ORIGINAL

45-024 Malulani Street #1 Kane`ohe, Hawai`i 96744 August 7, 2018

State of Hawai`i Land Use Commission
Department of Business, Economic Development & Tourism
P.O. Box 2359
Honolulu, Hawai`i 96804-2359
Attention: Daniel Orodenker, Executive Director

Dear Director Orodenker,

STATE OF HAWAII

RE: Proposed Amendments to Chapter 15-15 Hawai'i Administrative Rules

I am writing to provide comments on the proposed amendments to Chapter 15-15 regarding climate change and sustainability.

I am providing the following comments from the perspective of a planner who has worked in Hawai'i for 39 years at planning agencies in both the City and County of Honolulu and the State, as the former planning advisor to the chair of the Honolulu City Council, as a former Principal Planner in one of the largest planning firms in the state, as the owner of my own consulting practice, and as a current member of the faculty of the Department of Urban and Regional Planning at the University of Hawai'i at Mānoa. The majority of my professional planning career has focused on the preparation and processing of land use permit applications, including petitions to the State Land Use Commission (hereinafter, "LUC"), environmental impact assessments, environmental impact statements, and land use master plans. I have been previously qualified by the LUC as an expert witness in the field of planning. The two courses I am teaching at UH this semester are PLAN 310 - Introduction to Planning, and PLAN 101 - Sustainable Cities (cross listed as SUST 114). The following comments are offered as my own point of view and do not represent the views of former employers, the University of Hawai'i, or my former or current clients.

Comments:

Chapter 15-15(c)24: I AGREE with the first sentence that a petition for a boundary amendment should include a statement and analysis pursuant to Section 226-109, HRS, addressing climate change related threats to a proposed development and proposed mitigation measures. However, I disagree with some of the subsequent issues that are required to be included in the statement.

Chapter 15-15(c)24(A): AGREE. I believe it is appropriate for a petitioner to disclose the anticipated impacts of sea level rise on their proposed development. However, I believe that the language presented in subparagraph A is overly broad. I

recommend that the requirement be limited to <u>primary</u> or <u>direct</u> impacts. As written, the petitioner is provided no guidance as to the level of impact analysis required. Must the petitioner address secondary, indirect and cumulative impacts? How far must the required analysis extend? What level of detail is expected? As the former co-author of numerous petitions, the vagueness of subparagraph A, as written, leaves me perplexed. Does the requirement distinguish between short-term construction impacts and long-term operational impacts?

Chapter 15-15(c)24(B): I DISAGREE with the way this requirement is written. Subparagraph A singles out "sea level rise", but subparagraph B refers to the much broader term "climate change". Potential infrastructural adaptations to "climate change" are so numerous that it would be difficult to attempt to list them all. The term "climate change" has evolved to issues that include, but are not limited to, sea level rise; ambient temperature changes (both hotter summers and colder winters); episodic rainfall; flooding; changes in global and regional wind patterns; frequency and duration of drought; increased intensity in tropical cyclones; changes in ocean surface temperatures and currents; changes in terrestrial floral, faunal, and avifaunal habitats; introduction of new invasive and/or non-native species of flora, fauna, and avifauna; changes in marine habitats; impacts on potable water sources; changes in energy consumption, and on and on and on... As written, where would a petitioner begin in offering an analysis of infrastructure adaptations to respond to the above list? For example, how does one go about determining the appropriate capacity of storm water drainage for episodic rainfall events? Are we to size storm drainage systems for the 50+ inch rain event that the Hanalei area of Kauai experienced in a 24-hour period earlier this year?

Next, is the term "impacts" as used in this subparagraph meant to be inclusive of direct, indirect, secondary, and cumulative impacts? It would be helpful if the LUC were to disclose specifically which aspects of climate change are of concern and the extent of impact analysis desired. Moreover, how will this information be evaluated and who will do the evaluating? The LUC has a professional staff of four. Clearly this level of analysis will require technical expertise which current staff does not likely possess. Who will conduct the review...the Commissioners? Will the State Office of Planning be expected to evaluate the petitioner's statements and provide commentary to the Commissioners? If so, I anticipate that new technical staff at OP will be required. Has this been budgeted? How much will increased staffing cost the taxpayers?

