release/2020-island-areas-data-products.html>

2. INTRODUCTION AND VISION FOR DIGITAL EQUITY

Table I. Population Definitions

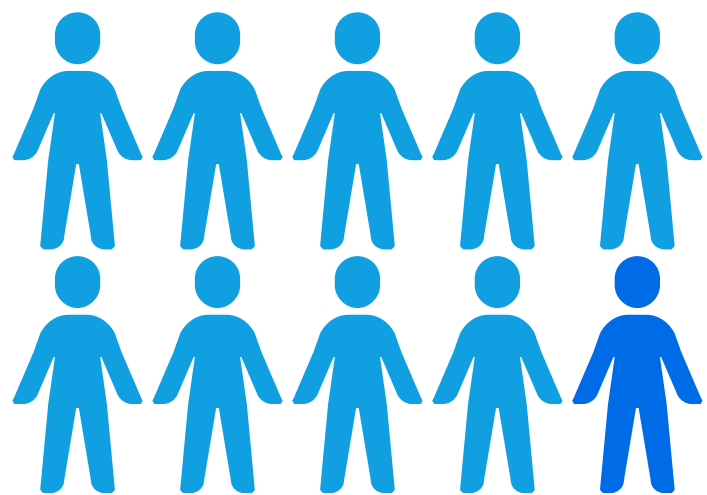
POPULATION	POPULATION DEFINITION
Individuals in Covered Households (i.e., Low-Income Households)	This category comprises individuals living in households with constrained financial resources, necessitating targeted assistance to address economic disparities. Representing 38% of the population, as per the 2019 census data, these individuals fall below 150% of the poverty threshold.
Aging Individuals (Over 65 Years Old, also known as <i>Manamko</i> in Chamorro)	Encompassing individuals aged 65 or older, this demographic faces unique considerations regarding health, social interactions, and well-being. Accounting for 5.90% of the population, as per the 2019 census data.
Incarcerated Individuals (Excluding Federal Correctional Facilities)	Describing those serving sentences at state or local correctional facilities, excluding federal prisons. Currently, there are 236 incarcerated individuals at the CNMI Department of Corrections, including juveniles, constituting about 0.5% of the CNMI population, as per the 2019 census data.
Veterans	This group includes individuals who have served in the military, representing a diverse cohort with varied experiences related to military service. Approximately 2.20% of the CNMI population are veterans, as per the 2019 census data.
Individuals with Disabilities	Encompassing individuals with physical, cognitive, sensory, or other impairments, requiring accommodations for full participation in various aspects of life. About 9.50% of the CNMI population are individuals with disabilities, as per the 2019 census data.
Individuals with a Language Barrier	English Learners: Describes individuals for whom English is not the primary language, often necessitating additional support for effective communication. Low Levels of Literacy: Refers to individuals with limited reading and writing skills in any language, facing challenges related to literacy. About 35.20% of the CNMI population are individuals with language barrier, as per the 2019 census data.

2. INTRODUCTION AND VISION FOR DIGITAL EQUITY

Table I. Population Definitions (Continued)

POPULATION	POPULATION DEFINITION
Individuals who are Members of a Racial or Ethnic Minority Group	Encompassing individuals belonging to communities with distinct racial or ethnic characteristics, often experiencing unique social, economic, or cultural contexts. 2019 census data indicates that 90.56% of CNMI residents are individuals of a racial or ethnic minority group. This distinct percentage can be seen in Figure 2 below.
Individuals who Primarily Reside in a Rural Area	All of the CNMI residents predominantly live in rural areas. As per the National Telecommunications and Information Administration criteria, a rural area encompasses open countryside, rural towns (communities with fewer than 2,500 people), and urban areas with populations ranging from 2,500 to 49,999, provided they are not part of larger labor market areas (metropolitan areas). Given that the CNMI has a total population of 47,329, it qualifies as meeting the eligibility criteria.

According to the 2019 Census Data, 90.56%, or 9/10, CNMI residents are individuals of a racial or ethnic minority group.



2. INTRODUCTION AND VISION FOR DIGITAL EQUITY

2.3. ALIGNMENT WITH EXISTING EFFORTS TO IMPROVE OUTCOMES

The establishment of the CNMI Broadband Policy and Development (BPD) Office, as directed by Governor Arnold I. Palacios through Directive 2023-003 on April 24, 2023, underscores a commitment to addressing the internet infrastructure challenges in the Commonwealth of the Northern Mariana Islands (CNMI). Situated within the Office of the Governor, as seen in the picture below, the CNMI BPD Office operates with a focus on enhancing broadband accessibility, affordability, and adaptability.

The primary objective of the CNMI BPD Office is to formulate a comprehensive broadband strategy that fosters advanced network services, stimulates the digital economy, and ensures access and affordability for residents across the islands. Recognizing the pivotal role of the internet in areas such as education, healthcare, workforce investment, economic development, emergency response, civic and social engagement, and public services, the CNMI BPD Office acknowledges the existing lag in CNMI's internet infrastructure, broadband technology, digital literacy, and engagement compared to the rest of the United States.



To remedy this disparity, the CNMI BPD Office assumes the responsibility of spearheading CNMI's efforts to secure federal grants like the Digital Equity Capacity Grant and coordinate the effective utilization of broadband funding for residents. Engaging stakeholders from both the public and private sectors, the CNMI BPD Office endeavors to revolutionize the internet infrastructure, emphasizing reliability, affordability, accessibility, and speed.

The mission extends beyond infrastructure development to promoting digital equity, ensuring that all individuals and communities possess the necessary information technology capacity for full participation in the economy and daily life. The CNMI BPD Office is dedicated to enhancing the quality of life for CNMI residents by facilitating equitable access to reliable, affordable, high-speed internet, thereby unlocking social, educational, healthcare, essential services, and economic benefits for all.

The CNMI BPD Office is unwavering in its commitment to rectifying substantial disparities in Digital Equity (DE), Broadband Equity and Adoption (BEAD). The overarching objective is to establish a robust and sustainable broadband program, facilitating the formulation and realization of crucial action items. By 2030, our aim is to guarantee reliable internet access for all residents across the CNMI.

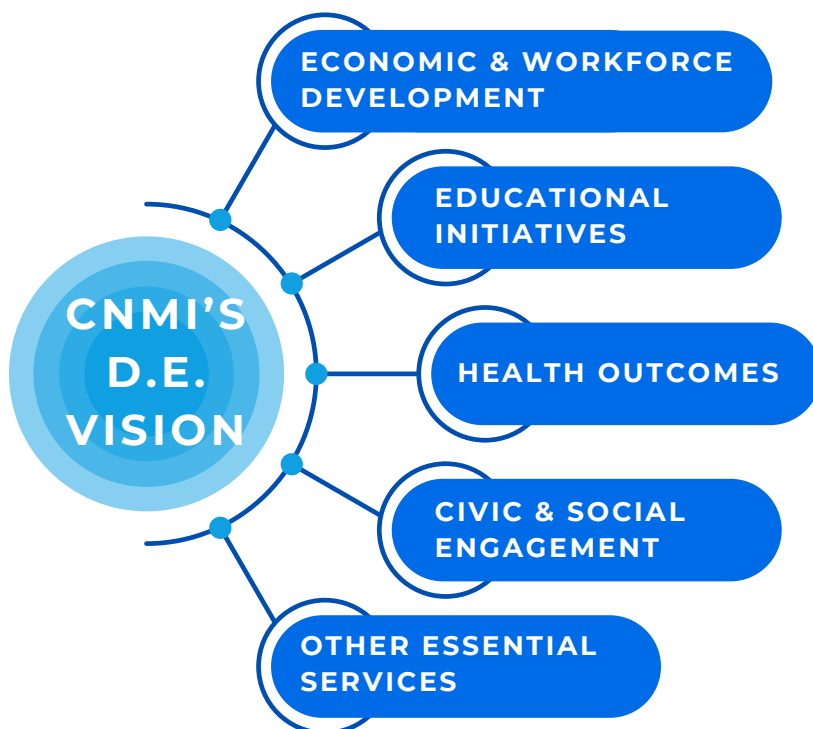
2. INTRODUCTION AND VISION FOR DIGITAL EQUITY

We are collaboratively shaping a comprehensive Digital Equity (DE) Plan, integrating short- and long-term goals, ensuring that all objectives are met using Key Performance Indicators (KPIs). This is a targeted plan, encapsulating the vision for 2030. To navigate towards these initiatives, the CNMI BPD Office is poised to submit additional funding proposals, including the DE Capacity Award, specifically tailored to support the implementation of priorities outlined in the Digital Equity Plan. The DE Capacity funding will be used directly to fund dedicated DE staff, programs, and activities to achieve the DE Five-Year Plan.

Our focus is fostering widespread adoption of broadband services and promoting digital literacy and equity throughout the community. This objective will be achieved through inter-agency and local business collaborations, targeted outreach efforts, comprehensive educational initiatives, and awareness campaigns designed to highlight the myriad benefits of digital equity. By doing so, we aim to bridge digital divides and cultivate a more inclusive and connected society.

We are dedicated to a proactive stance, reaffirming our commitment to the continual evolution of a dynamic plan that adapts to the ever-changing landscape of technological, economic, and social conditions. These forward-looking plans extend beyond mere connectivity, encompassing a comprehensive vision for a digital economy. This vision spans across crucial sectors and our five pillars, as seen in the visual below. These five pillars include economic and workforce development, educational initiatives, health outcomes, civic and social engagement, and other essential services. Our strategic approach ensures that the benefits of broadband connectivity are woven into the fabric of diverse aspects of community life, fostering a thriving and interconnected digital ecosystem.

Furthermore, the CNMI BPD Office is committed to conducting regular assessments of unmet needs identified in the Digital Equity Plan. These findings will be systematically integrated into the Five-year Broadband Plan update, ensuring that our ongoing efforts continually address any gaps in digital equity initiatives, fostering an inclusive and connected future for all.



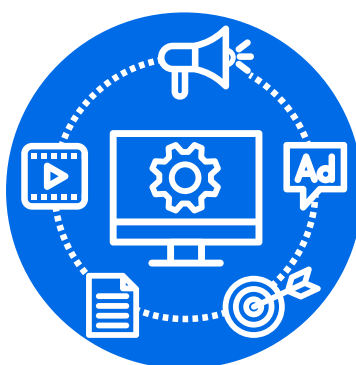
2. INTRODUCTION AND VISION FOR DIGITAL EQUITY

2.4. STRATEGY AND OBJECTIVES

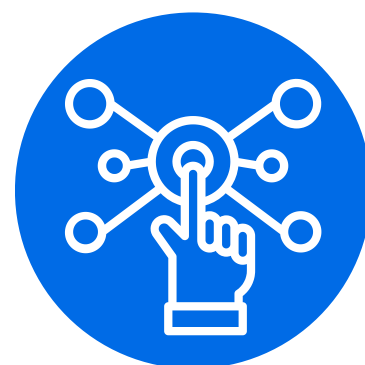
As we formulated our strategy, we identified three core principles encapsulated in the "3 A's": Affordability and Accessibility, and Adaptability. These overarching principles align with the comprehensive framework of our Digital Equity Plan, which comprises our five key pillars: Health Outcomes, Educational Outcomes, Economic and Workforce Development, Essential Services, and Civic and Social Engagement. The targeted beneficiaries encompass eight vulnerable populations, namely individuals in low-income households, Aging individuals (*Manamko*), incarcerated individuals, veterans, individuals with disabilities, those facing language barriers, individuals belonging to racial or ethnic minority groups, and those residing in rural areas.



AFFORDABILITY



ACCESSIBILITY



**ADAPTABILITY
(AGENCY)**

Affordability

Affordability refers to ensuring that individuals and communities have access to digital technologies and online resources without facing financial barriers. It involves making technology and internet services reasonably priced and accessible to a broad range of people, especially those included in vulnerable populations. Achieving affordability in digital equity aims to bridge the digital divide, allowing everyone to participate in the digital age regardless of economic constraints.

Accessibility

Accessibility refers to the extent to which digital technologies, online resources, and information are available and usable by all individuals, regardless of their abilities, socio-economic status, or other potential barriers. Achieving accessibility in digital equity involves ensuring that all vulnerable populations have access to digital tools and platforms in a way that ensures inclusivity for people with diverse needs, including those with disabilities, varying levels of technological literacy, or limited financial resources.

2. INTRODUCTION AND VISION FOR DIGITAL EQUITY

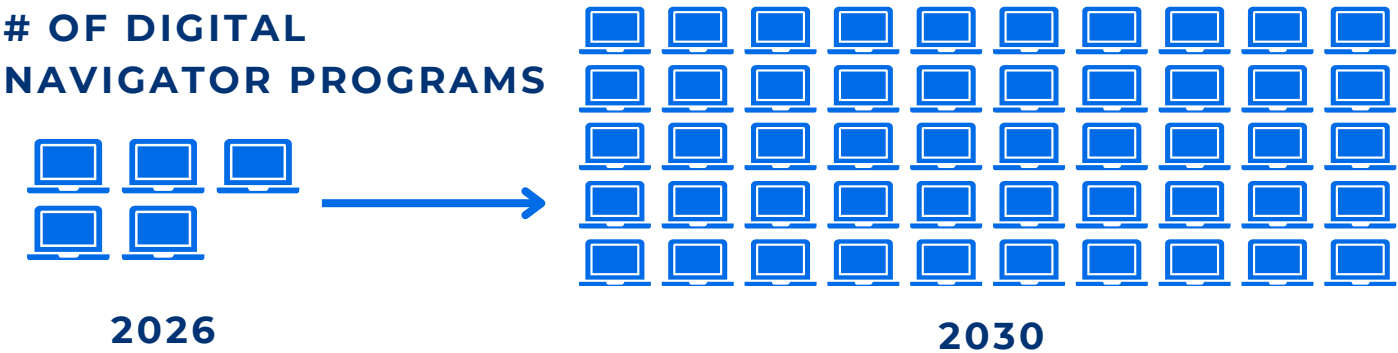
Adaptability (Agency)

Adaptability is a crucial skill that can help individuals adjust to and embrace changes in digital technologies, allowing them to thrive in the digital world. Digital literacy plays a vital role in this process by equipping individuals with the necessary knowledge and skills to adapt to new technologies. When individuals possess adaptability, they feel empowered and are better equipped with the essential tools to thrive. This provides them with the freedom and choice to embrace various opportunities, making them more successful in the rapidly changing digital landscape.

