ANNUAL REPORT

ON THE STATUS OF LAND USE ON OAHU

Fiscal Year 2017

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INTRODUCTION

This *Annual Report on the Status of Land Use on Oahu* reviews land use in the context of the planning system set in place by State law and the Revised Charter of the City & County of Honolulu (Charter). The planning system begins with the classification of all lands into use districts to reflect the broad interest of the State. The counties direct their planning efforts at lands in the State Urban District (and since 1986, also at lands under 15 acres in other districts). To guide planning on Oahu, the Charter mandates the preparation of a General Plan (GP) and a set of regional plans to implement the objectives and policies of the GP. This report is required by Section 6-1503(d) of the Charter.

The GP was adopted in 1977 and has undergone a number of revisions. Eight regional plans have been adopted, the first in 1997, and revisions have either been adopted or are underway. These regional plans are called Development Plans (DPs) for the two areas where growth is encouraged and Sustainable Communities Plans (SCPs) for the remaining six areas. To avoid unnecessary verbiage, all eight regional plans are referred to in this report generically as Development Plans - the term used in the Charter.

The goal of this report is to provide meaningful measures of progress on how each DP is moving toward its envisioned future. The emphasis is on the physical development of the island in each of the eight regions, referred to as Development Plan Areas (DPAs). As such, this report provides data on population trends, housing construction activities, land use approvals, the status of selected City infrastructure projects, and other aspects of land use that are mandated by the Charter. Specific tables include: (1) the existing and projected population, visitor units, housing units, and jobs by DPA; (2) the progress being made on known housing developments; and (3) revisions to the DPs and selected land use approvals and infrastructure projects.

This information is intended to help the City Council, the development community, and interested citizens understand how growth is occurring and how the development objectives of the City and County of Honolulu are being met.

This report updates the Fiscal Year 2014 Annual Report (published in June 2016). Annual Reports for Fiscal Years 2015 and 2016 were not produced. This report updates data to Fiscal Year 2017, which ended on June 30, 2017. All data up to that date is regarded as actual events, and all remaining data as estimates. In addition all references to "year" are intended to mean fiscal year, unless otherwise indicated as calendar year, which ends on December 31st.

The report is organized into three chapters as follows:

Chapter I: Land Use and Population

This chapter provides data on: (1) the amount of land on Oahu in each State Land Use District and how they changed over time; (2) the distribution by DPA of the existing population on Oahu for each decade from 1980 through 2010; and (3) growth projections by DPA of resident population for the years 2020, 2025 and 2040. The City's population distribution guideline,

stated in the GP for the year 2025, is also shown for comparison with actual and projected future conditions.

Chapter II: Housing Supply and Demand

This chapter examines the supply and demand aspects of housing. The long-range demand projection is derived and explained. Supply projections are determined from known projects based on a survey of developers, as supplemented by public announcements, permit applications, and adopted unilateral agreements. Affordable housing is separately discussed. An assessment of how housing supply compares with housing demand in each DPA on Oahu is presented.

Chapter III: Land Use Plans and Infrastructure Projects

This chapter reports on: (1) the status of reviews and revisions to the City's eight DPs; (2) specific changes to entitlements such as rezoning and State Land Use District boundary amendments; and (3) the current status of the City's active Public Infrastructure Map projects, based on a survey of City agencies.

CHAPTER I: LAND USE AND POPULATION

This Chapter examines land use from a broad perspective. Hawaii's overall land use management system begins with the process established by the State Land Use Law in 1961 (Chapter 205, Hawaii Revised Statutes). All lands are classified into one of four districts. Amendments to the boundaries of these districts are made from time to time to reflect the changing policy needs of the State. The City & County of Honolulu begins its land use stewardship by establishing growth policies in the General Plan (GP) in terms of the geographic distribution of the future population. Development Plans (DPs) are then prepared, as mandated by the City Charter, for individual planning regions to implement these growth policies. Based on the policies promulgated in these plans, the Department of Planning and Permitting (DPP) generates geographically detailed projections or forecasts of the future population. These population forecasts are used to measure how well the DPs implement the growth policies of the GP.

These population forecasts also serve as the common basis for the planning of all infrastructures on Oahu, including roads, sewer and water, to ensure that they are mutually consistent and conform to the overall growth objectives of the City and State.

A. STATE LAND USE

The State Land Use Commission classifies all lands in Hawaii into four districts. On Oahu only three districts apply: Urban, Agricultural and Conservation. **FIGURE I-1** shows the amount of land on Oahu in each of these districts from 1970 to 2016. Also shown for 1970 and 2016 are the percentages these acreages represent of the island's total land area. In 1970, 22 percent of land on Oahu was classified as Urban; by 2016, the share of lands in the Urban district has increased steadily to 26 percent. Agricultural lands declined correspondingly, from 38 percent to 33 percent. Conservation lands remained steady at 41 percent.

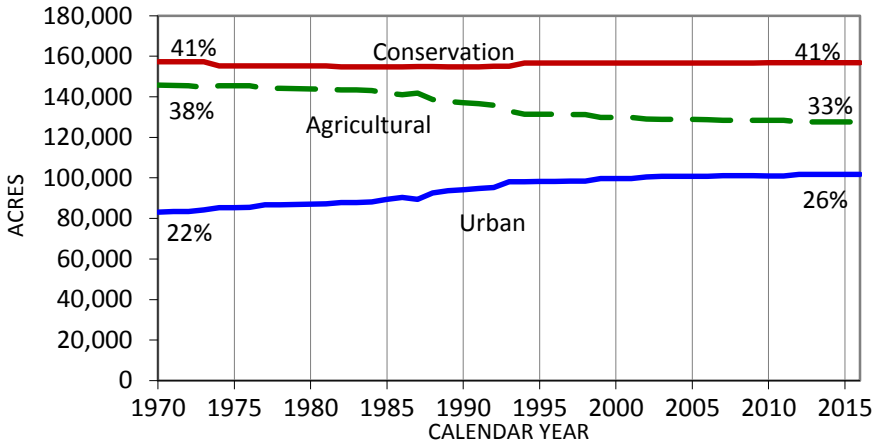
These shifts result from boundary amendments that occur from time to time. **TABLE I-1** tabulates the cumulative changes from 1970 for each district. In the past 40-plus years, the Urban district gained over 18,500 acres, basically at the expense of a loss of over 18,100 acres of Agricultural lands. Conservation lands stayed basically the same.

This expansion of urban land is a reflection of a population that increased by more than half in the same 40-year period.

B. POPULATION TRENDS AND GENERAL PLAN POLICY

Population distribution is a specific concern of the GP. The GP policy for population distribution is set forth in Population Objective C, which contains four policies for the attainment of a population distribution that *"will allow the people of Oahu to live and work in harmony."*

FIGURE I-1: STATE LAND USE DISTRICT ACREAGE (1970 - 2016)[1]



% = % of Oahu land area total

TABLE I-1: STATE LAND USE DISTRICTS CUMULATIVE CHANGE FROM 1970 (IN ACRES)

Calendar Year	Urban	Agricultural	Conservation
1975	2,293	-295	-1,999
1980	3,962	-1,949	-2,013
1985	6,408	-3,986	-2,422
1990	11,111	-8,693	-2,418
1995	15,125	-14,479	-646
2000	16,597	-15,951	-646
2005	17,641	-16,996	-645
2006	17,675	-17,025	-650
2007	18,020	-17,370	-650
2008	18,020	-17,370	-650
2009	18,020	-17,370	-650
2010	17,805	-17,370	-435
2011	17,805	-17,370	-435
2012	18,572	-18,137	-435
2013	18,572	-18,137	-435
2014	18,572	-18,137	-435
2015	18,572	-18,137	-435
2016	18,572	-18,137	-435

SOURCE: State Land Use Commission

[1] Data from 2016 was the latest available at the time this report was being developed.

The first three policies lay out the directed growth policy of the City and County of Honolulu. This fundamental policy, which has remained essentially intact since the GP was first adopted in 1977, aims to: (1) promote the full development of the Primary Urban Center (PUC), (2) encourage growth in the secondary urban center at Kapolei and in the urban fringe areas in Ewa and Central Oahu to meet housing needs not available in the PUC, and (3) discourage significant growth in the remaining urban fringe and rural areas of Oahu. The fourth policy of Population Objective C is a table of percentages depicting the population distribution on Oahu among the eight Development Plan Areas (DPAs) for the year 2025. These percentages are provided to guide the implementation of the directed growth policy. They are intended to serve as "markers" to measure how well the directed growth policy is being achieved in the City's plans.

