

### **EXECUTIVE SUMMARY**

In order to contain Covid-19, cushion the collapse of the local economy, and better position Hawai'i for recovery, state government should take these urgent steps, many of which are already under consideration at the capitol:

- Make emergency investments in agencies critical to the pandemic response, so that Hawai'i has the capacity to identify, investigate, and contain infections before they become clusters
- Take full advantage of federal relief funds and the Federal Reserve's Municipal Liquidity Facility, which can buy state bonds at historically low interest rates
- Stabilize but do not cut spending across state government to avoid compounding the private-sector crisis
- Develop long-term plans for surgical cuts, targeted revenue enhancements, and strategic investments to return to balanced budgeting as the economy rebounds

These spending and borrowing guidelines will enable Hawai'i to complement rather than counteract the federal government's relief efforts. With swift and decisive action, state government can mount a robust response to both the public health crisis and the economic crisis—and can take tentative steps toward a post-Covid economy that works better for all of Hawai'i's residents.<sup>2</sup>

### INTRODUCTION

When our household income suddenly declines, we have little choice but to cut back. We cook instead of ordering takeout. We try to be careful with our credit cards. In a personal financial crisis, tightening our belt is necessary, prudent, even a sign of good character.

Commonsense for our families, however, does not always apply to governments.<sup>3</sup> Governments have unique powers and responsibilities. They can spend, borrow, make laws, and command their own revenue in ways households and businesses cannot.

### INTRODUCTION CONTINUED

Governments depend on economic circumstances, but they also shape economic conditions.

In major disasters and emergencies, governments alone have the capabilities to mount a coordinated, comprehensive response. When we call 911 as a community, we count on our government to answer.

In the public health response to the Covid-19 pandemic, state and local governments have heroically led the way, with astonishingly little guidance from the federal government. In the face of the looming recession, however, many state governments have been slow to act. Rather than dispensing funds to stabilize their local economies, they have cut spending to comply with balanced-budget requirements. <sup>4</sup>

Most economists believe this is the wrong policy at the wrong time. In the nine decades since the Great Depression, we have seen time and again how austerity has exacerbated downturns, prolonged recoveries, and reduced government revenue over the long term.<sup>5</sup>

Increased government spending during economic contractions, by contrast, is frequently the best available policy option, so long as the overall conditions are right. In the case of the Covid downturn, increased spending is both prudent and necessary: Prudent because we are operating in a highly favorable borrowing

environment, with interest rates low, federal relief dollars flowing, and the Federal Reserve buying state debt.

Necessary because sustained investment in testing, tracing, and public health is critical to safely managing the pandemic over its full course.<sup>6</sup>

# WHEN WE CALL 911 AS A SOCIETY, WE COUNT ON OUR GOVERNMENT TO ANSWER.

A robust response by state government to both the public health and economic crisis is critical to saving lives, protecting Hawai'i households and businesses, and ensuring that we don't layer a public-sector crisis atop the private-sector one. Well-designed, shrewd investments under crisis conditions can even help us take tentative steps toward a stronger, more resilient post-Covid economy, one that works for a greater portion of Hawai'i's residents.

### INTRODUCTION CONTINUED

Based on a survey of emerging economic, policy, public health, and historical literature—and after a series of consultations with economists, policy analysts, tax experts, jurists, social service providers, and current and former government officials, we recommend four principles to guide the State of Hawai'i's response to the health and economic crises:

- Make emergency investments in agencies critical to containing the virus and mitigating the economic downturn, e.g., public health, technology, and vital human services
- Bridge the revenue gap by adjusting state finances, tapping federal relief funds, and, most important, making use of the Federal Reserve's debt purchasing program
- Stabilize spending across all other agencies, with no new cuts until long-term conditions become clearer or until the recovery begins
- Develop long-term plans for surgical cuts, revenue enhancements, and strategic investments that will allow a return to balanced budgeting as the economy recovers

These steps, we believe, are critical to safely navigating the pandemic and laying the groundwork for economic recovery.

