HAWAI'I DATA LANDSCAPE: From Better Data to Better Outcomes

Hawaii Data Collaborative
WHY DATA AND EVIDENCE MATTER FOR HAWAI’I IN 2021 & BEYOND

The COVID crisis has been extremely difficult for so many residents, families, and communities across Hawai’i, with impacts across nearly every aspect of daily life. Those working to provide support continue to be challenged to understand how to deploy limited resources where they are most needed. In the past year, we have supported partners struggling to understand:

- Post-pandemic food insecurity
- Unmet demand for childcare
- Shifting economic realities for families, and corresponding gaps in financial support
- Communities where households are most at risk of eviction
- Racial and ethnic inequities in the distribution of federal resources

Our partnerships to address these topics have revealed fundamental data challenges, with clear opportunities to do better. The COVID crisis has raised awareness of the importance of timely accessible data, while revealing troubling limitations in our ability to collect new data, and mobilize existing data, in service of timely decision making.

Even with a shared urgency to address data shortfalls, there are clear systemic roadblocks that cannot be addressed overnight.

As we look forward with optimism that the COVID pandemic will soon be in the past, we must recognize the challenges we face in the months and years ahead to ensure that Hawai’i’s households and communities are not left behind. Recovering from this crisis will take years, requiring unprecedented collaboration across government, private sector, non-profit organizations, and communities. We believe that shared access to robust, timely data will be fundamental to the success of these collaborations.

We need more timely data. We need data that allows us to identify residents, families, and communities in need and target services effectively. We need data that helps us assess and prioritize programs and services in a dynamic environment that is changing daily. We must empower all stakeholders with the data and tools they need, while working to promote a thriving data culture that ensures we will be able to confront the challenges that lie ahead.

The report that follows is a summary of what the Hawaii Data Collaborative has learned directly, and indirectly through interviews with key stakeholders, about the data landscape in Hawai’i, offering a guide to moving forward. Our sincere hope is that this report catalyzes the collective and collaborative effort needed to foster a thriving data culture, ready to confront the challenges of 2021 and beyond.

Nick Redding, PhD
Executive Director
Hawaii Data Collaborative
In our discussions we have heard a range of definitions and perspectives on data and evidence. We will discuss those perspectives throughout this report. This section provides a high-level overview perspective on why data and evidence matter that we have developed through our experience.

What is Data?
Data is information that can be measured, collected, coded and analyzed. There are many forms of data and data collection. Even information that is viewed as subjective, such as how people are feeling, can be represented as data. Data by itself has no inherent meaning and without context can be easily misinterpreted.

What is Evidence?
Evidence is established when data has appropriate context, where data collection and analyses become information supporting an argument or hypothesis about something being objectively true.
Data and evidence are useful because together they inform our understanding of what is happening, why it is happening, and what we should do about it. This enables us to make better decisions which will lead to better outcomes for Hawai‘i.

What is happening?

Better Data

Better Evidence

Better Decisions

Better Outcomes

Why is it happening?

Did our actions have the expected outcomes?

What actions should we take (if any)?
The path from better data to better outcomes isn’t just about **data capacity** – it is also about **data culture**. How stakeholders use data to achieve outcomes matters just as much as access to data and analytic ability.

**Why Data Matters**

**Data Collectors** decide what information to collect, how it should be collected, what should be omitted or discarded, who to share the data with, and how often to share it.

**Data Evaluators** analyze and interpret data to create meaning and/or evidence from the data. They package and distribute studies, reports, articles, and other artifacts that convey their findings.

**Influencers + Decision Makers** use data and evidence to make decisions or influence decision makers to take action or maintain the status quo. These decisions often effect the provision of services, polices, resources, and programs.

**At-Risk + In-Need Residents** provide information about their needs and the effectiveness of services, policies, and programs.
Hawai‘i’s data landscape is represented by stakeholders each playing an important role in ensuring that data leads to better outcomes.

