

County of Hawai'i

DEPARTMENT OF RESEARCH AND DEVELOPMENT

25 Aupuni Street, Room 1301 • Hilo, Hawai'i 96720-4252
(808) 961-8366 • Fax (808) 935-1205
E-mail: chresdev@co.hawaii.hi.us

The University of Hawai'i (UH) released a Draft Strawman for Hawai'i's BEAD Five-Year Action Plan as required by the U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA) in March 2023. The purpose of this document is to provide a written response to UH's Draft Strawman to support the development of the Broadband, Equity, Access, and Deployment (BEAD) Five-Year Action Plan.

The response outline is as follows:

1. Details on previous meetings with UH to discuss and provide input on the Five-Year Action Plan (Refer to Appendix 1.0);
2. Overview of Hawai'i Island Digital Equity & Inclusion Coalition's (HIDEC) Action Plan (Refer to Appendix 2.0); and
3. Overview of County's GIS StoryMap and list of data resources provided to UH (Refer to Appendix 3.0).

1. PREVIOUS MEETINGS

The following Table 1.0 is a list of meetings with UH where the County has provided verbal and textual input on the strawman for the BEAD Five-Year Action Plan. Refer to Appendix 1.0+ for details of each meeting.

Table 1.0: List of Meetings between UH and CoH

Meeting Date	Title	Reference Document
December 15, 2023	Broadband Hui: Data Mapping Subcommittee	Appendix 1.1
February 22, 2023	Vibrant Education Stream meeting: First public share of CoH storymap; <i>UH present.</i>	Appendix 1.2
<i>Start:</i> March 14, 2023	<i>Reoccurring weekly meetings between UH, DBEDT, and four Counties.</i>	Appendix 1.3
March 16, 2023	UH and Four County In-person Meeting notes	<i>Appendix 1.4</i>
April 10, 2023	Hawai'i County / UH Mapping Meeting	<i>Appendix 1.5</i>

2. HAWAI‘I ISLAND DIGITAL EQUITY & INCLUSION COALITION’S ACTION PLAN

Refer to Appendix 2.0 +for coalition members working towards broadband projects on Hawai‘i Island. There you’ll find a list of community projects and performance measures. This action plan highlights a list of on-going projects and potential proposed project ambitions that could be incorporated into the BEAD plan. The County recommends incorporating these edible program areas.

Eligible BEAD Projects Per the NTIA’s Program Overview (2023¹) includes:

1. “Planning for the deployment of high-speed Internet, including conducting research, collecting data, outreach, and training.
2. Deploying or upgrading Internet in unserved or underserved areas or improving service to community anchor organizations
3. Installing Internet and Wi-Fi in multi-unit residential buildings
4. Supporting adoption and digital equity programs
5. Supporting workforce development programs and vocational training programs.”

To add telehealth programs, outreach, and services is of utmost importance to HIDEc members and the County of Hawai‘i. This is especially important for rural communities. Incorporating telehealth solutions into the Five-Year BEAD plan is recommended.

3. GIS RESROUCES & GIS STORYMAP

Refer to Appendix 3.0+ for copy of StoryMap and Table on GIS Resources. The purpose of the GIS StoryMap, [*Exploring the Landscape of Broadband Equity & Inclusion*](#), is to share information about where internet exist and where it does not. In addition, the StoryMap highlights information on eligible projects for the BEAD Program to be considered in the Five-Year Action Plan. A table listing all the GIS resources shared with UH.

According to the Federal Communications Commission’s (FCC) National Broadband Map (2023²), council districts 1, 5, & 6 experience the lowest rates of unserved access to 25/3 Mbps. However, even areas with high rates of internet coverage do not adequately describe access to connectivity. That is due to the size of the island, large parcels, and high costs of last-mile connectivity. Also, regarding the FCC map, the County of Hawai‘i was the only government entity in Hawai‘i to submit fabric and availability challenges. A total of 2,500 fabric challenges and 52 availability challenges were submitted. As of the date of this memo, 42 availability challenges were upheld, 10 are still pending, and all fabric challenges are also still pending.

As listed above, and deemed eligible for the BEAD program, the County recommends ensuring community anchor institutions with no enterprise access are connected and

¹ <https://www.internetforall.gov/sites/default/files/2022-05/BEAD%20Info%20Sheet%20-%20IFA%20Launch%20-%20Final.pdf>

² <https://broadbandmap.fcc.gov/home>

served. Community anchor institutions must include hazard resiliency locations to support emergency response and services.

Secondly, council districts 1, 3, 5, & 6 are more socially vulnerable areas. These communities experience the highest adverse impacts of natural hazards and disproportionately experience death, injury, loss, and disruption of livelihood. These areas are also more notably rural in nature. Similarly, council districts 1, 4, & 5 have the highest rates of Asset Limited, Income Constrained, and Employed households as defined by Aloha United Way (2022³).

Lastly, affordable housing sites are a priority for Hawai‘i County. While all the sites are located in areas over 25/3 Mbps, understand rates to connection and access to broadband services is needed. We recommend diverting resources to understanding last mile connection to these locations, connecting this location with the devices from the Affordable Connectivity Program, and planning for future affordable housing locations connection to broadband as defined by 2022 S.B. N0. 2479⁴. Similarly, with BEAD funding allocation, defining how local projects can support and expand outreach where there is high concentration of ALICE communities, socially vulnerable, low rates of internet subscription, and/or areas under 25/3 Mbps.

³ https://www.unitedforalice.org/Attachments/StateDataSheet/DataSheet_HI.xlsx

⁴ https://www.capitol.hawaii.gov/session/archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=2479&year=2022

Appendix 1.1

Broadband Hui: Data Mapping Subcommittee

15 December, 2022

Attendees

Laura Arcibal, Michelle Beasley, Philip Beilin, Arthur Buto, Michael Commons, Gwen Jacobs, Shola Kahiapo-Trevino, Burt Lum, Robert Martin, Issa Moffett, Marceline Naff, Pete Plass, Tricia Reimer, Jennifer Russell, Riley Saito, Madalyn Tolbert

Purpose

The purpose of this meeting is to present the County's current progress in mapping broadband connectivity for Hawai'i Island, elaborate on the FCC challenge, and to discuss the next steps in supporting applications for Broadband Equity, Access, and Deployment (BEAD) funding.

Notes

- Issa begins with presenting the current progress for broadband mapping and FCC challenge
- Gwen: Current updates: in the process of hiring a data scientist to help work with cost quest data and fcc challenge, has funding for BEAD planning
- Gwen: How does a bulk challenge work?
 - Issa: Only provider challenges can come from an individual; you have to use a specific format. We are approaching by code errors and geography; will do it in smaller uploads rather than bulk uploads
- Gwen: Will we get this information back in time to submit for BEAD funding?
 - Concerned we will have to submit with inaccurate information
 - The amount of money we can request depends on the number of validated addresses that are unserved
- Gwen: How are we supposed to go about this with inaccurate data?
 - What if you are in a serviceable area, but cannot afford the service?
- Gwen: Two best arguments for BEAD support:
 - Affordability
 - # of addresses that are unserved or underserved
- Issa: some municipalities are submitting letters to FCC with NTIA copied; is this something we should do?
 - Gwen: there is a number of states bringing awareness to this; Will ask Garrett if there is plan to submit a letter
 - What is the best use of everyone's time with so many errors in the data?
 - Burt: TX and WA are reporting dissatisfaction from the governors level

-
- Big Island is providing a good example of how other counties can approach this; but need a collective effort from all islands
 - We need to unify our effort for the state of Hawai'i and raise the importance of this work
 - Laura: we need to get to a local, grassroots level because this community knows what areas are unserved
 - Gwen: For BEAD planning, does anyone know if NTIA would accept additional data not provided by the FCC? Can we do our own "local or grassroots" research?
 - Burt: you should be able to use other outside data to support you claims; would recommend including outside data
 - Laura: we should use local research because we need to know what is not yet on the map; if you find addresses that are not served we should identify these areas
 - Issa: for Oceanview, the south left corner is showing up as served. We are hypothesizing this is showing up as served because the police station is connected to the fiber
 - The real question is; do the residential areas have connectivity even though it shows as served on the FCC data?
 - Robert (from chat): "I've heard that NTIA is expected to be more open-minded than FCC when it comes to speed tests and independent research as evidence. They're also making more of a distinction between unserved and underserved communities. So they might be more of a friendly ear, though the BEAD allocations will already be made by that point, as I understand it." ; "*state allocations, that is"
 - Laura (from chat): "It's challenging. Yes absolutely Robert. Multigenerational homes, corner apartments, across the street..."
 - Phil: having the vulnerable communities shown in numbers could be a good way to get decision makers on board (ex. new governor)
 - Gwen: we need a consistent way to work with the available data and alternative data sources; if we can follow the same methodology across the islands, it could make this data more reputable for BEAD support.
 - Riley: What is the timeline?
 - From Nov 1: 270 days
 - Riley: Are there any benchmarks or reporting dates?
 - Burt: need to give UH draft before hand; have a final draft in 240 days; should have everything close to finished in ~6 months
 - Robert (from chat): "One other deadline to flag — January 13 is the last date to get fabric and availability challenges in order for them to be considered for BEAD allocations."
 - Bulk challenges are to correct CostQuest data; we want this to be accurate so this dataset can be accurate in order to supplement BEAD application

-
- Robert: FCC should come back with corrected maps on the normal cycle (June)
 - Michelle: Have we broken up into working groups to work on each of the challenges?
 - We can submit bulk and individual challenges
 - Focused on fixed connections for BEAD funding
 - Because the data is so poor, [and proprietary CostQuest] a working group may not be effective

Takeaways

- Ideas for alternative supporting data for BEAD applications
 - Robert (from chat): “Knowledge of Infrastructure. This knowledge could be based on, for example, local building permit records, rights-of-way records, franchise agreements, or an on-the-ground examination of broadband infrastructure in a particular structure. Filers must upload a file that contains evidence to support the information in the fixed availability challenge.”
 - Working from a local, grassroots perspective on gathering data on unserved areas
 - Working on getting numbers on vulnerable communities (ex: SNAP recipients, etc...)
- We need unity and consistent methodology between the Counties

Links

- [Senators and Witnesses Criticize Accuracy of FCC’s New Map](#)
 - Article on dissatisfaction of CostQuest data
- [How Good is the FCC Broadband Fabric in a Big City?](#)
 - Robert’s article
- [VCBB issues 'Call to Action' for Vermonters to challenge wrong FCC map data](#)
 - What Vermont is doing

Chat Comments

09:35:09 From Shola Kahiapo-Trevino to Everyone:

<https://medium.com/@rbrtmrtn/how-good-is-the-fcc-broadband-fabric-in-a-big-city-16bfdcdb3c45>

09:35:14 From Robert Martin to Everyone:

If anyone would like some light reading and moral support...