To put it simply, being adaptable in the digital age is crucial for success. The ability to learn and adapt to new technologies is key to staying relevant and competitive. With digital literacy, individuals can gain the skills and knowledge needed to navigate the changing digital landscape. This empowers them to take advantage of new opportunities and achieve success in their personal and professional lives.

Table II. Key Objectives and Strategies

Objective: Availability and Affordability of Broadband for All Covered Populations	
STRATEGIES	METRICS
Establish Community Anchor Institutions (CAIs) across the CNMI to enable residents to access free internet.	Baseline: No CAIs currently established. Near-term: Establish 5 CAIs across the CNMI by 2026. Long-term: At least 10 CAIs across the CNMI will be established by 2030.
Develop a Digital Navigator Program to provide technical assistance advisors for digital skills training and assistance.	Baseline: No digital navigator programs currently exist. Near-term: Establish 5 digital navigator programs across the CNMI by 2026. Long-term: At least 50 digital navigators across the CNMI will be trained by 2030.



2. INTRODUCTION AND VISION FOR DIGITAL EQUITY

Table II. Key Objectives and Strategies (Continued)

Develop community digital literacy workshops in collaboration with local agencies and educational institutions.	Baseline: To be determined. Near-term: Develop at least 4 digital literacy training programs by 2027. Long-term: Provide quarterly digital literacy workshops to community members throughout 2030.
Objective: Cybersecurity and Privacy Awareness	
Create and distribute educational resources on cybersecurity best practices and privacy protection measures.	Baseline: No educational resources or programs currently exist. Near-term: Create and distribute educational materials through print and social media on cybersecurity protection by 2025. Long-term: Develop marketing and awareness campaign to educate the community about cybersecurity protection and community workshops by 2026.
Ensure that technology distribution programs require participants to attend cybersecurity and privacy workshops.	Baseline: No existing data. Long-term: All individuals participating in the distribution program must attend a cybersecurity and privacy workshop.
Objective: Inclusive and Accessible Online Public Resources	
Partner with government agencies to ensure compliance with Web Content Accessibility Guidance (WCAG) and promote user experience.	Baseline: To be determined Long-term: All government agencies will be in compliance of WCAG.
Connect Technical Assistance Advisors with government agencies to promote online public resource best practices.	Baseline: To be determined Long-term: Digital navigator program will include training and support for online government services.
Enhance accessibility features of government websites and mobile applications, including text-to-speech and captioning options.	Baseline: To be determined Long-term: All government websites will be accessible to all individuals with special needs.

2. INTRODUCTION AND VISION FOR DIGITAL EQUITY

Table II. Key Objectives and Strategies (Continued)

Objective: Availability and Affordability of Consumer Devices and Technical Support	
STRATEGIES	METRICS
Offer free or subsidized access to technology and internet for those who cannot afford it.	Baseline: To be determined Long-term: By 2027, all individuals who cannot afford technology or the internet will participate in the program.
Provide devices at CAIs.	Baseline: No CAIs currently exist. Long-term: All community members will have access to necessary digital devices to utilize digital technology at CAIs.

It's crucial for us to have a clear understanding of the current state of the populations we serve and to track their progress over time. However, we've encountered a challenge in that there is a lack of existing baseline data available related to digital literacy for most of the vulnerable populations. To address this, we've made the decision to dedicate the first year of the grant solely to collecting and analyzing relevant data. This will allow us to establish a solid foundation for our work and ensure that we're able to measure the impact of our efforts effectively.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

3.1. ASSET INVENTORY

The CNMI BPD Office is actively collaborating with governmental and non-governmental entities to gather essential information to provide an accurate representation of the region's digital equity assets. Their collaboration efforts have produced valuable insights, providing a comprehensive view of the digital assets in the CNMI. This involved conducting virtual and in-person meetings, sharing data with various agencies, having one-on-one discussions, and carrying out community and organization-focused surveys.

3.1.1. Digital Inclusion Assets by Covered Population

Table III. Digital Inclusion Assets by Covered Population

Organization: Broadband Policy & Development Office	
Population Target: All	
DIGITAL INCLUSION ASSET	ASSET PURPOSE
The CNMI Broadband Office has been established and is expanding capabilities to support broadband and DE initiatives.	To achieve mandates and long-term telecommunications goals reflected in Broadband 5-year Plan, DE Plan, and CNMI's 2021-2030 CSDP.
Organization: Public School System	
Population Target: Covered Households/ Racial or Ethnic Minority Group/ Individuals in Rural Areas/ Individuals with a Language Barrier/ Individuals with Disabilities	
1) Technology on wheels / Laptop lend out program, webpage curriculum, MiFi loan for unserved children, tech hub development. 2) Sustainable funding and coursework for Technology Center and curriculum development for grades K-12 and at NMC / NM-Tech.	1) To promote and provide access to learning from grades K-12. 2) Expansion of digital literacy courses and support services offered to grades K-12; graduate level digital literacy "teachers" certified through NMC/NM-Tech programs.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Table III. Digital Inclusion Assets by Covered Population
(Continued)

Organization: DCCA Community Center Connectivity Support	
Population Target: All	
DIGITAL INCLUSION ASSET	ASSET PURPOSE
Computer access for homework and school related projects, printing applications, NAP application assistance, register for trainings and workshops (Students and parents), computers for community use.	To service low-income households, at risk youth, and students, high speed internet service area to support scholarship applications.
Organization: CHCC	
Population Target: All	
FCC Consulting Assistance for Hospitals, Schools, Libraries; Subsidy and Digital Literacy Outreach.	Successfully obtain FCC support for telehealth services and deployment through community outreach support.
Organization: NMC/ NMTech	
Population Target: All	
Technology center and curriculum development.	Expansion of digital literacy education courses and support services offered to college students and community members
Organization: Joeten Kiyu Public Library	
Population Target: All	
Internet accessibility and training support.	To expand accessibility at library internet hubs.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Table III. Digital Inclusion Assets by Covered Population
(Continued)

Organization: Department Of Labor	
Population Target: All	
DIGITAL INCLUSION ASSET	ASSET PURPOSE
Job training and online application support.	To expand worker skills and accessibility to support economic diversification and improved digital literacy.
Organization: CNMI Judiciary	
Population Target: All	
Legal services kiosks	To support access to legal forms and services and for supporting pro se filings.

3.1.2. Existing Digital Equity Plans and Programs

Currently, the CNMI lacks comprehensive digital equity plans beyond the ongoing Digital Equity Five-Year Plan. Despite this, the concerted efforts in digital equity outreach among local agencies have laid the groundwork for a flourishing wave of future collaborations. The imminent implementation of the Digital Equity (DE) capacity grant is poised to further amplify these collaborative endeavors, ensuring a dynamic and sustained trajectory toward digital equity within the islands.

3.1.3. Existing Local Programs

The Commonwealth of the Northern Mariana Islands (CNMI) currently boasts comprehensive programs facilitated by various local agencies, each dedicated to nurturing different facets of the community. Notable agencies contributing to these initiatives include the Northern Marianas Technical Institute, the Northern Marianas College, and the Workforce Investment Agency (specializing in Workforce Investment and Economic Development). Furthermore, the CNMI Public School System and the Private School Association focus on advancing education, while the Commonwealth Healthcare Corporation spearheads Telehealth services. Essential Services are managed by the CNMI Department of Public Safety and the Office of Homeland Security. Additionally, civic and social engagement flourish through the efforts of Support CNMI in collaboration with diverse community stakeholders.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Health Outcomes

The healthcare system in the CNMI encompasses both public and private providers. The Commonwealth Healthcare Corporation (CHCC), the public provider, oversees a hospital, emergency department, three municipal health centers, the Community Guidance Center, the Division of Public Health, and various ancillary services. There are also five private clinics. Residents in the territory have access to Medicare, Medicaid, and Children's Health Insurance Program (CHIP) funding.

CHCC's mission is to deliver quality comprehensive health services and foster healthy environments for a resilient community, while their vision focuses on providing sustainable, innovative, equitable, and culturally responsive services for accessible, high-quality, patient-centered wellness outcomes. The healthcare system is poised to introduce a patient portal and telehealth services to enhance patient access and convenience.

In 2021, CHCC received a \$522,722 FCC Telehealth COVID-19 Round 2 grant, facilitating the expansion of outpatient telemedicine services. This initiative particularly benefits patients on more remote islands, reducing the need for air travel and minimizing COVID-19 exposure. The potential for telehealth in behavioral mental health services is also recognized, with ongoing internet connectivity upgrades on Tinian and Rota.

CHCC serves the CNMI guided by the core principles of **Affordability, Accessibility, and Adaptability**—also known as the 3 A's, inclusive to all, especially to the eight vulnerable populations. On the front of **Affordability**, CHCC stands as a public service provider committed to offering cost-effective options, inclusive of accessible healthcare choices for all. Acceptance of Medicaid and Medicare further underscores its dedication to ensuring financial accessibility for covered households. Recent initiatives aimed at facilitating COVID-19 vaccination for the elderly (manamkos) underscore the priority and attentive care provided by the Commonwealth Healthcare Corporation (CHCC) to this demographic. In a concerted effort to effectively address the healthcare needs of incarcerated individuals, the Prescription Drug Monitoring Program Training and Technical Assistance Center (PDMPTTAC) offers an extensive overview of the Northern Mariana Islands Prescription Drug Monitoring Program (CNMI PDMP). This comprehensive report delves into the 2020 data and highlights new features implemented in 2021. To address the needs of those with a language barrier in the CNMI, CHCC embarked on an initiative to enhance patient experience and care in 2017. The organization aimed to introduce a language line service, facilitating effective communication between doctors and patients. This on-demand interpreting service, known as a language line, was designed to eliminate language barriers that often impede clear communication between medical professionals and patients, particularly during critical and challenging phases of treatment.⁴

⁴https://www.saipantribune.com/news/local/chcc-avails-of-language-interpreting-service/article_4e6eaf3b-830d-5be6-9b4c-736cdfc922f1.html

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Under the administration of the Commonwealth Healthcare Corporation, CNMI PDMP ensures that access to its data by law enforcement agencies is restricted to instances with a court order/approval and a written request. The report also underscores the technological strides made by the PDMP, particularly its enhanced capability for interstate data sharing. This commitment to technological advancement aligns with the broader goal of improving healthcare and safety measures for the community.⁵

In terms of **Accessibility**, CHCC is a beacon of inclusivity, welcoming individuals from diverse backgrounds, regardless of socio-economic status, disability, or ethnic language. The organization is dedicated to serving all eight vulnerable populations, fostering a healthcare environment that is open and accessible to the entire community.

CHCC's commitment to **Adaptability** is evident in its embrace of modern technological advancements and evolving workforce practices. By staying attuned to contemporary healthcare trends and leveraging technology, CHCC remains agile and responsive to the changing needs of its community, ensuring the delivery of quality healthcare services.

Workforce Investment and Economic Development

The most recent comprehensive data on employment and unemployment in the CNMI is sourced from the CNMI 2020: Decennial Census of Islands (DECIA)⁶, officially released in July 2023. This report offers a detailed analysis of employment and unemployment characteristics, encompassing labor participation rates and trends.

Among residents aged 16 and older, 53.0% (18,759 individuals) were employed across diverse occupations, distributed as follows:

- Management, business, science, arts occupations: 28.4%
- Service occupations: 24.6%
- Sales and office occupations: 20.0%
- Natural resources, construction, and maintenance occupations: 16.4%
- Production, transportation, and material moving occupations: 10.6%

The majority, comprising 72.0%, were employed in the private sector; 25.7% in the public sector; and 2.3% were self-employed. Median earnings varied, with male full-time workers earning a median of \$18,857, and female full-time workers earning \$20,090.

In terms of unemployment, the CNMI's unemployment rate is reported at 14.1%, while the Labor Force Participation Rate stands at 61.7%.

⁵<https://bja.ojp.gov/library/publications/prescription-drug-monitoring-program-northern-mariana-islands-profile-2021>

⁶<https://data.census.gov/allg=040XX00US69&d=DECIA+Commonwealth+of+the+Northern+Mariana+Islands+Demographic+and+Housing+Characteristics>

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Analyzing the employed population (18,759 civilian employed population aged 16 and older) from the CNMI 2020 DECIA, the distribution across industries is as follows:

- Arts, Entertainment, Recreation, Accommodation, and Food Services: 20.3%
- Educational Services, Health Care, and Social Assistance: 12.4%
- Public Administration: 12.0%
- Construction: 11.7%
- Retail Trade: 11.3%
- Professional, Scientific, Management, and Administrative and Waste Management Services: 8.7%
- Transportation and Warehousing, and Utilities: 7.2%
- Finance, Insurance, Real Estate, Rental and Leasing: 4.1%
- Other Services, Except Public Administration: 3.9%
- Wholesale Trade: 3.0%
- Manufacturing: 2.2%
- Information: 2.1%
- Agriculture, Forestry, Fishing and Hunting, and Mining: 0.9%

Based on the insights gleaned from the employment and unemployment data, it becomes evident that the trades workforce is robust in the CNMI. Given the unique nature of our island territory, a profound understanding of the needs and preferences of our residents is paramount. Our rich cultural heritage significantly shapes the arts, accommodation, and recreation workforce. By enhancing the skills and knowledge of more CNMI residents, we have the potential to foster a thriving and culturally enriched economy. These cultural foundations can be nurtured and expanded through the exclusive institute in the CNMI, NMTech, which provides training and certifications to harness the resourcefulness of individuals.