In March 2012, the State Department of Business, Economic Development, and Tourism (DBEDT) released its latest series of population and economic projections for the counties in 5-year increments to the year 2040. Based on this projection series, the DPP projected the likely population distribution among the eight DPAs, taking into account: (1) the most recent GP population policy, (2) the potential for housing in accordance with the land use policies given in each area's Development Plan or Sustainable Communities Plan, (3) the progress being made on known developments, and (4) realistic expectations of Oahu's future housing market and economy.

The population projections for the years 2020, 2025, and 2040 are shown in **TABLE I-2**, along with the actual population counts from the 1980, 1990, 2000, and 2010 U.S. Census. The population numbers are given in the bottom portion while the percentage breakdown by DPA is given on top. The Policy 4 population percentages by DPA for the year 2025 are also shown.

The results shown in **TABLE I-2** are presented graphically in **FIGURE I-2**. Each group of bars shows the changing population shares of a DPA in 5-year intervals from 2000 to 2040. Superimposed on the graph are the GP markers, which are shown as a black line over the bar for the year 2025. The graph shows clearly that all the planning areas are trending in the direction envisioned by the GP, except for Waianae, whose population share is expected to remain markedly above its marker well into the distant future. The graph also shows that the PUC population share is expected to decline faster than the GP vision, while Ewa's share is expected to increase faster. The other areas are essentially "on target" with respect to approaching the markers laid out by the GP.

Projections of visitor units, housing units, and jobs corresponding to the population projections are shown in **TABLE I-3**. Visitor units are defined as any housing units intended for visitor accommodation. They include hotels, condo hotels, bed and breakfasts, and timeshares.

TABLE I-2: POPULATION DISTRIBUTIONS

DEVELOPMENT PLAN AREA	PERCENT OF ACTUAL POPULATION TOTAL				PERCENT OF PROJECTED POPULATION TOTAL			GENERAL PLAN PERCENTAGE FOR 2025[2]
	1980	1990	2000	2010	2020	2025	2040	
Primary Urban Center	54.7%	51.7%	47.9%	45.6%	44.3%	43.7%	43.0%	46.0%
Ewa	4.7%	5.1%	7.8%	10.6%	13.0%	14.2%	15.9%	13.0%
Central Oahu	13.3%	15.6%	16.9%	17.7%	17.4%	17.5%	17.7%	17.0%
East Honolulu	5.7%	5.5%	5.3%	5.2%	5.1%	4.9%	4.6%	5.3%
Koolau Poko	14.3%	14.1%	13.5%	12.1%	11.5%	11.1%	10.4%	11.6%
Koolau Loa	1.4%	1.7%	1.7%	1.8%	1.7%	1.7%	1.7%	1.4%
North Shore	1.7%	1.9%	2.1%	1.9%	1.9%	1.8%	1.8%	1.7%
Waianae	4.1%	4.5%	4.8%	5.1%	5.0%	5.0%	4.9%	4.0%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
	ACTUAL POPULATION				**PROJECTED POPULATION**			
Primary Urban Center	417,240	432,023	419,333	435,118	444,800	449,900	467,100	
Ewa	35,523	42,931	68,696	101,397	130,700	146,100	172,700	
Central Oahu	101,685	130,526	148,208	168,643	174,400	180,000	192,400	
East Honolulu	43,213	45,654	46,735	49,914	51,500	50,600	50,000	
Koolau Poko	109,373	117,694	117,999	115,164	115,900	114,600	113,300	
Koolau Loa	10,983	14,263	14,546	16,732	17,400	17,700	18,100	
North Shore	13,061	15,729	18,380	17,720	18,600	18,900	19,600	
Waianae	31,487	37,411	42,259	48,519	50,500	51,600	53,600	
TOTAL	**762,565**	**836,231**	**876,156**	**953,207**	**1,003,700**	**1,029,400**	**1,086,700**	

NOTE: Parts may not sum to totals because of rounding.
SOURCE: U.S. Census; Department of Planning and Permitting

[2] General Plan (www.honoluludpp.org/Planning/GeneralPlan.aspx) Population Objective C, Policy 4

