



**MARKET STUDY ECONOMIC  
INCOME ANALYSIS & PUBLIC  
COST BENEFIT ASSESSMENT**

**APPENDIX**

**H**



# MARKET STUDY ECONOMIC IMPACT ANALYSIS & PUBLIC COST BENEFIT ASSESSMENT

## HOKUAO PROJECT PROPOSED LANAI CITY EXPANSION

Located Southwesterly of the Existing Village Core  
Lanai City, Maui County, Hawaii 96738  
Tax Map Key (2) 4-9-002:061(por), (2)-4-9-014:001(por), (2)-4-9-014:009(por)  
CBRE, Inc. File No. 20-251PS-2352

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October 22, 2020

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RE: **Market Study, Economic Impact Analysis, and  
Public Cost Benefit Assessment  
of the Proposed Hokuao 201-H Housing Project  
Located Southwesterly of the Existing Lanai City Core  
Lanai City, Maui County, Hawaii 96763**  
Tax Map Key (2) 4-9-002:061(por), (2)-4-9-014:001(por), (2)-4-9-014:009(por)  
CBRE, Inc. File No. 20-251PS-2352-1

Dear Ms. Thom:

At your request, we have completed a series of market and econometric analyses associated with the proposed Hokuao 201-H Housing project, a 150-house single family subdivision to be set on some 76 acres of currently vacant land southwesterly adjacent to and downhill from the existing village core of Lanai City, Lanai Island, Maui County, Hawaii. The site is identified on State of Hawaii Tax Map Key as (2) 4-9-002:061(por), (2)-4-9-014:001(por), and (2)-4-9-014:009(por). The site is currently classified for agricultural use and Urban for the SLUD; Agricultural, Interim, Active Open Space, and Open Space for County Zoning, and Mixed Use Residential, Park, Public/Quasi Park, and Open Space in the Lanai Community Plan (2016).

The project will be fully offered as "for rent" residential homes for Lanai residents, which the developer plans to own and operate on a long-term basis.

The current master plan includes:

- 76 workforce "affordable-rent" two-bedroom homes averaging 1,080 square feet of living area and 327 square feet of Lanai on 8,000 square foot lots.

- 59 "market-rent" two-bedroom homes averaging 1,080 square feet of living area and 327 square feet of Lanai on 8,000 and up square foot lots.
- 15 "market-rent" four-bedroom homes averaging 1,858 square feet of living area, 470 square feet of Lanai, and 250 square foot garage, on 10,000 to 12,000 square foot lots.
- A 1.0-acre improved park with 1,500 square foot community center (for use by Lanai City events), and 60 surface, striped parking stalls for Hokuao residents.

The workforce inventory will be offered for long-term tenancy at rents meeting County/HUD affordability pricing guidelines. The market-rent component will be leased at competitive price. No Transient Vacation Rentals will be permitted, nor Accessory Dwelling (Ohana) units in the near-term. Pulama Lanai will own, manage and maintain the homes and common areas/landscaping of the project using centralized services. Renters will be responsible for all utilities and grounds maintenance of their lots.

The map below displays the master plan for Hokuao with some 150 homes.



It is our understanding that the new neighborhood would be entitled as a Maui County "201H" project designation requiring that more than 50 percent of the inventory meet affordability guidelines.

As a result, portions of our assignment scope and presentation are more-oriented towards County-based issues. Our summary report is suitable for inclusion into an Environmental Assessment or Environmental Impact Statement submitted for County of Maui review quantifying the market demand and resulting economic and public fiscal impacts associated with the implementation of the proposed master plan.

Our study consists of the following three general components:

1. Market Study. This analysis included an overview of the Lanai economy focusing on the residential real estate market sector; and, forecast demographic and land use trends over the coming 15+ years (through 2035).

We quantified the demand for the workforce (affordable) and market single family product on Lanai homes using methods appropriate, identified existing and proposed competing supply, determined the appropriateness of the property to support the proposed project components; and, estimated subject inventory absorption over time.

The location of the proposed Hokuao project nearby an existing wastewater treatment plant and its potential effect on product desirability, home pricing and absorption was also a consideration.

We also surveyed prominent Lanai/Maui County community members, real estate brokers and other market participants.

2. Economic Impact Analysis. This analysis used a micro-econometric model depicting the project from ground-breaking through construction build-out, lease and "stabilization" quantifying the flow of capital investment, creation of jobs/wages during construction and stabilized operations/use projection of resident and de facto population, on- and off site tenant expenditures, and other aspects of impact in the community.

We also analyzed the impact of the project using the State of Hawaii "Inter-County Input-Output Economic Model," a macro-economic application.

3. Public Fiscal (Cost/Benefit) Assessment. This assessment quantified the favorable impacts the project will have on the County and State purses by forecasting the tax revenues (primary and secondary) created by the development and its population.

During the course of study, the COVID-19 Pandemic and resulting trans-pacific quarantine on travel to Hawaii has resulted in the virtual closure and massive unemployment in the Statewide tourism and restaurant industries; with Lanai being particularly hard-hit. This skews all short-term

Sharon Thom  
October 22, 2020  
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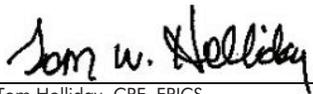
economic analysis due to uncertainties as to when the islands will “re-open” and what impacts it will have as it recovers over the next several years.

However, most consider the viral outbreak to be a passing event with a vaccine or effective treatments and testing available for wide-spread distribution within a year; before the first homes are constructed and completed at Hokuao by the end of 2022.

Our projections extend to 2035, following historic/market statistics over a long-term horizon; hopefully well-past any lingering COVID concerns.

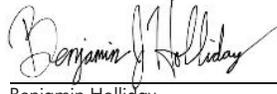
Pandemic concerns and impacts are discussed throughout the report as it helps establish a current perspective, but our focus has been on data-trending since 1980 and anticipated future evolutions, while recognizing continuing economic disruptions for several years.

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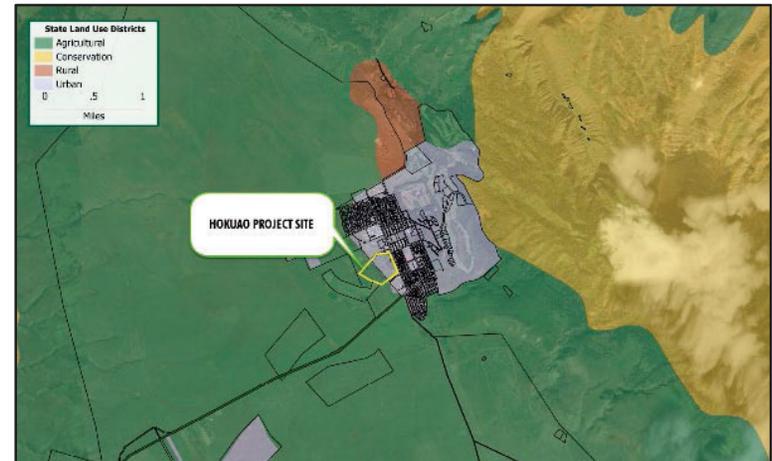
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## Subject Location Maps



Aerial of Lanai Island Showing Hokuao Property Location



Hokuao Site and Relationship to Existing Lanai City

(Note: Project site outline (yellow) is used for example. Does not represent exact site outline)

**CBRE**

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**ADDENDA**

- Addenda A – Market Study and Absorption Tables
- Addenda B – Economic Impact Tables
- Addenda C – Public Fiscal Benefit Tables
- Addenda D – CBRE Community Survey
- Addenda E – Qualifications

**Introduction and Primary Study Conclusions**

**INTRODUCTION**

The CBRE, Inc. assignment was to analyze the proposed “for rent” Hokuao 201-H Master Planned community from a real estate market perspective and to identify and quantify probable market and economic impacts associated with the master plan in light of competitive, regional, prevailing and forecast trends in order to answer five basic study questions:

1. Is there sufficient demand to absorb the 76 “workforce/affordable-rent” and 74 “market-rent” single family homes within the Hokuao community during a reasonable exposure period given competing developments and projected island/statewide/regional market trends?
2. Is the project an appropriate use of the underlying site relative to market needs, standard land planning objectives, accepted master plan design characteristics, and the area environs?
3. What will be the general/specific and direct/indirect economic impacts on Lanai resulting from the undertaking of the Hokuao development via employment, wages, business operations, population, property values and other economic activity related to the real property asset?
4. What will be the benefits to the state and county “public purse” from the project from tax/fee receipts?
5. What is the opinion of Lanai City community members and real estate professionals of the project and the need for its development?

These issues were addressed through a comprehensive research and inquiry process utilizing data from market investigation, governmental agencies, various Hawaii-based media, industry spokespersons/sources, on-line databases, survey/interviews, published public and private documents, and our files.

We have also considered the near-term impacts of the continuing COVID Pandemic on the Lanai economy and real estate market anticipating an effective vaccine/treatment or testing regimen allows for wide-spread re-opening and recovery commencement by mid to late-2021, with full ramp-up and stabilization in 2022-23. An outcome of the study was a lessening of interest in land entitlement and real estate issues as attention is focused elsewhere.

The pertinent results of our study are highlighted in the following summary report which contains brief narrative, tabular data and other materials contributing to our conclusions. The presentation is divided into eight sections:

1. **Primary Study Conclusions**
2. **The Subject Property and Proposed Project**
3. **Market Study of the Lanai Residential Sector**
4. **Appropriateness of the Lanai Lands for the Proposed Residential Uses and Absorption Estimates**
5. **Analysis of the Economic Impacts of the Hokuao Developments**
6. **DBEDT 3<sup>rd</sup> Quarter Economic Projections**
7. **Assessment of the New Public Fiscal Impact Benefits Associated with the Project**
8. **Public Opinion of the Proposed Development**

The primary source information regarding the subject used in our study were:

- Maps, master plans, unit counts, density estimates and background materials provided by Pulama Lanai, and other members of the planning team;
- Infrastructure cost estimates (on and off-site) previously completed for Hokuao and actual and budgeted costs for recently-developed and proposed neighbor island developments;
- Maui County Lanai Community Plan ordinance 4343 (2016);
- Resident population and housing projections, proposed development and other maps, community plan materials, and other data from the County of Maui Planning Department and State of Hawaii Office of Planning;
- The United States 2010 Census and subsequent updates through 2018;
- Sales and listing data from the Maui Board of Realtors (Multiple Listing Service) and Hawaii Information Service; and,
- Data from published and on-line sources and from our files.

The Hokuao site and environs have been viewed by our firm on several occasions and we have completed appraisal and consulting assignments regarding the holding on several occasions over the past three decades.

Our *Market Study* time-frame which serves as a basis for subject absorption projections extends approximately 15+ years, from mid-2020 through 2035, although it is anticipated all of the homes, will be absorbed by the market in a shorter period. The demand for single family homes on Lanai is quantified during this period, existing, planned competitive supply is identified, the appropriateness of the site for the proposed subdivision is analyzed, and absorption is estimated using several market-based methods.

Our *Economic Impact Analysis* and *Public Fiscal Assessment* study model extends over the 10+-year development period of the project (2020-2030), and assumes:

- Entitlements and approvals will be achieved during 2020-21;
- Infrastructure emplacement will take place in 2021, and pre-leasing will commence;
- Lease-up and build-out of finished single home product over the following 8 years (2022-2029);
- Reaching stabilized community "operations" in 2030 (and beyond).

This time-frame effectively depicts the life-span of Hokuao from today, through final entitlement, ground-breaking, absorption/build-out, and its eventual functional "stabilization."

Primary and direct secondary capital/economic outcomes from the development of Hokuao are quantified in two five-year periods, 2021-2025 and 2026-2030 (no meaningful activity at the site is anticipated during the remainder of this year). We forecast the de facto population in the community and associated income and spending with the resultant taxes flowing to the County and State estimated.

We have also tested our econometric model outcomes against the formulae within the State DBEDT "2012 Hawaii Inter-Island Input-Output Model" (approved August 2016).

It is noted, our economic and fiscal models are not specifically time-sensitive as all dollar amounts are expressed in constant 2020 dollars. Should the project timeline move several years in either direction from the modeling period we would not anticipate major changes to our stated conclusions.

### PRIMARY STUDY CONCLUSIONS

Based on our analysis of the subject property, its environs, and envisioned development we have reached the following conclusions as of the Third Quarter of 2020 regarding the probable market standing and economic impacts of the proposed Hokuao community.

#### Market Study

- Prior to the onset of the COVID-19 Pandemic, the State of Hawaii had steadily rebounded from the 2008-09 recession and associated down-cycle in the real estate market with an extended-term favorable economic period featuring gradually and consistently strengthening property sectors. Sales activity, volume, and prices all showed meaningful post-recession recovery/stabilization on Lanai; in many cases reaching near to full recovery to the levels achieved during the 2004-07 peak market years. The state economy had one of its best years ever in 2019 and the first three months of 2020 were showing signs of an even stronger year. However, the global pandemic has erased any economic gains of 2020 and has pushed the state into a recession due to a state mandated 14-day quarantine.
- The July unemployment rate on Lanai was at 4.8 percent (near peak recession levels), and some 752 employees of the Four Season Lanai were issued furlough and lay-off notices in

August after the second shutdown of interisland travel by the Governor, which could increase unemployment several fold; although concurrent with the report date plans were announced to re-open the resort in November and begin ramp-up and re-staffing. Prior to COVID, and indicative of long-term job market potentials, the unemployment rate had dropped to about 0.5 percent (effective full employment). Per capita income in Maui County grew at 3.9 percent compounded annually over the past decade and Lanai was experiencing generally positive economic activity and stable tourism until March 2020. There was some \$124.5 million in visitor spending last year on the island, with a statewide-leading Per Person Per Day Spending of \$457, more than double any other island. Total Visitor Arrivals and Total Visitor Days also reached new all-time highs in 2019.

- As with most in Hawaii, the Lanai residential real estate market has generally weathered the COVID Pandemic well, a function of generationally-low mortgage interest rates, chronic housing shortages, and limited inventory. 2020 is on pace to have the highest single family “Sales volume” (total dollars spent) since record-setting 2014; the “number of sales” for the year will be well-above annual averages for the past decade; and stable; and, relatively-high median prices are being maintained.
- Lanai City is the focal point of the Lanai economy and community, with more than 90 percent of the resident population and three-quarters of the economic activity. It is now home to one of the most exclusive and expensive destination resort communities in the world with a reputation for quality. And, the recently refurbished and re-positioned Sensei Retreat is an ultra-luxury, personal experience. This trend toward upscale visitor inventory is anticipated to continue into the long-term, increasing the cumulative attraction of the island as the economy ramps-up following the Pandemic.
- Although stymied by the economic limitations of scale and orientation, we project the Lanai economy will substantially recover from the negative COVID impacts by 2023-24 with modest, sustainable growth thereafter. Apart from external influences, post-Pandemic annual expansion at greater than three percent compounded is anticipated for most sectors. The overall mid-term to long-term outlook is favorable, as the same characteristics which drew visitors to the island will remain after the event fades away; sun, beaches, dry warm weather, and a low intensity, retreat ambience. The latter of which should assist recovery as Lanai is viewed as a “refuge” from the virus.
- Though difficult to accurately estimate, the population of the island has declined in recent years and is now likely below the 3,335 persons counted in the 2010 census. The most recent (2018) Census estimate was at 2,802 persons, down from the 3,356 average count since 2010. Further with the onset of COVID and associated loss of employment there has been some out-migration. We have used a conservative estimate of 3,000 residents on Lanai as of mid-2020, reaching between 3,433 and 3,486 persons by the end of our projection modeling period, as shown below.

ESTIMATED POPULATION FOR LANAI 2020 TO 2035

Scenario	Current 2020	Projected Lanai Resident Population		
		2025	2030	2035
<i>One: Based on Historic Growth Trend 1980 to 2020</i>				
Resident Population	3,000	3,138	3,282	3,433
<i>Two: Maximum Based on Extrapolated/Adjusted County Planning Department Technical Forecasts</i>				
Resident Population	3,000	3,154	3,316	3,486

- There are an estimated 1,463 "housing units" on Lanai; there have been no major additions over the past two years but some individual homes have been built. We have estimated the 2020 housing unit count is about 1,480, of which 13 are identified as vacation rentals, resulting in 1,467 available housing units.
- The non-resident second/vacation home buyer demographic has grown over the past two decades and is now represented in virtually every market project; particularly new development. The percentage of this segment is anticipated to continue increasing and stabilize at about 20 to 25 percent by 2035.
- The current average Lanai resident household size is about 2.48 persons and is forecast to decline in coming decades as a result of evolving family/household trends and an increasingly diverse mix of unit types of new development. By 2035, the average household size in the study area is anticipated to lower to 2.30 to 2.34 persons.
- The median prices for residential product in the Lanai year-to-date 2020 was at \$436,000 for single family homes, \$850,000 for condominium units, and insufficient data for vacant lots/land. Post-COVID median prices are anticipated to increase into the long-term as new units manifest the higher costs of land, construction, impact fees and entitlement, are added to the inventory, and appreciation (though cyclical) continues.
- In 2018 (most recent data), some 43.6% of the occupied housing units on the island were “Renter-Occupied”; which is generally consistent with statewide (41.7% of total units) and Maui County (39.8%) . The percent of rented units on Lanai has decreased in recent years, averaging 46.6% annually from 2010 through 2018. However, the efficacy of this metric is limited by the small size of the Lanai City market and concentrated land use/ownership, as the “market” does not provide the opportunity for supply to accurately reflect demand desires.
- There is a scarcity of homes on the island available for long-term residential rental. As of the publication date, there were a cumulative total of four such units listed on rent.com, Zillow.com, apartment.com, craigslist, and Lanai96793.com, as shown below. This is

insufficient to provide for general market demands, meeting a diversity of specific tenant needs, and a vacancy allowance capable of servicing the community.

- Maui County/HUD 2020 “affordable” housing pricing guidelines set rents for two-bedroom units at from \$603 monthly (households at 50% of the Lanai Median Household Income - MHI) to \$1,688 monthly (140% of Lanai MHI). Affordable rents for four-bedroom units ranges from \$777 (50% of MHI) to \$2,176 (140% of MHI). The average monthly rent in Maui County for long-term residential tenancy was \$1,406 in 2018.
- Four-bedroom homes are rare on the island; particularly for rent. While some 25.9% of all Lanai resident households have four or more persons, only 12.6 percent of the housing inventory has four or more bedrooms.
- We estimate the mid-point demand for new residential (non-TV) units in Lanai through 2035 will total 465 units, as shown following. Single family homes and lots will comprise about 76 percent of the total area demand and condominium units 24 percent.

QUANTIFICATION OF HOUSING UNIT DEMAND FOR LANAI 2020 TO 2035					
Scenario	Current 2020	Projected Lanai Resident Population			Additional Units Required by 2035
		2025	2030	2035	
<b>One: Based on Historic Growth Trend 1980 to 2020</b>					
Resident Population	3,000	3,138	3,282	3,433	
Average Household Size <sup>(8)</sup>	2.48	2.43	2.39	2.34	
Total Resident Units Required	1,210	1,290	1,375	1,466	
Part-Time Resident/Second Homes (Max 20%)	121	161	206	293	
Transient Units (Max 4%)	36	39	55	59	
Vacancy Allowance (Max. 3%)	0	26	41	44	
<b>TOTAL MARKET UNIT DEMAND</b>	<b>1,367</b>	<b>1,516</b>	<b>1,678</b>	<b>1,862</b>	<b>395</b>
<b>Two: Maximum Based on Extrapolated/Adjusted County Planning Department Technical Forecasts</b>					
Resident Population	3,000	3,154	3,316	3,486	
Average Household Size	2.48	2.42	2.36	2.30	
Total Resident Units Required	1,210	1,304	1,406	1,516	
Part-Time Resident/Second Homes (Max 25%)	212	248	309	379	
Transient Units (Max 4%)	26	39	56	61	
Vacancy Allowance (Max. 3%)	0	26	42	45	
<b>TOTAL MARKET UNIT DEMAND</b>	<b>1,448</b>	<b>1,617</b>	<b>1,814</b>	<b>2,002</b>	<b>535</b>
<b>CALCULATION OF MID-POINT PERIODIC HOUSING UNIT DEMAND</b>					
	<b>Latent Demand</b>	<b>2021-2025</b>	<b>2026-2030</b>	<b>2031-2035</b>	<b>Totals</b>
<b>MINIMUM DEMAND</b>					
Periodic	(100)	149	162	184	<b>395</b>
Cumulative		115	244	395	
Average Annual Demand <sup>(4)</sup>		23	26	30	
<b>MAXIMUM DEMAND</b>					
Periodic	(19)	170	197	187	<b>535</b>
Cumulative		163	354	535	
Average Annual Demand (4)		33	38	36	
<b>MID-POINT DEMAND</b>					
Periodic	(60)	159	180	186	<b>465</b>
Cumulative		139	299	465	
Average Annual Demand (4)		28	32	33	

- We estimate approximately 59 percent of the demand for finished resident housing units (single and multifamily) on Lanai over the next 17 years will be for units meeting affordability guidelines for those households having an income of 120 percent of less of the 2020 Median Household Income (MHI); with 41 percent of demand for market-price/rent units for households earning more than 120 percent of the Lanai MHI.
- There have been numerous long-term proposed developments on Lanai over the past decade, most by Pulama Lanai. The projects controlled by Pulama Lanai (or associates) are generally on-hold and subject to unit count change. Further, the County Lanai City Housing Project (with up to 400+ units) is on-hold pending selection of a new developer and 105 units will be in a restricted DHHL subdivision. We consider it unlikely that all of the proposed units will be manifest for many decades. We have estimated only some 113 non-subject units will likely be built before 2035.
- Although there are some concerns regarding the proximity of the existing waste water treatment plant to the project site (which we determined was of only a minor issue), the subject property is a superior location for the proposed development regarding access, views, topography, shape, size, connection with the existing community, and general lack of incompatible nearby uses, County planning guidelines and objectives, climate, and ability to provide quality lifestyle opportunities for a diverse spectrum of Lanai residents. It will have the attributes necessary to be competitive in the workforce housing and market-priced product sectors, and will capture a reasonable market share during its offering period.
- Developer is committed to start construction on the affordable units and add market units at a rate that maintains the ratio of affordable to market units of 51% to 49%, respectively.

#### Absorption Estimates

- Based on application of the Gross Demand, Residual Demand and Market Share (or Capture Rate) methods and their correlation, we estimate that 150 proposed “for rent” single family homes of the Hokuao project will require about 8 years to be fully absorbed following commencement of pre-leasing (tentatively anticipated for 2021) with the final homes being spoken for by 2029 and built-out by 2030.