The Northern Marianas Technical Institute (NMTech⁷) is leveraging its existing infrastructure for workforce development to contribute to state digital equity planning and capacity building. With a mission to invest in students through advanced trades, career, and technical education, NMTech aims to produce skilled individuals, fortify the CNMI's workforce, and equip them with technical skills and core fundamentals for the evolving world.

Aligned closely with the State Digital Equity Plan, NMTech envisions technology as a pivotal tool to ensure full and equitable digital access for all individuals, businesses, and communities in the CNMI, fostering economic and personal opportunities. Originally established as a non-profit organization in 2008, NMTI (Trades) underwent a transition to a non-profit public corporation, officially established by PL 20-92 in 2019, with the process finalized in 2021.

⁷NMTech website: <https://www.nmtechnmi.org/>

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

NMTech, initially launching seven existing programs, is now able to offer up to 29 programs in the trades and technical fields, including safety best practices through an Alliance Agreement with Federal and CNMI OSHA. In addition, NMTech has formed an official partnership with Google to offer digital skills courses in the Pacific Region.

Through the Governor's Education Stabilization Funds (ESF-II), NMTech bolstered its infrastructure, strengthened its network infrastructure, and updated instructional technology in most of its instructional spaces. Positioned as a Community Anchor Institution, NMTech plans to extend services to neighboring islands like Rota and Tinian, providing technology access through workspaces or work pods for the general population.

Anticipating the completion of a new campus in Koblerville by 2027, NMTech envisions transforming the current Lower Base campus in Saipan into a Maker's Lab or Incubator, fostering technological advancements in various technical fields that would be accessible to members of the community.

NMTech actively fulfills the principles of the "3 A's" – **Affordability, Accessibility, and Adaptability** –by design. Its commitment to providing advanced trades, career, and technical education aligns with the goal of **Affordability**, ensuring that education and skills development are accessible to a diverse range of individuals. NMTech collaborates with the CNMI Department of Labor under the Workforce Innovation and Opportunity Act (WIOA) to make affordable training and skill enhancement accessible, thereby fostering upward mobility. Enacted on July 22, 2014, WIOA is designed to support job seekers by providing access to employment, education, training, and support services, ultimately ensuring success in the labor market. Additionally, WIOA emphasizes the alignment of workers' skills with the requirements of employers, enhancing competitiveness in the global economy.

In terms of **Accessibility**, NMTech's initiatives extend beyond Saipan to neighboring islands, expanding services and technology access to a broader community. The establishment of workspaces or workpods further enhances accessibility, reaching beyond traditional classroom settings.

Adaptability is ingrained in NMTech's approach, as evidenced by its transition from a non-profit organization to a non-profit public corporation, demonstrating flexibility to meet evolving needs. The ongoing updates to instructional technology, partnerships with industry leaders like Google, and plans for a new campus showcase NMTech's commitment to staying adaptable and relevant in the ever-changing landscape of technical education.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

In essence, NMTech serves the 3 A's by making education affordable, extending accessibility to diverse populations, and maintaining adaptability to align with the evolving demands of the digital era, inclusive to all eight vulnerable populations. Covered households or individuals with low income are eligible for financial aid that covers most, if not, all of tuition fees. As defined by the USDA, the CNMI as a whole is considered rural; therefore, NMTech serves and accommodates this population. NMTech and the CNMI Department of Corrections work closely together to empower inmates with education and training, aiming to enhance their skills for successful reintegration into the workforce. Participants in their Outreach Program have achieved certifications in the National Center for Construction Education & Research (NCCER) CORE Curriculum and Electrical fields. This educational initiative is formalized through an official Memorandum of Agreement between the DOC and NMTech, focusing on bolstering system capacity in the reentry program to reduce recidivism. Furthermore, NMTech extends support to covered populations through scholarship programs such as WIOA, CNMI Scholarship Office, and Saipan Higher Education Financial Aid. In support to individuals with disabilities, the NMTech has signed a memorandum of understanding with the Office of Vocational Rehabilitation to ensure that individuals with developmental disabilities and their families have the same opportunities as others in the community by allowing a smooth and hassle-free transition for consumers to take classes at NMTech. Unfortunately, there is no baseline data on the specific accommodation to the manamkos, veterans, ethnic or minority groups, and language barrier populations; however, NMTech is inclusive to all members of the community regardless of background.

Educational Outcomes

The data from the 2020 Decennial Census of Island Areas⁸ indicates a total population of 47,329. Among them, 10,846 individuals are enrolled in public schools, distributed across various educational levels. Specifically, 378 are in nursery school, preschool, or pre-kindergarten, 554 in kindergarten, 5,451 in grades 1 to 8, 2,983 in grades 9 to 12, and 1,480 in college, graduate, or professional school.

Additionally, 2,133 individuals are enrolled in private schools or being homeschooled, with varying numbers at each educational level. This includes 198 in nursery school, preschool, or pre-kindergarten, 231 in kindergarten, 1,052 in grades 1 to 8, 353 in grades 9 to 12, and 299 in college, graduate, or professional school. A significant portion of the population, 32,459 individuals, is not enrolled in school.

The Commonwealth of the Northern Mariana Islands Public School System (CNMI PSS) is the educational authority responsible for overseeing and managing public education in the Northern Mariana Islands.

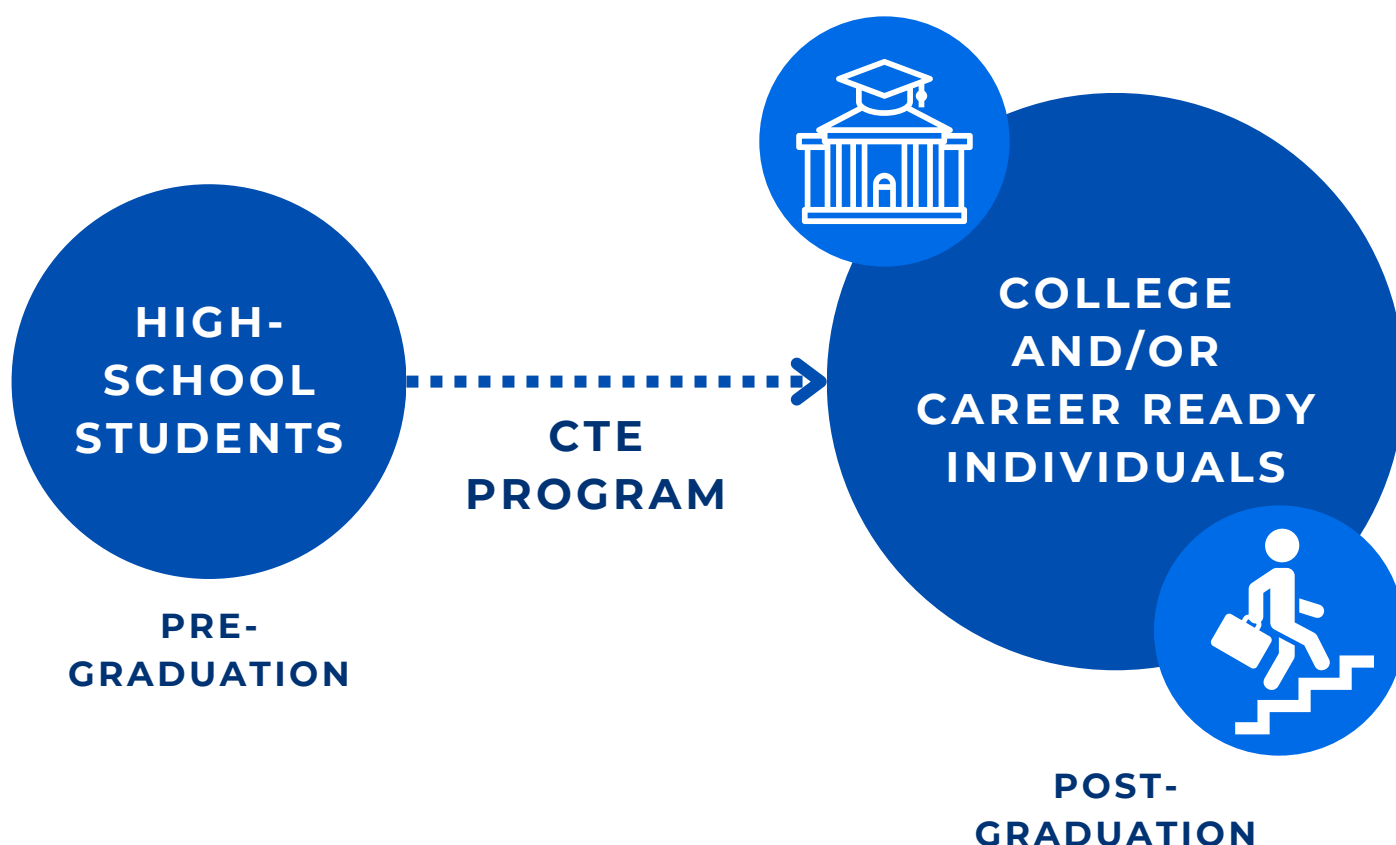
⁸<https://data.census.gov/allg=040XX00US69&d=DECIA+Commonwealth+of+the+Northern+Mariana+Islands+Demographic+and+Housing+Characteristics>

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

The CNMI PSS is leveraging its existing educational infrastructure to play a pivotal role in state digital equity planning and capacity building. In its commitment to digital equity, CNMI PSS provides access to devices and internet connectivity at all sites, coupled with digital literacy skill-building initiatives for students. Ongoing professional development for teachers and staff supports the integration of technology into education, while digital literacy training extends to parents. The program strives for equitable resource distribution, exemplified by its robust response during the Covid-19 pandemic. CNMI PSS facilitated Wi-Fi access through "Wi-Fi on wheels," transforming school buses into mobile hotspots. Collaborations with community organizations established "community Wi-Fi centers," and students in need received MiFi devices for remote learning.

Simultaneously, the CNMI PSS Career and Technical Education (CTE) Program is dedicated to inclusivity, offering diverse Career Clusters and Pathways. Integrating a rigorous and relevant curriculum with academics, the program forms high school and post-secondary partnerships leading to various degrees and pathways to employment. The emphasis on foundational, pathway, occupational, and 21st-century skills within its framework positions the program as a dynamic force in education.

The vision of the CTE Program is to produce College and Career Ready students, offering enhanced Career and Cluster Pathways, a rigorous and relevant academic curriculum, effective partnerships addressing high-growth industries, and a progressive 21st-century CTE Framework, as seen in the visual below.



3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Aligned with CNMI PSS's mission of "Educating lifelong learners to become productive citizens of a global society," CNMI PSS is actively addressing the educational needs of vulnerable populations, excluding veterans and the elderly. As a public education system, education is equitable to individuals in a covered household. Notably, CNMI PSS extends its educational services to youth in the justice system, ensuring comprehensive instruction is delivered by highly qualified classroom teachers. Collaborating with home schools, the program ensures that all educational services are seamlessly provided to incarcerated youth and their families, facilitating a smooth re-entry into the school setting. Furthermore, CNMI PSS extends support to students with disabilities and language barriers through three dedicated programs: Head Start/Early Learning, Special Education Program, and Early Intervention Program. The 2020 Decennial Census of Island Areas⁹ reveals a total population of 3,721 individuals reported as having a disability. Among those with a disability, the educational distribution is as follows: 949 have less than a high school graduate education, 1,498 are high school graduates (including equivalency), 761 have completed some college or obtained an associate's degree, and 513 hold a bachelor's degree or higher.

Given the rural nature of the CNMI, CNMI PSS is designed to cater to the needs of individuals residing in rural areas. Additionally, to ensure inclusivity, CNMI PSS employs distance learning methods for students who may benefit from such accommodations. Unfortunately, there is no baseline data for ethnic or minority groups.

CNMI PSS's concerted efforts align harmoniously with the "3 A's" – **Affordability, Accessibility, and Adaptability**, ensuring that education is accessible, affordable, and adaptable to the evolving needs of our communities, both locally and globally.

Essential Services

The CNMI Department of Public Safety is dedicated to delivering top-tier public safety services, prioritizing community well-being, and striving to reduce crime rates in the Commonwealth of the Northern Mariana Islands. Through collaborative partnerships with the community, stakeholders, and partners, DPS is committed to addressing challenges, ensuring visibility, and enhancing overall safety and quality of life. Key objectives include crime reduction, community engagement, a modern workforce, promotion of equality and diversity, fostering a culture of leadership, upholding integrity, and optimizing resource utilization for the benefit of the public.

Within the DPS structure, several units operate, including the DPS Patrol Section, Criminal Investigation Division, Boating Safety Section, Division of Motor Vehicles, and Highway Patrol Section. Post-pandemic expenses for fiscal year 2023 predominantly focused on personnel salaries, followed by operational costs, particularly significant expenditures on gas and vehicle maintenance for the entire DPS Fleet.

⁹<https://data.census.gov/allg=040XX00US69&d=DECIA+Commonwealth+of+the+Northern+Mariana+Islands+Demographic+and+Housing+Characteristics>

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Notable activities included virtual attendance at various training courses and conferences by Highway Safety Office and Highway Patrol personnel, covering Event Data Recorder (EDR) Training, Standardized Field Sobriety Testing (SFST), and Laser/Radar Training.

Despite these efforts, DPS faces several challenges, including reassessments of communications and internet connectivity, providing essential computer use and printing assistance during daytime office hours, and outfitting all police personnel with high-quality law enforcement gear and high-caliber armor. The agency also grapples with outdated computers running obsolete operating systems, hindering compatibility with essential software for daily operations. Limited internet service connection at some DPS satellite offices adversely affects online communication and work efficiency. Additionally, funding is required to equip all offices and report writing rooms with updated computers, software, printers, and support for implementing REAL ID.

