## Broadband Infrastructure and Digital Equity: Building Digital Foundations for Hawai'i's Communities Session Q&A June 23, 2022

- 1. Among the current internet service providers, are there plans to expand and increase the bandwidth?
  - a. While expansion of capability and capacity of the current internet service providers is not directly supported by the set of federal programs, strategic investments in middle mile and last mile infrastructure should encourage investment by internet service providers in their own infrastructure to improve overall capability and capacity of their service offerings. In the absence of such action, the lowered cost of entry to the market resulting from the federal investments should encourage competitive providers to enter the Hawaii market and provide market forces to improve services to consumers.
- 2. Are there plans to create computer literacy courses for seniors in the County operated senior centers?
  - a. This is an area that we can definitely work to encourage as well as directly fund via the NTIA BEAD program, and the NTIA DE programs. General workforce IT literacy programs should also serve to help support seniors in our communities. As mentioned in our forum, Lanakila Pacific does offer digital literacy courses and programs to support seniors.
- 3. Who will decide what resources to provide for these centers?
  - a. The process will center on both the needs and hurdles to adoption identified in the various planning, outreach and community engagement efforts, as well as identification of capacity available to deliver programs in and around various communities.
- 4. How can we use this digital transformation to create open access to lessons, assignments, student work, grades, attendance, test scores, credits, and more? Currently the several different systems that are not integrated make it difficult for families to see the full picture of their students' school experience. And the lack of integration wastes valuable teacher time. Current HI DOE plans do NOT show a path to true integration of systems and data. And focus on family communication and engagement is not adequate. As a foster parent, I have further seen that CWS (Child Welfare Services) is not connected to what HI DOE data is now available. Therefore, CWS does not have accurate info on foster students to share with prospective parents. HI DOE and CWS systems should have a connection.
  - a. As part of the systematic statewide outreach, we will also engage the Hawaii Department of Education to help ensure no group is left behind in the execution of programs.
- 5. In Hawaii, is the challenge availability of broadband or is it affordability? In other words, if it was affordable, would folks be able to get broadband where they need it?
  - a. Aloha Nam. Great question. In 2018 during the development of Hawaii's state telehealth plan we conducted focus groups and interviews in every county. What

we learned is all of these—consumers were concerned about affordability, reliability, and availability of broadband. BEAD and DE funding will address all 3.

- b. Adding to Laura's note, we have all of these cases in various locations throughout Hawaii. While there are areas that have less than optimum service (as Kaala noted in his discussion), there are also affordability issues in many of our communities, including those that are houseless or living in difficult residential situations. The range of programs should help to address many of these barriers, including with the community hub strategy, similar in part to the successful example of the Hawaii Literacy program.
- 6. What tools do you use to measure internet speeds at the areas you are visiting?
  - a. Ookla is commonly used and is preferred by NTIA, alongside their in-house speed test.
- 7. Will new fiber backbone/Middle Mile be open access?
  - a. New builds that we fund directly will be open access (100% public funded). Work that is shared funding will also be expected to have at least some of the facilities available as open access.
- 8. Are there any Native Hawaii Organizations (NHO) involved in that or the NHO Association?
  - a. For the Tribal Broadband Connectivity program, the funding will be via DHHL to be used to benefit the Native Hawaiian community. For all the statewide equity and literacy programs, the net will be cast very widely to get as many organizations as possible engaged.
- 9. During the process of connectivity development, what controls, measures, auditing, and contingency plans are being considered if a provider quotes, documents, promises, et al... and fails to deliver quality speeds and performance to established specifications? Are pre-approval processes going to be established throughout these projects to maintain accountability?
  - a. This one is primarily managed through direct contracting for delivery of services the hard part is the consumer services where the consumer really votes with their dollars; this is where having competitive services are critical to ensure the market forces work correctly.
- 10. Related to Digital Equity, the deeper considerations of Blockchain technology could provide economic development and social impact via Peer to Peer Energy Trading, Smart Contracts, Network Cybersecurity, Distributed Voting Systems, Carbon Trading/Offset Mgt, IoT, Healthcare, and many other community efforts. Aside from training to use the basics, what efforts will Digital Equity programs/projects make to advance greater skills and economic development opportunities?
  - a. The digital equity program will not only look at the entry level learning but also encompass the spectrum of upskilling to diversify Hawaii into the digital economy. The Digital Equity Act looks at enabling "covered populations" to use the technologies that will include broadband access, digital literacy, computer literacy, access to devices and affordable programs. Through the BEAD program and other federal programs going to UH, DOE, Department of Labor, State

Libraries. etc. will develop pipelines for the workforce to find jobs in the digital economy.

- 11. What do you see as the dimensions of the equity part? Numbers? Cost per individual/household intrusional hours, devices, dollars?
  - a. Through our Workforce Resilience Initiative, we are implementing a digital skills readiness survey to help establish a baseline for companies to assess their employees digital readiness. We can then track improvement. For our covered populations we are looking at socio-economic data that will help correlate digital literacy and broadband access with barriers that impact adoption. We are at an early stage in this analysis but we recognize the importance of correlating socio-economic factors to develop the right kind of digital equity programs and the delivery mechanism to those communities. Thirdly, we are working with DBEDT's Research, Economic Analysis Division (READ) to assess the key metrics that determine Hawaii's digital economy. With that we can then measure how our digital equity programs are contributing to the digital economy.
  - b. In addition to the quantitative barriers (e.g. cost of service and lack of access to equipment), there are additional qualitative barriers that are equally as impactful to the dimensions of digital equity. This looks like digital readiness, which includes digital literacy skills and trust in digital platforms, and relevancy (i.e. perceiving a lack of necessity in digital and broadband adoption in one's life).
- 12. Have Spectrum and Hawaiian Telcom shared their service coverage saturation data? Also, 5G and LTE might be a viable option in really hard to reach areas with a wireless gateway/hotspot.
  - a. The carriers will generally not share saturation and load data (that's what I think you're asking). And yes, the alternatives are helpful, especially if folks know what's available.
- 13. One other note here The NHOs themselves are non-profits which do give backs to the Native Hawaiian Community so that could be another way to magnify the effort by having those NHO non-profits do some fund matching
  - Definitely need to look to leverage and broadly collaborate with many of the other programs that are already delivering services and supports to our communities. Together is always better.