FIGURE I-2: POPULATION TRENDS VS. GENERAL PLAN POLICY

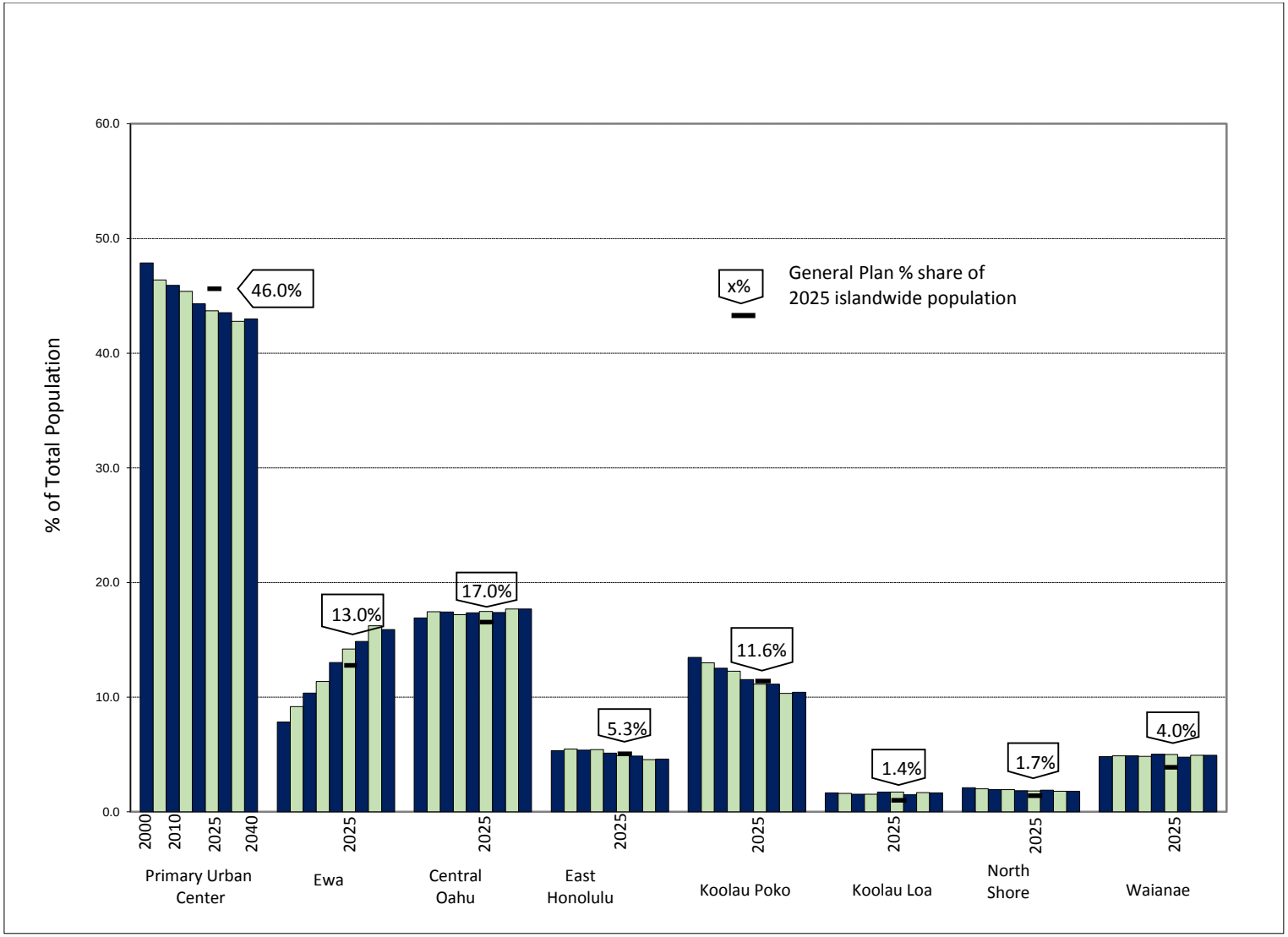


TABLE I-3: GROWTH PROJECTIONS BY DP AREA

DEVELOPMENT PLAN AREA	RESIDENT POPULATION								VISITOR UNITS							
	Number				Share				Number				Share			
	2010	2020	2025	2040	2010	2020	2025	2040	2010	2020	2025	2040	2010	2020	2025	2040
Primary Urban Center	435,118	444,795	449,881	467,074	46%	44%	44%	43%	30,961	26,457	27,364	30,117	92%	76%	76%	76%
Ewa	101,397	130,702	146,096	172,679	11%	13%	14%	16%	1,154	6,323	6,541	7,198	3%	18%	18%	18%
Central Oahu	168,643	174,351	179,984	192,369	18%	17%	17%	18%	212	177	183	202	1%	1%	1%	1%
East Honolulu	49,914	51,514	50,627	49,985	5%	5%	5%	5%	370	310	320	352	1%	1%	1%	1%
Koolau Poko	115,164	115,868	114,626	113,258	12%	12%	11%	10%	68	58	60	71	0%	0%	0%	0%
Koolau Loa	16,732	17,427	17,704	18,104	2%	2%	2%	2%	586	1,230	1,272	1,218	2%	4%	4%	3%
North Shore	17,720	18,570	18,906	19,641	2%	2%	2%	2%	28	23	25	27	0%	0%	0%	0%
Waianae	48,519	50,480	51,590	53,589	5%	5%	5%	5%	217	181	187	206	1%	1%	1%	1%
OAHU TOTAL	**953,207**	**1,003,700**	**1,029,400**	**1,086,700**	**100%**	**100%**	**100%**	**100%**	**33,596**	**34,800**	**36,000**	**39,400**	**100%**	**100%**	**100%**	**100%**
Annual Growth Rate		0.3%	0.3%	0.5%						0.2%	0.3%	0.9%				

DEVELOPMENT PLAN AREA	HOUSING UNITS								TOTAL JOBS							
	Number				Share				Number				Share			
	2010	2020	2025	2040	2010	2020	2025	2040	2010	2020	2025	2040	2010	2020	2025	2040
Primary Urban Center	174,569	184,343	189,377	204,112	52%	51%	50%	49%	437,011	458,299	473,329	493,054	73%	71%	71%	68%
Ewa	30,726	40,899	46,425	57,505	9%	11%	12%	14%	28,294	44,567	46,028	73,607	5%	7%	7%	10%
Central Oahu	50,998	54,482	57,168	63,679	15%	15%	15%	15%	56,174	64,965	67,095	78,524	9%	10%	10%	11%
East Honolulu	18,774	19,991	19,945	20,283	6%	5%	5%	5%	10,252	10,357	10,696	10,406	2%	2%	2%	1%
Koolau Poko	36,894	38,328	38,477	39,154	11%	11%	10%	9%	46,181	47,271	48,822	47,578	8%	7%	7%	7%
Koolau Loa	4,884	5,262	5,432	5,756	1%	1%	1%	1%	7,316	8,287	8,558	9,144	1%	1%	1%	1%
North Shore	6,678	7,228	7,478	8,011	2%	2%	2%	2%	5,888	6,055	6,254	6,059	1%	1%	1%	1%
Waianae	13,376	14,363	14,906	16,136	4%	4%	4%	4%	9,098	9,364	9,671	9,382	2%	1%	1%	1%
OAHU TOTAL	**336,899**	**364,900**	**379,200**	**414,600**	**100%**	**100%**	**100%**	**100%**	**600,214**	**649,200**	**670,500**	**727,800**	**100%**	**100%**	**100%**	**100%**
Annual Growth Rate		0.5%	0.4%	0.9%						0.5%	0.3%	0.8%				

NOTE: All projected "Oahu Total" counts are rounded to the nearest 100. Percentage shares by DP area may not sum to 100% due to rounding.

Areas with negative increases should be interpreted as stable communities with little or no growth expected. The negative population is caused by declines in household size that negated any population increases from housing unit gains.

CHAPTER II: HOUSING SUPPLY AND DEMAND

This chapter examines land use from the perspective of housing, which takes up more than 75 percent of the lands zoned for urban uses on Oahu. Both the supply and demand aspects of housing are discussed. Demand analysis seeks to determine the number of housing units required to house the projected population described in Chapter I. The resultant long-range housing projection to the year 2040 is described. Supply analysis is concerned with determining how this projected need can be met. This report takes a bottom-up approach to supply by focusing on the projects and units being built or likely to be built based on current market knowledge, as opposed to a top-down approach that calculates the theoretical potential supply based on the characteristics of the land and the rules and constraints of the applicable regulations. The resultant housing production data details the location, characteristics and timeline of all housing units identified to date. Because of its special importance, affordable housing data is separately presented. This chapter concludes with an assessment of how the projected demand compares with the foreseeable supply, and what this comparison says about the housing policies in the underlying land use plans.

It is important to first point out that in this report supply and demand are net quantities. That is, the demand for housing in a particular year represents only the new demand that arise because of the new population in that year. Demand attributable to the relocation of the existing population is not reflected. In other words, this report is not concerned with gross market activities and fluctuations. Similarly, the housing supply in a particular year represents the new units constructed after accounting for the units demolished or relocated. In other words, the units tabulated for the projects in this report are not necessarily the total number of units associated with the projects.

Another point that requires clarification is that the term "housing unit" refers only to units intended for use by local residents, as opposed to visitors. This definition was observed in the historical data. Hotel condominiums, for example, are treated by the Census as commercial units, and so are excluded from the housing count. This definition was also used in the identification of known housing projects, so that condominiums likely to be operated as transient vacation rentals (TVRs) are not counted. However, TVRs without the necessary Nonconforming Use Certificates (NUCs) are counted as housing units because, in the case of bed and breakfast operations, the owner resides in the unit, and in other cases, the TVR uses may not be permanent. It is possible, however, that known projects identified as housing units will in fact be used as second homes or be subsequently placed in a hotel pool, thereby rendering the housing units unavailable to the resident population. The DBEDT report entitled *"Residential Home Sales in Hawaii: Trends and Characteristics"*[3] revealed that during the period from 2008 to 2015, 11.6 percent of the home sales on Oahu were purchased by mainlanders and that 3.6 percent were purchased by foreigners. Thus, up to 15 percent of the housing units identified may not be available since units purchased by non-residents are more likely to be used as second homes or as TVRs. To the extent that a portion of these non-resident owned

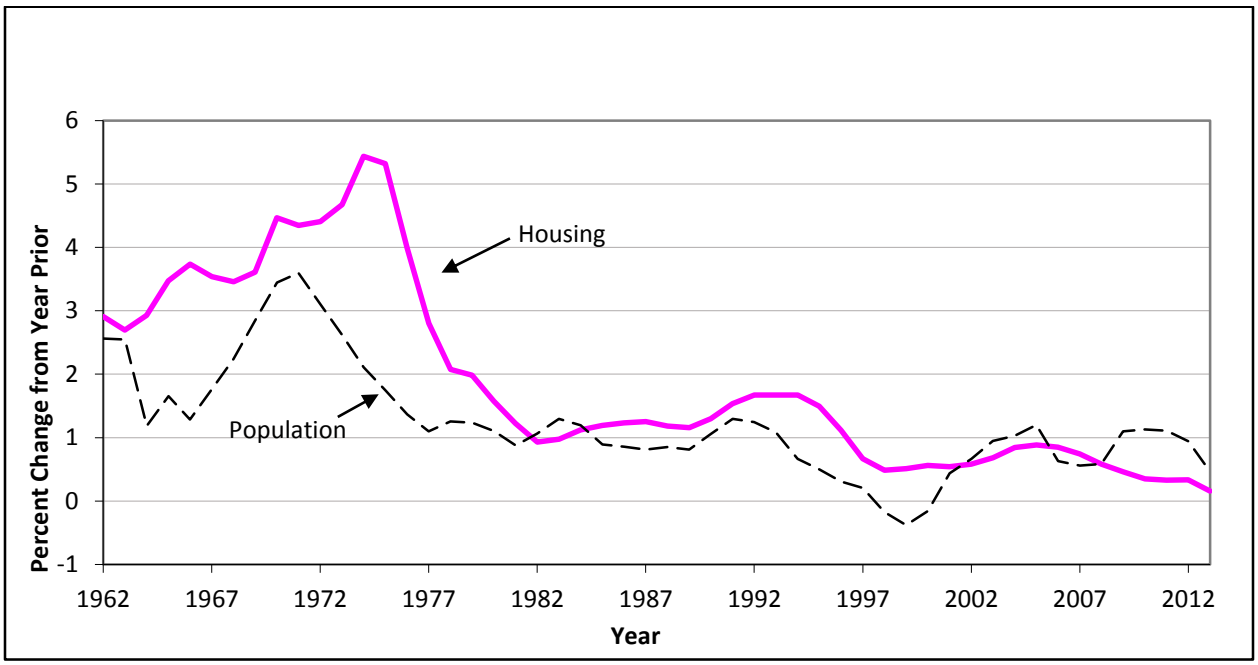
[3] *Residential Home Sales in Hawaii, Trends and Characteristics: 2008-2015*, DBEDT, May 2016, (http://files.hawaii.gov/dbedt/economic/data_reports/homesale/Residential_Home_Sales_in_Hawaii_May2016.pdf)

units will in fact be available as rentals, the findings and conclusions of this report pertaining to the housing supply will need to be adjusted accordingly.

