

COMMUNITY HEALTH NEEDS ASSESSMENT

FOR THE PEOPLE AND ISLANDS OF HAWAI'I



CREATING A HEALTHIER HAWAI'I

May 15, 2019

Healthcare Association of Hawai'i

Produced by: Islander Institute

TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
OVERVIEW	7
STATEWIDE ASSESSMENT	22
A COMMUNITY PRESCRIPTION FOR HEALTH	23
<i>SECURITY</i>	25
<i>JUSTICE</i>	31
<i>LOVE</i>	37
<i>HOPE</i>	40
<i>TIME</i>	43
<i>FOOD</i>	46
<i>PLACE</i>	50
<i>COMMUNITY</i>	56
<i>HEALTHY KEIKI</i>	63
<i>HEALTHY KŪPUNA</i>	73
<i>CARE</i>	79
<i>AVAILABLE HEALTHCARE</i>	86
DOWNSTREAM HEALTH EFFECTS	93
SIGNIFICANT HEALTH ISSUES, GOALS AND PRIORITIES IN HAWAI‘I	97
ISLAND ASSESSMENTS	101
HAWAI‘I	102
STRENGTHS AND PRIORITIES	111
MAUI	113
STRENGTHS AND PRIORITIES	122
MOLOKA‘I	124
STRENGTHS AND PRIORITIES	133
LĀNA‘I	135
STRENGTHS AND PRIORITIES	144
O‘AHU	146
STRENGTHS AND PRIORITIES	155
KAUA‘I	157
STRENGTHS AND PRIORITIES	166
ADDRESSING HEALTH PRIORITIES	168
A SHARED KULEANA FOR COMMUNITY HEALTH	169
CHOOSING PRIORITIES AND DEVELOPING STRATEGIES	170
FACILITY PRIORITIES	172
CONCLUSION	178
ACKNOWLEDGMENTS	179
APPENDIX A - SHARED KULEANA STRATEGIES	182
APPENDIX B - EXISTING HEALTHCARE FACILITIES	190
APPENDIX C - STEERING COMMITTEE	201
APPENDIX D - COMMUNITY MEETINGS	202
APPENDIX E - KEY INFORMANTS	203
APPENDIX F - INTERVIEWS, 2013 & 2015 CHNAs	208
APPENDIX G - RESOURCES UTILIZED	212

EXECUTIVE SUMMARY

To truly address the root causes of health in Hawai‘i, we need to understand that we are a unique people with a unique history living in a unique place.

When Hawai‘i people are asked to describe a healthy life, few think that the absence of illness and the extension of life years are the only aspects of health.

Diet, exercise, and doctors are essential—though insufficient—to improve health, but they alone are far from capable of providing the sense of meaning, security, loving relationships, sense of home, happiness, quality time, and other aspects of health that people want and deserve.

This Community Health Needs Assessment (CHNA), as required by the Internal Revenue Service for tax-exempt hospital facilities to complete at least once every three years, culminates a yearlong effort involving 19 hospital facilities; numerous community health centers and organizations; and hundreds of providers, experts, and community members to identify and prioritize significant health issues facing Hawai‘i’s communities. This reports shares the dominant themes that emerged in conversations across the islands, analyzes data sets that impact all aspects of people’s lives, and provides statewide and island specific priorities to address the most significant health issues.

Community Prescription For Health

The participants in this CHNA have written a new *community prescription for health* in Hawai‘i, one derived from people’s own definitions of health and the factors that contribute to attaining and maintaining that health. These 12 factors make us healthy when we have them and unhealthy when we don’t. To be healthy, we all need: security, justice, love, hope, time, food, place, community, healthy keiki, healthy kūpuna, care, and available healthcare. By seeing the full picture, we can begin to envision a strategy for community health that addresses the important gaps and takes advantage of our greatest opportunities in order to help our people live healthy, fulfilling lives.

Sharing Kuleana in the Healthcare Ecosystem

In Hawai‘i, health is a shared experience and endeavor. No single person, no single entity, and no single industry can be solely responsible for community health. Rather than pushing responsibility back and forth between individuals and the healthcare system, it is more realistic and more consistent with Hawai‘i values to engage one another and *share kuleana* throughout the entire *healthcare ecosystem*.

The healthcare ecosystem acknowledges that health encompasses essentially everything; therefore every person, family, organization, and agency has the kuleana to advance community health. This approach values and strives to generate the non-sickness aspects of health, including the 12 factors in the community prescription of health. Lastly, the healthcare ecosystem has the collective authority and potential capability to address all the causes of poor health, including some of society’s most systemic and stubborn issues such as discrimination, housing, and low wage jobs. It is only by sharing kuleana—by doctors, patients, and everyone else in the ecosystem—that Hawai‘i can adequately address the measured and unmeasured health challenges facing our people.

Statewide and Island Priorities

Three major issues inhibit people’s abilities to achieve a truly health life: 1) A lack of foundation for health that includes the basic things that every human being needs; 2) Loss of community, including the aspects of place, values, culture, and practices; and 3) A poor relationship to the healthcare system, which is seen as lacking in humanity, empathy, and availability.

While this CHNA is designed for member hospitals, any interested individual, organization, or agency can develop plans to address the priorities most important to their constituency. The most successful plans would include identifying existing initiatives, engaging community and other partners, developing internal capacity, and building partnerships to strengthen existing efforts and create new ones. The 11 statewide priorities identified in this CHNA, including the ones most pertinent to each island, are as follows:

STATEWIDE PRIORITIES	Hawai'i	Maui	Moloka'i	Lāna'i	O'ahu	Kaua'i
GOAL 1 - FOUNDATIONS : Provide the basic foundations so that people can have more control over their own health						
1.1 Address financial insecurity. Create coordinated and systemic opportunities for communities and families to make good food and housing realistically accessible, develop workforce skills, create new economic opportunities, build financial assets, and reestablish active lifestyles.	•	•	•	•		
1.2 Work together for equality and justice. Work alongside affected populations to address inequitable treatment and opportunity.	•	•			•	•
1.3 Strengthen families. Create the conditions and opportunities for families to be healing forces for its own members, including addressing financial stress that will enable more healthy time together.		•	•		•	•
1.4 Prepare for emergencies. Mitigate future health impacts by engaging people, increasing understanding of the most vulnerable populations, building food systems, and strengthening relationships and community cohesion.			•			
1.5 Build good food systems. Establish access to nutritious food so that it is available to all.	•			•	•	•
GOAL 2 - COMMUNITY : Preserve, nurture, expand, and employ the healing properties of community						
2.1 Restore environment and sense of place. Better protect Hawai'i's natural resources, prepare adequately for climate change, develop good design and integration of the built environment, and reduce the negative environmental impacts of the visitor industry.		•			•	•
2.2 Nurture community identity and cohesiveness. Support community led efforts through shared activities and events, active organizing around shared purposes, and instilling community pride to foster greater trust and connectivity.	•	•	•	•	•	
2.3 Invest in teenagers and healthy starts. Invest in health and education at the earliest stages of life. Support school-based structures, community-based activities, and youth empowerment for pre-teens and teens.	•	•	•			•
2.4 Shift kūpuna care away from "sick care." Build a new paradigm of aging so that healthy aging is available to more. Combat the grave threats of boredom, loneliness, purposelessness, inactivity, and other social and emotional hardships of aging.		•	•	•		
GOAL 3 - HEALTHCARE : Improve the relationship between people and the healthcare system						
3.1 Strengthen trust in healthcare. Rebuild and strengthen trust through listening, empathy, compassion, and treating the whole person, while also paying attention to the use of language and cultural nuances.	•	•	•			
3.2 Provide accessible, proactive support for those with high needs. Identify, develop, and strengthen outreach, early intervention, free healthcare services, mental health, and oral health for those who are struggling with houselessness, mental illness, and addiction.	•	•	•	•	•	•

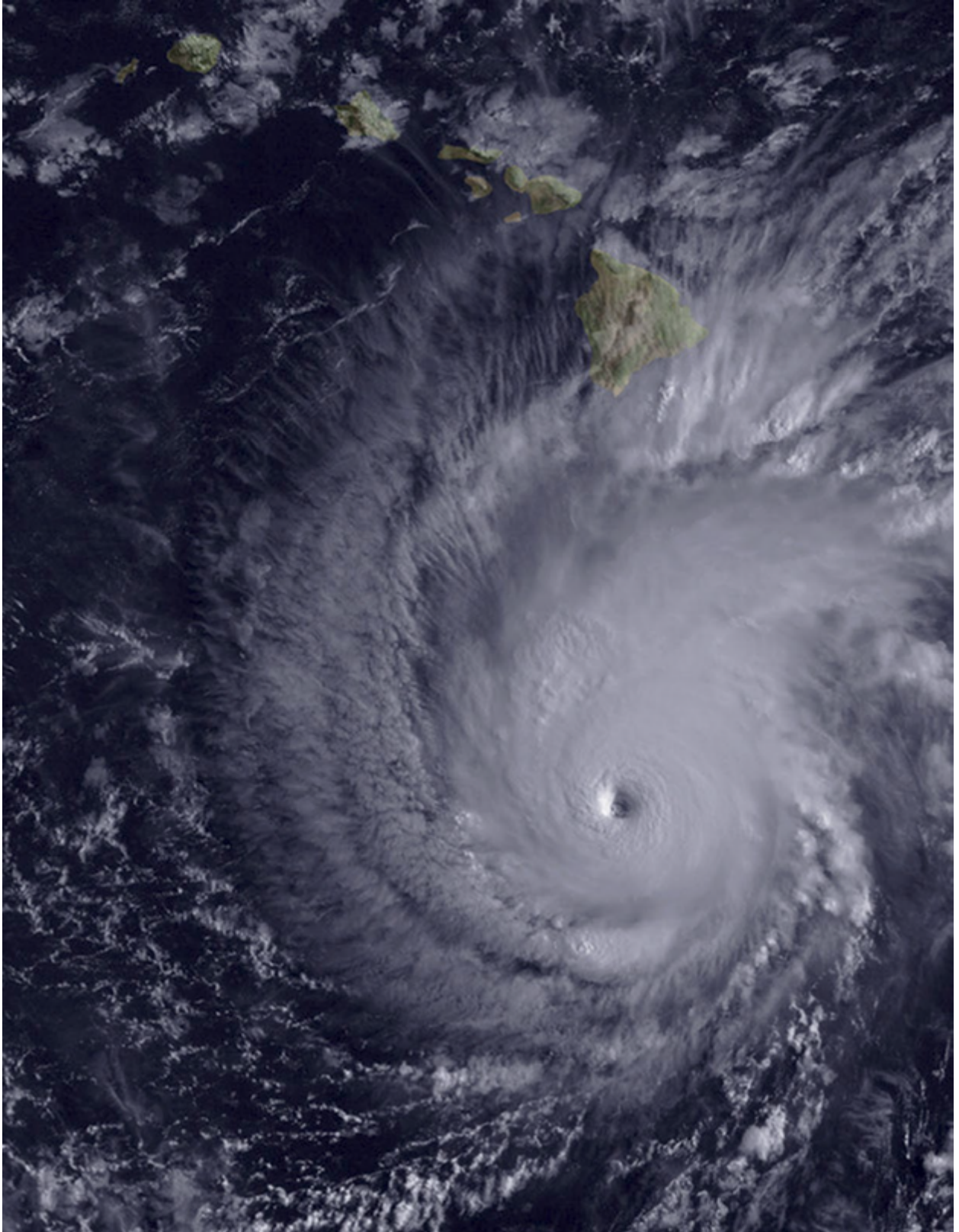
Important island priorities marked with "•"
Highest need areas on island in RED
Note: all statewide priorities are significant on all islands

No one patient, no matter how compliant, and no one doctor, no matter how high quality, can achieve health in the community. The ingredients of good health come from every corner of society. The likelihood of this CHNA leading to real action in the future depends greatly on successful communication and strong partnerships.

Each person's story of health enlists more people into the health conversation—farmers, caregivers, emergency responders, judges, store managers, chefs, bankers, environmentalists, bus drivers, architects, cultural practitioners, teenagers, grandparents.

Everyone is together in a single health ecosystem that determines the health of people and whether it accrues to all or just for those with enough advantages. It calls upon each of us to listen to one another and share kuleana for the health of our people and place.

#



Hurricane Lane. (Source: National Oceanic and Atmospheric Administration)

OVERVIEW

On the north shore of Kaua'i, a woman lost what little she had left in the floods after experiencing a fire that burned down her home months before. What was left of her belongings was washed out. In the shell of what remained, she immediately began to cook all the food she had available and pack it up. Pulling a little red wagon through badly affected areas, she passed out food to make sure that her neighbors were okay.

INTRODUCTION

On August 22, 2018, a hurricane warning was issued for Hawai‘i County and Maui County as Hurricane Lane approached from the southeast and threatened our island chain. That week, meetings that were part of this Community Health Needs Assessment were canceled in Wahiawā, Kaunakakai, Lāna‘i City, and Waimea, Hawai‘i. Schools closed, work stopped, planes were grounded, and everyone waited anxiously for Lane. When it was over, rain, wind, and fire had destroyed or damaged over 200 homes. Property damage totaled \$22 million.¹ Two weeks later, Hurricane Olivia stopped more work, caused more anxiety, and affected more lives.

When natural disasters strike, things we thought were important get swept aside by the things that are truly important: Our loved ones. Our home.

The hurricanes that occurred during the making of this report were literally health events. The storms disrupted lives, impacted physical and mental health, and made some people houseless. People are still recovering. Hurricane Lane even took a life—a man from Kōloa was swept away after saving a dog from drowning in an overflowing stream.²

The storms—the preparation, anticipation, destruction, response, and recovery—are also an apt metaphor for the health of Hawai‘i’s people. Storms will come to our islands. It is inevitable. As inevitable as illness, misfortune, and death. People get sick and injured, including our loved ones. We give birth to new generations and old ones pass away. We get warning signs and frightening near misses. Much feels out of our control, so all we can do is stick together, wait, get news, be ready to help others, and be open to receiving help. We worry about our loved ones, often more worried about them than ourselves. We worry about whether we can afford the costs of recovery.

Are we ready? Can we put the most important things first, learn from the past, and apply our knowledge? What about the most vulnerable among us? Have we met with them and listened to what they said about the things they need and how we might help? Are we mindful of our neighbors, and take only what we need, or do we hoard supplies like it is every person for oneself? Will we face pain and grief with courage and kindness?

It’s all too easy to be in denial and think hard times won’t come to us, but we know better. We are island people. Waves crash, volcanoes erupt, rain falls, and winds blow. We get hurt, we feel pain, we get sick, we suffer, we lose loved ones. But we are island people. These same things also bring out the best in us—our intelligence, diversity, humility, compassion, resilience, humor, and aloha. Because we are island people. We put the important things first. We talk story. We stick together. We get stronger.

BACKGROUND

The Patient Protection and Affordable Care Act of 2010 (also known as the “ACA” or “Obamacare”) included a section on community health planning—Section 9007—which amended the Internal Revenue Code by adding a requirement that tax-exempt hospital facilities complete a Community Health Needs Assessment (CHNA) at least once every three years. This requirement is part of a family of laws and regulations meant to ensure that hospitals bestowed with the benefit of tax exemption are, in fact, conferring benefits to the communities they serve.³

¹ Governor David Ige disaster proclamation.

² Hawai‘i News Now staff. “A Nightmare: Kaua‘i man dies after jumping into stream to save dog.”

³ Internal Revenue Service. “Community Health Needs Assessments for Charitable Hospital Organizations - Section 501(r)(3).”

The general purpose of the CHNA is for hospital facilities to identify and prioritize significant health issues facing communities and to identify resources potentially available to address those needs. The Healthcare Association of Hawai‘i (“HAH”), on behalf of its member hospitals, conducted two prior CHNAs in 2013 and 2015.

HAH aims to be the unifying voice of Hawai‘i’s healthcare providers and an authoritative and respected leader in shaping Hawai‘i’s healthcare policy. Founded in 1939, HAH represents the state’s hospitals, nursing facilities, assisted living facilities, home health agencies, hospices, and other healthcare providers. HAH works with committed partners and stakeholders to establish a more equitable, sustainable healthcare system driven to improve quality, efficiency, and effectiveness for patients and communities.

In preparation for the creation of this report, HAH was intentional about continuing to improve its approach to the CHNA. In January 2018, HAH released a Request for Proposals seeking a partner to conduct the CHNA. Included in that request was this statement: “HAH and its member hospitals are committed to engaging in deep and transformative relationships with local communities to address the social determinants of health and to increase access to high quality of care.”

Intrigued by the intent of HAH and its member facilities, Islander Institute responded to the request for proposals and was ultimately selected to research and write this CHNA. Islander Institute is a local, civic enterprise working to bring about positive social, economic, and political change in Hawai‘i by partnering with individuals, communities, organizations, and networks committed to island values. The members of Islander Institute who worked on this report have combined educations and experiences that include public policy, public administration, strategic planning, community organizing, community-based economic development, education, social work, child welfare, architecture, art, folklore, mapping, ecology, urban design, emergency response, entrepreneurship, nonprofit management, philanthropy, journalism, politics, communications, and law. To help with the project, Islander Institute subcontracted the Hawai‘i Public Health Institute (“HIPHI”), a nonprofit organization with the aim of addressing health disparities and increasing healthy living and active living. HIPHI provided two research assistants who helped conduct background research, organize data collection, gather quantitative data, and provide preliminary data analysis.

SCOPE

Nineteen HAH member hospitals contributed to the production of this CHNA. The names of those hospitals follow:

- Adventist Health Castle
- Kāhi Mōhala
- Kahuku Medical Center
- Kaiser Foundation Hospital – Honolulu
- Kapi‘olani Medical Center for Women & Children
- Kuakini Medical Center
- Kula Hospital
- Lāna‘i Community Hospital
- Maui Memorial Medical Center
- Molokai General Hospital
- North Hawai‘i Community Hospital
- Pali Momi Medical Center
- The Queen’s Medical Center
- The Queen’s Medical Center – West O‘ahu
- Rehabilitation Hospital of the Pacific
- Shriners Hospitals for Children – Honolulu
- Straub Medical Center
- Wahiawā General Hospital
- Wilcox Medical Center

Together, the service areas of these hospitals span the totality of the islands of Hawai‘i. In the past, HAH produced five separate, though similar, reports: one statewide report and one per county jurisdiction. For this CHNA, HAH agreed that Islander Institute would provide one comprehensive report to serve all 19 facilities. The reason for this decision may be unique to Hawai‘i. Although some facilities serve relatively small communities, as island people who share a unique historical, cultural, social, and economic context, the story of Hawai‘i’s entire archipelago forms the backdrop for everyone’s community work. Common themes, challenges, and issues cut across communities, and there is much to be learned from our shared experiences as people of Hawai‘i. As such, the majority of this CHNA is written for the benefit of *every* participating facility, with themes and findings relevant to any work in Hawai‘i. This single report also includes focused island-specific assessments—previously separated into different reports.

PURPOSE

Although some may look at the CHNA as merely an Internal Revenue Service requirement to be completed, a brief history of the ACA’s intent is illuminating. The federal government wants to ensure organizations that receive public support in the form of a tax exemption are creating a community benefit. But “community benefit” is a broad and vague term that could include many activities if left undefined.

At the time the ACA was created, evidence was growing that individual and societal health are strongly determined by social determinants such as socioeconomic status and environmental factors. As such, the intent of the ACA was to encourage a shift in thinking and ultimately a shift in how hospitals distribute community benefit dollars.⁴ In order to accomplish this, the ACA recognized that hospitals would need to be encouraged to better understand and address community needs. Thus, the CHNA requirement was created, and funds spent in conducting CHNAs were allowed to count toward a hospital’s “community benefit” spending requirements.⁵

The CHNA provides a meaningful opportunity to refocus resources and attention on effective, relevant community health needs and solutions. The ACA was passed to transform healthcare in this country on many levels. And while details of that transformation are not specifically scripted in CHNA requirements, those intentions can be sensed in the regulations which lay out both what is required and encouraged.

A recent journal article showed that many hospitals across the country have not been using their CHNA processes to follow the spirit of the ACA. Many hospitals fail to actively engage community voices around issues of social determinants. Instead, hospitals identify community need by identifying and treating disease—offering medical solutions for community problems. Instead of focusing on community health improvement, the vast majority of hospitals medicalize population health factors that stem from poverty and present them as treatable illnesses for which they can provide care, rather than treating the root causes of ill health.⁶

Again, HAH’s expressed desire was to use this CHNA to engage “**in deep and transformative relationships with local communities** to address the **social determinants of health** and to increase access to **high quality of care**” (emphasis added). Even though the federal government does not specifically require it, the hospitals of Hawai‘i, with the leadership of HAH, have explicitly embraced the intentions of the ACA. Therefore, this CHNA is meant to be a substantial step forward in addressing the root causes of health. It is a resource to be shared with all of Hawai‘i for the creation of new strategies and partnerships.

⁴ Dixon, 87-89.

⁵ Internal Revenue Service, Additional Requirements for Charitable Hospitals.

⁶ Caffrey, 615-621.

The CHNA should...	26 CFR Part 1 ⁷
<i>...lift up and listen to community voice; engage with and learn from community</i>	<p>§1.501(r)-3(b)(6)(i)(C) - the CHNA...must include...A description of how the hospital facility solicited and took into account input received from persons who represent the broad interests of the community it serves</p> <p>§1.501(r)-3(b)(1)(iii) - In assessing the health needs of the community, solicit and take into account input received from persons who represent the broad interests of that community, including those with special knowledge of or expertise in public health</p> <p>§1.501(r)-3(b)(5)(ii) - ...a hospital facility may solicit and take into account input received from a broad range of persons located in or serving its community</p>
<i>...aim to understand people with the greatest needs</i>	<p>§1.501(r)-3(b)(3) - In defining the community it serves... a hospital facility may not define its community to exclude medically underserved, low- income, or minority populations who live in the geographic areas from which the hospital facility draws its patients</p> <p>§1.501(r)-3(b)(5)(i)(B) - ...a hospital facility must solicit and take into account input received from...Members of medically underserved, low-income, and minority populations in the community served by the hospital facility, or individuals or organizations serving or representing the interests of such populations</p>
<i>...refocus on upstream causes of health</i>	<p>§1.501(r)-3(b)(4) - For these purposes, the health needs of a community...may include, for example, the need to address financial and other barriers to accessing care, to prevent illness, to ensure adequate nutrition, or to address social, behavioral, and environmental factors that influence health in the community</p>
<i>...foster dialogue and help hospitals forge partnerships and take action</i>	<p>§1.501(r)-3(b)(1)(v) - Make the CHNA report widely available to the public</p> <p>§1.501(r)-3(b)(4) - To assess the health needs of the community...a hospital facility must...identify resources (such as organizations, facilities, and programs in the community, including those of the hospital facility) potentially available to address those health needs</p>

METHODOLOGY

With the intent of HAH in mind, Islander Institute designed and continually adapted a process to achieve the objectives of the CHNA: a) listening to community voices; b) learning about those with the greatest needs; c) focusing on upstream causes; and d) facilitating action through dialogue and partnerships. This section describes all the salient features of that process.

⁷ IRS, Additional Requirements for Charitable Hospitals.

Guiding Principles

Islander Institute conducted its work in accordance with the following set of principles to help ensure integrity in the process while achieving the desired objectives:

Local style

The first rule was to honor our home by conducting the work in accordance with the values and practices of Hawai'i: to be respectful of places and traditions, to be generous with time and spirit, and to approach the work with humility, joy, and aloha. Islander Institute met people "where they were at," and then pursued connections. So when people said, "Try talk to this person," Islander Institute tried its best to say, "Yeah, can," continually expanding the study where possible.

Start with people's lived experiences

Although there are many excellent studies and models to utilize (many of which were reviewed and integrated into this analysis), Islander Institute did not want to impose any pre-set assumptions on the community. This study starts with people's own stories and conceptions of health, accepting the fact that what people share is their truth. Individual accounts are considered to be at least as important and real as statistics and the opinions of subject matter experts. The intent was that all gathered information would be able to supplement one another to uncover common themes as well as nuances, complexities, and insights.

Honor everyone's contribution

Everyone who volunteered to participate in this CHNA cares about health in Hawai'i. To complete this report, many individual viewpoints were gathered and reviewed. Thereafter, themes were identified, ideas organized, and conclusions drawn. So that individual ideas are not lost in the process, this report presents many ideas in people's own words. When people provided thoughts that stood in conflict with someone else's, those differences were allowed to coexist. Islander Institute made every effort to have every voice represented in some way in this document so that they can live beyond this report as a contribution to community health.

Be open to different narratives

In a study with such a large scope, on a subject considered many times, it can sometimes be difficult to keep an open mind. Often, data serve to harden generalizations and biases because they have been regularly interpreted through the same lens—e.g. that certain races or places are just unhealthy or troubled or needy; that any particular person might be "typical"; that a particular solution is always the right medicine. To avoid making assertions on false understandings, Islander Institute always tried to keep an open mind, to deepen understandings through conversation and empathy, and to be cautious not to reinforce commonly held beliefs without first examining them against people's real lives.

Keep looking upstream

Quantifying diseases and death are often where health analyses begin. And yet, disease and death are really the points where good health ends. With guidance from community members, Islander Institute and its partners asked about and sought the root causes of downstream health effects, resisting the common urge to medicalize problems and solutions.

Build relationships

Throughout this process, Islander Institute and its partners looked for opportunities to strengthen existing relationships and facilitate new ones, knowing that the likelihood of the CHNA leading to real action in the future depends greatly on successful communication and strong partnerships.

Steering Committee

A steering committee was formed to: a) advise Islander Institute on the factors that impact health in Hawai'i and the different communities affected; b) participate in or help plan community engagement; and c) provide input and analysis in the development of findings.

In building the committee, Islander Institute looked for a diverse group with the following collective attributes:

- Direct experiences conducting similar community-based research in Hawai'i
- Experiences working across many communities in Hawai'i
- Direct experiences working in health research, health care provision, or public health
- Large networks spanning across the islands and including those who might be consulted as key informants
- Understanding of grassroots politics, community organizing, government agencies, philanthropy, economics, or academic research

The committee included a number of willing participants from HAH and member facilities, and provided an opportunity for them to forge new relationships and shared understandings that will hopefully benefit the future implementation phases of this CHNA.

The steering committee met a total of three times in 2018 on May 21, July 27, and September 19. In between meetings, steering committee members were called on for advice and for help in making community connections. Some attended community meetings, and some planned and facilitated meetings based on their own relationships with groups. A list of steering committee members appears in APPENDIX C.

Community Meetings

Islander Institute convened 21 community meetings in total to engage everyday people in discussions around health in their communities. A full list of community meetings can be found in APPENDIX D.

A specific effort was made to learn about the experience of health in vulnerable communities, including disadvantaged minorities, rural residents, youth, seniors, places that are medically underserved, and people with low incomes. The meetings were not limited to these populations and included a diverse sample of geographies, ages, ethnicities, and socioeconomic backgrounds. Special attention was given to ensure the meetings were not merely extracting information from people and communities. Rather, the purpose of the meetings was to build relationships by listening, engaging, understanding values, and building reciprocity.

Islander Institute partnered with organizations and individuals with strong connections within their communities to organize and host these meetings. All the hosts work in community health, community service and/or community building and engage on issues affecting health and wellbeing. As hosts, they played a critical role in creating a safe space and inviting the right people into the space, including patients, staff, or community members who had important stories and could feel comfortable sharing them. The meetings were kept relatively small—between five to 25 people—and designed to maximize everyone's comfort level, which would allow all to meaningfully participate and for the conversation to go deeper. Participants were told that they would not be personally identified in the report. In this CHNA, they are identified based on attributes that might be helpful to give context to their input, such as their area of residence or background.

Nearly all the meetings included food, a critical part of building relationships in Hawai‘i. Meeting participants ate together before or during the meeting as a way to create an informal, comfortable setting conducive to building relationships and sharing openly. In some cases, the host began the meeting with an appropriate protocol as commonly practiced by that group to honor their space and traditions. The conversations were to be true “talk story” sessions that people of Hawai‘i are used to in their everyday lives.

Following introductions by hosts, Islander Institute usually began its facilitation with an overview of the CHNA process and report. The conversations were launched with some variation of the question, “What is your definition of a good, healthy life?” The purpose was to allow people to enter into the conversation wherever they felt comfortable, without judgment or a feeling of being studied. With facilitation that honors people, does not judge, and redirects as necessary, these community discussions regularly took deep dives into issues. Some conversations required translators to fully include people who, in particular meetings, spoke Marshallese, Ilocano, and American Sign Language. Other questions that were asked, depending on the direction of the conversation, included:

- *When was the last time you felt healthy?*
- *What is something you do that makes you feel healthy?*
- *What makes it hard to be healthy?*
- *What have your experiences been like when going to the doctor’s office or to the hospital?*
- *What is a healthy community? What does a healthy community have?*
- *Do you feel your community is healthy? Why or why not?*
- *What are some things in your community that improve health?*
- *What are some things you’d like to have in your community to help improve health?*

The format was adapted for certain communities, in conjunction with hosts, to find ways to best benefit and honor their community. For example, facilitators from Islander Institute went on a hike with a women’s healing group on Kaua‘i as part of their regular learning series on Hawaiian medicine. This helped set the tone for a day of learning, exchange, and relationship building before a lunch picnic where the discussion on community health was held. Another example was working with the Moloka‘i office of Lili‘uokalani Trust, which wanted to help build the skills of teenagers in one of their afterschool programs. Islander Institute ran a training session for the teenagers on how to interview their peers, family, and teachers. In a later session, the teenagers debriefed their lessons around the skills of interviewing and analyzed the responses from their surveys. The goal with each community meeting was to create an environment of reciprocity and learning; therefore every meeting needed to be a positive experience and valuable to each community. A key takeaway from this experience is that people want to be heard, and that safe, interactive forums are necessary to truly understand what is happening and to create action plans that have requisite legitimacy and support.

Key Informants

Islander Institute created an initial list of people who could shed light on questions of health, social determinants, and the circumstances in various communities. The initial list included experts and authorities with whom Islander Institute had existing relationships based on its many years of working in Hawai‘i. Throughout the months of conversations, people suggested others to talk to and helped make connections. In total, Islander Institute spoke with roughly 200 people from six islands in person or over the phone, in a one-on-one format or in small groups, and in formal or informal settings. A full list of key informants whose views influenced this report can be found in APPENDIX E.

The conversations began with a few general questions, and key informants were encouraged to delve into whatever they felt was most important to share. When appropriate, they shared about their own personal experiences and/or professional connection to health.

Among the key informants, Islander Institute also met with representatives of each of the 19 participating hospital facilities to best understand their engagement with the CHNA and the communities they serve. These conversations helped illuminate interests, capacities, and missions of each facility and shed light on limitations and uses of previous CHNAs and the potential for this CHNA.

As part of the 2013 and 2015 CHNAs, key informants were also interviewed. A few of the same persons participated in this year's process, while others felt they had already shared what they had to say in the previous process(es). Rather than re-interview many of the same people in the same positions, Islander Institute obtained the informant interview notes from the past two CHNAs, reviewed them, and incorporated those views that were still timely into this process. A full list of the reviewed past interviews can be found in APPENDIX F.

Literature Review

Islander Institute reviewed past CHNAs from Hawai'i and other states, background information on various organizations and programs, numerous scholarly reports, and contemporary articles from the mainstream media. Two research assistants from HIPHI did a comprehensive review of health-related data from national, state, and local sources. That data was summarized and analyzed to help build arguments for prioritizing issues and to understand the data resources available for advancing community health. A full list of the resources reviewed over the course of the CHNA process is included in APPENDIX G. These citations may be useful for future study and planning.

Quantitative Data Approach and Analysis

This CHNA begins with the lived experiences of people in their own words, and therefore depends on the authenticity, quality, and breadth of that sharing in order to draw meaningful inferences. The focus of this CHNA is also on the upstream causes of health. Both of these aims call for a different approach to using the health statistics that are commonly collected and tracked.

Typically, a health assessment begins with health statistics that track *medical outcomes* usually in the form of morbidity rates—diabetes, heart disease, cancer, etc. These are generally the kinds of things for which one would require medical care. Another set of statistics looks at *risk factors*—smoking, exercise, diet, etc. These are essentially the behaviors that affect medical care. Finally, there is an assessment of *medical resources*—numbers of doctors, hospital beds, health insurance, etc. These are the components of medical care.

Statistics on medical outcomes, risk factors, and medical resources are indispensable for developing strategies to improve community health. However, when we begin with these measures, they often become identified as the problems and the solutions, leaving out many factors that people consider to be part of health and that go into creating health. In short, there is a tendency to aim for only the things that are measured.

This can be problematic for two reasons. First, it may cause us to marginalize certain health challenges and the people experiencing them when overall statistics are good. This is particularly tempting in Hawaii which, by most traditional measures, has long been considered one of the "healthiest" states in the nation. Second, when we use standard measures to label things "healthy" or "unhealthy," whole

groups of people and communities often get stereotyped and treated differently, instead of being listened to and understood. These sentiments came out clearly in community meetings and key informant interviews. One of the more unfortunate results of this is that we can fail to acknowledge health *strengths* in particular populations because they are not measured.

Given this, Islander Institute considered the following cautions in its approach to using quantitative data in this analysis:

1. If quantitative data are being used to learn about community, it is important to first understand the community's reality and then try to view those numbers through a community lens. One common theme is that health statistics have a tendency to emphasize medical care more than people actually value medical care in their pursuit of health. Some of the factors that matter to community are not measured. Some are not measurable.
2. Quantitative and qualitative should inform each other on equal planes to generate powerful insights. With proper care in collection and analysis, neither is "more true" than the other.
3. Quantitative data without community input can sometimes reinforce untrue biases and unhelpful narratives. Statistics can be dehumanizing and can cause us to forget that individuals experience life in uniquely human ways.
4. Quantitative rankings and comparisons can sometimes obfuscate important issues, marginalize communities, dismiss issues that are of real importance to people, and lead to wrong conclusions.

For this CHNA, Islander Institute tried to employ quantitative data in new ways, placing data in different contexts based on community input. More work needs to be done to ensure more upstream data is collected on a regular and reliable basis, and is presented in a context that sheds light on community interpretations of health. For this report, some core county-level data is presented through the community lens that was developed from community conversations and key informant feedback. Quantitative data was appended to the different issues identified by community to provide further insight, evidence, and/or corroboration. In some cases, reliable supporting data simply does not exist. Health outcomes data is also presented in a separate section to show those downstream effects in the four county jurisdictions.

County data was used because it is a relatively stable and reliable delineation of data that is often trackable over time. For this report, Kalawao County, which includes the Kalaupapa Peninsula, is incorporated into Maui County when data is presented by county, and is incorporated into Moloka'i when data is presented by island. It should be recognized that county level data can be particularly frustrating for the three islands of Maui County with their unique capacities and priorities. Survey approaches that cover Moloka'i and Lāna'i often fail to reach large enough sample sizes to draw accurate conclusions. County data can also mask disparities between urban and rural areas of an island, particularly on O'ahu. Therefore, additional care and alternative approaches are needed to assemble accurate information for smaller communities.

While new ways of seeing and presenting data are needed, and while some important factors are not currently measured, it should be noted that Hawai'i has a tremendous amount of available data pertaining to the social and environmental factors that can contribute to a healthy life. There are also a number of very high quality, highly accessible data resources for generating reports and maps with subsets of data, trends, and other analyses. Some of the more useful community health research tools examined and accessed in the course of this study are:

Hawai'i Health Matters (<http://www.hawaiihealthmatters.org>), developed by Hawai'i Health Data Warehouse (<http://hhdw.org>) and the Hawai'i Department of Health, provides access to data on health and quality of life, data reporting tools, promising practices, and local resources.

Data USA (<https://datausa.io>) is a comprehensive visualization engine of public U.S. government data. The resource was created in a partnership between Deloitte, Datawheel, and Collective Learning to inform decision making by understanding and visualizing the critical issues facing the U.S. in areas like jobs, skills and education across industry and geography. Data for Hawai'i are available at multiple geographic levels in categories including economy, health and safety, diversity, education, and housing and living.

HealthLandscape (<https://www.healthlandscape.org>) is a web-based mapping tool that allows health professionals, policymakers, academic researchers, and planners to combine, analyze, and display information in ways that promote better understanding of health. The tool draws from many sources of health, socio-economic, and environmental information and can be used to create maps. HealthLandscape is a division of the American Academy of Family Physicians.

Community Commons (<https://www.communitycommons.org/CHNA>) provides access to thousands of data layers that allow mapping and reporting capabilities to explore community health. Within Community Commons is a CHNA toolkit, designed in response to the IRS CHNA requirement, to assist hospitals and organizations seeking to better understand the needs and assets of their communities. Community Commons is managed by the Institute for People, Place and Possibility; the Center for Applied Research and Environmental Systems; and Community Initiatives.

These resources are often updated and enhanced, and they can have tremendous value when trying to analyze specific issues.

Mapping

One of the purposes of this CHNA is to catalyze curiosity, insight, and dialogue around community health issues. Because health data is so readily available in regularly updated and customizable forms, this report focused on developing alternative ways of looking at quantitative data that might spark ideas and be built upon in the coming years.

With this intention, a variety of data sets were incorporated and combined based on availability to create a series of maps that are included in each island's assessment. The visualizations of the maps are meant to help deepen and inspire the ways health is measured and approached.

Each map begins to spatialize various types of data typically associated with measuring "health" to support the idea that being healthy is not an outcome, but a process unique to different communities across different islands. The maps serve to strengthen the spatial lens of the reader, such that in the future, data used to measure different indicators of health can be expanded and more place-based. Seeing and thinking about a particular health outcome in a map affords the reader a chance to visualize in a dimensional capacity and consider how experiences of time, stress, loneliness, etc., affect and determine community health.

Data was considered based on an island's moku (the large land divisions based on Hawaiian wisdom and practice), neighborhood, and zip code, which reflect the ways a community may understand their place. These three layers reflect the ways data are collected and understood: zip code reflects most health data; neighborhood reflects distinctions used by the State of Hawai'i Department of Health reports; and moku for the way many local people refer to their areas.

To spatialize the data in each map, a variety of data sets were incorporated and combined. All rates, proportions, indicators, and raw data were collected from publicly available data sources, such as annual reports from the Behavioral Risk Factor Surveillance System (BRFSS) published through the Hawai'i Data Warehouse and the Hawai'i Indicator-Based Information System. Where applicable, the most recently published data was utilized. High school data was gathered from the publicly available 2016-2017 Status and Improvement reports provided by the State of Hawai'i Department of Education.

Each data set was then processed according to U.S. Census American Community Survey 2012-2016 Data Profiles, which provide spatialized geographical base layers relating to population size, race, income, household status, etc. Each base layer was then combined with additional geographic layers regarding land use, land ownership, schools, and parks, for example, to build an appropriate base layer upon which health data could be applied. Whereas a typical map may color-code an entire zip code, the maps in this CHNA take a more granular level analysis at the level of the census block group. The maps are not meant to be exact representations of community health, but are intended to provide a new example of how health can be portrayed beyond percentage and beyond zip code.

While the presentation of the maps are limited to the availability of existing data sets, the hope for the visualization of the maps is to help deepen and inspire the ways health is measured and approached. As affirmed by qualitative data, health is not an outcome to be treated as a condition, but one that is as real and as complex as these islands are.

Identifying Significant Health Issues, Goals and Priorities

Based on all collected data and analysis, this CHNA identifies three significant health issues, three corresponding health goals, and eleven priorities that apply statewide. Almost all of these are focused on what one might call “upstream factors” or “social determinants” of health.

All input was considered in the development of these priorities including: a) community input from meetings, which indicated community needs and the degree of community readiness to join in forming solutions; b) key informant interviews, which provided expert opinion on various community needs, possible solutions, systemic factors, and/or evaluation of organizational readiness for partnerships; and c) quantitative data, which provided evidence of need, locational and population priorities, and other nuanced aspects of issues.

Based on this information, an analysis was done looking at five criteria:

- Evidence of community need based on qualitative and/or quantitative data
- Community knowledge, energy and readiness to address an issue
- Existing or potential cross-sector partnerships for broad impact
- Existence of current efforts to replicate or learn from
- Political will and potential resources, if known

As statewide priorities were being identified, each island was also assessed based on what was learned through community talk stories, interviews with island residents during the assessment period, and island-specific quantitative data where available. For each island, health priorities that are of specific relevance to that island are identified. These lists were created using the same criteria employed for the statewide priorities.

Finally, each participating hospital facility conducts its own independent prioritization process to determine its own priorities. Suggested criteria and information on that process, as well as an area for

participating hospitals to insert their own specific priorities can be found in the last section of this report.

Editing and Review

Islander Institute was entirely responsible for the drafting of this CHNA, including the creation of all maps and charts. In the latter part of November 2018, a draft of the CHNA was shared with all steering committee members and HAH member facilities for review and comment. All feedback was carefully considered prior to final editing and layout. The final report was delivered to HAH in December 2018.

LIMITATIONS

This CHNA has five important limitations that should be kept in mind when it is put to use:

Scope and representation

Obviously this process could not accommodate every person and group that has a viewpoint to be shared. Furthermore, resources were not expended on survey methods specifically because the emphasis of this process was on obtaining a depth of understanding through dialogue. Of course, every person and group deserves to be heard, and it is always disappointing to know that a person or group that wants to be part of the process could not be included at this time. Because this process is finite, a plan was devised to have depth in conversations across a strategic breadth of people and places that would likely generate scalable themes that resonate within and across geographies and groups. Nevertheless, the fact that certain important viewpoints may not have made it into this report is a limitation. It is Islander Institute's sincere hope that processes like this continue to occur so that more people and places can have their stories heard for the advancement of community health.

Quantitative data

The scope of this report is large, which limits the extent to which it can delve deeply into specific areas or populations with quantitative data. Islander Institute continually wrestled with the conundrum of including more detailed data while trying not to make the report too large. In the end, geographic focused data has been provided at the county and island levels. Very specific geographic representations of certain data have been provided in island maps. Geographic-focused numerical data within islands is generally not included in this study even though it could be significant to community-based entities with coverage areas smaller than an entire island. The same can be said for entities that serve specific populations. The primary intent of this CHNA is to provide the themes that are resonating across the islands. These themes and references to resources will hopefully provide a basis for continued analysis and planning for specific communities and populations.

Qualitative data

This analysis attempts to give appropriate weight to people's opinions. Every story is authoritative as it applies to the person telling it, and sometimes as it applies to family members and associates. However, when people made generalizations, a judgment had to be made as to whether the person was in a position to confirm that generalization. It is different in every situation. Comments made by key informants about issues within their sphere of experience are more reliable than their opinions on issues for which they have no direct knowledge. As much as possible, anecdotal views were corroborated by other people's views and by quantitative data. Nevertheless, this approach is not

perfect science, and Islander Institute acknowledges that all themes and assumptions that rely on qualitative data should be subject to continual verification.

Authority

This report suggests strategies and priorities that apply to whole communities and jurisdictions, including the entire state. However, it should be acknowledged that the actual authority to set strategies and priorities lies in many entities, which must consider many variables that are outside the scope of this study. All strategies and priorities within this CHNA are based on analysis of the data gathered for this report only, and are not the decisions set forth by any individual organizations or entities.

Expectations

It is HAH and Islander Institute's intention that this report present ambitious ideas and goals that will lead to bettering the lives of people in Hawai'i. It is acknowledged, however, that change is a usually slow product of many factors. One of the important drivers of social change is the existence of strong working relationships, which take time to develop. It is hoped that this CHNA will be a catalyst for more cooperation, partnership and initiative.

USING THIS REPORT

This CHNA has two sets of assessments which follow this OVERVIEW. It begins with a statewide assessment.

The STATEWIDE ASSESSMENT begins with a detailed accounting of the dominant themes that emerged from all of the conversations with hundreds of community members across the islands. Twelve community health themes are identified and described along with stories in people's own words that illustrate those points. Together, those twelve themes constitute what will be called **a community prescription for health**. Interspersed within these themes are selected quantitative data that shed light on aspects of those themes. These data are presented at the state and county levels. The assessment also contains a section with health status indicators in the four counties. These familiar statistics might be interpreted as "downstream" effects of the twelve themes identified by the community. At the end of the statewide assessment is a description of three **significant health issues**, three goals, and eleven priorities that emerged from this study.

Following the statewide assessment are six sub-reports that contain ISLAND ASSESSMENTS for each of the six major populated islands that were the focus of this CHNA. As with the statewide assessment, each island assessment begins with community input in the form of a written narrative summarizing what was learned from the conversations that took place on those islands. This is followed by island-specific data presented in maps and tables which are meant to provide new, alternative insights into the nature and scope of health issues on each island. At the end of each island assessment is a description of identified strengths and health priorities for that island, which can be the subject of future discussion, planning, and action. The CHNA process is too short and the island-specific summaries are too brief to capture the entirety of each island and all the pertinent issues its people face. To really understand an island, one needs to live on it for quite some time. Fully aware of this limitation, the hope is that the island reports will help accomplish two things: a) help outsiders grasp less stereotypical, more accurate views of each island; and b) advance a dialogue on each island for improving health.

After the assessments, this CHNA focuses on ADDRESSING HEALTH PRIORITIES. This section contains a strategic framework for community health, which is presented as a **shared kuleana** for many individuals and organizations. The section also contains ideas and criteria for setting priorities, and an area where HAH member facilities insert their own information and aims of their community health engagement plans. A list of community health initiatives that are prime examples of strategies in alignment with the findings of this report can be found in APPENDIX A. Each example can serve as a model or, in some cases, a potential future partner.

The report ends with concluding thoughts and a mahalo to those who contributed to this report. This is followed by numerous appendices, including examples of current health initiatives in Hawai‘i, a list of existing healthcare facilities in Hawai‘i, lists of individuals and communities who contributed to this report, and a list of resources used in the making of this report.

It is the ACA’s intent that a document like this would be a benefit to the community by encouraging dialogue and catalyzing collaborations. In service to that purpose, this CHNA is a public document. HAH and its member hospitals are putting these findings forward to all potential audiences including:

HAH Participating Hospital Facilities

This CHNA meets their IRS requirements for submission once facility specific information is added and facility priorities are chosen. The report will also hopefully spark dialogue and collaboration among hospitals as they innovate to meet the needs of their various constituencies.

General Public

The CHNA shows how hospitals value transparency and accountability. As will be detailed later in this report, the relationship between people and their healthcare system has much room for improvement. By reading this report, community members can begin to develop a shared reality with hospitals and other health industry players. All residents have a responsibility and opportunity to ensure all voices are heard, and that ways are found for residents to contribute to better health.

Policymakers

The ideas in this report should help advance the evolving notion that a broad view of health and healthcare—one that encompasses social, economic, and other factors—is necessary for improving societal health. The ACA took important steps to encourage movement in this direction. Now policymakers in Hawai‘i have an opportunity to take those evidence-based ideas to the next level.

Researchers and Academics

This report attempts to lay out new and original ideas based primarily on the input of hundreds of Hawai‘i residents engaged in concentrated conversations about health, its meaning, and its causes. It is hoped that this report will raise new questions and inspire researchers and academics to collect new data, develop and test new theories, and create new knowledge that can be parlayed into action to serve our communities.

Healthcare Ecosystem (and all its elements)

That is, all of the players that affect health and wellbeing in Hawai‘i, including youth organizations, foundations, schools, workplaces, farmers, natural resource managers, unions, artists, caregivers, community leaders, cultural practitioners, businesses, housing developers, government agencies, civil rights advocates, health insurers, and so many more. It is hoped that this report makes it clear that the health of Hawai‘i’s people, or the lack thereof, is a product of *everything* we do together on these islands. Everyone has a role.

STATEWIDE ASSESSMENT

A Waipahu man with diabetes wants so badly to follow his doctor's directions and be healthy. He takes his insulin every morning and night. He struggles to eat the right portions and the right foods. He lives with his immigrant parents, and as a family, they know how to cook only their cultural foods—noodles, rice, and meat. It's not always the best for his diet, but not wanting to offend or inconvenience his family, he eats it. He's too ashamed to tell his coworkers about his diabetes, and his work doesn't always allow for the frequent food breaks diabetics need to keep their blood sugar at a healthy level. So instead he eats a full portion to get by the whole shift and deals with both the jitteriness and fatigue. Every time he visits his doctors, he's ashamed to tell them he slipped up and is eating full sized meals again with too much sugars, so he doesn't tell them the full truth. When his assigned doctor changes (and changes again), he needs to build a relationship with yet another one and fears the judgment, the same questions, the same excuses he has to give. His family doesn't fully understand his diabetes and why he can't just take care of himself. They berate him for the choices he makes, so food—even the food he loves—has become poison and he sinks further into isolation.

COMMUNITY PRESCRIPTION FOR HEALTH

We all know this common prescription for health: To be healthy, you need to *eat well*, you need to *exercise*, and you need to *do what your doctor tells you to do*.

Through habit and repetition, we have firmly established this simplistic paradigm that personal behavior and the healthcare system are the generators of health. But when we ask people to share their own stories of health, this prescription breaks down in three important ways.

First, what is health?

When we look at most health reports, it is easy to conclude that health is about disease and the things people should do to prevent it. These familiar data regularly place Hawai'i among the most "healthy" states in the nation. But when people are asked to describe a healthy life, few think that the absence of illness and the extension of life years are the only aspects of health. Instead, they talk about a sense of meaning, security, loving relationships, sense of home, happiness, quality time, and other aspects of health that they long for and deserve.

Second, what factors go into health?

Quality healthcare and personal behavior are important elements of health, but we have known for a long time that there are many elements beyond the control of individuals and healthcare providers that conspire to determine health outcomes. These include the so-called social determinants, including economic stability, education, environmental factors, and community factors that affect an individual's health status.

Third, who produces health?

Healthcare—really medical care—is not the only kind of "care" available and valuable for individuals. Besides one's own personal will and behavior, people also rely on families, friends, the natural environment, community institutions, neighbors, and many others to contribute to wellbeing. When those "health providers" are unavailable or not functioning, people can get sick or they can take longer to heal.

Nevertheless, we continue to emphasize the mantra: the keys to good health are healthy living and the healthcare system. This idea is the prime focus of our resource allocations, our health industries, our health policy, our interventions, and our measurements of success. It is what children are taught and the public is told. Doctors blame patients. Patients blame doctors. It is an easy prescription to remember and repeat, but it is not accurate and not helpful in getting people truly healthy.

In this CHNA, an alternative prescription emerged; one derived from people's own definitions of health and the factors that contribute to attaining and maintaining that health. Many frameworks and measures of social determinants are being developed and deployed across the nation and world to categorize people's needs, set their priorities, and develop strategies. But Hawai'i people are unique people with a unique history, living in a unique place. So instead, this CHNA process simply asked people to share their honest thoughts and experiences. Collectively, this is what they said:

To be healthy, we all need...

SECURITY

JUSTICE

LOVE

HOPE

TIME

FOOD

PLACE

COMMUNITY

HEALTHY KEIKI

HEALTHY KŪPUNA

CARE

AVAILABLE HEALTHCARE

Taken together, the participants in this CHNA have written a new prescription for community health in Hawai‘i—twelve health factors that make us healthy when we have them, and unhealthy when we don’t. By having the full picture, we can begin to envision a strategy for community health that addresses the important gaps and takes advantage of our greatest opportunities in order to help our people live healthy, fulfilling lives. We can all take part in filling this prescription.

At the same time, when we look at these twelve factors, we need to remember that each individual has a deeply personal health story reflective of her or his needs and strengths. Not all factors apply to all people, and factors apply to different people in different ways. People’s needs are nuanced and layered, one on top of the other in unique combinations and in unique circumstances. Throughout this section, people’s stories are shared in their own words to remind us of each person’s individuality. Our health priorities and strategies need to create the conditions for good health, while also accommodating the humanity and uniqueness of each individual.

SECURITY

Many people are in crisis. Whether the crisis is chronic or acute, when the situation exists, a person in crisis is often too preoccupied to care for her or his own health. People in unstable conditions need compassion, outreach, and specialized help so they can endure, escape, and ultimately heal. Security is prerequisite to the effective pursuit of good health.

Financial Hardship

“Health is survival,” was a sentiment shared by people who are living right on the edge of economic disaster. In 2017, the United Way released an important report about families who are asset limited, income constrained, and employed (known by the acronym ALICE). That report, which has gained the attention of many, found that 11% of Hawai‘i households are at or below the Federal Poverty Level, and an additional 37% of households are ALICE. This means that nearly half of Hawai‘i households struggle to afford basic necessities, including housing, childcare, food, transportation, and healthcare.⁸ Those just scraping by and perhaps a misfortune or two away from eviction or bankruptcy said they had little or no time to think about their own health, let alone act on it.

My definition of health is staying alive while my children are still young. I never learned what being healthy is; I only saw the doctor when I’m sick. I want to be able to support my family and think about their future.
(Marshallese woman living in West Hawai‘i)

I have to live in Ocean View because there isn’t any affordable housing nearby. The driving takes a toll on you. Housing is still so expensive so you end up with no disposable income.
(Ocean View resident working in Kona)

Most high schools students have to have jobs and manage school too, which is stressful. My parents are stressing me out about getting a job, but I already have so much on my plate. My mom works three jobs and my dad works one. My parents argue about who will pay taxes and who will pay for the house. I don’t want to hear it; I’m already stressed about school and trying my best.
(Kaua‘i teen)

⁸ Aloha United Way, ii.

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kauai County
POVERTY	14.6%	10.3%	17.4%	10.0%	9.1%	9.1%
Percentage of people living below the federal poverty level (FPL). (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
INSUFFICIENT LIQUID ASSETS	36.8%	N/A	37.0%	33.5%	30.7%	30.5%
Percentage of households without sufficient liquid assets to subsist at the poverty level for three months in the absence of income. (Data: 2013). Source: Prosperity Now Estimates Using Survey of Income and Program Participation and American Community Survey, 2018						
ALICE + POVERTY	N/A	48%	61%	47%	44%	45%
Percentage of households Asset Limited, Income Constrained, and Employed with incomes above FPL but not high enough to afford a basic household budget + the %age of households below FPL = households struggling to afford basic necessities. (Data: 2015). Source: United Way, ALICE: A Study Of Financial Hardship in Hawai'i, 2017						
CASH PUBLIC ASSISTANCE	2.6%	3.4%	4.4%	3.1%	3.3%	3.1%
Percentage of households receiving general assistance and/or Temporary Assistance to Needy Families (TANF). (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

About one in ten people in Hawai'i lives below the federal poverty level (in Hawai'i, the federal poverty level in 2018 for a family of four is \$28,870). This income threshold and multipliers of it are the bases for eligibility for many government programs, but FPL is not an accurate indicator of what it takes to actually survive. Furthermore, income alone is not the only measure of economic security. Assets such as money in a bank account or other savings is also necessary in case there is an interruption in income as can happen in life. Because of the high cost of living, Hawai'i families have had difficulty accumulating necessary liquid assets. The ALICE report provides a better indicator of financial stability, as well as insights into what families must do to cope when living below the minimum household budget. One support is government subsidy such as cash public assistance, but only about 3% of Hawai'i households receive that entitlement. The important takeaway from the data is that many more Hawai'i families are severely financially insecure than one might think at first glance. Hawai'i County has the highest proportion of people who are economically strapped.

Houseless and Hungry

Listening to people's stories, one can start to fathom how devastating houselessness is to personal health, and how extremely difficult it is to get out of a houseless situation. Health and wellbeing are lower priorities than finding a place to stay and food to eat. In the healthcare system, people who are houseless feel they are treated with less respect and tend to avoid seeking care until it turns into an emergency. Hunger is a state of being that extends even to those with shelter, and is a basic need that often must precede all others.

When I'm sitting around the waiting room, I think they (the staff) think it's okay to make me wait two hours because I have QUEST. Maybe because of how I look, or maybe because our medical is not the best so they treat us to how good our medical is. If we get QUEST, they treat us like crap.

(Houseless woman in Hilo)

I have a disabled patient in his mid-60s and he ended up on the street. He gets a Social Security check every month from work that he did as a younger man and he ends up in the hospital at least once every six weeks because younger homeless men fight him. He has been stabbed, broken many bones, had multiple concussions.

(Maui provider)

I have food. I have housing. I'm happy. I'm not sick anymore. I'm healthy.

(Deaf formerly houseless, now living in Whitmore Village, translated from American Sign Language)

	US	HAWAII	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
HOUSELESS (per 10,000)	18.3	55.4	70.2	69.2	49.8	61.4
Rate of homelessness per 10,000 population. <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i Dept. of Human Services, 2017. National figure from 2015.</i>						
FOOD INSECURITY	N/A	13.7%	13.1%	13.1%	13.0%	12.8%
Feeding America accounts for poverty, unemployment, and median income to project the number of "food insecure" individuals. <i>(Data: 2014). Source: Hawai'i Community Foundation, Hunger in Hawai'i; Feeding America, Map the Meal Gap, 2016</i>						
FOOD INSECURE, % SNAP ELIGIBLE	N/A	57.0%	75.0%	65.0%	54.0%	66.0%
Feeding America's identified "food insecure" individuals who live below 200% FPL and are eligible for government benefits. <i>(Data: 2014). Source: Hawai'i Community Foundation, Hunger in Hawai'i; Feeding America, Map the Meal Gap, 2016</i>						
FOOD INSECURE, % NOT SNAP ELIGIBLE	N/A	43.0%	25.0%	35.0%	46.0%	34.0%
Feeding America's identified "food insecure" individuals who live above 200% FPL and are disqualified from government benefits. <i>(Data: 2014). Source: Hawai'i Community Foundation, Hunger in Hawai'i; Feeding America, Map the Meal Gap, 2016</i>						
RED = of significant note; YELLOW = positive compared to other counties						

Hawai'i's houselessness rates are three times higher than the national average and a serious issue facing every jurisdiction. About one in ten Hawaii residents are deemed "food insecure," meaning they cannot afford to adequately feed themselves to live a healthy lifestyle. People with low food intake have less energy and are linked to poor health and poor performance in school. More than half of individuals who are food insecure qualify for the federal Supplemental Nutrition Assistance Program (also known as "Food Stamps"). Eligibility creates more options for creatively addressing this need. Fewer options are available for the 43% of the state who are food insecure and ineligible for benefits, which is a particular issue to consider for O'ahu's hungry.

Severe Mental Illness and Addiction

Some of our fellow residents have lost most or all of their personal ability due to mental illness or addiction or both. Some have become houseless, and those who shared their stories for this report relayed just how difficult it is to want to seek help, find help, receive help, and get to a state of stability for any amount of time. Many shared how they have become estranged from families. Sometimes, caring and active support is provided by friends found in shelters or in treatment programs.

I used to live in Honolulu and had a good stable job. I had friends who got me into drugs, I lost my kid, my girlfriend left me, and now I'm here.

(Shelter resident in Hilo)

I used to be homeless and struggled with mental health and substance abuse. My work makes my sobriety feel more important.
(Wahiawā community worker)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
FREQUENT MENTAL DISTRESS	15.0%	9.6%	11.7%	10.2%	8.5%	9.4%
Percentage of adults who stated that their mental health, which includes stress, depression, and problems with emotions, was not good for 14 or more of the past 30 days. (Data: 2016). Source: Hawai'i Health Matters, County Health Rankings, 2018						
HEAVY DRINKING	6.5%	7.9%	11.6%	7.9%	7.4%	9.7%
Percentage of adults who reported having more than two drinks per day on average (for men) or more than one drink per day on average (for women). (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017						
DRUG OVERDOSE DEATHS	16.9	12.1	10.9	12.8	12.2	12.1
Death rate per 100,000 population due to drug poisoning (accidental or intentional) (Data: 2014-16). Source: Hawai'i Health Matters, County Health Rankings, 2018						
RED = of significant note; YELLOW = positive compared to other counties						

There is no regularly available data on the number of people actually afflicted with severe mental illness, severe addiction, and their treatment or lack thereof. Based on Department of Health surveys, Hawai'i is doing better than the national average for adults who report poor mental health, such as stress and depression, although some shared that people in Hawai'i may be culturally inclined to not talk about or admit their mental illness. Hawai'i has higher rates of heavy drinking than the national average. Alcohol abuse can negatively impact a person's employment, finances, legal, and family life. Drug overdoses in the U.S., particularly those associated with the opioid crisis, have not climbed to the same levels in Hawai'i, but it is a grave concern for public health officials and could become a major problem for Hawai'i in the years ahead.

Fear and Anxiety

Some people live in fear, lacking the basic safety and security that allows many of us to go on with our lives and take care of our health. A few willing to share their traumas said terror is a special kind of burden to carry. Many victims of physical abuse, sexual abuse, sex trafficking, and other crimes cannot safely seek help, do not want to seek help, or have no help available to them. A different, but also debilitating kind of fear was experienced by residents in Pāhoā who were traumatized by earthquakes and lava. For many, the reaction was helplessness and paralysis.

I've never felt healthy. I went through a lot of spiritual trauma and had a rough childhood.
(Moloka'i adult)

There is a widespread problem of human trafficking in Hawai'i that may be impossible to account for.
(Honolulu attorney)

The sky was red. The stress level was high. Every morning I would wake up wondering if there was lava at my door.
(Pāhoā resident)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
INTIMATE PARTNER VIOLENCE-PHYSICAL	8.6%	9.5%	11.5%	14.3%	8.3%	10.7%
Percentage of adults who report they have ever been hit, slapped, kicked, or hurt in any way by a current or former intimate partner. (Data: 2013). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2015						
INTIMATE PARTNER VIOLENCE-SEXUAL	1.8%	3.6%	4.5%	5.5%	3.0%	3.8%
Percentage of adults who report they have ever experienced unwanted sex by a current or former intimate partner. (Data: 2013). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2015						
RAPE/ATTEMPTED RAPE	N/A	5.8%	5.6%	9.1%	5.2%	6.6%
Percentage of adults who report that someone has ever had sex with them, or attempted to have sex with them, after they said or showed they didn't want that person to or without their consent. (Data: 2013). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2015						
RED = of significant note; YELLOW = positive compared to other counties						

Fear and its severity is not something regularly measured. It is also not something that people can easily talk about or reveal. Some measures exist that may indicate some of the root causes of fear. The percentage of adults who reported being physically or sexually abused by a partner in Hawai'i are higher than the national average, with Maui County reporting the highest rates. The impacts of intimate partner violence can be lasting, resulting in physical injuries and/or emotional trauma. People may cope with this trauma in unhealthy ways such as smoking, drinking, and drug abuse. Maui County also leads the state with the highest reporting rate of rape or attempted rate at 9.1%. All of the measures above are self reported, which suggests the need for further analysis and understanding to know if these are accurate estimates of the actual number of instances.

Grief and Loss

Losing a loved one is a pain that nearly everyone experiences. It too can be paralyzing, destabilizing, and disruptive to health. Similarly, over the past few years, many people in Hawai'i have suffered great losses of life, property, opportunities, and stability at the hands of flooding, lava, earthquakes, storm winds, and fire. The family of a very important community leader in the Puna District had to move for economic reasons after lava destroyed the fishing grounds that helped pay the bills. It is in times of grief and loss that strong families and communities can be a healing force.

I suffered the loss of my son and nothing takes you more into the depths of depression than that. You need to rely on the community here on Maui and appreciate the good things.

(Maui kupuna)

I was married for 25 years and have three children. And then all of a sudden, without any warnings, one day my husband woke up and he didn't recognize me. I felt like I was going crazy. After three weeks, his memory came back. He was basically healthy, but he had Alzheimer's. He passed away after only a few years. My children are all grown up. They left me; they're married. I was really sad and lonely. And I was thinking about taking my life.

(Kalihi kupuna)

The impact of loss on individuals and a community is the underlying factor for most of the problems in our society. Loss of relationships, jobs, marriage, homes, not graduating, individual loss of self, all of these things that put people in situations of unresolved grief. Having that be unresolved and unidentified continues to trigger choices that bring about poor health—substance abuse, violence, houselessness. Loss is the root cause.

(Kaua'i health employer)

According to Hawai'i Health Matters and the National Survey on Drug Use and Health, 9.0% of adults in Hawai'i reported having at least one major depressive episode in the past year compared to 14.3% nationwide (2015-16 data). Studies show that most people with mental health issues do not receive treatment for that illness.

JUSTICE

Health disparities exist, and even without seeing the statistics, those disparities are palpable when spending time in certain communities across Hawai‘i. Those community members know the disparities exist too. If we look for proximate causes of health disparities, we find disparities in income, education, incarceration, and so on. For many who are part of a group with systematically poor health due to their race, gender, sexual orientation, class, national origin, age, or disability, the root of every disparity is an injustice. People experiencing disadvantage and discrimination often shared that what they need to be healthy is to be free from the lingering burdens of unfairness. The layered impacts of injustice are pervasive, cyclical, and generational. Injustice impairs a person’s ability to attain health, education, economic stability, and justice itself. In places where injustice runs deep, some people express resignation that all people like them get sick, or all people like them die early. Rather than focusing on the disadvantages and deficits that certain communities are facing, most of the people who talked about this subject want something done. They want societal wrongs to be righted.

Historical Injustice and Trauma

Many of us have ancestors who as a group suffered a severe historical injustice that destroyed people’s lives—eras of colonization, occupation, forced migration, environmental destruction, systematic oppression, genocide, or enslavement. In the absence of full societal healing and reconciliation, that injustice can still be felt today, most acutely by those who remain at a disadvantage, lack equitable opportunities, face crude discrimination, and are often misunderstood, judged, or discounted. Some can themselves remember the experience—or remember ancestral stories of the experience—of that historical collective trauma. For many indigenous Hawaiians whose ancestral lands were colonized and are now occupied, and more recently for migrants from three nations in Oceania whose islands were used for nuclear testing (often incorrectly clumped together and called “Micronesians”), and any others from throughout the world who now find themselves in Hawai‘i, the present-day reverberations of historical injustice are real. Many feel caught up in a narrative of failure—because their group is more in prison, more dependent on government programs, less educated, more sick. At the same time,

counternarratives of rediscovery and restoration exist as well, and many others are feeling a determination to achieve justice, self-determination, and true health.

For a family to really break a cycle and make a change, it means most of the time addressing a social determinant, it's directly related to economy, education, income, food security, etc. What is the mo'okū'auhau (genealogy) of chronic disease?

(Waimānalo service provider)

Historical trauma or cultural trauma...disempowerment, loss of land, loss of resources. If you follow the trickle down of that...it goes directly to meth. It is oversimplifying to connect it all to sovereignty...but still, it's all connected. If your great, great grandfather was treated poorly, it goes from generation to generation.

(Kaua'i physician)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
PART HAWAIIAN	0.4%	26.0%	33.9%	26.7%	24.5%	23.7%

Percentage of people who list themselves as Native Hawaiian alone or in combination with one or more other races (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017

Native Hawaiians are more likely to live in poverty, have higher rates of unemployment, live in crowded and impoverished conditions, and be imprisoned. Socioeconomic factors are linked to health outcomes, which are poorer for Hawaiians than other races in Hawai'i. Hawaiians have the shortest life expectancy and higher mortality rates than the rest of the population. They have higher prevalence of heart disease and stroke. The overall cancer mortality rates are highest for Hawaiian men and women, and the overall incidence rates are highest for Hawaiian women. The prevalence of diabetes for Hawaiians is nearly double the general population when there are actual screenings as opposed to self-reporting.⁹

There's bullies that make fun of our skin color and culture. One said, "Did you come from a microwave?" and another said, "Micronesian bitch," and another said that we are like roaches.

(Chuukese girl living in Wahiawā)

Micronesians feel unwanted, even at the community health centers and the hospitals. They are told, "you don't comply," "you're dirty," and "you're constantly moving around, so we can't reach you." They feel they are seen as a pariah in the community.

(Honolulu doctor who works with Micronesian and other Pacific Islander populations)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
OTHER PACIFIC ISLANDER	0.1%	2.5%	2.7%	2.3%	2.7%	0.8%

Percentage of people who list themselves as Other Pacific Islander, which does not include Native Hawaiian, Chamorro, or Samoan (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017

⁹ Mokuau, 1-7.

The Compact of Free Association (COFA) is a series of treaties between the U.S. and the nations of the Federated States of Micronesia, the Marshall Islands, and the Republic of Palau. While they do not typically self identify as “COFA,” they are sometimes referred to as the “COFA community” to describe the residents of many different ethnicities who have come to Hawai‘i under this agreement. There is no reliable population data on COFA residents, though estimates from studies and news reports ranged between 12,000 to 18,000 in Hawai‘i. The U.S. Census measure of “Other Pacific Islander” is used here as a proxy for the estimated percent of residents who may be from COFA nations. Many COFA residents have left their island homes because of the adverse health and economic effects of U.S. nuclear bomb testing on their homeland. In Hawai‘i, COFA residents are disproportionately experiencing socio-economic hardship and poor health status, and they are the target of significant discrimination.

Immigration, Language, and “Otherness”

Discrimination and bigotry exist in Hawai‘i. People can sense when they are being judged, scapegoated, perceived as a threat, or treated differently, and stories were shared in that regard. “Otherness” is a sticky trait foisted upon people because in someone else’s judgment, they look, talk or act “weird” or “different.” Immigrants, or people suspected of being immigrants, have particular fears grounded in real government policies, which are felt regardless of their actual immigration status. The injustice of being unfairly treated affects people’s ability to live the healthy life they deserve to have.

When I came to the United States, my family was undocumented. I remember how intentional we were about living in the shadows.

(Kona resident)

People talk to me like I’m stupid because I can’t speak English good. If they spoke Chinese, they would know how smart I am.

(Immigrant living in Waipahu)

There is a fear to go to any institution because people don’t know who is reporting to ICE (Immigration and Customs Enforcement). Many have issues that could benefit from seeing a health provider, but they are afraid, and if issues are non-life-threatening, then people are opting to not be seen. Being scared is an important determinant of health.

(Maui immigrant rights advocate)

Poor people go to the ER and are inadequately treated with bad attitude. Somewhere along the line, health workers altered their thinking about how to treat people. It upsets me that physicians are indifferent to patients who need to be served. The impact is that they don't want to go there because they're going to be ridiculed or treated as less than.

(Maui provider)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
DIFFICULTY WITH ENGLISH	8.5%	12.4%	6.3%	10.5%	14.2%	9.0%
Percentage of people who speak English less than "very well" (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
FOREIGN BORN	13.4%	18.1%	11.3%	18.6%	19.4%	16.6%
Percentage of people who were born outside of the United States (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

Immigrants living in Hawai'i report having difficulty navigating different systems because of language and cultural differences, facing discrimination in employment, and enduring general hostility because they are different. This also applies to COFA residents who may have difficulties with English and are often the targets of Hawai'i's fiercest bigotry and stereotyping. Undocumented immigrants, estimated at 36,000,¹⁰ also face similar language barriers on top of the fear of deportation and worse in the current political climate. O'ahu has the highest percentage and largest raw numbers of immigrants and non-English speakers.

Age and Ability

People with disabilities and seniors whose abilities are deteriorating often feel ignored or at best, an afterthought by others for whom most of the built environment and human systems have been designed. Seniors and people with disabilities feel discrimination and can be the targets of hostility and abuse; all of which constitutes a barrier to being healthy and well.

Ageism is a lot more rampant and insidious than people think. A lot of seniors need paying jobs to stay afloat, and some employers purposely only advertise online or on social media to reduce the number of older applicants.

(Specialist on senior issues in Honolulu)

We have a number of wheelchair-bound clients who have limited access to care because they live in remote areas and don't have transportation that can accommodate the wheelchair. And they can't afford a taxi, either. The result is they can't access their doctor and they don't have the financial resources to go either.

(Hilo provider)

¹⁰ Migration Policy Institute.

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
ANY DISABILITY	12.6%	11.2%	13.3%	10.5%	11.0%	10.1%
Percentage of the population that are limited in any activities because of physical, mental, or emotional problems (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
COGNITIVE DIFFICULTY	5.1%	4.5%	5.8%	3.9%	4.4%	3.8%
Percentage of the population having serious difficulty concentrating, remembering, or making decisions (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
VISION DIFFICULTY	2.3%	1.8%	2.7%	1.7%	1.6%	1.8%
Percentage of the population that are blind or have serious difficulty seeing even when wearing glasses (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
HEARING DIFFICULTY	3.6%	3.7%	4.9%	3.8%	3.4%	3.8%
Percentage of the population that are deaf or have some serious difficulty hearing (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

One in ten persons in Hawai'i reports having a disability. Persons with disabilities have higher rates of poor health outcomes than those without disabilities, including higher blood pressure, inactivity, obesity, and smoking. This is in addition to barriers they face in health care, education, and employment. Hawai'i Island has the largest proportions of people with disabilities among the counties.

Gender

The role of gender can play out in several ways in healthcare. Transgender and gender nonconforming individuals say they are commonly misunderstood by their doctors. Women often do not feel listened to or trusted, and many expressed a desire for sensitivity, empathy, and understanding. Some men feel uncomfortable with being vulnerable and admitting to needing help, so some avoid care until problems are critical.

I told my doctor that something wasn't right because I know my body. But he frequently dismissed what I had to say. I think he didn't trust me because doctors think they understand our bodies better than we as women do.
(Kaua'i woman)

The trans community doesn't feel safe in their doctor's office. Doctors don't use the right pronoun. Trans people pretend to be a different gender to make the doctors feel at ease. They settle for subpar care.
(Health provider who also treats transgender and gender nonconforming individuals)

My mom passed away from breast cancer and when the delivery was made by a male doctor, he said, "Oh yeah, you'll die. There's no cure, but you can have a longer life if you want. But it's gonna be awful because the chemicals are not good." She said she needed some help to hear what she needed to hear, but protect her spirits, don't give into a total loss of hope. So I could do that. She did not go back with him for monitoring, but if he'd had more sensitivity, she might have considered it.

(Maui health worker)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
LGBTQ	N/A	4.8%	4.6%	3.4%	5.2%	4.0%
Percentage of adults who do not identify as heterosexual (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017						

Adults who identify as a sexual minority and transgender and gender nonconforming have poorer health outcomes than heterosexual people. This could be a result of humiliating or harsh interactions with the healthcare system that discourages them from seeking care. Compared to heterosexual adults in Hawai'i, lesbian, gay, and bisexual adults are more likely to smoke cigarettes and drink alcohol, experience physical and sexual abuse by an intimate partner, and have a greater prevalence of depressive disorders.¹¹

¹¹ Hawai'i Sexual and Gender Minority Health Report, 2017.

LOVE

For many people, love is the reason to be healthy. Some would even say love is health itself. Humans need meaningful connections with others. They need to love and be loved; to understand and be understood. A basic foundation of health requires reciprocal, healthy relationships that share familiarity, security, happiness, trust, and intimacy, even if it is with just one other person. When love is empty or at risk, health seems to fall away.

Family and Friends

Although health is often framed as an individual's responsibility, many viewed family and friends as critical to healthy living. Loved ones impact the choices people make, such as diets, treatment options, and overall outlook. Family members and friends are often caregivers or navigators and are also heavily impacted by a loved one's health. That said, others shared stories of how family can also cut the opposite way; some families can be negative influences and/or create an environment that makes it difficult to be healthy.

The last time I felt healthy? The last time I felt healthy was when I was with my mom.

(Unsheltered man in his 60s in Hilo)

Sometimes as a native Hawaiian male, I don't want to hear it from a doctor—even if I know it's true. If I hear it from my mom or my wife, though, there's something different when it comes from your family.

(Kaua'i resident)

A week and a half ago, I went camping with my family for four days. I felt relaxed. We went fishing. Being out with my 'ohana, there were no distractions.

(Moloka'i resident)

Most people want their family navigating for them. We might consider how to pay for a family member to go with the patient when they receive treatment off island. It would give peace of mind to the caregiver and is critical to the patient, especially for rural health.

(Moloka'i provider)

People will be flown off island for treatment and then don't hear anything back in community until it's a relapse or funeral announcement. Sure, there are things to shore up on the medical side but we need more family involvement included in the care model. All the funds go to the patient but the family member is the one taking care of the patient. Individualistic service delivery tends to isolate.

(Moloka'i provider)

The closeness of our 'ohana is a double-edged sword. When there are problems in the family, we tend to protect one another rather than do what's right. Some people might describe people as "resilient" when they are just normalizing bad behaviors or coping.

(Moloka'i resident)

There are no regularly kept measures of the degree to which people have positive loving relationships in their lives, nor are there good measures for when family relationships become a negative force or for how lonely people are. Furthermore, especially in Hawai'i, family relationships can take many forms, extending beyond the walls of the Census-designated household and beyond blood relations.

Caregivers

One of the beautiful things about Hawai'i is the willingness of so many among us to put others ahead of themselves. People shared how they are giving everything to care for a dependent loved one at the cost of their own health and wellbeing. Some of Hawai'i's caregivers sacrifice their own stability, putting themselves at risk of poor health for lack of an alternative that can both ease their burden and meet their obligations.

I haven't been to the doctor's for myself since my postpartum check up. I take my daughter to all her doctors' appointments and make sure she is healthy.

(Mother of a young daughter in Honolulu)

Catching a bus for two hours for a doctor's office or taking care of grandma at home? People will choose to take care of their grandma.

(Wai'anae resident)

Some of our patients are not healthy because their priorities are not right at that stage of their lives. They come with diabetes, mental health issues, oral health issues. How the families are oriented, if one family member is out of sync, they all get out of sync. They need to take care of themselves so that they can take care of others rather than always taking care of others.

(Maui provider)

A 2015 study by AARP-Hawai'i estimated there are about 154,000 family caregivers in Hawai'i who were helping an adult loved one carry out daily activities. This number does not include the number of parents caring for children, and particularly those with special needs.¹²

Screen Time and Social Media

Some feel pervasive technology has been a boost to their quality of life and health. Technology enables them to stay connected with people, form online communities, and find important information on matters of health. However, the majority of views on technology and screen time were negative. In fact, screens were frequently brought up as one of the biggest barriers to good health, often equated to a kind of addiction that is ruining relationships and lives. Many teenagers mentioned this factor, not just for how it is affecting themselves and their peers, but also how screens are impairing adults. Others seemed a little ashamed to admit they are spending too much time on their phones, and not enough on the things that really matter to them.

My mom tells me to get off my phone, but then right after that she's playing a game on my sister's phone.

(Kaua'i teen)

Kids spend all day on their phones, which is rotting our brain. It's an addiction. It becomes dangerous when you pick your phone over family time, like beach or hiking.

(Moloka'i teen)

The amount of time we spend in front of a screen can prevent us from doing what is needed. Like when a parent asks a kid to go cut the grass, but you don't because you're in front of a screen. There are so many things we don't know how to do because we're in front of a screen.

(Kaua'i teen)

Being a teen, we were raised into technology. Day by day, they're including more tech in our schools. But it's still important to learn social skills, and technology is still not a reliable resource for communication. You can miscommunicate a lot of things through social media. Reducing the use of tech would be ideal.

(Kaua'i teen)

While there are some measurements for children's use of screens (covered in the section on Healthy Keiki), there are no consistent measures for adult screen time, use of social media, and any negative impacts that may result from this use. Further study on screen time is recommended as this issue was often mentioned as one of the biggest, growing threats to positive relationships.

¹² AARP Hawai'i.

HOPE

One of the most mentioned factors for living a healthy life was hope—the desire and belief that one deserves to be healthy and can be healthy. How people feel about themselves, though difficult, if not impossible to reliably measure, seems to be one of the most important requirements for living a healthy life. Over and over, people shared stories of loved ones who lost hope and fell to depression, addiction, and even suicide.

Identity and Purpose

A central part of having hope is having an identity and purpose. Many people in Hawaiian communities shared the impacts of a resurgence of positive Hawaiian identity, particularly among children. The restoration of Hawaiian culture and practice has been a positive force for many people, including among non-Hawaiians. Others find inspiration and purpose in their responsibility to family members, in community service, and in their gardens.

I didn't want to go to the doctor and hear negative stuff. I thought I would die early like my dad at 56. But my family is everything and my grandkids are our pride and joy. I can prevent my health from going the wrong way. After two years, I went from not walking to eight miles per day. I lost 31 pounds from January to August with exercise and eating better. This program changed our lives and we want to help our family, friends, and church.