Chapter 15-15(c)24(C): I DISAGREE with this requirement. The calculation of carbon footprint is largely derived from the nature of human activities over a set period of time, e.g. what kind of car do you drive?, does your home have solar panels?, does your home have air conditioning?, do you use energy saving light bulbs in your home?, do you practice recycling?, do you compost?, how many times a week do you consume fast food?, how often do you use mass transit?, do you consume organic vegetables?, how often do you travel by airplane?, etc. Assuming a petitioner is proposing a single family home, this may be an enlightening exercise.

But how can a petitioner possibly make these assumptions if the project is an entire subdivision or similar-scaled regional project, based upon only a conceptual plan for development? Calculating a carbon footprint at a regional scale may be beyond the scope of an individual petitioner.

It might be helpful for the purposes of this discussion, to consider the actual inputs needed for the calculation of a carbon footprint. Some useful information concerning the data required is available at https://carbonfund.org/how-we-calculate/. The data needed includes the following:

- Electrical consumption on a per-household scale;
- Natural gas consumption on a per-household scale;
- Propane consumption on a per-household and scale;
- · Per-vehicle gasoline consumption;
- · Air-travel and bus travel;
- For businesses, the calculations require estimates of office emissions, electrical consumption, propane and natural gas consumption, building type, number of employees, number of computer servers, employee travel habits, and employee commuting habits (car, bus, truck, transit, and airplane).
- The model also requires shipping information for freight by air cargo, truck, train (not relevant in Hawaii but relevant on the mainland for freight destined for Hawaii), and sea freight.

To my knowledge, in addition to a number of individual-oriented websites, there are presently at least three regional calculation models available; the Climate Registry Information System (CRIS), the Clean Air and Climate Protection (CACP) Software, and the Local Government Operations Protocol (LGOP). However, the CRIS is no longer registering greenhouse gas emission inventories and has been replaced by an online reporting system that is available to cities and counties. Similarly, the CACP software and the LGOP are available to local governments. It appears to me that the proposed amendment regarding carbon footprint analysis would require an individual petitioner to take on what an entire local government would otherwise be expected to do. If this is, in fact, the case, then I recommend that the State invest in the requisite computer modeling software and make it available to petitioners. Otherwise, the petitioner will likely be unable to provide the requisite data.

Aside from the issues pertaining to how an individual petitioner can afford to gather this information and long it would take, I am also concerned about how the LUC is going to evaluate the response to this requirement? Is it going to reject a petition on the basis that the petitioner is not "green" enough? What standards and measurements will be used to determine what is an appropriate carbon footprint? And who at the LUC, the State Office of Planning, or the UH Environmental Center (presumably the only state "agencies" that are capable of providing specialized analysis to the LUC) is qualified to review and comment on the petitioner's analysis? I am particularly irked by this subparagraph because it suggests that the LUC is

intending to not only assume some of the responsibilities of a County Building Department by dictating the detailed design components of a proposed development, at a scale far beyond its mandate, but that it is also placing itself in the potential position of dictating what human activities might be "acceptable" or "sufficient" at the operational phase of a proposed development to warrant an LUC approval.

Rather than pursue a requirement for a carbon footprint analysis, I recommend a more proactive solution. Because the focus should be on education and change, perhaps the LUC could ask the petitioner to propose what carbon offsets might be practical for the proposed development. This would enable the petitioner to build them into their development program, rather than have them forced upon the petitioner in the form of conditions to an approval.

Chapter 15-15(c)24(D): I AGREE with this requirement. But I recommend that the content of subparagraph 24 be limited to subparagraphs A and D, subject to my above stated concerns regarding A.

Chapter 15-15(c)25: I DISAGREE with the intent of the introductory statement because it is clearly beyond the scope of the LUC's mandate. The State's 2050 Sustainability Plan includes the following principles:

"We balance economic, social, community and environmental priorities; We respect and live within the natural resources and limits of our islands; We must achieve a diversified and dynamic economy; We honor the host culture;

We make decisions based on meeting the present needs without compromising the needs of future generations;

The principals of the ahupua`a system guide our resource management decisions; and Everyone – individuals, families, communities, businesses and government – has a responsibility for achieving a sustainable Hawai`i."