09:35:21 From Robert Martin to Everyone:

You beat me to it, thanks Shola!

09:35:34 From Shola Kahiapo-Trevino to Everyone:

No prob!

09:37:05 From Phil Beilin, FEMA Recovery to Everyone:

Great graphic!

09:37:38 From Robert Martin to Everyone:

++++ excellent viz

09:41:34 From Robert Martin to Everyone:
Q: what was the hyphen you added?

09:45:22 From Laura Arcibal to Everyone:
Great job Issa!

09:47:51 From R&D County of Hawaii to Everyone:
Good question, Robert. FCC addresses were written as 12345 and our address locator recognizes it as 12-345. So I added a hyphen to all addresses equal to or greater than 5 characters

09:48:36 From Robert Martin to Everyone:
Ah that makes sense, thanks!

09:54:00 From Robert Martin to Everyone:
Perhaps a few of the states making noise...
<https://broadbandbreakfast.com/2022/12/senators-and-witnesses-criticize-accuracy-of-fccs-new-map/>

09:56:00 From Robert Martin to Everyone:
Power in numbers!

09:56:51 From Issa to Pete Plass(Direct Message):
Hello

09:57:03 From Issa to Pete Plass(Direct Message):
I don't think we've met. Who are you with?

09:58:34 From Burt Lum (he/him) to Everyone:
Here is what Vermont is doing:
<https://vermontbiz.com/news/2022/december/08/vcbb-issues-call-action-vermonters-challenge-wrong-fcc-map-data>

10:01:12 From Issa to Michelle Beasley(Direct Message):
welcome!

10:01:19 From Michelle Beasley to Issa(Direct Message):
Thank you:)

10:03:20 From Robert Martin to Everyone:
I've heard that NTIA is expected to be more open-minded than FCC when it comes to speed tests and independent research as evidence. They're also making more of a distinction between unserved and underserved communities. So they might be more of a friendly ear, though the BEAD allocations will already be made by that point, as I understand it.

10:03:39 From Robert Martin to Everyone:
*state allocations, that is

10:06:59 From Laura Arcibal to Everyone:
It's challenging. Yes absolutely Robert. Multigenerational homes, corner apartments, across the street....

10:09:58 From Robert Martin to Everyone:
One other deadline to flag — January 13 is the last date to get fabric and availability challenges in in order for them to be considered for BEAD allocations.

10:10:17 From Gwen Jacobs to Everyone:
Thanks Robert -

10:10:43 From Robert Martin to Everyone:

You got it @Gwen

10:17:28 From Robert Martin to Everyone:

<https://help.bdc.fcc.gov/hc/en-us/articles/10389893104923-Overview-of-Bulk-Fixed-Availability-Challenges>

10:18:25 From Issa to Everyone:

- Missing Broadband Serviceable Location
- Incorrect Location Primary Address
- Incorrect Location Unit Count
- Incorrect Location Building Type Code
- Location is Not Within Footprint of the Correct Building
- Location is Not Broadband Serviceable
- Add Supplemental Address

10:19:46 From Robert Martin to Everyone:

Knowledge of Infrastructure. This knowledge could be based on, for example, local building permit records, rights-of-way records, franchise agreements, or an on-the-ground examination of broadband infrastructure in a particular structure. Filers must upload a file that contains evidence to support the information in the fixed availability challenge.

10:27:22 From Robert Martin to Everyone:

And then CostQuest can sell it to somebody else next year! :/

10:27:43 From Pete Plass to Issa(Direct Message):

And this isn't some regex fix, this is like junk data? sorry, got the meeting invite late. happy to chat if you'd like

10:29:42 From Arthur Buto - Statewide GIS Program to Everyone:

Thanks Issa and the COH team for all of this hard work and thinking through the issues!

10:29:54 From Robert Martin to Everyone:

Thanks everyone!!!

10:33:11 From Pete Plass to Everyone:

props for your strawberry pie chart

10:37:37 From Pete Plass to Everyone:

Broadband certainly won't be getting that data wrong when billing



Upcoming Vibrant Hawai'i Events



County of Hawai'i OHCD Director, Susan Kunz will share about the Affordable Housing Production Program, which received \$9 Million for fiscal year 2022-23.

Thursday, February 16th

1:00PM - 2:30PM | Zoom

[Read More about AHP](#)

Register Here



Riley Saito, Energy Specialist for the County of Hawai'i, and members of the Hawai'i Island Digital Equity Coalition will provide an update on efforts to address gaps in broadband infrastructure and increase access to broadband for our rural communities.

Wednesday, February 22nd

2:00PM - 3:00PM | Zoom

[Read more about HIDEC](#)

Register Here

Building Community Resilience

Appendix 1.3

Moffett, Karissa (Issa)

Subject: UH BEAD/DBEDT DE - Survey (standing)
Location: <https://hawaii.zoom.us/j/94562550545>

Start: Tue 3/14/2023 9:00 AM
End: Tue 3/14/2023 10:00 AM
Show Time As: Tentative

Recurrence: Weekly
Recurrence Pattern: every Tuesday from 9:00 AM to 10:00 AM

Meeting Status: Not yet responded

Organizer: hirais@hawaii.edu

Susan Hirai is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting
<https://hawaii.zoom.us/j/94562550545>

Meeting ID: 945 6255 0545
Passcode: 245268
One tap mobile
+16027530140,,94562550545#,,,,*245268# US (Phoenix)
+16692192599,,94562550545#,,,,*245268# US (San Jose)

Dial by your location

- +1 602 753 0140 US (Phoenix)
- +1 669 219 2599 US (San Jose)
- +1 669 900 6833 US (San Jose)
- +1 720 928 9299 US (Denver)
- +1 971 247 1195 US (Portland)
- +1 206 337 9723 US (Seattle)
- +1 213 338 8477 US (Los Angeles)
- +1 253 215 8782 US (Tacoma)
- +1 346 248 7799 US (Houston)
- +1 470 381 2552 US (Atlanta)
- +1 646 518 9805 US (New York)
- +1 651 372 8299 US (Minnesota)
- +1 786 635 1003 US (Miami)
- +1 929 205 6099 US (New York)
- +1 267 831 0333 US (Philadelphia)
- +1 301 715 8592 US (Washington DC)
- +1 312 626 6799 US (Chicago)
- +1 470 250 9358 US (Atlanta)

Meeting ID: 945 6255 0545
Passcode: 245268
Find your local number: <https://hawaii.zoom.us/u/acAo8rObU>

Join by SIP

94562550545@zoomcrc.com

Join by H.323

162.255.37.11 (US West)

162.255.36.11 (US East)

115.114.131.7 (India Mumbai)

115.114.115.7 (India Hyderabad)

213.19.144.110 (Amsterdam Netherlands)

213.244.140.110 (Germany)

103.122.166.55 (Australia Sydney)

103.122.167.55 (Australia Melbourne)

209.9.211.110 (Hong Kong SAR)

64.211.144.160 (Brazil)

69.174.57.160 (Canada Toronto)

65.39.152.160 (Canada Vancouver)

207.226.132.110 (Japan Tokyo)

149.137.24.110 (Japan Osaka)

Meeting ID: 945 6255 0545

Passcode: 245268

Appendix 1.4

5 Year Strawman Plan: 4 County Priority Areas

Meeting Attendance:

- UH: Garret Yoshimi
- State: Burt Lum
- Kauai: Nate Prescott
- C&C of Honolulu: Lanore Hahn
- Maui County: IT Rep, Laksami Abraham, Cynthia Lallo
- County of Hawaii: Doug Adams, Riley Saito, Shola Kahiapo-Trevino

Meeting Purpose: We (Hawaii County) would like to understand their deliverables up till the submission of the BEAD application. Find out/ iron out the work counties need to do to help support the BEAD program: Data analysis, community engagement, etc.

What do we want to get out of the meeting with UH?

1. Clarify County objectives ([page 4; C,D,F](#))
 - a. Ex: Permitting will be a factor, how to best navigate these hurdles (long mile and middle mile connectivity)
2. Q: What are the dates of Current Activities that the Broadband Program/Office Conducts
 - b. Meeting 1-on-1 with Counties
 - c. Date/ time frame of community outreach
 - i. 3 months (estimate)
 1. June is the target to get information in
 - a. Push info out and briefing (UH)
 - b. Reviewing the information; able to respond with community specific needs (County)
3. Q: Who are the current hires for the UH BEAD team, and what are their roles.
 - d. Propose: Local county positions.
 - ii. Need support mapping / outreach e.g. Pono
4. County Roles/ things that we have collected already:
 - e. Community program priority areas
 - iii. Business chambers (may- Doug)
 - iv. Non-profit (HIDEC)
 - v. ****create a template for data collection for all 4 counties
 - f. Mapping
 - g. Data
5. Needs and Gaps Assessment
 - h. Issa's Storymap purpose;
 - vi. provided an analysis for Hawaii island, provided the resource/ framework for UH so they can perform an in depth analysis for the entire state.
 - vii. Identified gaps in the community

Suggestions to UH:

6. Total collaborators meeting “Design Thinking Workshop” with a moderator and facilitators
 - i. Moderators
 - viii. All the pockets people that are part of the hui meetings
 - ix. Diverge, converge, emerge
7. Utilize the identified gaps and information Issa provided on the Storymap
8. Last three (Data specialist, Community Outreach and Engagement Specialist, Communications Specialist) being put into the County, would create better data, gives more capacity to the UH.