It is anticipated that the demand for the 76 for-rent workforce homes would be oversubscribed. The 74 market-rent homes would be offered via an on-going leasing program, with anticipated relatively stable absorption over time. Homes would be reserved (or “under-contract”) pending completion of construction and occupancy.

Cumulatively, this absorption estimate represents only about 65 percent of total island-wide demand the offering period; a readily achievable portion of the larger Lanai market, which could be enlarged if some proposed projects fail to reach fruition (as anticipated). Our concluded absorption forecast for Hokuao is shown below.

PROJECTED DEVELOPMENT AND ABSORPTION OF HOKUAO INVENTORY											
		Long-Term Residential Rentals									
		Workforce Housing Homes Occupied				Market-Priced Homes Occupied				Total Units Absorbed	
Year			Annually	Cumulatively	Annually	Cumulatively	Annually	Cumulatively	Annually	Cumulatively	
Estimated Calendar	Project	Development Activity									
2020	1	Entitlement									
2021	2	Site Prep. & Infrastructure Employment	Pre-Leasing Begins (1)		Pre-Leasing Begins (1)						
2022	3	Initial Homes Constructed and Leased	20	20	0	0	20	20			
2023	4	Home Construction and Leasing Continues	20	40	0	0	20	40			
2024	5	Home Construction and Leasing Continues	20	60	0	0	20	60			
2025	6	Home Construction and Leasing Continues	16	76	4	4	20	80			
2026	7	Home Construction and Leasing Continues	0	76	20	24	20	100			
2027	8	Home Construction and Leasing Continues	0	76	20	44	20	120			
2028	9	Home Construction and Leasing Continues	0	76	20	64	20	140			
2029	10	Final Homes Constructed and Leased	0	76	10	74	10	150			
<b>2030</b>	<b>11</b>	<b>Community has been fully built-out and is occupied and "operating" on stabilized level</b>									

(1) Pre-Leasings are reservation agreements pending completion of the homes and occupancy.

Source: CBRE

**Economic Impact Analysis**

We have constructed a model depicting the economic impact of the Hokuao projects on the Lanai and Statewide community during the course of its "lifespan" from anticipated ground-breaking in 2021, through absorption (2029), to build-out 2030, and stabilized "operations" thereafter.

The model builds on the absorption estimates and data contained in our market study. All estimated amounts are in constant 2020 dollars. We note, that even if the timing of development or absorption moves substantially from our projections it does not change the resultant outcomes or indicators as the use of constant dollars removes time as a determinant variable. The purpose of the model is to illustrate how capital, jobs, wages, population and business activity will flow over time for planning and budgeting purposes apart from and present value considerations.

All forecasts and calculations consider the two components of Hokuao, the workforce/affordable and market-rent units, as a single, integrated development.

- The development of Hokuao will bring in an estimated \$115.2 million of new, direct capital investment with significant unquantified indirect expenditures into the island's real estate market and generate: \$166.3 million in total new economic activity island-wide during its

build-out over an 10-year period (forecast from 2021 through 2030). It will contribute some \$8.3 million in annual economic activity on a stabilized basis thereafter.

- The construction of the Hokuao infrastructure and finished single family homes will directly create an estimated 476 "worker-years" of employment (the equivalent of 52 work weeks at 40 hours per week) in the trades and supply businesses during build-out, averaging about 48 worker years annually, with an estimated \$37.5 million in wages (averaging about \$4 million per year).
- The community common element, Pulama Lanai management, landscaping and maintenance, and renovations of the 150 homes will create 39 worker-years of employment from 2021 through 2030 and associated wages of \$2.7 million. Once stabilized these project components will have 18 FTE positions and annual wages of \$1.24 million.
- Associated secondary/off-site employment during the overall development and absorption time-frame will total 172 worker-years with wages of \$11.8 million and a stabilized FTE job-count of 6 with total wages of \$412,000 per year.
- At build-out the average daily de facto population of the community will be some 418 full-time residents (exclusive of guests). The cumulative resident household income during the first 10 years of occupancy (2021 through 2030) will total \$70.4 million, and will stabilize at \$12.1 million annually thereafter. Discretionary expenditures into Lanai businesses by the Hokuao population will be some \$34.4 million during build-out and average \$5.4 million per year on a stabilized basis.
- The on-going business activity (excluding construction) in the community will total \$51.1 million during the projection period and average \$8.3 million per year on a stabilized basis. The base impact to the Lanai from 2021 through 2030 will be \$166.3 million.
- Application of the State Input-Output Model macro multipliers depicting direct, indirect and induced economic impacts arising from development of Hokuao results in significantly higher economic out-flow indicators than those from our direct, subject-specific micro model.
- The total State economic impact from construction of the project would reach \$233.8 million, there would be 1,647 total worker-years of jobs created, and the total increase in earnings statewide would be \$78.3 million.
- The State model also estimates the total annual economic output from on-going activity within Hokuao would be at \$71.4 million during build-out and \$12.9 million annually on a stabilized basis. The total number of worker-years statewide attributable to the subject dollars flowing through the economy would be 99.4 positions upon stabilization.

**Public Fiscal Benefits**

Public fiscal benefits impacts were estimated using the outputs from the economic impact model.

- The County of Maui will realize Real Property Taxes (\$2.6 million), and other secondary receipts and development fees totaling \$6.9 million during the 10-year building and absorption projection period (2020-2030), and \$1.5 million annually on a stabilized basis thereafter.
- The State of Hawaii will receive Gross Excise and Income taxes, secondary revenues, and school impact fees of \$19.5 million during the 2020-2030 modeling period, and \$712,000 per year thereafter.
- The major economic impacts and public fiscal conclusions for Hokuao are summarized on the following table. The column on the left summarizes the cumulative impacts during the construction and build-out period (2020-2030) covering infrastructure emplacement, lot absorption, home construction and ramp-up to stabilization of economic activity, and the right hand column the annual impacts after stabilization.

SUMMARY OF MAJOR ECONOMIC IMPACTS AND PUBLIC FISCAL BENEFITS		
All Amounts Expressed in Constant, Uninflated 2020 Dollars		
Analysis Item	Cumulative During Build-Out Period	Stabilized Annually Thereafter
Direct Capital Investment	\$115,182,583	
Local Contractor's Profits	\$11,518,258	
Local Supplier's Profits	\$4,607,303	
Worker Years of Jobs	687	24
Employee Wages	\$51,956,674	\$1,656,960
De Facto Population		418
Full-Time Resident Household Income	\$70,336,875	\$12,057,750
De Facto Population Expenditures	\$34,364,588	\$5,425,988
Total Lanai Island "Base" Economic Impact	\$166,282,028	\$8,282,948
Accounting for All Direct Impacts		
County of Maui Gross Tax Receipts	\$6,933,043	\$1,516,306
State of Hawaii Gross Tax Receipts	\$19,463,322	\$712,220

Source: CBRE

## The Subject Property and Proposed Project

The Hokuao master-planning area encompasses some 76 acres of vacant land in Central Lanai southwesterly adjacent to, and down-slope from, the existing Lanai City core. According to descriptions from development team members:

- The project is sited close to Dole Park to take advantage of its walkable proximity to shops, groceries, educational, and entertainment venues. The project visually and physically connects to the town via 9<sup>th</sup> avenue and 12<sup>th</sup> avenue road extensions, continuing the existing street grid pattern into the new development. 9<sup>th</sup> avenue will also have a wide concrete bike/walk path connecting the community to Fraser Avenue.
- Along the east edge bordering the school fields, the project provides a one-acre park, a 1,500 square foot pavilion, comfort stations, and 60 parking stalls for use by the community.
- The Hōkūāo project proposes construction of 150 "for rent" single family homes, comprised of 76 affordable homes exclusively "for rent" to households falling within HUD low-income guidelines, and 74 market-rent homes. Workforce/affordable home lots will typically be 8,000 square feet minimum, with market-priced home lots ranging from 8,000 to 12,000 square feet.
- The mix of homes is appropriate for the Lanai market with 76 homes (or 51% of the total count) for affordable renter-occupancy and 74 homes (49% of total) for market-priced tenant-occupancy.
- The character of the homes will reflect the existing design vernacular of Lanai City. The two-bedroom homes will have 1,080 square feet of living area, a 327 square foot Lanai and a pad for parking. The four-bedroom homes will have 1,858 square feet interiors, a 470 square foot Lanai and a 250 square foot garage. Houses will have hipped or gable roofs, covered front Lanais, board & batten siding, large trim profiles, and other design details matching historic Lanai buildings.
- Most of the project area topography consists of flat to gently sloping open, patchy forest and scrub lands. An existing drainage swale on the western boundary of the site carries storm water away from the existing town and community center. On the western flank, the project sets back from the existing wastewater treatment plant (WWTP), with a 600 foot buffer between the closest lot and the WWTP edge.

A “Sustainable Environmental Design” was a focal point of master planning according to the team: “Hokuao is being designed to integrate the latest commercial technologies within a palette of historically significant design patterns. Hokuao will incorporate Hawaii 2050 sustainability guiding principles to responsibly and respectfully utilize and preserve the island’s natural resources. Thus sustainable design intentions are at the forefront being established now during the initial site planning and programming stages, and will continue through design, materials specification, and construction phases.

Outlined below are the project’s environmental sustainability intentions relative to the US Green Building Council LEED categories, the standard bearer for sustainability determination.

**Location and Transportation** focuses on compact development, connection to existing infrastructure, community, and amenities.

- Hokuao will continue the grid layout pattern of Lanai city to minimize roads, utilities, and land development requirements.
- The site is immediately proximate to the educational, recreation, and commercial areas of Lanai city, promoting pedestrian and bike use over the reliance upon automobiles.

**Sustainable Sites** focuses on the environment surrounding the project by restoring site land features and preserving site ecosystems.

- The parcel is serviced by existing water, electric, and wastewater utilities to minimize infrastructure excavation and land disruption.
- Site lighting will be oriented to shield against up lighting
- Road and lot layouts are oriented with topography to minimize site mass grading requirements.
- Houses will use post and beam construction to minimize fine grading through the site, while maintaining soil permeability, minimizing runoff, and enhancing aquifer refresh.
- Construction contractors will be required to follow ‘best practices’ in sitework and construction, to control run-off and construction impacts upon the land.

**Water efficiency** considers ways to minimize water utilization both indoors and out.

- Site landscaping design will focus on low-water and drought tolerant plantscape
- Homes will follow county requirements for low-flow fixtures and fittings.
- Generated gray and black water will be treated to an R-1 water level to be used by Pulama Lanai in its irrigation needs.

**Energy and atmosphere** focuses on reducing energy consumption through efficient design strategies and renewable energy sources.

- Site lighting will be low-energy consumptive.

- Homes will be designed to maximize natural air flow.
- Homes will incorporate Energy Star fixtures, LED lighting, and interior fans
- Homes will be constructed to include R-19 insulation, solar roof ventilators, and reflective roof heat barriers.
- Homes may include solar photovoltaic on-site generation with individual home battery storage.

**Materials and resources** focuses on minimizing the energy required for materials to be processed and transported to the site, and the subsequent disposal of building materials. Hokuao’s island location is a limiting factor, however the project is working towards other opportunities through smart design:

- Excavated soils will be re-utilized at other island locations for required fill conditions.
- Homes will be designed to industry standard sizes to minimize construction waste.
- Homes will be pre-paneled to minimize materials debris and expedite construction process.
- Construction contractors will be required to follow ‘best practices’ in materials stockpiling, construction, and removal.

**Indoor environmental quality** focuses on thermal, visual, and acoustic comfort to benefit the daily health and comfort of occupants.

- Design will foster fresh air movement and natural daylight into the homes.
- Interior finished will be specified to be low VOC.
- With the reliance necessarily on fresh-air ventilation, variations of house designs will work to offset window/door locations to decrease noise transmission.

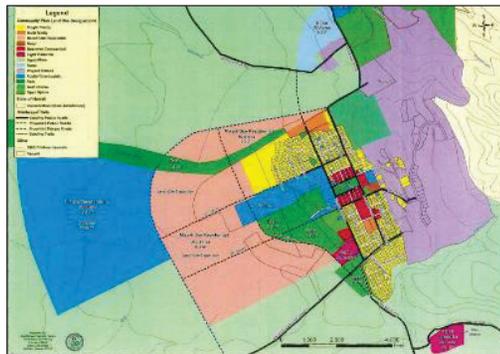
Hokuao’s goal is to provide exemplary housing units that are also minimally impactful upon the environment. With one-ownership leadership driving site planning, design, and construction, the opportunity to achieve a high level of sustainable practices can be assured.

The property is currently classified as:

- **State Land Use (SLU)** - The following map shows the Hokuao project area on the base SLU map as primarily “Green” or as within the Agricultural District. A small portion is within the Urban District.

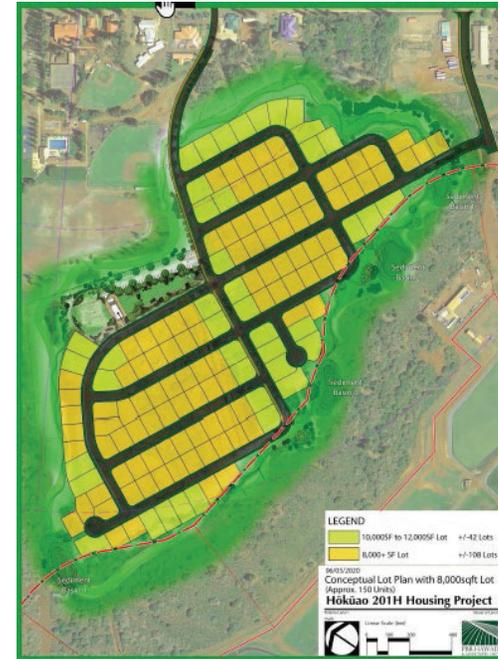


- **Lanai Community Plan** –The Hokuao project area is shown as split-designated on the Lanai Community Plan and is identified in multiple Community Plan Land Use Designations, include Public/Quasi-public, Park, Mixed Use Residential, and Open Space.



- **County of Lanai Zoning** - The Hokuao project site is currently split-zoned, including areas designated as Agricultural, Interim, Active Open Space, and Open Space.

A current Hokuao development master plan with approximately 150 single family lots is shown below.



Hokuao Design

Hokuao is designed to perpetuate the site-planning and architectural character already present throughout Lāna`i City. As an intact plantation town, and with a unique town center seen nowhere else in the islands, this strong and attractive vernacular serves as the design basis for Hokuao. And in its expansion westward of Fraser Avenue, this development will also serve as a model for future private and public housing projects proposed in the immediate vicinity.

Hokuao Master-planning

Two primary egress roads with curb/gutter and pedestrian sidewalks connect the Hokuao community to town. Interior community roads mimic existing city patterns and drain rainwater to side swales without sidewalks and gutters. This keeps the streetscape character small scale and rural.

The development includes an improved park as a community amenity feature. This park is located along the primary pedestrian path to schools and shops, but is nestled at a lower elevation within the community, ensuring active use yet with a sense of intimacy for Hokuao residents.

Homes will be similar in height, shape, and size to the surrounding historic Lanai City. They will also have similar setbacks and orientation towards neighbors, and compatible proportions, shapes and placements of nearby historic buildings.

Hokuao Architectural Design

Original Lanai City houses were kit homes pre-packaged on the mainland by James Dole. Adapted to the local environment, the units integrated aspects defining island design: covered front Lanai entries; simple hipped roofs, board and batten siding; double-hung six over six windows, and wide trims to frame windows and doors within single layer sheathing. This mix of elements created a style of architecture unique to Hawaii and meritorious of being replicated to the greatest extent possible.

Selected preliminary house plans are shown below.



It is our understanding, and we have assumed throughout our study, no homes/units will be permitted to be used as a Transient Vacation Rental (TVR).

Assuming sufficient market demand, the Hokuao project will transform a vacant bulk acreage holding having limited agricultural or other near-term use potentials and nominal regional economic benefit, into an asset providing needed affordable/workforce and market-priced housing, producing hundreds of "worker years" of employment and wages, attracting significant new capital investment and stimulating regional business activity. This activity will in turn create employment, housing and business opportunities for Lanai residents and an expanded tax base for the state and county.

## The Lanai Residential Market

We have analyzed the market demand for the 150 Hokuao “for rent” single family homes based on the long-term population and household growth within the context of the overall Lanai Island residential market.

**Full-size tables of those excerpted into the text are presented in the Addenda for easier viewing.**

Residential development in Lanai has historically been focused towards Lanai City, where upwards of 90 percent of the de facto daily population on the island resides.

In 2018, the US Census “American Community Survey”, the source for many data in our study, counted 1,463 housing units on Lanai. There have been no major inventory additions in the past 18 months, and we estimate the total unit count using this baseline figure is currently about 1,480 units.

Thirteen of the units are identified as being available for vacation rental, leaving 1,467 units available for residential uses.

Today, about 78 percent of the residential inventory in the study area is single family; 22 percent multifamily.

The COVID Pandemic has not, as yet, had a significant impact on the sector; sales activity has been buoyed by pent-up demand and generationally-low mortgage rates, with median prices remaining stable to up from recent previous years.

However, the impacts on the Lanai residential market have thus far been muted, but will likely increase as unemployment remains high and household budgets are tightened. Economic recovery and return towards stabilized levels will take several years, depressing activity in the short-term, but for the most part will be ramped-up by the time the first Hokuao homes are occupied in late-2022.

### QUANTIFICATION OF DEMAND FOR HOUSING UNITS

We have projected the total number of residential housing units which will be required on Lanai to meet basic community stabilized demand through the year 2035. Our estimates were based on several indicators, primarily:

1. “Lanai Community Plan – 2016,” approved as County Maui Ordinance 4343 (2016).
2. “Population and Economic Projections for the State of Hawaii to 2045,” State of Hawaii Department of Business, Economic Development & Tourism, June 2018.
3. “Maui Island Plan – General Plan 2030” County of Maui Planning Department Long-Rang Division, Approved December 2012.
4. “Lanai Housing Issue Paper,” John M. Knox & Associates, Inc., May 2011.
5. U.S. Census Data – from 2010 census, and five-year rolling data from 2011 through 2018 updates.

6. Historical Market Trending – based on analysis of residential and de facto population figures dating back to 1970.

Lanai had a relatively steady increase in population from 1970 when census counted 2,204 residents on the island through 2016 when the count was 3,650 persons, growing at about 31 persons per year over the past four-plus decades. However, since 2017 the annual Census data has shown a meaningful decline of hundreds of persons, reaching the lowest point of this century at 2,802 residents.

We trace this near-term downward trend to both the high margin of error within the small Lanai sample size (which could be indicative of no real change) and the loss of jobs resulting from the closure for renovations of the Lodge at Koele.

We have utilized a conservative Lanai 2020 population count of 3,000 residents as the basis for our modeling, with growth going-forward at long-term historic levels.

Our population projections for Lanai are shown below through 2035.

ESTIMATED POPULATION FOR LANAI 2020 TO 2035				
Scenario	Current 2020	Projected Lanai Resident Population		
		2025	2030	2035
<i>One: Based on Historic Growth Trend 1980 to 2020</i>				
Resident Population	3,000	3,138	3,282	3,433
<i>Two: Maximum Based on Extrapolated/Adjusted County Planning Department Technical Forecasts</i>				
Resident Population	3,000	3,154	3,316	3,486

According to the US Census Interim Survey Data releases, the estimated current average household size has dropped meaningfully since 2011 to about 2.48 persons by 2018, which we have used as a current figure. The following table displays the “American Fact Finder” data for Lanai City along with the 2000 and 2010 census conclusions.

RESIDENT POPULATION AND HOUSING UNIT ESTIMATES FROM THE U.S. CENSUS BUREAU FOR LANAI CITY CDP THROUGH 2018										
Year	DECENNIAL CENSUS		ACS 5-YEAR Estimates Data Profiles							
	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>1. Resident Population</b>	3,193	3,235	3,460	3,424	3,311	3,514	3,519	3,650	3,185	2,802
Percent Average Annual Change	3.2%	0.4%	3.7%	-1.0%	-3.3%	6.1%	0.1%	1.9%	-8.4%	-6.0%
<b>2. Total Housing Units</b>	1,343	1,452	1,356	1,371	1,405	1,445	1,463	1,484	1,496	1,463
Percent Average Annual Change	0.8%	0.8%	-6.6%	1.1%	2.5%	2.8%	0.6%	0.8%	0.3%	-1.1%
Occupied Housing Units	1,148	1,140	1,016	1,040	1,070	1,134	1,185	1,255	1,236	1,130
Percent Average Annual Change	-0.1%	-0.1%	-10.9%	2.4%	2.9%	6.0%	2.2%	3.0%	-0.8%	-4.3%
Vacant/Other Housing Units	195	312	340	331	335	311	278	231	260	333
Percent Average Annual Change	6.0%	6.0%	9.0%	-2.6%	1.2%	-7.2%	-5.3%	-8.5%	6.3%	14.0%
<b>3. Average Resident Household Size</b>	2.78	2.93	3.41	3.29	3.09	3.10	2.97	2.91	2.57	2.48
Percent Average Annual Change	0.5%	0.5%	16.4%	-3.3%	-6.0%	0.1%	-2.1%	-1.0%	-5.8%	-1.8%
<b>4. Occupied Housing Unit Type</b>										
Single Family Home (Detached and Attached)	N/A	1,084	954	910	903	883	1,123	1,098	1,066	901
Percent Average Annual Change			-12.0%	-4.6%	-0.8%	-2.2%	13.6%	-1.1%	-1.5%	-7.7%
Percent of Total Occupied Units		95.1%	93.9%	87.5%	84.4%	77.9%	94.8%	77.0%	77.0%	77.0%
Multifamily Unit	N/A	56	62	130	167	251	62	157	170	229
Percent Average Annual Change			10.0%	109.8%	28.4%	50.1%	-37.8%	76.8%	4.1%	17.4%
Percent of Total Occupied Units		4.9%	6.1%	12.5%	15.6%	22.1%	5.2%	23.0%	23.0%	23.0%
<b>5. Occupied Unit Tenure</b>										
Owner-Occupied	571	576	603	599	583	562	600	637	632	637
Percent Average Annual Change	0.1%	0.1%	4.7%	-0.7%	-2.7%	-3.6%	3.4%	3.1%	-0.4%	0.4%
Percent of Total Occupied Units	49.7%	50.3%	59.4%	57.6%	54.5%	49.6%	50.6%	50.8%	51.1%	56.4%
Renter-Occupied	577	564	413	441	487	572	585	618	604	493
Percent Average Annual Change	-0.2%	-0.2%	-26.8%	6.8%	10.4%	17.5%	1.1%	2.8%	-1.1%	-9.2%
Percent of Total Occupied Units	50.3%	49.5%	40.6%	42.4%	45.5%	50.4%	49.4%	49.2%	48.9%	43.6%

The breakdown of Lanai households by numbers of persons in 2018 is shown following, with 25.9 percent having four or more persons, a target segment for the Hokuao market-rent units.

