CONNECT KĀKOU

STATE OF HAWAI'I BEAD INITIAL PROPOSAL

VOLUME 2

FOR SUBMISSION TO NTIA

December 18, 2023

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Introduction

Background

A high-speed Internet connection used to be a nice-to-have, but today, it is a necessity. In 2020, the coronavirus pandemic highlighted Internet access disparities between urban and rural areas, between Oʻahu and the neighbor islands, and between socioeconomic groups reinforcing that the Internet is for more than just entertainment; it is *essential* to have continuous access to education, work, healthcare, and other professional services. Especially for the State of Hawaiʻi, a high-speed Internet connection is critical to ensure the State of Hawaiʻi does not get left behind in the global economy as one of the most geographically isolated populations in the world.

Hawaiʻi's challenge involves ensuring all residents: from urban to rural areas, from Niʻihau to Hawaiʻi Island, from keiki (children) to kūpuna (elderly) have meaningful access to reliable and affordable high-speed Internet. To achieve this, Hawaiʻi must lay the foundation by investing in quality broadband infrastructure in our first mile (transpacific), middle mile (inter-island), and last mile (to the home) connections.

Since March 2020, the federal government has dedicated over $65 billion in federal funding to make sure that no one in the country is ever left behind because of a lack of Internet access again. In April 2023, Governor Josh Green, M.D. joined the White House and the U.S. Department of the Treasury to announce the release of $115.5 million to improve broadband for the State of Hawaiʻi. Hawaiʻi is on track to receive more than $400 million from this historic investment of federal and state funding.

The largest of all funding sources is the Broadband Equity, Access, and Deployment (BEAD) Program, administered by the National Telecommunications and Information Administration (NTIA), prioritizing the construction of high-speed Internet access to unconnected (i.e., unserved) locations, and to communities with underperforming Internet connections (i.e., underserved). Hawaiʻi will see approximately $149.5 million under the BEAD Program alone to connect an estimated 10,568 locations statewide who cannot connect to the Internet at home or are relying on outdated technology to get it.

Pursuant to Executive Memorandum No. 23-03, Governor Josh Green, M.D. designated David Lassner, President of the University of Hawaiʻi (UH), or his designee to lead State Broadband Projects for Hawaiʻi. UH will be working closely with Lieutenant Governor Sylvia Luke, who oversees broadband initiatives for the Executive Branch of the State of Hawaiʻi and the Department of Business, Economic Development and Tourism, Broadband and Digital Equity Office.

The State of Hawaiʻi has completed the first major milestone of the BEAD Program by developing the State's BEAD Five-Year Action Plan and has worked with various stakeholders on other broadband efforts to bolster Hawaiʻi's broadband infrastructure. UH is currently working on the next major milestone of the BEAD Program developing the State's Initial Proposal due at the end of 2023.

This Initial Proposal is the "first draft" of the Final Proposal for BEAD grant funding, and, among other things, explains how the State of Hawaiʻi ensures every resident has access to a reliable, affordable, and high-speed broadband connection. The twenty requirements of the Initial Proposal are developed in two parts: Volume 1 & 2. Volume 1 will describe UH's plan for the Challenge Process and includes the sections Existing Broadband Funding (Requirement 3), Unserved and Underserved Locations (Requirement 5), Community Anchor Institutions (Requirement 6), and Challenge Process (Requirement 7). Volume 2 will include the remaining Initial Proposal Requirements, Requirements 1, 2, 4 and 8-20.

About Connect Kākou

Connect Kākou is the State of Hawaiʻi's statewide broadband initiative to ensure people from all walks of life have reliable and affordable access to high-speed Internet. The name "Connect Kākou" was chosen to reflect Hawaiʻi's goal of using high-speed internet to connect everyone across the state. The Hawaiian word "kākou" is used to convey the idea of "all of us," and underscores the sense of collective responsibility and unity that this initiative represents.

The State of Hawaiʻi is committed to affordable access to high-speed internet. In collaboration with Governor Josh Green, M.D., Lieutenant Governor Sylvia Luke has launched Connect Kākou with partners from the Hawaiʻi Broadband and Digital Equity Office, the University of Hawaiʻi, the Department of Hawaiian Home Lands, and multiple state and county agencies, Connect Kākou encompasses BEAD and other broadband efforts across the State.

The initial landing page for Connect Kākou can be found at https://www.connectkakou.org/. The website will eventually serve as the centralized hub for residents and community partners to access resources and learn about Hawaiʻi's current and future broadband efforts.

Volume II (Requirements 1, 2, 4, 8 – 20)

2.1 Objectives (Requirement 1)

2.1.1 Text Box: Outline the long-term objectives for deploying broadband; closing the digital divide; addressing access, affordability, equity, and adoption issues; and enhancing economic growth and job creation. Eligible Entities may directly copy objectives included in their Five Year Action Plans.

Hawai'i's goals and objectives are structured to achieve maximum leverage and benefit from this historic investment of federal funds. These goals and objectives collectively support the vision of providing all residents meaningful access to high-speed Internet by 2030. The BEAD program broadly supports this vision by prioritizing new connections to unserved and underserved locations, raising the floor for all connections to the Internet to at least 100 Mbps, and ensuring the deployment of gigabit service to community anchor institutions. BEAD also supports critical training for building skills to overcome the legacy hurdles to adoption of technologies.

Goal 1: Provide reliable and affordable access to high-speed Internet for all residents (universal service)

Objectives
- Identify locations without access to high-speed Internet service through community outreach.

- Redefine Community Anchor Institutions (CAIs) to reach all communities.

Measures
- Increase the accuracy of the Federal Communications Commission (FCC) map data by adding previously unmarked locations.

- Increase the number of identified CAIs and create a funding priority list by collaborating with Counties and community organizations.

- Build connections to locations without access and reach all CAIs.

- Universal service performance indicators will, include but are not limited to, continuously mapping unserved and underserved locations throughout the BEAD implementation term to show the progression of connectivity over time, together with running a summary of broadband serviceable locations (BSLs) with access (to get to 100%).

Goal 2: Enable all Hawai'i residents to fully participate in a digitally integrated society

Objectives
- Expand digital equity programs.

- Integrate the State of Hawai'i Digital Equity plan with the BEAD ~~plan~~ Initial Proposal and Final Proposal, leveraging State Digital Equity capacity grants with BEAD funds.

Measures
- Increase the number of residents with digital literacy, workforce development, and online safety skills through training programs.

- Build a statewide program to train and support community digital navigators.

- Expand digital support network by fostering partnerships between community service providers and CAIs.

- Establish and maintain a catalog of digital equity service providers and offerings connected with CAIs.

Goal 3: Maximize benefits to Hawai'i through effective coordination of all State- and federally funded broadband projects

Objectives
- Ensure value delivered commensurate with the magnitude of funds invested by funding strategic uses that best fit each funding program while supporting the overall State strategy.

- Use federal funds to leverage access to private funds to further invest in Hawai'i's infrastructure.

- Integrate existing Information Technology (IT) workforce development initiatives with BEAD/Digital Equity (DE).

Measures
- Define State broadband strategy.

- Define clear roles and responsibilities for all stakeholders.

- Refine State broadband strategy as additional funds and programs become available.

- Monitor efforts to ensure consistent outcomes and results.

Goal 4: Protect public broadband infrastructure assets created from Federal and State broadband investment programs and ensure their financial sustainability.

Objectives
- Ensure public oversight through Act 231 SLH 2022, establishing a broadband infrastructure working group.

Measures
- Develop recommendations to the Hawai'i Legislature to effectively manage broadband assets, including potentially establishing a public

entity to represent the public good to manage the assets and ensure financial and operational sustainability.

2.2 Local, Tribal, and Regional Broadband Planning Processes (Requirement 2)

2.2.1 Text Box: Identify and outline steps that the Eligible Entity will take to support local, Tribal, and regional broadband planning processes or ongoing efforts to deploy broadband or close the digital divide. In the description, include how the Eligible Entity will coordinate its own planning efforts with the broadband planning processes of local and Tribal Governments, and other local, Tribal, and regional entities. Eligible Entities may directly copy descriptions in their Five-Year Action Plans.

The BEAD program's success necessitates multiple, ongoing levels of coordination and integration into existing regional and local community planning efforts. Initial outreach efforts were driven by the Governor and the counties to help identify known connectivity, equity, and literacy gaps; and connect the UH Broadband Office (UHBO) with their community organizations already engaged in outreach and general community engagement activities. Many of these organized entities hold regular member or public meetings, enabling UH to use existing events to help push out information more broadly throughout the state. Governor Josh Green has designated Lieutenant Governor Sylvia Luke as the executive lead for Hawaiʻi. She, along with other elected officials, including state legislators and county council members, will be key partners to help broadly reach neighborhoods around the state.

At the gubernatorial level, UH provides bi-monthly updates to the Lieutenant Governor to keep her apprised of program progress. At the cabinet level, UH has monthly meetings with the Hawaiʻi Department of Budget & Finance and other state agencies, including the Hawaiʻi Department of Business, Economic Development, and Tourism (DBEDT), that have planned broadband projects. Additionally, UH is required to fulfill reporting requirements to the Hawaiʻi Department of Budget & Finance, and NTIA.

The counties have developed island-specific outreach plans, which have generated feedback from neighborhood-level grassroots entities, enabling statewide broadband efforts to complement community-level planning efforts.

UH has outlined an initial communications and outreach campaign in three parts:

1) County coordination
2) UH engagement and listening sessions
3) Statewide communications and branding campaign

This campaign is expected to cover approximately the first two years of the BEAD program, from the development and submission of the Five Year Action Plan to NTIA's acceptance of the Final Proposal and will be discussed in detail in section 2.3 Local Coordination. All outreach efforts will be fully coordinated with the counties, the

State Digital Equity Plan effort (already underway), and the Department of Hawaiian Home Lands (DHHL) efforts under the Tribal Broadband Connectivity (TBC) program.

Hawaiʻi has already begun outreach via known public and organizational networks, requesting assistance in identifying bonafide community grassroots organizations that can directly assist with outreach and engagement at the affected community level.

One such entity is The Broadband Hui[1], convened by the Hawaiʻi Broadband and Digital Equity Office (HBDEO) and the County of Hawaiʻi. Formed in 2020 during the pandemic, the Hui has met virtually every week for the past three years. Its membership includes Hawaiʻi residents across diverse sectors interested in broadband and finding ways to close the digital divide in Hawaiʻi. Although state entities participate in Broadband Hui meetings, the Hui itself is not a state-funded effort. UH's outreach efforts initially began with the Hui providing broad inputs and feedback that were incorporated into planning and implementation efforts and have expanded to include smaller regional community groups. These include the Chambers of Commerce, Economic Development Boards, small businesses, and community organizations. Specific regional or neighborhood non-profits that have previously participated in broadband outreach activities — and continue to be partners — including Vibrant Hawaiʻi, Hawaiʻi Literacy, Catholic Charities, and Lanakila Pacific.

Partnership with Counties

All four counties are actively partnering with the UH Broadband Office to provide local outreach, engagement, and support for the Five-Year Action Plan along with the subsequent detailed planning and implementation efforts. The efforts include engagement with the State's digital equity efforts, informational and outreach briefing activities, and active engagement of local stakeholders and community groups to provide broad and comprehensive reach for the State's broadband efforts. NOTE: Maui County continues to be severely impacted by the August 2023 wildfire disaster and is focusing all resources on disaster mitigation, recovery, and restoration efforts. Other statewide organizations have also been impacted as a result of the disaster, including affecting resource allocations of carriers and utilities. As earlier requests to defer the State's efforts were declined, the current approach includes substantial contingency and placeholder language in order to maximize the benefit to Maui County and the State in coordinating recovery funding with federal broadband funds.

In order to help maximize the effectiveness of the collaborative efforts with the counties, UH will provide financial support in the form of four sub-awards to the

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[1] https://broadband.hawaii.gov/broadband-hui/

counties. As part of the approved BEAD Planning Funds proposal, the funds will be distributed to the counties for local engagement activities, supplemental staffing, and direct support for local non-profit and community groups.

Over the course of the Five-Year Action Plan, the Initial Proposal, the State's Challenge Process, and the Final Proposal, the UH will work closely with the counties to gain contextual community infrastructure and digital equity needs to ensure those county-level priorities are met. In the six months since the Five-Year Action Plan was finalized, the partnership between UH and county leadership has provided the groundwork for informational briefings across the state, where the public has had the opportunity to learn more about the programs and funding going into the broadband space to ensure that all residents have the opportunity to be connected and have the necessary skills to make the most of the Internet. Each county has unique issues challenging their communities that have informed the planning and implementation efforts necessary to see broadband flourish in those communities they serve. The counties are helping UH identify the gaps in broadband coverage and reconciling unserved and underserved communities, as well as identifying and supporting potential community digital hubs, service providers, and partners to provide future wrap-around support services to assist residents who need help safely navigating the Internet.

Finally, partnership with the counties is expected to streamline the required construction and implementation activities in their respective localities for new and improved telecommunications infrastructure. Further description of county coordination is provided in section 2.3 Local Coordination.

Coordination with Department of Hawaiian Home Lands (DHHL) on Tribal Broadband Connectivity (TBC) Efforts

Historically, residents on Hawaiian Home Lands have experienced poor and unequal access to robust, reliable, high-speed internet that was unfortunately exacerbated by their contracted local exchange carrier, who effectively failed to install and provision sufficient last mile service assets on Hawaiian Home Lands.

Because Native Hawaiians are not a federally recognized tribe, UH sought guidance from NTIA to define a suitable consultation path to engage the broader Native Hawaiian community in order to comply with its BEAD consultation requirements. In November 2023, NTIA officially informed UH in writing that the BEAD and DE programs do not require formal consultation with Native Hawaiians as NTIA requires 'formal consultation' with Tribal organizations. That said, to fulfill the BEAD program's local coordination requirements, UH is actively dialoguing with Native Hawaiian Organizations (NHOs) including but not limited to DHHL, the Office of Hawaiian Affairs, and the Council for Native Hawaiian Advancement. Per NTIA, NHOs can be any organization that does the following:

- Serves and represents the interests of Native Hawaiians;

- Has as a primary and stated purpose the provision of services to Native Hawaiians; and

- Has expertise in Native Hawaiian affairs and includes the Native Hawaiian organizations registered with the Department of the Interior's Office of Native Hawaiian Relations and Hawaiian Homes Commission Act Beneficiary Associations and Homestead Associations, as defined under 43 C.F.R. §§ 47.10 and 48.6, prior to the close of the application period.

Recognizing that DHHL is an integral part of the statewide coordination effort, UH and DHHL entered into a memorandum of agreement (MOA) in Fall 2022 to formalize the pre-existing efforts in this space by the UH Broadband Office and to lend technical and programmatic support to DHHL. DHHL and the UH are committed to conducting outreach and community engagement in cooperation with other statewide broadband outreach and community engagement included as part of the Coronavirus Capital Project Fund (CPF), BEAD, and Digital Equity (DE) efforts. While some differences exist across the various program requirements, residents will benefit from coordinated community engagement efforts and coordinated solutions to address the disparities in broadband access. The overall coordination efforts by the UH Broadband Office will also ensure that statewide BEAD and DE funds are available to fully complement TBC-funded work. State CPF and BEAD investments are also intended to support closing DHHL's middle mile gaps in coverage. As previously noted, DHHL and UH also meet regularly with each other as well as with the Hawaiʻi Department of Budget and Finance to coordinate all sources of funds and prevent duplication of funding and efforts.

Engagement with Business and Community Groups, Including Active Non-Profit Organizations

Extensive community engagement and outreach are critical to ensure that the State's BEAD effort can achieve the objective of meaningful, robust, reliable, and affordable Internet-for-All Hawaii's residents. In addition to simply provisioning the required telecommunications infrastructure to establish universal access to the Internet, it is critical that Hawaiʻi build and maintain a rich and robust social infrastructure of digital equity and digital literacy wraparound services that has statewide reach and support all of our communities. Building on the concept of Community Anchor Institutions (CAIs), Hawaiʻi plans to establish and work to sustain widespread Community Digital Hubs to provide community-based access and support in every community.

Community Digital Hubs may be sourced from a range of public and private non-profit organizations. These may include public and private educational institutions,

community centers, non-profit service centers, business organizations, economic and community development entities — any gathering place with some form of sustained organizational support. Some Community Digital Hubs may also be mobile or even "pop-up," provided the operation has some foundational support.

Community engagement at the county level is underway to identify and organize around key community players who can reach into their local communities to further pinpoint discrete community needs, and determine which residences may be unserved or underserved but lack a proper street address (necessary to be included for in the FCC maps, and teach basic digital literacy and workforce development skills. Together with the CAIs and Community Digital Hubs, these key community players and the organizations they represent will be the roots of a future Community Digital Navigator program critical to building sustainable community-based wrap-around service delivery systems.

The State and counties have identified a number of nonprofits already working in this space providing complementary services to digital literacy, including Vibrant Hawai'i, Hawai'i Literacy, Lanakila Pacific, Catholic Charities, Institute for Human Services, Aloha United Way, Hawai'i Foodbank, and Hawai'i Community Foundation, with additional organizations continually being added to the group.

The counties have also added a significant number of grassroots organizations to the list, given their existing community relationships. As outreach and engagement efforts ramp up, these community partners will gather information and provide input to formulate project ideas and broadly encourage participation across our diverse communities.

Notably, the UH Broadband Office has also connected with the pre-existing Information Technology (IT) sector workforce development efforts underway by the Chief Information Office (CIO) Council of Hawai'i and the Chamber of Commerce of Hawai'i. The CIO Council of Hawai'i, a community of local IT leaders that includes more than 100 industry Chief Information Officers representing Hawai'i public and private sector organizations, has an ongoing effort to improve the alignment between education and industry to increase the number of students in IT-related education pathways and programs and improve the workforce pool's overall employment-ready quality. The effort originated several years ago and includes engagement with educators and student groups in IT-sector programs focused on alignment of curriculum, and participation by industry in education delivery, internships, and apprenticeship-like programs.

The direct result of this effort has been a substantial increase in internship and employment training activities, funded by a variety of sources. A stellar example is the Good Jobs Hawai'i program that brings together funding from multiple sources to directly support the training of students and incumbent workers, in high-demand IT

sector jobs. One of the four explicit target areas for Good Jobs Hawaiʻi is the IT sector space, to include support for workforce critical to broadband infrastructure design, deployment, operations, and maintenance. This effectively provides a headstart on the BEAD workforce development activities that will be integrated with the ongoing community activities as BEAD funding reaches the implementation stage.

Together with the CIO Council of Hawaiʻi, the Chamber of Commerce of Hawaiʻi has also been executing a workforce development initiative of its own, also in coordination with the UH system. The IT Sector Partnership has been underway for two years and continues to run with three working groups led by community leaders (ref. cochawaii.org/itsector/). As the primary convener of the IT Sector Partnership, the Chamber of Commerce brings its large statewide membership of more than 2,000 organizations to the table to ensure broad participation by statewide employers. The UH Broadband Office will also leverage the opportunity to bring the BEAD workforce development activities in alignment with the ongoing IT Sector Partnership program.

Orchestration of Statewide Efforts

The UH has been tasked with coordinating major state and federal broadband investments, including BEAD, Coronavirus Capital Projects Fund (CPF), Digital Equity (DBEDT/HBDEO), Affordable Connectivity Program (DBEDT/HBDEO), and Tribal Broadband Connectivity (DHHL assisted by UH). Additional federally funded efforts are also in-flight by the Hawaii Department of Transportation and Hawaiian Telcom (Rural Digital Opportunity Fund & Connect America Fund). All funded efforts are expected to complement each other and result in effectively braided efforts to minimize gaps in coverage, eliminate duplication of efforts, and maximize the overall benefit to the State.

The UH Broadband Office is also in the process of inventorying all current broadband-related efforts across all State executive branch departments (under EM 23-03[2], directing cabinet members to provide broadband project information to the University of Hawaiʻi). The overall effort is focused on achieving robust, reliable, and affordable Internet-for-All.

Hawaiʻi Act 231 Broadband Working Group

The State convened the first Act 231 Broadband Working Group meeting on March 30, 2023. The meeting convened via Zoom, with a handful of participants present in person at the University of Hawaiʻi's Information Technology Center. The meeting included representatives of the University of Hawaiʻi, Hawaiʻi Department of Business, Economic Development, and Tourism, Hawaiʻi Department of Budget & Finance, Hawaiʻi Department of Commerce and Consumer Affairs, Hawaiʻi Department of Accounting

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[2] https://budget.hawaii.gov/wp-content/uploads/2023/06/EM-23-03-Interim-Policy-for-State-Broadband-Projects.pdf

and General Services, Hawaiʻi Department of Health, Hawaiʻi Department of Education, Department of Hawaiian Home Lands, Kauaʻi County, City and County of Honolulu, Maui County, Hawaiʻi County, and the Lt. Governor. A meeting recording is posted on the UH broadband website, along with meeting materials. The Act 231 Broadband Working Group will continue to meet at least once a quarter to determine the appropriate governance structure to implement, operate, and maintain state-owned broadband infrastructure assets.

In order to include broad industry input in the process, the Act 231 Broadband Working Group has organized an industry advisory group that includes representatives from key telecommunications providers and large industries. The industry advisory group was convened by the UH Broadband Office to collect and assemble inputs for consideration by the Act 231 Broadband Working Group. The industry advisory group participants were identified, and an initial meeting was held on July 21, 2023, to brief members on the current status of the broadband investment effort. The industry advisory group included representatives from all major wireline and wireless carriers, local colocation and Internet exchange operators, and selected large enterprise operators.

The Act 231 Broadband Working Group will ultimately submit its recommendations on the structure of a proposed public entity to hold and manage those public assets, including proposed legislation, in a report to the legislature no later than twenty days before the convening of the regular session 2024.

Ongoing Engagement and Monitoring

UH and DBEDT began meeting with counties in March 2023 to establish county roles to contribute to the overall success of BEAD implementation. This included identifying staff members fulfilling broadband and digital equity leadership in their respective counties, determining technical assistance, and assigning tasks contributing to the overall success of BEAD and the Digital Equity plans (e.g. story maps, identification of smaller non-profit and local philanthropic organizations, etc.), and coordinating outreach activities to identify community needs and inform communities on the importance of fast, reliable Internet access and digital literacy skills.