Additional Meeting Notes:

- Introduction
 - Hawaii Island Strategies
 - HIDEC
 - FTE dedicated to Broadband
- *Overview of \$\$+ Current project status (Information will be sent via email from Garret)*
 - BEAD Funding
 - Using it to support broader efforts beyond the 5 year terms
 - Supplement staffing (UH) x3
 - Types of funding/ use of funding
 - RCUH procurement- much more flexible
 - Last mile funding
 - Leverage for non-profit funding
 - UH BEAD Strategy: Using County leverage to give us a better standing/ competition with other states
 - 100-few thousand contracts to non-profits, gives it a way to spread the \$\$ into the community
- County engagement
 - What are we doing on Hawaii island
 - Putting layers into the maps that issa already created
 - County Broadband Sustainability Strategy
 - Funding \$\$ from UH to bring people on to do this broadband work full time
 - Local businesses to participate
 - Act 23; cabinet members and appointed people of the mayors
 - March 30th at 2:30 (via zoom meetings)

NEXT STEPS: collecting information for the Strawman

- contact with business teams
- contact non profits/ community
- thinkers design workshop (get it set up)
- develop MOU for county(s)

-county trackers to provide information for Strawman (develop a county action plan to gather information for strawman)

next meeting in April 20th by zoom

Appendix 1.5

Moffett, Karissa (Issa)

From: Moffett, Karissa (Issa)
Sent: Monday, April 10, 2023 11:12 AM
To: 'Chris Zane'; Kiman Wong
Cc: Gwen Jacobs; Kahiapo-Trevino, Shola K; Saito, Riley; Susan Hirai; Krystal Lopez
Subject: Hawaii County Additional Dataset
Attachments: OwnedParcels_CoH.zip; bulk-fixed-challenge-2004337.csv; INET_CoH.zip

Hi UH Team,

Thank you for the good meeting today. Here are the additional datasets we discussed:

1. Cellular Tower (link): https://hifld-geoplatform.opendata.arcgis.com/datasets/0835ba2ed38f494196c14af8407454fb_0/explore?location=19.003562%2C-155.083629%2C7.15
2. County buildings with Internet (attached)
3. County owned parcels (attached)
4. COH FCC Challenges csv ("availability" only) -- let me know if you want the "fabric" challenges too. (attached)
5. Land Ownership Shapefiles (links)
-- Government Land Ownership: https://files.hawaii.gov/dbedt/op/gis/data/gov_own.shp.zip
-- or Government Land Ownership- detailed version by TMK:
https://files.hawaii.gov/dbedt/op/gis/data/gov_own_detailed.shp.zip

Issa Moffett
Infrastructure Specialist
Broadband Mapping Project Manager
Research and Development
County of Hawaii
Issa.Moffett@hawaiicounty.gov

-----Original Message-----

From: Chris Zane <czane@hawaii.edu>
Sent: Monday, April 10, 2023 9:29 AM
To: Moffett, Karissa (Issa) <Issa.Moffett@hawaiicounty.gov>
Subject: Hawaii County No Provider

Hi Issa

Here is the no provider file that we were looking at this morning.

Appendix 2.0

Organization	Resource Type	Name	Email	Coalition Map	Organization Resource	Mokupuni (Island)/ State Served/ Located	Moku (District) Service
CHW-Hilo	Health	Ceecee Crabtree	ccrabtr1@hawaii.edu	yes	Hawaii U Telehealth	Hawai'i	Hilo
CoH	Other	Shola Kahiapo-Trevino	skahiapo-trevino@hawaicounty.gov	yes	CoH Broadband	Hawai'i	Hilo
DBEDT	Education/Literacy	Burt Lum	burt.q.lum@hawaii.gov	yes	State Broadband Link	O'ahu	State Wide
Department of Ag	Infrastructure	Alton Kimura	alton.kimura@usda.gov	yes	ReConnet Program	Hawai'i	Entire Hawai'i Island
DHHL	Infrastructure	Niniau Kawaihae	niinau.kawaihae@hawaii.gov	yes	DHHL- Telecommunication	O'ahu	State Wide
Digital Ready HI	Education/Literacy	Kaala Souza	kaalas@gmail.com	yes	Digital Literacy	O'ahu	State Wide
DOH (East Hawaii)	Health	Skyler Kodani	skyler.kodani@doh.hawaii.gov	yes	Hawaii Island DoH	Hawai'i	East Hawaii
Federal Emergency Management Agency	Mapping	Michelle Beasley	michelle.beasley@fema.dhs.gov	yes	FEMA	Other	Hawaii Islands, CNMI, Guam, America Samoa, Ca. Nv, Az and 157 Tribal Nations
Hawai'i Workforce Funders Collaborative	Education/Literacy	Matt Stevens	matt@hawaiiwork.org	yes	Workforce development	Hawai'i	Kohala
Hawaii Community College	Education/Literacy	Rachel Solemsaas	solems@hawaii.edu	yes	Hawaii Community College	Hawai'i	Entire Hawai'i Island
Hawaii State Library System	Education/Literacy	Stacey Aldrich	stacey.aldrich@librarieshawaii.org	yes	Hawaii State Library System	O'ahu	State Wide
HDoT	Infrastructure	Dre Kalili	dreanalee.k.kalili@hawaii.gov	yes	HIDoT	O'ahu	State Wide
Hawaii Medical Service Association (HMSA)	Health	Tai Matsuoka	Tai_Matsuoka@hmsa.com	yes	HMSA Telehealth Resources		State Wide
Ho'opono Services for the Blind	Education/Literacy	John Zamorra	jzamorra@dhs.hawaii.gov	yes	Department of Human Services	O'ahu	State Wide
'Auamo Collaborative	Mapping	Kaleo Bennett	kaleobennett@gmail.com	yes	Hawaii Island Mapping Data	Hawai'i	State Wide
International Brotherhood of Electrical Workers	Infrastructure	Justin Puaoi	Justin_Puaoi@ibew.org	yes	International Brotherhood of Electrical Workers	O'ahu	Entire Hawai'i Island
Kua Kanaka LLC	Education/Literacy	Polani Kahakalau	polani@kuakanaka.com	yes	Hawaii Based Digital Literacy	Hawai'i	State Wide
Nalukai	Education/Literacy	Auston Stewart	auston@nalukai.org	yes	Nalukai Academy	Hawai'i	Kohala
North Kohala Community Resource Center (NKCRC)	Education/Literacy	Ekela Kahanui	ekela@northkohala.org	yes	North Kohala Community Resource Center	Hawai'i	Kohala
NTIA, Hawaii Rep	Infrastructure	Laura Arcibal	larcibal@ntia.gov	yes	NTIA-Hawaii	O'ahu	State Wide
Partners in Development	Education/Literacy	Ross Pagat	rpagat@pidfoundation.org	yes	Partners in Development Website	Hawai'i	Kohala
Startup Hawaii	Education/Literacy	Maria Leonardi	maria.f.leonardi@gmail.com	yes	Startup HI website	Hawai'i	Entire Hawai'i Island
State of Hawaii, Office of Planning and Sustainable Development	Mapping	Aurthur Buto	arthur.j.buto@hawaii.gov	yes		O'ahu	State Wide
University of Hawaii	Infrastructure	Gwen Jacobs	gwenj@hawaii.edu	yes	UH Broadband Office	O'ahu	State Wide
Vibrant Hawaii	Education/Literacy	Janice Ikeda	janice@vibranthawaii.org	yes	Vibrant Hawaii	Hawai'i	Entire Hawai'i Island
Arizona State University	Education/Literacy	Robin Martin	Roberta.Martin@asu.edu	yes	Arizona State University	Hawai'i	Ka'u
Charter/Spectrum	ISP	Rebecca Lieberman	rebecca.lieberman@charter.com	no	Spectrum Wireless	O'ahu	State Wide
Cricket Wireless/ ATT	ISP	Natasha Tom-Uncanin	nt7862@att.com (808)351-3511	no	Cricket Wireless	Hawai'i	State Wide
Hawaii Technology Development Corporation, Hawaii Island	Other	Tom Leonard	tom.m1@hdc.org	no	HDC	Hawai'i	State Wide
Hawaii Technology Development Corporation, Hawaii Island	Education/Literacy	Sandi Kanemori	sandi@hdc.org	no	HDC	O'ahu	State Wide
HCEOC	Other	Chad Hasegawa	chasegawa@hceoc.net	no	Hawaii County Economic Opportunity Council	Hawai'i	Entire Hawai'i Island
Interisland Fiber Cable	Infrastructure	Cliff Miyake	Cliff.Miyake@OceanNetworks.com	no	www.OceanNetworks.com		
Milolii 'Ohana	Education/Literacy	Kaيمي Kaupiko	kkaupiko@gmail.com	no	Kalanihale	Hawai'i	Kona
Salesforce	Education/Literacy	Scott Seto	scott.seto@salesforce.com	no	Salesforce Website	Hawai'i	Entire Hawai'i Island
UH Hilo	Education/Literacy	Sharon Ziegler-Chong	ziegler@hawaii.edu	no	Pipes, Marine Science	Hawai'i	Entire Hawai'i Island
Lead for Hawaii/ Ewalu industries	Education/Literacy	Alexis Ching	alexis@ewaluindustries.org	L4H - yes	Lead for Hawaii	Hawai'i	Entire Hawai'i Island
CoH	Other	Issa Moffet	karissa.moffett@hawaicounty.gov	-	CoH Broadband	Hawai'i	Kona
CoH	Other	Riley Saito	riley.saito@hawaicounty.gov	-	R&D Energy	Hawai'i	Kona
CoH	Health	Yoshiaki Otake	yoshitaki.otake@hawaicounty.gov	-	Hawaii County R&D	Hawai'i	Entire Hawai'i Island
CoH	Other	Bob Agres	Robert.Agres@hawaicounty.gov	-	Hawaii County R&D	Hawai'i	Entire Hawai'i Island
CoH	Other	Doug Adams	Douglass.Adams@hawaicounty.gov	-	Hawaii County R&D	Hawai'i	Entire Hawai'i Island
CoH	Infrastructure	Scott Uehara	Scott.Uehara@hawaicounty.gov	-	Hawaii County- IT	Hawai'i	Entire Hawai'i Island
CoH	Infrastructure	Corey Stone	Corey.Stone@hawaicounty.gov	-	Hawaii County- IT	Hawai'i	Entire Hawai'i Island
DBEDT	Other	Amber Ternus	amber.k.ternus@hawaii.gov	-	State Broadband Link	O'ahu	State Wide
DOH (West Hawaii)	Health	Paul Strauss	paul.strauss@doh.hawaii.gov	-	Hawaii Island DoH	Hawai'i	West Hawaii

FEMA	Mapping	Phil Beilin	philip.beilin@fema.dhs.gov	-	FEMA Region IX	Oakland, CA	Arizona, California, Hawaii, iNevada, Guam, American Samoa, Commonwealth of Northern Mariana Islands, Republic of Marshall Islands, Federated States of Micronesia
FEMA	Mapping	Nazih Fino	nazih.fino@fema.dhs.gov	-	FEMA Region IX	Oakland, CA	Arizona, California, Hawaii, iNevada, Guam, American Samoa, Commonwealth of Northern Mariana Islands, Republic of Marshall Islands, Federated States of Micronesia
Hawaii State Library System (Hilo)	Education/Literacy	Melissa Lundell	melissa.lundell@librarieshawaii.org	-	Hilo Library access, Digital Literacy Resources	Hawai'i	Hilo
Lead for Hawaii/ Ewalu industries	Education/Literacy	Emily Znamierowski	emily@ewaluindustries.org	-	Lead for Hawaii	Hawai'i	Entire Hawai'i Island
DIT	Other	Tony Velasco	tvelasco@honolulu.gov	-	Department of IT	O'ahu	State Wide
ESRI		Todd Kingman	tkingman@esri.com	-	ESRI	O'ahu	State Wide
Maui County	Infrastructure	Pono Asano	mayson.asano@co.maui.hi.us	-	Maui County	Maui	
UH Hilo	Education/Literacy	Farah- Marie Gomes	fmgomes@hawaii.edu	Yes	University of Hawaii at Hilo	Hawai'i	Entire Hawai'i Island
IT Reuse Hawaii	Other	Michele Mitsumori	itreusehi@gmail.com	Yes	IT Reuse Hawaii	Hawai'i	Hilo
Waipahu Community School for Adults	Education/Literacy	Christine Park	cpark@wcsa.k12.hi.us	yes	Waipahu Community School for Adults	Hawai'i	Hilo and Kona
UH Hilo IT	Education/Literacy	Charlie Snader	csnader@hawaii.edu	yes	University of Hawaii at Hilo	Hawai'i	Entire Hawai'i Island

Appendix 2.1

Mission Statement: Ensure community resilience and digital equity through education and broadband deployment for all Hawai'i Island residents.

