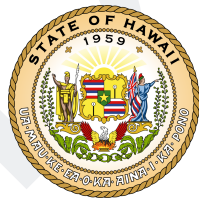


---

# INTERNET FOR ALL

---

## Hawai‘i BEAD Initial Proposal Volume 2



DRAFT FOR PUBLIC COMMENT

November 7, 2023

## Table of Contents

<b>Introduction</b>	<b>1</b>
<b>1 Volume II (Requirements 1, 2, 4, 8 – 20)</b>	<b>2</b>
2.1 Objectives (Requirement 1)	2
2.2 Local, Tribal, and Regional Broadband Planning Processes (Requirement 2)	4
2.3 Local Coordination (Requirement 4)	10
2.4 Deployment Subgrantee Selection (Requirement 8)	14
Deployment Projects Subgrantee Selection Process & Scoring Approach	14
Extremely High Cost Per Location Threshold	20
Deployment Subgrantee Qualifications	21
2.5 Non-Deployment Subgrantee Selection (Requirement 9)	25
2.6 Eligible Entity Implementation Activities (Requirement 10)	33
2.7 Labor Standards and Protection (Requirement 11)	36
2.8 Workforce Readiness (Requirement 12)	39
2.9 Minority Business Enterprises (MBEs/ Women’s Business Enterprises (WBEs)/ Labor Surplus Area Firms Inclusion (Requirement 13)	48
2.10 Cost and Barrier Reduction (Requirement 14)	49
2.11 Climate Assessment (Requirement 15)	51
2.12 Low-Cost Broadband Service Option (Requirement 16)	63
2.13 Middle Class Affordability Plans (Requirement 20)	65
2.14 Use of 20 Percent of Funding (Requirement 17)	67
2.15 Eligible Entity Regulatory Approach (Requirement 18)	69
2.16 Certification of Compliance with BEAD Requirements (Requirement 19)	69
2.17 Volume II Public Comment	73

## Introduction

---

A high-speed Internet connection used to be a nice-to-have, but today, it is a necessity. In 2020, the coronavirus pandemic highlighted that the Internet is for more than just entertainment; it is *essential* to have continuous access to education, work, healthcare, and other professional services. 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. Hawai'i is on track to receive more than \$400 million from this historic investment.

The largest of all funding pools, the Broadband Equity, Access, and Deployment (BEAD) Program prioritizes building high-speed Internet access to unconnected (i.e., unserved) residential locations, and to communities with underperforming Internet connections (i.e., underserved). Hawai'i will see \$149.5 million under the BEAD Program alone to connect an estimated 12,700 who cannot connect to the Internet at home or are relying on outdated technology to get it.

The University of Hawai'i (UH) is the designated BEAD Program lead, in addition to leading the coordination of all other broadband efforts in the State. UH is partnering with Hawai'i's counties, various state agencies, community organizations, the telecom industry, and others to understand each community's greatest needs to develop a broadband action plan to answer those needs as we work toward a common goal of ensuring all residents are fully equipped to participate and thrive in a digitally connected world.

This Initial Proposal is the "first draft" of the Final Proposal for BEAD grant funding, and, among other things, explains how Hawai'i 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 I & II. Volume I 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 II will include the remaining Initial Proposal Requirements, Requirements 1, 2, 4 and 8-20.

# 1 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 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.

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

#### Objectives

- Expand digital equity programs.
- Integrate State Digital Equity (DE) plan with BEAD plan, leveraging State DE 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

- Apply funding to strategic uses that best fit each funding program while connecting with the overall State strategy.
- Use federal funds to leverage access to private funds to further invest in Hawai'i's infrastructure.
- Integrate existing IT workforce development initiatives with BEAD/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 us with their community organizations already engaged in outreach and general community engagement activities. Many of these organized entities already hold regular member or public meetings, enabling the UH team 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 Hawai'i. She, along with other elected officials, including legislators and county council members, will be leveraged to help broadly reach out to 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 State Department of Budget & Finance and other state agencies, including DBEDT, that have planned broadband projects. Additionally, UH is required to fulfill reporting requirements to the State 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.

The UH Team 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 2 years of the BEAD program, from the development and submission of the five-year-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.

Hawai'i 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<sup>1</sup>, convened by the Hawai'i Broadband and Digital Equity Office and the County of Hawai'i. Formed in 2020 during the pandemic, the Hui has met virtually every week for the past three years. Its membership includes Hawai'i residents across diverse sectors interested in broadband and finding ways to close the digital divide in Hawai'i. 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 Hawai'i, Hawai'i Literacy, Catholic Charities, and Lanakila Pacific.

### **Partnership with Counties**

All four counties are actively partnering with the University of Hawai'i's broadband team 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 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 for deferral of the state's efforts were declined, our 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, the UH broadband office will provide financial support in the form of four sub-awards to the counties, to enable funding of supplemental staffing and direct support for local non-profit and community groups — that funding support was in the approved BEAD Planning Funds proposal, and will be distributed as sub-awards to the Counties for local engagement activities.

Over the course of the Five-Year Action Plan, the Initial Proposal and State Challenge process, and the Final Proposal, the State will work closely with the counties to gain contextual community infrastructure and digital equity needs to ensure those county-level priorities are met. Throughout the next few months, the partnership between the UH and county leadership will provide the groundwork for informational briefings across the State, where the public will have an opportunity to learn more about the 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, and as such, will inform the planning and implementation efforts necessary to see broadband flourish in those communities they serve. Counties will assist in identifying the gaps in broadband coverage and reconcile unserved and underserved communities, as well as identify and support community digital hubs, service providers, and partners for wrap-around support services. Collaboration is

---

<sup>1</sup> <https://broadband.hawaii.gov/broadband-hui/>

integral to ensuring ongoing support for access and wrap-around support services in local communities.

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 DHHL TBC Efforts**

Historically, residents on Hawaiian Home Lands have experienced poor 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. The University of Hawai'i is working closely with DHHL to ensure that the programmatic objectives of TBC are met, and that work in that space is fully coordinated and braided with BEAD and other sources of public investment to fulfill the unmet needs of Hawaiian Home Land residents within the program's period of performance window. UH and DHHL entered into a memorandum of agreement (MOA) in the Fall of 2022 to formalize an existing effort by the UH broadband team to lend technical and programmatic support to DHHL. The overall coordination effort will also ensure that duplication of effort is avoided in accordance with the requirements of the set of federal programs - this includes an overlay of RDOF, CAF, and other legacy broadband infrastructure programs.

As an integral part of the statewide coordination effort, DHHL outreach and community engagement will be conducted in collaboration with other State broadband outreach and community engagement efforts included as part of the State's CPF, BEAD, and DE programs (note: some duplication of effort has occurred over the startup period during the first half of 2023 as each of the programs was initiated at different times, as overlaid with the legacy Broadband Hui coordinated efforts for outreach and information gathering). While some differences exist across the various program requirements, the core outreach and community engagement efforts will benefit from greater efficiencies and the orchestration of solutions for residents. The overall coordination efforts by the UH broadband office will also serve to 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.

In addition to coordination with DHHL (as the recipient of TBC funds), NTIA is working to help define a suitable consultation path to engage the broader Native Hawaiian community in order to comply with its BEAD consultation requirements. UH understands that the specifics will be provided by NTIA later after joint consultation with the NTIA TBC and the NTIA BEAD programs.

### **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 Hawai'i's residents. In addition to simply provisioning the required telecommunications infrastructure to establish access to the Internet, it is critical that Hawai'i





build and maintain a rich and robust social infrastructure of digital equity and digital literacy wraparound services, with statewide reach supporting all of our communities. Building on the concept of Community Anchor Institutions (CAIs), Hawai'i looks to establish and work to sustain widespread Community Digital Hubs to provide community-based access and support in every statewide 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 sustainable organizational support. 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 and further pinpoint the needs of a community, determine which residences may be unserved or underserved but do not have a proper street address to be accounted for in the FCC maps, and as the programs progress, impart digital literacy and workforce development skills with residents. Together with the CAIs and Community Digital Hubs, these communities will be the roots of creating Community Digital Navigator programs that will be critical to building sustainable community-based wraparound service delivery systems.

The State and Counties have identified a number of nonprofits already working in this space, 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. Given their existing community relationships, it is expected that the counties will be able to add a significant number of grassroots-type organizations to the group. 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 statewide communities.

The University of Hawai'i has also connected with the already existing IT sector workforce development efforts underway by the CIO Council of Hawai'i and the Chamber of Commerce of Hawai'i. The CIO Council of Hawai'i 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 current effort originated several years ago and has the full support and participation of the CIO Council of Hawai'i membership (100+ industry CIOs representing Hawai'i public and private sector organizations). The current effort 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 the 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 Hawai'i 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 Hawai'i, the Chamber of Commerce of Hawai'i 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. [cochawai'i.org/itsector/](http://cochawai'i.org/itsector/)). As the primary convener of the IT Sector Partnership, the Chamber of Commerce brings its large statewide membership of over 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**

All active broadband programs in the State are coordinated by UH, including BEAD, CPF, DE (DBEDT), ACP (DBEDT), and TBC (DHHL assisted by UH). Additional federally funded efforts are also in-flight by DOT (FHWA funds) and Hawaiian Telcom (RDOF+CAF funds). 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 overall effort is focused on achieving robust, reliable, and affordable Internet-for-All.

