

# UNIVERSITY OF HAWAI‘I SYSTEM ANNUAL REPORT



REPORT TO THE 2021 LEGISLATURE

Annual Report on Operations of the  
Hawai'i Research Center for Futures Studies

HRS 304A-3253

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# **HAWAI‘I RESEARCH CENTER FOR FUTURES STUDIES**

**Activities for the year 2019-2020**

## **INTRODUCTION**

Since the last legislative report, the Center has continued its tradition of collaborative faculty and student research, consultations, and workshops, both in Hawai‘i and internationally. In what follows is a series of recommendations to the State of Hawai‘i, and a brief description of a selection of activities undertaken by the Center.

A detailed account of the work by the Director, associates, and students working together under the auspices of the Hawai‘i Center for Futures Studies can be found on our website <http://www.futures.hawaii.edu/>.

Our graduate researchers, affiliate researchers, and faculty researchers have expertise in a wide variety of areas from new media and information technologies, artificial and machine intelligence, Hawaiian resurgence, geoengineering to national security, space exploration, participatory governance design, and sustainable agriculture and development. We are capable of providing issue specific consultation, and creating and running futures design workshops.

All funding for the Center’s activities have been generated by the clients requesting our work, or through extramural grants obtained by members of the Center such as the Carnegie Corporation, the Arab Council for the Social Sciences, the US Fulbright Program, and the National Science Foundation. The Director and researchers receive no additional funding from the Hawai‘i state legislature beyond their salaries as professors. The director and faculty affiliates do not receive course releases or other workload benefits for their work in the Center, nor do any of the Center affiliates or students.

## **SELECTED ACTIVITIES SINCE OCTOBER 2019**

- In April, the Center was asked to spearhead a rapid COVID security report for the Air Force Warfighting Integration Capability (AFWIC) at the Pentagon. We provided futures methodology training and developed scenarios for how COVID could impact the geostrategic environment. The report was released to the public in June 2020 and became the basis for a nine-week course offered at National Intelligence University. The full report can be found here:  
[https://www.afwic.af.mil/Portals/72/Documents/AFWIC%20Global%20Futures%20Report\\_FINAL.pdf?ver=2020-06-18-124149-070&fbclid=IwAR1wMKNfDqaqGUcH-MGRXX86E7Tj7uZLe-qMyHifkDbTl4tAkUbQr1ECkSQ](https://www.afwic.af.mil/Portals/72/Documents/AFWIC%20Global%20Futures%20Report_FINAL.pdf?ver=2020-06-18-124149-070&fbclid=IwAR1wMKNfDqaqGUcH-MGRXX86E7Tj7uZLe-qMyHifkDbTl4tAkUbQr1ECkSQ)
- Similar foresight work and training regarding COVID futures was provided to the U.S. Coast Guard’s Eastern Pacific command as well as the DOD online event The Merge.
- In March of 2020, the Futures Center provided recommendations to the University of Hawai‘i regarding planning and adaptation in the COVID environment. We hope we can continue to be a useful resource to the University and the State of Hawai‘i during these uncertain times.

A number of local events have been hosted by our graduate researcher Ari Eisenstat, including:

- United Nations Association to host UN Day on Climate Justice in October 2019, and Human Rights Day in February 2020 at the Hawai‘i State Capitol.
- The development of the radio show "The Future Accords" for KTUH University of Hawai‘i Radio and the Hawai‘i public.
- The development of "The Futures Incubator" in partnership with Matsunaga Institute for Peace and KTUH with the mission of supporting students and community members to create multi-sector projects for transformational futures. Fellowship program launching in 2021.

### **FUTURES RECOMMENDATIONS FOR THE STATE OF HAWAI‘I**

Over the past year the Futures center has been part of a number of planning events for COVID response as well as planning for post-pandemic futures. These discussions have been at the city, state, national, and international scale. The following statewide recommendations are gleaned from those meetings with an eye to what makes Hawai‘i a distinctive living and policy environment.

These recommendations are along four major sectors for which the Futures Center has cultivated its strengths in research and collaboration. The four areas are environment, security, economy, and culture. We are always available to the Governor’s office and Legislature to discuss and conduct research about these recommendations, or other areas of concern.

**Technology:** The last few months suggest that Hawai‘i will have technological demands in the coming decades that may be quite different than those we may have presumed only a year ago. COVID has demonstrated how fragile our relationship to the rest of the world truly is, including human travel and the supply chains we depend on for vital needs. Thankfully, COVID has turned out to be less lethal and more manageable than our worst projections. Unfortunately, the duration of COVID and its cyclical character is living up to our expectations. We recommend that policy making on technological development and investment focus on the possibility of frequent interruptions with varying and unpredictable durations.