In 2005, the Office of Homeland Security was established under the Commonwealth of the Northern Mariana Islands (CNMI) Office of the Governor through Public Law No. 14-63. However, a significant reorganization occurred in 2013 with the enactment of Public Law No. 18-4, consolidating the Office of Homeland Security and the Office of Emergency Management. This integration gave rise to the CNMI Office of Homeland Security and Emergency Management (HSEM).

Comprising key divisions such as Finance and Administration, Personnel Management, and Financial Management, CNMI HSEM operates through effective collaboration and island-wide partnerships, dedicated to safeguarding the islands from diverse threats. The agency's mission is to protect lives, property, and the environment by preparing for, preventing, responding to, and recovering from all threats, crimes, hazards, and emergencies. This involves coordinating efforts within the first response community and fostering collaborations with public, private, and community entities.

In terms of disaster preparedness, CNMI HSEM played a pivotal role in responding to Typhoon Mawar and Typhoon Bolaven. The agency led the response and recovery efforts, working alongside local and federal counterparts to restore essential services to impacted CNMI residents.

The CNMI Department of Public Safety and the CNMI Office of Homeland Security and Emergency Management demonstrate a commitment to **Affordability** through prudent financial practices, emphasizing resource optimization. They prioritize **Accessibility** by actively engaging with the community, addressing challenges related to communication and technology accessibility. Additionally, both agencies show a dedication to **Adaptability** through various initiatives.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

These initiatives include workforce development, disaster response, and strategic planning for advanced communication systems, reflecting a forward-looking approach to evolving needs. Together, these efforts underscore a commitment to effective, inclusive, and responsive public safety and emergency management in the Commonwealth of the Northern Mariana Islands, all while serving the CNMI, inclusive to the eight vulnerable populations. The University Center for Excellence in Developmental Disabilities, under the Northern Marianas College, is in partnership with CNMI DPS, Homeland Security Emergency Management, Department of Fire Emergency Medical Services, CNMI Office of Transit Authority and the Disabilities Network to set CNMI emergency response accommodations to individuals with a disability and or language barrier. These institutions cater to the CNMI as a whole; inclusive to incarcerated individuals, covered households, manamkos (elders), veterans, ethnic or minority groups, and those in a rural area.

Civic and Social Engagement

Support CNMI is a collaborative coalition uniting public, private, and non-profit agencies with a shared goal of enhancing the network of social services for the community. The Northern Marianas College - Cooperative Research, Extension, and Education Services (NMC-CREES) maintains this website. NMC's role as a conduit brings together service providers, agency representatives, and nonprofits to create a safety net and connect individuals with opportunities to improve their quality of life. The website provides easier access to navigate food, housing, medical, employment, emergency crisis assistance, health insurance, behavioral health, disability service, financial wellness, education, faith-based institutions, justice system, legal services, parental services, transportation, and youth services.

In addressing the fiscal crisis, the coalition's dedication to collective action, discussing coordination efforts and actively seeking additional funding. This involves leveraging local resources, despite their scarcity, and collaborating to secure more federal funds to benefit those most in need.

Key organizations forming part of Support CNMI include the Northern Marianas Technical Institute, Marianas Alliance of Non-Governmental Organizations, CNMI Department of Labor, Commonwealth Medicaid Agency, Karidat, Commonwealth Healthcare Corporation, DOL-Workforce Investment Agency Division, Kagman Community Health Center, Office of Personnel Management, NMC, NMC-CREES, Public School System, DCCA-DYS Family & Youth Enhancement Program, and the Nutrition Assistance Program. This collective effort showcases a comprehensive approach to community support and resilience.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

This initiative embodies key principles of **Affordability** by optimizing resources in the face of a fiscal crisis, **Accessibility** through coordinated efforts and an informative website, and **Adaptability** by actively seeking additional funding and maintaining a diverse representation of organizations. The coalition's holistic strategy underscores its dedication to building resilience and adaptability in addressing the dynamic requirements of the Commonwealth of the Northern Mariana Islands (CNMI), particularly focusing on the eight vulnerable populations. The Support CNMI website has been designed to cater to individuals facing challenges such as disabilities and language barriers, providing tailored accommodations. The platform delivers specialized services to assist specific groups, including manamkos, covered households, veterans, ethnic or minority communities, and rural residents, ensuring they can access the support they require from various programs.

3.1.4-5. Broadband Adoption, Affordability, and Adaptability

Currently, there are 2,818 cable modem subscribers and 6,300 DSL subscribers, constituting the user landscape for internet services. The existing rates for various tiers are between \$70-\$120 for speeds ranging from 30-90 Mbps down and 5 Mbps up. It is crucial to address the disparity in rates, especially for lower-speed connections, as they are notably higher in the CNMI.

Collective advancements signify a promising future for the island's internet infrastructure. The introduction of Fiber to the Home technology through the BEAD Program ensures a quantum leap in internet speeds. The implementation of a subsea cable directly to CNMI is a strategic move to enhance connectivity and lower operational costs for Internet Service Providers (ISPs). Additionally, the Local ACP Funded Program, with a subsidy of \$30.00, plays a crucial role in making high-speed internet more affordable for residents.

The CNMI efforts aim to significantly improve broadband accessibility, usage, and safety throughout the CNMI, designed to boost competitiveness in the digital economy and enhance the overall quality of life for residents. The plan includes expedited deployment of high-capacity broadband infrastructure, ensuring the safety and security of networks, advocating for streamlined public policies to overcome obstacles, and developing targeted strategies for underserved areas. We are embracing a diverse range of broadband solutions, encouraging local and regional planning, and actively seeking federal funding to achieve our goals. Moreover, we are placing a strong emphasis on public awareness, digital equity, and effective communication with both the CNMI and federal agencies. The ultimate goal is to create and implement a comprehensive broadband strategy that promotes advanced network services, expands the digital economy, increases consumer options, fosters digital literacy, enhances broadband equity, and ensures access and affordability for residents across the Commonwealth's islands.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Together, these initiatives are poised to revolutionize the island's internet landscape, offering a combination of swifter speeds and more competitive pricing. However, these initiatives do not completely bridge the digital divide. There is still a need to bridge the gap between availability, affordability, and accessibility to those who need it most. There are several key areas that need to be addressed, including broadband technology, online accessibility, digital literacy, cybersecurity measures, and availability and affordability of consumer devices and technical support.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

3.2. NEEDS ASSESSMENT

3.2.1. Covered Population Needs Assessment

Table IV. Health Pillar's Covered Population Needs Assessment

HEALTH	
POPULATION	NEEDS ASSESSMENT
Covered Households	Challenges include insufficient funding for devices, limited internet access, gaps in community databases, and inadequate medical resources, impacting health outcomes.
Incarcerated Individuals	Access issues to digital workpods, workforce-related challenges, device management difficulties, cybersecurity concerns, and compliance issues with Health Insurance Portability & Accountability Act (HIPAA) create barriers to health improvement.
Individuals with Disabilities	Barriers involve limited access to devices, low digital literacy, challenges in accommodating services, issues with 504 compliances, and difficulties in navigating websites.
Veterans	Challenges include the affordability of devices and internet, accessibility issues with the Office of Veterans' Affairs' services, lack of awareness about digital programs, outreach challenges, and issues in digital communications.
Individuals with a Language Barrier	Barriers encompass English as a second language (ESL) and low literacy, difficulties in website accessibility, reliance on digital translators, and challenges in developing digital literacy skills.
Member of a Racial or Ethnic Minority Group	Challenges involve limited availability of online resources in multiple languages, the need for language translation in the Pacific region, and addressing cultural diversity in health-related programs.
Individuals who Live in a Rural Area	Barriers include challenges in telehealth due to network infrastructure limitations, geographic isolation issues, accessibility concerns, and affordability challenges.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

After a thorough examination of health barriers affecting each of the eight vulnerable populations, as gathered and identified through focus groups, it becomes evident that Telehealth services could serve as a pivotal solution in the CNMI. Telehealth serves as a comprehensive solution to the 3 A's—Affordability, Accessibility, and Adaptability—in healthcare. By leveraging digital technologies, Telehealth reduces costs, making healthcare more affordable for both patients and providers. It overcomes geographical barriers, ensuring accessibility for individuals in remote or underserved areas. Additionally, Telehealth offers adaptability through flexible delivery of care and continuous monitoring, accommodating diverse patient needs and improving overall healthcare quality. This digital approach revolutionizes healthcare delivery, making it more cost-effective, accessible, and adaptable to the evolving needs of patients.

Despite facing challenges in establishing sustainable telehealth services—such as infrastructure limitations, reimbursement issues, change management, and the need for new payment structures—a significant opportunity arises.

The Commonwealth Healthcare Corporation’s off-island medical referral program, one of the highest-cost programs, is undergoing restructuring to integrate telehealth. This strategic shift aims to improve care coordination, potentially reducing unnecessary off-island referrals and associated costs, which amounted to \$17.8 million in FY 2019, exceeding the annual budget appropriation of approximately \$2 million. Through the implementation of this 5-year digital equity plan, the CNMI is poised to embark on a journey towards a new realm of opportunity— Telehealth.

Table V. Education Pillar’s Covered Population Needs Assessment

EDUCATION	
POPULATION	NEEDS ASSESSMENT
Covered Households	Affordability concerns, limited accessibility, and the adaptation challenges of remote education create barriers.
Incarcerated Individuals	Challenges arising from adherence to the Family Educational Rights and Privacy Act (FERPA) hinder educational opportunities.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Table V. Education Pillar's Covered Population Needs Assessment (Continued)

EDUCATION	
POPULATION	NEEDS ASSESSMENT
Individuals with Disabilities	Affordability issues, the necessity for accessible/assistive devices, literacy challenges, limited availability of online classes/tutorials, and adherence to accessibility standards present barriers. Consumer/technical support, such as a Digital Navigator, is also crucial.
Veterans	Barriers involve awareness gaps about where to seek help, accessibility challenges, and issues related to digital addresses (IP addresses mapped with Asian countries, US-facing IP addresses).
Individuals with a Language Barrier	Challenges include a lack of resources and literacy issues impacting accessibility, including ESL. Digital addresses (IP addresses mapped with Asian countries, US-facing IP addresses) add complexity to the barrier.
Member of a Racial or Ethnic Minority Group	Barriers involve limited resources, literacy challenges, and obstacles related to shipping hardware/infrastructure (restriction accessibility), availability, timing, warranty, and support. IP addressing complexity exacerbates the challenge.
Individuals who Live in a Rural Area	Challenges encompass shipping hardware/infrastructure (restriction accessibility), limited availability, timing constraints, warranty issues, support challenges, and complexities in IP addressing when purchasing affordable devices.

These barriers were identified through collaborative efforts involving BPD's Digital Equity Core Planning Team, focus groups, and interviews. Our analysis indicates that a strategic partnership with the CNMI Public School System to enhance the existing Information Technology/Computer Science curriculum is a key avenue for effectively addressing barriers faced by six of the eight vulnerable populations. Leveraging the fact that the CNMI PSS serves the majority of CNMI students at no cost, this partnership ensures equitable extension of digital opportunities to a broad age group that includes backgrounds of Covered Households, Incarcerated Individuals, Individuals with Disabilities, Individuals with a Language Barrier, Members of a Racial or Ethnic Minority Group, and Individuals who Live in a Rural Area.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Furthermore, to address all eight vulnerable populations comprehensively, establishing digital literacy workshops across the entire CNMI emerges as a robust means of support for building a more sustainable education system. The CNMI BPD Office will partner and collaborate with an organization that offers digital literacy workshops inclusive and equitable to all.

A significant portion of the community lacks basic digital literacy skills, posing a hindrance to effective engagement with technology. Awareness and knowledge gaps in cybersecurity present risks to online safety. Barriers faced by community members, especially those from vulnerable populations, in accessing and utilizing basic IT tools are apparent. The availability of resources, including trained instructors, materials, and suitable venues, remains a critical factor impacting the successful implementation of digital literacy workshops. This holistic approach ensures that the educational system is more inclusive, addressing the specific needs of each vulnerable population and fostering a digitally literate and adaptable community.

These collaborative initiatives not only capitalize on the affordability and accessibility of the programs but also align with the goal of providing inclusive and tailored education to diverse demographics. The emphasis on fostering adaptability through digital literacy and skills empowers individuals across vulnerable populations, preparing them for the evolving landscape of technology and enhancing their overall educational experience.

Table VI. Workforce Investment and Economic Development Pillar’s Covered Population Needs Assessment

WORKFORCE INVESTMENT AND ECONOMIC DEVELOPMENT	
POPULATION	NEEDS ASSESSMENT
Covered Households	Barriers include literacy challenges, limited digital skills, lack of digital comprehension and awareness, unfamiliarity with netiquette, inadequate e-commerce literacy, and the need for promotion of remote work. Online tutorials for entrepreneurs, cybersecurity awareness, and mock interviews also pose challenges.
Aging Individuals	Barriers involve challenges in adapting to new career pathways and certifications, reflecting a need for educational and training support.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Table VI. Workforce Investment and Economic Development Pillar's Covered Population Needs Assessment (Continued)

WORKFORCE INVESTMENT AND ECONOMIC DEVELOPMENT	
POPULATION	NEEDS ASSESSMENT
Incarcerated Individuals	Digital literacy gaps persist, with transitional programs and existing information not adequately reaching the incarcerated community. Communication gaps hinder effective outreach and the provision of relevant information.
Individuals with Disabilities	Challenges include the need for enhanced digital literacy programs, tailored transitional support, and a lack of accessibility to existing information within the veteran community. Cybersecurity concerns also arise regarding password tracking.
Veterans	Lack of coordination and data sharing between local, regional, and national veterans' offices. Additionally, remote work faces challenges related to the quality of internet speed, network infrastructure, and geographic isolation.
Individuals with a Language Barrier	Challenges involve limited access to information about career pathways and certifications due to language barriers, impacting economic development opportunities.
Member of a Racial or Ethnic Minority Group	Barriers include difficulties in accessing information about career pathways and certifications, potentially hindering workforce development within minority communities.
Individuals who Live in a Rural Area	Challenges include limitations in remote work opportunities due to issues such as network infrastructure, geographic isolation, and internet speed.