All of Hawaii's four counties will receive an allocation sum of planning funds to enable them the flexibility to meet local staffing or contractor help for project fulfillment, fund county-wide outreach, fund mapping efforts, and other activities pertinent to BEAD's success. An initial lump sum of $100,000 will be subgranted to each County with an eighteen (18) month initial period of performance. UH hosts regular weekly meetings with the counties that include county report-outs and are used to regroup, provide county and State updates, and continue team coordination.

UH is releasing funds under a Memorandum of Agreement, requiring that counties provide quarterly reports on spending, activities, data, and metrics on community engagement activities. In addition, UH is required to fulfill reporting requirements to the Hawaiʻi Department of Budget & Finance, and NTIA.

As of December 2023, the drafted MOA is being reviewed by all county partners and under county procedure to receive the funds. It is expected to be finalized by early 2024 and planning funds dispersed immediately thereafter, also in early 2024.

Identifying Unserved and Underserved Last Mile Locations

UH has utilized the FCC's National Broadband Map data to identify unserved and underserved locations in Hawaiʻi. As of this writing, there are approximately 10,500 locations[3] across the state that potentially qualify for BEAD. UH is adopting the NTIA's BEAD Model Challenge Process[4] to engage Internet service providers, units of local government, and non-profits to further refine the set of unserved and underserved locations in Hawaiʻi.

Engagement with Industry to Build Infrastructure

Following the State's Challenge Process outlined in the BEAD Initial Proposal Volume 1 and Final Proposal, UH will engage with telecom carriers, Internet service providers, and utility construction organizations to secure bids for build out of high-speed Internet infrastructure to locations identified as unserved and underserved. The request for proposal process will need to identify the State's chosen extreme high-cost threshold in order to help ensure it does not exhaust available funds solely on last-mile construction to difficult-to-reach homes. Some of the challenges will be in difficult geography and terrain often associated with Hawaiʻi's highly rural and remote locations. In addition, long driveway properties will create a significant cost challenge for the State to manage its effective use of available funds. Depending on the nature of the locations to be served, there may ultimately be a mix of technologies that are eligible to manage cost while achieving the desired universal service connections.

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[3] As of June 30, 2023
[4] https://Internetforall.gov/bead-challenge-process-policy

2.3 Local Coordination (Requirement 4)

2.3.1 Text Box: Describe the coordination conducted, summarize the impact such impact has on the content of the Initial Proposal, and detail ongoing coordination efforts. Set forth the plan for how the Eligible Entity will fulfill the coordination associated with its Final Proposal.

The University of Hawai'i Broadband Office's (UHBO) three-part communications and outreach campaign includes:

1) County Coordination
2) UH Engagement and Listening Sessions
3) Statewide Communications and Branding Campaign

To date, UHBO has conducted 19 in-person presentations on five islands, 12 Broadband Hui learning sessions, four virtual outreach sessions, four virtual public comment sessions, attended two statewide conventions and provided a BEAD program overview to two of Hawaii's four county councils, with a third planned for early 2024.

These engagement and listening sessions in multiple venues and formats have allowed BEAD program staff to touch communities on O'ahu, Kaua'i, Maui, Moloka'i and Hawai'i island. In-person engagements for Lāna'i and additional rural communities on Maui and Hawai'i island are planned for early 2024.

County Coordination

Understanding that each community is different and has localized needs, UHBO decided early on to partner with the counties (Hawai'i, Honolulu, Kaua'i, and Maui) on BEAD outreach and engagement efforts. This approach was preferable to a top-down communications model and as a way to achieve greater community engagement at the grassroots level.

In March 2023, UHBO and DBEDT began meeting with the counties to establish county roles. This included identifying and designating specific county staff to lead broadband and digital equity leadership in their respective counties and ascertaining what assistance was needed. The counties built ArcGIS StoryMaps that shared broadband service maps in an interactive online format. They also helped UHBO identify smaller non-profit and local philanthropic organizations representing communities that would benefit from BEAD and Digital Equity programs.

Throughout the summer of 2023, UHBO worked closely with the counties to develop community engagement plans tailored to each island. While discussing various outreach strategies, Hawai'i County officials shared that they had established an island-wide digital equity coalition to disseminate information and build local support for their

broadband efforts. The success of Hawai'i County's coalition prompted the other counties to create their own digital equity coalitions.

UHBO helped the counties prepare for their community engagements by creating meeting agenda templates, run-of-show schedules, BEAD-related handouts, PowerPoint slides, FAQs, and other social media-ready communications materials explaining BEAD to layman audiences. UHBO also helped the counties refine survey questions to assist in identifying neighborhood-specific broadband needs.

County engagements generally consisted of a 2-3 hour meeting that began with setup, introductions, a presentation about BEAD, a presentation about Digital Equity, a question-and-answer session followed by some light refreshments, and completion of an online survey.

Presently, UHBO is in the process of dispersing a first installment of $100,000 in planning funds to enable the counties the flexibility to meet local staffing needs (or hire contractor help) for project fulfillment, county-wide outreach, mapping efforts, and other activities pertinent to BEAD's success. This lump sum is being granted to each county with a performance period ending December 31, 2024. Throughout the performance period, UHBO has and will continue to host weekly meetings with the counties to share updates, provide support as needed, and continue team coordination. UHBO is releasing the funds under a reimbursement agreement that requires the counties to provide monthly written reports on spending, activities, data, and metrics on community engagement activities.

By August 2023, Hawai'i, Honolulu, and Kaua'i counties had hosted at least one broadband information session in their respective counties. Maui County, however, suffered a devastating wildfire disaster in early August, impacting their planned outreach efforts.

Due to the sensitivity surrounding Maui's nascent recovery efforts, UHBO is actively working with Maui County officials to accommodate their unique circumstances, as the wildfire significantly impacted the broadband planning and outreach efforts due to the scope, scale, and significant human and economic impacts of the wildfire. While there will be emergency response funds to rebuild some of the impacted infrastructure, consideration in the statewide BEAD efforts needs to take into account likely future infrastructure gaps and ensure sufficient contingency funds are allocated to make Maui County whole. The State did request from NTIA a deferral of BEAD submission requirements to take these factors into account, but the request was not granted in consideration for the national grant structure.

In October 2023, Maui County engaged a private consultant to convene community engagements throughout the county when appropriate. An initial information

session was held in Kahului, Maui on October 27, 2023, with more sessions planned for December 2023 and into Spring 2024.

UH Broadband Office *Engagement and Listening Sessions*

In tandem with in-person outreach efforts, UH Broadband Office has spent considerable effort providing BEAD updates and disseminating program information to the Broadband Hui[5]. These sessions were intended to complement in-person sessions and allowed for more technical discussion to occur as the Hui's membership includes IT industry stakeholders and not just the general public.

Upon submission of the BEAD Five-Year Action Plan, UHBO produced a "Readers' Digest" version of the Plan and reviewed it on a Hui call. Immediately afterwards, UHBO began providing structured weekly updates to the Hui focused on singular topics. These bite-sized learning sessions were aimed at helping the Hui — and the communities they represent — better understand the many layers and requirements of the BEAD program. Hui conveners graciously allowed UHBO to give its BEAD updates at the top of the agenda, following introductions. The updates generally consisted of 4-10 slides and a 10-15 minute question and answer session immediately following. Slides were then posted to the UH Broadband website.

In September and October 2023, topics covered included:
- BEAD Timeline & Major Deadlines Review
- Community Anchor Institutions and Maps
- Definition of Served/Underserved, Speed Tests
- BEAD Initial Proposal components — Volume 1
- BEAD Initial Proposal components — Volume 2
- Fall 2023 Public Outreach Calendar and Public Comment Overview

In November, UHBO focused Hui sessions on the Initial Proposal and included:
- Challenge Process Overview
- BEAD Initial Proposal, presented in 4 parts over 4 meetings
  - Session 1: Initial Proposal Vol. 1
  - Session 2: Initial Proposal Vol. 2; Sections 1-6
  - Session 3: Initial Proposal Vol. 2; Section 7-11
  - Session 4: Initial Proposal Vol. 2; Section 12-16

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[5] https://broadband.hawaii.gov/broadband-hui/

Statewide Communications and Branding Campaign

The third pillar of UHBO's public engagement campaign is a statewide public communications campaign. To ensure that the public at large is aware of the funding and projects coming into the state, UHBO determined it would be helpful to conduct a statewide public communications campaign (in addition to ongoing grassroots-level engagements).

A public media campaign, developed and branded with the assistance of a consultant, was developed over the summer of 2023 and officially launched on November 7, 2023 with a live-streamed press conference hosted by Lieutenant Governor Sylvia Luke. Representatives from multiple state agencies and counties were physically present at the Hawaiʻi State Capitol to show unity and statewide engagement in the broadband program Connect Kākou, which in Hawaiian translates to "connecting everyone together."

UHBO is currently reviewing a proposal to renew its consultant to handle a statewide media campaign for 2024 that would include traditional media outreach and legacy print and media channels. The traditional media campaign is intended to complement more in-person outreach sessions on all islands planned for Spring 2024.

Underrepresented Engagement

UHBO is working closely with the counties and other state broadband programs (CPF, DE, TBC) to ensure outreach and engagement with underrepresented communities specific to each county. Since August 2023, BEAD has joined DHHL and DE staff in co-hosting community engagement sessions in order to leverage the comprehensive activities by all the state programs (CPF, BEAD, DE, TBC) to reach key nonprofits, advocacy organizations, and neighborhood groups that reflect underrepresented and unserved/underserved populations. Coordinating outreach with the DHHL and DE programs has also helped to clarify roles and avoid mission creep and outreach fatigue, as all of the broadband programs have complementary objectives requiring engagement with many of the same communities. UHBO is also leveraging community connections built by the Hawaiʻi Broadband & Digital Equity Office from its work on the State of Hawaiʻi Digital Equity Plan.

UHBO has compiled a list of community engagement events it conducted, noting which covered populations were in attendance at each event, in the NTIA's Local Coordination Documentation Tracker. This list details 19 in-person engagements conducted to date, 12 Broadband Hui learning sessions, 4 virtual community outreach sessions, BEAD attendance at two statewide conventions, and BEAD's appearance before members of the Honolulu and Maui county councils. UHBO activities utilized a

mix of participation mechanisms — virtual and in-person — and feedback was taken in all forms (written, verbal, emailed, and by phone).

Audience members at these engagements included rural farmers, Native Hawaiians, Native Hawaiian homestead leaders, minority business owners, college students from rural communities, public television advocates, advocates for persons with disabilities, county public housing administrators, kupuna groups, and others.

Future community engagements planned for Spring 2024 include, but are not limited to, the following communities:

- Hawai'i Island
    - Waimea
    - Kohala
    - Kea'au
    - Pahala
- Lana'i
    - Lana'i City
- Kauai
    - Anahola
    - Kekaha
- Moloka'i
    - Kaunakakai
    - Lanikeha
- Maui
    - Hana
    - Kaupo
    - Ke'anae
- Oahu
    - Kalihi
    - Kapalama Valley
    - Wahiawa
    - Waialua
    - Waianae
    - Waipahu

To further assist with UHBO's efforts to further engage underrepresented communities, UHBO has developed a map[6] based on the NBAM December 31, 2022 fabric version data set. The map highlights the U.S. Census zip code tabulation areas with the most to least unserved and underserved locations per island. UHBO has

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[6] https://www.hawaii.edu/broadband/state-broadband-service-map/

shared this map with counties as well as an analysis spreadsheet to support targeted outreach to unserved and underserved communities.

In addition to the range of community engagements, UHBO has conducted outreach and met with a range of telecommunication providers and industry representatives, service providers, and labor organizations to ensure broad coverage of stakeholders. These efforts will continue, in particular as greater awareness of collective broadband expansion efforts happens over the period of the BEAD program.

Impact of Local Coordination

UHBO's local coordination and outreach efforts have had two main impacts on the Initial Proposal. First, local coordination and outreach helped UHBO sync all communications on the state's comprehensive broadband activities and reach more audiences. Second, local coordination and outreach confirmed and allowed the counties and UHBO to validate particular community needs.

Regarding the first point: Feedback garnered from community engagements enabled UHBO to make new community connections. Listed below are some examples of community outreach feedback and follow-up actions taken or planned:

- Following an in-person DE/BEAD information session in Hilo in October, session participants suggested reaching out to entities such as Hawaiian language immersion schools, whose parent communities, also known as "Hui Makua", are extremely active and engaged. UHBO has reached out to three groups and plans to schedule a Zoom session with one.

- Following an in-person DE/BEAD information session on Molokaʻi, session participants provided a half dozen names of local contacts including the Molokaʻi high school principal, teachers, and local farm bureau leaders to invite to future public engagements. UHBO is planning spring outreach events that will include these individuals.

- Following an in-person BEAD information session at the University of Hawaiʻi West Oʻahu campus in October, session participants suggested engaging the college's vice chancellor to give a BEAD information session to department heads and seek opportunities for students from the Waiʻanae, Māʻili, and other underrepresented westside communities, to develop independent projects or practicums around a 'hyper-local' digital equity and digital literacy activities that could be part of BEAD's non-deployment fund plans.

- Following a Broadband Hui learning session presentation in late November, a healthcare advocate asked UHBO to present to a small group of healthcare

professionals about telehealth opportunities related to BEAD. A virtual presentation took place in early December.

Feedback from outreach sessions helped UHBO refine its communications strategy to address common miscommunication and misunderstandings around the BEAD program, existing infrastructure, and how to conduct valid home speed tests.

Outreach sessions to the Broadband Hui and out in the wider community also revealed that the public's base level of knowledge about broadband is very limited. Greater overall public information campaigns about broadband technologies — what is wired internet, what are download and upload speeds, and how to troubleshoot connectivity issues — are still needed. This base level familiarity, whether espoused by BEAD or DE programs, is important because the unserved and underserved populations that these programs are intended to serve often conflate cellular phone service with high-speed Internet access.

Through the outreach sessions, it has also become apparent that although technically "served," some communities appear to consistently experience poor connectivity speeds, leading UHBO to suspect that some geographies may have carrier service node problems and would benefit from some investment in splitting of nodes or adding nodes, as well as accounting for some middle mile coverage in certain, hard-to-reach locations.

Regarding the second impact of UHBO's local coordination and outreach efforts on the Initial Proposal, outreach events helped the counties and UHBO confirm community concerns and interests. These are written up in detail in the NTIA Local Coordination Tracker Tool.

Some areas of concern included how BEAD funding could be used to address connectivity issues to properties with off-grid structures, unpermitted structures, long driveways, and those without existing poles or other infrastructure needed to support a high-speed wired connection. Questions were raised about how digital navigators or staff manning future Community Digital Hubs would be supported or compensated, and how some in the community desired more public policy bills put before the state legislature and county councils addressing digital inclusion and digital equity.

UHBO's ongoing coordination efforts include continuing to support and assist the counties with their community engagements, identification of Community Anchor Institutions, and preparing for and learning about the BEAD Challenge Process. In addition to supporting the counties with planning funds throughout the BEAD project timeline, UHBO is available to present at community meetings and continues to produce supplemental handouts and other public relations materials for the counties on demand.

2.3.1.1 Attachment: As a required attachment, submit the Local Coordination Tracker Tool to certify that the Eligible Entity has conducted coordination, including with Tribal Governments, local community organizations, unions and work organizations, and other groups.

Information on each outreach session is being collected and feedback from each county is being collated and reported on. UHBO created an online form for the counties to fill out after their public outreach engagements to track and reflect on engagements for improvement. UHBO incorporated these engagements in the Local Coordination Tracker Tool submitted to NTIA.

2.3.2 Text Box: Describe the formal tribal consultation process conducted with federally recognized Tribes, to the extent that the Eligible Entity encompasses federally recognized Tribes. If the Eligible Entity does not encompass federally recognized Tribes, note "Not applicable."

The NTIA requires that the State of Hawai'i intentionally engage with our statewide communities, including Native Hawaiian Organizations (NHOs), Counties, other state agencies, community organizations and Internet Service Providers. UHBO has worked closely with the Department of Hawaiian Home Lands to ensure coordination with its Native Hawaiian beneficiaries. UHBO has ongoing weekly conversations with DHHL's broadband program staff.

UHBO has also reached out to the leadership of the largest organizations in the state representing Native Hawaiian interests, including the Department of Hawaiian Home Lands Chair, the Executive Director at the Office of Hawaiian Affairs, and the Chief Executive Officer of the Council for Native Hawaiian Advancement.

With DHHL's help, UHBO has planned a series of information sessions on each island specifically for DHHL constituents and stakeholders. These meetings will include an overall broad overview of BEAD and Connect Kākou, opportunities for questions, and public comment, and will include follow-up sessions at later dates that go into greater detail about the initial proposal, challenge process, and capacity grants. Feedback received from these outreach sessions will be incorporated into and will inform the state's BEAD non-deployment expenditure plans.

2.3.2.1 Optional Attachment: As a required attachment only if the Eligible Entity encompasses federally recognized Tribes, provide evidence that a formal tribal consultation process was conducted, such as meeting agendas and participation lists.

Meeting agendas that included outreach to Native Hawaiian communities followed this structure:

12:00 Registration

12:30 – 1:00 Digital Equity Presentation
1:00 – 1:30 University of Hawaiʻi BEAD Presentation
1:30 – 1:45 Question & Answer session

2.4 Deployment Subgrantee Selection (Requirement 8)

Deployment Projects Subgrantee Selection Process & Scoring Approach

2.4.1 Text Box: Describe a detailed plan to competitively award subgrants to last-mile broadband deployment projects through a fair, open, and competitive process.

The State's subgrantee selection process will begin after two major benchmarks: 1) the approval of the Initial Proposal Volume II and 2) once the BEAD Challenge Process is completed and all unserved and underserved locations are finalized and approved by NTIA. The University of Hawai'i Broadband Office (UHBO) will use the Research Corporation of the University of Hawai'i's (RCUH) Request for Proposal (RFP) process to fulfill a competitive subgrantee selection process for the State.

RCUH was established by the Hawai'i State Legislature in 1965 as a public instrumentality and is attached to the University of Hawai'i for administrative purposes. To fulfill its mission, RCUH is exempt from certain State procurement and personnel laws. This exemption allows RCUH to provide rapid and efficient services that enable its clients to be more productive and to meet their research, development, and training objectives in a timely manner. RCUH has established processes and procedures specifically designed for the execution of federally funded grants and is consistent and familiar with Federal requirements along with State procurement principles. All University of Hawai'i extramural funding utilizes RCUH for purchases, contracts, and transactions.

All RFPs will be announced through the Lieutenant Governor's Office, on the Connect Kākou website, on the UH broadband website, and in UHBO email newsletters. All RFPs will be officially released through CommercePoint, RCUH's designated portal, where potential subgrantees must upload all required documentation for consideration under the relevant funding announcement. RFPs will detail all required gating and scoring criteria, and clarify all safeguards to ensure that the subgrantee selection process is fair, including safeguards against the following: collusion, bias, conflicts of interest, and arbitrary decisions. RFPs will be posted for a minimum of 60 days and a maximum of 90 days before the funding round closes. Additional funding rounds may be conducted in the event no proposals are received or if applicants fail to meet the gating criteria and requirements of the RFP.

Once the RFP submission window closes, the review committee will have a minimum of 20 business days to review submissions and select the offeror with the highest average score. The review committee will be composed of at least five individuals, including at minimum: the director of the state BEAD Program; two (2) qualified technical reviewers with working knowledge of the broadband infrastructure deployment components and ISP services, and a minimum of two (2) broadband

specialists. The review committee will be required to follow the scoring rubric provided for the relevant RFP. Scoring criteria will be designed to ensure that an objective assessment of each proposal is conducted rather than subjective elements that leave room for interpretation by reviewers. A breakdown of the scoring template is detailed in 2.4.2, and a template of the corresponding rubric is included in 2.4.2.1. The State expects multiple addendums to the RFP as the extremely high-cost per location threshold is determined and refined, with prospective offerors submitting updated responses via the RCUH CommercePoint site. Once final offers are received, the highest average scoring qualified offeror will be selected and contracting processes will commence.

RCUH requires any potential subgrantee to submit a number of documents before formalizing a contract with a selected potential subgrantee. Capability of carrying out activities funded by the subgrant in a competent manner in compliance with all applicable federal, state, and local laws will be fulfilled with the submission of a valid tax clearance to RCUH from the Hawaiʻi Department of Taxation and the U.S. Internal Revenue Service prior to executing an Agreement of Services. This is in accordance with Section 103-53 of the Hawaiʻi Revised Statutes. A Certificate of Vendor Compliance that reflects a "Compliant" status from Hawaiʻi Compliance Express (HCE), https://vendors.ehawaii.gov/hce/splash/welcome.html is acceptable in satisfying the tax clearance requirement. Governmental agencies in the U.S. (i.e., city, county, state, federal) and any foreign governmental agencies are exempted from the tax clearance requirement. Note that a tax clearance from the Hawaiʻi Department of Taxation and the U.S. Internal Revenue Service is not required for the *submission* of a proposal.

In accordance with the BEAD Notice of Funding Opportunity (NOFO), formalized contracts with awarded subgrantee will, at a minimum, include the following in the Sub-granting Accountability Procedures:

- Disbursement of funding to subgrantees for all deployment projects, at a minimum, on a reimbursement basis (which would allow the State to withhold funds if the subgrantee fails to take the actions the funds are meant to subsidize);

- The inclusion of clawback provisions (i.e., provisions allowing recoupment of funds previously disbursed) in agreements between the State and any subgrantee;

- Timely subgrantee report mandates; and

- Robust subgrantee monitoring practices.

2.4.2 Text Box: Describe how the prioritization and scoring process will be conducted and is consistent with the BEAD NOFO requirements on pages 42 – 46.

The University of Hawaiʻi will use the RCUH proposal evaluation form to score all RFP responses. Points are allocated to specific criteria that will be specified in the RFP.