A. HISTORICAL EXPERIENCE

Historical data, from 1960 to the present, shows a direct relationship between housing and population growth. **FIGURE II-1** shows that the rate of growth of housing varies in a way that is very similar to the rate of growth of population. There are two observations of note. First, housing growth follows population growth by about two years. This is expected because it takes time for the building industry to recognize and respond to the need of the new population.

FIGURE II-1: HOUSING FOLLOWS POPULATION BY TWO YEARS

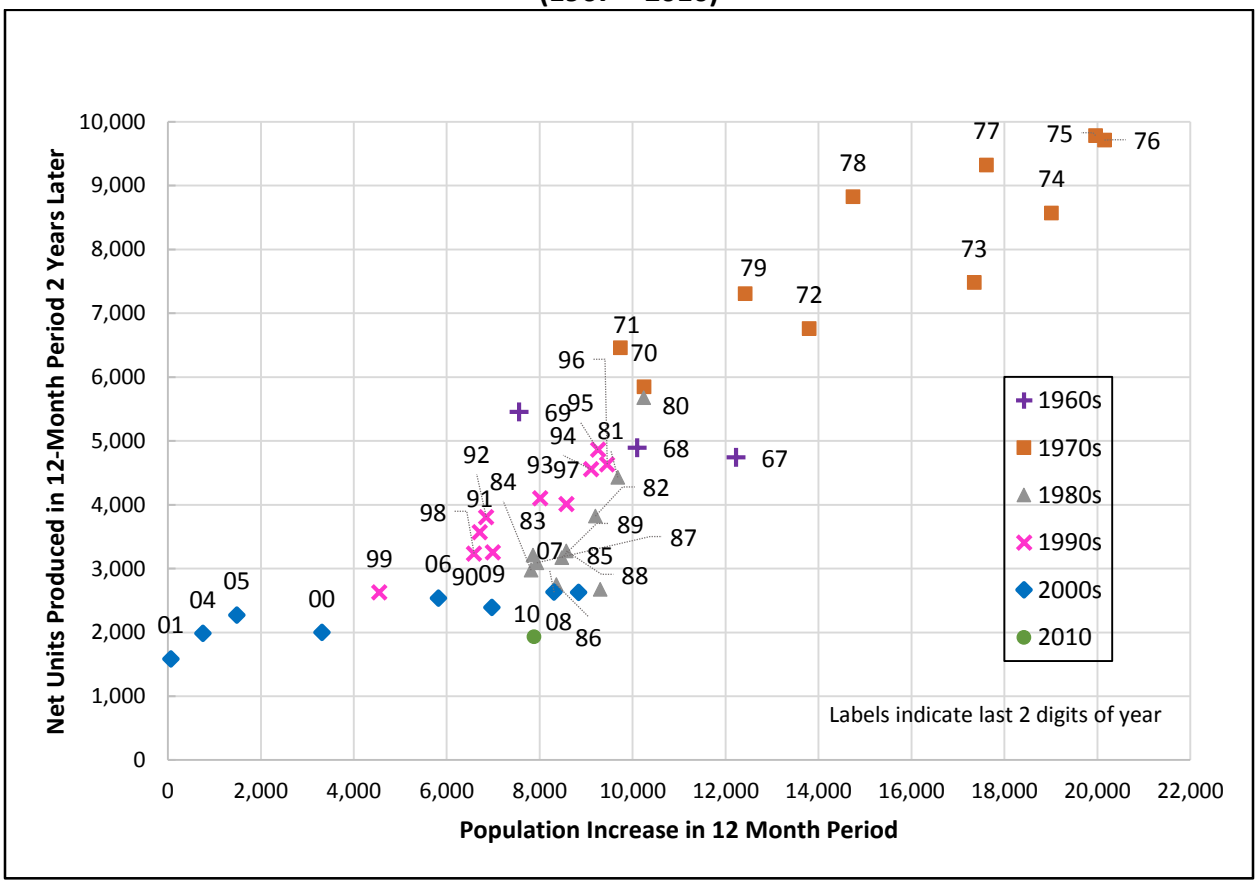


Second, housing growth rates tend to exceed population growth rates in a normal housing market. This is a reflection of the overall trend toward smaller household size. In a prolonged period of market difficulties, however, housing growth rates may trail population growth rates. This was in fact the case following the financial meltdown of 2007. In the long-run, however, these fluctuations are expected to even out, maintaining the relationship observed.

This relationship is better depicted by plotting the change in population against the resultant change in housing on a year-over-year basis. The result is shown in **FIGURE II-2**, where each data point represents the experience of a single year. The plot shows how housing production responds to changes in population over the course of more than five decades. Of interest is the rate of change between housing and population, as indicated by the slope implied by the data points. Two observations are noteworthy. First, data points belonging to a particular time period tend to cluster near each other. Second, different time periods exhibit slightly different slopes. This difference can be attributed to the economic conditions of the time. For example,

in the 60s and 70s, population increased in excess of 10,000 people per year, due in large measure to the euphoria of Statehood and the arrival of the jumbo jet. Housing increased correspondingly, as indicated by the positive slope of the trend line through the points representing the 70s. In the 80s and 90s, annual population growth fell to the 7,000-10,000 range, due in part to the airline strike in 1985, the Gulf War, and Hurricane Iniki. In response to the population reduction, housing production also declined, but not as rapidly as population, resulting in a slope that is steeper than that of the 70s. The post-2000 decade is characterized by slow population growth and economic malaise, punctuated by the financial meltdown that began in 2007. The housing response was essentially flat, with a nominally positive slope. The Great Recession that ensued in 2007, created a distressed market where housing production declined while population increased, resulting in a housing response rate that was negative.

FIGURE II-2: HOUSING PRODUCTION AND POPULATION GROWTH (1967 – 2010)



While it is instructive to note the variations in the way housing responds to population, it is also important to point out that the data across the entire timeframe of more than fifty years also cast a trend line that is relatively linear. Regression analysis reveals a relationship that is statistically significant, tying the population increase over a 12-month period to the net housing units produced (construction less demolition) in the 12-month period two years later. The relationship can be described as consisting of a constant gain of 650 units and an additional 42 units for every 100 people added to the population base. This can be interpreted as the

building industry anticipating a population increase of about 1,500 people a year, proceeding with building the units needed, then adjusting their plans to build more units as more population becomes evident. It should be pointed out that developers do not count population directly, but instead rely on price increases to gauge the degree of population growth.

B. DEMAND PROJECTION

Long-range planning on Oahu begins with the total population projected by the State DBEDT for each county. In order to plan for the housing needs of the projected population, it is necessary to develop a long-range housing projection.

The relationships gleaned from the historical data provided the quantitative basis for translating population into housing units. To avoid having to assume a specific market environment for the future, the statistical relationship based on the entire historical experience was used rather than any specific period as the basis for the projection.

The result is shown in **FIGURE II-3**, where the historical increases per year are shown together with the projected increases to the year 2040. Note that since Oahu's population over the next 30 years is not expected to exceed 5,000 people per year, this means the average housing increase is about 2,700 units per year. **TABLE II-1** summarizes the increase in housing units every 5 years from 2010 to 2040. The total housing stock for the year 2040 is estimated to be 414,600 units, for a population of 1,086,700. This represents a net increase of 77,700 new units between 2010 and 2040.

