

2024

# Hawai'i Annual Code Challenge (HACC)

<b>Challenge Title</b>	Building a Digital Equity Dashboard for Hawaii
<b>Department / Organization</b>	HBDEO
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<b>The Challenge</b>	
<b>Describe situation to be solved</b>	Design and develop a comprehensive digital equity dashboard that provides real-time data (if available) and insights into the state of digital equity across Hawaii. This dashboard should be accessible to both policymakers and the general public, enabling them to track progress, identify areas of need, and evaluate the effectiveness of ongoing digital equity initiatives.
<b>Preconditions</b> <i>(How does it work now)</i>	<ol style="list-style-type: none"><li>1. There are various specific dashboards like the Connectivity Summary and the Projects Tracker.</li><li>2. There are independent DE projects rolling out in parallel and not rolling up anywhere.</li><li>3. There are studies like the Digital Readiness and Literacy Study, the Digital Economy Study and the Rural Health Disparities that can be used as reference material and for analysis.</li></ol>
<b>Assumptions/Issues</b> <i>(list any conditions that could impact the solution)</i>	<ol style="list-style-type: none"><li>1. Assume this dashboard will be the frontend to the data analytic tools, APIs, reports and GIS maps on the backend.</li></ol>
<b>Current Approach</b> <i>(how is situation currently being handled)</i>	<ol style="list-style-type: none"><li>1. Currently there is no unifying frontend.</li></ol>
<b>Users</b> <i>(Who would use the application - employees or constituents or both? How many users would there be?)</i>	Target Audience: This dashboard will be used by state and local government officials, nonprofits, and community leaders to make informed decisions about where to allocate resources and how to tailor programs to better meet the needs of Hawaii's diverse population.

<b>Business Rules</b>	<p>Key Features:</p> <ol style="list-style-type: none"> <li>1. Geographical Breakdown: Provide data visualization at various geographic levels (statewide, by island, county, or even specific communities) to show disparities in broadband access, device availability, and digital literacy.</li> <li>2. Digital Literacy Tracking: Integrate data on digital literacy programs, participation rates, and outcomes to highlight areas where more education and training are needed.</li> <li>3. Device Access and Affordability: Show metrics on the availability and affordability of digital devices across different communities, including any gaps in access among covered populations.</li> <li>4. Broadband Connectivity: Map out broadband connectivity levels, highlighting areas with limited or no access and tracking improvements over time.</li> <li>5. Impact of Digital Equity Initiatives: Include a feature that allows for the monitoring and evaluation of state and local initiatives aimed at closing the digital divide, providing data on the reach and effectiveness of these programs.</li> <li>1. Community Feedback Loop: Incorporate a mechanism for community members to provide feedback on their digital equity needs and experiences, ensuring the dashboard reflects on-the-ground realities.</li> </ol>
<b>Special Requirements</b>	<p>Identify any special non-functional requirements, such legal, privacy or performance issues to be considered during design or implementation</p>
<b>Technical Platforms</b> <i>(in use or desired to be used)</i>	<p>ESRI WordPress</p>
<b>Data set to be used or collected</b>	<ul style="list-style-type: none"> <li>● Digital Equity Plan: <a href="https://broadband.hawaii.gov/digitalequityplan/">https://broadband.hawaii.gov/digitalequityplan/</a></li> <li>● HBDEO Open Data Portal: <a href="https://opendata.hawaii.gov/organization/hbdeo">https://opendata.hawaii.gov/organization/hbdeo</a></li> <li>● Digital Equity Project Tracker Viewer: <a href="https://histategis.maps.arcgis.com/apps/instant/basic/index.html?appid=675cd1c7b622456fab5d73955a52d4e5">https://histategis.maps.arcgis.com/apps/instant/basic/index.html?appid=675cd1c7b622456fab5d73955a52d4e5</a></li> <li>● Digital Equity Project Tracker Dashboard: <a href="https://histategis.maps.arcgis.com/apps/dashboards/2f353a6f35b94438b475126aa0f6f07e">https://histategis.maps.arcgis.com/apps/dashboards/2f353a6f35b94438b475126aa0f6f07e</a></li> <li>● Connectivity Summary Dashboard: <a href="https://www.arcgis.com/apps/dashboards/33d942b438d448e59d389be6d4e3953e">https://www.arcgis.com/apps/dashboards/33d942b438d448e59d389be6d4e3953e</a></li> <li>● Rural Health Disparities: <a href="https://uhero.hawaii.edu/rural-health-disparities-in-hawaii/">https://uhero.hawaii.edu/rural-health-disparities-in-hawaii/</a></li> <li>● Other datasets as discovered</li> </ul>

<b>Data set calculations or reporting needs</b>	TBD
<b>Solution Road Map</b>	
<b>Basic Flow</b> <i>(steps of user action/system response)</i>	<ol style="list-style-type: none"> <li>1. This site would be the statewide reference for digital equity projects and the measurable objectives to achieve the goal of digital equity.</li> <li>2. A user can go to this site and find out status of projects, money being spent, areas most affected, etc.</li> </ol>
<b>Goal of Solution</b>	To provide a user-friendly, easily navigable frontend for users to refer to for the latest on Digital Equity initiatives.
<b>Business Value</b> <i>(potential financial or time savings)</i>	This challenge aligns with the objectives outlined in the Hawaii Digital Equity Plan and leverages the extensive data and community insights already gathered to drive meaningful action toward digital equity across the state.
<b>Success Scenario</b> <i>(how you know a solution is working)</i>	<p>Expected Outcomes:</p> <ul style="list-style-type: none"> <li>• A clear, user-friendly interface that helps stakeholders easily understand and monitor digital equity across Hawaii.</li> <li>• Identification of critical gaps in digital access and literacy, enabling targeted interventions.</li> <li>• A platform that fosters transparency and community engagement in digital equity efforts.</li> </ul>
<b>To be completed by the HACC Planning Committee</b>	
<b>Community/Industry Data Available</b>	
<b>Potential Community/Industry Co-Sponsors</b>	