

## AH Committee

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**From:** paulbrewbaker@tzeconomics.com  
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**To:** AH Committee; County Clerk  
**Cc:** Harmony Hallas; Peter Martin; kyle@hopebuildershawaii.com  
**Subject:** Testimony, Affordable Housing Committee Wed Jun 19 2019  
**Attachments:** Brewbaker West Maui (Launiupoko) housing testimony June 19 2019.pdf

Please include in your committee's proceedings tomorrow the attached testimony in support of 201H developments in Launiupoko at Polanui Gardens (AH1-1) and Makila Rural East (AH1-2).

Mahalo,  
pb

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Testimony of Paul H. Brewbaker, Ph.D., CBE  
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*before the*  
Affordable Housing Committee  
Council of the County of Maui  
Wednesday, June 19, 2019

*regarding development of the*  
Polanui Gardens Workforce Housing Project (Lahaina) (AH-1(1))  
*and*  
Makila Rural-East Workforce Housing Project (Lahaina) (AH-1(2))  
Pursuant to Section 201H-38, Hawaii Revised Statutes

Aloha and good afternoon, members of the Maui County Council Affordable Housing Committee. My name is Paul Brewbaker and I submit this testimony in support of resolutions to approve independent development of the aforementioned workforce housing projects, with modifications if pertinent, and in rejection of resolutions for disapproval. My testimony was requested by the developers who, familiar with my occasional presentations of economic research on Maui housing markets, asked if I could provide insights relevant to their 201H housing development. I am not acting as a consultant in this regard although the developers had indicated a desire to engage me professionally. Instead, reflecting the developers' concerns about Maui's housing shortages, I describe the relevant context.

Long-range population projections for Maui County published by the Research and Economic Analysis Division (READ) of the Hawaii Department of Economic Development and Tourism (DBEDT)<sup>1</sup> reported 1.07 percent annual average resident population growth, 2010-2016 following the Great Recession of 2008-2009. For Maui's future, DBEDT projected 1.03 percent annual average population growth, 2016-2025 and 0.86 percent annual average population growth, 2025-2035. (Actual Maui County population growth 2010-2018 was 0.95 percent per annum.<sup>2</sup>) The deceleration of Maui resident population growth is largely a legacy of a prior demographic transition towards decreasing fertility, and because of slower net in-migration (which, in turn, also is a secondary consequence of the demographic transition). (This testimony does not concern itself with *de facto* Maui population growth including that of the average visitor daily census, except to note that all housing unit need estimates reported below would be higher if tourism needs were to be taken into account.)

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<sup>1</sup> Hawaii DBEDT READ (June 2018), *Population and Economic Projections for the State of Hawaii to 2045* ([http://files.hawaii.gov/dbedt/economic/data\\_reports/2045-long-range-forecast/2045-long-range-forecast.pdf](http://files.hawaii.gov/dbedt/economic/data_reports/2045-long-range-forecast/2045-long-range-forecast.pdf)).

<sup>2</sup> Hawaii DBEDT (April 18, 2019) ([http://files.hawaii.gov/dbedt/census/poestimate/2018-county-population-hawaii/PEP\\_2018\\_PEPANNRES.xls](http://files.hawaii.gov/dbedt/census/poestimate/2018-county-population-hawaii/PEP_2018_PEPANNRES.xls))

The increase in Maui households implied by the population increase of 16,126 persons projected to occur between 2016 and 2025 would, at an average three persons per household, require *at least* an additional 5,275 new housing units in Maui County, or 597 units per annum. This is higher than the 478 annual average new housing units authorized by building permit in Maui County during the 10 years 2009-2018, inclusive, enumerated in DBEDT's May 31, 2018 *Quarterly Economic and Statistical Report*,<sup>3</sup> comprising new housing units authorized by building permit. (The post-recession, 9-year housing production average 2010-2018, inclusive, was 488 new units.) By this *underestimate*, Maui homebuilding during the 2010s fell short of identified social need by about 120 units annually for about a decade, or roughly 1,200 units. This estimate ignores any historical cumulative shortfall between organic housing demand growth and new house supply from recent decades prior to the 2010s. Construction of housing has been constrained by regulatory impediments and by the Politics of NIMBY. Maui County's residential development constraints are not unlike those of Honolulu County, well-documented as the most restrictive major urban jurisdiction in America.<sup>4</sup>

