



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone:
Web:

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARK B. GLICK
CHIEF ENERGY OFFICER

(808) 451-6648
energy.hawaii.gov

Testimony of
MARK B. GLICK, Chief Energy Officer

before the
SENATE COMMITTEE ON GOVERNMENT OPERATIONS

Tuesday, February 13, 2024
4:00 PM
State Capitol, Conference Room 225 & Videoconference

Providing Comments on
SB 2994

RELATING TO THE STATE BUILDING CODE.

Chair McKelvey, Vice Chair Gabbard, and members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments on SB 2994 which slows down the required three-year code adoption cycle to six years and clarifies that the counties may adopt and amend building codes after the two-year time frame.

HSEO has concerns with provisions in section 1 of the bill.

National codes are updated by national experts based on lessons learned from disasters and failure analyses, as well as advances in technologies.¹ HSEO is concerned with provisions of this measure that would obstruct or delay the adoption of current building codes, as doing so would reduce the rate at which better designs and technologies are included in Hawai'i's buildings. Timely adoption of building codes and standards has such critical importance to the safety and well-being of communities that the Federal Emergency Management Agency requires timely code adoption as a non-negotiable criterion in its funding for disaster mitigation, resilience and recovery

¹ National Institute of Building Sciences. *Benefits and Challenges of a Timely Code Adoption Cycle*.
<https://www.caba.org/wp-content/uploads/2020/04/IS-2018-92.pdf>

projects. This is explained more on the Federal Emergency Management Agency's Building Code Adoption Tracking website.²

Hawai'i Revised Statutes 107-24 states that "the adoption of a code or standard shall be within two years of the official publication date of the code or standard," synchronizing Hawai'i's code adoption with national code adoption. Failure to follow the national cycle could put the health, safety, and welfare of building occupants at risk. Noncompliance could also jeopardize opportunities for federal funding which is often contingent on timely code adoption. HSEO cautions that weakening Hawai'i's existing building code adoption schedule would not be a prudent post-Maui Wildfires course of action.

HSEO advises that up-to-date energy codes are important and cost effective means of reaching Hawaii's energy and decarbonization goals. In HSEO's [Hawai'i Pathways to Decarbonization Report](#), delivered to the Hawai'i State Legislature in December of 2023, building codes are identified as one of the key drivers of energy efficiency within the state and that "energy efficiency and conservation are the single most important and most cost-effective measure to meaningfully reduce electricity demand..."

Thank you for the opportunity to testify.

² <https://www.fema.gov/emergency-managers/risk-management/building-science/bcat>



February 12, 2024

Senator Angus L.K. McKelvey, Chair
Senator Mike Gabbard, Vice Chair
Members of the Senate Committee on Government Operations
Thirty-Second Legislature, Regular Session of 2024

RE: **SB 2994 – RELATING TO THE STATE BUILDING CODE**
Hearing Date: February 13, 2024 at 10:30 am

Aloha Chair McKelvey, Vice Chair Gabbard and Members of the Committee,

Mahalo for the opportunity to submit testimony on behalf of D.R. Horton Hawaii LLC (“DRHH”) in **STRONG SUPPORT** of SB 2994 – RELATING TO THE STATE BUILDING CODE. DRHH is one of Hawaii’s largest home builders and has been providing affordable housing, 1ST time buyer and workforce housing for Hawaii’s families throughout the State for fifty years. D.R. Horton Hawaii is a leader in building quality and sustainable home designs and is actively developing our Ho`opili master planned community in Ewa Beach-East Kapolei.

SB 2994 would require the adoption, amendment or update of a building code or standard by the State Building Code Council to be within two years from every other official publication date of a code or standard. The primary purpose of code adoption is to set minimum requirements of the built environment that protect the life, health and safety of its occupant. D.R. Horton Hawaii absolutely agrees that it is of utmost importance to comply with appropriate building standards to ensure life, health and safety. It is equally important to adopt these building standards in an efficient, methodical and sustainable manner that provides clarity and certainty.

Unfortunately, the current frequency of code adoption required by Section 107-24 of the Hawaii Revised Statutes does not do this. While well intentioned, the current adoption protocol unintentionally creates a challenging and time sensitive task for State and County building officials to effectively and comprehensively review, seek community feedback, amend and adopt. It is currently resulting in just the opposite, hurried reviews with inadequate discussion and little to no case study analysis of the benefits and/or negative cost impacts new code language could have on Hawaii’s build environment, including much needed housing.

SB 2994 would provide a balance allowing appropriate code adoption to ensure life, health and safety is maintained while providing a practical approach that brings much needed clarity to the overall process. This balance will ultimately create inherent efficiency at the State, County, industry and public levels. Most importantly, SB 2994 will enable us to move in a positive direction towards solving our housing crisis by reducing confusion and creating certainty in the process, what we all collectively hope for.

February 12, 2024

Page 2

For these reasons, D.R. Horton Hawaii strongly urges the committee to pass SB 2994. Mahalo for your time and consideration, it is much appreciated.

Sincerely,

A handwritten signature in black ink, appearing to be 'Tracy Tonaki', written in a cursive style.