Total Points: 125

Scoring Criteria	Points
Primary Criteria	
Minimal BEAD Program Outlay	65
Affordability	15
Fair and Safe Labor Practices	15
Secondary Criteria	
Speed to Deployment	10
Speed of Network and Other Technical Capabilities	10
Additional Criteria	
Technical Response	5
Open Access	5

Table 1: Deployment RFP Scoring Criteria

Primary Criteria (95 points possible)

Minimal BEAD Program Outlay (65 points)
- Description: The total BEAD funding that will be required to complete the project, accounting for both total projected cost and the prospective subgrantee's proposed match (which must, absent a waiver, cover no less than 10 percent of the project cost), with the specific benefits awarded increasing as the BEAD outlay decreases. Prospective subgrantees may use subsidized subscriptions (subsidized amount * number of subscribers * duration of subsidy) as an alternative to matching funds.

    Scoring: The Minimal BEAD Program Outlay score will be composed of two parts, one representing the requested BEAD funding amount (Total project cost minus matching) and the other representing the amount of matching funds that

the prospective subgrantee is offering. Proposals will receive no points if the proposal omits a response to these criteria. Point values from Part 1 and Part 2 will be added to obtain the Minimal BEAD Program Outlay score.

<u>Part 1: Requested BEAD funding amount: Maximum Points: 45</u>

The prospective subgrantee that requests the LOWEST amount of requested BEAD funding will receive the maximum score. The points allocated to bidders with larger amounts will be equal to the lowest amount, multiplied by the maximum points for Part 1, and then divided by the larger amount.

Example: Maximum Points for Part 1: 45 points

Offeror A Requested: $20m (lowest amount) = Awarded 45 points

Offeror B Requested: $25m (higher) = 45 x (20/25) = Awarded 36 points

Offeror C Requested: $35m (higher) = 45 x (20/35) = Awarded 25.7 points

<u>Part 2: Proposed Match amount: Maximum Points: 20</u>

The prospective subgrantee that offers the HIGHEST amount of matching funds will receive the maximum score. The points allocated to bidders with lower amounts of matching funds will be equal to the lower amount, multiplied by the maximum points for Part 2, and then divided by the largest amount.

Example: Maximum Points for Part 2: 20 points

Offeror A matching: $8m (lower amount) = 20 x (8/25) = Awarded 6.4 points

Offeror B matching: $25m (highest amount) = Awarded 20 points

Offeror C matching: $15m (lower amount) = 20 x (15/25) = Awarded 12 points

<u>Summation of Part 1 and Part 2 will be done to obtain the total Minimal BEAD Program Outlay score. In the examples above</u>:

Offeror A: 45 + 6.4 = 51.4 Points

Offeror B: 36 + 20 = 56 Points

Offeror C: 25.7 + 12 = 37.7 Points

Affordability (15 points)

- Description: The prospective subgrantee's commitment to provide the most affordable total price (inclusive of taxes and fees) to the customer in the proposed service area. Prices offered must be normal rates and not limited-time or introductory offers.

- Scoring: Scoring will be based on the required speed level of 1Gbps down by 1Gbps up delivered on an end-to-end fiber connection. In the event that no provider can provide such a service to the locations offered, scoring will be based on a 100 Mbps down by 20 Mbps up, delivered on any technology that can provide such a service to the end location. The potential subgrantee proposing the least expensive rate will receive full points in this section. The points allocated to higher-priced bidders should be equal to the lowest bidder's price multiplied by the maximum points available for price, divided by the higher proposal price. Proposals will receive no points if the proposal omits a response to this criteria.

  Example: Maximum points = 20 points

  Offeror A Total: $100 per month for 1 Gbps symmetrical (lowest cost) = Awarded 20 points

  Offeror B Total: $150 per month for 1 Gbps symmetrical (higher cost) = 20 x (100/150) = Awarded 13.33 points

  Offeror C Total: $200 per month for 1 Gbps symmetrical (higher cost) = 20 x (100/200) = Awarded 10 points

Fair and Safe Labor Practices (15 points)

- Description: Eligible Entities must give priority to projects based on a prospective subgrantee's demonstrated record of and plans to be in compliance with federal labor and employment laws. New entrants without a record of labor and employment law compliance must be permitted to mitigate this fact by making specific, forward-looking commitments to strong labor and employment standards and protections with respect to BEAD-funded projects. This prioritization requirement is described in further detail in Section IV.C.1.e of this NOFO.

- Scoring: A maximum score of 15 points will be awarded to those who fully meet all of the mandatory and highly desired requirements as described in the Labor Standards and Protection section of the Initial Proposal. Missing or insufficient information in the proposal to determine whether requirements have or will be met by the prospective subgrantee will be deducted three points per requirement. Proposals will receive no points if the proposal omits a response to this criteria.

Secondary Criteria (20 points possible)

Speed to Deployment (10 points)
- Description: Potential subgrantees that receive BEAD Program funds for network development must deploy the planned broadband network and begin providing services to each customer that desires broadband services within the project area not later than four years after the date on which the subgrantee receives the subgrant from the State.

  Proposals must include a timeline for project implementation indicating all key milestones and estimated project completion date. At minimum, this should include a reporting schedule, permitting, and buildout schedule, with benchmarks to determine the percent of project completion through the proposed project period. Proposals shall also include the prospective subgrantee's expertise and ability in deploying the proposed broadband network and detail how they will be able to meet the proposed timeline.

  Potential subgrantees should be aware that scoring will be based on time to deploy and proposals that commit to completion date in less than the allocated time will receive a higher score.

- Scoring: Proposals will be evaluated based on the committed total duration required to deploy connectivity to areas defined. Evaluations will take into account the amount of time required to complete backbone deployment as well as last mile deployment. Proposals with a binding commitment to deploy connectivity to all locations within the project area within four years shall receive 5 points. Proposals will be given 1 additional point for every 6 months to deploy connectivity earlier. For example, a proposal committing to provide services in 3.5 years will be given 6 points; 3 years will be given 7 points. Proposals will receive no points if the proposal omits a response to this criteria.

Speed of Network and Other Technical Capabilities (10 points)

Description: Potential subgrantees will propose the technology to deploy to BEAD funded locations. Proposals must include the speed, latency, and other technical capabilities of the proposed technology to deploy. Proposals proposing to use technologies that exhibit greater ease of scalability with lower future investment and whose capital assets have longer useable lives will be afforded additional weight over those proposing technologies with higher costs to upgrade and shorter capital asset cycles.

Scoring: Proposals that will utilize end-to-end fiber-optic technology to each end-user premises will receive maximum points. The speeds, latency, and other

technical capabilities of other technologies proposed by prospective subgrantees seeking to deploy projects will be weighed collectively to determine the points received. Proposals will receive no points if the proposal omits a response to this criteria.

Additional Criteria (10 points possible)

Technical Response (5 points)
- Description: Potential subgrantees shall provide an in-depth technical solution of the proposed deployment including details to: technology selected, network capacity and planning, backhaul and middle mile requirements, as well as proposed customer support and installation details.

- Scoring: Technical responses will be evaluated based on sound network engineering principles as well as the customer support services and offerings. Proposals will receive no points if the proposal omits a response to this criteria.

Open Access (5 points)
- Description: Potential subgrantees should offer open access to backbone networks and last mile access where possible for the life of the subsidized networks. Such offerings shall be offered on fair, equal, and neutral terms to all potential retail providers.

- Scoring: Open access offerings shall be evaluated on cost, accessibility, interoperability as well as any other factors that would negatively impact the use of open access offerings. Proposals will receive no points if the proposal omits a response to this criteria.

2.4.2.1 Attachment: As a required attachment, submit the scoring rubric to be used in the subgrantee selection process for deployment projects. Eligible Entities may use the template provided by NTIA, or use their own format for the scoring rubric.

The RCUH RFP scoring rubric template will be utilized for all BEAD-related RFPs. A modified template with the above scoring criteria will be uploaded into the portal.

2.4.3 Text Box: Describe how the proposed subgrantee selection process will prioritize Unserved Service Projects in a manner that ensures complete coverage of all unserved locations prior to prioritizing Underserved Service Projects followed by prioritization of eligible CAIs.

The proposed RFP process will consist of a minimum of two cycles: the first cycle to fund deployment to unserved and underserved locations and the second cycle to fund deployment to eligible community anchor institutions (CAIs). If multiple RFP rounds are

necessary within the first cycle to fund unserved and underserved locations, these rounds will be completed prior to beginning the second cycle for eligible CAIs.

For each cycle, the proposed RFP process will be broken down by counties (i.e., Kaua'i, Honolulu, Maui (inclusive of Lāna'i and Moloka'i), and Hawai'i County) for a total of four RFPs. Each RFP issued will cover a single county and all the unserved and underserved locations within that county. Potential subgrantees will be required to cover *all* unserved and underserved locations for each county as part of their offer. This will ensure the coverage of *all* unserved and underserved locations. Once the unserved and underserved RFP is completed, the same process will be done for the eligible CAIs.

2.4.4 Text Box: If proposing to use BEAD funds to prioritize non-deployment projects prior to, or in lieu of, the deployment of services to eligible CAIs, provide a strong rationale for doing so. If not applicable to plans, note "Not applicable."

Not Applicable

2.4.5 Text Box: The proposed subgrantee selection process is expected to demonstrate to subgrantees how to comply with all applicable Environmental and Historic Preservation (EHP) and Build America, Buy America Act (BABA)6 requirements for their respective project or projects. Describe how the Eligible Entity will communicate EHP and BABA requirements to prospective subgrantees, and how EHP and BABA requirements will be incorporated into the subgrantee selection process.

Any applicable Environmental and Historic Preservation (EHP) and Build America, Buy America Act (BABA) requirements will be included in the RFP as minimum requirements. If minimum requirements are not met in any of the responses, the bid would be disqualified.

Last-Mile Broadband Deployment Project Areas

2.4.6 Text Box: Describe how the Eligible Entity will define project areas from which they will solicit proposals from prospective subgrantees. If prospective subgrantees will be given the option to define alternative proposed project areas, describe the mechanism for de-conflicting overlapping proposals to allow for like-to-like comparisons of competing proposals.

The State of Hawai'i's project areas will be broken down into counties. This means there will be only four project areas: the County of Hawai'i, the City and County of Honolulu, the County of Kaua'i, and the County of Maui (inclusive of Kalawao). This method ensures that no unserved and underserved location is left behind, as subgrantees will be required to submit a proposal that accounts for 100% of the location IDs indicated within the RFP. Potential subgrantees will also be required to validate locations, provide

cost models, and exclusions for non-buildable locations (e.g., water towers or a Location ID with no residential or CAI structure associated with it), as part of their application.

Potential subgrantees may only be able to propose alternative locations in the case of receiving funding under another state, private, or federal program to deploy funding with overlap in project areas. Potential subgrantees must report this if requesting funding from another program concurrently with overlapping project areas. In the event a potential subgrantee is awarded funding from another program covering locations they proposed to service, potential subgrantees are required to notify RCUH prior to contract to avoid duplication of funding, which is not allowed under the BEAD NOFO. Potential subgrantees must notify the RCUH as soon as the decision is made to avoid further delays in the award process. Failure to do so by the selected offeror will result in a non-award for the funding round.

2.4.7 Text Box: If no proposals to serve a location or group of locations that are unserved, underserved, or a combination of both are received, describe how the Eligible Entity will engage with prospective subgrantees in subsequent funding rounds to find providers willing to expand their existing or proposed service areas or other actions that the Eligible Entity will take to ensure universal coverage.

The selection of project areas is expected to ensure that no locations nor groups of locations are left without a prospective subgrantee. If the competitive process fails to attract at least one qualified prospective subgrantee, the University of Hawai'i (UH) will open negotiations with the provider or providers with existing service capacity at adjacent locations. UH may consider incentives such as waiving the match requirements without penalty to the potential subgrantee during scoring.

2.4.8 Text Box: Describe how the Eligible Entity intends to submit proof of Tribal Governments' consent to deployment if planned projects include any locations on Tribal Lands.

If a project is planned for deployment over Hawaiian Home Lands, potential subgrantees will be required to submit a formal letter issued by the Department of Hawaiian Home Lands authorizing/consenting to the proposed plan, pending permitting approval on Hawaiian Home Lands.

Extremely High Cost Per Location Threshold

2.4.9 Text Box: Identify or outline a detailed process for identifying an Extremely High Cost Per Location Threshold to be utilized during the subgrantee selection process. The explanation must include a description of any cost models used and the parameters of those cost models, including whether they consider only capital expenditures or include the operational costs for the lifespan of the network.

Upon review of the RFP responses, the University of Hawai'i Broadband Office (UHBO) will identify locations that are outliers in terms of cost to build. Using data that includes trunk-to-location footage, trunk/backbone footage, and locations per mile for the capital expenditures, as well any operational costs that may be impacted due to the higher cost to build locations (inclusive of additional operational and maintenance costs anticipated due to extensions of infrastructure pathways), UHBO will determine the Extremely High Cost Per Location Threshold (EHCPLT).

UHBO will start with the NTIA provided Eligible Entity Planning Tool cost models as the basis for estimating the costs to provision locations with the understanding that it is likely the models will understate the actual costs to be incurred in Hawaii by 15-20%, given the timing of procurement activities and the likelihood of ongoing inflation and supply chain pressures. In particular, UHBO will consider those locations that are not only a deployment high cost to serve but will also impose significant additional costs for upkeep and maintenance over the anticipated life of the incremental infrastructure. Special attention will be given to incremental rights-of-way and special construction to create single-use pathways for broadband serviceable locations (BSLs) located at a distance from common carrier distribution infrastructure. Consideration will be given to clusters of unserved/underserved BSLs requiring additional middle mile infrastructure that will increase overall access availability in rural areas. UHBO's determination of the EHCPLT will also take into consideration the balance of overall costs to achieve 100% access with reliable service above the 100Mbps/20Mbps underserved threshold that may be achievable and practical using non-fiber-based technology alternatives, inclusive of fixed wireless and low-Earth orbit (LEO) satellite services. Prior to receiving the RFP responses, UHBO will examine the likely cost and feasibility of non-fiber-based technology alternatives in order to best inform its determination of the EHCPLT. Per the NTIA's direction, UHBO will look to prefer fiber-based last mile deployment for BSLs below the EHCPLT.

UHBO anticipates high-setback (i.e. very long driveway) properties will be problematic during the RFP response and expects these BSLs will likely have a high cost to provision. In addition, the expectation that some of these BSLs will require either extensive trenching and/or pole construction via new rights-of-way access (private easements) will also create a significant maintenance and operations burden on RFP respondents' cost estimates. A few public comments were received that indicate resistance to allowing such construction on their individual property.

The other special case situation would be a cluster of BSLs located in a highly isolated location requiring significant middle mile investment (e.g., the private island of Ni'ihau). Cost Quest staff did indicate that the Eligible Entity Planning Tool cost estimator did not accurately assign sufficient middle mile costs to account for the additional submarine or specialized wireless elements of these special cases.

2.4.10 Text Box: Outline a plan for how the Extremely High Cost Per Location Threshold will be utilized in the subgrantee selection process to maximize the use of the best available technology while ensuring that the program can meet the prioritization and scoring requirements set forth in Section IV.B.6.b of the BEAD NOFO. The response must describe:

a. The process for declining a subgrantee proposal that exceeds the threshold where an alternative technology is less expensive.

b. The plan for engaging subgrantees to revise their proposals and ensure locations do not require a subsidy.

c. The process for selecting a proposal that involves a less costly technology and may not meet the definition of Reliable Broadband.

Once the Extremely High Cost Per Location Threshold (EHCPLT) is determined, the University of Hawai'i Broadband Office (UHBO) will issue an addendum to the RFP via the RCUH CommercePoint site and reissue a new response deadline. All prospective offerors who have submitted bids will be automatically notified of the addendum once posted. Prospective offerors will be required to submit updated bids by a set time period (typically 2-3 weeks from addendum posting). In the follow-up/addendum request, potential subgrantees may provide alternative technology solutions for the designated set of broadband serviceable locations (BSLs) above UHBO's established EHCPLT.

Should offerors not be able to provide reasonable responses, UHBO may elect to remove locations from the scope of work, and select alternative technologies to implement the required connectivity for the subset of locations removed from the EHCPLT. Any such action will be done via the addendum process on the RCUH CommercePoint site. UHBO may waive the match in project areas where potential subgrantees commit to a reasonable cost model with fiber deployment.

UHBO intends to hold the 100% coverage requirement for all potential subgrantees, with the allowed flexibility in provisioning services to BSLs above the EHCPLT. Potential subgrantees will be encouraged to apply flexible solutions to help ensure that the service and performance objectives of the BEAD program are fully met. UHBO will reserve the right to remove BSLs from the subgrantee awards that are significantly over the EHCPLT (even when alternative technologies are proposed), to look to implement alternatives that do not inordinately tax the overall BEAD deployment investment pool.

Deployment Subgrantee Qualifications

2.4.11 Text Box: Describe how the Eligible Entity will ensure prospective subgrantees deploying network facilities meet the minimum qualifications for financial capability as outlined on pages 72-73 of the BEAD NOFO. If the Eligible Entity opts to provide

application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

a. Detail how the Eligible Entity will require prospective subgrantees to certify that they are qualified to meet the obligations associated with a Project, that prospective subgrantees will have available funds for all project costs that exceed the amount of the grant, and that prospective subgrantees will comply with all Program requirements, including service milestones. To the extent the Eligible Entity disburses funding to subgrantees only upon completion of the associated tasks, the Eligible Entity will require each prospective subgrantee to certify that it has and will continue to have sufficient financial resources to cover its eligible costs for the Project until such time as the Eligible Entity authorizes additional disbursements.

b. Detail how the Eligible Entity plans to establish a model letter of credit substantially similar to the model letter of credit established by the FCC in connection with the Rural Digital Opportunity Fund (RDOF).

c. Detail how the Eligible Entity will require prospective subgrantees to submit audited financial statements.

d. Detail how the Eligible Entity will require prospective subgrantees to submit business plans and related analyses that substantiate the sustainability of the proposed project.

Minimum qualifications for ensuring that prospective subgrantees deploying network facilities meet the minimum qualifications for financial capability will be included as minimum requirements in any RFP or procurement activities. Acceptable evidence to demonstrate financial capability includes certifications, a letter of credit, audited financial statements, and sustainability/pro forma analyses of the proposed project. Additionally, prospective offerors will be asked to provide evidence that they have historically successfully completed substantially large capital investment projects of similar scope to the proposed RFP and provide details on the financial aspects of such deployment to demonstrate their ability to fund such projects.

2.4.11.1 Optional Attachment: As an optional attachment, submit application materials related to the BEAD subgrantee selection process, such as drafts of the Requests for Proposals for deployment projects, and narrative to crosswalk against requirements in the Deployment Subgrantee Qualifications section.

The RCUH superquote RFP base template found at https://www.rcuh.com/document-library/2-000/procurement-contracts-2/attachment-56a-rfp-template-uh-superquote/, as

well as RCUH Federal terms and conditions, will be utilized for all BEAD-related RFPs. This template and forms will be attached to the portal.

2.4.12 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for managerial capability as outlined on pages 73 – 74 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

    a. Detail how the Eligible Entity will require prospective subgrantees to submit resumes for key management personnel.
    b. Detail how it will require prospective subgrantees to provide a narrative describing their readiness to manage their proposed project and ongoing services provided.

As part of the gating criteria and as a standard practice of the RCUH RFP procurement process, the University of Hawaiʻi will require prospective subgrantees to submit resumes for key management personnel related to network deployment and management (e.g. network operations vice president or equivalent) and organizational charts detailing personnel reporting structure, parent companies, subsidiaries, and affiliates as part of their application package. Prospective subgrantees will also need to provide a narrative describing their readiness to manage their proposed project and ongoing services provided. This narrative should describe the experience and qualifications of key management for undertaking the project, its experience undertaking projects of similar size and scope, recent and upcoming organizational changes (including mergers and acquisitions), and relevant organizational policies around managerial capability.

Failure to submit these components will result in disqualification.

2.4.13 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for technical capability as outlined on page 74 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

    a. Detail how the Eligible Entity will require prospective subgrantees to certify that they are technically qualified to complete and operate the Project and that they are capable of carrying out the funded activities in a competent manner, including that they will use an appropriately skilled and credentialed workforce.

b. Detail how the Eligible Entity will require prospective subgrantees to submit a network design, diagram, project costs, build-out timeline and milestones for project implementation, and a capital investment schedule evidencing complete build-out and the initiation of service within four years of the date on which the entity receives the subgrant, all certified by a professional engineer, stating that the proposed network can deliver broadband service that meets the requisite performance requirements to all locations served by the Project.

Minimum qualifications for technical capabilities will be included in the minimum requirements in the RFP. Minimum qualifications that would be required include the demonstrated ability to design and install a physical network able to support the proposed broadband network deployment, the ability to operate, maintain, and support the physical network on an ongoing basis, as well as providing installation and ongoing customer support services on a 24x7x365 basis as would be expected of a broadband service provider.

Additional qualifications would include proof of licenses or permits to install physical infrastructure in the public right of way as required by the Hawai'i Public Utility Commission. Expected responses would include details of internal training and certification programs to ensure the necessary skill set within the prospective subgrante's technical workforce. Any prospective subgrantee that does not meet the minimum requirements will be disqualified.

Details of the network design, diagram, costs, buildout schedule with milestones, and capital investment schedule shall be required as part of the technical solution offered by the prospective subgrantee. All designs and documentation shall be certified by a professional engineer that states the proposed network can deliver broadband services that meet the required performance to all locations served by the project area and meet all State of Hawai'i construction rules and regulations.

2.4.14 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for compliance with applicable laws as outlined on page 74 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

a. Detail how the Eligible Entity will require prospective subgrantees to demonstrate that they are capable of carrying out funded activities in a competent manner in compliance with all applicable federal, state, territorial, and local laws.

b. Detail how the Eligible Entity will require prospective subgrantees to permit workers to create worker-led health and safety committees that management will meet with upon reasonable request.

Minimum qualifications for compliance with applicable laws, permits, and pertinent State and Federal licenses will be included in the minimum requirements in the RFP. Minimum qualifications required include a past record of compliance with federal, state, and local laws, including any violations.

Additional qualifications include any training programs, schedules, materials, policies, or other evidence that demonstrates the prospective subgrantee's workforce understands and adheres to federal, state, and local safety and legal standards.

The requirement to permit workers to create worker-led health and safety committees that management will meet upon reasonable request will be included as part of the minimum qualifications for compliance under the RFP.