COVID has shown that the current Hawaii strategy of stockpiling and emergency resupplying may become increasingly insufficient, as emergent diseases and climate change have the capacity to disrupt well beyond what COVID has as of yet been capable. We encourage the planners to account for the cracks and fissures COVID has made visible in the state’s infrastructure.

There are technological futures that are less susceptible to disruption. Hawai‘i would benefit from long-term development investments in 3D printing technology, the expansion of sustainable agriculture, onsite production of chemical and medicinal substrates, and the capacity to maintain information and communications technologies beyond reliance on resupply or military assistance.

In addition to long-term planning, we recommend a short-term survey of existing alternative infrastructures for research, development and fabrication that may already exist at universities on the island. For instance, what capacities for onsite production, food production, and communication already exist in the State of Hawai‘i that could be scaled to independence if we are caught again with limited transportation and commerce for an extended period of time?

**Environment:** The future of Hawai‘i’s environment requires consideration of both its ecosystem as well as the built environment on which many of us depend. Climate change is one of many possible disruptions to our islands capacity to renew clean water and potentially provide food. The question of how development on the islands continues to cope with housing demands and natural resources is not just a technical one. There is a significant and increasingly vocal divide in the state suggesting that the future visions of Hawai‘i are diverging and not likely to find consensus without significant investment in schemes for participatory development, which go beyond public hearings and representational democratic structures.

These divides will likely widen as resources become scarce and the possibility of potential emergencies enter the horizon. We recommend that efforts be made for dialogue on Hawai‘i resource and development futures that do not have specific projects in mind. Futures dialogue offers the possibility of long-term collective planning without the specific conflicts of interest that already exist when debating short-term, specific development projects. Given the potential severity of coming disruptions, and the divisiveness that is evident, it is not too early to begin a series of great debates on the next 100 years of Hawai‘i. Creating fora for dialogue and debate over Hawai‘i future well in advance of policy making can foster the development of alternatives and create the inclusive decision-making that is necessary for institutional legitimacy.

**Economy:** For the past forty years the Futures Center has been considering post-work futures. Beyond our recent spike in unemployment, the challenges of automation and the declining necessity for labor generally is a challenge and an opportunity for Hawai‘i. Hawai‘i’s reliance on a service economy may not fully recover after COVID or early retirements nation-wide, and increased leisure time could increase the numbers arriving in our state. As a state, we are prepared for tourism to flourish. However, the state is not prepared for a significant and permanent decline in the service industry. We do not make predictions at the Center, and instead offer guidance on possible futures and try to identify where even improbable futures may take existing planning by surprise. We recommend that the state consider alternative arrangements for financial support such as basic income guarantees, alternative revenue generation schemes, and a diversity of taxing schemes.

Sustenance is only the beginning of the challenges of a post-work future. Consideration should be given to how to make livable futures for people to thrive when work can no longer define our sense of success or a life well lived. Finding inspired ways of living and sustaining those lives will be quite difficult within the current economic framework in which we live.

Providing more opportunities for people to return to school earlier than traditional retirement ages for non-economic focused educations as well as supporting other cultural practices and artistic pursuits which can fulfil people may be essential to combat the malaise and depression that often accompanies unemployment.

Japan is currently facing a similar set of challenges as their average longevity has extended well beyond retirement. The Center has developed several futures models for Japan’s National Institute of Science and Technology and we would be excited to undertake developing similar scenarios for the state of Hawai‘i.

**Security:** The Futures Center’s work this year with the U.S. Air Force, National Intelligence University, and U.S. Coast Guard as well as others within the intelligence and defense community makes it clear that regardless of electoral outcome, the defense sector of the U.S. sees itself in a competitive and antagonistic relationship with China and North Korea.

At the same time, the U.S. alliance system that currently defines the security order for the Pacific is under heavy strain. Possible futures include a significant buildup of military force in and around Hawai‘i. Some possible futures could find Hawai‘i again as the halfway point between two warring states. The role of the U.S. military in Hawai‘i and the civil defense of our state will face many challenges in the next two decades.

We recommend exploring how Hawai‘i would thrive in such an environment, and how military presence or state-to-state hostility would undermine Hawai‘i’s existing economic model.

A sudden change to the security environment, even well short of war, could disrupt tourism as well as supply chains. While national defense is a national issue, the state plays an important role in developing the capacity to protect its residents and to facilitate the democratic dialogue that is the bedrock of the American theory of civil-military relations. We recommend research and planning around how to best prepare for possible disruptions in resources, how to develop plans for potentially long-term independence economically, and ways to ensure the safety of Hawai‘i with or without the current military posture of the United States.

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