Tracy Tonaki
President
Hawaii Division



February 13, 2024

Committee: Senate Committee on Government Relations
Bill Number: SB 2994, Relating to State Building Codes
Hearing Date and Time: February 13, 2024 at 4:00pm
Re: Testimony of HPM Building Supply in Support

Dear Chair McKelvey, Vice Chair Gabbard, and Committee Members:

I would like to submit this letter and testimony written in support of SB 2994, Relating to the State Building Code. SB 2994 requires that the adoption, amendment, or update of a building code or standard by the State Building Code Council be within two years of every other official publication date of a code or standard. The bill also clarifies that the Hawai'i state building code acts as the interim county building code until superseded by the county.

HPM Building Supply is a 100% employee-owned company serving Hawaii's home improvement market and building industry for over 100 years since 1921. With 18 locations across Hawaii and Washington State, HPM offers various services and products, including retail stores, building supply and lumber yards, home design centers, drafting and design services, and manufacturing facilities. HPM is dedicated to enhancing homes, improving lives, and transforming communities one home at a time.

This bill would allow local building officials and design professional more time to interpret, understand and make proper amendments to the proposed family of codes. Jurisdictions are also able to develop code standards based off each island's unique environment. The current code adoption cycle is not enough time for the industry to review changes and financial impact to homeowners and builders.

We also understand that the adoption of the building code as proposed in this bill will not negatively affect the State's funding from FEMA in terms of Building Resilient Infrastructure and Communities (BRIC) grants. The grant's criteria considers building code as a scoring factor but not a requirement. Furthermore, the FEMA policy grants points if the applicant "has adopted one of the two latest editions of the model building code".

Thank you for the opportunity to provide testimony in support of SB 2994. I strongly encourage your support and passage of this measure.

Sincerely,

Dennis Lin
Community Relations Administrator



Feb. 13, 2024, 4 p.m.
Hawaii State Capitol
Conference Room 225 and Videoconference

To: Senate Committee on Government Relations
Sen. Angus McKelvey, Chair
Sen. Mike Gabbard, Vice Chair

From: Grassroot Institute of Hawaii
Ted Kefalas, Director of Strategic Campaigns

RE: COMMENTS IN SUPPORT OF SB2994 — RELATING TO THE STATE BUILDING CODE

Aloha Chair McKelvey, Vice-Chair Gabbard and members of the Committee,

The Grassroot Institute of Hawaii would like to offer its support for the portion of [SB2994](#) that would mandate the State Building Code Council skip every other International Building Code cycle.

State law currently requires the State Building Code Council to adopt every iteration of the International Building Code and various related codes within two years of their release.

These codes are typically updated by the International Code Council every three years. For example, its 2024 code was released in December 2023 as an update of the 2021 code.¹

The counties, meanwhile, must adopt their own level amendments to the IBC after every state update.

However, the state and counties often struggle to adopt and amend the IBC within a reasonable time frame. For example, it was only in April 2021 that the State Building Code Council adopted the 2018 IBC² and it was early 2023 when Honolulu fully adopted its amendments to the 2018 IBC.³

¹ ["The International Code Council Releases 2024 International Codes®,"](#) International Code Council, Dec. 5, 2023.

² ["State Building Code Adoption,"](#) State Building Code Council, April 20, 2021, p. 1.

³ ["Interim Building Code \(2018 IBC\) Takes Effect,"](#) Honolulu Department of Planning and Permitting, April 20, 2023.

Because of this staggered adoption process, county building officials and architects must constantly re-learn the building code's requirements. The almost-constant nature of the building code updates also taxes already understaffed county planning and permitting departments.

Allowing the State Building Code Council to skip every other cycle would provide a level of certainty for builders and agencies and save the State Building Code Council and counties time from having to update the codes so often.

Thank you for the opportunity to testify.

Ted Kefalas
Director of Strategic Campaigns
Grassroot Institute of Hawaii

SAH - Subcontractors Association of Hawaii

1188 Bishop St., Ste. 1003**Honolulu, Hawaii 96813-2938

Phone: (808) 537-5619 ✦ Fax: (808) 533-2739

February 13, 2024

Testimony To: Senate Committee on Government Operations
Senator Angus L.K. McKelvey, Chair

Presented By: Tim Lyons, President

Subject: SB 2994 – RELATING TO THE STATE BUILDING CODE.

Chair McKelvey and Members of the Committee:

I am Tim Lyons, President of the Subcontractors Association of Hawaii. The Subcontractors Association represents the following nine separate and distinct contracting associations and they are:

ELECTRICAL CONTRACTORS ASSOCIATION OF HAWAII

HAWAII FLOORING ASSOCIATION

HAWAII WALL AND CEILING INDUSTRIES ASSOCIATION

PACIFIC INSULATION CONTRACTORS ASSOCIATION

PAINTING AND DECORATING CONTRACTORS ASSOCIATION

PLUMBING AND MECHANICAL CONTRACTORS ASSOCIATION OF HAWAII

ROOFING CONTRACTORS ASSOCIATION OF HAWAII

SHEETMETAL & AIRCONDITIONING CONTRACTORS' NATIONAL ASSOCIATION OF HAWAII

TILE CONTRACTORS PROMOTIONAL PROGRAM

We are opposed to this bill.