We are fortunate in Hawaiʻi that many of these proposals are under active consideration at the capitol. The package of bills announced as the legislative session resumed represents a promising approach. The proposed bills would provide additional funds to shore up the state budget and reduce the need for salary cuts and furloughs. This points Hawaiʻi in the right direction.

### **EMERGENCY INVESTMENT**

The highest priority for state government is to protect Hawai'i's population from Covid-19 for the duration. Thus far Hawai'i has not experienced a local epidemic, thankfully, but many experts contend we have yet to implement a comprehensive public health strategy. In order to box in the virus, Hawai'i needs to devote new, additional resources to:

- Safeguard the most vulnerable members of our community, including first responders, inmates, homeless individuals, and especially elderly residents of long-term care facilities, which have accounted for at least a fourth of Covid deaths nationwide.<sup>8</sup>
- Continue to ramp up diagnostic and surveillance testing in order to identify asymptomatic cases and shut down infections before they become clusters. Although testing capacity has improved, epidemiologists contend that Hawai'i is still conducting too few tests to safely reopen society.<sup>9</sup>
- Investigate and track each positive test result in order to find new cases and break the chains of transmission. Public health experts recommend that Hawai'i have the ability to assign 400 to 1,200 employees to fulltime contact tracing during an epidemic.<sup>10</sup>
- Provide voluntary isolation options so infected individuals don't endanger their families. Hawai'i is fortunate to have spare hotel capacity, but that capacity can't be fully utilized without planning and funding.<sup>11</sup>

Emergency Covid spending, most of which is reimbursable under the CARES Act, will save lives over the course of the pandemic. It will also allow us to ease physical distancing orders and reopen businesses. Public officials have discussed rebranding Hawai'i as "the safest place on earth." This will only work if Hawai'i is safe. And that will happen by design, not by luck.

PUBLIC OFFICIALS HAVE DISCUSSED
REBRANDING HAWAI'I AS "THE SAFEST PLACE
ON EARTH." THIS WILL ONLY WORK IF HAWAI'I
IS SAFE. AND THAT WILL HAPPEN BY DESIGN,
NOT BY LUCK.

### EMERGENCY INVESTMENT CONTINUED

Beyond the immediate Covid response, state action is also critically needed to take full advantage of federal government spending and to prevent many households from descending into poverty. To better equip state government to respond to the economic crisis, we need additional resources to:

Process unemployment claims and other forms of federal relief. State government has made do by repurposing employees from other agencies and mobilizing volunteers, but this will be inadequate going forward. Offices critical to the economic response need new hires, some temporary, some permanent. Every delay in distributing federal relief dollars adds to Hawai'i's economic pain

Aggressively tap CARES Act federal relief funding and staff up to expedite use of regular federal appropriations.

Hawai'i has lagged behind other states in dispensing allocated federal funds for years. 14 This is not a problem that can be fixed immediately, but personnel should be made available to clear bottlenecks where possible

Provide DOE and UH the resources they need to convert to quality online education, provide emergency job training, and advance pandemic-critical research<sup>15</sup>

Plug gaps in federal relief funding and supplement federal assistance to meet local needs. State resources can top-off assistance to excluded groups like mixed-status immigrant households and COFA migrants, and can also support essential local programs like Kupuna Care and Double Up Food Bucks

All of this will require funding. The good news is that the \$2 trillion CARES Act provides money for new and necessary state expenditures directly related to the pandemic. Howaith these federal funds, state leaders can add staff and supplies to essential programs at almost no cost to Hawait taxpayers.

### **BUDGET STABILIZATION**

Not every state office needs supplementary funding to address the pandemic. For programs indirectly involved in Covid response, funding for FY2021 should be frozen at FY2020 levels with no additional, crisis-induced cuts. Flat funding will stabilize state government, maintain essential services, and slow the economic downturn. Budget continuity will enable state leaders meet the first test of both emergency medicine and crisis governing: Do no harm.