Stakeholders across sectors hold different views regarding how well Hawai‘i’s data landscape supports these roles.
In addition to working directly with partners, we spent the last few months of 2020 interviewing and surveying key stakeholders across the data and evidence landscape to understand their needs, ideas, desires, concerns, and challenges. Our interviews and workshops included discussions with stakeholders across Hawai‘i – data collectors, researchers, evaluators, leaders, influencers, decisions makers, and community advocates.

This work made clear the challenge of moving from better data to better outcomes in Hawai‘i extends far beyond the implementation of more data collection mechanisms. Our discussions surfaced numerous systemic challenges that need to be addressed. The perspectives that follow are snapshots of the diverse narratives we heard from data stakeholders.
Illustrative perspectives that we heard:

**COMMUNITY ADVOCATES**
The problem isn’t a lack of data but a lack of connection and trust between those with the power to influence decisions and communities impacted by them.

**ECONOMISTS**
Analyzing and interpreting data incorrectly is worse than having no data. If you ask decision makers what data they need, they will tell you they need more granular data than necessary.

**MARKETERS**
There is not a compelling value proposition for sharing data. It’s a small market and doing so could compromise strategic positioning. The result is a fragmented and siloed data landscape where everyone is closed off.

**PHILANTHROPISTS**
We need data on what is working and what impact we are having on improving outcomes. Data that highlights what is bad does not inspire folks. People in Hawai’i have been told for a long time what is wrong with them.

**STATE LEGISLATORS**
Good data can be the difference between who gets healthcare and who doesn’t. We need more granular data to identify those in need.

**STATE CIVIL SERVANTS**
There is a strange mindset that as a civil servant my job is to protect data and guard it. As far as people who need that data and information, we do not trust them to share it openly.

**SOCIAL ENTREPRENEURS**
Sharing data that will forever be out there is risky. We are risk averse, so we don’t share our data... The data landscape in Hawai’i is disjointed, making it hard to drill down into the experience of specific populations.

**NON-PROFIT EXECUTIVES**
A lot of effort goes into collecting data that no one is acting on. I wish legislators would realize the manpower it takes to answer their questions. In 20 years of non-profit work, only one donor has ever called me to follow-up about our data.
Clearly, **perspectives about data and evidence in Hawai‘i are diverse and sometimes conflicting**. A government official we spoke to was adamant that they needed more granular data, while others were equally adamant that they had all the data they needed. Funders expressed frustration that grantees were not giving them enough data, while non-profits were equally frustrated by the lack of feedback from funders about the data they were providing.

Despite these often divergent perspectives, one common refrain that we heard was, in addition to fundamental data availability and capacity challenges, a lack of connection, communication, and trust created barriers to improving data sharing and transparency. From our work and conversations, it is clear that **the path to better data, evidence, decisions and outcomes will require collaborative engagement across data roles and perspectives**. In the following sections we dive deeper into the fundamental data capacity and data culture challenges we have observed, followed by actionable opportunities for transformation.
The capacity to collect, analyze, share and report data is foundational for effective data-driven decision making. Our outreach and experiences surfaced three primary challenges related to data capacities in Hawai‘i.

**Under-supported + Fragmented Government Infrastructure** results in poor data quality. Gaining the political will to invest significant resources in better data systems, and sufficient staffing is challenging.

**Lagging Data Collection + Reporting** does not support timely data and evidence-driven responses to emerging challenges, with the COVID-19 pandemic being the latest example.

**Incomplete Measures of Well-Being** are not sufficiently reflective of household and community circumstances, limiting the utility of data for stakeholders to align support to need.
Under-supported + Fragmented Government Data Infrastructure

Many government data systems are out-of-date and fragmented, with agencies often having limited data science capacity. The political will to invest significant resources in better data is challenged by the expense, and long-term nature of needed transformations.