We understand that in some cases, the Building Code should be responsive to the needs of that particular island however it is also important for there to be some uniformity between the various county codes. Our members are already reporting great difficulty in trying to understand the differences from one county to another, mostly based on their effective date. All the counties have to eventually conform with changes to the Code however, their effective dates can vary greatly.

In order to complicate the situation, getting answers from the various county building departments is oftentimes difficult and non-binding.

While we think there can be some avenue for determining specific island needs, we also think that uniformity should be the overriding factor and based on that we are opposed to this bill.

Thank you.



SENATE COMMITTEE ON GOVERNMENT OPERATIONS

February 13, 2024, 4:00 PM

Room 225

TESTIMONY IN OPPOSITION TO SB 2994

Aloha Chair McKelvey, Vice Chair Gabbard, and Committee members:

Blue Planet Foundation **opposes SB 2994**, which substantially delays the amount of time each county has to amend and adopt the Hawai'i state building codes and implements an eight-year timeframe for updating codes that make new construction safer, healthier, and more sustainable.

Building codes have direct and indirect impacts on our wellbeing and quality of life. By establishing and regularly updating uniform state and county building codes, Hawai'i can ensure that building design, construction, and operation address society's most important concerns, including public health and safety, environmental protection, and consumer protection against costly monthly utility bills.

Hawai'i already lags behind other states in adopting building energy codes—SB 2994 would make it worse

States across the country use national model codes and standards, like the International Energy Conservation Code (IECC), as a starting place for adopting state-specific versions based on their unique characteristics and climates. The International Code Council produces an updated version of the IECC through a democratic and deliberative process every three years. As noted by the Environmental and Energy Study Institute, “[t]he process of updating model codes every three years is optimal to ensure new technologies, materials and methods, as well as better approaches to health and safety, can be incorporated into the next generation of buildings with sufficient time for proof of performance.”¹

Hawai'i, however, has historically operated on a much slower timeline. The most recent version adopted by the state was the 2018 IECC (now six years old). Before that, it took nine years to move from the 2006 IECC to the 2015 version. In Hawai'i, adoption of the state building code is just the first step—it must subsequently be adopted by all four counties. The adoption at the

¹ Vaughn, Ellen and Jim Turner, *The Value and Impact of Building Codes*, 2013, <https://www.eesi.org/files/Value-and-Impact-of-Building-Codes.pdf>.

county level has lagged even further. For example, the City and County of Honolulu did not formally update its modified version of the 2015 IECC until June 2020.

This lag would be substantially magnified if SB 2994 passes. By statute, the Hawai'i state building energy conservation code must be adopted by the State Building Code Council (SBCC) within two years of the publication date of the national model code. Then, the state code must be adopted by the counties within two years following the SBCC's adoption. In essence, this timing translates to a current statutory framework in which counties are required to amend or adopt their county building codes within four years of the publication date of the model code. By tripling the time the counties have to adopt the state code to six years, SB 2994 would be codifying an *eight-year timeframe for updating building codes*—a surefire path to keeping Hawai'i lagging behind the national and other states' code update cycles (See Figure 1 below for a comparison of update cycles in various jurisdictions).

Outdated building codes leave energy and emission savings on the table

Among the types of building codes that would remain stuck in the past under SB 2994 is the energy conservation code. The primary function of energy codes is to reduce energy consumption in buildings, which reduces greenhouse gas emissions and pollution from burning fossil fuels—key priorities if we hope to achieve Hawai'i's ambitious climate goals. Energy codes can also lessen peak energy demand and reduce our reliance on imported energy sources, which increases utility system reliability and energy security, respectively. Moreover, energy codes create a more comfortable living and working environment through improved indoor air quality. They also help occupants save money by reducing monthly energy bills, which stimulates the economy. For example, the anticipated energy savings arising from the 2021 International Energy Conservation Code (IECC) were calculated in a July 2021 report prepared for the U.S. Department of Energy. The analysis reported a total statewide energy savings of 16.8% compared to the current state energy code. This equates to \$870 of annual utility bill savings for the average Hawai'i household.²

Hawai'i was ineligible for Federal funding due to outdated building codes

It is also our understanding that **Hawai'i's out-of-date codes rendered the state ineligible for millions in federal support for infrastructure resiliency projects that would reduce risks to natural disasters.** The Hawai'i Emergency Management Agency (HiEMA), which serves as a member of the State Building Code Council, applied for, but was denied, Inflation Reduction Act funding from the U.S. Federal Emergency Management Agency under the Building Resilient Infrastructure and Communities Program. This is a large federal grant program that supports states and local communities as they undertake hazard mitigation projects to reduce the risks

² *Cost-Effectiveness of the 2021 IECC for Residential Buildings in Hawaii*, The Pacific Northwest National Laboratory, prepared for U.S. Department of Energy, July 2021, https://www.energycodes.gov/sites/default/files/2021-07/HawaiiResidentialCostEffectiveness_2021_0.pdf.

they face from disasters and natural hazards.³ None of the Hawai'i projects qualified for the competitive portion of the grant, in part because of the state's outdated building codes. This loss in federal grant funding should be particularly concerning for lawmakers who will need to grapple with Maui's wildfire recovery and other hazard mitigation efforts for years to come, and provides another critical reason to not further delay code adoption via SB 2994.

