

**Project Title:** Kāko‘o I Ka Lāhui: Supporting a Nation Through Connectivity

**A. Executive Summary:**

The “Kāko‘o I Ka Lāhui: Supporting a Nation Through Connectivity” project is a comprehensive broadband initiative aimed at improving internet access and bridging the digital divide on Hawaiian Home Lands. While our total allotment under TBCP NOFO 2 is \$72,715,237.15, we have developed a project estimated to cost \$72,683,948.00. The Tribal Broadband Connectivity Program (TBCP) Grant being submitted will accomplish the following objectives: 1) connect unserved Department of Hawaiian Homelands (DHHL) households to current middle mile fiber routes that will provide service of at least 1000 Mbps symmetrical; 2) connect those extremely rural DHHL households with low earth orbit (LEO) connections of at least 100 Mbps downstream and 20 Mbps upstream; 3) construct conduit and fill it with middle mile fiber to DHHL homestead communities that are currently being constructed; 4) construct community digital innovation centers to be used for digital workforce development training and digital literacy training courses in order to build the capacity and knowledge base of our local population. By focusing on these 4 crucial priorities, we will meet the need for improved connectivity on Hawaiian Home Lands across the State of Hawaii and service both suburban and rural communities with qualifying broadband speeds.

**B. Status of Eligible Entity, Table of Funded Participants, and Resumes of Key Personnel:**

Section 905(a)(8) of the Consolidated Appropriations Act specifies the Department of Hawaiian Home Lands on behalf of the Native Hawaiian Community including Native Hawaiian Education Programs as the eligible entity and also appropriates set-aside funding directly to DHHL. The Department of Hawaiian Home Lands is governed by the Hawaiian Homes Commission Act of 1920, enacted by the U.S. Congress to protect and improve the lives of Native Hawaiians. The Act created a Hawaiian Homes Commission to administer certain public lands, called Hawaiian home lands, for homesteads. Native Hawaiians are defined as individuals having at least 50 percent Hawaiian blood.

The Act was incorporated as a provision in the State Constitution in 1959 when Hawai‘i was granted statehood. Responsibility for the Commission and the Hawaiian home lands was transferred to the State at that time. Except for provisions that increase benefits to lessees or relate to administration of the Act, the law can be amended only with the consent of Congress. As a condition of statehood in 1950, the federal government delegated administration of the Act to the newly created State of Hawaii. The State then delegated the administration of the Act to the Department of Hawaiian Home Lands, a State agency within the executive branch. As an agency of the State of Hawai‘i, the Department does not enjoy the quasi-sovereign rights and protections of federally recognized Indian tribes. The Department is partially funded by the State Legislature, which also exercises oversight over the Department.

The primary responsibilities of the Department of Hawaiian Home Lands are to serve its beneficiaries and to manage its extensive land trust. The land trust consists of over 200,000 acres on the islands of Hawai‘i, Maui, Moloka‘i, Lāna‘i, O‘ahu, and Kaua‘i with over 50 homesteads

and nearly 10,000 leases for residential, agricultural and pastoral uses.

The Department of Hawaiian Home Lands' oversight of the land trust serves three classes of beneficiaries: 1) those Native Hawaiians of 50% blood quantum or greater who have already received a lease from the Commission and currently resides on Hawaiian home lands, numbering approximately 10,000 households; 2) those Native Hawaiians of 50% blood quantum or greater who have not yet received a lease, are on the Department's waiting list, and live both on and off Hawaiian home lands, numbering approximately 28,000 individuals; and 3) those Native Hawaiians of 50% blood quantum or greater who have not applied for a homestead with the Department.

The Department also has a fourth, expanded, definition of its beneficiary class for the specific purposes of Title VIII of NAHASDA (25 U.S.C. 4221) and the Consolidated Appropriations Act of 2021, Division N, Title IX, Section 905(c) which authorizes this Tribal Broadband Connectivity Program. The aforementioned definition allows any Native Hawaiian able to trace their genealogy back to pre-1778, without regard for current blood quantum, to be eligible for assistance under both Acts. The proposed project will target all four beneficiary classes.