Maintaining budget stability will provide many benefits in containing the virus and hastening the recovery:

- Budget continuity will allow department heads and elected officials to devote their full attention to the crisis rather than getting sidetracked by political fights
- Crisis-driven cuts tend to be hasty, blunt, and poorly designed
- Significant cuts to the public-sector workforce will push more families into crisis. 17 Because most Hawai'i households have little capacity to absorb income loss, public-sector wage cuts will unleash additional spirals of bankruptcy, eviction, and impoverishment, which will only increase government costs for social services
- Covid-19 has especially ravaged vulnerable communities. State budget cuts will do the same. <sup>18</sup> In responding to the crisis, we should avoid worsening inequalities and cutting supports for Hawai'i residents most in need
- Major cuts will damage the economy. Hawai'i's private-sector economy is in free fall. State government cannot afford to exacerbate this crisis by precipitating a parallel crisis in the public sector. Hawai'i is already trying to navigate a terrible storm. We don't want a hurricane

Macroeconomists generally agree that local and state governments are ill equipped to rescue economies on their own. The heavy lifting of recovery necessarily falls to the federal government, which has unmatched borrowing capacity and manages the world's reserve currency. <sup>20</sup> Yet state government can help. By mounting a robust pandemic response and stabilizing public-sector spending, Hawai'i can better contain the virus, preserve government capacity, and avoid inflicting additional economic injury.

### BALANCING VS. BORROWING

Some politicians have advocated budget cuts for a simple reason: tax receipts have tumbled off a cliff.21 Since March, the state's largest industry, accounting for a fifth of GDP, has imploded.22 Stay-at-home orders have further constricted the local. non-tourist economy, with restaurants, bars, shops, and gyms all shutting their doors. This historic experiment in mass quarantine has saved many lives—the epidemiological evidence is clear on this point—but shutdown also has costs.23 Unemployment has soared, with perhaps a third of the workforce idled.24 Consumption and profits in non-essential industries have collapsed. In the United States as a whole, the economy is contracting at a faster rate than it did in the Great Depression.25

Tax revenue is also falling. In early March, the State Council on Revenue predicted zero revenue growth for FY2020, and conditions have since worsened. HERO estimates that tax revenue could fall by 10 to 25% as we plan next year's budget. Hawai'i's budget shortfall could total \$1 billion or more.

Under normal circumstances, Hawaiʻi, like most states, has to balance its budget.<sup>29</sup> Future liabilities, like pensions, as well as bond issues for capital projects, like rail, are exempt, but operating expenses normally must match revenue for each fiscal year. This fiscal discipline is encoded in Article VII, section V of the 1978 Hawaiʻi constitution:

General fund expenditures for any fiscal year shall not exceed the State's current general fund revenues and unencumbered cash balances, except when the governor publicly declares the public health, safety or welfare is threatened as provided by law.

In non-emergency conditions, there are good arguments to be made for prohibitions against state deficit spending.30 In genuine emergencies, not so much—which is precisely why state framers included an exception clause. Up to this point, this exception clause has not been exercised—Hawai'i has not faced a protracted emergency of this scale since statehood, after all—but the experts in public finance and state law we have consulted agree that there are various ways for the legislature to spend beyond its means. Hawai'i's balanced budget requirement is strict but not inviolable. It does not bar state government from saving lives and slowing economic collapse.

HAWAI'I'S BALANCED BUDGET REQUIREMENT IS STRICT BUT NOT INVIOLABLE. IT DOES NOT BAR STATE GOVERNMENT FROM SAVING LIVES AND SLOWING ECONOMIC COLLAPSE.

### BALANCING VS. BORROWING CONTINUED

During the Covid-19 emergency, there are a set of reasons why lawmakers should approve spending beyond formal revenue projections:

The state will be able to charge many of its expenditures to the federal government. In response to the pandemic, Congress and the Federal Reserve have already allocated some \$6 trillion in relief funds (at least \$1.25 billion for Hawaiʻi), with more in the works, including proposed funding specifically for local governments.<sup>31</sup>

The state has the ability to borrow on historically favorable terms. Although the state's general obligation bond ratings have declined slightly with the collapse of tourism, Hawai'i can still float top-rated investment-grade municipal securities (currently rated AA+ and Aa1). Moreover, the current macroeconomic landscape favors public debt, with both inflation and interest rates hovering around zero. Last, and most important, the Federal Reserve has stepped in to buy—and essentially guarantee—state debt, which means that Hawai'i can issue bonds without searching for and negotiating with buyers. State borrowing is never a free lunch, but at the moment it's a steal.