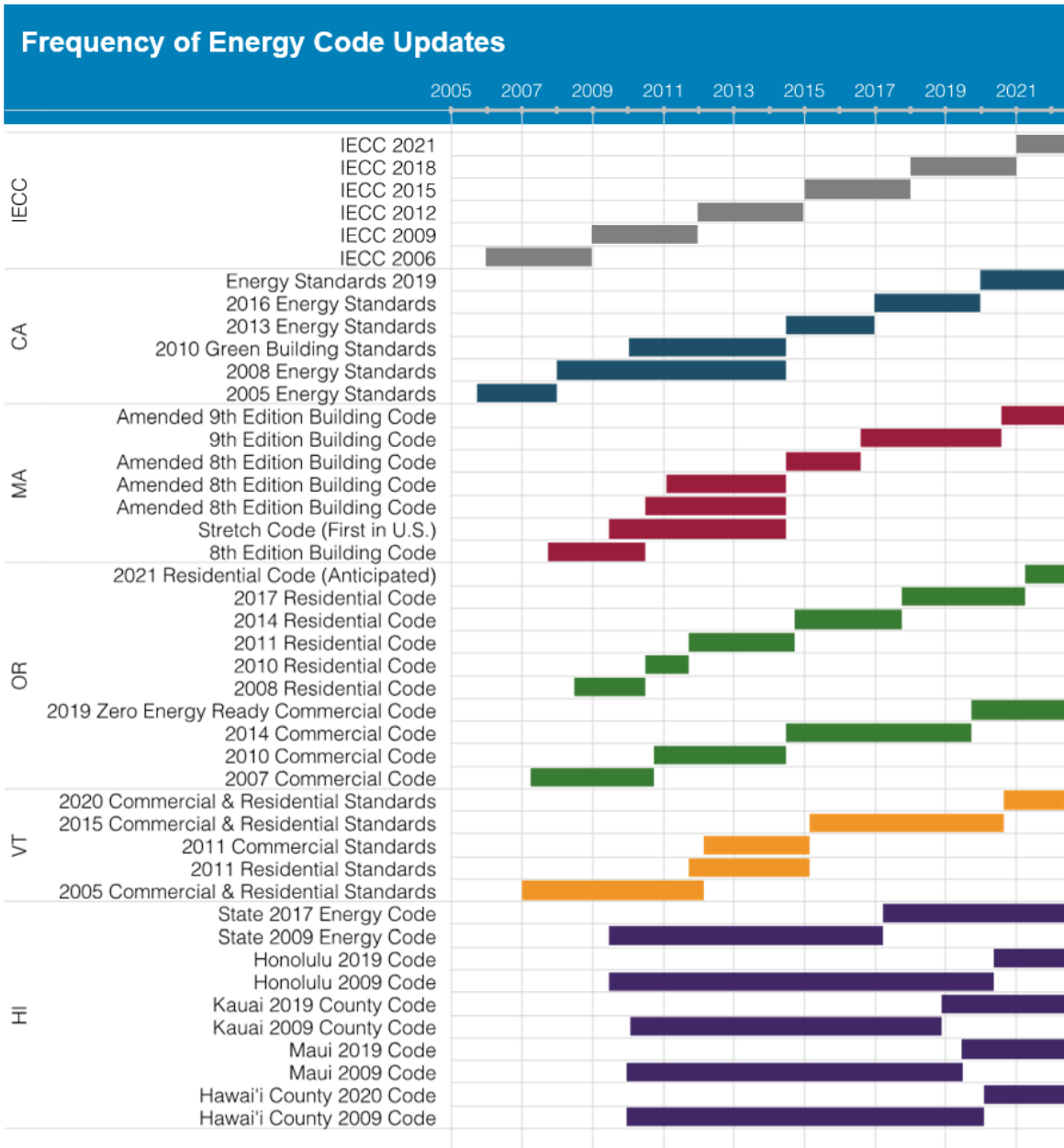
Conclusion

Most individuals spend a majority of their lives inside buildings. Yet buildings are often overlooked as important levers for influencing our safety, health, and economic and environmental quality of life. Hawai'i's code update cycle should mirror the national code update cycle to ensure that construction in Hawai'i can keep pace with changing technology, updated health and safety standards, and the state's clean energy and climate goals. After all, buildings constructed today will remain in our building stock for decades to come.

Please defer SB 2994. Thank you for the opportunity to provide testimony.

³ *Building Resiliency Infrastructure and Communities*, FEMA Hazard Mitigation Assistance Grants, 2024, <https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities>

Figure 1. Frequency of Energy Code Updates for States and the IECC





COMMERCIAL REAL ESTATE
DEVELOPMENT ASSOCIATION
HAWAII CHAPTER

February 12, 2023

Senator Angus McKelvey, Chair
Senator Mike Gabbard, Vice Chair
Committee on Government Operations

RE: **SB 2994 - Relating to the State Building Code**
Hearing date: February 13, 2024 at 4:00PM

Aloha Chair McKelvey, Vice Chair Gabbard, and members of the committee,

Mahalo for the opportunity to submit testimony on behalf of NAIOP Hawaii in **SUPPORT** on SB 2994. NAIOP Hawaii is the local chapter of the nation's leading organization for office, industrial, retail, residential and mixed-use real estate. NAIOP Hawaii has over 200 members in the State including local developers, owners, investors, asset managers, lenders, and other professionals.