LANAI HOUSEHOLDS BY NUMBERS OF PERSONS						
	Total Surveyed Units		Owner Occupied		Renter Occupied	
	Unit Count	Percent of Total	Unit Count	Percent of Total	Unit Count	Percent of Total
1-person Household	319	25.30%	115	17.90%	204	33.0%
2-person Household	411	32.60%	270	42.00%	141	22.8%
3-person Household	204	16.20%	89	13.80%	115	18.6%
4-or-more-person household	327	25.90%	169	26.30%	158	25.6%
<b>Totals</b>	<b>1,261</b>	<b>100.00%</b>	<b>643</b>	<b>100.00%</b>	<b>618</b>	<b>100.00%</b>
<b>Percent of Total Units</b>	<b>100.00%</b>		<b>50.99%</b>		<b>49.01%</b>	
<b>Probable Households Seeking 4-bedroom Housing Units</b>			<b>25.90%</b>			

Source: US Census and CBRE

However, only 12.6 percent of housing inventory on the island is four or more bedrooms, as presented in the following chart.

LANAI HOUSING UNIT INVENTORY BY NUMBER OF BEDROOMS		
Number of Bedrooms	Unit Count	Percent of Total
Studio	22	1.43%
1 Bedroom	142	9.20%
2 Bedroom	498	32.27%
3 Bedroom	687	44.52%
4 Bedroom	194	12.57%
5 or more Bedroom	0	0.00%
<b>TOTAL HOUSING UNIT COUNT (1)</b>	<b>1,543</b>	<b>100.00%</b>
<b>Total Unit Supply of 4 or More Bedroom Units</b>	<b>194</b>	<b>12.57%</b>

(1) Total may vary from other sources due to inclusion of vacation and second-home units and the survey margin-of-error.  
Source: US Census and CBRE.

As shown below (based on 2018 data) some 41.3 percent of Lanai household earn more than 120 percent of MHI and would comprise the majority of the demand for the 74-home market-rent Hokuao homes.

FINANCIAL CHARACTERISTICS OF HOUSEHOLDS LANAI FROM US CENSUS AMERICAN COMMUNITY SURVEY ESTIMATES FOR 2018						
Household Income	Total Lanai Occupied Housing Units		Owner-Occupied Housing Units		Renter-Occupied Housing Units	
	Number	Percent of Total	Number	Percentage	Number	Percentage
Less than \$5,000	0	0%	0	0%	0	0%
\$5,000 to \$9,999	0	0%	0	0%	0	0%
\$10,000 to \$14,999	68	6%	38	5%	30	6%
\$15,000 to \$19,999	27	2%	27	4%	0	0%
\$20,000 to \$24,999	166	14%	104	14%	62	13%
\$25,000 to \$34,999	89	7%	51	7%	38	8%
\$35,000 to \$49,999	172	14%	80	11%	92	19%
\$50,000 to \$74,999	199	16%	117	16%	82	17%
<b>Incomes Above 120% of 2020 Lanai Median Household Income</b>						
\$64,308 to \$74,999	85	7%	50	7%	35	7%
\$75,000 to \$99,999	177	14%	112	15%	65	13%
\$100,000 to \$149,999	179	15%	98	13%	81	17%
\$150,000 or more	66	5%	66	9%	0	0%
<b>Total</b>	<b>1,228</b>	<b>100%</b>	<b>743</b>	<b>100%</b>	<b>485</b>	<b>100%</b>
<b>Median Household Income of Group</b>	<b>\$53,589</b>		<b>\$62,977</b>		<b>\$50,395</b>	
<b>Percent of Households with Incomes Above 120% of Median</b>		<b>41.3%</b>		<b>43.9%</b>		<b>37.3%</b>

Source: US Census and CBRE

The average household size is anticipated to continue dropping over the coming decades to about 2.34 persons by 2035 as families/household demographic dynamics continue to change (nationwide) and new development changes the traditional mix of unit types in the area.

Relative to many neighbor island areas, the balance between demand and supply in Lanai has been more stable than average trends statewide. The island develops inventory slowly (supply) and the number of potential purchases (demand) remains somewhat static over time, primarily a result of natural family growth; this compares with periods of high-demand, hyper-appreciation and low

supply during up-cycles and low-demand, stable to declining prices and overhanging supply during recessions as seen on other islands.

However, at this time, with the population and job loss, there is a statistical indication of a slight overhang of available units.

Historically, it has taken Lanai several years longer than other neighbor islands in recovering from periodic down-cycles due to its limited economy and associated activity. Like most elsewhere on the neighbor islands, the Lanai market is projected to continue in a generally under-supplied mode into the mid to long-term and there remains significant unmet need for additional workforce/affordable housing opportunities.

Acknowledging the long-term trend towards smaller households, the impact of non-resident renters (moving from between 13 percent to 25 percent by 2035), and a vacancy allowance moving up to 3 percent to achieve a stable market, we have quantified the total mid-point demand for new housing inventory in Lanai at 465 units between late-2020 and the end of 2035.

This figure includes an implied existing, over-supply for some 122 residential units on the island as of the study date; however, we believe the actual count to be much less.

QUANTIFICATION OF HOUSING UNIT DEMAND FOR LANAI 2020 TO 2035					
Scenario	Current 2020	Projected Lanai Resident Population			Additional Units Required by 2035
		2025	2030	2035	
<b>One: Based on Historic Growth Trend 1980 to 2020</b>					
Resident Population	3,000	3,138	3,282	3,433	
Average Household Size <sup>(1)</sup>	2.48	2.43	2.39	2.34	
Total Resident Units Required	1,210	1,290	1,375	1,464	
Part-Time Resident/Second Homes (Max 20%)	121	161	206	293	
Transient Units (Max 4%)	36	39	55	59	
Vacancy Allowance (Max. 3%)	0	26	41	44	
<b>TOTAL MARKET UNIT DEMAND</b>	<b>1,367</b>	<b>1,516</b>	<b>1,678</b>	<b>1,862</b>	<b>395</b>
<b>Two: Maximum Based on Extrapolated/Adjusted County Planning Department Technical Forecasts</b>					
Resident Population	3,000	3,154	3,316	3,486	
Average Household Size	2.48	2.42	2.36	2.30	
Total Resident Units Required	1,210	1,304	1,406	1,516	
Part-Time Resident/Second Homes (Max 25%)	212	248	309	379	
Transient Units (Max 4%)	26	39	56	61	
Vacancy Allowance (Max. 3%)	0	26	42	45	
<b>TOTAL MARKET UNIT DEMAND</b>	<b>1,448</b>	<b>1,617</b>	<b>1,814</b>	<b>2,002</b>	<b>535</b>
<b>CALCULATION OF MID-POINT PERIODIC HOUSING UNIT DEMAND</b>					
	<b>Latent Demand</b>	<b>2021-2025</b>	<b>2026-2030</b>	<b>2031-2035</b>	<b>Totals</b>
<b>MINIMUM DEMAND</b>					
Periodic	(100)	149	162	184	<b>395</b>
Cumulative		115	244	395	
Average Annual Demand <sup>(4)</sup>		23	26	30	
<b>MAXIMUM DEMAND</b>					
Periodic	(19)	170	197	187	<b>535</b>
Cumulative		163	354	535	
Average Annual Demand (4)		33	38	36	
<b>MID-POINT DEMAND</b>					
Periodic	(60)	159	180	186	<b>465</b>
Cumulative		139	299	465	
Average Annual Demand (4)		28	32	33	
<b>Note: "Socio-Economic Forecast: The Economic Projections for Maui County General Plan 2030" (Maui County Planning Department, 2006) and "Lanai Housing Issue Paper" (Knox, 2011) project there will be a need for a total of 2,184 total housing units on Lanai by 2030.</b>					
<p>(1) According to the US Census American Community Survey in 2018 (the most recent data) there were 1,463 "housing units" on Lanai; there have been no major additions over the past two years but some individual homes have been built. We have estimated the 2020 housing unit count is about 1,460, of which 13 are identified as vacation rentals, resulting in 1,467 available housing units.</p> <p>(2) Compounded growth rate of Lanai resident population count was at 0.87 percent annually from 1980 census (2,119 persons) to 2020 estimate (3,000 persons). We have used long-term average growth rate of 0.90% annually.</p> <p>(3) Average Household Size on Lanai has steadily dropped since the 2000 US Census from 3.41 persons to 2.48 persons; a decline of 1.75% compounded annually. We have assumed a continuing decline of 1.3% per year, compounded, going-forward.</p> <p>(4) Latent Demand is assumed to be absorbed equally throughout projection time-frame to 2035.</p> <p>Source: US Census, State DBEDT, Hawaii Information Service, County of Maui Planning Dept. and CBRE.</p>					

**DEMAND BY RENT AMOUNT**

Using housing affordability calculations and historic trends in the relationship between Lanai residential pricing and household income level, we have estimated the range in unit leasing prices best fitting the forecast demand for new units in the region over the next 15+ years.

In conjunction with the US Department of Housing and Urban Development (HUD), the County of Maui Housing Division of the Department of Housing and Human Concerns, establishes rental

amount guidelines for the County based on household incomes and prevailing mortgage rates. The table below shows the Lanai rental guidelines for 2020.

**ISLAND OF LANAI WORKFORCE/AFFORDABLE RENTAL GUIDELINES FOR 2020**



Prepared by:  
**HOUSING DIVISION**  
DEPARTMENT OF HOUSING AND HUMAN CONCERNS (DHHC)  
COUNTY OF MAUI  
Effective: May 1, 2020

2020  
INCOME LIMITS & AFFORDABLE RENT GUIDELINES  
**LANAI**

**INCOME LIMITS FOR RENTAL UNITS (BY FAMILY SIZE & PERCENTAGE OF MEDIAN FAMILY INCOME)**

% of Median	1 PERSON	2 PERSONS	3 PERSONS	4 PERSONS	5 PERSONS	6 PERSONS	7 PERSONS	8 PERSONS
10%	\$1,015	\$1,420	\$1,825	\$2,230	\$2,635	\$3,040	\$3,445	\$3,850
20%	\$2,030	\$2,840	\$3,650	\$4,460	\$5,270	\$6,080	\$6,890	\$7,700
30%	\$3,045	\$4,260	\$5,475	\$6,690	\$7,905	\$9,120	\$10,335	\$11,550
40%	\$4,060	\$5,680	\$7,295	\$8,910	\$10,525	\$12,140	\$13,755	\$15,370
50%	\$5,075	\$7,100	\$8,915	\$10,730	\$12,545	\$14,360	\$16,175	\$17,990
60%	\$6,090	\$8,420	\$10,635	\$12,640	\$14,855	\$17,050	\$19,245	\$21,440
70%	\$7,105	\$9,840	\$12,550	\$15,050	\$17,460	\$19,860	\$22,260	\$24,670
80%	\$8,120	\$11,260	\$14,365	\$17,160	\$19,970	\$22,970	\$25,770	\$28,280
90%	\$9,135	\$12,680	\$16,180	\$19,270	\$22,380	\$25,480	\$28,580	\$31,190
100%	\$10,150	\$14,100	\$18,000	\$21,380	\$24,790	\$28,190	\$31,590	\$34,300
110%	\$11,165	\$15,520	\$19,815	\$23,490	\$27,100	\$30,700	\$34,100	\$37,210
120%	\$12,180	\$16,940	\$21,630	\$25,600	\$29,410	\$33,210	\$36,710	\$39,820
130%	\$13,195	\$18,360	\$23,445	\$27,710	\$31,720	\$35,720	\$39,320	\$42,430
140%	\$14,210	\$19,780	\$25,260	\$29,820	\$34,030	\$38,230	\$41,930	\$45,040

**AFFORDABLE RENT GUIDELINES (BY UNIT SIZE & PERCENTAGE OF MEDIAN FAMILY INCOME)**

% of Median	UNIT SIZE (NO. OF BEDROOMS)				
	0-1	2	3	4	5
10%	\$654	\$1,061	\$1,467	\$1,873	\$2,279
20%	\$1,308	\$2,121	\$2,934	\$3,746	\$4,558
30%	\$1,962	\$3,182	\$4,401	\$5,615	\$6,837
40%	\$2,616	\$4,242	\$5,868	\$7,482	\$9,109
50%	\$3,270	\$5,303	\$7,457	\$9,351	\$11,271
60%	\$3,924	\$6,364	\$8,916	\$11,163	\$13,362
70%	\$4,578	\$7,424	\$10,375	\$12,955	\$15,453
80%	\$5,232	\$8,485	\$11,834	\$14,747	\$17,544
90%	\$5,886	\$9,546	\$13,293	\$16,541	\$19,635
100%	\$6,540	\$10,607	\$14,752	\$18,335	\$21,726
110%	\$7,194	\$11,668	\$16,211	\$20,129	\$23,817
120%	\$7,848	\$12,729	\$17,670	\$21,923	\$25,908
130%	\$8,502	\$13,790	\$19,129	\$23,717	\$27,999
140%	\$9,156	\$14,851	\$20,588	\$25,511	\$30,090

Note: Affordable rents are based on 30% of gross monthly income. Affordable rents include utilities.

\* The estimated median household income for the Island of Lanai in 2020 was estimated at \$53,590 for a four-person household; the accepted median baseline.

Source: County of Maui Department of Housing and Human Concerns, Housing Division

Based on market analysis, new housing units in Lanai should be generally priced/rented within the following ranges:

- 21.6 percent affordable price or rent, according to affordability guidelines for households earning 80 percent or less of the MHI ("Low Income");
- 37.4 percent affordable for households earning 80 to 120 percent of the MHI ("Below Moderate" to "Gap Income" categories);
- 41.0 percent at market prices/rents with household earning above 120 percent of Lanai MHI.

The 76 two-bedroom workforce/affordable homes at Hokuao will have rents set according to prevailing HUD/County formula at the time of construction, with rents ranging from \$603 to \$1,688 per month in 2020 dollars.

It is anticipated the 74 market homes at Hokuao will likely be rented (current figure) at over \$1,800 monthly; and significantly higher for the four-bedroom homes.

Through year-to-date 2020, the median sales prices for Lanai residential inventory sold through the Maui Realtors' Multiple Listing Service (which may not include all original unit sales) were as listed below.

**Median Housing Prices on Lanai (2020 - YTD August)**

Single Family Median Price	<b>\$436,000</b>
Multi-Family Average Price	<b>\$850,000</b>

The trending of demand by stratified MHI from 2020 through 2035 is shown on the following table.

**TABLE 7  
STRATIATED PROJECTIONS OF STANDARD RESIDENT HOUSING UNIT DEMAND BY  
MEDIAN HOUSEHOLD INCOME LEVEL ON LANAI USING MID-POINT PROJECTIONS  
2020 TO 2035  
Expressed in Constant 2020 Dollars**

Period	Periodic Housing Unit Demand			Total Demand 2020-2035
	2020 to 2025	2026 to 2030	2031 to 2035	
<b>Less than 80% Median Household Income (Under \$42,872 Annually)</b>	<b>32</b>	<b>34</b>	<b>35</b>	<b>100</b>
Percent of Total Demand	23.0%	21.0%	21.0%	21.6%
<b>80% to 120% of Lanai MHI (Between \$42,872 and \$64,308 Annually)</b>	<b>50</b>	<b>61</b>	<b>63</b>	<b>174</b>
Percent of Total Demand	36.0%	38.0%	38.0%	37.4%
<b>120% and Above Lanai MHI (Over \$64,308 Annually)</b>	<b>57</b>	<b>65</b>	<b>68</b>	<b>191</b>
Percent of Total Demand	41.0%	41.0%	41.0%	41.0%
<b>Total Market Demand</b>	<b>139</b>	<b>160</b>	<b>166</b>	<b>465</b>
	100.0%	100.0%	100.0%	100.0%

Note: The estimated median household income for the Island of Lanai in 2020 was estimated at \$53,590 for a four-person household; the accepted median baseline.

Source: Maui County, DBEDT, MLS, Leading Banks and CBRE.

**DEMAND BY UNIT TYPE**

It is expected that the division in product type will continue to favor single family homes/lots, but that condominium development will increase as a percentage of the total market.

Available bulk acreage, entitled, serviced subdivision sites will become further scarce, extending infrastructure throughout a single-family neighborhood will less economic, and land costs and

### The Lanai Residential Market

home prices (spec-built and custom) will rise over time; pricing many households out of the single-family market and into the multi-family sector.

The projected demand for finished homes, vacant house lots and multifamily units is shown following; a function of both buyer preference and available inventory. However, the efficacy of this metric is limited by the small size of the Lanai City market and concentrated land use/ownership, as the “market” does not provide the opportunity for supply to accurately reflect demand desires.

#### DIVISION OF PROJECTED DEMAND BY UNIT TYPE FOR HOUSING UNITS ON THE ISLAND OF LANAI 2020 TO 2035

	2020 to 2025	2026 to 2030	2031 to 2035	Total Demand 2020-2035
<i>Using Mid-Point Demand Projections</i>				
Single Family Homes & Lots	107	121	126	355
Percent of Total	77%	76%	76%	76%
Multifamily Units	32	38	40	110
Percent of Total	23%	24%	24%	24%
<b>Total</b>	<b>139</b>	<b>160</b>	<b>166</b>	<b>465</b>
	100%	100%	100%	100%

Source: CBRE

#### MULTIPLE LISTING SERVICE DATA

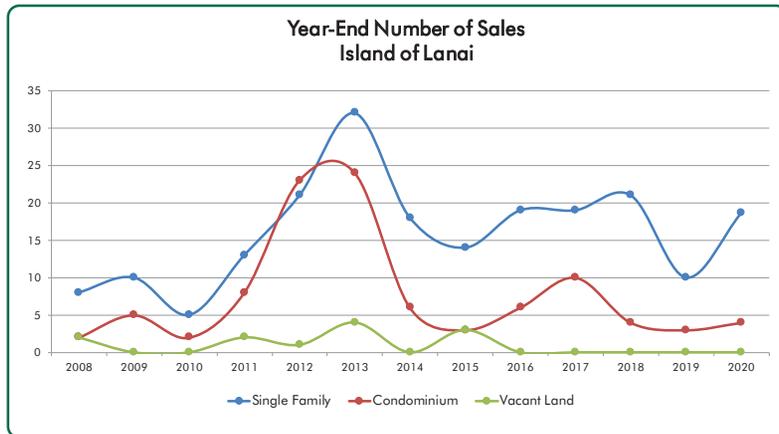
The Multiple Listing Service (MLS) transaction data summarized in the following table shows 12 years of transaction data from 2008 to 2020 (August year-to-date). A table showing additional years of transaction data from 2000 to 2020 is included in the addenda. Also included is two graphs showing Year-End Median Sales Price and Year-End Number of Sales from 2000 to 2020.

### The Lanai Residential Market

ISLAND OF LANAI MULTIPLE LISTING SERVICE TRANSACTION DATA													
Property Type	Year-End Median Sales Price												
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Single Family	\$443,500	\$291,850	\$268,000	\$270,000	\$245,000	\$320,000	\$465,000	\$375,000	\$414,000	\$385,000	\$460,000	\$455,000	\$436,000
% Change	4.4%	-34.2%	-8.2%	0.7%	-9.2%	30.6%	45.3%	-19.4%	10.4%	-7.0%	19.5%	-1.1%	4.2%
Condominium	\$1,975,000	\$1,875,000	\$1,155,000	\$1,022,700	\$529,000	\$97,000	\$1,725,000	\$1,800,000	\$1,212,500	\$895,000	\$1,625,000	\$193,000	\$850,000
% Change	-13.4%	-5.1%	-38.4%	-11.5%	-48.3%	-81.7%	1678.4%	4.3%	-32.6%	-26.2%	81.6%	-88.1%	340.4%
Vacant Land	\$1,115,000	\$0	\$0	\$1,956,250	\$350,000	\$445,000	\$0	\$350,000	\$0	\$0	\$0	\$0	\$0
% Change	72.9%	-100.0%	--	--	-82.1%	27.1%	-100.0%	--	--	--	--	--	--
Peak Years (2008-2019)													
Property Type	Year-End Number of Sales												
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Single Family	8	10	5	13	21	32	18	14	19	19	21	10	19
% Change	-57.9%	25.0%	-50.0%	160.0%	61.3%	52.4%	-43.8%	-22.2%	35.7%	0.0%	10.5%	-52.4%	86.2%
Condominium	2	5	2	8	23	24	6	3	6	10	4	3	4
% Change	-77.8%	150.0%	-60.0%	300.0%	187.5%	4.3%	-75.0%	-50.0%	100.0%	66.7%	-60.0%	-25.0%	33.0%
Vacant Land	2	0	0	2	1	4	0	0	0	0	0	0	0
% Change	-33.3%	-100.0%	--	--	-50.0%	300.0%	-100.0%	--	--	--	--	--	--
Peak Years (2008-2019)													
(1) 2020 data has been annualized													
Property Type	Year-End Sales Volume												
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Single Family	\$3,486,000	\$6,705,700	\$2,813,000	\$4,381,500	\$9,146,500	\$16,491,900	\$16,890,000	\$7,819,000	\$7,910,500	\$7,611,000	\$10,508,000	\$5,508,000	\$13,493,515
% Change	-82.6%	92.4%	-58.1%	55.8%	108.8%	80.3%	2.4%	-53.7%	1.2%	-3.8%	38.1%	-47.6%	145.0%
Condominium	\$3,950,000	\$9,425,000	\$2,310,000	\$9,443,900	\$19,610,250	\$14,615,200	\$10,875,000	\$3,924,000	\$4,170,000	\$12,264,500	\$8,200,000	\$2,073,000	\$4,532,640
% Change	-75.6%	138.6%	-75.5%	117.5%	103.3%	-25.5%	-25.6%	-63.9%	6.3%	194.1%	-33.1%	-74.7%	118.7%
Vacant Land	\$2,230,000	\$0	\$0	\$3,912,500	\$350,000	\$2,012,000	\$0	\$1,690,000	\$0	\$0	\$0	\$0	\$0
% Change	27.4%	-100.0%	--	--	-91.1%	474.9%	-100.0%	--	-100.0%	--	--	--	--
Peak Years (2008-2019)													
(1) 2020 data has been annualized													
Source: Maui MLS													

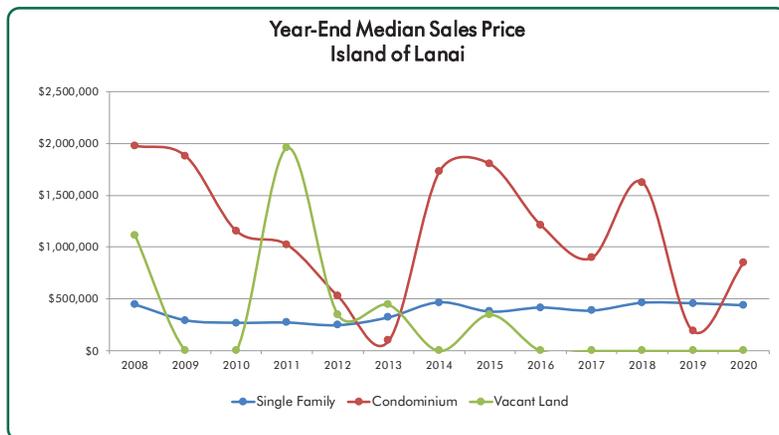
Due to Lanai being a small island with limited inventory, the number of transactions occurring on an annual basis is sparse. In the following graph, Year-End Numbers of Sales, after the 2008 – 2009 recession purchases for single family homes and condominiums were strongest between 2011 and 2013. From 2014 to 2020 number of sales moderated, but less so for Single family homes as compared to Condominiums.