Using more sophisticated methodology suggested by the Harvard Center for Housing Studies<sup>5</sup> an even larger new housing shortfall can be estimated for Maui. The methodology takes into account vacant units, vacation and other (*e.g.* seasonal) short-term rentals, and second-home investment, as well as new household formation. The methodology recognizes historically recorded vacancy rates ranging from 1.20-1.55 percent for owner-occupied housing units in Maui County, and vacancy rates ranging from 7.20-26.05 percent for renter-occupied housing units, arising from various frictions in the housing market,<sup>6</sup> and combines their implications with

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<sup>3</sup> Hawaii DBEDT READ (May 31, 2018), *Quarterly Economic and Statistical Report* (<http://dbedt.hawaii.gov/economic/qser/selected-county-tables/>).

<sup>4</sup> Honolulu's notoriety is well-established in the housing economics literature. See Carl Bonham, Kimberly Burnett, and Andrew Kato, "Inclusionary Zoning, Implications for Oahu's Housing Market," *UHERO Project Report* (February 12, 2010) (<http://www.uhero.hawaii.edu/assets/UHEROProjectReport2010-1.pdf>); Richard K. Green, Stephen Malpezzi, and Stephen K. Mayotte, "Metropolitan-Specific Estimates of the Price Elasticity of Supply of Housing, and Their Sources," *American Economic Review*, vol. **95**, no. **2** (May 2005) pp. 334-339; Edward L. Glaeser and Joseph Gyourko (2008), *Rethinking Federal Housing Policy: How to Make Housing Plentiful and Affordable*, Washington, D.C., AEI Press ([https://www.aei.org/wp-content/uploads/2014/03/-rethinking-federal-housing-policy\\_101542221914.pdf](https://www.aei.org/wp-content/uploads/2014/03/-rethinking-federal-housing-policy_101542221914.pdf)); Patrick Clark (June 26, 2017) "These Are the U.S. Cities Where It Costs Too Much to Build: Regulations and sky-high land prices are scaring off apartment developers," *Bloomberg* (<https://www.bloomberg.com/news/articles/2017-06-26/these-are-the-u-s-cities-where-it-costs-too-much-to-build>); and the City & County of Honolulu's own consultant study, Strategic Economics (June 2016) *Affordable Housing Requirement Financial Analysis: Final Report prepared for the City and County of Honolulu* ([https://www.honolulu.gov/rep/site/dpptod/officehousing\\_docs/ahr\\_docs/AHR-Financial-Analysis\\_SE\\_2016.pdf](https://www.honolulu.gov/rep/site/dpptod/officehousing_docs/ahr_docs/AHR-Financial-Analysis_SE_2016.pdf)), in which hypothetical *pro formas* clearly establish that the *lowest* unit construction and development cost on Oahu is associated with the *tallest* high-rise residential structures because of economies of scale and economies of scope, including only having to run the housing regulatory gauntlet once per building. The Kahului-Wailuku-Lahaina Metropolitan Statistical Area (MSA) does not comprise a major conurbation in this empirical literature.

<sup>5</sup> Hawaii DBEDT READ (April 2015), *Measuring Housing Demand in Hawaii, 2015-2025* (<http://files.hawaii.gov/dbedt/economic/reports/2015-05-housing-demand.pdf>).

<sup>6</sup> This is the equivalent to excess capacity in industrial manufacturing, for which 85 percent capacity utilization is considered high, to peak Maui hotel occupancy around 80 percent (seasonally-adjusted), and to airline load factors ranging from 90-95 percent. Excess capacity is customary to handle ordinary fluctuations in capacity utilization.

those of demand for seasonal and other second homes, and with new household formation. DBEDT applies this methodology to estimate 14,164 new housing units needed in Maui County between 2015-2025, within a range of 13,949 – 15,008 under alternative scenarios.<sup>7</sup> Taking into account the 2,178 new housing units authorized by building permit in Maui County, 2016-2018, the residual 11,986 new housing units needed in Maui County, 2019-2025, would represent an annual production flow (1,712 new units) that is *twice* the Maui average of the last two years (851 new units), the best years in more than a decade.