(Hawaiian man enrolled in a diabetes prevention program in West Hawai'i)

Prevent bad health? We gotta teach our kids the culture. But we have to do it now because the older people with the knowledge are all passing away.

(Ka'ū resident)

I learned that if you live for yourself, you've lived for nothing... Health is serving my community.

(Volunteer in Pāhoa)

There are no regularly collected quantitative measures of how people feel about themselves, their strength of identity, and their personal sense of purpose.

Fate and Future Prospects

A big part of having hope is being able to imagine a better future with a sense that it is attainable. Many wanted their kids to be able to grow up healthy, have an opportunity for good education and a good job, and to live in their community if they wanted to. But in some communities, there is little sense of hope. People shared how their goal of making enough money to provide for their family and live a healthy life has never been realized despite working hard. Because of their family histories and systemic disparities, many feel they are fated to illness and early death.

In the Hawaiian community, they don't understand that diabetes is reversible. A lot of our family would say, "We'll just take insulin when we get diabetes."

(Hawaiian woman living in Kona)

With the Hispanic community, we think that if our grandparents have diabetes that we think we're going to get it too.

(Hispanic woman living in West Hawai'i)

Most of us will never afford a house in Lahaina on minimum wage. That's why you get multiple family members in one household. That's why people need to move somewhere cheaper.

(Lahaina hospitality worker)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
SUICIDE DEATH RATE (per 100,000)	13.3	12.9	20.4	15.9	10.3	14.6
Age-adjusted death rate due to suicide (ICD-10 codes *U03, X60-X84, Y87.0). (Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH Vital Statistics, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

There are many reasons why someone might resort to taking one's own life. Here, it is presented as one possible indicator of people losing all hope. This ultimate choice has grave effects on families and communities. The suicide rate on Hawai'i Island is the highest of all the counties and nearly double that of O'ahu.

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kauai County
UNEMPLOYMENT	3.9%	2.2%	2.7%	2.1%	2.1%	2.4%
Civilians, 16 years of age and over, who are unemployed as a percent of the civilian labor force. (Data: 2018). Source: Hawai'i Health Matters, US Bureau of Labor Statistics, 2018						
NO HS DEGREE, adults	12.7%	8.4%	7.7%	7.9%	8.6%	8.2%
Percentage of people aged 18 years and older who do not have a high school diploma or a GED. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
NO BACHELOR DEGREE, age 25+	69.1%	68.0%	71.4%	73.7%	66.0%	71.8%
Percentage of people aged 25 years and over who have earned a bachelor's degree or higher. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
MEDIAN HOUSEHOLD INCOME	\$57,652	\$74,923	\$56,395	\$72,762	\$80,078	\$72,330
Median household income. Household income is defined as the sum of money received over a calendar year by all household members 15 years and older. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
HOMEOWNERSHIP	56.0%	49.4%	52.0%	44.7%	50.0%	46.4%
Percentage of all housing units (i.e. occupied and unoccupied) that are occupied by homeowners. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
MEDIAN HOUSING VALUE	\$193,500	\$563,900	\$316,000	\$569,100	\$626,400	\$520,100
Median housing unit value. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
VACANT HOUSING UNITS	12.2%	14.9%	22.3%	24.6%	10.1%	26.3%
Percentage of total housing units that are vacant (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
SEVERE HOUSING PROBLEMS	18.8%	27.8%	26.9%	32.2%	27.3%	26.6%
Percentage of households with at least one of the following four housing problems: overcrowding, high housing costs, lack of kitchen, or lack of plumbing facilities. (Data: 2010-14). Source: Hawai'i Health Matters, County Health Rankings, 2018						
RED = of significant note; YELLOW = positive compared to other counties						

Many people measure their life success around the “American Dream,” which includes getting an education, finding a good job, owning a house, and providing better opportunities for the next generation. While there are few measures of how one feels about their prospects in life, there are many measures of surrounding economic health that are likely to affect how one feels. The economic measures that report Hawai'i's low unemployment, high median income, and higher rates of high school education do not tell the full story of the economic reality of living in Hawai'i. A high cost of living and limited job prospects are causing many to leave Hawai'i and frustrating those who stay. And while many economists interpret high housing values as a positive sign of economic prosperity; for people in Hawai'i, it marks the growing impossibility of owning a house in the place they call home. The median cost of a home in Hawai'i at \$563,900 is nearly three times the national cost. As so many people are houseless or struggling to pay rent, people are frustrated to know that so many housing units are empty, particularly on the neighbor islands. The quality of housing is also low compared to national standards, with greater than one in four Hawai'i households dealing with overcrowding, high costs, lack of plumbing or lack of a kitchen. There are obviously many other aspects of hope than economic prospects, but these factors are telling as to why so many people on the middle and lower ends of the economic spectrum feel stuck on a treadmill, just getting by with little energy or motivation for their own health.

TIME

Many stories revealed an interesting relationship between time and health. People need time to build and maintain their health: time for healthy activity, healthy relationships, preparing healthy meals, going to the doctor or pharmacy, getting adequate sleep, and more. Some people literally have no time, with multiple jobs to make ends meet and long commutes to work. Others say they feel busier than ever and are crushed with the stress of life, while admitting maybe it is a matter of changing priorities and finding the time to be healthy. And finally, a few stories were shared of too much time, where the idleness of unemployment or retirement is causing a deterioration of health. A unifying factor in our relationship to time is the economy, including the jobs we have (or don't), the things we spend our money on, and the infrastructure on which that economy runs.

Multiple Jobs

People in Hawai'i often need to have more than one job to make ends meet, particularly when so many jobs are seasonal, temporary, part-time, and/or pay the minimum wage or close to it. According to the ALICE report, 62% of jobs pay less than \$20 an hour, with more than two-thirds of those paying less than \$15 per hour. It reports, "the state now faces an economy dominated by low-paying jobs."¹³ At one community meeting with service workers in Lahaina, the group was asked to raise their hands if they only had one paying job. No one raised their hand. When people are running from one job to the other while also juggling multiple priorities, there is little time and space for healthy activity.

When we're so busy with kids and working multiple jobs, there's no time for meal prep and eating healthy. I'll try to whip something together or get drive through at Taco Bell or Panda's. When people work multiple jobs, we lose sleep, which impacts our thought process. I'm not sure how I get home all the time. I'm afraid I'm going to fall asleep at the wheel.
(Lahaina hospitality worker)

It is not clear how many people in Hawai'i have multiple jobs, but based on what was shared in community meetings, one would think the number is quite high. According to the Bureau of Labor

¹³ Aloha United Way, 42.

Statistics only about 5% of the U.S. workforce has more than one job. But according to the Federal Reserve, about 30% of U.S. adults participate in the “gig economy” doing contract work and other side endeavors to supplement income.¹⁴

Commuting and Traffic

Many people are spending more time in their cars or on the bus in long commutes. Traffic congestion is no longer just an O‘ahu phenomenon, as residents of Kaua‘i, Maui, and Hawai‘i Island spend more time with more cars on the roads, exacerbated by increasing tourism and development. Commuting is tiring and stressful and it chews up time and energy that could otherwise be put to productive and healthy activity. According to the ALICE report, “Hawai‘i’s economy is dependent on jobs that pay wages so low that workers cannot afford to live near their jobs even though most are required to work on-site.”¹⁵

In a healthy community, people would live closer to their jobs and spend less time driving all over the island. There would be more time to exercise after work and have a healthier lifestyle. If they live in Wailuku but they have to work in the hotels, they spend two hours commuting, so when they get home from their jobs they have much less time to do anything but sleep.

(Maui immigrant rights advocate)

Most employment opportunities are in Kailua-Kona or even Waikoloa—traveling from down south to Kailua is easily an hour’s drive one way. This takes much time away from home and family and increases the hazards related to automobile related accidents. There’s a high number of traffic fatalities in West Hawai‘i due to infrastructure and the amount of time spent on the road.

(West Hawai‘i resident)

	US	HAWAI‘I	Hawai‘i County	Maui County	C&C of Honolulu	Kaua‘i County
MEAN TRAVEL TIME TO WORK	26.4	27.4	25.3	21.2	29.1	22.4
Average daily travel time to work in minutes for workers 16 years of age and older. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
45 MIN OR MORE COMMUTE	17.0%	19.4%	17.3%	12.0%	21.4%	13.4%
Percentage of workers 16 years of age and older whose average travel time to work is 45 minutes or more. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
MOTOR VEHICLE DEATHS (per 100,000)	11.5	6.3	10.6	11.7	5.1	7.9
Age-adjusted death rate due to unintentional motor vehicle crashes including deaths to automobile occupants, motorcyclists/moped riders, pedestrians, and bicyclists who were struck by a motor vehicle (Data: 2013-15). Source: Hawai‘i Health Matters, Hawai‘i DOH, Vital Statistics, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

¹⁴ Federal Reserve Board, 15.

¹⁵ Aloha United Way, 43.

Traffic has long been an issue on O‘ahu, which has the longest commute of all the islands with one in five people spending 45 minutes or more to and from work. But traffic is increasingly becoming an issue for commuters on the neighbor islands, and just as one West Hawai‘i resident noted in a community meeting, Hawai‘i Island does have a high rate of traffic fatalities, as does Maui.

Stress

Stress steals time and energy. And the people of Hawai‘i—certainly those who participated in this study—are feeling really stressed. Personal health is just not a priority for people worried about work, money, kids, partners, parents, friends, world events, or whatever else is causing stress in their lives. Under stress, many find coping relief in the convenience of fast food or the distraction of screens. Sometimes, stress unleashes even greater problems, such as mental health struggles, substance abuse, struggles at work, or domestic violence.

When there is a lack of funds for food, with increased family stress and drugs, it triggers much of the domestic violence.

(Honolulu medical provider)

It is a beautiful thing that people want to move to Kīhei. But what happens is that people want to get away from what they left, but then they bring it to Kīhei. It’s so commercial now, prices have gone up and now you have a more stressed out community.

(Kīhei provider)

	US	HAWAI‘I	Hawai‘i County	Maui County	C&C of Honolulu	Kaua‘i County
SINGLE PARENT HOUSEHOLDS	33.0%	29.1%	37.7%	33.8%	26.5%	30.9%
Percentage of children living in single-parent family households (with a male or female householder and no spouse present) out of all children living in family households. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
NO PHYSICAL ACTIVITY	23.3%	20.8%	18.8%	19.6%	21.6%	16.7%
Percentage of adults who did not participate in any physical activity or exercise outside of work during the 30 days preceding the survey. (Data: 2016). Source: Hawai‘i Health Matters, Hawai‘i DOH BRFSS, 2017						
INSUFFICIENT SLEEP	34.8%	42.8%	37.6%	38.8%	44.9%	40.1%
Percentage of adults who did not report getting 7 or more hours of sleep in an average 24-hour period. (Data: 2016). Source: Hawai‘i Health Matters, Hawai‘i DOH BRFSS, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

Stress is particularly high for people working and raising children by themselves, which leaves little time for healthy activity. Hawai‘i Island has the highest percentage of single parent households, which are associated with adverse health problems, such as emotional and behavioral problems for adults and children. Children of single parents are also more likely to abuse alcohol, smoke, and develop depression. Physical activity and sleep are important parts of health, yet many in Hawai‘i are not able to adequately do either. Physical activity reduces the risk of health conditions like obesity, heart disease, diabetes, and high blood pressure. Hawai‘i is doing worse than the national average for sleep deficiency, which is associated with health conditions including heart disease, high blood pressure, stroke, depression, and anxiety. O‘ahu has both the highest percentage of people with no physical activity and with insufficient sleep.

FOOD

More people of Hawai‘i seem to be expressing their love and reverence for food, to say nothing of the fact that without good food, we cannot have health. Because so many people in Hawai‘i have deep cultural connections to food, more people are sharing their desire to rebuild a positive relationship to food, produce more of it locally, and ensure that everyone has access to good food. Many positive stories of food were shared, but many of those harkened to a time past. Other stories told of poor food options and ultimately harmful food decisions, poor nutrition, and ill health.

Cultural Connection to Food

Food can be a powerful force for good health, far beyond the chemical nutrients it contains. And Hawai‘i is lucky to have many people and organizations leading this rediscovery, much of which is embedded in our different cultural practices in producing, preparing, sharing, and eating food. At the same time, some are learning that the foods they are accustomed to, whether from long standing traditions or relatively recent ones, can be harmful to them. In the end, a strong re-connection to food—a connection infused with meaning—is what many are seeking in order to obtain better health.

In poverty, we started to eat plenty rice. We shared canned spam, and then we start to lose the healthy ways. When you have generations of that, it's hard to break. My grandparents were eating fish and poi. But my parents were eating poverty food. Now that I have great grandchildren, I watch what I eat around them.

(Hau'ula resident)

I love the food we ate in the Philippines... especially the bagoong, it's so good. We were poor back then, but now I can go store and get it here. But then I learned that if I eat too much, I can get sick. So I have to keep learning how to eat not so much, because I still want to have it.

(Kalihi kupuna, translated from Ilocano)

Two kids named foods they remembered and missed including bobo (coconut and rice balls), breadfruit, coconut water, pancake with meat, icy juice, and mei breadfruit.

(facilitator notes from a talk story with Marshallese children in Wahiawā)

The degree to which people feel connected to their food is generally not measured. As such, it is a hidden asset in many communities that produce and prepare elements of their traditional diets.

Farming, Hunting, Fishing

People who grow or capture their own food often shared how important this activity is to their health. Besides knowing where the food was from and what is in it, people also feel a sense of satisfaction, pride, and confidence when producing food. Producing food also requires physical activity that engages people in the outdoors. Sharing that food is a powerful act for Hawai'i people. Mango, avocado, tangerines, lychee, eggplant, kalo, fish, tako, deer meat—so many things are exchanged, which form stronger interpersonal bonds while spreading the consumption of good food. People feel as though there is momentum around the issue of food, with more organizations and young people devoting time and energy to gardening, fishponds, lo'i, the business of farming, and other food production activities.

When there's akule, the akule 'ohana opens nets to everyone. The sense of community opening net is a big part of health. The net has to get patched and everyone who are skilled in net making helps to patch. Everyone else helps to open the net, teaching the kids about how to harvest the fish.

(Hāna provider)

In plantation days, every family had a hunter and a fisher but now we're getting away from that. We still have about 400 to 500 licensed hunters, which is decent, but without people who hunt, it means less voice and it's even easier to lose hunting areas.

(Longtime Lāna'i resident)

Pretty much everyone grows everything. And if you don't you know someone who does. Even homeless people here eat pretty well.

(Hāna health provider)

Subsistence activity in Hawai'i is generally unmeasured and often unrecognized. Given all the positive impacts of food production and sharing, it may be useful to gain a better understanding of this activity, particularly in communities where it is still a significant practice.

Availability and Affordability of Good Food

Nearly everyone talked about good food as a major part of a healthy life. But good food is understood as more expensive, and the time spent buying good food and then cooking food is another added cost to people's day. Getting good food is difficult for those who have no grocery stores in their neighborhood or who find it too expensive. For many, it can be difficult to switch to a healthy diet. But there is a growing food movement to eat local and eat healthy that has made it easier to get better food. This includes more farmer's markets and organizations building food systems (including production, processing, distribution, consumption, and waste systems) in communities.

Look at poi versus rice. One pound poi is 10 dollars and 15 pounds of rice for the same amount. It's more economical to get the rice.
(Kaua'i resident)

Everything is expensive. Healthy food is expensive and the processed stuff is cheaper. Am I going to pay my electric bill or get healthier food?
(Kaua'i resident)

The barge comes once a week and determines whatever we get here and the variety. Quality is impacted. Often things arrive already expired; is that due to an oversight or just not caring? I end up having to return things to the store.
(Lāna'i resident)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
LOW-INCOME, LOW ACCESS TO GROCERY	N/A	N/A	13.3%	8.2%	5.2%	10.7%
Percentage of the total population in a county that is low income and living more than one mile from a supermarket or large grocery store if in an urban area, and more than 10 miles from a supermarket or large grocery store if in a rural area. (Data: 2015). Source: Hawai'i Health Matters, U.S. Dept. of Agriculture, 2017						
FARMERS MARKETS (per 1,000)	0.03	N/A	0.16	0.06	0.04	0.19
Number of farmers markets per 1,000 population. A farmers market is a retail outlet in which vendors sell agricultural products directly to customers. (Data: 2016). Source: Hawai'i Health Matters, U.S. Dept. of Agriculture, 2017						
GROCERY STORES (per 1,000)	N/A	N/A	0.23	0.25	0.19	0.31
Number of supermarkets and grocery stores per 1,000 population. Convenience stores and large general merchandise stores such as supercenters and warehouse club stores are not included in this count. (Data: 2014). Source: Hawai'i Health Matters, U.S. Dept. of Agriculture, 2017						
ADULT FRUIT/VEG CONSUMPTION	N/A	19.8%	22.9%	21.2%	18.4%	22.8%
Percentage of adults who eat five or more servings of fruits and vegetables per day. (Data: 2015). Source: Hawai'i Health Matters, Hawai'i DOH BRFFS, 2016						
RED = of significant note; YELLOW = positive compared to other counties						

Low-income and rural communities often have fewer options of stores that sell healthy food, but in Hawai'i, rural communities potentially have good access to fresh food even if they lack large supermarkets. The data relating to food access on Kaua'i and Hawai'i Island may show this phenomenon. On one hand, their lower-income residents have less access to grocery stores. On the other hand, they have a higher ratio of farmers markets to people. Generally speaking, the density of grocery stores is related to the diet and nutrition of residents; availability and affordability of healthy food options increase the likelihood of a nutritious diet. One in five adults in Hawai'i is eating five servings of fruits and vegetables a day; Hawai'i Island and Kaua'i have higher rates. Eating a variety of fruits and vegetables is linked to reducing the risk of chronic disease.

Nutrition and Diet Information

One of the challenges to eating better is that people have a difficult time knowing what is and isn't good for them. People can be confused by the often conflicting or jargon-filled nutrition information put out by different sources on social media, websites, TV, and from doctors and peers. Key informants

shared that many doctors lack nutrition education along with an ability to effectively communicate information to their patients.

As far as eating, community gatherings can be a detriment. A lot of people come in with gout after festivals.

(Hāna health provider)

People don't know what it means to be healthy. They don't know that they shouldn't give their kids sugary cereals; they think that it's healthy for the kids to have breakfast.

(Wahiawā health employee)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
USE CALORIE LABELS IN RESTAURANTS	N/A	20.8%	17.7%	20.7%	21.6%	16.2%
Percentage of adults who report that, when calorie information is available in a restaurant, they always or most always use the information to help them decide what to order. (Data: 2012). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2015						
RED = of significant note; YELLOW = positive compared to other counties						

About 20% of people in Hawai'i say they use the calorie labels when they're available at food establishments, which is part of a growing national effort to increase understanding of healthy eating. It would also be helpful to track the degree to which people understand nutrition, nutrition education in schools, and nutrition information shared during doctor visits and other settings.

PLACE

For many people in Hawai‘i, our relationship to our home island is the most important relationship of all. Our land and sea are members of the community. The health of our natural environment affects human health directly and indirectly. Our built environment has a direct impact on what we do and how we live. People find special places where they go to heal and feel healthy. In so many ways, our place affects who we are and how we feel about who we are. It affects what we know, what we eat, what we do, our physical activity, our bodies, our emotional health, and spiritual health.

Connection to Place

The spiritual and cultural connections people have with their places help ground a person’s identity and gives people that knowing feeling of a home. This connection seems much stronger on the neighbor islands, although there are places on O‘ahu where the connection remains, and there are people on neighbor islands who feel that connection slipping away.

When we talk about aloha ‘āina, people think of picking up trash. They’re missing the point that ‘āina is about ourselves. We take care of that ‘āina and we become better. Like uncle learning the plants, teaching us the connection between mountains and sea. Learning our history and genealogy.

(Kaua‘i resident)

I looked all over the world for a place to be healthy. This place is a healthy place – we have fresh, clean air, no vog. You can eat out of your garden every day. You are not tempted to go to McDonald’s because we don’t have it here. We have a nice farmers market.

(Hāwī resident)

Most Hawaiians don't consider themselves minorities the way lawmakers might use that language in health policy. You can find that Hawaiians today are very educated about what they want for the entire community and land is always gonna come in. They think about what is happening with the resources, the food, plants, fish.

(Moloka'i service provider)

Connection to place is not something measured, and therefore is often not seriously taken into account. And yet many people in Hawai'i see it as vitally important to health. This is particularly true for the rural communities and the Hawaiian community.

Environmental Health and Climate Change

Many participants in this CHNA expressed concerns about the health of our environment, noting overcrowding with visitors, development pressures, land use practices, solid waste concerns, and other issues. Climate change experts shared additional risks coming our way including heat-related deaths, "Super" El Nino events that bring stronger and more frequent storms, wildfires, invasive plants that can lead to asthma, sewage overflow that can lead to infections, and changes to soils that could affect the quality of our food. The effects of climate change will also create social and economic burdens likely to disproportionately fall on the most disadvantaged populations, further exacerbating health disparities. The Fourth National Climate Change Assessment released in November 2018 contains a chapter on impacts to human health, and a chapter specifically on Hawai'i and U.S.-affiliated Pacific Islands, which details serious threats to water supplies, ecosystems, coastal communities, ocean resources, and indigenous cultures.¹⁶

We are seeing the overuse of particular geographic areas and environmental resources. The number of visitors at public parks are increasing and people are coming by the bus load. It is currently beyond the capacity of our community. It's actually detrimental to the environment and impacts all of the community.

(Waimānalo resident)

Hospitality and tourism from a business perspective...it's important for our economy. But there's a difference between locals and tourists. A difference in appreciation for the land. There's a lot of pollution caused by visitors. They leave, and it means we have to go and clean it up on our own time.

(Kaua'i teen)

We need healthy land for healthy people, and the deer and sheep are wrecking land, and we're standing by to allow it. It's wrecking the productivity of the reef when the fishpond could be food providing.

(Lāna'i resident)

¹⁶ Ebi, Chapter 14.

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
UNSATISFACTORY AIR QUALITY (days)	N/A	254	254	0	0	0
Number of days per calendar year in which the Air Quality Index (AQI) value was over 100. (Data: 2013). Source: Hawai'i Health Matters, Hawai'i DOH State Laboratories Division, 2014						
CARCINOGENS RELEASED (lbs)	N/A	64,111	1,632	717	61,762	0
Quantity (in pounds) of reported and recognized carcinogens released into the air. The quantity is based on fugitive and point source emissions of 179 recognized U.S. Occupational Safety and Health Administration carcinogens. (Data: 2017). Source: Hawai'i Health Matters, U.S. Environmental Protection Agency, 2018						
PBT RELEASED (lbs)	N/A	120,783	30,318	366	90,099	0
Total net pounds of reported PBT (Persistent, Bioaccumulative, and Toxic Chemicals) released. These data only reflect releases and other waste management activities of chemicals, not whether (or to what degree) the public has been exposed to those chemicals. (Data: 2017). Source: Hawai'i Health Matters, U.S. Environmental Protection Agency, 2018						
RED = of significant note; YELLOW = positive compared to other counties						

With an active volcano, Hawai'i Island is the only island with unsatisfactory air quality days. These pollutants can include particle pollution, carbon monoxide, sulfur dioxide, and nitrogen dioxide, and can harm people with asthma. Poor air quality contributes to the development of respiratory disease. Carcinogens, which can induce cancer, impact O'ahu the most. Chemicals like lead and mercury can cause harm to people and the environment. Other important environmental data to study includes the disposal of solid waste, biodiversity, health of streams and reefs, water quality, shoreline erosion, and many others that have impacts on human health.

Access to Healthy Places

Most participants in this CHNA, when asked about the place they go to be healthy, could name a special place. Some people's healthy places are private, like their homes. But many have public healthy places like hiking trails, beaches, and parks. They jump in the water or tend to the garden. For many, access to those places is crucial for maintaining health.

Health is mauka to makai. We used to swim at the wharf where our dad used to swim when he was keiki. Families did pūlehu down at the beach. Everybody was happy. As much as we want to keep it that way, we see reality: rock walls going up keeping us from accessing hunting and fishing, 'āina being purchased by rich people.

(Hāna resident)

We need more open space and parks and access to more hiking, fishing, biking, running, walking. Our community grew so much faster than people expected; it was poor planning and now it is hard to catch up.

(Kihei resident)

When things get really bad, we go to the ocean to go get grounded again. It's part of our healing.

(Moloka'i resident)

We have people fighting for places to go fishing, but that is getting harder and harder because of condos taking away our right of way.
(Kihei advocate)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
URBAN ACREAGE	N/A	4.9%	2.1%	4.2%	26.3%	4.2%
Percentage of total acreage classified "Urban" by the Hawai'i State Land Use Commission, and regulated by the counties (Data: 2017). Source: 2018 State of Hawai'i Data Book, Hawai'i DBEDT						
CONSERVATION ACREAGE	N/A	48.0%	50.7%	39.2%	40.6%	56.2%
Percentage of total acreage classified "Conservation" by the Hawai'i State Land Use Commission, including areas for protecting watersheds; preserving scenic and historic areas; providing park lands, wilderness, and beach reserves; conserving indigenous or endemic plants, fish, and wildlife; preventing floods and soil erosion; forestry; etc. (Data: 2017). Source: 2018 State of Hawai'i Data Book, Hawai'i DBEDT						
FOREST ACREAGE	N/A	24.0%	21.8%	19.2%	33.1%	45.2%
Percentage of total acreage that is either state-owned or privately-owned lands in the forest reserve system, or private forest land within the conservation district. (Data: 2017). Source: 2018 State of Hawai'i Data Book, Hawai'i DLNR, Division of Forestry and Wildlife						
SAFE BEACH DAYS	N/A	95.9%	93.0%	96.6%	96.3%	97.8%
Percentage of days that beaches are open and safe for swimming. Total available beach days are the sum of the length of each state/territory's beach season multiplied by the number of beaches in the state/territory. Notification actions are reported as the number of days under advisory or closed. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BEACH Program, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

The availability of healthy natural spaces is partly a function of land use designations. O'ahu is the most urban of all the islands, but still has a relatively large amount of land in conservation and forests. Hawai'i's forests, which total to about a quarter of the land, contain many of the best hiking trails, and are critical to the overall health of streams and oceans. Hawai'i experiences a high rate of safe beach days, though beaches are closed typically when there is sewage or chemical runoff that can cause infection and illness. Many people said their healthy places are being crowded out by visitors who have become aware of these places through social media and commercial promotion. It would be useful to track this phenomenon and its impact on resident health.

Land Ownership and Control

Whoever controls land has considerable power over the health of island residents, whether they are conscious of that fact or not. Many residents expressed frustration with the way land is being used in Hawai'i, believing that many of these uses are having adverse effects on human health.

(Someone) bought by Leho'ula, one of the first fishponds and the freshwater spring. We lost access. Now we have to decide whether to stay out or jump over the wall to "trespass." This raises anger in community. ... People become unhealthy, stressed out, and feel a sense of hopelessness. There's no future for the kids. That's when there's drugs and drinking. All you hear now, "how it used to be" and "only one fish over there now"... it's depressing.
(Hāna resident)

There's fear on this island of continued development, different communities really questioning whether we were right to give permits to developers. Why didn't we learn from Maui and O'ahu? There is sadness for our young people believing that they have to leave to better themselves. It is unhealthy for people to feel they have to leave.

(Kaua'i resident)

It seems that if major landowners don't see a benefit financially, they're not going to do it. For example, they could spend money to plant grass or foliage where it's needed to stop erosion, but they decide to spend money on something different that has immediate financial returns.

(Lāna'i resident)

Developers' resources are going into the housing but leaving issues like poor infrastructure and social and economic issues like homelessness to community to figure out. And in new developments, there are so many transplants; there's very little stake in the place—unlike Wai'anae or Waimānalo where you have generations of people tied to and invested in the place.

(State employee, O'ahu)

Owing to our unique history, one unusual feature of Hawai'i is the number of large private landowners and the significant impact that their land use decisions can have on everyday residents. On O'ahu, the two largest private landowners own 32% of all private land. On Hawai'i Island, the two largest own 45%. Four large landowners own 50% of the private land on Maui and three own 55% on Kaua'i. Single landowners control 46% of Moloka'i and 99% of Lāna'i.¹⁷

Built Environment

People mentioned the built environment as a factor in their health in four ways: what's in it, how it's designed, how one gets around, and how it looks. These factors can have profound impacts, sometimes unknowingly, on many aspects of a person's life.

There's no transportation here. The bus doesn't come or it doesn't drop you off in front where you need to go. You have to walk a mile to go to the bus, and it's always raining here.

(Houseless person in Hilo)

¹⁷ State of Hawai'i Department of Business, Economic Development and Tourism, Hawai'i Data Book, Table 06.07.

The roadways are unhealthy in this area. No safe sidewalks or paths along the roadway. A lot of people are against sidewalks because they will take away the country feel, but the kids can't walk or ride bike to school.

(Waimea, Hawai'i resident)

Everything around us is brown. We need to change the way Wahiawā looks. What if we planted trees along the main drag?

(Wahiawā provider)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
COMMUTE BY PUBLIC TRANS OR WALK	7.8%	11.2%	3.4%	5.2%	14.0%	3.7%
Percentage of total trips to work made by walking or public transit. <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i>						
COMMUTE BY BICYCLE	0.6%	1.0%	0.4%	0.8%	1.2%	0.5%
Percentage of total trips to work made by bicycling. <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i>						
RED = of significant note; YELLOW = positive compared to other counties						

Commuting by public transportation, walking, or by bicycle benefits the environment by removing cars from the road and can add to an individual's physical activity. O'ahu is doing better than the national average for these commutes, while only a small number of people are doing so on the neighbor islands. County governments are increasing dialogues around public transportation and safe streets for alternative commuting, however not all places have good infrastructure or realistic options—particularly across the vast distances of Hawai'i Island or in rural communities. Furthermore, many people do not have the luxury of a job that is within walking or biking distance from their home.

COMMUNITY

A community really isn't a community unless the people show signs of trust, caring, and interdependence. When those things exist, the community bestows tangible and intangible benefits upon the people within it. People feel safer and less anxious. They seek help, share information, and try to educate one another. They provide valuable goods and services to one another at no charge. They feel friendship, hope, fun, and purpose where there otherwise would be none. These are the human connections that produce health and are health. Forces that create division and isolation are an ongoing threat.

Community Identity

People on every island have stories of community identity and pride. These narratives are not imposed upon them from the outside, rather they come from the accumulated life experiences of people within the community. They are original, authentic stories about generations past, special places, shared norms and protocols, and historic events. This sense of identity is central to having a strong, connected community. This identity, however, can be fragile if not actively nurtured. Many communities are seeing an exodus of young people who feel they have no realistic opportunities to pursue their careers or make an adequate living in their hometowns. In communities seeing an influx of visitors, particularly into residential areas, people are going to their local stores and seeing fewer familiar faces. As communities become more transient, it is sometimes difficult for residents to keep track of who is coming and going. Continuity is disrupted, and shared experiences become more a thing of the past.

One thing that's not healthy is that Lahaina is a tourist destination. There's traffic and it's dangerous. We have to travel so far for simple needs if you want cheap price. The stress adds up. Tourists have taken over way too much on this side of the island.

(Lahaina resident and worker)

I worry about the impact of military in the area...both the stress that longtime residents are feeling and the health of the military personnel and their families.

(North Shore O'ahu resident)

People come to Hāna to leave it all behind, get away from it all. But locals feel like those people are in their elbow room. When newcomers take what locals feel belongs to them, the dynamic leads to unhealthy relationships.

(Hāna health provider)

I wish the cost of living wasn't so high. I would love to entice more of our local people to come home because they would understand us and know how people are. The graduates move away and wait to come back, but we need a way for them to come back.

(Kaua'i resident)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
HOMES SOLD TO NONRESIDENTS	N/A	27.3%	42.9%	51.7%	15.3%	45.2%
Percentage of total homes sold to non-residents including buyers from continental U.S. and foreign countries. (Data: 2008-15). Source: Hawai'i Appleseed, 2018; Hawai'i DBEDT, Residential Home Sales in Hawai'i, 2016						
PEOPLE MOVING INTO AREA	14.6%	13.1%	11.6%	12.8%	14.6%	11.7%
Percentage of people who moved into an area within the last year; either from a different location within the county, from another county in the state, from a different state, or from abroad. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
VISITORS PER DAY PER RESIDENT	N/A	0.15	0.16	0.37	0.10	0.35
Number of visitors per day divided by the number of residents in each county (Data: 2017). Source: 2018 State of Hawai'i Data Book, Hawai'i DBEDT Annual Visitor Research Report 2017; U.S. Census, American Community Survey 5-year estimates, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

A large number of homes on the neighbor islands are being sold to nonresidents, and yet the percentages of people moving into neighbor island counties are actually lower than on O'ahu. This suggests the homes being bought are not being occupied by owners but are either investment properties or second homes. Nevertheless, some people lamented about so many people moving in and out of their neighborhoods. It may be that influxes of new residents are happening in specific communities while populations are more stable in other towns. People may also be feeling crowded in their own neighborhoods because of an influx of visitors, not new residents. Finding data on short-term rentals is difficult since much of that information is held by private companies. However, the number of tourists coming to Hawai'i is at an all-time high. For Maui and Kaua'i, on average, one in every three people on island is a visitor. With more residences being used for tourist accommodations, local neighborhoods may start feeling less connected and familiar.

Kindness and Generosity

Aloha is real when it is practiced. The core manifestations of aloha in communities are acts of kindness and generosity that people selflessly perform for one another—friends and strangers alike. People give each other rides, share food, look out for each other's kids, give money even when there isn't much to give, and more. During this assessment period of threatening hurricanes, participants shared story after story of residents looking out for one another. However, it is also a common feeling across Hawai'i that communities are changing and the practice of kindness and generosity is being eroded by more people and a mass culture that follows a more individualistic and self-centered ethos.

What works in Hawai'i is the extended family, including hānai. If you want to call it aloha spirit. Whether it's family, friends, neighbors, our communities are just more inclined to take care of each other. Still stemming from the Iniki experience is this feeling that we can rely on each other.

(Kaua'i physician)

I see new vans sitting in (that organization's) parking lot unused, and I deal with so many kūpuna who can't find a way to their doctor's appointment. We have to be better at using our collective resources to help each other out.

(Ka'uū resident)

I was really touched by how many tourists who were strangers came to help us. It reminded me to not just lump people into one group that I usually label one way.

(Kaua'i resident about April 2018 storms and flooding)

Measures of generosity in a community tend to focus on charitable giving and volunteerism, both of which fail to grasp the valuable generosity and kindness in Hawai'i communities, particularly those in which residents lack the kind of money, time or institutional connections that lead to the recording and measurement of charity and volunteering.

Collective Activity

Community-wide activities provide good evidence of the existence of human connection in a community, while simultaneously generating more of that connection. Events and activities instill pride and can promote healthy living. On Moloka'i, teens talked about service days cleaning the beach at Mo'omomi as a healthy activity and a way for them to connect with the broader community. Others, particularly those in small communities, said they look forward to community-wide events that create excitement, cement a unique identity and perpetuate cultural practices and values. School activities, competitions, festivals, concerts, holiday events, and others make irreplaceable contributions to community health.

Here we have taro festival and ulu festivals that bring the community together. It draws everyone out of their nooks and crannies. Events that are fun and enriching. Cultural events are important for generational knowledge transfer.

(Hāna health provider)

When it comes to being healthy, so many people are still embedded in sports, especially at high school. If you go back to the older generations, they were pretty active and they lived off the land. Lots of them still hold that value.

(Lahaina worker)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
DRIVING ALONE w/LONG COMMUTE	34.7%	40.3%	34.2%	27.2%	44.3%	36.0%
Proportion of commuters who drive alone to work and commute for more than 30 minutes. (Data: 2012-16). Source: Hawai'i Health Matters, County Health Rankings, 2018						
SOCIAL ASSOCIATIONS (per 10,000)	N/A	6.5	6.4	6.5	6.3	8.8
Number of organizations per 10,000 population. Includes membership organizations such as civic organizations, golf clubs, fitness centers, sports organizations, political organizations, labor organizations, business organizations, and professional organizations. Social Associations does not measure all of the social support available within a county. (Data: 2015). Source: County Health Rankings, 2018						
RESIDENTS PER COUNTY PARK	N/A	1,947	939	1094	3,334	961
Total number of residents divided by the number of official county parks as of 2017 (Data: 2017). Source: 2018 State of Hawai'i Data Book, County parks and recreation departments; U.S. Census, American Community Survey 5-year estimates, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

44% of O'ahu commuters drive long distances alone, and a third on the other islands do the same. Driving alone taxes the environment and public infrastructure, as well as the driver's body. But it also indicates a society much less interactive, and it amounts to an opportunity cost that diminishes the social capital of the islands. County Health Rankings makes an attempt to measure social associations by looking at the number of organizations in a particular locale. Based on this measure, Kaua'i County does better than others. However, this is not a complete measure of how people interact. For many people without access to private spaces, public parks are important gathering places, but these are particularly scarce for the people of O'ahu. It would be helpful to have more stable measurements of community gatherings, the quality and accessibility of gathering spaces, community events, and actual participation in communal activity.

Workplaces

When thinking of workplaces and health, many might associate the two with so-called "workplace wellness" programs increasingly being implemented to encourage employees to adopt behaviors that may ultimately alter healthcare utilization and reduce costs. This type of program did not arise in interviews or community meetings. However, what did come up is that some workplaces can essentially become strong communities of people with supportive relationships and positive team identities. This can happen organically, or in some cases, employers work hard to intentionally develop that kind of trust and closeness among colleagues.

At our company, the culture is very important... recognition, incentives, big parties like UB40. That for me is the baseline of creating a healthy department overall. Communication is key, knowing where people are coming from. If employees feel like their opinion doesn't matter, that spreads and it becomes negative. Giving opportunity to have a say. They feel empowered to make decisions.

(Lahaina worker)

To the extent that workplaces may be replacing place-based communities, more information is needed to know how much workplaces are serving as positive, supportive communities, and how they can be intentional in this capacity. The same kind of investigation may be necessary to evaluate the strengths and weaknesses of online social networks.

Community Stress

As much as a community can make one feel secure, it can also make one feel scared, vulnerable, and anxious. Criminal activity and violence impact a community, increasing stress, seeding distrust, and encouraging greater isolation. In a number of neighborhoods, people talked about their fear of going out, and doing the normal things that one expects to be able to do in a community such as walking around at night and engaging with neighbors. Some shared about places that they knew were sites of criminal activity such as gambling, sex trafficking, drug distribution, and fighting. Because calling the police may lead to retribution or doesn't seem to stop the problems, people feel powerless. Instead, the community gets hijacked and becomes a liability for community health.

There's an illegal game room right here in our community. The politicians all know about it, law enforcement knows, but nobody is doing anything. Our residents are trying to get their lives together, recover, and heal. And there's violence next door, and sex trafficking. People are afraid. Our community is corrupt. That's why our community stays the way it is.

(Wai'anae transitional housing resident)

One of our kupuna lived next to a vacant house that had a squatter, who was a drug addict, living there. He was always too afraid to call the police for fear of retribution. One day, he came home to the squatter's house on fire and they still live there today. This adds stress to the community and people fearing for their safety.

(Pāhoa resident)

I also live in Ocean View and where you live can make it hard. I want to jog but there are no sidewalks, dogs are always chasing you, people are screaming.

(Ocean View resident)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
INDEX OFFENSES (per 10,000)	N/A	325	274	377	333	233
Number of Index Offenses per 10,000 population. Index Offenses include murder, rape, robbery, aggravated assault, burglary, larceny-theft, and motor vehicle theft. Does not include arson. (Data: 2016). Source: 2018 State of Hawai'i Data Book, Hawai'i Dept of the Attorney General, Uniform Crime Reports 2016; U.S. Census, American Community Survey 5-year estimates, 2016						
PART II OFFENSES (per 10,000)	N/A	703	684	1522	579	566
Number of Part II Offenses per 10,000 population. Part II offenses include other assault, disorderly conduct, driving under the influence, drug abuse violations, embezzlement, forgery and counterfeiting, fraud, gambling, liquor laws, manslaughter by negligence, offenses against the family and children, prostitution and commercialized vice, sex offenses, stolen property, vagrancy, vandalism, and weapons offenses. All traffic cases are excluded. (Data: 2016). Source: 2018 State of Hawai'i Data Book, Hawai'i Dept of the Attorney General, Uniform Crime Reports 2016; U.S. Census, American Community Survey 5-year estimates, 2016						
RED = of significant note; YELLOW = positive compared to other counties						

Hawai'i has a relatively low rate for serious crimes, called "index offenses," such as murder, rape, aggravated assault, larceny-theft, etc. The rates are nearly doubled for lower level crimes, called "part II offenses," which include assault, disorderly conduct, drug abuse, sex offenses, etc. Maui County has the highest rate for both these levels of crime.

Community Based Solutions

In communities deemed to be "disadvantaged," outside organizations are often driving efforts to help "fix" them. From the perspective of communities, these efforts can provide much needed resources, but they can also be the source of great frustration as programs come and go. New concepts seem to arrive every year or so, and these have to be adopted in order to get funding. Help often comes in disconnected silos—funding for health, funding for education, funding for culture, funding for capital improvements, etc. In this mode, it is difficult for a community to build leadership and capacity for sustained improvement. Advocates point to the need for community-based solutions grown and driven by those with the greatest stake in success—the residents themselves. Communities become stronger by engaging in dialogue and strengthening relationships within the community, forming the terms of partnership with outside allies, and coming up with solutions that fit their own people and place.

For something to be successful out here in this community, it takes years of continual dedication and passion for the cause. The guy running the local rugby club puts all of his free time and energy into it, like a second work shift but it's not paid. He comes home from work and coaches boys and girls rugby in the community six afternoon/evenings a week. He brought four of the girls to the mainland to provide some exposure and they each secured college scholarships in rugby.

(Kahuku provider)

The Waimānalo co-op grew over time. The health center partnered with the co-op to provide talk story sessions for patients and the community. The patients enrolled received free membership to the co-op and information about produce and cooking. Farmers would come in with different dishes to taste. Instead of cabbage alone, they tried something else to make, like kim chee. We wanted to expand people's knowledge. We learned what we could create with alternative produce and use what is available in this community.

(Waimānalo provider)

The work being done at Waipā—with the vision of creating sustainable ahupua'a—has community taking ownership and actively involved. Go on Thursday and clean kalo with kūpuna and you see that exchange of information and the connection to the land. For kūpuna especially, all those hands have worked in the lo'i. It is a celebration of place. From the youngest learners to the kūpuna... 'āina, ahupua'a, science, biology... it all creates a very healthy community.

(Kaua'i community leader)

The most important measures to track community building may be the steady improvement of target indicators over time and their correlation with an increase in community-based capacity, such as leadership development, successful community-based entities, civic participation, good jobs, and senses of empowerment. Efforts to help communities develop their own evaluation criteria and research capacities have also been gaining traction as positive steps toward sustainable, community-led solutions.

HEALTHY KEIKI

A common story of Hawai‘i’s past is that everybody looked out for each other’s kids. There are still some communities in Hawai‘i today where many adults feel a responsibility for the safety of neighborhood kids. This special status of our keiki is a deep-rooted value of Hawai‘i. In this CHNA, young people shared their stories to give adults the opportunity to see things through their eyes. Those who participated provided some of the most lucid and complete descriptions of Hawai‘i’s health needs. They see and share almost all of the same challenges and conditions of their adult counterparts. Children experience discrimination and trauma, struggle without basic needs, navigate healthcare services, operate in the same physical environments, benefit from connected communities, often feel isolated and alone, and thrive when their self-identities are strong. In fact, many of the teens in this CHNA have been prematurely thrust into the roles of adulthood, needing to find their own food and shelter, caring for younger siblings, and working to support their households. But for most young people in Hawai‘i, in addition to all other health needs described in this report, a unique set of factors apply in the establishment of good health. In conversations with teenagers, children, parents, teachers, youth workers, and neighbors across the islands, specific health-related challenges and opportunities associated with growing up in Hawai‘i arose.

A Healthy Beginning

Educators, health care workers and others emphasized the great future benefits realized by investing in a healthy start to life—both mothers and their children. Research has shown that the very beginning is the most important stage in a person’s lifetime for impacting future health outcomes.¹⁸ Supports and practices for a healthy start include help for high-risk pregnancies, prenatal care, infant care and

¹⁸ Center on the Developing Child at Harvard University.

nutrition, quality childcare, and preschool. Awareness, availability, and quality of these services vary across the islands. While there are more programs becoming available for some communities, many parents must fend for themselves. A group of new mothers told us how they found information and supports online via Facebook and websites so that they might learn how to provide the best care for their newborns.

My picture of community health is building a village. Without a village, it's hard not to feel isolated. That initial isolation when I first had my child was stifling and anxiety producing.
(New mother in Honolulu)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
INTENDED PREGNANCY	60.0%	54.8%	52.8%	56.8%	54.8%	55.3%
Percentage of intended pregnancies among live births. An intended pregnancy is one in which the mother reported that she wanted to be pregnant sooner than or at the time of conception. (Data: 2011). Source: Hawai'i Health Matters, Hawai'i DOH, Pregnancy Risk Assessment Monitoring System, 2013						
TEEN BIRTH RATE (per 1,000 teen girls)	26.5	20.6	29.5	22.1	17.8	28.8
Rate of live births to resident mothers between the ages of 15 and 19 years. (Data: 2015). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017; National figure from 2013						
EARLY/ADEQUATE PRENATAL CARE	66.8%	70.8%	59.6%	67.3%	72.7%	81.4%
Percentage of women with a recent birth who had adequate prenatal care according to the Adequacy of Prenatal Care Utilization Index. (Data: 2013). Source: Hawai'i Health Matters, Hawai'i DOH, Pregnancy Risk Assessment Monitoring System, 2017						
MOTHER SMOKED DURING PREGNANCY	9.0%	4.3%	7.0%	2.1%	4.0%	7.3%
Percentage of births to mothers who smoked during their pregnancy. (Data: 2013). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2015						
C-SECTION BIRTHS	26.9%	25.6%	32.8%	29.7%	23.5%	28.4%
Percentage of births to resident mothers delivered by a cesarean delivery, or a C-section. (Data: 2013). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2015						
EARLY PRETERM BIRTHS	1.5%	1.3%	1.4%	1.1%	1.3%	1.1%
Percentage of births to resident mothers in which the baby had 32 to 33 weeks of gestation. (Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017						
LOW BIRTH WEIGHT	8.1%	8.3%	5.4%	4.6%	9.3%	4.7%
Percentage of births to resident mothers in which the newborn weighed less than 2,500 grams (5 pounds, 8 ounces). (Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

Mothers who engage in unhealthy behaviors during pregnancy, like smoking or drinking alcohol, and those who do not receive adequate prenatal care, have greater risk of complicated deliveries and babies who are premature or born with low weight. Babies who are premature or low weight are likely to require special medical care and can face infant death or lifelong health conditions. Hawai'i falls within the national average in most of these categories. Hawai'i Island and Kaua'i have higher rates of mothers who smoked during their pregnancy and higher teen birth rates.

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
INFANTS SLEEPING ON BACK	78.5%	78.6%	78.0%	82.3%	78.7%	70.0%
Percentage of women with a recent birth who report they most often lay their babies down to sleep on their backs. (Data: 2014). Source: Hawai'i Health Matters, Hawai'i DOH, Pregnancy Risk Assessment Monitoring System, 2017						
CHILDREN w/o HEALTH INSURANCE	5.7%	2.5%	2.7%	3.2%	2.4%	2.6%
Percentage of children under 19 years who do not have health insurance. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
CHILDREN w/ASTHMA	9.2%	10.2%	11.9%	10.0%	10.1%	8.2%
Percentage of children under 18 years of age that currently have asthma. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018						
EARLY CHILDHOOD EDUCATION	47.5%	47.6%	43.7%	51.7%	48.5%	35.8%
Percentage of three- and four- year olds enrolled in school (public or private). (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

In the early stages of life, it is important for children to have knowledgeable parents and access to needed care. Nearly 80% of mothers say they lie their baby on their back to sleep, which is associated with preventing sudden infant death. Health insurance for children is high compared to the national average, but it can be a huge risk for those 2% to 3% who lack coverage. Asthma in young children is a serious public health problem that can result in limitations on their activities, missed school days, emergency room visits, and hospitalizations. Finally, making sure that children receive quality early education remains elusive with only about half of 3 and 4 year olds enrolled in school.

Children and Families With Significant Needs

Children with complex behavioral and developmental problems might not get the intense, quality care they need and deserve. It is a challenging experience for parents to navigate these unfamiliar and often unique healthcare journeys, from evaluation, to getting accurate diagnosis, to securing services and care management, to dealing with schools and other agencies. Often, children are misdiagnosed or undiagnosed, which can create grave trauma for them and their families. Care they need can be complicated and complex, with nutritional therapy, language therapy, occupational therapy, and other services, all of which need to be coordinated. During these stressful and scary times for parents and children, many need a safe space to get help, and a go-to person with knowledge of these issues. Unfortunately, many find that these supports are unavailable.

My daughter's pediatrician didn't know how to talk about my daughter's vision impairment. I wanted to know what her condition was and whether we needed to see a specialist. Her pediatrician was so awkward about it and couldn't really help. So I went online and found a community of resources. My doctor couldn't help me but the Internet could.

(Mother of a young daughter who is blind)

I had no idea how broken the system was until I had a child who needed urgent help. We survived our very stressful early weeks with the system by putting everything else in our lives on hold. I had to stop work and go after the help I needed to keep my son alive and our family intact. All along the way I saw kids who didn't have a parent who could put things in their lives on hold to deal with the crisis at hand. It's devastating what's at stake in this. And the path to good outcomes is grueling. I had to fight hard to get responses to calls, appointments, competent help and basic information.

(Mother in Windward O'ahu)

Last year our daughter had speech delays and signs of being on the autism spectrum. I feel like we only got the high quality services our child needed because of the steady stream of advocacy and follow up I had to do as the parent. From obtaining a referral from the doctor and following up with agencies and staying on top of a schedule that required me or a caregiver to be home at certain times for our daughter to receive the home based services, it was quite a process. She did so well once she had the services she needed, but I've had other parents tell me their kids aren't receiving the services they need and some did not even know about how to access help.

(Mother in Windward O'ahu)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
CHILDREN W/DISABILITY <5 YRS	0.8%	0.5%	0.3%	0.6%	0.6%	0.7%
Percentage of children less than 5 years old with any disability (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
CHILDREN W/DISABILITY 5-17 YRS	5.4%	3.7%	3.5%	4.1%	3.8%	2.9%
Percentage of children 5 to 17 years old with any disability (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

Children with disabilities make up a relatively small percentage of all children in Hawai'i, but in our connected island communities, many people are connected to a child and family with significant needs, whether through blood relation or friendship. Data is needed to better understand how information and services can flow better to families in need.

Healthy Schools

Hawai'i's schools are the settings where—whether with intention or not, and whether for good or for bad—young people eat many meals, learn about health, develop relationships, adapt to the norms of a community, develop their sense of self, observe peers and adults, and engage in some or all of the physical activity they might get for the day. Of course, the primary purpose of school—education itself—should also set children on a course for healthy and fulfilling lives. So there is no denying the

central role that schools play in the health of children. Comments about schools were divided among those who are quite critical of schools, and those who are hopeful about local successes, such as peer health education and having health professionals in schools.

School is not a safe place. There are lots of bad influences and peer pressure.

(Teen in substance abuse program)

Research has shown that when kids feel school spirit and pride, and when there's space for mindfulness and helping kids be aware of what they're feeling, they don't act out; it helps their behavior. We have a school in Lihue that has been very inclusive, they're involved in the Special Olympics program, they take a trauma-informed approach, and it has made a big difference. Generally kids who are acting out aren't just "bad;" there's more meaning behind it.

(Kaua'i provider)

We had a plan to bring counselors to work with middle schoolers on safe sex and smoking, but health and PE were replaced with math and English for state testing requirements. So a lot of those kids didn't get a health class until high school, which was too late.

(Former teacher, Leeward O'ahu)

The Hawai'i Department of Education collects wellness indicators, in which participating schools report whether their school has the required health education classes, physical education class, more than 20 minutes of recess time, etc. Some schools have also made concerted efforts to improve health, such as creating school gardens, implementing different challenges and games to increase physical activity, and cooking healthy meals together among other activities. An annual School Quality Survey by HIDOE asks members of the school community, such as teachers, support staff, students, and parents, about their safety and wellbeing. These measures demonstrate part of the potentially large role schools play in developing a student's health. With nearly all students having working parents, schools play a major role in developing and raising healthy children.

Youth Diet

The stereotypical youth diet is a bad one consisting of too many processed snacks, sugary drinks, fast food, and caffeine. Teens and adults alike confirmed these assumptions. At the same time, there are success stories of farm-to-school efforts, school gardens, and nonprofit organizations focusing on healthy food, and reducing sugar intake. These efforts are gaining traction and can become more widely impactful with additional investment of time and effort.

The last time I felt healthy was when I was three years old in Micronesia. I ate healthier foods, and things weren't so complicated.

(Wahiawā pre-teen)

There is a Foodland on one end, but people who live in the 'hood don't go there. Kids end up eating musubis from the convenience store, from the manapua man, and from Jack in the Box and Taco Bell.

(Wahiawā worker)

One thing for Kailua, where people supposedly like to eat healthy foods, 7-Eleven is where students stop by for snacks and high school students go there because it is right there.

(Windward O'ahu Public Health Nurse)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
STUDENTS ELIGIBLE FOR FREE LUNCH	42.6%	40.1%	58.3%	40.7%	36.1%	38.4%
Percentage of students eligible to participate in the Free Lunch Program under the National School Lunch Program. (Data: 2015-16). Source: Hawai'i Health Matters, National Center for Education Statistics, 2018						
TEEN FRUIT/VEG CONSUMPTION	22.3%	14.2%	15.6%	15.6%	13.6%	14.1%
Percentage public school students in grades 9-12 who ate fruits and vegetables five or more times per day during the seven days preceding the survey. (Data: 2017). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2018						
RED = of significant note; YELLOW = positive compared to other counties						

About one in eight Hawai'i students are eligible for the federal free lunch program. For some, school meals may be their only consistent meals throughout the year. Hawai'i's teens fall below the national average for consumption of fruits and vegetables, with only about one in seven reporting they ate five or more servings a day.

Stress Growing Up

Each generation seems to think the previous one has no idea what it is going through. Today's generation of teens actually have a point. Cyber-bullying, social media exposure, school shootings, e-commerce, the price of college and student debt, and other modern realities are unprecedented developments that are on teen minds. Many young people feel stressed out. Teens shared about the pressures of academic success, college entrance, and social stressors making life unbearable for many. Family stress is also flowing onto the children and some are being asked to pick up the slack as care providers and wage earners. Young people aren't getting much sleep, and they say there is more anxiety and depression leading to addiction and thoughts of suicide. Just one youth suicide is intolerable, and the tragedy reverberates throughout families and communities with painful effect. Suicide attempts and thoughts of suicide are likewise deeply troubling. So it is not surprising that teen suicide was brought up as a grave concern in Moloka'i, Kaua'i, North Shore of O'ahu, Maui, and practically every community visited. A lack of hope, inability to deal with stress, bullying, isolation, and nowhere to go, are some of the reasons given for this crisis.

It is so stressful with maintaining grades and participating in sports and clubs that I need for college. I have no time for myself.

(Kaua'i teen)

I'm helping my mom by trying to learn how to run one of her businesses so she has less things to worry about.

(Moloka'i teen)

Seeing peers having to get jobs at 14 or 15 to support their families...Playing is part of being a kid and we're missing a piece by not being able to do that.

(Kaua'i teen)

A lot of adults say we have it a lot easier than they did back in the day, but they have that wrong. Dad says he used to have to walk everywhere...but nowadays, we can't walk around without fear of something bad happening.

(Kaua'i teen)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
PARENTS WORKING	70.7%	73.4%	73.8%	79.1%	71.7%	81.5%
Percentage of households with children 6-17 years old and all parents in the family are in the workforce (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
CHILDREN BELOW POVERTY	20.3%	12.9%	23.7%	11.6%	11.2%	8.3%
Percentage of people under the age of 18 who are living below the federal poverty level. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
TEEN w/SUFFICIENT SLEEP	27.3%	22.8%	26.6%	21.8%	22.2%	23.8%
Percentage of public school students in grades 9-12 who got 8 or more hours of sleep on an average school night. (Data: 2017). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2018						
TEEN <2 HOURS SCREEN TIME	58.3%	59.3%	61.3%	55.3%	59.2%	63.5%
Percentage of public school students in grades 9-12 who play video or computer games or use a computer for something that is not school related for two hours or less on an average school day. (Data: 2017). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2018						
TEEN EATING DISORDER	N/A	20.8%	18.1%	23.4%	21.0%	19.9%
Percentage of public school students in grades 9-12 who went without eating for 24 hour or more, took diet pills, powders, or liquids without a doctor's advice, or vomited or took laxatives to lose weight or keep from gaining weight in the past 30 days. (Data: 2013). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2017						
TEEN SUICIDE ATTEMPT	2.8%	2.4%	3.5%	3.1%	2.1%	3.4%
Percentage of public school students in grades 9-12 who reported at least one suicide attempt that required medical attention in the past 12 months. (Data: 2017). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2018						
RED = of significant note; YELLOW = positive compared to other counties						

By now, it should be considered the norm that most children do not have a parent whose sole jobs are to be a parent and manage the home. Few children have that luxury, and in financially-strapped households in Hawai'i, it seems many of these parents have more than one job, leaving even less time for parent-child interaction. On Maui and Kaua'i, roughly four out of every five children have all parents working. Hawai'i Island at 23.7% is the only county with higher than U.S. average of children living below poverty, which is linked to a higher likelihood of physical, behavioral, and emotional problems. The percentage of teens in Hawai'i getting enough sleep has declined slightly from 2013 (state average of 26.8%) to 2017 (22.8%) and time on screens remains an issue. Eating disorders and suicide attempts can be the result of low self-esteem, depression, and other mental health conditions. Those at greater risk of suicidal thoughts can be teens going through traumatic life events, such as parents' divorce, moving, financial changes, and bullying.

Trusted Adults and Role Models

Adults have the potential to guide young people away from risky behaviors like substance abuse, violence, and sex. Most importantly, they can provide safety and security for the children in their care. Even youth who have run away from their homes expressed a desire and need for trusted adults in their lives. This intergenerational connection is vital to the health of young people. Finding that trusted adult, especially for those in distressed families or without structured activities, can be difficult. In the strongest communities in Hawai'i, people trust that most of the adults are looking after each other's children.

My healthy place was being at my grandma's house because she loved me even when I screwed up and loved me the way my parents should have.

(Teen in substance abuse treatment)

I always go to my friends first. If not, then a trusted adult.

(Kaua'i teen)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
TEEN w/ADULT THEY CAN TALK TO	N/A	81.9%	84.4%	81.7%	81.5%	81.3%

Percentage of public school students in grades 9-12 who report they have an adult or teacher they can talk to about things that are important to them. (Data: 2017). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2018

A relatively high percentage of teens report having an adult “they can talk to about things that are important to them.” Additional data would be helpful to understand whether youth have deeper connections with adults, where those connections are made, and how they can be strengthened.

Positive Activities

Activities for youth are valuable, but there are not enough out there to meet community needs. At the most basic level, all youth need places to go that are safe and pique their interests, whether sports, arts, community service, academics, or recreation. Without structured care or activity, children are unsupervised and susceptible to engage in the high-risk behaviors that often lead to poor health. At their finest, youth activities help young people develop skills, a sense of service, leadership, healthy friendships, and a sense of community. Occupied, engaged, connected young people are more likely to become healthy adults.

Our island is small and “healthy” means looking after the youth. We help with elementary kids, clean beaches, showing teenagers how to help with community. Staying in community service is a good activity for having something to do and being a good role model. We can be good leaders in the future and have the ability to serve the community.

(Kaua'i teen)

Athletics, youth and adult, are important. I see a lot of success with Pop Warner football, youth baseball, soccer. The West Side has basketball camps that have been successful. The county could do a better job of supporting sports through park management.

(Kaua'i physician)

We need more safe spaces for our teens and middle schoolers...we don't have a lot to keep them busy to keep them from having bonfires at the beach and getting drunk.

(Kapa'a provider)

Now that they have the ku'i program at Hāna School, I see that as big time health—kids harvesting kalo, cooking, learning how to pound it, right there everyone eating them. It's so rich in culture.

(Hāna provider)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
TEEN BULLIED	20.2%	18.4%	21.3%	21.7%	17.1%	19.9%
Percentage of public school students in grades 9-12 who were bullied on school property in the 12 months preceding the survey. <i>(Data: 2017). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2018</i>						
TEEN CYBERBULLIED	15.5%	14.6%	15.1%	16.4%	14.0%	16.1%
Percentage of public school students in grades 9-12 who were electronically bullied, including bullying through email, chat rooms, instant messaging, web sites, or texting, in the past 12 months. <i>(Data: 2017). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2018</i>						
TEEN TRIED VAPING	N/A	42.3%	49.6%	50.7%	39.0%	45.3%
Percentage of public school students in grades 9-12 who have ever tried an electronic vapor product (e.g. e-cigarettes, vaping pens). <i>(Data: 2017). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2018</i>						
TEEN ALCOHOL USE	32.8%	24.5%	32.1%	32.8%	21.0%	30.1%
Percentage of public school students in grades 9-12 who had at least one drink of alcohol on at least one day in the past 30 days. <i>(Data: 2017). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2018</i>						
OFFERED DRUGS AT SCHOOL	21.7%	25.4%	26.8%	26.5%	25.3%	21.4%
Percentage of public school students in grades 9-12 who were offered, sold, or given illegal drugs on school property in the past 12 months. <i>(Data: 2015). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2016</i>						
TEEN METH USE	3.0%	4.8%	5.7%	6.2%	4.3%	5.4%
Percentage of public school students in grades 9-12 who have used methamphetamines (also called speed, crystal, crank, or ice) one or more times during their life. <i>(Data: 2017). Source: Hawai'i Health Matters, Hawai'i DOH Youth Risk Behavior Surveillance System, 2018</i>						
RED = of significant note; YELLOW = positive compared to other counties						

Organized activity and positive role models can help direct youth away from behaviors like bullying and cyberbullying. Engaged youth can also reduce the chances of picking up addictive behaviors, such as tobacco, alcohol, and drug use. Nearly half of high school students tried vaping or an e-cigarette, a concerning national trend linked to adult tobacco addiction. It would be beneficial to regularly collect more positive measures of engagement to see what kinds of activities youth are engaged in and the impacts those activities are having on their lives.

Youth Voice and Power

Peer influence is often assumed to be a negative force, but there is a positive side that can be activated. Across the islands, teens are successfully holding down jobs, leading peer support efforts, organizing community service initiatives, growing food, and advocating for healthier schools. In places where youth are being heard, respected, and empowered, great opportunities have appeared for successfully navigating the unique challenges of growing up healthy in Hawai'i.

What I wish people knew about me is that I have dreams and goals.
(Mililani teen in rehab)

A few years back, people would say that teens are clueless and don't have a voice but now with the problems we see, we're getting better at voicing thoughts and opinions. And there's more understanding that we're not as clueless as people thought.
(Kaua'i teen)

HEALTHY KŪPUNA

Having reverence for elders is a core value of many cultures. Woven together over the generations, this obligation to honor kūpuna has become a firmly established societal value of Hawai‘i. But attitudes toward seniors in society are changing with the times for at least two reasons. First, in many people’s minds, growing old has become synonymous with having a medical condition. And indeed, much of society’s healthcare resources are directed at and consumed by the senior population with higher per capita costs.¹⁹ Second, there are more seniors than ever in history because people live longer and larger cohorts of people are entering older age.²⁰ This means more care is needed, and it also means more active older adults are playing an unprecedented role in society. In these changing times, how does the community live up to its value of honoring our kūpuna and what will that look like in the coming decades? Conversations with Hawai‘i seniors and the people who care for them helped to shed light on the issue.

Reason to Live

Loneliness, hopelessness, and boredom are the three enemies of growing old, according to a local leader in kūpuna health services. Many physical problems have some known medical treatment, but social and emotional challenges require different supports. Kūpuna shared stories about their children moving on, their friends and loved ones dying, and their feeling of being less needed by their family and society. However, most of the kūpuna who participated in this CHNA had bright outlooks on life, as many of them are connected to organizations working to decrease isolation and help kūpuna find their purpose, through the intentional creation of strong relationships and meaningful community activities.

¹⁹ Centers for Medicare and Medicaid Services.

²⁰ U.S. Census Bureau. “Older People Projected to Outnumber Children for First Time in U.S. History.”

I have a close family and a lot of good friends and my dog. My dog always knows when I nap and when I wake up he is there and he makes me so happy...When we are sad, he is sad but always happy when we come home.

(Maui kupuna)

You have to pursue a goal. I'm a gardener. That's my goal. I tell my plants, "I want you to make flowers and fruits for me," and it works. And I share all my fruit and flowers with my neighbors.

(91-year-old Kalihi resident)

We're pretty isolated here on Lāna'i. People sit at home, or they crochet, sew, and garden. Hobbies are pretty important.

(Lāna'i kupuna)

To realize how lucky you are to be a human being and to be alive, and I can still think and imagine at 94! The world is so beautiful and complicated so I am fascinated by life. It is good to be here and everyone here who is so healthy amazes me.

(Maui kupuna)

As long as kūpuna care focuses on sick care, most measurements of health status are focused on the physical afflictions and medical care of seniors. It would be helpful to have a better understanding of how seniors are viewing their lives, what gives them purpose, what frustrates them, and what kinds of services and interventions can improve emotional and mental wellbeing.

Activity

Most health information aimed at seniors revolves around "sick care," which shapes the narrative in people's minds (including their own) that growing old is about treating disease, slowing down, and eluding death. But the reality is that many kūpuna are still quite busy. A new and potentially expanding role is that more grandparents are becoming necessary full- or part-time caregivers to grandchildren. This intergenerational connection is an important community function. Other activities in both formal and informal settings provide physical activity, mental challenges, and social connection. Many seniors shared how meaningful activity was essential medicine for their physical and mental health.

I have felt healthiest since I had my first grandchild and now I have seven grandchildren. People say, "Aunty, how you stay slim?" My grandkids keep me always moving. But at the same time, I have to work, and when I come home from work, I'm tired.

(Wai'anae grandmother)

I get bored at home, so I come here. We dance, we exercise, we interact with other people, we learn things about how to be healthy. I come here even when I don't feel well because coming here makes me feel healthy. I hope that I will have good health for a long time.

(Kalihi kupuna at Kōkua Kalihi Valley Gulick Elder Center)

About a year and a half ago, I got involved in a program with Hui No Ke Ola Pono. Insurance covered a program for staying well. What they offer for people is really wonderful. If you're in the category of being eligible financially, there's a program for water aerobics, gym, massage...no matter the color of your skin, they are equitable. Many of us are retired age, we encourage one another, when we're doing our fitness, we push one another on. They've got a wonderful thing going in the community.

(Kahului kupuna)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
65+ RESPONSIBLE FOR GRANDCHILDREN	1.2%	1.8%	2.6%	1.7%	1.6%	0.9%
Percentage of residents 65 years or older who are responsible for grandchild(ren) <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i>						
65+ LIVING w/GRANDCHILDREN	5.1%	11.3%	7.9%	11.8%	12.1%	10.0%
Percentage of residents 65 years or older with grandchild(ren) in their household <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i>						
65+ EMPLOYED	16.8%	20.1%	19.1%	22.7%	19.7%	21.7%
Percentage of residents 65 years or older who in the labor force and employed <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i>						
65+ WHO ARE VETERANS	19.4%	20.0%	22.5%	17.7%	20.0%	17.7%
Percentage of residents 65 years or older who are veterans <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i>						
RED = of significant note; YELLOW = positive compared to other counties						

Hawai'i seniors are probably more integrated into families than in the rest of the nation. Besides the fact that fewer live alone, Hawai'i seniors care for their grandchildren at slightly higher rates, with Hawai'i Island at the highest, and a higher percentage of seniors living with their grandchildren. One in five Hawai'i seniors is employed, and one in five is a veteran, suggesting the kinds of engagement and activity available to kūpuna.

Kūpuna Access to Care

Many kūpuna in Hawai'i are on fixed income from pensions, retirement plans, or social security, which do not rise to meet the steady rise in the cost of living including medical care, and in particular the cost of prescription drugs. Across the islands, stories were shared about seniors who ration medications—taking less than the prescribed dosage—to save money. Seniors who live in poverty are among the most vulnerable in society, experiencing or at risk of isolation, hunger, and injury. For many, leaving their homes is difficult as their mobility is limited.

Many of our older patients make appointments for many, many things. Sometimes it might be because they're lonely, but there are a lot of layers to get through. As social workers, we try to see the diamond in the rough. Under all the complaints, it might be someone who needs more hand holding than they realize.

(Honolulu provider)

One fiercely independent father in his 90s saw the doctor recently, and the doctor said he needed to look ahead and figure out long term care if he couldn't find anyone to help him at home when the time comes. He's so independent that he wasn't going to ask around for help and is now selling his house that has been in his family for more than 50 years so he can afford long term care.

(Wai'anae service provider)

We can't ignore the treatment needs that are out there. What is the state going to be doing about the boomers or older? That's going to be a potential financial problem because there's no money to pay for adult dental unless people are privately insured.

(West O'ahu provider)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
65+ BELOW POVERTY	9.3%	8.0%	9.4%	8.4%	7.7%	7.9%
Percentage of residents 65 years or older who are below 100% FPL <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i>						
65+ FOREIGN BORN	13.4%	24.0%	13.4%	22.7%	26.9%	19.5%
Percentage of residents 65 years or older who are not born in the US <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i>						
65+ LIMITED ENGLISH	8.7%	18.1%	8.2%	15.0%	21.2%	13.0%
Percentage of residents 65 years or older who speak English less than "very well" <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i>						
65+ FLU VACCINE	58.2%	56.9%	50.0%	56.0%	59.9%	53.4%
Percentage of adults aged 65 years and older who received an influenza vaccination in the past year. <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018</i>						
65+ PNEUMONIA VACCINE	73.4%	67.6%	56.7%	63.1%	72.8%	64.0%
Percentage of adults aged 65 years and older who have ever received a pneumococcal (pneumonia) vaccine. <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018</i>						
RED = of significant note; YELLOW = positive compared to other counties						

Seniors living in poverty have greater likelihood of negative health outcomes and they may not have the means to afford healthcare, and thus they may skip appointments and forgo treatment. A quarter of Hawai'i's seniors are immigrants with the most on O'ahu, which also has the highest percentage who have limited English proficiency. This could limit their ability to communicate with and understand their healthcare providers. As a possible indicator of how easily seniors are accessing care, we can look at vaccination rates where the state is behind national averages.

Aging at Home

Many kūpuna want to live in the comfort of their own home, in a familiar place and near their family. Kūpuna want to be independent and not a burden on their loved ones to care for them. Some kūpuna aren't able to because they have higher needs of care than their home or community can provide, or that their means can afford. For many, this can be a terrible choice and a difficult transition at a most vulnerable time in life.

In our area there's a care home that cost \$10,000 per month, which is a skilled nursing facility. That's a big stretch...There are no affordable services for end of life.

(Waimea, Hawai'i resident)

I don't want to die among strangers, with the sterilization and smells; you only go to the hospital for emergency. How can we help people at home who don't want to die in a sterile environment?

(Moloka'i kupuna and former provider)

I wish I could die on Lāna'i. I love this place. But my wife needs healthcare that she can't get on island, so we'll likely have to move.

(Lāna'i kupuna)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
65+ LIVING ALONE	42.9%	33.9%	35.9%	34.8%	33.4%	32.5%
Percentage of residents 65 years or older who is a householder living alone (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						
65+ WIDOWED	24.9%	24.5%	21.3%	21.9%	25.6%	24.8%
Percentage of residents 65 years or older who are widowed (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017						

A third of Hawai'i's kūpuna are living alone and a quarter are widowed. Living alone can be a choice and is no doubt preferable to some seniors. But living alone can also be an unsafe proposition without adequate and available social and medical supports. The time for baby boomers to swell the ranks of the senior population is upon us. For kūpuna who lack sufficient financial resources, viable solutions are needed to ensure that all can have the safety and support needed to live out the rest of their lives with purpose, dignity, and security.

Kūpuna Status and Engagement

One kupuna in Hawai'i, who happens to be an expert on aging issues, said his goal is to "live long and die fast." As more baby boomers enter the kūpuna ranks, some are trying to shift the narrative away from sickness and toward engagement including volunteerism, paid work, taking classes, caregiving, community leadership, and teaching. There are challenges. Some seniors face discrimination in hiring, many lack requisite skills in technology, and others whose status was tied to their pre-retirement work have difficulty adjusting to something new. Nevertheless, many seniors are restoring the positive

connotations of “kūpuna status” away from disability and inactivity, and back to an integrated community position of value and honor.

I live Hale Mahaolu. When I first moved in there, there was kind of a stigma about living in low income housing. You didn't have all of the things you want to have. But that is not so in the housing. As a member of the Hale, I get to join a group that discusses ways in which we can have the best of life. We get to have people come by and talk with us about health insurance companies, how we can apply for food stamps. It makes our living that much easier. I like the way the senior citizen housing has been organized because it caters to the older senior citizens. I wish more of our local people would apply to become part of the Hale.

(Maui kupuna)

Positive measures are needed to better understand the tangible and intangible contributions made by seniors across the islands. By tracking and encouraging these social benefits, we may begin to see aging in a new light more appropriate to these generations and this century.

CARE

Often lost in the shuffle of paying for and receiving healthcare is the actual exchange of care. People shared stories of being satisfied with their healthcare, and some shared stories of very positive experiences. But many others, primarily those facing the most disadvantages, have had bad experiences with healthcare: experiences that cause them to get insufficient or deficient treatment; experiences that create confusion and misinformation; experiences that make them suspicious and distrusting of doctors and medicine; and experiences that cause them to avoid interaction with the healthcare system as much as possible, which often leads to more dire and expensive health problems.

Dislike or Fear of Doctors and Medicine

For some people, perhaps more than we might suspect, going to the hospital or seeing a doctor is a horrifying or terrifying experience. People shared stories of trying to get in and out of appointments as fast as possible. Some said they avoid doctors at all costs because they are so scared of hearing bad news, even if they know it means things could get worse in the future. Some are wary of medications, unsure of what they do, how they interact, and why so many are prescribed.

With my family history, my fear is that if I go through with the test, they're going to tell me things I don't want to know.

(Hilo resident with a family history of diabetes)

Our community thinks, "I no like go. I no need go. I'm okay." So then they self diagnose and they don't take the medicines.

(Pāhoa resident)

Lately when I go to the doctor, right from the beginning, the person at the desk is all stressed out and yelling at you...it gets everything off on the wrong foot

(Waimea, Hawai'i resident)

The important thing is stay as healthy as you can so that you don't have to endure the healthcare system.

(Waimea, Hawai'i resident)

No public data was available to help analyze people's negative views of healthcare, particularly those in populations that face health disparities. Based on community conversations, one might theorize that negative views of healthcare are passed down to generations and spread among communities to poison the relationship between people and their healthcare, or cloud the reputations of certain healthcare providers and facilities.

Shame

Shame is a mainstay of many of the cultures of Hawai'i, and it revealed itself in the way people talked about their interactions with healthcare. Some people simply feel unworthy of being helped. Or they are ashamed of their poor health and do not want to talk about it and feel judged. Often it plays out in subtle ways. People might nod when asked if they are doing what the doctor said to do when in reality they haven't. The intent here is not to lie, rather it is to internalize the shame of letting someone down.

Pride is a big barrier. When I was a Community Health Worker, I would tell people about public programs, "This is what your mother paid into, your grandmother paid into it...it's like a savings account...use it!" Pride and shame is a challenge for some. For some, there was "macho" man in the house who just lost his job, have to know how to communicate to convince them it's ok. They say they don't need that kind of help.

(Maui provider)

I notice a lot of clients coming in for things like SNAP applications, or needing employment, or needing medical insurance—but their pride is everything, they'd rather not take advantage. Families have so much pride, they'd rather not access services and usually wait until it is too late. One aunty went into ER last night because she couldn't breathe; she has lung cancer. But often they don't want to burden anybody else, "don't like bother," "figure you're too busy," "they going find all kinds of things wrong; I'd rather just wait"

(Hāna provider)

By its nature, shame is likely a difficult factor to measure. In a safe and comfortable environment, people may be willing to talk about their shame, but in a phone survey or focus group, it would be extremely difficult to discern how many people are too ashamed to communicate openly with their healthcare providers.

Community Competence

Knowing the people in a community—their cares, customs, healthy places, cultural practices, foods, communication styles, and all the other nuances that people have—is critical to providing good care.

Ideally, the healthcare providers in a community would know these things either because they were raised in the community, or because they have worked there with an open mind and have the ability to learn and change. But many communities, particularly small and rural ones, lack degree-qualified people from the community or community-qualified people with requisite degrees. For people in need of healthcare, this competency makes a big difference.

I love my doctor. She's a local girl, born and raised, and knows the struggle that we go through.

(West Hawai'i resident)

There is a greater understanding and comfort for patients when we go into their community and home settings. From there, you can see the reasons why they still have asthma or other illnesses. We need people from the community who understand our community and make getting healthier easier. The system should think more about loosening rigid rules about hiring individuals with degrees and hire more community-minded people.

(Pāhoa resident and former community health worker)

Seems like when you find a doctor who was born and raised in the community, they know better how to work with people here. We need to have more homegrown doctors who know the community.

(Waimea, Hawai'i resident)

I'm surrounded by people from Ni'ihau. They're so comfortable when surrounded by their native language. When they go to a doctor, it makes such a difference when doctor speaks the language.

(Kekaha resident)

Hospitals now employ hospitalists... "rent a docs." They don't live in the community, don't run into their family and patients at the grocery store. It used to be that doctors would advocate for their patients. Now all the work gets undone because the patient doesn't have the supports outside the hospital.

(Kaua'i physician)

There are no publicly available measures of the degree to which healthcare providers are attuned to their constituencies.

Attitudes Toward Non-Western Medicine

Though non-Western medical treatment has become more common, it still largely lacks respect and understanding by those in the healthcare system. Cultural practitioners said they approach healing by treating the whole patient—they talk story and listen to all their concerns, understanding that physical problems can be manifested from emotional and mental issues, and vice versa. But most also recognize

when there are limitations to their treatment and will refer patients to Western doctors when it requires certain medications or treatment. They said they wish there could be greater harmony and mutual respect for each other's practices.

Health is inner connection to being, in relation to everyone around me—family, second family at work, gatherings like this, ability to hang on to old values, old style of living, which would mean how I eat, having the ability to feel connected to my food, connected not in the sense of looking at it in a restaurant, but being connected to it, being as one with the universe, knowing when my body is responding. When I do feel sick, what do I do? When do I go to the doctor or when can I just keep taking lā'au lapa'au? I tune into the signs... getting a headache when not drinking enough water...feeling stressed. Being aware of that is health to me.

(Kaua'i resident and cancer survivor who chose traditional healing)

I provide health insurance for all of my employees. None of them use it because they don't trust Western medicine.

(Native Hawaiian employer)

It's important not to leave out the traditional healers. My mom, for example, she couldn't stand the medical community; she didn't trust. They had 10 minutes to spend with her, they didn't want to know her story, she was uncomfortable. But traditional healers spend a long time talking. These become gatekeepers or at least connectors to health. We should consider not stigmatizing, if not including, them. We need to make them partners at the table; they are seeing people who are not going to doctors.

(Maui health worker)

A pu'uhonua approach would have a warm atmosphere conducive to healing and a person-to-person element. It would be patient centered and not hospital centered where a person can be more comfortable, someone can listen to their needs and advocate.

(Moloka'i resident)

There has to be an understanding from mainstream medicine that traditional healing practices work. You are led to believe that they (Western doctors) know what will work. If they (patients) don't believe in it, all the talking in the world won't convince them. Going to traditional healers gives people a sense of control.