All active efforts are in regular communication to coordinate efforts and maximize efficiencies. In addition, the UH broadband office is in the process of collecting an inventory of current broadband related efforts across all State executive branch departments (under GM 23-03, directing cabinet members to provide broadband project information to the University of Hawai'i).

### **Hawai'i Act 231 Broadband Working Group**

The State convened the first Act 231 Broadband Working Group meeting on March 30, 2023. The meeting was convened via Zoom, with a handful of participants present in person at the University of Hawai'i, Information Technology Center. The meeting included representatives of UH, DBEDT, B&F, DCCA, DAGS, DOH, DOE, DHHL, Kaua'i County, City and County of Honolulu, Maui County, Hawai'i County, and the Lt. Governor. A meeting recording is posted at the UH broadband site, 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 State broadband staff 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, identify staff members fulfilling broadband and digital equity leadership in their respective counties, determine technical assistance and programmatic knowledge requiring clarification, assigning tasks contributing to the overall success of BEAD and the Digital Equity plan (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.

Counties will receive a 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. A lump sum of \$100,000 will be granted to each individual county with an eighteen (18) month period of performance extended to them. Scheduled weekly meetings with counties 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 State Department of Budget & Finance, and NTIA.

### **Identifying Unserved and Underserved Last Mile Locations**

UH has utilized the FCC's National Broadband Map data to identify unserved and underserved locations in Hawai'i. As of this writing, there are approximately 13,000 locations across the State that qualify for BEAD. UH plans to adopt the NTIA's BEAD challenge process model<sup>2</sup> to engage Internet service providers, counties, and non-profits to further refine the set of unserved and underserved locations in Hawai'i.

### **Engagement with Industry to Build Infrastructure**

Following the State Challenge process as outlined in the forthcoming Initial Proposal and Final Proposal, the State will engage with carriers, Internet service providers, and utility construction organizations to secure bids for build out of high-speed Internet infrastructure to those identified unserved and underserved locations. The 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. Some of the challenges will be in difficult geography and terrain that is often associated with Hawai'i's highly rural locations. In addition, high setback 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 be a mix of technologies that are eligible to manage cost while achieving the desired universal service connections.

## **2.3 Local Coordination (Requirement 4)**

<sup>2</sup> <https://Internetforall.gov/bead-challenge-process-policy>

**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 UH Team's three-part communications and outreach campaign includes:

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

### *County Coordination*

Understanding that each community is different and best known by its local county government, UH decided early on to partner with counties (Hawai'i, Honolulu, Kaua'i, Maui) on outreach and engagement efforts. This approach was viewed favorably compared to a top-down communications approach and as a way to achieve greater community engagement at the grassroots level.

In March 2023, UH and DBEDT began meeting with the counties to establish county roles. This included identifying county staff members as broadband and digital equity leadership in their respective counties and ascertaining assistance was needed. The counties built story maps and aided in the identification of smaller non-profit and local philanthropic organizations representing communities that would benefit from BEAD and digital equity programs.

Over the Summer of 2023, UH worked closely with the counties to develop community engagement plans tailored to each island. Through discussion of various outreach strategies, Hawai'i County officials shared their digital equity coalition's successes, prompting the other counties to create their own digital equity coalitions.

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

Presently, UH 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 or contractor help for project fulfillment, fund county-wide outreach, fund mapping efforts, and other activities pertinent to BEAD's success. This lump sum is being granted to each individual county with an eighteen (18) month period of performance extended to them. Throughout the performance period, UH has and will continue to host weekly meetings with the counties to share updates, provide support as needed, and continue team coordination. UH 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. Although work has been done to hold information sessions, Maui County has not convened broadband outreach sessions due to the Maui wildfires in early August and the sensitivity to nascent recovery efforts.

UH is actively working with Maui County officials to accommodate their unique circumstances, as the August 2023 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, there needs to be consideration in the statewide BEAD efforts to take likely future gaps into account, and ensure sufficient contingency funds are allocated to make Maui County whole. The state did request a deferral of BEAD submission requirements to take these factors into account; the request was not granted in consideration for the national grant structure.

As of October 2023, Maui County has engaged a private consultant to convene community engagements in the county and on Maui when appropriate.

### *UH Listening Sessions*

In tandem with the county-led outreach efforts, the UH broadband team has provided BEAD updates and information to the Broadband Hui<sup>3</sup>. After submitting the BEAD Five-Year Action Plan, UH began providing weekly structured updates at the Broadband Hui focused on singular topics each week aimed at helping the Hui — and the broader community they represent — better understand the many layers and requirements of the BEAD program. Presentation materials generally consisted of 4-8 slides and a 10-15 minute question and answer session immediately following. Slides were then posted to the UH Broadband website.

As of 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

Future sessions until the submission of the Initial Proposal to the NTIA will include:

- 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

---

<sup>3</sup> <https://broadband.hawaii.gov/broadband-hui/>

- Four formal public comment zoom sessions held weekly, throughout the month of November.

In addition to the Broadband Hui learning sessions, UH has planned a statewide in-person public engagement and listening tour to reinforce the statewide education and outreach process. The goal of the statewide listening tour is to share information on federal funding from multiple programs allocated to the State. The public listening tour runs statewide in November and early December. For those who cannot make the in-person sessions, UH will also host online engagement sessions and be available for any questions or comments at the formal public comment online sessions. As the engagement process is ongoing, the plan is to follow up in early 2024 with more information sessions in each county on the next steps, particularly the Challenge Process.

### *Statewide Communications and Branding Campaign*

Broadband and the funding programs available to the State is a complex topic with confusion and comprehension difficulty experienced by many people UH has engaged with. Given the topic's complexity and reach, UH wanted to ensure that the entire state is aware of the funding and projects coming into the state. Therefore, UH determined it was important to have a statewide campaign (in addition to grassroots-level engagements) to ensure the widest reach.

UH's public listening tour will be in conjunction with a traditional media outreach campaign, including legacy print and media channels. This public media campaign, developed with the assistance of a consultant, was developed over Summer 2023 and is currently under review and refinement.

### *Underrepresented Engagement*

UH plans on partnering with counties to reach and engage underrepresented communities specific to each county. In addition, UH plans on leveraging connections built from the Hawai'i Broadband and Digital Equity Office's work on the State of Hawai'i Digital Equity Plan to identify and engage these underrepresented communities.

UH has developed a map<sup>4</sup> based on the NBAM December 31, 2022 fabric version data set to assist in underrepresented engagement efforts. The map highlights U.S. Census zip code tabulation areas with the most to least unserved and underserved locations per island. UH has shared this map with counties as well as an analysis spreadsheet to support targeted outreach to unserved and underserved communities.

### *Impact of Local Coordination*

---

<sup>4</sup> <https://www.hawaii.edu/broadband/state-broadband-service-map/>

UH's coordination and outreach efforts are directly impacting the content of the Initial Proposal. Through the public engagements held by both the counties and UH, communication adjustments were identified and localized problems were confirmed through validation at the local level.

Additionally, coordination and outreach with the Broadband Hui and counties have helped UH refine our communications strategy to address common miscommunication and misunderstandings around the BEAD program, existing infrastructure, and the value of speed tests and BEAD program "challenges" to the end user.

Outreach sessions made clear that the public's base level of knowledge about broadband is very limited. Greater overall education is needed about what wired internet is, what download and upload "speeds" refer to, and how to troubleshoot connectivity issues. This base level familiarity, whether taught 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.

Through the outreach session, it has also become apparent that although technically "served," some communities appear to consistently experience poor connectivity speeds, leading us to hypothesize 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.

The UH broadband team's ongoing coordination efforts include continuing to support and assist the counties with their community engagements, identification of Community Anchor Institutions, and soon, learning the BEAD Challenge Process. The intent is to continue to support the counties with planning funds throughout the BEAD project timeline. UH expects input from the public comment period of the Initial Proposal in November 2023 will also affect the Initial Proposal's final draft content.

**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. UH created a custom tool that the counties fill out after their public outreach engagements.

**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."

Although Native Hawaiians are not formally recognized as Tribes, the State of Hawai'i is obligated to engage with Native Hawaiians as a means of fulfilling its "tribal" outreach and engagement obligations. UH is following the tribal consultation process outlined by the NTIA. Additionally, UH has worked closely with the Department of Hawaiian Home Lands to ensure

coordination with the Native Hawaiian homestead beneficiaries. The UH Broadband team has, at a minimum, weekly conversations with the DHHL's broadband program staff.