### **C. Description of activities to be funded by the grant:**

The "Kāko' o I Ka Lāhui" project embodies our commitment to the welfare and prosperity of the Native Hawaiian community. By harnessing the transformative power of enhanced broadband infrastructure, we anticipate substantial economic development, educational enrichment, improved telehealth services, and strengthened community bonds. This project description outlines the core objectives and strategies for each component, paving the way for a digitally connected and thriving future for Hawaiian Home Lands. Overall our priorities are 1) connect unserved Department of Hawaiian Homelands (DHHL) households to current middle mile fiber routes that will provide service of at least 100 Mbps symmetrical; 2) connect those extremely rural DHHL households with low earth orbit (LEO) connections of at least 100 Mbps downstream and 20 Mbps upstream; 3) construct conduit and fill it with middle mile fiber to DHHL homestead communities that are currently being constructed to ensure service of at least 100 Mbps symmetrical; 4) construct community digital innovation centers to be used for digital workforce development training and digital literacy training courses in order to build the capacity and knowledge base of our local population. To that end, DHHL will serve a total of 5 separate islands, each listed below and organized by separate priorities pertaining to their location.

From our work with the current ISP across the Hawaiian Islands we have received confirmation of backhaul fiber and the routes connecting all Hawaiian Islands with enough fiber capacity to add our limited number of unserved homes. Additionally, we have confirmed with the existing ISP that the fiber count in the current middle mile routes also have enough fiber capacity to add our limited number of unserved homes to their network. This guarantees that those households that we will connect to this existing infrastructure will have access to speeds of up to 1000 Mbps symmetrical. Documentation from the ISP demonstrating these points is attached to our application and included in our shapefile maps.

### **Molokai**

On the island of Molokai, DHHL has six separate areas of jurisdiction. Of these six areas, three have no broadband serviceable locations, and three include homes, community anchor

institutions, and/or businesses that do not have access to qualifying broadband speeds. On the island of Molokai there are 750 DHHL homes, 37 of which do not have access to qualifying broadband speeds. Below you will find each of our priorities broken out in detail as they pertain to the island of Molokai.

<b>Island - Molokai</b>	
DHHL Homestead Area	Solution Type and Additional Comments
Ho'olehua-Palā'au	Last mile solutions to unserved BSLs will be served by fiber or low earth orbit. <ul style="list-style-type: none"> <li>• (29) unserved locations to be served by fiber</li> <li>• (4) unserved locations to be served by low earth orbit.</li> </ul>
Kalama'ula	Last mile solutions to unserved BSLs will be served by fiber solution. <ul style="list-style-type: none"> <li>• (1) unserved locations to be served by fiber</li> </ul>
Kalaupapa	Last mile solutions to unserved BSLs will be served by low earth orbit satellite. <ul style="list-style-type: none"> <li>• (3) unserved locations to be served by low earth orbit.</li> </ul>

*Priority 1 & 2: Connect unserved DHHL households to current middle mile fiber routes & connect those extremely rural DHHL households with low earth orbit (LEO) connections:* As noted above, Molokai and its' three project areas (Ho'olehua-Palā'au, Kama'ula, and Kalaupapa) each include unserved DHHL households. The table above shows the number of households in each service area and how they will be served. To accomplish the Fiber to the home (FTTH) aspect of this project, DHHL will contract out work with the incumbent ISP or other entity utilizing our procurement policy. For details on these agreements, please see section M. on sustainability. For those locations that are extremely remote, and therefore FTTH is not aviable solution, we will utilize low earth orbit solutions.

## **Kauai**

On the island of Kauai, DHHL has eight separate areas of jurisdiction. Of these eight areas, six have no broadband serviceable locations, and two include homes, community anchor institutions, and/or businesses that do not have access to qualifying broadband speeds. Furthermore, on the island of Kauai there are 710 houses, 63 of which do not have access to qualifying broadband speeds. Within 1 DHHL jurisdiction, Hanapepe, TBCP funds will be used to construct new telecommunications conduit to service 82 new homes. Additionally, Kauai lacks space for community members to gather and be trained in digital literacy skills. DHHL also plans to utilize TBCP funds to assist the community organization, Kulukulu Kumuhana O Anahola (KKOA), in the construction of the KKOA Community Digital Innovation Center, a multiuse digital access center for the Western Kauai Homestead community. Below you will find each of our priorities broken out in detail as they pertain to the island of Kauai.