(Kaua'i resident)

Aloha ‘āina, mālama ‘āina...we need to treat culture as asset, not a challenge. Stop seeing culture as a risk factor.
(Honolulu advocate)

Trust

Some people said they have inherent trust in their doctors because of all the schooling and training required to become a doctor. And yet many people also said that they do not think their doctors trust them to do what they need to do. This important aspect of trust is fragile. One experience of mistake, or news of a mistake, or rumors of a mistake can tear down the trust that is so important in the relationship. Managing expectations in compassionate ways is also an important process that does not always occur. Some believe doctors and insurance companies are only in it for the money—a notion which, true or not, corrupts the sacred relationship between patient and healer.

I just lost my husband in December to cancer. He didn't use chemo until the end of his life. The oncologist kept on saying that "we have a better chemo." But it was the nurse practitioner who told him the truth. The nurse practitioner said, "what do you want, quality or quantity of life?" Right there, (my husband) made a decision, "I am done." The oncologist continued to try to convince him. All it took was the nurse practitioner telling him the truth. Sometimes with doctors, it'd be better they just tell you the truth. Doctors have their own commission for different treatments. When I saw the bill, I was totally shocked about how much one treatment cost. Never would I be able to pay that bill without insurance.
(Kaua'i resident)

We need people who understand that we need to treat the person and not just the wound. For some people to get help, it takes seeing a trusted provider regularly before they disclose or accept help.
(Wai'anae community member and advocate)

We have given away the power of health to doctors. I do not understand why we are not completely invested in preventative medicine. Our government and Congress side with the pharmaceutical industry. We have the worst healthcare system with the worst outcomes, and it is the most expensive.
(Maui kupuna)

For native Hawaiians, when they find a doctor who will take them and they secure transportation to get to their appointment, now it's about the relationship they have with the doctor. Today's current "in and out the door" style of business is a barrier. They need relationships in order to be receptive to the care being provided. If they don't feel like the doctor knows and understands them, they may not trust the doctor's instructions or the medication they prescribe. Then we hear that our native Hawaiian clients look like noncompliant patients, and once they get that message, they don't want to cause a problem to the doctor and they don't want to be a burden, so then they stop going to see that doctor. They become very reluctant to go back.

(Native Hawaiian health services provider in Hilo)

How do we switch from competition mindset to cooperation mindset...it's not hospitals' strength because they were trained under a competition mindset. We need to help reset the baseline. No matter how you cut it, capitalism and healthcare don't go together.

(Honolulu advocate)

Effort and Empathy

Patients are not illnesses or diagnoses to be treated. They have stories and histories that need to be understood in order for them to feel cared for. With the rise of electronic records, some talked about how their doctors are only looking at computer screens throughout an examination. Patients want doctors who take the time to understand their lives—their experiences that make it hard to follow the doctor's orders, their family situations that can hinder or support their healing processes, and other aspects that make their lives uniquely theirs. People shared how they want their doctors to trust them and their opinions. They want to feel empowered to take care of themselves. This requires dialogue and a mutual commitment to building a relationship. It takes time, listening, and empathy.

The CNAs (certified nursing assistants) who cared for my mom...they cried when she passed. That was so important to me.

(Health Services Administrator)

I have a new doctor every three or four months. Some are good, some are not so good. (Question: What does "good" mean to you?) Good means he remembers who I am.

(Kalihi kupuna)

I went to a new doctor I hadn't seen before. She didn't look at me, she asked if I was new here, she had an attitude, she didn't order the correct X-ray. Teaching doctor empathy is a big issue.

(Hāwī resident)

Language barriers are not as important as caring barriers. Even if you don't speak my language, I can tell from your body language and the time and patience that you give me that you care—and then we can communicate.

(Kalihi kupuna)

I would like to see more doctors helping patients be able to help themselves. We're our best doctors. Don't discount what people are saying, rather they should acknowledge them and empowering people to know their bodies.

(Kaua'i woman practicing lā'au lapa'au)

I'm afraid that the caring doctors are the old ones who are retiring. Doctors don't do tough love anymore. New doctors don't seem to have that deep love of caring. I see the younger doctors on their devices... they only give you five minutes. When you call, nobody answers. Nobody calls you back.

(Waimea, Hawai'i resident)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
ROUTINE CHECK UP IN THE PAST YEAR	70.8%	72.0%	67.9%	65.1%	74.4%	66.1%
Percentage of adults who have had a routine medical checkup in the past 12 months. <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018</i>						
DIABETICS w/DIABETES EDUCATION	N/A	56.0%	53.2%	55.7%	57.4%	51.3%
Percentage of persons aged 18 years and older with diabetes who report they have taken a course or class in diabetes self-management. Persons with pre-diabetes, borderline diabetes, and women with gestational diabetes are excluded. <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018</i>						
FLU VACCINE RATE (18-64)	33.6%	34.5%	25.8%	24.0%	38.3%	27.0%
Percentage of adults aged 18-64 years who received an influenza vaccination in the past year. <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018</i>						
PREVENTABLE HOSPITAL STAYS-MEDICARE	N/A	23	26	29	21	31
Hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees. Ambulatory care-sensitive conditions include: convulsions, chronic obstructive pulmonary disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney/urinary infection, and dehydration. <i>(Data: 2015). Source: County Health Rankings, 2018</i>						
RED = of significant note; YELLOW = positive compared to other counties						

Without much publicly available data on patient perceptions, satisfaction, and trust of their healthcare providers, a few data points might serve as proxies for the degree to which people feel comfortable with their healthcare. For example, one can look at how many people went to get a routine check up, received some kind of health education, or got a flu vaccine. Data on preventable hospital stays may indicate whether patients (in this case, Medicare patients) sought care at an appropriate or optimal time. However, one should be cautious with these measures since they could also be influenced by how physically or financially accessible services are to people. Better indicators of the strength of the relationship between people and healthcare are needed to create joint solutions to the problems shared by CHNA participants.

AVAILABLE HEALTHCARE

“Access” has become a common term used by the healthcare industry, but it isn’t a term that holds much meaning in the community. At the most basic level, people want to be able to see their doctor when they need to. However, this gets much more difficult to achieve when factoring in transportation, the different ways that healthcare is paid for, the different systems for different types of healthcare, the availability of medical professionals, and whether people have the help they need to know how best to utilize healthcare.

Getting There

For many people, getting needed healthcare involves hours on roads, or a half day on the ferry, or full days of airplane travel. One idea is that isolated areas need more providers and more healthcare facilities. There are certainly strong proponents of that. Others in rural areas shared an understanding that by living in isolated areas, they are making a tradeoff between healthcare convenience and living in the places they call home, although access to emergency care is still a necessity. For people who live far away from healthcare resources, adding new resources is only half of the picture. Another way to see it is that it is even more important for remote areas to have investments made in improving the social determinants of health to ultimately reduce the demand for medical care; things like access to healthy food, preservation of healthy spaces, strong community ties, good paying jobs, financial supports, and educational opportunities.

The lack of transportation on the Big Island makes it difficult to go to appointments. People are not going to get on a bus for two hours, go to Hilo for a doctor's appointment, and take two hours coming back.

(Pāhoa resident)

Another problem is if you need to go to a specialist doctor. I don't have someone to drive me. For Kaiser, you have to go to their places. They pay for you to go...but you have to get your body there.

(Waimea, Hawai'i resident)

We may not have everything we need, but people take care of each other here. We may have to go off island for certain things, but it's hard to imagine anything better than this community.

(Lāna'i resident)

It's hard on this side because we don't have clinic that's open past 8 o'clock. Traffic to go to the other side is crazy. I had to take an employee to Kaiser but because it was an accident that happened on the job and we had to go to (a specific place). If there was an emergency, this side of the island has to fend for itself.

(Lahaina employer)

A set of measures could be developed to look at healthcare consumption for those who are the longest distances away from healthcare. Of course, travel may need to be adequately subsidized to ensure people can realistically access the care they need. But other measures might look at people's demand for healthcare and how strategic upstream investments might help lower that demand in the first place. This kind of effort would need to be a shared effort among multiple parties.

Affordable

For people living on the edge of poverty, the cost of healthcare can drive it lower on the priority list than it ought to be. Many people choose to skip the doctor's office or medications because of cost. These costs go beyond the co-payments, and include the cost of missing work and transportation costs. In lieu of going to the doctor's office, some will look online to self-diagnose or self-medicate. Some talked about how free or subsidized programs saved their lives.

During coffee season, most of the men work from 6 am to 6 pm and just have time to take a lunch break. They think, "I cannot be sick because I need to work." They turn to pills.

(Hispanic resident living in West Hawai'i)

There's a need for free programs. People already overcome so many barriers for wanting to quit smoking. When there are programs for them, sometimes they require payment or they're only available on another island. Bay Clinic found a way to partner with organizations to ensure that all tools and parts of the program were free and available to participants.

(Pāhoa resident)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
NO DOCTOR VISIT DUE TO COST	12.1%	7.4%	9.9%	8.6%	6.5%	8.4%
Percentage of adults who report not seeing a doctor in the past 12 months because of cost. <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFFS, 2018</i>						
ADULTS w/o HEALTH INSURANCE	14.8%	6.6%	9.0%	8.3%	5.6%	8.4%
Percentage of adults aged 19-64 that do not have any kind of health insurance coverage. <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i>						
PUBLIC HEALTH INSURANCE ONLY	22.3%	18.9%	30.1%	20.8%	16.2%	20.4%
Percentage of persons who have public health insurance only. Public health coverage includes the federal programs Medicare, Medicaid, and VA Health Care (provided through the Department of Veterans Affairs); the Children's Health Insurance Program (CHIP); and individual state health plans. <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i>						
RED = of significant note; YELLOW = positive compared to other counties						

As has been the case over the decades, compared to the U.S., Hawai'i residents are more likely to have health insurance. Neighbor island residents are more likely to forgo doctors visits because of cost and more likely to be uninsured. Both situations mean that they are at higher risk of failing to detect and treat conditions before they get more serious. Hawai'i Island has the highest percentage of people with only public health insurance at 30%.

Comprehension

Medical language and scientific concepts are difficult to comprehend. Sometimes doctors do not take the time to explain information in ways their patients can understand. This lack of comprehension is no small matter—it can erode a patient's self confidence, deter people from seeking additional care, and at worst prevent someone from benefiting from the health care they need. Essentially, healthcare becomes inaccessible. For those who speak a language foreign to their doctor, the comprehension challenge is even more steep and can be more consequential. Although the common healthcare paradigm assumes the patient is responsible for complying with doctor's orders, when there is no comprehension, the doctor ends up holding all the cards, and perhaps more responsibility than is reasonable to expect.

Regarding medication, for patients who have trouble with English language, you have to be able to show shapes and colors and tabs instead of names; you have to be able to spend a lot of time. Patients are going to smile and nod and not complain. Sometimes they just want to please the doctor.

(Kaua'i physician)

We all just say "yes doctor" even if we no understand. If you no speak English or have a different culture, even worse.

(Maui kupuna)

Conversations with community members suggest that medical literacy among the general public is fairly low. Also, many are seeking information online or from peers rather than interacting with their designated healthcare providers. The degree to which this is happening, the quality of information being conveyed, and the ultimate effects could not be discovered in the course of producing this report.

Technology

The rise of technology in healthcare may give people more access to doctors and programs, but it is not always an effective solution according to some who have experienced it. Some talked about the advantages of technology, such as automated reminders about appointments and summaries of their visits. Other cautioned that technology cannot replace the human connection needed in health. Technology doesn't convey the same sense of trust that a person can, and some say they are unsure of the safety of their data and privacy. Many are also not as tech savvy, especially those whose first language isn't English, seniors, and those without stable access to technology.

We did a telehealth program for diabetes. It worked a little, but it doesn't replace the face-to-face interaction people need to really change.
(Moloka'i health worker)

They're developing telehealth for East Hawai'i to bring specialists to the people. It's a heavy lift but they had funding from the legislature. There are so many people going to O'ahu on a daily basis, spending so much money, to access specialists.
(Hilo hospital worker)

This tele-medicine nonsense has to stop. People think that you can do things telephonically. You cannot. You need to hold their hands. The navigators know how important it is when you physically hold hands and bring them on.
(Honolulu physician)

Access to good mental health care is lacking here. I wish we could do telehealth, though it's not the same as seeing therapists in person.
(Hāna provider)

More information is needed to determine what applications of technology are effective with different communities. There seems to be a disconnect between the promises and hopes of those deploying technology and community experiences with and attitudes toward technology aided access solutions.

Availability of Medical Professionals

A 2018 survey by the University of Hawai'i John A. Burns School of Medicine found there is a doctor shortage across Hawai'i.²¹ Healthcare employers say they have a hard time recruiting medical professionals, particularly in small communities where wages aren't as competitive and communities lack conveniences of bigger cities. Patients feel it too with the lack of available doctors and appointments as well as the high turnover of doctors in their communities.

I had to wait three months to see a doctor to get my knee replaced. I ended up having to go to O'ahu, and I suffered for it.
(Maui kupuna)

The choice of providers is really limited geographically. It is hard to bring specialists to our area, and there is a fair amount of turnover at our health center.
(Hāwī resident)

²¹ Consillio.

What does buying a home here symbolize? Commitment. If you are serving so many people, the more attractive place to service is O‘ahu. You couldn’t keep a doctor here. A doctor buying a home shows commitment to our community and to staying.

(Kohala resident)

It’s hard to hire qualified and dedicated people on Moloka‘i. There are many people whose spouses don’t want to come over and don’t want to do long distance marriages.

(Moloka‘i health employer)

It can be very challenging for a physician's family members to adapt or live on a rural island with no, or very limited, access to a big city.

(Lāna‘i provider)

	US	HAWAI‘I	Hawai‘i County	Maui County	C&C of Honolulu	Kaua‘i County
ADULTS w/USUAL SOURCE OF HEALTHCARE	78.2%	84.7%	82.2%	78.5%	86.8%	83.4%
Percentage of adults that report having one or more persons they think of as their personal doctor or health care provider. <i>(Data: 2016). Source: Hawai‘i Health Matters, Hawai‘i DOH BRFSS, 2018</i>						
PRIMARY CARE PHYSICIANS (per 100,000)	N/A	87	74	94	90	72
Number of primary care physicians including non-federal, practicing physicians (M.D.’s and D.O.’s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics per 100,000 residents <i>(Data: 2015). Source: County Health Rankings, Area Health Resource File, 2018</i>						
NON-PHYSICIAN PCP (per 100,000)	81	53	38	43	58	43
Non-physician primary care provider rate per 100,000 population. Primary care providers who are not physicians include nurse practitioners (NPs), physician assistants (PAs), and clinical nurse specialists. <i>(Data: 2017). Source: Hawai‘i Health Matters, County Health Rankings, 2018</i>						
RED = of significant note; YELLOW = positive compared to other counties						

Most Hawai‘i adults say they have at least one person they think of as their personal healthcare provider. People without a regular source of healthcare may not receive the care they need, which can lead to missed diagnoses, untreated conditions, and bad health outcomes. They are also less likely to get routine checkups and screenings. In general, O‘ahu has more health resources available to its residents than people on the neighbor islands. Conditions are much more tenuous in specific areas: the Federal Health Resources & Services Administration currently designates Lahaina, Kula, Kīhei, and Hāna/Ha‘ikū on Maui, all of Moloka‘i and Hawai‘i County as Primary Care Health Professional Shortage Areas.²²

Mental Health Services

As understanding of mental illness grows and as the occurrence of mental illness feels more ubiquitous and socially understood, the demand for mental and behavioral health services continues to grow. Furthermore, since the outcomes of mental illness can be just as devastating as illnesses of the body, people have a difficult time understanding the fact that the healthcare system seems to treat the

²² U.S. Department of Health & Human Services. "Health Professional Shortage Areas."

conditions so differently. In some places, the needs are at a critical level, with trauma, substance abuse, stress, depression, and other conditions wreaking havoc on the fabric of community, further weakening a core foundation of community health. Untreated mental and behavioral health issues spiral into many bad outcomes. This crisis of care is an issue of concern across the islands.

There is a severe shortage of mental and behavioral health, especially around inpatient and outpatient substance abuse treatment. Everything that we hear from our stakeholders is that spots are full and there's a waitlist.

(Honolulu advocate)

It was really hard to find culturally relevant help for our son. Being Hawaiian and living in a rural area with other Hawaiian families, you'd think there would be resources for mental and behavioral health derived from our cultural practices and knowledge. There weren't cultural programs for this and there weren't any other kind either. We spent so many hours in the car and it looks like there will be many more hours spent getting to and from the help we need.

(Mother in Windward O'ahu)

Behavioral health is super hard work when paddling upstream. Maybe there are plenty of eligible people to do this work, but why would anyone choose to do it? Burnout and exhaustion is high. Our main role is to support the patient and that takes a constant effort to justify and explain to counterparts.

(Honolulu provider)

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
MENTAL HEALTH PROVIDERS (per 100,000)	N/A	227	286	154	227	189
Number of mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug abuse, and advanced practice nurses specializing in mental health care per 100,000 residents (Data: 2017). Source: County Health Rankings, National Provider Identification Registry, 2018						
RED = of significant note; YELLOW = positive compared to other counties						

Connecting people in need with quality mental health care is a continuing challenge. It is widely reported that many people are not receiving the treatment that they need, although current public data was available. The Federal Health Resources & Services Administration currently designates Hana/East Maui, Moloka'i, Hawai'i County, and Kaua'i County as Mental Health Professional Shortage Areas.²³

²³ U.S. Department of Health & Human Services. "Health Professional Shortage Areas."

Oral Healthcare

Dental care is often overlooked when it comes to overall health, and yet it has far reaching impact on a person’s life. Poor dental health can cause debilitating pain. It can affect the ability to chew, causing digestive problems and affecting diets. It can negatively affect self-esteem and hinder a person’s ability to get a job. But oral healthcare is implemented differently from other types of medical care, and problems arise for people trying to get the services that they need, particularly for those who are most vulnerable. As with mental health services, this lack of parity with oral health care creates confusion and frustration particularly for those who see no difference between treatment inside the mouth and the rest of the body.

Dental problems are preventable. But if I’m living in tent on the beach with no running water, where do I put my toothbrush, where do I go to brush teeth? These daily logistics of taking care of yourself are taken for granted by people living in a house.

(West O’ahu provider)

If I had my back teeth, I’d eat carrots.

(Houseless person in Hilo)

Neglecting the oral health of our people has terrible consequences. It is difficult to say but, with government not supporting the dental care of those most in need, we are creating a generation of adults who don’t have any teeth.

(West O’ahu provider)

	US	HAWAI’I	Hawai’i County	Maui County	C&C of Honolulu	Kaua’i County
DENTISTS (per 100,000)	N/A	85	65	62	94	64
Number of dentists per 100,000 residents <i>(Data: 2016). Source: County Health Rankings, Area Health Resource File 2018</i>						
DENTIST VISIT	66.3%	72.7%	65.0%	66.3%	75.6%	73.0%
Percentage of adults who have visited a dentist or dental clinic for any reason in the past year. <i>(Data: 2016). Source: Hawai’i Health Matters, Hawai’i DOH BRFS, 2018</i>						
RED = of significant note; YELLOW = positive compared to other counties						

Hawai’i does slightly better than the national rate of people visiting their dentist, though Hawai’i Island and Maui County have lower rates than the state’s average. The Federal Health Resources & Services Administration currently designates Hawai’i County, Kalihi-Pālana on O’ahu and Hāna/Ha’ikū on Maui as Dental Health Professional Shortage Areas.²⁴

²⁴ U.S. Department of Health & Human Services. “Health Professional Shortage Areas.”

DOWNSTREAM HEALTH EFFECTS

The following are important downstream health effects seen in the four counties. By employing a social determinants of health framework, these measures can be seen as, in large part, outcomes of the more fundamental social, political, economic, and environmental upstream causes mentioned above.

Life and Death

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
LIFE EXPECTANCY - FEMALES	81.5	83.9	83.2	83.7	84.1	83.9
Total number of years a female person can be expected to live if current mortality rates continue to apply. (Data: 2014). Source: Hawai'i Health Matters, Institute for Health Metrics and Evaluation, 2017						
LIFE EXPECTANCY - MALES	76.7	78.4	77.3	78.4	78.6	78.3
Total number of years a male person can be expected to live if current mortality rates continue to apply. (Data: 2014). Source: Hawai'i Health Matters, Institute for Health Metrics and Evaluation, 2017						
ALL CAUSE MORTALITY (per 100,000)	733.1	571.3	645.2	572.7	558.3	561.4
Age-adjusted death rate due to all causes. (Data: 2015). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

Life expectancy measures a community's general health. Life expectancy and the death rate varies between race and ethnic groups, and they reflect the health disparities in the community, public health, and medical care. Hawai'i is doing better than the U.S. average, though Hawai'i Island has the lowest life expectancy and highest death rate among all the counties. Death rates of Native Hawaiians and other Pacific Islanders are three times the overall rate.

Cancer

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
CANCER	---	9.4%	10.7%	12.7%	8.7%	10.8%
Percentage of adults aged 18 and over who have ever been told by a health professional that they have any type of cancer, except skin cancer. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018						
DEATH - CANCER (per 100,000)	158.5	131.4	140.1	139.9	128.2	126.6
Age-adjusted death rate due to all forms of cancer (ICD-10 codes C00-C97). (Data: 2015). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017						
BREAST CANCER (per 100,000 F)	124.7	136.1	129.7	125.7	140.6	119.6
Age-adjusted incidence rate for breast cancer in cases per 100,000 females. (Data: 2011-15). Source: Hawai'i Health Matters, National Cancer Institute, 2018						
DEATH - BREAST CANCER (per 100,000 F)	20.3	18.7	20.1	21.7	15.5	14.0
Age-adjusted death rate due to breast cancer among females (ICD-10 code C50). (Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017						
PROSTATE CANCER (per 100,000 M)	109.0	86.9	49.2	56.7	100.0	98.2
Age-adjusted incidence rate for prostate cancer in cases per 100,000 males. (Data: 2011-15). Source: Hawai'i Health Matters, National Cancer Institute, 2018						

DEATH - PROSTATE CANCER (per 100,000 M)	18.8	15.4	14.4	18.5	12.9	15.5
Age-adjusted death rate due to prostate cancer among males (ICD-10 code C61). (Data: 2013-15). Source: <i>Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017</i>						
LUNG CANCER (per 100,000)	60.2	46.2	44.6	44.7	47.3	39.4
Age-adjusted incidence rate for lung and bronchus cancers in cases per 100,000 population. (Data: 2011-15). Source: <i>Hawai'i Health Matters, National Cancer Institute, 2018</i>						
DEATH - LUNG CANCER (per 100,000)	40.5	31.3	30.1	31.7	32.0	26.9
Age-adjusted death rate due to lung cancer (ICD-10 code C34). (Data: 2013-15). Source: <i>Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017</i>						
RED = of significant note; YELLOW = positive compared to other counties						

One in eight women will be diagnosed with breast cancer over the course of a lifetime, making breast cancer the most common type of cancer among women. For men, prostate cancer is the most commonly diagnosed cancer. Lung cancer is the most common cancer that people die from. Cancer rates are highest among the elderly and Caucasians. However, cancer death rates are highest among Native Hawaiians and other Pacific Islanders.

Diabetes

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
PREDIABETES	---	14.6%	13.7%	14.4%	15.2%	10.3%
Percentage of adults without diabetes who have been told by a health care professional that they had prediabetes. (Data: 2016). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017</i>						
DIABETES	10.5%	10.5%	11.5%	11.5%	10.2%	11.7%
Percentage of adults that have ever been diagnosed with diabetes. Women who were diagnosed with diabetes only during the course of their pregnancy were not included in this count. (Data: 2016). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017</i>						
DEATH - DIABETES (per 100,000)	21.3	14.4	14.8	17.0	14.7	14.2
Age-adjusted death rate due to diabetes (ICD-10 codes E10-E14). (Data: 2013-15). Source: <i>Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017</i>						
RED = of significant note; YELLOW = positive compared to other counties						

One in ten Hawai'i adults has diabetes, which disproportionately affects minority and elderly populations. Diabetes also leads to other complications, including cardiovascular disease, blindness, stroke, and kidney disease. The cost of diabetes goes well beyond medical costs as it leads to lower productivity and creates caretaking needs. As with other disease, even though incidence rates do not appear to be any higher for Native Hawaiians and other Pacific Islanders, and even though Native Hawaiians have the highest rates of receiving formal diabetes education, their death rates due to diabetes are the highest.

Heart Disease and Stroke

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
HIGH BLOOD PRESSURE	30.9%	32.0%	31.6%	27.1%	33.4%	32.6%
Percentage of adults who have been told they have high blood pressure. Normal blood pressure should be less than 120/80 mm Hg for an adult. Blood pressure above this level (140/90 mm Hg or higher) is considered high (hypertension). (Data: 2015). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2016</i>						
HIGH CHOLESTEROL	36.3%	36.3%	35.4%	35.8%	36.8%	36.9%
Percentage of adults who have had their blood cholesterol checked and have been told that it was high. (Data: 2015). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2016</i>						

CORONARY HEART DISEASE	4.1%	3.6%	4.7%	3.5%	3.3%	4.4%
Percentage of adults who have ever been told by a health professional that they had coronary heart disease. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017						
DEATH - CORONARY HEART DISEASE (per 100,000)	108.3	66.1	76.9	72.8	64.5	51.2
Age-adjusted death rate due to coronary heart disease (ICD-10 codes I20-I25). (Data: 2015). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017						
DEATH - CONGESTIVE HEART FAILURE (per 100,000)	19.9	14.4	13.7	10.0	14.3	12.3
Age-adjusted death rate due to congestive heart failure (ICD-10 code I50). (Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017						
STROKE	3.0%	3.0%	3.1%	1.7%	3.2%	3.7%
Percentage of adults who have ever been told by a health professional that they had a stroke (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017						
DEATH - STROKE (per 100,000)	37.6	37.4	43.7	28.9	34.0	38.1
Age-adjusted death rate due to stroke (ICD-10 codes I60-I69). (Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

High blood pressure, often called the “silent killer,” contributes to stroke, heart attacks, heart failure, and kidney failure. Nearly one third of people with high blood pressure are unaware they have it because there are no symptoms associated with it. Strokes affect mainly the elderly population and can lead to long-term disabilities and death. Although not more likely to have high blood pressure, high cholesterol, or coronary heart disease, Native Hawaiians and other Pacific Islanders are much more likely to die from heart disease, heart failure and stroke.

Other Factors and Ailments

	US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kauai County
ARTHRITIS	25.5%	21.9%	25.1%	25.7%	20.8%	23.7%
Percentage of adults aged 18 years and older who have ever been told by a doctor that they had arthritis. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017						
ASTHMA	9.1%	10.7%	12.7%	11.0%	10.6%	8.9%
Percentage of adults who have been told by a health care provider that they currently have asthma. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017						
COPD (45+yrs old)	6.2%	6.0%	7.4%	6.1%	5.8%	5.1%
Percentage of adults aged 45 years and older who have ever been told by a health care professional that they had chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017						
DEATH - COPD (45+yrs old)(per 100,000)	115.1	50.0	68.7	65.4	43.1	49.0
Death rate due to chronic obstructive pulmonary disease (ICD-10 codes J40-J44, and excludes asthma) among persons aged 45 years and older. (Data: 2015). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017						
OBESITY	30.1%	23.8%	26.9%	24.3%	23.3%	24.0%
Percentage of adults aged 18 years and older who are obese according to the Body Mass Index (BMI). A BMI >=30 is considered obese. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017						
KIDNEY DISEASE	2.8%	3.7%	3.2%	3.0%	4.1%	4.1%
Percentage of adults who have ever been told by a health care professional that they had kidney disease (not including kidney stones, bladder infection, or incontinence). (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017						
SMOKING	17.0%	13.1%	16.3%	15.2%	11.9%	15.1%
Percentage of adults aged 18 years and over who have smoked at least 100 cigarettes in their life and who report smoking some days or every day. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017						

DEATH - CIRRHOSIS (per 100,000)	10.8	8.0	10.4	11.2	5.8	5.9
Age-adjusted death rate due to cirrhosis (ICD-10 codes K70, K73-K74). (Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017						
ONE OR MORE TOOTH EXTRACTIONS	43.4%	41.5%	50.9%	44.5%	39.0%	45.8%
Percentage of adults who have had at least one permanent tooth extracted due to tooth caries or periodontal disease. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017						
RED = of significant note; YELLOW = positive compared to other counties						

Arthritis, affecting more than one in five adults in Hawai'i, is the most common disability that impacts people's daily activities. Chronic obstructive pulmonary disease, or COPD, refers to a group of diseases that cause breathing related problems and whose symptoms include wheezing, chronic cough, and shortness of breath. Obesity is an indicator of the overall health and lifestyle of a community and increases the risks of many diseases and health conditions. Kidney disease is caused primarily by diabetes and high blood pressure, and people feel generally unwell or lose their appetite. Unhealthy activities, such as smoking and heavy drinking, can contribute to a number of diseases, poor health conditions, and early death. Four in ten adults have had a tooth extracted due to poor dental health, with Hawai'i Island at 50%. Missing teeth can affect health and nutrition.

SIGNIFICANT HEALTH ISSUES, GOALS AND PRIORITIES IN HAWAI‘I

After engaging with people across Hawai‘i to learn about their lives, their struggles, and their interactions with the healthcare system, and after reviewing a sampling of data that help to define the scope of challenges and who in society might be facing the biggest challenges, three major health issues emerge. These issues point us to the most significant health priorities in Hawai‘i, particularly those that can help the most needy in society—those who are often bearing the brunt of the downstream effects of poor health including disease, shorter lives, and poorer quality of life.

ISSUE 1: Many individuals in Hawai‘i lack a foundation for health—security, justice, hope, love, time, good food—the basic things that every human being needs to have a reasonable chance at assembling a truly healthy life.

It is a common belief that poor health is the result of people making poor decisions. In conversations across the islands, Islander Institute met people making conscious, well-reasoned decisions. The problem is that many people have poor options. People in Hawai‘i are making tradeoffs at the expense of their own health and the health of the community. They have to choose between an extra job to pay the rent or the chance to spend time cooking good meals for their kids; between the time it takes to care for an aging parent or the money it takes to pay someone else to care for that parent; between money for a car payment to get to work or money for out-of-pocket expenses to see the doctor; between an unfulfilling job that provides health insurance or a personally fulfilling job that doesn't. And if they are facing discrimination or unfair disadvantage, their options are even worse. If they are lacking a multitude of the health basics, the options are worse still.

Many people cannot simply “live healthy.” They need the support of family, friends, community, workplaces, organizations, and society to obtain the basics for healthy living. When this foundation is in place, many of the upstream factors get addressed, which should subsequently mitigate the expensive and painful downstream impacts. Understanding community needs and working with people to address priorities are much more strategic than waiting to treat their poor health outcomes in an already taxed healthcare system.

ISSUE 2: Many feel that Hawai‘i is losing its sense of community—including aspects of the place, values, culture, and practices—and this loss is diminishing health itself.

Community is becoming a tired word. What does it mean? More significantly, what does it mean in Hawai‘i? Talk with enough people, particularly in rural Hawai‘i, and the pillars of community start to come into focus. The foundation was set by the genius of the indigenous people of these islands. At the foundation of community, we have our land that provides everything we need to live. The people of this place work together for the benefit of all, including two sacred obligations—to nurture the keiki

and to honor the kūpuna. And many generations of migrants to these islands have added flavor to that reciprocal relationship among people and place. But as much as we have added to community, we also do many things to diminish it. In the eyes of many in Hawai‘i today, we are losing healthy places, creating more disconnection to our land, putting the needs of visitors ahead of residents, and losing our sense of community. It already feels lost in parts of O‘ahu, and people across the islands feel it eroding away. People long for the healing power of community. Community makes health, it has health, and it is health.

Hawai‘i’s people and place form a powerful healing force that is currently underutilized and steadily being diminished. By building healthy environments and strong communities that meet our obligations to keiki and kūpuna, we set the stage for good living and bring more power to bear on addressing the upstream determinants of health.

ISSUE 3: For many in Hawai‘i, particularly those with the greatest needs, the relationship to the healthcare system is a poor one, often seen as lacking in humanity, empathy, and availability.

Receiving healthcare is a highly personal and deeply involved human interaction. It often carries the highest stakes of any interactions that people will have in their lives. So it is difficult to square this with the fact that healthcare has been largely reduced to a three-way economic transaction between a consumer, a provider, and a payer. Most participants in the CHNA shared how they are not satisfied with the products and services in these transactions, and many questioned the very premise of reducing healthcare to money issues when what they really need is help from other human beings. People shared stories of discrimination, medical mistakes, lack of listening, lack of caring, and other negative experiences with such frequency that one would conclude that bad healthcare is the norm. Of course, some stories may be exaggerations or misperceptions that are part of a generally negative narrative about healthcare. But the fact that these impressions exist is a problem in itself. Furthermore, there is good reason to believe that the things people shared in a safe, comfortable community meeting will not be shared directly with their healthcare providers in the form of feedback, because local people—out of shame, fear, respect, or resignation because they have no healthcare options—often won’t call a supervisor or fill out a feedback form.

The relationship that Hawai‘i people have to their healthcare system is a core factor in the state of community health. With all the talk of social determinants, the fact is that healthcare will always be essential to good health. Walling off personal health with the rules of individual privacy is not personalization. What people really want are compassion, empathy, and heartfelt human connection in their relationship to healthcare. Improving this aspect of quality will ensure that people—especially those in greatest need—can and will seek, access, and benefit from healthcare.

SIGNIFICANT HEALTH GOALS AND PRIORITIES.

Given these three core issues, a three-part strategy emerges that focuses on three significant goals. Each goal is divided into priorities that were determined by a review of all input including: a) community input from meetings, which indicated community needs and the degree of community readiness to join in forming solutions; b) key informant interviews, which provided expert opinion on various community needs, possible solutions, systemic factors, insights into political factors, and/or evaluation of organizational readiness for partnerships; and c) quantitative data, which provided evidence of need, locational and population priorities, and other nuanced aspects of issues.

Based on this information, an analysis was done looking at criteria including:

- Evidence of community need based on qualitative and/or quantitative data
- Community knowledge, energy and readiness to address an issue
- Existing or potential cross-sector partnerships for broad impact
- Existence of current efforts to replicate or learn from
- Political will and potential resources, if known

GOAL 1: Secure the basic foundations so that people can have more control over their own health

FOUNDATIONS Priorities

- 1.1 Address financial insecurity.** Roughly half of all households in Hawai‘i are living lives conducive to poor health because of financial constraints. There is not enough charity to change the living conditions of every other household in Hawai‘i. Communities and families need coordinated and systemic supports to make good food and housing realistically accessible, develop workforce skills, create new economic opportunities, build financial assets, and reestablish active lifestyles that are giving way to economic pressures.
- 1.2 Work together for equality and justice.** At the root of health disparities are historical and current injustice. Instead of addressing the health consequences of that unfairness, society needs to become increasingly more inclusive and work alongside affected populations to address inequitable treatment and opportunity. Comprehensive approaches to support the advancement of Native Hawaiian health could very well improve the health of all people in Hawai‘i. And efforts must be made to stamp out prejudice and unjust treatment of Pacific Islanders, immigrants, non-English speakers, people with disabilities, elderly, transgender and gender non-conforming individuals, and any others whose lack of privilege becomes an upstream cause of economic hardship, life traumas, poor healthcare, and poor health.
- 1.3 Strengthen families.** People of Hawai‘i value their families, but financial pressures and stress take their toll. We need to create the conditions and opportunities for families to be healing forces for its own members—preventing domestic violence and trauma before it happens, eating healthy together, spending adequate time with one another, being the primary role models for keiki and primary caregivers of those in need.
- 1.4 Prepare for emergencies.** Natural disasters are on people’s minds, and for good reason. Working with community to prepare for these emergencies will not only mitigate future health impacts. It is a community building activity that can engage people, increase understanding of the most vulnerable populations, build food systems, and strengthen relationships and community cohesion.
- 1.5 Build good food systems.** Hawai‘i has the ingredients to ensure that nutritious food is available and consumed by all. Farming, subsistence expertise, grocery stores, farmers markets, cultural practices, culinary arts, prices, time, food waste—all of these factors must be thoughtfully organized to disrupt unhealthy aspects of our food consumption and establish access to good food, particularly for those whose health will benefit the most.

GOAL 2: Preserve, nurture, expand, and employ the healing properties of community

COMMUNITY Priorities

- 2.1 **Restore environment and sense of place.** The natural environment is *the* health resource in Hawai‘i. It is a critical provider of healthcare and health-risk prevention for the people of Hawai‘i, particularly for those without access to medical care. For many people, the sense of connection to these islands is health itself. Efforts should be made to restore Hawai‘i’s sense of place with better protections of natural resources, adequate preparation for climate change, good design and integration of the built environment, and reducing the negative environmental impacts of the visitor industry.
- 2.2 **Nurture community identity and cohesiveness.** Strengthening communities means actively working against forces leading people to feel more divided, isolated, and unfamiliar with the people and places around them. Greater trust and connectivity within community can be built through shared activities and events, active organizing around shared purposes, and instilling community pride. These efforts are more likely to be successful when they are led from communities themselves.
- 2.3 **Invest in teenagers and healthy starts.** With almost all of the adults tied up with work, too many of Hawai‘i’s children are ill-equipped to lead healthy lives. Investment in health and education at the earliest stages of life needs to expand. But in addition, there is a large void of support for pre-teens and teens who are not getting enough physical activity, sleep, healthy food, positive relationships with adults, and positive social engagement with one another. Many spend more waking hours at school or with their peers than they do with their parents. Therefore, school-based structures, community-based activities, and youth empowerment are three critical targets for investment of time and resources.
- 2.4 **Shift kūpuna care away from “sick care.”** According to many accounts, the focus on medical care for seniors pulls attention away from boredom, loneliness, purposelessness, inactivity, and other social and emotional hardships of aging. A new paradigm of aging must be built so that healthy aging is available to more than just the few who can afford those supports and activities.

GOAL 3: Improve the relationship between people and the healthcare system

HEALTHCARE Priorities

- 3.1 **Strengthen trust in healthcare.** Health disparities are caused in part by people not receiving the benefits of healthcare, which is in part a function of people’s attitudes toward healthcare. We may not be able to know the full extent of people’s fear or mistrust of healthcare, but based on community accounts, it is high. Trust needs to be strengthened, and in some cases rebuilt, through listening, empathy, compassion, and treating the whole person. Healthcare workers need to be able to meet people where they are at in terms of language, culture, and community. And information needs to be shared in plain language that can engage people and effectively convey information.
- 3.2 **Provide accessible, proactive support for those with high needs.** People with great needs, including those who are struggling with houselessness, mental illness, and addiction as well as those who are physically distant from healthcare require more proactive services, including outreach, early intervention, free healthcare services, mental healthcare, oral healthcare, and other preventative services.

ISLAND ASSESSMENTS

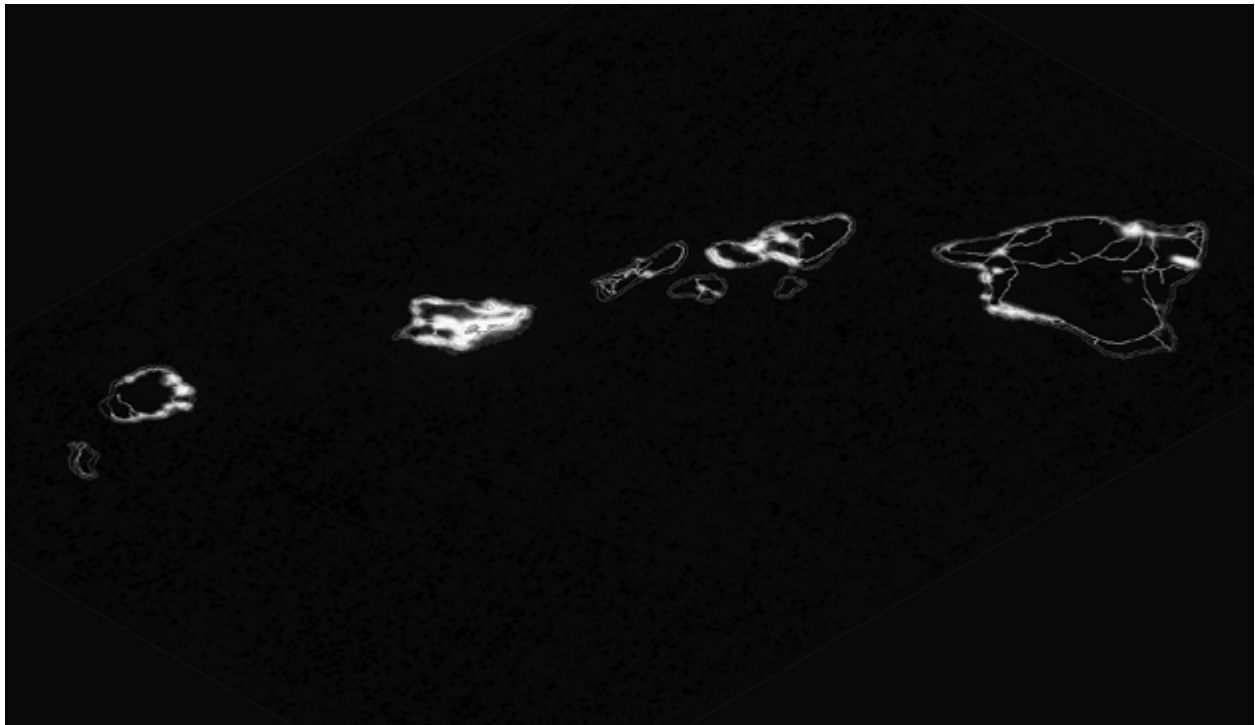
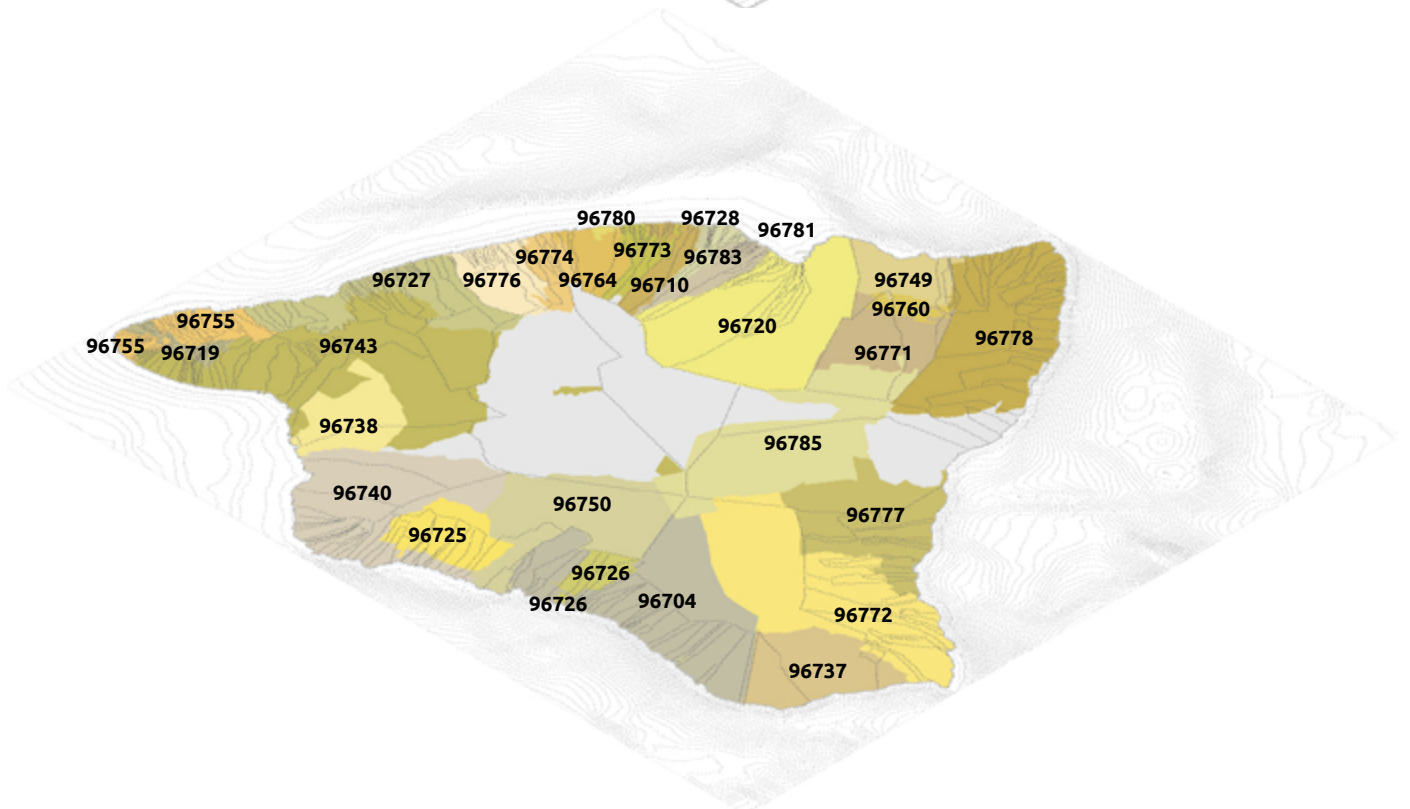
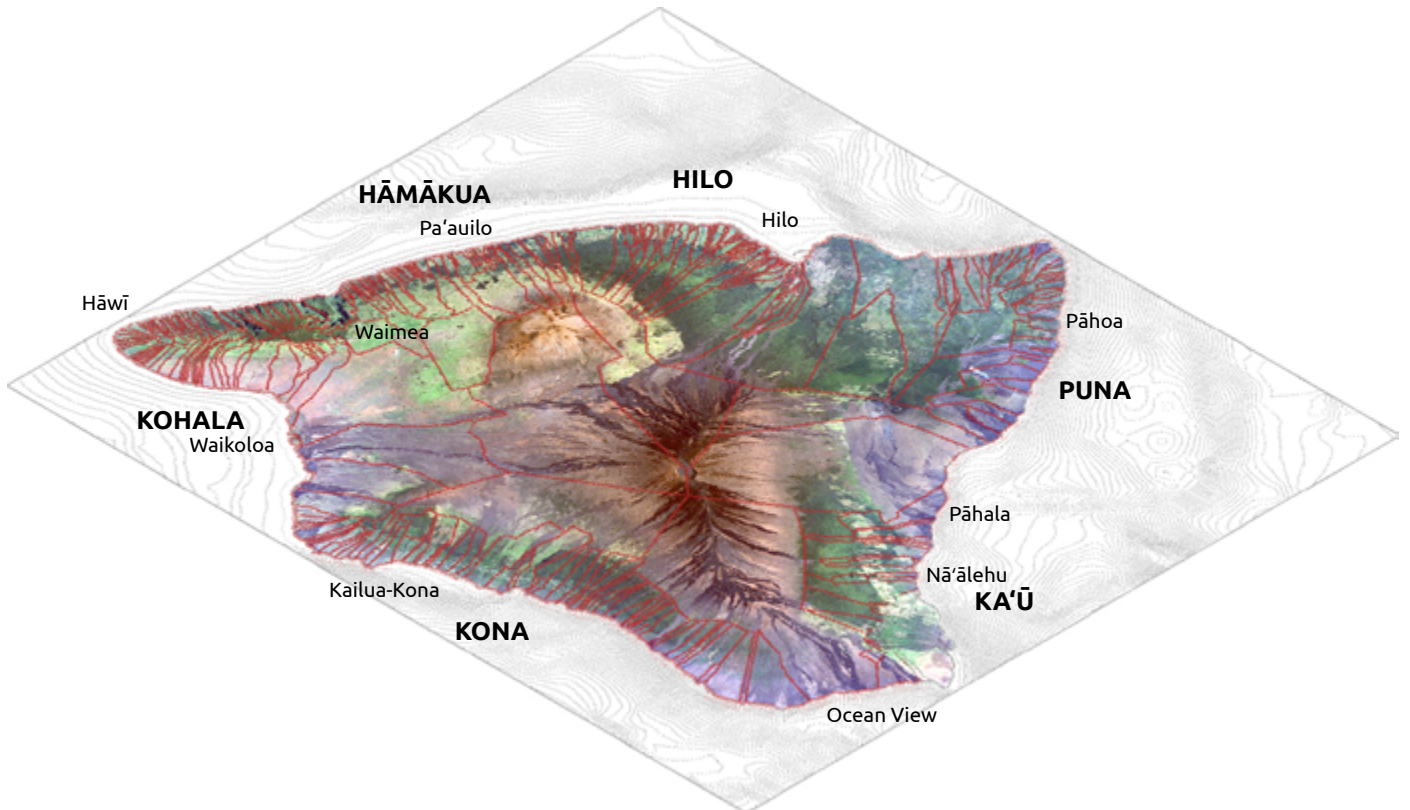


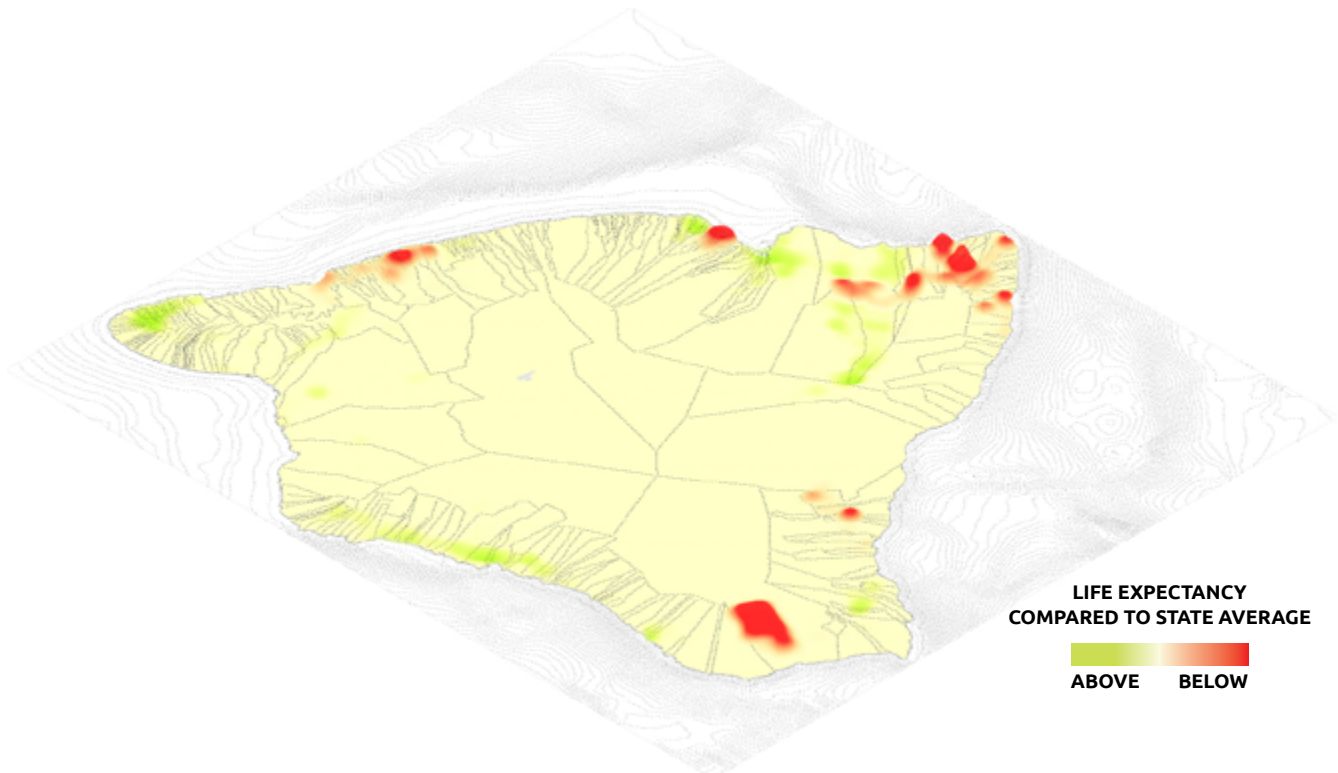
Image of Hawai'i at night shows the extent of urbanization. Source: NOAA

HAWAI‘I ISLAND



In May 2018, the eruption of Kīlauea and the lava it spewed into residential areas launched community members into action. The Bodacious Women of Pāhoā (“Bodacious”) is a community-based group that started with three women seeking connection and grew to dozens of volunteers who provide food and emergency supplies to their isolated, rural community. The fear and uncertainty during this time was palpable; in the words of one resident, “The sky was red. The stress level was high. Every morning I would wake up, wondering if there was lava at my door.” Bodacious was ready—they organized through networks of trust; passed out food, water, and supplies; created ready-to-go survival kits in orange buckets for residents to leave in their vehicles; coordinated with county, state, and federal agencies; and maintained a sense of security and calm.

The ability to positively contribute to their community and their passion to fulfill a greater purpose are central to Bodacious members’ view of a healthy life. Yet they recognize that their community faces tremendous challenges in being healthy. Like in other areas outside of Hilo and Kona, transportation is a major challenge affecting Hawai‘i Island residents’ everyday quality of life. This notion was repeated in Ka‘ū, Pāhoā, Ocean View, Kona, Kamuela and Hāwī. For some, doctor appointments take an entire day when factoring in car rides or unreliable public transportation and often take lower priority when compared to other obligations in life. Some decide it is better to self-diagnose and self-medicate. For those with long commutes to work, there is little to no time to spend with family, make healthy meals, exercise, get enough sleep, or do much of anything outside of work or school.



With the vastness of Hawai‘i Island, it is easy for people and problems, like houselessness, severe mental illness, and substance abuse, to remain hidden and forgotten. Several houseless individuals and workers from a Hilo-based nonprofit spoke about their experience in shelters and seeking healthcare. They shared stories of shelter residents with untreated open wounds and conditions like Methicillin-resistant *Staphylococcus aureus* (MRSA). Some prefer not to go to the doctor because they don’t trust them, they feel disrespected and discriminated against, and they lack the money needed for prescriptions. Many just wait until the point where they are sent to urgent care or the emergency room. A difficult and common barrier is returning to the doctor for follow ups, which often does not happen because of the inconvenience and cost of the bus or medical taxis.

Across the island in West Hawai‘i, at a dinner gathering, residents from Hawaiian, Marshallese, and Hispanic communities found commonalities in their experiences as people working hard to just get by in a world that often isn’t amenable to their cultural perspectives. Those cultural norms include a reluctance to share about stress and vulnerability, causing many to just keep pushing through difficult times. In the Hispanic community, especially for those who are undocumented, they are afraid to seek healthcare services. Because of the costs of healthcare and not having insurance, they are careful in selecting which visits are essential and which can wait. “During coffee season, most of the men work from 6 am to 6 pm and just have time to take a lunch break. They think, ‘I cannot be sick because I need to work.’ They turn to pills,” one person said. “We don’t recognize the stress. There’s this mentality that you have to suck it up, don’t be a coward, and there’s no time to cry.”

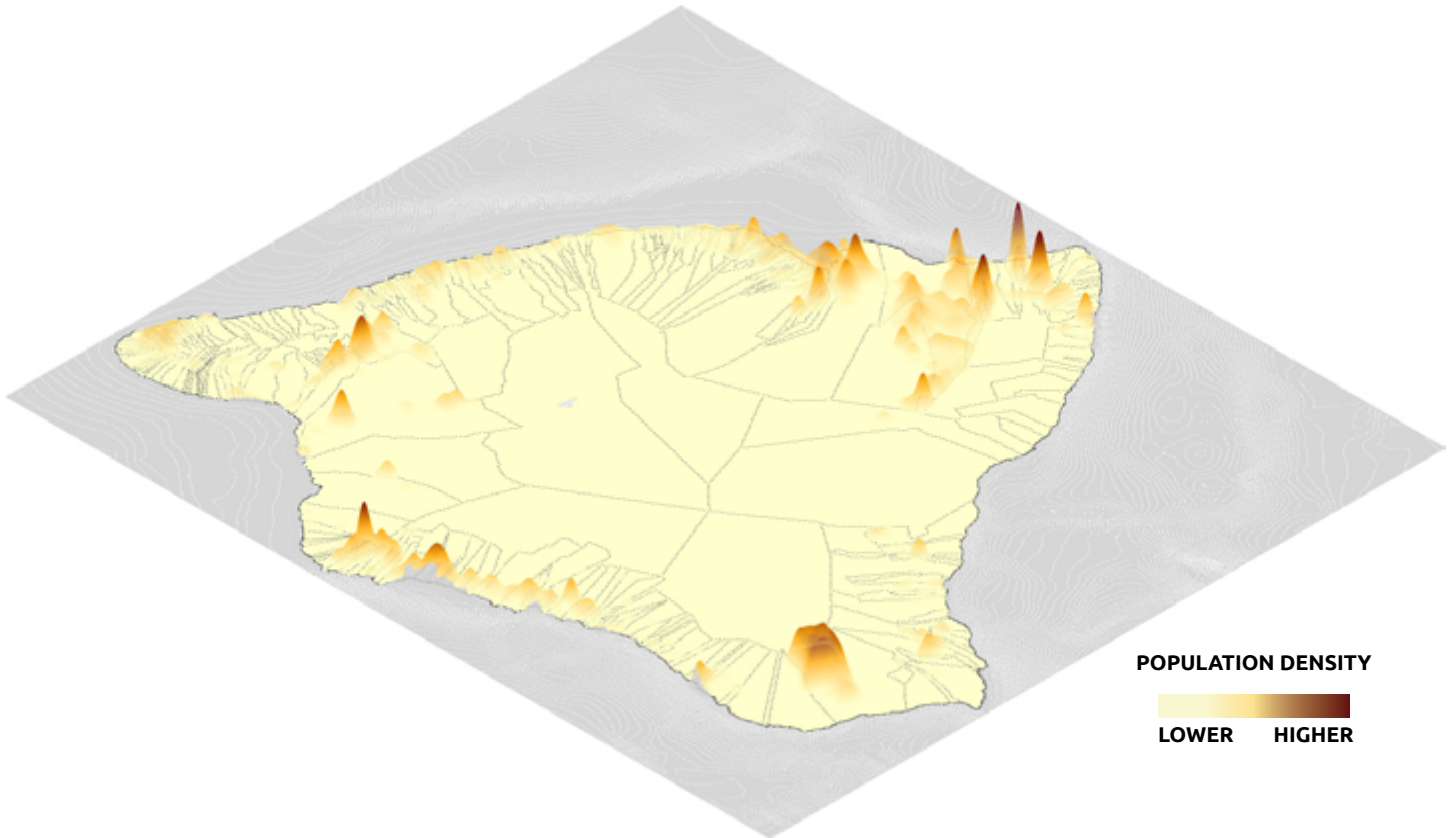
Further south in Ka‘ū, the diverse communities of Nā‘ālehu, Ocean View, and Pāhala find themselves lumped together by outsiders in government and nonprofits who want to “help” them because they are labeled poor and needy. Residents said most of these outside efforts typically don’t last, as programs and resources come and go. It is easy to understand why some feel used, and that there is no real cooperative investment to create hope and futures for the children. They point to a need for community grown and driven solutions, particularly practices that ground families in their culture and identity.

Up north in Waimea, during a talk story at Tūtū’s House, residents shared about the healthy aspects of their community—a playground, a nature park, an informal network of alternative medicine practitioners, options for kūpuna care, and farmers markets. But some recognize there are disparities within the community, such as hidden poverty that reveals itself in the schools. In Hāwī, they spoke about how rural isolation impacts their choice when it comes to doctors and food. In rural areas, doctors who are from the community are the ones most successful in treating people because they understand patients on a deep level. But more common is the frequent turnover of doctors—whether because of the low pay, isolation, or difficulty integrating into the community.

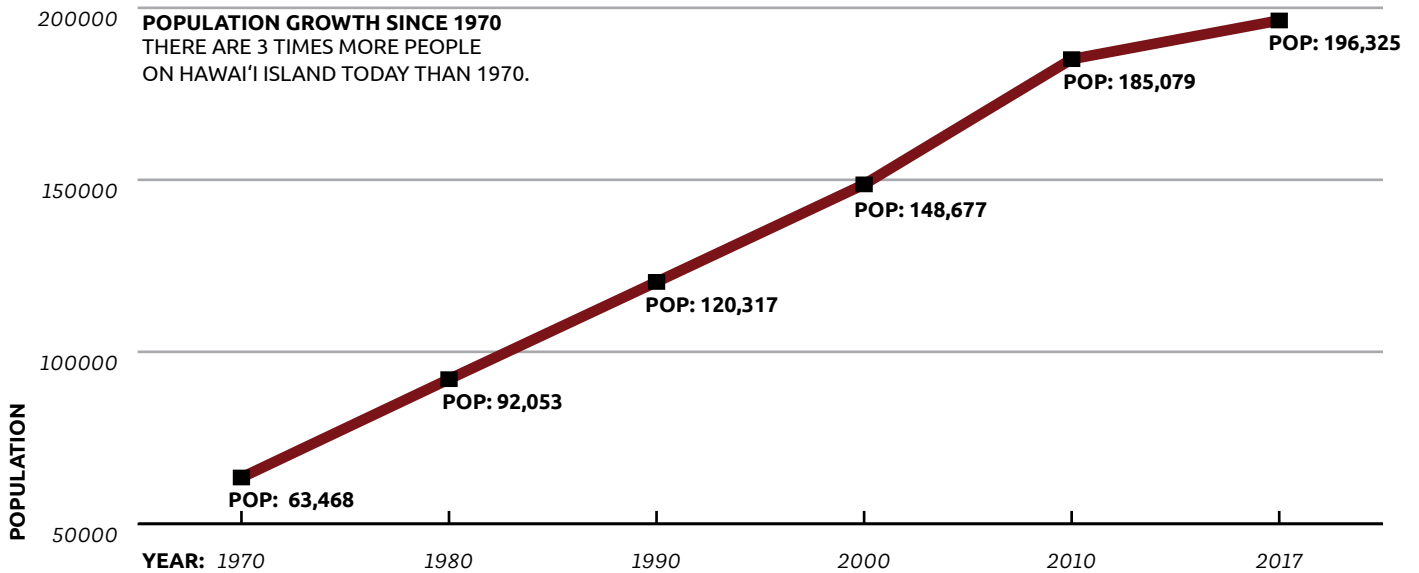
The statistics point to Hawai‘i Island as having some of the biggest challenges in the state when it comes to the socio-economic factors often associated with poor health outcomes. This includes the number of people in poverty or otherwise struggling economically, lower educational attainment, and higher unemployment. These social determinants seem to play themselves out with Hawai‘i Island residents having higher than average engagement in risky behaviors like smoking and drinking, which in turn may have to do with higher rates of cardiovascular disease, and a generally shorter life expectancy. Those upstream economic issues are troubling and worthy of attention, but those challenges aren’t the total picture.

Hawai‘i Island has bigness, but it also has closeness. There is cohesion in its many towns around the island—each with its own character, history and strengths. It stands in contrast to O‘ahu which is crowded, but in many ways not as close. With its closeness, Hawai‘i Island feels capable of coming together to make positive things happen in community. With its bigness, Hawai‘i Island has what seems like abundant natural resources and human connection that are the irreplaceable ingredients to community health. The people of Hawai‘i Island are not only finding solutions for their own people. Just as the island’s famous ali‘i, Kamehameha and ‘Umi-a-Līloa, once did, Hawai‘i Island has the potential to generate innovations that will spread across the islands. Government, organizations, and community have been working diligently and are coming together to innovate around healthy food systems, clean energy, disaster preparedness, sustainable waste management, and many other social needs. Close people in a big place can get a lot done.

Population



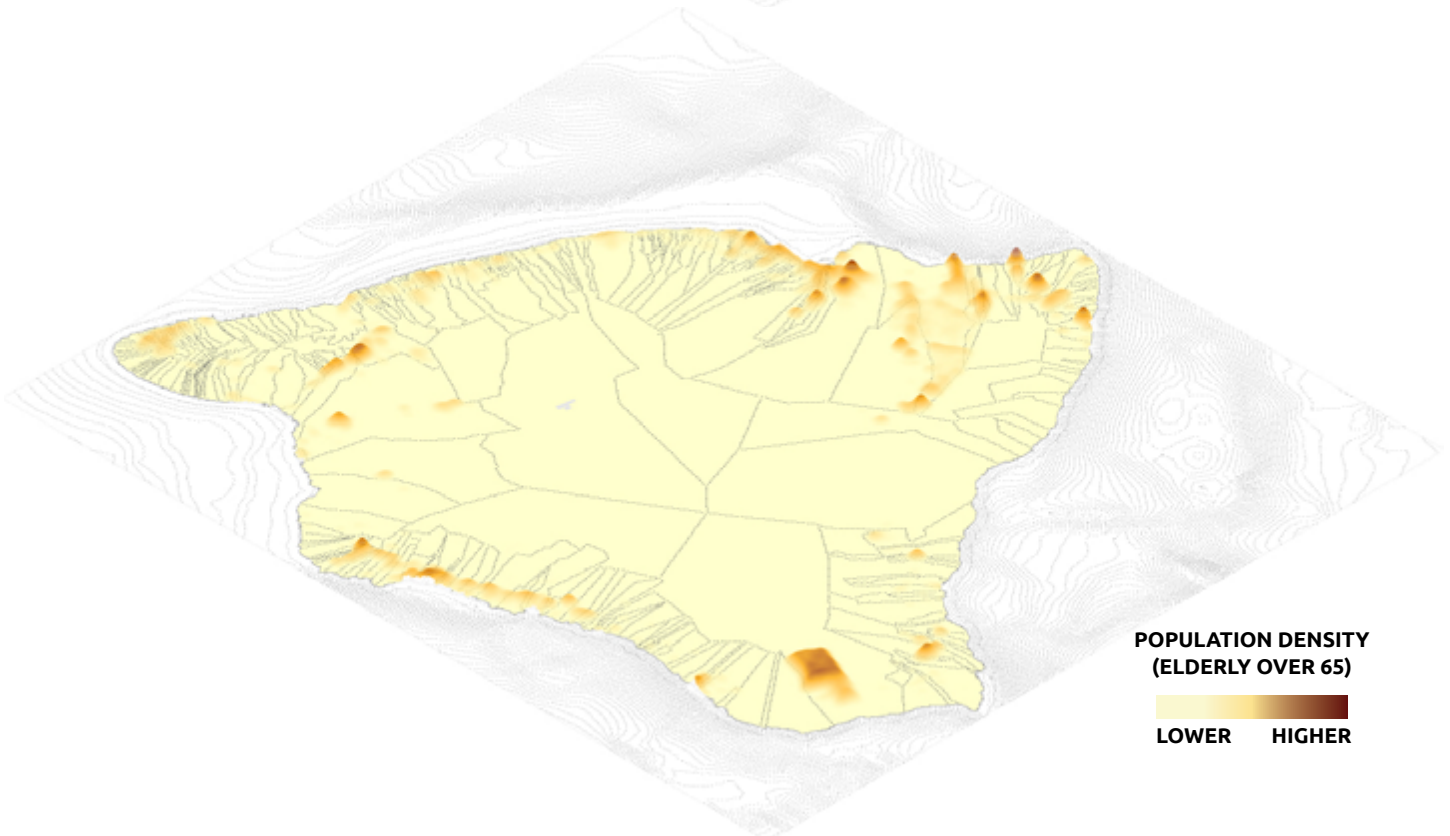
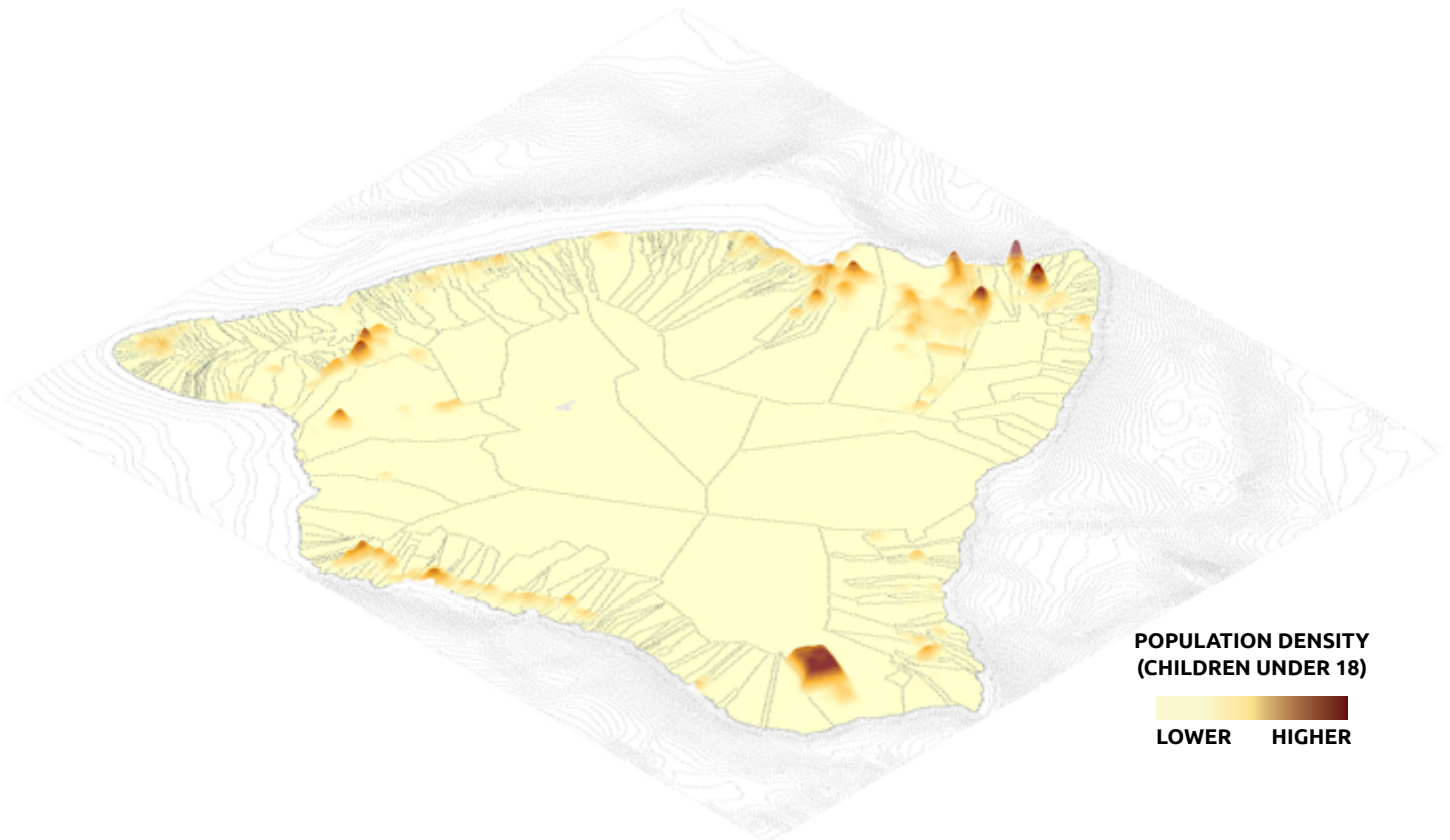
POPULATION DENSITY
LOWER HIGHER



1 OUT OF 6 PEOPLE ON HAWAI'I ISLAND ARE VISITORS:

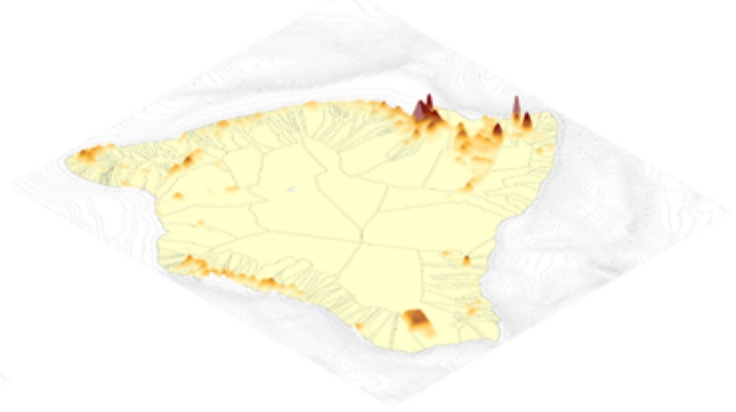


Keiki & Kūpuna

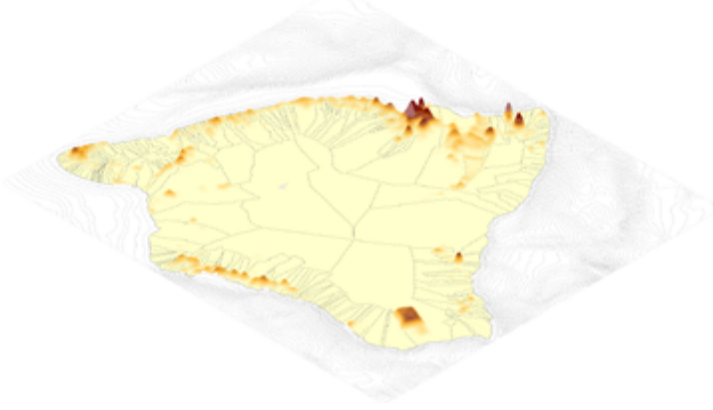


Race

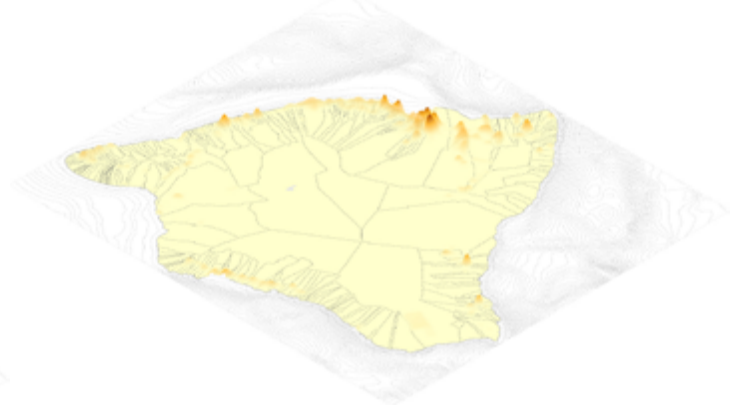
"HAWAIIAN"



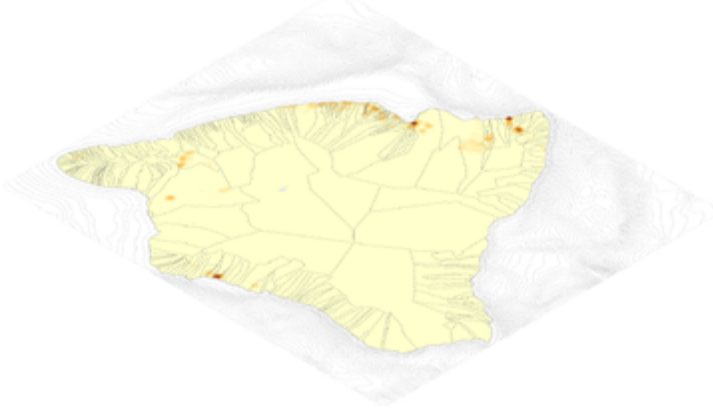
"MIXED" (TWO OR MORE)



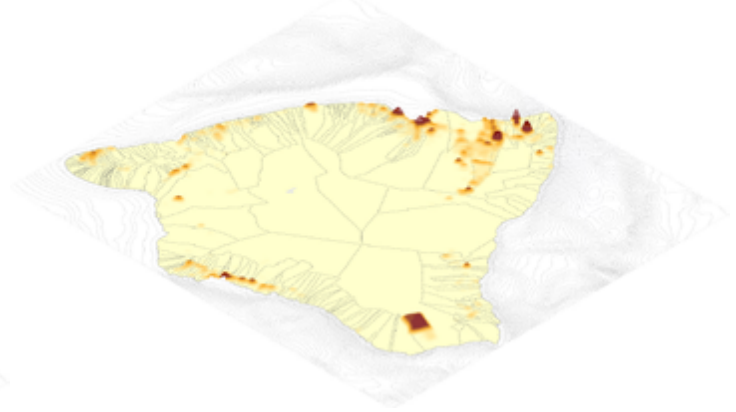
"ASIAN"



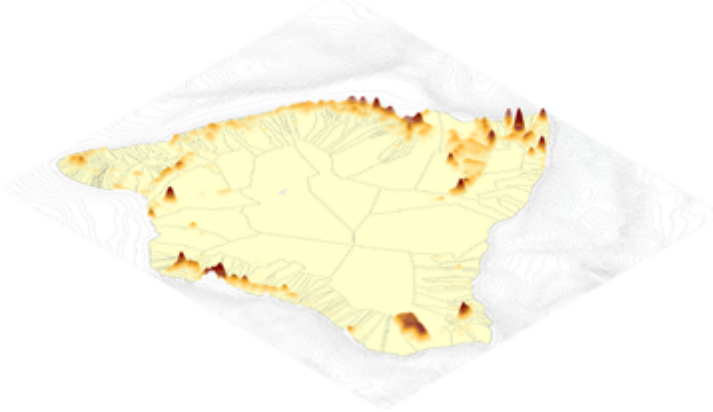
"BLACK"



"LATINO"



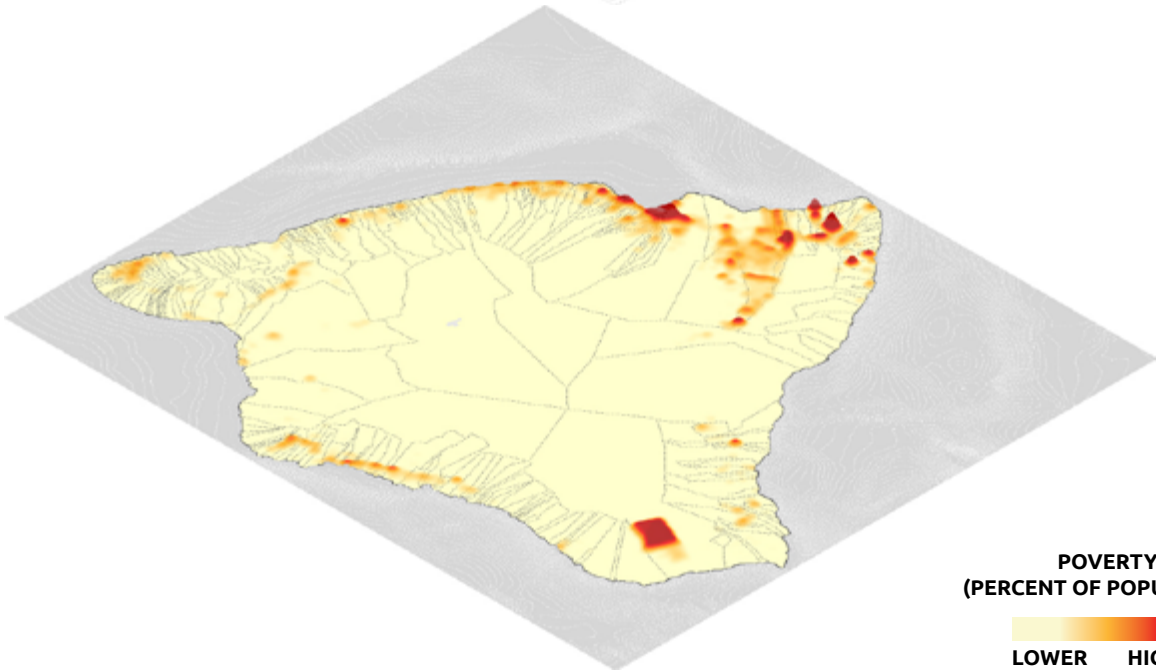
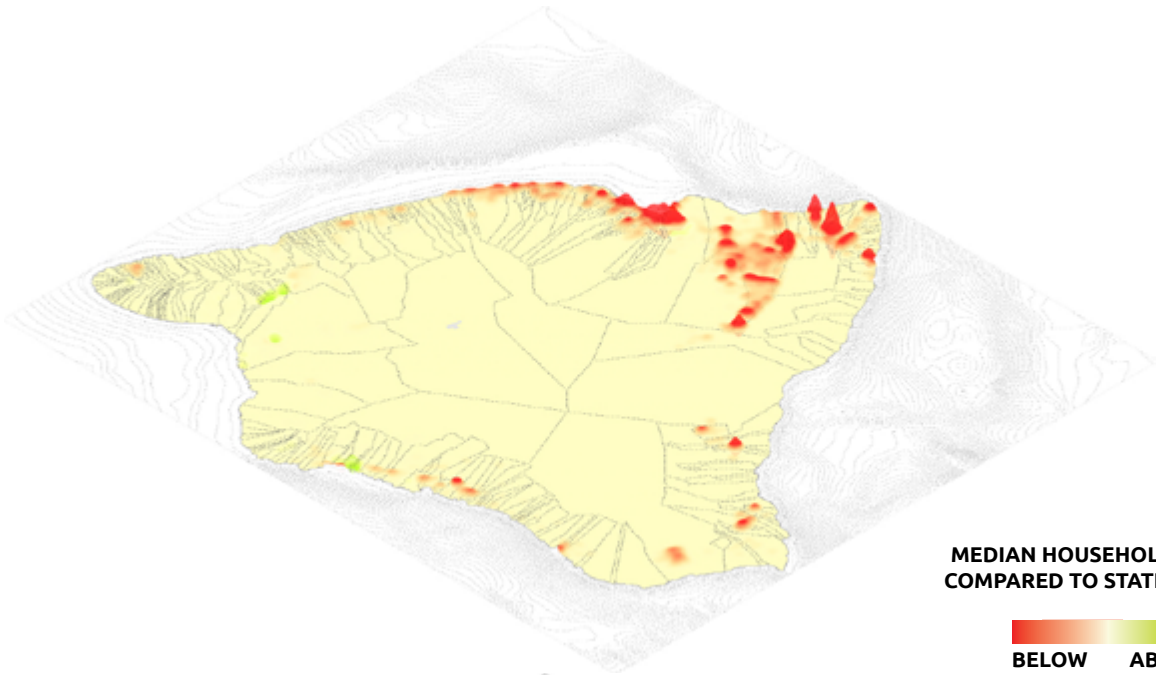
"WHITE"



RACIAL IDENTITY
(PERCENT OF POPULATION)



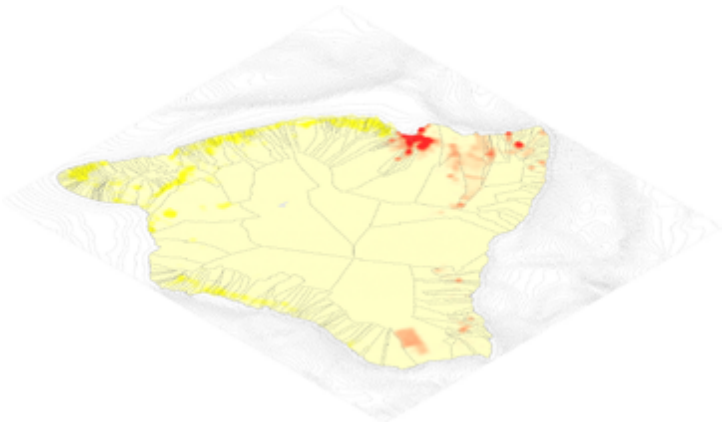
Income



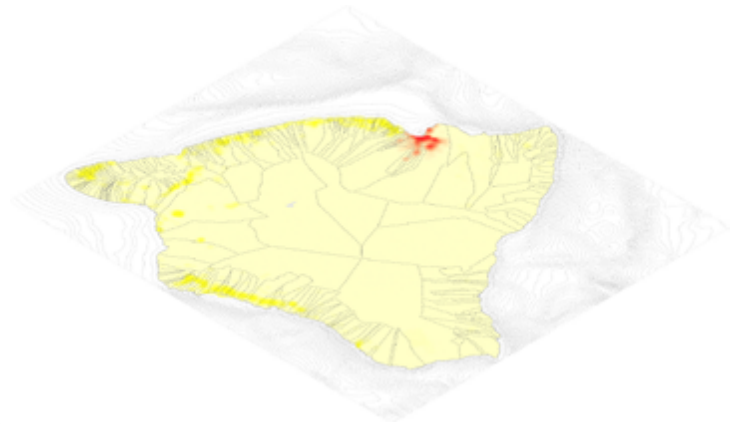
PERCENTAGE OF HAWAI'I HOUSEHOLDS BY INCOME BRACKET
 AVERAGE 4-PERSON HOUSEHOLD SURVIVAL BUDGET IN HAWAI'I COUNTY IS \$78,420.