Effectively addressing barriers to upskilling and professional development across diverse demographic groups necessitates a strategic approach that centers on affordability, accessibility, and adaptability. For covered households facing literacy challenges and limited digital skills, the emphasis is on providing affordable and accessible digital literacy programs, online tutorials, and remote work promotion. Aging individuals encountering challenges in adapting to new career pathways benefit from tailored upskilling programs coupled with educational support, ensuring accessibility to evolving career opportunities.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Incarcerated individuals, facing digital literacy gaps and communication challenges, require transitional programs and improved outreach for existing information to enhance accessibility to professional development resources. Individuals with disabilities, dealing with accessibility issues and cybersecurity concerns, benefit from enhanced digital literacy programs, tailored transitional support, and cybersecurity training, promoting inclusivity in professional development opportunities.

Veterans, encountering limited remote work opportunities and lack of coordination and data-sharing challenges with various veterans’ offices, would benefit from upskilling programs tailored to their unique challenges, including cybersecurity training and support for remote work in areas with limited infrastructure. Those with language barriers require access to professional development materials in multiple languages, while racial or ethnic minority groups benefit from culturally sensitive resources and targeted outreach.

Residents in rural areas facing limitations in remote work opportunities due to infrastructure issues find solutions through investments in improved network infrastructure, remote-friendly upskilling programs, and addressing internet speed challenges. In summary, the key to fostering inclusivity in upskilling and professional development lies in tailoring initiatives to be affordable, accessible, and adaptable. This ensures that individuals across diverse barriers can actively participate in and benefit from educational and career advancement opportunities.

Table VII. Essential Services Pillar’s Covered Population Needs Assessment

ESSENTIAL SERVICES	
POPULATION	NEEDS ASSESSMENT
Covered Households	Challenges include dead zones impacting access to essential services and potential barriers related to device availability.
Aging Individuals	Barriers involve concerns related to online safety, emphasizing the need for a comprehensive registry and regular check-ins to ensure the well-being of aging individuals.
Incarcerated Individuals	Challenges include difficulties in receiving mass notifications and being informed about emergency situations. Emergency signals and assistive technology may not be fully accessible to incarcerated individuals.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Table VII. Essential Services Pillar’s Covered Population Needs Assessment (Continued)

ESSENTIAL SERVICES	
POPULATION	NEEDS ASSESSMENT
Individuals with Disabilities	Barriers include difficulties in accessing and benefiting from emergency signals and assistive technology tailored to the needs of individuals with disabilities.
Veterans	Specific challenges may exist in the form of dead zones, sirens, blinking lights, emergency signals, and amber alerts, impacting the ability of veterans to receive timely and effective emergency notifications.
Individuals with a Language Barrier	The language barrier may contribute to challenges in understanding and responding to emergency notifications, affecting individuals who face language-related barriers.
Member of a Racial or Ethnic Minority Group	Barriers involve potential disparities in accessing and benefiting from emergency signals and related technologies within minority communities.
Individuals who Live in a Rural Area	Challenges include dead zones, limited access to emergency sirens, blinking lights, and emergency signals, which may impact the effectiveness of emergency notifications in rural areas.

It's crucial to highlight that the current functionality of the CNMI Department of Public Safety Dispatch is deemed ineffective. The initiation of an emergency 911 call involves contacting the CNMI DPS 911 landline, staffed by four dispatchers. Subsequently, emergency calls are conveyed to response officers with a verbal description of the caller's address. While additional details like street names, cities, or neighborhoods may be mentioned, the absence of specific numerical information for location identification is notable. This gap is attributed to the lack of a comprehensive house numbering program under the Saipan, Tinian, and Rota Mayor's Office, rendering the national database devoid of physical street addresses. Residents exclusively rely on P.O. Boxes for mail, contributing to the challenge of pinpointing precise locations promptly during emergencies.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Importantly, the CNMI, prone to natural disasters, including typhoons, lacks effective communication channels for disseminating information to residents, particularly those without access to television, social media, FEMA websites, government websites, or word of mouth.

Addressing this predicament involves the implementation of a Mass Notification System (MNS) that is accessible, affordable, and adaptable to the entire CNMI population, including individuals with disabilities, those with low income, language barriers, and those residing in rural areas. Such a system could incorporate warning sirens and flashing emergency lights to effectively convey the state of an emergency.

The Community Emergency Response Team (CERT) program in the Commonwealth of the Northern Mariana Islands (CNMI) plays a vital role in enhancing community preparedness and resilience in the face of emergencies and disasters. Established to empower residents with the knowledge and skills necessary to respond effectively to various hazards, CERT trains volunteers to assist their families, neighbors, and communities during times of crisis.

Led by the CNMI Homeland Security and Emergency Management Office (HSEM), the CERT program follows a structured curriculum developed by the Federal Emergency Management Agency (FEMA). This curriculum covers a wide range of topics, including disaster preparedness, fire safety, medical operations, search and rescue techniques, and team organization. Through classroom instruction, hands-on training, and practical exercises, CERT volunteers learn how to identify and mitigate potential hazards, provide basic medical care, conduct light search and rescue operations, and effectively communicate and coordinate with emergency responders.

One of the key strengths of the CERT program in the CNMI is its emphasis on community engagement and partnership. Local government agencies, nonprofit organizations, businesses, and community leaders collaborate closely with HSEM to support CERT training initiatives, provide resources and logistical support, and promote public awareness of emergency preparedness. This collaborative approach helps to build strong bonds within neighborhoods and fosters a culture of resilience that extends beyond formal training sessions.

In addition to their roles as first responders during emergencies, CERT volunteers also play an important role in promoting disaster preparedness and resilience within their communities. They serve as ambassadors for emergency preparedness, sharing their knowledge and skills with friends, family members, and neighbors to ensure that everyone is adequately prepared for potential disasters.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

By educating the public about the importance of having an emergency plan, assembling a disaster supply kit, and staying informed about local hazards, CERT volunteers help to strengthen the overall resilience of the CNMI.

The Digital Equity Plan in collaboration with the CERT Program will significantly enhance emergency response and preparedness, particularly for vulnerable populations such as individuals with disabilities and language barriers. By leveraging digital resources and technology, the CERT program can ensure that critical emergency information and resources are accessible to all residents, regardless of their background or abilities.

The CNMI BPD Office will collaborate with NMC CREES to implement a voluntary registry on the website supportcnmi.com. This website will serve as a central hub for emergency response awareness information. Individuals with disabilities and language barriers can voluntarily register on this website, providing relevant information about their specific needs and requirements during emergencies. This registry will enable emergency responders and CERT teams to prioritize assistance and support for vulnerable populations, ensuring that their needs are addressed effectively during crisis situations.

Moreover, the Digital Equity Plan will integrate a mapping system into the website, allowing for the identification of individuals and households in neighborhoods with specific needs or vulnerabilities. This integrated mapping system will enable CERT teams to proactively engage with at-risk populations, offering targeted training, awareness campaigns, and support services. Additionally, residents will have the option to self-identify their needs and preferences through the website supportcnmi.com, ensuring that emergency responders have accurate and up-to-date information to facilitate timely assistance.

The Digital Equity Plan will encourage the development of mobile applications or collaboration with existing websites to promote public awareness and engagement. These digital tools can provide real-time updates on emergency situations, offer interactive training modules for CERT volunteers, and facilitate community outreach initiatives. By harnessing the power of technology, the CERT program can effectively reach a wider audience and foster greater community involvement in emergency preparedness efforts.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Table VIII. Civic and Social Engagements Pillar's Covered Population Needs Assessment

CIVIC AND SOCIAL ENGAGEMENTS	
POPULATION	NEEDS ASSESSMENT
Covered Households	Literacy challenges, limited digital skills, lack of awareness about digital equity, and insufficient access to digital literacy programs hinder active participation in civic and social engagement initiatives.
Aging Individuals	Limited digital literacy, potential resistance to adopting new technologies, and a lack of awareness about online civic platforms may hinder the engagement of aging individuals in digital civic initiatives.
Incarcerated Individuals	Limited access to digital literacy programs, challenges in utilizing online civic platforms, and communication gaps contribute to the difficulty for incarcerated individuals to actively participate in digital civic engagement.
Individuals with Disabilities	Accessibility issues in digital platforms, lack of tailored digital literacy programs, and potential gaps in awareness about inclusive digital events may impede the engagement of individuals with disabilities in civic and social initiatives.
Veterans	Veterans may face challenges related to digital literacy, especially if transitioning from military to civilian life. Accessibility concerns and a potential lack of awareness about online civic platforms may also hinder their engagement.
Individuals with a Language Barrier	Limited access to digital literacy programs in native languages, potential difficulties in navigating online civic platforms due to language barriers, and challenges in understanding public awareness campaigns may hinder engagement.
Member of a Racial or Ethnic Minority Group	Potential disparities in access to digital literacy programs and a lack of representation in online civic platforms may contribute to reduced engagement within minority communities.

3. CURRENT STATE OF DIGITAL EQUITY: BARRIERS & ASSETS

Table VIII. Civic and Social Engagement Pillar’s Covered Population Needs Assessment (Continued)

CIVIC AND SOCIAL ENGAGEMENTS	
POPULATION	NEEDS ASSESSMENT
Individuals who Live in a Rural Area	Limited access to digital infrastructure, including community anchor institutions, potential challenges in attending digital events due to connectivity issues, and lower awareness about the importance of digital equity may hinder engagement in rural areas.

The CNMI BPD Office has identified these barriers through collaborative efforts with the DE CPTeam, utilizing focus groups and interviews. In addressing these challenges, The CNMI BPD Office is committed to the guiding principles of affordability, accessibility, and adaptability. The strategic partnership with NMC Crees, administrators of the supportcnmi.com website, aims to enhance the inclusivity of online platforms.

This involves ensuring resources are provided in multiple languages, adhering to Web Content Accessibility Guidelines (WCAG) for improved accessibility to individuals with disabilities, and launching awareness campaigns meticulously tailored to resonate with the unique needs and challenges faced by each distinct population.

To address these needs and barriers, a collaborative effort involving government bodies, private entities, and community stakeholders is essential. This may include seeking investment for infrastructure projects, coordinating with subsea cable providers, and exploring partnerships for datacenter development. Additionally, engaging in public-private partnerships and seeking support from relevant authorities can play a pivotal role in overcoming these challenges and enhancing the digital infrastructure of the CNMI.

4. COLLABORATION AND STAKEHOLDER ENGAGEMENT

4.1. COORDINATION AND OUTREACH STRATEGY

This section showcases the CNMI's Broadband Policy and Development Office (BPD) Office's collaboration with partners and stakeholders, emphasizing groups and individuals dedicated to developing the Digital Equity Plan and overseeing its implementation.

The CNMI BPD Office conducted a robust and participatory approach in developing its five-year broadband plan, focusing on the identification and involvement of diverse stakeholders. The strategy begins with targeted meetings with government agencies, non-governmental organizations (NGOs), and private entities specifically dedicated to serving the eight vulnerable populations covered by the plan. This initial engagement aims to establish direct lines of communication, fostering collaboration and understanding of the unique needs of these communities.

4.2. DIGITAL EQUITY CORE PLANNING TEAM

The formation of the Digital Equity Core Planning Team (DE CPTeam) was driven by a commitment to equitable representation for vulnerable populations in our planning initiatives. To achieve this, we invited leaders from diverse organizations dedicated to directly serving vulnerable populations to join the DE CPTeam and serve as advocates for improved inclusivity.

The DE CPTeam comprises individuals who possess the capability to articulate and champion their respective organization's vision, aligning it seamlessly with the overarching objectives of the Digital Equity 5-year plan. Each team member is selected for their capacity to effectively represent their organization's mission and values, ensuring that the collective efforts of the team align cohesively with the strategic goals outlined in the DE 5-year plan. This diverse representation guarantees a holistic and informed approach, reinforcing the plan's commitment to addressing digital equity comprehensively and inclusively.

As seen in the picture on the right, through regular weekly meetings, the team engaged in collaborative brainstorming sessions, fostering a dynamic exchange of ideas aimed at effectively bridging the digital divide. This collective effort ensures that the resulting plan is not only comprehensive but also incorporates a range of perspectives to address the unique needs of vulnerable communities.



4. COLLABORATION AND STAKEHOLDER ENGAGEMENT

Through regular weekly meetings, the team engaged in collaborative brainstorming sessions, fostering a dynamic exchange of ideas aimed at effectively bridging the digital divide. This collective effort ensures that the resulting plan is not only comprehensive but also incorporates a range of perspectives to address the unique needs of vulnerable communities.



The DE CPTeam acts as a focal point for ongoing collaboration, providing a platform for constructive dialogue and joint decision-making throughout the planning process.

The DE CPTeam consists of accomplished leaders from various organizations, each distinguished in their respective fields. These organizations include:

- Northern Marianas Technical Institute
- CNMI Public School System
- Northern Marianas College Community Development Institute
- CNMI Department of Labor
- Commonwealth Economic Development Authority
- CNMI Substance Abuse Addictions & Rehabilitation
- CNMI Office of Vocational Rehabilitation
- Commonwealth Healthcare Corporation
- Office of Aging
- CNMI Judiciary
- Department of Public Safety
- Department Of Corrections
- Marianas Alliance of Non-Governmental Organizations
- Northern Marianas Cooperative Research, Extension and Education
- University Center for Excellence in Developmental Disabilities

4. COLLABORATION AND STAKEHOLDER ENGAGEMENT

4.3. WEEKLY STAKEHOLDER MEETINGS

The CNMI BPD Office conducts biweekly meetings to collaboratively address various aspects of the five-year plan and related initiatives. These weekly gatherings are organized to facilitate meaningful discussions on different dimensions of the plan.