Historical economic research overwhelmingly shows that retrenchment in response to crisis, especially in conditions of controlled inflation, has counterproductive effects: accelerating decline, delaying recovery, and, in the end, depressing government revenue. This was true in the Great Depression, which was initially worsened by austerity and only solved by war spending. It was true in the 1997 Asian financial crisis, during which countries that implemented IMF structural adjustment programs fared worst. And it was true, worldwide, during the great recession of 2009.

Such studies primarily involve national governments, but states are supporting actors in a larger drama. If Hawai'i inflicts unnecessary damage through budget cuts, we make our economy harder to rescue.

The return on investment associated with public spending is larger in crises than under normal circumstances. Because businesses and households have curtailed spending, state spending to fill the demand gap can have an usually pronounced effect on economic growth, which can, in turn, elevate state revenue over the long term.<sup>34</sup>

### BALANCING VS. BORROWING CONTINUED

Observers of financial panics point out that economic crises can behave like pandemics; fear is contagious.<sup>35</sup> To bolster consumer and business confidence, therefore, the State of Hawaiʻi needs to demonstrate that it has the public health capacity to contain the virus.<sup>36</sup> State leaders also need to signal that they will do what it takes to support local businesses and stop local residents from spiraling into poverty. At the national level, the Federal Reserve has effectively communicated it will prevent economic catastrophe by any means necessary—and the markets have responded favorably.<sup>37</sup> Hawaiʻi's leaders need to speak with similar boldness and determination.

Many politicians are understandably reluctant to spend public money beyond our immediate means.<sup>38</sup> In a crisis like Covid, however, the preponderance of evidence suggests this as the best course of action. A robust, properly funded state response will allow us to better contain the virus, more deftly navigate the economic crisis, and more quickly rebound. Our lives and welfare depend on state leaders doing what they must, even if the course of action is unprecedented.

### BRIDGING THE GAP

There are a variety of ways for state government to bridge the revenue gap for the coming fiscal year. Below are some possibilities put forward by experts in state finance. Many of these ideas are already under active consideration by lawmakers. They include:

- A formal suspension of the state's balanced-budget requirement, in addition to rule and accounting changes to allow de-facto deficit spending 39
- Postponement of previously negotiated salary increases for public-sector employees

- Full use of the state's rainy day and hurricane relief funds
  - Postponement of payments to the state employee pension plan, though with an eye toward long-term solvency<sup>40</sup>

Note that none of these maneuvers within state finance is as important as taking full advantage of federal relief funds and the Federal Reserve's Municipal Liquidity Facility. The Covid crisis is too severe to treat with conventional remedies. We must stabilize our budget and inject new money into the system.

### REDUCTIONS AND REVENUE POSSIBILITIES

Budget cuts or tax increases enacted under crisis conditions are likely to be poorly designed and potentially damaging. As the economy recovers, however, the state will need to make spending and revenue adjustments to repay debts, reform agencies, improve government services, and enhance readiness for future challenges. None of this will be easy—elected officials have been wrestling with public priorities and finite resources for years—but we are more likely to succeed if we don't upend government in the middle of an emergency.

BUDGET CUTS OR TAX INCREASES ENACTED UNDER CRISIS CONDITIONS ARE LIKELY TO BE POORLY DESIGNED AND POTENTIALLY DAMAGING.

In recent years, politicians and economists have proposed a variety of structural changes to reduce state spending and liabilities. Note that the items included here are not formal recommendations. Rather, they are starting points for a deliberate policy process that should take place as the crisis abates. Past proposals to substantially reduce state spending include: pension reform, healthcare cost regulation, reduction of business subsidies, inmate population controls, and redirection of more Transient Accommodation Tax receipts to the General Fund.