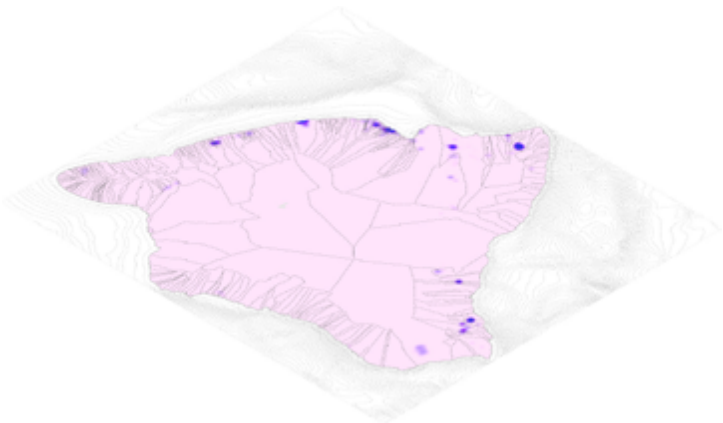
Time



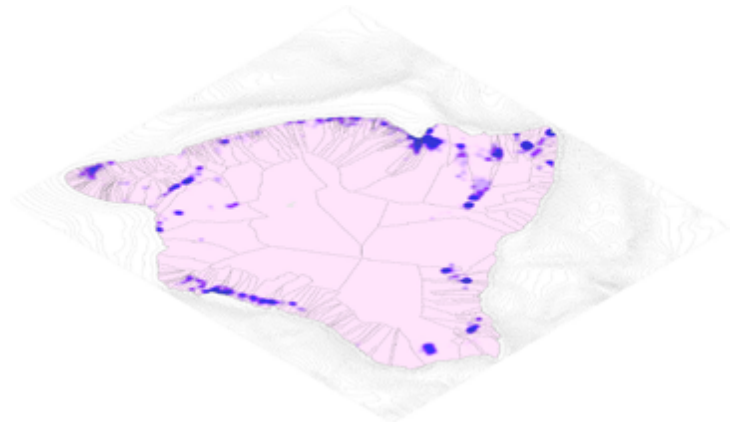
**EXERCISE
COMPARED TO
STATE AVERAGE**
ABOVE BELOW



**+7 HOURS SLEEP
COMPARED TO
STATE AVERAGE**
ABOVE BELOW

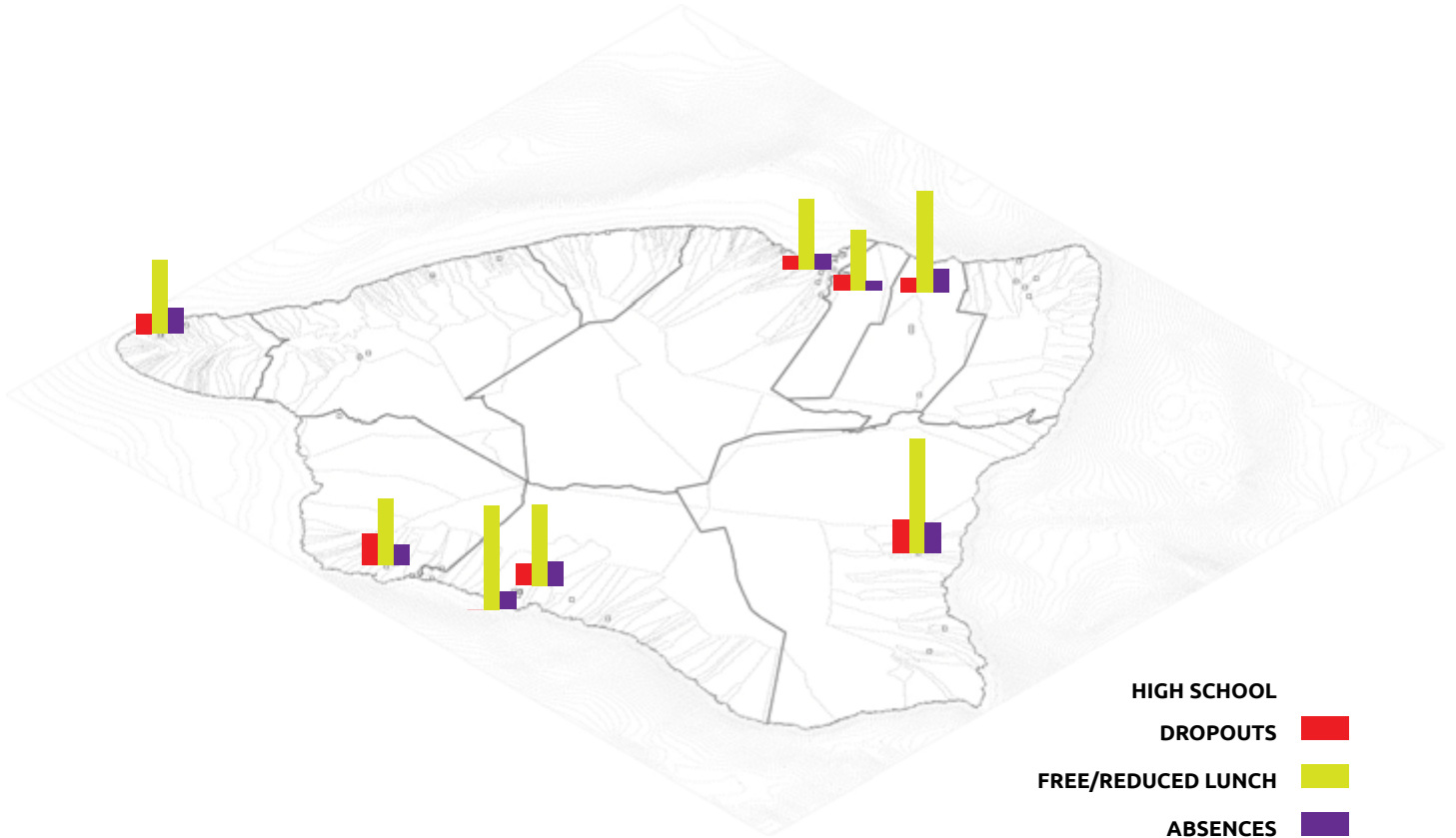


**COMMUTE
(OVER 40 MINUTES)**
+ 40 MIN. →



**COMMUTE
(DRIVING ALONE)**
LESS MORE

High Schools



	Attendance	Dropouts	Free/Reduced Lunch	Absences	Hawaiian	Samoan	Micronesian	Chinese	Filipino	Japanese	Korean	Portuguese	Black	Hispanic	White
Hilo High	94%	10%	53%	11%	46%	1%	7%	1%	13%	10%	<1%	3%	1%	3%	11%
Ka'ū High	88%	25%	86%	22%	44%	<1%	12%	<1%	25%	2%	<1%	2%	<1%	2%	9%
Kea'au High	90%	11%	76%	18%	43%	1%	4%	1%	22%	2%	<1%	4%	2%	3%	15%
Kealakehe High	91%	24%	50%	15%	27%	2%	10%	1%	16%	5%	1%	1%	1%	7%	23%
Kohala High	89%	15%	55%	19%	44%	0%	1%	5%	21%	2%	<1%	2%	1%	3%	17%
Konawaena High	90%	16%	61%	18%	40%	1%	7%	<1%	11%	7%	<1%	1%	2%	10%	19%
Waiākea High	96%	12%	46%	7%	38%	1%	3%	2%	14%	20%	1%	4%	1%	2%	10%

Hawai‘i Island Strengths and Priorities

Statewide Health Priorities

GOAL 1 - FOUNDATIONS Provide the basic foundations so that people can have more control over their own health	GOAL 2 - COMMUNITY Preserve, nurture, expand, and employ the healing properties of community	GOAL 3 - HEALTHCARE Improve the relationship between people and the healthcare system
1.1 Address financial insecurity 1.2 Work together for equality and justice 1.3 Strengthen families 1.4 Prepare for emergencies 1.5 Build good food systems	2.1 Restore environment and sense of place 2.2 Nurture community identity and cohesiveness 2.3 Invest in teenagers and healthy starts 2.4 Shift kūpuna care away from “sick care”	3.1 Strengthen trust in healthcare 3.2 Provide accessible, proactive support for those with high needs

Hawai‘i Island Strengths

- Access to natural resources and strong connection to place
- Diverse array of close-knit communities with numerous seasoned community leaders and emerging leaders in Hawaiian and COFA communities
- Record of social innovations and collaboration among agencies
- Specific success and traction with farm-to-school efforts

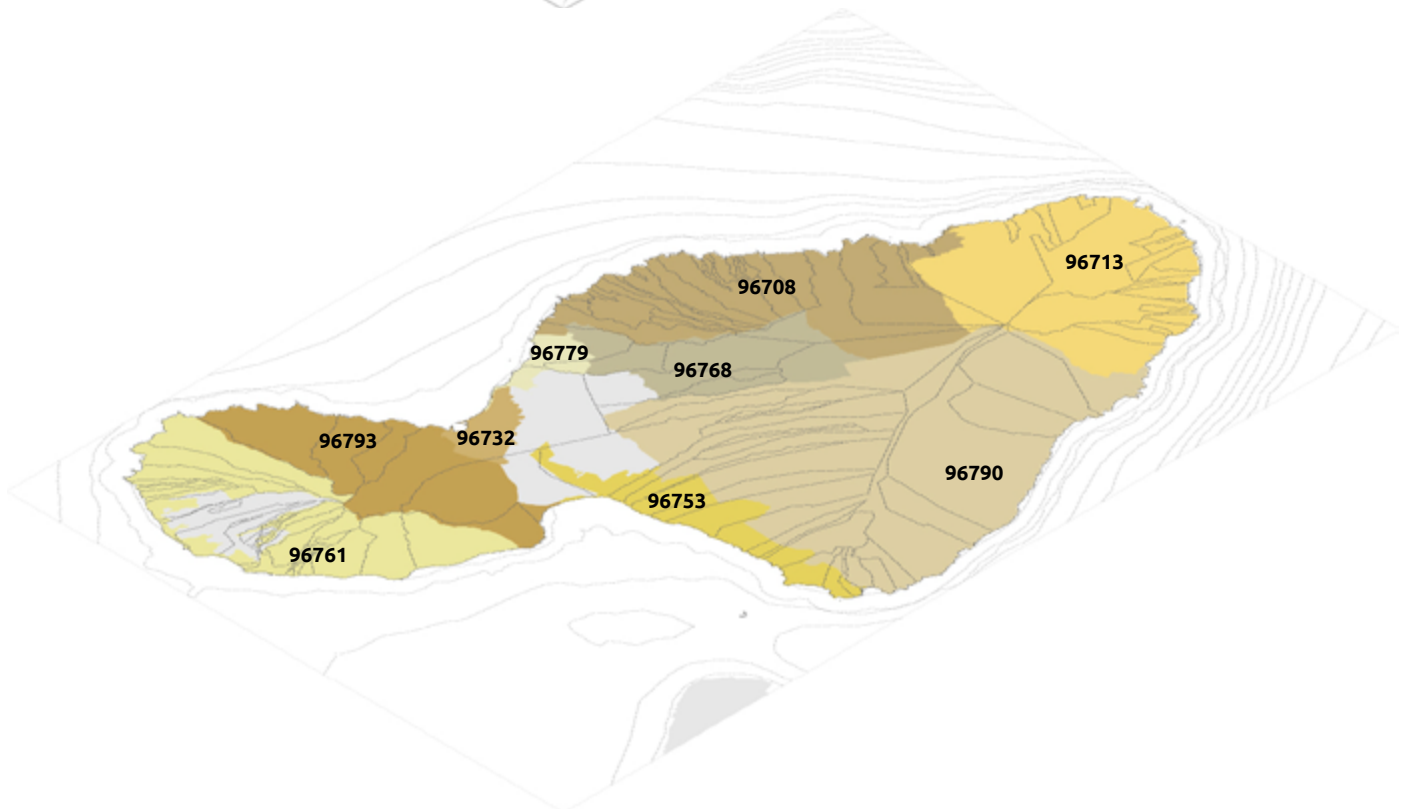
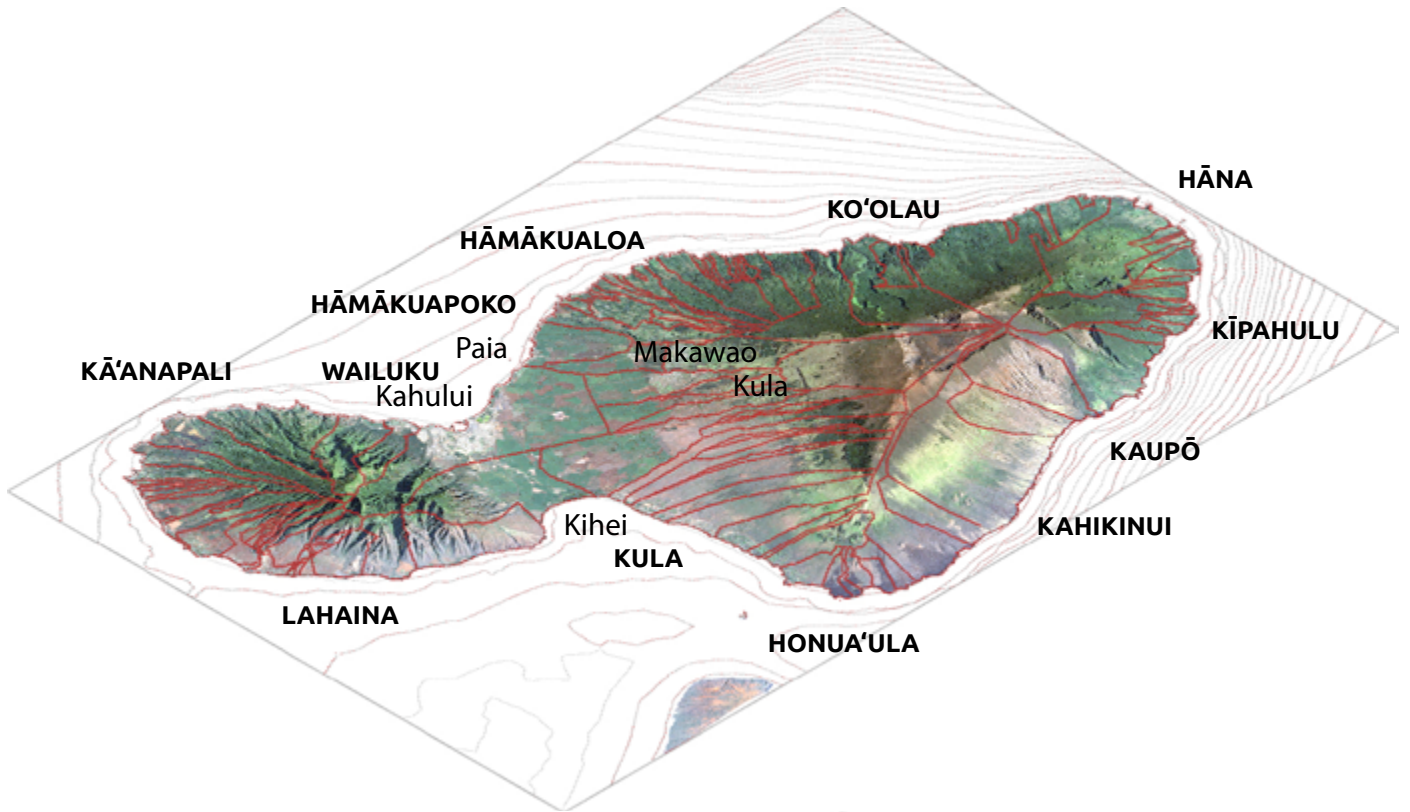
Populations of Note

	Estimate
HOUSELESS	900
PEOPLE IN POVERTY	33,700
NO HEALTH INSURANCE	11,700
WOMEN GIVING BIRTH IN LAST YR	2,500
DISABLED CHILDREN	1,100
CHILDREN IN POVERTY	10,100
NO HS 25 older	10,300
UNEMPLOYED (IN LABOR FORCE)	6,200
DISABLED ADULTS (18-64)	11,100
VETERANS	15,100
65+ LIVING ALONE	7,300
DISABLED 65+	13,600
85+	4,900
HAWAIIAN	66,500
ON HAWAIIAN HOMESTEAD	6,700
OTHER PACIFIC ISLANDER	5,300
RECENT FOREIGN IMMIGRANT	3,700
LIMITED-ENGLISH	11,500
<small>All 5-year estimates from U.S. Census, American Community Survey, 2017 except Hawaiian Homestead population from 2018 Hawai‘i State Data Book, and houseless count from Partners in Care, 2018 Point-In-Time Homeless Count.</small>	

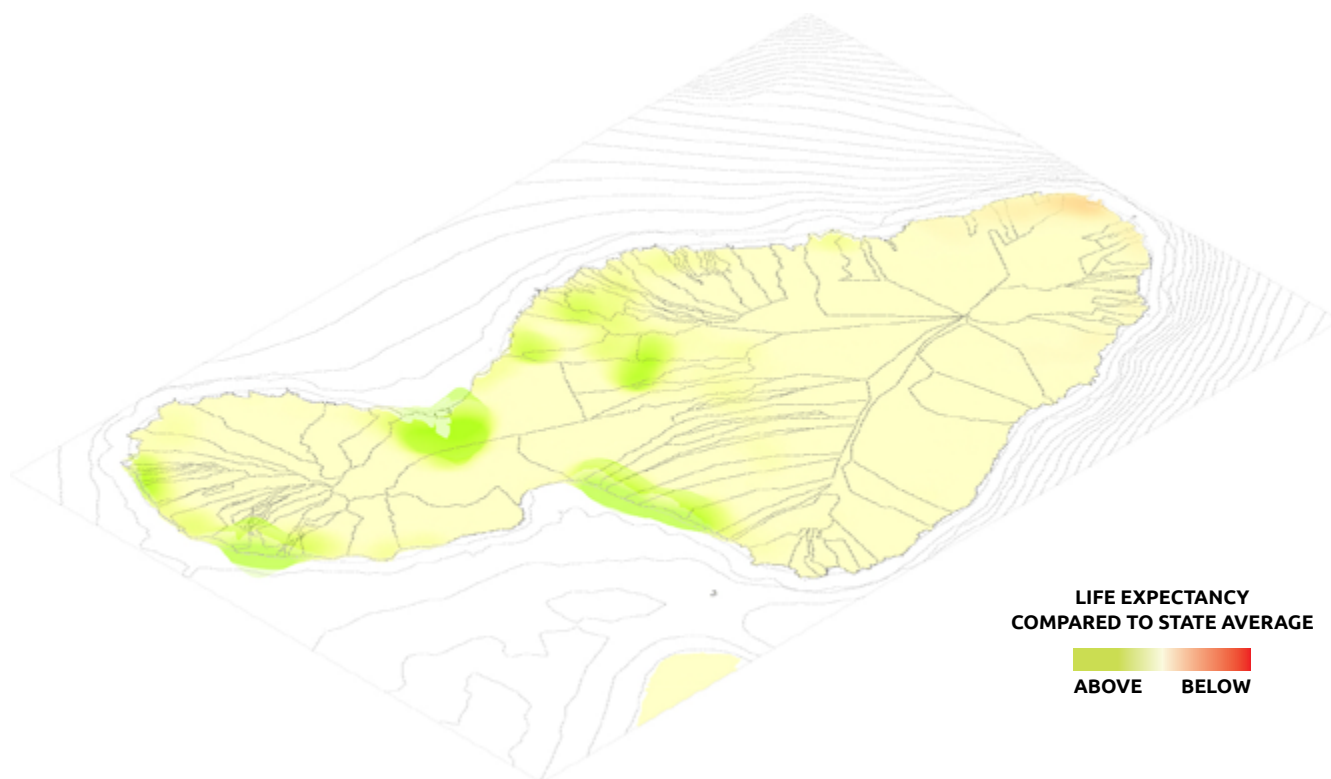
Hawai'i Island Priorities (Highest need areas in RED)

	CRITERIA				
FOUNDATIONS	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
FINANCIAL INSECURITY					
Increase family self-sufficiency through higher earning and asset building	✓	✓	✓	✓	
EQUALITY AND JUSTICE					
Build stronger connections with immigrants and communities from the COFA states	✓	✓	✓	✓	
EQUALITY AND JUSTICE					
Support community-based capacity building and economic self-sufficiency in Hawaiian communities	✓	✓	✓	✓	✓
FOOD SYSTEMS					
Develop and strengthen food systems through increased production and distribution	✓	✓	✓	✓	✓
COMMUNITY	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
COMMUNITY COHESION					
Address gentrification and class inequality	✓	✓			
COMMUNITY COHESION					
Continue to provide meaningful opportunities for different communities to be at the table for the visioning and planning of their own rapidly changing island	✓	✓	✓	✓	✓
KEIKI					
Create a broader array of positive activities for youth, especially pre-teens and teens	✓	✓	✓		
HEALTHCARE	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
TRUST					
Improve relationship to healthcare focusing on community and cultural competence and overall availability of care	✓	✓	✓	✓	
SUPPORT FOR HIGH NEEDS					
Implement more joint strategies to provide houseless services and solutions	✓	✓	✓	✓	✓
SUPPORT FOR HIGH NEEDS					
Improve transportation system—more ways to avoid travel, improved public transportation	✓	✓	✓	✓	
SUPPORT FOR HIGH NEEDS					
Develop more services to support people with mental health needs	✓	✓	✓		

MAUI



Maui, it has been boasted by travelers, is the best island in the U.S. Come relax in its resorts and venture out into the lush forests and world-class beaches, they say, while still having the conveniences of a big city. Tourism affects every island in the state, but it has latched onto Maui in a very unique way. Beneath that glossy veneer are the residents of Maui that participated in this CHNA. These seniors, community volunteers, health providers, cultural practitioners, workers, and family members don't want to lose their island to the tourism story. They would rather boast about their pockets of tight knit communities: of neighbors looking out for each other, senior clubs and paddling clubs that connect generations and cultures, work friends that they lean on for support, and thriving practices of farming, ranching, fishing, and subsistence living.



At a meeting in Lahaina, the oldest tourist town of Maui, employees of the area's visitor service industry talked about their extremely busy lives. When the facilitator asked the group, "Who here has only one job?" No one raised their hand. This was followed by another question, "Who here owns a home?" Again, no hands raised. The two questions and the responses were illustrative of the life of Hawai'i's service sector working class. In Maui, the eight most common occupations—retail salespersons, waiters/waitresses, housekeepers, cashiers, cooks, landscaping/groundskeeping, janitors/cleaners, and office clerks—have average annual wages between \$26,000 and \$38,000.²⁵ Given that a survival budget in Maui is in the \$76,000 range for a family of four,²⁶ simple math explains why having multiple jobs is just a fact of life for many Maui families.

In addition to the income constraints, Maui has severe housing constraints. According to Hawai'i Appleaseed, 52% of Maui homes are sold to nonresident buyers and 60% of Maui condos and apartments are sold to investors and second home buyers.²⁷ In Lahaina, where the community meeting took place, Appleaseed estimated that one out of every three homes is being used as a vacation rental.²⁸ "Most of us will never afford a house in Lahaina; that's why you get multiple family members in one household," one person shared. Another explained, "Construction is booming and we don't have

²⁵ County of Maui. Office of Economic Development, 170.

²⁶ Aloha United Way, 31.

²⁷ Geminiani, 3.

²⁸ Geminiani, 9.

enough construction workers on island so they bring people from off island, who bring their families and then they want to stay. They can afford the housing that we can't."

The service sector working class makes too much to receive public assistance, but makes too little to do much of anything except work. They spoke of older children raising younger children, and how a life of constant work has just become normal. The meeting in Lahaina, which took place in the late morning of August 21, 2018, ended earlier than planned. The workers had to go back to their worksites to make them safe and secure in preparation for Hurricane Lane, hoping to have enough time afterward to make long runs into town for supplies to take care of their own families.

Central Maui, including Kahului and Wailuku, is home to most of the healthcare resources, shopping, and modern conveniences of Maui. Living amongst all the new development are people who go hungry. At Faith Family Fellowship in Kahului, a group of community volunteers were brought together by the Maui Food Bank to talk about their views on community health. Whether descended from many generations on Maui or recently arrived looking for a community to belong to, these volunteers put their faith into action by distributing food and performing other acts of service for people in need. One volunteer put it this way, "if we get beyond our own personal likes and dislikes and come together to discuss what is best for our community, for the general good, that's healthy."

The kūpuna of Maui share that spirit with some of the most active and engaged senior clubs that can be found anywhere in the state. In group discussions, they shared about their enduring sense of purpose, strong friendships, active lifestyles, family support, and community service. In the same meeting, they piled on the criticisms of a medical care system which they often find lacking in understanding, unavailable, and not something that they generally trust.

For Upcountry Maui, Lahaina, Hāna, and other communities, traveling to the healthcare resources in Central Maui is a long commute that is sometimes riddled with traffic. With just one major hospital on Maui in Kahului, there's little choice for people. It is not unusual for people to fly to O'ahu for surgeries, to see a specialist, or get more intensive care.

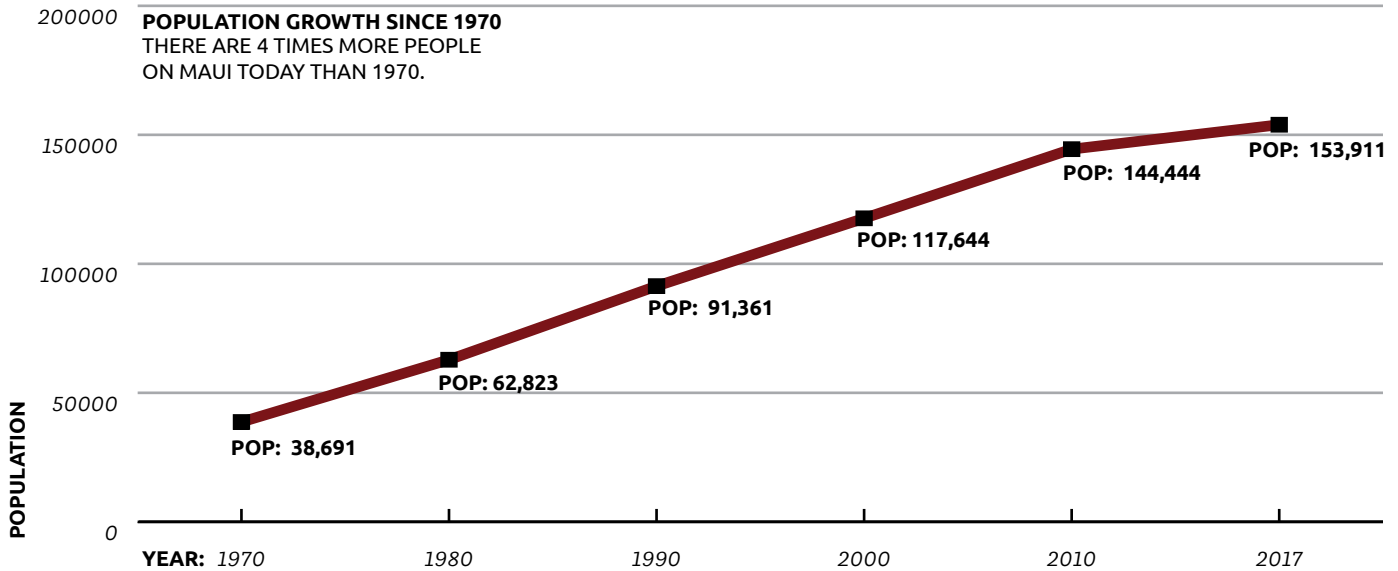
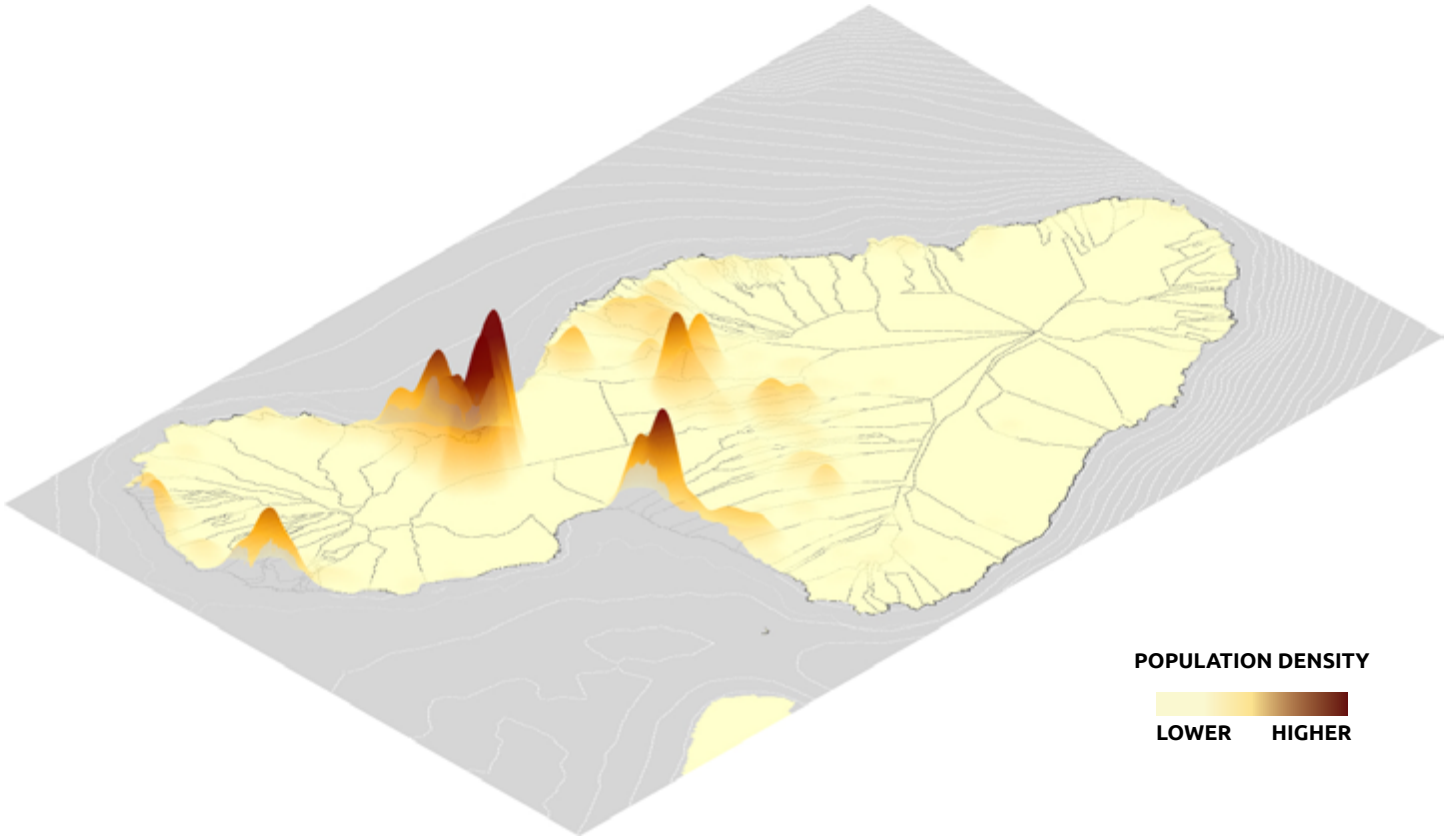
In Hāna, one of the most isolated places in Hawai'i, residents have a high degree of self-reliance. Community leaders have developed activities for youth to have positive outlets away from drinking and drugs, and while there are fantastic programs like Hāna Arts and Ma Ka Hana 'Ike, the struggle to support youth is always a difficult one. Building a strong community is a priority. When there is a community event, turnout is high, although one health provider noted that after the events, people come in with gout from all the party food consumed.

Huge wealth disparities and gentrification is also a reality in Maui. Rich celebrities have bought property in Hāna and Kīpahulu. Some construct walls for privacy, but it effectively cuts off access to certain important healthy places. In the resort town of Kīhei, residents talked about a similar dynamic of wealthy individuals mixed with working class families, many of whom are employed by the hotels. There are stories of immigrant workers living in group homes because they can't afford housing on their own. The beautiful beaches are becoming inundated with tourists. The busy highway makes walking unsafe, and there are more signs of drug use littering the ground.

Back in Lahaina, the group was asked, if they could change something to make their community healthier, what would that be. One person said, "I would put a cap on tourists." The whole group nodded in agreement, and then she added, "but we all work hospitality, so our lives would be lower quality." That seemingly no-win dilemma is a central plot line in the story of Maui: people trying to reaffirm their identity and sense of place in a rapidly changing landscape.

**NOTE: This sub-report was derived only from conversations and analysis done as part of this CHNA. The island summary and list of priorities are based on community talk stories, key informant interviews, data reviews, and other observations, and they are intended to highlight the important themes that emerged in the process. It is far from, and not meant to be, a complete or definitive statement of every relevant health factor on the island. As part of sound community practice, users of this report are advised to regularly check in with community partners and engage new voices, as situations change and opinions evolve.*

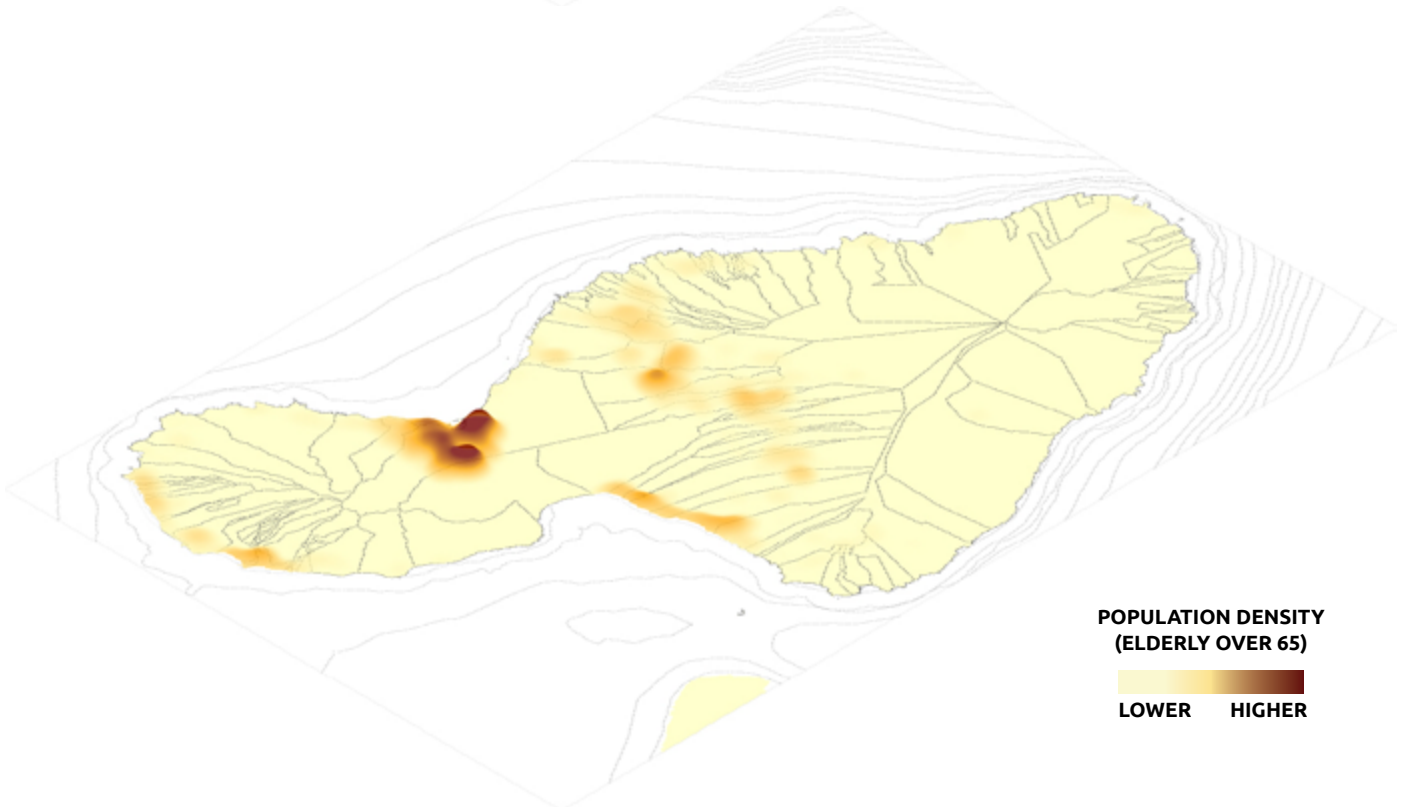
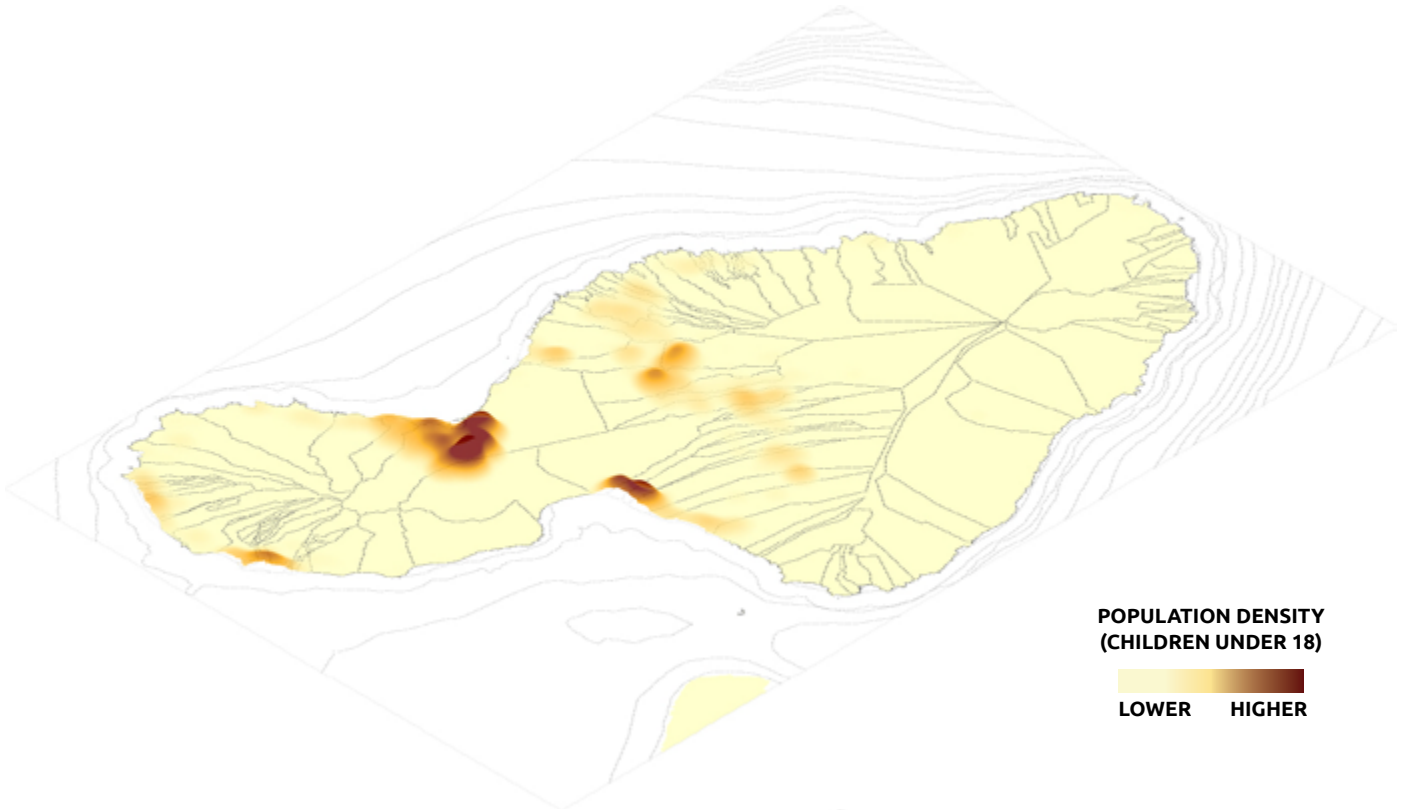
Population



2 OUT OF 5 PEOPLE ON MAUI ARE VISITORS:

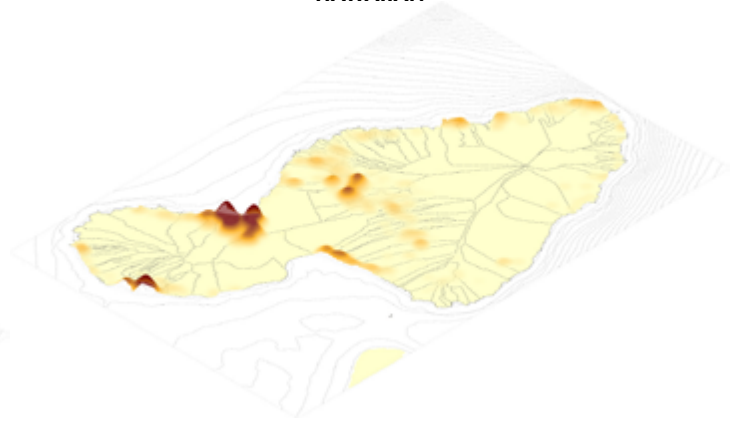


Keiki & Kūpuna

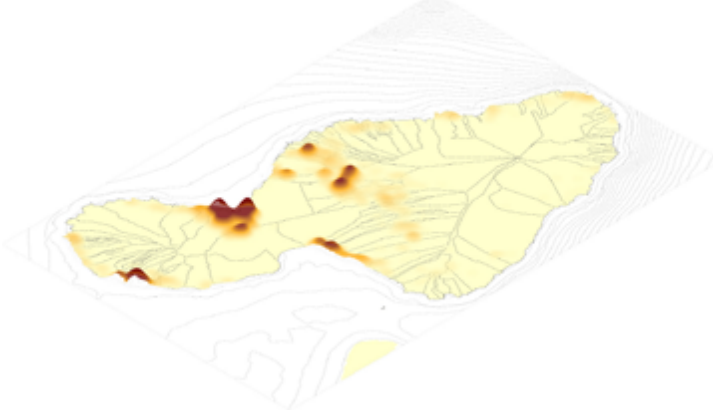


Race

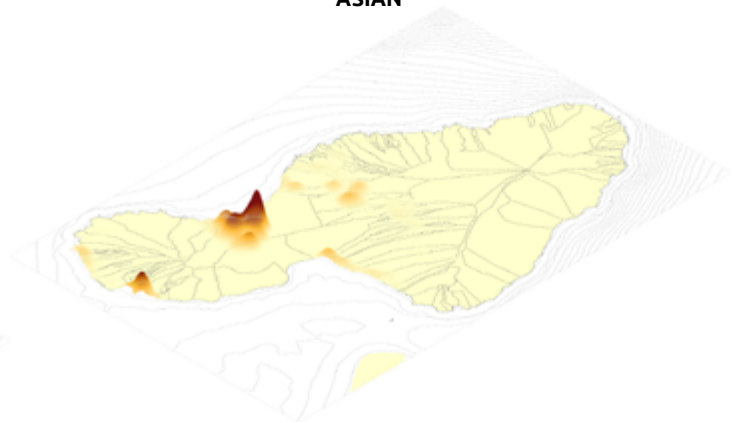
"HAWAIIAN"



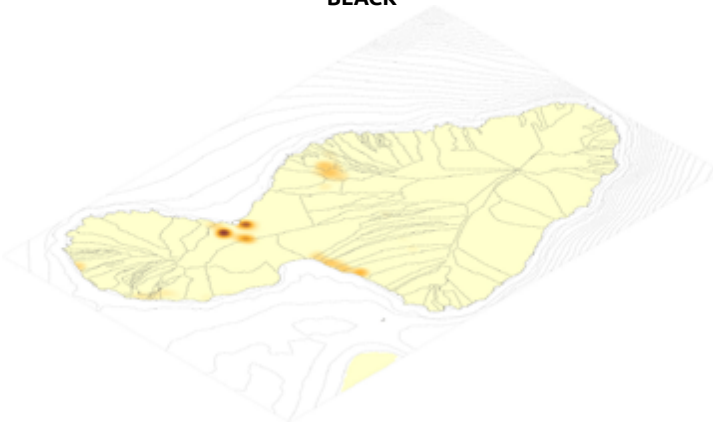
"MIXED" (TWO OR MORE)



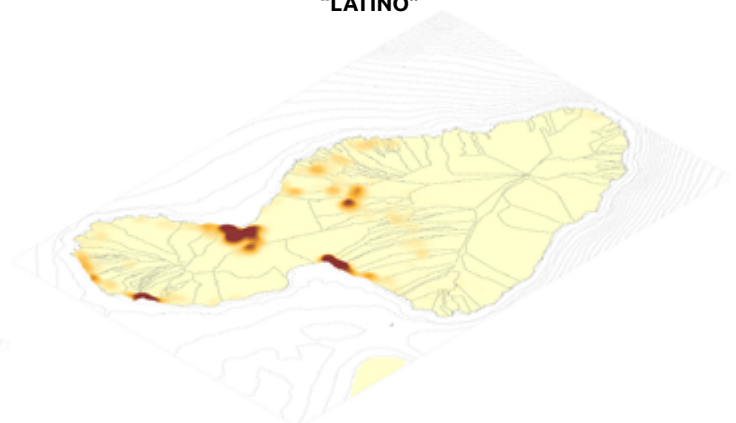
"ASIAN"



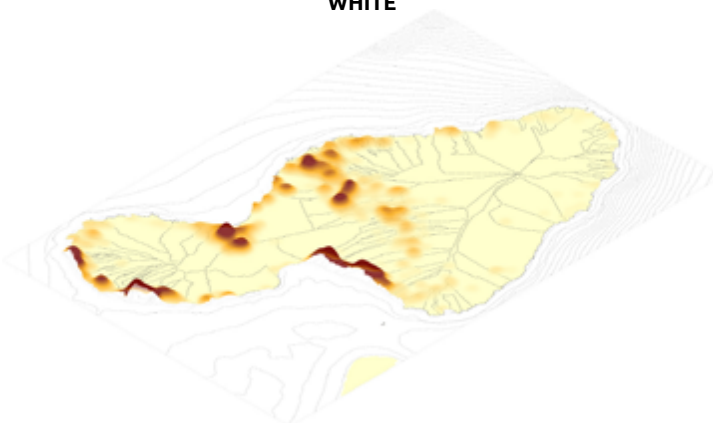
"BLACK"



"LATINO"



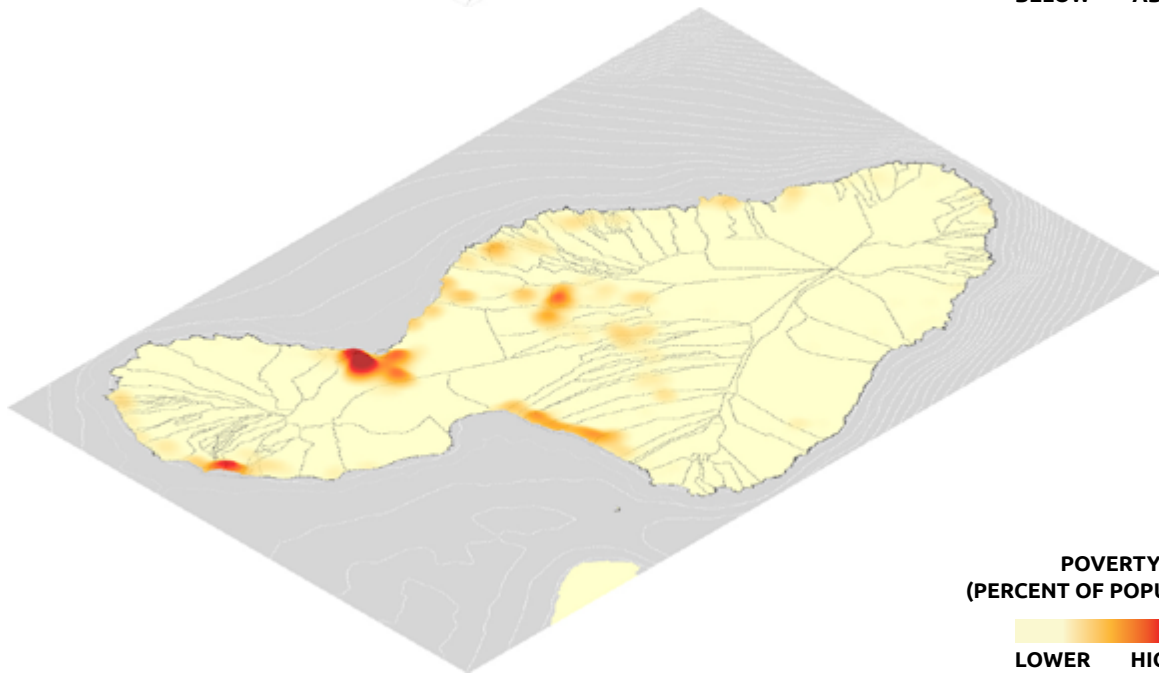
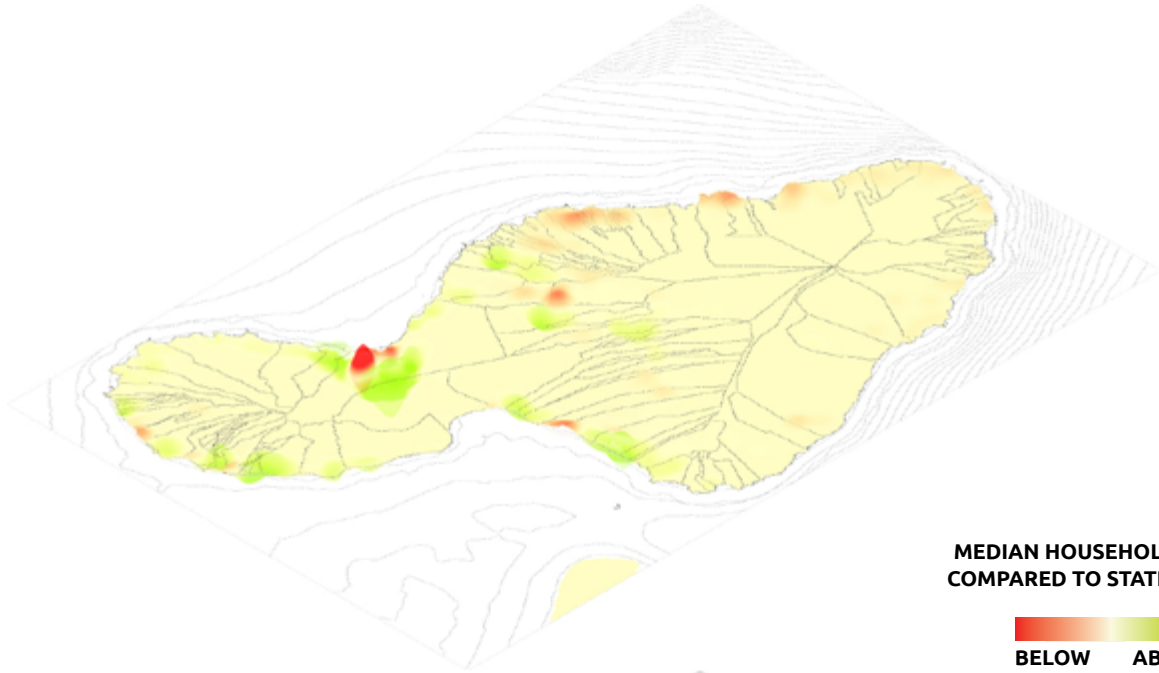
"WHITE"



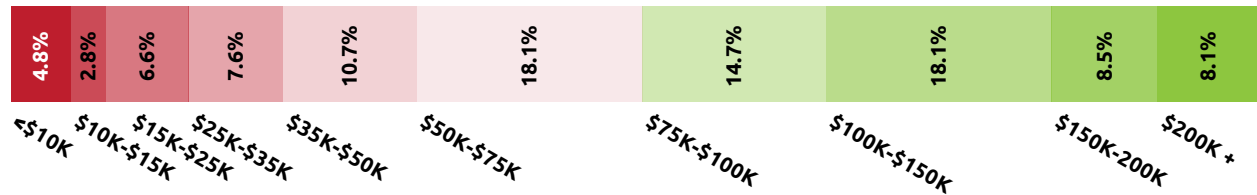
RACIAL IDENTITY
(PERCENT OF POPULATION)



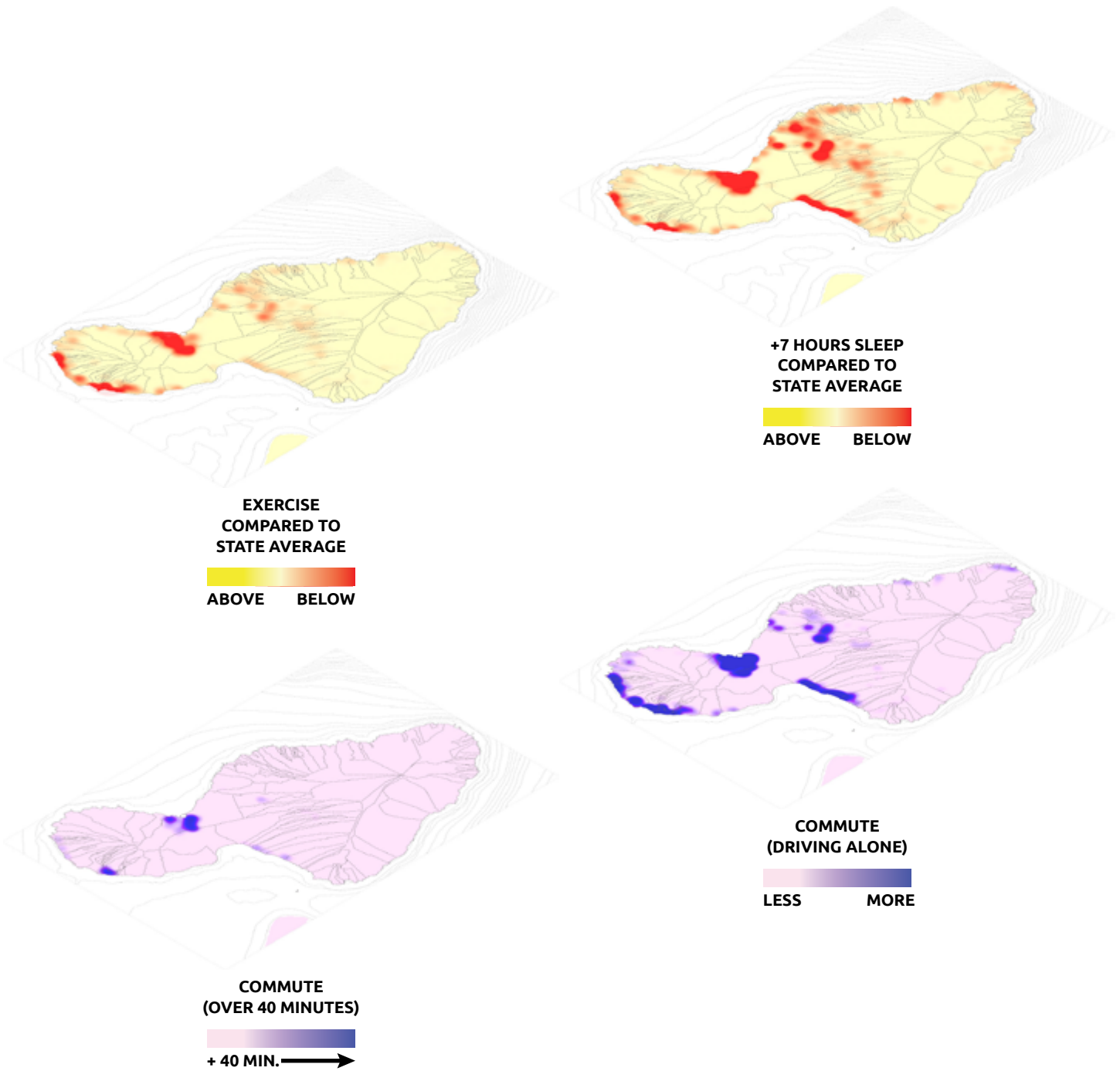
Income



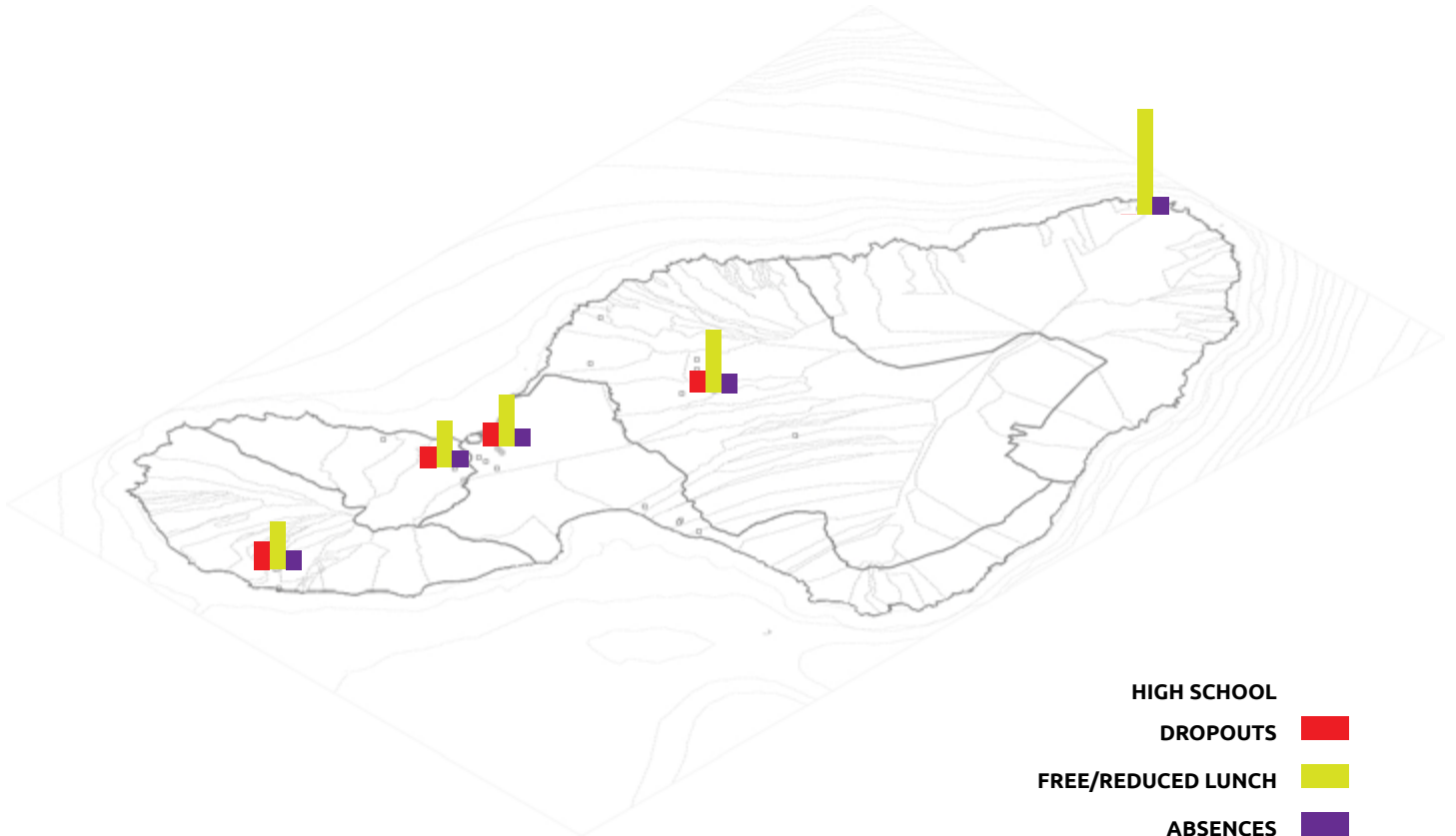
PERCENTAGE OF MAUI HOUSEHOLDS BY INCOME BRACKET
 AVERAGE 4-PERSON HOUSEHOLD SURVIVAL BUDGET IN MAUI COUNTY IS \$76,872.



Time



High Schools



HIGH SCHOOL
DROPOUTS [Red square]
FREE/REDUCED LUNCH [Yellow square]
ABSENCES [Purple square]

	Attendance	Dropouts	Free/Reduced Lunch	Absences	Hawaiian	Samoan	Micronesian	Chinese	Filipino	Japanese	Korean	Portuguese	Black	Hispanic	White
Baldwin High	93%	16%	35%	12%	34%	1%	4%	2%	25%	10%	1%	2%	1%	4%	11%
Hāna High	93%	--	79%	13%	76%	2%	<1%	<1%	1%	1%	<1%	<1%	1%	1%	16%
Kekaulike High	92%	16%	47%	14%	34%	0%	1%	2%	12%	6%	1%	5%	2%	5%	30%
Lahainaluna High	92%	21%	36%	14%	22%	1%	2%	1%	34%	3%	<1%	1%	<1%	15%	16%
Maui High	93%	17%	38%	13%	17%	1%	4%	1%	50%	5%	1%	1%	1%	5%	10%

Maui Strengths and Priorities

Statewide Health Priorities

GOAL 1 - FOUNDATIONS Provide the basic foundations so that people can have more control over their own health	GOAL 2 - COMMUNITY Preserve, nurture, expand, and employ the healing properties of community	GOAL 3 - HEALTHCARE Improve the relationship between people and the healthcare system
1.1 Address financial insecurity 1.2 Work together for equality and justice 1.3 Strengthen families 1.4 Prepare for emergencies 1.5 Build good food systems	2.1 Restore environment and sense of place 2.2 Nurture community identity and cohesiveness 2.3 Invest in teenagers and healthy starts 2.4 Shift kūpuna care away from "sick care"	3.1 Strengthen trust in healthcare 3.2 Provide accessible, proactive support for those with high needs

Maui Strengths

- Relatively strong economic capacity and potential to activate resources for community health
- Strong kūpuna network, family ties, and connection to tradition
- Population with a diversity of cultural strengths without the "big city" dynamic
- Community-based leadership in many towns and Hawaiian cultural stronghold in Hāna

Populations of Note

	Estimate
HOUSELESS	900
PEOPLE IN POVERTY	14,700
NO HEALTH INSURANCE	9,200
WOMEN GIVING BIRTH IN LAST YR	1,800
DISABLED CHILDREN	1,100
CHILDREN IN POVERTY	3,700
NO HS 25 older	8,300
UNEMPLOYED (IN LABOR FORCE)	4,100
DISABLED ADULTS (18-64)	6,900
VETERANS	8,400
65+ LIVING ALONE	4,500
DISABLED 65+	7,700
85+	2,900
HAWAIIAN	38,900
ON HAWAIIAN HOMESTEAD	4,500
OTHER PACIFIC ISLANDER	3,500
RECENT FOREIGN IMMIGRANT	4,100
LIMITED-ENGLISH	15,200

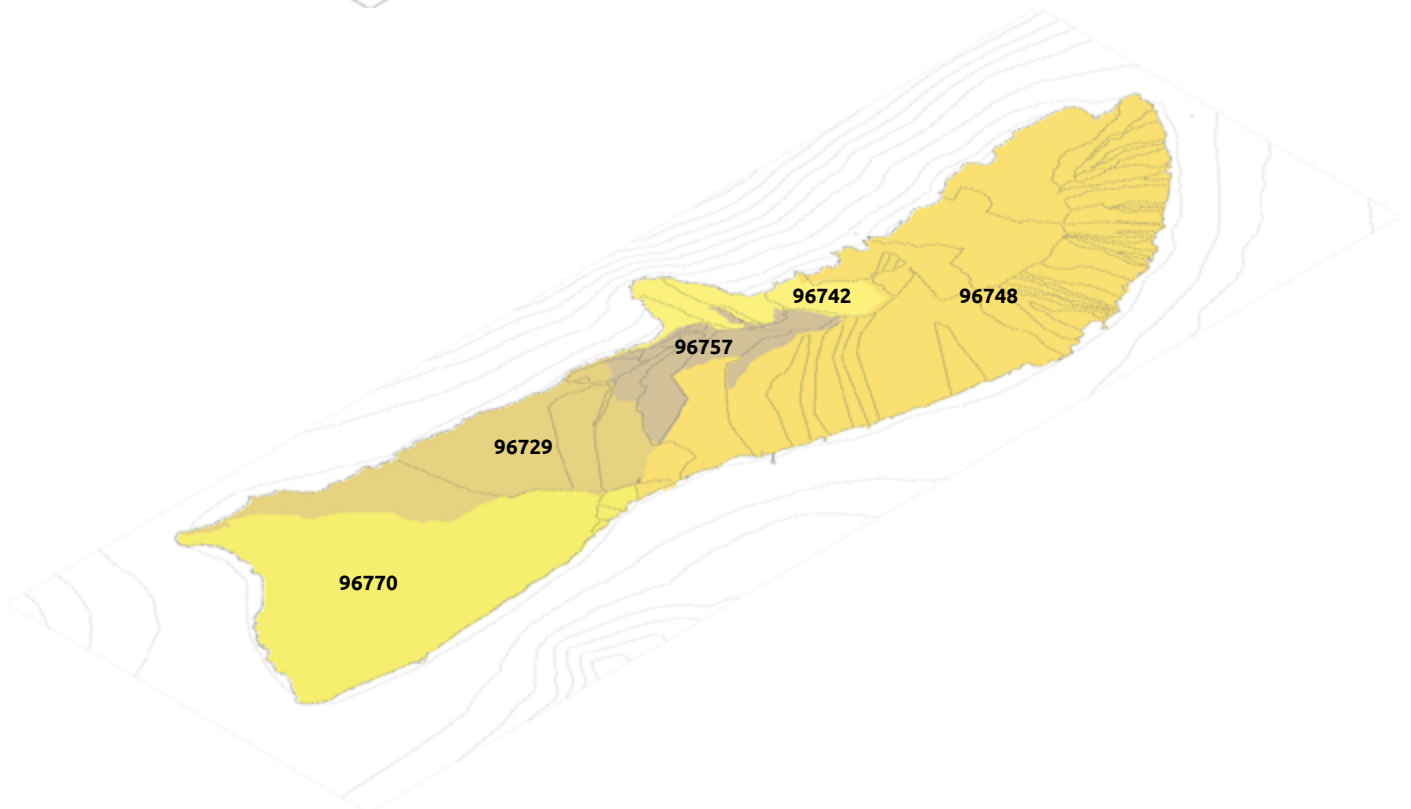
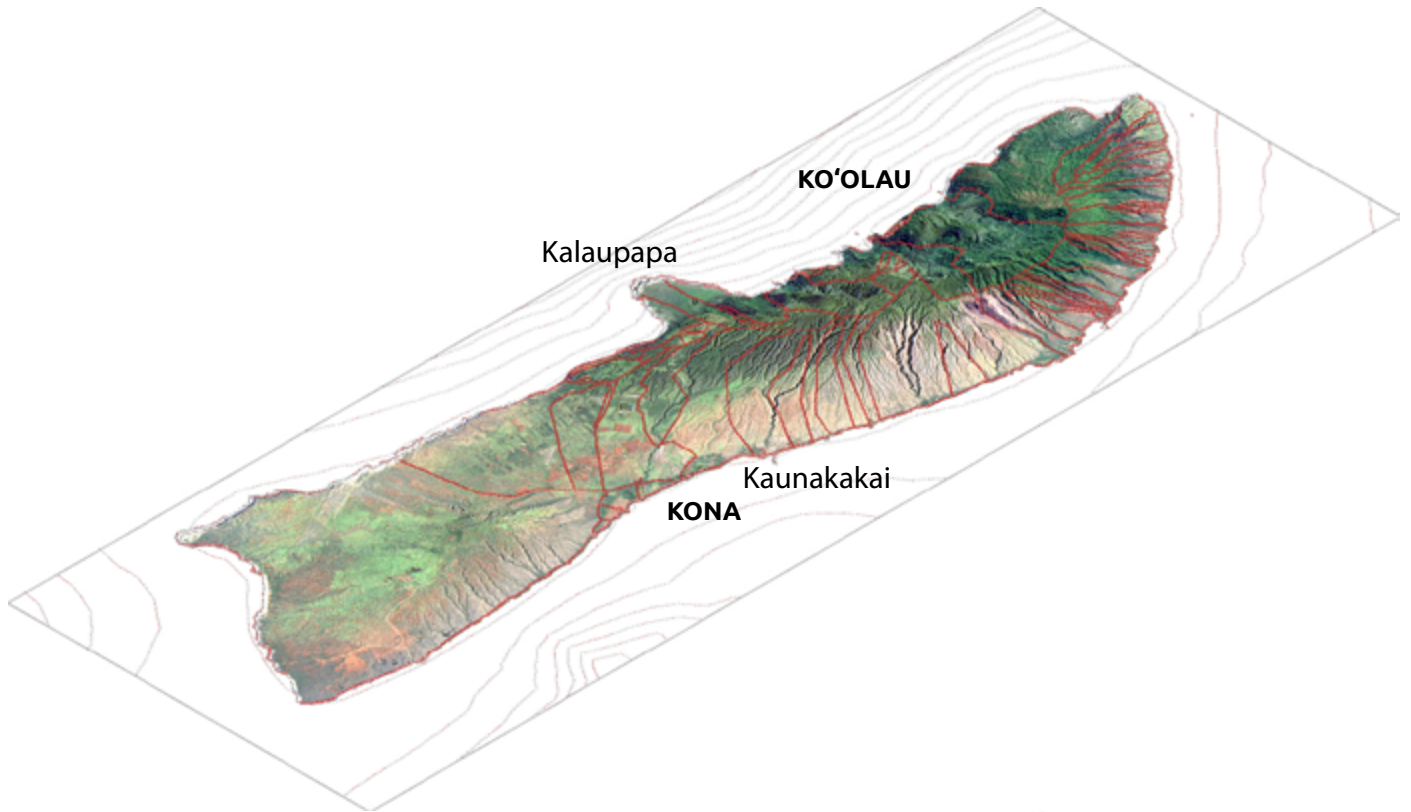
All 5-year estimates from U.S. Census, American Community Survey, 2017 except Hawaiian Homestead population from 2018 Hawai'i State Data Book, and houseless count from Partners in Care, 2018 Point-In-Time Homeless Count.

Maui Priorities

(Highest need areas in RED)

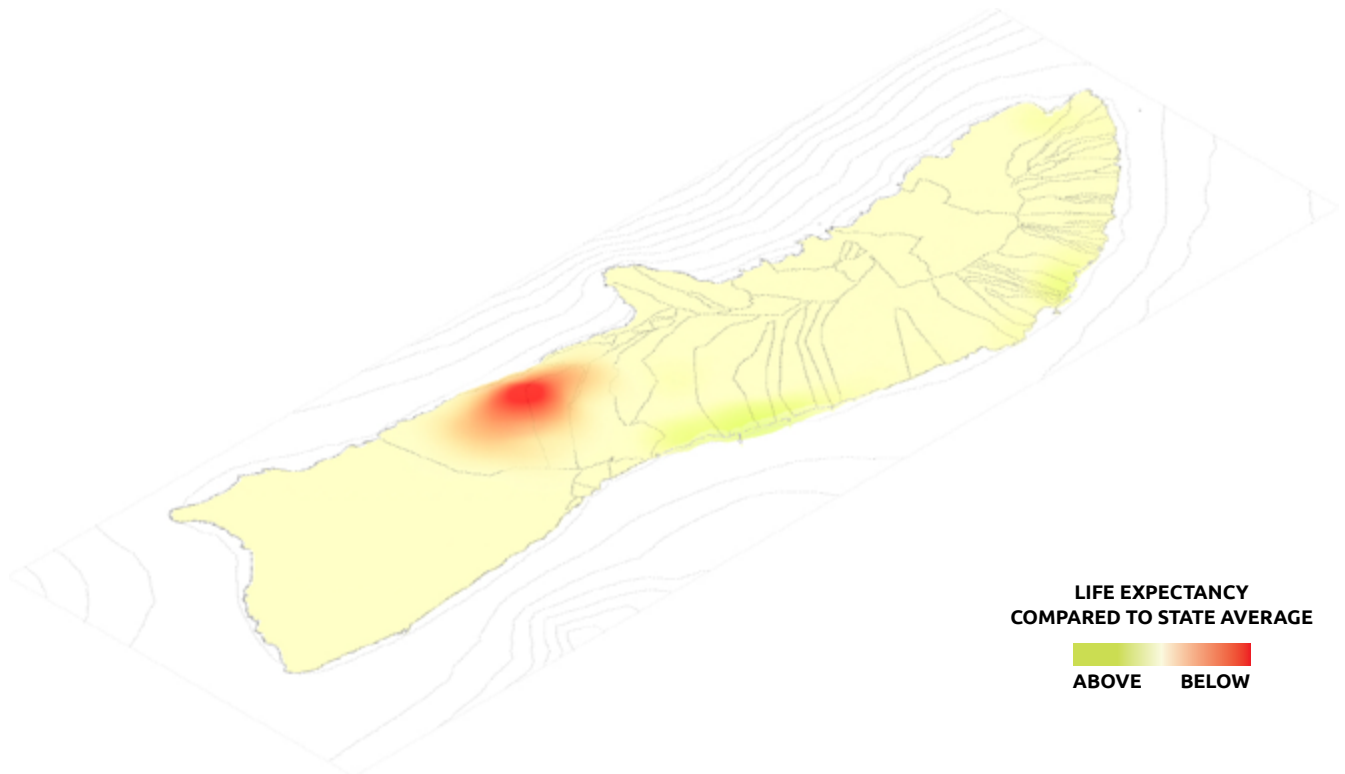
	CRITERIA				
	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
FOUNDATIONS					
FINANCIAL INSECURITY					
Seriously address housing affordability and availability for local residents	✓	✓			
FINANCIAL INSECURITY					
Develop higher paying jobs outside of tourism	✓	✓	✓		
EQUALITY AND JUSTICE					
Support leadership development among immigrants and COFA communities	✓	✓	✓	✓	
FAMILIES					
Address stress of overwork; make it a priority to help families and communities find more time for health	✓	✓			
FAMILIES					
Address Maui's relatively higher incidence of violence against women	✓		✓	✓	
COMMUNITY					
ENVIRONMENT					
Mitigate more of the impacts that the visitor industry is having on environment	✓	✓	✓	✓	
ENVIRONMENT					
Secure local access to healthy places around the island	✓	✓			
COMMUNITY COHESION					
Mitigate more of the impacts that the visitor industry is having on community cohesion	✓	✓	✓		
KEIKI					
Create more positive activities for youth, particularly for those with working parents	✓	✓	✓	✓	
KŪPUNA					
Develop innovative housing and activity options	✓	✓	✓	✓	✓
HEALTHCARE					
TRUST					
Improve the relationship between people and healthcare resources focusing on trust and cultural competence	✓	✓	✓		
SUPPORT FOR HIGH NEEDS					
Address transportation regarding access to health resources for more remote neighborhoods	✓	✓	✓	✓	

MOLOKA'I



Many outsiders are quick to drown Moloka'i in generalizations and stereotypes: that it is economically depressed because of a rejection of development; the community is in constant battle with one another; and there is nothing to do and not enough action to change that. It's really not the story. Moloka'i is like a patient that gets the wrong diagnosis and therefore the wrong treatment.

The reality of Moloka'i is what makes it, in many intangible ways, a uniquely healthy place. Spend enough time with the people of Moloka'i and three common themes stand out: independence, deep roots, and strong connections.