FIGURE II-3: HISTORICAL AND PROJECTED HOUSING UNIT INCREASE PER YEAR

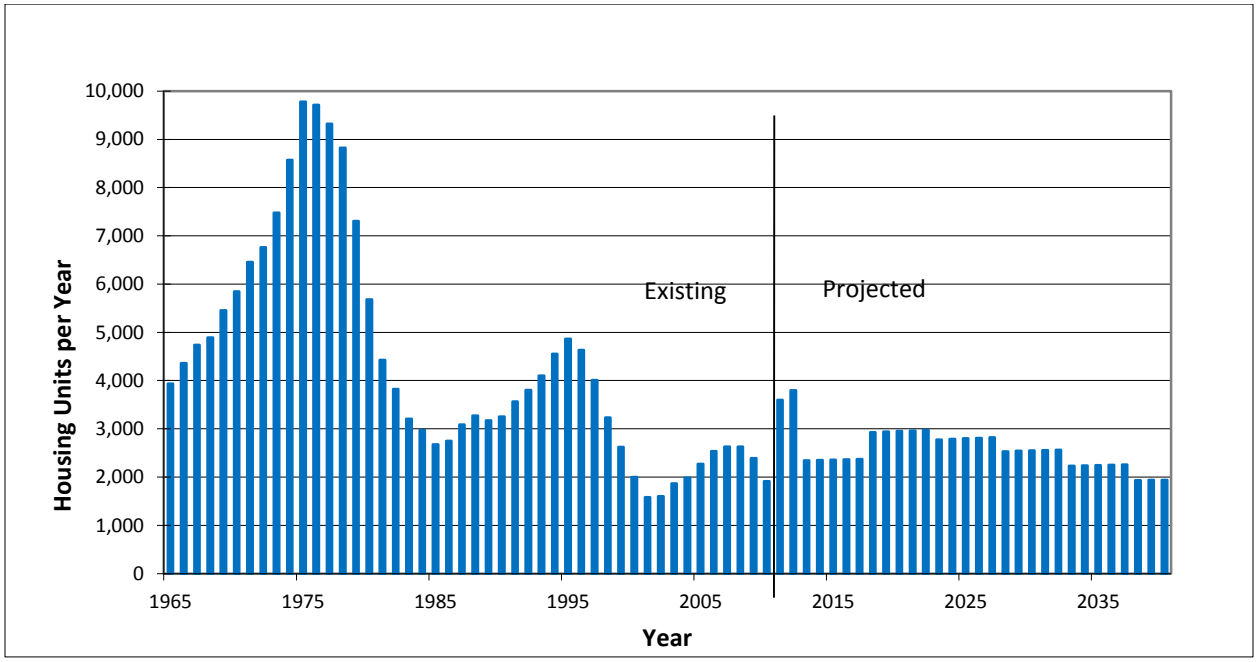


TABLE II-1: UNITS NEEDED TO HOUSE PROJECTED POPULATION (2010 – 2040)

YEAR	POPULATION	HOUSING UNITS	NET NEW UNITS
2010	955,800	336,900	0
2015	976,200	351,300	14,400
2020	1,003,700	364,900	28,000
2025	1,029,400	379,200	42,300
2030	1,052,100	392,500	55,600
2035	1,071,200	404,300	67,400
2040	1,086,700	414,600	77,700

This population-driven estimate of future housing demand can be interpreted as the historical-norm projection. This is because the projection will provide the level of housing that historically has satisfied the "shelter" need of the population. It assumes that the housing market will respond to the changing population the same way it did in the past, with the same characteristics and efficiencies (or inefficiencies), and under the same regulatory limitations and constraints. In other words, the future population under the historical norm projection would be no worse off housing-wise than the current or past population. They would be better off if more housing were provided by the market and worse off if less were provided.

It should also be noted that this projection is intended to estimate housing projection in the long-run. It is not intended to measure the year-to-year fluctuations of the housing market.

C. SUPPLY PROJECTION

Of equal importance to the projection of future housing needs is the examination of current conditions and actual development events. Thus, a detailed description of the housing units currently being produced is provided in this report. The inventory of housing units is created based on known projects as well as a derived factor to account for "unknown" projects (projects that fall outside of the projects used to identify the known projects).

1. Known Projects

To develop a reasonable inventory of these housing units, this report identified all projects known to the DPP that have a credible planning basis. This includes: housing units approved by the State Land Use Commission; units implied by the development policies of the City's General Plan; units in projects referenced in the City's eight DPs; units approved by the Hawaii Community Development Authority for Kakaako and Kalaeloa; units under the jurisdiction of the Department of Hawaiian Home Lands; and units on lands with entitlement under the City's zoning code and subdivision regulations. In other words, all housing projects that are consistent with the vision, policies, plans and regulations of the City and State are included.

Known projects are identified from several sources. First, projects are known to the DPP by virtue of its planning and permitting function. Examples include projects for which applications have been submitted for Conservation District Use Permits, zoning changes, land subdivision, and building permits. Projects are also known by way of information gleaned from official

communication with developers and land owners, such as affordable housing agreements. Unofficial communications, as well as data gathered from trade and professional journals, and announcements in the public media are also consulted. Finally, the DPP conducts an annual survey of major developers in order to track their current plans and construction schedules.

These known projects are then vetted as to their likelihood of completion based on their planning and entitlement status. They are classified into two groups: committed and proposed. Projects that are under construction, or have a building permit or have the proper zoning in place are referred to as "committed". Developments which are exempt from county planning and zoning rules, such as projects on Hawaiian Homes lands, are also treated as "committed". Projects without zoning but are supported by adopted plans, such as the DPs or approved by agencies such as the Hawaii Community Development Authority, are referred to as "proposed".

The complete set of known projects identified as of 2017 is shown in **TABLE A-1** in the Appendix. All construction schedules are shown on a fiscal-year basis (i.e., fiscal year ends in June, as opposed to December). Each project is described by the following attributes:

1. Project name and location;
2. Total housing units from project inception (after 1981);
3. Start year and estimated completion year;
4. Annual units completed from 2010 to 2017;
5. Estimated annual completion schedule from 2018 to 2021; and
6. Project likelihood (committed vs. proposed).

The same attributes are also provided for affordable projects. In addition, the table shows the number of rental units in rental projects that charge affordable (140 percent of the area median income and below) versus market rent.

A total of 164 known projects were identified, involving 101,451 units across Oahu. The project list includes all projects in areas with ongoing developments. To simplify the data presentation, the project-specific data were aggregated by DPAs (regions) and its subareas (neighborhoods). Summary measures were then introduced to more clearly describe the data. The result is presented in the following tables.

TABLE II-2 summarizes the status of the known projects and their implied housing capacity. Of the 101,451 units associated with the known projects, 32 percent have been built as of 2017, totaling 32,474 units. This leaves a capacity of 68,977 units remaining to be built on Oahu as of 2017. Almost half of this remaining capacity is in Ewa, totaling 31,010 units. The PUC and Central Oahu follow with 19,521 units and 14,059 units, respectively. Moreover, the remaining capacity of particular neighborhoods stands out within their region. They include: Kapolei East (which includes Hoopili) in Ewa with 13,132 units, Waiawa in Central Oahu with 7,400 units, and Ala Moana/Kakaako in the PUC with 8,033 units.