Vacant Land Sales are also uncommon with only a total of 9 vacant land transactions occurring between 2008 to 2020.



Year-end median sales prices for single family homes recovered after the recession, peaking in 2014, and showing stabilization within a minor-upcycle since.

Condominium median sales prices have also fluctuated greatly over the years, though recent median price levels have not been able to surpass 2006 where the median condominium price was \$2,384,800



**ASKING RENTS FOR LANAI HOMES**

We identified four homes for rent on Lanai as of the report date, summarized in the following tables. This is a typical level of offered inventory, based on our past periodic review of available rental supply on the island, the “days on market” is generally less than one month.

SUMMARY OF AVAILABLE MARKET PRICED RENTAL HOMES ON LANAI 9/25/2020				
Listing	A	B	C	D
House Type (Bed/Bath)	4/2	2/2	4/1	1/1
Size in Square Feet	N/A	1,085	1,024	N/A
<b>Mo. Asking Rent</b>	<b>\$2,500</b>	<b>\$3,000</b>	<b>\$3,328</b>	<b>\$2,500</b>
Utilities Paid By	Tenant	Landlord	Tenant	Landlord
Days Listed on Market	28	2	27	61
Comments	Furnished	Furnished Ohana Unit	Rent to Own/FSBO	Furnished Cottage
Source	Craigslist	Zillow	HomeFinder	Craigslist
Compiled by CBRE				

**PROPOSED SUPPLY**

There are few residential entitled residential projects on Lanai. Numerous developments have been announced over the years, as shown on the following table, but many are on-hold, controlled by a single landowner, being reduced in scale, or proceeding at a very slow pace.

UNIT MIX BY TYPE OF MAJOR PROPOSED RESIDENTIAL HOUSING PROJECTS ON LANAI AS CONTAINED IN THE 2016 UPDATED GENERAL PLAN			
	Single Family Lots and Homes	Multi-Family Units	Total Residential Units
<b>1. Resort Residential</b>			
Manele Bay Resort Residential (Project District)	Project on Hold, Inventory to be Substantially Reduced, Long-Term Only		
Koele Resort Residential (Project District)	Project on Hold, Inventory to be Substantially Reduced, Long-Term Only		
<b>Sub-Total</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Percent of Total			
<b>2. Standard Residential</b>			
Manele Bay Rural Residential (1)		Project on Hold, Long-Term Only	
Manele Mauka (2)		Project on Hold, Long-Term Only	
Koele Stables Rural Residential (3)		Project on Hold, Long-Term Only	
Kaunapala Harbor Mixed-Use Residential (4)	120	0	120
Maui County Affordable Housing		Project on Hold Pending Selection of Developer	
Dept. of Hawaiian Home Lands (6)	105	0	105
Lanai City Expansion (Excluding Subject)		Circa 500 Unplanned Gross Acres	
<b>Sub-Total</b>	<b>225</b>	<b>0</b>	<b>225</b>
Percent of Total	100.0%	0.0%	100.0%
<b>3. Subject Project</b>			
Pulama Lanai Lanai City 201H Project	150	0	150
<b>Sub-Total</b>	<b>150</b>	<b>0</b>	<b>150</b>
Percent of Total	100.0%	0.0%	100.0%
<b>LANAI TOTAL</b>			
	<b>375</b>	<b>0</b>	<b>375</b>
Percent of Total	100.0%	0.0%	100.0%

(1) Estimated at .75 lots per acre for 76 acre bulk development site.  
 (2) Estimated 270 houselots on 56 net acres (5/acre) and 120 multifamily units on 12 net acres (10/acre) within 83 acre community site.  
 (3) Estimated average lot size of two acres.  
 (4) Estimated at 120 houselots (4/acre) on 30 net acres.  
 (5) Assumes 12 units per net acre of multifamily building site.  
 (6) Assuming 105 houselots on 35 acres (3/acre) as initial phase of project.

Source: Long Range Planning Division, Department of Planning, County of Maui, "2016 Lanai Community Plan Update".

Other considerations in analyzing the level of proposed supply include:

- It is unlikely all the still-unapproved units will successfully gain necessary entitlements.
- Many development sites currently lack water and/or other critical service systems and may never obtain them, or will require decades for regional systems to extend/expand to service their property.
- Master planned projects, particularly larger proposed communities, are often not built out to maximum densities.

Due to the uncertainty of several major projects and their current lack of inertia, precise quantification of probable additions to supply during the 2020 to 2035 projection period is problematic.

If all the projects were to come on-line at near maximum build-out over the next four decades there still would be insufficient inventory to meet quantified market demand. And, several are intended as extended (very long-term) planning efforts requiring generations of development.

We consider it highly unlikely that all these projects and their units will be constructed in our study time-frame, likely well-below 225 total units and have made our absorption estimates accordingly.

## Residential Product Absorption Projections

The full-size tables of those excerpted into this section of the report are contained in Addenda B.

### APPROPRIATENESS OF THE SITE FOR THE PROPOSED DEVELOPMENT

Given the quantified support for significant additions to the Lanai residential inventory over the coming two-decades, the next step in analysis is to assess whether the Hokuao site and concept are appropriate from a market perspective, in concert with macro demand trends, and the probable standing of its inventory therein. These insights determine the competitiveness and resulting probable market shares for the residential components of the project.

The master plan for the subject community is consistent with modern urban planning objectives for small single-family residential subdivisions and will provide a high-quality competitive environment for the 150 homes proposed. Among the features we consider most relevant regarding market acceptance are:

- Quality, new affordable-rent single family homes are exceptionally rare on Lanai (and throughout the State) and will be highly sought after; especially on Lanai where there are few products to choose from.
- The location of Hokuao is desirable, with a superior climate, some view panoramas, and proximate to Lanai City community and recreational amenities, Manele Resort, public facilities and supporting commercial services. It will have easy access onto Kaunalapau Highway, a valued commodity among residents, as will be the unique opportunity to rent affordable and market-priced homes in a modern master planned subdivision.
- The parks, open spaces and greenbelts are integrated into the design as to maximize the frontage offered to the abutting residential development sites.
- There will be recreational facilities in Hokuao from passive parks and pathways to an improved park (pavilion, parking lot and comfort station) providing both an "anchor" and theme for the community along with gathering place opportunities.
- The varying lot areas, house sizes and pricing envisaged for the market-rent component of the project will create diversity in the neighborhood; a desirable attribute for sustainability and secondary marketing.

The single meaningful negative attribute of the subject location is its relatively close proximity to the existing Lanai City wastewater treatment plant located beyond a 600 foot buffer southerly of the Hokuao boundary. As is typical for such plants, occasional odors are produced.

An *Air Quality Study for the Proposed Hokuao 201H Housing Project* was published in January 2019 which identified the plant as a contributor to air quality considerations in the area. In our

interviews with brokers, agents and market participants, the indications were the plant would not be a significant factor as:

- The prevailing winds blow the plant odors away from the project site.
- It is a consideration for other Lanai City neighborhoods, so not unique to Hokuao product.
- The demand for new affordable single family homes is so high on Lanai as to overcome any secondary negative factor.

The master plan is an appropriate use of the subject property from a market demand and economic acceptance perspective based on a variety of criteria, including:

- It will convert an economically non-productive agricultural holding into master-planned subdivision which will help in meeting future residential needs in the region, while contributing meaningful economic stimulus to the island.
- It is within and consistent with the County-designated Lanai City expansion node and will provide a transition from the town to the feral farmlands west and south of the urban area.
- The subject will help fill a critical market niche; the unquenchable demand for new affordable housing product on the island. An appropriate mix of residential inventory is vital to a stable regional market.
- The overall low intensity of development, below two units per acre (150 units / 76 acres), will generally maintain the density and ambience of the Lanai City residential neighborhoods.

Based on these attributes of the subject property, our analyses of the Lanai residential market, and the historic experience of competitive projects in the neighbor island marketplace, we have estimated the probable absorption velocity for the subject inventory using three methodologies:

Gross Demand/Supply Comparison -- This straight-forward technique assumes that if there is insufficient existing and planned supply to meet projected market gross demand levels during the projection period, the proposed subject units will be absorbed in a reasonable manner, regardless of competitive qualities, as there are no other alternatives available.

Over the next 15+ years (mid-2020 through 2035), without Hokuao, it is projected there will be at best fewer than 74 total non-Pulama Lanai units built on the island far fewer than the estimated 465-unit mid-point market need; with the remaining units in other projects taking decades to actualize (if ever). The undersupply condition will ensure there is sufficient demand to absorb the 150 subject homes within the projection timeframe.

The Residual Method -- In this technique, the "planned" inventory and in-place but leased units are placed on a time-line depicting the combined lease absorption anticipated by the developers (as estimated by the County, stated in EIS, reported in the media or through interviews) or assuming a

Appropriateness of the Subject Property for Residential Use and Absorption Estimates

reasonable market share. To the extent this supply of units fall short of the forecast demand for product in the study region or exceed the total, a respective undersupply or oversupply situation is present.

Having accounted for all the planned units in the market reasonably moving forward at this time, and acknowledging the unlikelihood of otherwise competitive sites in the region, it can be asserted the subject development will capture a significant portion of all the residual demand.

This approach is generally conservative, as it assumes the subject will capture only what is left over after all other projects garner their share. Given the nature of the subject holding we believe it could be a regional market leader, not a follower.

The residual method model for the combined Hokuao inventory is shown below. It is assumed that 50 percent of the total number of likely-developed proposed units are built by 2030.

PROJECTION OF POTENTIAL SUBJECT UNIT ABSORPTION USING THE RESIDUAL METHOD BASED ON TOTAL DEMAND FOR RESIDENTIAL UNITS ON LANAI				
Segment	TOTAL UNITS	2020-2025	2026-2030	2031-2035
<i>Mid-Point Demand (Assuming 50% of Proposed Inventory is Developed)</i>				
Assumed Supply	113	33	40	40
Island Residential Unit	465	139	160	166
Shortage or (Excess) Supply	353	106	120	126
<b>Potential Residual Subject Demand</b>	353	106	120	126

 = Periods in which Hokuao inventory of 150 homes would be absorbed. The rounded absorption indicated by this method is about 8 years.

Source: Maui County, Developers/Agents, & CBRE.

Application of the residual model indicates:

1. There will be excess demand available (total demand exceeding proposed supply) to flow to Hokuao in every offering period of the model from when product first is made available on a pre-lease basis in 2021.
2. Full absorption of the 150 proposed Hokuao units will require some 8 years.

The Market Shares Method -- This approach accounts for the probable competitiveness of the subject inventory regardless of the total level of product being otherwise offered on the regional market. In essence, it is an estimate of how much of total forecast demand in the Lanai residential sectors Hokuao could expect to capture on an annual basis in light of its locational, pricing and amenity characteristics.

Appropriateness of the Subject Property for Residential Use and Absorption Estimates

Generally moderate in application, this technique tests "pure" competitiveness and is considered the classic methodology, but does require judgment in the selection of factors.

The following table displays the Market Shares Method for the Hokuao inventory. We forecast the subject will be able to achieve market penetration, or a share averaging 65 percent of the total regional residential (non-resort) demand during its leasing period, resulting in an absorption period of 8 years commencing with pre-lease in 2021 through full absorption in 2029.

The rounded average absorption is about 15 units per year.

SUMMARY OF SUBJECT PROJECTED DEMAND LEVELS USING THE MARKET SHARES METHOD				
Assuming Pre-Leasing of 150 Subject Units Begin in 2021				
<u>Mid-Point Demand Assumptions</u>				
<u>Lease Year</u>		<u>Total Island Residential Unit Demand</u>	<u>Effective Subject Share</u>	<u>Indicated Total Subject Absorption</u>
<u>Date</u>	<u>Period</u>			
2022	1	28	80.00%	22
2023	2	28	80.00%	22
2024	3	28	75.00%	21
2025	4	28	60.00%	17
2026	5	28	60.00%	17
2027	6	32	60.00%	19
2028	7	32	60.00%	19
2029	8	32	40.00%	13

<u>ANALYSIS CONCLUSIONS &amp; TOTALS</u>			
<b>7.7 Years</b>	<b>235</b>	<b>63.80%</b>	<b>150</b>

Source: CBRE

**Correlation**

Based on absorption analysis, we estimate the full-absorption of the subject residential component of Hokuao will require some eight-years to achieve full absorption, with stabilized annual leasing rate of about 19 homes during the offering period.

### Economic Impacts of the Proposed Development

The development of Hokuao will result in significant expenditures that will favorably impact the Lanai economy on both a direct and indirect basis, increasing the level of capital investment and capital flow in the region, which will in turn create employment and widen the tax base.

From a direct perspective, the proposed 150 single-family homes will create numerous construction, equipment operator and specialty trade jobs on- and off-site, directly and indirectly, during the planning and emplacement of the infrastructure, and building of the improvements.

After completion of the common systems, vertical construction, support facilities and amenities over a decade-plus development period, there will be permanent employment positions created by the buildings themselves (landscape, service, maintenance, and renovation needs in the course of their use) and community association operations.

Numerous local businesses will see significant profit opportunities arising for construction trade companies building the improvements, and for local businesses which would supply a substantial portion of the materials needed in the building efforts.

The general island economy also will benefit from the subject development, as its residents, employees and businesses will spend large amounts of discretionary income in off-site shops, restaurants, and service establishments throughout Lanai and Maui County, and in purchasing goods and services.

Indirectly, as these wages, profits, and expenditures move through the regional economy, they will have a ripple, or "multiplier," effect which increases the amount of capital flowing to the entire community resulting from the development of the subject.

Construction, operational and other workers earning wages via Hokuao development and associated off-site/supporting efforts will spend the majority of their income on living and entertainment expenses while supporting and patronizing other island businesses. Much of this spending would be re-directed by these businesses to other island industries, and significant portions of these secondary profits would in turn be put back through the region's economic and tax structure.

These substantial direct and indirect economic impacts associated with the proposed subject project, as quantified in the following sections, are all the result of the capital investment and entrepreneurship necessary to convert undeveloped, fair/poor quality agricultural lands into a low intensity diverse residential community. The Lanai/Maui County economy will be meaningfully stimulated by the capital investments, population/user spending and business operations of the development.

We note, our economic modeling is based on a 10-year build-out and absorption period (2021 through 2030). The construction may take longer or shorter. However, whether full development takes 8 or 20 years, the stabilized "operation" of the community and its de facto population will be

the same following completion. As constant, uninflated 2020 dollars are used throughout the model, time is not a significant variable in the analysis.

It is anticipated that final approvals, surveys and planning will require approximately one year (2020-21), infrastructure will be emplaced and pre-leasing will commence in 2021, initial homes completed, closed and occupied in late-2022, and full build-out and absorption from 2022 through 2029.

### CAPITAL INVESTMENT AND CONSTRUCTION COSTS

The subject will bring an estimated \$115.2 million in direct development capital into Lanai over the build-out period for the project as summarized on the following table.

PROPOSED DEVELOPMENT SCHEDULE AND ESTIMATED CONSTRUCTION COSTS			
All Amounts Expressed in Constant 2020 Dollars			
Item	Development and Lease Period		Totals During Build-Out
	2021 to 2025	2026 to 2030	
Infrastructure Emplacement (1)	\$40,007,958		<b>\$40,007,958</b>
Residential Construction (Combined Workforce and Market Homes, Average Overall Costs, including Sitework and Landscaping)	\$50,116,417	\$25,058,208	<b>\$75,174,625</b>
<b>TOTAL PERIODIC CONSTRUCTION COSTS</b>	<b>\$90,124,375</b>	<b>\$25,058,208</b>	<b>\$115,182,583</b>
Supplier Profits	\$3,604,975	\$1,002,328	<b>\$4,607,303</b>

(1) Includes site work, on and off-site infrastructure, roadways and contingency; engineering & architecture, permits and study fees and GET for total project.

Source: CBRE

Infrastructure and Residential Construction cost estimates are summarized as shown. Construction costs in Hawaii have stabilized following early-decade inflation and we consider these costs from several years ago to still be reasonable.

Cost Item	Total Project Cost
Vertical and Finished Lot Costs	\$75,174,625
Infrastructure Costs	\$31,082,000
Design & Soft Costs	\$3,632,000
Landscaping, Irrigation & Security	\$800,000
GET	\$4,493,958
<b>Total Project Development Cost Before Land</b>	<b>\$115,182,583</b>

Source: Palama Lanai

Hokuao development will infuse on average an anticipated \$11.5 million annually into the Maui/Lanai building industry on average over the build-out period. This will provide a significant near to mid-term boost for the construction trade.

**DIRECT BUSINESS PROFITS FROM CONSTRUCTION**

While a significant percentage of the materials needed to build the subject infrastructure and residential improvements must be imported to Lanai, a portion of the construction costs spent in the development will directly flow to local businesses in the form of supplier profits.

Typically, within the industry supplier profits are extrapolated at four percent of total costs, or up to \$5.5 million. The total annual Supplier's Profit will be \$460,730 in aggregate.

**EMPLOYMENT OPPORTUNITIES CREATED**

Based on indicators provided by the construction of comparable sized projects and Hawaii industry averages, we have estimated the demand for on- and off-site, direct and indirect, full-time equivalent employment positions associated with laying of initial infrastructure systems, construction of the homes, and in providing continuing services to the occupied residences.

The construction, maintenance, and indirect/off-site employment opportunities created by the subject development will not be "new" jobs requiring new Lanai/Maui residents, but will be vitally needed new opportunities for in-place resident construction trade workers and existing local businesses. The jobs associated with home maintenance and operations will represent an expansion of the currently depressed employment market.

It is assumed the off-site/indirect work created will be steered towards existing Lanai/Maui supply, equipment providers, and other service companies.

Our employment estimates on are based on full-time "worker-years," although one worker-year (or circa 2,080 working hours) may be comprised of many employees involved in specialized tasks of a much shorter duration.

Our projections are founded on examples provided by various resort/residential developments undertaken on the neighbor islands over the past decade, and via formulae expressing relationships between total worker wages/benefits and construction task costs.

Infrastructure construction employment forecasts are taken from discussions with developers, review of project records and ratios of direct costs to job creation, which currently project one worker-year for every \$400,000 in development costs expended. The ratio of job creation to costs is relatively low for these components due to the high equipment, materials and systems expenses associated with major site work.

Home vertical construction, which are more labor intensive in regard to overall costs, are anticipated to require one worker-year per \$200,000 in construction expenses.

The finished homes and community assets will require maintenance, landscaping, service, and renovation and repair workers and common element staff. We project centralized Pulama Lanai community management and common area maintenance/upkeep personnel of three full-time-equivalent workers, with maintenance and common element staff at the equivalent of one FTE worker for every 15 completed residential units.

Off-site employees were estimated at 33 percent of on-site workers, and are comprised of three groups:

- Off-site building/trade industry positions will be enhanced by the subject development, including such jobs as administration, office help, material providers, equipment maintenance and specialty tasks.
- Off-site support businesses, including contractor/retail/counter sales, fuel providers, shipping, storage and professional services will also benefit.
- Each on-site worker creates demand for services (and related employment) during and directly attributable to the work day. These positions include food businesses, providers of tools and trade goods, payroll/financial and insurance businesses, medical requirements and other secondary indirect/off-site employment.

Application of these ratios to the proposed Hokuao master plan is shown below.

Economic Impacts of the Proposed Development

ESTIMATED YEARLY FULL-TIME EQUIVALENT EMPLOYMENT POSITIONS CREATED BY 201H DEVELOPMENT			
Construction Employment (1)	Development and Lease Period		Totals During Build-Out
	2021 to 2025	2026 to 2030	
Infrastructure Employment	100		100
Residential Units	251	125	376
<b>Total Periodic Construction Jobs</b>	<b>351</b>	<b>125</b>	<b>476</b>
Maintenance & Common Element (2)	11	29	39
<b>Total FTE Jobs in Place at End of Period</b>	<b>8</b>	<b>18</b>	<b>18</b>
Off-Site Employment (3)	120	51	172
<b>Total FTE Jobs in Place at End of Period</b>	<b>3</b>	<b>6</b>	<b>6</b>
<b>TOTAL PERIODIC WORKER YEARS</b>	<b>481</b>	<b>205</b>	<b>687</b>
<b>TOTAL END-OF-PERIOD PERMANENT JOBCOUNT</b>	<b>11</b>	<b>24</b>	<b>24</b>

(1) Infrastructure construction employment estimated at 1 worker-year for every \$400,000 in costs. Vertical construction employment estimated at 1 worker-year for every \$200,000 in costs. Includes all direct employment associated with construction, on and off-site.  
 (2) Includes common element administration and maintenance staff of 3 jobs, and single family home services (landscaping, maintenance & renovation) at one FTE for every 10 homes. Includes Palama Lanai central employees and outside contractors.  
 (3) Estimated at one cumulative off-site employment position for every three on site positions.

Source: CBRE

During the 10-year modeling period the number of worker-years created on- and off-site, directly and indirectly, by the development will total some 687 worker-years over the entire timeframe. Of this total, 476 worker-years (an annual average of 48 positions) are direct construction-oriented, 18 are maintenance positions; and 172 are off-site/indirect worker-year requirements.

On a stabilized basis, after the completion of construction (year 2030 and beyond), the project will generate some 24 permanent full-time equivalent employment opportunities--18 directly related to on-site activities, and 6 indirect positions throughout the island.

**WAGE INCOME GENERATED**

In accordance with data compiled by the state Department of Labor and Industry Relations, as tempered through our analysis, we have estimated the personal income (in the form of wages) which will flow to Lanai/Maui workers as a result of Hokuao construction and use. The results are shown below.