We firmly believe that all stakeholders, encompassing internet users at large, should have a say in these crucial decisions. Our outreach extends to Internet Service Providers (ISPs), government entities, NGOs, non-profits, businesses, anchor institutions, and members of the broader community.

The CNMI BPD Digital Equity Stakeholder Meetings are scheduled biweekly on Fridays, from 3 pm to 4 pm. While the atmosphere is informal, these meetings operate under a fundamental rule: respect is of utmost importance. Any disparaging comments or attacks against fellow stakeholders will not be tolerated in these forums.

4.4. COMMUNITY OUTREACH SURVEY

To comprehensively investigate the internet access and adoption challenges confronted by CNMI residents, our Broadband Policy and Development office forged partnerships with numerous government agencies and non-profit organizations. In a concerted effort, we executed a survey covering the entire expanse of the CNMI islands. Leveraging the Qualtrics survey platform, participants were presented with a curated set of questions addressing crucial aspects such as household computer ownership, home internet adoption, barriers to adoption, internet affordability, and patterns of internet usage.

The survey, conducted through an online portal from December 28, 2023, to January 15, 2024, garnered a total of 101 responses. The collaboration between the Broadband Policy and Development Office, government agencies, and non-profit organizations was instrumental in ensuring the outreach to diverse populations.

This collective endeavor empowered us to scrutinize the intricate factors contributing to disparities in internet access, discern specific challenges faced by covered populations, and devise targeted strategies aimed at narrowing the digital divide. Through collaborative initiatives, our goal is to develop tailored solutions that address the unique needs of CNMI residents, fostering a more inclusive and equitable landscape for internet affordability, accessibility, and adaptability. Please refer to Appendix IV.

4. COLLABORATION AND STAKEHOLDER ENGAGEMENT

4.5. COMMUNITY ORGANIZATION OUTREACH SURVEY

Recognizing the importance of community input, the CNMI BPD Office implemented a comprehensive survey distribution strategy. By disseminating surveys widely, the plan captures the perspectives and insights of a diverse range of stakeholders, including community members, businesses, and potential community anchor institutions. This inclusive engagement model, coupled with associated mechanisms for feedback and continuous communication, is designed to ensure that the resulting Digital Equity Plan is informed by a comprehensive understanding of the unique needs and aspirations of the communities it serves.

4.6. ONGOING ENGAGEMENT

Ongoing engagement is critical to maintaining momentum and ensuring that DE coordination efforts are sustainable over the long term. The CNMI BPD Office is committed to providing opportunities to stakeholders by using a variety of strategies to stay engaged, such as regular check-ins with collaborating agencies, progress reports to and from DE partners, ongoing public outreach engagements like community digital equity fiestas where local businesses and agencies can promote their products and services, marketing and awareness campaigns through email or social media, and promotion and usage of CAIs to promote digital literacy and adaptability. By using a multi-stakeholder approach that includes opportunities for public comment, collaboration, and ongoing engagement, stakeholders can work together to address complex issues and achieve shared goals.

5. IMPLEMENTATION

5.1. IMPLEMENTATION STRATEGY & KEY ACTIVITIES

This section delineates the CNMI's comprehensive approach to bridging the digital divide. The ensuing strategies and key activities specifically target our objectives related to our essential pillars, while addressing the impediments to digital equity. These implementation strategies are responsive to the existing broadband landscape and the obstacles impeding widespread adoption. These strategies concentrate on enhancing affordability, facilitating access to devices, nurturing digital skills, providing technical support, and streamlining digital navigation.

Table IX. Implementation Strategies

HEALTH IMPLEMENTATION STRATEGIES	
Objective: Telehealth Network	
STRATEGY	KPI
1) Initiate discussions with telehealth and telecommunications providers to establish a robust telehealth network connecting Saipan, Tinian, Rota, and the Northern Islands.	1) Number of telehealth consultations conducted through the network each month.
2) Implement a secure and reliable communication infrastructure for telehealth consultations.	2) Percentage of successful telehealth consultations conducted without any technical issues.
Objective: Devices for Healthcare Providers	
1) Procure and distribute necessary telehealth devices to healthcare providers across the islands.	1) Number of healthcare providers using telehealth devices in their practice.
2) Provide training programs for healthcare professionals on effective use of telehealth equipment.	2) Percentage of healthcare professionals who have completed the training program and are confident in using the telehealth equipment.
Objective: Telehealth Literacy Programs	
1) Develop and implement telehealth literacy programs at technology centers to educate the public on the benefits and usage of telehealth services.	1) Number of individuals who have completed the telehealth literacy program.

5. IMPLEMENTATION

Table IX. Implementation Strategies (Continued)

STRATEGY	KPI
2) Conduct community outreach programs to ensure widespread awareness and participation.	2) Percentage increase in the number of individuals using telehealth services after the community outreach program.
EDUCATION AND WORKFORCE DEVELOPMENT IMPLEMENTATION STRATEGIES	
Objective: Collaboration with PSS	
1) Form a working group with at least one representative from each school district to assess the current IT/CS curriculum. 2) Develop a comprehensive IT/CS core curriculum that aligns with industry standards and emerging technologies. 3) Conduct at least two workshops and training sessions for educators in a year to help them effectively integrate the new curriculum.	1) Number of representatives from each school district joining the working group. 2) Percentage of alignment of the new curriculum with industry standards and emerging technologies. 3) Number of educators attending the workshops and training sessions.
Objective: Enhancing IT Career Paths	
1) Collaborate with at least five high schools to introduce specialized IT career paths, including internships and mentorship programs with local industry partners. 2) Conduct at least five awareness campaigns and workshops in a year to inform students and parents about the potential of IT careers and the skills required.	1) - Number of high schools collaborating and offering specialized IT career paths. - Number of students participating in internships and mentorship programs. 2) Number of attendees in the awareness campaigns and workshops.
Objective: Digital Navigator Program	
1) Develop the digital navigator program and implement it in at least three schools.	1) Number of schools implementing the digital navigator program.

5. IMPLEMENTATION

Table IX. Implementation Strategies (Continued)

STRATEGY	KPI
2) Establish partnerships with at least three local businesses to offer real-world projects and experiences for students. 3) Assist at least five students with job placement who participate in the Digital Navigator Program within a year.	2) Number of partnerships with local businesses established. 3) Number of students who receive assistance with job placement.
COMMUNITY ANCHOR INSTITUTIONS (CAIS) IMPLEMENTATION STRATEGIES	
Objective: Establishing CAIs	
1) Identify at least 5 suitable locations for the establishment of CAIs. 2) Acquire all necessary infrastructure, equipment, and personnel to ensure the functionality of the technology centers. 3) Develop a standardized curriculum for technology centers that aligns with the needs of the local community.	1) Number of suitable locations identified for the establishment of CAIs. 2) Percentage of required infrastructure, equipment, and personnel acquired. 3) Feedback from the local community on the standardized curriculum developed for the technology centers
INTER-AGENCY COORDINATION IMPLEMENTATION STRATEGIES	
Objective: Enhance and support emergency response and preparedness for vulnerable populations such as individuals with disabilities and language barriers.	
1) Enhance emergency response and preparedness. 2) Ensure that critical emergency information and resources are accessible to all residents. 3) Prioritize assistance and support for vulnerable populations. 4) Proactively engage with vulnerable populations, including the community and local agencies, offering targeted training, awareness campaigns, and support services.	1) Number of individuals with disabilities and language barriers who voluntarily register on the website supportcnmi.com. 2) Percentage of emergency responders and CERT teams who use the voluntary registry to prioritize assistance and support for vulnerable populations during crisis situations. 3) Percentage of at-risk populations who are identified through the mapping system and receive targeted training, awareness campaigns, and support services. 4) Number of mobile applications or collaborations with existing websites developed to promote public awareness and engagement in emergency preparedness efforts. 5) Number of emergency situations where critical emergency information and resources were accessible to all residents, regardless of their background or abilities.

5. IMPLEMENTATION

5.2. EVALUATION AND SUSTAINABILITY

To ensure the effectiveness of our initiatives over the grant period, the CNMI will implement a Key Performance Indicator (KPI) framework. This framework will be instrumental in gauging and optimizing the success of activities outlined in our comprehensive Digital Equity Five-Year Plan. The KPIs will not only serve as benchmarks for success but will also play a pivotal role in maintaining adherence to timelines and facilitating Continuous Quality Improvement (CQI).

Our set of KPIs will encompass various metrics, with a specific focus on technical assistance and training logs. These logs will meticulously capture the details of support provided and training sessions conducted, offering valuable insights into the skill development and support mechanisms integral to our programs. Additionally, semi-annual surveys and reports from collaborating agencies will form an essential component of our KPIs, providing a holistic view of the collaborative efforts and their impact on the overall objectives.

In addition to the above-mentioned metrics, we will also be including feedback from our quarterly advisory group. This group will consist of representatives from various stakeholders who will provide valuable insights into the effectiveness of our programs and activities and suggest areas for improvement. Their feedback will be an essential component of our KPIs, helping us ensure that we are meeting the needs of our stakeholders and achieving our objectives.

By integrating these KPIs into our monitoring and evaluation processes, we aim to foster transparency, accountability, and adaptability throughout the grant period to ensure internet affordability, accessibility, and adaptability for are prioritized populations. This systematic approach will not only keep us on track but will also enable us to identify areas for improvement, thereby ensuring the sustained success of our initiatives.

5. IMPLEMENTATION

5.3. TIMELINE

This timeline provides a sequential plan for our Implementation Strategies and Key Activities over the course of three years. Adjustments can be made based on specific circumstances and feedback received during the implementation process.

<i>TIMELINE</i>	<i>ACTIVITIES</i>
Year 1 (6/2024-12/2024) (6/2024-5/2025)	• Establish baseline data for all proposed objectives • Establish MOAs with agency partners • Establish working and advisory groups with partners collaborating in Digital Equity Plan • Plan initial meetings with partners to review and initiate Digital Equity Plan and determine next steps • Begin collaboration with local agencies to digitally enhance and support emergency response services for vulnerable populations. • Identify suitable locations for CAIs • Establish a working group for the telehealth network project • Begin assessing infrastructure needs for telehealth network • Begin the assessment of current IT/CS curriculum in collaboration with PSS
Year 2 (7/2025- Ongoing) (7/2025-5/2026)	• Launch awareness campaigns and workshops for students and parents • Initiate community outreach programs to raise awareness. • Develop the Digital Navigator Program • Develop the comprehensive IT/CS core curriculum • Develop procurement plans for telehealth devices for healthcare providers • Conduct training programs for healthcare professionals on telehealth equipment • Develop a standardized curriculum for technology centers • Establish partnerships with local businesses for student projects
Year 3 (6/2026- 12/2026)	• Launch the telehealth literacy programs at technology centers • Ensure connectivity and internet provision to all technology centers • Start distributing telehealth devices to healthcare providers • Initiate regular workshops and training sessions for educators • Launch the Digital Navigator Program

5. IMPLEMENTATION

<i>TIMELINE</i>	<i>ACTIVITIES</i>
Year 3 (6/2026- 12/2026) (1/2027-5/2027)	• Conduct training programs for emergency responders and community members • Collaborate with high schools to introduce specialized IT career paths • Acquire infrastructure, equipment, and personnel for CAIs
Year 4 (6/2027- 5/2028)	• Ensure all DE programs and initiatives have been implemented
Year 5 (6/2028 – 5/2029)	• Monitor and adjust all programs based on feedback; use data to ensure continuous quality improvement
Year 6 (6/2029 – 6/2030)	• Monitor and evaluate the achievements in Year 5 and gauge progress towards overall goals and objectives • Conduct surveys and engage in community conversations to assess the outcomes and impact of the Digital Equity Plan

6. CONCLUSION

While the Commonwealth of the Northern Mariana Islands may find itself geographically isolated amidst vast oceans, we are dedicated to overcoming this challenge by navigating the currents that bridge the digital divide. Our pathway to connectivity involves leveraging the Digital Equity Five-Year Plan to lay the foundation for a digital future that aligns with the Five Pillars, emphasizing affordability, accessibility, and adaptability.

The accomplishment of this vision relies on the concerted and collaborative efforts of all stakeholders. Through a united endeavor, we aspire to transform the CNMI into a hub of thriving, inclusive, and sustainable digital opportunities that lead to digital equity. By embracing change, confronting challenges, and capitalizing on opportunities, our collective engagement will propel us towards the realization of a digitally connected and prosperous future.