TABLE II-2: STATUS OF KNOWN PROJECTS AND PROJECT CAPACITY

DP AREA	TOTAL HOUSING UNIT CAPACITY	UNITS BUILT BY 2017	PERCENT OF CAPACITY COMPLETED	REMAINING HOUSING UNIT CAPACITY
OAHU TOTAL	**101,451**	**32,474**	**32%**	**68,977**
PRIMARY URBAN CENTER	**25,171**	**5,650**	**22%**	**19,521**
McCully/Moiliili	505	125	25%	380
Waikiki	1,226	514	42%	712
Makiki	211	176	83%	35
Ala Moana/Kakaako	11,919	3,886	33%	8,033
Nuuanu/Punchbowl	332	170	51%	162
Downtown	298	0	0%	298
Liliha/Kapalama	550	0	0%	550
Kalihi-Palama	5,336	160	3%	5,176
Moanalua	597	122	20%	475
Aiea	2,740	0	0%	2,740
Waiau/Pacific Palisades	1,457	497	34%	960
EWA	**54,875**	**23,865**	**43%**	**31,010**
Ewa Villages/Honouliuli	1,398	1,203	86%	195
Ewa Gentry/West Loch	8,520	7,764	91%	756
Ewa Beach/Iroquois Point	4,850	3,854	79%	996
Kalaeloa/Campbell Industrial Park	6,730	80	1%	6,650
Ko Olina/Honokai Hale	4,450	1,164	26%	3,286
City Of Kapolei	2,904	1,633	56%	1,271
Kapolei Villages	4,209	4,056	96%	153
Kapolei East	13,803	671	5%	13,132
Makakilo/Makaiwa Hills/Kunia	8,011	3,440	43%	4,571
CENTRAL OAHU	**14,255**	**196**	**1%**	**14,059**
Village Park/Kunia	2,111	0	0%	2,111
Waipahu	780	0	0%	780
Waipio	3,500	0	0%	3,500
Waiawa	7,400	0	0%	7,400
Mililani	48	48	100%	0
Mililani Mauka/Launani	373	148	40%	225
Wahiawa/Whitmore	43	0	0%	43
EAST HONOLULU	**1,138**	**1,073**	**94%**	**65**
Hawaii Kai	473	443	94%	30
Kuliouou-Kalani Iki	665	630	95%	35
KOOLAU POKO	**463**	**234**	**51%**	**229**
Kahaluu	45	0	0%	45
Kaneohe	46	29	63%	17
Kailua	255	153	60%	102
Waimanalo	117	52	44%	65
KOOLAU LOA	**2,000**	**0**	**0%**	**2,000**
Kahuku/Kawela	2,000	0	0%	2,000
NORTH SHORE	**708**	**18**	**3%**	**690**
Haleiwa	680	0	0%	680
Sunset Beach/Pupukea	28	18	64%	10
WAIANAE	**2,841**	**1,438**	**51%**	**1,403**
Nanakuli	285	111	39%	174
Maili	1,284	931	73%	353
Waianae	411	320	78%	91
Makaha/Kaena	861	76	9%	785

Another way to describe these projects is to estimate the number of years required to exhaust the remaining capacity of the projects when completed, at the current production rate as observed. **TABLE II-3** shows that it will take about 33 years beyond 2017, (i.e., until the year 2050), to build out the remaining 68,977 units on Oahu. This reflects an estimated production rate of 2,112 units per year, which is based on the built experience from 2010 to 2017 and the expected production schedule of developers from 2018 to 2021. With respect to the planning regions, the PUC has 21 years remaining while Ewa has 37 years, based on their production rate of 911 and 845 units per year, respectively. Significantly lower production rates are expected for the remaining regions, with Central Oahu at 189 units per year, Waianae at about 107 units per year and the rest at less than 40 units per year. These production rates result in the large years-remaining figures shown for these regions.

It should be emphasized that the years-remaining figures described above are simply alternative expressions of the quantity of housing projects committed or proposed for the different areas. They reflect the areas' current development activities and market conditions. Because future production rates may increase or decrease, and because additional projects will come into play in the future, these years-remaining statements should not be interpreted as projections for the areas.

TABLE II-4 parses remaining capacity into "committed" and "proposed" to indicate the relative likelihood of project completion amongst the planning regions and neighborhoods. About 64 percent of the remaining capacity on Oahu consist of the more likely "committed" projects. The proportions for Ewa, East Honolulu and Koolau Poko are even greater, ranging from 72 percent to 100 percent "committed." The likelihood of the remaining regions are significantly lower, with Central Oahu and Waianae at 42 percent and 12 percent respectively, and Koolau Loa and the North Shore almost absent of committed projects. The distribution of committed and proposed projects over time is shown in **FIGURE II-4**. As can be seen, committed projects generally occur in the near-term, while proposed projects occur in the more distant future.

TABLE II-3: YEARS OF CAPACITY REMAINING IN KNOWN PROJECTS BEYOND 2017

DP AREA	REMAINING HOUSING UNIT CAPACITY	UNITS BUILT (2010-2017)	UNITS (2018-2021)	UNITS (2010-2021)	UNITS PER YEAR	YEARS REMAINING
OAHU TOTAL	**68,977**	**13,096**	**12,252**	**25,348**	**2,112**	**33**
PRIMARY URBAN CENTER	**19,521**	**5,544**	**5,391**	**10,935**	**911**	**21**
McCully/Moiliili	380	125	210	335	28	14
Waikiki	712	408	62	470	39	18
Makiki	35	176	35	211	18	2
Ala Moana/Kakaako	8,033	3,886	4,107	7,993	666	12
Nuuanu/Punchbowl	162	170	141	311	26	6
Downtown	298	0	147	147	12	24
Liliha/Kapalama	550	0	0	0	0	0
Kalihi-Palama	5,176	160	214	374	31	166
Moanalua	475	122	475	597	50	10
Aiea	2,740	0	0	0	0	0
Waiau/Pacific Palisades	960	497	0	497	41	23
EWA	**31,010**	**6,009**	**4,133**	**10,142**	**845**	**37**
Ewa Villages/Honouliuli	195	406	52	458	38	5
Ewa Gentry/West Loch	756	997	520	1,517	126	6
Ewa Beach/Iroquois Point	996	1,299	584	1,883	157	6
Kalaeloa/Campbell Industrial Park	6,650	0	50	50	4	1,596
Ko Olina/Honokai Hale	3,286	0	0	0	0	0
City Of Kapolei	1,271	1,613	714	2,327	194	7
Kapolei Villages	153	593	63	656	55	3
Kapolei East	13,132	658	2,137	2,795	233	56
Makakilo/Makaiwa Hills/Kunia	4,571	443	13	456	38	120
CENTRAL OAHU	**14,059**	**196**	**2,076**	**2,272**	**189**	**74**
Village Park/Kunia	2,111	0	404	404	34	63
Waipahu	780	0	40	40	3	234
Waipio	3,500	0	1,401	1,401	117	30
Waiawa	7,400	0	0	0	0	0
Mililani	0	48	0	48	4	0
Mililani Mauka/Launani	225	148	225	373	31	7
Wahiawa/Whitmore	43	0	6	6	1	86
EAST HONOLULU	**65**	**295**	**18**	**313**	**26**	**2**
Hawaii Kai	30	273	3	276	23	1
Kuliouou-Kalani Iki	35	22	15	37	3	11
KOOLAU POKO	**229**	**226**	**165**	**391**	**33**	**7**
Kahaluu	45	0	1	1	0	540
Kaneohe	17	21	17	38	3	5
Kailua	102	153	102	255	21	5
Waimanalo	65	52	45	97	8	8
KOOLAU LOA	**2,000**	**0**	**0**	**0**	**0**	**0**
Kahuku/Kawela	2,000	0	0	0	0	0
NORTH SHORE	**690**	**10**	**4**	**14**	**1**	**591**
Haleiwa	680	0	0	0	0	0
Sunset Beach/Pupukea	10	10	4	14	1	9
WAIANAE	**1,403**	**816**	**465**	**1,281**	**107**	**13**
Nanakuli	174	71	2	73	6	29
Maili	353	391	328	719	60	6
Waianae	91	278	15	293	24	4
Makaha/Kaena	785	76	120	196	16	48