A careful read of the above principles reveals that they are value-based. How on earth is a petitioner supposed to articulate the adherence by a future project's future occupants to the above stated principles? And how on earth would a petitioner be able to assure (enforce) that the future occupants will do as the petitioner has stated? A restrictive covenant? Certainly the petitioner can offer the LUC an explanation of the <u>petitioner's</u> commitment to the 2050 Plan's principles, but to expect that the petitioner can speak on behalf of the proposed development's future occupants, be they residents, workers, day-visitors, or tourists, is misguided.

And taking my concern even a step further, if the petitioner is unable to enforce future adherence, what are the implications of the LUC including specific requirements of compliance as part of a conditional approval? Those conditions would then run with the land because Decision & Orders (D&Os) are typically required to be filed at the Bureau of Conveyances, thereby obligating all future

owners of the property. How then would the LUC test conformance? It would be unable to do so until the development is fully operational because the above principles focus on social outcomes rather than physical development parameters. If a compliance review was conducted at some point in the future and the LUC were to somehow determine that the development is not complying with Sustainability Plan principles, what would it do, revoke the D&O and revert the land back to its former classification? That may work in the instance where a development or use has not commenced, but it would likely be determined to be illegal for the LUC to revoke a classification after a project is built. In short, a requirement for a proposed development or use to comply with social goals is, I believe, unenforceable.

In addition, the proposed inclusion of a new subparagraph 24 appears to be redundant. Subparagraph 17 of Chapter 15-15-50 already requires an assessment of the conformity of a proposed boundary amendment to the Hawaii State Plan, aka Chapter 226 HRS, of which the Hawaii 2050 Sustainability Plan is a part, presented at subparagraph 108.

The stated goals of the 2050 Plan are:

"Goal One. <u>A Way of Life</u> – Living sustainably is part of our daily practice in Hawai`i; Goal Two. The Economy – Our diversified and globally competitive economy enables us to meaningfully <u>live</u>, <u>work and play</u> in Hawai`i;

Goal Three. Environmental and Natural Resources – Our natural resources are responsibly and respectfully used, replenished and preserved for future generations; Goal Four. Community and Social Well-Being – Our community is strong, healthy, vibrant and nurturing, providing safety nets for those in need, and Goal Five. Kanaka Maoli and Island Values – Our Kanaka Maoli and island cultures and values are thriving and perpetuated." [underlining added]

The 2050 Plan is a socially oriented plan intended to educate and influence the choices that Hawai`i's residents make in their day-to-day lives. It is clearly not intended to be used as a yardstick for the evaluation of land development. To use it as some kind of decision-making criteria is ill informed and misguided.

The plan offers 9 priority actions:

- Increase affordable housing;
- Strengthen public education;
- Reduce reliance on fossil fuels;
- Increase recycling;
- Develop a more diverse and resilient economy;
- Create a sustainability ethic;
- Increase consumption and production of local foods;
- Provide access to long-term care and elderly housing; and
- Preserve and perpetuate our Kanaka Maoli and cultural values.

The language in subparagraph 25's introductory statement requires an analysis of a proposed development's adherence to these priority actions, as well as the above listed principles. Aside from an increase in affordable housing, the eight other priority actions are focused on "practices" that island residents should employ to collectively bring our State closer to sustainability. How can a petitioner be expected to offer an analysis of how a project's future residents, workers, dayvisitors, and/or tourists will engage in these practices? How can a petitioner determine what actions people may take in the future regarding sustainability? Simply put, the petitioner cannot. What then is the practical outcome of the petitioner's requisite "statement and analysis"? What value would it have as an analytical document? It would, based on the requirements presented in the proposed amendments, be nothing more than speculation.

What then is to be gained by the analysis? If a proposed project is not residential based, and therefore unable to contribute to the provision of more affordable housing, will it be deemed non-compliant with the 2050 Plan by the LUC? How can a petitioner be expected to make commitments to the LUC regarding the project's future occupants' reliance on fossil fuels, or their proclivity to recycle or grow organic vegetables? And so on and so on... The proposed rule amendments appear to me to be an attempt by the LUC to convert a socially oriented plan into specific decision-making criteria, an action clearly not intended by the Plan's authors.