Economic Impacts of the Proposed Development

ESTIMATED YEARLY EMPLOYEE WAGES CREATED BY 201H DEVELOPMENT			
All Amounts Expressed in Constant 2020 Dollars			
Construction Wages (1)	Development and Lease Period		Totals During Build-Out
	2021 to 2025	2026 to 2030	
Infrastructure Employment	\$7,875,567		\$7,875,567
Residential Units	\$19,730,833	\$9,865,417	\$29,596,250
<b>Total Periodic Construction Wages</b>	<b>\$27,606,400</b>	<b>\$9,865,417</b>	<b>\$37,471,816</b>
Maintenance & Common Element (2)	\$726,180	\$1,971,060	\$2,697,240
Off-Site Employment Wages (3)	\$8,266,828	\$3,520,790	\$11,787,618
<b>TOTAL PERIODIC WAGES</b>	<b>\$36,599,408</b>	<b>\$15,357,266</b>	<b>\$51,956,674</b>

(1) Average annual wage for experienced full-time-equivalent construction worker (all trades) at \$78,740 in 2019.  
 (2) Average annual wage for experienced full-time-equivalent installation, maintenance and repair workers at \$69,160 in 2019.  
 (3) Average annual wage for experienced full-time-equivalent general worker at \$68,680 the 2019 average wage for all "Total All Occupations" in the state.

Wages taken from State of Hawaii "Occupation Employment and Wages" as of 2019.

Source: CBRE

The gross full-time equivalent wage estimates for a worker-year according to the identified employment categories for an "experienced" worker in Maui County during 2019 are as follows:

- Construction workers (covering all trades), \$78,740 per year.
- Maintenance/common element at \$69,160 annually.
- Off-site and indirect employment, \$68,680.
- Overall average wages paid via the subject development are equal to \$75,779 per worker-year created during the modeling time-frame.

Due to COVID we do not expect any meaningful increase in wages to be evident in 2020.

In the initial five-year period of active development (2021-2025), the "Total Construction Wages" by the subject development effort would be \$27.6 million, and \$9.9 million in 2026-2030.

After completion of all construction, the stabilized on-going maintenance/common element, off-site and indirect employment would result in total annual wages of \$1.7 million thereafter in uninflated 2020 dollars. This equates to an average wage of \$69,040 per worker-year.

During the development period, on- and off-site, direct and indirect worker wages would total \$60.0 million.

**POPULATION, INCOME AND EXPENDITURES**

All 150 “for rent” homes at Hokuao are expected to be 100 percent occupied by full-time Lanai residents.

The resident households and their guests will constitute the de facto population of the community members, whose income and discretionary expenditures will create major positive impacts on the Lanai economy.

We have quantified these focal statistics within the modeling process, as shown following.

ESTIMATED RESIDENT POPULATION, HOUSEHOLD INCOME AND DISCRETIONARY EXPENDITURES				
All Amounts Expressed in Constant 2020 Dollars				
	Development and Lease Period		Stabilized	Totals During Build-Out
	2021 to 2025	2026 to 2030		
<b>Total Homes Occupied (End of Period)</b>	<b>100</b>	<b>50</b>		
<b>Market-Rent Single Family Homes Occupied (End of Period)</b>	<b>50</b>	<b>24</b>		
Percent of Total Units	50%	48%		
Full-Time Resident Average Household Size (persons)	2.65	2.65		
Part-Time Resident Average Household Size (persons)	N/A	N/A		
Full-Time Residents (100% of Total)	133	64		
Part-Time Residents (0% of Total)	0	0		
<b>Workforce Single Family Homes Occupied (End of Period)</b>	<b>50</b>	<b>26</b>		
Percent of Total Units	50%	52%		
Full-Time Resident Average Household Size (persons)	2.91	2.91		
Part-Time Resident Average Household Size (persons)	N/A	N/A		
Full-Time Residents (100% of Total)	146	76		
Part-Time Residents (0% of Total)	0	0		
<b>De Facto Population (End of Period)</b>				
<b>Total Full-Time Resident Population - End of Period</b>	<b>278</b>	<b>418</b>		
<b>Total Part-Time Resident Population - End of Period</b>	<b>0</b>	<b>0</b>		
<b>Total De Facto Population</b>	<b>278</b>	<b>418</b>		
<b>RESIDENT HOUSEHOLD INCOME (1)</b>				
<b>Average Annually End of Period</b>	<b>\$8,038,500</b>	<b>\$12,057,750</b>	<b>\$12,057,750</b>	
<b>Total During Period</b>	<b>\$20,096,250</b>	<b>\$50,240,625</b>		<b>\$70,336,875</b>
<b>TOTAL POPULATION EXPENDITURES (2)</b>				
<b>Average Annually End of Period</b>	<b>\$3,617,325</b>	<b>\$5,425,988</b>	<b>\$5,425,988</b>	
<b>Total During Period</b>	<b>\$9,043,313</b>	<b>\$25,321,275</b>		<b>\$34,364,588</b>

(1) Average resident households at 150% of Lanai household income average of \$53,590 in 2020; or \$80,385.  
 (2) For full-time residents assumes 10% of gross income for taxes, 30% for housing costs and 15% for utilities/maintenance. Leaving 45% of gross income as net disposable. For non-full time resident estimated disposable expenditures at average Maui spending per visitor per day of \$218.

Source: CBRE

The top half of the table depicts the construction/absorption of the 150 homes and their division between affordable-rent and market-rent residents.

It is projected the average full-time resident household size for the Hokuao two-bedroom homes will be 2.65 persons, and the four-bedroom homes at 3.95 persons, all effectively occupied on average 100 percent of the time. These figures are taken from our market demand analysis.

These average household sizes are above the Census estimates to account for the larger unit sizes and that there will be few one or two-person households renting at Hokuao.

The total resident population at build-out is forecast to be 418 persons.

Based on affordable-pricing guidelines coupled with the level of income necessary to support the market-rent inventory, we estimate the average annual income for resident households at Hokuao will be \$80,385 in 2020 dollars. This is the equivalent of 150 percent of the established Lanai median. During occupancy of the build-out period, the total resident household income will be \$70.3 million, and at \$12.1 million annually thereafter.

The resident population of the project will place significant discretionary expenditure dollars into the Lanai/Maui economy. This will be comprised of the year-round, daily expenditures by the full-time resident group.

We estimate that full-time resident households will spend about 45 percent of their total income on discretionary items, with the remainder going towards mortgage debt service and fixed expenses.

By build-out, the total population discretionary expenditures made by subject project owners in the local market will be at \$5.4 million annually on a stabilized basis, in 2020 dollars. During the development and stabilization model period, the total sum of these expenditures will be \$34.4 million.

**SUMMARY OF TOTAL ECONOMIC ACTIVITY**

The estimated level of total gross on-site economic activity within the proposed Hokuao community during the modeling period and on a stabilized basis is summarized below.

Economic Impacts of the Proposed Development

SUMMARY OF ECONOMIC IMPACTS ASSOCIATED WITH 201H DEVELOPMENT				
All Amounts Expressed in Constant 2020 Dollars				
	Development and Lease Period		Totals During Build-Out	Stabilized Annually
	2021 to 2025	2026 to 2030		
<b>Construction Activity</b>				
Construction Wages	\$27,606,400	\$9,865,417	\$37,471,816	
Supplier Profits	\$3,604,975	\$1,002,328	\$4,607,303	
Other Construction Costs	\$58,913,000	\$14,190,463	\$73,103,463	
<b>Total Construction Impact</b>	<b>\$90,124,375</b>	<b>\$25,058,208</b>	<b>\$115,182,583</b>	
Maintenance & Common Element Wages	\$726,180	\$1,971,060	\$2,697,240	\$1,244,880
Off-Site Wages	\$8,266,828	\$3,520,790	\$11,787,618	\$412,080
Total Project Population Spending	\$9,043,313	\$25,321,275	\$34,364,588	\$5,425,988
Home Maintenance & Repairs (1)	\$1,500,000	\$750,000	\$2,250,000	\$1,200,000
<b>TOTAL BASE ECONOMIC IMPACT</b>	<b>\$109,660,695</b>	<b>\$56,621,333</b>	<b>\$166,282,028</b>	<b>\$8,282,948</b>

(1) Estimated at average of \$500 per home per month.

Source: CBRE

Apart from construction of the neighborhood, the primary stabilized, on-going contributing activity is project population spending, with Home Maintenance and Repairs, and Wages being other notable items.

Overall, Hokuao will create taxable gross operating revenues of \$8.3 million per year following stabilization. During the development period, this model projects total on-site of \$166.3 million.

These dollars will be spent, then re-spent, on goods and services on the island, diminishing in impact on the local economy with each turnover as a portion flows off Lanai/Maui for goods, services and financing commitments.

STATE INPUT/OUTPUT MODEL

We have also analyzed the impacts of the project for Lanai/Maui and Statewide using the *Hawaii County Input-Output Economic Model* (2012 data approved by DBEDT in 2016) Type II multipliers. These factors quantify the total Direct, Indirect and Induced "effects" of various forms of business and spending activity as it flows through the economy of the islands.

In every instance, application of the macro Input-Output multipliers resulted in higher dollar, employment, and tax revenue indicators than in our subject-focused micro model which was designed to reflect Direct and upper-level Indirect impacts only.

Among the outputs using the State method:

- The \$115.2 million in cumulative Hokuao construction costs will generate a total State Economic Output of \$233.8 million during build-out with subsequent household spending, association and maintenance/ renovation activity averaging \$36.6 million annually on a stabilized basis.

Economic Impacts of the Proposed Development

- Direct subject construction wage earnings will yield \$75.1 million in statewide wage earnings during build-out and on-going business activity will generate \$2.9 million in wages each stabilized year.
- Indirect and induced State taxes during build-out will total \$11.8 million during construction and \$123,000 annually thereafter.
- Direct effect jobs created by construction employment will be 2.04 times the number of on-site workers, or a total of 970 worker years of employment. The on-going business activity will generate 38 annually at stabilization.

ESTIMATES OF TOTAL ECONOMIC IMPACT FROM SUBJECT CONSTRUCTION USING INTER-COUNTY INPUT-OUTPUT MODEL "TYPE II" MULTIPLIERS				
All Amounts Expressed in Constant 2020 Dollars				
Year	Development and Lease Period		Totals During Build-Out	Stabilized Annually
	2021 to 2025	2026 to 2030		
<b>Construction Costs</b>	<b>\$90,124,375</b>	<b>\$25,058,208</b>	<b>\$115,182,583</b>	<b>\$1,200,000</b>
1. Economic Output Multiplier	2.03	2.03	2.03	2.03
<b>Total State Economic Output</b>	<b>\$182,952,481</b>	<b>\$50,868,163</b>	<b>\$233,820,644</b>	<b>\$2,436,000</b>
2. Earnings Multiplier	0.68	0.68	0.68	0.68
<b>Total Increase in State Earnings</b>	<b>\$61,284,575</b>	<b>\$17,039,582</b>	<b>\$78,324,157</b>	<b>\$816,000</b>
3. State Tax Multipliers	0.10	0.10	0.10	0.10
<b>Total Increase in State Taxes</b>	<b>\$9,228,736</b>	<b>\$2,565,961</b>	<b>\$11,794,697</b>	<b>\$122,880</b>
4. Total Job Multipliers	14.30	14.30	14.30	14.30
<b>Total State Jobs Created</b>	<b>1,288.8</b>	<b>358.3</b>	<b>1,647.1</b>	<b>17.2</b>
<b>Construction Employment</b>	<b>351</b>	<b>125</b>	<b>476</b>	<b>27</b>
5. Direct-Effect Job Multipliers	2.04	2.04	2.04	2.04
<b>Total Direct Jobs Created</b>	<b>715.2</b>	<b>255.6</b>	<b>970.8</b>	<b>55.1</b>
<b>Construction Wages</b>	<b>\$27,606,400</b>	<b>\$9,865,417</b>	<b>\$37,471,816</b>	<b>\$1,656,960</b>
6. Direct-Effect Earnings	1.62	1.62	1.62	1.62
<b>Total Increase in Direct Earnings</b>	<b>\$44,722,368</b>	<b>\$15,981,975</b>	<b>\$60,704,343</b>	<b>\$2,684,275</b>

Source: "2012 Hawaii Inter-County Input-Output Study" (approved August 2016), and CBRE

ESTIMATES OF TOTAL ECONOMIC IMPACT FROM SUBJECT OPERATIONS USING INTER-COUNTY INPUT-OUTPUT MODEL "TYPE II" MULTIPLIERS FOR "SERVICES" All Amounts Expressed in Constant 2020 Dollars				
Year	Development Year		Totals During	Stabilized
	2021 to 2025	2026 to 2030	Build-Out	Annually
<b><i>Household Spending &amp; Maintenance</i></b>	<b>\$10,543,313</b>	<b>\$26,071,275</b>	<b>\$36,614,588</b>	<b>\$6,625,988</b>
1. Economic Output Multiplier	1.95	1.95	1.95	1.95
<b>Total State Economic Output</b>	<b>\$20,559,459</b>	<b>\$50,838,986</b>	<b>\$71,398,446</b>	<b>\$12,920,676</b>
2. Earnings Multiplier	0.53	0.53	0.53	0.53
<b>Total Increase in State Earnings</b>	<b>\$5,587,956</b>	<b>\$13,817,776</b>	<b>\$19,405,731</b>	<b>\$3,511,773</b>
3. State Tax Multipliers	0.06	0.06	0.06	0.06
<b>Total Increase in State Taxes</b>	<b>\$606,240</b>	<b>\$1,499,098</b>	<b>\$2,105,339</b>	<b>\$380,994</b>
4. Total Job Multipliers	15.00	15.00	15.00	15.00
<b>Total State Jobs Created</b>	<b>158.1</b>	<b>391.1</b>	<b>549.2</b>	<b>99.4</b>
<b><i>Operating Employment</i></b>	<b>10.7</b>	<b>24.0</b>	<b>34.7</b>	<b>24.0</b>
5. Direct-Effect Job Multipliers	1.57	1.57	1.57	1.57
<b>Total Direct Jobs Created</b>	<b>16.7</b>	<b>37.7</b>	<b>54.4</b>	<b>37.7</b>
<b><i>Operating Wages</i></b>	<b>\$907,725</b>	<b>\$2,463,825</b>	<b>\$3,371,550</b>	<b>\$1,656,960</b>
6. Direct-Effect Earnings	1.74	1.74	1.74	1.74
<b>Total Increase in Direct Earnings</b>	<b>\$1,579,442</b>	<b>\$4,287,056</b>	<b>\$5,866,497</b>	<b>\$2,883,110</b>

Source: "2012 Hawaii Inter-County Input-Output Study" (approved August 2016), and CBRE

## DBEDT 3<sup>rd</sup> Quarter 2020 Report – Outlook for the Economy

Hawaii's economy has been greatly impacted by the COVID-19 pandemic. During the April-July 2020 period, the average unemployment rate (not seasonally adjusted) was 18.5 percent. Hawaii lost 115,000 non-agriculture payroll jobs during the April-July period as compared with the same period a year ago. All industry sectors lost jobs except construction and federal civilian jobs. The leisure and hospitality sector accounted for 58.7 percent of the total job loss at 67,500. Natural resource, mining, & construction sector gained 0.5 percent or 200 jobs, federal civilian job count was flat during this period. Overall, statewide non-agriculture payroll jobs decreased by 17.7 percent in the second quarter of 2020.

Hawaii initial unemployment claims started to rise mid-March and peaked at 53,112 during the first week of April and then gradually declined. During the second week of August, initial unemployment claims were still above 5,000 per week. During 2012-2019 period, the weekly initial unemployment claims averaged 1,442 per week.

Visitor arrivals to the State during the second quarter of 2020 totaled 30,748, a decrease of 98.8 percent from the same quarter in 2019. However, these visitors stayed longer in Hawaii with average length of stay at 27.3 days. In 2019 the average length of stay was 8.8 days.

Value of private building permits showed a decrease of 14.3 percent during the second quarter of 2020. The largest decrease occurred in the additions and alterations category which was down by 40.7 percent. Value of residential building permits was down by 3.9 percent and the value for commercial and industrial category was up by 101.2 percent during the same period. Though the value of private building permits was down, state government spending on capital investment projects (CIP) was up by 10.7 percent during the same time period. State government spent an average of nearly \$1.5 billion a year on CIP projects during the last three years (2017-2019).

As of August 25, 2020, federal funds allocated to Hawaii totaled \$8.4 billion. Most of these federal funds has been or will be received as household income and will be spent by Hawaii households. These funds helped mitigate the economic impact from COVID-19.

At the national level, the U.S. economic growth rate was at 0.3 percent during the first quarter and declined by 9.1 percent in the second quarter, as compared to the same quarter in 2019. The Blue Chip Economic Indicators report from Aug. 10, 2020, which is the consensus of 50 economic forecasting organizations, projected that the U.S. economic growth rate for 2020 will decrease by 5.2 percent. The report projected a positive 3.8 percent U.S. economic growth for 2021. The Blue Chip forecasts for foreign countries were all negative except China and India which showed small growth.

Based on the above development, and the delayed pre-test program for transpacific travel coupled with the August 25th two-week Stay-at-Home, Work-from-Home Order for Oahu, DBEDT projects that Hawaii's economic growth rate, as measured by the real gross domestic product (GDP), will

drop by 12.3 percent in 2020, then will increase at 2.1 percent in 2021, 2.0 percent in 2022, and 1.2 percent in 2023.

Hawaii will welcome 2.9 million visitors in 2020, a decrease of 71.9 percent from the 2019 level. Visitor arrivals will increase to 7.2 million in 2021, 8.3 million in 2022, and 9.4 million in 2023. Visitor spending will decrease 67.8 percent in 2020, then will increase 109.1 percent in 2021, 18.8 percent in 2022, and 14.7 percent in 2023.

Non-agriculture payroll jobs will shrink by 12.1 percent in 2020, then will increase by 8.5 percent in 2021, 2.0 percent in 2022, and 1.5 percent in 2023.

Overall for 2020, the average annual unemployment rate will be at 10.9 percent, then decrease to 7.2 percent in 2021, 6.6 percent in 2022, and 6.3 percent in 2023. These rates are much higher than the average Hawaii unemployment rate of 2.5 percent 2017 to 2019.

Nominal personal income is expected to decrease by 12.1 percent in 2020, then will increase by 5.3 percent in 2021 and 3.9 percent in 2022. Nominal personal income growth rate will be at 3.0 percent in 2023.

Hawaii’s consumer inflation rate, as measured by the Honolulu Consumer Price Index for All Urban Consumers, will increase at rates between 1.4 to 1.8 for the next few years.

Hawaii’s population is expected to be unchanged in 2020 and increase only by 0.1 percent in 2021, and 0.3 percent each year thereafter. Though international migration (usually net immigration) may be halted in 2020, domestic migration (usually net out-migration) is likely to be on hold as well in 2020.

Economic Indicators	2018	2019	2020	2021	2022	2023
	Actual		Forecast			
Total population (thousands)	1,421	1,416	1,416	1,417	1,421	1,425
Visitor arrivals (thousands) <sup>1</sup>	9,889	10,387	2,922	7,242	8,309	9,362
Visitor days (thousands) <sup>1</sup>	88,285	90,892	30,035	62,962	72,135	81,155
Visitor expenditures (million dollars) <sup>1</sup>	17,643	17,844	5,742	12,005	14,267	16,372
Honolulu CPI-U (1982=84=100)	277.1	281.6	285.5	289.8	294.8	300.1
Personal Income (million dollars)	78,721	81,442	71,551	75,375	78,298	80,666
Real personal income (millions of 2012\$) <sup>2</sup>	61,931	62,935	54,678	56,915	58,325	59,229
Non-agricultural wage & salary jobs (thousands)	658.3	655.7	576.3	625.2	637.9	647.3
Civilian unemployment rate <sup>3</sup>	2.4	2.7	10.9	7.2	6.6	6.3
Gross domestic product (million dollars)	93,798	97,282	56,479	89,922	93,326	96,092
Real gross domestic product (millions of 2012\$)	82,652	83,509	73,208	74,779	76,266	77,183
Gross domestic product deflator (2012=100)	113.5	116.8	118.1	120.3	122.4	124.5

## Public Fiscal Benefits from the Proposed Development

We have quantified the public fiscal benefits which will flow into the County of Maui and State of Hawaii coffers from Hokuao.

### REAL PROPERTY TAXES (TO COUNTY OF MAUI)

For the County, the primary tax source will be from Real Property Taxes paid by Pulama Lanai as the developers and fee owners of the 150 “for rent” Hokuao homes.

The potential property tax receipts were estimated by applying current prevailing tax rates against the projected cost of the homes as they are finished over time.

We acknowledge that being based on costs, the tax amount may be overstated as Pulama Lanai will likely subsidize significant amounts (or absorb significant losses) by offering inventory at affordable-pricing (or “below-market”) criteria. Yet, as real property taxes are generally based on reproduction costs new less depreciation and un-subsidized market values, the taxes will steadily grow over time as the entire project moves towards open pricing.

It was assumed all of the “for rent” workforce homes would be renter-occupied and not entitled to any Maui County tenants exemption.

The cumulative net assessed value of the Hokuao homes will total \$109.3 million upon build-out. The assessments and associated real property taxes based on current “Apartment” tax rates of \$5.55 per \$1,000 of assessed value resident and other uses during the build-out period and on a stabilized basis are shown below.

Development Period	Development and Lease Period		Totals During Build-Out Period	Stabilized Annually After Build-out
	2021 to 2025	2026 to 2030		
<b>PUBLIC BENEFITS (Revenues)</b>				
<b>1. COUNTY REAL PROPERTY TAXES</b>				
<i>Assessed Value</i>				
<i>Finished Market Homes End of Period</i>	50	24		74
<i>Finished Workforce Homes End of Period</i>	50	26		76
<i>Vacant Land (76 acres)/Finished Lots Prior to Leasing</i>	\$19,255,996	\$8,896,457	\$22,256,643	\$0
<i>Market Homes (Rentals), Total Assessed Value No Exemptions</i>	\$99,339,540	\$150,019,918	\$249,247,458	\$40,005,547
<i>Workforce Homes (Rentals), Total Assessed Value No Exemptions</i>	\$81,048,889	\$123,194,311	\$204,243,200	\$49,277,724
<b>Total Assessed Value</b>	<b>\$193,718,415</b>	<b>\$282,098,887</b>	<b>\$475,817,302</b>	<b>\$109,283,292</b>
<i>Real Property Taxes</i>				
<i>Vacant Land/Finished Lots</i>	\$39,473	\$22,816	\$55,789	\$0
<i>Market Homes (Rentals), Total Assessed Value No Exemptions</i>	\$551,201	\$832,577	\$1,283,878	\$339,031
<i>Workforce Homes (Rentals), Total Assessed Value No Exemptions</i>	\$449,821	\$483,728	\$1,133,550	\$273,491
<b>Total Real Property Taxes</b>	<b>\$1,038,895</b>	<b>\$1,339,121</b>	<b>\$2,573,217</b>	<b>\$606,522</b>

Source: CBRE

Public Fiscal Benefits from the Proposed Development

We estimate the County will receive some \$2.6 million in real property tax receipts during the build-out/absorption period from 2021 through 2030 and annual collections of \$606,500 on a stabilized basis thereafter.