I don't live in Maui, I'm only married to someone from Maui, but even an alien from a distant quadrant of the galaxy would conclude from afar, based on these data, that if Maui in its best two years of the last ten can't build half of what is its new housing need with a lower underlying resident population growth rate than in the past, then it is falling short. Presumably, a disproportionate share of those whose progress this failure impairs are younger individuals, families, and households, or those enjoying the miracle of divorce, circumstances which may increase the need for housing units even in the absence of population growth. Forget about increasing female labor force participation of the last half century, which enabled more individuals to live independently than ever before.<sup>8</sup> Meanwhile, the average size of a new house has grown from a bungalow in 1920 with a living area under 1,000 square feet (an average 5 occupants), to 1,500 square feet at the time of Statehood—when Maui's population actually stopped *declining* for the first time in 40 years—to 2,500 square feet in the 2010s as a result of positional arms races.<sup>9</sup> You don't need to build tiny houses not to build giant ones.

I have checked the Maui Island Plan Directed Growth Map, Lahaina Town W3 and the (May 2016) South Lahaina – Ukumehame Development Projects maps posted by the Long Range Planning Division of the Department of Planning of Maui County. I even wasted some time walking myself through Form 201H-001 (10/5/06) (*ugh*) to familiarize myself with the Hawaii Housing Finance and Development Corporation's application. Even my limited familiarity with what the developer proposes for the Launiupoko area, bounded as it is by residential development on its mauka reach, given its proximity to the Lahaina bypass road, and

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<sup>7</sup> See footnote 4. Using a slightly different methodology, DBEDT's range of estimates increase to 14,373 – 16,698, with a middling estimate of 15,237 new housing units for Maui County, 2015-2025.

<sup>8</sup> In the half century from 1960 to 2010, the share of Hawaii households comprising individuals living independently nearly doubled from 12 to 23 percent, the share of Hawaii households comprising families with children shrank from 56 to 20 percent, the share of households comprising other families (relations) rose from 30 to 47 percent, and the share of other non-families rose from 2 to 10 percent. Hawaii household density probably should have been falling faster than it did from 5 persons per household in 1920 to an estimated 3 persons likely to be estimated in the 2020 census, and to a lower number. See U.S. Bureau of the Census and Hawaii DBEDT (June 2014); *Kakaako: Urban Core Living* (<http://files.hawaii.gov/dbedt/economic/reports/2014-06-kakaako-study.pdf>).

<sup>9</sup> See Lewers & Cooke (1925), *Homes in Hawaii* (<https://ia800809.us.archive.org/30/items/homesinhawaiiisug00lewe/homesinhawaiiisug00lewe.pdf>); Robert C. Schmitt (1977) *Historical Statistics of Hawaii* UH Press; and Mark J. Perry *Carpe Diem* (blogpost) June 5, 2016 (<http://www.aei.org/publication/new-us-homes-today-are-1000-square-feet-larger-than-in-1973-and-living-space-per-person-has-nearly-doubled/>). People prefer the largest house in a neighborhood of small houses rather than the smallest house in a neighborhood of large houses even when the latter is larger than the former. See Robert H. Frank (May 2005), "Positional externalities cause large and preventable welfare losses," *American Economic Review Papers and Proceedings*, pp. 137-141 (<https://www.aeaweb.org/articles?id=10.1257/000282805774670392>).

out of harm's reach from climate change-induced sea level rise and inundation, suggest to me that these areas for some time have been intended for adaptive evolution from agricultural uses to habitation. As in, that was the plan, right? I don't know the details, and I'm a big fan of agricultural land preservation and have argued in favor of preserving agricultural land use options before the Hawaii Land Use Commission where I have believed an argument can be made. The Launiupoko area does not appear to me to be that place, or if it was, it doesn't appear to be any more. Maui needs affordable (the adjective) housing. Proceed.

I encourage Maui County to take advantage of an actual developer seeking to build workforce housing and to approve these two projects. At the rate Maui is building houses—half as fast as its identified housing need—it couldn't hurt.