Public policy experts have also put forward a variety of ideas for increasing state revenue.<sup>41</sup> Tax increases are rarely popular, but they will likely be necessary as the population ages and the climate crisis intensifies. The best revenue proposals are targeted and carefully designed so as not to retard growth or exacerbate inequalities. Such revenue enhancements in Hawai'i could include: a small wealth tax, a modest increase in the excise tax (with exemptions to mitigate its impact on working families), a carbon tax, an increase in tourist tax, making high-dollar pensions taxable, creating new brackets at the very top of the income scale, taxing capital gains at regular income rates, and extending business taxes to real estate investment trusts. 42

### REDUCTIONS AND REVENUE POSSIBILITIES CONTINUED

These possibilities notwithstanding, the best way to restore state revenue and repay any debt incurred during the emergency is to return to economic growth—and the best way to do that is to effectively manage the emergency. Data from the Great Recession of 2009 shows that nations that loosened monetary policy, increased public spending, and took on new debt did better than countries that imposed austerity, or had it imposed upon them. 43 Countries with more aggressive macroeconomic interventions saw their economies recover more quickly, tax receipts rebound, and their overall level of indebtedness decline. In other words, growth paid off their debts. Austerity, by contrast, led only to misery. 44

Even though we have less capacity than a national government, the State of Hawai'i needs to heed these lessons. If we want a comparatively steep rebound—a V- or even a U-shape recovery—we must demonstrate capacity to contain the virus, decelerate the local economic slide, and begin making investments that will foster a more resilient economy going forward.

### LONG TERM INVESTMENTS

This policy brief outlines near-term measures to combat the virus, cushion the economic freefall, and hasten the recovery. We propose mostly flat government spending with new resources only for programs directly involved in Covid response and thus mostly reimbursable by the federal government. We could think bigger.

Even before the crisis, Hawai'i's economy wasn't working for everyone. The unemployment rate was the lowest in the United States and visitor numbers had soared, but insecurity was gnawing at too many households across the archipelago. According to a recent report by Hawai'i's

Financial Health Network, only a third of Hawai'i households qualify as financially healthy in terms of income stability, credit, savings, and housing costs. To make it, a quarter of Hawai'i residents have to work more than one job and have to use credit or savings to cover basic expenses.45 Others aren't making it. Sixteen percent of Hawai'i households struggle with food insecurity, and Hawai'i still has one of the highest per capita rates of homelessness in the country.46 In a growing economy that should have been delivering plenty, a solid majority of Hawai'i residents were struggling—and too often failing—to make ends meet.

### LONG TERM INVESTMENTS CONTINUED

The first task before us is to address the virus and the meltdown, but this crisis also presents an opportunity to rethink what sort of Hawai'i we want and how to get there.

Many economists argue that long-term growth and well-being result from good internal investments, especially in human capital. In recent decades, Hawai'i has initiated a variety of experiments to foster economic diversification, a transition from tourism to more knowledge-based industries. These have included innovation grants, film credits, and, most notoriously, the Act 221 technology tax credits, which ended up costing nearly a billion dollars. 47 These narrowly focused experiments have for the most part not succeeded. Despite much treasure expended, tourism and military spending remain on top.

What we have not tried are ambitious structural investments with more distant return horizons. Such investments could include:

A full commitment to early-childhood education, which a mountain of social science research shows delivers positive results over lifetimes<sup>48</sup>

Substantial improvements in K-12 education, with a focus on facilities, compensation, equity, research, and student engagement

## THIS CRISIS ALSO PRESENTS AN OPPORTUNITY TO RETHINK WHAT SORT OF HAWAI'I WE WANT AND HOW TO GET THERE.

Renewed attention to the University of Hawai'i as an engine of innovation and workforce development, and also of cultural enrichment and democratic preservation<sup>49</sup>

Serious engagement with the housing crisis, which at present is pushing residents into poverty and emigration but could instead enable decent wage earners to more easily achieve the trappings of middle-class prosperity

Development of high-performing technology and communications infrastructure, which could make the islands' more attractive to startups and digital nomads, whose numbers may increase in the Zoom era

Infrastructure fortification to meet the disruptions of climate change, which could put Hawai'i ahead of the world in preparing for a crisis for which we have ample warning

### LONG TERM INVESTMENTS CONTINUED

These represent major challenges that would require substantial resources. Investing in such programs would require new sources of revenue, but might also be addressed through public debt. Most governments in most times don't have the ability to borrow money at almost no interest to invest in human capital. We do.