Stepping back for a moment, the intent of the proposed amendments appears to me to be an attempt to somehow replicate the impact analysis characteristic of an environmental assessment as envisioned by Chapter 343, HRS. However, as the author of well over a dozen environmental impact statements and dozens of environmental assessments, please allow me to point out that environmental assessment is principally a binary process, meaning that the author is tasked with determining the extent of impacts a proposed action may have and how those that are significant might be mitigated. Reviewing the content requirements for an EA as presented in Section 11-200, HAR, an author must make a simple binary decision for each of the criteria; is there or is there not an impact. This binary analytical process is not, however, generally applicable to the content of the 2015 Sustainability Plan. Because the Sustainability Plan is really about individual choices and about community values, it does not lend itself to binary analysis. To attempt to reduce the Sustainability Plan to binary analysis represents a serious misunderstanding of the Plan itself.

Chapter 15-15(c)25(A): I DISAGREE with this requirement. Subsection 25 generally appears to assume that the petition in question is from Conservation to Urban (or Rural) or from Agriculture to Urban (or Rural). But subsection Chapter 15-15(c) does not offer that distinction; it addresses the content requirements for any petition. What relevancy would the smart growth principle of "walkability" have to petition from Conservation to Agricultural for an agricultural project or an energy

project? And if a project is not deemed to be "walkable", does that diminish its legitimacy or acceptability in the eyes of the LUC?

Chapter 15-15(c)25(B): I DISAGREE for the same reason as stated above regarding subparagraph A. This level of analysis is only relevant for petitions seeking Urban classification. And moreover, pursuant to Chapter 46, HRS, once a property is classified as Urban District, it falls under the authority of the County within which it is located. The County is, in fact, much better equipped to address issues pertaining to smart growth, that are inherently design-oriented, and therefore far beyond the scope of and venue of the LUC. To require design-level detail in a petition for land use district reclassification is far beyond the scope of the LUC. While the LUC is faced with the question "should a property be granted an Urban classification", it is not qualified to dictate the design criteria for urban development.

Chapter 15-15(c)25(C): I DISAGREE for the same reason as stated above regarding subparagraph A and B. To the extent that transit systems are located in Urban districts, transit-oriented development is a County issue pursuant to Chapter 46, HRS, not an LUC issue.

Chapter 15-15(c)25(D): I DISAGREE for the same reasons as stated above regarding subparagraph A, B and C. In particular, water recharge, reuse, and recycling are detailed design issues best addressed at the County Building Department level. The LUC has no business exercising authority in these areas of design.

Chapter 15-15(c)25(E): I DISAGREE for the same reason as stated above regarding subparagraph A. Again, this subsection appears to be only relevant for petitions seeking Urban classification. But more importantly, what kind of technical analysis is expected for an estimate of heat-island effects at the conceptual planning stage inherent to an LUC petition. The generation of radiated heat from a future urban project will depend largely upon design decisions including but not limited to the type of roof material used for buildings; the type of paving materials used; the landscaping concepts employed, including but not limited to the planting of shade trees; the use of reflective materials in building construction; and the character of heat exhaust generated by a particular building's interior uses such as centralized air conditioning; to mention just a few. These design decisions are not only clearly within the jurisdiction of the County pursuant to Chapter 46, HRS, but they are entirely premature for the purposes of an LUC petition. It is inappropriate to expect a petitioner to generate this level of design detail for a state land use district petition. In my 39 years of experience, I have never met a client or an agency willing to engage architectural services for the benefit of a regional-oriented land use classification process.

Chapter 15-15(c)25(F): I DISAGREE for the same reason as stated above regarding subparagraph A. This level of analysis is only relevant for petitions seeking Urban classification. Moreover, the LUC is not in business of determining if urban dwellers should grow vegetables to better supplement their diets.