<b>Island - Kauai</b>	
DHHL Homestead Area	Solution Type and Additional Comments
Anahola – Residential	<p>Last mile solutions to unserved BSLs will be served by fiber or low earth orbit.</p> <ul style="list-style-type: none"> <li>• (62) unserved locations to be served by fiber</li> </ul> <p>CAI to be built in this community (Kulukulu Kumuhana O Anahola (KKOA)).</p> <ul style="list-style-type: none"> <li>• (1719) beneficiaries in the Anahola community.</li> </ul>
Moloa’a	<p>Last mile solutions to unserved BSLs will be served by: Fiber solution.</p> <ul style="list-style-type: none"> <li>• (1) unserved locations to be served by fiber</li> </ul>
Hanapepe	<p>New development will be serviced by newly constructed middle mile conduit and fiber optic cable.</p> <ul style="list-style-type: none"> <li>• (82) near-future BSLs</li> </ul>

*Priority 1 & 2: Connect unserved DHHL households to current middle mile fiber routes & connect those extremely rural DHHL households with low earth orbit (LEO) connections:* As noted above Kauai and its two service areas (Anahola – Residential, and Moloa’a) include unserved DHHL households. The table above shows the number of households in each service area and how they will be served. To accomplish the Fiber to the home (FTTH) aspect of this project, DHHL will contract out work with the incumbent ISP or other entity utilizing our procurement policy. For details on these agreements, please see section M. on sustainability.

*Priority 3: Construct conduit and fill it with middle mile fiber to DHHL homestead communities that are currently being constructed.* Under Act 279, Session Laws of Hawaii (SLH) 2002, “Waitlist Reduction Act”, DHHL will develop 2,727 new homes in the upcoming years. On Kauai, 82 new homes will be developed in the Hanapepe subdivision. It is our intent to use TBCP funds to construct only the telecommunication infrastructure for this development. To accomplish this, DHHL will contract out work according to State procurement policy. For details on these agreements, please see section M. on sustainability.

*Priority 4: Construct community innovation labs to be used for digital workforce development training and digital literacy training courses.* DHHL on the island of Kauai lacks the community spaces that can be used for digital literacy training and related workforce development classes. Therefore, we are proposing to build in collaboration with Kulukulu Kumuhana O Anahola (KKOA) a community anchor institution that will be used as a computer lab and digital literacy training facility. Additionally, this structure can be used by community members for telehealth appointments and remote education with respect to higher education opportunities and K-12 online tutoring. The location of this structure has been selected and will be built on an existing plot of land that has been specifically selected for this purpose.

## **Hawaii Island**

On Hawaii island, DHHL has twenty-four separate areas of jurisdiction. Of these twenty-four areas, twelve have no broadband serviceable locations, three areas that have Unserved BSL that are currently served and/or covered under a federal enforceable commitment to deploy qualifying broadband service and eleven include homes, community anchor institutes, and/or businesses that do not have access to qualifying broadband speeds. Furthermore, on the island of Hawaii there are 2,144 houses, 478 of which do not have access to qualifying broadband speeds. Additionally, Hawaii Island lacks space for community members to gather and be trained in digital literacy skills. DHHL plans to utilize TBCP funds to assist the community organizations, O Makuu Ke Kahua and Keaukaha-Panaewa Community Alliance, in constructing the Makuu Community Digital Innovation Center and Pana’ewa Community Digital Innovation Center, respectively. Each building will be a multiuse digital access center for their respective Homestead communities. Below you will find each of our priorities broken out in detail as they pertain to the island of Hawaii.

<b>Hawaii Island</b>	
<b>DHHL Home Stead Areas</b>	<b>Solution type and additional comments</b>
Pana’ewa	<p>Last mile solutions to unserved BSLs will be served by fiber solution.</p> <ul style="list-style-type: none"> <li>• (277) unserved locations to be served by fiber</li> </ul> <p>CAI to built in this community (Keaukaha Panaewa Community Digital Innovation Center (KPCDIC))</p> <ul style="list-style-type: none"> <li>• (3,769) beneficiaries in the Keaukaha and Panaewa Communities</li> </ul>
Maku’u	<p>Last mile solutions to unserved BSLs will be served by fiber solutions.</p> <ul style="list-style-type: none"> <li>• (13) unserved locations to be served by fiber</li> </ul> <p>CAI to be built in this community (‘O Maku’u Ke Kahua Community Center (OMKKCC))</p> <ul style="list-style-type: none"> <li>• (75) beneficiaries in the Maku’u community</li> </ul>
Kamā’oa - Pu’u’eo	<p>Last mile solutions to unserved BSLs will be served by fiber solution.</p> <ul style="list-style-type: none"> <li>• (1) unserved locations to be served by fiber</li> </ul>
Humu’ula	<p>Last mile solutions to unserved BSLs will be served by fiber solution.</p> <p>(1) unserved locations to be served by fiber</p>