Notification of the consultation process has been sent via letter to 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. UH confirmed with DHHL – and via letter Hawaiian Homes Commission — that the appropriate entities representing Native Hawaiian consultative interests were identified.

With DHHL's help, UH 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 the Hawai'i Broadband Initiative, 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 the Native Hawaiian outreach sessions will be incorporated and will partially inform the digital equity non-deployment fund 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 and participation lists will be provided.

## **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 UH broadband office 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.

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.

All RFPs will be officially released through CommercePoint, RCUH's designated application portal, where potential subgrantees must upload all required documentation for consideration for funding 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 submission window closes, the review committee will have ten (10) days to review all submissions and select the offeror with the highest average score. The review committee will be composed of at least three individuals, including at minimum: the director of the state BEAD Program; two (2) qualified technical reviewers with knowledge of the broadband infrastructure deployment components and ISP services. 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 highest-scoring offeror will be offered the RFP contract.

RCUH requires any potential subgrantees 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 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 exempted 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 the *submission* of a proposal.

In accordance with the BEAD 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 will use the RCUH proposal evaluation form to score all RFP responses. Points are allocated to specific criteria that will be required on the RFP.

**Total Points: 120**

**Primary Criteria (90 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 25 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 potential subgrantee proposing the most cost-efficient and technically sound proposal 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.

**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. While specific service levels will not be required, prospective subgrantees will be asked to provide a range of service levels offered with the minimum service level of at least 100 Mbps download and 20 Mbps upload. Prices offered must be normal rates and not limited-time or introductory offers.
- **Scoring:** Scoring will be based on two parts: 10 points for the cost of the minimum service level (at least 100/20) and 5 points for computed costs for the other service levels provided.

For the minimum service level portion, the prospective subgrantee who offers the lowest price at the minimum service level will obtain the full point total. The points allocated to higher-priced bidders shall be equal to the lowest bidder's price multiplied by the maximum points available for price (10 points) and then divided by the prospective subgrantee's price offer.

The computed costs for service will be a calculation to determine the asymmetry of the service level (upstream divided by downstream) multiplied by the total cost of the service level. The resulting value will be totaled for all service levels, and the prospective subgrantee with the highest totaled value will be considered the best offer. The points allocated to lower value bidders shall be equal to the highest bidder's total value multiplied by the maximum points available for price (5 points), and then divided by the prospective subgrantee's total value.

### **Fair and Safe Labor Practices (10 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 10 points will be awarded to those who fully meet the requirements.

### **Secondary Criteria (10 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.

- Scoring: Proposals will be evaluated based on the 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 that have binding commitments to provide earlier service dates shall be given a higher score.

### **Additional Criteria (20 points possible)**

#### **Technical Response (10 points)**

- Description: Prospective 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.

#### **Open Access (10 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.

**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 be broken down by counties (Kaua'i, Honolulu, Maui (inclusive of Lāna'i and Moloka'i), and Hawai'i County). Each of these counties represents a Hawaiian Island (or group of Islands). Each RFP issued will cover a single county and all the unserved locations within that county. Prospective 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 EHP or 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's project areas will be broken down into counties. This means that there will be only four project areas: the County of Kaua'i, the City and County of Honolulu, the County of Maui (inclusive of Kalawao), and the County of Hawai'i. 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 State 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 (which will be fulfilled by the State's provided match) 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.

Because the competitive broadband landscape in Hawai'i is severely limited, and the State will only have four project areas (by county), potential subgrantees will have an opportunity to identify and recommend an extremely high cost per location threshold within their applications that they believe viable for the total project costs. The State will be ultimately responsible for the determination of such a threshold. There are extreme fringe cases that the State is already aware of (for example, Ni'ihau, where there is no submarine fiber to the island and radio communications are nearly impossible due to terrain). The State is in the process of determining the threshold for these 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.

Potential subgrantees will be required to propose an extremely high-cost per location threshold, which will be considered in the State's ultimate determination of this threshold. This proposed number will be part of the first step in the multi-step procurement process, in which the state will assess the overall costs provided by potential subgrantees and request a follow-up. In the follow-up request, potential subgrantees may provide alternative technology solutions for the set of designated BSLs above the State's designated extremely high-cost per location threshold. Should offerors not be able to provide reasonable responses, the State 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 extremely high-cost per location threshold. Note that the State may waive the match in project areas where potential subgrantees commit to a reasonable cost model with fiber deployment.

## 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 in the minimum requirements in the RFP. Acceptable evidence to demonstrate financial capability includes certifications, a letter of credit, audited financial statements, and sustainability/pro forma analyses of the proposed project.

**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](#), as well as RCUH Federal terms and conditions, will be utilized for all BEAD-related RFPs. This template and forms will be attached in 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 State will require prospective subgrantees to submit resumes for key management personnel as part of their application package. Potential subgrantees will also need to provide a narrative describing their readiness to manage their proposed project and ongoing services provided. 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. Any prospective subgrantee that does not meet the minimum requirements will be disqualified. Expected responses would include details to internal training and certification programs to ensure the necessary skill set within their workforce. Details to 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.

**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. 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 will be included in the minimum requirements in the RFP. Any prospective subgrantee that does not meet the minimum requirements 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 has submitted, plan to submit, undertaking or committed to will be part of the minimum requirements of the RFP. 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.

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:

DRAFT

## Total Points: 100

### Technical Merit (45 points possible)

- **Project purpose (15 points):** Reviewers will consider the extent to which potential subgrantees propose a project that aligns with the goal of the RFP. Reviewers will consider how proposed projects will prioritize the needs of the community and the project outcomes of the proposed program.
- **Level of need/impact in proposed service areas (15 points):** Applications will need to provide any community statistics that reflect the potential 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 program, the demographics of the impacted community (social, education, age, financial, and any covered populations as identified in the Digital Equity Act. Potential subgrantees will need to provide context as to how and why they selected their proposed project area.
- **Technical feasibility (15 points):** Potential subgrantees will be scored on the comprehensiveness and appropriateness of the project, including the clarity and level of detail of the proposed project plan. Reviewers will assess the extent of which proposed programs stimulate the adoption of broadband for telehealth, distance learning, telework and entrepreneurship, economic growth, and job creation. Reviewers will also consider the reasonableness of the program timeline.

### Qualifications and Expertise (20 points possible)

- **Technical and operational capability (10 points):** Potential subgrantees will need to provide proof of past work in deploying related programs, or at minimum, demonstrate capability of operating the proposed program with appropriately skilled staffing with high technical understanding of proposed digital literacy activities.
- **Financial and managerial capacity (10 points):** Potential subgrantees will need to show proof of financial good standing and must demonstrate a substantial workforce able to fulfill the needs of the proposed program in a timely manner.

### Local Coordination (10 points possible)

- **Proof of community engagement in proposed service area (5 points):** Potential subgrantees will need to provide record that they engaged the community for which they are submitting a proposal to serve, documenting that they considered the needs of the community when developing their proposal. Potential subgrantees who do not provide proof of engagement will receive no points in the category.
- **Letter(s) of support (5 points):** Potential subgrantees are requested to submit at least one letter of support from collaborating organizations (e.g., CAI where proposed services will be implemented). All collaborating organizations are encouraged to submit a letter of support in the application package submitted by the potential subgrantee for full points.



Potential subgrantees who do not submit any letter(s) of support will receive no points in this category.

#### **Other (10 points possible)**

- **Minority Business Enterprise, Woman Business Enterprise, or Labor Surplus Area Firm (5 points):** Full points will be awarded to any potential subgrantee meeting one of these designations.
- **Sustainability of the project after the end of funding term (5 points):** Potential subgrantees will need to provide a project sustainability plan after the end of the BEAD funding term (October 2027). Points will be awarded based on a succinct plan for project continuity passed 2027, and how the funded program will be maintained financially and operationally.

#### **Project Budget (15 points possible)**

- **Reasonableness of the budget (10 points):** When assessing points for reasonableness of the budget, there shall be a maximum number of points awarded to the lowest priced bidder. 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.
- **Match requirement (5 points):** Applicants will receive points in this category based on the amount of match they will contribute. A minimum match will be set in the RFP. Applicants will receive 3 points for meeting the match, 4 points if they contribute an additional match within 5% of the requested match, and 5 points if they contribute over an additional 5% of match requested in the RFP. Applicants who do not propose a match will receive no points in this category, but will NOT be disqualified from consideration.

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 and do NOT overlap project locations, and will negotiate a mutually acceptable Agreement for Services 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 Hawai'i:

1. Tax clearance from the Hawai'i 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.

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

1. User training with respect to cybersecurity, privacy, and other digital safety matters.
2. Remote learning or telehealth services/facilities.
3. Digital literacy/upskilling (from beginner-level to advanced).
4. Computer science, coding, and cybersecurity education programs.
5. 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).
6. Broadband sign-up assistance and programs that provide technology support.
7. Multi-lingual outreach to support adoption and digital literacy.