What We’ve Heard
+ Existing government IT systems and infrastructure are outdated and produce lagging, varying quality datasets.
+ Data that is provided is often difficult to use due to formatting or coding of the data.
+ Limited data skills and insufficient funding impede data collection and sharing within and outside of government.
+ The state does not have enough human or technological capacity to build a picture of need and share insights effectively.
+ Systems to capture the needs of at-risk residents are often unable to keep pace with data needed to quickly inform decisions and guide action.
+ Policymakers need a clear value proposition for data – without this, there is limited political will to invest resources needed to build capacity across government agencies.

Quotes from Stakeholders
“It is ridiculous how much work it is to collect data from state agencies. It's in PDF's and text files. Every state agency collecting data in a similar way that also protects privacy would make it much better.”

“The government in many cases still relies on paper-based systems that require considerable human involvement. In the coming years, the people who are currently propping up these systems will be retiring. Without these people the systems reliant on hard paper copies will break.”
Lagging Data Collection and Reporting
Hawai’i’s data systems and stakeholders are not equipped to support timely data and evidence-driven responses to emerging challenges, or shocks such as that presented by the COVID pandemic.

What We’ve Heard

+ There is a need to create more direct and timely communication channels with at-risk groups to better understand their needs in order to effectively direct resources and services.
+ Under rapidly changing conditions, the typical datasets and reports that we rely on quickly become outdated.
+ Data collection mechanisms are not oriented to quickly collect and openly share data about community needs or identify those newly in-need who do not yet qualify for assistance.
+ More granular data on race and ethnicity is needed for providers to be able to better tailor services based on differences in values, priorities and social capital.
+ Remote communities that are more difficult to reach are underrepresented in existing datasets.

Quotes from Stakeholders

“The barriers to collecting data in Hawai’i are multiple. It is an island nation with a very diverse population, it’s hard to reach everyone, some communities do not have consistent internet, multimodal data collection is necessary…”

“There are enormous gaps that the Census doesn’t cover – housing, health, economic. A good study could actually collect real, actionable data on ALICE families.”
Incomplete Measures of Well-Being
Current measures of well-being* fall short in reflecting the circumstances of households and communities, challenging the ability of stakeholders to respond to need effectively.

What We’ve Heard

+ There is a disconnect between macro-level measures of well-being and the daily work that frontline organizations do; it is unclear if or how their work is impacting macro well-being measures.

+ Using mainland models to assess the well-being of Native Hawaiians and Pacific Islanders leads to gaps between the data and how these communities view well-being.

+ There is a recognition that social capital – the support provided and received through social connections – is a fundamental component of well-being in Hawai‘i, yet there is limited data (or approaches) to measure it.

+ Residents of Hawai‘i are resilient and leverage positive coping strategies and strong social capital to buffer stressors – these qualities are not measured and therefore are not included in analyses of community situation.

Quotes from Stakeholders

“The bridge from high level data like ALICE, to low level actionable data is missing. Data collection happens at the macro level while people live at the micro level.”

“Many organizations attempt to create models that incorporate Native Hawaiian values, but it isn’t sustained. To truly do justice to a process like this would require a paradigm change.”

*Well-being is a holistic indicator of quality of life that takes into account multiple factors including health, economic, social, education, environment, and culture.
The path to better data is not simply a function of capacity. Shared expectations of data transparency, evidence-based discussion, and data-driven decision making are necessary to ensure that data capacities translate to better outcomes. Informed by our conversations and partnerships, we offer three limitations of the current data culture in Hawai‘i.

**Lack of Trust, Communication, and Translation** creates barriers to data sharing, transparency, and decision making.

**Limited Forums for Feedback + Communication** about the data and evidence that is currently being collected and distributed, means less information for key stakeholders to do better.

**Resistance to Data-Driven Decisions** results in data more often being used to reinforce or justify, rather than shape, important decisions.
Barriers to Trust, Communication, and Translation

Issues with trust, communication, and translation are barriers to data sharing, transparency, and collaboration.