Appendices

Appendix I. Digital Equity Engagement Tracker

Engagement Title	Engagement Date	Engagement Type	Target Audience	# Engaged	Covered Populations
PDS Meeting with Lt. Governor	05/01/2023	Listening Session (In-person)	Statewide Engagement	5	All Targeted Populations
Weekly Pacific Territory Stakeholder meetings	05/03/2023	Listening Session (Virtual)	Regional	average of 20	All Targeted Populations
Pacific Island Broadband Office Brunch	05/03/2023	Listening Session (Virtual)	Regional	average of 20	All Targeted Populations
Territorial Climate and Infrastructure Workshop	05/06/2023	Listening Session (In-person)	Regional	100	
Docomo Pacific Meeting	05/07/2023	Listening Session (In-person)	Statewide Engagement	4	All Targeted Populations
SBLN Monthly Meetings	05/10/2023	Listening Session (Virtual)	Regional	60	
IT&E Meeting	05/16/2023	Listening Session (In-person)	Statewide Engagement	3	All Targeted Populations
Docomo Pacific Meeting	05/19/2023	Listening Session (In-person)	Statewide Engagement	4	All Targeted Populations
PDS Meeting	05/19/2023	Listening Session (Virtual)	Statewide Engagement	5	All Targeted Populations
IT&E Meeting	06/16/2023	Listening Session (In-person)	Statewide Engagement	3	All Targeted Populations
PDS Meeting	06/20/2023	Listening Session (In-person)	Statewide Engagement	2	All Targeted Populations
Docomo Pacific Meeting	06/26/2023	Listening Session (In-person)	Statewide Engagement	4	All Targeted Populations

Senate President Meeting	07/17/2023	Listening Session (In-person)	Statewide Engagement	3	
Citadel Pacific Meeting	07/20/2023	Listening Session (In-person)	Statewide Engagement	2	All Targeted Populations
PDS Meeting with NTIA	07/21/2023	Listening Session (In-person)	Statewide Engagement	2	All Targeted Populations
Citadel Pacific Meeting with NTIA FPO	07/22/2023	Listening Session (In-person)	Statewide Engagement	3	All Targeted Populations
Rota Mayor's Office	8/4/2023	Listening Session (In-person)	Local	8	All Targeted Populations
PDS Meeting	08/11/2023	Listening Session (Virtual)	Statewide Engagement	2	All Targeted Populations
SBLN Conference	08/14/2023	Listening Session (In-person)	Regional	200	
Belau Submarine Cable Co	08/25/2023	Listening Session (In-person)	Regional	6	
Department of Corrections	9/12/2023	Listening Session (In-person)	Local	2	Incarcerated Individuals, Individuals Who Primarily Reside in Rural Areas
Northern Islands Mayor's Office	9/13/2023	Listening Session (In-person)	Local	5	All Targeted Populations
Marianas Alliance of Non-Governmental Organizations	9/15/2023	Listening Session (In-person)	Local	2	All Targeted Populations
Department of Labor	9/16/2023	Listening Session (In-person)	Local	4	Individuals Who Live in Covered Households, Individuals with A Language Barrier, Individuals

					Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas
Northern Marianas College	9/18/2023	Listening Session (In-person)	Local	10	Individuals Who Primarily Reside in Rural Areas
Rep. Aldan Chair of PUTC	09/20/2023	Listening Session (In-person)	Statewide Engagement	3	All Targeted Populations
IT&E Meeting with NTIA and BPD	09/20/2023	Listening Session (In-person)	Statewide Engagement	3	All Targeted Populations
Citadel Pacific Meeting with NTIA	09/22/2023	Listening Session (In-person)	Statewide Engagement	6	All Targeted Populations
NM Technical Institute	9/24/2023	Listening Session (In-person)	Local	2	Individuals Who Primarily Reside in Rural Areas
CNMI Public School System	9/24/2023	Listening Session (In-person)	Local	7	Individuals Who Live in Covered Households, Individuals with Disabilities, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas
Division of Youth Services	9/26/2023	Listening Session (In-person)	Local	1	Individuals Who Live in Covered Households, Individuals with Disabilities, Individuals

					Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas
CNMI NUTRITION ASSISTANCE PROGRAM	9/27/2023	Listening Session (In-person)	Local		Individuals Who Live in Covered Households, Aging Individuals, Individuals with Disabilities, Individuals with A Language Barrier, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas
Submarine Network World	09/27/2023	Listening Session (In-person)	Regional	500	
Office of Vocational Rehabilitation	9/28/2023	Listening Session (In-person)	Local	5	Individuals Who Live in Covered Households, Individuals with Disabilities, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas

Northern Marianas Protection and Advocacy Systems, Inc.	9/28/2023	Listening Session (In-person)	Local	5	Individuals Who Live in Covered Households, Individuals with Disabilities, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas
CNMI PSS Sports Director	9/28/2023	Listening Session (In-person)	Local	5	Individuals Who Live in Covered Households, Individuals with Disabilities, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas
Special Assistant for Climate Policy and Planning	10/3/2023	Listening Session (Virtual)	Local	3	All Targeted Populations
Saipan Mayor's Office	10/5/2023	Listening Session (In-person)	Local		All Targeted Populations
Tinian Mayor's Office	10/5/2023	Listening Session (In-person)	Local	15	All Targeted Populations
Congressman Gregorio Kilili Sablan	10/13/2023	Listening Session (In-person)	Local	2	
Rotaract Club of Saipan	10/14/2023	Listening Session (In-person)	Local	10	Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals

					Who Primarily Reside in Rural Areas
Substance Abuse Addiction and recovery	10/17/2023	Listening Session (In-person)	Local	2	Individuals Who Live in Covered Households, Incarcerated Individuals, Individuals Who Primarily Reside in Rural Areas
CNMI Judiciary	10/18/2023	Listening Session (In-person)	Local	9	Individuals Who Primarily Reside in Rural Areas
Joeten Kiyu Public Library	10/24/2023	Listening Session (In-person)	Local	4	All Targeted Populations
Saipan Chamber of Commerce	11/1/2023	Listening Session (In-person)	Local	80	All Targeted Populations
CNMI Homeland Security and Emergency Management	11/2/2023	Listening Session (In-person)	Local	3	All Targeted Populations
CNMI Department of Public Safety	11/2/2023	Listening Session (In-person)	Local	6	All Targeted Populations
Rotary Club of Saipan	11/7/2023	Listening Session (In-person)	Local	40	All Targeted Populations
Department of Public Lands	11/7/2023	Listening Session (In-person)	Local	12	Individuals Who Live in Covered Households, Aging Individuals, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas

Jim Arenovski IC3 Training	11/9/2023	Listening Session (In-person)	Local	7	Individuals Who Live in Covered Households, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas
Veteran's Affairs	11/14/2023	Listening Session (In-person)	Local	3	Veterans, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas
PSS CTE	11/17/2023	Listening Session (In-person)	Local	3	Individuals Who Live in Covered Households, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas
NMC CREES	11/21/2023	Listening Session (In-person)	Local	6	Individuals Who Live in Covered Households, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas

NM Technical Institute	11/21/2023	Listening Session (In-person)	Local	4	Individuals Who Live in Covered Households, Incarcerated Individuals, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas
Department of Labor	11/21/2023	Listening Session (In-person)	Local	4	All Targeted Populations
CERTIPORT	11/29/2023	Listening Session (In-person)	Local	6	Individuals Who Live in Covered Households, Individuals Who Are Members of a Racial/Ethnic Minority Group, Individuals Who Primarily Reside in Rural Areas
Weekly Online Stakeholder meetings	weekly	Listening Session (Virtual)	Local	average of 20	All Targeted Populations

Appendix II. Asset Inventory

Organization Name	Asset Name	Description	Pillars	Covered Populations Served
Federal Communications Commission (FCC)	Affordable Connectivity Program (ACP)	Subsidized monthly payment for postpaid/internet services with a one-time discount of \$100 on any laptop or tablet.	N/A	Individuals Who Reside in A Rural Area, Low-Income
Commonwealth Economic Development Agency (CEDA)	Loan Program	Financing for devices/infrastructure for businesses	Economic Development	Others
Commonwealth Health Care Corporation (CHCC)	Telepharmacy/ Teledentistry/ Telepsychology	TP & TP - 5years TD - Present Rota and Tinian (Interisland) Patient Portal (Launching in 2 years, funding from CDC) Patient to access their records at any time online.	Health	All Populations Covered
Department of Labor (DOL)	DOL Website	Will be launched end of February: Online resources for the community. User-friendly job board (Centralized search). Digital Resources available at the office with vulnerable population support (Digital Navigator)	Workforce Investment	Individuals Who Reside in A Rural Area, Low-Income
Northern Marianas College Cooperative Research, Extension, and Education Services (NMC CREES)	supportcnmi.com	Support for online services.	Workforce Investment & Civic and Social Engagement	All Populations Covered
Small Business Development Center (SBDC)	N/A	Client support on small businesses. Technical support & Cybersecurity. UEI Federal funding	Workforce Investment	Others
NMC - University Center for Excellence in Developmental Disabilities	N/A	Working towards technical support and online learning/training	Others	Individuals With Disabilities

Office of Vocational Rehabilitation (OVR)	N/A	Temporary loaner devices upon eligibility	Others	Individuals With Disabilities
NMC - Commonwealth Development Institute (CDI)	N/A	Program to provide training and services directly to individuals, businesses, government agencies, and community organizations in the CNMI.	Workforce Investment	Individuals Who Reside in A Rural Area
Joeten Kiyu Public Library	N/A	Outreach to aging individuals for digital literacy, Disabilities Resources Center (potentially digitizing the library) NOTE: access digital resources for research programs	Workforce Investment & Civic and Social Engagement	Aging Individuals and Individuals with Disabilities
Northern Marianas Technical Institute (NMTech)	N/A	Computer Labs, Digital Skills/ Technical Support, device access. Access to internet	Workforce Investment & Civic and Social Engagement	Individuals Who Reside in A Rural Area
Substance Abuse, Addiction Rehabilitation (SAAR) (Career Development Center)	Re-entry Program	Partnership with DOC: intensive case management and offer digital nav.	Workforce Investment	Incarcerated Individuals
Substance Abuse, Addiction Rehabilitation (SAAR) (Career Development Center)	SAAR Outreach Partnership Program	Planning Tech-hub area to help navigate (homelessness, substance abuse, youth)	Civic And Social Engagement	Individuals Who Reside in A Rural Area
Public Health	Home Visiting Program, Family Planning, Early Hearing Detection I) Maternal and Child health,	Support for online services.	Health	All Populations
Guam Community	N/A	Telehealth services	Health	Veterans

Base Outreach Center				
CNMI Veterans Affairs	CCRP	Connecting Veterans to services in Guam and Hawaii. Treatment and rehabilitation.		Veterans
CNMI Judiciary	Pro Se Centers	Pro Se Centers have dedicated workstations (device and internet connection) that may be utilized by court patrons during regular business hours to conduct research and filing. Device and connection (hub) research center, e-courts, e-citation in the works, planning for the JMS	Civic And Social Engagemen	Individuals Who Reside in A Rural Area
CNMI Center for Living Independently (Aging Center)	N/A	Access to internet, access to devices, digital/technical support	Others	Aging Individuals and Individuals with Disabilities
CNMI Public School System (PSS)	N/A	Access to reliable internet and devices on school sites, digital literacy skills, Wi-Fi on wheels	Education	Youth
Marianas Alliance of Non-Governmental Organizations (MANGO)	N/A	Access to devices, access to internet, digital conference access	Social And Economic Developme	All Population s Covered
Department of Labor (DOL)	N/A	Access to internet, access to devices, digital/technical support	Workforce Developme	All Population s Covered
COMMONWEALTH OF THE NORTHERN MARIANA ISLAND GROWERS ASSOCIATION/ PANOPTICON GROUP	N/A	Access to internet, digital/technical support/ developing cross cultural D.E. Programming	Social And Economic Developme	All Population s Covered

Appendix III. Covered Populations

Covered Population	Total	Percentage
Aging Individuals (62 years and over)	4141	8.70%
Aging Individuals (65 years and over)	2792	5.90%
Veterans	748	2.20%
Racial or Ethnic Minorities	42,861	x
People with Disabilities	4483	9.50%
Primarily Reside in Rural Area	47,329	100%
Incarcerated Persons*	236	x
Low-income (150% of Poverty Threshold)	17,876	38%
Individuals with Language Barriers	15,512	35.20%

Data Sources: 2019 US Census Estimates and the CNMI Department of Corrections, 2023.

Appendix IV: CNMI Community Outreach Survey Results

Question 1: Do you have access to the Internet at home?		
Answer	Response	%
Yes	95	94.06%
No	6	5.94%
Total	101	100.00%

*Those who answered “No” were immediately taken to Question 7.

Question 2: How do you access the Internet at home? (Select all that apply)		
Answer	Response	%
I am unsure.	3	3.49%
Digital Subscriber Lines (IT&E)	53	61.63%
Cable Internet (Docomo)	20	23.26%
Satellite Internet	3	3.49%
Fixed Wireless	7	8.14%
Cellular Phone	29	33.72%
Other (please list)	0	0.00%
Total	115	100.00%

*Total Responses were 115, while the Total Respondents were 86.

Question 3: Who is your Internet provider?		
Answer	Response	%
I am unsure.	2	2.33%
IT&E	62	72.09%
Docomo Pacific	20	23.26%
Other (please list)	2	2.33%
Total	86	100.00%

*Both responses for the Other Category listed was “Starlink.”

Question 4: How much does your household pay per month for Internet service?		
Answer	Response	%
I am unsure.	15	17.44%

I do not pay for Internet service.	1	1.16%
Less than or equal to \$30/month	1	1.16%
Between \$31/month and \$50/month	5	5.81%
Between \$51/month and \$70/month	11	12.79%
More than \$70/month	53	61.63%
Total	86	100.00%

Question 5: What is your Internet speed?

Answer	Response	%
I am unsure.	56	65.12%
25 Mbps Download/ 5 Mbps Upload	7	8.14%
50 Mbps Download/ 5 Mbps Upload	12	13.95%
75 Mbps Download/ 5 Mbps Upload	4	4.65%
90 Mbps Download/ 5 Mbps Upload	2	2.33%
100 Mbps Download/ 5 Mbps Upload	1	1.16%
Other (please list)	4	4.65%
Total	86	100.00%

*The following list includes the responses from the Other Category:

- 355/65
- Not sure the exact number, but its terrible
- 350-495 Mbps
- 60mbps/3mbps

Question 6: Are you familiar with the Affordable Connectivity Program (ACP)? ACP is a federally funded program that offers a maximum \$30 a month discount on High-Speed Home Internet for qualifying households. It was also previously known as the Lifeline Program.

Answer	Response	%
Yes	39	45.35%

No	47	54.65%
Total	86	100.00%

Question 7: Did you have access to the Internet at home in the past?