Waiākea	<p>Last mile solutions to unserved BSLs will be served by fiber solutions</p> <ul style="list-style-type: none"> <li>• (2) unserved locations to be served by fiber</li> </ul>
Pu‘ukapu	<p>Last mile solutions to unserved BSLs will be served by fiber or low earth orbit satellite.</p> <ul style="list-style-type: none"> <li>• (101) unserved locations to be served by fiber</li> <li>• (4) unserved locations to be served by low earth orbit.</li> </ul> <p>New development will be serviced by newly constructed middle mile conduit and fiber optic cable.</p> <ul style="list-style-type: none"> <li>• (1) near-future BSL (Waimea Nui Health Clinic)</li> </ul>
Kawaihae	<p>Last mile solutions to unserved BSLs will be served by fiber solution.</p> <p>(149) unserved locations to be served by fiber</p>
Nienie	<p>Last mile solutions to unserved BSLs will be served by fiber solution.</p> <ul style="list-style-type: none"> <li>• (20) unserved locations to be served by fiber</li> <li>(3) unserved locations to be served by low earth orbit.</li> </ul>
Honokai‘a	<p>Last mile solutions to unserved BSLs will be served by fiber solution.</p> <p>(12) unserved locations to be served by fiber</p>
Keoniki	<p>Last mile solutions to unserved BSLs will be served by fiber solution.</p> <p>(3) unserved locations to be served by fiber</p>

*Priority 1 & 2: Connect unserved DHHL households to current middle mile fiber routes & connect those extremely rural DHHL households with low earth orbit (LEO) connections: As noted above Hawaii Island and its eleven service areas include unserved DHHL households. The table above shows the number of households in each service area and how they will be served. To accomplish the Fiber to the home (FTTH) aspect of this project, DHHL will contract out work with the incumbent ISP or other entity utilizing our procurement policy. For details on these agreements, please see section M. on sustainability. For those locations that are extremely remote, and therefore FTTH is not a viable solution, we will utilize low earth orbit solutions.*

*Priority 3: Construct conduit and fill it with middle mile fiber to DHHL homestead communities that are currently being constructed.* Under Act 279, SLH 2002, “Waitlist Reduction Act”, DHHL will develop 2,727 new homes in the upcoming years. On Hawaii Island, we plan to use TBCP funds to develop telecommunications infrastructure for 56 new homes to be built in the Honomu subdivision as well as new conduit to support the Waimea Nui Community Health Center and future community use projects. It is our intent to use TBCP funds to construct only the telecommunication infrastructure for these developments. To accomplish this, DHHL will contract out work according to State procurement policy. For details on these agreements, please see section M. on sustainability.

*Priority 4: Construct community innovation labs to be used for digital workforce development training and digital literacy training courses.* DHHL on the island of Hawaii lacks community spaces that can be used for digital literacy training and related workforce development classes. Therefore, we are proposing to build in collaboration with O Makuu Ke Kahua and Keaukaha-Pana’ewa Community Alliance, the Makuu Community Digital Innovation Center and Panaewa Community Digital Innovation Center, respectively, that will be used as a computer lab and digital literacy training facility. Additionally, this structure can be used by community members for telehealth appointments and remote education with respect to higher education opportunities and K-12 online tutoring. The location of this structure has been selected and will be built on an existing plot of land that has been specifically selected for this purpose.

## **Maui**

On Maui, DHHL has nine separate areas of jurisdiction. Of these nine areas, two have no broadband serviceable locations, one area that have Unserved BSL that are currently served and/or covered under a federal enforceable commitment to deploy qualifying broadband service and five include homes, community anchor institutes, and/or businesses that do not have access to qualifying broadband speeds. Furthermore, on the island of Maui there are 587 houses, 491 of which do not have access to qualifying broadband speeds. Within 2 DHHL jurisdictions, Leialii and Puuhona, TBCP funds will be used to construct new telecommunications conduit to service 342 new homes. Additionally, Maui lacks sufficient space for community members to gather and be trained in digital literacy skills. DHHL plans to utilize TBCP funds to assist the community organization, Waiohuli Hawaiian Homes Association, in the construction of the Waiohuli Community Center’s Computer Lab. This space will be a multiuse digital access center for the Homestead communities in the Central Maui area. Below you will find each of our priorities broken out in detail as they pertain to the island of Maui.