Be the voice of the people, provide digital equity solutions that are [important/ good] for their community/ organization

Priority Area: Digital Resiliency & Infrastructure Connection in Hawaii Island					
GOAL 1: Ensure Broadband Infrastructure to Hawaii Island					
Objective 1: Expand Hawaii Island Broadband Infrastructure by 25% by Year 1					
Strategies	Resources	Lead Person/Org.	Measure	Current Performance Level/ updates	Performance or Annual Target
Work with County IT to map out Broadband infrastructure expansion at County sites	American Rescue Plan grant \$6 Million	Corey Stone, DIT-CoH Riley Saito, R&D-CoH	# of County sites connected	11/4/2022: Kohala, Kona, [insert other locations pending] 1/18/2023: [add update]	Increase County site connectivity by 25%
Increase the throughput of the INET capacity to accommodate the additional graphics base platforms.	American Rescue Plan grant \$6 Million	Scott Uhera, DIT CoH Douglass Adams, R&D CoH	# of sub-rings added # of gigabit throughput	11/4/2022: in the process of expanding 10gig at various locations and additional equipment to improve	2 sub-rings of INET with the capacity of 10 gigs

			# % uptime?	connection capacity 1/18/2023: [add update]	Set a standard for reliable uptime and track (%)
Provide wireless access along highways	IIJA funding \$25 million	Ed Sniffen, HIDOT Dre Kalili, HIDOT	#of IIJA sites	10/1/2022: Obtaining permits for Naalehu, Pahala, and Pahoia pilot project 1/18/2023: [add update]	Get annual target from HDOT
Provide internet to affordable housing sites 2 (paid for by county)	Affordable Connectivity Program HRS	Keiko Mercado and Sharon Hirota Office of housing and community development	#of sites internet provided	1/18/2023: [add update]	At least one site per year
Hazard Mitigation Create BB support efforts	HIEMA	HIEMA FEMA	# of people who support projects; sectors of projects that benefit; leads to other complementary projects	11/21/2022: HIEMA hired 1 person to help community organizations apply. FEMA has capacity to assist (Phil) 1/18/2023: complete ✓	Hire 1 person ✓

Miloli'i Village broadband connectivity	DHHL / NTIA Funding (pending) Hawaiian Telcom (ISP)	'Auamo	# of household connections	11/4/2022 yes, community buy-in. Need to find installation provider, dependent on DHHL NTIA Funding	Connect Miloli'i
---	--	--------	----------------------------	---	------------------

Priority Area: Digital Inclusion, Education, and Workforce Development on Hawaii Island

GOAL: Expand Digital Inclusion and Adoption through education to achieve Digital Equity

Objective: Increase digital readiness from x population by x population annually [create objective]

Strategies	Resources	Lead Person/Organization /Support	Measure	Current Performance Level	Performance or Annual Target
Provide an internship program	Hawaii Community College NSF Grant	<ul style="list-style-type: none"> Start Up Hawaii Hawaii Community College 	<ul style="list-style-type: none"> Establishing Pilot program # of students 	<ul style="list-style-type: none"> waiting for NSF funding to be awarded 	<ul style="list-style-type: none"> 1 year program 10 students

<p>(pilot) Build augmented reality app (similar to pokemon go)</p>	<p>*Hawaii Tracker, donated technology/ idea</p>	<ul style="list-style-type: none"> • Vibrant Hawaii • Start up Hawaii 	<ul style="list-style-type: none"> • Establish talent studio (allowing students to have hands on work & provide a product) 	<ul style="list-style-type: none"> • Gathered idea/ technological resources • Still working on outreach for the program 	<ul style="list-style-type: none"> • 5 mentors • 5 students
<p>IT Reuse Hawaii pilot program</p>	<p>Partnership with: Hilo Library, Mr. K, PC for People, Hawaii Community College, Hawaii First Federal Credit Union</p>	<p>Michele Mitsumori: IT Reuse Hawaii</p>	<ul style="list-style-type: none"> • Individuals pass pilot program <ul style="list-style-type: none"> • typing database • Northstar database • skill finder • Increase # of participants • Increase locations program is 	<ul style="list-style-type: none"> • Named partnerships • Develop pilot program • roll out in April 2023 	<p>2023 Pilot Target:</p> <ul style="list-style-type: none"> • 8 people • 8 desktops

			offered in (affordable housing complexes/ program in district offered)		
Technology resource assistance volunteer program	<ul style="list-style-type: none"> Hilo Library 	<ul style="list-style-type: none"> Hilo Library Future volunteers 	<ul style="list-style-type: none"> Hours of availability # of volunteers # of people helped Time spent with each patron Type of programs assisted in 	<ul style="list-style-type: none"> <i>In development</i> 	<ul style="list-style-type: none"> <i>In development</i>
Digital Literacy pathway program for K-12	TBD	<p>P20 / HCC / DOE(?)</p> <p>State Librarian: Stacey Aldrich</p> <p>Hawaii Kids Can: David Miyashiro</p> <p>P/20- Schatz</p>	1 program	11/7/2022: Rachel set up a meeting with P20 and Principal	<p>Recruit 1 pilot school for a k-12 literacy program</p> <p>Introduce subject matter change to DOE as a policy change</p>

		DOE:			
Develop digital literacy courses for HCC students	TBD	HCC	1 program	11/7/2022: Looking at subscribing to https://www.digital-literacyassessment.org/	Pilot digital literacy classes for HCC students
Provide upscale for digital workforce	DBEDT	HTDC	# of webinars # of people trained	11/7/2022: providing workforce development (webinars) for small businesses	Reach 50 clients / year
Provide community workshops at county sites	?	Vibrant Hawaii Auamo Collective Tom Leonard DoH HCEOC Shola Library System	#of workshops # of people trained #surveys	1/18/2023: [add update]	Hold 1 workshop per month Train 100 people / year

					Obtain 100 surveys about workshops / year
Participate in annual Digital Inclusion Week	collaborations/ partnerships	Shola Hawaii State Library	# of events # of people attended	Oct 2022: DI Week held on Oct. 4, 2023 # 1 event # 5 people attended Complete ✓	1 Digital Inclusion Week Event / year ✓ Double every year
Digital Literacy Inclusion Outreach for resources	CoH & Partners	Shola Taulpe	# of brochures # QR code scanned Translate Hawaii Island DL resource to multiple languages	Oct 2022: 50 brochures distributed at Revitalize Puna. 20 brochures distributed at Hilo Library. # 70 brochures # QR codes 1/18/2023: [add update]	Distribute 500 brochures annually. Translate to top 5 languages on Hawaii island
(NDIA) trailblazer 2023	CoH Staff	Shola	Complete and submit 1 application Trailblazer status	2/24/2023: Sent in application for digital trailblazers 😊	Become a recognized Trailblazer

Develop Action Plan Coalition for Hawaii Island	Coalition Members	Shola	# of coalition member	1/18/2023: [add update]	Create a coalition of members in support of Hawaii Island Broadband
Create and Fund County Staff Members specifically focused on Broadband	CoH	Shola Issa	# of staff members	Two positions directly working on broadband in scope of work.	Renew at least 1 staff member full-funded and dedicated to digital inclusion initiatives, policies and/or programs
Establish a County resource page on R&D	Coalition Meetings	CoH Staff Coalition Members	#website views	12/14/2022: Launched Broadband Page on R&D website and continue to add to it 1/18/2023: complete ✓	Launch a broadband page ✓
Digital Literacy Workshops	CARES	Vibrant Hawaii	# of residents trained # of trainings	11/4/2022: 300 residents trained in 90 days, there's a need for access to technology	Train 500 people in 90 days
Engaging youth on instructors	CARES	Vibrant Hawaii	# of people trained	11/4/2022 program goes hand-in-hand with e-health literacy. Collaboration with	Develop a youth training programing

				Rachel S. Bridge to Digital Health	
Kanaka Digital Technology	Kū-A-Kanaka – EA E-Learning courses	Kū-A-Kanaka	# of people trained	11/21/2022: Course is in the first pilot version with 100 people via sandbox learning style. Expand to economics/business/workforce	Complete pilot
ILXP (Indigenous Learning Exploration Platform)	In search of funding	Kū-A-Kanaka	# 1 program developed	11/21/2022: Culture based and non linear ways of learning. Launch in March 2023	Develop first indigenous learning online platform

Priority Area: Digital Health Equity on Hawaii Island

Goal: Support digital health literacy and provide secure telehealth access to Hawaii island residents

Objective: [create objective]

Strategies	Resources	Lead Person/Organization	Measure	Current Performance Level	Performance or Annual Target
Provide additional support for Kuleana Health	CoH Health Kuleana Health	Yoshi Kuleana Health partners	# of telehealth users # of telehealth users associated with Kuleana health (collect data)	1/18/2023: [add update]	Increase users by X by X
Refer to “Engaging youth on instructors” for Priority Area: Digital Inclusion and Education on Hawaii Island	—	—	—	—	—

Priority Area: Island Wide Mapping

GOAL: Identify unserved and underserved areas throughout Hawaii island by community mapping projects.