Answer	Response	%
Yes	2	33.33%
No	4	66.67%
Total	6	100.00%

*This question was only available to those who answered “No” in Question 1.

Question 8: What was the reason for disconnecting your Internet service? (Select all that apply)

Answer	Response	%
Internet service was costly.	2	100.00%
I consistently experienced slow speeds.	0	0%
I was worried about my private information being compromised.	0	0%
I preferred to no longer have access to the Internet.	0	0%
I moved to a new area where Internet service was unavailable.	0	0%
I had less reliance on the Internet.	0	0%
Other (please specify)	0	0%
Total	2	100.00%

*This question was only available to those who answered “Yes” in Question 7.

Question 9: What's preventing your access to the Internet? (Select all that apply)

Answer	Response	%
Internet service is costly.	4	100.00%
I prefer not to have access to the Internet.	0	0%

I am worried about my private information being compromised.	0	0%
I have difficulty using and navigating the Internet.	0	0%
I am overwhelmed by the amount of information online.	0	0%
I have no power at home.	0	0%
Other (please specify)	0	0%
Total	4	100.00%

*This question was only available to those who answered “No” in Question 7.

Question 10: How much are you willing to pay for home Internet services?		
Answer	Response	%
Less than or equal to \$30/month	4	80.00%
Between \$31/month and \$50/month	1	20.00%
Between \$51/month and \$70/month	0	0.00%
More than \$70/month	0	0.00%
Total	5	100.00%

*This question was only made available to those who answered, “Internet service was costly.” in Question 8 or “Internet service is costly.” in Question 9.

Question 11: What kind of devices do you use to access the Internet? (Select all that apply)		
Answer	Response	%
Laptop	74	86.05%
Desktop Computer	25	29.07%
Smartphone	80	93.02%
Tablet	48	55.81%
Gaming Console	40	46.51%
Other (please list)	17	19.77%

Total	86	100.00%
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* Total Responses were 284, while the Total Respondents were 86.

* Out of the 17 responses in the Other category:

- 14 responded with “TV” or “Television”
- 1 responded with “Printer”
- 1 responded with “VR/Smart home devices”
- 1 responded with “Surveillance”

Question 12: How many devices do you have that can access the Internet in your household?		
Answer	Response	%
None	0	0.00%
Less than or equal to 5 devices	34	39.53%
Between 6 – 10 devices	36	41.86%
10+ devices	16	18.60%
Total	86	100.00%

Question 13: Do you know of any public spaces that provide free access to the Internet?		
Answer	Response	%
Yes	53	58.24%
No	38	41.76%
Total	91	100.00%

*This question was available to all participants.

Question 14: What public spaces are you aware of that provide free access to the Internet? (Select all that apply)		
Answer	Response	%
Public library	39	75.00%
Community Center	15	28.25%
Schools	28	53.85%
Work	27	51.92%
Other (please list)	16	30.77%
Total	125	100.00%

*This question was only made available to those who answered “Yes” in Question 13.

*Total Responses were 125, while Total Respondents were 52.

*Out of the 16 responses in the Other category:

- 15 responded with “Restaurants” or “Cafes”
- 2 responded with “Laundromats” in addition to their other answers
- 1 responded with “Trade Schools” in addition to their other answers

Question 15: What public spaces do/did you use to access the Internet? (Select all that apply)		
Answer	Response	%
I do not use the Internet at any public space.	11	21.15%
Public library	9	17.31%
Community Center	3	5.77%
Schools	15	28.85%
Work	27	51.92%
Other (please list)	10	19.23%
Total	75	100.00%

*This question was only available to those who answered “Yes” in Question 13.

Question 16: In what ways do/did you use Internet service that are relevant to your life? (Select all that apply)		
Answer	Response	%
Health	25	29.07%
Education	39	45.35%
Work	43	50.00%
Safety & Security Protection	17	19.77%
Entertainment	42	48.84%
Communicating with family & friends	44	51.16%
All of the above	49	56.98%
Others (please list)	2	2.33%
Total	261	100.00%

*This question was only made available to those who answered “Yes” in Question 1 or “Yes” in Question 7.

*Total Responses were 261, while Total Respondents were 86.

*Out of the 2 responses in the Other category:

- 1 responded with “Shopping, Making travel plans, Looking up info for events, business establishments, public services or agencies”
- 1 responded with “Creating”

Question 17: While you might already have some of these skills, which ones do you think the Internet could help you acquire? (Select all that apply)		
Answer	Response	%
How to communicate with friends and family	37	43.53%
How to find a job online	47	55.29%
How to research topics for academic purposes	52	61.18%
How to find information about public resources and events	60	70.59%
How to participate in ecommerce	49	57.65%
Others (please list)	5	5.88%
Total	250	100.00%

*Total Responses were 250, while Total Respondents were 85.

*Out of the 5 responses in the Other category:

- 2 responded with “How to create and collaborate with other creators/ Be a Youtuber”
- 1 responded with “Cyber Security for family and friends
- 1 responded with “General Information”

Question 18: Would you be interested in learning more about Information Technology (IT)?		
Answer	Response	%
Yes	72	80.90%
No	17	19.10%
Total	89	100.00%

*This question was available to all participants.

Question 19: On a scale of 1-5, how would you rate your ability to detect suspicious behavior online?							
Statement	1- Not able to detect	2- Less likely to detect	3- Unsure	4- More likely to detect	5- Able to detect	Total Responses	Average Value
I am able to detect suspicious behavior online.	5	13	18	35	14	85	3.47

Question 20: Including yourself, how many people currently live in your household?		
Answer	Response	%
1	6	6.74%
Less than or equal to 5	66	74.16%
Between 6 – 10	15	16.85%
10+	2	2.25%
Total	89	100.00%

Question 21: What island do you reside on?		
Answer	Response	%
Saipan	82	92.13%
Tinian	4	4.49%
Rota	3	3.37%

Northern Islands	0	0.00%
Total	89	100.00%

Question 22: What village do you reside in?		
Answer	Response	%
Marpi	1	1.23%
As Matuis	4	4.94%
San Roque	1	1.23%
Tanapag	4	4.94%
Puerto Rico	1	1.23%
Capitol Hill	6	7.41%
As Teo	1	1.23%
Kagman	15	18.52%
Papago	2	2.47%
Navy Hill	7	8.64%
Garapan	5	6.17%
Gualo Rai	2	2.47%
I Liyan	1	1.23%
Oleai	1	1.23%
Chalan Kiya	2	2.47%
Kanat Tabla	3	3.70%
San Vicente	3	3.70%
Dandan	2	2.47%
As Lito	3	3.70%
Finasisu	4	4.94%
As Perdido	1	1.23%
San Antonio	2	2.47%
Koblerville	3	3.70%

Susupe	7	8.64%
Total	81	100.00%

*Villages with 0 answers were excluded from this list.

*This question was only made available to those who answered “Saipan” in Question 21.

Question 23: What village do you reside in?		
Answer	Response	%
Carolinas Heights	1	25.00%
Marpo Heights	1	25.00%
San Jose	2	50.00%
Total	4	100.00%

*Villages with 0 answers were excluded from this list.

*This question was only made available to those who answered “Tinian” in Question 21.

Question 23: What village do you reside in?		
Answer	Response	%
Sinapalo	1	33.33%
Songsong	2	66.67%
Total	3	100.00%

*Villages with 0 answers were excluded from this list.

*This question was only made available to those who answered “Rota” in Question 21.

Appendix V: CNMI Organization Outreach Survey Results

Question 1: What is the name of your organization?

Response

CNMI Public School System

Center for living Independently in the CNMI

Northern Marianas Technical Institute

Department of Public Safety

Xtreme CNMI Wellness Inc

Marianas Alliance of Non-governmental Organizations

DOL WIA

Marianas Visitor's Authority

Commonwealth of the Northern Mariana

Island Growers Association/Panopticon Group

WW

Department of Finance - Division of Customs & Biosecurity

Marianas Islands Nature Alliance

Question 2: Does your organization serve any of these communities? (Check all that apply)

Field	Choice Count
Youth	12
Individuals who lived in covered households	6
Aging Individuals	7
Incarcerated individuals, other than individuals who are incarcerated in a federal correctional facility	7
Veterans	8
Individuals with disabilities	9
Individuals with a language barrier	9
Members of a racial or ethnic minority group	9
Individuals who primarily reside in a rural area	8

Question 3: What is the population size of the community served by your organization?

Field	Choice Count
Under 1,000	5
1,000 - 9,000	2
10,000 - 24,999	1
25,000 - 39,999	0
40,000+	4
Don't know/Not applicable	3

Question 4: What is the mission of your organization?

Response

Educating lifelong learners to become productive citizens of a global society
To ensure the right of people with disabilities to live independently and fully intergrated within the community
NMTech invests in students by providing advanced trades, career, and technical education to produce skilled individuals and strengthen the CNMI workforce.
Essential services
Technical School
To promote Health and Wellness
Building CNMI non-profit sector capacity by providing leadership and technical services using expertise, empowerment, and best-practices structures to increase community sustainability and expansion.
Empowering, integrating, implementing, and innovating the workforce needs of the CNMI.
To promote & develop the NMI as a premier destination of choice for visitors from throughout the world while providing a maximum quality of life for our people. We nurture and encourage cultural interchange and environmental sensitivity for visitors' enjoyment and for our children's children.
"Working together, Learning together: To Harvest the Good things in Life."
Protect the borders of the CNMI
Empowering communities for Conservation

Question 5: Are there other Digital Equity sources of funding you are aware of? - selected choice

Field	Choice Count	specify
If yes, please specify.	5	ACP Program, Lifeline Program, BEAD Funding
None	2	N/A

Question 6: Does your organization actively advocate for Digital Equity

Field	Choice Count
Yes	5
No	8

Question 7: Do you know of any other community assets in regards to Digital Equity?

Field	Choice Count
Yes	4
No	9

Question 8: Please describe any previous digital equity efforts your organization has completed in the CNMI

Response
Giving Ipads and internet sim cards to our consumers
Launching Google career certificates
During Pandemic, our organization provided students access to wifi services via "Wifi on wheels" in which school buses were equipped with Wifi services for students and community members to access. Also, we partnered with several community organizations to make available "Community wifi centers" to allow additional wifi services to the community.
Zumba, Zumba, Zumba
MANGO offers it's "resource room" (includes digital assets) to it's non-profit organization members free of charge
Access to digital literacy training.
Various outreach and lobbying efforts that we conducted by calling/emailing our federal partners in Washington, DC in order to address various digital inequities

Question 9: The following are various barriers related to our Digital Equity pillar, Economic & Workforce Development. Please indicate which barriers your organization and/or the communities you serve face. Please note some barriers may not apply to your role in the community. (Check only the barriers that apply)

Field	Choice Count
Limited Access to Online Job Opportunities: The challenge of individuals facing barriers in accessing online job opportunities, hindering their ability to participate in the digital job market.	
Skill Gaps in Digital Tools for Employment: The barrier posed by skill gaps in essential digital tools for employment, impacting workforce development and employment prospects for certain individuals.	
Digital Divide in Training and Skill Development: Disparities in access to digital training and skill development programs, limiting opportunities for certain populations to acquire necessary job-related skills.	
These barriers do not apply to my organization and/or the communities we serve.	

Question: The following are various barriers related to our Digital Equity pillar, Educational Outcomes. Please indicate which barriers your organization and/or the communities you serve face. Please note some barriers may not apply to your role in the community. (Check only the barriers that apply)

Field	Choice Count
Unequal Access to Online Learning Resources: Disparities in access to online learning resources, particularly affecting students in underserved communities, leading to gaps in educational outcomes.	
Limited Digital Education Tools for Diverse Learning Needs: The barrier presented by a lack of digital education tools catering to diverse learning needs, affecting the inclusivity and effectiveness of online education.	

Technology Gaps Impacting Academic Performance: The impact of technology gaps on academic performance, as students without adequate access struggle to engage in online learning environments.	
These barriers do not apply to my organization and/or the communities we serve.	

Question: The following are various barriers related to our Digital Equity pillar, Health Outcomes. Please indicate which barriers your organization and/or the communities you serve face. Please note some barriers may not apply to your role in the community. (Check only the barriers that apply)

Field	Choice Count
Limited Access to Preventive Healthcare Information: The challenge of individuals lacking easy access to digital platforms for crucial preventive healthcare information, impacting their ability to make informed health decisions.	
Inadequate Telehealth Infrastructure: The barrier posed by insufficient infrastructure for telehealth services, restricting access to remote medical consultations and impacting health outcomes.	
Low Digital Health Literacy: The challenge of low digital health literacy among certain populations, hindering their ability to navigate online health resources and make informed healthcare decisions.	
These barriers do not apply to my organization and/or the communities we serve.	

Question: The following are various barriers related to our Digital Equity pillar, Civic & Social Engagement. Please indicate which barriers your organization and/or the communities you serve face. Please note some barriers may not apply to your role in the community. (Check only the barriers that apply)

Field	Choice Count
Digital Barriers to Civic Participation: The challenge of individuals facing barriers to participating in civic and social engagement online, limiting their involvement in community activities and initiatives.	
Social Isolation Due to Technology Gaps: The impact of technology gaps contributing to social isolation, as certain individuals face challenges in connecting with others through digital platforms.	
These barriers do not apply to my organization and/or the communities we serve.	

Question: The following are various barriers related to our Digital Equity pillar, Other Essential Services. Please indicate which barriers your organization and/or the communities you serve face. Please note some barriers may not apply to your role in the community. (Check only the barriers that apply)

Field	Choice Count
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Insufficient Access to Government Services Online: The challenge of limited access to essential government services online, impacting individuals' ability to access critical information and public services.	
Barriers to Financial Services Online: The impact of barriers preventing access to financial services online, hindering financial inclusion and access to essential banking resources.	
These barriers do not apply to my organization and/or the communities we serve.	