What We’ve Heard

+ There are few trusted mechanisms for collaborating across the government, social and civic sectors in the collection and sharing of data.
+ The data landscape in Hawai‘i is fragmented and siloed with minimal cross-pollination; there is often hesitation to share data due to personal and organizational risk.
+ Limited trust between marginalized communities and those with power and influence may be negatively impacting the quality of data for certain groups.
+ Regularly targeted communities experience survey fatigue and lack confidence that the results of data collection efforts will translate to addressing need.
+ The COVID pandemic revealed the need for improved data sharing and transparency while illuminating the risks to government stakeholders.
+ Government agencies and officials are often reluctant to share data externally for fear it will only have a negative impact on them.

Quotes from Stakeholders

“Banks, foundations, and government make no effort to collaborate in the collection or distribution of data. [We need]...a data repository free from politics that everyone can get behind.”

“There is a mindset among civil servants that they want to protect and defend data. This impedes transparency. They have not made the leap to believe that sharing data is important. They operate in the safe grey space of being shielded by inferior data infrastructure.”
Limited Forums for Feedback and Communication
There are limited forums for feedback and communication about the data and evidence that is currently being collected and distributed.

What We’ve Heard

+ Surveyed communities and frontline organizations are often unsure that the information they provided made a difference or if it was used at all.

+ Donors and funders do not always provide feedback about data and reports they request from grantees, leaving non-profits feeling in the dark about how or if the data is used.

+ Communities are tired of responding to surveys and providing data to donors and government officials who they feel consistently fail to respond to their needs.

+ Non-profits on the front lines have the most up to date information about their served demographic, but few forums for sharing this data.

+ Stakeholders, even those working in the same communities, are not frequently engaging one another with data, evidence, and information about changing conditions.

Quotes from Stakeholders

“It’s not about providers doing what the funder wants. It’s about them doing what the people they are serving need.”

“The COVID crisis is eroding modest progress that has been made (embedding listeners or community liaisons in organizations and departments). Now, people are saying that because the situation is urgent, “we know better” or “we have to make this decision” for you and outreach functions are getting cut.”
Resistance to Data-Driven Decision Making

There is reluctance in Hawai‘i to using data to make decisions; data is often used more to reinforce and gain support for decisions made, and less to shape decision-making.

What We’ve Heard

+ Given the many data capacity and culture challenges in Hawai‘i, there is doubt and skepticism about using data and evidence to make decisions.
+ Even when there is a willingness to use data, many leaders and influencers are not data fluent or are unsure how to implement evidence-based practices.
+ Non-profits in particular often lack the capacity to efficiently collect and analyze data that would shape programs.
+ Community organizations do not always see how the current data they are collecting is being used, which can lead to data collection being viewed as a burden that detracts from valuable program work.
+ Some non-profits view requests for data collection as a lack of trust from the donor, leading them to seek trust-based funding relationships free of data collection and reporting requirements.

Quotes from Stakeholders

“Suppose we have the data we need, there is still a gap between data analysts and decision makers, and between data visualization and political action.”

“Decision makers are often unable to conduct deep analysis of data and therefore rely on reports created by analysts. If they don’t understand these reports they rely on gut decisions.”
While we have identified many challenges to achieving better data for better outcomes, there are also actionable opportunities. Transformation will come from making data capacity progress, while working to foster a thriving data culture.
From our experiences and inspired by our conversations with key data stakeholders, we have identified multiple actionable opportunities to expand data capacities in Hawai‘i.

TRANSFORM GOVERNMENT DATA PRACTICES
Foster collaborations and the political will necessary to expand government data capacity including investing in needed infrastructure and platforms for data sharing.

ADDRESS DATA GAPS
Close the gap between the data needed to make decisions and currently available data - address gaps in timeliness, demographic specificity, and reach.

DEVELOP ACTIONABLE WELL-BEING DATA + EVIDENCE
Develop actionable data and measures of well-being that support decisions that lead to more effective outcomes.
OPPORTUNITIES

TRANSFORM GOVERNMENT DATA PRACTICES
Create the political will necessary to transform government data practices including investing in needed infrastructure and data sharing.