Any prospective subgrantee that does not meet the minimum requirements will be disqualified.

2.4.15 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for operational capability as outlined on pages 74 – 75 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section.The response must:

a. Detail how the Eligible Entity will require prospective subgrantees to certify that they possess the operational capability to qualify to complete and operate the Project.

b. Detail how the Eligible Entity will require prospective subgrantees to submit a certification that have provided a voice, broadband, and/or electric transmission or distribution service for at least two (2) consecutive years prior to the date of its application submission or that it is a wholly owned subsidiary of such an entity, attests to and specify the number of years the prospective subgrantee or its parent company has been operating.

c. Detail how the Eligible Entity will require prospective subgrantees that have provided a voice and/or broadband service, to certify that it has timely filed Commission Form 477s and the Broadband DATA Act submission, if applicable,

as required during this time period, and otherwise has complied with the Commission's rules and regulations.

d. Detail how the Eligible Entity will require prospective subgrantees that have operated only an electric transmission or distribution service, to submit qualified operating or financial reports, that it has filed with the relevant financial institution for the relevant time period along with a certification that the submission is a true and accurate copy of the reports that were provided to the relevant financial institution.

e. In reference to new entrants to the broadband market, detail how the Eligible Entity will require prospective subgrantees to provide evidence sufficient to demonstrate that the newly formed entity has obtained, through internal or external resources, sufficient operational capabilities.

Minimum qualifications for operational capabilities, as outlined in BEAD NOFO Section IV.D.2.e, will be included in the minimum requirements in the RFP. All prospective subgrantees must provide details on how they meet these requirements, providing a certification that outlines requirements such as the number of years operating as a broadband service prior to the date of its RFP submission, certification of filing Commission Form 477's to the FCC and the Broadband DATA Act submission, or other similar evidence sufficient to demonstrate their operational capabilities.

Prospective subgrantees that have operated only electric transmission/distribution services must provide qualified operating or financial reports filed with relevant financial institutions for the relevant time period, and must also certify to the accuracy of the provided reports.

New entrants to the broadband domain must present evidence to demonstrate readiness highlighting their sufficient operational capabilities. This can be:
- Resumes of significant personnel (i.e. leadership, network deployment personnel);
- Detailed project descriptions and narratives from contractors; subcontractors, or partners with relevant operational experience; and/or
- Any other comparable evidence underlining operational proficiency.

Any prospective subgrantee who does not provide sufficient details to meet the operational capability requirement will be disqualified.

2.4.16 Text Box: Describe how the Eligible Entity will ensure that any prospective subgrantee deploying network facilities meets the minimum qualifications for providing information on ownership as outlined on page 75 of the BEAD NOFO. If the Eligible

Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

a. Detail how the Eligible Entity will require prospective subgrantees to provide ownership information consistent with the requirements set forth in 47 C.F.R. § 1.2112(a)(1)-(7).

The requirement to provide information on ownership as required by 47 C.F.R. § 1.2112(a)(1)-(7) will be included as a minimum requirement in the RFP. Any prospective subgrantee that does not meet the minimum requirements will be disqualified.

2.4.17 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for providing information on other public funding as outlined on pages 75 – 76 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

a. Detail how it will require prospective subgrantees to disclose for itself and for its affiliates, any application the subgrantee or its affiliates have submitted or plan to submit, and every broadband deployment project that the subgrantee or its affiliates are undertaking or have committed to undertake at the time of the application using public funds.

b. At a minimum, the Eligible Entity shall require the disclosure, for each broadband deployment project, of: (a) the speed and latency of the broadband service to be provided (as measured and/or reported under the applicable rules), (b) the geographic area to be covered, (c) the number of unserved and underserved locations committed to serve (or, if the commitment is to serve a percentage of locations within the specified geographic area, the relevant percentage), (d) the amount of public funding to be used, (e) the cost of service to the consumer, and (f) the matching commitment, if any, provided by the subgrantee or its affiliates.

Disclosures and details of broadband deployment projects that the prospective subgrantee or its affiliates have submitted, plan to submit, undertaking, or committed to undertake at the time of the RFP submission using public funds will be part of the minimum requirements of the RFP. Details of the disclosure must include for each broadband deployment project:

a. The speed and latency of the broadband service to be provided;

b. The geographic area to be covered;

c. The number of unserved and underserved locations committed to serve;

d. The amount of public funding to be used;

e. The cost of service to the consumer; and

f. The matching commitment, if any, provided by the subgrantee or its affiliates.

Example: A prospective subgrantee might provide details of a project funded under the CARES Act, covering a defined geographic area, aiming to serve 80% of unserved locations, with a service speed of 25/3 Mbps and latency of 60ms. They might also disclose a $2M funding from the CARES Act and a service cost of $50/month to consumers.

Any prospective subgrantee that does not meet the minimum requirements will be disqualified.

2.5 Non-Deployment Subgrantee Selection (Requirement 9)

2.5.1 Text Box: Describe a fair, open, and competitive subgrantee selection process for eligible non-deployment activities. Responses must include the objective means, or process by which objective means will be developed, for selecting subgrantees for eligible non-deployment activities. If the Eligible Entity does not intend to subgrant for non-deployment activities, indicate such.

As with the deployment programs, RFPs will be released for non-deployment activities through RCUH. RFPs will detail the types of projects that will be funded under that announcement, as well as the project's minimum and maximum costs for award. RFPs will highlight that potential subgrantees must meet the minimum qualifications detailed in the BEAD NOFO for all potential subgrantees, and show appropriate proof of the following:

1. Capability of carrying out activities funded by the subgrant in a competent manner in compliance with all applicable federal, state, and county laws;

2. Financial and managerial capacity to meet the commitments of the subgrantee under the subgrant, the requirements of the Program and such other requirements as have been prescribed by the Assistant Secretary or the Eligible Entity; and

3. Technical and operational capability to provide the services promised in the subgrant in the manner contemplated by the subgrant award.

Notification of the release of the non-deployment RFP's will be posted to websites such as the RCUH CommercePoint site, the UH broadband website, and the Connect Kākou website. In addition, the RFP release notification will be emailed to contacts that the UH Broadband Office (UHBO) has compiled and distributed to County and State groups for dissemination to their contacts. Potential subgrantees will have their applications evaluated using a standardized proposal evaluation form designed specifically for non-deployment activities. This proposal evaluation form will merge the evaluation criteria outlined in the deployment proposal evaluations. The proposed scoring criteria for non-deployment activities are detailed below:

Total Points: 100

Criteria	Points
Primary Criteria	
Project Merit	40
Qualifications and Expertise	25
Secondary Criteria	
Project Sustainability	15
Project Budget	10
Additional Criteria	
Prior Community Engagement	5
MBE, WBE, LSA Firm	5

Table 2: Non-Deployment RFP Scoring Criteria

Primary Criteria

Project Merit (40 points possible)

- **Project purpose (20 points):**

- Description: Potential subgrantees must describe the project purpose, anticipated outcomes, and its alignment with the RFP's goals and the strategies and priorities described in the NTIA approved State of Hawai'i Digital Equity Plan in a specified project area.

  Potential subgrantees must explain how and why they selected their proposed project area. Applications will need to provide any community statistics that demonstrate the need in the community for the proposed program, including but not limited to the estimated number of households or residents that may benefit from the project and the demographics of the impacted community (social, education, age, financial, any covered populations as identified in the Digital Equity Act.)

- Scoring: Reviewers will assess the extent to which the proposed project aligns with the RFP's goals and the strategies and priorities described in the State's approved Digital Equity Plan. Reviewers will assess how proposed projects will meet the needs of the community and the quality of the proposed project outcomes.

- **Project feasibility (20 points)**

   Description: Potential subgrantees must demonstrate the feasibility of the proposed project within the RFP's timeframe and describe a plan to carry out the project.

   Scoring: Proposals will be scored on the comprehensiveness and appropriateness of the project plan, including the clarity, level of detail, project timeline, and measures of success of the proposed project.

Qualifications and Expertise (25 points possible)

- **Technical and operational capability (15 points):**

   Description: Potential subgrantees will need to provide proof of past work in deploying related project(s), or at minimum, demonstrate the capability of operating the proposed project with an appropriately skilled workforce.

   Scoring: Reviewers will assess the extent to which the potential subgrantee has demonstrated the technical understanding and the operational capabilities necessary to execute the proposed project successfully in an effective and timely manner.

- **Financial and managerial capacity (10 points):**

   Description: Potential subgrantees will need to show proof of good financial standing and must demonstrate a managerial capability with a high technical understanding of the RFP subject matter to execute the proposed project successfully in an effective and timely manner.

   Scoring: Reviewers will assess the extent to which the potential subgrantee has demonstrated good financial standing in a credible way, such as a third-party audit, and managerial capabilities necessary to execute the proposed project in an effective and timely manner.

Secondary Criteria

- **Project Sustainability (15 points):**

Description: Potential subgrantees must provide a project sustainability plan to sustain the proposed project efforts after the end of the BEAD funding term (October 2027).

Scoring: Points will be awarded based on a succinct and detailed plan for project continuity passed 2027 and how the funded project will be maintained financially and operationally.

- **Project Budget (10 points):**

Description: Potential subgrantees must provide a budget detailing the costs or expected costs of the proposed project in the proposed project area to the best of their ability.

Scoring: Maximum points will be awarded to the lowest-priced budget. The points allocated to higher-priced bidders should be equal to the lowest bidder's price divided by the higher proposal price multiplied by the maximum points available.

Example: Maximum points = 10 points
Offeror A Total: $100,000 = Awarded 10 points

Offeror B Total: $150,000 (higher budget) = 10 x (100/150) = Awarded 6.66 points

Offeror C Total: $200,000 (higher budget) = 10 x (100/200) = Awarded 5 points

Additional Criteria (10 points possible)

- **Proof of community engagement in the proposed service area (5 points):**

Description: Potential subgrantees who have previously worked with the community in the past five years or have engaged the community in a meaningful way when developing the proposal in the proposed project area(s) will receive points in this category.

Scoring: Potential subgrantees who can provide proof of working with communities in the past five years in the proposed project areas or documentation of meaningful community engagement when developing the proposal in the proposed project areas will receive full points. Potential subgrantees who do not provide proof of engagement will receive no points in the category.

- **Minority-Owned Business Enterprise, Woman-Owned Business Enterprise, or Labor Surplus Area Firm (5 points)**

Description: The potential subgrantee is classified as a Minority-Owned Business Enterprise, Woman-Owned Business Enterprise, or Labor Surplus Area Firm. Potential subgrantees must provide proof of such classification either via a third-party or business registration and photo identification.

Scoring: Full points will be awarded to any potential subgrantee meeting one of these designations. Potential subgrantees who do not meet one of these designations will receive no points in the category.

A minimum of three reviewers will score all submitted proposals using the template above. The RCUH will select the potential subgrantees who average the highest score. Multiple awards may be made to the same project area so long as the programs are not duplicative (i.e., a telehealth program and a program for digital literacy may be awarded for the same area, but two telehealth programs cannot be awarded to the same project area). A mutually acceptable Agreement for Services will be negotiated within 21 calendar days. If this cannot be accomplished within 21 calendar days after initial Selection, the RCUH reserves the right to terminate contract negotiations with the first-ranked potential subgrantee, and may select the second-ranked subgrantee for negotiation of a potential award. This process may continue in order of Offeror ranking until a mutually acceptable Agreement for Services is achieved with the RCUH and an award is made to a selected Offeror.

Selected potential subgrantees who score highest on the respective RFP release must submit the following documentation prior to execution of an Agreement for Services with the Research Corporation of the University of Hawaiʻi:

1. Tax clearance from the Hawaiʻi Department of Taxation and the U.S. Internal Revenue Service.

2. Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters, if applicable.

3. Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, if applicable.

Acceptance of an Agreement for Services with the RCUH requires acceptance of Attachment B – General Conditions for Services Agreements, Attachment C – Special Conditions for Services Agreements–Federal Provisions, if applicable, and Attachment D – Standards of Conduct Declaration. Necessary forms will be provided to the selected subgrantee.

A sample RFP was included as part of the submission for 2.4 Deployment Subgrantee Selection Process. Please refer to the template attached for a template of the RCUH RFP and scoring rubric.

2.5.2 Text Box: Describe the Eligible Entity's plan for the following:

a. How the Eligible Entity will employ preferences in selecting the type of non-deployment initiatives it intends to support using BEAD Program funds;

b. How the non-deployment initiatives will address the needs of residents within the jurisdiction;

c. The ways in which engagement with localities and stakeholders will inform the selection of eligible non-deployment activities;

d. How the Eligible Entity will determine whether other uses of the funds might be more effective in achieving the BEAD Program's equity, access, and deployment goals.

Hawaiʻi plans to allow non-deployment funding to be used towards the following projects, in alignment with the BEAD NOFO:

- Community digital navigators.

- Broadband sign-up assistance and programs that provide technology support.

- User training with respect to cybersecurity, privacy, and other digital safety matters.

- Remote learning or telehealth services/facilities.

- Digital literacy/upskilling (from beginner-level to advanced).

- Computer science, coding, and cybersecurity education programs.

- Implementation of Eligible Entity digital equity plans (to supplement, but not to duplicate or supplant, Planning Grant funds received by the Eligible Entity in connection with the Digital Equity Act of 2021).

- Multi-lingual outreach to support adoption and digital literacy.

- Prisoner education to promote pre-release digital literacy, job skills, online job-acquisition skills, etc.

- Direct subsidies for use toward broadband subscription, where the Eligible Entity shows the subsidies will improve affordability for the end user population (and to

supplement, but not to duplicate or supplant, the subsidies provided by the Affordable Connectivity Program).

- Costs associated with stakeholder engagement, including travel, capacity-building, or contract support.

- Other allowable costs necessary to carrying out programmatic activities of an award, not to include ineligible costs described below in Section V.H.2 of the BEAD NOFO.

In the working RFP text for non-deployment uses of funds, Hawaiʻi modeled its non-deployment uses after the NTIA Connecting Minority Communities NOFO to organize appropriate uses that will benefit communities, particularly in cases of programs aimed for delivery in CAIs, with the following three categories for uses of funding:

- In general, funding is authorized for use to:

    a. Provide broadband education, awareness, training, access, equipment, and support to residents at community sites

    b. Provide subsidized broadband access and equipment to qualified low-income households

    c. Improve use of broadband services by community-based organizations to deliver digital skills, digital inclusion, workforce development programs, and technology services in anchor communities

    d. Stimulate the adoption and community use of broadband services for telehealth, remote learning, telework and entrepreneurship, economic growth, and job creation in anchor communities

    e. Build digital skills and IT workforce capacity in the state, including education in STEM/STEAM, coding, cybersecurity, technician, and work-based learning programs

    f. Assess the needs of anchor communities and conduct planning related to online education, digital inclusion, workforce, and digital skills development

    g. Gather data and conduct evaluation of the digital inclusion, broadband access and adoption, and professional development programs funded by the grant to determine their effectiveness and document best practices

- Where the eligible recipient will conduct a project prioritizing digital literacy:

a. Purchase laptops, hotspots, or other broadband internet and instructional equipment, excluding mobile phones

b. Pay for staffing required to carry out these activities including internships, stipends, and apprenticeships

c. Pay for educational software, online licensing fees and resources;

d. Provide digital skills training and train information technology personnel within applicant-designated anchor communities

e. Provide tech support and IT services

f. Provide digital skills, cybersecurity and IT-related professional development training for residents

g. Pay for software, online licensing fees and resources including online program; management, distance learning platforms, learning management systems, cybersecurity and/or other learning support services

- Where the eligible recipient will conduct a project to create or support the creation of a community hub:

  a. Purchase laptops, hotspots, or other broadband internet and instructional equipment, excluding mobile phones, to include distribution for community use

  b. Pay for broadband internet access services within applicant-designated anchor communities

  c. Pay for staffing required to carry out these activities including internships, stipends, and apprenticeships.

  d. Pay for educational software, online licensing fees and resources;

  e. Provide digital skills training and train information technology personnel within applicant-designated anchor communities;

  f. Provide apprenticeship and internship programs within community networking sites

  g. Provide tech support and IT services to the local community

  h. Manage and administer broadband equipment and subsidy programs

(a) Prioritization of non-deployment funding in this model will lean towards the establishment of "community hubs", in which CAIs equipped with 1 Gbps symmetrical speeds may become places residents look to for digital literacy, workforce, and IT skills development, turn to for technical "help desk" support or engaging with Community Digital Navigators, a place for students to participate in distance learning and career workshops (e.g., resume-building, applying for jobs, etc.), and telehealth opportunities. These initiatives will serve to cover the gaps that access alone cannot cover, i.e., the development of digital literacy skills to be an active user of Internet services independently.

(b-c) The University of Hawaiʻi Broadband Office (UHBO) will work closely with DBEDT, who manages the State's Digital Equity Planning and Capacity Grant Program, to identify the communities that are most in need of non-deployment programs as well as the gaps in those communities (e.g., health access, education, low employment, etc.). Non-deployment funding may also be used specifically to support programs identified in the State of Hawaiʻi Digital Equity Plan, pending the availability of funds to support the desired programs, taking special care not to duplicate application of multiple funding sources.

UHBO will continue to conduct outreach alongside the counties through the course of the BEAD Program to ensure that community voices are heard. There will be dedicated effort towards reaching the most unserved and underserved communities within the counties to hear specifically what has deterred them from Internet access, and what services they would be interested in if their local CAIs offered non-deployment activities.

In addition, and as covered in the proposed scoring rubric, prospective subgrantees will also be required to be actively involved within the communities for which they are submitting proposals. Their plans must detail what additional needs and gaps they identified within the community they wish to serve, with formal documentation that they coordinated this outreach signed off by a trusted community leader.

(d) In specific cases, other uses for funds may be deemed more appropriate in achieving the BEAD Program's equity, access, and deployment goals. Potential subgrantees to any non-deployment RFP must provide a thorough rationale as to why they might propose an activity outside of the pre-approved uses of funds above. If the solution is innovative and sustainable, potential subgrantees proposing a project outside of the above scope may still be considered.

2.5.3 Text Box: Describe the Eligible Entity's plan to ensure coverage to all unserved and underserved locations prior to allocating funding to non-deployment activities.

The University of Hawai'i Broadband Office (UHBO) expects to fully cover all unserved and underserved locations by following the Last-Mile Broadband Deployment Project Areas process outlined in the 2.4 Deployment Subgrantee section. At this time, UHBO anticipates there will be funding expendable for use on non-deployment projects (see also, Initial Proposal Funding Request).

Prior to the release of any RFPs for the non-deployment subgrantee selection process, UHBO will formalize its timeline for the deployment subgrantee selection process. In addition, UHBO is currently considering the data reflected in the NBAM release to determine the most appropriate programmatic execution for the State. The NBAM map reflects 10,568 total unserved and underserved locations for the State as of June 2023, with additional locations potentially unidentified that do not appear in the FCC National Broadband Map, which feeds the NBAM data. Hawai'i will prioritize last mile service rollout to all identified unserved, underserved, and CAI locations prior to the execution of non-deployment funding in all cases.

RFPs for non-deployment subgrantee selection, in particular with CAI broadband buildout, will include language that supports prioritization of locations for communities that are historically unserved or underserved, and will also see prioritization in the initial non-deployment RFP releases.

2.5.4 Text Box: Describe how the Eligible Entity will ensure prospective subgrantees meet the general qualifications outlined on pages 71 – 72 of the NOFO.

As detailed in the BEAD NOFO, NTIA specifies the following general qualifications for prospective subgrantees:

1. Is capable of carrying out activities funded by the subgrant in a competent manner in compliance with all applicable federal, Eligible Entity, and local laws;

2. Has the financial and managerial capacity to meet the commitments of the subgrantee under the subgrant, the requirements of the Program and such other requirements as have been prescribed by the Assistant Secretary or the Eligible Entity; and

3. Has the technical and operational capability to provide the services promised in the subgrant in the manner contemplated by the subgrant award.

RCUH requires that any potential subgrantees submit a number of documents before formalizing a contract with a selected potential subgrantee. Capability of carrying out activities funded by the subgrant in a competent manner in compliance with all applicable federal, Eligible Entity, and local laws will be fulfilled with the submission of a valid tax clearance to the RCUH from the Hawai'i Department of Taxation and the U.S.

Internal Revenue Service prior to executing an Agreement of Services. This is in accordance with Section 103-53 of the Hawai'i Revised Statutes. A Certificate of Vendor Compliance that reflects a "Compliant" status from Hawai'i Compliance Express (HCE), https://vendors.ehawaii.gov/hce/splash/welcome.html is acceptable in satisfying the tax clearance requirement. Governmental agencies in the U.S. (i.e., city, county, state, federal) and any foreign governmental agencies are excepted from the tax clearance requirement. Note that a tax clearance from the Hawai'i Department of Taxation and the U.S. Internal Revenue Service is not required for *submission* of a proposal.

To fulfill the requirements for full points in the Qualifications and Expertise section of the scoring rubric in section 2.5.1, potential subgrantee candidates will need to demonstrate financial and managerial capacity, as well as technical and operational capability, requiring the following documentation as eligible proof:

Has the technical and operational capability to provide the services promised in the subgrant in the manner contemplated by the subgrant award.

- The minimum standards applied to determine compliance;

- Methods used to determine a prospective subgrantee meets the necessary standards; and

- Evidence the Eligible Entity will accept in making its determination.

Has the financial and managerial capacity to meet the commitments of the subgrantee under the subgrant, the requirements of the Program and such other requirements as have been prescribed by the Assistant Secretary or the Eligible Entity; and

- The minimum standards applied to determine compliance;

- Methods used to determine a prospective subgrantee meets the necessary standards; and

- Evidence the Eligible Entity will accept in making its determination.

2.6 Eligible Entity Implementation Activities (Requirement 10)

2.6.1 Text Box: Describe any initiatives the Eligible Entity proposes to implement as the recipient without making a subgrant, and why it proposes that approach.

To date, the University of Hawai'i Broadband Office (UHBO) has executed or is in the process of executing the following implementation activities with BEAD planning funds awarded in October 2022:

- **Activity 1 (Executed)**: The addition of five (5) FTEs to UHBO to supplement existing internal UH capacity will serve to greatly expand the capacity of the state to oversee, manage and execute the range of impactful broadband efforts over the next five (5) years.