Objective: **create objective

Strategies	Resources	Lead Person/Organization	Measure	Current Performance Level	Performance or Annual Target
Phase 1: Mapping, survey collection.	DHHL - \$250k	'Auamo	# of surveys collected	11/4/2022: 1,400 surveys / 673 surveys Hawaii Island	2,700 surveys
Phase 2: Start data collection	DHHL residual funding, currently seeking additional funding	'Auamo	# of surveys collected	11/4/2022 to gather community partners for input on survey questions	2,700 surveys
County Mapping Project: Digital Divide and Equity	CoH and Partners	Issa Moffett, R&D CoH	# of shapefiles developed # of underserved and unresourced reached # of sites accessible by transit (within 0.5 miles) # of website views	1/18/2023: [add update]	Develop and publish a storymap of the broadband landscape on Hawaii Island Equity Analysis
FCC Broadband Fabric and Availability Mapping Challenge	U.S. Digital Response	Issa Moffett, R&D CoH	# of fabric challenges # of availability challenges	1/18/2023: [add update]	

Mapping internet speed/ cellphone reception at county sites	Library BB Network Journal	CoH	# of speed tests # of facilities	1/18/2023: [add update]	Conduct Speed Tests at All identified county facilities
Toolkit creation	Example: tribal toolkit [insert link]	CoH FEMA_pb	# Develop a toolkit to query and find resources for broadband; leads to other complementary projects	11/21/2022: project start date tbd January 2023	1 toolkit developed

Appendix 3.0

Dataset / Info Name	Date Shared	Details
FCC Internet Availability Data	December 15, 2023	Refer to Appendix 1.5
Broadband StoryMap	February 22, 2023	Refer to Appendix 3.1
Social Vulnerability Index and Population (StoryMap)	""	""
CoH Community Wi-Fi Locations	""	""
CoH Parks and Recreation Locations & Attendance Totals	""	""
Affordable Connectivity Program Sign-ups for Hawaii	""	""
Affordable Housing Locations	""	""
Hazard Response Locations (Fire, Police, Sirens, Shelters)	""	""
Community Anchor Institutions	""	""
ALICE Data by United Way	""	""
COH Internet Network	April 10, 2023	Refer to Appendix 3.2
Cellular Towers	""	""
County Owned Parcels	""	""
COH Submitted Availability Challenges Locations	""	""
Land Ownership Shapefiles	""	""

Appendix 3.1

Exploring the Landscape of Broadband Equity & Inclusion

with the Department of Research and Development
at the County of Hawai‘i

Last Updated: March 15, 2023
February 7, 2023

Introduction

The County was first introduced to broadband equity and inclusion by destiny.

The County attended one of the very first State Broadband Hui meetings in 2020 at the height of the pandemic to better understand how to close the digital divide.



From then on, we have been passionately drawn to adding value to community programs, services, and addressing digital equity and inclusion.

There are two parts to this StoryMap:

1. Share information about where internet services do not exist and propose eligible project areas for Broadband, Equity, Access, and Deployment (BEAD) Program allocations to be considered in [University of Hawai'i's 5-Year Action Plan](#).
2. Share a centralized list all the County projects

*Links to Download all data are at the bottom of this StoryMap.

PART 1: ELIGIBLE PROJECTS FOR BEAD PROGRAM



Eligible Projects Include:

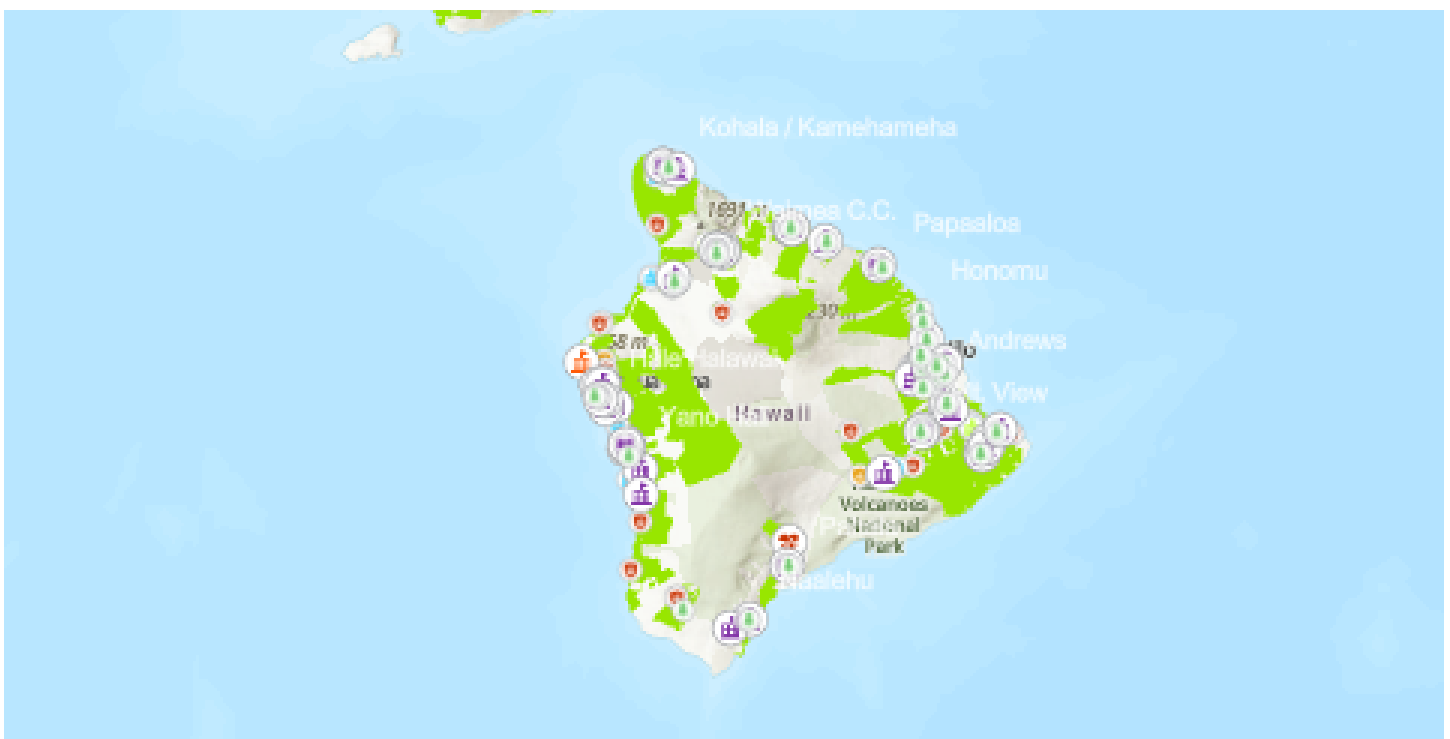
1. Planning for the deployment of high-speed Internet, including conducting research, collecting data, outreach,

- and training.
2. Deploying or upgrading Internet in unserved or underserved areas or improving service to community anchor organizations
 3. Installing Internet and Wi-Fi in multi-unit residential buildings
 4. Supporting adoption and digital equity programs
 5. Supporting workforce development programs and vocational training programs.

The map shows areas where fixed broadband service is available and where it is not available according to the [FCC's National Broadband Map](#).

Council Districts 1, 5, & 6 experience the lowest rates of having unserved access to 25/3 Mbps. However, even having access to internet does not define connectivity.

The State GIS Division of Office and Planning developed a [Connectivity Summary Dashboard](#) using a [Survey](#) developed by 'Auamo Collaborative.



Community Anchor Institutions & Hazard

Resiliency

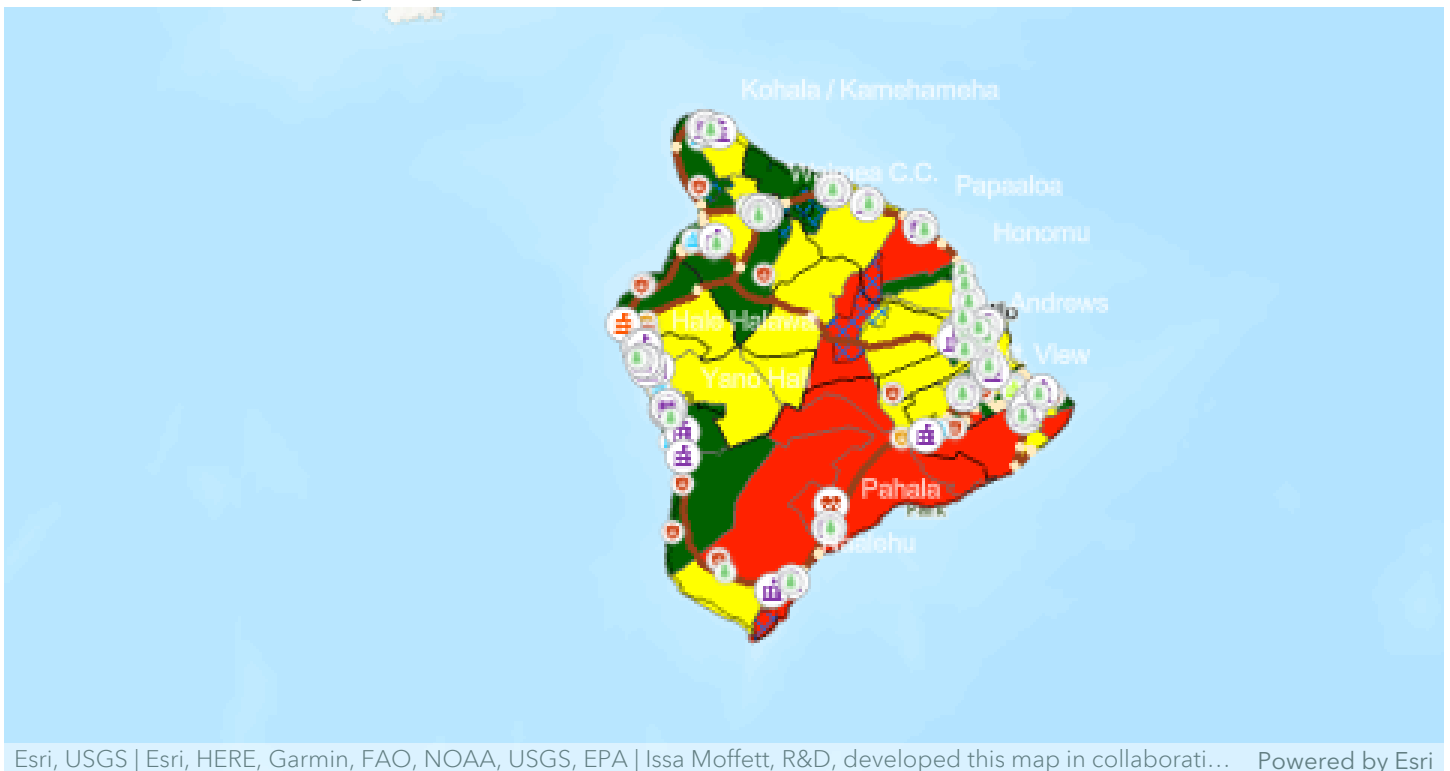
Community anchor institutions include schools (PK-12, university, college, other), libraries, medical/healthcare, public safety, community support-government, and other community support-nongovernmental organizations.