<b>Island - Maui</b>	
<b>DHHL Homestead Area</b>	<b>Solution Type and Additional Comments</b>
Waiohuli	Last mile solutions to unserved BSLs will be served by fiber solutions <ul style="list-style-type: none"> <li>• (347) unserved locations to be served by fiber</li> </ul> CAI to be built in this community (Waiohuli Community Digital Innovation Center (CDIC)) <ul style="list-style-type: none"> <li>• (1594) beneficiaries in the Waiohuli and Keokea communities</li> </ul>
Kēōkea	Last mile solutions to unserved BSLs will be served by fiber solutions <ul style="list-style-type: none"> <li>• (38) unserved locations to be served by fiber</li> </ul>
Kahikinui	Last mile solutions to unserved BSLs will be served by low earth orbit satellite. <ul style="list-style-type: none"> <li>• (101) unserved locations to be served by low earth orbit.</li> </ul>
Pūlehunui	Last mile solutions to unserved BSLs will be served by Fiber Solution <ul style="list-style-type: none"> <li>• (3) unserved locations to be served by fiber</li> </ul>
South Maui	Last mile solutions to unserved BSLs will be served by Fiber Solution <ul style="list-style-type: none"> <li>• (2) unserved locations to be served by fiber</li> </ul>
Leiali'i	New development will be serviced by newly constructed middle mile conduit and fiber optic cable <ul style="list-style-type: none"> <li>• (181) near-future BSLs</li> </ul>
Pu'uhona	New development will be serviced by newly constructed middle mile conduit and fiber optic cable <ul style="list-style-type: none"> <li>• (161) near-future BSLs</li> </ul>

*Priority 1 & 2: Connect unserved DHHL households to current middle mile fiber routes & connect those extremely rural DHHL households with low earth orbit (LEO) connections: As noted above Maui and its five service areas (Waiohuli, Keokea, Kahikinui, Pulehunui, and South Maui) include unserved DHHL households. The table above shows the number of households in each service area and how they will be served. To accomplish*

the Fiber to the home (FTTH) aspect of this project, DHHL will contract out work with the incumbent ISP or other entity utilizing State of Hawaii procurement policy. For details on these agreements, please see section M. on sustainability. For the communities receiving LEO connections, DHHL will contract out work with a licensed installer and service provider according to State of Hawaii procurement policy.

*Priority 3: Construct conduit and fill it with middle mile fiber to DHHL homestead communities that are currently being constructed.* Under Act 279, SLH 2002, “Waitlist Reduction Act”, DHHL will develop 2,727 new homes in the upcoming years. On Maui, we plan to use TBCP funds to develop telecommunications infrastructure for 342 new homes to be built in the Leiali’i and Pu’uhona subdivisions. It is our intent to use TBCP funds to construct only the telecommunication infrastructure for these developments. To accomplish this, DHHL will contract out work according to State procurement policy. For details on these agreements, please see section M. on sustainability.

*Priority 4: Construct community innovation labs to be used for digital workforce development training and digital literacy training courses.* DHHL on the island of Maui lacks the community spaces that can be used for digital literacy training and related workforce development classes. Therefore, we are proposing to build in collaboration with the Waiohuli Hawaiian Homesteaders Association (WHHA) a community anchor institution that will be used as a computer lab and digital literacy training facility. Additionally, this structure can be used by community members for telehealth appointments and remote education with respect to higher education opportunities and K-12 online tutoring. The location of this structure has been selected and will be built on an existing plot of land that has been specifically selected for this purpose.

### **Oahu:**

On Oahu, DHHL has seventeen areas of jurisdiction. Of these seventeen areas, zero have no broadband serviceable locations, zero have areas that include unserved BSL that are currently served and/or covered under a federal enforceable commitment to deploy qualifying broadband service, and one include homes, community anchor institutes, and/or businesses that do not have access to qualifying broadband speeds. Within 2 DHHL jurisdictions, Kaupea and East Kapolei, TBCP funds will be used to construct new telecommunications conduit to service 510 new homes. Below you will find each of our priorities broken out in detail as they pertain to the island of Oahu.

Island – Oahu	
DHHL Homestead Area	Solution Type and Additional Comments
Waimānalo	Last mile solutions to unserved BSLs will be served by Fiber Solution <ul style="list-style-type: none"> <li>(5) unserved locations to be served by fiber</li> </ul>
Kaupe‘a	New development will be serviced by newly constructed middle mile conduit and fiber optic cable <ul style="list-style-type: none"> <li>(60) near-future BSLs</li> </ul>
East Kapolei	New development will be serviced by newly constructed middle mile conduit and fiber optic cable <ul style="list-style-type: none"> <li>(450) near-future BSLs</li> </ul>

*Priority 1 & 2: Connect unserved DHHL households to current middle mile fiber routes & connect those extremely rural DHHL households with low earth orbit (LEO) connections: As noted above Oahu and its 17 service areas (review table above) only 1 includes unserved DHHL households. The table above shows the number of households in each service area and how they will be served. To accomplish the Fiber to the home (FTTH) aspect of this project, DHHL will contract out work with the incumbent ISP or other entity utilizing State of Hawaii procurement policy. For details on these agreements, please see section M. on sustainability.*