SB 2994 This bill exempts any code with an official publication date within two years of every other official publication date of a code or standard. Clarifies that the Hawai'i state building code acts as the interim county building code until superseded by the county.

NAIOP finds that this bill is necessary to help the developers more efficiently and consistently build housing for Hawaii residents. As it stands, the building code goes through numerous changes regularly, causing confusion, delays, and constant added cost. Developers are consistently challenged with having to determine discrepancies in the code which further delay the development of affordable housing projects in our state.

The current State Building Code Council does not take into consideration the cost implications of adopting new codes. Nationally, many of the new codes have mandates built-in embedded into new code revisions by special interest groups without consideration of the impacts. Certain mandates are not intended to protect the public health or safety, and ultimately increase the cost of housing. Providing additional time between changes in the building codes will improve efficiency and add clarity for developers.

Ultimately, Hawaii is in a major housing crisis, which continues to worsen. As the Legislature is aware, the cost of housing in Hawaii is extremely high, with Oahu's median price of homes being currently over \$1 million. NAIOP Hawaii supports this legislation which will increase the development industry's ability to provide housing at all levels in a more timely and efficient manner. Thank you for the opportunity to share our strong support for SB 2994.

Mahalo for your consideration,

Reyn Tanaka, President
NAIOP Hawaii



Shaping Tomorrow's
Built Environment Today

180 Technology Parkway, NW • Peachtree Corners, GA 30092-2977 • Tel: 404.636.8400 • Fax: 404.321.5478
www.ashrae.org

Ginger Scoggins
2023-2024 ASHRAE President

Engineered Designs, Inc.
1151 SE Cary Pkwy., Ste. 200
Cary, NC 27518
Phone: (919) 851-8481
Email: gscoggins@engineereddesigns.com

February 12, 2024

The Honorable Angus McKelvey
The Honorable Mike Gabbard
Senate Committee on Government Operations
Hawai'i State Capitol
415 South Beretania St.
Honolulu, HI 96813

Re: Senate Bill 2994 "Relating to the State Building Code"

Dear Chair Ichiyama and Vice Chair Poepoe:

I am writing on behalf of ASHRAE, the American Society of Heating Refrigerating, and Air Conditioning Engineers, to **oppose the goals of Hawai'i Senate Bill 2994**, titled "Relating to the State Building Code" that sits before you in the House Committee on Water and Land. ASHRAE, founded in 1894, is a global professional society of more than 53,000 members, including more than 250 in Hawai'i, that focuses on building systems, energy efficiency, indoor air quality, resiliency, and sustainability. Through our research, standards writing, publishing, certification, and continuing education, ASHRAE shapes tomorrow's built environment today.

Senate Bill 2994, though well intentioned, would see Hawai'i change from a three-year update cycle for the state's building energy codes to a six-year cycle. The stated intent behind this legislation is to reduce housing costs. However, the underpinning idea, that Hawai'i's adoption of modern energy codes and standards is responsible for high housing costs, and that ceasing to adopt up-to-date energy codes and standards would bring down housing costs, is incorrect. The actual outcome of skipping every other iteration of the International Energy Conservation Code and ASHRAE's Standard 90.1 *Energy Standard for Buildings Except Low-Rise Residential Buildings*, which are published on a three-year cycle that syncs up with HI's code updates, would be:

- Energy efficiency gains left on the table.
- Business owners, homeowners, and tenants pay higher utility bills.
- Thousands of tons of unmitigated greenhouse gas emissions.
- Greater difficulty meeting Hawai'i's 2030 and 2045 climate targets.
- Inability to access some federal funding opportunities.
- Missing out on job creation associated with energy code adoption.
- No meaningful reduction in housing or construction costs.

I wish to expand upon these points to show and substantiate how hamstringing updates to the state's building energy code would be detrimental to the people of Hawai'i while also failing to deliver on the bill's intentions.

Energy Efficiency Gains Will Be Left on the Table:

Building energy standards establish minimum efficiency requirements for new construction, ensuring reductions in energy use and greenhouse gas emissions over the long life of a structure. The two energy codes in question, the 2021 edition of the International Energy Conservation Code and the 2019 edition of ASHRAE's 90.1 *Energy Standard for Buildings Except Low-Rise Residential Buildings* deliver substantial energy efficiency gains over their predecessors. Over the last two decades, each new edition of these resources delivers ever greater energy efficiency gains.¹ The 2019 edition of ASHRAE's 90.1 energy code is about 4.3% more efficient than the preceding edition.² Subsequently, on a national level, building energy codes represent an opportunity to reduce utility bills by over \$130 billion and avoid 900MMT of CO₂ emissions by 2040³ On a state level, in Hawai'i the adoption of the newest editions of these minimum energy efficiency requirements is expected to result in a reduction of 8,132 metric tons of CO₂ emissions in the first year alone, according to DOE studies conducted by the Pacific Northwest National Laboratory (PNNL).⁴⁵

Business Owners, Homeowners, and Tenants Will Pay Higher Utility Bills While Also Releasing Thousands of Tons of Unnecessary Greenhouse Gas Emissions:

The reduction in utility bills from energy efficiency gains can be substantial. Per the PNNL studies, a combined energy cost savings for Hawai'i home and building owners of nearly \$3 million is expected in the first year, and over \$1 billion in cost savings is expected in a 30 year cumulative period.⁶⁷ In terms of Hawai'i's individual homeowners, the average residential home's downpayment would be expected to increase by only \$288 while the homeowner would see a \$896 yearly reduction in their utility bills; they would be cashflow positive immediately.⁸ For commercial construction in Hawai'i we would expect to see similar reductions in utility bills while *also achieving less expensive construction costs*. This is possible due to the cost savings delivered by LED lighting and through better insulation allowing for less expensive HVAC units.