TABLE II-4: REMAINING CAPACITY OF KNOWN PROJECTS BEYOND 2017

DP AREA	REMAINING HOUSING UNIT CAPACITY	PERCENT OF OAHU TOTAL UNITS	UNITS COMMITTED	UNITS PROPOSED	PERCENT OF CAPACITY COMMITTED
OAHU TOTAL	**68,977**	**100%**	**44,372**	**24,605**	**64%**
PRIMARY URBAN CENTER	**19,521**	**28%**	**11,566**	**7,955**	**59%**
McCully/Moiliili	380	1%	210	170	55%
Waikiki	712	1%	506	206	71%
Makiki	35	0%	35	0	100%
Ala Moana/Kakaako	8,033	12%	6,311	1,722	79%
Nuuanu/Punchbowl	162	0%	162	0	100%
Downtown	298	0%	227	71	76%
Liliha/Kapalama	550	1%	0	550	0%
Kalihi-Palama	5,176	8%	2,140	3,036	41%
Moanalua	475	1%	475	0	100%
Aiea	2,740	4%	1,500	1,240	55%
Waiau/Pacific Palisades	960	1%	0	960	0%
EWA	**31,010**	**45%**	**26,497**	**4,513**	**85%**
Ewa Villages/Honouliuli	195	0%	195	0	100%
Ewa Gentry/West Loch	756	1%	756	0	100%
Ewa Beach/Iroquois Point	996	1%	996	0	100%
Kalaeloa/Campbell Industrial Park	6,650	10%	2,550	4,100	38%
Ko Olina/Honokai Hale	3,286	5%	3,286	0	100%
City Of Kapolei	1,271	2%	1,271	0	100%
Kapolei Villages	153	0%	90	63	59%
Kapolei East	13,132	19%	13,132	0	100%
Makakilo/Makaiwa Hills/Kunia	4,571	7%	4,221	350	92%
CENTRAL OAHU	**14,059**	**20%**	**5,894**	**8,165**	**42%**
Village Park/Kunia	2,111	3%	2,111	0	100%
Waipahu	780	1%	40	740	5%
Waipio	3,500	5%	3,500	0	100%
Waiawa	7,400	11%	0	7,400	0%
Mililani	0	0%	0	0	0%
Mililani Mauka/Launani	225	0%	225	0	100%
Wahiawa/Whitmore	43	0%	18	25	42%
EAST HONOLULU	**65**	**0%**	**65**	**0**	**100%**
Hawaii Kai	30	0%	30	0	100%
Kuliouou-Kalani Iki	35	0%	35	0	100%
KOOLAU POKO	**229**	**0%**	**165**	**64**	**72%**
Kahaluu	45	0%	1	44	2%
Kaneohe	17	0%	17	0	100%
Kailua	102	0%	102	0	100%
Waimanalo	65	0%	45	20	69%
KOOLAU LOA	**2,000**	**3%**	**0**	**2,000**	**0%**
Kahuku/Kawela	2,000	3%	0	2,000	0%
NORTH SHORE	**690**	**1%**	**10**	**680**	**1%**
Haleiwa	680	1%	0	680	0%
Sunset Beach/Pupukea	10	0%	10	0	100%
WAIANAE	**1,403**	**2%**	**175**	**1,228**	**12%**
Nanakuli	174	0%	2	172	1%
Maili	353	1%	103	250	29%
Waianae	91	0%	70	21	77%
Makaha/Kaena	785	1%	0	785	0%

FIGURE II-4: COMMITTED VS. PROPOSED PROJECTS

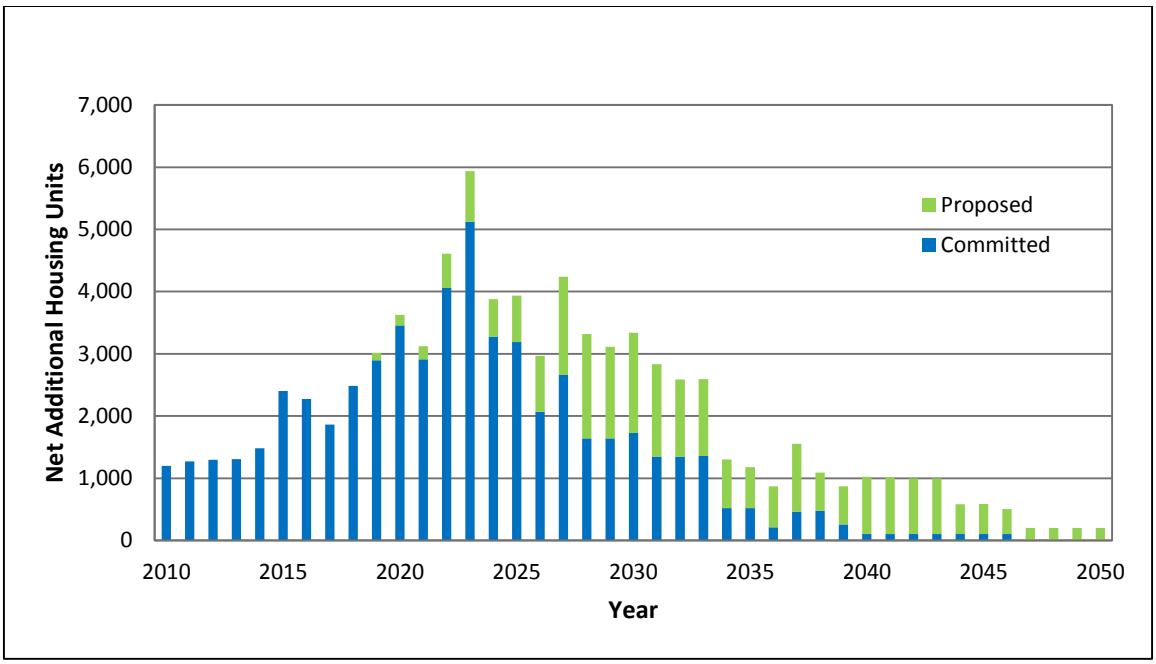


TABLE II-5 provides additional details on larger projects (over ten acres) not yet under construction. It tracks activities such as plan and permit work and constructing project infrastructure. It lists gross acres planned for housing use, the year of DP or zoning approvals, the year of the first housing subdivision, the percent completion of the needed infrastructure, and further details on construction and permit progress. The last column summarizes the regulatory milestones over the past few years.

TABLE II-5: REGULATORY STATUS OF MAJOR HOUSING PROJECTS

DP AREA	TOTAL UNITS	RESIDENTIAL LAND AREA (AC)	YEAR APPROVED		HOUSING SUBDIV. YEAR	INFRASTRUCTURE BUILT TO DATE		CURRENT PROGRESS
			DP OR SCP	ZONING MAP		ONSITE	OFFSITE	
EWA								
DHHL East Kapolei II	1,022	186	1997	-		0%	75%	General Plan/infrastructure (2014); Pending construction
Hoopili	11,750	1054	1997	2015		0%	0%	State Land Use (2012); pending construction
Kapolei West	2,500	234	1991	2008		0%	40%	Subdivision pending
Makaiwa Hills	4,200	908	1997	2008		0%	40%	No recent activity
Palailai Residential	350	30	1986			0%	50%	No action; zone change is needed
CENTRAL OAHU								
Koa Ridge	3,500	310	2003	2013		0%	0%	State Land Use (2011); pending construction
Royal Kunia Phase II	2,007	327	1995	1997		0%	0%	Requires State Land Use Commission approval to change to residential use
Waiawa Castle & Cooke	1,500	130	2003			0%	0%	Deferred approval at State Land Use Commission (2012)
Waiawa Ridge Phase I	5,000	546	1998	2003		0%	0%	No developer
KOOLAU POKO								
The Woods at Ahuimanu	44	15	1984	-				Infrastructure (2013); no recent activity
WAIANAE								
Makaha Valley Subdivision	100	198	1996	1988				No recent activity
Nanaikeola Village (self-help)	142	12	1985	1996	-		100%	No recent activity

2. Affordable Housing

Affordable housing has long been the stated goal of public policy in Honolulu. The General Plan adopted in 1977 specifically called for housing that people can afford. Late 1977 saw the first Unilateral Agreements (UA) by developers involving housing, when Waipio Gentry agreed to provide 10 percent of its housing units as affordable. Act 15 increased the affordability requirement to 60 percent and became the impetus of residential development in Ewa Villages and Villages at Kapolei in the late 1980s. Hawaii Revised Statutes Chapter 359G and its successor Chapter 201H further promoted affordability, as public and quasi-public projects

developed under these statutes are, by definition, affordable. Hawaiian Home Lands developments, which are exempt from county planning and zoning regulations, are also basically affordable. These affordable requirements were made under varying definitions of qualifying income, ranging from 30 percent to 120 percent of the median income of the households in the area under consideration. Under Resolution 09-241, the City Council revised the income limit for affordable housing from 120 percent to 140 percent, of the area median income. It should be noted that this report does not reflect the provisions of Ordinance 18-10, which was adopted in April 2018.

This report monitors the state of affordable housing by providing data on: 1) the progress in building affordable and rental units and 2) the improvement (or lack thereof) in the housing cost burden borne by the affected households.