How Might We:
+ Advocate for the modernization of Hawai’i’s government data infrastructure and standards?
+ Communicate the value of good data with relevant government agencies and support them to strengthen data practices?
+ Help individuals in government at all levels use and provide data more efficiently and effectively?

Actionable Opportunities:
Create a Chief Data Officer (CDO) position for the State. The CDO would convene key community stakeholders to develop a government data strategic plan, and would work to execute the plan in coordination with State departments.

Resource and reinforce the intent of Hawai’i’s Open Data Law, Act 263 (2013), requiring State agencies to “use reasonable efforts to make appropriate and existing electronic data sets maintained by the department electronically available to the public through the State’s open data portal,” and mandate annual status updates to the legislature.

For times of urgent need, establish a highly-skilled floating data team within the Office of Enterprise Technology Services (ETS), with legal agreements worked out in advance, that provides critical capacity boosts to departments (or interfaces between departments).

Establish a blueprint for government, community, and donor-led efforts to conduct well-defined, time-limited, and goal-oriented data collection pilots.

Launch a private sector funded data fellowship program for State agencies. Agencies would apply to receive one or more data science fellows for a sufficient period of time to provide internal data capacity building support.
ADDRESS DATA GAPS

Close the gap between the data needed to make decisions and currently available data – address gaps in timeliness, demographic specificity, and reach.

How Might We:

+ Collect more frequent and granular data on ethnicity, race and identity?
+ Reduce the lag time between data collection and reporting?
+ Identify vulnerable residents and households who are not currently being captured within existing datasets?

Actionable Opportunities:

Resource the enhancement of systems for State agencies to be able to capture individual race/ethnicity data using a common standard appropriate for Hawai‘i’s population, such as the Hawai‘i Department of Health’s Race Reporting Guidelines, instead of relying upon federal reporting requirements.

Establish a weekly dashboard of requests for assistance received through resource support hotlines such as Hawai‘i CARES and Aloha United Way’s 211 helpline.

Establish a local data aggregator for combining employment, spending and other relevant real-time private sector economic and household financial data sources – similar to the national Opportunity Insights Economic Tracker platform.

Collaborate with relevant State agencies to develop a process for capturing data on households that apply for assistance but do not receive coverage – an accounting of unmet need.

Develop and launch a mobile app (or expand an existing program) for engaging Hawai‘i residents with regular pulse surveys collecting data on household circumstances, concerns and need.
Actionable Opportunities:

Elevate Native Hawaiian models of well being (e.g. Kūkulu Kumuhana) amongst other (predominantly western) models. Partner with community organizations, engaged non-profits and relevant government agencies to identify and take action on gaps in data collection and reporting identified.

Develop tool kits to guide and support community and service provider data collection – increasing alignment of data collection across projects for broader comparison and better insight.

Convene relevant data stakeholders to identify available indicators for an index of household financial health and establish a system for regular and timely reporting.

Establish a framework, dataset, and measures for capturing indicators of social capital within and between communities.

Improve public health data access, timeliness, and accessibility through health information exchange platforms by increasing provider participation, expanding the breadth of indicators captured (e.g. social determinants), and making aggregated data available for broader use.
There is no prescriptive path toward a stronger data culture for Hawai‘i. However, opportunities abound to encourage collaboration, build trust and empower stakeholders to advocate for the data and support needed.

ENHANCE DATA SHARING + TRANSPARENCY
De-risk the sharing of data and create a culture of trust, transparency and collaboration around data and evidence.

ESTABLISH FORUMS FOR FEEDBACK + COMMUNICATION
Establish data–based feedback mechanisms between communities, frontline organizations and influencers to encourage more adaptive decision making and accountability for achieving beneficial outcomes.