8. Prisoner education to promote pre-release digital literacy, job skills, online job-acquisition skills, etc.
9. Digital navigators.
10. 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).
11. Costs associated with stakeholder engagement, including travel, capacity-building, or contract support.
12. 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, Hawai'i 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 CAls, with the following four categories for uses of funding:

1. 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

2. 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
  
3. 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 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 will work closely with DBEDT, who manages the State’s Digital Equity Planning and Capacity Programs, 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 Digital Equity Plan, pending the availability of funds to support the desired programs.

The University 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 they are submitting their proposals for. 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.**

UH plans on covering 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, the State anticipates there will be funding expendable for use on non-deployment projects.

Prior to the release of any RFPs for the non-deployment subgrantee selection process, the University will formalize its timeline for the deployment subgrantee selection process. In addition, the University is currently considering the data reflected in the NBAM release to determine the most appropriate programmatic execution for the State. The NBAM map currently reflects around 13,000 total unserved or underserved locations for the State, 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 EXCEPT when a community that should have otherwise been included in the NBAM map were excluded.

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, 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 has executed or is in the process of executing the following implementation activities with BEAD planning funds awarded to us in October 2022:

- **Activity 1 (Executed):** the addition of five (5) FTEs to supplement existing internal 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, communications, and visualization of broadband adoption. This activity 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), 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 capacity will also serve to increase the capacity of the Department of Hawaiian Homelands (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 the state's broadband office. 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 standard procurement methods and will maximize the participation by diverse members of the community to ensure we can maximize the effectiveness of broadband data. Efforts will be coordinated by staff of the state broadband office (Activity 1). (\$900,000)
- **Activity 3 (In Progress):** Provide training and technical assistance to broadband office staff, contractors, community organizations and state/county entities. Coordinated by staff (under Activity 1), services will be secured via standard procurement methods 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 (pending Lt. Gov approval)
  - UH broadband team outreach and community engagement events that will fully inform the statewide population of our broadband efforts, and to ensure that the project has broad and diverse community inputs that will inform the design and implementation of efforts supported by the public funds.
  - Sub-award 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 Hawai'i 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 appropriated to Hawai'i 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 as authorized by the NTIA, including:

1. User training with respect to cybersecurity, privacy, and other digital safety matters.
2. Remote learning or telehealth services/facilities.
3. Digital literacy/upskilling (from beginner-level to advanced).
4. Computer science, coding and cybersecurity education programs.
5. 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).
6. Broadband sign-up assistance and programs that provide technology support.
7. Multi-lingual outreach to support adoption and digital literacy.
8. Covered population digital literacy, job skills, online job-acquisition skills, etc.
9. Digital navigators.
10. 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).
11. Costs associated with stakeholder engagement, including travel, capacity-building, or contract support.
12. 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 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 will require prospective subgrantees to submit the following information within their applications:

1. As generally required by the 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 the state'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.

**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 intends to make mandatory for all subgrantees (including contractors and subcontractors) to adhere to the following as part of the award contract:

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. 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);
3. Use of local hire provisions;
4. Commitments to union neutrality;
5. Use of labor peace agreements;
6. 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);
7. Use of an appropriately credentialed workforce (i.e., satisfying requirements for appropriate and relevant pre-existing occupational training, certification, and licensure); and
8. Taking steps to prevent the misclassification of workers.

## 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.

In 2020 during the early planning phases, three major workforce needs were identified for the State of Hawai'i to take advantage of the once-in-a-lifetime opportunity afforded by the national Internet for All effort: 1) ensuring that a diverse, well-trained workforce will be available to design, build and implement Internet services to all unserved and underserved populations in Hawai'i, 2) to provide comprehensive education and training programs in four high demand employment sectors: Information Technology, Healthcare, Clean Energy/skilled trades and Creative Industries and 3) develop education and training programs in digital literacy to ensure that all citizens of the state can use the internet to access critical social services, engage in well paying remote work opportunities and diversify the state economy through high tech jobs and the innovation economy. The following sections describe plans for how UH and BEAD subgrantees will meet these needs in collaboration with key state partners.

### **Telecommunications Workforce:**

The anticipated spike in construction activity to build telecommunications infrastructure will stress local capacity within the ISP enterprises and in the supply chain of subcontractors commonly used by the industry. Large utility operations, including telecommunications and electric utilities, will feel the impacts of the spike in activity funded by the large federal infrastructure investments. While many of the construction workforce needs may be transient in nature, we do expect to see an overall increase in the steady State demand for engineers and technicians that will be responsible for operating and managing expanded broadband networks, as well as the staff of repair and maintenance, customer service, and other related staff to support the increased demand for services.

Some of these employment classes should see gains in demand over the immediate term as ISPs ramp up in preparation for the increased work. Short-term training and workforce development efforts are already in place in Hawai'i, pre-dating the federal broadband investment, courtesy of other funding sources, and in comprehensive recognition of the already chronic IT sector workforce shortage. Employers can (and are) already take advantage of these

training and certification opportunities to pre-position skilled labor in anticipation of the spike in projects.

The state is mainly served by two ISPs that provide residential service (Charter Communications/Spectrum and Hawaiian Telcom). The State's competitive landscape is significantly smaller than other states and territories, and there will be a heavy reliance on these providers to collaborate with the State to ensure service to residents with no last mile connectivity or underserved status across all islands, regardless of cost for deployment and topographical barriers. A handful of small and potentially new startup ISPs may be able to help fill gaps subject to sufficient capacity and capability to deliver services. UH and the State of Hawai'i have long term collaborative partnerships with both Hawaiian Telcom and Charter Communications.

UH's BEAD project management team has decades of technical and business management experience working with both terrestrial and subsea fiber optic cable projects. They have submitted and managed large-scale, statewide fiber deployment grants and projects, as well as managed the purchase and activation of transpacific submarine fiber capacity, so are well qualified to evaluate the workforce readiness of the two main providers and of future participants.

Hawaiian Telcom and Charter/Spectrum have a robust and highly qualified employee workforce for planning, designing, and installing new fiber and delivering Internet services. Each of these organizations employs certified personnel who are qualified to design, engineer, install, monitor, and maintain a fiber network. In addition to their internal and union employees, these companies work with several qualified contractors with the skill and qualifications to contribute to the installation, expansion, and service of their respective fiber networks.

The University of Hawai'i, a department of the State of Hawai'i, is, by State law, required to adhere to all State and Federal labor standards. All subcontractors of the University of Hawai'i have existing labor and employment compliance policies that meet all Fair Labor requirements, including anticipated scaling of labor resources required during the project delivery and performance period. Specifically, these policies include, but are not limited to: The Corporate Davis Bacon and Related Acts Policy, Corporate Code of Conduct and other similar policies, e.g. Equal Employment Opportunity and Affirmative Action, Anti-Harassment, Disability and Reasonable Accommodation, and Anti-Retaliation policies all serve to complement the Federal Sales Policy in ensuring compliance with Federal rules, laws and regulations.

All subcontractors that have designated project roles must have the following certifications to be eligible: 1) Certified Fiber Optic Technician (CFOT), 2) Professional Engineering (PE) Licenses and 3) Building Industry Consulting Services International (BICSI) Certifications.

All subcontractors must ensure that all direct employees, contractors, and subcontractors have attained the requisite skills through on-the-job training, independent course study, job performance testing, and apprenticeship programs. All subcontractors providing construction services must have a current contractor license and be electrically qualified.



Both major providers have well-established, in-house training and apprenticeship programs in place to address labor shortages and train workforce locally for various telecommunications jobs. These programs will create the flexibility for apprentices to obtain quality, well-paying careers on O‘ahu as well as the neighbor islands. These apprenticeship programs are sponsored by the providers in partnership with IBEW Local 1260 and are registered with the State of Hawai‘i Department of Labor and Industrial Relations.

UH and both major providers recognize that a well-trained, highly skilled workforce is critical to successfully delivering services the citizens of Hawai‘i depend on. Our statewide community of employers has come together over the past decade to bring focus to our collective workforce development efforts, with an eye to ensuring a sustainable supply chain of skilled labor for Hawai‘i’s employers. The focus on broadband and the associated demand for IT skills in the workforce heightens the bar for the collective efforts of our community. In addition to strong collaborative work already underway, e.g., the statewide IT Sector Partnership with broad representation of employers and educators, combined federal support under BEAD and the DE series of programs will help build the long-term workforce required to support our future economy.

The BEAD deployment activity will span all of the islands in the state and providers are committed to supporting job flexibility in that workers can remain on the island where they live, instead of having to move temporarily or at a minimum fly to another island in order to carry out their work. The expanded broadband network built on four islands will support job creation and flexibility by all Hawaiian residents in providing more reliable broadband for small businesses, government, non-profit entities, and commercial businesses.