Many of these locations play a key role in providing services before, during, and after a natural disaster or an emergency.

Understanding which community anchor institutions does not have access to reliable, high-speed Internet access is the first step to planning.

Vibrant Hawai'i has also developed an excellent map showcasing community anchor institutions for their Resiliency Hubs, amongst a robust collection of other layers. [See here for more information.](#)

Refer to the bottom left-hand corner for legend details about the map.



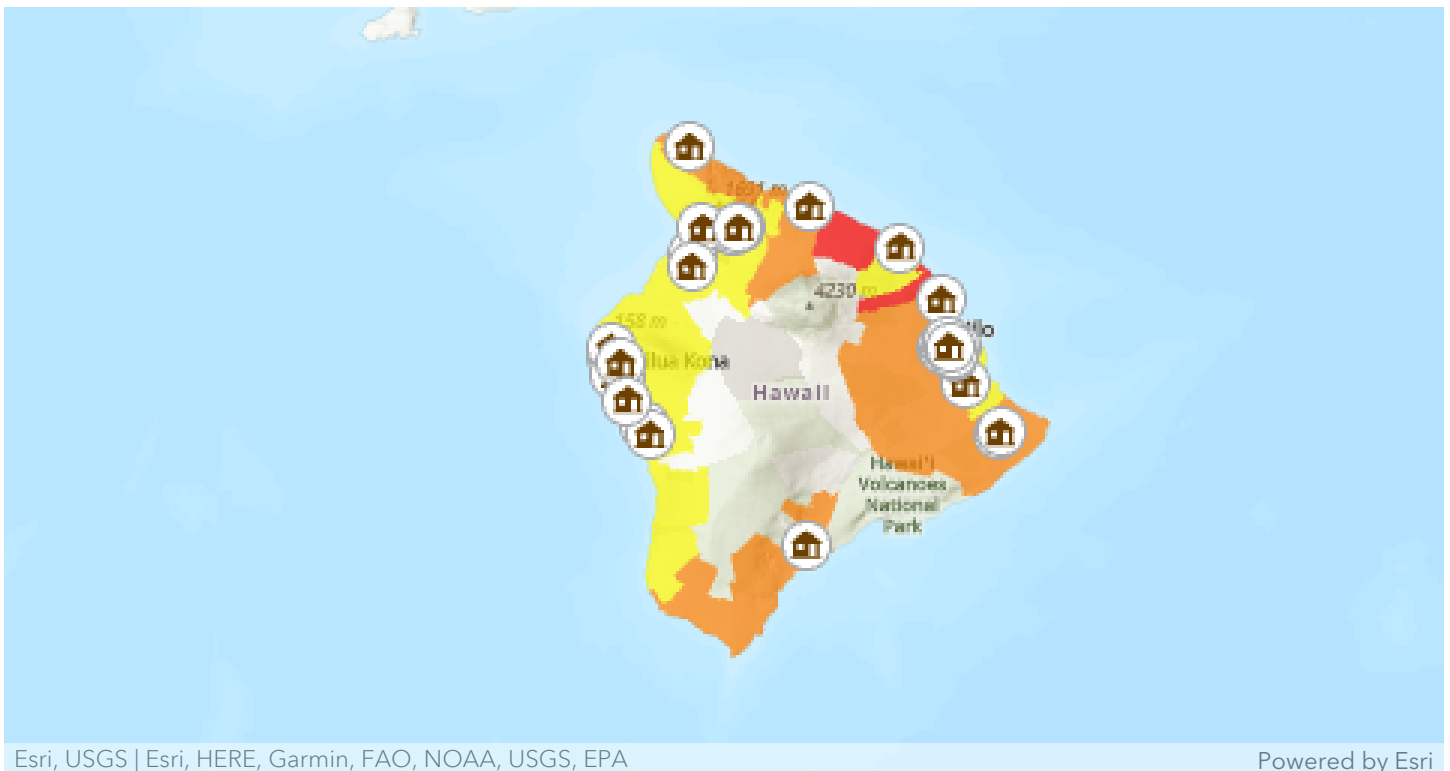
Social Vulnerability Index (SVI)

FEMA (2022) defines social vulnerability as "the susceptibility of social groups to the adverse impacts of natural hazards, including disproportionate death, injury, loss, or disruption of livelihood."

The following map shows low, medium, and high-risk census tracts. The top 10 areas of concern are in red. The map also shows relative positioning of community anchor institutions and Department of Hawaiian Homeland parcels.

The SVI was developed by the Pacific Disaster Center (2019) and Focused Planning Solutions (2022), for the Kilauea 2018 Eruption Recovery efforts and redeveloped for the Integrated Climate Action Plan.

Refer to legend icon (bottom left corner of map) for details on SVI Index Scoring.

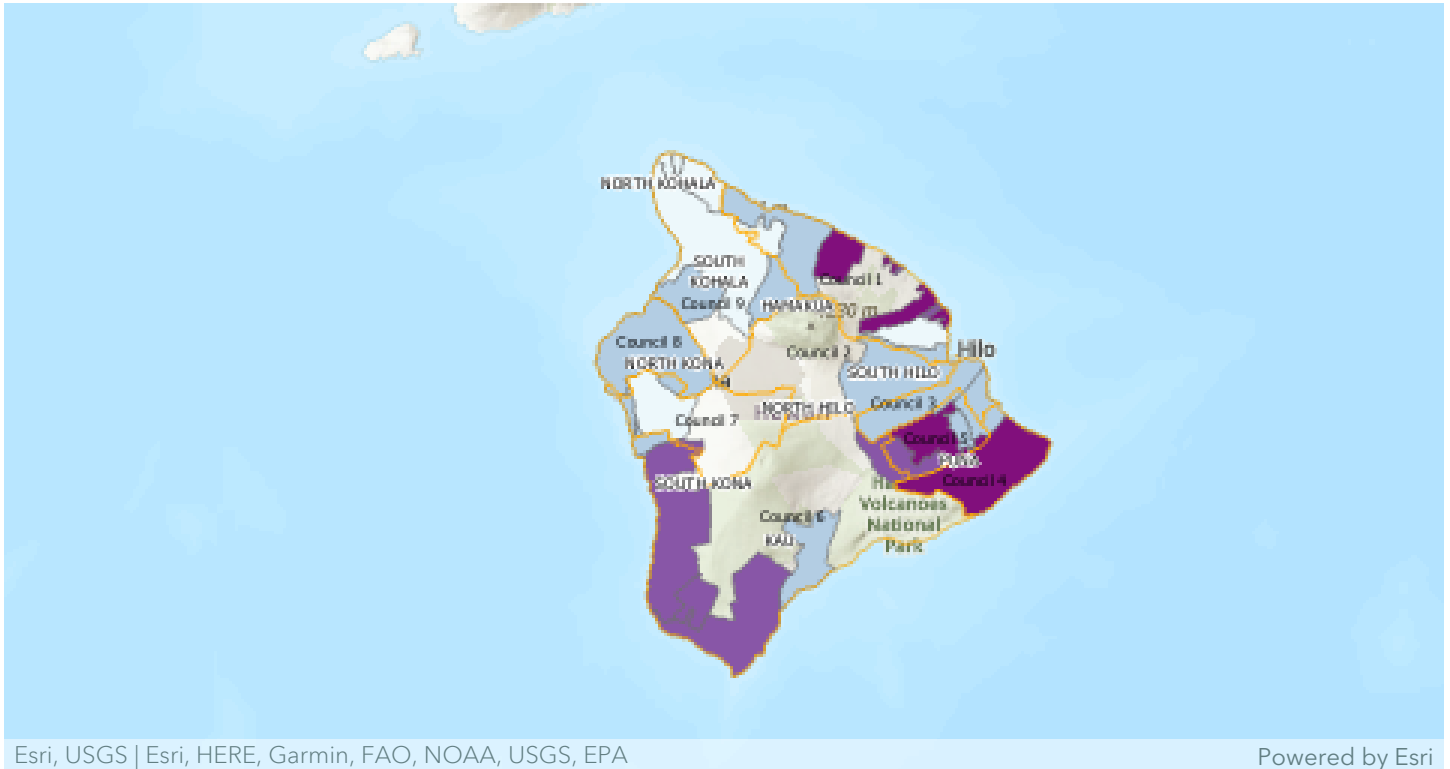


Affordable Housing & Broadband

Providing broadband infrastructure access at all affordable housing locations is a priority for the State (2022 [S.B. No. 2479](#)) as well as a priority for Hawai‘ County.

Understanding rates to connection and access to broadband services is underway. Addressing Affordable Housing Connection Rates and providing solutions multi-housing units is a recommended priority.

Refer to legend icon (bottom left corner of map) for explanation of icons and color pattern.