Conclusion: I believe that sum effect of the proposed rule amendments would result in significant and serious unintended consequences. At the very time that our State is trying to encourage innovation in design and practice to achieve greater sustainability and resiliency, these proposed rules amendments would stifle any attempts by landowners and/or developers to do so. The additional content requirements for a petition to comply with these proposed rule amendments would, in my experience, discourage a potential petitioner from even entering the process. The vagueness of the rule requirements and the exhaustive level of analytical detail they appear to expect would serve as a disincentive for most petitioners. The cost of preparing the analysis, the additional time that would be required to negotiate the content requirements of the draft petition with LUC staff, as reflected by the current wording of the proposed amendments, and the chilling effect that a conditional land use approval would have on a petitioner's future ability to develop the project in a manner consistent with the LUC's order based on these rule amendments would likely discourage any petitioner from even entertaining a land use district amendment as a development strategy. On a personal note, I shudder to think of the cost of a professional liability insurance premium if I, as a consulting planner, were tasked with preparing design standards for a regional development to address climate change.

In addition, the contentiousness associated with the current intervention procedures at the LUC would, in my opinion, manifest as a circus of dueling experts more than it already is if these proposed amendments were to be implemented. Requiring a petitioner to present what could only be at best an arbitrary estimate of a future carbon footprint for a project or an "analysis" of the value-based decisions to be made in the future by the residents and/or businesses anticipated in a conceptual design for a proposed development, would invite skepticism and counter claims, be they legitimate or ill-informed, by interveners which would in our collective experience prolong the hearing process and increase the costs for all those involved. If you ask for uncertainty, you will get chaos. By proposing these vague and ill-informed rule amendments, you will be increasing the polarization of stakeholders. At a time when we should be seeking collaboration, you are advocating for the opposite. There has got to be a better way than this.

Given the City and County of Honolulu's urban-growth boundary strategy employed in its Sustainable Community Development Plans, the land use petitions reasonably expected to emerge over the next decade on O`ahu would likely be for Conservation District to Agricultural District, or Agricultural to Rural reclassifications. It is unlikely that we will see future reclassifications on the order of Mililani Mauka or Ho`opili. Therefore, future reclassification petitions on O`ahu would not likely be for large land areas. Subsequently, the scale of the proposed projects would likely be modest. The costs and time associated with gathering the requisite information required by the proposed amendments would deter anyone in their right mind from applying, and especially if the petitioner is a relatively small-scale project. Thus, at the very instant that we are looking for creative solutions to energy production,

agricultural diversification, and new affordable housing opportunities on O`ahu, the LUC is proposing rule amendments that would discourage new creative and innovative land use strategies.

Because the neighbor islands have not, to my knowledge, yet employed urban growth boundaries as a land use control mechanism, and because 49% of land in the state is classified as Agricultural, it is entirely likely that most reclassification petitions in the foreseeable future will be on the neighbor islands for Agricultural to Urban. The costs and time associated with gathering information required as the result of the proposed rule amendments may very well discourage petitioners from coming forward.

Finally, given the very serious challenges facing our state concerning climate change, and especially in light of the fact that of the three strategies inherent to a response to sea-level rise (defend, adapt, or abandon), the third will likely require new land reclassifications to move critical infrastructure and land uses inland and away from the shoreline, at the very time we should be facilitating creative problem solving, the LUC is proposing to make the process more costly, time-consuming, and contentious. I believe the proposed rule amendments are ironically directly contrary to the spirit and intent of the 2050 Sustainability Plan.

Recommended Alternative Language:

In view of my comments above, I recommend that Chapter 15-15-50(c) be amended by deleting subparagraphs 24 and 25 as presently proposed in their entirety and replacing them with the following:

- (24) A statement and analysis pursuant to section 226-109, HRS, addressing climate change related threats directly applicable to the conceptual plan for the proposed use or development and measures recommended to mitigate them. The statement and analysis shall address the location of the proposed development and the threats imposed to it by sea level rise, based on the maps and information contained in the Hawaii Sea Level Rise Vulnerability Adaptation report and the measures proposed by the petitioner to address.
- (25) A statement addressing the proposed development or use's carbon reduction goals and what measures the petitioner proposes as part of the conceptual development plan to offset the production of carbon resulting from the proposed use or development.

Very truly yours,
Lee Sichter