*Priority 3: Construct conduit and fill it with middle mile fiber to DHHL homestead communities that are currently being constructed. Under Act 279, SLH 2002, “Waitlist Reduction Act”, DHHL will develop 2,727 new homes in the upcoming years. On Oahu, 510 new homes will be developed in the Kaupea and East Kapolei subdivisions. It is our intent to use TBCP funds to construct only the telecommunication infrastructure for these new homes.*

**D. Description of Community Needs and Project Beneficiaries**

After completing community outreach DHHL’s leadership consolidated our priorities into our objectives listed throughout this narrative. To reiterate our project benefits please see the table below with additional information.

TOTAL Number of Tribal Households on Tribal Land?	10,000
---	--------

Number of UNSERVED Tribal households on Tribal Land?	1,069
Number of UNSERVED Tribal households that this project will connect to Qualifying Broadband Service (defined as 25 Mbps download/3 Mbps upload with sufficient latency for real time interactive applications)?	1,069
Number of UNSERVED Tribal Businesses that this project will connect to Qualifying Broadband Service?	76
Number of UNSERVED Community Anchor Institutions that this project will connect to Qualifying Broadband Service?	8

In addition to connecting unserved homes, businesses, and anchor institutions, DHHL leadership has received feedback from community and elected leaders that physical infrastructure is lacking across various islands and that space for digital training and workforce development does not exist. Therefore, to address this challenge, our project is proposing to construct 4 community innovation centers that can be used to train Native Hawaiians with digital literacy skills in addition to hosting workforce development workshops and sessions.

Finally, housing is limited on the Hawaiian Islands. Currently, there are 10,000 existing lessees on residential, agricultural, and pastoral trust lands spread across the state, with over 27,000 applicants on the waitlist. As a result the state has allocated funding for additional DHHL homestead developments that are currently being built and will be complete by 2028. DHHL will utilize TBCP funding to ensure that these developments have fiberoptic conduit and fiber to guarantee these developments have the middle mile infrastructure needed for an existing ISP to connect them to last mile service.

Our project plans, description of activities, and budget documents support these needs and illustrate how DHHL will ensure these benefits to our population and service area.

Poverty for those residing on DHHL maintains a level of approximately 31%. This information is consistent with our Project information form which states that of the 10,000 DHHL homes, 3,130 are at or below 150% of the poverty line.

**E. Description of Area to Be Served**

Section 905(a)(8) of the Consolidated Appropriations Act specifies the Department of Hawaiian Home Lands on behalf of the Native Hawaiian Community including Native Hawaiian Education Programs as the eligible entity. The Department of Hawaiian Home Lands (DHHL) is governed by the Hawaiian Homes Commission Act of 1920, enacted by the U.S. Congress to protect and improve the lives of Native Hawaiians. The Act created a Hawaiian Homes Commission to administer certain public lands, called Hawaiian Home Lands, for homesteads.

Native Hawaiians are defined as individuals having at least 50 percent Hawaiian blood. Section (a)(13) of the Act in pertinent part defines tribal lands as “(D) Hawaiian Home Lands, as defined

in section 801 of the Native American Housing Assistance and Self-Determination Act of 1996 (25 U.S.C. 4221)". Under 25 U.S.C. 4221, Section 801 - Hawaiian Home Lands is defined as lands that-- (A) have the status as Hawaiian home lands under section 204 of the Hawaiian Homes Commission Act, 1920 (42 Stat. 110); or (B) are acquired pursuant to that Act. Those lands are highlighted below in green.

Hawaiian home lands currently serve approximately 10,000 households and 700 businesses, community anchor institutions, and tenants. Of those approximately, 1,069 households across the state are connected at speeds below 25/3. For the purposes of this project, DHHL will provide 1 Gbps broadband service to 100% of those households identified by the NTIA's Indicator of Broadband Need.

The NTIA's Map of Broadband Need identifies the number of households in trust land areas with fixed broadband speeds below 25/3 as well as the percentages of households without 1) internet access and 2) internet connectivity devices, by county. While DHHL believes that there are additional unserved households, for the purposes of this project, the department will rely on the number of unserved households reported in the NTIA Indicator of Broadband Need.