EXPECT DATA–DRIVEN MEANING–MAKING
Build capacities at all levels to transform data into meaningful insights that can be used to make better decisions.
**OPPORTUNITIES**

**ENHANCE DATA SHARING & TRANSPARENCY**

De-risk the sharing of data and create a culture of trust, transparency and collaboration around data and evidence.

**Actionable Opportunities:**

Conduct annual data discovery, design and meaning-making workshops on pressing issues that convene relevant data stakeholders and influencers to develop mutually empowering partnerships – leading to stronger data collection and reporting relevant to the issue.

Foster community-driven data networks, whereby initiating organizations integrate data literacy and collaborative outreach into existing or planned data collection efforts.

Stand up one or more independent nonprofit organizations to serve as trusted and honest data brokers, facilitating more access to government and private-sector data in service of the public good.

Develop a Hawai'i Data Sources, Indicators and Evidence directory as a platform for facilitating connections between data stakeholders.

Provide the Department of Human Services (DHS) with increased data capacity in order to be able to respond to requests for data, and effectively engage in exercises requiring merging of DHS data with other sources.

**How Might We:**

- Encourage / support data collaboration and foster trust and sharing between multiple stakeholders (non-profit, government, academia, communities, etc.)?

- Make it safe / less risky for State agencies and other organizations to share data more openly and view data as an essential public good?

- Support data ownership and understanding of data use in measured communities?
**OPPORTUNITIES**

**ESTABLISH FORUMS FOR FEEDBACK & COMMUNICATION**

Establish data-based feedback mechanisms between communities, frontline organizations and influencers to encourage more adaptive decision making and accountability for achieving beneficial outcomes.

**How Might We:**

+ Create opportunities for more direct and timely communication with at-risk groups to better understand their needs and effectively direct resources and services?
+ Develop channels between concerned stakeholders and influencers so dynamic changes in environment are readily communicated to all?
+ Create forums to deepen trust between donors / funders and communities?

**Actionable Opportunities:**

Establish guidelines for new data collection efforts that give due consideration to audiences at multiple levels from households to legislators, and from community organizations to Federal agencies.

Engage non-profit organization networks to develop shared understandings of thematic data needs and provide resources to members to be able to conduct effective data-driven advocacy on behalf of those they serve.

Develop and launch a mobile app for Hawai‘i residents to respond to regular pulse surveys for gathering data on household well-being (repeat opportunity).

Launch a new (or reinvigorate an existing) State and/or private sector sponsored open data enthusiast forum, where data scientists, coders and developers work with government agencies, non-profits and/or community groups to solve specific public data accessibility challenges.
Actionable Opportunities:

Build on the success of efforts, such as COVID Pau, to build collaborative communication platforms that empower, educate and reinforce the value of data and how it can be used to address challenges.

Share concrete illustrative use cases of data collaborations informing important decisions. For example, the Aloha United Way ALICE Report, and the data-rich policy and program conversations that followed.

Support cross-sector domain-specific data stakeholder groups, composed of university, government and community experts, that serve as bridges between evidence needs and holders of data. During the pandemic, the Hawai’i Pandemic Applied Modeling work group (HiPAM) has been an example.

Conduct a deep dive public-facing reflection and analysis of Hawai’i’s COVID pandemic crisis response, specifically focused on government data accessibility challenges and missed opportunities for collaboration to empower a more robust community response. Identify clear action steps for insuring a more effective response in the future.
The path from better data to better outcomes is far from straightforward. Data capacities and data culture are mutually reinforcing, requiring that we make progress by not neglecting one in pursuit of the other. As we build capacities, we see new possibilities that increase the demand to be able to stretch our capacities even more. We offer this landscape report as a starting point for the conversations and data-rich collaborations needed to move us forward with a shared vision of better data for a better Hawai‘i.
From Better Data to Better Outcomes

Hawaii Data Collaborative is a 501(c)(3) non-profit. We collaborate to make meaning from data to solve Hawai‘i’s pressing challenges.