    This staff capacity will support a range of activities, including coordination, community engagement, outreach and public communications, and visualization of broadband adoption. Activity 1 broadly supports the implementation of all of the remaining activities. The coordination role extends across the range of Federal broadband funding programs, including, the Coronavirus Capital Projects Fund (US Treasury), Rural Digital Opportunity Fund, Hawai'i Department of Transportation HI Connect, BEAD, the set of Digital Equity programs (plan, capacity, competitive), the Tribal Broadband Connectivity Program, and the Middle Mile Broadband Infrastructure Grant program, to maximize the benefits to Hawai'i's broadband infrastructure.

    This staff capacity will also serve to increase the capacity of the Department of Hawaiian Home Lands (DHHL) to both increase oversight and management of the department's efforts under the Tribal Broadband Connectivity Program, and to ensure cooperative and effective cross-benefits among the statewide efforts directly overseen by UHBO. This office will directly supplement the capabilities of DHHL to ensure its effective use of funds and successful implementation of project efforts. ($2,900,000)

- **Activity 2 (In Progress)**: Gather data, and conduct and disseminate research activities to fully determine the population of direct unserved/underserved, as well as those facing a range of hurdles to full adoption and realization of benefits available from robust, resilient and affordable broadband services. The services will be performed by a range of contractors, community organizations, and state/county entities; these will be secured via memorandums of agreements and will maximize the participation of diverse members of the community to ensure the State can maximize the effectiveness of broadband data. Efforts will be coordinated by UHBO. ($900,000)

- **Activity 3 (In Progress)**: Provide training and technical assistance to broadband staff, contractors, community organizations, and state/county entities. Coordinated by staff (under Activity 1), services will be secured to provide the required services, and will maximize the participation by diverse members of the community. The services provided over the term of the project will also build sustainable capacity internal to the range of community and state/county entities engaged with the statewide population. ($300,000)

- **Activity 4 (In Progress)**: Provide support for broad community engagement through providing support to a diverse range of community organizations, contractors, and state/county entities. These will include:

  - A statewide public communication campaign on broadband

  - UHBO outreach and community engagement events that will inform the statewide population of broadband efforts, and ensure that the project has broad and diverse community inputs that will inform the design and implementation of efforts supported by the public funds.

  - Support funding to the counties for outreach and community engagement events ($800,000)

- **Activity 5 (In Progress)**: The BEAD Challenge Process requires that Eligible Entities create a challenge portal tool to enable permissible challengers (e.g., non-profit organizations, Internet Service Providers, and local state entities) to submit challenges that will go through a review, validation, and rebuttal process by ISPs and final adjudication by the University. The University will contract with a challenge portal tool vendor to create a portal for the State of Hawaiʻi capable of meeting the minimum requirements outlined by NTIA.

Earlier this year, the State legislature appropriated $33 million (with an additional $13 million requested in the FY2025 supplemental budget request) towards the BEAD program, in addition to the $149.5 million allocated to Hawaiʻi by the NTIA. This match will be primarily used to fulfill any implementation activities UH will take on to administer the BEAD program and provide support, manage the grant, bolster the state workforce in the implementation of BEAD-related activities, and select non-deployment activities.

In addition, to offset the match requirement during the subgrantee selection process, the State-provided match may be used to fulfill the 25% match requirement by NTIA with a reduction in the match required by potential deployment subgrantees.

2.7 Labor Standards and Protection (Requirement 11)

2.7.1 Text Box: Describe the specific information that prospective subgrantees will be required to provide in their applications and how the Eligible Entity will weigh that information in its competitive subgrantee selection processes. Information from prospective subgrantees must demonstrate the following and must include information about contractors and subcontractors:

a. Prospective subgrantees' record of past compliance with federal labor and employment laws, which:

    i. Must address information on these entities' compliance with federal labor and employment laws on broadband deployment projects in the last three years;

    ii. Should include a certification from an Officer/Director-level employee (or equivalent) of the prospective subgrantee evidencing consistent past compliance with federal labor and employment laws by the subgrantee, as well as all contractors and subcontractors; and

    iii. Should include written confirmation that the prospective subgrantee discloses any instances in which it or its contractors or subcontractors have been found to have violated laws such as the Occupational Safety and Health Act, the Fair Labor Standards Act, or any other applicable labor and employment laws for the preceding three years.

b. Prospective subgrantees' plans for ensuring compliance with federal labor and employment laws, which must address the following:

    i. How the prospective subgrantee will ensure compliance in its own labor and employment practices, as well as that of its contractors and subcontractors, including:

        1. Information on applicable wage scales and wage and overtime payment practices for each class of employees expected to be involved directly in the physical construction of the broadband network; and

        2. How the subgrantee will ensure the implementation of workplace safety committees that are authorized to raise health and safety concerns in connection with the delivery of deployment projects.

The University of Hawai'i Broadband Office (UHBO) will require prospective subgrantees to submit the following information within their applications:

1. As generally required by RCUH and as part of NTIA's requirements, record of past compliance with federal labor and employment laws, which:

    a. Must address information on these entities' compliance with federal labor and employment laws on broadband deployment projects in the last three years;

    b. Should include a certification from an Officer/Director-level employee (or equivalent) of the prospective subgrantee evidencing consistent past compliance with federal labor and employment laws by the subgrantee, as well as all contractors and subcontractors; and

    c. Should include written confirmation that the prospective subgrantee discloses any instances in which it or its contractors or subcontractors have been found to have violated laws such as the Occupational Safety and Health Act, the Fair Labor Standards Act, or any other applicable labor and employment laws in the preceding three years.

2. Plans for ensuring compliance with federal labor and employment laws, which must address the following:

    a. How the prospective subgrantee will ensure compliance in its own labor and employment practices, as well as that of its contractors and subcontractors, including:

        i. Information on applicable wage scales and wage and overtime payment practices for each class of employees expected to be involved directly in the physical construction of the broadband network; and

        ii. How the subgrantee will ensure the implementation of workplace safety committees that are authorized to raise health and safety concerns in connection with the delivery of deployment projects

        iii. Information on policies regarding whistleblower protection

Proposals submitted during the subgrantee selection processes will require offerors to certify compliance with the range of requirements cited in UHBO's request for proposals (RFPs), to ensure that the offerors are eligible for consideration, and will be expected to comply with the requirements under any contract with the State. This will be included as part of the offeror's minimum eligibility requirements for the issued RFPs.

2.7.2 Text Box: Describe in detail whether the Eligible Entity will make mandatory for all subgrantees (including contractors and subcontractors) any of the following and, if

required, how it will incorporate them into binding legal commitments in the subgrants it makes:

a. Using a directly employed workforce, as opposed to a subcontracted workforce;

b. Paying prevailing wages and benefits to workers, including compliance with Davis-Bacon and Service Contract Act requirements, where applicable, and collecting the required certified payrolls;

c. Using project labor agreements (i.e., pre-hire collective bargaining agreements between unions and contractors that govern terms and conditions of employment for all workers on a construction project);

d. Use of local hire provisions;

e. Commitments to union neutrality;

f. Use of labor peace agreements;

g. Use of an appropriately skilled workforce (e.g., through Registered Apprenticeships or other joint labor-management training programs that serve all workers, particularly those underrepresented or historically excluded);

h. Use of an appropriately credentialed workforce (i.e., satisfying requirements for appropriate and relevant pre-existing occupational training, certification, and licensure); and

i. Taking steps to prevent the misclassification of workers.

The University of Hawaiʻi Broadband Office will include following labor and standards protection clauses in the RFP as mandatory, and will be scored under the Fair and Safe Labor Practices scoring criterion:

1. Paying prevailing wages and benefits to workers, including compliance with the Federal Davis-Bacon, the State's Wages and Hours of Employees on Public Works Law [Chapter 104, HRS] (Little Davis Bacon), and Service Contract Act requirements, where applicable, and collecting the required certified payrolls;

2. Use of an appropriately skilled workforce (e.g., through Registered Apprenticeships or other joint labor-management training programs that serve all workers, particularly those underrepresented or historically excluded);

3. Use of an appropriately credentialed workforce (i.e., satisfying requirements for appropriate and relevant pre-existing occupational training, certification, and licensure); and

4. Taking steps to prevent the misclassification of workers.

The following are highly desired, but not required, and will be scored under the Fair and Safe Labor Practices scoring criterion:

1. Using project labor agreements (i.e., pre-hire collective bargaining agreements between unions and contractors that govern terms and conditions of employment for all workers on a construction project);

2. Use of local hire provisions;

3. Commitments to union neutrality; and

4. Use of labor peace agreements;

2.8 Workforce Readiness (Requirement 12)

2.8.1 Text Box: Describe how the Eligible Entity and their subgrantees will advance equitable workforce development and job quality objectives to develop a skilled, diverse workforce. At a minimum, this response should clearly provide each of the following, as outlined on page 59 of the BEAD NOFO:

a. A description of how the Eligible Entity will ensure that subgrantees support the development and use of a highly skilled workforce capable of carrying out work in a manner that is safe and effective;

b. A description of how the Eligible Entity will develop and promote sector-based partnerships among employers, education and training providers, the public workforce system, unions and worker organizations, and community-based organizations that provide relevant training and wrap-around services to support workers to access and complete training (e.g., child care, transportation, mentorship), to attract, train, retain, or transition to meet local workforce needs and increase high-quality job opportunities;

c. A description of how the Eligible Entity will plan to create equitable on-ramps into broadband-related jobs, maintain job quality for new and incumbent workers engaged in the sector; and continually engage with labor organizations and community-based organizations to maintain worker voice throughout the planning and implementation process; and

d. A description of how the Eligible Entity will ensure that the job opportunities created by the BEAD Program and other broadband funding programs are available to a diverse pool of workers.

A. Subgrantee Workforce Safety and Capability

To ensure that subgrantees support the development and use of a highly skilled workforce capable of carrying out work in a manner that is safe and effective, the University of Hawai'i Broadband Office (UHBO) will require as part of the prospective subgrantee's proposal to include:

1. Any current or future programs/curriculum/apprenticeships by the prospective subgrantee to train new hires in technical knowledge required in network deployment roles, including worker safety.

2. Any current or future programs/curriculum/apprenticeships by the prospective subgrantee to advance or maintain knowledge of employees in network deployment roles, including worker safety.

3. Any current or future programs/curriculum by the prospective subgrantee to train employees how to create and maintain a safe, healthy, and respectful work environment.

4. A summary of the prospective subgrantee's network deployment workforce by job title and an indication of any licenses or certifications required for each job title, including management.

5. A record of the prospective subgrantee's past compliance with federal labor and employment laws as described in section 2.7.1 of the Initial Proposal.

B. Sector-based Partnerships for Workforce Development

As Hawai'i's state university, the University of Hawai'i (UH) has a long history of partnerships across various sectors through its system of universities, community colleges, and community-based learning centers across the state. Also, because it is an institute of higher education, UH is actively involved in strategic statewide workforce development and promotion efforts to ensure Hawai'i trains and retains high-quality skilled local workers to meet the state's needs. For example, in collaboration with the Chamber of Commerce Hawai'i, UH developed the 2021 IT Workforce Needs Analysis Report[7] with key findings about the growing demand for skilled IT professionals at multiple levels in Hawai'i. (Ref. https://www.cochawaii.org/itsector/ - the site provides substantial background and description the ongoing efforts, including listing of statewide employer and education collaborators)

Specifically regarding the telecommunications sector, UH has historically played a part in the development of the state's broadband infrastructure at all levels (i.e. first, middle, and last mile). This included leading the 2007 Hawai'i Broadband Taskforce[8] to develop the State's broadband strategy and working with the local telecommunication industry to carry out complex and large-scale network deployment projects, thus fostering relationships between UH and local telecommunications providers. Most recently, with the BEAD Program, UHBO has conversed with local telecommunications and electric utility companies to assess the telecommunications workforce demand to be created by BEAD and other concurrent broadband programs. UHBO will continue to converse with these entities throughout BEAD implementation. To help meet the workforce demand created by BEAD and other broadband programs, UHBO will take the following steps:

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[7] https://www.hec.org/files/IT-Workforce-Needs-Report-November-2021_FINAL.pdf
[8] http://www.hbtf.org/

1. Continue to promote and support UH's GoodJobs Hawaiʻi[9] website that provides a course on basic fiber optic theory and hands-on training and various job websites such as Hawaiʻi Career Explorer[10] and Hawaiʻi Is Hiring[11].

2. Collaborate with Hawaiʻi's American Job Centers to promote telecommunication and other jobs to accomplish BEAD

3. Continue to leverage UH's long standing relationship with industry partners to place graduates in high-quality local jobs

4. Continue to work with telecommunications providers to promote and develop pathways from UH to telecommunications jobs.

5. Place job listings on UH's broadband website and other sites as available.

6. Work with local unions such as the International Brotherhood of Electrical Workers (IBEW) Local 1186 and 1260 to identify relevant training and wrap-around services to support workers in accessing and completing training.

These steps will be taken in addition to the University of Hawaiʻi's current workforce development efforts.

C. Maintaining Worker Voice Throughout Project Planning and Implementation

As mentioned above, UH is providing on-ramps to broadband-related jobs by offering courses on fiber optic theory and hands-on training, providing trade worker education with pathways to trade jobs, and ongoing conversations with local telecommunications providers to meet the future broadband workforce demand.

In conversation with telecommunications providers, providers offer internal training to maintain job quality for new and incumbent workers. UHBO will encourage providers to continue these trainings throughout BEAD's implementation and beyond while also attempting to implement similar course offerings through UH to job seekers.

As part of the deployment subgrantee's award contract, UHBO will encourage the subgrantee to work with local labor organizations and community-based organizations to maintain worker voice throughout the BEAD deployment planning and implementation process and maintain union neutrality. UHBO will engage with local labor organizations and community-based organizations throughout the BEAD

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[9] https://uhcc.hawaii.edu/goodjobshawaii/
[10] https://careerexplorer.hawaii.edu/index.php
[11] https://www.hawaiiishiring.com/

deployment planning and implementation process by informing them of BEAD deployment activities through email and providing presentations, as requested.

D. Ensuring Availability of Jobs to Diverse Pool of Workers

As part of the ongoing public communications plan for the State, UHBO will leverage the statewide broadband initiative's Connect Kākou website and multimedia strategy platform to communicate the job opportunities created by BEAD and other broadband funding programs to residents and businesses in Hawai'i. This multimedia strategy includes various mediums (radio, print, social media, etc.) and languages to ensure the widest reach possible statewide.

In addition, UHBO will invite the telecommunications industry to participate in job fairs that the University of Hawai'i System regularly hosts statewide and will work with County partners to publicize job opportunities at other job fairs or hiring events held throughout the year.

2.8.2 Text Box: Describe the information that will be required of prospective subgrantees to demonstrate a plan for ensuring that the project workforce will be an appropriately skilled and credentialed workforce. These plans should include the following:

a. The ways in which the prospective subgrantee will ensure the use of an appropriately skilled workforce, e.g., through Registered Apprenticeships or other joint labor management training programs that serve all workers;

b. The steps that will be taken to ensure that all members of the project workforce will have appropriate credentials, e.g., appropriate and relevant pre-existing occupational training, certification, and licensure;

c. Whether the workforce is unionized

d. Whether the workforce will be directly employed or whether work will be performed by a subcontracted workforce; and

e. The entities that the proposed subgrantee plans to contract and subcontract with in carrying out the proposed work.

If the project workforce or any subgrantee's, contractor's, or subcontractor's workforce is not unionized, the subgrantee must also provide with respect to the non-union workforce:

The job titles and size of the workforce (FTE positions, including for contractors and subcontractors) required to carry out the proposed work over the course of the project and the entity that will employ each portion of the workforce;

For each job title required to carry out the proposed work (including contractors and subcontractors), a description of:

    i.   Safety training, certification, and/or licensure requirements (e.g., OSHA 10, OSHA 30, confined space, traffic control, or other training as relevant depending on title and work), including whether there is a robust in-house training program with established requirements tied to certifications, titles; and

    ii.   Information on the professional certifications and/or in-house training in place to ensure that deployment is done at a high standard.

UH as the Eligible Entity will require the following information from all subcontractors and subgrantees to be eligible for participating in BEAD funded activities:

Skilled Workforce:
1. Documentation on how the subcontractor will ensure the use of an appropriated skilled workforce.

2. Evidence of participation in registered apprenticeship programs and other management training programs that are inclusive of all workers.

3. Descriptions of existing and planned training programs designed to maintain and enhance workers' skills and advancement.

Verification of Credentials:
1. Details of relevant existing occupational training, certification and licensure for all key project personnel and workers.

2. A list of relevant certifications and licenses held by key personnel such as network deployment management, field technicians, and other staff involved in network deployment operations.

3. Procedures for verifying and maintaining workforce credentials for key personnel.

Unionization Status:
1. Disclosure of whether the project workforce is unionized.

2. For subcontractors with a union, include name, affiliation and collective bargaining agreements relevant to the project.

Non-union status:
1. Provide a list of all job titles required to carry out the project, the total size of the workforce, specified in terms of Full-Time Equivalent (FTE) positions for each

title. Specify whether these positions will be employed by the subcontractor or by another entity.

2. For each job title provide a description of the roles and responsibilities of that position. Specify any required safety training, certificates and/or licenses required for each job title. Include safety certifications such as OSHA 10, OSHA 30 or other relevant training.

3. Describe any in-house training program including the courses offered, requirements for certifications, information on training staff responsible, training frequency and documentation procedures for tracking training completion.

4. Provide evidence of the personnel's current certifications and training records.

Employment Structure/Contractual Partnerships:
1. Statement confirming whether the project workforce will be employed directly by the subcontractor or if portions of the project will be performed by a subcontracted workforce.

2. If subcontractors will be used, describe the selection criteria, including documentation on workforce skills and credential requirements.

3. Provide a list of all entities proposed to carry out the subcontracted work.

4. Include details of roles and responsibilities of each subcontractor in relation to the project.

5. Include information on partnerships with specialized labor organizations or trade associations related to the project.

Diversity and Inclusion:
1. Provide documentation and metrics on efforts to promote a diverse workforce representative of the demographics of the state. Metrics will be part of the offeror's proposal but will include at a minimum the number of minority-owned, women-owned, and labor surplus firms.

2. Describe outreach programs focused on hiring underrepresented groups and providing equal opportunities to workers.

Safety and Compliance Records:
1. Include historical records for the last 20 years of safety and compliance policies, include any past violations or citations.

2. Detail plans for maintaining a safe work environment and compliance with safety regulations throughout the project.

Insurance and Liability Coverage:

1. Provide evidence of adequate insurance coverage, including workmans comp, liability and bonding.

Statements of Certifications and Compliance:

1. Provide signed compliance statements for all local, state and federal labor laws and regulations

2. Provide certifications demonstrating adherence to any project specific workforce requirements outlined in the subcontract.

References:

1. Provide contact information for references from previous projects with documentation to assess past performance, workforce quality and adherence to project requirements.

2.9 Minority Business Enterprises (MBEs/ Women's Business Enterprises (WBEs)/ Labor Surplus Area Firms Inclusion (Requirement 13)

2.9.1 Text Box: Describe the process, strategy, and the data tracking method(s) the Eligible Entity will implement to ensure that minority businesses, women-owned business enterprises (WBEs), and labor surplus area firms are recruited, used, and retained when possible.

The University of Hawaiʻi (UH) is committed to supporting diversity, equity and inclusion in all aspects of the BEAD program. Promoting these values is a socially responsible approach and can bring additional benefits to the project including the opportunity to recruit new talent, enhance innovation, and have access to a broader pool of talent. UH will use the following strategic processes to ensure that minority business enterprises (MBE), women's business enterprises (WBE), disadvantaged business enterprises (DBEs), and labor surplus area (LSA) firms are recruited, used, and retained when possible for this project.

As a starting point for a list of MBEs, WBEs, and LSAs, UH will utilize the U.S. Small Business Administration's database search tool[12], and the State of Hawaiʻi's Hawaii Awards & Notices Data System (HANDS[13]). HANDS is a centralized system to solicit bids on projects throughout the State and other municipalities that also provides a list of small businesses, including minority-owned, women-owned, Native Hawaiian-owned, veteran-owned, and labor surplus firms that register their business with the State.

UH will also partner with several entities to recruit participation of these businesses, including, but not limited to:

- Hawaiʻi Department of Business, Economic Development, and Tourism
- Hawaiʻi Office of Hawaiian Affairs
- Hawaiʻi Chamber of Commerce, along with its affiliates
- Hawaiʻi Minority Business Development Agency (MBDA) Business Centers
- Hawaiʻi Small Business Development Center
- Young Women's Christian Association (YWCA)
- Patsy T. Mink Center for Business & Leadership Women's Business Center
- Council for Native Hawaiian Advancement
- Native Hawaiian Chamber of Commerce

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[12] https://dsbs.sba.gov/search/dsp_dsbs.cfm
[13] https://hands.ehawaii.gov/hands/

- Kanaka Economic Development Alliance
- Kauai Economic Development Board
- Maui Economic Development Board
- City & County of Honolulu Office of Economic Revitalization

Deployment RFPs will include specific language that encourages or requires offerers the use of a diverse workforce, dividing total requirements, when economically feasible, into smaller tasks or quantities, establishing reasonable delivery schedules by business size, and soliciting MBEs, WBEs, and LSAs as subcontractors to permit maximum participation by MBEs, WBEs, and LSAs as part of BEAD deployment. Non-deployment RFPs will include scoring criteria that grants points to offerers who are minority-owned, women-owned, or labor surplus firms in the evaluation of bids and proposals.

UH will regularly monitor and report on diversity efforts, including the number of contracts awarded to minority-owned, women-owned, and labor surplus area firms and their impact delivered. Other key performance indicators (KPIs) related to diversity goals will be defined, tracked, and reported on UH's broadband website.

UH will to the best extent possible organize or attend diversity-focused events and engage with organizations that support minority, women-owned, and labor surplus area businesses and build relationships with local community organizations that can help identify qualified diversity suppliers.