Moloka'i is a tough place because it chooses to be. The island rejects the conveniences of other islands—no fast food, no big box stores, no major developments. As a result, Moloka'i is healthy in ways that aren't measured, including people's deep connection to the land, their culture, to one another, and to their way of life.

Many residents know how to live off the land by fishing, hunting, and planting, and are still able to pass down these practices to their children. Important places around the island are still accessible to residents and not overrun by visitors. Cultural practices, including the Hawaiian language, live on in both formally organized and informally authentic ways.

Economically, Moloka'i can be a difficult place to live. Young people and families have few public spaces to regularly gather like how they did before when there was a bowling alley and theater. Moloka'i teens talked about how easy it would be to succumb to vaping or drugs because it is so pervasive around them. Health services available to residents on more developed islands require Moloka'i residents to fly to Maui or O'ahu. And an aging population is becoming increasingly difficult to support with care. Residents face high unemployment and underemployment. There are both really busy people and really idle people.

Like all communities across Hawai'i, idleness can lead some into the darkness of drugs, violence, sexual abuse, or depression. Because of the island's strong connections, pain and struggle reverberate in the community more than in most places. People who lose hope or who fall to disease are people who were

known as children; former children who were once healthy and full of potential. Even people who aren't really close on Moloka'i are still people known to each other in school or around town. And in a tight community where anyone's fate could be anyone else's, it is understandable why some say they feel fated to bad endings.

"The closeness of our 'ohana is a double-edged sword," one person shared. "When there are problems in the family, we tend to protect one another rather than do what's right. Some people might describe people as 'resilient' when they are just normalizing bad behaviors or coping." As families do, sometimes people protect each other and keep problems like childhood sex abuse, domestic abuse, and substance abuse within the home, away from the attention, intervention, and help they need. In surveys done by teens who interviewed their peers, parents, and teachers, several talked about still living with the impact of past traumas like rough childhoods or cultural discrimination. They hinted at poor mental health, and not always having a consistent, healthy outlet to express their troubles.

On a tight-knit, small island, people cannot hide from one another as they do in more populated places. Conflict and disagreement do occur. Organizations in Moloka'i working in community health have clashed in the past, because of overlapping responsibilities, differences of strategy, conflicting personalities, and limited resources. But collaboration is growing among the hospital, health center, Native Hawaiian health system, public health system, and other healthcare providers. Like in any tight knit family, it will take some time for the organizations to align their purposes and move beyond past conflicts. However, this collaboration is crucial because solutions for Moloka'i have better success when they are homegrown and have the necessary amount of cultural and community competency. Community organizations of Moloka'i are also building momentum with great intention, including those who were met with over the course of this report: the Moloka'i Health Foundation, Ka Honua Momona, Sust'āinable Moloka'i, Kualapu'u School, and Lili'uokalani Trust. Moloka'i needs resources and support, but at the same time, the island needs the space to identify and solve its own problems.

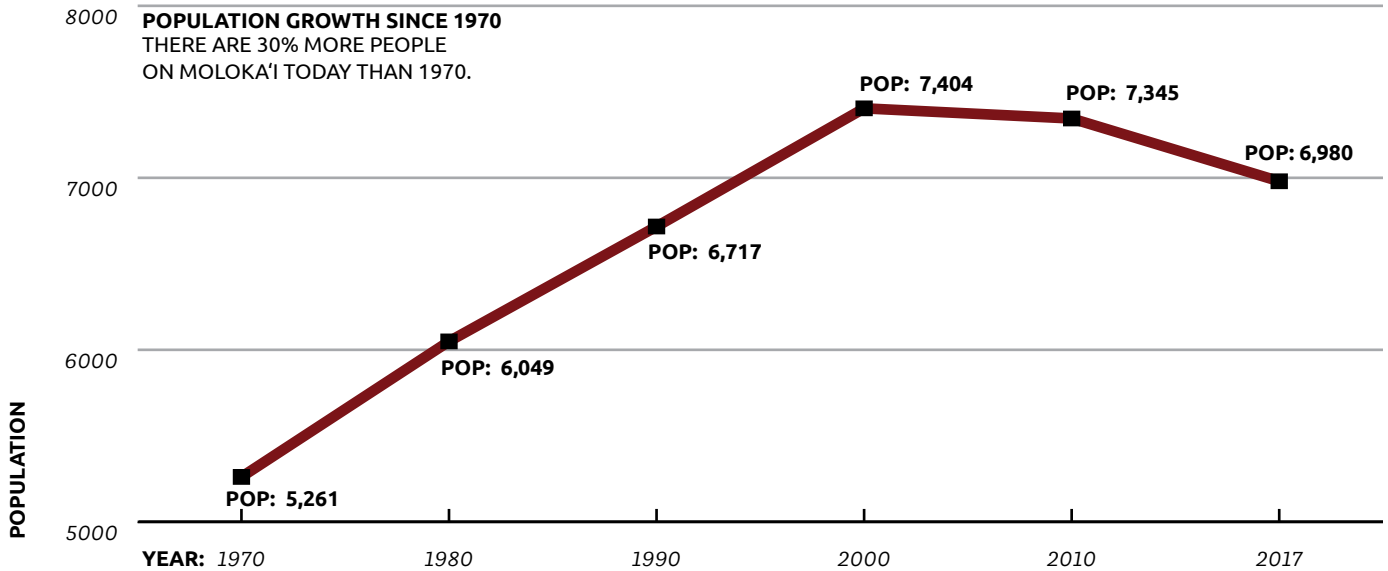
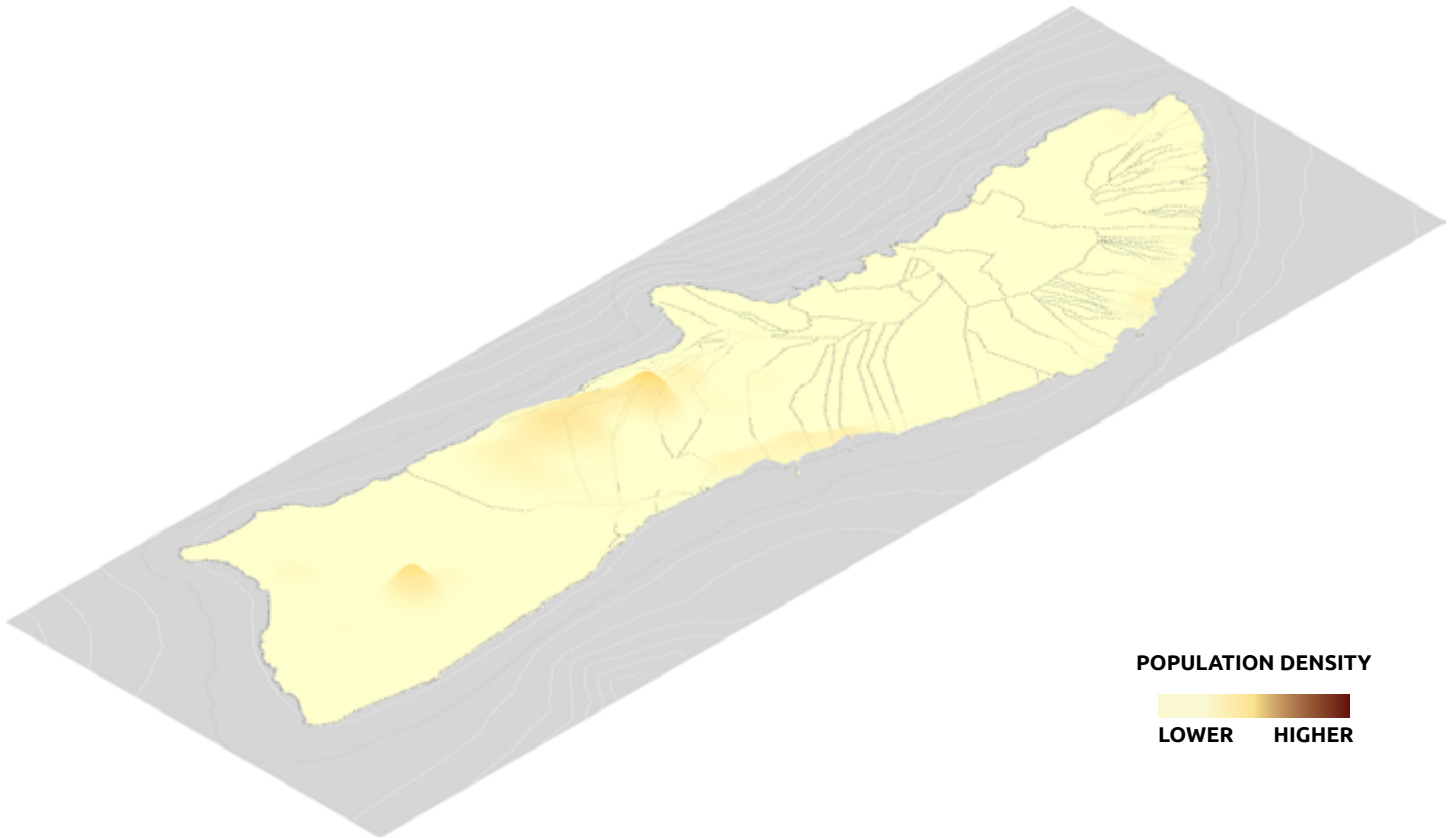
During the course of this CHNA, Islander Institute was also engaged in a partnership with residents of Kalaupapa, their family and friends. Kalaupapa—with its oft-told story of isolation, banishment, and shame for patients who suffered from Hansen's disease—in fact feels like a story of health and healing for all of Hawai'i to contemplate. Theirs is a story of bringing life, spirituality, community, and aloha out of the darkest of circumstances. These days, the remaining patients live in their homes or in a care facility of their choosing. A few of the remaining residents, descendants, and supporters have been working to share their stories with pride as a way to move past historic trauma. They are claiming their own story, and not letting others define their place for them.

Moloka'i has a kind of contentment, and contentment is an unmeasured indicator of health.

Being content sometimes gets twisted into being lazy. Moloka'i people are hard at work, many employed in making life better for others—especially children, kūpuna, and those with the greatest needs. Being content can get misinterpreted as being ignorant. Moloka'i people are well aware of the challenges they face and the things they would like to see made better. Some think being content means not caring. Moloka'i people care very much about making things better to the point where they create their own solutions, try things, and are even willing to fight for their beliefs. People who don't like life on Moloka'i leave, but for those who stay, their contentment is rooted in aloha for the land and a lifestyle worth fighting for. That contented sense of home is something that all people might be so lucky to have in their lives.

**NOTE: This sub-report was derived only from conversations and analysis done as part of this CHNA. The island summary and list of priorities are based on community talk stories, key informant interviews, data reviews, and other observations, and they are intended to highlight the important themes that emerged in the process. It is far from, and not meant to be, a complete or definitive statement of every relevant health factor on the island. As part of sound community practice, users of this report are advised to regularly check in with community partners and engage new voices, as situations change and opinions evolve.*

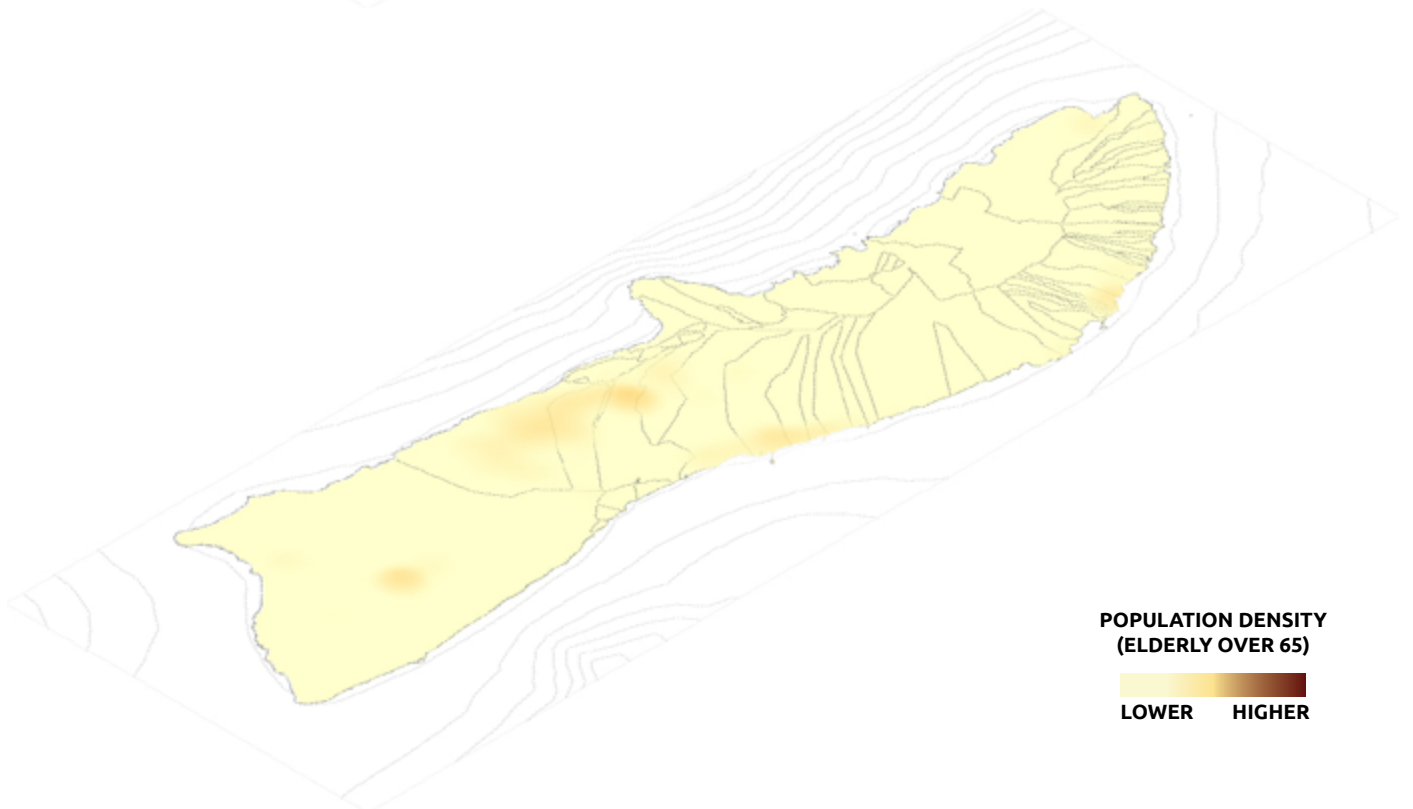
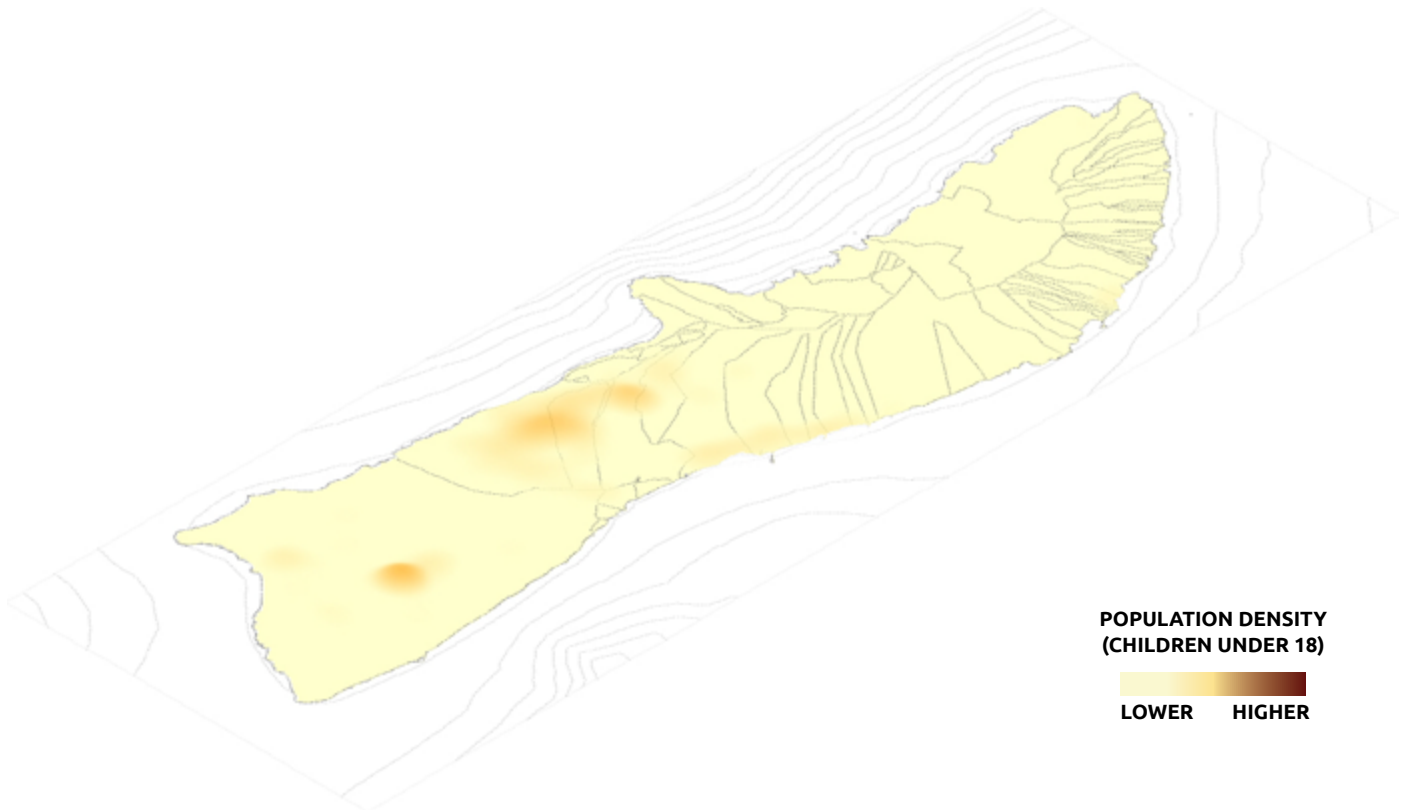
Population



1 OUT OF 10 PEOPLE ON MOLOKA'I ARE VISITORS:

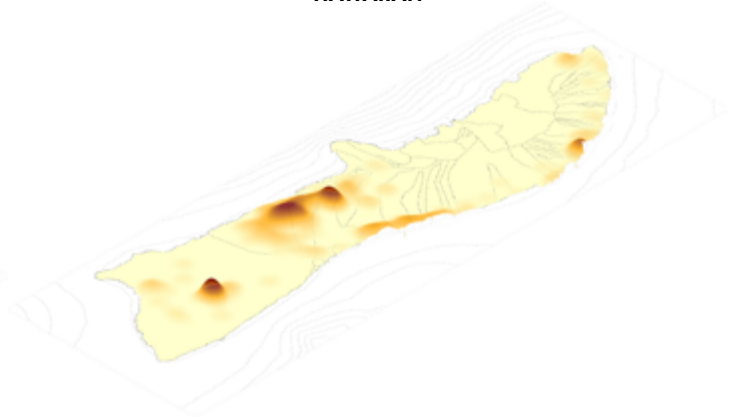


Keiki & Kūpuna

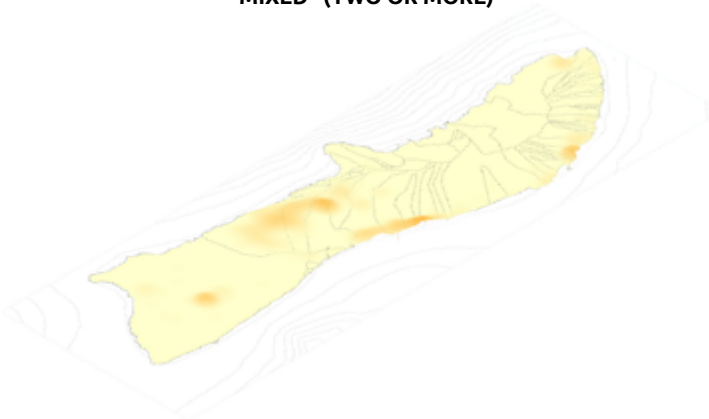


Race

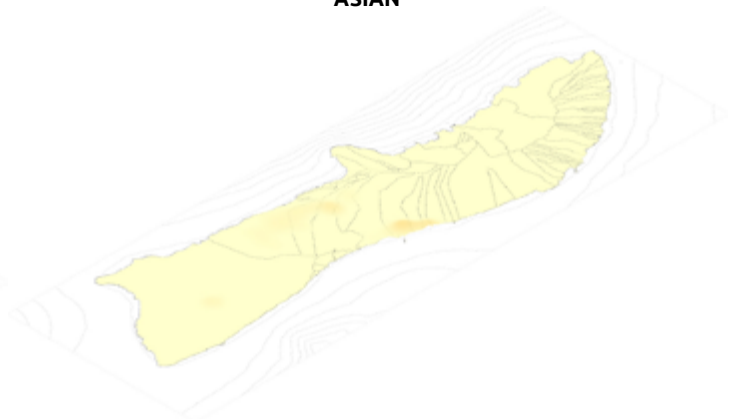
"HAWAIIAN"



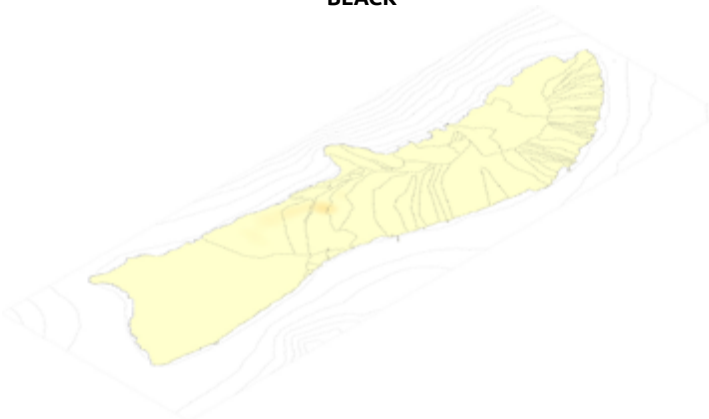
"MIXED" (TWO OR MORE)



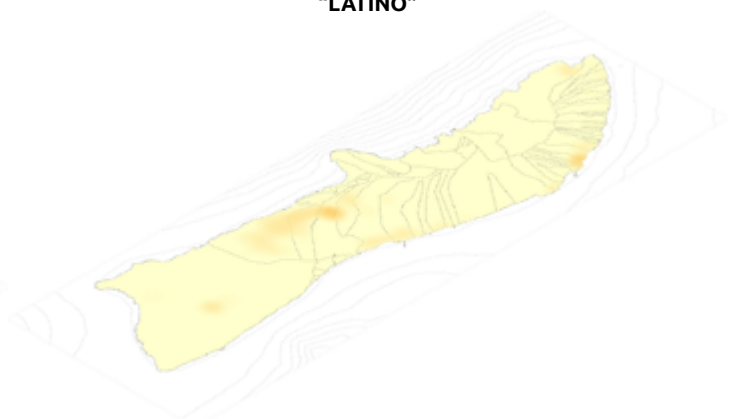
"ASIAN"



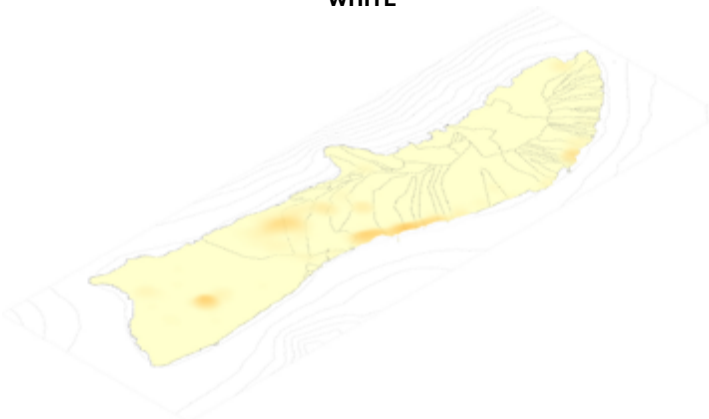
"BLACK"



"LATINO"



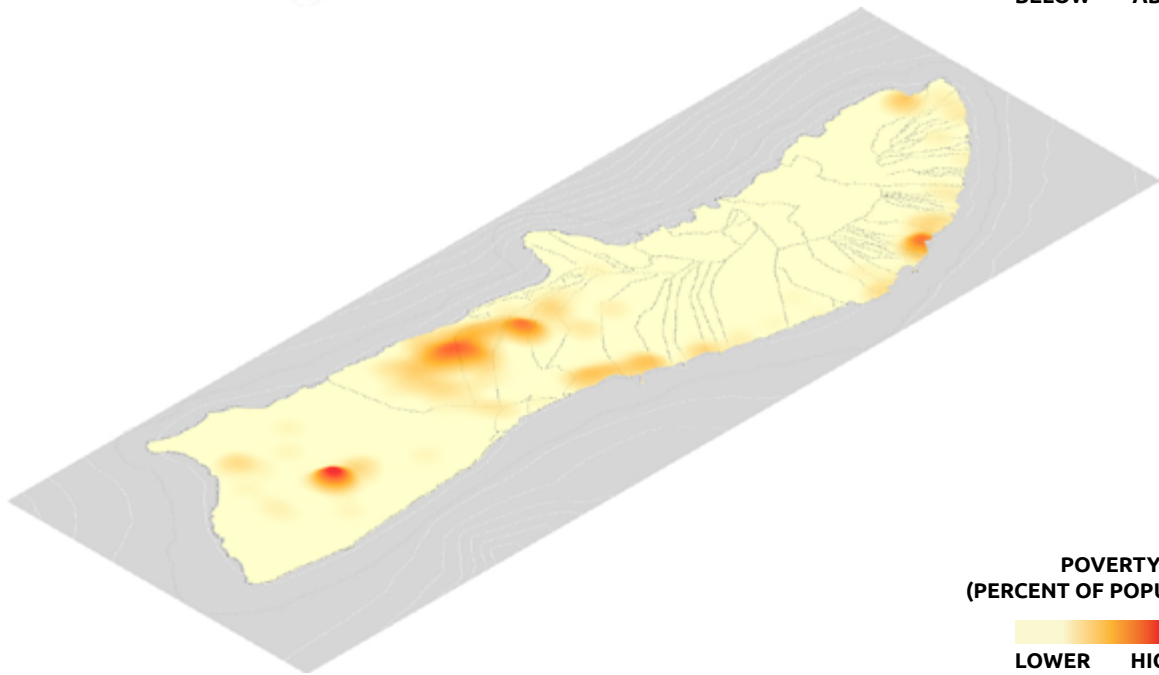
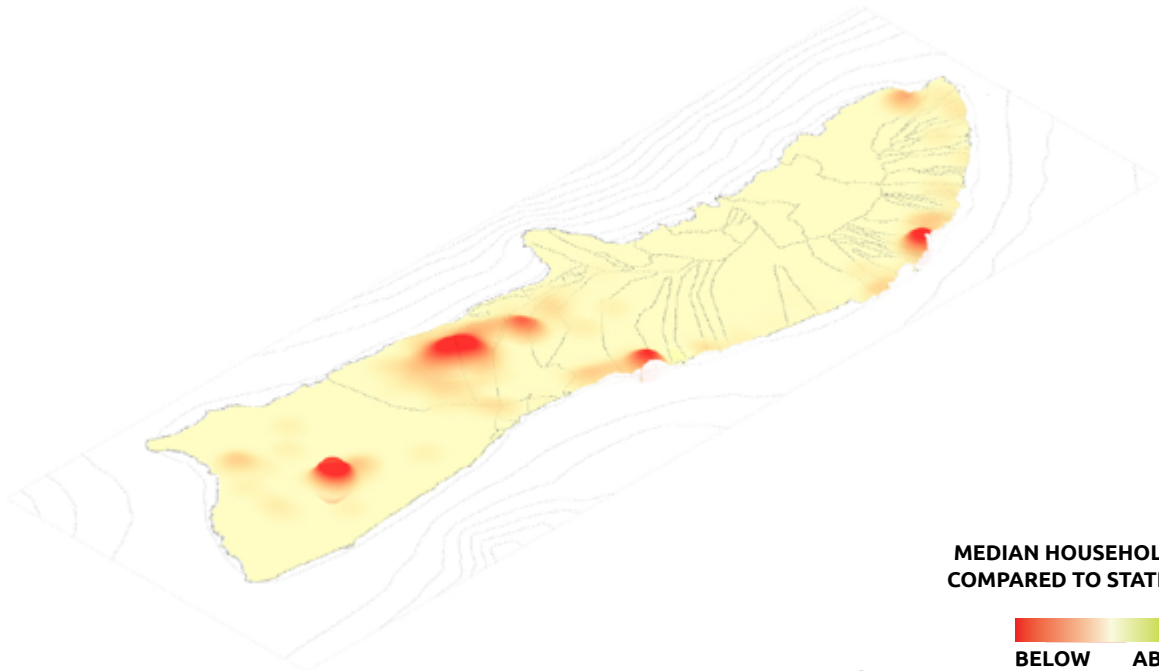
"WHITE"



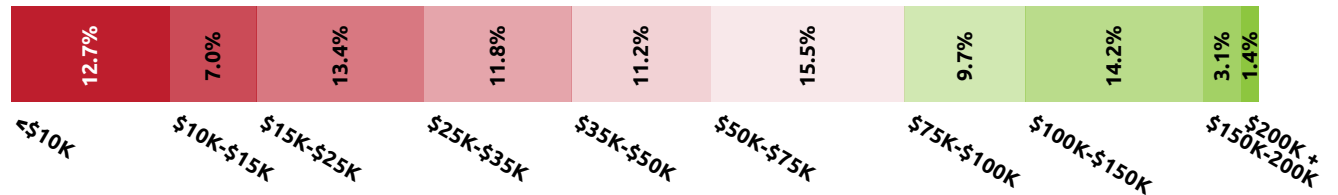
RACIAL IDENTITY
(PERCENT OF POPULATION)



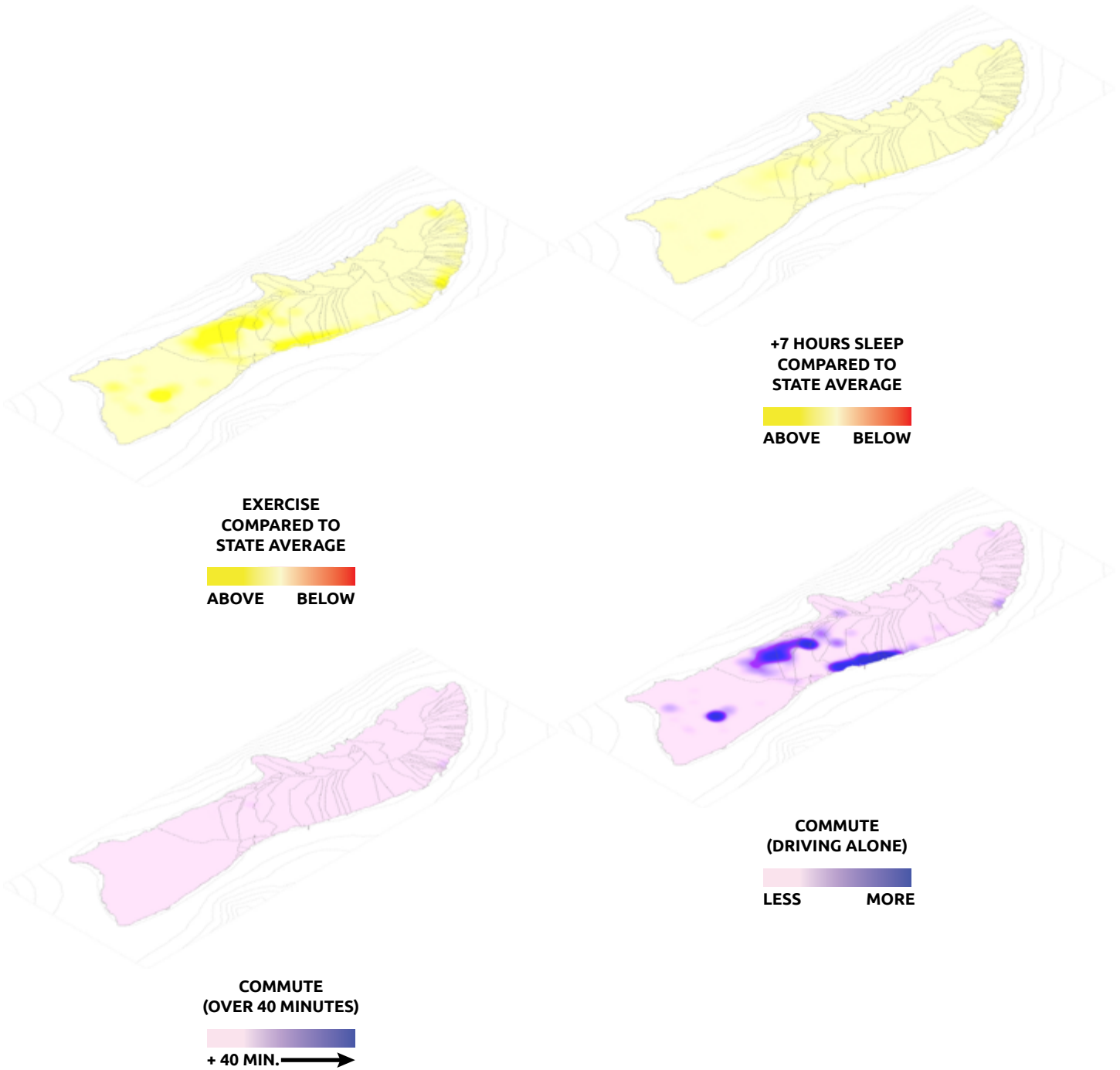
Income



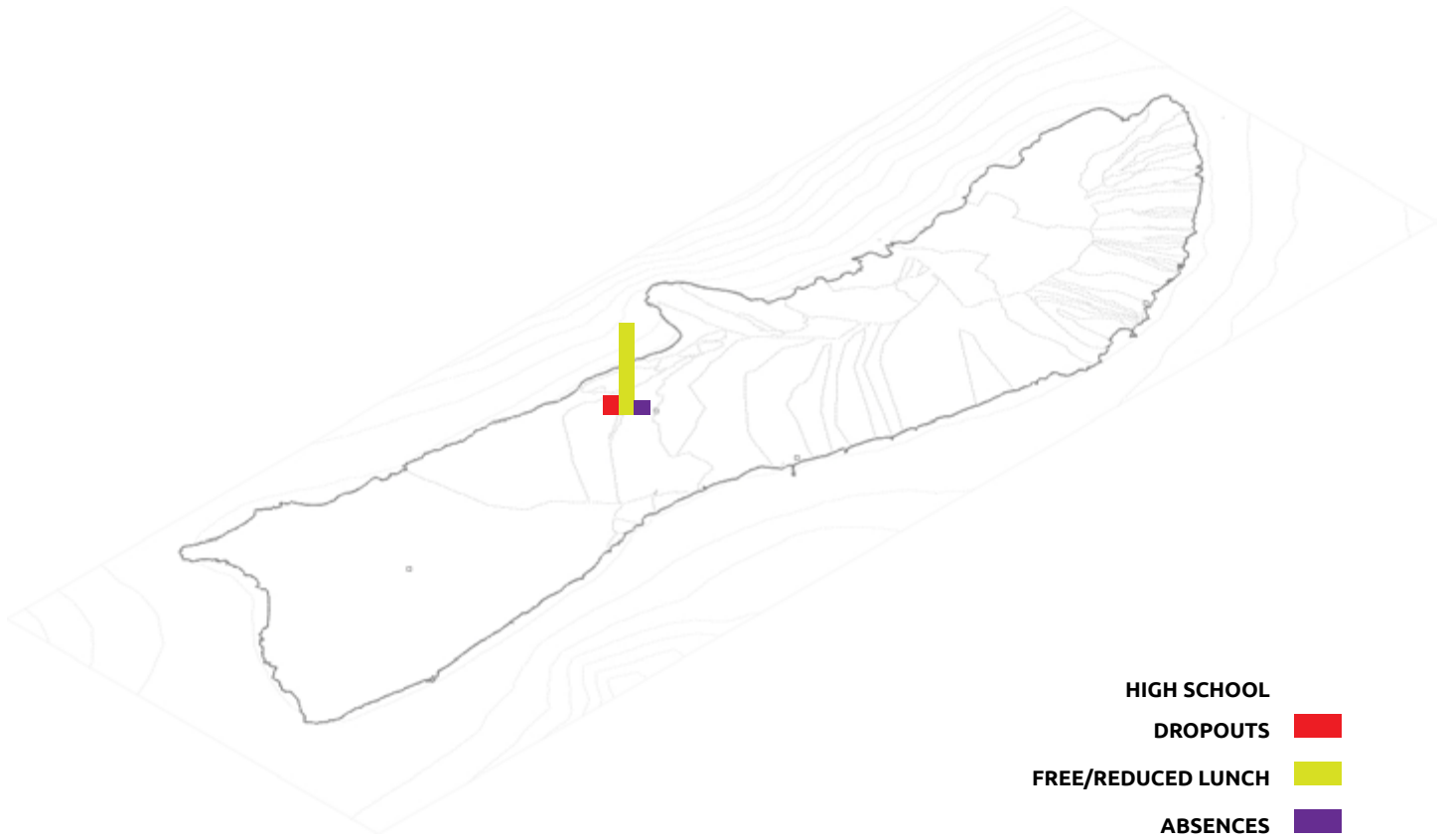
PERCENTAGE OF MOLOKA'I HOUSEHOLDS BY INCOME BRACKET
 AVERAGE 4-PERSON HOUSEHOLD SURVIVAL BUDGET IN MAUI COUNTY IS \$76,872.



Time



High School



HIGH SCHOOL
DROPOUTS ■
FREE/REDUCED LUNCH ■
ABSENCES ■

	Attendance	Dropouts	Free/Reduced Lunch	Absences	Hawaiian	Samoan	Micronesian	Chinese	Filipino	Japanese	Korean	Portuguese	Black	Hispanic	White
Moloka'i High	94%	15%	69%	11%	79%	1%	<1%	<1%	15%	1%	<1%	<1%	<1%	<1%	3%

Moloka‘i Strengths and Priorities

Statewide Health Priorities

GOAL 1 - FOUNDATIONS Provide the basic foundations so that people can have more control over their own health	GOAL 2 - COMMUNITY Preserve, nurture, expand, and employ the healing properties of community	GOAL 3 - HEALTHCARE Improve the relationship between people and the healthcare system
1.1 Address financial insecurity 1.2 Work together for equality and justice 1.3 Strengthen families 1.4 Prepare for emergencies 1.5 Build good food systems	2.1 Restore environment and sense of place 2.2 Nurture community identity and cohesiveness 2.3 Invest in teenagers and healthy starts 2.4 Shift kūpuna care away from “sick care”	3.1 Strengthen trust in healthcare 3.2 Provide accessible, proactive support for those with high needs

Moloka‘i Strengths

- Deep connection to place and good access to healthy places
- Strong sense of community identity and connectedness
- Widespread subsistence skills
- General consensus about the problems that need to be addressed

Populations of Note

	Estimate
HOUSELESS	N/A
PEOPLE IN POVERTY	1,210
NO HEALTH INSURANCE	270
WOMEN GIVING BIRTH IN LAST YR	70
DISABLED CHILDREN	50
CHILDREN IN POVERTY	420
NO HS 25 older	330
UNEMPLOYED (IN LABOR FORCE)	120
DISABLED ADULTS (18-64)	470
VETERANS	480
65+ LIVING ALONE	370
DISABLED 65+	610
85+	220
HAWAIIAN	4,220
ON HAWAIIAN HOMESTEAD	2,150
OTHER PACIFIC ISLANDER	60
RECENT FOREIGN IMMIGRANT	180
LIMITED-ENGLISH	410

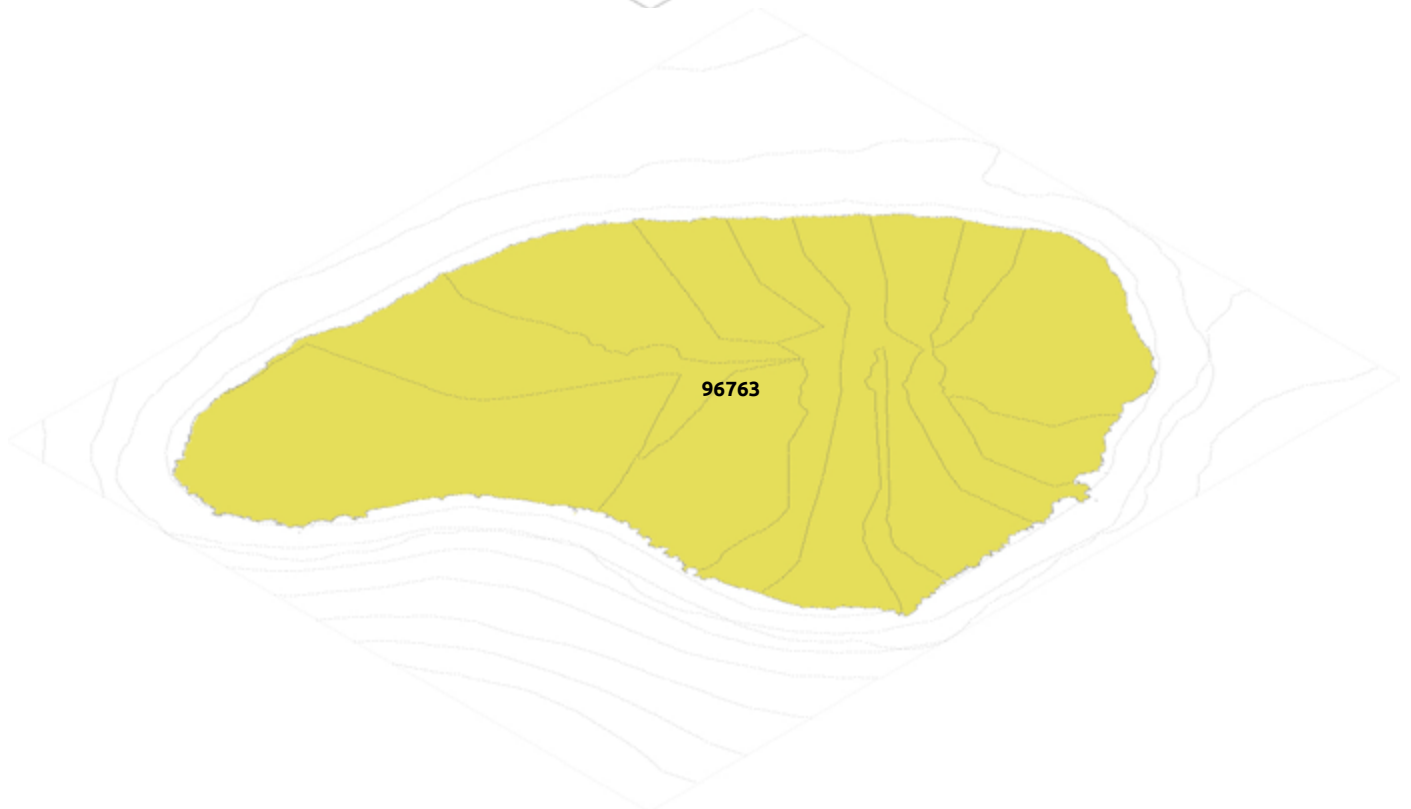
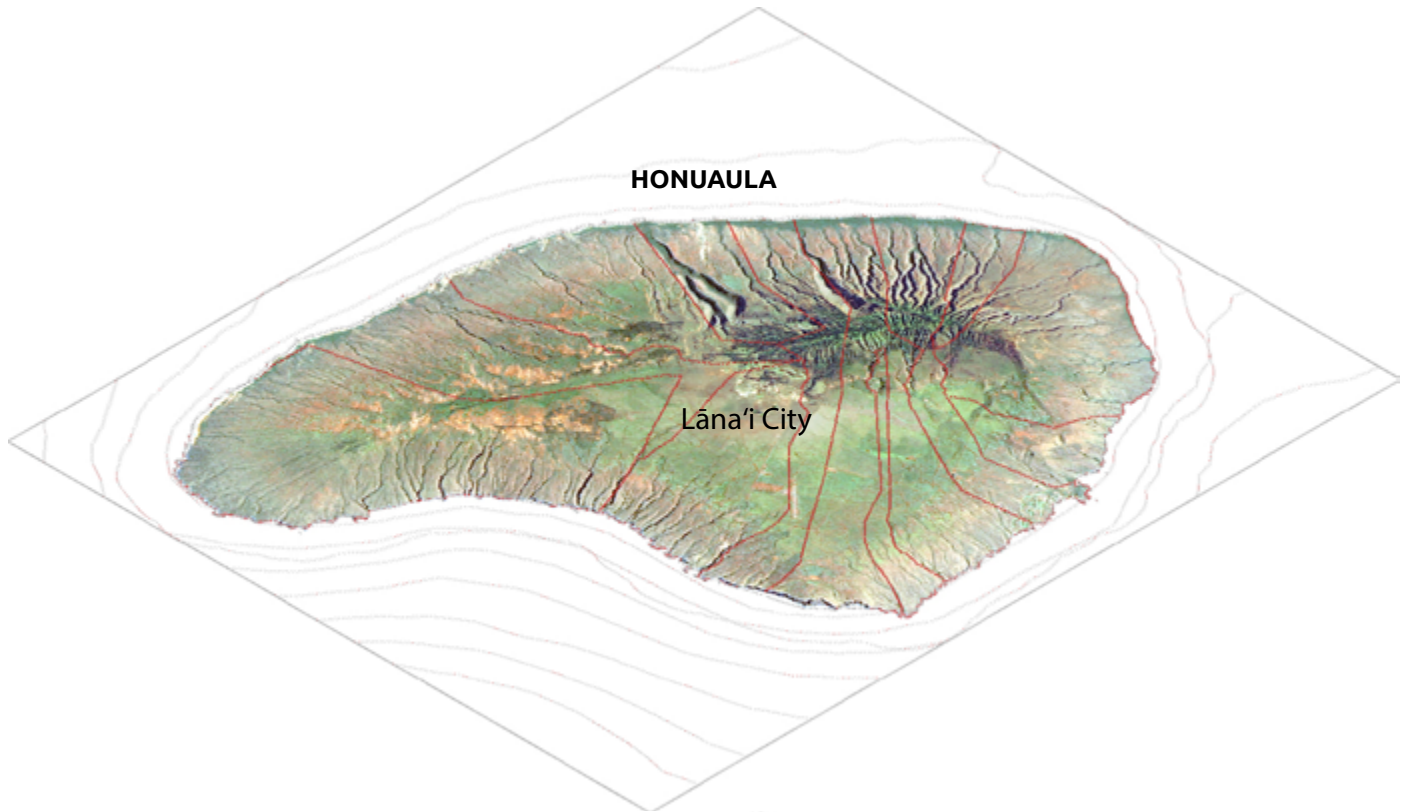
All 5-year estimates from U.S. Census, American Community Survey, 2017 except Hawaiian Homestead population from 2018 Hawaii State Data Book, and houseless count from Partners in Care, 2018 Point-In-Time Homeless Count.

Moloka‘i Priorities

(Highest need areas in RED)

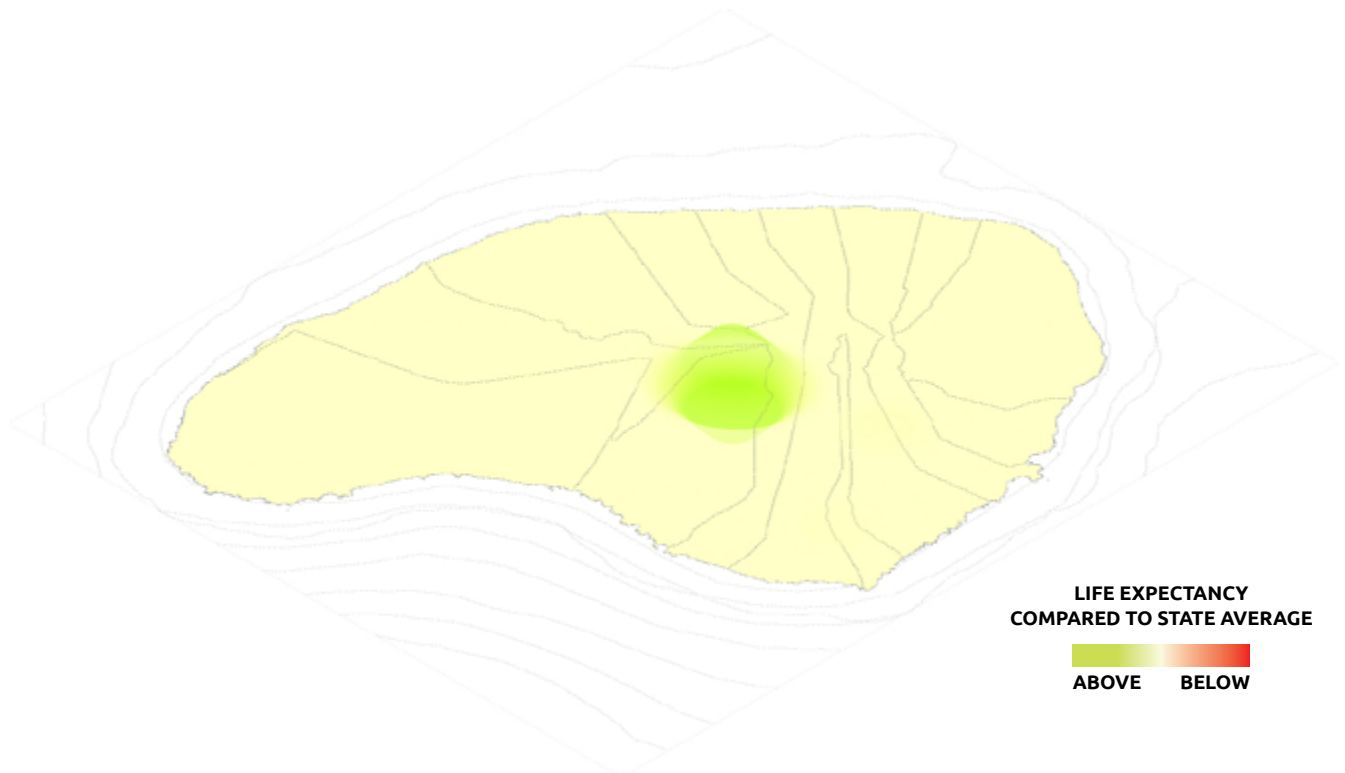
	CRITERIA				
FOUNDATIONS	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
FINANCIAL INSECURITY Increase economic self-sufficiency through entrepreneurship, asset building, and food self-sufficiency	✓	✓	✓	✓	
FAMILIES Address domestic abuse and sexual abuse in culturally appropriate and effective ways	✓	✓	✓	✓	✓
EMERGENCIES Engage community in disaster preparedness planning	✓				
COMMUNITY	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
COMMUNITY COHESION Develop healthy activities and opportunities for community contribution among idle adults	✓	✓			
KEIKI Develop more positive activities and opportunities for youth, including those in more remote areas and those with high needs	✓	✓	✓	✓	✓
KŪPUNA Develop an array of care and supports for the growing population of kūpuna	✓	✓	✓	✓	
HEALTHCARE	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
TRUST Continue fostering effective collaboration among health agencies and community partners	✓	✓	✓	✓	✓
SUPPORT FOR HIGH NEEDS Develop and/or attract more services and solutions to support people with mental health needs	✓	✓	✓	✓	
SUPPORT FOR HIGH NEEDS Work with community by employing proactive outreach and engagement	✓	✓	✓	✓	

LĀNA‘I



On Lānaʻi, residents describe this small island as safe, peaceful, connected, close-knit, and quiet. It is a place where people take care of each other and where motorists drive well below the speed limit in town and wave to one another. They share the outside resources of food and supplies that come in from the barge once a week, which are distributed through a handful of markets and restaurants.

It is a place where babies are rarely born on island and where seniors commonly go off island toward the end of life. As a part of the tradeoff of living in a small community, they learn to live without everything they need. With two doctors on island, Lānaʻi residents go off island for specialized services, such as pediatrician visits and mammograms. This leaves Lānaʻi residents dependent on the one commercial airline carrier that services Lānaʻi and a ferry service to Maui for their off-island transportation to doctor visits. Once on another island, they rely on taxis or family and friends to shuttle them to doctor offices. One doctor's appointment can take a full day of travel. Insurance covers airfare and taxis, but typically not hotel stays or delayed flights.



Every weekday, a group of seniors gather at the Lānaʻi Senior Center for activities and lunch as a way to create and maintain social connections. Some catch the Maui Economic Opportunity (MEO) shuttle to the center while others drive. They bring food and gossip to share. For many, this is the highlight of their day to talk story with friends in a comfortable, welcoming environment. Several times a month, they catch the ferry together to Maui, where they are met by the MEO bus there, to go shopping at Costco, Walmart, and other places.

On a rainy Tuesday before Tropical Storm Olivia was to hit Lānaʻi in September of 2018, a group of 14 seniors ate together while also talking story about what makes them healthy in Lānaʻi. They take care of one another, whether it is checking up on a friend at home, giving each other rides, or cooking food to share. With the tropical storm coming, many said they were prepared, and even if it got worse than anticipated, they felt assured that they had the protection of their fellow community members.

While these seniors were healthy enough to stay on Lānaʻi, there are many others who had to leave because of poorer health. The seniors who live in the senior housing in town need to be independent and healthy enough to get by on their own. Kūpuna lack a long term care facility, a nursing home, and

other more intensive health services. One kupuna said he would want to die on his beloved island, but because of a lack of care needed for his wife, he would likely move off island. Some did point to having good care on island, such as routine dental services and doctor visits.

In a small place, even small changes and individuals can have a big impact. Some point to the successful lobbying of a few community champions to open a dialysis center and hospice. In the summer of 2018, an abrupt closing of the Native Hawaiian Health System office, Ke Ola Hou o Lāna‘i Na Pu‘uwai, created concern in the community about the end of home visits by nurses and a community fund benefiting cancer patients.

Another recent change was the creation of Sensei Farms Lāna‘i, a company created by the island’s majority landowner, the billionaire and Oracle co-founder Larry Ellison, to grow fresh produce on island using hydroponics, starting first with lettuce to export. Because much of the island’s produce arrives on the barge weekly, some are already weeks old. Residents find produce expensive to buy in stores, making it unaffordable and difficult to eat healthy. Some residents were excited at the prospect of the island growing its own food with hopes that some will go toward feeding the Lāna‘i community.

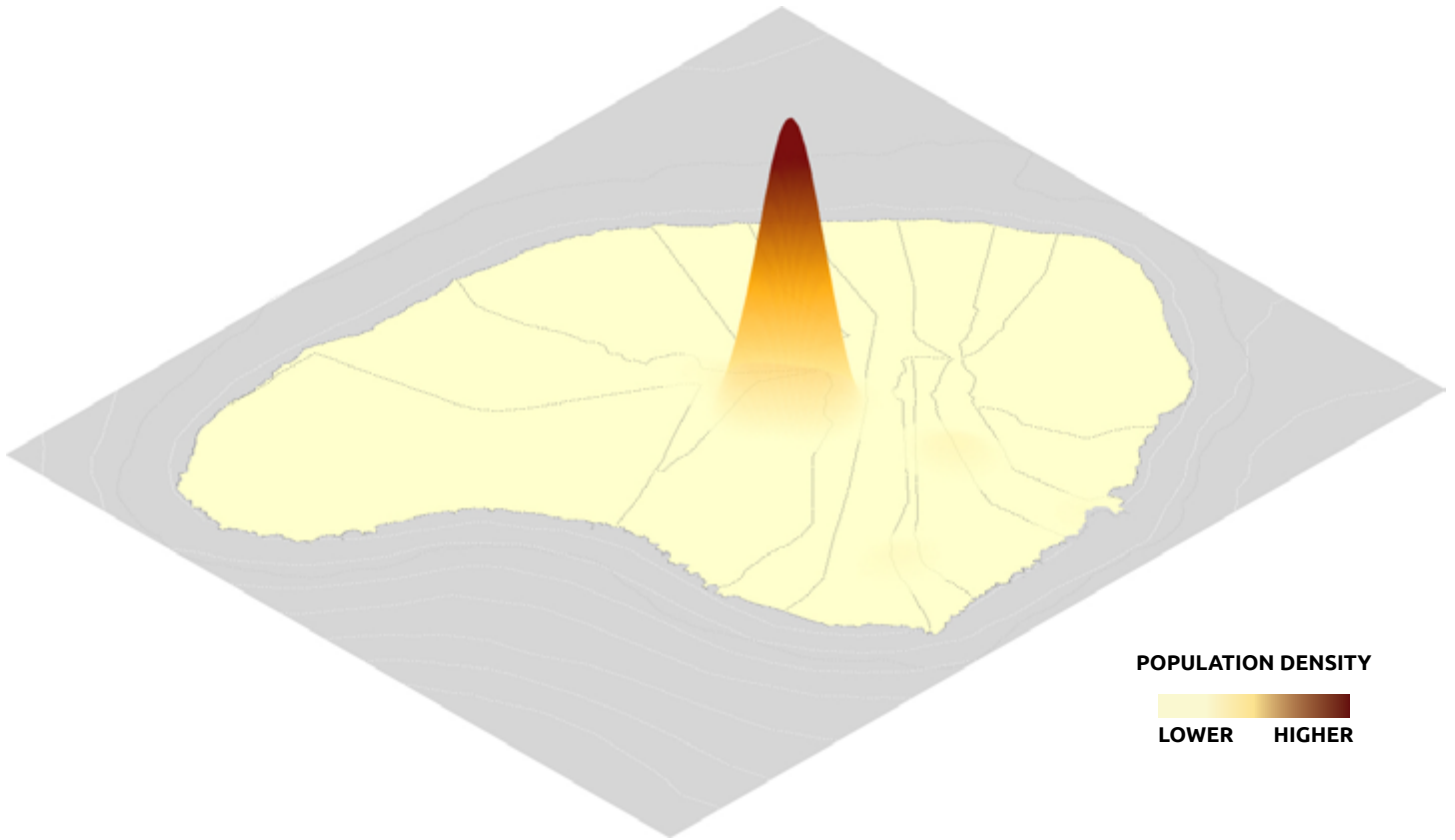
Lāna‘i lacks fast food restaurants and traffic, but they still experience the stress of living in an isolated place that sometimes feels quite crowded. The main employer is the Four Seasons Resorts on Lāna‘i, owned and managed by Ellison’s company called Pūlama Lāna‘i, where high-end tourism is the dominant economic industry. Though houselessness is not really a problem on island, there is still a shortage of affordable housing. It is common for multiple generations to live together in one house, which can lead to other social problems like domestic violence and substance abuse.

Lāna‘i people have pride in and strong connection with land and culture. Many point to the love of activities on the land, including hunting, diving, fishing, camping, and going to the beach. More than just “recreation,” these activities produce needed food supplies and also form a large part of the identity of many Lāna‘i residents.

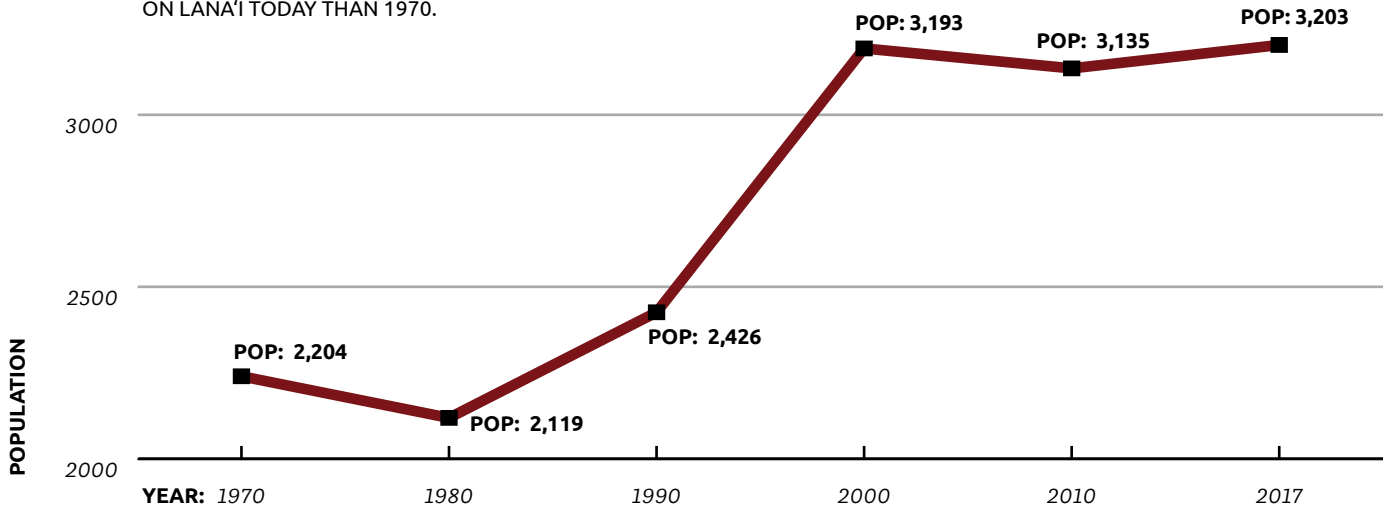
The story of Lāna‘i has largely centered around the decisions made its major landowners. The current era of luxury tourism was preceded by a rocky transition from agriculture to resorts, which included a community struggle over a proposed wind farm. Prior to that, Lāna‘i was known worldwide for its identification as the “Pineapple Island,” and lesser known for a successful 200-day plantation worker strike in 1951 that some residents continue to recollect with pride and as evidence of the resilience of Lāna‘i people. And before pineapple, and before the preceding ranching era, the story of Lāna‘i spans many generations of rich stories of a land and its people. These stories of old are being restored and retold in current efforts to build cultural identity and community connection, including a mural at the school and restoration of one of the island’s fishponds.

**NOTE: This sub-report was derived only from conversations and analysis done as part of this CHNA. The island summary and list of priorities are based on community talk stories, key informant interviews, data reviews, and other observations, and they are intended to highlight the important themes that emerged in the process. It is far from, and not meant to be, a complete or definitive statement of every relevant health factor on the island. As part of sound community practice, users of this report are advised to regularly check in with community partners and engage new voices, as situations change and opinions evolve.*

Population



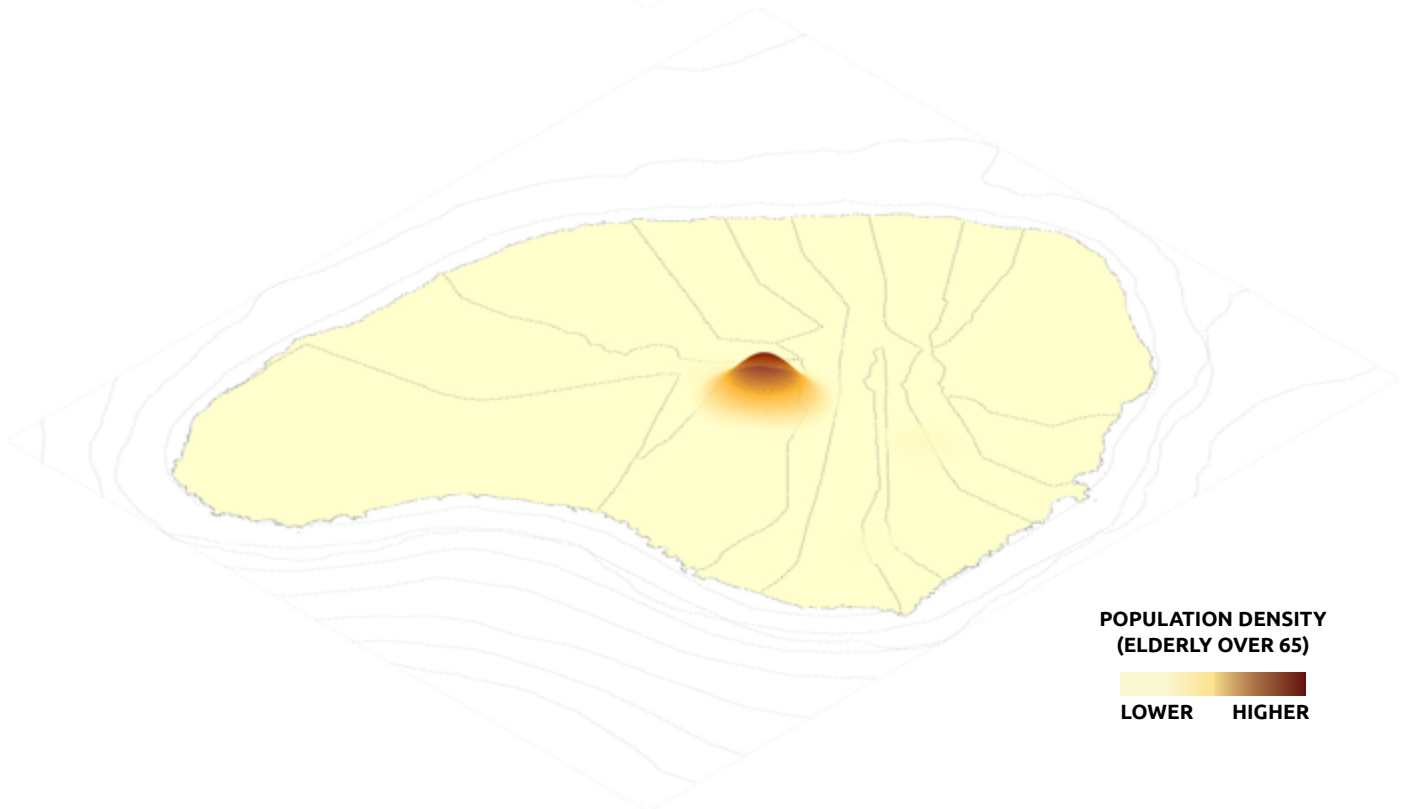
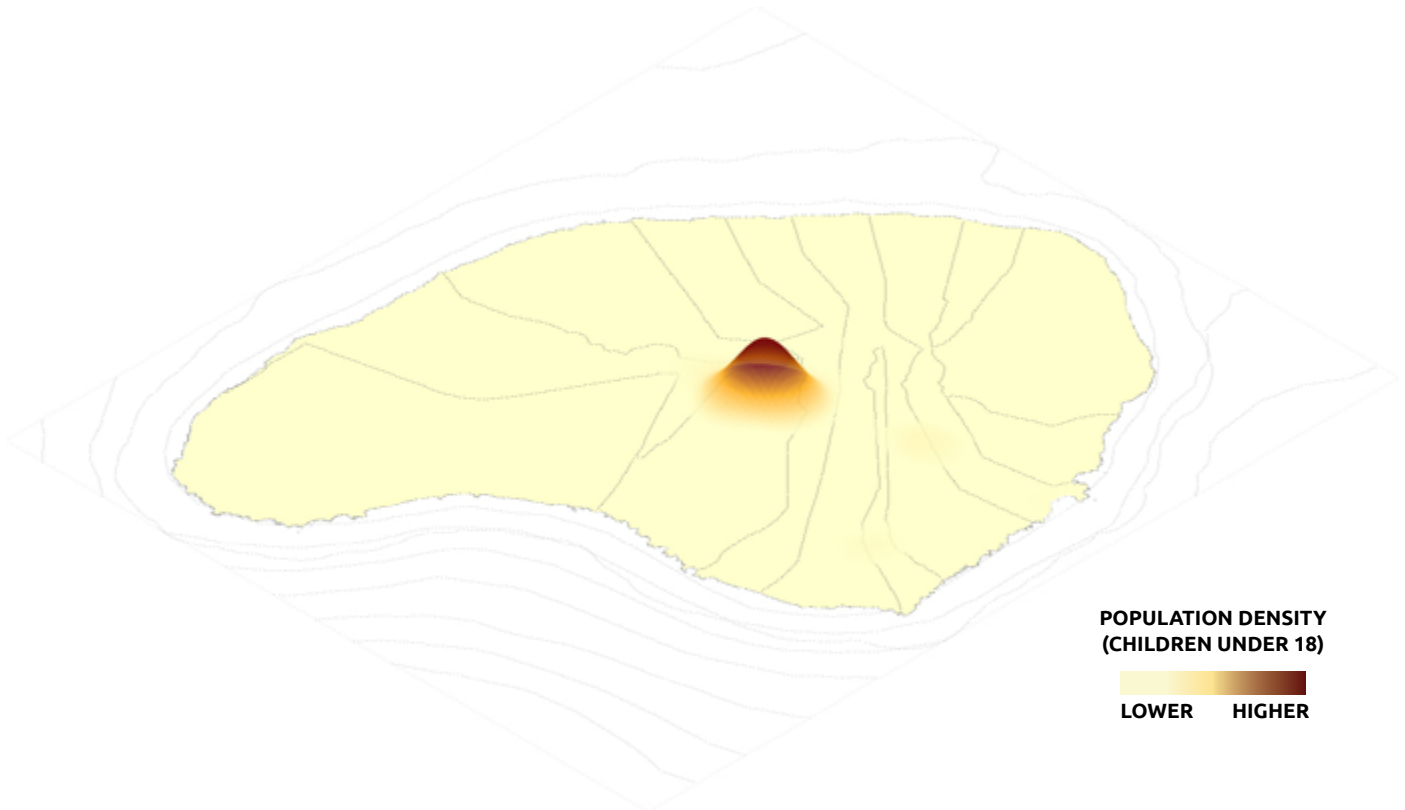
POPULATION GROWTH SINCE 1970
THERE ARE 45% MORE PEOPLE
ON LĀNAʻI TODAY THAN 1970.



1 OUT OF 5 PEOPLE
ON LĀNAʻI
ARE VISITORS:

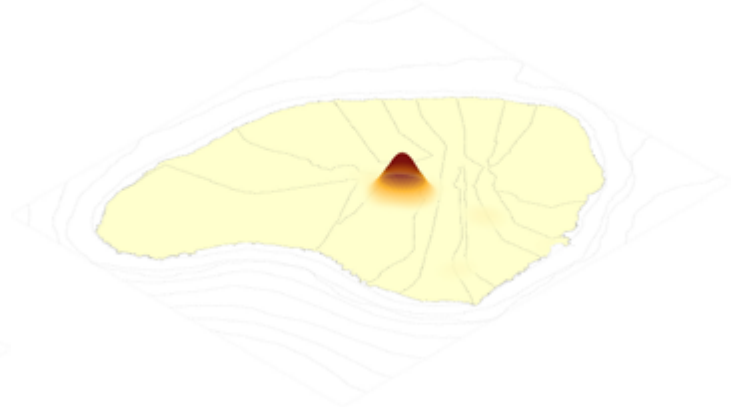


Keiki & Kūpuna

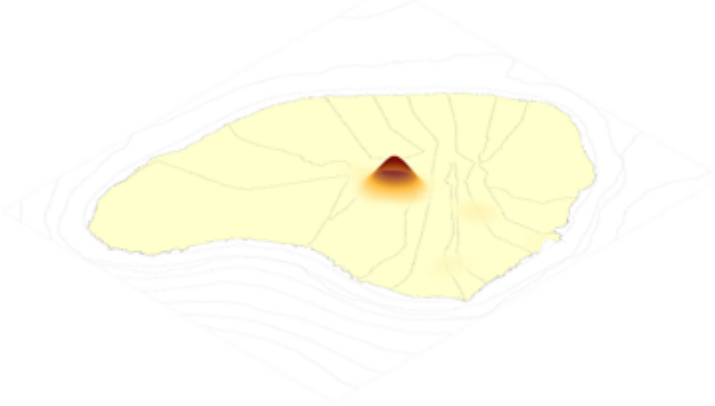


Race

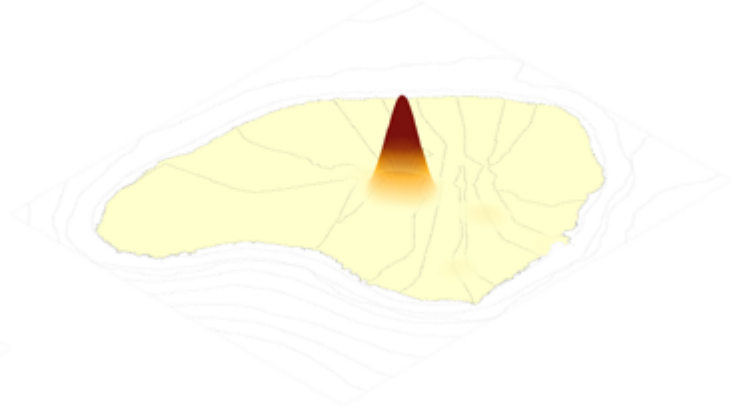
"HAWAIIAN"



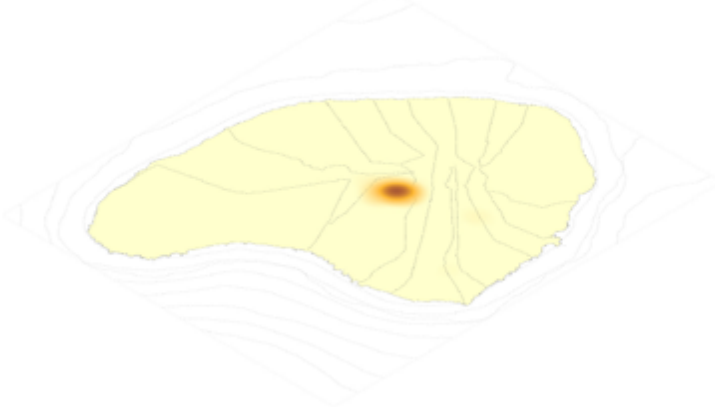
"MIXED" (TWO OR MORE)



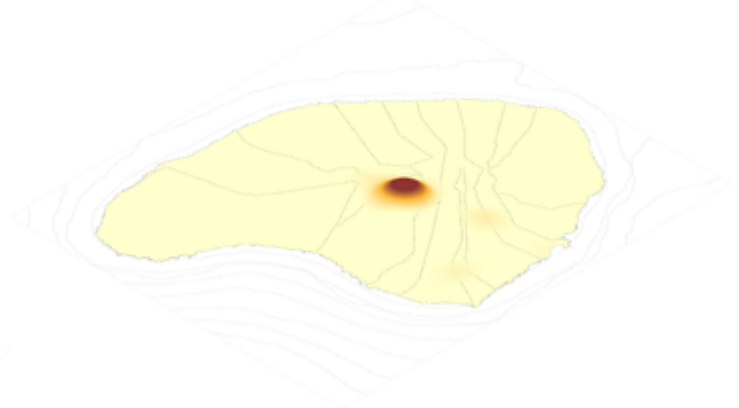
"ASIAN"



"BLACK"



"LATINO"



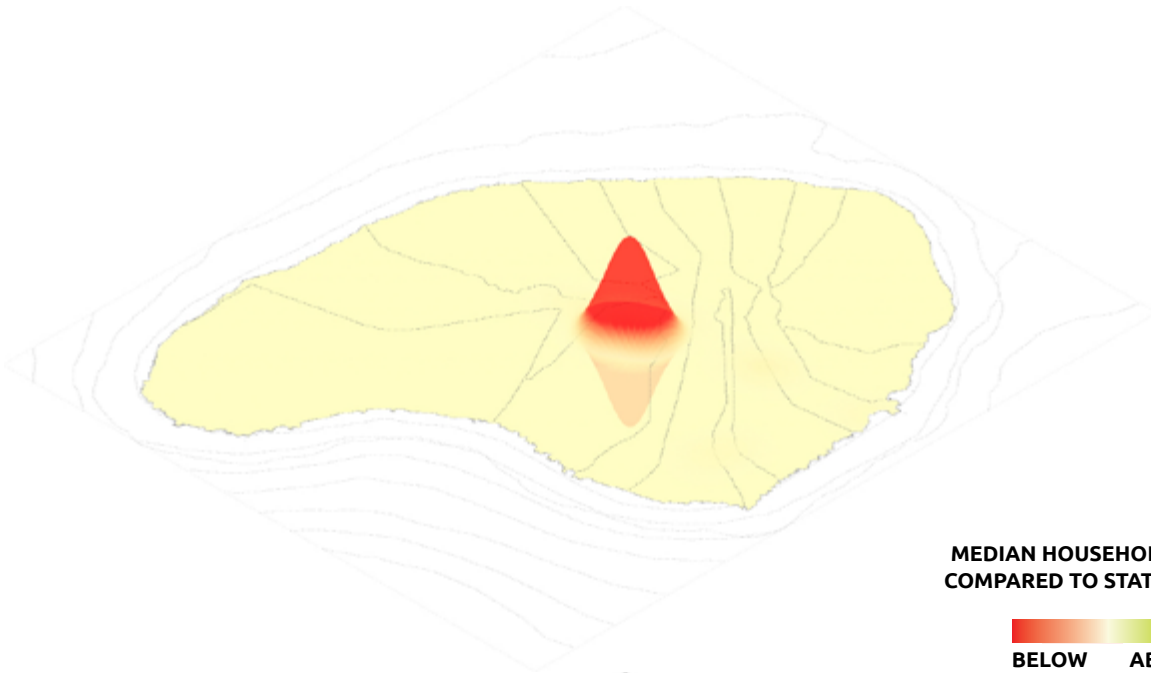
"WHITE"



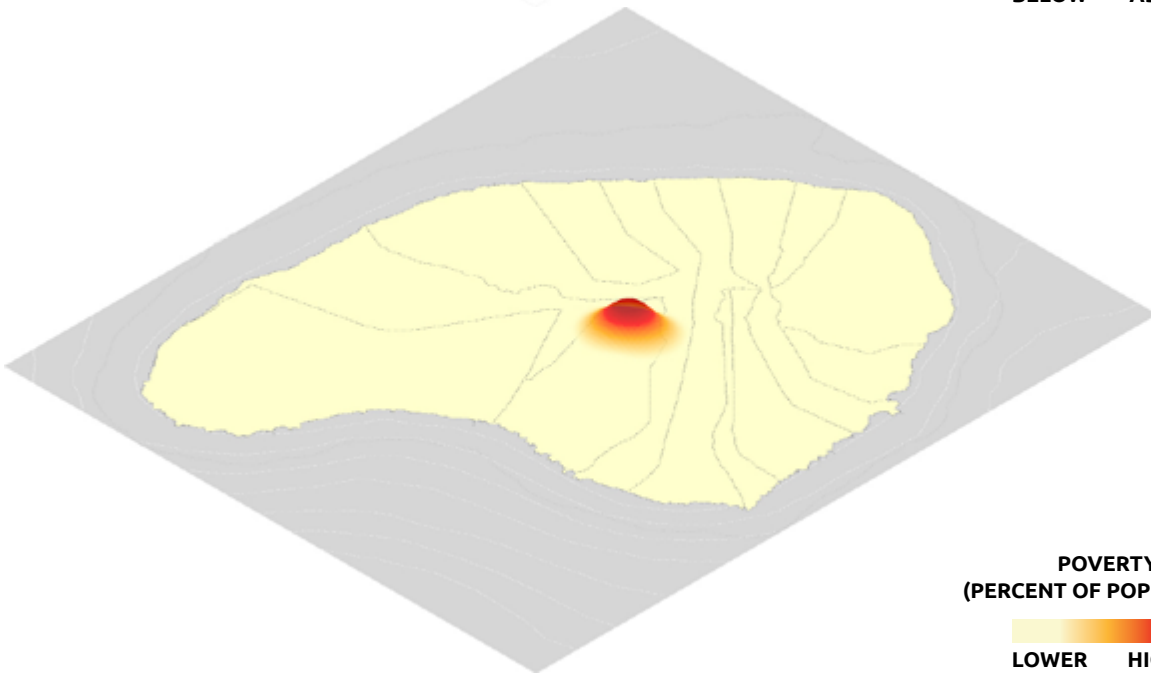
RACIAL IDENTITY
(PERCENT OF POPULATION)



Income



MEDIAN HOUSEHOLD INCOME
COMPARED TO STATE AVERAGE



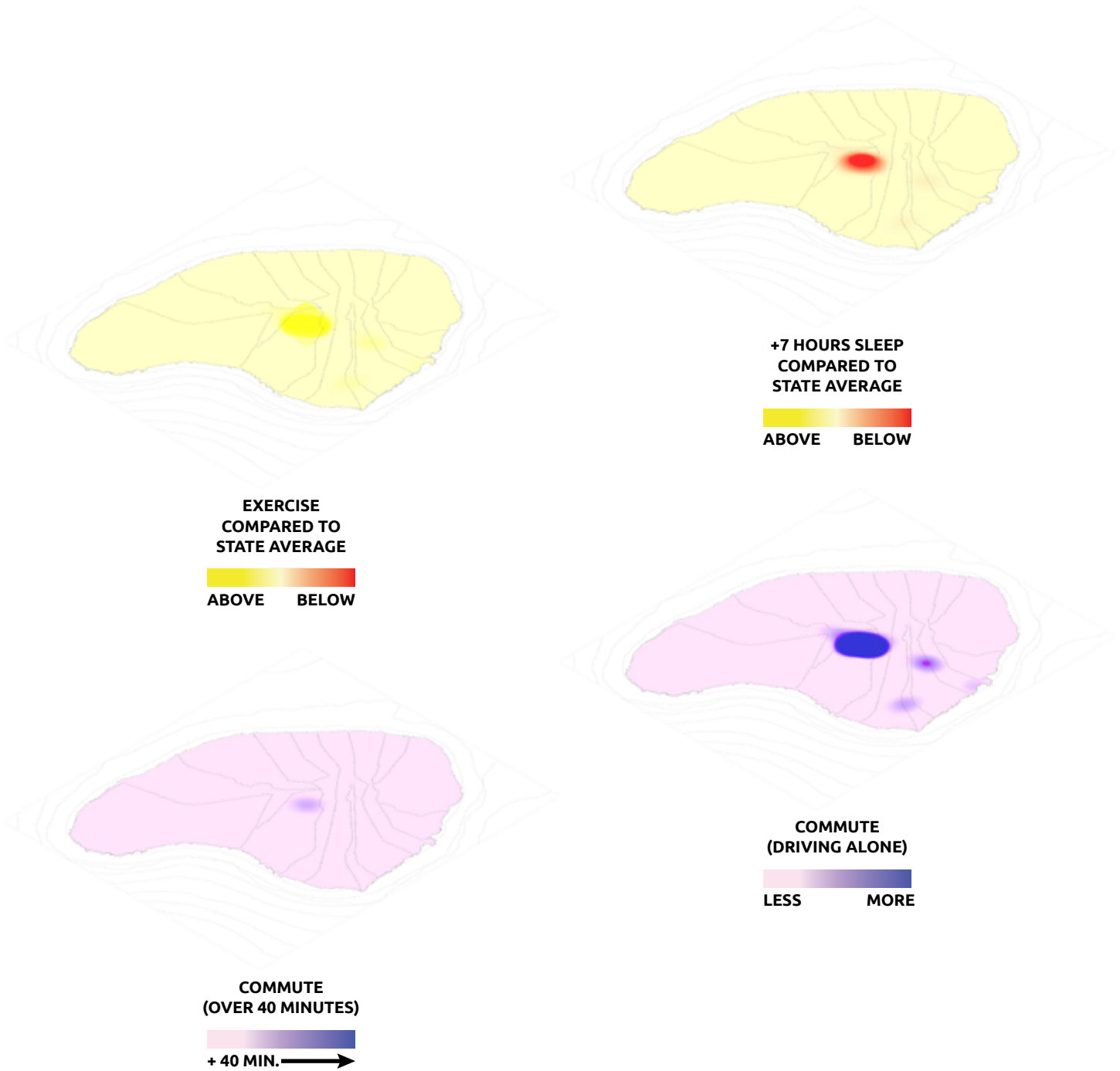
POVERTY
(PERCENT OF POPULATION)



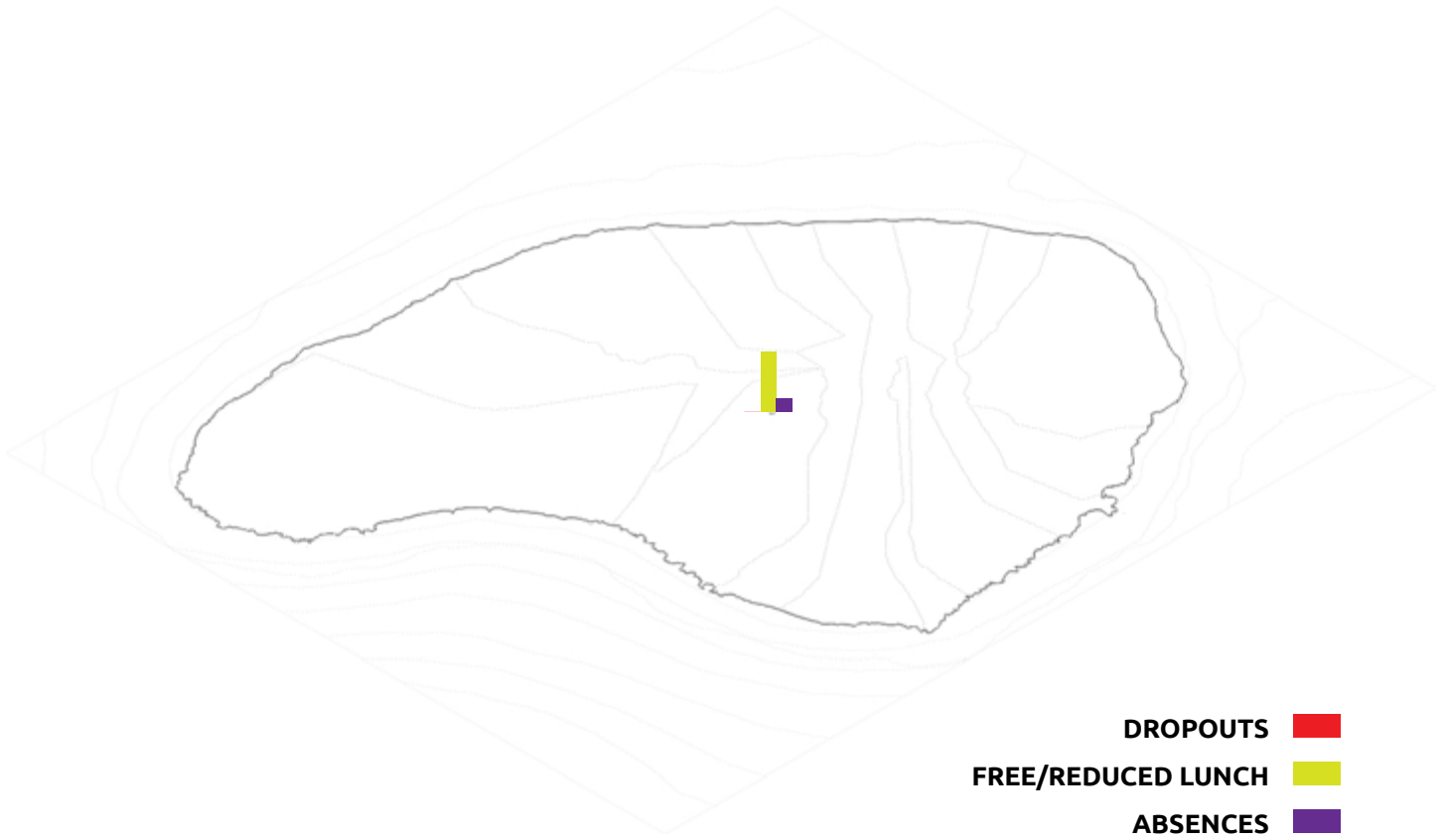
PERCENTAGE OF LĀNA'I HOUSEHOLDS BY INCOME BRACKET
AVERAGE 4-PERSON HOUSEHOLD SURVIVAL BUDGET IN MAUI COUNTY IS \$76,872.