The SARS-CoV-2 virus has swept the earth, leaving sickness, death, chaos, and economic ruin in its wake. Yet we don't have to emerge from this gauntlet weaker than when we entered. If we effectively contain the virus and prepare Hawai'i for recovery, we will have the luxury of envisioning an economy that better serves all of its residents—and we will have the capacity to work our way toward it.

### RESEARCH APPROACH

This report urges state government to mount a robust response to the Covid-19 pandemic and to its accompanying recession. It calls for emergency investments in public health, budget stabilization across state agencies, and full utilization of federal relief funding and borrowing programs. These recommendations are based on a survey of emerging economic, policy, and public health literature on the pandemic, as well as historical literature on government responses to previous economic crises. In developing these proposals, we have also consulted with economists, tax specialists, policy analysts, public health experts, jurists, historians, political scientists, and non-profit leaders. To assess the viability of these recommendations, we have shared drafts of this report with current and former government officials, many of whom have spoken with us in confidence. We have consulted extensively, but the ideas offered here are our own and in no way speak for any other individuals or institutions. Covid-19 has dramatically transformed the economic and policy landscape, and this analysis is therefore based on incomplete knowledge. Nonetheless, we hope the recommendations will prove useful to policymakers as they confront the challenge of our time.

Published by the Public Policy Center at the University of Hawai'i at Mānoa.

Graphic Design by Bryan Keith of Nomancy Design LLC.

www.publicpolicycenter.hawaii.edu www.scholars.org

### **CITATIONS**

- <sup>1</sup>See HB1632, HB 2200, HD1 and HB2725, HD1; Thirtieth Legislature, State of Hawai'i 2020.
- <sup>2</sup> Although our focus is on state government, some of these recommendations can apply in general terms to the counties, especially Honolulu. Under new rules published on April 27, the Fed's MLF can be tapped not only by states but by large cities and counties. "Federal Reserve Board Announces an Expansion of the Scope and Duration of the Municipal Liquidity Facility." Board of Governors of the Federal Reserve System (April 27, 2020).
- <sup>3</sup> John Maynard Keynes famously called this disjuncture, "the paradox of thrift." John Maynard Keynes, "From Keynes to Roosevelt: Our Recovery Plan Assayed," *New York Times*, December 31, 1933.
- <sup>4</sup>Alan Greenblatt, "Absent Fed Help, State Budgets Will be the Worst in Decades," *Governing* (April 27, 2020).
- <sup>5</sup> Mark Blyth, *Austerity: The History of a Dangerous Idea* (Oxford University Press, 2013); Abhijit V. Banerjee and Esther Duflo, *Good Economics for Hard Times* (PublicAffairs, 2019).
- <sup>6</sup>Veronica Guerrieri et al., "Macroeconomic Implications of COVID-19: Can Negative Supply Shocks Cause Demand Shortages?" NBER Working Paper w26918 (Accessed May 10, 2020). Emmanuel Saez and Gabriel Zucman, "Keeping Business Alive: The Government as Buyer of Last Resort," University of California, Berkeley (March 15, 2020).
- <sup>7</sup>HB1632, HB 2200, HD1 and HB2725, HD1; Thirtieth Legislature, State of Hawai'i 2020.
- <sup>8</sup> "New Count Reveals 1,600 More Nursing Home Deaths in N.Y.," New York Times (May 7, 2020).
- <sup>9</sup> Sharon Begley, "Many States are Far Short of Covid-19 Testing Levels Needed for Safe Testing, New Analysis Shows," *STAT* (April 27, 2020). Heather Long, "The Only Way to Get Back to Normal this Summer is to Test Everyone in the United States, Nobel Prize-Winning Economist Says," *The Washington Post* (April 27, 2020). Paul Romer, "Roadmap to Responsibly Reopen America." http://roadmap.paulromer.net (Accessed May 10, 2020).
- National Association of County and City Health Officials, "NACCHO Position Statement" (April 16, 2020). Maggie Fox, "'We need an army': Hiring of coronavirus trackers seen as key to curbing disease spread," STAT (April 13, 2020); Kristen Consillio, "Health experts say it's too soon to reopen," Honolulu Star-Advertiser (May 6, 2020).
- <sup>11</sup>Robert Perkinson, Seiji Yamada, and Colin Moore, "Crush the Cure: Urgent Steps Hawai'i Can Take to Contain the Covid-19 Pandemic," University of Hawai'i (April 15, 2020).
- <sup>12</sup>Kevin Dayton, "Plans in the works to market Hawaii as the 'safest place in the world," *Honolulu Star-Advertiser* (May 1, 2020).
- <sup>13</sup>Allison Schaefers, "Less than one-third of Hawaii's unemployment claims have been paid since March 1," *Honolulu Star-Advertiser* (April 27, 2020).
- <sup>14</sup>Shannon Tangonan, "Use it or lose it: Tracking down unspent federal funds, *Honolulu Star-Advertiser* (December 13, 2015).