Failing to adopt up-to-date energy codes and standards by virtue of skipping every other cycle will change the economic and environmental gains associated with updated code and standard adoption into costs that will be borne by Hawai'i residents. This is especially troubling considering that Hawai'i has the highest electricity retail price of any state, and this electricity is largely sourced from fossil fuels.⁹

This Will in Turn Make Meeting Hawai'i's Climate Goals More Difficult:

Hawai'i has set laudable climate goals that this legislation will, if passed, make it much more difficult to meet. Hawai'i has set a goal of reducing electricity consumption by 4,300 GWh by 2030 through measures such as building retrofits, construction policies, energy saving technologies, and energy saving practices; this legislation runs directly counter to that goal.¹⁰ More generally, Hawai'i is not currently on track to meet its climate goals of reducing emissions 50% below 2005 levels by 2030, and achieving net-zero by 2045.¹¹ Energy codes and standards and the efficiency gains they deliver are tools in the toolbox that Hawai'i can use to get back on track and keep emissions in line with these goals. Mandating longer lag times between energy code updates can then be seen as an active hinderance toward meeting these climate goals.

¹https://public.tableau.com/app/profile/doebecp/viz/HistoricalModelEnergyCodeImprovement/CombinedHistoricalCodeImprovement_1

² https://www.ashrae.org/file%20library/about/government%20affairs/public%20policy%20resources/briefs/climate-change-and-the-built-environment_2023.pdf

³ https://www.energycodes.gov/sites/default/files/2021-07/EED_1365_BROCH_StateEnergyCodes_states_HAWAII.pdf

⁴ https://www.energycodes.gov/sites/default/files/2021-07/HawaiiResidentialCostEffectiveness_2021.pdf

⁵ https://www.energycodes.gov/sites/default/files/2021-07/Cost-effectiveness_of_ASHRAE_Standard_90-1-2019-Hawaii.pdf

⁶ https://www.energycodes.gov/sites/default/files/2021-07/Cost-effectiveness_of_ASHRAE_Standard_90-1-2019-Hawaii.pdf

⁷ https://www.energycodes.gov/sites/default/files/2021-07/HawaiiResidentialCostEffectiveness_2021.pdf

⁸ https://www.energycodes.gov/sites/default/files/2021-07/EED_1365_BROCH_StateEnergyCodes_states_HAWAII.pdf

⁹ <https://www.eia.gov/state/?sid=HI#tabs-1>

¹⁰ <https://climate.hawaii.gov/hi-mitigation/>

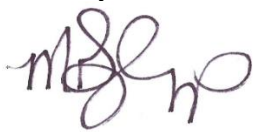
¹¹ https://health.hawaii.gov/cab/files/2023/05/2005-2018-2019-Inventory_Final-Report_rev2.pdf

Updating Energy Codes is not the Primary Driver of Construction Costs:

There are many causes of high housing costs, and it would be outside our area of professional expertise to speak authoritatively on them. However, we can point to many counter examples of states that adopt the newest energy standard on cycle and have substantially lower housing and construction costs than Hawai'i, indicating that at most energy standards and codes are a marginal factor in Hawai'i's housing crisis. For example, Montana, Florida, and Oregon all update to the newest edition of ASHRAE's 90.1 energy standard like clockwork. This legislation cites the median price of a single-family home in Hawai'i as \$825,000. This can be compared to \$609,900 in Montana, \$405,00 in Florida, and \$490,200 in Oregon.¹² More generally, we know that there is substantial return on investment when it comes to building codes: up to date model building codes save \$11 for every \$1 invested through disaster mitigation benefits.¹³ Additionally, a study has shown that the lower utility bills delivered by using up-to-date energy codes reduce mortgage default rates by about a third.¹⁴ Finally, numerous case studies have shown that updating to modern and more stringent building safety codes and energy codes is not associated with an increase in housing and construction costs.^{15,16,17}

In conclusion, ASHRAE strongly believes that the adoption and enforcement of the most up-to-date building codes and standards creates a safe, healthy, and sustainable built environment for all. Furthermore, ASHRAE believes that the continued timely adoption of our 90.1 energy standard is a crucial component of Hawai'i's climate change mitigation efforts. This legislation, while well intentioned, would unfortunately result in an outdated body of codes and standards in Hawai'i and create several associated negative externalities to the detriment of the state's economy, environment, and residents. On behalf of our more than 250 members in Hawai'i, thank you for your consideration of ASHRAE's comments.