#### **F. Description of Households**

Based on a 2020 survey of Native Hawaiian lessee households living on Hawaiian home lands, DHHL has been able to determine that the average family size is approximately 4.2 persons per household, while noting that approximately 38% of households had more than five individuals residing therein. This survey primarily relied on 2019 household income data; thus, the 2019 HHS Poverty Guidelines are most appropriate for providing and supporting this analysis. These statistics only apply to existing households and not upcoming projects and Native Hawaiians on a wait list.

The 2019 HHS Poverty Guideline for the State of Hawai'i for a household of four individuals was \$29,620. Extrapolating the data for those households at or below 150% of the poverty line (\$44,430), the Department's data indicates approximately 31.3% of households, or approximately 3,130 of the nearly 10,000 households on Hawaiian home lands were at or below 150% of the 2019 HHS Poverty Guideline.

#### **G. Estimate of Jobs That Will Comply with TERO**

As an agency of the State of Hawai'i, DHHL cannot legally give preference to Native Hawaiian contractors or their employees and will comply with all Federal, State, and local mandates as it relates to employment practices. We believe that DHHL should not be deducted points in any phase of TBCP's review with respect to this topic.

## **H. description of the pricing for the broadband services**

It is not DHHL's intent to, itself, provide broadband service to Home Land areas. Instead, DHHL will work with the existing Service Providers and provide equal access to DHHL lands. Our highest priority is to ensure that all ISPs within the State have access to Home Lands so that prices for service remain affordable for Beneficiaries. DHHL will work with all ISPs in the State to ensure that services within Home Land areas are priced fairly as compared to prices in the surrounding area. For more information on terms for ISPs to serve DHHL lands, please view section M. "Long-term Network Sustainability" below.

## **I. Description of Labor Standards**

DHHL operates as a State agency, and consequently, there are no specific Tribal or Native Hawaiian laws applicable to Hawaiian home lands. Instead, full compliance with all relevant Federal, State, and local labor standards is ensured, aligning with the practices of any other State-sponsored project. Numerous development initiatives on Hawaiian home lands, including recent endeavors in renewable energy, commonly involve community benefit agreements. These agreements typically incorporate provisions facilitating Native Hawaiian training opportunities and contributions to Hawaiian home lands Community Associations and Community Development Corporations.

Furthermore, the Department's administrative rules mandate the execution of Beneficiary Consultation, an administrative process through which the Department engages with Native Hawaiian communities affected by any project. This process seeks beneficiary input, ensuring that community benefits directly serve these communities and align with their priorities. This commitment reflects the Department's adherence to administrative guidelines and its dedication to meaningful engagement with and consideration of the perspectives of Native Hawaiian communities impacted by its initiatives.

## **J. Assessment of Weather and Climate Hazards**

Hawaii's challenges relating to weather and climate hazards and the possible negative impacts to telecommunications infrastructure are numerous. DHHL, taking into account threats such as heavy rains leading to flooding, wildfires, volcanic eruptions, earth quakes and related tsunamis, and sea level rise, has ensured that, where possible, all telecommunications infrastructure will be placed below ground. As was evident after the 2023 Lahaina Fire, 2018's Hurricane Lane, and 2018's Kilauea eruption and subsequent damage to Hawaii Island, subterranean infrastructure can be the most resilient deployment of broadband service. In addition, a substantial amount of Home Lands reside near the ocean which again reinforces the importance of deploying subterranean infrastructure.

## **K. Project Plan**

A well-coordinated and diverse framework is imperative to establish the Native Hawaiian home lands broadband infrastructure as a reliable, stable, and high-performance platform, facilitating the adoption and beneficial use of broadband internet by Native Hawaiians. The operational aspects of this network are designed to deliver initial overarching functionality and interoperability, seamlessly connecting thousands of Native Hawaiians to dependable, robust, and consistent broadband services. Given the challenging topography and limited backbone resources in the unique island environment, a multimodal infrastructure is anticipated. It is crucial to ensure effective network operation across these connections, with the primary objective of providing low-cost 100/20Mbps service to Home Land households (and surrounding communities), baseline connectivity [25/3Mbps] across the service area, and Gig service wherever fiber assets are readily available.

To expand broadband coverage in the Hawaiian home lands, considering the topographical, social, and historical realities of the project area, a fiber network approach is deemed the most effective in terms of building off of existing infrastructure to ensure DHHL homes, businesses, and anchor institutions have access to high-speed internet. The project team has already taken initial steps towards determining the ideal network infrastructure design for this unique multimodal approach. Collaboration has commenced with potential partner network engineers, resulting in the development of a robust infrastructure for a fiber system, as evidenced in the attached maps. These maps depict Hawaiian home lands, existing infrastructure (middle mile) and proposed last mile fiber routes to connect unserved homes.