Time



High School



	Attendance	Dropouts	Free/Reduced Lunch	Absences	Hawaiian	Samoan	Micronesian	Chinese	Filipino	Japanese	Korean	Portuguese	Black	Hispanic	White
Lāna'i High	94%	--%	45%	10%	18%	1%	7%	1%	54%	2%	<1%	1%	2%	3%	9%

Lāna‘i Strengths and Priorities

Statewide Health Priorities

GOAL 1 - FOUNDATIONS Provide the basic foundations so that people can have more control over their own health	GOAL 2 - COMMUNITY Preserve, nurture, expand, and employ the healing properties of community	GOAL 3 - HEALTHCARE Improve the relationship between people and the healthcare system
1.1 Address financial insecurity 1.2 Work together for equality and justice 1.3 Strengthen families 1.4 Prepare for emergencies 1.5 Build good food systems	2.1 Restore environment and sense of place 2.2 Nurture community identity and cohesiveness 2.3 Invest in teenagers and healthy starts 2.4 Shift kūpuna care away from “sick care”	3.1 Strengthen trust in healthcare 3.2 Provide accessible, proactive support for those with high needs

Lāna‘i Strengths

- New generation of emerging community leaders establishing themselves
- Rich cultural diversity and community history
- Strong community cohesion and aloha

Populations of Note

	Estimate
HOUSELESS	N/A
PEOPLE IN POVERTY	240
NO HEALTH INSURANCE	200
WOMEN GIVING BIRTH IN LAST YR	0
DISABLED CHILDREN	10
CHILDREN IN POVERTY	90
NO HS 25 older	300
UNEMPLOYED (IN LABOR FORCE)	90
DISABLED ADULTS (18-64)	140
VETERANS	160
65+ LIVING ALONE	120
DISABLED 65+	200
85+	100
HAWAIIAN	680
ON HAWAIIAN HOMESTEAD	150
OTHER PACIFIC ISLANDER	140
RECENT FOREIGN IMMIGRANT	150
LIMITED-ENGLISH	620

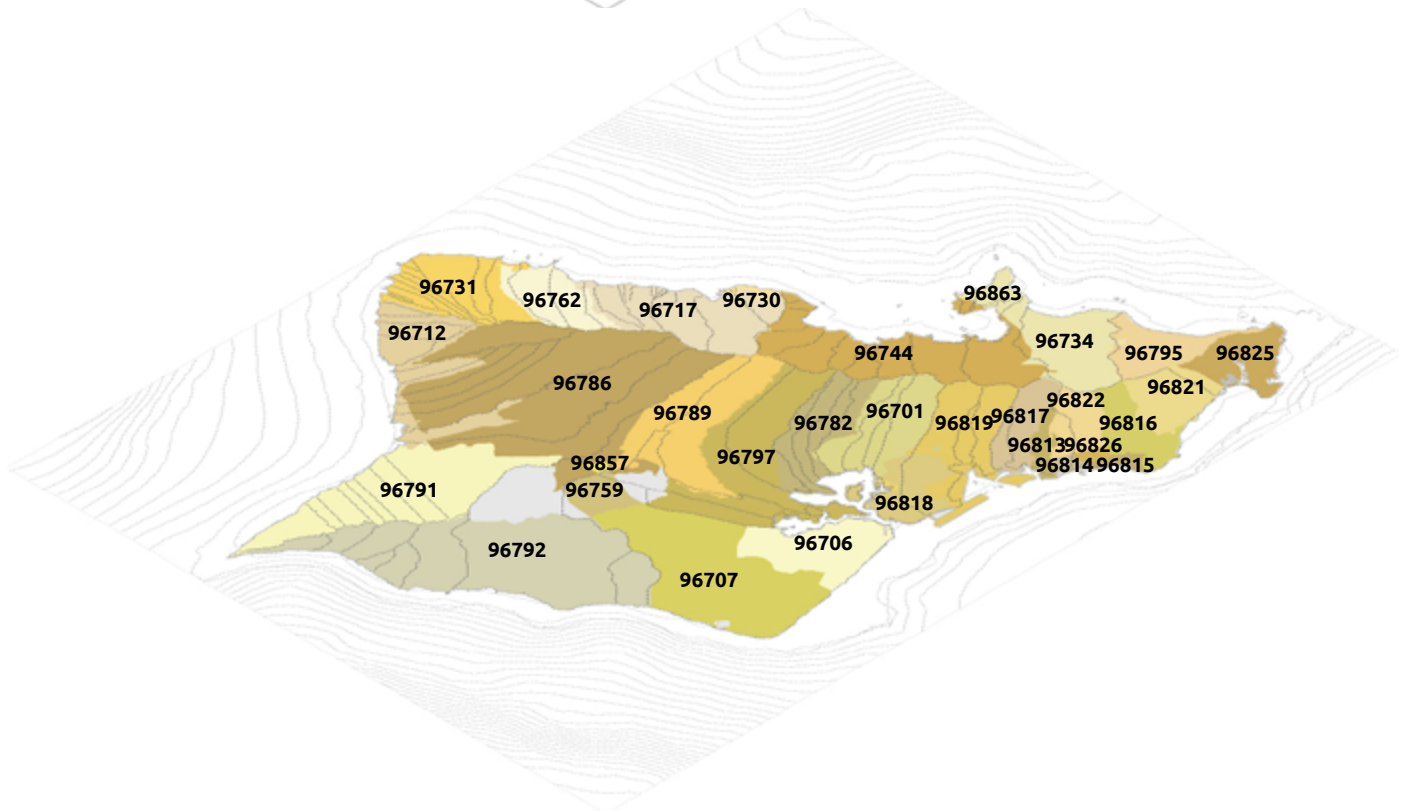
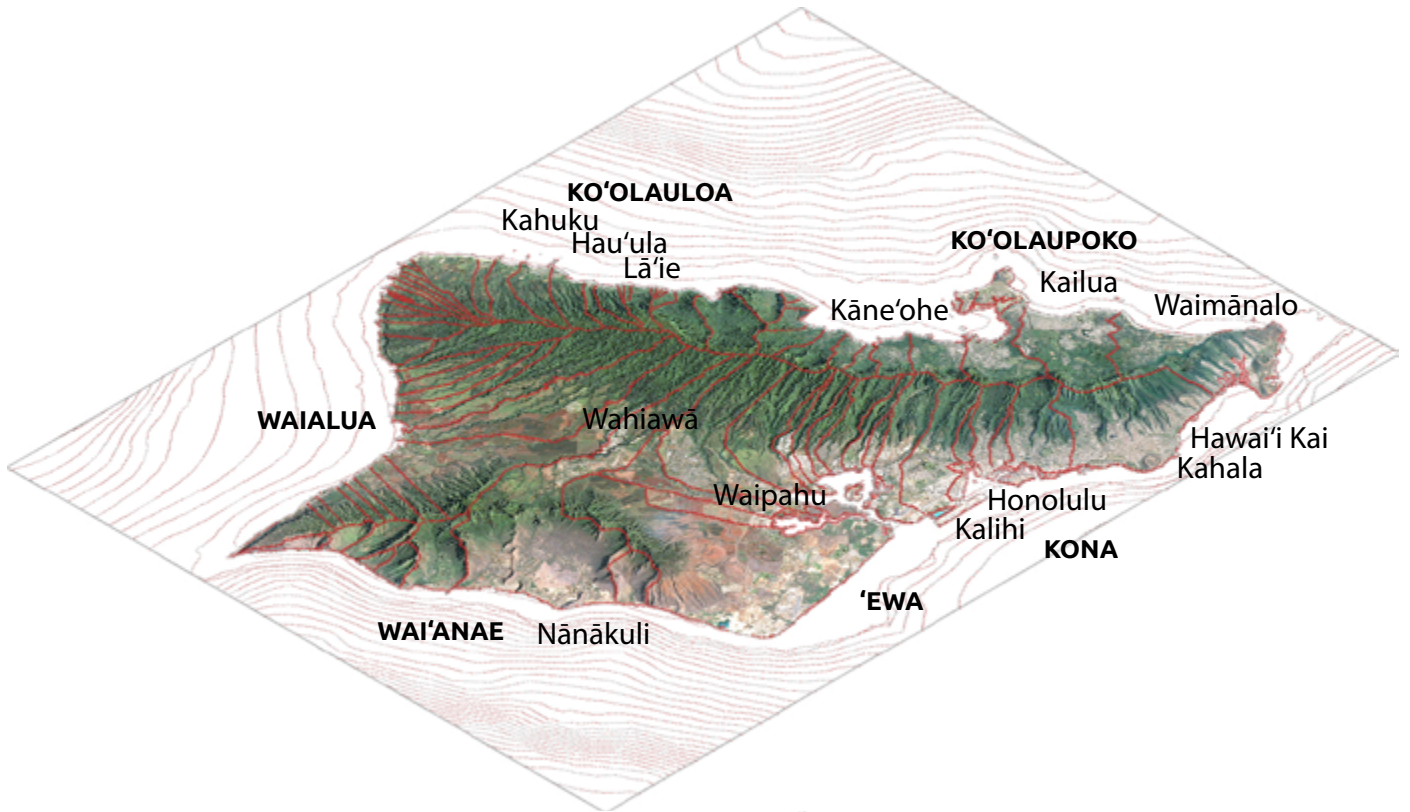
All 5-year estimates from U.S. Census, American Community Survey, 2017 except Hawaiian Homestead population from 2018 Hawaii State Data Book, and houseless count from Partners in Care, 2018 Point-In-Time Homeless Count.

Lāna‘i Priorities

(Highest need areas in RED)

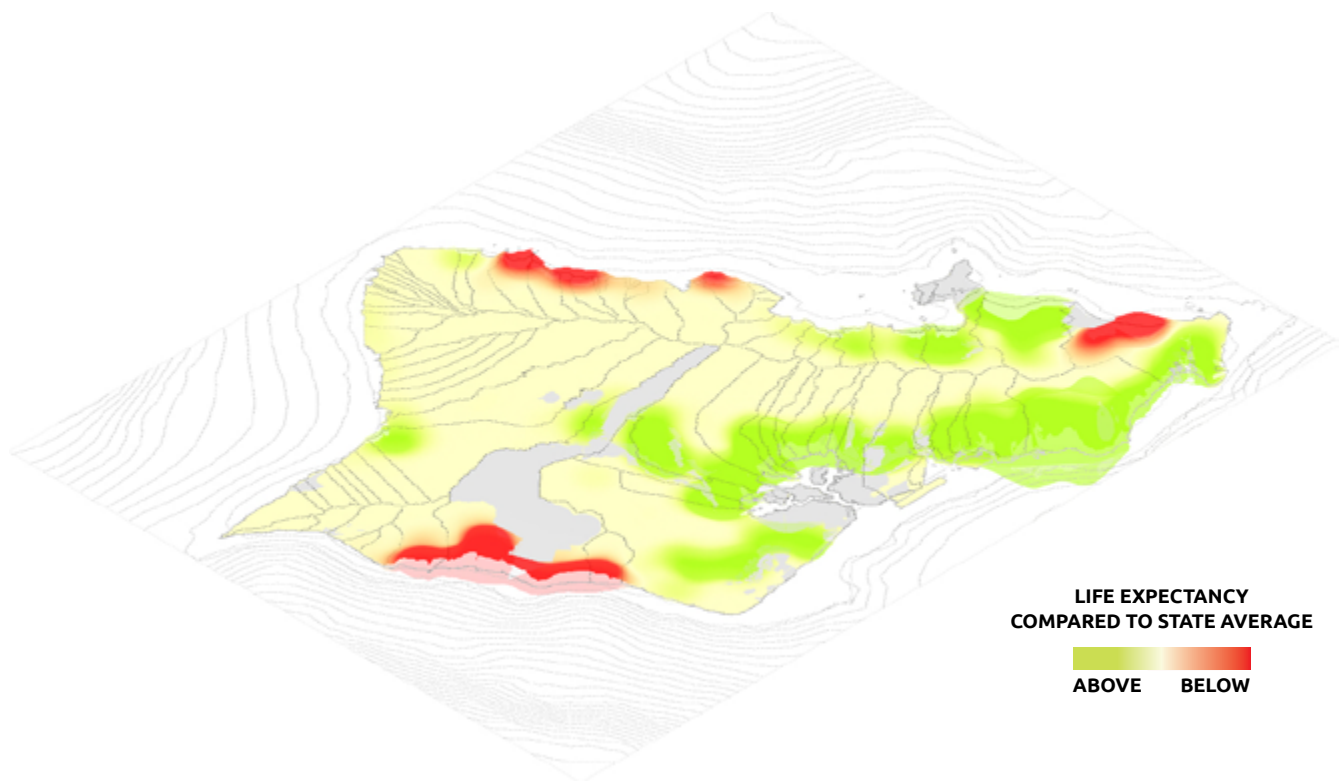
	CRITERIA				
FOUNDATIONS	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
FINANCIAL INSECURITY Address crowded housing situations and the core needs of residents	✓	✓	✓	✓	
FINANCIAL INSECURITY Increase economic self-sufficiency through workforce training and entrepreneurship training	✓	✓	✓		
FOOD SYSTEMS Increase food production looking at what people can produce from the land and sea	✓	✓	✓	✓	✓
COMMUNITY	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
COMMUNITY COHESION Create leadership opportunities and supports for young people to develop homegrown initiatives	✓	✓	✓	✓	
COMMUNITY COHESION Continue cultural strengthening work in schools and with community members to establish a firm island identity	✓	✓	✓	✓	✓
COMMUNITY COHESION Engage entire community in civic matters wherever possible	✓		✓	✓	
KŪPUNA Expand and create more supports for kūpuna who require more intensive care	✓	✓	✓	✓	✓
HEALTHCARE	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
SUPPORT FOR HIGH NEEDS Work with community by employing proactive outreach and engagement	✓	✓	✓	✓	✓

O'AHU



O‘ahu is a place of tourism and gentrification. It is a place where many cultures are able to practice their traditions and share them. It is a place of visible disparities between rich and poor, urban and rural, sheltered and unsheltered. It is a place of rural living where you know your neighbors and care for each other. It is a place of workplace stress, traffic and long commutes, sedentary lifestyles, poor sleep, and people locked in on their phones. It is a place of convenience, job opportunities, and healthcare accessibility for most. It is a place of commercial activity and material abundance. It is a place of connection to lo‘i, fishponds, beaches, hiking, and fishing. O‘ahu is a place for all of these things and more.

Nearly one million people live on O‘ahu and nearly five million tourists visit the island during the year. It is a crowded place filled with both vastly different and common experiences. In all of the talk stories for this report, from Kahuku to Kaka‘ako, food was a common connector in people’s experience of health. Cooking healthy meals feels like a luxury as people seek to find the time, energy, and money to cook. In rural areas, it is typical to grab a plate lunch while at work and go to a drive-thru for dinner on the way home. In some parts of O‘ahu, there are simply more options, more grocery stores, big box stores, and farmers markets while some areas have few, if any. The availability of healthier options doesn’t mean people have the time, money, or desire to partake. As summed up by a parent in Wahiawā, “There is a Foodland on one end, but people who live in the ‘hood don’t go there. Kids end up eating musubis from the convenience store, from the manapua man, and from Jack in the Box and Taco Bell.”



A steady stream of development continues around rail, luxury condominiums, shopping centers, and suburban neighborhoods. Many feel policies regarding public areas are made for the safety and wellbeing of visitors first, thus exacerbating a crisis for houseless people in large part caused by a lack of sufficient affordable housing and insufficient services for those with mental illnesses. Care for houseless individuals, particularly those in urban Honolulu, falls primarily to government and nonprofits rather than appealing to a broader notion of all caring for all. In a place that is so crowded, it’s easy to get lost, remain anonymous, and stay disconnected.

But that idea of taking care isn't completely lost on O'ahu. In Hau'ula, a local pastor takes in those in need, providing them with shelter in yurts in his backyard. "The best community plan for the hospital is to keep people out of the hospitals," he said with a smile in all sincerity. In Wahiawā, the community recognized the importance of the hospital, organized to show their support and lobbied for government aid. "The whole community knows the hospital almost went under, and it's the largest private employer in the community," one worker in Wahiawā said. "People really banded together and did fundraisers and car washes to raise money for the hospital."

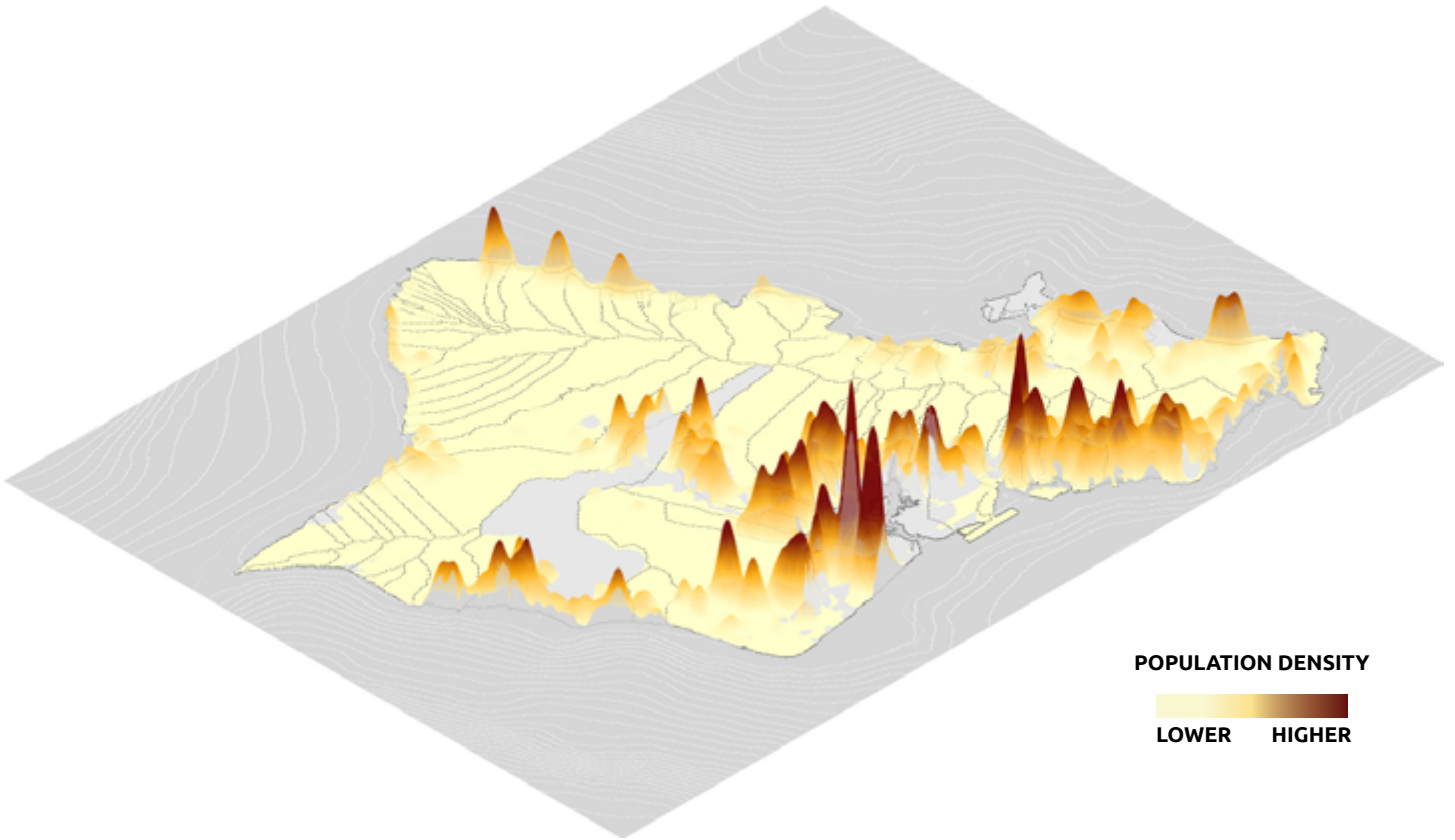
While there are many things that separate O'ahu residents from one another—income level, geography, lifestyle, and more—they still constitute one community susceptible to the same vulnerabilities that affect everyone. In 2018, the year of a false nuclear missile alarm and several threatening hurricanes, O'ahu's sense of preparedness, resilience, and safety were tested. To prepare for the hurricanes in the summer, media reports showed cleared shelves as people hurried to buy water, canned goods, plywood, and supplies while businesses restocked them as quickly as they could depending on the next delivery. For many working in the tourism industry, they cared for the safety of tourists and hotels, which for some meant being away from their own families. Around the clock news coverage showed numerous reports of ruined vacations for tourists in Waikīkī, while emergency workers gave constant updates and families hunkered down. It has been an interesting time for O'ahu, challenging the degree to which it has a foundation of community health in place for its residents.

It is a common complaint on other islands that too many decisions that affect them are made from an "O'ahu-centric" perspective. Talking to people in communities from the North Shore, Leeward, Central, and Windward O'ahu, it is clear that a more precise description of the phenomenon would be "urban Honolulu-centric," deriving from the place where most leaders of business, nonprofits, and government work, meet, and make decisions. Honolulu, perhaps more than anywhere else in Hawai'i, is a place where health is largely seen as something for each individual to maintain with the help of the healthcare system. Setting aside for a moment whether that is a good way to think about health, it is not difficult to hold that view in Honolulu because its residents have more healthcare resources, more choices of doctors, more kinds of available food, and more economic opportunities than others in the rest of the state. Outside of urban Honolulu, decisions made in the furtherance of that kind of health mindset are often met with frustration and resistance.

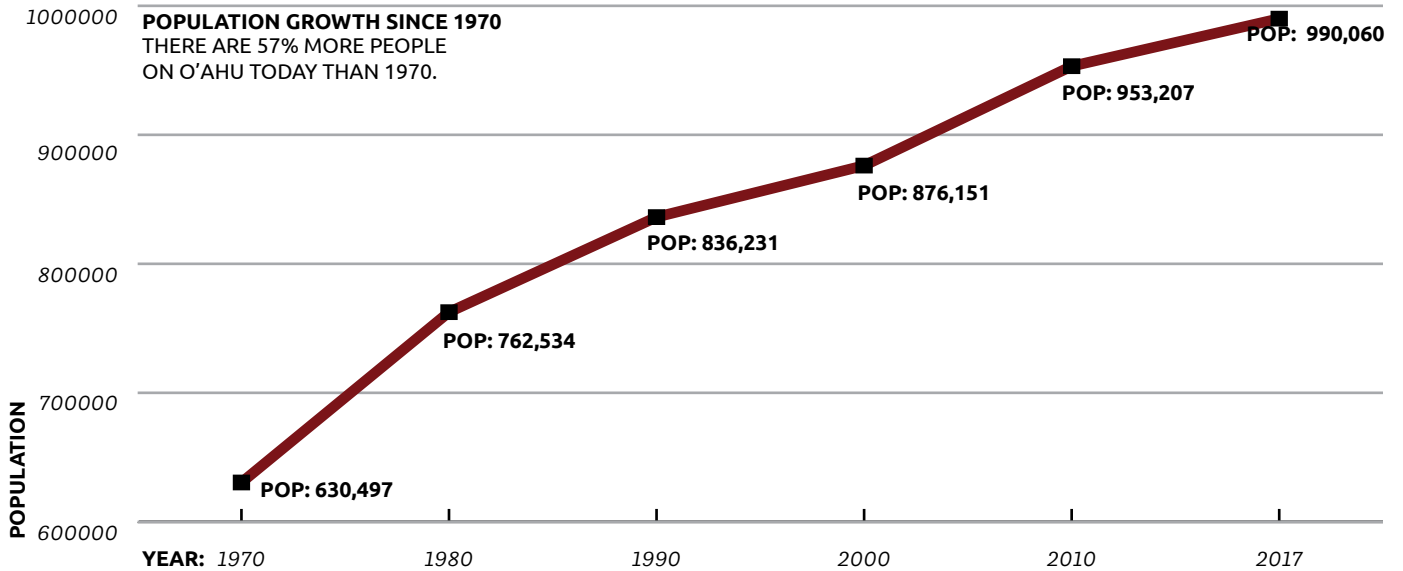
But as it turns out, it may be that the personal responsibility model of health is not what most people believe, want, or experience even within urban Honolulu. Certainly for those who are houseless, living in poverty, facing discrimination, or otherwise marginalized, personal access to healthcare is not enough to attain health. Many other Honolulu people who feel that health is a family matter, who crave connection with others, and who want to be connected to the land, are also making a case for an alternative to a medical model of health and care.

**NOTE: This sub-report was derived only from conversations and analysis done as part of this CHNA. The island summary and list of priorities are based on community talk stories, key informant interviews, data reviews, and other observations, and they are intended to highlight the important themes that emerged in the process. It is far from, and not meant to be, a complete or definitive statement of every relevant health factor on the island. As part of sound community practice, users of this report are advised to regularly check in with community partners and engage new voices, as situations change and opinions evolve.*

Population



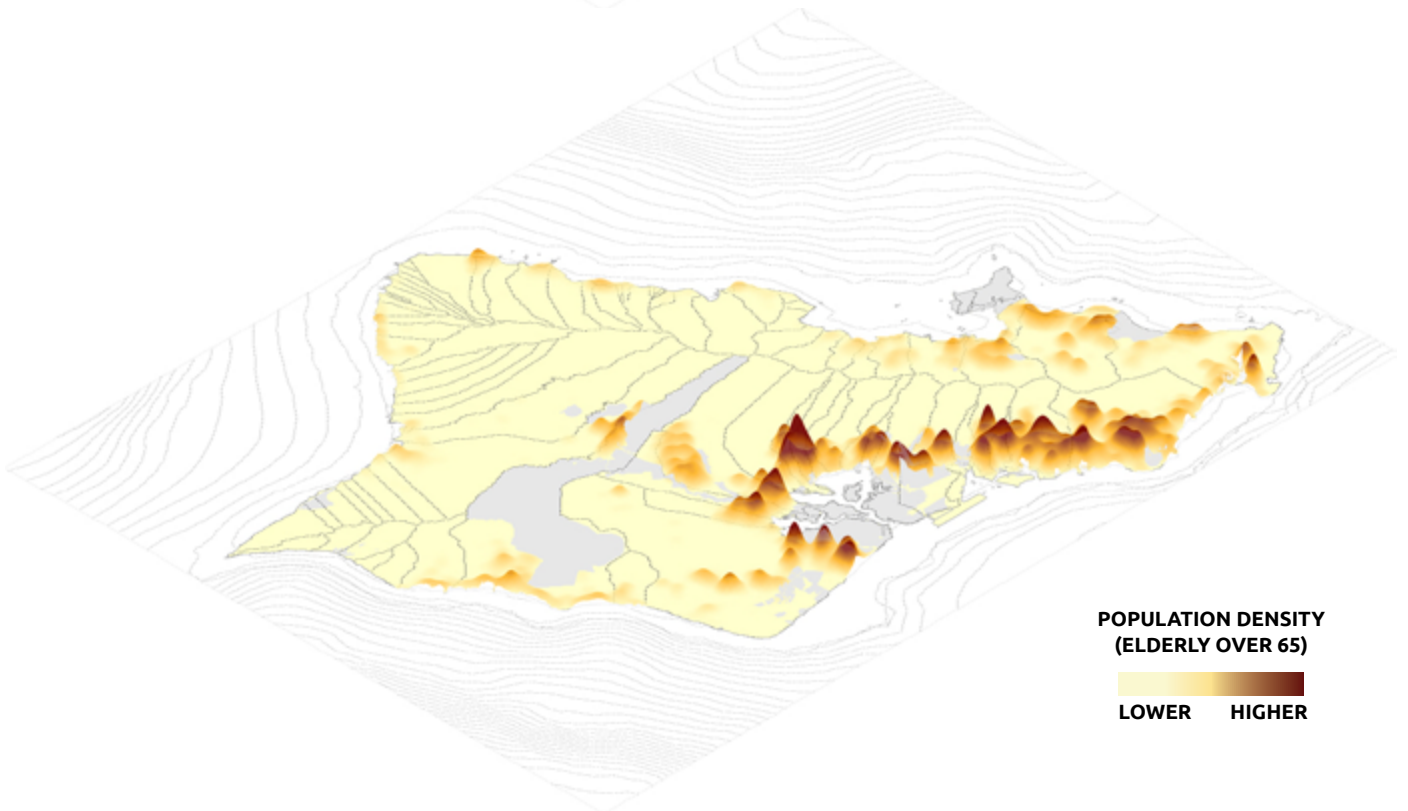
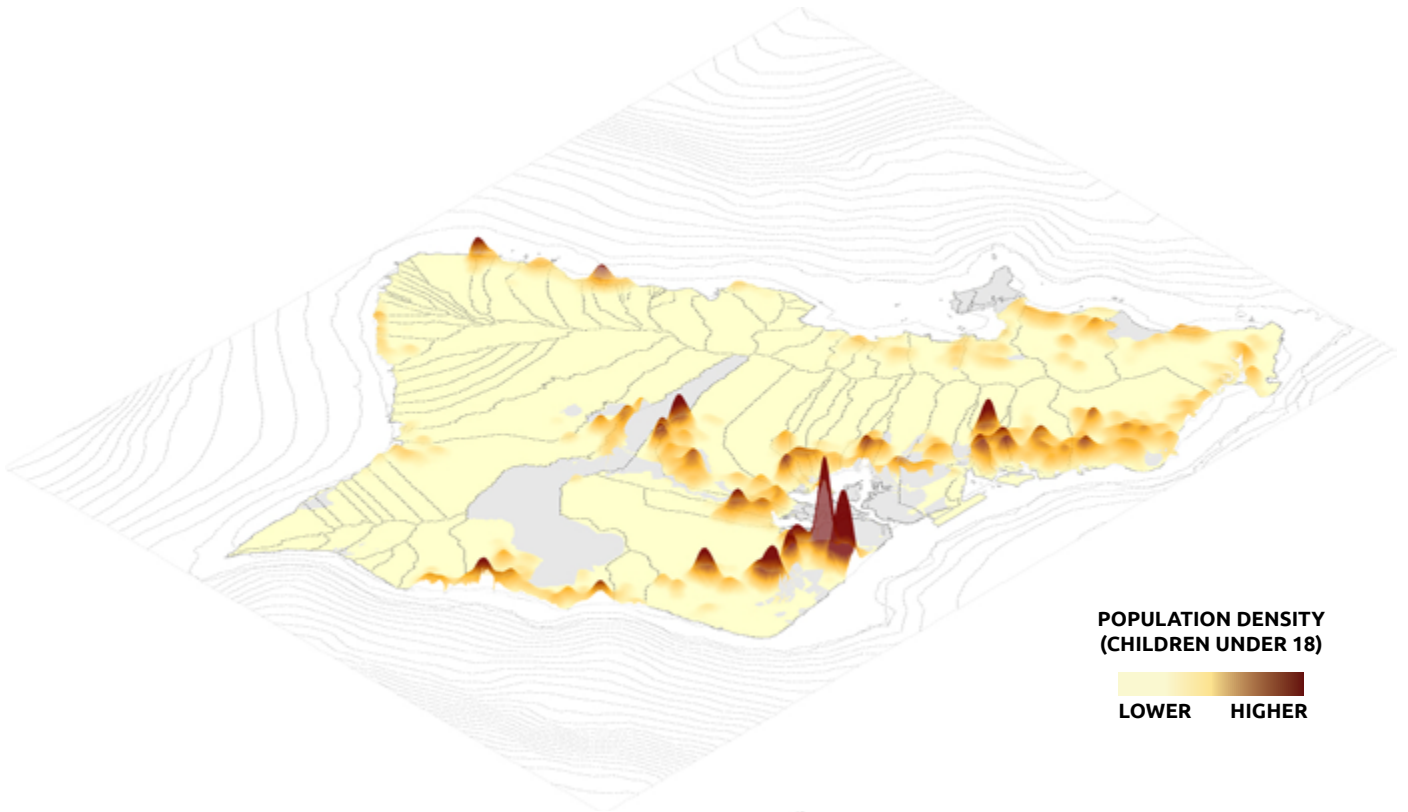
POPULATION DENSITY
 LOWER HIGHER



1 OUT OF 10 PEOPLE ON O'AHU ARE VISITORS:

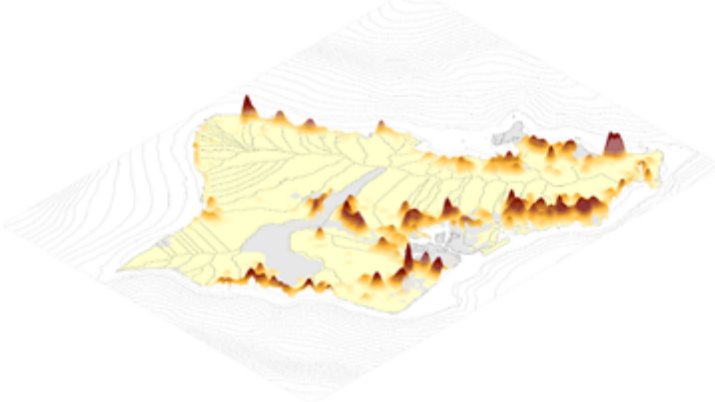


Keiki & Kūpuna

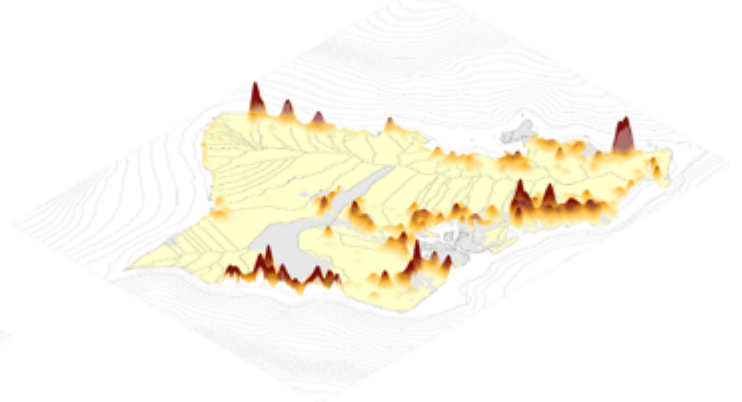


Race

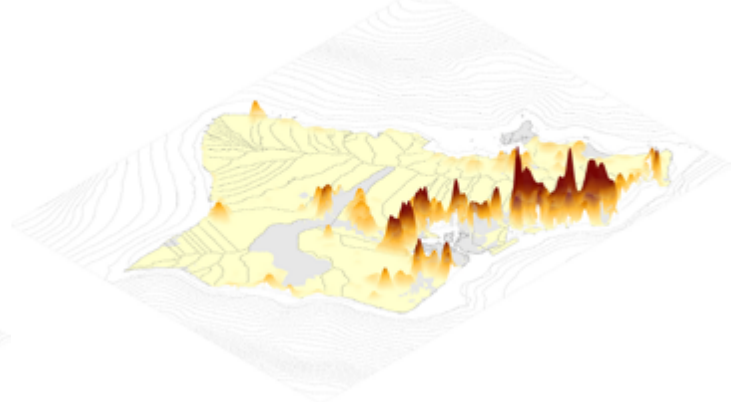
"MIXED" (TWO OR MORE)



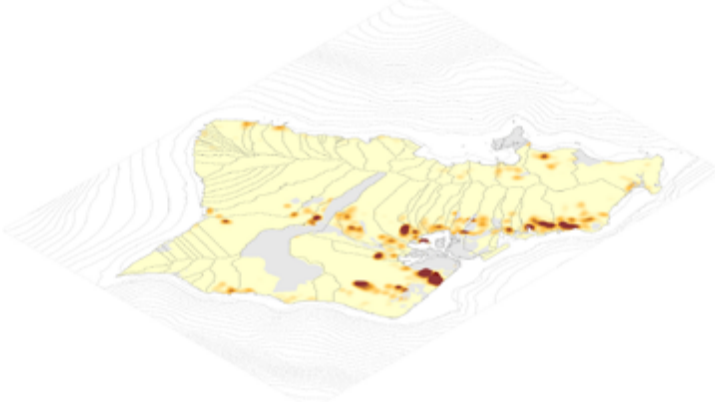
"HAWAIIAN"



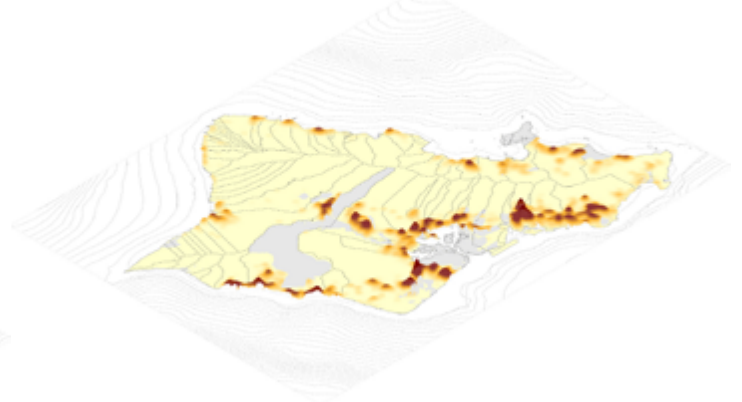
"ASIAN"



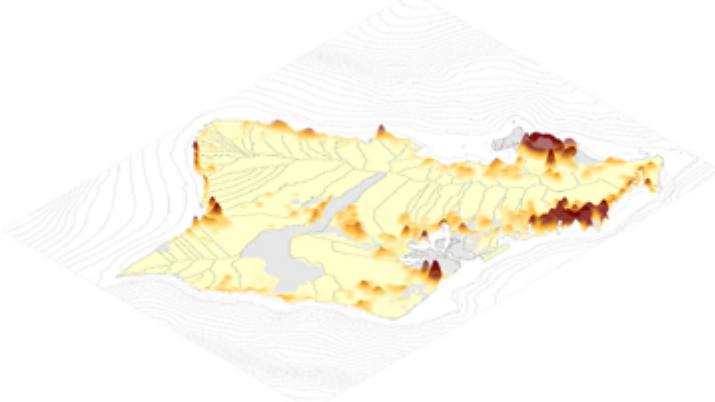
"BLACK"



"LATINO"



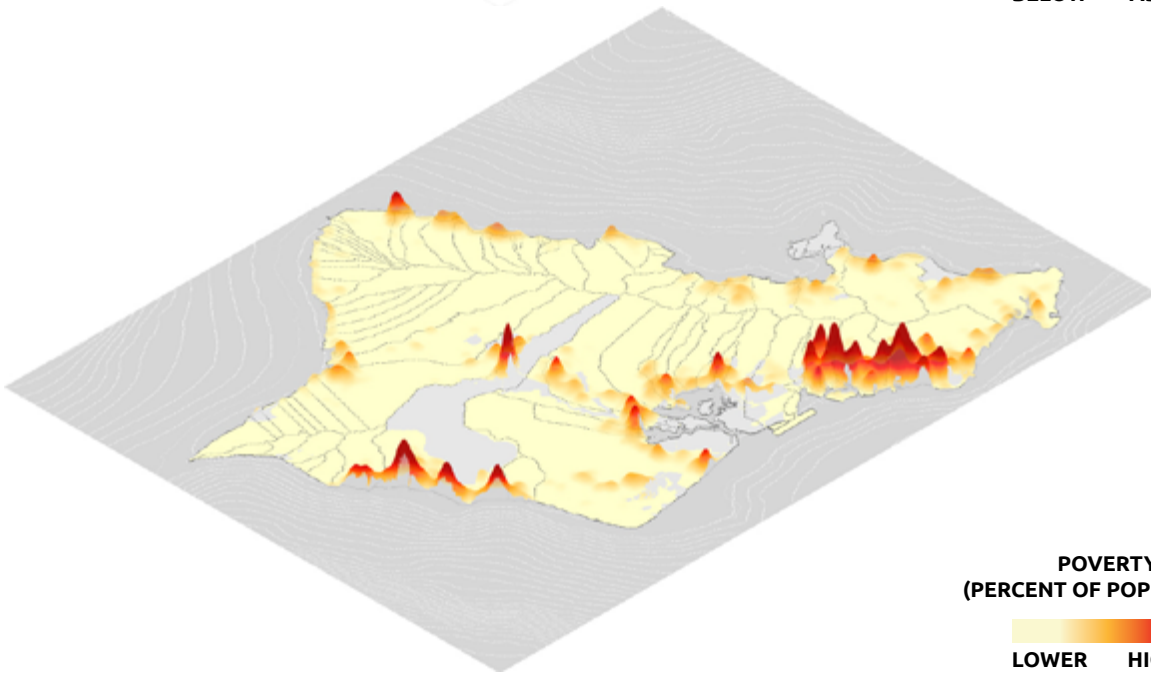
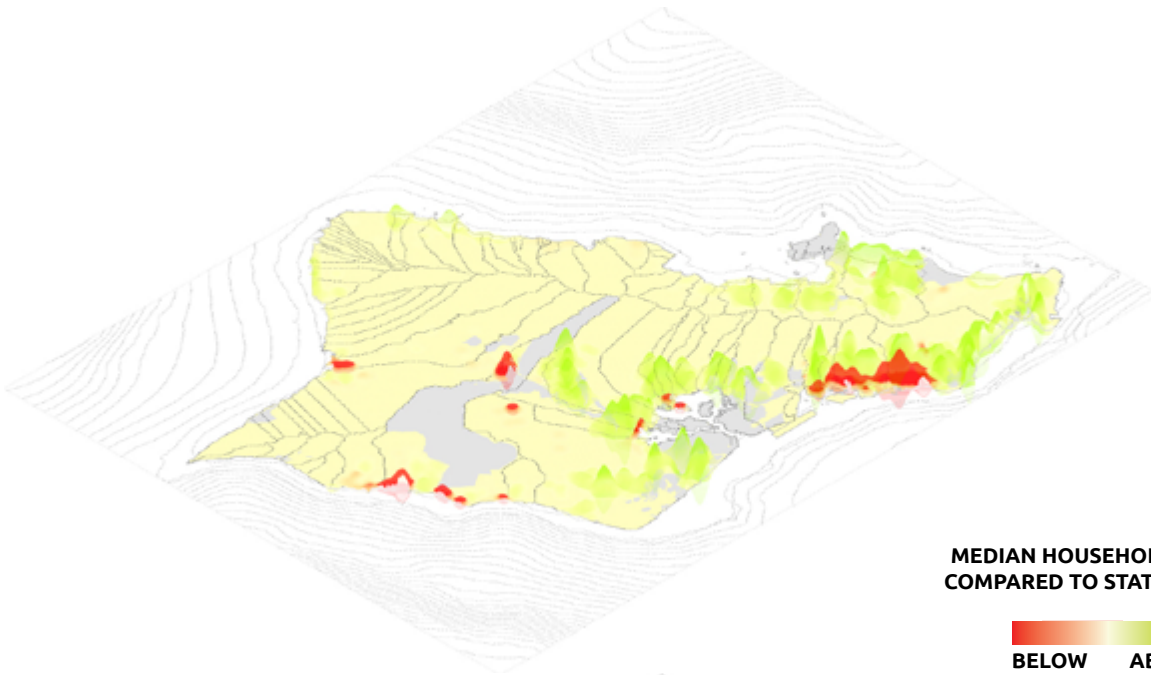
"WHITE"



RACIAL IDENTITY
(PERCENT OF POPULATION)



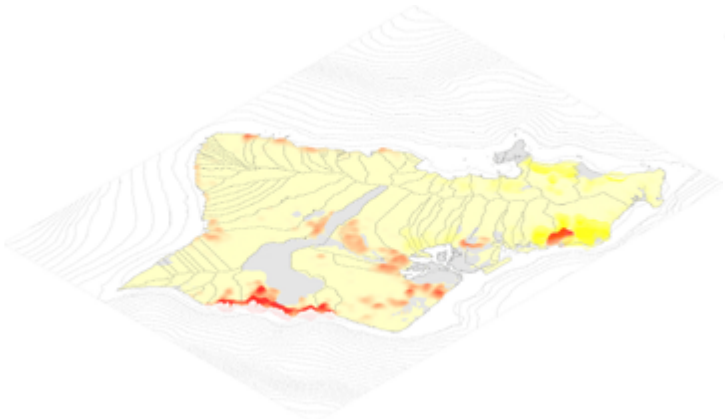
Income



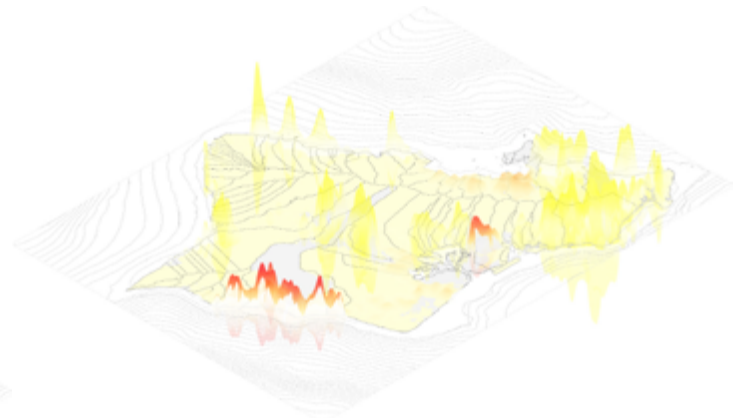
PERCENTAGE OF O'AHU HOUSEHOLDS BY INCOME BRACKET
 AVERAGE 4-PERSON HOUSEHOLD SURVIVAL BUDGET IN C&C OF HONOLULU IS \$85,200.



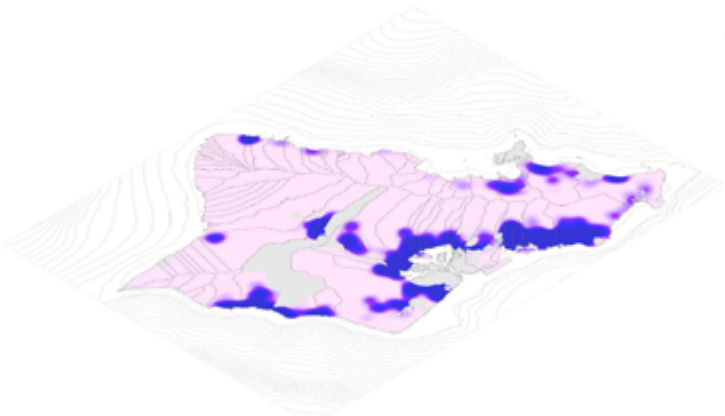
Time



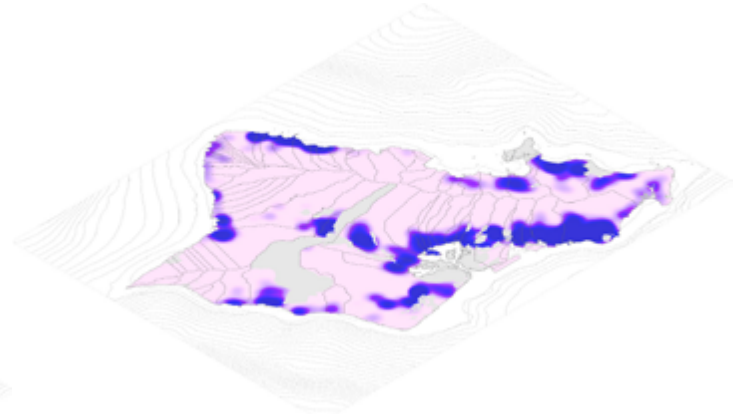
**EXERCISE
COMPARED TO
STATE AVERAGE**
ABOVE BELOW



**+7 HOURS SLEEP
COMPARED TO
STATE AVERAGE**
ABOVE BELOW

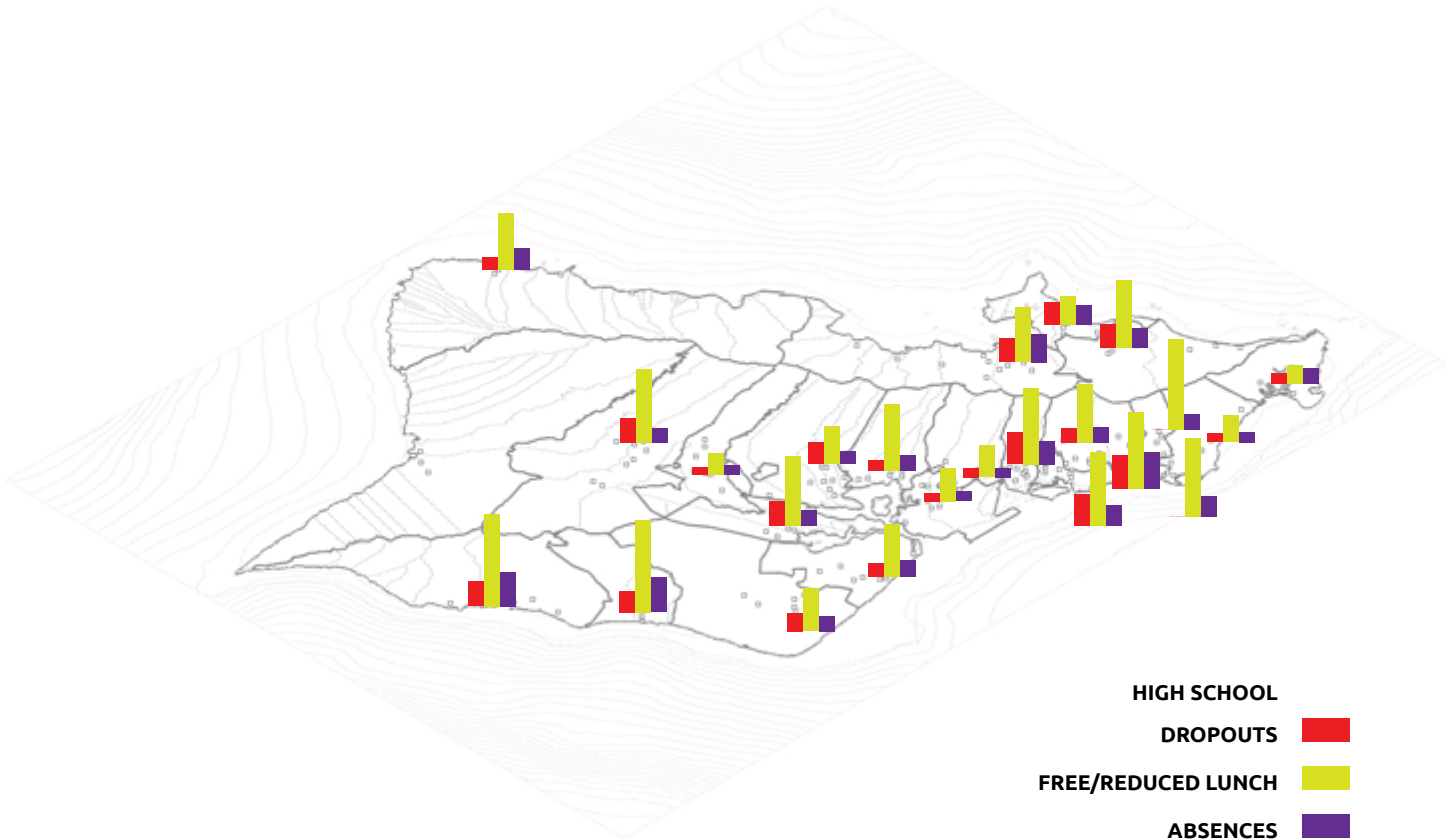


**COMMUTE
(OVER 40 MINUTES)**
+ 40 MIN. →



**COMMUTE
(DRIVING ALONE)**
LESS MORE

High Schools



HIGH SCHOOL
DROPOUTS ■
FREE/REDUCED LUNCH ■
ABSENCES ■

	Attendance	Dropouts	Free/Reduced Lunch	Absences	Hawaiian	Samoan	Micronesian	Chinese	Filipino	Japanese	Korean	Portuguese	Black	Hispanic	White
'Aiea High	93%	8%	50%	12%	19%	7%	7%	4%	30%	12%	1%	1%	3%	4%	8%
Campbell High	93%	10%	39%	13%	20%	4%	1%	1%	43%	5%	<1%	1%	5%	3%	12%
Castle High	88%	18%	41%	21%	50%	2%	1%	3%	10%	14%	<1%	2%	2%	1%	1%
Farrington High	91%	--	57%	17%	10%	10%	12%	1%	59%	1%	<1%	<1%	1%	1%	1%
Sch for the Deaf & Blind	91%	--	59%	15%	30%	7%	24%	2%	30%	<1%	<1%	<1%	2%	<1%	2%
Kahuku High	91%	9%	43%	16%	42	14%	<1%	1%	5%	1%	<1%	1%	1%	2%	21%
Kailua High	92%	17%	51%	15%	51%	4%	1%	3%	12%	7%	<1%	2%	1%	2%	14%
Kaimukī High	85%	25%	57%	27%	18%	4%	24%	6%	9%	11%	1%	1%	3%	3%	8%
Kaiser High	93%	8%	14%	12%	12%	1%	<1%	10%	6%	25%	4%	1%	2%	2%	30%
Kalāheo High	92%	17%	22%	15%	20%	1%	<1%	2%	5%	5%	1%	2%	5%	4%	50%
Kalani High	30%	0	--	30%	35%	--	38%	--	--	--	--	39%	33%	35%	31%
Kapolei High	94%	14%	32%	11%	31%	7%	1%	1%	24%	6%	1%	1%	5%	4%	13%
Leilehua High	94%	18%	55%	11%	20%	4%	4%	1%	24%	4%	<1%	1%	11%	7%	20%
McKinley High	91%	24%	55%	15%	9%	3%	11%	20%	22%	9%	3%	<1%	2%	3%	5%
Mililani High	96%	6%	16%	7%	18%	2%	1%	4%	20%	22%	2%	<1%	4%	4%	17%
Moanalua High	96%	7%	24%	7%	10%	2%	2%	9%	24%	16%	5%	1%	7%	4%	14%
Nānākuli High	87%	16%	76%	24%	70%	11%	3%	<1%	6%	<1%	<1%	<1%	2%	2%	2%
Pearl City High	95%	16%	28%	10%	21%	4%	2%	5%	29%	21%	1%	1%	2%	3%	7%
Radford High	96%	6%	25%	7%	5%	4%	2%	1%	22%	1%	<1%	<1%	15%	7%	36%
Roosevelt High	94%	11%	44%	11%	19%	1%	3%	19%	10%	20%	6%	<1%	1%	2%	8%
Wai'anae High	85%	19%	69%	26%	64%	7%	3%	1%	10%	1%	<1%	2%	2%	3%	4%
Waipahu High	94%	18%	52%	12%	9%	7%	6%	1%	68%	3%	<1%	<1%	1%	1%	2%

O‘ahu Strengths and Priorities

Statewide Health Priorities

GOAL 1 - FOUNDATIONS Provide the basic foundations so that people can have more control over their own health	GOAL 2 - COMMUNITY Preserve, nurture, expand, and employ the healing properties of community	GOAL 3 - HEALTHCARE Improve the relationship between people and the healthcare system
1.1 Address financial insecurity 1.2 Work together for equality and justice 1.3 Strengthen families 1.4 Prepare for emergencies 1.5 Build good food systems	2.1 Restore environment and sense of place 2.2 Nurture community identity and cohesiveness 2.3 Invest in teenagers and healthy starts 2.4 Shift kūpuna care away from “sick care”	3.1 Strengthen trust in healthcare 3.2 Provide accessible, proactive support for those with high needs

O‘ahu Strengths

- Economic resources, opportunities, access to power
- Innovative population with broad reach beyond the shores
- Strong community cohesion in spots, particularly in rural areas
- Healthcare options and availability
- Overall diversity
- Growth of cultural, educational, and environmental activities for youth

Populations of Note

	Estimate
HOUSELESS	4,500
PEOPLE IN POVERTY	86,900
NO HEALTH INSURANCE	37,600
WOMEN GIVING BIRTH IN LAST YR	14,600
DISABLED CHILDREN	6,000
CHILDREN IN POVERTY	23,500
NO HS 25 older	56,800
UNEMPLOYED (IN LABOR FORCE)	21,800
DISABLED ADULTS (18-64)	43,600
VETERANS	78,400
65+ LIVING ALONE	29,300
DISABLED 65+	53,900
85+	28,000
HAWAIIAN	242,500
ON HAWAIIAN HOMESTEAD	19,500
OTHER PACIFIC ISLANDER	26,500
RECENT FOREIGN IMMIGRANT	28,600
LIMITED-ENGLISH	131,100

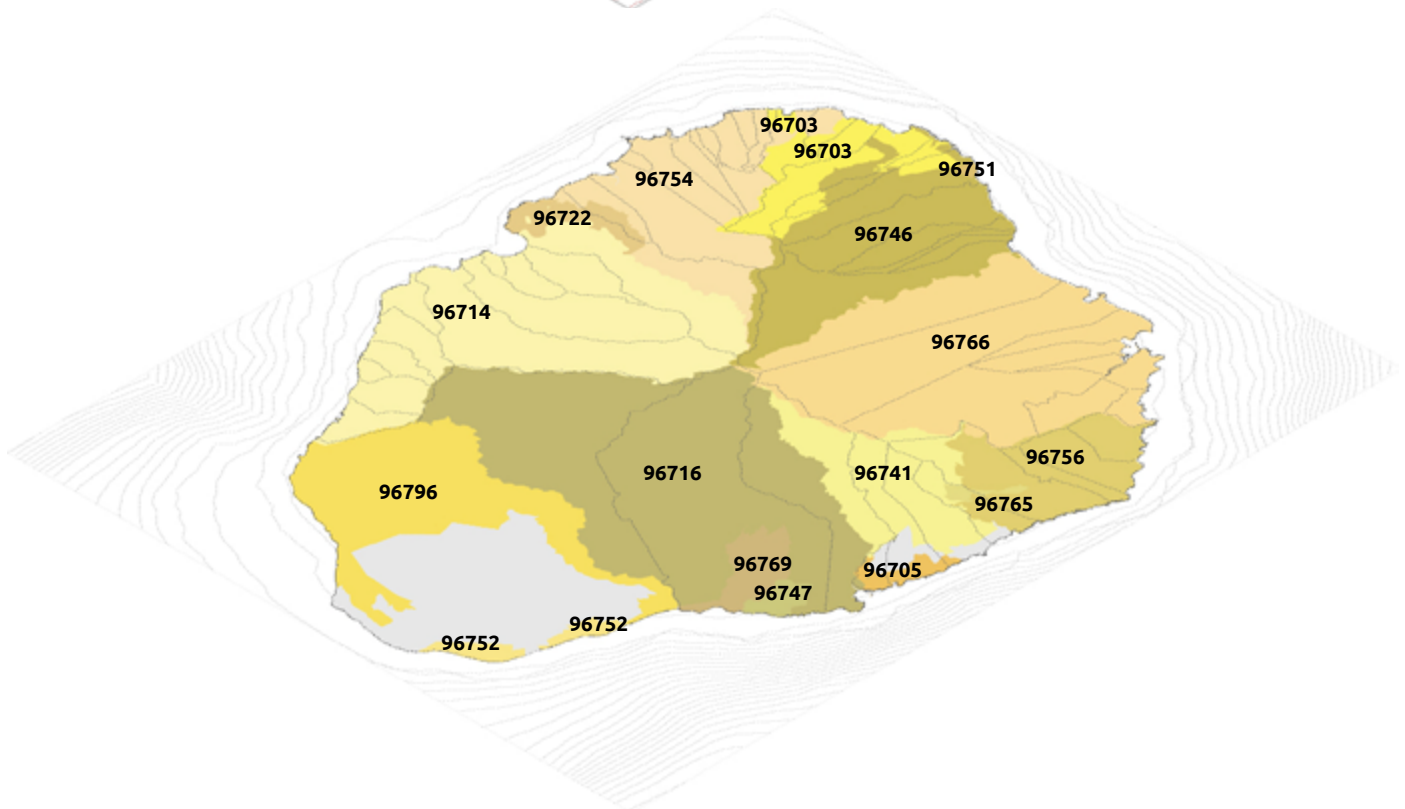
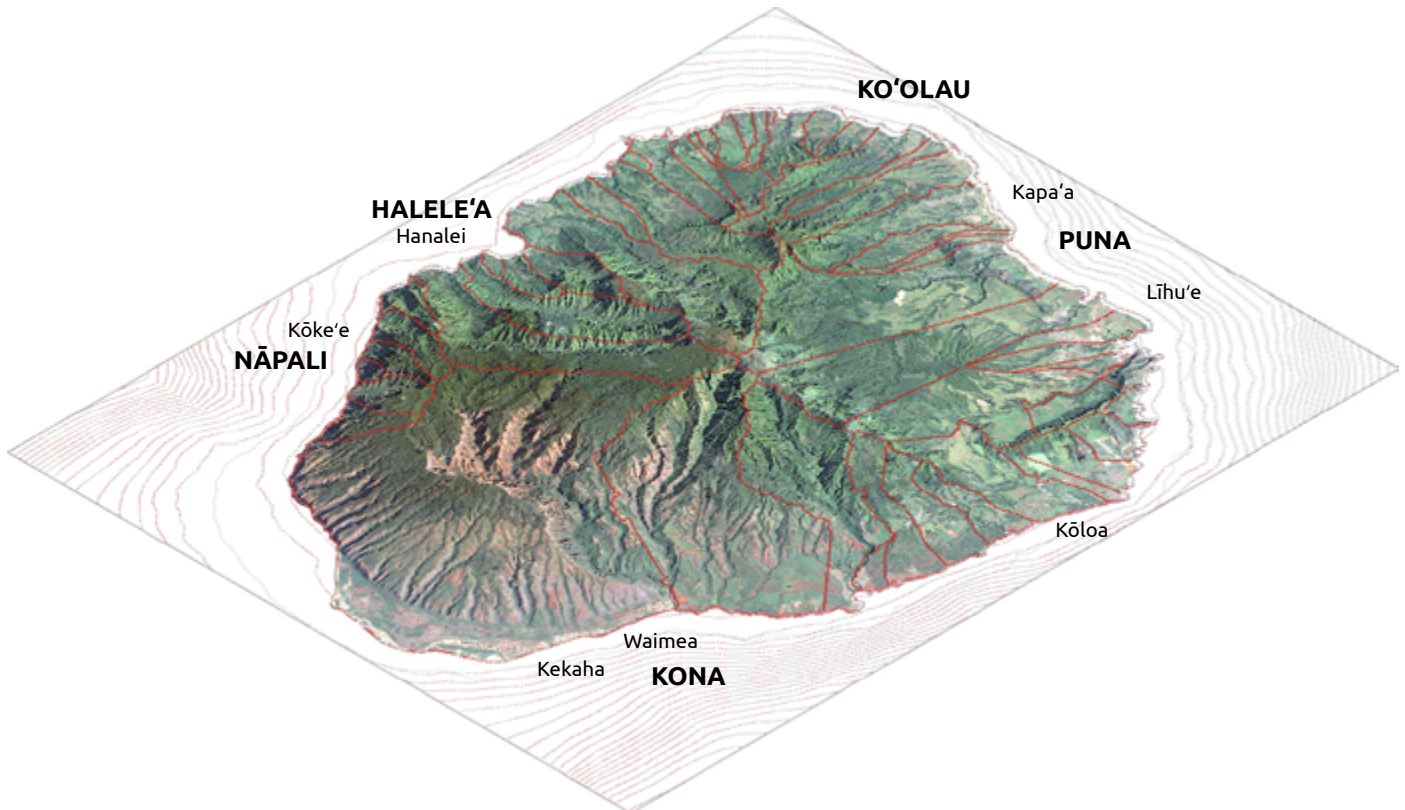
All 5-year estimates from U.S. Census, American Community Survey, 2017 except Hawaiian Homestead population from 2018 Hawai‘i State Data Book, and houseless count from Partners in Care, 2018 Point-In-Time Homeless Count.

O‘ahu Priorities

(Highest need areas in **RED**)

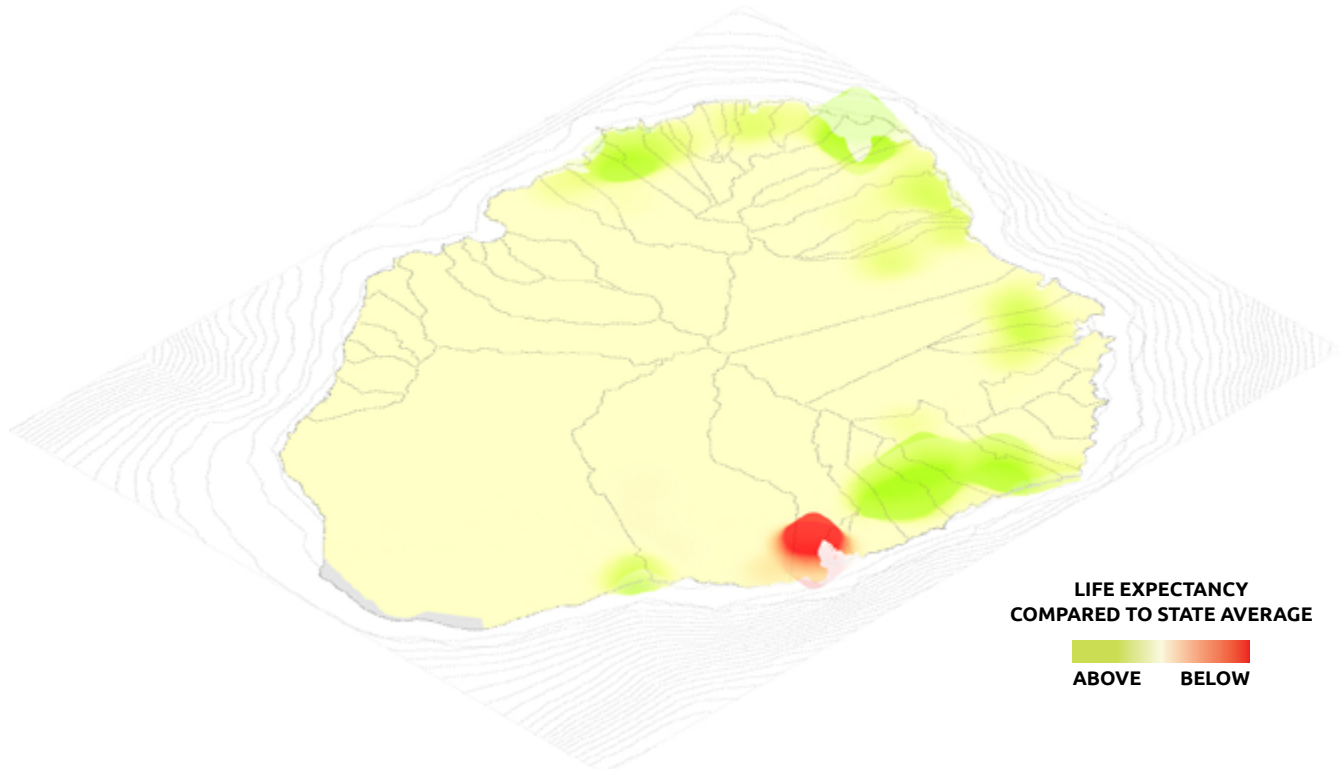
	CRITERIA				
FOUNDATIONS	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
EQUALITY AND JUSTICE Lead the charge to establish justice and support for immigrants and COFA communities	✓	✓	✓	✓	
EQUALITY AND JUSTICE Achieve economic and educational equity, particularly for Hawaiian communities	✓	✓	✓	✓	✓
FAMILIES Acknowledge and address the population’s stress, lack of sleep, lack of physical activity, and overuse of screens	✓	✓	✓		
FOOD SYSTEMS Develop strong community-based local food systems with farmers, food hubs, and others	✓	✓	✓	✓	✓
COMMUNITY	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
ENVIRONMENT Involve the community in preparation for the impacts of climate change	✓	✓	✓	✓	
ENVIRONMENT Restore more natural sites and recreation areas for community use	✓	✓	✓	✓	
COMMUNITY COHESION Develop traffic solutions to reduce commute times	✓	✓			
COMMUNITY COHESION Resist gentrification and inequality of conditions exacerbated by development	✓	✓			
COMMUNITY COHESION Address the impacts of more visitors in residential areas	✓	✓			
HEALTHCARE	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
SUPPORT FOR HIGH NEEDS Engage the public in developing and implementing solutions for houseless population	✓	✓	✓	✓	✓

KAUA'I



Twenty five years later, the experience of Hurricane Iniki is woven into the fabric of the community of Kauaʻi. After heavy rains devastated the North Shore in April 2018, the tight-knit, resilient community came together once again in a scary time to take care of each other. And they were tested yet again in the summer of 2018, when streams overflowed from a tropical storm. They dug themselves out of the mud. They figured out a system to get around closed roads. And they took responsibility for more than just themselves.

The floodings and road closures also disrupted tourism, the dominant economic industry, thus giving residents a rare present-day glimpse into life on the North Shore without as many visitors. The significant increase in visitors to Kauaʻi is having widespread impacts on everyday life. Rental cars are jamming up traffic, particularly in Kapaʻa; more vacation rentals are disrupting community life; residents are struggling to keep up with rising housing prices and the cost of living; and pervasive use of social media is exposing favorite local spots to overuse.



While tourism provides much needed employment, many say they still need multiple jobs to get by. The need to work, the time spent in traffic, and other demands of life lead to many feeling like there isn't enough time for activities that make them feel healthy and well. Healthy, home cooked meals compete with the convenience and price of fast food. In addition, television and phones are taking over quality time with family and friends.

At a talk story at the Boys and Girls Club of Kauaʻi, local teenagers shared their firsthand accounts of their families' economic stress. They spoke about the tradeoffs of tourism from an environmental perspective, seeing an increase in waste and less respect for the land. They also spoke about the difficulties of being teenagers today: the stress of family economics, stress of school, navigating their social and online life, and the influence of vaping and drugs. In a small community, news of teenage suicides and attempted suicides travels fast and hurts the community deeply.

Yet, even with these challenges, the teens expressed a desire to help out, whether through volunteer activities with their peers or with younger kids. "Kauaʻi is a small place where relationships are everything. We have three high schools—Kauaʻi, Kapaʻa, Waimea—and we all understand that there's a

time for competition and a time for cooperation. I saw this video from back in the day after Hurricane Iniki. That same aloha continues to this day,” one said. That particular teen worked with others to start a peer support group to help youth who are feeling hopeless and may be contemplating suicide.

Some point to the strength of the community going even further back to the island’s history of never being conquered by King Kamehameha, a story that they carry with pride. Building and maintaining the ancestral connection to Kaua’i is important to many for their cultural identity, and it contributes to health and wellbeing.