2.9.2 Check Box: Certify that the Eligible Entity will take all necessary affirmative steps to ensure minority businesses, women's business enterprises, and labor surplus area firms are used when possible, including the following outlined on pages 88 – 89 of the BEAD NOFO:

a. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
b. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
c. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
d. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
e. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and

f. Requiring subgrantees to take the affirmative steps listed above as it relates to subcontractors.

Hawaiʻi certifies that it will take all necessary affirmative steps to ensure minority businesses, women's business enterprises, and labor surplus area firms are used when possible, including the following outlined on pages 88 – 89 of the BEAD NOFO.

2.10 Cost and Barrier Reduction (Requirement 14)

2.10.1 Text Box: Identify steps that the Eligible Entity will take to reduce costs and barriers to deployment. Responses may include but not be limited to the following:

   a. Promoting the use of existing infrastructure;

   b. Promoting and adopting dig-once policies;

   c. Streamlining permitting processes;

   d. Streamlining cost-effective access to poles, conduits, easements; and

   e. Streamlining rights of way, including the imposition of reasonable access requirements.

The State of Hawaiʻi is taking, or plans to take, the following steps to reduce costs and barriers to deployment:

Promoting the use of existing infrastructure
Price/cost containment will look to focus on the use of existing infrastructure, except in cases where the State is looking to create strategic resilience for key middle mile routes.

Promoting and adopting dig-once policies

The State of Hawaiʻi does not have a dig-once policy. However, the State has a dig law[14] in place requiring an entity to notify other entities via the Hawaiʻi One Call Center at least five working days but not more than twenty-eight calendar days before the planned subsurface activities. This dig law reduces the risk of unintended costs and delays from improper excavation as a result of possible underground broadband deployment.

Streamlining permitting processes

The State has the Act 193[15] law exempting broadband projects related to installation, improvement, construction, or development of infrastructure relating to broadband service or broadband technology, including the interconnection of telecommunications cables, from County and State permitting and approval requirements.

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[14] https://www.digsafelyhawaii.com/dig-law/
[15] https://cca.hawaii.gov/broadband/files/2016/11/GM1295_.pdf

In the event permitting is required, the State has laws[16][17] in place to automatically approve broadband-related permits within sixty days of submission with respect to the installation, improvement, construction, or development of infrastructure relating to broadband service or broadband technology, including the interconnection of telecommunications cables, cable installation, tower construction, placement of broadband equipment in the road rights-of-way, and undersea boring, or the landing of an undersea communications cable. These laws streamline State and County permitting approval processes and reduce barriers to broadband deployment by the subgrantee.

Streamlining cost-effective access to poles, conduits, easements

Hawaiian Electric Company (HECO) owns almost all poles (joint power and telecommunications) on Oʻahu, Molokaʻi, Lānaʻi, Maui and Hawaiʻi Island. Hawaiian Telcom (HT) owns almost all telecommunications only (i.e. non-power bearing) poles statewide. Kauaʻi Island Utility Cooperative (KIUC) owns almost all power and joint poles on Kauaʻi. The joint-pole process speeds applications to attach to these poles and having one utility own and managing each pole greatly improves the approval times.

Promoting the use of reliable alternative broadband technologies (non-fiber)

The Five-Year Action Plan discusses in further detail the need for alternative technologies to account for gaps in coverage due to the cost of broadband deployment in high-cost geographic and topographic areas. This might include, in rare *extreme high-cost* cases, consideration of low-earth orbit satellites to offset the cost of buildout to locations like Niʻihau, an island almost 45 miles away from Kauaʻi with no existing submarine cable reaching the island and with approximately 20 residential locations requiring service under the BEAD Program. Additionally, lava-impacted regions will require creative solutions to maximize service while reducing costs in geographically vulnerable and hard-to-build terrain.

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[16] https://www.capitol.hawaii.gov/hrscurrent/Vol01_Ch0001-0042F/HRS0027/HRS_0027-0045.htm

[17] https://www.capitol.hawaii.gov/hrscurrent/Vol02_Ch0046-0115/HRS0046/HRS_0046-0089.htm

2.11 Climate Assessment (Requirement 15)

2.11.1 Text Box: Describe the Eligible Entity's assessment of climate threats and proposed mitigation methods. If an Eligible Entity chooses to reference reports conducted within the past five years to meet this requirement, it may attach this report and must provide a crosswalk narrative, with reference to page numbers, to demonstrate that the report meets the five requirements below. If the report does not specifically address broadband infrastructure, provide additional narrative to address how the report relates to broadband infrastructure. At a minimum, this response must clearly do each of the following, as outlined on pages 62 – 63 of the BEAD NOFO:

a. Identify the geographic areas that should be subject to an initial hazard screening for current and projected future weather and climate-related risks and the time scales for performing such screenings;

b. Characterize which projected weather and climate hazards may be most important to account for and respond to in these areas and over the relevant time horizons;

c. Characterize any weather and climate risks to new infrastructure deployed using BEAD Program funds for the 20 years following deployment;

d. Identify how the proposed plan will avoid and/or mitigate weather and climate risks identified; and

e. Describe plans for periodically repeating this process over the life of the Program to ensure that evolving risks are understood, characterized, and addressed, and that the most up-to-date tools and information resources are utilized.

SECTION A - HAZARD NARRATIVE

Hawaiʻi is a state consisting of eight main islands and five counties. Kauaʻi County comprising the islands of Niʻihau and Kauaʻi, City and County of Honolulu comprising the island of Oʻahu, Maui County comprising the islands of Molokaʻi, Maui, Kahoʻolawe, and Lānaʻi, and Hawaiʻi County comprising the island of Hawaiʻi. Kalawao County is located on the island of Molokaʻi, but is usually considered part of Maui County. Niʻihau is a privately owned island and Kahoʻolawe is an uninhabited island reserve and therefore, not subject to initial hazard screening for weather and climate related risks. Therefore, the islands of Kauaʻi, Oʻahu, Molokaʻi, Maui, Lānaʻi, and Hawaiʻi would be subject to initial hazard screening for significant weather and climate related risks every five years in accordance with Hawaiʻi Emergency Management Agency (HI-EMA)'s hazard mitigation screenings.
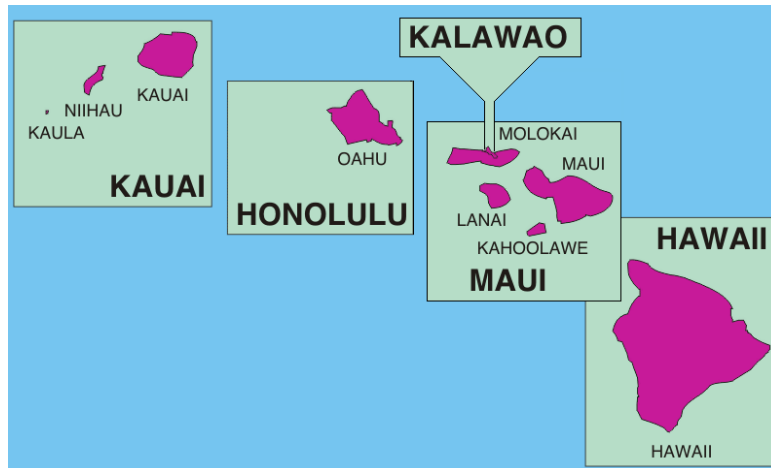
Figure 1: State of Hawai'i County Breakdown Source: Wikipedia

SECTION B - PRIORITIZE HAZARDS

According to the 2023 State of Hawai'i Hazard Mitigation Plan Page 92, Hawai'i has the following climate-related hazards of most significant risk to the State in no particular order:

- Climate Change and Sea Level Rise
- Drought
- Earthquake
- Flood
- High Wind Storm
- Hurricane
- Landslide and Rockfall
- Tsunami
- Volcanic Hazards
- Wildfire
- Windstorm

However, of the hazards listed, the top six hazard of most risk statewide from greatest to least are (Page 549):

1. Wildfire
2. Climate Change and Sea Level Rise
3. Hurricane
4. Tsunami
5. Earthquake
6. Volcanic Hazards (Lava Flow and Vog)

These risks can also vary by county and should be taken into consideration at

the county level. For example, the State has six active volcanoes[18], most of which are located on the island of Hawaiʻi. This makes Hawaiʻi County the most susceptible to lava flow and earthquake hazards due to volcanic activity[19].

Table F-89. 2023 State and County Hazard Ranking Summary

Hazard	Statewide	County of Kauaʻi	City and County of Honolulu	County of Maui	County of Hawaiʻi
Climate Change and Sea Level Rise	High	High	High	High	High
Cyber Threat	Medium	Medium	Medium	Medium	Medium
Drought	Medium	Medium	Medium	Medium	Medium
Earthquake	High	Medium	High	High	High
Flood	Medium	Medium	High	High	Medium
Hazardous Materials	Low	Low	Low	Low	Low
Health Risks	High	High	High	High	High
Hurricane	High	High	High	High	High
Infrastructure Failure	Low	Low	Low	Medium	Low
Landslide and Rockfall	Medium	Medium	Medium	Medium	High
Terrorism	Low	Low	Low	Low	Low
Tsunami	High	High	High	High	High
Volcanic Hazards	Medium	Low	Low	Medium	High
Wildfire	Medium	High	High	High	High
Windstorm	Medium	Medium	Medium	Medium	Medium

Risk Factor Scores - High: > 4.0; Medium: 3.0 to 4.0; Low < 3.0

Figure 2: 2023 State of Hawaiʻi Hazard Plan Page 1,240

Climate Change and Sea Level Rise

The 2022 National Oceanic and Atmospheric Administration's (NOAA) Hawaiʻi State Summary, three key messages are stated:

1. Temperatures in Hawaiʻi have risen about 2°F since 1950, with a sharp increase in warming over the last decade. Under a higher emissions pathway, historically unprecedented is projected during this century.

2. Annual rainfall has decreased throughout Hawaiʻi since the early 1980s, with uncertain projections for the future. The frequency and magnitude of extreme precipitation events have changed in recent years, but these changes are not uniform across the island chain. Extreme precipitation events have become less frequent for Kauaʻi and Oʻahu but more frequent for the Island of Hawaiʻi.

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[18] https://www.usgs.gov/observatories/hvo/active-volcanoes-hawaii

[19] https://www.usgs.gov/observatories/hawaiian-volcano-observatory/damaging-earthquakes-common-hazard-hawaii

3. Sea level rise will continue to be a major threat to the state's coastline through inundation and erosion.

As an archipelago state in the Pacific Ocean near the Equator, Hawaiʻi is surrounded by water, with almost half of the state's land area within 5 miles of the ocean[20] and relatively warm weather year-round. This makes the State especially vulnerable to ocean-related hazards, with climate change being a major contributor to sea-level rise and current global sea-level rise projections predicting a likely 1-4 feet rise by 2100 and 0.7 to 1.5 feet by 2050[21]. Therefore, the initial areas that should be subject to initial hazard screenings include all coastal flood hazard zone areas within the 3.2 ft sea-level exposure area, according to model projections by https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/ and https://www.climatecentral.org/sea-level-rise. This includes, but is not limited to, Hanalei, Waimea, Hanapēpē, and Kealia on Kauaʻi, Haleʻiwa, Kailua, Waikīkī, and Māʻili on Oʻahu, Makanalua, Kaunakakai, and ʻUalapuʻe on Molokaʻi, Kahului, Lahaina, and Kīhei on Maui, and Waipiʻo, Hilo, and Kailua-Kona on Hawaiʻi island.

Kauaʻi	Oʻahu	Molokaʻi	Maui	Hawaiʻi Island
Hanalei Waimea Hanapēpē Kealia	Haleʻiwa Kailua Waikīkī Māʻili	Makanalua Kaunakakai ʻUalapuʻe	Kahului Lahaina Kīhei	Waipiʻo Hilo Kailua-Kona

Table X - Partial list of screening areas for coastal flood hazard and sea-level rise

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[20] https://statesummaries.ncics.org/chapter/hi/

[21] https://aambpublicoceanservice.blob.core.windows.net/oceanserviceprod/hazards/sealevelrise/2.0-Future-Mean-Sea-Level.pdf Page 13

Sea Level Rise : State of Hawaiʻi Sea Level Rise Viewer

An Interactive Mapping Tool in Support of the State of Hawaiʻi Sea Level Rise Vulnerability and Adaptation Report
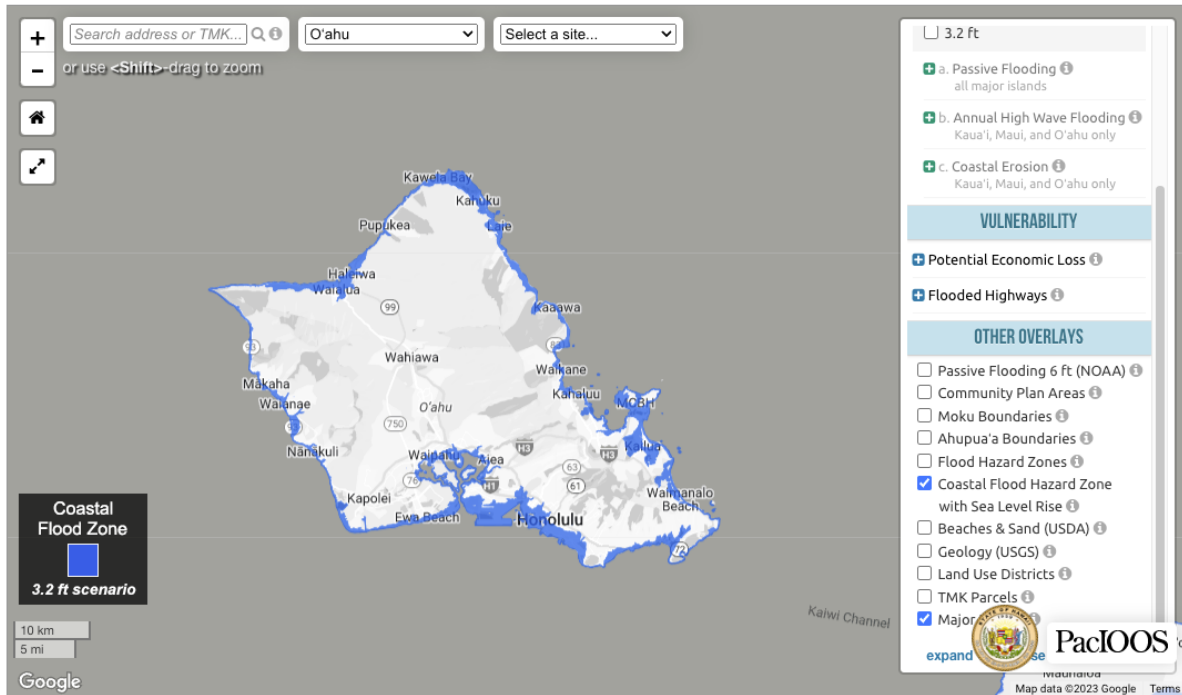

Figure 3: Areas on Oʻahu projected to be flooded by a 1%-annual-chance coastal flood event such as tropical storms, hurricanes, and tsunamis with a projected 3.2 ft sea level rise by 2100

Hurricane

Hurricane season in the Pacific begins June 1 and ends on November 30[22]. Hurricanes directly hitting are infrequent in Hawaiʻi with many dissipating into tropical storms or tropical depressions.[23] The effects of these hurricanes on Hawaiʻi's weather can still lead to high winds and flooding due to heavy rains. These effects can cause downing of trees and other structures, water damage, and cause landslides. With climate change and sea temperatures rising, these tropical cyclones are likely to be more powerful, causing extreme rainfall, strong winds, and storm surge events[24][25].

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[22] https://www.nhc.noaa.gov/aboutcphc.php

[23] https://statesummaries.ncics.org/chapter/hi/

[24] https://www.climate.gov/news-features/understanding-climate/climate-change-probably-increasing-intensity-tropical-cyclones

[25] https://climate.nasa.gov/news/3184/a-force-of-nature-hurricanes-in-a-changing-climate/

Tsunami

Earthquakes, landslides, and volcanic eruptions cause tsunamis. Therefore, the frequency of a tsunami depends on these other geological events occurring.[26] In conjunction with the projected 3.2 ft global seal level rise by 2100, this makes tsunamis even more dangerous to coastal areas in the State and should be subject to initial tsunami hazard screening. Tsunami evacuation zones can be found at https://dod.hawaii.gov/hiema/public-resources/tsunami-evacuation-zone/.

Earthquake

Thousands of earthquakes occur every year in Hawaiʻi, but few are ever felt. Hawaiian earthquakes fall into three classes: volcanic, tectonic, and mantle. Volcanic earthquakes are caused by magma movement and rarely cause significant damage. Tectonic earthquakes occur on major faults within and at the base of volcanoes and can cause significant damage. However, the largest and most damage tectonic earthquakes occur at the base of volcanoes. Mantle earthquakes are caused by the flexing and bending of the earthʻs lithosphere. Mantle earthquakes are the most common source of damaging earthquakes north of Hawaiʻi Island[27]. Destructive earthquakes (magnitude 5.0+ on the Richter scale[28]) have a an average frequency of 0.7 to 0.02 earthquakes per year, with average days ranging from 1.5 years to 55.8 years between earthquakes of those magnitude[29]. This means destructive earthquakes are relatively infrequent occurrences for the State. However, Hawaiʻi County, with the most active volcanoes is most susceptible to earthquake damage with risk decreasing as one goes up the island chain[30].

Volcanic

Hawaiʻi Volcano Observatory places the potential threat for each volcano as follows[31] (Page 430):
1. Kīlauea—Very High. This volcano has been erupting continuously since 1983.

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[26] https://dod.hawaii.gov/hiema/files/2023/01/2023_Hawaii_SHMP_Final_Approved_Adopted_508Compliant-10.27.23.pdf Page 417

[27] https://dod.hawaii.gov/hiema/files/2023/01/2023_Hawaii_SHMP_Final_Approved_Adopted_508Compliant-10.27.23.pdf Pages 191-192

[28] https://www.usgs.gov/media/images/richterscalegif

[29] https://www.usgs.gov/observatories/hawaiian-volcano-observatory/damaging-earthquakes-common-hazard-hawaii

[30] https://www.fema.gov/emergency-managers/risk-management/earthquake/hazard-maps

[31] https://dod.hawaii.gov/hiema/files/2022/06/2018-SHMP-Amended-for-EMAP-4.2.3-Supplemental-Period.pdf

2. Mauna Loa—Very High. It last erupted in 1984, and is considered certain to erupt again.
3. Hualālai—High. It is likely to erupt again.
4. Mauna Kea—Moderate.
5. Haleakalā—Moderate

This is evident with the 2018 Kīlauea lower East Rift Zone eruptions that affected and displaced many in Puna[32]. Although most of the volcanoes are in Hawai'i County, Maui County also faces moderate risk with Haleakalā on Maui Island. The State may experience one volcanic eruption every two years and has a 47% chance of eruption occurring in any given year (Page 431). Hawai'i County faces the most risk with respect to volcanic hazards, especially lava flow. Therefore, lava flow hazard zones 1-4 on Hawai'i Island should be screened for lava flow hazard[33].
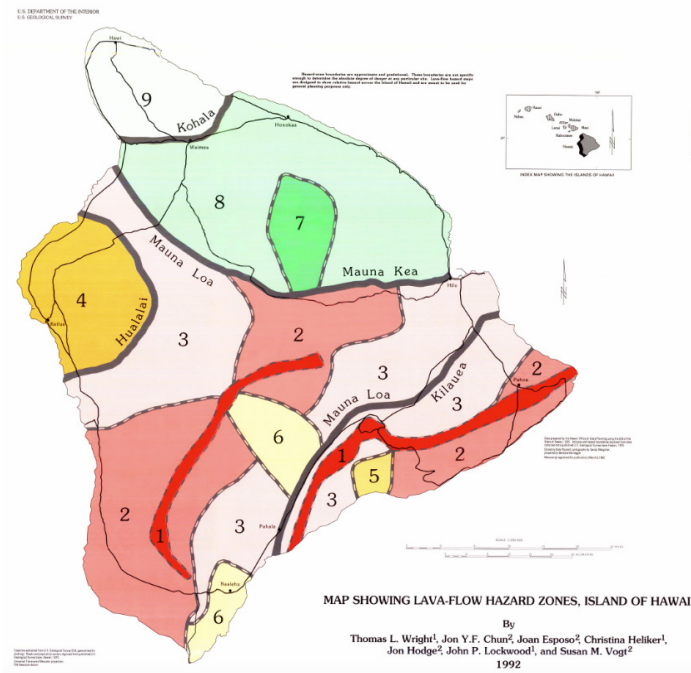

Figure 4: Lava-flow hazard zone map, Island of Hawai'i. (Hawai'i Volcano Observatory 1992)

Wildfire

Climate change has also led to warmer conditions and decreased annual rainfall, leading to long-term drought and drier conditions and an increase in wildfire frequency[34]. The U.S. Department of Agriculture places Hawai'i, on average, having an

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[32] https://www.usgs.gov/observatories/hvo/news/volcano-watch-2018-eruption-kilauea-was-big-global-scale
[33] https://www.usgs.gov/media/images/lava-flow-hazard-zone-map-island-hawaii
[34] https://statesummaries.ncics.org/chapter/hi/

annual wildfire likelihood greater than 90% of states in the U.S[35]. Therefore, initial areas that should be subject to initial hazard screenings should include areas with the highest level of wildfire likelihood, according to https://wildfirerisk.org/explore/wildfire-likelihood/15/. This includes but is not limited to, southern areas of Kauaʻi (Kalāheo, Lāwaʻi, ʻŌmaʻo), the leeward side of Oʻahu, Maunaloa in Molokaʻi, west Maui, and northern areas of Hawaiʻi island (Hāwī, Kapaʻau, Kawaihae).

Kauaʻi	Oʻahu	Molokaʻi	Maui	Hawaiʻi Island
Kalāheo Lāwaʻi ʻŌmaʻo	Waiʻanae Nānākuli Makakilo	Maunaloa	Lahaina Launiupoko Olowalu	Hāwī Kapaʻau Kawaihae

Table 3 - Partial list of screening areas for wildfire hazard

Screening of areas for coastal and wildfire risk should be assessed at time of BEAD deployment by subgrantee and reassessed every four years in conjunction with the Intergovernmental Panel on Climate Change (IPCC) assessment reports.