UH, in partnership with these providers, is committed to attracting talent from Hawai‘i’s diverse communities and sees this commitment as imperative to the success of this project. Both providers have developed a series of programs and initiatives that proactively identify and seek talent statewide from Hawai‘i’s diverse communities, including disadvantaged communities, to ensure access to skills/professional development and contribute to the state’s growth and economic development.

Besides the expected increased demand for utility construction and technical skills required to build, maintain, and operate the expanded telecommunications infrastructure, the State anticipates the need to support broad additional classes of skilled workers to support the State’s goal of meaningful universal access to the Internet. Widely available digital literacy, training, and support services are critical to that success. These wrap-around services must be readily available statewide to ensure that residents will be fully capable of utilizing access to high-speed Internet service.

### **High Demand Employment Sectors:**

The 2021 IT Workforce Needs Analysis report, a collaboration between the Chamber of Commerce Hawai‘i and the UH Community Colleges identified several key findings about the growing demand for skilled IT professionals at multiple levels in Hawai‘i. Top three fastest-growing IT occupations in Hawai‘i from 2018 to 2028 are projected to be information



security analysts, computer and information research scientists, and software developer and software quality testers. The hourly wages for these higher paying positions is 157% higher than the ALICE individual wage. Currently the demand for IT employees in Hawai'i exceeds the number of available individuals. Training programs, including internships, are highly valued by employers as a way for entry-level IT job candidates to acquire professional skills such as critical thinking, problem solving and flexibility.

UH has also connected with the already existing IT sector workforce development efforts underway by the CIO Council of Hawai'i and the Chamber of Commerce Hawai'i. The CIO Council of Hawai'i 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 current effort originated several years ago and has the full support and participation of the CIO Council of Hawai'i membership (100+ industry CIOs representing Hawai'i public and private sector organizations). The current effort 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 the effort has been a substantial increase in internship and employment training activities, funded by a variety of sources.

Together with the CIO Council of Hawai'i, the Chamber of Commerce Hawai'i 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 (<https://www.cochawaii.org/itsector/>). As the primary convener of the IT Sector Partnership, the Chamber of Commerce brings its large statewide membership of over 2,000 organizations to the table to ensure broad participation by statewide employers. The Hawai'i state broadband office will also leverage the opportunity to bring the BEAD workforce development activities in alignment with the ongoing IT Sector Partnership program.

In addition to the IT sector, the three other high demand employment sectors, healthcare, clean energy and the creative industries will also benefit from these training programs. Specifically for supporting the BEAD efforts the Good Jobs Hawai'i program ( brings together funding from multiple sources to directly support the training of students and incumbent workers, in high-demand IT topics as well as the other sectors. One of the four explicit target areas for Good Jobs Hawai'i 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.

### **Digital Literacy:**

The 2022 State of Hawai'i 5 Year Strategic Plan for a Digital Ready Workforce report, produced by the Digital Workforce Hui identified several major barriers that employers and potential employees face to recruit, hire and retain workers with appropriate skills.

Of the employers that were surveyed by the study, 93% rated digital skills as an important function to the job of their average employed. 73% of employers reported that most of their employees need more training to meet the technical skills of their jobs. Core competencies identified were in: basic digital skills, email, and word processing, excel, teleconferencing and team collaboration platforms. Employers surveyed included government and public sector jobs to nonprofits and the construction industry.

Employers expect prospective hires to have all of the skills needed to do the job they are hired for, with little general or specialized training happening post-onboarding. Many employers do not offer basic training or upskilling and many jobs go unfilled as a result. Additionally, in positions where technologies are changing, both employees and employers are challenged to keep skills and training programs current. Many employers are willing to incorporate more training but need additional resources in the form of third-party trainers, curriculum, or cost-sharing incentives to take part.

From the employee perspective, common barriers to acquiring digital skills centered on 1) lack of broadband access; 2) limited access to devices; and 3) time to learn new skills. A second tier of challenges included: 4) access to training; 5) understanding the benefits of gaining digital skills; and 6) fear of ability to use or learn technical skills.

This report stresses that training programs must be incorporated into either the work that organizations are already doing, incentivized, or made very accessible with regard to time and cost. Simply providing an employee with a laptop and internet access is not enough to address this problem. Other themes that emerged from focus groups were the combined challenge of being fearful of technology (not wanting to break a device or fear of learning) and a lack of understanding as to why digital skills were important.

### **Digital Navigator programs:**

The Hawai'i State Libraries has developed a digital navigator program, which if expanded and fully staffed has great potential to close the digital divide. Individuals and community organizations can be empowered and equipped to be digital navigators who meet people where they are, and foster digital pilina and upskilling through the digital economy. Ideal candidates are fluent in other languages and are attuned to unique needs of populations such as individuals experiencing homelessness, kūpuna, immigrants, individuals with disabilities, and previously incarcerated individuals.

Digital navigators will be deployed to strategic locations such as libraries and established CAIs, along with a broad range of community digital hubs. At these sites, they will aid residents in gaining access to devices, helping them get connected, teach technical skills necessary for independent technology use for personal and professional tasks, and provide continued technical assistance to late adopters. The state will leverage statewide IT/Cyber workforce development efforts to enhance and expand the available staffing pool to support community access locations and community digital hubs.

At these sites, navigators will assist residents gain access to devices and the internet, register for ACP and other affordability programs, learn technical skills necessary for both independent technology use for both personal and professional tasks, and obtain continued technical assistance. Further coaching and assistance can be provided via telephone, email, video chat, or other channels that meet the needs of learners. The state will leverage statewide IT/Cyber workforce development efforts described above to build a staffing pool to support CAIs and community digital hubs.

The Community Digital Navigator Program will serve as the umbrella program to provide consistency of purpose and process to serve a wide range of services needed to overcome broadband use hurdles to adoption. Within the program, various levels of training and certifications will tie each individual's skills to the matrix of needs. The Digital Navigator program pilot currently supporting ACP outreach and enrollment provides the basis for building layers of skills to broadly support statewide wrap-around service requirements. These layers may include, in addition to ACP, skills supporting digital literacy, use and connections, cybersecurity, and other similar services that may be useful in our communities across the state. Over the course of 2023-2024 this community based and implemented program will develop specific training, both on-line and in-person, that will be recommended as standard practices. The current digital equity plan research has supported the HBDEO priority to provide resources for rural community locations using local, trusted navigators to support a wide range of service provision support.

Other non-profits support additional digital navigator programs including the The Community Telehealth Navigator pilot program supported by HUD and its non-profit partner, Hawai'i Literacy. The Community Telehealth Navigator program recruits, trains and supports (via stipend) individuals from the identified community of need, in order to leverage the beneficial network effects of individuals known to their community that may best provide insights and most effective delivery of wrap-around support services - in the case of the HUD pilot, for telehealth supports to public housing residents.

**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:

- a. 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;
- b. 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 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
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.
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.

UH is dedicated 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.

The State of Hawai'i provides notifications of federally funded project opportunities to small and minority businesses, WBEs and labor surplus firms that register their business with the state. Eligible organizations can register for a Vendor Self Service (VSS) account via this website: <http://www.honolulu.gov/pur/helpguides.html> to bid on federally funded contracts. Organizations must also register with the State of Hawai'i Compliance Express system to be in compliance with Federal and State tax, labor and business requirements. (<http://vendors.ehawaii.gov>). The City of Honolulu also supports a Disadvantaged Business Enterprise program (HDBE) designed for for-profit small businesses that are at least 51 percent owned by minorities, women and other socially economically disadvantaged persons, and who is the day-to-day manager (<https://hidot.hawaii.gov/administration/ocr/dbe/>).

UH will use the following strategic processes to ensure that minority businesses, women-owned business enterprises (WBEs) and labor surplus area firms are recruited and retained for this project.

UH will develop and communicate a clear supplier diversity policy that outlines our commitment to working with minority-owned, women-owned, and labor surplus area firms.

Potential suppliers that meet our diversity criteria will be identified through industry associations, business directories, and State government databases.

RFPs will include specific language that encourages or requires diversity participation from potential suppliers including a scoring system that considers diversity as a factor in the evaluation of bids and proposals. Contracts with selected suppliers must include diversity goals, reporting requirements, and provisions for penalties or incentives based on performance.

UH will regularly monitor and report on diversity efforts, including the number of contracts awarded to minority, women-owned, and labor surplus area firms.

Training will be provided to procurement and project management teams on the importance of supplier diversity and how to evaluate diverse suppliers fairly.

UH will organize and 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. Establish a mechanism for suppliers to provide feedback on your diversity initiatives and their experiences working with your company.

UH will maintain a database of potential and current suppliers, including their diversity status and implement a reporting system that tracks the diversity metrics, such as the number and value of contracts awarded to diverse suppliers. Key performance indicators (KPIs) related to diversity goals will be defined and tracked.