By working with existing ISPs to extend current infrastructure we are confident that DHHL homes will have access to high-speed internet by the end of our period of performance. We also recognize the need to go through certain processes such as environmental review, procurement, and network testing. A full project plan specific to each individual island and objectives on each island with detailed milestones and dates can be viewed in Section C. of this project narrative.

## **L. Details/Evidence of Proactivity**

DHHL has a long-standing relationship with current ISPs within the State and has made sure that access to Hawaiian home lands is open for the benefit of all DHHL beneficiaries. DHHL plans to use the funds from TBCP NOFO 2 as a major way to bring all beneficiaries into the highest level of service currently available within the State of Hawaii far, surpassing TBCP and BEAD qualifying broadband speeds. These major actions through TBCP NOFO 2, along with DHHL's NOFO 1 Use and Adoption Projects, are the Departments biggest steps to filling any service and access gaps currently within the Hawaiian Home Lands system.

DHHL will also develop contract language that will ensure equal access to highspeed services at affordable rates, as well as perpetual maintenance of all physical broadband assets, and increased workforce development. Please see section “M. Long-term Network Sustainability” for more information.

### **M. Long-term Network Sustainability**

DHHL’s goal is to ensure that our Native Hawaiian beneficiaries have access to reliable, affordable, high-speed Internet. DHHL does not intend to become an Internet service provider. Therefore, DHHL will place the responsibility of long-term network sustainability on the provider(s) that are bringing service to, and profiting from, DHHL homesteaders via a Master License Agreement which is required between all public utility companies and DHHL. By including the items listed below in all Master License Agreements with ISPs servicing DHHL homes, we will ensure long-term network sustainability for the physical infrastructure and the services that it offers.

- Standardized service terms for the customer: Consistent service rates and quality across Hawaiian home lands.
- Operations and Maintenance of all physical assets: ISPs will be responsible to maintain, operate, monitor, and repair all infrastructure deployed to ensure reliable broadband service.
- Fund depreciation of capital assets to ensure lifecycle sustainability.
- ISPs will be required to participate in all federal & state subsidy programs they are eligible for that will lower the cost of high-speed internet for the DHHL home owner. This includes but is not limited to FCC’s ACP.
- Bring awareness to Native Hawaiians of any and all public workforce opportunity training programs being offered by the ISP.
- Provide DHHL with copies (and updates as applicable) all terms of service documents for applicable services offered to homesteaders.
- Terminating electronics will be included in ISP costs to service our populations

By establishing Master License Agreements with the above items, DHHL can create a thriving broadband ecosystem that empowers the Hawaiian home lands community with affordable, reliable internet access for generations to come. This strategic approach leverages DHHL's existing strengths while fostering a competitive landscape that prioritizes community benefit and long-term network sustainability.

Included in our application is there required pro-forma document, illustrating that whichever ISP is contracted to bring high-speed internet to our DHHL homes, will be able to financially sustain the network and provide services including but not limited to customer care, billing, and marketing/outreach. This is primarily due to DHHL through this TBCP award providing the one time investment of brining physical infrastructure to these unserved areas and the contracted ISP not being required to contribute capital for these build-outs.

## **N. Description of Physical Project Area**

The envisioned initiative encompasses the entirety of the State of Hawai'i, extending across six primary islands and encompassing 53 Hawaiian Homesteads. DHHL census tracts traverse diverse topographies, climates, and natural resource areas, including mountains, rivers, wetlands, forests, beaches, and oceans. Functioning as a State agency, DHHL prioritizes the conscientious management of Hawai'i's natural resources, often collaborating with the State Department of Land and Natural Resources.

Hawaiian home lands exhibit a spectrum of development, ranging from undeveloped, unoccupied parcels to highly developed residential homesteads within a single census tract. Currently, approximately 66% of Hawaiian home lands are allocated for homesteading, 31% fall under special use districts or conservation lands, and 1.3% serve commercial and/or industrial purposes.

With a two-decade track record as a recipient of federal funds under the Native American Housing Assistance and Self-Determination Act of 1996, Title VIII - Native Hawaiian Housing Block Grant, DHHL possesses a deep understanding of NEPA and NHPA compliance. Moreover, the Department is obligated to adhere to NAGPRA and the State Historic Preservation Division to ensure alignment with federal and State safeguards for Native Hawaiian burials. Operating with its zoning authority, DHHL is not bound by local ordinances governing land use. The Department is committed to exerting every effort to adhere to all relevant environmental, historic preservation, and cultural prerequisites associated with the proposed project.