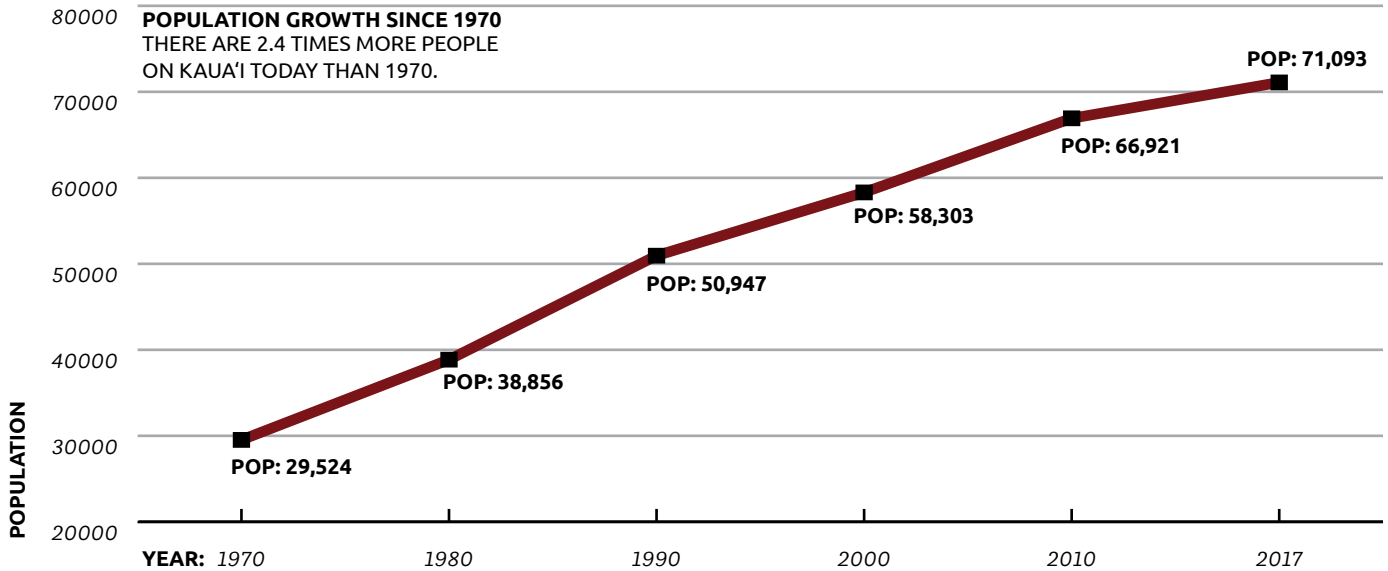
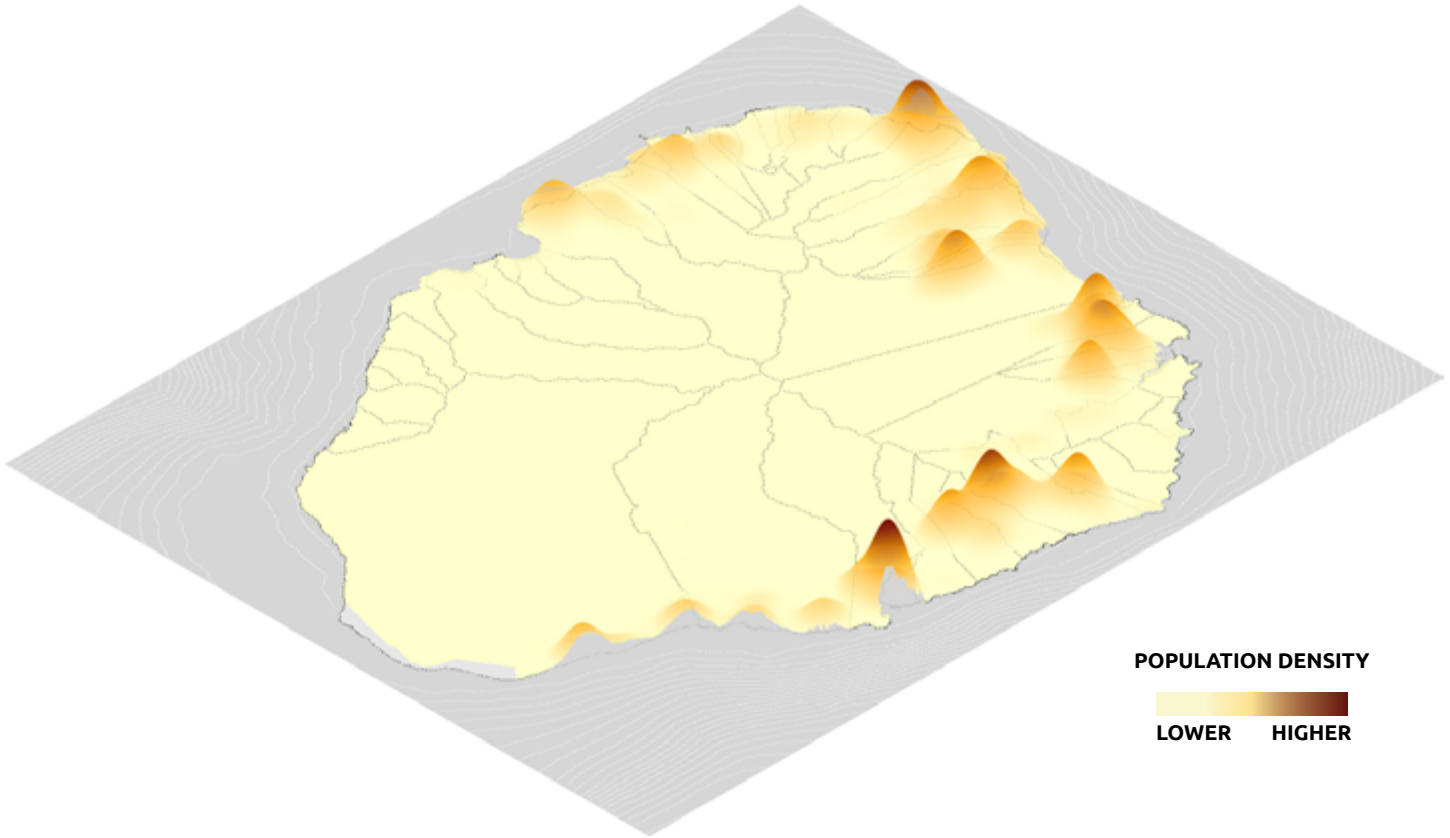
For example, a group of women interested in learning the traditional practices of Hawaiian healing, including lā’au lapa’au and lomilomi, gathers regularly to learn from one another. One Saturday in July 2018, they started their day with a morning hike into a native forest in the western part of Kaua’i to learn about different Hawaiian plants that can be used to treat diabetes, high blood pressure, inflammation, and other ailments. The plants were of both cultural and medicinal value. A majority of this group chooses to receive care from both Western medical doctors as well as Hawaiian practitioners. They value the cultural approach of Hawaiian practitioners, who treat the whole person, trust their patients’ opinions, and care about patients like family.

Kaua’i seems to have a propensity to find balance, forged over difficult experiences that most communities have not had to endure; experiences that demand cooperation, generosity and patience. Kaua’i today feels stressed out, but it also feels very wise. The County of Kaua’i, Kaua’i Community College, Wilcox Medical Center, Ho’ōla Lāhui, the Boys and Girls Club of Kaua’i, Lili’uokalani Trust, Kamehameha Schools, Kaua’i Planning and Action Alliance, Waipā Foundation, Mālama Kaua’i, and many others have a good grasp of the challenges and potential of Kaua’i. Those from Kaua’i who participated in this CHNA know what is most important in life and nothing seems to distract from that focus.

Although Islander Institute did not travel to Ni’ihau for this report, Kaua’i residents and providers talked about their connection with residents of Ni’ihau, a small, privately owned island 18 miles west of Kaua’i. Ni’ihau residents routinely commute to Kaua’i for work, medical care, and/or school, and many call both islands home. On Ni’ihau, there are no telephone services, no paved roads, no power lines, and no plumbing or running water. This makes it harder to refrigerate foods. Almost all residents of Ni’ihau qualify for QUEST, but because there is no mail delivery, residents don’t receive the re-enrollment letters that the state agency sends to them. People come off the island for health reasons and find that their insurance has lapsed. Transportation, language access, and getting needed medical attention are particularly difficult for this island.

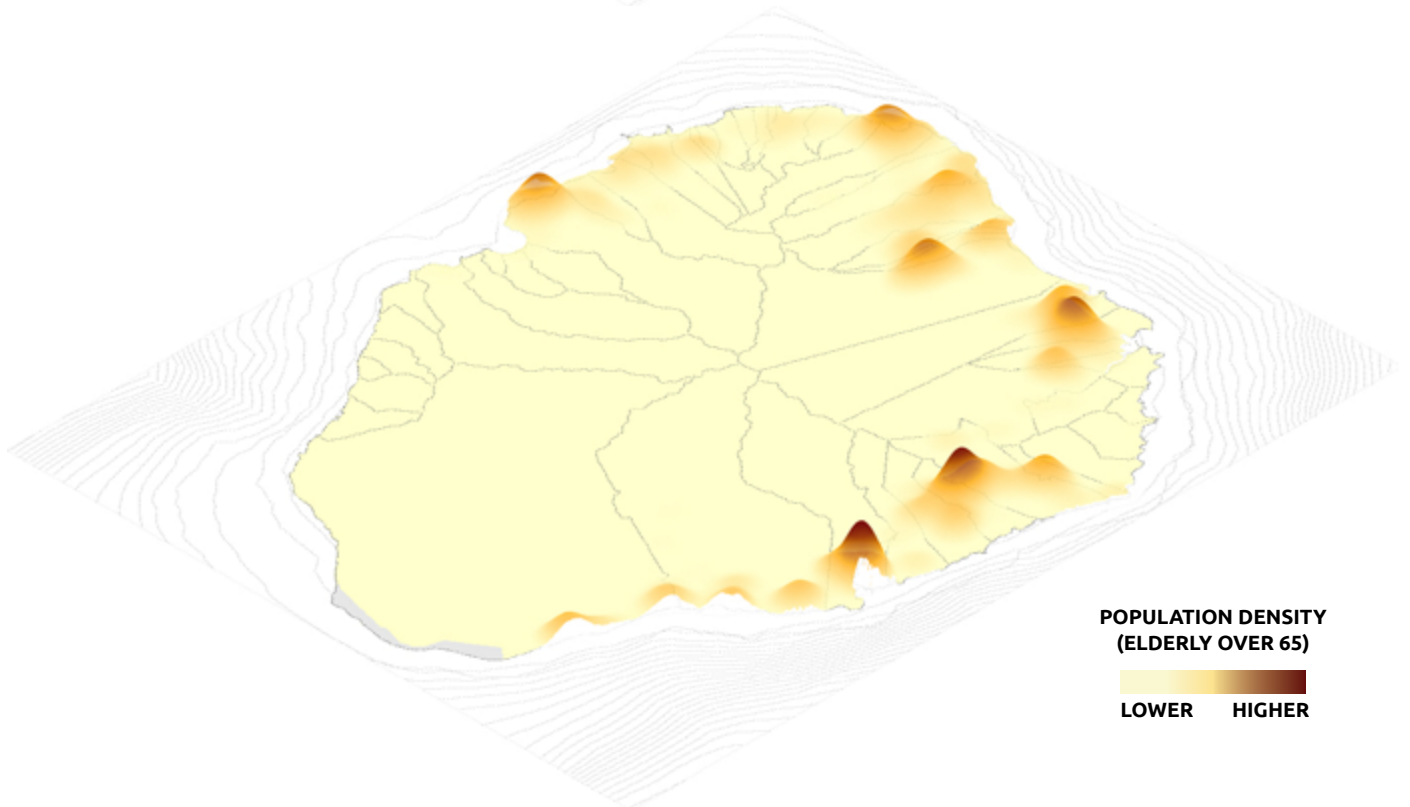
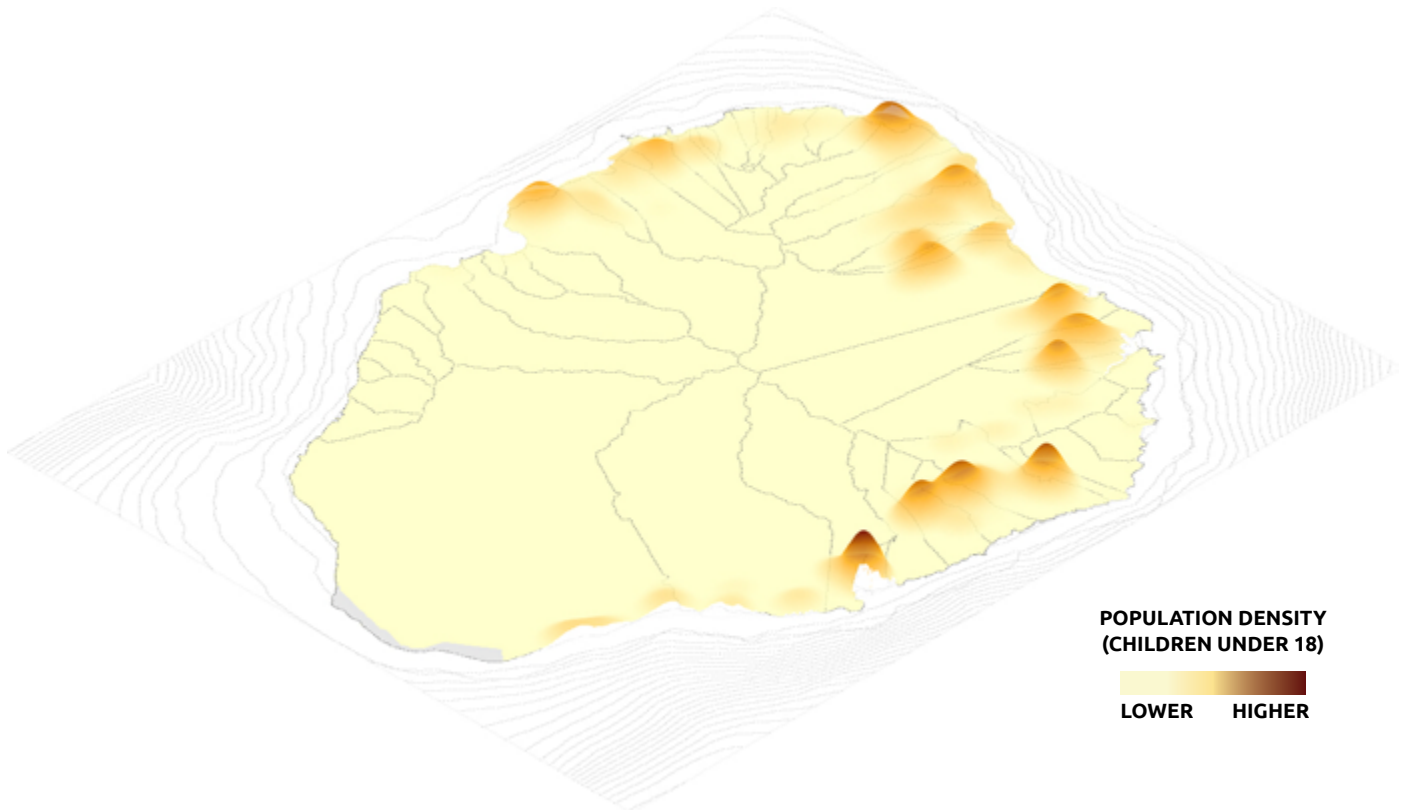
**NOTE: This sub-report was derived only from conversations and analysis done as part of this CHNA. The island summary and list of priorities are based on community talk stories, key informant interviews, data reviews, and other observations, and they are intended to highlight the important themes that emerged in the process. It is far from, and not meant to be, a complete or definitive statement of every relevant health factor on the island. As part of sound community practice, users of this report are advised to regularly check in with community partners and engage new voices, as situations change and opinions evolve.*

Population



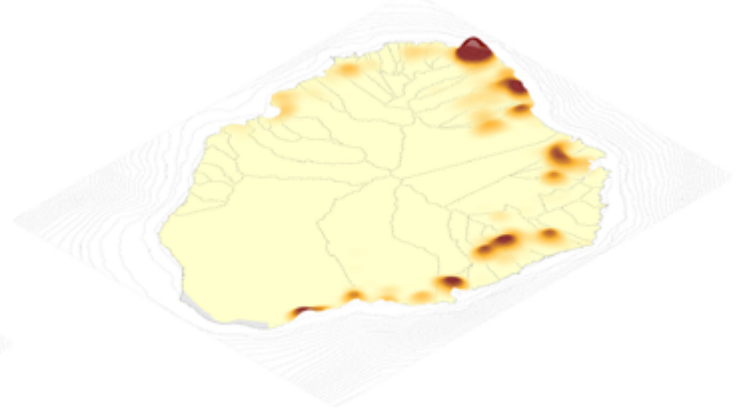
1 OUT OF 3 PEOPLE ON KAUA'I ARE VISITORS:

Keiki & Kūpuna

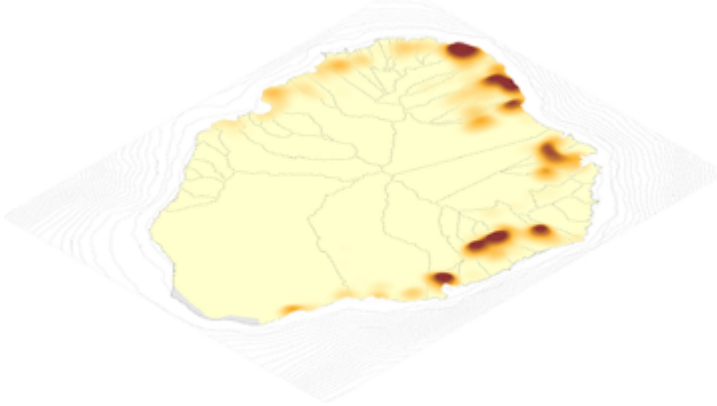


Race

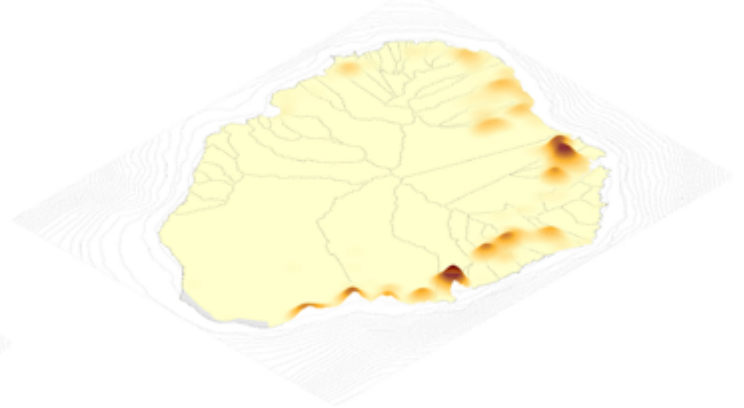
"HAWAIIAN"



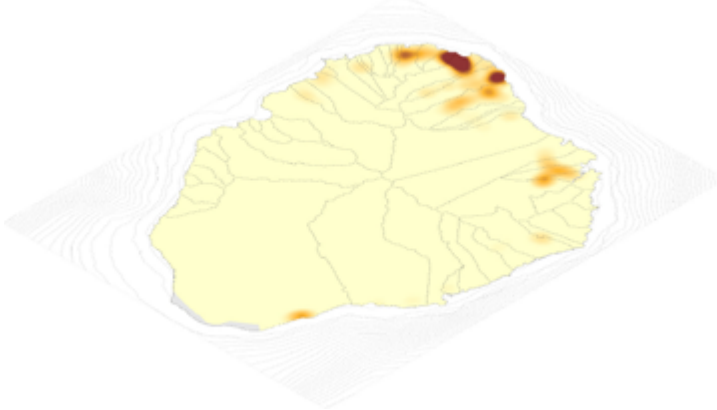
"MIXED" (TWO OR MORE)



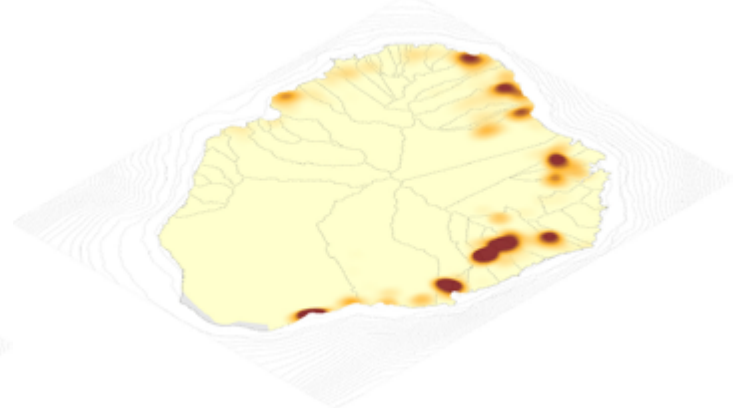
"ASIAN"



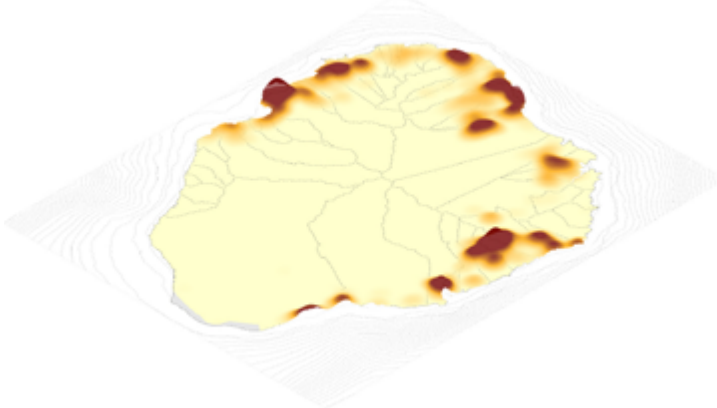
"BLACK"



"LATINO"



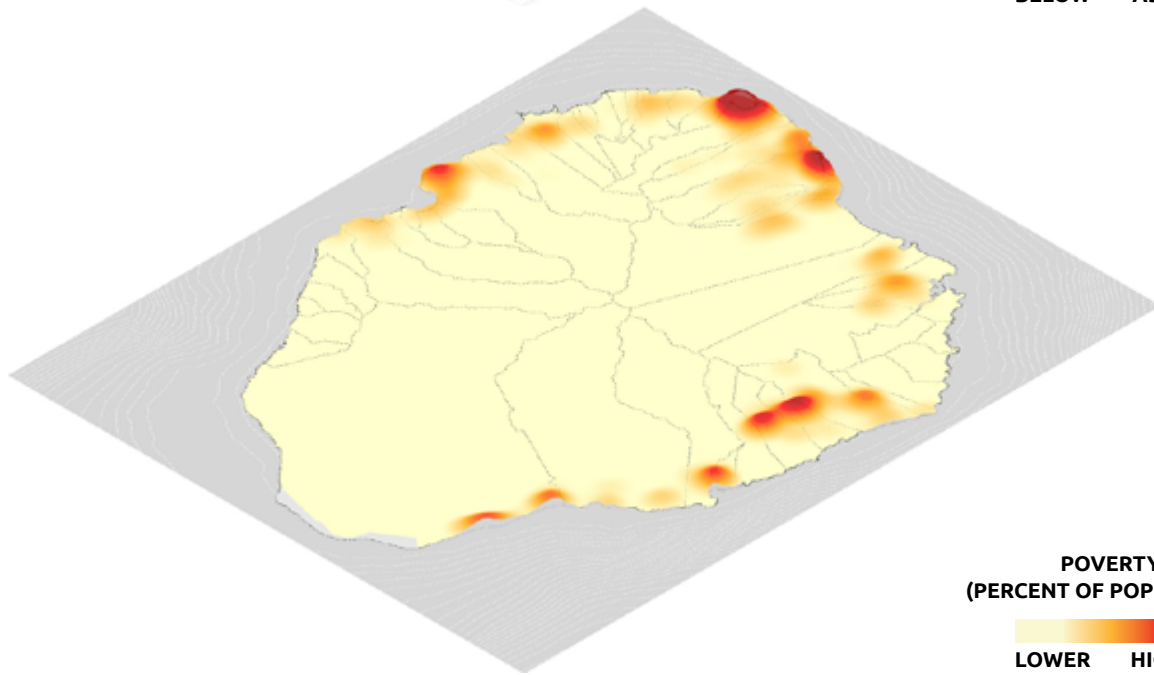
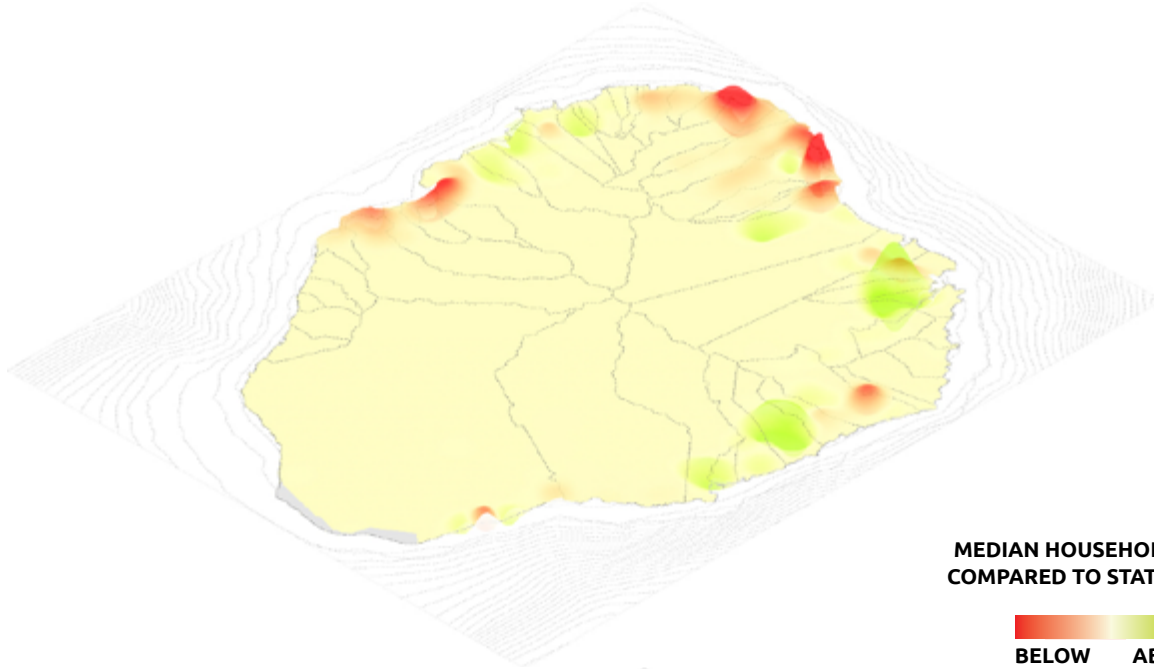
"WHITE"



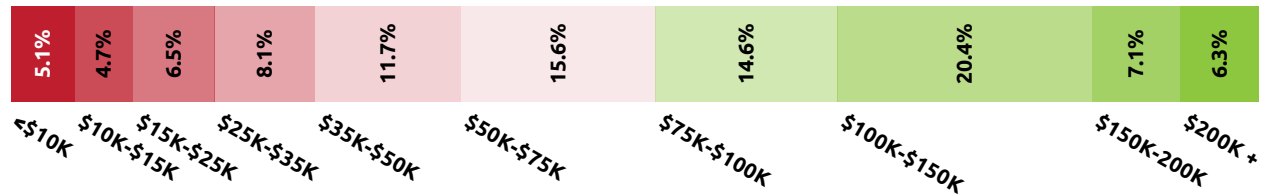
RACIAL IDENTITY
(PERCENT OF POPULATION)



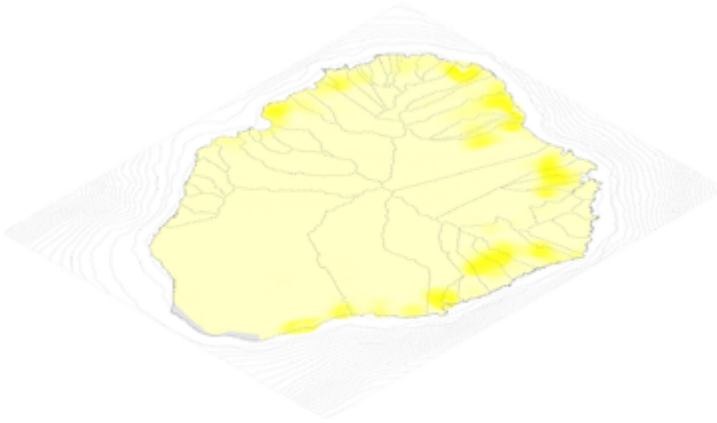
Income



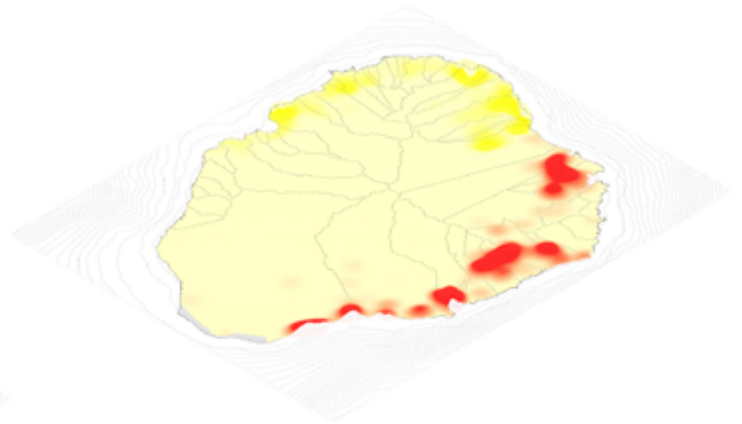
PERCENTAGE OF KAUAI'I HOUSEHOLDS BY INCOME BRACKET
 AVERAGE 4-PERSON HOUSEHOLD SURVIVAL BUDGET IN KAUAI COUNTY IS \$79,416.



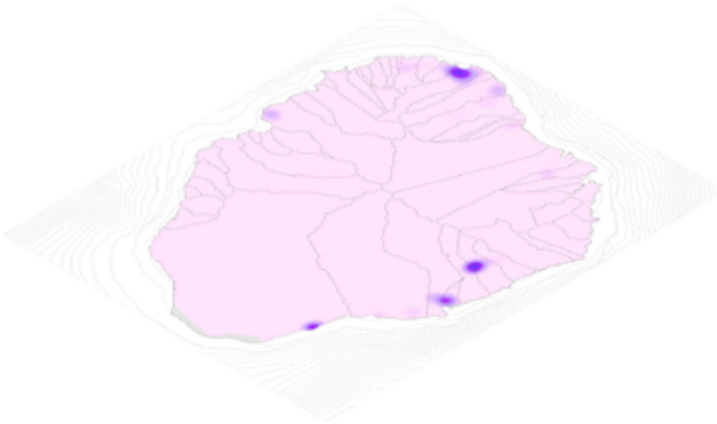
Time



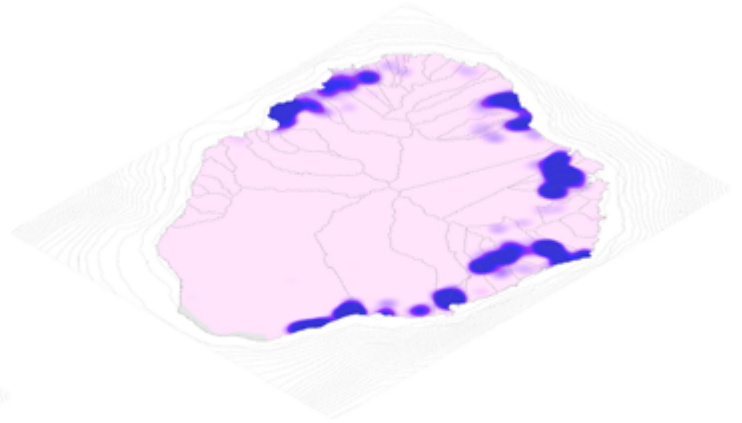
**EXERCISE
COMPARED TO
STATE AVERAGE**
ABOVE BELOW



**+7 HOURS SLEEP
COMPARED TO
STATE AVERAGE**
ABOVE BELOW

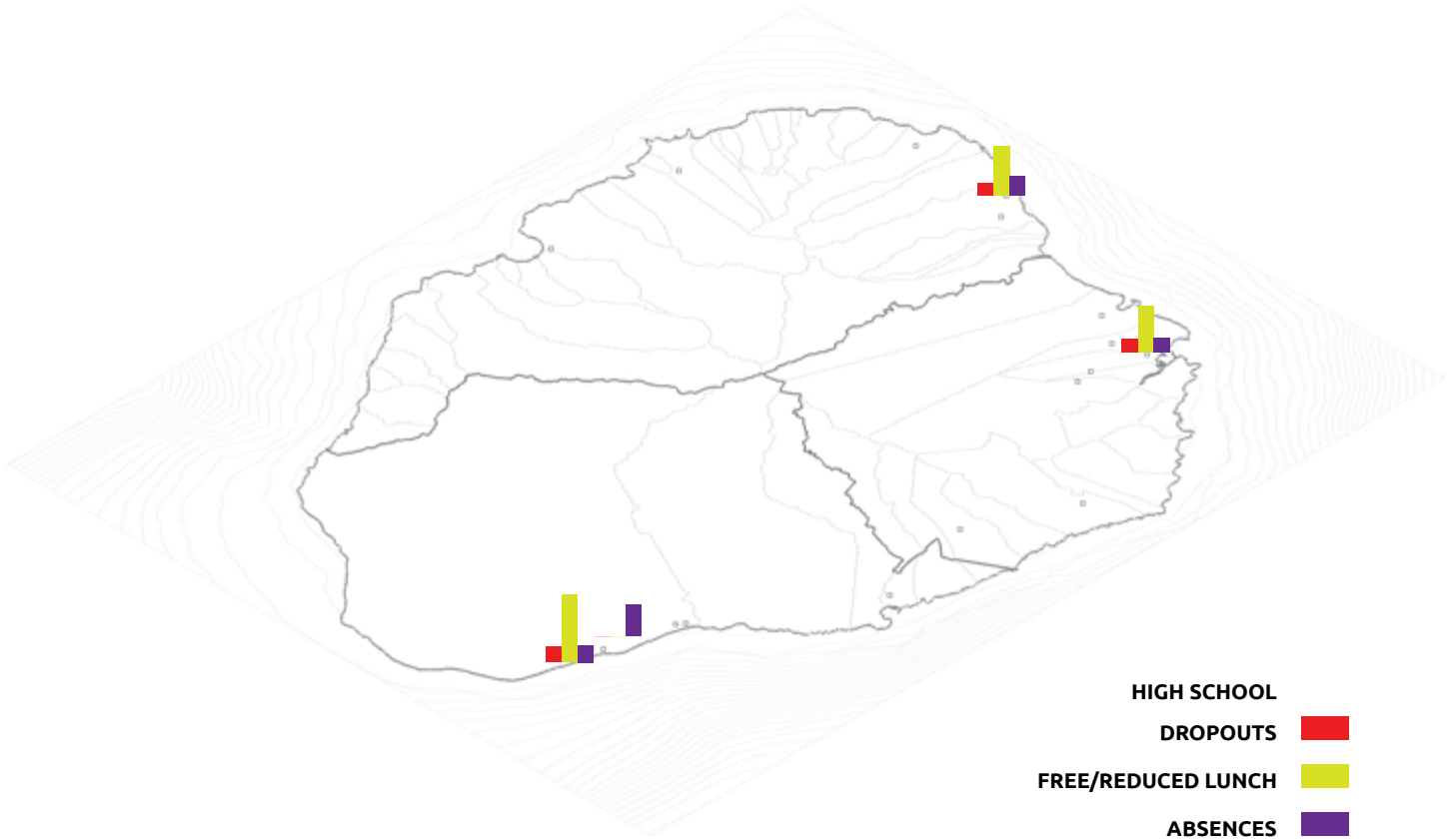


**COMMUTE
(OVER 40 MINUTES)**
+ 40 MIN. →



**COMMUTE
(DRIVING ALONE)**
LESS MORE

High Schools



	Attendance	Dropouts	Free/Reduced Lunch	Absences	Hawaiian	Samoan	Micronesian	Chinese	Filipino	Japanese	Korean	Portuguese	Black	Hispanic	White
Kapa'a High	92%	9%	37%	15%	30%	1%	2%	1%	18%	5%	<1%	2%	1%	5%	30%
Kaua'i High	94%	10%	35%	11%	24%	1%	4%	1%	36%	10%	<1%	3%	1%	2%	17%
Waimea High	93%	12%	51%	13%	43%	<1%	1%	1%	34%	6%	<1%	3%	1%	1%	8%
Ni'ihau High	86%	--	--	24%	100%	--	--	--	--	--	--	--	--	--	--

Kaua‘i Strengths and Priorities

Statewide Health Priorities

GOAL 1 - FOUNDATIONS Provide the basic foundations so that people can have more control over their own health	GOAL 2 - COMMUNITY Preserve, nurture, expand, and employ the healing properties of community	GOAL 3 - HEALTHCARE Improve the relationship between people and the healthcare system
1.1 Address financial insecurity 1.2 Work together for equality and justice 1.3 Strengthen families 1.4 Prepare for emergencies 1.5 Build good food systems	2.1 Restore environment and sense of place 2.2 Nurture community identity and cohesiveness 2.3 Invest in teenagers and healthy starts 2.4 Shift kūpuna care away from “sick care”	3.1 Strengthen trust in healthcare 3.2 Provide accessible, proactive support for those with high needs

Kaua‘i Strengths

- Proven community cohesion, resilience and aloha
- Civic engagement and capacity for cross-sector collaboration
- Relatively healthy and active population
- Entrepreneurial and resourceful culture

Populations of Note

	Estimate
HOUSELESS	300
PEOPLE IN POVERTY	6,400
NO HEALTH INSURANCE	4,000
WOMEN GIVING BIRTH IN LAST YR	800
DISABLED CHILDREN	400
CHILDREN IN POVERTY	1,300
NO HS 25 older	4,000
UNEMPLOYED (IN LABOR FORCE)	1,600
DISABLED ADULTS (18-64)	2,600
VETERANS	4,100
65+ LIVING ALONE	2,300
DISABLED 65+	4,200
85+	1,700
HAWAIIAN	16,900
ON HAWAIIAN HOMESTEAD	2,100
OTHER PACIFIC ISLANDER	600
RECENT FOREIGN IMMIGRANT	1,900
LIMITED-ENGLISH	6,000

All 5-year estimates from U.S. Census, American Community Survey, 2017 except Hawaiian Homestead population from 2018 Hawai‘i State Data Book, and houseless count from Partners in Care, 2018 Point-In-Time Homeless Count.

Kaua‘i Priorities (Highest need areas in RED)

	CRITERIA				
FOUNDATIONS	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
EQUALITY AND JUSTICE Continued development of Hawaiian communities and cultural practice	✓	✓	✓	✓	
FAMILIES Address the stress of overwork, developing more job opportunities outside of the service sector, and generating more time for families and communities	✓	✓			
FOOD SYSTEMS Develop a strong community food system for locally grown, healthy food	✓	✓	✓	✓	
COMMUNITY	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
ENVIRONMENT Balance the impacts of tourism; ensure more local access to healthy places	✓	✓			
ENVIRONMENT Protect and preserve natural resources of the island	✓	✓	✓	✓	
KEIKI Develop more positive activities for youth, especially teens, that help ease stresses of life and develop leadership	✓	✓	✓	✓	✓
KEIKI Increase early childhood education opportunities	✓				
HEALTHCARE	<i>Evidence of high need</i>	<i>Community readiness</i>	<i>Available partners</i>	<i>Existing efforts</i>	<i>Political will /resources</i>
SUPPORT FOR HIGH NEEDS Support for the houseless population	✓		✓	✓	

ADDRESSING HEALTH NEEDS

As she mourned the death of her husband from cancer, a Kalihi woman at the age of 70 spent her days alone watching TV to pass the time. She couldn't walk very far, it was hard for her to move around, and she couldn't lift her arms. Sharing her story with her friend, she was told to go to the senior center at Kōkua Kalihi Valley (KKV). So she went one day, and saw lots of other seniors smiling at her, and not long after, she found herself laughing and talking story with her new friends. "I told myself that laughter is better medicine than any pill," she said. As a part of the kūpuna program at KKV, they sing, dance for an hour, and eat together. It's fun and communal, and it's exercise. She noticed her body got stronger—she could walk, dance, and lift her arms. She feels great and happy. At KKV, she found a community of doctors and health workers who care about her. She also has a community of friends where they share recipes and learn how to make the Filipino dishes they love, but healthier and in the right portion. She loves her neighborhood of Kalihi, where she is able to walk from her house to the shopping center, KKV, grocery stores, and bus stops. She loves watering her plants and eating vegetables from her garden. "I'm 77 years old and I'm the healthiest I've ever been," she said.

A SHARED KULEANA FOR COMMUNITY HEALTH

In Hawai‘i, health is a shared experience and endeavor. No single person, no single entity, and no single industry can be solely responsible for community health.

At some point in history, a model of healthcare was established that went this way: It is up to the doctor to heal the patient, and it is up to the patient to comply with the doctor’s orders. But even as our understanding of health grew to include public health, prevention, and social determinants, our concept of responsibility for health doesn’t seem to have kept pace. We are still primarily looking to healthcare—now in the form of the healthcare industry—to drive the improvement of health, now including community health. In turn, the industry puts increasing onus on individuals to adopt “healthy lifestyles”—something that many in the community would say is essentially impossible for lack of a basic foundation for health. Expectations are unrealistic on both sides of the equation.

Rather than pushing responsibility back and forth between individuals and the healthcare system, it is more realistic and more consistent with Hawai‘i values to engage one another and share kuleana throughout the entire healthcare *ecosystem*.

The healthcare *ecosystem*...

- Includes the individual, the healthcare system, and all the other non-medical contributors to health. Health encompasses essentially everything, therefore every person, family, organization, and agency has the opportunity to advance community health.
- Acknowledges, values, and strives to generate the non-sickness aspects of health: things like healthy relationships, purpose and meaning, community pride, and time at the beach.
- Has the collective authority and potential capability to address all the causes of poor health, including everything upstream of medical care: things like ending discrimination, creating better jobs, making communities safer, improving transportation infrastructure, preparing for climate change, improving schools, curbing sexual violence, and providing considerably more affordable housing

It is only by sharing kuleana—doctor, patient, and everyone else in the ecosystem—that Hawai‘i can adequately address both the measured and unmeasured health challenges facing our people.

In this section, a specific process is laid out for hospital facilities to choose priorities and develop strategies based on what was learned in this CHNA. But really any interested individual, organization, or agency can develop priorities and strategies in the same way. The process begins by reviewing state and island priorities, running ideas through a screen of important factors, and then developing plans to engage community and other partners in strengthening existing initiatives and developing new ones.

CHOOSING PRIORITIES & DEVELOPING STRATEGIES

HAH facilities and others in the health industry have brought up the need for and benefits of collective planning. This CHNA is designed to be a shared frame of reference so that hospitals can plan initiatives together if they so choose. For even greater impact, the CHNA can be a catalyst for cross-sector planning along with community organizations, financial institutions, foundations, large employers, unions, government agencies, educational institutions, and others.

There are many kinds of priority initiatives that HAH member facilities and others in the healthcare ecosystem can adopt, including direct service programs, outreach programs, internal policy changes, public policy advocacy, internal capacity building, network building, and education campaigns. For the purpose of selecting priorities and initiatives, follow these steps:

STEP 1 - Choosing community/island health priorities to address

STATEWIDE PRIORITIES	Hawai'i	Maui	Moloka'i	Lāna'i	O'ahu	Kaua'i
GOAL 1 - FOUNDATIONS Provide the basic foundations so that people can have more control over their own health						
1.1 Address financial insecurity	●	●	●	●		
1.2 Work together for equality and justice	●	●			●	●
1.3 Strengthen families		●	●		●	●
1.4 Prepare for emergencies			●			
1.5 Build good food systems	●			●	●	●
GOAL 2 - COMMUNITY Preserve, nurture, expand, and employ the healing properties of community						
2.1 Restore environment and sense of place		●			●	●
2.2 Nurture community identity and cohesiveness	●	●	●	●	●	
2.3 Invest in teenagers and healthy starts	●	●	●			●
2.4 Shift kūpuna care away from "sick care"		●	●	●		
GOAL 3 - HEALTHCARE Improve the relationship between people and the healthcare system						
3.1 Strengthen trust in healthcare	●	●	●			
3.2 Provide accessible, proactive support for those with high needs	●	●	●	●	●	●

Important island priorities marked with "●"
 Highest need areas on island in RED
 Note: *all* statewide priorities are significant on all islands

STEP 2 - Setting organizational purpose

Determine how addressing the priorities aligns with and advances your values, mission, and strategy.

STEP 3 - Identifying existing initiatives

APPENDIX A contains a list of current community health strategies throughout Hawaii. This list can provide ideas and organizations to connect with and learn from.

STEP 4 - Evaluating partnership needs and potential

Make an inventory of the tangible and intangible resources you bring to the effort and what might be needed from partners. Make a list of potential partners who could help make the initiative successful.

STEP 5 - Building internal capacity

Determine what resources, skills and other internal capacities are needed in order to do your part for this initiative and support partners. This includes the capacity to effectively engage with community members, organizations, and other entities in ways that engender good communication, trust, and collaboration.

STEP 6 - Engaging community and building partnerships

Reach out to potential partners including the skillful engagement of members of and leaders from affected communities. Share existing plans and ideas, develop collaborative plans, and build systems of open communication. Discuss potential unintended consequences and risks to the community that can be discussed and mitigated. Develop shared indicators of success so that data collection and evaluation can happen in conjunction with community partners.

Pali Momi Medical Center

In the early 1980s, Dr. Joseph “Joe” Nishimoto returned to Hawai‘i from the mainland to practice medicine in ‘Aiea and Pearl City. As the community grew, he envisioned a local, state-of-the-art hospital so Leeward families would not have to drive into town for medical care. The road to achieving that vision spanned eight years and took the efforts of many.

Pali Momi opened on July 31, 1989. Since its opening, the hospital has delivered many medical firsts for Central and West O‘ahu, including:

- The first interventional cardiac catheterization unit to detect and treat heart disease.
- First retina center in Hawai‘i.
- Minimally invasive surgical technology featuring the da Vinci robot-aided system.
- A comprehensive women’s center.
- Hawai‘i’s only team triage approach to emergency medicine.
- A complete bariatric surgery program.
- The most advanced diagnostic imaging technology available.

Today, Pali Momi continues to provide award-winning care to thousands of patients each year. Pali Momi is a Level III Trauma Center, accredited by the American College of Surgeons. It has been recognized by the American Heart Association and American Stroke Association for its stroke care program. Pali Momi’s Bariatric Surgery Program offers complete patient care, lifestyle transition and support, and has received Metabolic and Bariatric Surgery Accreditation and is recognized as a Quality Improvement Program Accredited Center, a joint program of the American College of Surgeons and the American Society for Metabolic and Bariatric Surgery. With more than 1,200 employees and 400 physicians, Pali Momi is fully accredited by The Joint Commission, an independent nonprofit organization that certifies health care organizations and programs in the United States.

Hawai‘i Pacific Health

Hawai‘i Pacific Health (HPH) is a not-for-profit health care network of hospitals, clinics, physicians and care providers dedicated to the mission of improving the health and well-being of the people of Hawai‘i and the Pacific Region. Anchored by its four hospitals—Kapi‘olani Medical Center for Women & Children, Pali Momi Medical Center, Straub Clinic Medical Center and Wilcox Medical Center—HPH includes more than 50 convenient locations and service sites statewide. As the state’s largest health care provider, Hawai‘i Pacific Health’s network of doctors and specialists provide a distinctive model of coordinated care. Its not-for-profit mission means all earnings are reinvested into improving medical equipment and facilities, as well as invested in research, education, training, and charity care for under-served people within the island community.

Community Served by Pali Momi Medical Center

Pali Momi serves the health needs of residents in Central and West O‘ahu, as well as patients from all across O‘ahu. Therefore, the island of O‘ahu, which comprises the County of Honolulu, will serve as the unit of analysis for this CHNA. An assessment of community health issues specific to O‘ahu can be found on pages 146 - 156 of this report.

Demographics of O‘ahu

In 2017, O‘ahu had a population of 990,060.¹ O‘ahu’s population of children under 18 is similar to the rest of the state of Hawai‘i. Children under 18 made up 21.4% of the island’s population (compared to 21.6% in Hawai‘i) and adults over 65 made up 16.4 % of the population (compared to 16.7% in the state).

¹ U.S. Census Bureau, American Community Survey, 2013-2017 Estimates

The largest single race group in O'ahu is Asian at 42.9%, with the majority of the Asian population identifying as Filipino or Japanese. The Black/African American, Native Hawaiian and Other Pacific Islander, multiracial, and Hispanic populations are relatively larger in Hawai'i overall, and a closer examination of the multiracial population shows that the majority (42.9%) of O'ahu residents identified as any part Asian.¹

A comparable percentage of Hawai'i State and O'ahu residents have at least a high school degree or a bachelor's degree. 22.4% of O'ahu residents ages 25 and older had at least a bachelor's degree, compared to 21.2% in the state.

The 2008-2012 median household income on O'ahu (\$80,078) was relatively high compared to the state (\$74,923). Per capita income was \$33,776 on O'ahu in 2013-2017, higher than the rest of the State (\$32,511), and the U.S. (\$31,177).¹ Larger household sizes account for this juxtaposition. While the average household has 2.63 members in the USA, the average O'ahu household has over 3.02 members. 9.1% of O'ahu's population lived below poverty level in 2013-2017, comparable to Hawai'i overall (10.3%) and lower than the U.S. average (14.6%). Certain race/ethnic groups on O'ahu are also more affected by poverty. Overall, the American Indian and Alaska Native, "Other" and Native Hawaiian, or Other Pacific Islander populations had the highest poverty rates in 2013-2013.¹

It is important to note, however, that federal definitions of poverty are not geographically adjusted, so the data may not adequately reflect the proportion of residents who struggle to provide for themselves due to the high cost of living across the state of Hawai'i.

The Asset Limited, Income Constrained, Employed (ALICE) Report may provide a more accurate picture of economic hardship and survival in accordance with Hawai'i's relatively high cost of living, dominance of low wage jobs, lack of affordable housing, and gaps in public assistance.² This measure, developed by the United Way, provides estimates for those who live above the Federal Poverty Level but still struggle financially. The ALICE population is working, but they are typically just one major crisis (loss of job, health emergency, etc.) away from being at an increased risk for long term problems such as loss of housing or chronic health concerns. The report has determined that while 9% of O'ahu households meet Federal Poverty Level guidelines for financial hardship, an additional 35% (108,209 households) met ALICE criteria.

According to the ALICE Report, many households with children fall under the ALICE threshold, and families headed by a single parent are even more likely to meet this criteria. Of the 13,191 single female headed households on O'ahu, 43% meet ALICE criteria, as do 55% of the 5,948 single male headed households. This is compared to just 29% of the 63,385 married households with children who meet ALICE criteria. Ethnicity is also a factor in the ALICE breakout, and the Native Hawaiian, Black, and Hispanic populations meet the ALICE threshold at the highest rates. While there are ALICE households in every age bracket on O'ahu, 61% of the 10,317 households consisting of individuals under the age of 25 meet ALICE criteria.

Food insecurity is a major component of poverty, and 194,610 people in Hawai'i struggle with food security. Of that figure, an estimated 83,000 do not qualify for government assistance and roughly 1 in 5 children struggle with hunger in Hawai'i.³

Homelessness is a significant issue for women and children in Hawai'i. Of the 7,220 homeless individuals identified in 2017, 1,667 were children under the age of 18 and 3,177 identified as female (women and children), accounting for 67% of the total homeless population in the state.⁴

² Hawai'i United Way ALICE Report, 2017

³ Hunger in Hawai'i Report, 2016

⁴ State of Hawai'i Homeless Point-in-Time Count, 2017

SocioNeeds Index®

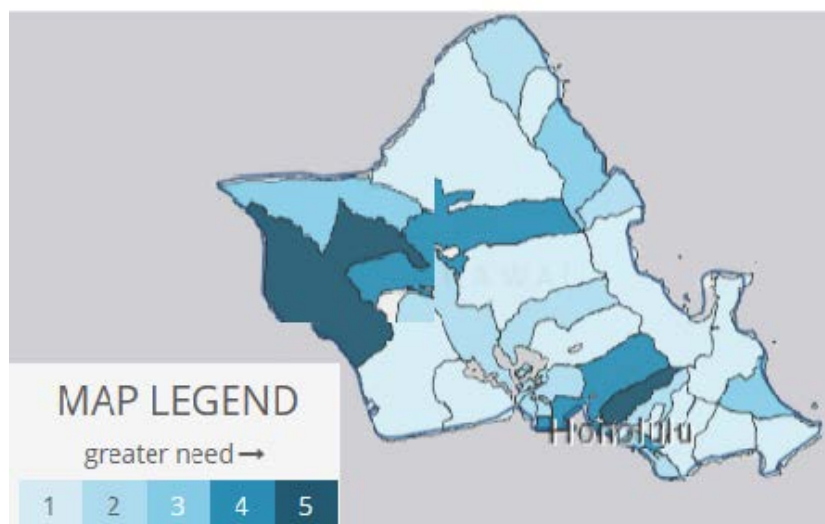
Healthy Communities Institute developed the SocioNeeds Index® to easily compare multiple socioeconomic factors across geographies. This index incorporates estimates for six different social and economic determinants of health that are associated with health outcomes. The data, which cover income, poverty, unemployment, occupation, educational attainment, and linguistic barriers, are then standardized and averaged to create one composite index value for every zip code in the United States with a population of at least 300.

Zip codes with higher values are estimated to have the highest socioeconomic need and are correlated with poor health outcomes, including preventable hospitalizations and premature death. Within Hawai'i, zip codes are ranked based on their index value to identify the relative level of need within the state. Index values were not calculated for those areas missing on the map below due to low population count.

The zip codes in Honolulu County with the highest levels of socioeconomic need are found in the Waianae, Wahiawa, and Kalihi areas of the island.

SocioNeeds Index

Data Source: Conduent Healthy Communities Institute
Measurement Period: 2019



Zip Code	Index	County
96792	76.9	Honolulu
96817	64.4	Honolulu
96786	47.9	Honolulu
96819	45.6	Honolulu
96826	44.4	Honolulu
96814	32.9	Honolulu
96791	29.4	Honolulu
96717	28.6	Honolulu
96795	26.3	Honolulu
96818	25.7	Honolulu
96797	24.7	Honolulu
96860	24.5	Honolulu
96815	21.7	Honolulu

Selected Priority Health Needs

In 2016, the Hawai'i Pacific Health system undertook a planning process to provide focus for HPH's community health initiatives and develop a strategy to more meaningfully address the social (non-clinical) determinants of health. A work group made up of leadership from across the HPH system conducted listening sessions with a wide range of community organizations to learn about critical social issues impacting the health of our community, with special attention to vulnerable populations.

As a result of this process, HPH adopted the following priority areas of focus for its community health partnerships: *Strengthening families and developing resilient children by promoting 1) Economic Empowerment through food security, housing stability, and self-sufficiency; and 2) Education through holistic child development and family educational attainment.*

The work group evaluated the significant health needs identified in this CHNA (page 4) based on the following criteria:

- Alignment with above HPH community health focus areas
- Opportunity to leverage planned and existing HPH community partnerships and initiatives
- Alignment with HPH's resources and expertise
- Potential to make a measurable impact in collaboration with partners

Together with the other Hawai'i Pacific Health facilities, Pali Momi selected the following four community health priorities:

GOAL 1 - FOUNDATIONS: Provide the basic foundations so that people can have more control over their own health

- 1) **Strengthen families.** Create the conditions and opportunities for families to be healing forces for its own members, including addressing financial stress that will enable more healthy time together.
- 2) **Build good food systems.** Establish access to nutritious food so that it is available to all.

GOAL 2 - COMMUNITY: Preserve, nurture, expand, and employ the healing properties of community

- 3) **Invest in teenagers and healthy starts.** Invest in health and education at the earliest stages of life. Support school-based structures, community-based activities, and youth empowerment for pre-teens and teens.

GOAL 3 - HEALTHCARE: Improve the relationship between people and the healthcare system

- 4) **Provide accessible, proactive support for those with high needs.** Identify, develop, and strengthen outreach, early intervention, free healthcare services, mental health, and oral health for those who are struggling with houselessness, mental illness, and addiction.

A plan for addressing these priorities will be further described in Pali Momi's 2020-2022 Implementation Strategy.

Evaluation of Prior 2017-2019 Implementation Strategy

Over the past three years, Pali Momi Medical Center conducted the following programs to address the two priority community health needs identified in the medical center's 2016 Community Health Needs Assessment: *Access to Health Services* and *Diabetes*.

Priority 1: Access to Health Services

Strategy 1.1: Support development of West O'ahu's health care workforce.

- **Health Professions Education:** Pali Momi provided clinical training and continuing education for physicians, medical students, nursing students and allied health professionals to increase the capacity of the local health care workforce and improve the availability of and access to quality specialty medical care in West O'ahu. Over the past three years, Pali Momi provided residencies and training for 367 residents, 616 medical students, 277 nursing students, and 578 allied health professionals in such fields as ultrasound, surgical technology, pharmacy, radiology, medical laboratory services, and respiratory technology. Pali Momi also contributed \$750,000 to support the Family Medicine Primary Care Consortium which worked to develop quality family medicine residencies in Hawai'i.
- **Continuing Medical Education for Community Physicians:** Pali Momi offered 28 continuing medical education presentations annually, open to all physicians in the community, on pertinent medical topics to help keep them apprised of the latest developments in health care. Each session was attended by 50 to 60 physicians.

- **Physician Recruitment:** The Hawai'i Physician Workforce Assessment Project estimates a 20 percent shortage of physicians statewide. This shortage is especially acute in rural areas such as Central and West O'ahu, where Pali Momi is located. To improve access to quality specialty care for its surrounding community, Pali Momi actively recruited physicians for specialties for which O'ahu has shortages. Over the past three years, Pali Momi successfully recruited 20 physicians with needed specialties including neurology, obesity medicine, cardiology, urology, orthopedics, general surgery, family practice, palliative care, bariatrics, and oncology to practice in West and Central O'ahu.
- **Scholarships for UH Medical Students:** The Hawai'i Pacific Health Medical Student Scholarship Fund addresses the physician shortage in Hawai'i by supporting Hawai'i residents who commit to practicing medicine in Hawai'i to attend the University of Hawai'i John A Burns School of Medicine. The scholarship, beginning Fall 2019, will provide four-year full-tuition scholarships to five in-coming Hawai'i resident medical students each year. Pali Momi has donated \$194,736 to the scholarship fund.

Strategy 1.2: Increase access to health services for medically-underserved communities and vulnerable populations.

- **Wahiawa Center for Community Health:** Over the past three years, Pali Momi contributed \$10,000 to support development of the Wahiawa Center for Community Health (Wahiawa Health) in Wahiawa, one of the most economically disadvantaged areas of O'ahu, and a designated Medically Underserved Population area. To date, Pali Momi has donated a total of \$30,000 toward the health center's development. Federal health centers are important community-based safety net providers that offer comprehensive primary care, behavioral health, and oral health services on a sliding fee scale to rural, underserved communities, and low-income, under-insured individuals. Wahiawa Health provides care for 6,400 patients.
- **Community Care for Homeless Patients:** Homeless individuals face significant barriers to accessing routine medical care leading to high rates of multiple chronic health conditions, illness and injury, and disproportionate use of emergency services. Pali Momi gave financial support and donated medical supplies to the Hawai'i HOME Project, a program of the UH John A. Burns School of Medicine that provides free clinics for homeless individuals, staffed by medical students and physician volunteers at homeless shelters and from a mobile health van. Since its inception in 2006, HOME has served more than 5,200 homeless patients.

Strategy 1.3: Provide and subsidize health services that would not otherwise be available to the community.

- **Cancer Research Center of Hawai'i:** Cancer is the second leading cause of death in Hawai'i. Pali Momi, together with the other hospitals of Hawai'i Pacific Health, Queen's Medical Center, and Kuakini Medical Center, partnered with the University of Hawai'i's Cancer Research Center of Hawai'i to enhance the quality and breadth of cancer care in Hawai'i, supporting enhanced access for more than two-thirds of the cancer patients in the state to clinical trials, state-of-the-art treatment, and innovative therapies near to home for local patients. Many of these trials are designed specifically for populations in Hawai'i with cancer mortality disparities. Over the past six years, more than 13,000 cancer patients were enrolled in over 600 interventional therapeutic trials.

Priority 2: Diabetes

Strategy 2.1: Improve diabetes self-management.

- **Diabetes Self-Management Education:** Pali Momi provided funding to the YMCA and Straub Medical Center to support free American Diabetes Association-approved diabetes self-management education programs at community locations around O'ahu. The initiative focused

on recruiting and enrolling high-need, low-income, under-insured individuals with diabetes. 79 under-insured individuals were enrolled at locations in Wahiawa, Kalihi, Kaneohe, and Nuuanu, with 80% completing the program.

Strategy 2.2: Prevent diabetes by reducing obesity and promoting healthy lifestyles.

- ***Child and Adolescent Weight Management:*** Healthy Weight and Your Child is an intensive, family-based program to combat childhood obesity, a leading cause of diabetes, based on best practices identified by the CDC. The YMCA of Honolulu and Pali Momi, together with the other Hawai'i Pacific Health facilities, partnered to provide the program in communities around O'ahu. Eleven cohorts were conducted over the past three years, enrolling 366 participants (168 enrolled youth, and 198 family members). Upon completion of the program, 74% of enrolled youth maintained or lowered their BMI, and 100% of families reported initiating lifestyle changes.
- ***Diabetes Screening:*** Pali Momi partnered with Pearlridge Center (the community's largest shopping mall) to provide free bi-monthly blood pressure and diabetes screenings to the general public. Individuals at risk for disease were given educational materials and recommendations to improve their health. Over the past three years, 2,039 individuals were screened.
- ***Kids Fest:*** This annual health fair for children and families offers hands-on activities, such as a Teddy Bear Clinic, Keiki Zumba, Balloon Olympics, Wheel of Nutrition and Fire Safety House, to teach participants about child health, nutrition and injury prevention. This popular event, held at the Bishop Museum, was attended by more than 5,000 children and adults in each of the past three years. Kids Fest is a collaboration of Hawai'i Pacific Health's four medical centers.
- ***School-Based Fitness Programs:*** Pali Momi supported DOE Fitness Days attended by students from 64 public elementary schools in Central, West, and Windward O'ahu. The objectives of the events were to promote health and wellness among students, align fitness and performance goals to national standards, and increase student participation in fitness activities. Pali Momi provided education on healthy eating and how to live a healthy, active lifestyle. A total of 8,672 students participated over the past three years.

Pali Momi Medical Center did not receive any written feedback from the community regarding its 2016 Community Health Needs Assessment and 2017-2019 Implementation Strategy.

CONCLUSION

My family used to go camping at the beach every year from when I was young. We would camp on the beach basically from June to August every year. My family was poor but we were rich because we had love. When we went camping, we had to utilize the natural resources. We knew how to live out of coolers. My family started to die off and we got older but we tried to keep the camping tradition going. Because of that experience living on the beach, I feel like we can handle dealing with hurricanes and their aftermath. When the other hurricanes came in the past, we were all together and we took care of each other. We never had the connection to phones, internet—being able to constantly keep up with the news and what everyone else is doing—that stuff can make you crazy. Sometimes being too educated can trip you out.

- Wai'anae resident

Each person’s story of health reminds us of the important things in life.

Each person’s story of health matters. It matters to the individual, it matters to loved ones, and it matters to the entire community.

Each person’s story of health tells us that living a healthy life is more than just being free of disease. It is more than just maximizing the number of years one gets to live. And so, getting healthy is more than just the treatment of disease or the adoption of healthy behaviors.

Each person’s story of health weaves into other people’s stories of health, forming a tapestry of shared experiences of people just trying to survive or trying to deal with fear or despair or shame or stress or discrimination or all of those things; of people in need of love and connection; of people breathing air and drinking water and eating food from these islands; of people trying to figure out the complexities of their health and seeking the help that they need. This shared experience tells us that we are more alike than statistics or stereotypes might make us think.

Each person’s story of health reminds us of the obvious fact that health—although a private relationship between individuals and their healers—is not just determined by those two. No one patient, no matter how compliant, and no one doctor, no matter how high quality, can achieve health in the community. The ingredients of good health come from every corner of society.

Therefore, each person’s story of health enlists more people into the health conversation—farmers, caregivers, emergency responders, judges, store managers, chefs, bankers, environmentalists, bus drivers, architects, cultural practitioners, teenagers, grandparents. It draws more and more people in until everyone is together in a single health ecosystem that determines the health of people and whether it accrues to all or just for those with enough advantages. It calls upon each of us to listen to one another and share kuleana for the health of our people and place.

ACKNOWLEDGMENTS

This assessment of community health in Hawai‘i is the product of many hands and hearts. Islander Institute wishes to acknowledge and thank the following community members who shared their time, perspectives, care, stories, and support throughout the year:

The Healthcare Association of Hawai‘i and its Associate Vice President of Post-Acute Care & Operations, Andrew Garrett, for their diligent management of this process and for their sincere commitment to lifting up community voices.

The nineteen HAH member facilities, including their lead contacts, leadership teams, and staff members who collectively invested in this CHNA and participated in the process.

Bob Agres, Punahale Alcon, Joy Barua, Janet Berreman, Andrew Garrett, Carol Ignacio, Karey Kapoi, Lorraine Lunow-Luke, Jon Matsuoka, May Okihiro, Judy Mohr Peterson, Mike Robinson, Tracie Ann Tjapkes, JoAnn Tsark, Sharlene Tsuda, and Chris Van Bergeijk who, as members of the CHNA steering committee, offered valuable guidance, supported community engagement efforts, and engaged in critical dialogue that had profound impacts on this final document.

The Hawai'i Public Health Institute, including Fadi Youkhana and Maggie Morris, who helped with data collection and analysis, and Executive Director Jessica Yamauchi and her staff for their support.

Special mahalo to Marisa Castuera Hayase, Kilikina Mahi, and Lily Bloom Domingo, the Hawai'i-based consultants who conducted interviews for the 2013 and 2015 CHNAs and who generously shared their notes and wisdom; to Dr. Lee Buenconsejo-Lum and her colleagues at the John A. Burns School of Medicine for going above and beyond by arranging numerous conversations with interns, residents and faculty in many of the school's programs; and to Lorraine Lunow-Luke of Hawai'i Pacific Health for sharing her extensive knowledge of the CHNA requirements and helping ensure this document meets the needs of Hawai'i's hospitals.

Mahalo to the many key informants who took the time to share their valuable wisdom and expertise by phone or in person throughout the islands, and without whom this assessment could not be complete.

Finally, Islander Institute extends a sincere mahalo nui to everyone who participated in the community convenings. To the organizations and individuals who put their trust in us, reached out to their communities, and created safe, welcoming, comfortable, nourishing spaces for meaningful talk story, this CHNA would literally not be possible without your kōkua. And to every community member who shared their truth so that we can all live in a healthier Hawai'i, we are humbled by your generosity and humanity.



APPENDICES

APPENDIX A – SHARED KULEANA STRATEGIES

The health of Hawai‘i’s people is the responsibility of all. It is a shared kuleana. The following initiatives are some of the promising efforts moving in the three strategic directions. Hospitals and others in the health ecosystem can look to these examples and work with communities to develop their priorities and partnerships.

1. FOUNDATIONAL HEALTH

GOAL: Provide the basic foundations so that people can have more agency over their own health

Accountable Health Communities Model, The Centers for Medicare & Medicaid Services (CMS). The AHC Model identifies and addresses the health-related basic needs of Medicare and Medicaid beneficiaries—such as food insecurity and inadequate or unstable housing—through screening, referral, and community navigation services. It tests whether addressing these needs will impact health care costs and reduce their use of health care. The AHC model is being piloted in a partnership between UnitedHealth, Queen’s Medical Center, Kalihi-Pālana Health Center, and Wai‘anae Coast Comprehensive Health Center. (<https://innovation.cms.gov/initiatives/ahcm>)

‘Āina Pono: Farm to School Program, Hawai‘i State Department of Education (HIDOE). This program is increasing local food in student meals as well as connecting keiki with the ‘āina through their food, using produce from local farms. HIDOE has established partnerships that include the Office of the Lieutenant Governor, the Hawai‘i Department of Agriculture (HDOA), the Hawai‘i State Department of Health (DOH), The Kohala Center, Kōkua Hawai‘i Foundation, Ulupono Initiative, the Hawai‘i Farm to School Hui, Dorrance Family Foundation, Hawai‘i Appleseed, Johnson ‘Ohana Charitable Foundation, Kaiser Permanente, the Hawai‘i Farm Bureau Federation (HFBF) and HMSA.

ALEA Bridge. Based in Wahiawā, ALEA Bridge works with at-risk individuals, families, youths, and veterans including people who are houseless through a personal, respectful, collaborative and grassroots approach. They help with finding employment and housing; managing finances; and placing people into substance abuse and behavioral health program. They often partner with Wahiawā General Hospital. (<http://www.aleabridge.org>)

ALICE. Aloha United Way recently released a report, ALICE: A STUDY OF FINANCIAL HARDSHIP IN HAWAI‘I. ALICE (Asset Limited, Income Constrained, Employed) individuals and families are those who have at least one job yet cannot afford housing, child care, food, transportation and health care. Nearly one in two households in Hawai‘i are ALICE and below. Since release its report, AUW has focused on supporting the ALICE community on strengthening their financial health. AUW embraces the reality that sustainable social change must involve cross-sector coordination, long-term commitment, and investment in deeper relationships with strategic partners. (<https://www.auw.org/alice>)

Double Up Food Bucks. This program helps low-income people who are on SNAP or food stamp benefits buy more healthy fruits and vegetables at participating markets and grocery stores. As its name suggests, the program doubles the value of benefits that enables people to eat local produce and support local farmers. Many organizations are offering this program throughout Hawai‘i, including The Food Basket (Hawai‘i Island’s Food Bank), Sust‘āinable Moloka‘i, Mālama Kaua‘i, Mālama Learning Center’s Mākeke Kapolei market, Wai‘anae Coast

Comprehensive Health Center's Mākeke Wai'anae, Kōkua Kalihi Valley, and others. (<http://www.doubleupfoodbucks.org>)

Farm to School Hui. Under the Hawai'i Public Health Institute, this hui aims to strengthen the farm-to-school movement in Hawai'i. It does this by support networks on five islands by sharing resources, capacity building, professional development, and advocacy. It works with community organizations, and representatives of the Hawai'i departments of agriculture, education, health, and the University of Hawai'i. (<https://www.hiphi.org/farmtoschool>)

Hawai'i Budget & Policy Center (HBPC). A program of Hawai'i Appleseed, HBPC works on state and local economic policies to increase opportunity for all residents by analyzing and understanding the implications of tax and budget decisions and educating public and policy-makers. The HBPC's advisory board includes representatives from Kaiser Hospital, Federally Qualified Health Centers, the University of Hawai'i System, and community-based organizations. (<https://hibudget.org> and <https://hiappleseed.org>)

Hawai'i County Fire Department Paramedicine Program. The Hawai'i Fire Department has been focusing on advocating for vulnerable populations that have become disconnected from health care for any of a variety of reasons. These groups could include the elderly, the medically fragile, the houseless, high utilizers of the EMS system, and those at high risk of falling. This program tries to identify these individuals, assess their situation and work as their advocates to find solutions that will improve their overall health and wellness. (<http://www.hawaiicounty.gov/fire>)

Hawai'i Housing Coalition. The Federal Reserve Bank of San Francisco has been convening a group of Hawai'i stakeholders to develop a vision and strategy for establishing a multi-sector, community-driven coalition that promotes affordable housing for low-income residents of Hawai'i. (<https://www.frbsf.org>)

Hawaiian Community Assets. HCA helps low- and moderate-income communities, particularly Native Hawaiians, become more self-sufficient in their housing and finances. They provide workshops in housing and financial education, counseling for individuals, and access to asset building services—all of which are grounding in Native Hawaiian culture. HCA has been playing a critical role in assisting with relief and recovery efforts in the aftermath of the 2018 natural disasters on Hawai'i Island and Kaua'i—providing housing counseling, financial coaching, emergency financial planning, and access to grants and loans for assistance. (<http://www.hawaiiancommunity.net>)

Kahauiki Village. This housing community will provide long term, permanent, affordable housing for approximately 153 currently houseless families with children on O'ahu. Kahauiki Village is a community of approximately 144 one- and two-bedroom homes being built on 11.3 acres of land located between Nimitz Highway, Keehi Lagoon Park, and Sand Island. When completed, Kahauiki Village is expected to house over 600 adults and children. This project, led by the State of Hawai'i, City and County of Honolulu, and aio Foundation, has another goal to provide employment opportunities within walking distance for houseless parents. (<http://www.kahauiki.org>)

Keiki Produce Prescription. The Mākeke Wai'anae Farmacy Keiki Produce Prescription Pilot Project provides children and their families with produce prescriptions, redeemable for locally grown produce at Mākeke Wai'anae (farmers market). Each "prescription" is good for three \$24 refills to be distributed to patients monthly when they visit the Wai'anae Farmers Market. The objective of the project is to increase access to healthy, locally grown food, improve diet quality and reduce the burden of childhood obesity and risk for future chronic disease.