**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.

Hawai'i 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 Hawai'i 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 Hawai'i does not have a dig-once policy. However, the State has a dig law<sup>5</sup> in place requiring an entity to notify other entities via the Hawai'i 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<sup>6</sup> 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.

In the event permitting is required, the State has laws<sup>78</sup> in place to automatically approve broadband-related permits within sixty days of submission with respect to the installation,

<sup>5</sup> <https://www.digsafelyhawaii.com/dig-law/>

<sup>6</sup> [https://cca.hawaii.gov/broadband/files/2016/11/GM1295\\_.pdf](https://cca.hawaii.gov/broadband/files/2016/11/GM1295_.pdf)

<sup>7</sup> [https://www.capitol.hawaii.gov/hrscurrent/Vol01\\_Ch0001-0042F/HRS0027/HRS\\_0027-0045.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol01_Ch0001-0042F/HRS0027/HRS_0027-0045.htm)

<sup>8</sup> [https://www.capitol.hawaii.gov/hrscurrent/Vol02\\_Ch0046-0115/HRS0046/HRS\\_0046-0089.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol02_Ch0046-0115/HRS0046/HRS_0046-0089.htm)

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 O‘ahu, Moloka‘i, Lāna‘i, Maui and Hawai‘i Island. HawaiianTelcom (HT) owns almost all telecommunications only poles statewide. Kaua‘i Island Utility Cooperative (KIUC) owns almost all power and joint poles on Kaua‘i. 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.

The State is continuing to work with the pole and other pathway infrastructure (conduits/ducts) owners to ensure open access.

### **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 Ni‘ihau, an island almost 45 miles away from Kaua‘i 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.

## **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;

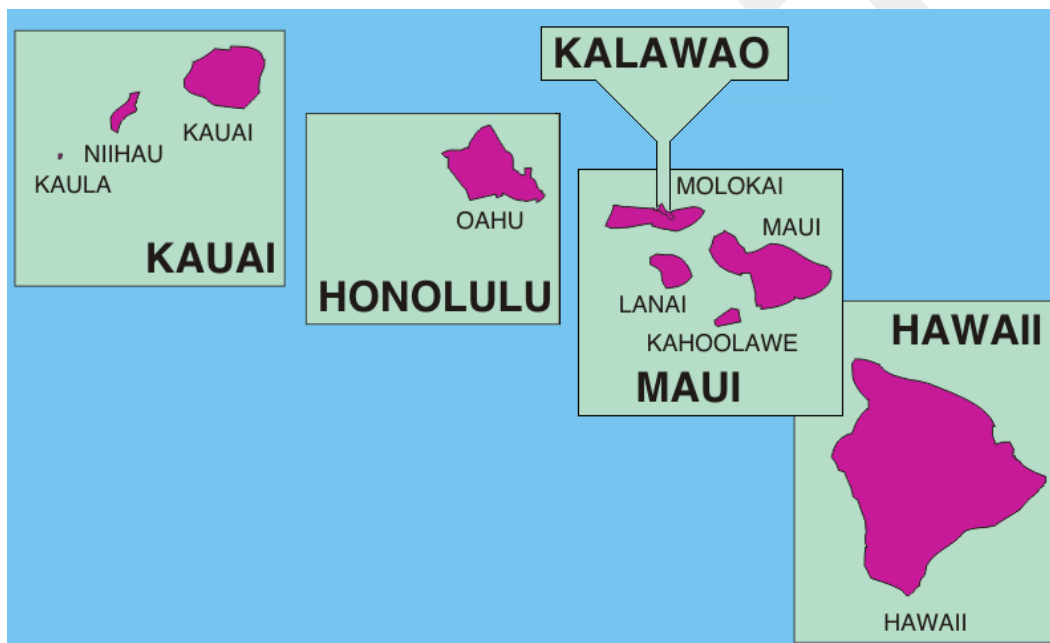
- c. Characterize any weather and climate risks to new infrastructure deployed using BEAD Program funds for the 20 years following deployment;
- d. Identify how the proposed plan will avoid and/or mitigate weather and climate risks identified; and
- e. Describe plans for periodically repeating this process 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.

DRAFT



## SECTION A - HAZARD NARRATIVE

Hawai'i is a state consisting of eight main islands and five counties. Kaua'i County comprising the islands of Ni'i'hau and Kaua'i, City and County of Honolulu comprising the island of O'ahu, Maui County comprising the islands of Moloka'i, Maui, Kaho'olawe, and Lāna'i, and Hawai'i County comprising the island of Hawai'i. Kalawao County is located on the island of Moloka'i, but is usually considered part of Maui County. Ni'i'hau is a privately owned island and Kaho'olawe is an uninhabited island reserve and therefore, not subject to initial hazard screening for weather and climate related risks. Therefore, the islands of Kaua'i, O'ahu, Moloka'i, Maui, Lāna'i, and Hawai'i would be subject to initial hazard screening for significant weather and climate related risks every five years in accordance with Hawai'i Emergency Management Agency (HI-EMA)'s hazard mitigation screenings.



Source: Wikipedia

## SECTION B - PRIORITIZE HAZARDS

According to the 2018 State of Hawai'i Hazard Mitigation Plan Page 110, 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
- Chronic Coastal Flood
- Drought
- Earthquake
- Event-Based Flood
- High Wind Storm
- Hurricane
- Landslide and Rockfall
- Tsunami

- Volcanic Hazards
- Wildfire

However, of the hazards listed, the top six hazard of most risk statewide from greatest to least are (Page 484):

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

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<sup>9</sup>, most of which are located on the island of Hawai'i. This makes Hawai'i County the most susceptible to lava flow and earthquake hazards due to volcanic activity<sup>10</sup>.

**Table F.17-1. 2018 State and County Hazard Ranking Summary**

Hazard	Statewide	County of Kaua'i	City and County of Honolulu	County of Maui	County of Hawai'i
Chronic Coastal Flooding	Medium	Medium	Medium	High	Medium
Climate Change and Sea Level Rise	High	High	High	High	High
Dam Failure	Low	Low	Low	Medium	Low
Drought	Medium	Medium	Medium	Medium	Medium
Earthquake	High	Medium	High	High	High
Event-based flood	Medium	Medium	Medium	Medium	Medium
Hazardous Materials	Low	Low	Low	Low	Low
Health Risks	Medium	Medium	Medium	Medium	Medium
High Wind Storms	Medium	Medium	Medium	Medium	Medium
Hurricane	High	High	High	High	High
Landslide and Rockfall	Medium	Medium	Medium	Medium	High
Tsunami	High	High	High	High	High
Volcanic (Lava flow and Vog)	Medium	Low	Low	Medium	High
Wildfire	Medium	High	High	High	High

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

Figure: 2018 State of Hawai'i Hazard Plan Page 1,054

### Climate Change and Sea Level Rise

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

<sup>9</sup> <https://www.usgs.gov/observatories/hvo/active-volcanoes-hawaii>

<sup>10</sup>

<https://www.usgs.gov/observatories/hawaiian-volcano-observatory/damaging-earthquakes-common-hazard-hawaii>

1. Temperatures in Hawai'i 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 Hawai'i 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 Kaua'i and O'ahu but more frequent for the Island of Hawai'i.
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, Hawai'i is surrounded by water, with almost half of the state's land area within 5 miles of the ocean<sup>11</sup> 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<sup>12</sup>. 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 Kaua'i, Hale'iwa, Kailua, Waikīkī, and Mā'ili on O'ahu, Makanalua, Kaunakakai, and 'Ualapu'e on Moloka'i, Kahului, Lahaina, and Kīhei on Maui, and Waipi'o, Hilo, and Kailua-Kona on Hawai'i island.