COUNTY SECONDARY RECEIPTS AND TOTAL TAXES

Real Property Taxes (RPT) are forecast to generate about 41 percent of total Maui County General Fund revenues in the 2018 and 2019 fiscal-year budgets, with secondary taxes and fees the forming the remainder. It is logical to assume the Hokuao development and business activities will generate secondary taxes in proportion to RPT as does the overall Maui community.

The secondary Maui County receipts are equal to 150 percent of the RPT total (60% divided by 40%).

Application of the total tax revenue ratio of 2.50 against the real property taxes received from Hokuao, plus inclusion of an allowance of \$500,000 for potential County impact fees, results in a cumulative total estimated County tax collection from the subject of \$6.9 million during the initial projection period through 2030, and \$1.5 million annually on a stabilized basis.

INCOME TAXES (TO STATE OF HAWAII)

The State of Hawaii will receive an estimated \$7.0 million in primary receipts from State Income Taxes from worker wages, and profits from businesses based on average statewide corporate and personal payments rates of 4.4 percent and 5.1 percent, respectively, applied against the economic model forecasts.

On an annualized basis after stabilization of the community in 2030, the State will generate income taxes of \$182,000.

QUANTIFICATION OF PUBLIC FISCAL BENEFITS TO COUNTY AND STATE FROM HOKUAO 201H DEVELOPMENT				
All Amounts Expressed in Constant 2020 Dollars				
Development Period	Development and Lease Period		Totals During Build-Out Period	Stabilized Annually After Build-out
	2021 to 2025	2026 to 2030		
INCLUDES ALL STATE TAXES ONLY				
<b>2. STATE INCOME TAXES</b>				
Taxable Personal Income (Includes 100% Population)	\$56,695,658	\$65,597,891	\$122,293,549	\$2,862,735
Taxable Corporate Profits	\$10,899,452	\$5,465,027	\$16,364,479	\$628,295
Personal Taxes Paid	\$2,891,479	\$3,345,492	\$6,236,971	\$145,999
Corporate Taxes Paid	\$479,312	\$240,461	\$719,773	\$36,445
<b>TOTAL STATE INCOME TAXES</b>	<b>\$3,370,790</b>	<b>\$3,585,954</b>	<b>\$6,956,744</b>	<b>\$182,444</b>

GROSS EXCISE TAXES (TO STATE OF HAWAII)

The State will collect Gross Excise Taxes (GET) of 4.17 percent on the gross amount of building contracts, construction supplies, spending by workers and residents, and from the on-going business activity (association and maintenance). During the construction, absorption and ramp-up period these receipts will total \$6.8 million and a stabilized amount of \$345,000 annually.

Public Fiscal Benefits from the Proposed Development

QUANTIFICATION OF PUBLIC FISCAL BENEFITS TO COUNTY AND STATE FROM HOKUAO 201H DEVELOPMENT				
All Amounts Expressed in Constant 2020 Dollars				
Development Period	Development and Lease Period		Totals During Build-Out Period	Stabilized Annually After Build-out
	2021 to 2025	2026 to 2030		
INCLUDES ALL STATE TAXES ONLY				
<b>3. STATE GROSS EXCISE TAX</b>				
Taxable Transactions				
Construction & Maintenance Contracts	\$64,017,975	\$15,942,792	\$79,960,767	\$1,200,000
Worker Disposable Income Purchases	\$85,873,228	\$13,386,206	\$49,239,434	\$1,656,960
De Facto Population Discretionary Expenditures	\$9,049,313	\$25,321,275	\$34,364,588	\$5,425,788
	\$106,940,515	\$54,650,273	\$169,594,788	\$8,282,748
<b>TOTAL STATE EXCISE TAX</b>	<b>\$4,838,974</b>	<b>\$2,277,119</b>	<b>\$6,816,097</b>	<b>\$845,126</b>

Source: CBRE

STATE SECONDARY RECEIPTS AND TOTAL TAXES FROM HOKUAO DEVELOPMENT PROJECT

In recent fiscal years, Income Tax and GET have generated about 74 percent of total State revenues, and secondary taxes and fees the remainder. We anticipate Hokuao activity will result in similar ratios of secondary taxes flowing from the project relative to the primary sources quantified.

The secondary State receipts are equal to 35 percent times the Income Tax and GET totals (26% divided by 74%).

Application of the total tax ratio of 1.35 to the Hokuao income tax and GET sums, plus the addition of an allowance for potential State impact fees of \$870,000, results in a cumulative total estimated tax collection from the subject of \$19.5 million during the initial forecasting period through 2030, and \$712,000 annually on a stabilized basis.

**TOTAL COUNTY AND STATE DIRECT AND SECONDARY TAX RECEIPTS**

The total direct, secondary and impact fees flowing to the County and State as tax receipts from the development, absorption, occupation and operation of Hokuao are summarized below.

On an aggregate basis County and State governments will receive \$25.9 million during the development of Hokuao (2020-2035) and \$2.2 million annually on a stabilized basis thereafter.

QUANTIFICATION OF PUBLIC FISCAL BENEFITS TO COUNTY AND STATE FROM HOKUAO 201H DEVELOPMENT				
All Amounts Expressed in Constant 2020 Dollars				
Development Period	Development and Lease Period		Totals During Build-Out Period	Stabilized Annually After Build-out
	2021 to 2025	2026 to 2030		
<b>INCLUDES ALL COUNTY AND STATE TAXES ONLY</b>				
<b>TOTAL GROSS PUBLIC REVENUES</b>				
Real Property Taxes To County of Maui	\$1,034,596	\$1,598,621	\$2,573,217	\$606,522
Adjustment for Other Proportional Taxes (1)	2.50	2.50	2.50	2.50
Adjusted Maui County Revenues	\$2,586,490	\$3,846,553	\$6,433,043	\$1,516,306
Plus Impact Fees (2)	\$0	\$0	\$500,000	\$0
<b>Total County of Maui Receipts</b>	<b>\$2,586,490</b>	<b>\$3,846,553</b>	<b>\$6,933,043</b>	<b>\$1,516,306</b>
To State (Income Taxes and GET)	\$7,909,765	\$5,863,067	\$13,772,831	\$527,570
Adjustment for Other Proportional Taxes	1.35	1.35	1.35	1.35
Adjusted State Revenues	\$10,678,183	\$7,915,140	\$18,593,322	\$712,220
Plus Impact Fees	\$870,000	\$0	\$870,000	\$0
<b>Total State of Hawaii Receipts</b>	<b>\$11,548,183</b>	<b>\$7,915,140</b>	<b>\$19,463,322</b>	<b>\$712,220</b>
<b>AGGREGATE TAX REVENUES</b>	<b>\$14,134,672</b>	<b>\$11,761,693</b>	<b>\$25,896,365</b>	<b>\$2,228,525</b>

(1) Real property taxes comprised 40.2 percent and 39.3 percent of Total Revenues for the County of Maui in 2020 and 2021 fiscal years, respectively, averaging about 40 percent. Economic activity generates other revenue items of 60 percent or additional 150 percent above real property taxes.  
 (2) For DOE estimated at \$5,800 per home.  
 (3) In recent fiscal years, Gross Excise and Income Taxes have averaged some 74 percent of total State revenues; other revenue items 26 percent, or 35 percent above income and gross excise taxes.

Source: CBRE

The full page integrated fiscal benefits model is shown on the following page.

QUANTIFICATION OF PUBLIC FISCAL BENEFITS TO COUNTY AND STATE FROM HOKUAO DEVELOPMENT				
All Amounts Expressed in Constant 2020 Dollars				
Development Period	Development and Lease Period		Totals During Build-Out Period	Stabilized Annually After Build-out
	2021 to 2025	2026 to 2030		
<b>PUBLIC BENEFITS (Revenues)</b>				
<b>1. COUNTY REAL PROPERTY TAXES</b>				
<i>Assessed Value</i>				
Finished Market Homes End of Period	50	24		74
Finished Workforce Homes End of Period	50	26		76
Vacant Land (76 acres)/Finished Lots Prior to Leasing	\$13,335,986	\$8,890,657	\$22,226,643	\$0
Market Homes (Rentals), Total Assessed Value No Exemptions	\$99,333,540	\$150,013,918	\$249,347,458	\$60,005,567
Workforce Homes (Rentals), Total Assessed Value No Exemptions	\$81,048,889	\$123,194,311	\$204,243,200	\$49,277,724
<b>Total Assessed Value</b>	<b>\$193,718,415</b>	<b>\$282,098,887</b>	<b>\$475,817,302</b>	<b>\$109,283,292</b>
<i>Real Property Taxes</i>				
Vacant Land/Finished Lots	\$38,473	\$22,316	\$55,789	\$0
Market Homes (Rentals), Total Assessed Value No Exemptions	\$551,301	\$832,577	\$1,383,878	\$333,031
Workforce Homes (Rentals), Total Assessed Value No Exemptions	\$449,821	\$683,728	\$1,133,550	\$273,491
<b>Total Real Property Taxes</b>	<b>\$1,034,596</b>	<b>\$1,598,621</b>	<b>\$2,573,217</b>	<b>\$606,522</b>
<b>INCLUDES ALL STATE TAXES ONLY</b>				
<b>2. STATE INCOME TAXES</b>				
Taxable Personal Income (Includes 100% Population)	\$56,695,658	\$65,597,891	\$122,293,549	\$2,862,735
Taxable Corporate Profits	\$10,893,452	\$5,465,027	\$16,358,479	\$828,295
Personal Taxes Paid	\$2,891,479	\$3,345,492	\$6,236,971	\$145,999
Corporate Taxes Paid	\$479,312	\$240,461	\$719,773	\$36,445
<b>TOTAL STATE INCOME TAXES</b>	<b>\$9,370,790</b>	<b>\$9,585,954</b>	<b>\$18,954,744</b>	<b>\$182,444</b>
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Taxable Transactions	\$64,017,975	\$15,942,792	\$79,960,767	\$1,200,000
Construction & Maintenance Contracts	\$35,873,228	\$13,386,206	\$49,259,434	\$1,656,960
Worker Disposable Income Purchases	\$9,049,313	\$25,321,275	\$34,364,588	\$5,425,998
De Facto Population Discretionary Expenditures	\$108,934,515	\$54,650,273	\$163,584,788	\$8,282,948
<b>TOTAL STATE EXCISE TAX</b>	<b>\$4,538,974</b>	<b>\$2,277,113</b>	<b>\$6,816,087</b>	<b>\$345,126</b>
<b>INCLUDES ALL COUNTY AND STATE TAXES ONLY</b>				
<b>TOTAL GROSS PUBLIC REVENUES</b>				
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Plus Impact Fees (2)	\$0	\$0	\$500,000	\$0
<b>Total County of Maui Receipts</b>	<b>\$2,586,490</b>	<b>\$3,846,553</b>	<b>\$6,933,043</b>	<b>\$1,516,306</b>
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Adjustment for Other Proportional Taxes	1.35	1.35	1.35	1.35
Adjusted State Revenues	\$10,678,183	\$7,915,140	\$18,593,322	\$712,220
Plus Impact Fees	\$870,000	\$0	\$870,000	\$0
<b>Total State of Hawaii Receipts</b>	<b>\$11,548,183</b>	<b>\$7,915,140</b>	<b>\$19,463,322</b>	<b>\$712,220</b>
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 (2) For DOE estimated at \$5,800 per home.  
 (3) In recent fiscal years, Gross Excise and Income Taxes have averaged some 74 percent of total State revenues; other revenue items 26 percent, or 35 percent above income and gross excise taxes.

Source: CBRE

## Public Opinion Regarding the Proposed Development

A 9-question multiple choice survey was emailed on July 31, 2020 to various community members regarding the Hokuao project. The purpose of the survey was to measure public interest in the project. The survey was distributed to 18 community members, whose contacts were provided to us by Pulama Lanai. As of August 10<sup>th</sup>, 2020, only one response was submitted by the interviewees. A copy of the survey is contained the Addenda.

Based on our past experience in similar projects and discussion with market participants throughout our study period, we conclude the lack of responses and discussion with other community members was indicative of two perspectives:

1. The COVID Pandemic and its economic impacts are overwhelming other non-related community issues and placing stress on its members and the entitlement process; and,
2. The Lanai community appears to be well-informed regarding Hokuao, and development is an accepted outcome.

The State of Hawaii is in a midst of a global pandemic. Interviewees most likely have their attention on dealing with the pandemic as opposed to responding to a survey of an already approved project.

### MARKET PARTICIPANT INTERVIEWS

Another way to measure opinion regarding the proposed development would be to interview local realtors/brokers who interact with the Lanai market and understand the needs of resident and non-resident buyers.

We talked to several realtors who both lived and/or took part in transactions on Lanai. The realtors asked that their names not be included due to concerns over being named in a public document within the tight community.

Summarized observations from the interviews:

- Many were aware of the Hokuao project but knew few specific details.
- All the realtors stressed that the most important feature Lanai residents want in a home is storage space and a garage with room for a workshop. Lanai residents are hunters and fisherman. They often work with their hands in both their jobs and on their free time. Most residents won't even consider looking at a new home if it doesn't have adequate or additional storage space to what they already have. We were told that the ideal home on Lanai for locals would be a 3-bed/2-bath with a 2-car garage. Features like a backyard and Lanai are also important, but they often become the space that's used for storage and aren't used for their primary purpose.

- A local family on Lanai could probably afford at most a home between the range of \$400,000 to \$500,000. Generational housing on Lanai is an important aspect to consider as the whole family will move together as one. It can be very difficult to meet the needs of an entire family. Due to the lack of high paying jobs and economic opportunities many families need multiple incomes to purchase a home.
- Project amenities such as a community park would be considered desirable if it has space for BBQ and installed picnic tables and park benches.
- During the interviews it was mentioned that the housing market on Lanai was doing far better than anticipated. Neighbor Island and non-resident buyers were still active in the market despite the pandemic.

## Assumptions and Limiting Conditions

1. CBRE, Inc. through its appraiser (collectively, "CBRE") has inspected through reasonable observation the subject property. However, it is not possible or reasonably practicable to personally inspect conditions beneath the soil and the entire interior and exterior of the improvements on the subject property. Therefore, no representation is made as to such matters.
2. The report, including its conclusions and any portion of such report (the "Report"), is as of the date set forth in the letter of transmittal and based upon the information, market, economic, and property conditions and projected levels of operation existing as of such date. The dollar amount of any conclusion as to value in the Report is based upon the purchasing power of the U.S. Dollar on such date. The Report is subject to change as a result of fluctuations in any of the foregoing. CBRE has no obligation to revise the Report to reflect any such fluctuations or other events or conditions which occur subsequent to such date.
3. Unless otherwise expressly noted in the Report, CBRE has assumed that:
  - (i) Title to the subject property is clear and marketable and that there are no recorded or unrecorded matters or exceptions to title that would adversely affect marketability or value. CBRE has not examined title records (including without limitation liens, encumbrances, easements, deed restrictions, and other conditions that may affect the title or use of the subject property) and makes no representations regarding title or its limitations on the use of the subject property. Insurance against financial loss that may arise out of defects in title should be sought from a qualified title insurance company.
  - (ii) Existing improvements on the subject property conform to applicable local, state, and federal building codes and ordinances, are structurally sound and seismically safe, and have been built and repaired in a workmanlike manner according to standard practices; all building systems (mechanical/electrical, HVAC, elevator, plumbing, etc.) are in good working order with no major deferred maintenance or repair required; and the roof and exterior are in good condition and free from intrusion by the elements. CBRE has not retained independent structural, mechanical, electrical, or civil engineers in connection with this appraisal and, therefore, makes no representations relative to the condition of improvements. CBRE appraisers are not engineers and are not qualified to judge matters of an engineering nature, and furthermore structural problems or building system problems may not be visible. It is expressly assumed that any purchaser would, as a precondition to closing a sale, obtain a satisfactory engineering report relative to the structural integrity of the property and the integrity of building systems.
  - (iii) Any proposed improvements, on or off-site, as well as any alterations or repairs considered will be completed in a workmanlike manner according to standard practices.
  - (iv) Hazardous materials are not present on the subject property. CBRE is not qualified to detect such substances. The presence of substances such as asbestos, urea formaldehyde foam insulation, contaminated groundwater, mold, or other potentially hazardous materials may affect the value of the property.
  - (v) No mineral deposit or subsurface rights of value exist with respect to the subject property, whether gas, liquid, or solid, and no air or development rights of value may be transferred. CBRE has not considered any rights associated with extraction or exploration of any resources, unless otherwise expressly noted in the Report.
  - (vi) There are no contemplated public initiatives, governmental development controls, rent controls, or changes in the present zoning ordinances or regulations governing use, density, or shape that would significantly affect the value of the subject property.
  - (vii) All required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, state, nor national government or private entity or organization have been or can be readily obtained or renewed for any use on which the Report is based.
  - (viii) The subject property is managed and operated in a prudent and competent manner, neither inefficiently or super-efficiently.
  - (ix) The subject property and its use, management, and operation are in full compliance with all applicable federal, state, and local regulations, laws, and restrictions, including without limitation environmental laws, seismic hazards, flight patterns, decibel levels/noise envelopes, fire hazards, hillside ordinances, density, allowable uses, building codes, permits, and licenses.
  - (x) The subject property is in full compliance with the Americans with Disabilities Act (ADA). CBRE is not qualified to assess the subject property's compliance with the ADA, notwithstanding any discussion of possible readily achievable barrier removal construction items in the Report.

- (xi) All information regarding the areas and dimensions of the subject property furnished to CBRE are correct, and no encroachments exist. CBRE has neither undertaken any survey of the boundaries of the subject property nor reviewed or confirmed the accuracy of any legal description of the subject property.
 

Unless otherwise expressly noted in the Report, no issues regarding the foregoing were brought to CBRE's attention, and CBRE has no knowledge of any such facts affecting the subject property. If any information inconsistent with any of the foregoing assumptions is discovered, such information could have a substantial negative impact on the Report. Accordingly, if any such information is subsequently made known to CBRE, CBRE reserves the right to amend the Report, which may include the conclusions of the Report. CBRE assumes no responsibility for any conditions regarding the foregoing, or for any expertise or knowledge required to discover them. Any user of the Report is urged to retain an expert in the applicable field(s) for information regarding such conditions.
4. CBRE has assumed that all documents, data and information furnished by or behalf of the client, property owner, or owner's representative are accurate and correct, unless otherwise expressly noted in the Report. Such data and information include, without limitation, numerical street addresses, lot and block numbers, Assessor's Parcel Numbers, land dimensions, square footage area of the land, dimensions of the improvements, gross building areas, net rentable areas, usable areas, unit count, room count, rent schedules, income data, historical operating expenses, budgets, and related data. Any error in any of the above could have a substantial impact on the Report. Accordingly, if any such errors are subsequently made known to CBRE, CBRE reserves the right to amend the Report, which may include the conclusions of the Report. The client and intended user should carefully review all assumptions, data, relevant calculations, and conclusions of the Report and should immediately notify CBRE of any questions or errors within 30 days after the date of delivery of the Report.
5. CBRE assumes no responsibility (including any obligation to procure the same) for any documents, data or information not provided to CBRE, including without limitation any termite inspection, survey or occupancy permit.
6. All furnishings, equipment and business operations have been disregarded with only real property being considered in the Report, except as otherwise expressly stated and typically considered part of real property.
7. Any cash flows included in the analysis are forecasts of estimated future operating characteristics based upon the information and assumptions contained within the Report. Any projections of income, expenses and economic conditions utilized in the Report, including such cash flows, should be considered as only estimates of the expectations of future income and expenses as of the date of the Report and not predictions of the future. Actual results are affected by a number of factors outside the control of CBRE, including without limitation fluctuating economic, market, and property conditions. Actual results may ultimately differ from these projections, and CBRE does not warrant any such projections.
8. The Report contains professional opinions and is expressly not intended to serve as any warranty, assurance or guarantee of any particular value of the subject property. Other appraisers may reach different conclusions as to the value of the subject property. Furthermore, market value is highly related to exposure time, promotion effort, terms, motivation, and conclusions surrounding the offering of the subject property. The Report is for the sole purpose of providing the intended user with CBRE's independent professional opinion of the value of the subject property as of the date of the Report. Accordingly, CBRE shall not be liable for any losses that arise from any investment or lending decisions based upon the Report that the client, intended user, or any buyer, seller, investor, or lending institution may undertake related to the subject property, and CBRE has not been compensated to assume any of these risks. Nothing contained in the Report shall be construed as any direct or indirect recommendation of CBRE to buy, sell, hold, or finance the subject property.
9. No opinion is expressed on matters which may require legal expertise or specialized investigation or knowledge beyond that customarily employed by real estate appraisers. Any user of the Report is advised to retain experts in areas that fall outside the scope of the real estate appraisal profession for such matters.
10. CBRE assumes no responsibility for any costs or consequences arising due to the need, or the lack of need, for flood hazard insurance. An agent for the Federal Flood Insurance Program should be contacted to determine the actual need for Flood Hazard Insurance.
11. Acceptance or use of the Report constitutes full acceptance of these Assumptions and Limiting Conditions and any special assumptions set forth in the Report. It is the responsibility of the user of the Report to read in full, comprehend and thus become aware of all such assumptions and limiting conditions. CBRE assumes no responsibility for any situation arising out of the user's failure to become familiar with and understand the same.
12. The Report applies to the property as a whole only, and any pro ration or division of the title into fractional interests will invalidate such conclusions, unless the Report expressly assumes such pro ration or division of interests.

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#### Assumptions and Limiting Conditions

13. The allocations of the total value estimate in the Report between land and improvements apply only to the existing use of the subject property. The allocations of values for each of the land and improvements are not intended to be used with any other property or appraisal and are not valid for any such use.
14. The maps, plats, sketches, graphs, photographs, and exhibits included in this Report are for illustration purposes only and shall be utilized only to assist in visualizing matters discussed in the Report. No such items shall be removed, reproduced, or used apart from the Report.
15. The Report shall not be duplicated or provided to any unintended users in whole or in part without the written consent of CBRE, which consent CBRE may withhold in its sole discretion. Exempt from this restriction is duplication for the internal use of the intended user and its attorneys, accountants, or advisors for the sole benefit of the intended user. Also exempt from this restriction is transmission of the Report pursuant to any requirement of any court, governmental authority, or regulatory agency having jurisdiction over the intended user, provided that the Report and its contents shall not be published, in whole or in part, in any public document without the written consent of CBRE, which consent CBRE may withhold in its sole discretion. Finally, the Report shall not be made available to the public or otherwise used in any offering of the property or any security, as defined by applicable law. Any unintended user who may possess the Report is advised that it shall not rely upon the Report or its conclusions and that it should rely on its own appraisers, advisors and other consultants for any decision in connection with the subject property. CBRE shall have no liability or responsibility to any such unintended user.