Sincerely,



Ginger Scoggins
ASHRAE President



Justin Choriki
ASHRAE Hawai'i Chapter President



Kevin Luoma
ASHRAE Hawai'i Chapter Government Affairs Chair

¹² <https://www.bankrate.com/real-estate/median-home-price/#median-price-by-state>

¹³ https://www.fema.gov/sites/default/files/2020-11/fema_building-codes-save_brochure.pdf

¹⁴ https://www.imt.org/wp-content/uploads/2018/02/IMT_UNC_HomeEEMortgageRisksfinal.pdf

¹⁵ https://nehf.gov/pdf/NIST%20GCR%2014-917-26_CostAnalysesandBenefitStudiesforEarthquake-ResistantConstructioninMemphisTennessee.pdf

¹⁶ <https://www.sciencedirect.com/science/article/abs/pii/S2212420917302819>

¹⁷ <https://headwaterseconomics.org/wp-content/uploads/building-costs-codes-report.pdf>



SIERRA CLUB OF HAWAI'I

SENATE COMMITTEE ON GOVERNMENT OPERATIONS

February 13, 2023

4:00 PM

Conference Room 225

In **OPPOSITION** to **SB2994**: RELATING TO THE STATE BUILDING CODE

Aloha Chair McKelvey, Vice Chair Gabbard, and Members of the Committee,

On behalf of our over 20,000 members and supporters, the Sierra Club of Hawai'i **OPPOSES SB2994**, which would saddle Hawai'i residents with nearly decade-old building standards that do not respond to the rapidly changing realities of our climate crisis – jeopardizing human health and safety as well as our islands' climate resiliency, and even foreclosing critical federal funding opportunities that are contingent on up-to-date building codes.

As the climate crisis continues to worsen, all aspects of our society must rapidly adapt. This is particularly true for our built environment. For example, outdated or nonexistent building codes that do not reflect our climate reality have already led to significant numbers of heat-related indoor deaths in other jurisdictions. The anticipated increase in extreme weather-related events such as fires and floods must also be accounted for via up-to-date building codes, to protect both human life and property. Buildings that do not meet modern energy and infrastructure standards may also result in the unnecessary draining of our water and energy resources, exacerbating the impacts of droughts on our water security, driving up our collective carbon footprint, and creating long-term and ever-increasing costs for residents and businesses.

By allowing building code updates to be delayed for six years at a time, this measure would lock in outdated building standards that fail to reflect our climate realities, and the most modern strategies of protecting human health and safety as well as our climate resilience and necessary responses. **The adoption of this measure may also spur the adoption of similar proposals in many other jurisdictions, spurring even greater climate chaos while replacing Hawai'i's reputation as a climate leader with that of a cautionary tale.**

The Sierra Club urges the Committee and the Legislature to instead explore and directly address noted causes of building permit review delays, namely the chronic understaffing of and lack of timely training for county planning departments, including through assessments of staff salaries and conditions affecting worker retention.

As a final note, the Sierra Club understands that significant federal funds under the IRA may be contingent upon the adoption of updated building codes. This measure would accordingly prevent Hawai'i from accessing critical funds needed to meet our residents' resilience and resource needs, should it be adopted.

Accordingly, the Sierra Club of Hawai'i respectfully but strongly urges the Committee to **HOLD SB2994**. Mahalo nui for the opportunity to testify.



Before the Senate Committee on Government Operations
Tuesday, February 13, 2024 at 4:00 p.m.

Testimony Providing Comments on: SB2994: Relating to the State Building Code

Chair McKelvey, Vice Chair Gabbard, and Members of the Committee:

Thank you for the opportunity to testify and provide comments on Senate Bill 2994.

Hawai'i Energy works to empower island families and businesses on behalf of the Hawai'i Public Utilities Commission (PUC) to make smart energy choices to reduce energy consumption, save money, and pursue a 100% clean energy future. Energy efficiency – the energy we do not use – is the cheapest option to help us achieve our 100% clean energy goal by eliminating waste and being more efficient. We believe updated energy codes are critical in this effort and part of a global movement to make progress on climate change mitigation through codes and standards.

This bill would replace the current three-year cycle for adopting updated building codes, including energy codes via the International Energy Conservation Code, in Hawai'i with a six-year cycle. Skipping every other iteration of updated state building codes would undoubtedly give stakeholders additional time to comprehend and implement each round of changes, but it would also negatively impact Hawai'i's ability to meet our 2030 and 2045 clean energy goals by leaving potential energy efficiency gains on the table. Given that the goal of updating building energy codes is to ultimately save Hawai'i residents money on their electric bills, which remain the highest in the country, we would be leery of the potential unintended consequences of skipping every other energy codes adoption cycle.

On the other hand, as described by HRS §107-23, there already exists the so far unused opportunity to staff the Council with an executive director, executive assistant, and other staff as necessary to support the updated building codes adoption process.

Hawai'i Energy certainly appreciates the intent of Senate Bill 2994 to allow all stakeholders involved in the state building code adoption process more time to fully digest each round of changes being discussed and implemented. We would just urge the legislature to first explore other avenues and tools already at its disposal to improve the building codes adoption process for all stakeholders before making additional foundational changes to it.

Thank you for the opportunity to provide comments on Senate Bill 2994.

Sincerely,
Caroline Carl
Executive Director
Hawai'i Energy



holomua

COLLABORATIVE

OUR MISSION

To support and advance public policies that make Hawai'i affordable for all working families.