Kaua'i	O'ahu	Moloka'i	Maui	Hawai'i Island
Hanalei Waimea Hanapēpē Kealia	Hale'iwa Kailua Waikīkī Mā'ili	Makanalua Kaunakakai 'Ualapu'e	Kahului Lahaina Kīhei	Waipi'o Hilo Kailua-Kona

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

<sup>11</sup> <https://statesummaries.ncics.org/chapter/hi/>

<sup>12</sup>

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



## Sea Level Rise : State of Hawai'i Sea Level Rise Viewer

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

[view full-screen map](#)

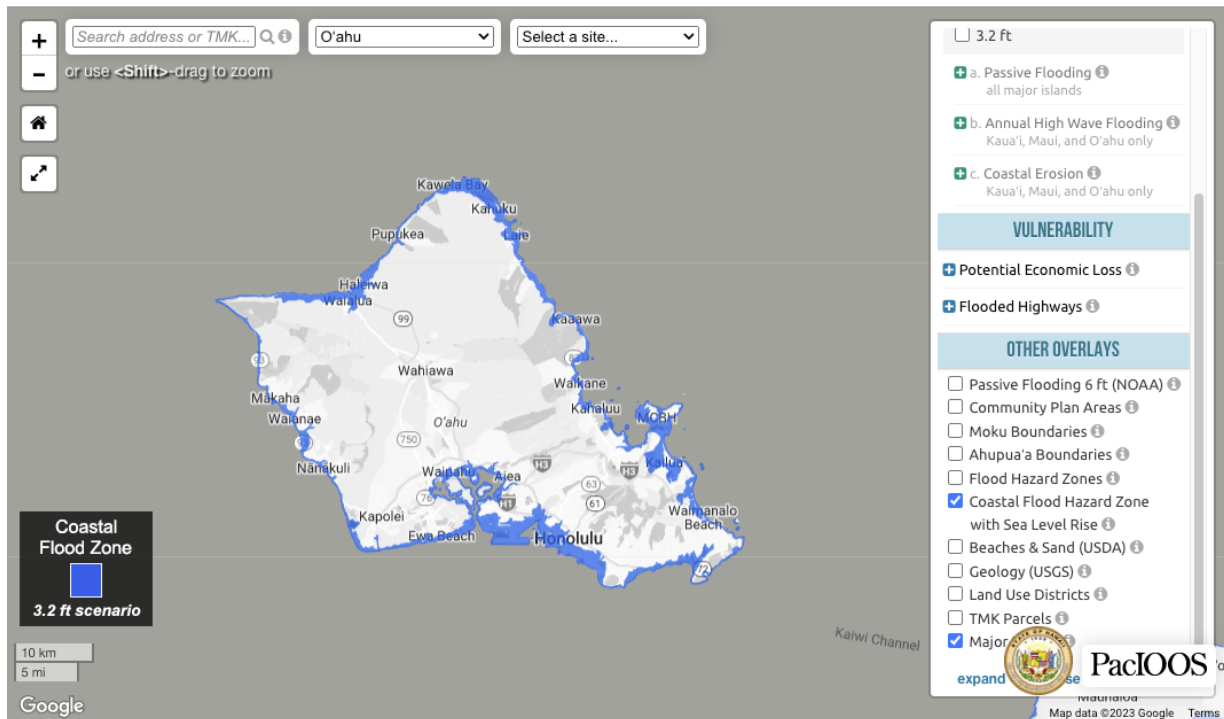


Figure : Areas on O'ahu projected to be flooded by a 1%-annual-chance coastal flood event such as tropical storms, hurricanes, and tsunamis with a projected 3.2 ft sea level rise by 2100

### Hurricane

Hurricane season in the Pacific begins June 1 and ends on November 30<sup>13</sup>. Hurricanes directly hitting are infrequent in Hawai'i with many dissipating into tropical storms or tropical depressions.<sup>14</sup> The effects of these hurricanes on Hawai'i'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<sup>1516</sup>.

<sup>13</sup> <https://www.nhc.noaa.gov/aboutcphc.php>

<sup>14</sup> <https://statesummaries.ncics.org/chapter/hi/>

<sup>15</sup>

<https://www.climate.gov/news-features/understanding-climate/climate-change-probably-increasing-intensity-tropical-cyclones>

<sup>16</sup> <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.<sup>17</sup> (Page 401) 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 Hawai'i, but few are ever felt. Hawaiian earthquakes fall into three classes: volcanic, tectonic, and mantle. Destructive earthquakes (magnitude 5.0+ on the Richter scale<sup>18</sup>) have 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<sup>19</sup>. This means destructive earthquakes are relatively infrequent occurrences for the State. However, Hawai'i County, with the most active volcanoes is most susceptible to earthquake damage with risk decreasing as one goes up the island chain<sup>20</sup>.

## Volcanic

Hawai'i Volcano Observatory places the potential threat for each volcano as follows<sup>21</sup> (Page 430):

1. Kīlauea—Very High. This volcano has been erupting continuously since 1983.
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<sup>22</sup>. 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.

---

<sup>17</sup>

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

<sup>18</sup> <https://www.usgs.gov/media/images/richterscalegif>

<sup>19</sup>

<https://www.usgs.gov/observatories/hawaiian-volcano-observatory/damaging-earthquakes-common-hazard-hawaii>

<sup>20</sup> <https://www.fema.gov/emergency-managers/risk-management/earthquake/hazard-maps>

<sup>21</sup>

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

<sup>22</sup>

<https://www.usgs.gov/observatories/hvo/news/volcano-watch-2018-eruption-kilauea-was-big-global-scale>

Therefore, lava flow hazard zones 1-4 on Hawai'i Island should be screened for lava flow hazard<sup>23</sup>.

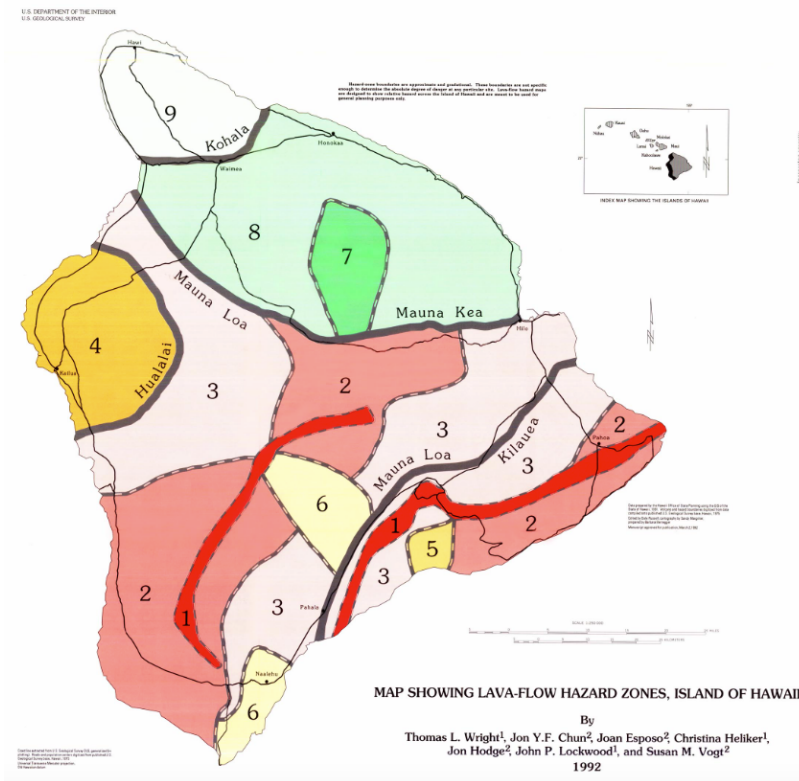


Figure : Lava-flow hazard zone map, Island of Hawai'i. (Hawai'i Volcano Observatory 1992)

### 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<sup>24</sup>. The U.S. Department of Agriculture places Hawai'i, on average, having an annual wildfire likelihood greater than 90% of states in the U.S.<sup>25</sup>. 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 Kaua'i (Kalāheo, Lāwa'i, 'Ōma'o), the leeward side of O'ahu, Maunaloa in Moloka'i, west Maui, and northern areas of Hawai'i island (Hāwī, Kapa'au, Kawaihae).

Kaua'i	O'ahu	Moloka'i	Maui	Hawai'i Island
Kalāheo Lāwa'i	Wai'anae Nānākuli	Maunaloa	Lahaina Launiupoko	Hāwī Kapa'au

<sup>23</sup> <https://www.usgs.gov/media/images/lava-flow-hazard-zone-map-island-hawaii>

<sup>24</sup> <https://statesummaries.ncics.org/chapter/hi/>

<sup>25</sup> <https://wildfirerisk.org/explore/overview/15/>

‘Ōma‘o	Makakilo		Olowalu	Kawaihae
--------	----------	--	---------	----------

Table X - 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 Hawai‘i, 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 Hawai‘i and Maui.