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#### Addenda

**ADDENDA**

# Addendum A

## MARKET STUDY AND ABSORPTION TABLES

Addenda

TABLE 1

PROJECTED DEVELOPMENT AND ABSORPTION OF HOKUAO INVENTORY									
Estimated Calendar	Year	Project	Development Activity	Workforce Housing Homes Occupied		Long-Term Residential Rentals		Market-Priced Homes	
				Annually	Cumulatively	Annually	Cumulatively	Annually	Cumulatively
								Total Units Absorbed	
2020		1	Entitlement						
2021		2	Site Prep. & Infrastructure Emplacement	Pre-Leasing Begins (1)	Pre-Leasing Begins (1)				
2022		3	Initial Homes Constructed and Leased	20	20	0	0	20	20
2023		4	Home Construction and Leasing Continues	20	40	0	0	20	40
2024		5	Home Construction and Leasing Continues	20	60	0	0	20	60
2025		6	Home Construction and Leasing Continues	16	76	4	4	20	80
2026		7	Home Construction and Leasing Continues	0	76	20	24	20	100
2027		8	Home Construction and Leasing Continues	0	76	20	44	20	120
2028		9	Home Construction and Leasing Continues	0	76	20	64	20	140
2029		10	Final Homes Constructed and Leased	0	76	10	74	10	150
2030		11							

Community has been fully built-out and is occupied and "operating" on stabilized level

(1) Pre-Leasings are reservation agreements pending completion of the homes and occupancy.

Source: CBRE

TABLE 2

**QUANTIFICATION OF HOUSING UNIT DEMAND FOR LANAI 2020 TO 2035**

Scenario	Current 2020	Projected Lanai Resident Population			Additional Units Required by 2035
		2025	2030	2035	
<i>One: Based on Historic Growth Trend 1980 to 2020</i>					
Resident Population	3,000	3,138	3,282	3,433	
Average Household Size <sup>(2)</sup>	2.48	2.43	2.39	2.34	
Total Resident Units Required	1,210	1,290	1,375	1,466	
Part-Time Resident/Second Homes (Max 20%)	121	161	206	293	
Transient Units (Max 4%)	36	39	55	59	
Vacancy Allowance (Max. 3%)	0	26	41	44	
<b>TOTAL MARKET UNIT DEMAND</b>	<b>1,367</b>	<b>1,516</b>	<b>1,678</b>	<b>1,862</b>	<b>395</b>
<i>Two: Maximum Based on Extrapolated/Adjusted County Planning Department Technical Forecasts</i>					
Resident Population	3,000	3,154	3,316	3,486	
Average Household Size	2.48	2.42	2.36	2.30	
Total Resident Units Required	1,210	1,304	1,406	1,516	
Part-Time Resident/Second Homes (Max 25%)	212	248	309	379	
Transient Units (Max 4%)	26	39	56	61	
Vacancy Allowance (Max. 3%)	0	26	42	45	
<b>TOTAL MARKET UNIT DEMAND</b>	<b>1,448</b>	<b>1,617</b>	<b>1,814</b>	<b>2,002</b>	<b>535</b>

**CALCULATION OF MID-POINT PERIODIC HOUSING UNIT DEMAND**

	Latent Demand	2021-2025	2026-2030	2031-2035	Totals
<b>MINIMUM DEMAND</b>					
Periodic	(100)	149	162	184	395
Cumulative		115	244	395	
Average Annual Demand <sup>(4)</sup>		23	26	30	
<b>MAXIMUM DEMAND</b>					
Periodic	(19)	170	197	187	535
Cumulative		163	354	535	
Average Annual Demand <sup>(4)</sup>		33	38	36	
<b>MID-POINT DEMAND</b>					
Periodic	(60)	159	180	186	465
Cumulative		139	299	465	
Average Annual Demand <sup>(4)</sup>		28	32	33	

Note: "Socio-Economic Forecast: The Economic Projections for Maui County General Plan 2030" (Maui County Planning Department, 2006) and "Lanai Housing Issue Paper" (Knox, 2011) project there will be a need for a total of 2,184 total housing units on Lanai by 2030.

- (1) According to the US Census American Community Survey in 2018 (the most recent data) there were 1,463 "housing units" on Lanai; there have been no major additions over the past two years but some individual homes have been built. We have estimated the 2020 housing unit count is about 1,480, of which 13 are identified as vacation rentals, resulting in 1,467 available housing units.
- (2) Compounded growth rate of Lanai resident population count was at 0.87 percent annually from 1980 census (2,119 persons) to 2020 estimate (3,000 persons). We have used long-term average growth rate of 0.90% annually.
- (3) Average Household Size on Lanai has steadily dropped since the 2000 US Census from 3.41 persons to 2.48 persons; a decline of 1.75% compounded annually. We have assumed a continuing decline of 1.5% per year, compounded, going-forward.
- (4) Latent Demand is assumed to be absorbed equally throughout projection time-frame to 2035.

Source: US Census, State DBEDT, Hawaii Information Service, County of Maui Planning Dept. and CBRE.

TABLE 3

Year	DECENNIAL CENSUS									
	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>1. Resident Population</b>	3,193	3,325	3,460	3,424	3,311	3,514	3,519	3,650	3,185	2,802
Percent Average Annual Change	3.2%	0.4%	3.7%	-1.0%	-3.3%	6.1%	0.1%	1.9%	-6.4%	-6.0%
<b>2. Total Housing Units</b>	1,343	1,452	1,356	1,371	1,405	1,445	1,463	1,486	1,496	1,463
Percent Average Annual Change		0.6%	-6.6%	1.1%	2.5%	2.8%	0.6%	0.8%	0.5%	-1.1%
Occupied Housing Units	1,148	1,140	1,016	1,040	1,070	1,184	1,185	1,255	1,234	1,130
Percent Average Annual Change		-0.1%	-10.9%	2.4%	2.9%	6.0%	2.2%	3.0%	-0.8%	-4.3%
Vacant/Other Housing Units	195	312	340	331	335	311	278	231	260	333
Percent Average Annual Change		6.0%	9.0%	-2.6%	1.2%	-7.2%	-5.3%	-8.5%	6.3%	14.0%
<b>3. Average Resident Household Size</b>	2.78	2.93	3.41	3.29	3.09	3.10	2.97	2.91	2.57	2.46
Percent Average Annual Change		0.5%	16.4%	-3.5%	-6.0%	0.1%	-2.1%	-1.0%	-5.6%	-1.8%
<b>4. Occupied Housing Unit Type, Single Family Home (Detailed and Attached)</b>	N/A	1,084	954	910	903	883	1,123	1,098	1,066	901
Percent Average Annual Change		95.1%	-12.0%	-4.6%	-0.6%	-2.2%	13.6%	-1.1%	-2.7%	-7.7%
Percent of Total Occupied Units		95.1%	93.9%	87.5%	84.4%	77.5%	94.8%	77.0%	77.0%	77.0%
Multifamily Unit	N/A	56	62	130	167	251	62	157	170	229
Percent Average Annual Change		4.9%	10.9%	109.8%	28.4%	50.1%	-97.6%	76.6%	4.1%	17.4%
Percent of Total Occupied Units		4.9%	6.1%	12.5%	15.6%	22.1%	5.2%	23.0%	23.0%	23.0%
<b>5. Occupied Unit Tenure</b>										
Owner-Occupied	571	576	603	599	588	562	600	637	632	637
Percent Average Annual Change		0.1%	4.7%	-0.7%	-2.7%	-3.6%	3.4%	3.1%	-0.4%	0.4%
Percent of Total Occupied Units	49.7%	50.3%	59.4%	57.6%	54.5%	49.6%	50.6%	50.6%	51.1%	56.4%
Renter-Occupied	577	564	413	441	487	572	585	618	604	493
Percent Average Annual Change		-0.2%	-24.8%	4.8%	10.4%	17.6%	1.1%	2.8%	-1.1%	-9.2%
Percent of Total Occupied Units	50.3%	49.5%	40.6%	42.4%	45.5%	50.4%	49.4%	49.2%	48.9%	43.6%

RESIDENT POPULATION AND HOUSING UNIT ESTIMATES FROM THE U.S. CENSUS BUREAU FOR LANAI CITY CDP THROUGH 2018

TABLE 4

## FINANCIAL CHARACTERISTICS OF HOUSEHOLDS LANAI FROM US CENSUS AMERICAN COMMUNITY SURVEY ESTIMATES FOR 2018

Household Income	Total Lanai Occupied Housing Units		Owner-Occupied Housing Units		Renter-Occupied Housing Units	
	Number	Percent of Total	Number	Percentage	Number	Percentage
Less than \$5,000	0	0%	0	0%	0	0%
\$5,000 to \$9,999	0	0%	0	0%	0	0%
\$10,000 to \$14,999	68	6%	38	5%	30	6%
\$15,000 to \$19,999	27	2%	27	4%	0	0%
\$20,000 to \$24,999	166	14%	104	14%	62	13%
\$25,000 to \$34,999	89	7%	51	7%	38	8%
\$35,000 to \$49,999	172	14%	80	11%	92	19%
\$50,000 to \$74,999	199	16%	117	16%	82	17%
<b>Incomes Above 120% of 2020 Lanai Median Household Income</b>						
\$64,308 to \$74,999	85	7%	50	7%	35	7%
\$75,000 to \$99,999	177	14%	112	15%	65	13%
\$100,000 to \$149,999	179	15%	98	13%	81	17%
\$150,000 or more	66	5%	66	9%	0	0%
<b>Total</b>	<b>1,228</b>	<b>100%</b>	<b>743</b>	<b>100%</b>	<b>485</b>	<b>100%</b>
Median Household Income of Group	\$53,589		\$62,977		\$50,395	
Percent of Households with Incomes Above 120% of Median		41.3%		43.9%		37.3%

Source: US Census and CBRE

TABLE 5

## LANAI HOUSEHOLDS BY NUMBERS OF PERSONS

	Total Surveyed Units		Owner Occupied		Renter Occupied	
	Unit Count	Percent of Total	Unit Count	Percent of Total	Unit Count	Percent of Total
1-person Household	319	25.30%	115	17.90%	204	33.0%
2-person Household	411	32.60%	270	42.00%	141	22.8%
3-person Household	204	16.20%	89	13.80%	115	18.6%
4-or-more-person Household	327	25.90%	169	26.30%	158	25.6%
<b>Totals</b>	<b>1,261</b>	<b>100.00%</b>	<b>643</b>	<b>100.00%</b>	<b>618</b>	<b>100.00%</b>
Percent of Total Units	100.00%		50.99%		49.01%	

Probable Households Seeking 4-  
bedroom Housing Units 25.90%

Source: US Census and CBRE

**TABLE 6  
LANAI HOUSING UNIT INVENTORY BY NUMBER OF  
BEDROOMS**

Number of Bedrooms	Unit Count	Percent of Total
Studio	22	1.43%
1 Bedroom	142	9.20%
2 Bedroom	498	32.27%
3 Bedroom	687	44.52%
4 Bedroom	194	12.57%
5 or more Bedroom	0	0.00%
<b>TOTAL HOUSING UNIT COUNT (1)</b>	<b>1,543</b>	<b>100.00%</b>
<b>Total Unit Supply of 4 or More Bedroom Units</b>	<b>194</b>	<b>12.57%</b>

(1) Total may vary from other sources due to inclusion of vacation and second-home units and the survey margin-of-error.

Source: US Census and CBRE.

**TABLE 7**

**STRATED PROJECTIONS OF STANDARD RESIDENT HOUSING UNIT DEMAND BY MEDIAN  
HOUSEHOLD INCOME LEVEL ON LANAI USING MID-POINT PROJECTIONS 2020 TO 2035**

Expressed in Constant 2020 Dollars

Period	Periodic Housing Unit Demand			Total Demand 2020-2035
	2020 to 2025	2026 to 2030	2031 to 2035	
<b>Less than 80% Median Household Income (Under \$42,872 Annually)</b>	<b>32</b>	<b>34</b>	<b>35</b>	<b>100</b>
Percent of Total Demand	23.0%	21.0%	21.0%	21.6%
<b>80% to 120% of Lanai MHI (Between \$42,872 and \$64,308 Annually)</b>	<b>50</b>	<b>61</b>	<b>63</b>	<b>174</b>
Percent of Total Demand	36.0%	38.0%	38.0%	37.4%
<b>120% and Above Lanai MHI (Over \$64,308 Annually)</b>	<b>57</b>	<b>65</b>	<b>68</b>	<b>191</b>
Percent of Total Demand	41.0%	41.0%	41.0%	41.0%
<b>Total Market Demand</b>	<b>139</b>	<b>160</b>	<b>166</b>	<b>465</b>
	100.0%	100.0%	100.0%	100.0%

Note: The estimated median household income for the island of Lanai in 2020 was estimated at \$53,590 for a four-person household; the accepted median baseline.

Source: Maui County, DBEDT, MLS, Leading Banks and CBRE.

TABLE 8

**DIVISION OF PROJECTED DEMAND BY UNIT TYPE FOR HOUSING UNITS  
ON THE ISLAND OF LANAI 2020 TO 2035**

	2020 to 2025		2026 to 2030		2031 to 2035		Total Demand 2020-2035
	Single Family Homes & Lots Percent of Total	107 77%	121 76%	126 76%	355 76%		
Multifamily Units Percent of Total	32 23%	38 24%	40 24%	110 24%			
<b>Total</b>	<b>139 100%</b>	<b>160 100%</b>	<b>166 100%</b>	<b>465 100%</b>			

Source: CBRE

**TABLE 9  
ISLAND OF LANAI MULTIPLE LISTING SERVICE TRANSACTION DATA**

Property Type	Year-End Median Sales Price												
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Single Family	\$443,500	\$291,850	\$268,000	\$270,000	\$245,000	\$320,000	\$465,000	\$375,000	\$414,000	\$385,000	\$460,000	\$455,000	\$436,000
% Change	4.4%	-34.2%	-8.2%	0.7%	-9.3%	30.6%	45.3%	-19.4%	10.4%	-7.0%	19.5%	-1.1%	-4.2%
Condominium	\$1,975,000	\$1,875,000	\$1,155,000	\$1,022,700	\$539,000	\$97,000	\$1,725,000	\$1,800,000	\$1,212,500	\$895,000	\$1,625,000	\$193,000	\$850,000
% Change	-13.4%	-5.1%	-38.4%	-11.5%	-48.3%	-81.7%	1678.4%	4.3%	-32.6%	-26.2%	81.6%	-88.1%	340.4%
Vacant Land	\$1,115,000	\$0	\$0	\$1,956,250	\$350,000	\$445,000	\$0	\$350,000	\$0	\$0	\$0	\$0	\$0
% Change	72.9%	-100.0%	-	-	-82.1%	27.1%	-100.0%	-	-	-	-	-	-

Peak Years (2008-2019)

Property Type	Year-End Number of Sales												
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Single Family	8	10	5	13	21	32	18	14	19	19	21	10	19
% Change	-57.9%	25.0%	-50.0%	160.0%	61.3%	52.4%	-43.8%	-22.2%	35.7%	0.0%	10.5%	-52.4%	86.2%
Condominium	2	5	2	8	23	24	6	3	6	10	4	3	4
% Change	-77.8%	150.0%	-60.0%	300.0%	187.5%	4.3%	-75.0%	-50.0%	100.0%	66.7%	-60.0%	-25.0%	33.0%
Vacant Land	2	0	0	2	1	4	0	3	0	0	0	0	0
% Change	-33.3%	-100.0%	-	-	-50.0%	300.0%	-100.0%	-	-	-	-	-	-

Peak Years (2008-2019)

(1) 2020 data has been annualized

Property Type	Year-End Sales Volume												
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Single Family	\$3,486,000	\$6,705,700	\$2,813,000	\$4,381,500	\$9,146,500	\$16,491,900	\$16,890,000	\$7,819,200	\$7,910,500	\$7,611,000	\$10,506,000	\$5,508,000	\$13,493,515
% Change	-82.6%	92.4%	-58.1%	55.8%	108.8%	80.3%	2.4%	-53.7%	1.2%	-3.8%	38.1%	-47.6%	145.0%
Condominium	\$3,950,000	\$9,425,000	\$2,230,000	\$9,643,900	\$19,610,250	\$14,615,200	\$10,875,000	\$3,924,000	\$4,170,000	\$12,264,500	\$8,200,000	\$2,073,000	\$4,532,640
% Change	-75.6%	138.6%	-75.5%	317.5%	103.3%	-25.5%	-25.6%	-63.9%	6.3%	194.1%	-33.1%	-74.7%	118.7%
Vacant Land	\$2,230,000	\$0	\$0	\$3,912,500	\$350,000	\$2,012,000	\$0	\$1,690,000	\$0	\$0	\$0	\$0	\$0
% Change	27.4%	-100.0%	-	-	-91.1%	474.9%	-100.0%	-	-	-	-	-	-

Peak Years (2008-2019)

(1) 2020 data has been annualized

Source: Maui MLS

ISLAND OF LANAI WORKFORCE/AFFORDABLE RENTAL GUIDELINES FOR 2020



Prepared by:  
PLANNING DIVISION  
DEPARTMENT OF HOUSING AND HUMAN CONCERNS (DHHC)  
COUNTY OF MAUI  
Effective: May 1, 2020

2020  
INCOME LIMITS & AFFORDABLE RENT GUIDELINES  
LANAI

INCOME LIMITS FOR RENTAL UNITS (BY FAMILY SIZE & PERCENTAGE OF MEDIAN FAMILY INCOME)

% of	1-PERSON	2-PERSON	3-PERSON	4-PERSON	5-PERSON	6-PERSON	7-PERSON	8-PERSON
10%	\$3,750	\$4,200	\$4,650	\$5,100	\$5,550	\$6,000	\$6,450	\$6,900
20%	\$7,500	\$8,400	\$9,300	\$10,200	\$11,100	\$12,000	\$12,900	\$13,800
30%	\$11,250	\$12,600	\$13,950	\$15,300	\$16,650	\$18,000	\$19,350	\$20,700
40%	\$15,000	\$16,800	\$18,600	\$21,000	\$22,800	\$24,600	\$26,400	\$28,200
50%	\$18,750	\$21,000	\$23,250	\$25,500	\$27,750	\$30,000	\$32,250	\$34,500
60%	\$22,500	\$25,200	\$27,900	\$30,600	\$33,300	\$36,000	\$38,700	\$41,400
70%	\$26,250	\$29,400	\$32,100	\$35,100	\$37,950	\$40,800	\$43,650	\$46,500
80%	\$30,000	\$33,600	\$36,300	\$39,000	\$42,000	\$45,000	\$48,000	\$51,000
90%	\$33,750	\$37,800	\$41,550	\$44,700	\$48,150	\$51,450	\$54,750	\$58,050
100%	\$37,500	\$42,000	\$45,750	\$49,500	\$53,250	\$56,700	\$60,150	\$63,600
110%	\$41,250	\$46,200	\$50,400	\$54,150	\$57,900	\$61,650	\$65,400	\$69,150
120%	\$45,000	\$50,400	\$54,600	\$58,500	\$62,700	\$66,450	\$70,200	\$73,950
130%	\$48,750	\$54,600	\$58,800	\$62,700	\$66,450	\$70,200	\$73,950	\$77,700
140%	\$52,500	\$58,800	\$62,900	\$66,600	\$70,350	\$74,100	\$77,850	\$81,600

AFFORDABLE RENT GUIDELINES (BY UNIT SIZE & PERCENTAGE OF MEDIAN FAMILY INCOME)

% of	UNIT SIZE (NO. OF RESIDENTS)				
	1	2	3	4	5
10%	\$1,001	\$1,171	\$1,341	\$1,511	\$1,681
20%	\$2,002	\$2,342	\$2,682	\$3,022	\$3,362
30%	\$3,003	\$3,513	\$4,023	\$4,533	\$5,043
40%	\$4,004	\$4,684	\$5,364	\$6,044	\$6,724
50%	\$5,005	\$5,855	\$6,725	\$7,595	\$8,465
60%	\$6,006	\$7,026	\$8,096	\$9,166	\$10,236
70%	\$7,007	\$8,197	\$9,467	\$10,737	\$12,007
80%	\$8,008	\$9,368	\$10,838	\$12,308	\$13,678
90%	\$9,009	\$10,539	\$12,209	\$13,879	\$15,349
100%	\$10,010	\$11,710	\$13,580	\$15,440	\$17,010
110%	\$11,011	\$12,881	\$14,841	\$16,701	\$18,371
120%	\$12,012	\$14,052	\$16,102	\$17,962	\$19,732
130%	\$13,013	\$15,223	\$17,363	\$19,223	\$21,093
140%	\$14,014	\$16,394	\$18,624	\$20,484	\$22,454

Note: Affordable rents are based on 30% of gross monthly income. Affordable rents include utilities.

The estimated median household income for the Island of Lanai in 2020 was estimated at \$53,590 for a four-person household; the occupied median baseline.

Source: County of Maui Department of Housing and Human Concerns, Housing Division

UNIT MIX BY TYPE OF MAJOR PROPOSED RESIDENTIAL HOUSING PROJECTS ON LANAI AS CONTAINED IN THE 2016 UPDATED GENERAL PLAN

	Single Family Lots and Multi-Family Units	Total Residential Units
<b>1. Resort Residential</b>		
Manole Bay Resort Residential (Project District)	Projected on Hold, Inventory to be Substantially Reduced, Long-Term Only	
Koala Resort Residential (Project District)	Projected on Hold, Inventory to be Substantially Reduced, Long-Term Only	
Sub-Total	N/A	N/A
Percent of Total		
<b>2. Standard Residential</b>		
Manole Bay Rural Residential (1)	Projected on Hold, Long-Term Only	
Manole Mauka (2)	Projected on Hold, Long-Term Only	
Koala Stables Rural Residential (3)	Projected on Hold, Long-Term Only	
Kaunaloa Harbor Mixed-Use Residential (4)	120	
Maui County Affordable Housing	0	
Dept. of Hawaiian Home Lands (6)	105	
Lanai City Expansion (Excluding Subject)	0	
Circle 500 Unplanned Gross Acres	0	
Sub-Total	225	
Percent of Total	100.0%	100.0%
Sub-Total	150	
Percent of Total	100.0%	100.0%
Sub-Total	150	
Percent of Total	100.0%	100.0%
Sub-Total	0	
Percent of Total	0.0%	0.0%
Sub-Total	0	
Percent of Total	0.0%	0.0%
Sub-Total	375	
Percent of Total	100.0%	100.0%
Sub-Total	375	
Percent of Total	100.0%	100.0%

TABLE 11

Source: Long Range Planning Division, Department of Planning, County of Maui, "2016 Lanai Community Plan Update".