OUR VISION

Collaborative, sustainable, and evidence-based public policies that create a diverse and sustainable Hawai'i economy, an abundance of quality job opportunities, and a future where all working families living in Hawai'i can thrive.

BOARD MEMBERS

Jason Fujimoto
Meli James, *Board Chair*
Micah Kāne
Brandon Kurisu
Mike Mohr
Brad Nicolai
Mike Pietsch

ADVISORY COMMITTEE

Josh Feldman
Brittany Heyd
Alicia Moy
Ed Schultz

Josh Wisch
President & Executive Director

827 Fort Street Mall, 2nd Floor
Honolulu, Hawaii 96813

+1 (808) 909-3843
info@holomuacollaborative.org

HolomuaCollaborative.org

Page 1 of 2

Committee: Senate Committee on Government Operations
Bill Number: SB 2994, Relating to the State Building Code
Hearing Date and Time: February 13, 2024 at 4:00pm (Room 225)
Re: Testimony of Holomua Collaborative in support

Aloha Chair McKelvey, Vice Chair Gabbard, and Committee Members:

We write in support of SB 2994, Relating to the State Building Code. The purpose of SB 2994 is to require that the adoption, amendment, or update of a building code or standard by the State Building Code Council be within two years of every other official publication date of a code or standard.

Under current law, existing building codes remain in place for three years at a time. The challenge this presents is that the building codes are complex, highly technical documents. Every time a new code is adopted, it invariably takes at least one to two years for county permitting officials, plan reviewers, and design professionals to develop a common interpretation of what that code means and how it must be implemented.

It is not a simple process.

And the way the process works in practice is that design professionals must submit plans over and over as they work to understand what the government officials reviewing the plans want to see to approve the plans. It is this process of repeated trial and error that eventually results in a common interpretation of the code between all stakeholders. But by the time that happens, only one-to-two years remain in which the process can now proceed smoothly.

By changing the code adoption cycle to be within two years of every *other* official publication date of the code, this bill effectively allows everyone to operate on a six-year code cycle, rather than a three-year code cycle. This means that once the one-to-two-year period of trial and error is over, there are now four-to-five remaining years when plans can be submitted, reviewed, and approved in a timely fashion (as opposed to the one-to-two years that occurs under the current building code cycle system).

That means we are gaining meaningful *years* more time when the system is working smoothly, permits are being processed more quickly, and fewer mistakes are being made. This savings of time will invariably result in cost savings in home building costs, which will ultimately mean lower home prices for local residents.

It is also important to note that this additional time on a single code will give the counties more time and experience within each six-year code cycle to suggest amendments to the code as it relates to building materials, methods, and standards, which would be appropriate to their own respective geographies and climates. So, for example, if a model code was adopted that required insulated flooring, the counties



now have time to make a reasonable change that maintains safety, while eliminating unnecessary cost.

This is a common-sense approach to maintaining safety, improving efficiency, and lowering costs.

As an organization devoted to finding ways to keep all local working families in Hawai'i by making sure they can afford to stay, we support this bill as a good approach to address urgent cost-of-living challenges—in this case by reducing the cost of home building for local families.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Josh Wisch', is written in a cursive style.

Josh Wisch
President & Executive Director



**HAWAII STATE SENATE
COMMITTEE ON GOVERNMENTAL OPERATIONS
Conference Room
State Capitol
4:00 PM**

February 13, 2024

Subject: SB 2994 - RELATING TO THE STATE BUILDING CODE

Chair McKelvey, Vice-Chair Gabbard, and members of the Committee:

My name is Greg Thielen, Codes Committee Chair of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii. Our members build the communities we all call home.

BIA-Hawaii is testifying in strong support of SB 2994. This bill requires that the adoption, amendment, or update of a building code or standard by the State Building Code Council be within two years of every other official publication date of a code or standard.

The current building code is made of 7 different codes, each of which is being updated every three years. This 3 year cycle is not mandated by any government agency at the Federal, State or Local level. Instead the 3 year cycle is self-selected by Non-Government Organizations (NGO's). These same NGO's derive their income stream from the sale of these codes and training on their modifications.

This continuous change places a heavy burden on the agencies tasked with enforcing the code, the design community and the builders constructing projects. Essentially as soon as a code is adopted by the State Building Code Council (SBCC), they need to begin analysis of the next 7 codes. By switching to an every other year code cycle we can create a greater period of stability and we can alternate code reviews. This way 3 codes can be reviewed on one cycle, while 4 codes can be reviewed on another cycle. This intention exists in the current law in that HRS 107-24.(c) in that it calls for codes to be adopted on a "staggered basis".

BIA-Hawaii would also like to dispel a common misconception on the issue of code adoption as it relates to FEMA funding. There is absolutely no link between building codes and FEMA funding for disaster relief. Code adoption policy is a scoring factor, not a requirement, for FEMA Building Resilient Infrastructure and Communities (BRIC) grants. Furthermore FEMA policy grants points if the applicant "has adopted one of the two latest editions of the model building code". This means Hawaii will not be at any disadvantage for a BRIC grant application should this legislation pass.

For all these reasons, BIA-Hawaii asks for your support on this important legislation.