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

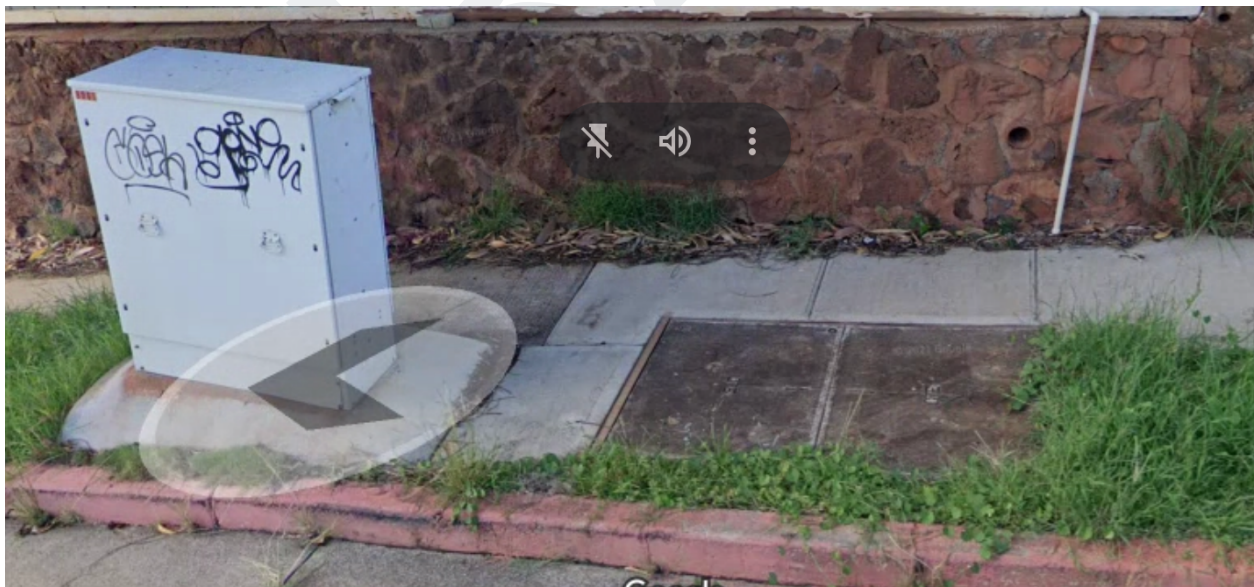


Figure X: Example of a location where underground broadband is surfaced to a conduit to serve a household

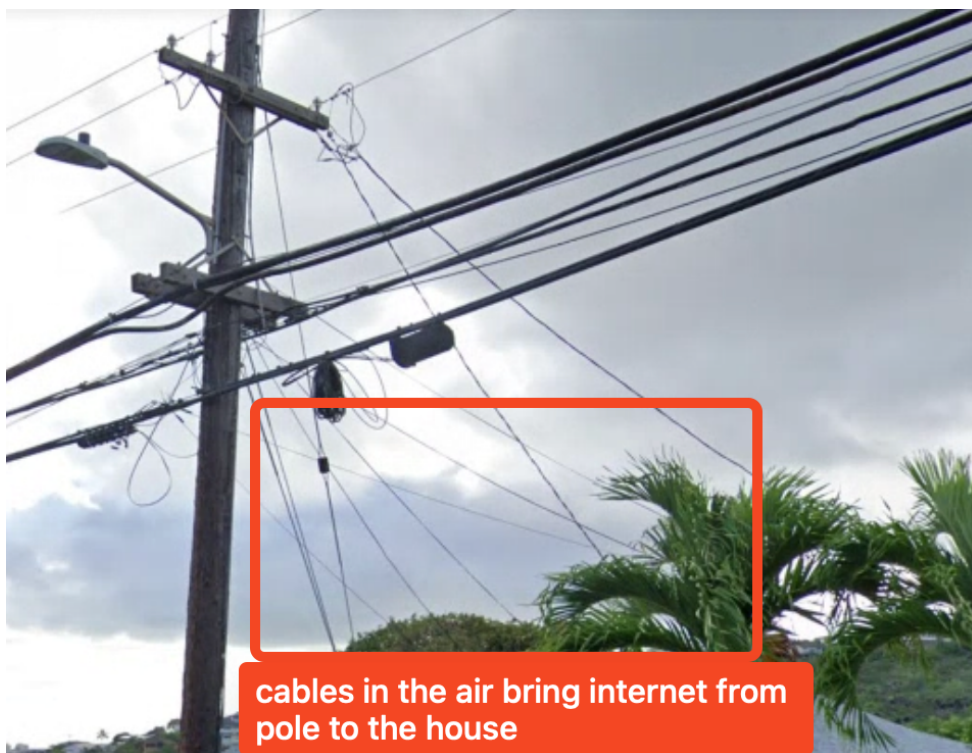


Figure X: Example of broadband aerial equipment that is then dropped to the household.

## 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 Hawai'i Hazard Mitigation Plan  
<https://dod.hawaii.gov/hiema/files/2022/06/2018-SHMP-Amended-for-EMAP-4.2.3-Supplemental-Period.pdf>
2. NOAA State Climate Summary - Stevens, L.E., R. Frankson, K.E. Kunkel, P.-S. Chu, and W. Sweet, 2022: Hawai'i State Climate Summary 2022. NOAA Technical Report NESDIS 150-HI. NOAA/NESDIS, Silver Spring, MD, 5 pp.
3. Tetra Tech, Inc. and University of Hawai'i 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.

- Hazard Mitigation Plan:  
<https://dod.hawaii.gov/hiema/files/2022/06/2018-SHMP-Amended-for-EMAP-4.2.3-Supplemental-Period.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<sup>26</sup> and approximately 10% of the State’s population in poverty<sup>27</sup>, it is no surprise that high-speed internet is a luxury to many. As access to high-speed internet is deployed in Hawai’i, it is equally important that all residents of Hawai’i can also afford it. As noted in the 2023 State of Hawai’i 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 Hawai’i 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. The provide the proposed service option:
  - a. Costs \$30 per month or less, inclusive of all taxes, fees, and charges if the subscriber does not reside on Tribal Lands, or \$75 per month or less, inclusive of all taxes, fees, and charges if the subscriber resides on Tribal Lands, with no additional non-recurring costs or fees to the consumer
  - b. Allows the end user to apply the Affordable Connectivity Benefit or successor program similar 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;
  - 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;

<sup>26</sup> <https://eric.mo.gov/data/cost-living-data-series>

<sup>27</sup> 2022 American Community Survey 1-Year Estimates  
<https://data.census.gov/profile/Hawaii?g=040XX00US15#income-and-poverty>



- 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.<sup>28</sup> 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 Hawai'i.

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

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

## 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 our 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

<sup>28</sup> <https://broadband.hawaii.gov/digitalequityplan/>

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 US Treasury 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, our 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.

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 RDOF and CAF, Hawai‘i will utilize BEAD and TBC funds to fill the remaining gaps in our 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.

Hawai'i 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, Hawai'i 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 12,500 broadband serviceable locations, 11,500 of whom are unserved, and an additional 1,000 underserved locations.
- 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.
- Hawai'i 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, Hawai'i 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 Hawai'i fares better than other states in proportionately less unserved and underserved locations altogether, the digital skills, adoption, and affordability measures to date make it clear that Hawai'i 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:

- 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 Broadband team

Funding amounts for each category will be clarified once budgetary amounts are finalized.

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

Hawai'i is requesting \$149,484,493.57 (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."

Hawai'i 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

- 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.
- 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 Hawai'i 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.

N/A

## **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

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

Subgrantees must meet all reporting requirements, including submitting the following reports, to maintain eligibility for grant funds:

- **Monthly Project and Expenditure Report:** Due within a week (7 days) of the end of the last calendar month. Reports must record all expenses made within the monthly performance period as well as running project costs since the initial awarding of funds.
- **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.
- **Post-Closeout Report(s):** Due 6 months and again 12 months after the project closeout. These reports should provide subscriber counts and any issues reported by subscribers, how they were resolved, and outstanding issues identified that may not be service-related.

- **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 Hawai'i Broadband Office's technical team 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.
- **Internal compliance reviews:** Internal compliance reviews are to ensure compliance with the BEAD NOFO.

Potential subgrantees should be aware that funds will be granted on a reimbursable basis, and are otherwise subject to clawback 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 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 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 UH broadband office will release a draft of the Initial Proposal Volume 1 & 2 in early November for public comment. The public comment period will begin on November 7, 2023, and will conclude on December 10, 2023. During this 33-day period, the public will be able to submit comments in writing via mail, telephone, or electronically through email or an online form. The UH Broadband Team will also be conducting in-person and virtual meetings across Hawai'i, informing the public on BEAD and the Initial Proposal comment period, where public comment can also be received. The public is encouraged to register for events using the form: <https://forms.gle/RDWWtP1ZJjEg47wK8>.

The public is encouraged to submit their comments during the 33-day period for the best possibility of impacting the Initial Proposal's final draft. However, the UH broadband office will continue to consider and incorporate comments and feedback throughout the BEAD implementation effort.

To encourage feedback during the public comment period, the UH will be breaking down components of the Initial Proposal into four sessions so that the information is digestible for the public.

- 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

Each Wednesday in November, the UH broadband office will do a brief overview of the session topic at the Broadband Hui. Each Monday in November, the UH broadband office will hold a virtual information session via Zoom to go over the session topic in more detail as well as take any questions or comments. While the intent is to keep the sessions focused on the topic of the week, the UH broadband office will be taking oral comments on any section of the Initial Proposal during these sessions.

The UH broadband office began broadcasting the Public Comment period for Volume II of the Initial Proposal in early October through email to over 800 contacts subscribed to our mailing list. Once the Initial Proposal becomes publicly available, all contacts will receive an email notice of the document, which will be available on the UH broadband office website at [hawaii.edu/broadband/](http://hawaii.edu/broadband/). A second follow-up email will be sent out two weeks after the public comment period opens. All public comments will be published post-public comment period.

**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.

DRAFT