SECTION C - HOW DO THESE HAZARDS IMPACT BROADBAND INFRASTRUCTURE DEPLOYED BY BEAD

Given the description of climate and weather hazards above and the existing broadband last mile in Hawaiʻi, the hazards of most risk to BEAD infrastructure deployment and the 20 years following deployment are climate change and sea level rise, hurricanes (tropical cyclones), wildfires, and volcanic activity.

Sea level rise can cause last mile infrastructure to be subject to water hazards by being submerged through coastal flooding and erosion. In conjunction with climate change and sea level rise, hurricanes bring storm surges and heavy rains, which can cause last mile infrastructure to be subject to water hazards and downing from strong winds. Finally, wildfires and lava flow from volcanic activity can cause last mile infrastructure to be destroyed by fire. As noted earlier, volcanic hazard is not a statewide risk to BEAD infrastructure deployment but is limited to the islands of Hawaiʻi and Maui.

In Hawaiʻi, existing last-mile wired broadband infrastructure is primarily deployed underground or aerial using portions of utility poles to house broadband provider infrastructure.

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[35] https://wildfirerisk.org/explore/overview/15/

Figure 5: Example of a location where underground broadband is surfaced to a conduit to serve a household

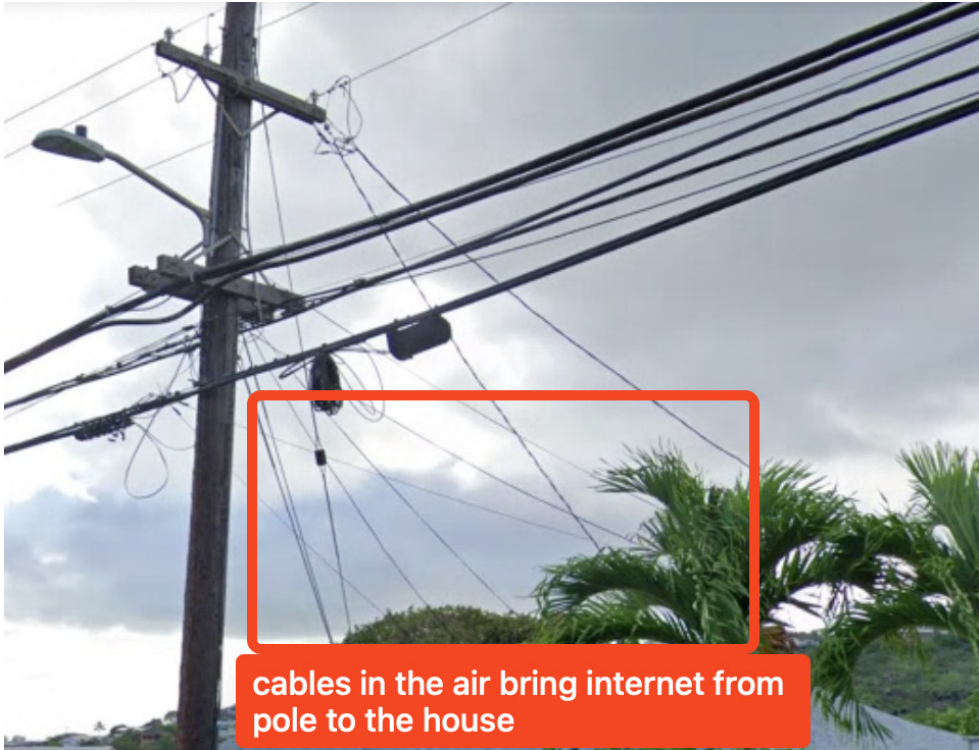

cables in the air bring internet from pole to the house

Figure 6: Example of broadband aerial equipment that is then dropped to the household.

SECTION D - CREATE A CLIMATE READINESS PLAN

To address the hazards identified throughout the life of BEAD deployment and the 20 years following deployment, the following proposed climate readiness plan will be adopted.

1. Risk Assessment and Planning:

Sea Level Rise:

- Leverage science-based sea level rise projections and coastal flooding tools to identify areas prone to sea level rise and flooding and erosion impacts.
- Prioritize infrastructure in elevated locations and employ waterproofing measures for critical facilities.

Tropical Cyclones:

- Develop a comprehensive cyclone risk assessment, considering historical data and projections.
- Design infrastructure to withstand high winds and heavy rainfall associated with cyclones.

Wildfires:

- Leverage USDA data and local data to identify wildfire-prone areas and assess the risk of infrastructure being affected.
- Utilize fire-resistant materials and clear vegetation in strategic areas to create firebreaks.

2. Infrastructure Design and Construction:

Due to the higher resiliency of fiber with respect to water hazards and its lower carbon footprint compared to other technologies, fiber deployment will be the first choice to address hazards identified throughout the life of BEAD deployment and the 20 years following deployment. In addition, the following steps will be taken into design:

Sea Level Rise:

- Elevate critical infrastructure above projected sea levels, such as data centers and key distribution points.
- Use water-resistant conduits and cable materials for fiber optic deployments near coastlines.

Tropical Cyclones:

- Design infrastructure with reinforced materials capable of withstanding high winds.

- Implement underground cabling where feasible in cyclone-prone areas to reduce exposure to wind damage.

Wildfires:

- Utilize fire-resistant conduit materials and casing for fiber optic cables.
- Implement underground installations where possible to reduce vulnerability to ground-based wildfires.

3. Early Warning Systems:
Sea Level Rise:

- Work with local weather forecasting entities to forecast storm trajectories and impact and prepare infrastructure for flooding in high risk coastal areas

Tropical Cyclones:

- Have a rapid response plan for securing and protecting infrastructure when a cyclone is forecasted.

Wildfires:

- Establish protocols for immediate power shutdown and evacuation if a wildfire is detected.

4. Backup and Redundancy:
Sea Level Rise:

- Establish redundant connections and backup systems to minimize downtime in case of flooding.
- Regularly test and update disaster recovery plans for sea level rise scenarios.

Tropical Cyclones:

- Build redundancy into the network to reroute traffic in case of infrastructure damage.
- Implement mobile and temporary solutions to restore connectivity quickly.

Wildfires:

- Create alternative routes and redundant connections to mitigate the impact of cable damage.
- Develop quick deployment solutions for temporary connections during and after wildfires.

5. Regulatory Compliance and Environmental Impact Assessments:
Sea Level Rise:

- Ensure compliance with regulations related to coastal development and environmental impact assessments.
- Collaborate with environmental agencies to monitor and minimize the ecological impact of infrastructure.

Tropical Cyclones:

- Adhere to building codes and standards that account for cyclone resilience.
- Work closely with local authorities to obtain necessary permits for cyclone-prone areas.

Wildfires:

- Comply with environmental regulations and conduct thorough assessments of wildfire impact.
- Collaborate with forestry and local fire departments to implement wildfire-safe practices.
- Adhere to building codes and standards that account for wildfire resilience.

6. Continual Monitoring and Adaptation:
- Establish a monitoring system to track changes in sea level rise projections, cyclone patterns, and wildfire risks.
- Establish a plan for testing and maintenance of early warning and monitoring systems
- Regularly update risk mitigation strategies based on evolving environmental conditions and technological advancements.

SECTION E - CREATE A PLAN TO IDENTIFY AND ADDRESS CLIMATE RISKS IN SECTION C AND REPEATING THE ASSESSMENT

In conjunction with HI-EMA and other county emergency management agencies, climate and weather related hazard risks will be identified and reassessed every five years per HI-EMA. Climate and weather hazard risks identified will be communicated to

prospective deployment subgrantees and required to be addressed in their deployment proposal.

Bibliography

1. HIEMA 2018 State of Hawaiʻi Hazard Mitigation Plan https://dod.hawaii.gov/hiema/files/2022/06/2018-SHMP-Amended-for-EMAP-4.2.3-Supplemental-Period.pdf
2. HIEMA 2023 State of Hawaiʻi Hazard Mitigation Plan https://dod.hawaii.gov/hiema/files/2023/01/2023_Hawaii_SHMP_Final_Approved_Adopted_508Compliant-10.27.23.pdf
3. NOAA State Climate Summary - Stevens, L.E., R. Frankson, K.E. Kunkel, P.-S. Chu, and W. Sweet, 2022: Hawaiʻi State Climate Summary 2022. NOAA Technical Report NESDIS 150-HI. NOAA/NESDIS, Silver Spring, MD, 5 pp.
4. Tetra Tech, Inc. and University of Hawaiʻi Coastal Geology Group. 2017. *Sea Level Rise – Exposure Area.* https://planning.hawaii.gov/gis/download-gis-data-expanded/. Accessed Oct 2, 2023

2.11.1.1 Optional Attachment: As an optional attachment, submit any relevant reports conducted within the past five years that may be relevant for this requirement and will be referenced in the text narrative above.

- 2018 State of Hawaiʻi Hazard Mitigation Plan: https://dod.hawaii.gov/hiema/files/2022/06/2018-SHMP-Amended-for-EMAP-4.2.3-Supplemental-Period.pdf
- 2023 State of Hawaiʻi Hazard Mitigation Plan: https://dod.hawaii.gov/hiema/files/2023/01/2023_Hawaii_SHMP_Final_Approved_Adopted_508Compliant-10.27.23.pdf
- Future Mean Sea Level: https://aambpublicoceanservice.blob.core.windows.net/oceanserviceprod/hazards/sealevelrise/2.0-Future-Mean-Sea-Level.pdf

2.12 Low-Cost Broadband Service Option (Requirement 16)

2.12.1 Text Box: Describe the low-cost broadband service option(s) that must be offered by subgrantees as selected by the Eligible Entity, including why the outlined option(s) best services the needs of residents within the Eligible Entity's jurisdiction. At a minimum, this response must include a definition of low-cost broadband service option that clearly addresses the following, as outlined on page 67 of the BEAD NOFO:

    a. All recurring charges to the subscriber, as well as any non-recurring costs or fees to the subscriber (e.g., service initiation costs);

    b. The plan's basic service characteristics (download and upload speeds, latency, any limits on usage or availability, and any material network management practices);

    c. Whether a subscriber may use any Affordable Connectivity Benefit subsidy toward the plan's rate; and

    d. Any provisions regarding the subscriber's ability to upgrade to any new low-cost service plans offering more advantageous technical specifications.

As the State with the highest cost of living index[36] and approximately 10% of the State's population in poverty[37], it is no surprise that high-speed internet is a luxury to many. As access to high-speed internet is deployed in Hawaiʻi, it is equally important that all residents of Hawaiʻi can also afford it. As noted in the 2023 State of Hawaiʻi Digital Equity Plan, some families (many of those in covered populations), have to choose between the monthly cost of Internet or other basic necessities. This affordability barrier perpetuates the digital equity divide in Hawaiʻi and affects upwards mobility in the State for those whose access to the Internet is an opportunity to escape from the low-income downward spiral. Therefore to assist in overcoming the affordability barrier, selected subgrantees must offer the low-cost broadband service option as defined below with all requirements at a minimum:

    1. Provide a low-cost service option that:
        a. To the extent possible, costs $30 per month or less, inclusive of all taxes, fees, and charges with no additional non-recurring costs or fees to the consumer;

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[36] https://meric.mo.gov/data/cost-living-data-series
[37] 2022 American Community Survey 1-Year Estimates
https://data.census.gov/profile/Hawaii?g=040XX00US15#income-and-poverty

b. To the extent possible, allows the end user to apply the Affordable Connectivity Program subsidy or successor program subsidy to the service price to achieve "net free" access;

c. Provides the greater of (a) typical download speeds of at least (preferably better than) 100 Mbps and typical upload speeds of at least 20 Mbps, or the fastest speeds the infrastructure is capable of if less than 100 Mbps/20 Mbps or (b) the performance benchmark for fixed terrestrial broadband service established by the Federal Communications Commission pursuant to Section 706(b) of the Communications Act of 1934, as amended, provided that any increased performance benchmark does not cause unreasonable increases in the cost to provide service;

d. Provides typical latency measurements of no more than 100 milliseconds; and

e. Is not subject to data caps, surcharges, or usage-based throttling, and is subject only to the same acceptable use policies to which subscribers to all other broadband internet access service plans offered to home subscribers by the participating subgrantee must adhere;

f. In the event the provider later offers a low-cost plan with higher speeds downstream and/or upstream, permits Eligible Subscribers that are subscribed to a low-cost broadband service option to upgrade to the new low-cost offering at no cost

2. Subgrantees are required to participate in the Affordable Connectivity Program or any successor program, and Eligible Subscribers who are eligible for a broadband service subsidy can apply the subsidy to the proposed service option.

51,577 out of an estimated 100,000 (51.6%) of eligible households have enrolled in the Affordability Connectivity Program (ACP) as of September 25, 2023.[38] The proposed low-cost broadband service option would enable those 51,577 households enrolled in ACP as well as those who are low-income, but have not enrolled in ACP a chance to afford high-speed internet in Hawaiʻi.

2.12.2 Checkbox: Certify that all subgrantees will be required to participate in the Affordable Connectivity Program or any successor program.

Hawaiʻi certifies that all subgrantees will be required to participate in the Affordable Connectivity Program or any successor program.

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[38] https://broadband.hawaii.gov/digitalequityplan/

2.13 Middle Class Affordability Plans (Requirement 20)

2.13.1 Text Box: Describe a middle-class affordability plan that details how high-quality broadband services will be made available to all middle-class families in the BEAD-funded network's service area at reasonable prices. This response must clearly provide a reasonable explanation of how high-quality broadband services will be made available to all middle-class families in the BEAD-funded network's service area at reasonable prices.

U.S. telecommunications regulatory policy relies on two pillars to ensure access and affordability. The base access policy is rooted in telephone access for all, derived from the post-depression infrastructure expansion and the concept of telephone access as a necessary utility service. Internet access has historically been treated as a market service, and is dependent on the assumption of a "fully competitive" market to drive prices to "low" and affordable levels. Recent (and current) policies now consider Internet access as a necessity and classify basic (at the updated 100/20 Mbps floor) access as a utility. While Internet access continues to be treated as operating in a "fully competitive" market (not 100% true), additional supports such as the Affordable Connectivity Program (ACP) and reconsideration for inclusion in the Universal Service Fund, are working to shore up support for income challenged families.

Middle class affordability will likely continue to be dependent on the market, and the necessity for a fully competitive market with a reasonable number of highly viable participants, for the purpose of BEAD middle class affordability, with focus on effective wireline competitive service with access for all residents. This competitive market scenario requires a reasonably competitive wholesale access market to help maintain reasonable pricing and availability for first and middle mile transport. Hawai'i's market has historically suffered from a high cost and very limited availability in the first and middle mile. Even though mostly limited to a (wireline) duopoly, Hawai'i's consumers have benefitted from reasonable pricing. The hidden hurdle continues to be very high prices for high capacity services to enterprises, including those required by competitive wireless carriers. This hidden hurdle has also limited the number of competitive ISPs serving this market - of note, in the early days of the Internet, when services were delivered via acoustically coupled modems, Hawai'i had quite a handful of competitive ISPs; nearly all of them were driven out of business as the market evolved to its current high speed delivery paradigm.

Hawai'i's core strategic framework, with its basis in the Hawai'i Broadband Task Force report (c.2008), includes prioritized investment in critical middle mile infrastructure with the desire to address the age and brittleness of inter-island lifelines, and to increase and diversify the middle mile supply to lower capital costs of *all* carriers and ISPs, including reducing the cost of entry into the market for new competitive providers.

The intended market impact will lower the capital and operating costs of existing and potential new providers, to help support downward pressure on consumer and enterprise prices. While lowering costs by themselves will not guarantee lower prices, the expected outcome relies on energizing the competitive market, and improving the customer value proposition (i.e. lower prices and/or higher speed availability). Enterprises (and government) will also directly benefit from lowered wholesale pricing levels, with similar downstream benefits to consumers.

Consumer facing outcomes, in particular for middle class consumers (and in particular those ALICE consumers), should create stable, and potentially lower entry-level offerings (above the 100/20Mb floor), and increased affordability for offerings including gigabit class services.

Pursuant to this strategy, Hawai'i is investing the majority of its U.S. Treasury Coronavirus Capital Projects Fund (CPF) allocation to support the construction of a new inter-island submarine fiber optic cable system. In addition to the CPF investment, Hawaiian Telcom is the recipient of the Middle Mile Competitive Grant award that will also incrementally improve both subsea and terrestrial middle mile capacity in its core networks. These efforts together have already resulted in significant interest by multiple prospective trans-Pacific system projects in looking to land their systems in Hawai'i. While these trans-Pacific systems would not see direct public investment, collective work in cable landing stations and carrier neutral interconnection facilities significantly reduces project and financial risks and uncertainties for those trans-Pacific systems.

The largest portion of the overall federal investments will directly expand last mile high-speed access for all residents, and include layered wrap-around services to support digital literacy, Internet adoption, and workforce development. The expanded last mile coverage will support an incremental increase of adoption and subscriptions at the edge of carrier and ISP coverage, and the layered wrap-around services will increase overall adoption across the population by overcoming legacy fear, uncertainty and doubt for segment of residents that have access, but remain unconnected to the Internet. Affordability, even at low consumer prices, continues to be a significant hurdle for those residents that are financially challenged.

The final critical policy principle is that the public sector will generally NOT enter into competition with the commercial carriers and ISPs. Public sector entities would generally provision support for their locations, facilities and associated public facing support, as different from becoming a "commercial" carrier. In addition, use of non-deployment investments are expected to generally increase demand for commercial carriers and ISPs to incrementally increase total revenue available to the market.

Ongoing middle mile investments funded out of the Coronavirus Capital Projects Fund (CPF), as well as others anticipated over the next decade are expected to influence the competitive market, lowering prices for both carriers and the public.

The broad injection of public capital and wrap-around support services will reinvigorate the competitive commercial telecommunications market by making it more attractive for commercial telecom providers to make other investments that grow their business while also benefiting Hawai'i. Increasing the market potential by incrementally improving take-up rates and the general digital literacy of the population will help fuel expansion opportunities for incumbents as well as new providers.

Residents, businesses, and government operations throughout the state will benefit from lowering the cost of internal connections and access to an increasingly competitive telecommunications market. By taking the initiative and building new key broadband routes to previously unserved areas, the State will expand Hawai'i's direct-service market capacity and stimulate new economic prospects. A world-class high-speed Internet connection available to all Hawai'i residents empowers the potential export of local products, services, and talent. Opportunities include Hawai'i-originated research and commercial entities and peer-level collaboration with existing and new entities from regional and global sources

Building on the foundational middle mile investments funded by the CPF and MMG programs, and the legacy last mile investments funded by Rural Digital Opportunity Fund and Connect America Fund, Hawai'i will utilize BEAD and Tribal Broadband Connectivity funds to fill the remaining gaps in rural last mile infrastructure. Many of those areas that were previously uneconomical service locations for private carriers will be fully served by robust and affordable Internet access. While benefiting incumbent service providers, the comprehensive middle and last mile investments will also significantly lower the capital cost for new competitive service providers and other community-based networks to enter the market, which will also benefit consumers. Direct public investment in strategic middle mile routes is intended to lower the capital and operating costs incurred by telecommunications providers, encourage new competitive market entrants, and encourage new interest in commercial investments in Hawai'i-beneficial assets, including critical needs such as the construction of new trans-Pacific first mile submarine cable landings. In addition to addressing the capital gap, advance permitting for seaward and landing access for cable landings will remove the single greatest risk hurdle for new trans-Pacific landings.

2.14 Use of 20 Percent of Funding (Requirement 17)

2.14.1 Text Box: Describe the Eligible Entity's planned use of any funds being requested, which must address the following:

a. If the Eligible Entity does not wish to request funds during the Initial Proposal round, it must indicate no funding requested and provide the rationale for not requesting funds.

b. If the Eligible Entity is requesting less than or equal to 20 percent of funding allocation during the Initial Proposal round, it must detail the amount of funding requested for use upon approval of the Initial Proposal, the intended use of funds, and how the proposed use of funds achieves the statutory objective of serving all unserved and underserved locations.

c. If the Eligible Entity is requesting more than 20 percent (up to 100 percent) of funding allocation during the Initial Proposal round, it must detail the amount of funding requested for use upon approval of the Initial Proposal, the intended use of funds, how the proposed use of funds achieves the statutory objective of serving all unserved and underserved locations, and provide rationale for requesting funds greater than 20 percent of the funding allocation.

Hawaiʻi is allocated $149,484,493.57 under the BEAD Program, 20% of this amount totaling just under $29.9 million. Per recommendation by the NTIA, Hawaiʻi is requesting 100% of its allocation. This request is based on the following:

-   The proposed funding gap needed to serve the balance of BEAD-eligible locations is at least 10,568 broadband serviceable locations, 9,731 of whom are unserved, and 837 of whom are underserved locations as of June 2023.

-   The running of the State's subgrantee selection process for both deployment and non-deployment programs through the end of 2027. Terms of the subgrantee selection process are highlighted in sections 2.4 and 2.5 of this proposal.

-   Hawaiʻi faces unique geographic (multiple islands) and topographic challenges (volcanic, coastal, and mountainous terrain among others) that make infrastructure development a costly venture, particularly in communities that are more rural. To maximize the priority broadband buildout, Hawaiʻi expects to spend a large sum of the allocation towards unserved and underserved location deployment, with additional state-provided matches to offset costs and maximize participation in the BEAD Program by the limited service providers within the state.

- While Hawaiʻi fares better than other states in proportionately less unserved and underserved locations altogether, the digital skills, adoption, and affordability measures to date, as highlighted in the State of Hawaiʻi's Digital Equity Plan make it clear that Hawaiʻi requires proper investment in non-deployment activities that will not only advance our human capital but provide a venue for residents to capitalize on opportunities that may be beneficial to them (e.g., distance learning, teleworking, telemedicine, etc.)

Through 2027, this 100% allocation will be used towards the following program areas, and was covered in depth in the Initial Proposal Funding Request:

- Deployment costs, including all last mile buildouts to unserved, underserved, and qualifying CAI locations, and select middle mile buildouts required to successfully build out last mile deployment

- Non Deployment costs, such as Digital Navigator programs and community digital hubs to be deployed at qualifying CAIs

- Programmatic expenses, including the procurement of an NTIA BEAD-compliant challenge process portal and outreach activities

- Administrative costs, including staffing of the University of Hawaiʻi Broadband Office

2.14.2 Financial Data Entry: Enter the amount of the Initial Proposal Funding Request. If not requesting initial funds, enter '$0.00.'