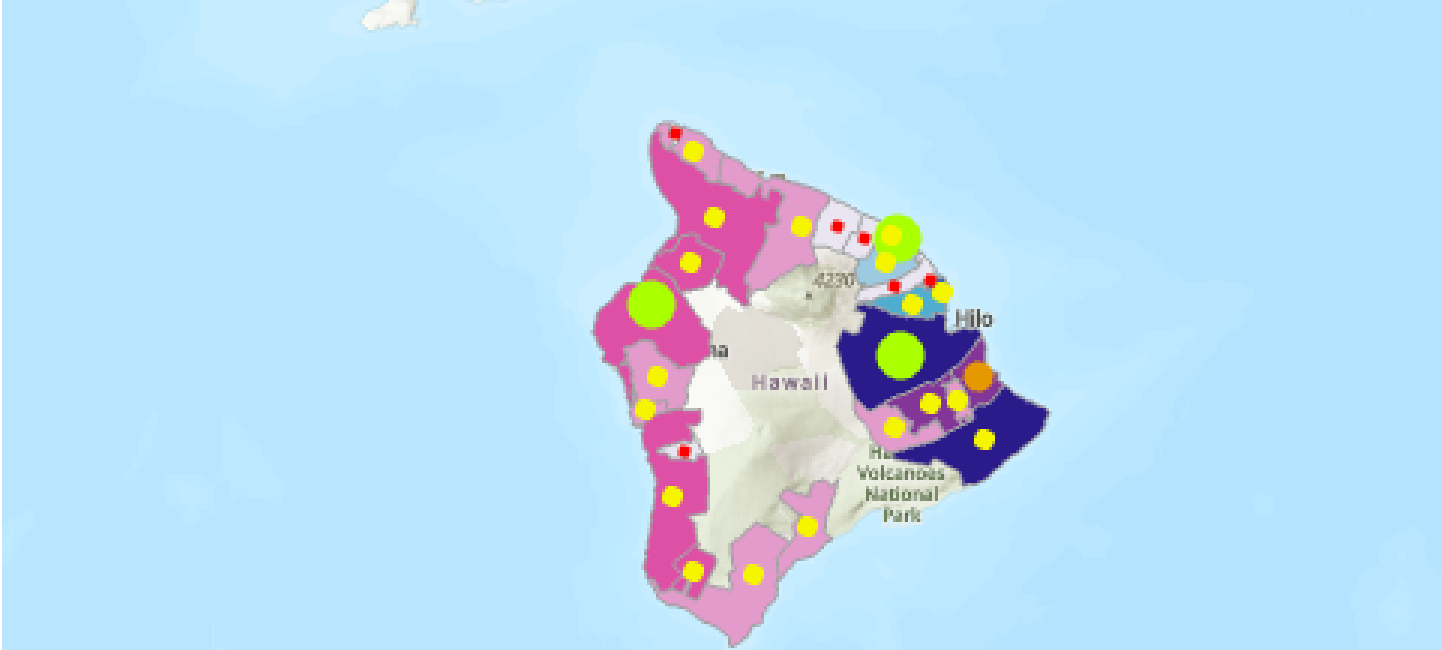


ALICE HAWAII

Aloha United Way defines ALICE, Asset Limited, Income Constrained, and Employed, as "ALICE represents the growing number of households who are above the Federal Poverty Line, do not qualify for many government assistance programs, and who are working yet cannot afford basic necessities to remain stable and self-sufficient."

Council Districts 1, 4, & 5 have the most ALICE households. Developing BEAD Program projects in this area is priority.

Refer to legend icon (bottom left corner of map) for details on ALICE households (normalized by total households) by zip code, featuring council districts.



Esri, USGS | Esri, HERE, Garmin, FAO, NOAA, USGS, EPA

Powered by Esri

Digital Equity Programs and Affordable Connectivity Program

From January 2022 to October 2022, there were ~5.3k subscribers and 440 internet connected devices distributed through the [Affordable Connectivity Program \(ACP\)](#), which is a federal program that assists low-income households with the costs of broadband service and internet-connected devices.

With the BEAD funding allocation, local projects are prime to help expand outreach and digital equity programs to areas with high enrollment rates.

ACP provides a \$30-a-month discount to eligible households (\$75 a month for households on Hawaiian Homelands). A number of members of HIDEC are focused on outreach.

Refer to legend icon (bottom left corner of map) for details on population by ACP subscribers (normalized by population).

PART 2: COUNTY PROJECTS

Hawai'i Island Digital Equity Coalition (HIDEC)

HIDEC was formed by over two dozen community organizations (refer to Figure. 1) in September 2022. Members attend regular occurring meetings focused on digital equity and inclusion.

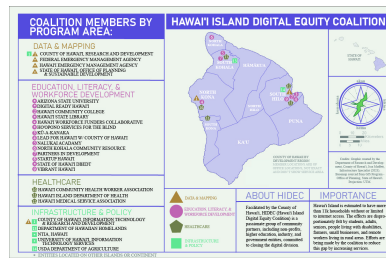
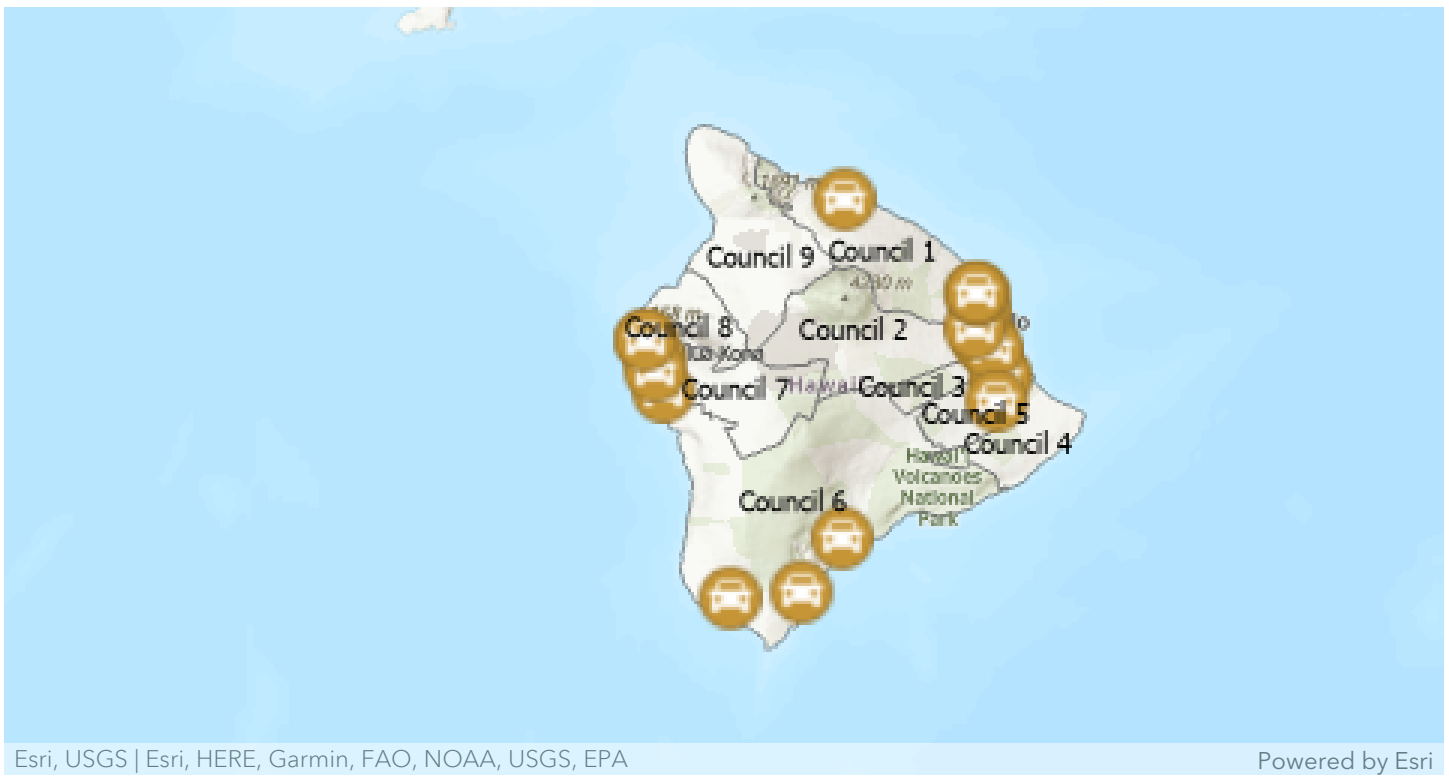


Figure 1: HIDEC Members

To learn more about HIDEC, please visit our website or contact the [Digital Equity Specialist](#) and/or visit our website [here](#).

Annual Digital Inclusion Week

The 2022 [Digital Inclusion Week](#) was planned by the County and hosted by the [Hilo Public Library](#). The event's aim was to examine local digital equity issues and elevate broadband initiatives. The next DIW will be October 2023. Reach out to get involved.



Wi-Fi On Wheels [2020]

One of the first projects the County got involved in was at the height of the pandemic. Schools were closed and students and

teachers were having trouble accessing their lessons.

In 2020, the Department of Research and Development opened a funding opportunity called Innovation and COVID-19 Economic Recovery Grants. A selected recipient was the Hawai'i County Economic Opportunity Council (HCEOC) who was awarded to support a Mobile Wi-Fi Connectivity Enhancement Program with [HawaiiKidsCan](#).

HCEOC's program provided Internet and device usage to 411 students (ages 5 to 22), 187 seniors, 156 disabled individuals, and 187 low-to-medium income families.

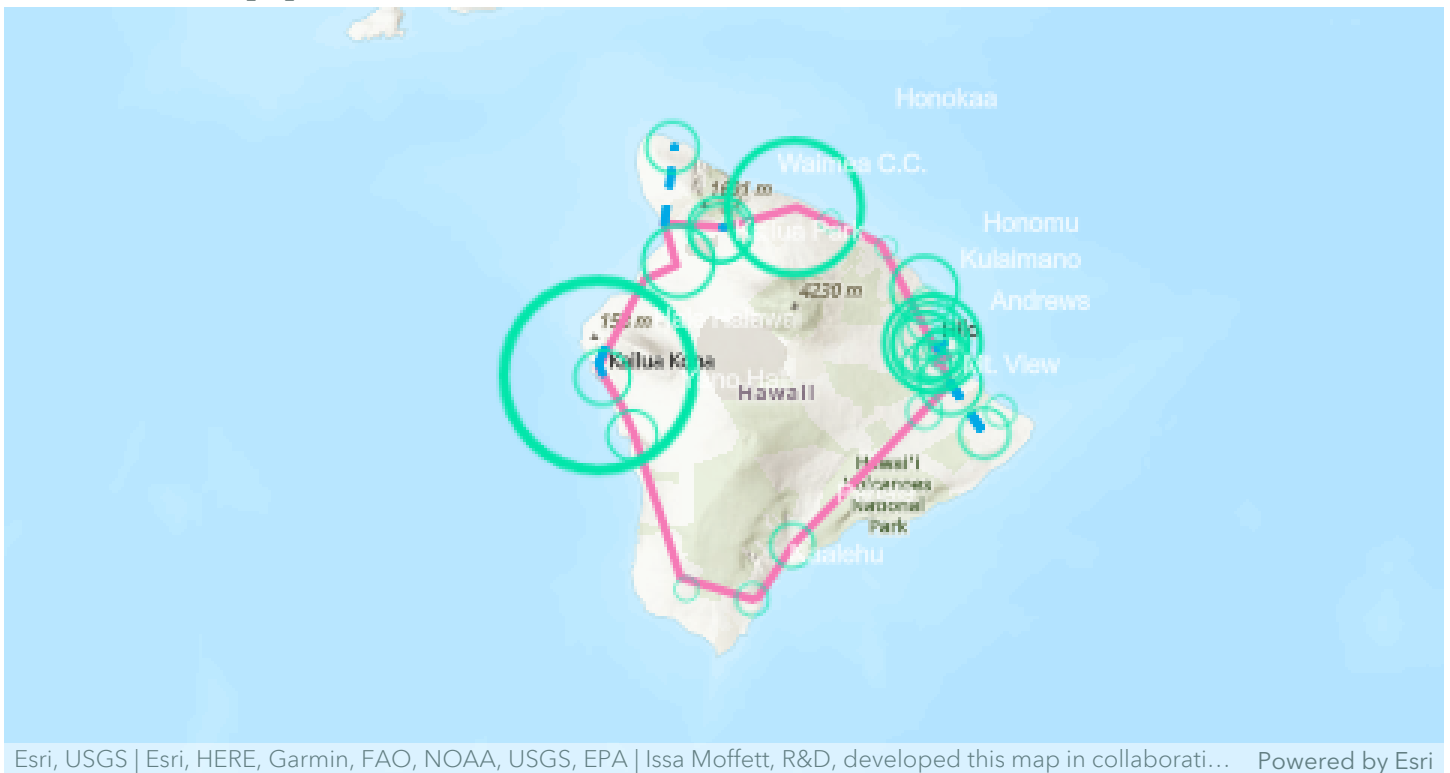
The map shows all the locations where free Internet services were provided.