- (1) Estimated at .75 lots per acre for 75 acre bulk development site.
- (2) Estimated 270 households on 56 net acres (5/acre) and 120 multifamily units on 12 net acres (10/acre) within 83 acre community site.
- (3) Estimated average lot size of two acres.
- (4) Estimated at 120 households (4/acre) on 30 net acres.
- (5) Assumes 12 units per net acre of multifamily building site.
- (6) Assuming 105 households on 35 acres (3/acre) as initial phase of project.

TABLE 12

**PROJECTION OF POTENTIAL SUBJECT UNIT ABSORPTION USING THE RESIDUAL METHOD  
BASED ON TOTAL DEMAND FOR RESIDENTIAL UNITS ON LANAI**

Segment	TOTAL UNITS	2020-2025	2026-2030	2031-2035
<i>Mid-Point Demand (Assuming 50% of Proposed Inventory is Developed)</i>				
Assumed Supply	113	33	40	40
Island Residential Unit	465	139	160	166
Shortage or (Excess) Supply	353	106	120	126
<b>Potential Residual Subject Demand</b>	<b>353</b>	<b>106</b>	<b>120</b>	<b>126</b>

= Periods in which Hokuoa inventory of 150 homes would be absorbed. The rounded absorption indicated by this method is about 8 years.

Source: Maui County, Developers/Agents, & CBRE.

TABLE 13

**SUMMARY OF SUBJECT PROJECTED DEMAND LEVELS  
USING THE MARKET SHARES METHOD**

Assuming Pre-Leasing of 150 Subject Units Begin in 2021

Mid-Point Demand Assumptions		Total Island Residential Unit Demand	Effective Subject Share	Indicated Total Subject Absorption
Date	Lease Year Period			
2022	1	28	80.00%	22
2023	2	28	80.00%	22
2024	3	28	75.00%	21
2025	4	28	60.00%	17
2026	5	28	60.00%	17
2027	6	32	60.00%	19
2028	7	32	60.00%	19
2029	8	32	40.00%	13

**ANALYSIS CONCLUSIONS & TOTALS**

**7.7 Years** **235** **63.80%** **150**

Source: CBRE

Addendum B

**ECONOMIC IMPACT ANALYSIS TABLES**

TABLE A

**SUMMARY OF MAJOR ECONOMIC IMPACTS  
AND PUBLIC FISCAL BENEFITS**

All Amounts Expressed in Constant, Uninflated 2020 Dollars

Analysis Item	Cumulative During Build-Out Period	Stabilized Annually Thereafter
Direct Capital Investment	\$115,182,583	
Local Contractor's Profits	\$11,518,258	
Local Supplier's Profits	\$4,607,303	
Worker Years of Jobs	687	24
Employee Wages	\$51,956,674	\$1,656,960
De Facto Population		398
Full-Time Resident Household Income	\$70,336,875	\$12,057,750
De Facto Population Expenditures	\$34,364,588	\$5,425,988
Total Lanai Island "Base" Economic Impact	\$166,282,028	\$8,282,948
<i>Accounting for All Direct Impacts</i>		
County of Maui Gross Tax Receipts	\$6,933,043	\$1,516,306
State of Hawaii Gross Tax Receipts	\$19,463,322	\$712,220
Source: CBRE		

**TABLE A-1  
PROJECTED HOKUAO BUILD-OUT TIMING**

Year	Project Year	Activity	Homes Built by Developers	
			Annually	Total
2020	1	Entitlements		
2021	2	Clearing, Grubbing, Infrastructure Emplacement		
2022	3	Initial Homes Constructed & Closed	20	20
2023	4	Home Construction & Closings Continue	20	40
2024	5	Home Construction & Closings Continue	20	60
2025	6	Home Construction & Closings Continue	20	80
2026	7	Home Construction & Closings Continue	20	100
2027	8	Home Construction & Closings Continue	20	120
2028	9	Home Construction & Closings Continue	20	140
2029	10	Final Homes Constructed & Closed	10	150

Source: CBRE

**TABLE A-2**

**PROPOSED DEVELOPMENT SCHEDULE AND ESTIMATED CONSTRUCTION COSTS**  
All Amounts Expressed in Constant 2020 Dollars

Item	Development and Lease Period		Totals During Build-Out
	2021 to 2025	2026 to 2030	
Infrastructure Emplacement (1)	\$40,007,958		\$40,007,958
Residential Construction (Combined Workforce and Market Homes, Average Overall Costs, including Sitework and Landscaping)	\$50,116,417	\$25,058,208	\$75,174,625
<b>TOTAL PERIODIC CONSTRUCTION COSTS</b>	<b>\$90,124,375</b>	<b>\$25,058,208</b>	<b>\$115,182,583</b>

Supplier Profits \$3,604,975 \$1,002,328 \$4,607,303

(1) Includes site work, on and off-site infrastructure, roadways and contingency; engineering & architecture, permits and study fees and GET for total project.

Source: CBRE

TABLE A-3

## ESTIMATED YEARLY FULL-TIME EQUIVALENT EMPLOYMENT POSITIONS CREATED BY DEVELOPMENT

	Development and Lease Period		Totals During Build-Out	Stabilized Annually
	2021 to 2025	2026 to 2030		
Infrastructure Employment (1)	100		100	
Residential Units	251	125	376	
Total Periodic Construction Jobs	351	125	476	
Maintenance & Common Element (2)	11	29	39	
Total FTE Jobs in Place at End of Period	8	18	18	18
Off-Site Employment (3)	120	51	172	
Total FTE Jobs in Place at End of Period	3	6	6	6
TOTAL PERIODIC WORKER YEARS	481	205	687	
TOTAL END-OF-PERIOD PERMANENT JOBCOUNT	11	24		24

(1) Infrastructure construction employment estimated at 1 worker-year for every \$400,000 in costs. Vertical construction employment estimated at 1 worker-year for every \$200,000 in costs. Includes all direct employment associated with construction, on and off-site.

(2) Includes common element administration and maintenance staff of 3 jobs, and single family home services (landscaping, maintenance & renovation) at one FTE for every 10 homes. Includes Paluno Lanai central employees and outside contractors.

(3) Estimated at one cumulative off-site employment position for every three on site positions.

Source: CBRE

TABLE A-4

## ESTIMATED YEARLY EMPLOYEE WAGES CREATED BY DEVELOPMENT

	All Amounts Expressed in Constant 2020 Dollars		Totals During Build-Out	Stabilized Annually
	2021 to 2025	2026 to 2030		
Construction Wages (1)				
Infrastructure Employment	\$7,875,567		\$7,875,567	
Residential Units	\$19,730,833	\$9,865,417	\$29,596,250	
Total Periodic Construction Wages	\$27,606,400	\$9,865,417	\$37,471,816	
Maintenance & Common Element (2)	\$726,180	\$1,971,060	\$2,697,240	\$1,244,880
Off-Site Employment Wages (3)	\$8,266,828	\$3,520,790	\$11,787,618	\$412,080
TOTAL PERIODIC WAGES	\$36,599,408	\$15,357,266	\$51,956,674	\$1,656,960

(1) Average annual wage for experienced full-time-equivalent construction worker (all trades) at \$78,740 in 2019.

(2) Average annual wage for experienced full-time-equivalent installation, maintenance and repair workers of \$69,160 in 2019.

(3) Average annual wage for experienced full-time-equivalent general worker at \$68,680 the 2019 average wage for all Total All Occupations<sup>1</sup> in the state.

Wages taken from State of Hawaii "Occupation Employment and Wages" as of 2019.

Source: CBRE

TABLE A-5

## ESTIMATED RESIDENT POPULATION, HOUSEHOLD INCOME AND DISCRETIONARY EXPENDITURES

All Amounts Expressed in Constant 2020 Dollars

	Development and Lease Period		Stabilized	Totals During Build-Out
	2021 to 2025	2026 to 2030		
Total Homes Occupied (End of Period)	100	50		
<b>Market-Rent Single-Family Homes Occupied (End of Period)</b>				
Percent of Total Units	50	24		
Full-Time Resident Average Household Size (person)	2.65	2.45		
Part-Time Resident Average Household Size (person)	N/A	N/A		
Full-Time Residents (100% of Total)	133	44		
Part-Time Residents (0% of Total)	0	0		
<b>Workforce Single-Family Homes Occupied (End of Period)</b>				
Percent of Total Units	50	26		
Full-Time Resident Average Household Size (person)	2.65	2.65		
Part-Time Resident Average Household Size (person)	N/A	N/A		
Full-Time Residents (100% of Total)	133	69		
Part-Time Residents (0% of Total)	0	0		
<b>De Facto Population (End of Period)</b>				
Total Full-Time Resident Population - End of Period	265	398		
Total Part-Time Resident Population - End of Period	0	0		
Total De Facto Population	265	398		
<b>RESIDENT HOUSEHOLD INCOME (1)</b>				
Average Annually End of Period	\$8,098,500	\$12,057,750	\$12,057,750	
Total During Period	\$20,076,250	\$50,240,625	\$70,336,875	
<b>TOTAL POPULATION EXPENDITURES (2)</b>				
Average Annually End of Period	\$9,617,325	\$5,425,988	\$5,425,988	
Total During Period	\$9,043,313	\$25,321,275	\$34,364,598	

(1) Average resident households at 1.50% of total household income average of \$53,590 in 2020; or \$80,385.

(2) For full-time residents assumes 10% of gross income for taxes, 30% for housing costs and 15% for utilities/maintenance. Leaving 45% of gross income as net disposable. For non-full time resident estimated disposable expenditures of average 9-hour spending per visitor per day of \$218.

Source: CBRE

TABLE A-6

## SUMMARY OF ECONOMIC IMPACTS ASSOCIATED WITH DEVELOPMENT

All Amounts Expressed in Constant 2020 Dollars

	Development and Lease Period		Totals During Build-Out	Stabilized Annually
	2021 to 2025	2026 to 2030		
<b>Construction Activity</b>				
Construction Wages	\$27,606,400	\$9,865,417	\$37,471,816	
Supplier Profits	\$3,604,975	\$1,002,328	\$4,607,303	
Other Construction Costs	\$59,913,000	\$14,190,463	\$73,103,463	
Total Construction Impact	\$90,124,375	\$25,058,208	\$115,182,583	
Maintenance & Common Element Wages	\$726,180	\$1,971,060	\$2,697,240	\$1,244,880
Off-Site Wages	\$8,266,828	\$3,520,790	\$11,787,618	\$412,080
Total Project Population Spending	\$9,043,313	\$25,321,275	\$34,364,598	\$5,425,988
Home Maintenance & Repairs (1)	\$1,500,000	\$750,000	\$2,250,000	\$1,200,000
<b>TOTAL BASE ECONOMIC IMPACT</b>	<b>\$109,660,695</b>	<b>\$56,621,333</b>	<b>\$166,282,028</b>	<b>\$8,282,948</b>

(1) Estimated at average of \$500 per home per month.

Source: CBRE

TABLE A-7

**ESTIMATES OF TOTAL ECONOMIC IMPACT FROM SUBJECT CONSTRUCTION**  
**USING INTER-COUNTY INPUT-OUTPUT MODEL "TYPE II" MULTIPLIERS**  
 All Amounts Expressed in Constant 2020 Dollars

Year	Development and Lease Period		Totals During		Stabilized Annually
	2021 to 2025	2026 to 2030	Build-Out	Annually	
<b>Construction Costs</b>					
1. Economic Output Multiplier Total State Economic Output	2.03 \$182,952,481	2.03 \$25,058,208	2.03 \$233,820,644	2.03 \$2,436,000	
2. Earnings Multiplier Total Increase in State Earnings	0.68 \$61,284,575	0.68 \$17,039,582	0.68 \$78,324,157	0.68 \$816,000	
3. State Tax Multipliers Total Increase in State Taxes	0.10 \$3,228,736	0.10 \$2,565,961	0.10 \$11,794,697	0.10 \$122,880	
4. Total Job Multipliers Total State Jobs Created	14.30 1,288.8	14.30 358.3	14.30 1,647.1	14.30 17.2	
<b>Construction Employment</b>					
5. Direct-Effect Job Multipliers Total Direct Jobs Created	2.04 715.2	2.04 255.6	2.04 970.8	2.04 55.1	
<b>Construction Wages</b>					
6. Direct-Effect Earnings Total Increase in Direct Earnings	1.62 \$44,722,368	1.62 \$15,981,975	1.62 \$60,704,343	1.62 \$2,684,275	

Sources: "2012 Hawaii Inter-County Input-Output Study" (approved August 2016), and CBRE

TABLE A-8

**ESTIMATES OF TOTAL ECONOMIC IMPACT FROM SUBJECT OPERATIONS**  
**USING INTER-COUNTY INPUT-OUTPUT MODEL "TYPE II" MULTIPLIERS FOR SERVICES"**  
 All Amounts Expressed in Constant 2020 Dollars

Year	Development Year		Totals During		Stabilized Annually
	2021 to 2025	2026 to 2030	Build-Out	Annually	
<b>Household Spending &amp; Maintenance</b>					
1. Economic Output Multiplier Total State Economic Output	1.95 \$20,559,459	1.95 \$50,838,986	1.95 \$71,398,446	1.95 \$12,920,676	
2. Earnings Multiplier Total Increase in State Earnings	0.53 \$5,587,956	0.53 \$13,817,776	0.53 \$19,405,731	0.53 \$3,511,773	
3. State Tax Multipliers Total Increase in State Taxes	0.06 \$606,240	0.06 \$1,499,098	0.06 \$2,105,339	0.06 \$380,994	
4. Total Job Multipliers Total State Jobs Created	15.00 158.1	15.00 391.1	15.00 549.2	15.00 99.4	
<b>Operating Employment</b>					
5. Direct-Effect Job Multipliers Total Direct Jobs Created	1.57 16.7	1.57 37.7	1.57 54.4	1.57 37.7	
<b>Operating Wages</b>					
6. Direct-Effect Earnings Total Increase in Direct Earnings	1.74 \$1,579,442	1.74 \$4,287,056	1.74 \$5,866,497	1.74 \$2,883,110	

Sources: "2012 Hawaii Inter-County Input-Output Study" (approved August 2016), and CBRE

Addenda

Addendum C

PUBLIC FISCAL BENEFIT ASSESSMENT TABLES

TABLE B-1

QUANTIFICATION OF PUBLIC FISCAL BENEFITS TO COUNTY AND STATE FROM HOKUAO DEVELOPMENT				
All Amounts Expressed in Constant 2020 Dollars				
Development Period	Development and Lease Period		Totals During Build-Out Period	Stabilized Annually After Build-Out
	2021 to 2025	2026 to 2030		
<b>PUBLIC BENEFITS (Revenues)</b>				
<b>1. COUNTY REAL PROPERTY TAXES</b>				
<i>Assessed Value</i>				
Finished Market Homes End of Period	50	24		74
Finished Workforce Homes End of Period	50	26		76
Vacant Land (76 acres)/Finished Lots Prior to Leasing	\$13,335,986	\$8,890,657	\$22,226,643	\$0
Market Homes (Rentals), Total Assessed Value No Exemptions	\$99,333,540	\$150,013,918	\$249,347,458	\$60,005,567
Workforce Homes (Rentals), Total Assessed Value No Exemptions	\$81,048,889	\$123,194,311	\$204,243,200	\$49,277,724
<b>Total Assessed Value</b>	<b>\$193,718,415</b>	<b>\$282,098,887</b>	<b>\$475,817,302</b>	<b>\$109,283,292</b>
<i>Real Property Taxes</i>				
Vacant Land/Finished Lots	\$33,473	\$22,314	\$55,789	\$0
Market Homes (Rentals), Total Assessed Value No Exemptions	\$551,201	\$832,577	\$1,383,878	\$333,031
Workforce Homes (Rentals), Total Assessed Value No Exemptions	\$449,821	\$683,728	\$1,133,550	\$273,491
<b>Total Real Property Taxes</b>	<b>\$1,034,596</b>	<b>\$1,538,621</b>	<b>\$2,573,217</b>	<b>\$606,522</b>
<b>INCLUDES ALL STATE TAXES ONLY</b>				
<b>2. STATE INCOME TAXES</b>				
Taxable Personal Income (Includes 100% Population)	\$56,695,658	\$65,597,891	\$122,293,549	\$2,862,735
Taxable Corporate Profits	\$10,893,452	\$5,465,027	\$16,358,479	\$828,295
Personal Taxes Paid	\$2,891,479	\$3,345,492	\$6,236,971	\$145,999
Corporate Taxes Paid	\$479,312	\$240,461	\$719,773	\$36,445
<b>TOTAL STATE INCOME TAXES</b>	<b>\$9,370,790</b>	<b>\$3,985,954</b>	<b>\$6,956,744</b>	<b>\$182,444</b>
<b>3. STATE GROSS EXCISE TAX</b>				
Taxable Transactions				
Construction & Maintenance Contracts	\$44,017,975	\$15,942,792	\$79,960,767	\$1,200,000
Worker Disposable Income Purchases	\$35,873,228	\$13,386,206	\$49,259,434	\$1,656,960
De Facto Population Discretionary Expenditures	\$9,043,313	\$25,321,275	\$34,364,588	\$5,425,988
	\$108,934,515	\$54,650,273	\$163,584,788	\$8,282,948
<b>TOTAL STATE EXCISE TAX</b>	<b>\$4,538,974</b>	<b>\$2,277,113</b>	<b>\$6,816,087</b>	<b>\$345,126</b>
<b>INCLUDES ALL COUNTY AND STATE TAXES ONLY</b>				
<b>TOTAL GROSS PUBLIC REVENUES</b>				
Real Property Taxes To County of Maui	\$1,034,596	\$1,538,621	\$2,573,217	\$606,522
Adjustment for Other Proportional Taxes (1)	2.50	2.50	2.50	2.50
Adjusted Maui County Revenues	\$2,586,490	\$3,846,553	\$6,433,043	\$1,516,306
Plus Impact Fees (2)	\$0	\$0	\$500,000	\$0
<b>Total County of Maui Receipts</b>	<b>\$2,586,490</b>	<b>\$3,846,553</b>	<b>\$6,933,043</b>	<b>\$1,516,306</b>
To State (Income Taxes and GET)	\$7,909,765	\$5,863,067	\$13,772,831	\$527,570
Adjustment for Other Proportional Taxes	1.35	1.35	1.35	1.35
Adjusted State Revenues	\$10,678,183	\$7,915,140	\$18,593,322	\$712,220
Plus Impact Fees	\$870,000	\$0	\$870,000	\$0
<b>Total State of Hawaii Receipts</b>	<b>\$11,548,183</b>	<b>\$7,915,140</b>	<b>\$19,463,322</b>	<b>\$712,220</b>
<b>AGGREGATE TAX REVENUES</b>	<b>\$14,134,672</b>	<b>\$11,761,693</b>	<b>\$25,896,365</b>	<b>\$2,228,525</b>

(1) Real property taxes comprised 40.2 percent and 39.3 percent of Total Revenues for the County of Maui in 2020 and 2021 fiscal years, respectively, averaging about 40 percent. Economic activity generates other revenue items of 60 percent or additional 150 percent above real property taxes.

(2) For DOE estimated of \$5,800 per home.

(3) In recent fiscal years, Gross Excise and Income Taxes have averaged some 74 percent of total State revenues; other revenue items 26 percent, or 35 percent above income and gross excise taxes.

Source: CBRE

TABLE B-1

## QUANTIFICATION OF PUBLIC FISCAL BENEFITS TO COUNTY AND STATE FROM HOKUQAO 201H DEVELOPMENT

All Amounts Expressed in Current 2020 Dollars

Development Period	Development and Lease Period		Totals During Build-Out Period	Stabilized Annually After Build-out
	2021 to 2025	2026 to 2030		
<b>PUBLIC BENEFITS (Revenue)</b>				
<b>1. COUNTY REAL PROPERTY TAXES</b>				
Assessed Value				
Finished Market Homes End of Period	50	24		74
Finished Workforce Homes End of Period	50	26		76
Vacant Land (50.1 acres)/Finished Lots Prior to Leasing				
Market Homes (Rentable), Total Assessed Value No Exemptions	\$13,335,986	\$8,890,657	\$22,226,643	\$0
Workforce Homes (Rentable), Total Assessed Value No Exemptions	\$99,333,540	\$150,013,918	\$249,347,458	\$60,005,667
Total Assessed Value	\$193,718,415	\$282,098,887	\$475,817,302	\$109,283,292
<b>Real Property Taxes</b>				
Vacant Land/Finished Lots	\$39,473	\$22,316	\$55,789	\$0
Market Homes (Rentable), Total Assessed Value No Exemptions	\$651,301	\$832,577	\$1,383,878	\$333,031
Workforce Homes (Rentable), Total Assessed Value No Exemptions	\$449,821	\$689,728	\$1,133,550	\$273,491
Total Real Property Taxes	\$1,039,596	\$1,539,621	\$2,573,217	\$606,592
Source: CBRE				

TABLE B-2

## QUANTIFICATION OF PUBLIC FISCAL BENEFITS TO COUNTY AND STATE FROM HOKUQAO DEVELOPMENT

All Amounts Expressed in Current 2020 Dollars

Development Period	Development and Lease Period		Totals During Build-Out Period	Stabilized Annually After Build-out
	2021 to 2025	2026 to 2030		
<b>PUBLIC BENEFITS (Revenue)</b>				
<b>1. COUNTY REAL PROPERTY TAXES</b>				
Assessed Value				
Finished Market Homes End of Period	50	24		74
Finished Workforce Homes End of Period	50	26		76
Vacant Land (7.6 acres)/Finished Lots Prior to Leasing				
Market Homes (Rentable), Total Assessed Value No Exemptions	\$13,335,986	\$8,890,657	\$22,226,643	\$0
Workforce Homes (Rentable), Total Assessed Value No Exemptions	\$99,333,540	\$150,013,918	\$249,347,458	\$60,005,667
Total Assessed Value	\$193,718,415	\$282,098,887	\$475,817,302	\$109,283,292
<b>Real Property Taxes</b>				
Vacant Land/Finished Lots	\$39,473	\$22,316	\$55,789	\$0
Market Homes (Rentable), Total Assessed Value No Exemptions	\$651,301	\$832,577	\$1,383,878	\$333,031
Workforce Homes (Rentable), Total Assessed Value No Exemptions	\$449,821	\$689,728	\$1,133,550	\$273,491
Total Real Property Taxes	\$1,039,596	\$1,539,621	\$2,573,217	\$606,592
Source: CBRE				