### CITATIONS CONTINUED

- <sup>15</sup> Suevon Lee, "DOE Chief: Distance learning will still fill a need once classrooms reopen," Honolulu Civil Beat (April 29, 2020); David Lassner, "Public higher education key to Hawaii's COVID-19 recovery," Honolulu Star-Advertiser (May 10, 2020).
- <sup>16</sup> U.S. Department of the Treasury, "The CARES Act provides assistance for state and local governments" (Accessed May 10, 2020).
- <sup>17</sup> Hawaiʻi Appleseed Center for Law and Economic Justice, "Struggle to Make Ends Meet: The Need for a Working Family Credit" (March 2017).
- <sup>18</sup> Peter Orszag and Joseph Stiglitz, "Spending Cuts vs. Tax Increases at the State Level: Is One More Counter-Productive than the Other During a Recession?" Center on Budget and Policy Priorities (November 6, 2001).
- Howard Schneider, "An amazing mea culpa from the IMF's chief economist on austerity," The Washington Post (January 3, 2013); Hawai'i Budget and Policy Center, "Avoid public sector cuts at all costs during a recession" (Accessed May 10, 2020); Thomas Piketty, Capital and Ideology, (Cambridge, MA: Belknap Press of Harvard University Press, 2020).
- <sup>20</sup> Paul Krugman, "Starve the Beast, Feed the Depression," New York Times (April 16, 2020).
- <sup>21</sup> Kevin Dayton, "Tax Collections Tank as Hawaii Lawmakers Plan Budget Fixes to Avoid Public Worker Furloughs," *Honolulu Star-Advertiser* (May 9, 2020).
- <sup>22</sup> Allison Schaefers, "Hawaii visitor arrivals climb to highest since start of coronavirus quarantine," *Honolulu Star-Advertiser* (May 5, 2020).
- <sup>23</sup> Eduardo Porter and Jim Tankersley, "Shutdown Spotlights Economic Cost of Saving Lives," New York Times (April 13, 2020). Martin S. Eichenbaum et al., "The Macroeconomics of Epidemics." NBER Working Paper No. 26882 (April 2020).
- <sup>24</sup> UHERO, "COVID-19: Developing Economic Recovery Scenarios for Hawaii" (May 4, 2020).
- <sup>25</sup> Louise Sheiner and Kadija Yilla, "The ABCs of the post-COVID Economic Recovery," Brookings Institute (May 4, 2020).
- <sup>26</sup> Kevin Dayton, "Council on Revenues sharply cuts back on Hawaii's revenue projections," *Honolulu Star-Advertiser* (March 11, 2020).
- <sup>27</sup>UHERO, "Interim Forecast Update: Hawaii's Economy is Shut Down to Deal with COVID-19" (March 30, 2020).
- <sup>28</sup> Nancy Cook Lauer, "Ige Considering Pay Cuts as State Faces \$1.5 Billion Shortfall Because of Pandemic," West Hawaii Today (April 16, 2020).
- <sup>29</sup>Kim S. Rueben and Megan Randall, "Balanced Budget Requirements: How States Limit Deficit Spending." Urban Institute (November 27, 2017).
- <sup>30</sup> Jeffrey Clemens and Stephen Miran, "Fiscal Policy Multipliers on Subnational Government Spending," *American Economic Journal: Economic Policy*, 4(2): 46-68.
- <sup>31</sup> Andrew Van Dam, "The U.S. has Thrown More than \$6 Trillion at the Cronoavirus Crisis. That Number Could Grow," *The Washington Post* (April 15, 2020).
- <sup>32</sup> Dave Segal, "Credit-rating agencies lower Hawaii's debt outlook to 'negative'," *Honolulu Star-Advertiser* (April 26, 2020).