Complete County Fiber Rings [2022]

The County finished a fiber ring in 2022. This ring serves as a backbone to connect County departments with telecommunication services. This is integral to providing services, workforce support, community Wi-Fi, hazard mitigation and response, and more.

This milestone provides an opportunity to expand and connect more remote & popular community locations to the Internet. This will enable the County and partners to improve community services (telehealth, digital literacy programs, etc.) in communities situated far from the main centers of population.



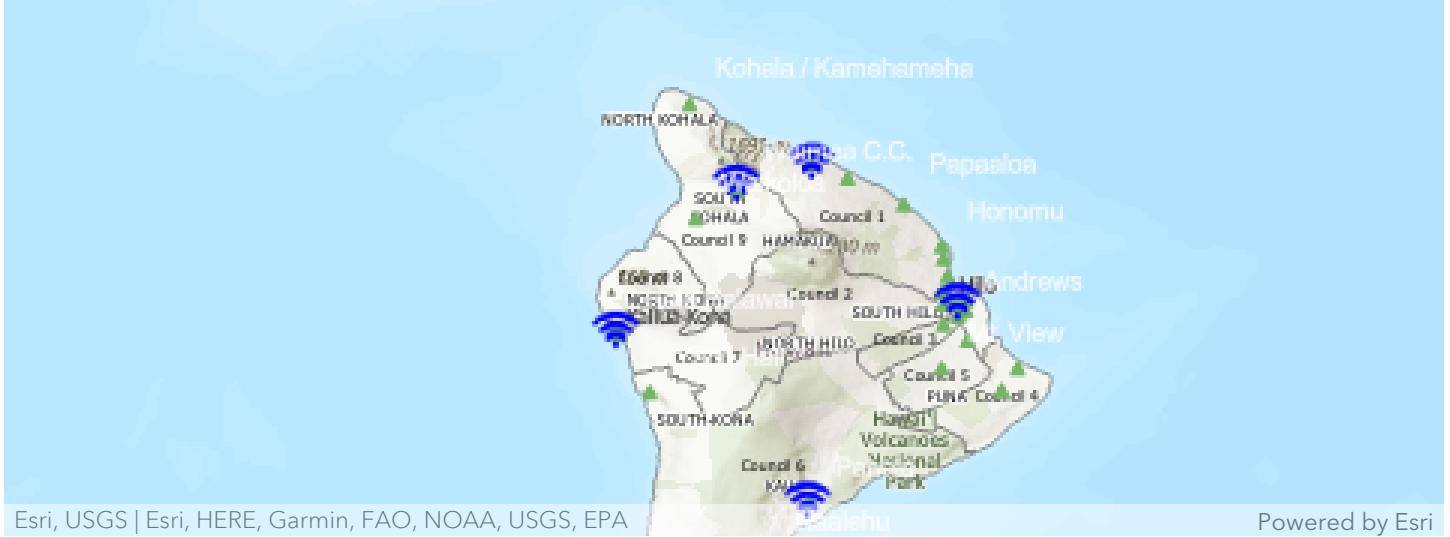
Esri, USGS | Esri, HERE, Garmin, FAO, NOAA, USGS, EPA | Issa Moffett, R&D, developed this map in collaborati... Powered by Esri

Parks & Recreation's Community Hubs

Team sports practice, community meetings, after-school events, arts & crafts, drama & storytelling are all happenings associated with the County's Parks & Recreation sites.

Having completed and mapped the County's fiber ring, we were also able to map the total annual attendance at events parks.

This information helps us understand which sites are not connected to Wi-Fi Internet and which sites to prioritize for connection.



Free Community Wi-Fi Project

As of February 2023, there are 5 County locations with public Wi-Fi Internet locations provided at no cost to the community.

The County is looking to expand the locations of public Wi-Fi Internet to all Parks and Recreation sites with community centers.

Refer to legend icon (bottom left corner of map) for explanation of each of the map icons.

Sources: Download Data

1. CoH: Parks and Recreation Locations & Attendance Totals (contact for file)
2. CoH: Social Vulnerability Index and Population (contact for file)
3. CoH: Community Wi-Fi Locations (contact for file)
4. USAC: [Affordable Connectivity Program Sign-ups](#)
5. FCC: [Internet Availability Data](#)
6. SoH: [Affordable Housing Locations](#)
7. SoH: [Hazard Response Locations \(Fire, Police, Sirens, Shelters\)](#)
8. SoH: [Community Anchor Institutions](#)
9. United Way: [ALICE Data Sheet \(2010 to 2018\)](#)

Contact Us

For additional information, please visit the County's

Broadband webpage at:

<https://www.rd.hawaiicounty.gov/economic-development/broadband>.

[County Broadband Page](#)

We have an open-door policy and welcome discourse, comment, and input on these projects. To set up a time to chat, contact Shola Kahiapo-Trevino, Digital Equity Specialist, at skahiapo-trevino@hawaiicounty.gov and Issa Moffett, Broadband Mapping Project Manager, at issa.moffett@hawaiicounty.gov.

[Email Digital Equity Specialist](#)

[Email Broadband Project Manager](#)

StoryMap Designed by Issa Moffett
(2023)

Appendix 3.2

Moffett, Karissa (Issa)

From: Moffett, Karissa (Issa)
Sent: Thursday, December 15, 2022 12:39 PM
To: 'Ternus, Amber K'; Levy, Jonathan I; Beilin, Philip; Beasley, Michelle; Saito, Riley; Buto, Arthur J; Adams, Douglass; Dykstra, Elizabeth; Kawaihae, Niniau; Krystal Lopez; Lum, Burt QC; Brad Kaleo Bennett; Niniau Simmons; Yoshimi, Garret; Tolbert, Madalyn; michael.commonson@fema.dhs.gov; Reimer, Tricia; Chikasuye, Katia A; makenaka@hawaii.edu; Kahiapo-Trevino, Shola K; Wong Lau, Lorinda G; gwenj@hawaii.edu; 'Daniel Smith'; 'Robert Martin'; Marceline Naff
Subject: RE: Broadband Hui: Data Mapping Subcommittee
Attachments: BroadbandSubcommitteeMinutes121522.pdf; ServedUnserved_CountyofHawaii_FCCBroadband_12152022.pdf

Hi all,

Thank you for joining this morning and providing insight, comments, and support. I'm attaching the meeting notes (thanks Tricia!) as well as a slide from my presentation of where broadband is and is not available on Hawaii Island, according to the public FCC fabric information.

Issa Moffett
Infrastructure Specialist
Broadband Mapping Project Manager
Research and Development
County of Hawaii

-----Original Appointment-----

From: Moffett, Karissa (Issa)
Sent: Wednesday, December 7, 2022 5:03 PM
To: Moffett, Karissa (Issa); Ternus, Amber K; Levy, Jonathan I; Beilin, Philip; Beasley, Michelle; Saito, Riley; Buto, Arthur J; Adams, Douglass; Dykstra, Elizabeth; Kawaihae, Niniau; Krystal Lopez; Lum, Burt QC; Brad Kaleo Bennett; Niniau Simmons; Yoshimi, Garret; Tolbert, Madalyn; michael.commonson@fema.dhs.gov; Reimer, Tricia; Chikasuye, Katia A; makenaka@hawaii.edu; Kahiapo-Trevino, Shola K; Wong Lau, Lorinda G; gwenj@hawaii.edu; Daniel Smith; Robert Martin; Marceline Naff
Subject: Broadband Hui: Data Mapping Subcommittee
When: Thursday, December 15, 2022 9:30 AM-10:30 AM (UTC-10:00) Hawaii.
Where: Zoom

Hi All,

We recently received a dataset from CostQuest containing the broadband serviceable locations, as well as the [FCC Fabric Mapping Data](#). Scheduling a meeting for next week, Thursday, December 15th at 9:30am HST. Our focus for this meeting is to share insights on how we are making the best the data, [submitting challenges](#), and honestly, offering moral support. Zoom link is below.

Issa Moffett
Infrastructure Specialist
Broadband Mapping Project Manager
Research and Development
County of Hawaii

R&D County of Hawaii is inviting you to a scheduled ZoomGov meeting.

Topic: Broadband Data Mapping

Time: Dec 15, 2022 09:35 AM Hawaii

Join ZoomGov Meeting

<https://www.zoomgov.com/j/1610640214?pwd=Z1ViZmZNV013KzhMV0pLaDh4MFIWZz09>

Meeting ID: 161 064 0214

Passcode: 421455

One tap mobile

+16692545252,,1610640214#,,,,*421455# US (San Jose)

+16692161590,,1610640214#,,,,*421455# US (San Jose)

Dial by your location

+1 669 254 5252 US (San Jose)

+1 669 216 1590 US (San Jose)

+1 551 285 1373 US

+1 646 828 7666 US (New York)

Meeting ID: 161 064 0214

Passcode: 421455

Find your local number: <https://www.zoomgov.com/u/ac23cNIJBc>