Kōkua Life, Suicide Prevention App for Hawai‘i. Kōkua Life is a suicide prevention app that provides users with Hawai‘i resources and tools related to suicide prevention. It is designed for use by both healthcare or other professionals and the general public to find help for oneself or others. It includes a resource directory for mental health and social service providers on each island. Kōkua Life was created by Mental Health America of Hawai‘i with funding from the State of Hawai‘i Department of Health. (<https://kokualife.org>)

Medical-Legal Partnership for Children in Hawai‘i. MPLC provides legal services to low-income clients in a community health setting. These populations may not know they have a legal issue or know how to get help, and health centers are spaces more familiar than legal service offices. MPLC is a partnership between the William S. Richardson School of Law (University of Hawai‘i at Mānoa), Kōkua Kalihi Valley Comprehensive Family Services, and Waikiki Health Center. (<http://www.mlpchawaii.org>)

PILI ‘Ohana Partnership (POP). POP addresses obesity in Hawai‘i and the larger Pacific. It integrates community wisdom with scientific methods to conduct research in Native Hawaiian and Pacific Peoples (including Filipinos, Chuukese, and other Pacific Islanders). The partnership includes Hawai‘i Maoli of the Association of Hawaiian Civic Clubs; Kula no nā Po‘e Hawai‘i of the Papakōlea, Kewalo, and Kalāwahine Hawaiian Homestead communities; Ke Ola Mamo; Kōkua Kalihi Valley; the Pacific Chronic Disease Coalition; the Department of Native Hawaiian Health at the University of Hawai‘i at Mānoa; and the Office of Hawaiian Affairs. (<http://www2.jabsom.hawaii.edu/pili/about.html>)

Project Hiehie Mobile Hygiene Services. This mobile unit, named after “the Hawaiian way to express an inalienable sense of dignity,” provides access to bathing and hygiene services to houseless individuals—to reduce infections and disease, improve feeling of self-worth, and allow houseless individuals to connect with social and community services without having to “walk through an office door.” (<http://hiehie.org>)

Roots Mobile Market, Kōkua Kalihi Valley. The Mobile Market is a mobile produce service, bringing local farmers’ products right to local businesses, agencies, or community sites. The Mobile Market began as a way to distribute produce to KKV employees who couldn’t make it to the market during their work day. (<https://www.rootskalih.com>)

The Sundays Project of the Parents and Children Together Family Center at Kūhiō Park Terrace. This program aims to reduce the high rates of absenteeism in public schools among children from The Federated States of Micronesia, the Marshall Island, Palau, and others who are new to Hawai‘i. It provides learning opportunities grounded in culture for families. (<https://pacthawaii.org>)

Transition to Success (TTS). Transition to Success, which began in Detroit in 2006, coordinates care across healthcare, human services, government, faith-based organizations and education to work on social determinants affecting low-income families. This includes racism, low-paying jobs, and lack of food, healthcare, transportation, affordable housing, reliable, stable child care and education. TTS is being piloted in Hawai‘i by Child & Family Service through its Family Centers on Maui, Moloka‘i, and Kaua‘i, with hopes to expand statewide. (<http://transitiontosuccess.org>) (<https://www.childandfamilyservice.org>)

Waipahu Safe Haven Immigrant Resource Center. In 2015, Safe Haven began as a computer access center for youth and adults in Waipahu, and a site to help train and develop women’s sewing skills so that they would be able to use their skills for their families and as a source of income. The center’s mission expanded to include a focus on improving the success of the community and helping individuals and families out of poverty. Currently, the center provides

services to a variety of migrant and immigrant populations, including Samoan and Filipino, and the majority are Marshallese and Chuukese families. (<https://www.waipahusafehaven.com>)

2. HEALTHY COMMUNITY

GOAL: Preserve, nurture, expand, and employ the healing properties of community

Blue Zones Project. Dan Buettner's book, *The Blue Zones: Lessons for Living Longer from the People Who've Lived the Longest*, evolved into a worldwide network of "community-wide well-being improvement initiatives" intended to help people live longer, healthier, and happier lives. The Hawai'i Medical Service Association (HMSA) brought the Blue Zones Project to Hawai'i, with program staff implementing various activities in communities throughout the state. For example, in September 2018, Blue Zones held a Big Island Food Policy Summit in Hilo that convened close to 100 stakeholders from agriculture, the food industry, health, education, local government, and various parts of the community to build a common agenda for Hawai'i Island's food self-reliance and work toward creating a healthy food system for Hawai'i Island. (<https://hawaii.bluezonesproject.com>)

The Bodacious Women of Pāhoa, Nānāwale, Hawai'i. What began as a small group of friends getting together to socialize grew to volunteers helping with a monthly food pantry. In the summer of 2014, when Hurricane Iselle hit Hawai'i Island, isolating many communities from assistance, the group began to aggregate and distribute hundreds of bags of groceries to households that needed food. Following that experience, Bodacious stationed shipping containers stocked with food in several Puna communities to prepare for future disasters. (<https://www.punalavaflow2018.com/bodacious>)

Chief Community Health Officer. At a systemwide level, Kaiser Permanente established a position of Chief Community Health Officer, reporting directly to the Chief Executive Officer, reflecting an effort to move beyond the minimum compliance of "community benefit" and elevating the centrality of place in building health and well-being. (<https://share.kaiserpermanente.org/article/kaiser-permanente-names-bechara-choucair-md-ms-as-first-chief-community-health-officer>)

Community First, Hilo, Hawai'i. Community First is a non-profit organization established in 2014 in East Hawai'i to change the the definition of healthcare to caring for health and not just treating disease. Community First formed a Regional Health Improvement Collaborative (RHIC), which aims to fundamentally reform healthcare payment. (<https://www.communityfirsthawaii.org>)

Community Meal, St. James' Church, Waimea, Hawai'i Island. The Community Meal is a weekly Thursday evening dinner hosted by St. James' Church in Kamuela, which began as a meal for the "homeless, working poor, lonely and downright hungry in our community." It has grown to a popular and diverse community event for everyone. Local farmers and ranchers contribute food to the meal; volunteers cook, bake and serve; and leftovers are delivered to senior homes, houseless shelters, and to the homes of families who need food. Many cite the weekly event as a source of community pride, bringing people together to build relationships and help each other. (<http://stjameshawaii.org/community-meal>)

Community "Poi Day," Waipā Foundation. This community gathering happens every Thursday at 5 am when community volunteers gather to process cooked kalo into poi and lunch is served when the job is done. Poi Day was started about 30 years ago by the Hawaiian families along Kaua'i's north shore to keep poi available and affordable. Today, Waipā distributes poi to kūpuna and 'ohana throughout the island. (http://waipafoundation.org/community_poi)

Epigenetics Study in Waiʻanae. The University of Hawaiʻi at Mānoa and MAʻO Organic Farms is researching community health impact of ʻāina or land-based programs in Waiʻanae. The study hopes to identify how a community program such as MAʻO's community-based program focused on restoring our connection to ʻāina can actually impact the health of individuals, especially in the reduction of obesity and other cardio-metabolic disorders. The study is sponsored by the HMSA Foundation and Kamehameha Schools. (<http://mauliolanetwork.com>)

Hāna Ola Project. Hāna Ola aims to reduce the burden of obesity and other cardiovascular disease risk factors among Native Hawaiians. The project utilizes community practices of loʻi restoration, organic agriculture, kūpuna assisted living, and kuʻi (the cultural practice of pounding kalo or taro into paʻi ʻai and poi). It is a partnership between Ma Ka Hana Ka ʻIke and Queen's Medical Center. (<https://hanabuild.org>)

Healthy Mothers Healthy Babies Coalition of Hawaiʻi. This local nonprofit, with offices in Chinatown, Honolulu, is part of a national network of organizations and individuals committed to improving Hawaiʻi's maternal, child and family health. Their program includes creating support groups and community spaces for mothers and children to connect. (<https://www.hmhb-hawaii.org>)

Keiki to Career Kauaʻi. Launched in 2012, Keiki to Career Kauaʻi is a network of partners in education, health, human service and youth programs, families, and businesses working together to ensure Kauaʻi's young people are "ready to learn and ready for life." The goal of Keiki to Career is for every young person to be ready for each key transition point in their life—entry to kindergarten, middle school, high school, and college or work. (<http://keikitocareer.org>)

KEY Project Kūpuna Program. The Kūpuna Program promotes socialization, culture, exercise and access to healthy foods. On Wednesdays and Fridays, up to 100 senior citizens fill into the KEY Project campus to have fellowship and a freshly prepared meal. The program involves many other activities, like ukulele and art classes, field trips, and guest speakers. (<https://keyproject.org/index.php/senior-citizens-kupuna>)

Kōkua Kalihi Valley Elder Services. KKV's Elder Care Programs provide Kalihi seniors from all cultural backgrounds with holistic care. At KKV's Elder Center and at the nearby public housing community of Kūhiō Park, elderly clients gain daily opportunities for social engagement, physical activity health education, and primary health care. (<http://kkv.net/index.php/elder-care>)

Lānaʻi mural project. A partnership between Lānaʻi Culture & Heritage Center, Lānaʻi High & Elementary School, and local artist collective 808 Urban created a large-scale mural at Lānaʻi High & Elementary School depicting scenes from Lānaʻi's history—creation, settlement, native lore, historic era, plantation, and ongoing practices. The creation of the mural included artists and students visiting some of Lānaʻi's storied places and conducting interviews with elder residents to develop the themes for the mural. The mural has become a source of community pride. (<https://www.lanaichc.org/mural-project.html>)

Kailua Homeless Aid. On the fourth Tuesday of each month, the Windward branch of the YMCA of Honolulu and neighboring Daybreak Church provide support for houseless people in Kailua. Supported by Alexander & Baldwin and the Harold K.L. Castle Foundation, partner agencies include AlohaCare, Waimānalo Health Center, Veteran Services, Residential Youth Services Empowerment, Catholic Charities, Legal Aid, Institute for Human Services, Child and Family Services, Hiehie Mobile Hygiene, and Community Outreach Court. (<https://www.daybreakhawaii.church> and <https://www.ymcahonolulu.org/locations/windward>)

Maui Economic Opportunity (MEO). A nonprofit Community Action Agency committed helping low income individuals and families become stable and achieve economic security, MEO provides many important programs. This report focuses on its transportation services. On Maui and Moloka'i, van drivers transport their participants to doctor's offices. The services, funded largely via County of Maui grant appropriation, include transport for services such as Ala Hou, Easter Seals & Adult Day Care, Employment for the Disabled, Dialysis, Low-income and Economically Challenged, Kaunoa Leisure Program, Ka Lima O Maui Program, Rural Shuttle, Senior Nutrition Program, Youth and Community, HeadStart Program, Hospice of Maui, Independent charter, Maui Memorial Medical Center, and Medicaid. (<http://www.meoinc.org>)

Moloka'i Child Abuse Prevention Pathways (MCAPP). Launched in 2013 by the Consuelo Foundation as an exploratory pilot program, MCAPP addresses childhood sexual violence on Moloka'i through primary prevention education. The program partners with schools to educate children in a culturally responsive way on how to address and prevent this devastating problem. (<https://www.molokaicapp.org>)

PATH (Peoples Advocacy for Trails Hawai'i). This advocacy organization aims to safely connect people and places on Hawai'i Island with pathways and bikeways. (<https://pathhawaii.org/about-path>)

School-Based Health Centers. Wai'anāe Coast Comprehensive Health Center manages three School-Based Health Centers located at Wai'anāe High, Wai'anāe Intermediate, and Nānākuli High & Intermediate Schools so that students are able to receive primary care and behavioral health services at school. The Health Centers offer a full range of health services, from sick visits to sports physicals, keeping students healthy and focused on their studies. (<http://www.wcchc.com/SBHC>)

Sustainable Transportation Coalition of Hawai'i. This network of organizations and individuals aims to reduce the use of cars. The work of the coalition has direct health implications, whether related to active modes of transportation such as bicycling and walking, or reducing the stress and time of commutes with car sharing, carpooling, and public transportation. (<http://www.stchawaii.org>)

Walking School Bus. The Walking School Bus is a program in which children walk to school as a group, led by parents or another adult. Students are picked up in front of their home or at a designated stop. Children and their parents can choose when they participate. The goal of the "walking school bus" is to increase children's rates of active commuting to school and physical activity. Communities throughout Hawai'i, including Kaua'i and Hawai'i Island, have experimented with the Walking School Bus program. (<http://www.walkingschoolbus.org>)

3. HUMAN CONNECTION TO HEALTHCARE

GOAL: Improve the relationship between people and the healthcare system

The Baldrige Award. This program, established by Congress in 1987 and administered by the National Institute of Standards and Technology within the U.S. Department of Commerce, recognizes U.S. organizations and businesses that demonstrate "an unceasing drive for radical innovation, thoughtful leadership, and administrative improvement." Adventist Health Castle won the Malcolm Baldrige National Quality Award in 2017, becoming the first recipient of the Baldrige Award in Hawai'i. Castle was recognized for its "demonstrated continuous improvement practices for delivering health care services, exhibited efficient and effective operations, and revealed systematic methods for engaging and responding to patients and other stakeholders." (<https://www.nist.gov/baldrige>)

Basic Adult Dental Care for Medicaid Members in Hawai'i. AlohaCare and 'Ohana Health Plan will offer basic adult dental care coverage beginning January 1, 2019. Since 2009, dental care coverage for adults enrolled in the state's Medicaid program has been limited to emergency care. (<https://www.wellcare.com/Hawai'i> and <https://www.alohacare.org>)

Cardiac Rehab Lab. At the Cardiac Rehab Lab at Wilcox Medical Center, patients receive customized treatment plans that focus on their own conditions and limitations. The Cardiac Rehab Lab utilizes exercise treadmills, bikes, cross-trainers and free weights. The program was launched in 2012 in response to a lack of rehab options for residents of Kaua'i following cardiac interventions. (<https://www.hawaiipacifichealth.org/wilcox/services/heart-health>)

Care for houseless discharged from hospital facilities. OHANA (O'ahu Health Access and Network Association) project provides case management and short-term residential care that allows houseless individuals discharged from Queen's Medical Center and Adventist Health Castle the opportunity to rest in a safe environment while accessing medical care. Tūtū Bert's Homes, an 8-bed private medical respite, offer medically frail houseless individuals who are no longer in need of in-patient hospitalization, but still too frail to recuperate on the streets. The house facilitates short-term stabilization and supportive case management that accelerates their transition out of houselessness, and into available housing options. (<http://www.kphc.org/patient/healthcare-homeless>)

Community Health Workers. A Community Health Worker (CHW) is a trusted member of the community and a valuable member of a healthcare or social services team. They serve as a bridge, helping to improve access to services and ensure services are culturally appropriate. Maui College and Kapiolani Community College offer Certificate programs for CHWs, and Hawai'i Public Health Institute is helping to develop and facilitate a statewide network of CHWs. (<http://maui.hawaii.edu/communityhealth> and <https://www.kapiolani.hawaii.edu/academics/programs-of-study/community-health-worker>)

Hui Pono, the Ornish Lifestyle Medicine at Hilo Medical Center. The Intensive Cardiac Rehabilitation program helps participants adopt and sustain lifestyle changes in what they eat; how active they are; how they respond to stress; and how much love and support they have in their lives. The result is a decrease in their reliance on medication, avoidance of future surgeries, and most importantly, a control of their health. (<https://www.hilomedicalcenter.org/the-ornish-lifestyle-medicine.html>)

Kukui Ahi Patient Navigation Program. Molokai General Hospital's Patient Navigation Program, Kukui Ahi, helps patients, families and their caregivers navigate the healthcare system. They assist with coordination of air and ground transportation and lodging for patients requiring services and treatment on the neighbor islands. Patient navigation services are tailored to the individual patient's needs and provides culturally sensitive care. They work closely with community organizations such as Moloka'i Cancer Fund, Cancer Care, Pacific Cancer Foundation, Senior Aging Services, and American Cancer Society. (<https://www.queens.org/molokai/patients-and-visitors/patient-tools-resources/patient-navigation-mgh>)

Milestones Hawai'i. Milestones was founded in 2018 by a team of physicians and therapists who saw an opportunity and unmet need for a unified effort to improve care for children with neurodevelopmental and behavioral conditions in Hawai'i. Milestones provides medical assessments and treatments for children with disabilities; interisland and rural care with clinics, medical centers, and community providers; child-centered and family-focused therapy for children on the autism spectrum; and comprehensive care for children ages 0-5 with behavioral conditions. (<https://www.milestoneshawaii.org>)

The Native Hawaiian Traditional Healing Center, Wai‘anae Coast Comprehensive Health Center. The center promotes traditional Native Hawaiian healing and cultural education, practices, and traditions. The primary practices include lomilomi, lā‘au lapa‘au, lā‘au kāhea (spiritual healing), and ho‘oponopono (conflict resolution). (<http://www.wcchc.com/Healing>)

PRAPARE. The Protocol for Responding to and Assessing Patients’ Assets, Risks, and Experiences (PRAPARE) is a national effort to help health centers and other providers collect the data needed to better understand and act on their patients’ social determinants of health. Health centers and other providers can define and document the increased complexity of their patients, transform care with integrated services and community partnerships, advocate for change in their communities, and demonstrate the value they bring to patients, communities, and payers. PRAPARE is being used by facilities in Hawai‘i, including West Hawai‘i Community Health Center and Wai‘anae Coast Comprehensive Health Center. (<http://www.nachc.org/research-and-data/prapare>)

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). This treatment for children and adolescents impacted by trauma and their parents or caregivers successfully removes a broad array of emotional and behavioral difficulties associated with trauma. There are 30 providers being trained in TF-CBT on Kaua‘i, including organizations such as the YWCA of Kaua‘i. (<https://tfcbt.org>)

Walk with a Doc. Started in 2005 by a cardiologist in Columbus, Ohio who began inviting his patients to go for a walk with him in a local park, Walk with a Doc has grown as a grassroots effort. In association with North Hawai‘i Community Hospital, it is a simple model that involves a doctor giving a brief presentation on a health topic and then leading participants on a walk at their own pace. (<https://walkwithadoc.org>)

APPENDIX B – EXISTING HEALTHCARE FACILITIES

This CHNA calls for a healthcare ecosystem approach to community health that includes *all* community entities, too numerous to list in this document. Among those are healthcare facilities that serve the public. HAH member hospitals are specifically required by the IRS to describe “existing health care facilities and resources within the community that are available to respond to the health needs in the community.” Health care facilities in Hawaii registered with the federal Health Resources and Services Administration (<https://findahealthcenter.hrsa.gov>), U.S. Department of Veterans Affairs (<https://www.va.gov/find-locations>), and Hawai‘i State Office of Health Care Assurance (<http://health.hawaii.gov/ohca>) are listed, by island, below.

HAWAI‘I ISLAND	
Health Centers	
Bay Clinic, Inc.	https://www.bayclinic.org/
Hāmākua Health Center	http://www.hamakua-health.org/
Hui Mālama Ola Nā ‘Ōiwi	https://hmono.org/
West Hawai‘i Community Health Center	https://www.westhawaiiichc.org/
Rural Health Clinics	
Kīpuka o ke Ola	https://www.kipukaokeola.com/
Ka‘ū Hospital Rural Health Clinic	https://www.kauhospital.org/rural-health-clinic.html
Medical/Surgical/Critical Care/Obstetric	
Hilo Medical Center	https://www.hilomedicalcenter.org/
Kona Community Hospital	https://kch.hhsc.org/
North Hawaii Community Hospital	https://www.queens.org/north-hawaii/north-hawaii-community-hospital
Acute Care, Skilled Nursing Facility (SNF), and Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF)	
Hale Ho‘ola Hāmākua	https://www.halehoolahamakua.org/
Ka‘ū Hospital	https://www.kauhospital.org/
Kohala Hospital	https://kohala.hhsc.org/
Skilled Nursing Facility (SNF) and Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF)	
Hale ‘Ānue Restorative Care Center	http://haleanuenuecarecenter.com/
Hilo Medical Center	https://www.hilomedicalcenter.org/
Life Care Center of Hilo	http://lifecarecenterofhilo.com/
Life Care Center of Kona	http://lifecarecenterofkona.com/
VA Facilities	
VA Hilo Community Based Outpatient Clinic	https://www.hawaii.va.gov/locations/Hilo_Hawaii.asp

VA Kona Community Based Outpatient Clinic	https://www.hawaii.va.gov/locations/Kailua_Kona_Hawaii.asp
Psychiatric	
Hilo Medical Center	https://www.hilomedicalcenter.org/
Kona Community Hospital	https://kch.hhsc.org/
Ambulatory Surgery Centers	
Big Island Endoscopy Center, LLC	http://www.bigislandgastro.com/
Hilo Community Surgery Center	http://www.hiloeye.com/hilo-community-surgery-center.html
Kona Ambulatory Surgery Center, LLC.	http://www.konasurgerycenter.com/
The Endoscopy Center	http://www.hawaiiigastro.com/treatment/endoscopy-center
End Stage Renal Disease Programs	
Liberty Dialysis – Hawaii LLC – Hilo Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/hilo/
Liberty Dialysis – Hawaii LLC – Kona Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/kailua-kona/
Liberty Dialysis – North Hawai‘i LLC	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/kamuela/
Home Health Care	
Bayada Home Health Care — Hilo	https://www.bayada.com/offices/hi/hilo/68-kekuaaoa-st/home-health
Careresource Hawai‘i — Hilo	http://www.careresourcehawaii.org/
Careresource Hawai‘i — Kona	http://www.careresourcehawaii.org/
Hilo Medical Center Home Care	https://www.hilomedicalcenter.org/long-term-care.html
Kohala Home Health Care	https://www.queens.org/north-hawaii/services/kohala-home-health-care/kohala-home-health-care-nhch
Kokua Nurses, Inc. Home Health Services, Inc.	http://kokuanurses.com/
Hospice	
Hawai‘i Care Choices formerly Hospice of Hilo	https://www.hawaiicarechoices.org/
Hospice of Kona	https://hospiceofkona.org/
North Hawai‘i Hospice, Inc.	https://northhawaiihospice.org/
Special Treatment Facility	
C.A.R.E. Cottage - Hilo	
Care Hawai‘i Licensed Crisis Residential Services	https://www.carehawaii.info/programs/crisis-services/
Hawai‘i Island Recovery	https://hawaiianrecovery.com/
The Exclusive Addiction Treatment Center	https://theexclusivehawaii.com/

MAUI	
Health Centers	
Hāna Health	http://hanahealth.org/
Hui No Ke Ola Pono	http://hmkop.org/
Mālama I Ke Ola Health Center	http://ccmaui.org/
Rural Health Clinics	
Kīhei Clinic	https://healthy.kaiserpermanente.org/hawaii/facilities/kaiser-permanente-kihei-clinic-100440
Lahaina Clinic	https://healthy.kaiserpermanente.org/hawaii/facilities/Kaiser-Permanente-Lahaina-Clinic-100437
Medical/Surgical/Critical Care/Obstetric	
Maui Memorial Medical Center	https://www.mauihealthsystem.org/
Acute Care, Skilled Nursing Facility (SNF), and Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF)	
Kula Hospital	https://www.mauihealthsystem.org/kula-hospital/
Skilled Nursing Facility (SNF) and Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF)	
Hale Makua -- Kahului	https://www.halemakua.org/
Hale Makua -- Wailuku	https://www.halemakua.org/
Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF)	
The Arc Of Maui (Hale Kanaloa)	http://www.arcofmaui.org/
The Arc Of Maui (Hale Kīhei)	http://www.arcofmaui.org/
The Arc Of Maui (Mana Ola Na Keanuenue)	http://www.arcofmaui.org/
VA Facilities	
VA Maui Community Based Outpatient Clinic	https://www.hawaii.va.gov/locations/Maui.asp
Psychiatric	
Maui Memorial Medical Center	https://www.mauihealthsystem.org/
Ambulatory Surgery Centers	
Aloha Eye Clinic Surgical Center, LLC	https://alohaeyeclinic.com/
Aloha Surgery Center	https://alohasurgicalcenter.com/
Kaiser Wailuku Clinic Asc	https://healthy.kaiserpermanente.org/hawaii/facilities/Kaiser-Permanente-Wailuku-Medical-Office-100431

End Stage Renal Disease Programs	
Liberty Dialysis – Hawai‘i LLC – Kahana Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/lahaina/4405-honoapiilani-hwy-96761/7385
Liberty Dialysis – Maui Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/wailuku/105-mauiilani-pkwy-96793/7375
Rainbow Dialysis Lahaina	https://www.mauihealthsystem.org/
Rainbow Dialysis Wailuku	https://www.mauihealthsystem.org/
Home Health Care	
Bayada Home Health Care — Wailuku	https://www.bayada.com/offices/hi/wailuku/2200-main-street-suite-660/home-health
Careresource Hawaii — Kahului	http://www.careresourcehawaii.org/
Hale Makua Home Health Care Agency — Wailuku	https://www.halemakua.org/home-health
Home Health by Hale Makua	https://www.halemakua.org/home-health
Kaiser Permanente Home Health Agency—Maui	https://kpinhawaii.org/
Hospice	
Hospice Maui, Inc.	https://www.hospicemaui.org/
Special Treatment Facility	
Ai Pono Maui	https://www.aipono.com/
Aloha House, Inc	http://www.aloha-house.org/
Nova Luna, Inc.	https://www.novalunacenter.com/
MOLOKA‘I	
Health Centers	
Moloka‘i Community Health Center	http://molokaichc.org/
Na Pu‘uwai	https://www.napuuwai.org/
Rural Health Clinics	
Molokai General Hospital Rural Health Clinic	https://www.queens.org/molokai/molokai-general-hospital
Obstetric, Acute Care, Skilled Nursing Facility (SNF)	
Molokai General Hospital	https://www.queens.org/molokai/molokai-general-hospital
VA Facilities	
VA Molokai Outreach Clinic	https://www.hawaii.va.gov/locations/molokai.asp
Hansen's Disease	

Kalaupapa Care Home	https://www.nps.gov/kala/index.htm
End Stage Renal Disease Programs	
Liberty Dialysis – Hawai‘i LLC – Molokai Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/kaunakakai/28-kamoi-street-96748/7382
Home Health Care	
Careresource Hawai‘i — Molokai	http://www.careresourcehawaii.org/
Hospice	
Hospice Hawai‘i – Molokai	https://www.hospicehawaii.org/
LĀNA‘I	
Health Centers	
Lāna‘i Community Health Center	https://lanaihealth.org/
Ke Ola Hou o Lāna‘i Na Pu‘uwai	https://www.napuuwai.org/
Medical/Surgical, Skilled Nursing Facility (SNF) and Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF)	
Lāna‘i Community Hospital	https://www.mauihealthsystem.org/lanai-hospital/
VA Facilities	
VA Lāna‘i Outreach Clinic	https://www.hawaii.va.gov/locations/lanai.asp
End Stage Renal Disease Programs	
Fresenius Medical Care – Lāna‘i	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/lanai-city/628-7th-st-96763/2809
Hospice	
Hospice Hawai‘i — Lāna‘i	https://www.hospicehawaii.org/our-services/care-settings/lanai-hope-house/
Q‘AHU	
Health Centers	
Kalihi-Pālama Health Center	http://www.kphc.org/
Ke Ola Mamo	http://www.keolamamo.org/
Ko‘olauloa Health Center	https://koolauloachc.org/
Kōkua Kalihi Valley	http://kkv.net/
Wahiawā Center for Community Health	https://www.wahiawahealth.org/

Waiʻanae Coast Comprehensive Health Center	http://www.wcchc.com/
Waikīkī Health	http://waikikihc.org/
Waimānalo Health Center	https://waimanalohealth.org/
Rural Health Clinics	
Castle Health Clinic of Lāʻie	https://www.adventisthealth.org/locations/health-clinic-of-laie/
Kahuku Clinic	http://www.kmc-hi.org/
Medical/Surgical/Critical Care/Obstetric	
Adventist Health Castle	https://www.adventisthealth.org/castle/
The Queen’s Medical Center	https://www.queens.org/the-queens-medical-center/queens-medical-center
Kaiser Permanente – Moanalua Medical Center	https://healthy.kaiserpermanente.org/hawaii/facilities/kaiser-permanente-moanalua-medical-center-100434
Kapʻiolani Medical Center for Women & Children	https://www.hawaiipacifichealth.org/kapiolani/
Medical/Surgical/Critical Care	
Kuakini Medical Center	https://www.kuakini.org/
Pali Momi Medical Center	https://www.hawaiipacifichealth.org/pali-momi/
Straub Medical Center	https://www.hawaiipacifichealth.org/straub/
Wahiawā General Hospital	https://wahiawageneral.org/
Pediatric, Neonatal ICU	
Kaiser Permanente – Moanalua Medical Center	https://healthy.kaiserpermanente.org/hawaii/facilities/kaiser-permanente-moanalua-medical-center-100434
Kapʻiolani Medical Center for Women & Children	https://www.hawaiipacifichealth.org/kapiolani/
Child Ortho	
Shriners Hospital for Children -- Honolulu	https://www.shrinershospitalsforchildren.org/honolulu
Acute Care, Skilled Nursing Facility (SNF), and Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF)	
Kahuku Medical Center	http://www.kmc-hi.org/
Skilled Nursing Facility (SNF) and Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF)	
Wahiawa General Hospital	https://wahiawageneral.org/
15 Craigsid	https://arcadia.org/companies/15-craigsid/
Aloha Nursing & Rehab Centre	http://www.alohanursing.com/
Ann Pearl Nursing Facility	http://www.ohanapacific.com/locations/oahu/kaneohe/ann-pearl/
Arcadia Retirement Residence	https://arcadia.org/companies/arcadia/

Avalon Care Center -- Honolulu	https://www.avalonhealthcare.com/honolulu/
Care Center of Honolulu	https://www.ccoh.us/
Hale Ho Aloha	http://halehoaloha.com/
Hale Malamalama	http://www.halemalamalamanursing.com/
Hale Nani Rehabilitation & Nursing Center	https://www.avalonhealthcare.com/halenani/
Hale Ola Kino	https://www.haleolakino.com/
Harry & Jeannette Weinberg Care Center at Pohai Nani	https://www.good-sam.com/locations/pohai-nani
Hi'olani Care Center at Kahala Nui	http://www.kahalanui.com/
Ka Punawai Ola	http://kapunawaiola.com/
Kalākaua Gardens	http://kalakauagardens.com/
Kuakini Geriatric Care, Inc	https://www.kuakini.org/wps/portal/public/Programs-Services/Geriatric-Care-Services
Kūlana Mālama	http://kulanamalama.com/
Leahi Hospital	https://leahi.hhsc.org/
Maluhia Hospital	https://maluhia.hhsc.org/
Mānoa Cottage Kaimukī	https://manoacottage.com/
Maunalani Nursing and Rehabilitation Center	https://maunalaninursing.org/
O'ahu Care Facility	http://oahucarefacility.com/
Palolo Chinese Home	https://palolohome.org/
Pearl City Nursing Home	http://pearlcitynursinghome.com/
Pu'uawai 'O Mākaha	http://www.ohanapacific.com/locations/oahu/waianae/puuwai-o-makaha/
Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF)	
Opportunities And Resources, Inc.	http://www.ori-hawaii.com/
The Arc In Hawai'i (6a)	http://www.thearcinhawaii.org/
The Arc In Hawai'i (6b)	http://www.thearcinhawaii.org/
The Arc In Hawai'i ('Ewa B)	http://www.thearcinhawaii.org/
The Arc In Hawai'i ('Ewa C)	http://www.thearcinhawaii.org/
The Arc In Hawai'i (Kaimukī A)	http://www.thearcinhawaii.org/
The Arc In Hawai'i (Kaimukī B)	http://www.thearcinhawaii.org/
The Arc In Hawai'i (Wahiawā A)	http://www.thearcinhawaii.org/
VA Facilities	
Spark M. Matsunaga VA Medical Center	https://www.hawaii.va.gov/locations/directions.asp
Tripler Army Medical Center	https://www.tamc.amedd.army.mil/
VA Leeward Community Based Outpatient Clinic	https://www.hawaii.va.gov/locations/Leeward.asp
National Center for PTSD	https://www.ptsd.va.gov/
Rehabilitation Facility	

Rehabilitation Hospital of the Pacific	https://www.rehabhospital.org/
Psychiatric	
Adventist Health Castle	https://www.adventisthealth.org/castle/
The Queen’s Medical Center	https://www.queens.org
The Queen’s Medical Center – West O’ahu	https://www.queens.org/west-oahu/queens-medical-center-west-oahu
Hawai’i State Hospital	http://health.hawaii.gov/amhd/hawaii-state-hospital-about-us/
Kāhi Mōhala Behavioral Health	https://www.sutterhealth.org/kahi
Ambulatory Surgery Centers	
Asia Pacific Surgery, LLC	https://www.drshimching.com/
Cataract And Vision Center Of Hawai’i	https://www.cataractandvisioncenter.com/
Endoscopy Institute Of Hawai’i	https://endoscopyhawaii.com/
Eye Surgery Center Of Hawai’i	http://www.eyesurgeryhi.com/
Hawai’i Endoscopy Centers, L.L.C.	http://www.hawaiiec.com/
Hawaiian Eye Surgicenter	http://www.hawaiianeye.com/
Honolulu Spine Center	https://www.honoluluspine.com/
Kaiser Permanente Mapunapuna Clinic – Asc	https://healthy.kaiserpermanente.org/hawaii/facilities/Kaiser-Permanente-Mapunapuna-Medical-Office-100428
Minimally Invasive Surgery Of Hawai’i	http://www.mishawaii.com/
Pacific Endoscopy Center, LLC	http://pacificendoscopy.com/
Surgicare Of Hawai’i	https://surgicareofhawaii.com/
The Surgical Suites, LLC	http://www.thesurgicalsuites.org/
Windward Surgery Center	http://windwardsurgerycenter.com/
Hansen’s Disease	
Hale Mohalu Hospital	https://leahi.hhsc.org/
End Stage Renal Disease Programs	
DSI – Aloha Dialysis	http://www.usrenalcare.com/locations/aloha
DSI – Honolulu Dialysis	http://www.usrenalcare.com/locations/honolulu
DSI – Kapahulu Dialysis	http://www.usrenalcare.com/locations/kapahulu
DSI – Kapolei Dialysis	http://www.usrenalcare.com/locations/kapolei
DSI – Ko’olau Dialysis	http://www.usrenalcare.com/locations/ko%20olau
DSI – Pearlridge Dialysis	http://www.usrenalcare.com/locations/pearlridge
DSI – Wahiawā Dialysis	http://www.usrenalcare.com/locations/wahiawa
DSI – Windward Dialysis	http://www.usrenalcare.com/locations/windward
Liberty Dialysis – Hawai’i – Kaimuki Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/honolulu/36-25-harding-ave-96816/7381
Liberty Dialysis – Hawai’i LLC – Ala Moana Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/honolulu/50-0-ala-moana-blvd-96813/100115

Liberty Dialysis – Hawai‘i LLC – Hawai‘i Kai Dialysis	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/honolulu/71-92-kalaniana'ole-hwy-96825/7384
Liberty Dialysis – Hawai‘i LLC – Kailua Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/kailua/25-ka-neohe-bay-dr-96734/7372
Liberty Dialysis – Hawai‘i LLC – Leeward Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/honolulu/22-30-liliha-st-96817/7379
Liberty Dialysis – Hawai‘i LLC – Mililani Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/mililani/95-1-105-ainamakua-drive-96789/9226
Liberty Dialysis – Hawai‘i LLC – Salt Lake Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/honolulu/43-80-lawehana-st-96818/9227
Liberty Dialysis – Hawai‘i LLC – Siemsen Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/honolulu/22-26-liliha-st-96817/7380
Liberty Dialysis – Hawai‘i LLC – Wai‘anae Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/waianae/86-080-farrington-hwy-96792/7389
Liberty Dialysis – Hawai‘i LLC – Waipahu Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/waipahu/94-450-mokuola-st-96797/7388
U.S. Renal Care Beretania Dialysis	http://www.usrenalcare.com/locations/beretania-2
U.S. Renal Care Waipahu Dialysis	http://www.usrenalcare.com/locations/waipahu%20home
U.S. Renal Care West O‘ahu Dialysis	http://www.usrenalcare.com/locations/west-oahu
Home Health Care	
Adventist Health Castle Home Care	https://www.adventisthealth.org/home-care-services/locations/castle/
Arcadia Home Health And Home Care Services	http://www.arcadiahomecare.com/
Attention Plus Care	https://www.attentionplus.com/
Bayada Home Health Care — Honolulu	https://www.bayada.com/offices/hi/honolulu
Careresource Hawai‘i — Honolulu	http://www.careresourcehawaii.org/
Kaiser Home Health Agency--O‘ahu	https://kpinhawaii.org/
Lou’s Quality Home Health Care Services, LLC	http://louscare.com/
Mastercare Homecare & Healthcare	https://www.gomastercare.com/
O‘ahu Home Healthcare	http://www.oahuhomehealthcare.com/
Prime Care Services Hawai‘i, Inc.	http://primecarehawaii.com/
Safe Harbor Homecare, Inc.	http://www.safeharborhomecare.net/
Seniorcare Foundation	http://seniorcarefoundation.org/
Wahiawā General Hospital Home Health Agency	https://wahiawageneral.org/
Wilson Homecare	https://www.wilsoncare.com/
Hospice	
Bristol Hospice, Hawai‘i LLC	https://bristolhospice-hawaii.com/
Hospice Hawai‘i	https://www.hospicehawaii.org/
Islands Hospice	https://www.islandshospice.com/
St. Francis Hospice	http://www.stfrancishawaii.org/services/hospice

Special Treatment Facility	
Benchmark Behavioral Health System	https://www.bbhsnet.com/
Bobby Benson Center	http://bobbybenson.org/dev/
Habilitat, Inc	https://www.habilitat.com/
Hina Mauka	http://www.hinamauka.org/
Ho‘omau Ke Ola	http://www.hoomaukeola.org/
Hope Inc	http://www.hopehi.com/
Ka Pa Ola	https://www.childandfamilyservice.org/programs/kapaola/
Kline-Welsh Behavioral Health Foundation	http://www.sandisland.com/
Pearl City Specialized Residential Services Population	https://www.carehawaii.info/
Po‘ailani, Inc -- Kailua	https://poailani.org/
Po‘ailani, Inc -- Kāne‘ohe	https://poailani.org/
The Salvation Army Addiction Treatment Services	https://hawaii.salvationarmy.org/hawaii/ats
The Salvation Army Family Treatment Services	https://hawaii.salvationarmy.org/hawaii/fts
KAUAI	
Health Centers	
Ho‘ōla Lāhui Hawai‘i	http://www.hoolalahui.org/
Medical/Surgical/Critical Care/Obstetric	
Wilcox Memorial Hospital	https://www.hawaiipacifichealth.org/wilcox/
Medical/Surgical/Acute Care/Skilled Nursing Facility (SNF)	
Samuel Mahelona Memorial Hospital	http://smmh.hhsc.org/
Medical/Surgical/Critical Care/Skilled Nursing Facility (SNF), and Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF)	
West Kaua‘i Medical Center (KVMH)	http://kvmh.hhsc.org/
Skilled Nursing Facility (SNF) and Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF)	
Garden Isle Rehabilitation & Healthcare Center	http://www.ohanapacific.com/locations/kauai/lihue/garden-isle-rehabilitation-healthcare-center/
Hale Kūpuna Heritage Home	http://www.ohanapacific.com/locations/kauai/koloa/hale-kupuna-heritage-home/
Kaua‘i Care Center	http://www.regency-pacific.com/senior-living/hi/waimea/kauai-care-center/
VA Facilities	

VA Kaua'i Community Based Outpatient Clinic	https://www.hawaii.va.gov/locations/
Psychiatric	
Samuel Mahelona Memorial Hospital	http://smmh.hhsc.org/
West Kaua'i Medical Center (KVMH)	http://kvmh.hhsc.org/
End Stage Renal Disease Programs	
Liberty Dialysis – Hawaii LLC – Kaua'i Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers/hawaii/lihue/3224-e-lua-st-96766/7386
Liberty Dialysis – Hawaii LLC – West Kaua'i Dialysis Facility	https://www.freseniuskidneycare.com/dialysis-centers
Home Health Care	
Haumea Home Health Agency, LLC	
'Ohana Home Health, LLC	http://ohanahomehealthllc.com/
Stay At Home Healthcare Services	http://www.ohanapacific.com/locations/kauai/lihue/stay-at-home-healthcare-services/
Hospice	
Kaua'i Hospice	http://kauaihospice.org/

APPENDIX C – STEERING COMMITTEE

Name	Affiliation
Bob Agres	County of Hawai'i
Punahele Alcon	Molokai General Hospital
Joy Barua	Kaiser Permanente
Janet Berreman	Kaua'i District Health Office
Andrew Garrett	Healthcare Association of Hawai'i
Carol Ignacio	Blue Zones Project
Karey Kapoi	HMSA
Lorraine Lunow-Luke	Hawai'i Pacific Health
Jon Matsuoka	Pili Group Consulting
May Okihiro	John A. Burns School of Medicine
Judy Mohr Peterson	State of Hawai'i Department of Human Services
Mike Robinson	Hawai'i Pacific Health
Tracie Ann Tjapkes	Adventist Health Castle
JoAnn Tsark	Office of Public Health Studies, University of Hawai'i
Sharlene Tsuda	Queen's Medical Center
Chris Van Bergeijk	Hawai'i Community Foundation

APPENDIX D – COMMUNITY MEETINGS

Host	Location/Date	Description
Pastor Sage Chee	Hau‘ula, O‘ahu July 12, 2018	Provider working with youth and groups in Hau‘ula
Ho‘ōla Lāhui	Kōke‘e, Kaua‘i July 28, 2018	Women and families interested in Hawaiian healing
Bobby Benson Center	Kahuku, O‘ahu July 31, 2018	Girls and boys in residential treatment for substance abuse
West Hawai‘i Community Health Center	Kealakehe, Hawai‘i August 7, 2018	Patients of WHCHC and residents of West Hawai‘i
North Kohala Community Resource Center	Hāwī, Hawai‘i August 17, 2018	Residents of North Kohala
Ka Honua Momona	Kaunakakai, Moloka‘i August 18, 2018	Women from Moloka‘i and across the pae‘āina
Healthy Mothers, Healthy Babies	Honolulu, O‘ahu August 20, 2018	Support group for expecting and new parents
Maui Food Bank	Kahului, Maui August 21, 2018	Clients and partners of Maui Food Bank
Nā Hoaloha ‘Ekolu	Lahaina, Maui August 21, 2018	Employees of Nā Hoaloha ‘Ekolu companies
Catholic Charities	Wai‘anae, O‘ahu August 28, 2018	Residents of transitional housing
Bodacious Women of Pāhoa	Pāhoa, Hawai‘i August 30, 2018	Volunteers who help with food distribution and emergency preparedness
HOPE Services	Hilo, Hawai‘i August 30, 2018	Clients living in shelters and receiving treatment
ALEA Bridge	Wahiawā, O‘ahu September 6, 2018	Wahiawā health workers, nonprofit employees and clients, and area politicians
Boys and Girls Club Kaua‘i	Līhue, Kaua‘i September 7, 2018	Teen participants
Bay Clinic	Pāhala, Hawai‘i September 10, 2018	Ka‘ū residents and service providers who are in Bay Clinic’s network
Lāna‘i Senior Center	Lāna‘i City, Lāna‘i September 11, 2018	Seniors who gather every weekday for lunch and friendship
Surfing the Nations	Wahiawā, O‘ahu September 19, 2018	After school program for children and teens
Maui Economic Opportunity	Wailuku, Maui September 21, 2018	Presidents of the various senior clubs throughout Maui County
Tūtū’s House	Kamuela, Hawai‘i September 29, 2018	Residents of the Waimea/North Hawai‘i region
Kōkua Kalihi Valley Gulick Elder Center	Kalihi, O‘ahu October 19, 2018	Elder participants
Lili‘uokalani Trust	Kaunakakai, Moloka‘i November 7, 2018	Teens in an afterschool program

APPENDIX E – KEY INFORMANTS

HAWAI‘I ISLAND	
Name	Affiliation
Elena Cabatu	Hilo Medical Center
Tina Clothier	PATH (Peoples Advocacy for Trails Hawai‘i)
Angela Dean	La Comunidad Latina de Hawai‘i
Vicky Hanes	West Hawai‘i Community Health Center
Cyd Hoffeld	Bay Clinic
Liana Honda	North Hawai‘i Community Hospital
Carol Ignacio	Blue Zones Project
Cindy Kamikawa & admin team	North Hawai‘i Community Hospital
Ka‘i Kiefer	West Hawai‘i Community Health Center
Wally Lau	Former Hawai‘i County Managing Director
Viviana Martinez	Konawaena High School
Michelle Medeiros	Tūtū’s House
Brandee Menino	HOPE Services
Heather Miner	West Hawai‘i Community Health Center
Misty Pacheco	UH Hilo
Christine Richardson	North Kohala Community Resource Center
Lia Rozmiarek-Held	Teach for America
Mike Sayama	Community First
Jasmine Staup	West Hawai‘i Public Health Nursing
Richard Taaffe	West Hawai‘i Community Health Center
Roseanne Uno	Waipahu Community School for Adults
Franz Weber	Community Volunteer
MAUI	
Name	Affiliation
Nicole Apoliona	Kula Hospital and Clinic
Perry Artates	Waiohuli Hawaiian Homesteaders Association
Curtis Bekkum	Family Medicine
Stephen Bennett	Boys & Girls Clubs of Maui
Kevin Block	Attorney
Debbie Cabebe	Maui Economic Opportunity
Victor Comaianni	Kaiser Permanente
Joey Gonsalves	Hui No Ke Ola Pono
Lehua Huddleston-Hafoka	Kīhei Youth Center
Karey Kapoi	HMSA

Judy Kodama	Maui Memorial
Pomai Konohia	Hui No Ke Ola Pono
Wesley Lo	Hale Makua
Joylynn Paman	Maui Fishpond Association
Lorrin Pang	Maui District Health Office
Rick Paul	Hāna High School
Stacey Prusky	Makana 'O Ka La
Rochelle Sommerville	HMSA
Kirsten Szabo	Hale Makua
Jayme Tamaki	Maui Public Health Nursing
Heidi Taogoshi	Maui Public Health Nursing
<u>MOLOKA'I</u>	
Name	Affiliation
Billy Akutagawa	Rural Health
Punahela Alcon	Molokai General Hospital
Emmett Aluli	Community physician
Kamahana Farrar	Na Pu'uwai
Barbara Haliniak	Moloka'i Health Foundation
Kekama Helm	Lili'uokalani Trust
Glenn Izawa	Moloka'i Health Foundation
Janice Kalanihuia	Molokai General Hospital
Noelani Lee	Ka Honua Momona
Louise Linker	Public Health Nurse
Margaret Makekau	Public Health Nurse
Judy Mikami	Rural Health
Jamie Ronzello	Sust'āinable Moloka'i
Harmonee Williams	Sust'āinable Moloka'i
<u>LĀNA'I</u>	
Name	Affiliation
Melissa Champlin	Lāna'i Hospice
Maggie Daub	Lāna'i Community Hospital
Butch Gima	State of Hawai'i Department of Health
Kelly Gima	State of Hawai'i Department of Human Services
Val Janikowski	Nurse
Robin Kaye	Community organizer
Sally Kaye	Community organizer
Tina Kikuyama	Pharmacy
Jon Matsuoka	Pili Group Consulting
Linda Mau	Public Health Nurse

Albert Morita	Former Hawai'i Department of Land and Natural Resources
Diane Preza	Pulama Lāna'i
Annabel Raqueno	Nurse
Greg Sanders	Lāna'i High and Elementary School
John Schaumburg	Lāna'i Community Hospital
En Young	Sensei Farms
O'AHU	
Name	Affiliation
Phil Acosta	ALEA Bridge
Cindy Adams	Aloha United Way
Bob Agres	County of Hawai'i
Joy Barua	Kaiser Permanente Hawai'i
Laura Bonilla	Kapi'olani Medical Center
Lee Buenconsejo-Lum	John A. Burns School of Medicine
Barbie-Lei Burgess	Wai'anae Neighborhood Place
Sadrian Chee	'Ohana Family of the Living God Church
Lowell Chun Hoon	Attorney
Makena Coffman	Institute for Sustainability and Resilience
Barbara Craft	Kapi'olani Medical Center
Brian Cunningham & admin team	Wahiawā General Hospital
Jim Dannemiller	SMS Research
David Derauf	Kōkua Kalihi Valley
Ritabelle Fernandes	Geriatrics
Chip Fletcher	UH School of Ocean and Earth Science and Technology
Jerome Flores	Kahuku Medical Center
Kealoha Fox	Office of Hawaiian Affairs
Dan Fujii	Wai'anae Coast Comprehensive Health Center
Beth Giesting	Hawai'i Appleseed Budget & Policy Center
Art Gladstone & Admin Team	Straub Medical Center
Aimee Grace	University of Hawai'i System
Cullen Hayashida	Senior issues
Hawai'i Medical Education Council	John A. Burns School of Medicine
Lynnette P. Higa	Central O'ahu Public Health Nursing Section
Robert Hirokawa	Hawai'i Primary Care Association
Natividad Hopewell	Ko'olauloa Community Health Center
Bill Hoshijo	Civil Rights Commission
JABSOM Family Medicine group	John A. Burns School of Medicine
JABSOM Ob/Gyn Residents/Fellows	JABSOM/Kapi'olani Medical Center
JABSOM Pediatric Residents	JABSOM/Kapi'olani Medical Center

Merlene Jose	Shriners Hospitals for Children
Kent Ka'ahanui	Ke Ola Mamo
Keawe Kaholokula	JABSOM Native Hawaiian Health
Katherine Keir	United Healthcare
Gail Kim	Public Health Nursing
Kanilehua Kim	Queen's Medical Center
Lisa Kimura	Healthy Mothers Healthy Babies
Nagisa Kimura	East Honolulu Public Health Nursing Office
Gregg Kishaba	State of Hawai'i Department of Health
Keri Kobayashi	Windward O'ahu Public Health Nursing Section
Jeannette Kojane	Kōkua Mau
Cheryl Kozai	Pali Momi Medical Center
Andi Kubota	Shriners Hospitals for Children
Douglas Kwock	Pali Momi Medical Center
Ryan Lee	Milestones Hawai'i
Steph Lee	University Health Partners/Planned Parenthood
Christy MacPherson	FACE (Faith Action for Community Equity) Hawai'i
Kyle Maschoff	Rehab Hospital of the Pacific
Kathleen Mau	Kaiser Moanalua
Blake McElheny	North Shore
Brigitte McKale	Pali Momi Medical Center
Alan McPhee	Kahuku Medical Center
Maile Meyer	Na Mea Hawai'i
Tai-an Miao	UH Department of Urban and Regional Planning
Judy Mohr Peterson	State of Hawai'i Department of Human Services
Lauren Nahme	Kamehameha Schools
Ken Nakamura	Kapi'olani Medical Center
Quin Ogawa	Kāhi Mōhala
May Okihiro	JABSOM/Wai'anae Coast Comprehensive Health Center
Lisa Oliveira-Tua	Kaiser Moanalua
Mary Oneha	Waimānalo Health Center
Deja Ostrowski	Medical Legal Partnership for Children
Karlee Palms	Kapi'olani Medical Center
Adriana Ramelli	The Sex Abuse Treatment Center
Faith Rex	SMS Research
Mike Robinson	Hawai'i Pacific Health
Gidget Ruscetta	Pali Momi Medical Center
Jodie Sanada	West Honolulu Public Health Nursing
Keith Sanderson	Shriners Hospitals for Children
Dina Shek	Medical Legal Partnership for Children

Debbie Shimizu	Executive Office on Aging
Martha Smith	Kapi‘olani Medical Center
Joan Takamori	Public Health Nursing
Karen Tan	Child & Family Services
Gavin Thornton	Hawai‘i Appleseed
Tracie-Ann Tjapkes & admin team	Adventist Health Castle
Wennie Tomita	Kuakini Health System
JoAnn Tsark	UH Office of Public Health Studies
Sharlene Tsuda	Queen’s Medical Center
Chris Van Bergeijk	Hawai‘i Community Foundation
KAUA‘I	
Name	Affiliation
Fran Becker	Na Lei Wili AHEC
Janet Berreman	Kaua‘i District Health Office
Nalani Brun	County of Kaua‘i
Jen Chahanovich	Wilcox Medical Center
Mason Chock	Kaua‘i County Council
Kapono Chong Hanssen	Ho‘ōla Lāhui
Sean Chun	Ho‘ōla Lāhui
Megan Fox	Mālama Kaua‘i
Chia Granda	Kapa‘a Pediatrics
Lori Miller	Kaua‘i Hospice
Chris Molina	Lili‘uokalani Trust
Buffy Ofisa	Kamehameha Schools
Marion Paul	Kaua‘i Planning & Action Alliance
Stacy Sproat	Waipā Foundation

APPENDIX F – INTERVIEWS, 2013 & 2015 CHNAs

HAWAI‘I	
Name	Affiliation
Donna Altshul	West Hawai‘i Community Health Center
Deborah Baker	Kona-Kohala Chamber of Commerce
Katherine Ciano	North Hawai‘i Hospice
Mary Correa	State of Hawai‘i DOE Ka‘ū, Kea‘au, Pāhoa Complex Area
Scott Daniels	State of Hawai‘i Department of Health, Office of Rural Health
Dan Domizio	Puna Community Medical Center
Elizabeth Dykstra	County of Hawai‘i
Louise Fincher	Hilo Medical Center
Josh Green	State Senate
Michelle Hiraishi	Hui Mālama Ola Nā ‘Ōiwi Hawai‘i
Susan Hunt	Hawai‘i Island Beacon Community
Wally Lau	Hawai‘i County Mayor’s Office
Kaye Lundburg	Retired, Catholic Diocese, Office of Social Ministry
Jessanie Marques	Ka‘ū Community Rural Health Association
Pam McKenna	Hāmākua Health Center
Cathy Meyer-Uyehara	Hale Ho‘ola Hāmākua
Karen Pellegrin	UH-Hilo, Daniel K. Inouye College of Pharmacy
John Saplan	State of Hawai‘i DOE Ka‘ū, Kea‘au, Pāhoa Complex Area
Robert Surber	Community Advocate
Nick Szubiak	West Hawai‘i Community Health Center
Richard Taafe	West Hawai‘i Community Health Center
Aaron Ueno	Hawai‘i District Health Office
Sharon Vitousek	North Hawai‘i Health Outcomes Project
MAUI	
Name	Affiliation
Dana Alonzo-Howeth	Mālama I Ke Ola Health Center
Alan Arakawa	Mayor, County of Maui
Roz Baker	State Senate
Jud Cunningham	Aloha House
Donna Haytko	University of Hawai‘i, Moloka‘i Education Center
Tony Krieg	Hale Makua
Wesley Lo	Hawai‘i Health Systems Corporation
Lyn McNeff	Maui Economic Opportunity
Lorrin Pang	Maui District Health Office

Lisa Ponichtera	Mālama Family Recovery Center
Diana Shaw	Maui Community Health Center
Alvin Shima	Complex Area Superintendent
Napua Spock	Hawai'i Primary Care Association
Deborah Stone-Walls	Maui County Office on Aging
Cheryl Vasconcellos	Hāna Health Center
<u>MOLOKA'I</u>	
Name	Affiliation
Emmett Aluli	Moloka'i Family Health Center
Desiree Puhī	Moloka'i Community Health Center
Lynette Schaefer	Maui Police Department, Moloka'i Hospice
Tracy Stephenson	Moloka'i Community Health Center
<u>LĀNA'I</u>	
Name	Affiliation
Kimberly Miyazawa-Frank	Pūlama Lāna'i
Shirley Samonte	Straub Lāna'i Family Health Center
Carole Starbird	Lāna'i Community Hospital
<u>O'AHU</u>	
Name	Affiliation
Norm Baker	Aloha United Way
Sheila Beckham	Waikīkī Health
Mike Broderick	YMCA of Honolulu
Jennifer Dang	State of Hawai'i Department of Education
David Derauf	Kōkua Kalihi Valley
Lynn Fallin	State of Hawai'i DOH, Behavioral Health Services
Kenny Fink	State of Hawai'i Department of Human Services
Loretta Fuddy	State of Hawai'i Department of Health
Dan Fujii	Wai'ānae Comprehensive Community Health Center
Marc Gannon	Aloha United Way
Beth Giesting	Healthcare Transformation Coordinator, Governor's Office
Marya Grambs	Mental Health America Hawai'i
Jan Harada	Helping Hands Hawai'i
Robert Hirokawa	Hawai'i Primary Care Association
Jim Ireland	City and County of Honolulu
Lola Irvin	State of Hawai'i Department of Health
Bliss Kaneshiro	State Medical Director of Family Planning
Poka Laenui	Hale Na'au Pono
Leslie Lam	American Diabetes Association

Bernie Ledesma	Nursing home administrator
Andy Lee	City and County of Honolulu
Leonard Licina	Kāhi Mōhala
Wes Lum	Executive Office on Aging
Deejay Mailer	Kamehameha Schools
Kathryn Matayoshi	Hawai'i Superintendent of Education
Connie Mitchell	Institute for Human Services
Ken Nakamura	John A. Burns School of Medicine
Deedee Nelson	Mountain Pacific Quality Health
Gary Okamoto	AlohaCare
May Okihiro	JABSOM/Wai'anae Coast Comprehensive Health Center
Mary Oneha	Waimānalo Health Center
Bill Osheroff	Chief Medical Officer, HMSA
Neal Palafox	John A. Burns School of Medicine
Sarah Park	State of Hawai'i DOH, Disease Outbreak Control Division
Leolinda Parlin	Hilopa'a Family to Family Health Information Center
Hilton Raethel	HMSA
Linda Rosen	Hawai'i Department of Health
Mark Rigg	City and County of Honolulu, EMS Department
David Sakamoto	Hawai'i Department of Health
Emilie Smith	CareResource Hawai'i
Hardy Spoehr	Papa Ola Lōkahi
Corinne Suzuka	St. Francis Home Care Services
JoAnn Tsark	'Imi Hale, Native Hawaiian Cancer Network
Lori Tshako	Homeless Programs Office
Stella Wong	Catholic Charities
Mark Yamakawa	Hawai'i Dental Services
Jackie Young	American Cancer Society
Ken Zeri	Hospice Hawai'i
<u>KAUA'I</u>	
Name	Affiliation
Kurt Akamine	'Ohana Pacific Management Company
Dileep Bal	Kaua'i District Health Office
Maile Ballesteros	St. Francis Home Healthcare
Laverne Bishop	Hale 'Ōpio Kaua'i, Inc.
Bev Brody	Get Fit Kaua'i
Kathy Clark	Wilcox Memorial Hospital
Helen Cox	Kaua'i Community College
Paul Esaki	Family Medicine
Harold Goldberg	Hawai'i Department of Health, Mental Health Division

Renae Hamilton	Kaua'i YWCA
John Hunt	Department of Health
DQ Jackson	Mālama Pono
Scott McFarland	Hawai'i Health Systems Corporation
Gerald McKenna	McKenna Recovery Center
Lori Miller	Kaua'i Hospice
Thomas Noyes	State of Hawai'i DOH, Kaua'i District Health Office
David Peters	Ho'ōla Lāhui
Naomi Sugihara	Sugihara Planning and Consulting
Beth Tokioka	Kaua'i Mayor's Office
Toni Torres	District Health Nurse
Geri Young	Kaua'i Medical Clinic

APPENDIX G – RESOURCES UTILIZED

HEALTH REPORTS

Aloha United Way. "ALICE: A Study of Financial Hardship in Hawai'i." 2017.
https://www.auw.org/sites/default/files/pictures/AlohaUnitedWayALICE%20Report_HIFINAL.pdf

Association for Community Health Improvement. "Community Health Assessment Toolkit." 2017.
http://www.healthycommunities.org/Resources/toolkit.shtml#W_zfSSdRegQ

Bay Area Regional Health Inequities Initiative. "A Public Health Framework for Reducing Health Inequities."
<http://barhii.org/framework/>

Beatty, Abigail, Dionne Foster. "The Determinants of Equity: Identifying Indicators to Establish a Baseline of Equity in King County." King County Office of Performance, Strategy and Budget, January 2015.
https://kingcounty.gov/~media/elected/executive/equity-social-justice/2015/The_Determinants_of_Equity_Report

Beeson, Tishra et al. "Making the Case for Medical Legal Partnerships: A Review of the Evidence." National Center for Medical-Legal Partnership, School of Public Health and Health Services, George Washington University. 1 Feb. 2013.
<https://medical-legalpartnership.org/wp-content/uploads/2014/03/Medical-Legal-Partnership-Literature-Review-February-2013.pdf>

Catholic Health Association of the United States. "Assessing & Addressing Community Health Needs: A Summary of New Requirements & Recommended Practices." January 2015.
<https://www.chausa.org/communitybenefit/assessing-and-addressing-community-health-needs>

Centers for Disease Control and Prevention. "Social Determinants of Health: Know What Affects Health." 20 March 2018. <https://www.cdc.gov/socialdeterminants/>

Children's Hospital Association. "Screening for Social Determinants of Health; Children's Hospitals Respond." 30 March 2018.
<https://www.childrenshospitals.org/Issues-and-Advocacy/Population-Health/Reports/Screening-for-Social-Determinants-of-Health>

Davis, Rachel. *Measuring What Works to Achieve Health Equity: Metrics for the Determinants of Health*. Prevention Institute, June 2015.
http://preventioninstitute.org/sites/default/files/publications/Measuring%20What%20Works%20to%20Achieve%20Health%20Equity%20_Full_Report.pdf

Ebi, Kristie L. "Chapter 14: Human Health." *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment*, Volume II. U.S. Global Change Research Program. November 2018.
<https://nca2018.globalchange.gov/chapter/14/>

Federal Reserve Board, Division of Consumer and Community Affairs. "Report on the Economic Well-Being of U.S. Households in 2017." May 2018.
<https://www.federalreserve.gov/publications/files/2017-report-economic-well-being-us-households-201805.pdf>

Geminiani, Victor, and DeLuca, Madison. "Hawai'i Vacation Rentals: Impact on Housing & Hawai'i's Economy." Hawai'i Appleseed, March 2018.
<http://hiappleseed.org/wp-content/uploads/2018/03/Appleseed-Vacation-Rental-Report-rev.-3.29.18.pdf>

Hawai'i Appleseed Center for Law & Economic Justice. "The State of Poverty in Hawai'i: How Hawai'i's Low-Income Residents Are Faring Post-Recovery." April 2016.
<http://hiappleseed.org/wp-content/uploads/2016/11/State-of-Poverty-2016-Report.pdf>

Hawai'i Public Health Institute. "Report to the Department of Health Oral Health Task Force of Hawai'i." 2018.

Kaiser Foundation Health Plan of Hawai'i. "Hawai'i Community Health Needs Assessment; Community Voices on Health." December 2010.
https://healthy.kaiserpermanente.org/static/health/pdfs/how_to_get_care/hi_community_voices_on_health.pdf

Mercy Housing and The Low Income Investment Fund for The California Endowment and The Kresge Foundation. "Innovative Models in Health and Housing." 2017.
<http://liifund.org/wp-content/uploads/2017/08/Health-and-Housing-LIF-Mercy-Report-2017.pdf>

Minnesota Department of Health. "Community Health Assessment."
<http://www.health.state.mn.us/divs/opi/pm/lphap/community/cha.html>

Moving Health Care Upstream. "Policy Leadership for Health Care Transformation: Formalizing our Commitment to Communities." Public Health Institute, 2018.
<http://phi.org/uploads/application/files/qz0f4j80jbodef42i0s6c9wl629z6fbxd9nlv77bgw33hxol47.pdf>

Office of Hawaiian Affairs. "Haumea—Transforming the Health of Native Hawaiian Women and Empowering Wahine Well-Being." 2018. <https://www.oha.org/wahinehealth>

Office of Hawaiian Affairs. "Kānehō'ālanī—Transforming the Health of Native Hawaiian Men." 2018.
<https://www.oha.org/kanehealth>

Prevention Institute for The California Endowment. "Good Health Counts: A 21st Century Approach to Health and Community for California." November 2007.
<http://preventioninstitute.org/sites/default/files/publications/GoodHealthCounts.pdf>

Sprong, Shari, Laurie Stillman. "Leveraging Multi-Sector Investments: New Opportunities to Improve the Health and Vitality of Communities." Health Resources in Action, January 2014.
http://hria.org/wp-content/uploads/2018/01/HRIA_PPR_Leveraging_Multi_Sector_Investments_Jan_2014.pdf

State of Hawai'i Department of Health. "2016–2020 Tobacco Use Prevention and Control in Hawai'i Five-Year Strategic Plan." <http://health.hawaii.gov/tobacco/files/2013/04/2016TobPlanR.pdf>

State of Hawai'i Department of Health. "Hawai'i Sexual & Gender Minority Health Report." 2017.
http://www.hawaiihealthmatters.org/content/sites/hawaii/2017_Hawaii_Sexual_and_Gender_Minority_Health_Report_1.pdf

State of Hawai'i Department of Health. "Hawai'i Sexual & Gender Minority Report 2018: A Focus on Transgender Youth."
<http://health.hawaii.gov/surveillance/files/2018/09/HawaiiSexualandGenderMinorityHealthReport2018.pdf>

State of Hawai'i Department of Health, Family Health Services Division. "Hawai'i Oral Health: Key Findings." 25 Sept. 2015. http://health.hawaii.gov/about/files/2013/06/Key_Findings_wC.pdf

Stotzer, R. L. "LGBTQI Hawai'i: A Needs Assessment of the Lesbian, Gay, Bisexual, Transgender, Queer, and Intersex Communities in the State of Hawai'i, Supplement 2, Findings by Gender." Myron B. Thompson School of Social Work, University of Hawai'i at Mānoa. 2013.
<http://manoa.hawaii.edu/childandfamilylab/Publications/LGBTQIHbyGIEFinal.pdf>

University of Wisconsin Population Health Institute. "County Health Rankings Key Findings 2018." March 2018.
<http://www.countyhealthrankings.org/explore-health-rankings/rankings-reports/2018-county-health-rankings-key-findings-report>

JOURNAL/NEWS ARTICLES

AARP Hawai'i. "Hawai'i Caregivers Provide \$2.1 Billion in Unpaid Care." 2015 July 16. AARP Hawai'i.
<https://states.aarp.org/hawaii-family-caregivers-provide-2-1-billion-in-unpaid-care-sc-hi-wp-advocacy/>

Ancker, Jessica et al. "The potential value of social determinants of health in predicting health outcomes." *Journal of the American Medical Informatics Association*, Volume 25, Issue 8, 1 Aug. 2018, Pages 1109–1110, <https://doi.org/10.1093/jamia/ocy061>

Badger, Emily, Quoc Trung Bui. "Detailed New National Maps Show How Neighborhoods Shape Children for Life." *New York Times*, 1 Oct. 2018. <https://www.nytimes.com/2018/10/01/upshot/maps-neighborhoods-shape-child-poverty.html>

Bowler, Diana E. et al. "A systematic review of evidence for the added benefits to health of exposure to natural environments." *BMC Public Health*, Volume 10, Issue 1, 4 Aug. 2010, Page 456. <https://doi.org/10.1186/1471-2458-10-456>

Bryce, Rosalind et al. "Subjective well-being indicators for large-scale assessment of cultural ecosystem services." *Ecosystem Services*, Volume 21, Part B, October 2016, Pages 258-269, <https://doi.org/10.1016/j.ecoser.2016.07.015>

Caffrey, Arden et al. "The Role of Community Health Needs Assessments in Medicalizing Poverty." *The Journal of Law, Medicine & Ethics*, Volume 46, 2018, Pages 615-621. <https://doi.org/10.1177/1073110518804212>

Castrucci, Brian. "Rowing Together: How Public Health Supports the 'Upstream' Doctor." *Life, The Blog*, 23 April 2014. https://www.huffpost.com/entry/rowing-together-how-publi_b_5191121

Center on the Developing Child at Harvard University. "Three Principles to Improve Outcomes for Children and Families." 2017. <http://www.developingchild.harvard.edu>

Cho, Renee. "Climate Change May Be Hazardous to Your Health." *State of the Planet, News from the Earth Institute, Columbia University*. 12 March 2018. <https://blogs.ei.columbia.edu/2018/03/12/climate-change-may-hazardous-health/>

Consillio, Kristen. "Community activities reduce weight among kids, study says." *Honolulu Star-Advertiser*, 5 Nov. 2018. <http://www.staradvertiser.com/2018/11/05/hawaii-news/community-activities-reduce-weight-among-kids-study-says/>

Consillio, Kristen. "Hawai'i loses 51 full-time doctors as physician shortage continues." *Honolulu Star-Advertiser*. 17 Sept. 2018. <http://www.staradvertiser.com/2018/09/17/hawaii-news/hawaii-facing-doctor-shortage/>

Consillio, Kristen. "Younger patients prefer urgent care clinics, and health care providers are delivering." *Honolulu Star Advertiser*, 22 Oct. 2018. <http://www.staradvertiser.com/2018/10/22/hawaii-news/younger-patients-prefer-urgent-care-clinics-and-health-care-providers-are-delivering/>

Crossley, Mary et al. "Tax-exempt hospitals and community health under the affordable care act: identifying and addressing unmet legal needs as social determinants of health." *Public Health Reports*, Volume 131, Issue 1, 2016 Jan-Feb, Pages 195–199. <https://doi.org/10.1177/003335491613100127>

Dixon, Jane. "Social Determinants of Health." *Health Promotion International*, Volume 15, Issue 1, March 2000, Pages 87-89. <https://doi.org/10.1093/heapro/15.1.87>

Ellis, Wendy et al. "A New Framework for Addressing Adverse Childhood and Community Experiences: The Building Community Resilience Model." *Academic Pediatrics*, Volume 17, Issue 7, Supplement, September-October 2017, Pages S86–S93. <https://doi.org/10.1016/j.acap.2016.12.011>

Esslinger, Laura, Scott Sivik "Access to dental care crucial to health." Op-Ed. *Honolulu Star-Advertiser*, 14 Oct. 2018. <http://www.staradvertiser.com/2018/10/14/editorial/island-voices/column-access-to-dental-care-crucial-to-health/>

Essoyan, Susan. "Hawai'i high school students tapped to fill medical assistant shortage." *Honolulu Star-Advertiser*, 18 Sept. 2018. <http://www.staradvertiser.com/2018/09/18/hawaii-news/hawaii-high-school-students-tapped-to-fill-medical-assistant-shortage/>

Felitti, Vincent J. et al. "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults." *American Journal of Preventive Medicine*, Volume 14, Issue 4, May 1998, Pages 245-258. [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8)

Fish, Robert, Andrew Church, Michael Winter. "Conceptualising cultural ecosystem services: A novel framework for research and critical engagement." *Ecosystem Services*, Volume 21, Part B, October 2016, Pages 208-217. <https://doi.org/10.1016/j.ecoser.2016.09.002>

Grocott, Angela, Wilfred McSherry. "The Patient Experience: Informing Practice through Identification of Meaningful Communication from the Patient's Perspective." *Healthcare*, Volume 6, Issue 1, 20 March 2018, Page 26. <https://doi.org/10.3390/healthcare6010026>

Harris, Malinda et al. "Application of a novel socioeconomic measure using individual housing data in asthma research: an exploratory study." *Nature Partner Journals: Primary Care Respiratory Medicine*, Volume 24, 26 June 2014, Page 14018. <https://doi.org/10.1038/npjpcrm.2014.18>

Hawai'i News Now staff. " 'A Nightmare': Kaua'i man dies after jumping into stream to save dog." *Hawai'i News Now*. 29 Aug. 2018. <http://www.hawaiinewsnow.com/story/38988947/kauai-man-dies-in-widespread-flash-flooding-associated-with-lane/>

Hobbes, Michael. "Everything You Know About Obesity Is Wrong." *Highline*, 19 Sept. 2018. <https://highline.huffingtonpost.com/articles/en/everything-you-know-about-obesity-is-wrong/>

Hofschneider, Anita. "If You're Poor In Hawai'i, A Visit To The Dentist Is A Luxury." *Honolulu Civil Beat*, 30 July 2018. <https://www.civilbeat.org/2018/07/if-youre-poor-in-hawaii-a-visit-to-the-dentist-is-a-luxury/>

Hole, Michael K. et al. "Improving Access to Evidence-Based Antipoverty Government Programs in the United States; A Novel Primary Care Initiative." *JAMA Pediatr*, Volume 171, Issue 3, 1 March 2017, Pages 211-212. <http://dx.doi.org/10.1001/jamapediatrics.2016.3868>

Holmes, Joshua R. et al. "Examining Variation in Life Expectancy Estimates by ZIP Code Tabulation Area (ZCTA) in Hawai'i's Four Main Counties, 2008-2012." *Preventing Chronic Disease*, Volume 15, 2018, Page 180035. <http://dx.doi.org/10.5888/pcd15.180035>

Hurley, Timothy. "Hawai'i income stats climb, but so does the cost of living." *Honolulu Star-Advertiser*, 19 Sept. 2018. <http://www.staradvertiser.com/2018/09/19/hawaii-news/hawaii-income-stats-climb-but-so-does-the-cost-of-living/>

Hurley, Timothy. "State's poor face nation's second-largest tax burden." *Honolulu Star-Advertiser*, 22 Oct. 2018. <http://www.staradvertiser.com/2018/10/22/hawaii-news/states-poor-face-nations-second-largest-tax-burden/>

Ige, David. "Disaster Declaration Documents." State of Hawai'i. 6 Sept. 2018. <http://governor.hawaii.gov/main/disaster-declaration-documents/>

Internal Revenue Service. "Additional Requirements for Charitable Hospitals; Community Health Needs Assessments for Charitable Hospitals; Requirement of a Section 4959 Excise Tax Return and Time for Filing the Return; Final Rule." *Federal Register*, Volume 79, No. 250, 31 Dec. 2014. <https://www.gpo.gov/fdsys/pkg/FR-2014-12-31/pdf/2014-30525.pdf>

Internal Revenue Service. "Community Health Needs Assessments for Charitable Hospital Organizations - Section 501(r)(3)." <https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3>

Institute of Medicine. *Improving Health in the Community: A Role for Performance Monitoring*. Washington, DC: The National Academies Press, 1997. <https://doi.org/10.17226/5298>

Isham, George J. et al. "HealthPartners Adopts Community Business Model To Deepen Focus On Nonclinical Factors Of Health Outcomes." *Health Affairs*, Volume 32, Issue 8, August 2013, Pages 1446-52. <https://doi.org/10.1377/hlthaff.2011.0567>

Juhn, Young J. et al. "Development and Initial Testing of a New Socioeconomic Status Measure Based on Housing Data." *Journal of Urban Health*, Vol. 88, Issue 5, October 2011, Pages 933-44.
<https://doi.org/10.1007/s11524-011-9572-7>

Kaholokula, Joseph Keawe'aimoku et al. "The effects of perceived racism on psychological distress mediated by venting and disengagement coping in Native Hawaiians." *BMC Psychology*, Volume 5, Issue 2, 12 Jan. 2017.
<https://doi.org/10.1186/s40359-017-0171-6>

Kaholokula, Joseph Keawe'aimoku et al. "Association between perceived racism and physiological stress indices in Native Hawaiians." *Journal of Behavioral Medicine*, Volume 35, Issue 1, Pages 27-37. February 2012.
<https://doi.org/10.1007/s10865-011-9330-z>

Langford, Terri. "Experts: Lack Of Mental Health Treatment Among The Culprits In Police Shootings." *Honolulu Civil Beat*. 15 Oct. 2018.
<https://www.civilbeat.org/2018/10/experts-lack-of-mental-health-treatment-among-the-culprits-in-police-shootings/>

Leong, Frederick T.L. "Asian Americans' differential patterns of utilization of inpatient and outpatient public mental health services in Hawai'i." *Journal of Community Psychology*, Volume 22, Issue 2, April 1994, Pages 82-96,
[https://doi.org/10.1002/1520-6629\(199404\)22:2<82::AID-JCOP2290220205>3.0.CO;2-I](https://doi.org/10.1002/1520-6629(199404)22:2<82::AID-JCOP2290220205>3.0.CO;2-I)

Lewis, Niñon. "Populations, Population Health, and the Evolution of Population Management: Making Sense of the Terminology in US Health Care Today." *IHI Leadership Blog*, 19 Mar. 2014.
<http://www.ihl.org/communities/blogs/population-health-population-management-terminology-in-us-health-care>

Li, Yanping et al. "Impact of Healthy Lifestyle Factors on Life Expectancies in the US Population." *Circulation*, Volume 138, 30 April 2018. <https://doi.org/10.1161/CIRCULATIONAHA.117.032047>

Marcil, Lucy E. et al. "Free Tax Services in Pediatric Clinics." *Pediatrics*, Volume 141, Issue 6, June 2018.
<http://pediatrics.aappublications.org/content/141/6/e20173608>

Mineo, Liz. "Good genes are nice, but joy is better." *The Harvard Gazette*, 11 Apr. 2017.
<https://news.harvard.edu/gazette/story/2017/04/over-nearly-80-years-harvard-study-has-been-showing-how-to-live-a-healthy-and-happy-life/>

Mokuau, Noreen, et al. "Challenges and Promise of Health Equity for Native Hawaiians." *National Academy of Medicine*. 31 Oct. 2016.
<https://nam.edu/wp-content/uploads/2016/10/Challenges-and-Promise-of-Health-Equity-for-Native-Hawaiians.pdf>

Moorer, Kerry et al. "Using appreciative inquiry as a framework to enhance the patient experience," *Patient Experience Journal*, Volume 4, Issue 3, Article 18, 2017. <https://pxjournal.org/journal/vol4/iss3/18/>

Moy, Ernest et al. "Ethnic differences in potentially preventable hospitalizations among Asian Americans, Native Hawaiians, and other Pacific Islanders: implications for reducing health care disparities." *Ethnicity & Disease*, Volume 23, Issue 1, Winter 2013, Pages 6-11.
http://www2.jabsom.hawaii.edu/native/docs/publications/2013/Mau_Ethnicity_&_Disease_Winter_1213.pdf

Ochner, Margaret H. et al. "Obesity and Self-reported General Health, Hawai'i BRFSS: Are Polynesians at Higher Risk?" *Obesity*, Volume 16, Issue 4, April 2008, Pages 923-6. <https://doi.org/10.1038/oby.2007.120>

Olivet, Jeffrey, Marc Dones. "Time for Change: Findings from the SPARC Study on Race and Homelessness." *National Alliance to End Homelessness*.
<https://endhomelessness.org/time-change-findings-sparc-study-race-homelessness/>

PBS Hawai'i. "Quality of Life on Hawai'i Island." *Island Insights*. 2 June 2018.
<https://www.pbs.org/video/quality-of-life-on-hawaii-island-626jws/>

PBS Hawai'i. "Quality of Life on Kaua'i." *Island Insights*. 24 May 2018.
<https://www.pbs.org/video/quality-of-life-on-kauai-txejak/>

- PBS Hawai'i. "Quality of Life on Lāna'i." *Island Insights*. 28 June 2018. <https://www.pbshawaii.org/insights-on-pbs-hawaii-quality-of-life-on-lanai/>
- PBS Hawai'i. "Quality of Life on O'ahu." *Island Insights*. 7 June 2018. <https://www.pbshawaii.org/insights-on-pbs-hawaii-quality-of-life-on-oahu/>
- PBS Hawai'i. "Quality of Life on Maui." *Island Insights*. 21 June 2018. <https://www.pbs.org/video/quality-of-life-on-maui-ssrc0t/>
- PBS Hawai'i. "Quality of Life on Moloka'i." *Island Insights*. 14 June 2018. <https://www.pbshawaii.org/insights-on-pbs-hawaii-quality-of-life-on-molokai/>
- Pobutsky, Ann M. et al. "Micronesian Migrants in Hawai'i: Health Issues and Culturally Appropriate, Community-Based Solutions." *Californian Journal of Health Promotion*, Volume 3, Issue 4, 2005, Pages 59-72. https://www.researchgate.net/publication/228621966_Micronesian_Migrants_in_Hawaii_Health_Issues_and_Culturally_Appropriate_Community-Based_Solutions
- Quensell, Michelle L. et al. " "I Need my Own Place to get Better": Patient Perspectives on the Role of Housing in Potentially Preventable Hospitalizations." *Journal of Health Care for the Poor and Underserved*, Volume 28, Issue 2, 2017, Pages 784-797. <http://doi.org/10.1353/hpu.2017.0074>
- Rosenbaum, Sara. "Hospitals as Community Hubs: Integrating Community Benefit Spending, Community Health Needs Assessment, and Community Health Improvement." *Economic Studies at Brookings, A Series of Discussion Papers on Building Healthy Neighborhoods*, Number 5, March 2016. <https://www.brookings.edu/wp-content/uploads/2016/07/Rosenbaum-PDF-Layout-FINAL.pdf>
- Ryu, Euijung et al. "Assessing health disparities in children using a modified housing-related socioeconomic status measure: a cross-sectional study." *BMJ Open*, Volume 6, Issue 7, 22 July 2016. <http://dx.doi.org/10.1136/bmjopen-2016-011564>
- Scutchfield, F. Douglas et al. "Public Health and Hospitals: Lessons Learned From Partnerships in a Changing Health Care Environment." *American Journal of Public Health*, Volume 106, Issue 1, January 2016, Pages 45-8. <http://doi.org/10.2105/AJPH.2015.302938>
- Sentell, Tetine et al. "Comparison of Potentially Preventable Hospitalizations Related to Diabetes Among Native Hawaiian, Chinese, Filipino, and Japanese Elderly Compared with Whites, Hawai'i, December 2006–December 2010." *Preventing Chronic Disease*, Volume 10, 25 July 2013, Page E123. <http://dx.doi.org/10.5888/pcd10.120340>
- Sentell, Tetine et al. "Disparities in Diabetes-Related Preventable Hospitalizations among Working-Age Native Hawaiians and Asians in Hawai'i." *Hawai'i Journal of Medicine & Public Health*, Volume 73, Issue 12, Supplement 3, December 2014, Pages 8-13. <https://www.ncbi.nlm.nih.gov/pubmed/25535595>
- Sentell, Tetine et al. "Pathways to potentially preventable hospitalizations for diabetes and heart failure: a qualitative analysis of patient perspectives." *BMC Health Services Research*, Volume 16, 26 July 2016, Page 300. <https://doi.org/10.1186/s12913-016-1511-6>
- Sentell, Tetine et al. "The influence of community and individual health literacy on self-reported health status." *Journal of General Internal Medicine*. Volume 29, Issue 2, February 2014, Pages 298-304. <http://doi.org/10.1007/s11606-013-2638-3>
- Sharpe, Rochelle. "Should Medicare pay for toothpaste and shoes? Why an experiment in Massachusetts is using federal health money to pay for some very non-medical things." *Politico*, 12 Sept. 2018. <https://www.politico.com/agenda/story/2018/09/12/medicare-preventative-social-needs-000688>
- Turnock B. *Public Health: What It Is and How It Works*. Jones and Bartlett, 2009. <http://publichealth.jbpub.com/turnock/3e/>
- U.S. Census Bureau. "Older People Projected to Outnumber Children for First Time in U.S. History." 13 March 2018. <https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html>

Wi, Chung-Il et al. "Socioeconomic Status, and Health Disparities in a Mixed Rural-Urban US Community-Olmsted County, Minnesota." *Mayo Clinic Proceedings*, Volume 91, Issue 5, May 2016, Pages 612–622. <https://doi.org/10.1016/j.mayocp.2016.02.011>

Wilson, Christie. "National Park Service offers plan for Kīpahulu overcrowding." *Honolulu Star-Advertiser*, 29 Oct. 2018. <http://www.staradvertiser.com/2018/10/29/hawaii-news/nps-offers-plan-for-kipahulu-overcrowding/>

Wilson, Christie. "Pāhoā women provide comfort and support to their neighbors." *Honolulu Star-Advertiser*, 27 June 2018. <http://www.staradvertiser.com/2018/06/27/hawaii-news/paho-women-provide-comfort-and-support-to-their-neighbors/>

Wu, Yanyan et al. "Life Expectancies in Hawai'i: A Multi-ethnic Analysis of 2010 Life Tables." *Hawai'i Journal of Medicine & Public Health: a Journal of Asia Pacific Medicine & Public Health*, Volume 76, Issue 1, January 2017, Pages 9-14. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5226016/>

DATA RESOURCES

Bridging the Gap and Partners in Care. "2018 Hawai'i Statewide Point in Time Count Topline Report." 22 January 2018. <https://www.partnersincareoahu.org/sites/default/files/2018%20COMBINED%20STATEWIDE%20PIT%20COUNT%20-%20Topline%20Report%20FINAL.pdf>

Centers for Disease Control and Prevention. "High School Youth Risk Behavior Surveillance System." <https://nccd.cdc.gov/YouthOnline/App/Default.aspx>

Centers for Disease Control and Prevention. "State Data Profile for Hawai'i." <https://www.cdc.gov/ncbddd/disabilityandhealth/impacts/hawaii.html>

Centers for Medicare and Medicaid Services. "National Health Expenditure Fact Sheet, 2016." <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet.html>

County of Maui, Office of Economic Development. "Maui County Data Book, 2016." <https://hisbdc.org/Portals/0/MCDB/2016/2016%20Maui%20Data%20Book.pdf>

Data USA. "Data USA: Hawai'i." <https://datausa.io/profile/geo/hawaii/>

Hawai'i Health Data Warehouse. <http://hhdw.org/>

Hawai'i Health Matters. <http://www.hawaiihealthmatters.org/>

Migration Policy Institute. "Profile of the Unauthorized Population: Hawaii." <https://www.migrationpolicy.org/data/unauthorized-immigrant-population/state/HI>

Opportunity Insights. "The Opportunity Atlas; Which neighborhoods in America offer children the best chance to rise out of poverty?" <https://opportunityatlas.org/>

Nā Puke Wehewehe ʻŌlelo Hawai'i. Hawaiian Electronic Library. <http://wehewehe.org/>

Prosperity Now Scorecard. <https://scorecard.prosperitynow.org/>

Resource Center for Child and Adolescent Health. "2016 and 2016-2017 Combined National Survey of Children's Health." <http://childhealthdata.org/>

Social Interventions Research & Evaluation Network. University of California, San Francisco. <http://sirenetwork.ucsf.edu/>

State of Hawai'i Department of Business, Economic Development and Tourism, Research and Economic Analysis Division. "State of Hawai'i Data Book." <http://dbedt.hawaii.gov/economic/databook/>

State of Hawai'i Department of Business, Economic Development and Tourism, Research and Economic Analysis Division. "Statistical Report: Detailed Languages Spoken at Home in the State of Hawai'i." March 2016.
http://files.hawaii.gov/dbedt/census/acs/Report/Detailed_Language_March2016.pdf

State of Hawai'i Department of Business, Economic Development and Tourism, Research and Economic Analysis Division. "Residential Home Sales in Hawai'i: Trends and Characteristics, 2018-2015." May 2016.
http://files.hawaii.gov/dbedt/economic/data_reports/homesale/Residential_Home_Sales_in_Hawaii_May2016.pdf

State of Hawai'i Department of Health. "Hawai'i Behavioral Risk Factor Surveillance System."
<http://health.hawaii.gov/brfss/>

United Way Alice Project. <https://www.unitedwayalice.org/by-state>

University of Wisconsin Population Health Institute. <http://www.countyhealthrankings.org/>

U.S. Census Bureau. "American Community Survey." <https://census.gov/programs-surveys/acs/>

U.S. Department of Agriculture, National Agricultural Statistics Service. <https://quickstats.nass.usda.gov/>

U.S. Department of Health & Human Services, Health Resources & Services Administration. "Health Professional Shortage Areas." <https://data.hrsa.gov/tools/shortage-area/hpsa-find>

U.S. Department of Health & Human Services, Substance Abuse and Mental Health Services Administration. "National Survey on Drug Use and Health."
<https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>

U.S. Department of Labor, Bureau of Labor Statistics. "Labor Force Statistics from the Current Population Survey: Multiple jobholders by selected characteristics." <https://www.bls.gov/cps/cpsaat36.htm>

U.S. Department of Labor, Bureau of Labor Statistics. "May 2017 State Occupational Employment and Wage Estimates Hawai'i." https://www.bls.gov/OES/Current/oes_hi.htm