#### CITATIONS CONTINUED

- <sup>33</sup> Board of Governors of the Federal Reserve System, Municipal Liquidity Facility Term Sheet. (April 27, 2020).
- <sup>34</sup> Bebonchu Atems, "The Effects of Government Spending Shocks: Evidence from U.S. States," Regional Science and Urban Economics, v. 74 (January 2019): 65 – 80.
- <sup>35</sup> Robert J. Schiller, "The Two Pandemics," *The Guardian* (March 31, 2020).
- <sup>36</sup> Paul Romer, "Roadmap to Responsibly Reopen America." https://roadmap.paulromer.net (Accessed May 10, 2020).
- <sup>37</sup> Carla Fried, "Bonds Started to Falter. Then, the Fed Came to the Rescue," *New York Times* (April 16, 2020)
- <sup>38</sup> Nathan Eagle, "House, Senate Agree to \$14 Billion State Budget Bill," *Honolulu Civil Beat* (April 20, 2018).
- <sup>39</sup>Office of the Attorney General, State of Hawaiʻi, Hawaiʻi Attorney General Legal Opinion 97-01. http://ag.hawaii.gov/wp-content/uploads/2013/01/97-01.pdf (Accessed May 10, 2020).
- <sup>40</sup> Gregg Mennis and Kate Kemmerer, "Hawaii's Pension Fund Positioned to Withstand Next Recession," Pew Charitable Trusts (March 29, 2019).
- <sup>41</sup> Hawai'i Budget and Policy Center, "Hawai'i Progressive Revenue Options" (May 10, 2020).
- <sup>42</sup> Roger Epstein, "It's Absurd that REIT Income is not Taxed in Hawaii," *Honolulu Civil Beat* (April 26, 2019); Hawai'i Budget and Policy Center, "Hawai'i Progressive Revenue Options" (May 10, 2020); Elizabeth McNichol, "State Taxes on Capital Gains," Center on Budget and Policy Priorities (December 11, 2018); Janelle Cammenga, "How Much Does Your State Collect in Corporate Income Taxes per Capita?," Tax Foundation (March 4, 2020).
- <sup>43</sup> Lucyna Gornicka et al., "Learning about Fiscal Multipliers During the European Sovereign Debt Crisis," VOX: CEPR Policy Portal (January 23, 2020).
- <sup>44</sup> Jon Danielsson et al., "The Coronoavirus is No 2008," VOX: CEPR Policy Portal (March 26, 2020).
- <sup>45</sup> Financial Health Network, "Hawaii Financial Health Pulse: 2019 Survey Results" (January 2020).
- <sup>46</sup> Hawaiʻi Health Matters, "Food Insecurity Among Households" (Accessed May 10, 2020); "Hawaii Falls to 2nd Nationally in Homeless Population Size" Associated Press (January 2, 2020).
- <sup>47</sup> Stewart Yerton, "This Long-Expired High-Tech Tax Credit is Still Costing Hawaii Millions," Honolulu Civil Beat (January 8, 2010).
- <sup>48</sup> Suzanne Bouffard, *The Most Important Year: Pre-Kindergarten and the Future of Our Children* (New York: Penguin, 2017).
- <sup>49</sup> David Lassner, "Public higher education key to Hawaii's COVID-19 recovery," *Honolulu Star-Advertiser* (May 10, 2020); Corey Robin, "The Pandemic is the Time to Resurrect the Public University," *The New Yorker* (May 7, 2020).