Hawaiʻi is requesting $144,484,493.57 (100%) of funds.

2.14.3 Check Box: Certify that the Eligible Entity will adhere to BEAD Program requirements regarding Initial Proposal funds usage. If the Eligible Entity is not requesting funds in the Initial Proposal round and will not submit the Initial Funding Request, note "Not applicable."

Hawaiʻi certifies that it will adhere to BEAD Program requirements regarding Initial Proposal funds usage.

2.15 Eligible Entity Regulatory Approach (Requirement 18)

2.15.1 Text Box

a. Disclose whether the Eligible Entity will waive all laws of the Eligible Entity concerning broadband, utility services, or similar subjects, whether they predate or postdate enactment of the Infrastructure Act that either (a) preclude certain public sector providers from participation in the subgrant competition or (b) impose specific requirements on public sector entities, such as limitations on the sources of financing, the required imputation of costs not actually incurred by the public sector entity, or restrictions on the service a public sector entity can offer.

b. If the Eligible Entity will not waive all such laws for BEAD Program project selection purposes, identify those that it will not waive (using the Excel attachment) and their date of enactment and describe how they will be applied in connection with the competition for subgrants. If there are no applicable laws, note such.

The State of Hawaiʻi does not have any laws governing broadband, utility services, or similar subjects, whether they predate or postdate enactment of the Infrastructure Act that either (a) preclude certain public sector providers from participation in the subgrant competition or (b) impose specific requirements on public sector entities, such as limitations on the sources of financing, the required imputation of costs not actually incurred by the public sector entity, or restrictions on the service a public sector entity can offer.

2.15.1.1 Optional Attachment: As a required attachment only if the Eligible Entity will not waive laws for BEAD Program project selection purposes, provide a list of the laws that the Eligible Entity will not waive for BEAD Program project selection purposes, using the Eligible Entity Regulatory Approach template provided.

Not applicable

2.16 Certification of Compliance with BEAD Requirements (Requirement 19)

2.16.1 Check Box: Certify the Eligible Entity's intent to comply with all applicable requirements of the BEAD Program, including the reporting requirements.

The University certifies its intent to comply with all applicable requirements of the BEAD Program, including the reporting requirements.

2.16.2 Text Box: Describe subgrantee accountability procedures, including how the Eligible Entity will, at a minimum, employ the following practices outlined on page 51 of the BEAD NOFO:

a. Distribution of funding to subgrantees for, at a minimum, all deployment projects on a reimbursable basis (which would allow the Eligible Entity to withhold funds if the subgrantee fails to take the actions the funds are meant to subsidize);

b. The inclusion of clawback provisions (i.e., provisions allowing recoupment of funds previously disbursed) in agreements between the Eligible Entity and any subgrantee;

c. Timely subgrantee reporting mandates; and

d. Robust subgrantee monitoring practices

Prior to awarding the contract between the RCUH and the subgrantee, the subgrantee must submit to UH:

1. A cybersecurity risk management plan that is either operational or ready to be operationalized upon grant award. The cybersecurity risk management plan must reflect the latest version of the National Institute of Standards and Technology (NIST) Framework for Improving Critical Infrastructure Cybersecurity (currently Version 1.1) and the standards and controls set forth in Executive Order 14028 and specifies the security and privacy controls being implemented.

2. A supply chain risk management plan that is either operational or ready to be operationalized upon grant award. The supply chain risk management plan is based upon the key practices discussed in the NIST publication NISTIR 8276, Key Practices in Cyber Supply Chain Risk Management: Observations from Industry and related SCRM guidance from NIST, including NIST 800-161, Cybersecurity Supply Chain Risk Management Practices for Systems and Organizations and specifies the supply chain risk management controls being implemented.

3. A plan for a public awareness campaigns in BEAD funded locations to highlight the value and benefits of broadband service in order to increase the adoption of broadband service by consumers. Awareness campaigns must include information about low-cost service plans and any federal subsidies for low-income households such as the Lifeline Program, the Affordable Connectivity Program, and any successor programs. Further, awareness campaigns must be conducted in an equitable and nondiscriminatory manner. Subgrantees must utilize a variety of communications media (e.g., online, print, radio) and provide information in languages other than English when warranted based on the demographics of the community.

All plans will be reevaluated and updated on a periodic basis and as events warrant. If the subgrantee makes any substantive changes to either plan, a new version will be submitted to UH within 30 days.

Upon award of the contract between the RCUH and the subgrantee, grant funds will be distributed on a reimbursement basis. Subgrantees are authorized to begin work that will be funded with grant funds.

Deployment subgrantees must meet all reporting requirements, including submitting the following reports, to maintain eligibility for grant funds throughout the project:

1. **Quarterly Project and Expenditure Report**: Due within two weeks (14 calendar days) of the end of the previous quarter (Example: Q1 ends March 31, reports are due April 14). Reports must record all expenses made within the quarterly performance period as well as running project costs since the initial awarding of funds. Reports must include the following information for each project area:

Project Summary
   - A project status relative to subgrantee's proposed deployment timeline (e.g. on-time, delayed, ahead of schedule, etc.)
   - The number and percentage of unserved locations deployed to and remaining
   - The number and percentage of underserved locations deployed to and remaining
   - The number and percentage of community anchor institutions deployed to and remaining
   - The technology used for deployment (e.g. fiber) and amount used (e.g. miles, meters, etc.) to-date
   - Any subcontractors used and description of their services and indicate if they are a MBE, WBE, or LSA.
Project Details

- The FCC fabric location ID, fabric version (e.g. Dec 2022, Jun 2023), and latitude/longitude of each location deployed to
- The location's type (i.e. unserved, underserved, community anchor institutions)
- The date deployment to the location was completed in MM/DD/YYYY format
- The entity responsible for deployment to the location
- The technology used for deployment (e.g. fiber) and amount used (e.g. miles, meters, etc.) to deploy to each location
- The maximum advertised download speed, upload speed, and latency of each location deployed to
- Cost of deployment to location
- Any notes describing any challenges or any irregularities encountered for deployment to the location

2. **Closeout Report**: Due within 60 days of the end of the project period. This report should confirm that all contractual obligations to the RCUH were met.

3. **Post-Closeout Report**: Due 6 months after the project closeout. This report should provide subscriber counts, subscriber satisfaction rating, and any issues reported by subscribers, how they were resolved, and outstanding issues identified that may not be service-related. The report should also include the following information for each subscription in a project area:
   - The FCC fabric location ID, fabric version (e.g. Dec 2022, Jun 2023), and latitude/longitude of each subscriber
   - Start date of subscription
   - End date of subscription (if applicable)
   - Technology subscribed to
   - Download and upload speed of the chosen subscription tier
4. **Conditional report**: Provided a subgrantee includes a subsidized Internet term for all new deployment locations, subgrantees will need to submit two (2) reports, the first at 6 months and the second 12 months **post-subsidy term** detailing upgraded subscriber count or intent to subsidize Internet subscriptions within BEAD project areas post-commitment.

In addition to the reporting requirements, the University of Hawaiʻi will do additional subrecipient monitoring, including the following activities:

- **Semi-annual project site visits**: Site visits to project areas will occur twice a year, around six months apart. These regular visits will be to document construction and progression of BEAD projects. In the event of slower project

progression, additional site visits may be required to assess the project closely and make a determination on whether funds may need to be recouped, should a subgrantee fail to fulfill contractual obligations on their proposed timeline to service.

- **Desk Reviews**: UH will conduct desk reviews of all BEAD deployment milestones each quarter to ensure progress is made and reported as outlined in the subgrantee contract.

- **Internal compliance reviews**: Internal compliance reviews by UH to ensure compliance with the BEAD NOFO.

- **Final Review:** Upon project close-out, UH will conduct a final review of all reports and financial review to ensure all contractual obligations were met and BEAD funding is compliant with the NOFO.

Potential subgrantees should be aware that funds will be granted on a reimbursable basis, and are otherwise subject to nonpayment and/or termination in the event funds are awarded but the subgrantee fails to meet contractual obligations, including reporting requirements and availability for other routine subrecipient monitoring activities.

If an awardee expects delays from their initial proposed timeline for deployment, they must provide an explanation for the delay and new anticipated benchmarks to deployment. Subgrantees must also notify the RCUH if, prior to deployment of BEAD funds, another Federal, state, or private award is made to fund projects in a BEAD-eligible funding location.

All reports and additional subrecipient submitted to the RCUH and the subrecipient monitoring may be used/referenced in the regular program status meetings the Department of Budget and Finance (B&F) will conduct with the University to continuously monitor the execution of planned grant-funded activities throughout the grant period. Regular monthly meetings will include participation by B&F staff, University grant program staff, the Department of Business, Economic Development, and Tourism (DBEDT) staff, Department of Hawaiian Home Lands (DHHL) staff, and the Lieutenant Governor's office staff.

2.16.3 Check Box: Certify that the Eligible Entity will account for and satisfy authorities relating to civil rights and nondiscrimination in the selection of subgrantees.

The University of Hawaiʻi certifies that it will account for and satisfy authorities relating to civil rights and nondiscrimination in the selection of subgrantees.

2.16.4 Check Box: Certify that the Eligible Entity will ensure subgrantee compliance with the cybersecurity and supply chain risk management requirements on pages 70 - 71 of the BEAD NOFO to require prospective subgrantees to attest that:

Cybersecurity

1) The prospective subgrantee has a cybersecurity risk management plan (the plan) in place that is either: (a) operational, if the prospective subgrantee is providing service prior to the award of the grant; or (b) ready to be operationalized upon providing service, if the prospective subgrantee is not yet providing service prior to the grant award;

2) The plan reflects the latest version of the National Institute of Standards and Technology (NIST) Framework for Improving Critical Infrastructure Cybersecurity (currently Version 1.1) and the standards and controls set forth in Executive Order 14028 and specifies the security and privacy controls being implemented;

3) The plan will be reevaluated and updated on a periodic basis and as events warrant; and

4) The plan will be submitted to the Eligible Entity prior to the allocation of funds. If the subgrantee makes any substantive changes to the plan, a new version will be submitted to the Eligible Entity within 30 days.

Supply Chain Risk Management (SCRM)

1) The prospective subgrantee has a SCRM plan in place that is either: (a) operational, if the prospective subgrantee is already providing service at the time of the grant; or (b) ready to be operationalized, if the prospective subgrantee is not yet providing service at the time of grant award;

2) The plan is based upon the key practices discussed in the NIST publication NISTIR 8276, Key Practices in Cyber Supply Chain Risk Management: Observations from Industry and related SCRM guidance from NIST, including NIST 800-161, Cybersecurity Supply Chain Risk Management Practices for Systems and Organizations and specifies the supply chain risk management controls being implemented;

3) The plan will be reevaluated and updated on a periodic basis and as events warrant; and

4) The plan will be submitted to the Eligible Entity prior to the allocation of funds. If the subgrantee makes any substantive changes to the plan, a new version will be submitted to the Eligible Entity within 30 days. The Eligible Entity must provide a subgrantee's plan to NTIA upon NTIA's request.

The University of Hawaiʻi certifies that it will ensure subgrantee compliance with the cybersecurity and supply chain risk management requirements on pages 70 - 71 of the BEAD NOFO to require prospective subgrantees to attest to the above.

2.17 Volume II Public Comment

2.17.1 Text Box: Describe the public comment period and provide a high-level summary of the comments received during the Volume II public comment period and how they were addressed by the Eligible Entity. The response must demonstrate:

a. The public comment period was no less than 30 days; and
b. Outreach and engagement activities were conducted to encourage feedback during the public comment period.

The University of Hawaiʻi Broadband Office (UHBO) released a draft of the Initial Proposal Volume 1 & 2 in early November for public comment. The public comment period began on November 7, 2023, and concluded on December 10, 2023. During this 33-day period, the public was able to submit comments in writing via mail, telephone, or electronically through email or an online form. UHBO also conducted in-person and virtual meetings across Hawaiʻi, informing the public on BEAD and the Initial Proposal comment period, where public comment could also be received. The public was encouraged to register for events using the form: https://forms.gle/RDWWtP1ZJjEg47wK8.

The public was encouraged to submit their comments during the 33-day period for the best possibility of impacting the Initial Proposal's final draft. All public comments received during the official public comment period were published to UHBO's Initial Proposal webpage once the public comment period concluded. UHBO will continue to consider and incorporate any additional comments and feedback throughout the BEAD implementation effort.

During the public comment period, UHBO took various steps to spread awareness and encourage feedback.

UHBO collaborated with the Office of the Lieutenant Governor to issue a press release on the Initial Proposal's public comment period launch, in concert with the announcement of the state's Connect Kakou statewide broadband initiative, resulting in substantial local media coverage.

UHBO began promoting the Initial Proposal public comment period in early October 2023 through email to over 800 contacts subscribed to UHBO's mailing list, and general announcements on the weekly Broadband Hui calls. Once the Initial Proposal draft was publicly posted, all contacts received an additional email notice that the draft Initial Proposal was available on the UH broadband website at hawaii.edu/broadband/. Additional reminders to submit public comments were sent out in November & December newsletters.

During the public posting period, UHBO held four virtual information sessions breaking down components of the Initial Proposal into digestible components for the public. Each Wednesday in November, UHBO provided a brief overview of the session topic at the Broadband Hui to a weekly audience of over 50 attendees via Zoom. The slides from each session were posted to the UH broadband website for the general public to view. Each Monday in November, UHBO held a follow-up virtual information session via Zoom to go over the session topic in more detail as well as take any questions or comments. These sessions covered the following sections:

- Session 1: Volume 1
- Session 2: Volume 2, Sections 1 - 6
- Session 3: Volume 2, Section 7 - 11
- Session 4: Volume 2, Section 12 - 16
- Session 5: General session

At public engagement events, UHBO handed out bifold brochures to attendees on the Initial Proposal's public comment period. Organizations at public engagement events received brochures as well and mentioned their willingness to distribute electronic copies of the brochure to their members.

During the 33-day period, UHBO received over 55 written public comments, with numerous verbal comments also made at public engagement events, which were noted and discussed throughout the development of the Initial Proposal. The majority of written public comments received on Volume 2 were on the Deployment Subgrantee Selection section, with comments also received on the Objectives, Non-Deployment Subgrantee Selection, Labor Standards and Protections, Workforce Readiness, Minority Business Enterprises (MBEs/ Women's Business Enterprises (WBEs)/ Labor Surplus Area Firms Inclusion, Cost & Barrier Reduction, Low-Cost Broadband Service Option, and Climate Assessment sections. Comments included:

- Adding language on resiliency and redundancy.

- De-preferencing fiber, with fixed wireless highlighted in UHBO's strategy and supported by the EHCPLT listing involved/supporting organizations explicitly.

- Deployment Subgrantee Selection

  - Adding a plan for marketing and public awareness campaigns when applying for funding.

  - Addressing funding needs of Small Business Native Hawaiian telecommunications stakeholders.

- ○ Allowing potential subgrantees to define their own project areas, with multiple application rounds.

- ○ Advocating for 5G solutions.

- ○ Scoring Criteria

  - ■ Adding/increasing the scoring of:
    - Network/emergency resilience
    - Network design
    - Climate resilience
    - MDU ownership of infrastructure solution
    - Fixed amount subawards
    - Letter of Credit alts/waivers
    - Affordability

  - ■ Remove/reducing the scoring of:
    - Speed to deployment
    - Open access

- Low-Cost Option

  - ○ Adding language supporting price changes to account for inflation and the market and concern over price regulation.

- Non-Deployment Subgrantee Selection

  - ○ Eliminating the matching requirement for nondeployment subgrantees.

  - ○ Altering language on technical/operational capability language to be more inclusive of everyone, and no penalty to potential subgrantees for not having an appropriate workforce or related program deployment history.

- Cost & Barrier Reduction

  - ○ Advocating for the streamlining of permitting and concerns on impact in delaying BEAD deployment.

UHBO considered all public comments that were received and applied recommendations that fit within the scope and objectives of the BEAD program. This included the removal of a cost matching requirement in the nondeployment subgrantee selection scoring criteria to help ensure that non-profit organizations have a fair opportunity to bring their proposed services to our communities.

A number of comments and suggestions were in conflict with NTIA requirements documented in the NOFO and subsequent guidelines. UHBO will continue to take all

comments under advisement as the BEAD process continues through the State Challenge Process, Final Proposal, and implementation. Some of the recommendations will also be shared with stakeholders and advisory groups, including recommendations for streamlined permitting processes.

UHBO gave special consideration to comments and recommendations from the County of Maui in the context of the ongoing disaster response, recovery and rebuilding efforts that will continue over a number of years. UHBO continues to work with NTIA, and NTIA with its partner federal agencies, in order to help ensure that the State can maximize collective efforts to benefit the communities across the County of Maui, and in particular, those communities directly affected by the wildfire disaster.

- Suggestions to increase the understandability of the materials include work to provide additional public facing documentation, such as acronyms and FAQs, as well as a "readers digest" or executive summary of the Initial Proposal. Formatting and sequencing of the Initial Proposal are driven by the NTIA template and response requirements (to be entered into the NTIA Portal for submission).

- Suggestions related to community anchor institutions are also somewhat constrained by NTIA guidelines. However, UHBO is open to finding common ground, in particular working with the Counties, to determine what works best for their communities, and to match what is allowed to fund under the BEAD program. While the program has infrastructure deployment as its highest priority, UHBO will work with Counties to help determine the best approach for non-deployment funding within each County.

- Specific to wildfire devastated areas of Maui, NTIA has consulted with the Federal Emergency Management Agency (FEMA) and its other federal agency partners to determine the best way for UHBO to support Maui. UHBO expects that the combination of emergency funding and insurance proceeds will result in a substantial rebuild of the affected areas, including broadband infrastructure that is based on currently deployed standards. UHBO expects to be able to supplement this reconstruction effort by applying BEAD funds in a complementary manner, to address any remaining gaps in service, as well as helping to ensure a robust last mile and middle mile broadband infrastructure to service Maui residents. Given the time to plan and complete the reconstruction effort, the Initial Proposal submission proposes to reserve an allocation of funds to support uncertain Maui needs in the affected areas, so that residents of those areas are not bound by the aggressive State Challenge Process and Final Proposal timelines. UHBO expects that NTIA will continue to provide executive

and operational support to this approach as it directly relates to the needs of the affected residents of Maui - and is the right thing to do.

- The objective of the BEAD program is simple and straightforward, completion of 100% access to high speed broadband infrastructure so that every resident may subscribe to modern internet service. Measures of this will be directly supported by ongoing updates to the FCC map database, together with the state's challenge portal populated during the State Challenge Process. UHBO expects to be able to visualize the successful implementation of BEAD funding over the course of the program, eventually reaching the State objective of 100% access.

- All of the examples cited by Maui County as participating entities, agencies, and organizations are absolutely envisioned to participate in UHBO efforts. While the majority of these are not explicitly listed in the Initial Proposal, they are included by reference and context, and most certainly as a result of the County citing their value to the collective effort.

2.17.2 Optional Attachment: As an optional attachment, submit supplemental materials to the Volume II submission and provide references to the relevant requirements. Note that only content submitted via text boxes, certifications, and file uploads in sections aligned to Initial Proposal requirements in the NTIA Grants Portal will be reviewed, and supplemental materials submitted here are for reference only.

Appendix

A. Glossary of Acronyms

- **ACP**: Affordable Connectivity Program https://www.fcc.gov/acp
- **ARPA/CSFRF**: American Rescue Plan Act / Coronavirus State Fiscal Relief Funds
- **ARRA:** American Recovery and Reinvestment Act
- **BDA:** Broadband DATA Act
- **BEAD:** Broadband Equity Access and Deployment Program
- **BSL:** Broadband Serviceable Location (a location that can receive mass-market Internet)
- **BTOP:** Broadband Technology Opportunities Program
- **CAI:** Community Anchor Institution (e.g., school, library, hospital)
- **CAF**: Connect America Fund
- **CLEC:** Competitive Local Exchange Carrier
- **CONUS**: Continental United States
- **CPF:** Coronavirus Capital Project Funds
- **CQA:** CostQuest Associates (the entity that FCC contracted to create, manage and distribute the Fabric and data map)
- **DBEDT:** Hawai'i Department of Business, Economic Development, and Tourism
- **DE:** Digital Equity
- **DEP:** Digital Equity Plan
- **DHHL:** Department of Hawaiian Home Lands
- **DOT**: Hawai'i Department of Transportation
- **DSL**: Digital Subscriber Line (copper wiring)
- **EBB**: Emergency Broadband Benefit
- **EHCPLT**: Extremely High Cost Per Location Threshold
- **FCC**: Federal Communications Commission
- **FEMA**: Federal Emergency Management Agency
- **FPO:** Federal Program Officer
- **HBDEO:** Hawai'i Broadband & Digital Equity Office (under DBEDT)
- **HIDEC**: Hawai'i Island Digital Equity Coalition
- **HPHA**: Hawai'i Public Housing Authority
- **ILEC:** Incumbent Local Exchange Carrier
- **ISP:** Internet Service Providers
- **INET**: Institutional Network
- **IIJA**: Infrastructure Investment and Jobs Act
- **MDU**: Multi Dwelling Unit (condo, townhouse, apartment, etc.)
- **MMG:** Enabling Middle Mile Infrastructure Grant Program
- **MOU:** Memorandum of Understanding (sometimes referred to Agreement)

- **NELHA:** Natural Energy Laboratory of Hawaii Authority
- **NOFO:** Notice of Funding Opportunity
- **NTIA**: National Telecommunications and Information Administration
- **ODEC**: Oʻahu Digital Equity Coalition
- **PIO**: Public Information Officer
- **RCUH**: Research Corporation of the University of Hawaiʻi
- **RDOF**: Rural Digital Opportunity Fund
- **RFP:** Request for Proposal
- **SBLN**: State Broadband Leaders Network
- **TBC**: Tribal Broadband Connectivity Program
- **UH**: University of Hawaiʻi
- **UHBO**: University of Hawaiʻi Broadband Office