Affordable housing is defined as housing projects available to those earning no more than 140 percent of the area median income. It should be pointed out that, in this report, affordable housing refers only to units intended by law or by design to be affordable, such as those defined by developers under the terms of a UA. They do not include existing units and future units offered with affordable rent set by the market without government assistance. Similarly, the rental units tabulated refer only to units in projects built specifically for rent. They do not include rental units placed in the market by individual owners.

TABLE II-6 shows that the 101,451 units in the known projects contain a total of 37,497 affordable units (for sale or for rent) and 20,164 rental units. Affordable units thus represent about 37 percent of the units in the known projects. This is consistent with the cumulative effect of the various affordability requirements that have been in use over the past four decades. Rental units, in contrast, represent only 20 percent of the known project units. This confirms the fact that rental developments have been few and far between in Honolulu, particularly market rentals.

As of 2017, 13,315 of the 37,497 affordable units in the known projects have been completed. This represents a 36 percent completion rate. Ewa accounted for about 75 percent of the completed total, or 9,941 units. In contrast the PUC contributed to less than 20 percent of the total affordable units built.

TABLE II-6 also shows data that refer to the years 2010 through 2017. In this 18-year period, 13,096 units were completed, of which 5,055 were affordable. This represents a 39 percent completion rate, compared to the 36 percent cumulative completion rate. Ewa accounted for 41 percent of the affordable units built, but the PUC now contributed 45 percent the total affordable units built over the 18-year period.

TABLE II-6: KNOWN AFFORDABLE AND/OR RENTAL PROJECTS

DP AREA	TOTAL UNITS	INTENDED AS RENTALS	PERCENT INTENDED RENTALS	INTENDED AS AFFORD.	AFFORD. FOR SALE	AFFORD. FOR RENT	PERCENT INTENDED AFFORD.	AFFORD. BUILT BY 2017	PERCENT AFFORD. BUILT BY 2017	UNITS BUILT (2010-2017)	AFFORD. BUILT (2010-2017)	PERCENT AFFORD. BUILT (2010-2017)
OAHU TOTAL	**101,451**	**20,164**	**20%**	**37,497**	**23,245**	**14,252**	**37%**	**13,315**	**36%**	**13,096**	**5,055**	**39%**
PRIMARY URBAN CENTER	**25,171**	**13,065**	**52%**	**13,706**	**3,515**	**10,191**	**54%**	**2,382**	**17%**	**5,544**	**2,276**	**41%**
McCully/Moiliili	505	155	31%	138	108	30	27%	0	0%	125	0	0%
Waikiki	1,226	812	66%	317	0	317	26%	106	33%	408	0	0%
Makiki	211	0	0%	90	90	0	43%	90	100%	176	90	51%
Ala Moana/Kakaako	11,919	2,621	22%	5,155	2,867	2,288	43%	1,695	33%	3,886	1,695	44%
Nuuanu/Punchbowl	332	198	60%	0	0	0	%	0	0%	170	0	0%
Downtown	298	298	100%	298	0	298	100%	0	0%	0	0	0%
Liliha/Kapalama	550	550	100%	550	0	550	100%	0	0%	0	0	0%
Kalihi-Palama	5,336	5,137	96%	4,177	0	4,177	78%	160	4%	160	160	100%
Moanalua	597	597	100%	0	0	0	%	0	0%	122	0	0%
Aiea	2,740	1,240	45%	1,690	450	1,240	62%	0	0%	0	0	0%
Waiau/Pacific Palisades	1,457	1,457	100%	1,291	0	1,291	89%	331	26%	497	331	67%
EWA	**54,875**	**3,288**	**6%**	**17,299**	**15,117**	**2,182**	**32%**	**9,941**	**57%**	**6,009**	**2,081**	**35%**
Ewa Villages/Honouliuli	1,398	342	24%	1,344	1,152	192	96%	1,149	85%	406	352	87%
Ewa Gentry/West Loch	8,520	112	1%	2,657	2,545	112	31%	2,657	100%	997	0	0%
Ewa Beach/Iroquois Point	4,850	0	0%	787	787	0	16%	787	100%	1,299	0	0%
Kalaeloa/Campbell Industrial Park	6,730	415	6%	980	750	230	15%	80	8%	0	0	0%
Ko Olina/Honokai Hale	4,450	0	0%	392	392	0	9%	392	100%	0	0	0%
City Of Kapolei	2,904	991	34%	1,415	751	664	49%	478	34%	1,613	478	30%
Kapolei Villages	4,209	295	7%	3,481	3,330	151	83%	3,372	97%	593	593	100%
Kapolei East	13,803	628	5%	5,578	4,950	628	40%	671	12%	658	658	100%
Makakilo/Makaiwa Hills/Kunia	8,011	505	6%	665	460	205	8%	355	53%	443	0	0%
CENTRAL OAHU	**14,255**	**2,820**	**20%**	**5,017**	**3,872**	**1,145**	**35%**	**76**	**2%**	**196**	**76**	**39%**
Village Park/Kunia	2,111	104	5%	706	602	104	33%	0	0%	0	0	0%
Waipahu	780	740	95%	740	0	740	95%	0	0%	0	0	0%
Waipio	3,500	1,308	37%	1,050	1,050	0	30%	0	0%	0	0	0%
Waiawa	7,400	295	4%	2,220	2,220	0	30%	0	0%	0	0	0%
Mililani	48	0	0%	0	0	0	%	0	0%	48	0	0%
Mililani Mauka/Launani	373	373	100%	301	0	301	81%	76	25%	148	76	51%
Wahiawa/Whitmore	43	0	0%	0	0	0	%	0	0%	0	0	0%

TABLE II-6, CONTINUED

DP AREA	TOTAL UNITS	INTENDED AS RENTALS	PERCENT INTENDED RENTALS	INTENDED AS AFFORD.	AFFORD. FOR SALE	AFFORD. FOR RENT	PERCENT INTENDED AFFORD.	AFFORD. BUILT BY 2017	PERCENT AFFORD. BUILT BY 2017	UNITS BUILT (2010-2017)	AFFORD. BUILT (2010-2017)	PERCENT AFFORD. BUILT (2010-2017)
EAST HONOLULU	**1,138**	**269**	**24%**	**54**	**0**	**54**	**5%**	**54**	**100%**	**295**	**54**	**18%**
Hawaii Kai	473	269	57%	54	0	54	11%	54	100%	273	54	20%
Kuliouou-Kalani Iki	665	0	0%	0	0	0	%	0	0%	22	0	0%
KOOLAU POKO	**463**	**42**	**9%**	**98**	**98**	**0**	**21%**	**52**	**53%**	**226**	**52**	**23%**
Kahaluu	45	0	0%	1	1	0	2%	0	0%	0	0	0%
Kaneohe	46	0	0%	0	0	0	%	0	0%	21	0	0%
Kailua	255	42	16%	0	0	0	%	0	0%	153	0	0%
Waimanalo	117	0	0%	97	97	0	83%	52	54%	52	52	100%
KOOLAU LOA	**2,000**	**0**	**0%**	**0**	**0**	**0**	**%**	**0**	**0%**	**0**	**0**	**0%**
Kahuku/Kawela	2,000	0	0%	0	0	0	%	0	0%	0	0	0%
NORTH SHORE	**708**	**156**	**22%**	**177**	**21**	**156**	**25%**	**0**	**0%**	**10**	**0**	**0%**
Haleiwa	680	156	23%	177	21	156	26%	0	0%	0	0	0%
Sunset Beach/Pupukea	28	0	0%	0	0	0	%	0	0%	10	0	0%
WAIANAE	**2,841**	**524**	**18%**	**1,146**	**622**	**524**	**40%**	**810**	**71%**	**816**	**516**	**63%**
Nanakuli	285	118	41%	184	66	118	65%	111	60%	71	71	100%
Maili	1,284	51	4%	537	486	51	42%	434	81%	391	180	46%
Waianae	411	265	64%	335	70	265	82%	265	79%	278	265	95%
Makaha/Kaena	861	90	10%	90	0	90	10%	0	0%	76	0	0%

a. Housing Cost Burden

The impact of housing costs on the lives and well-being of households can be measured by computing the cost burden borne by households in different income levels. Using Public Use Microdata Sample files collected by the American Community Survey conducted annually by the Census Bureau, five income brackets are defined, in terms of the Area Median Income (AMI) of Honolulu:

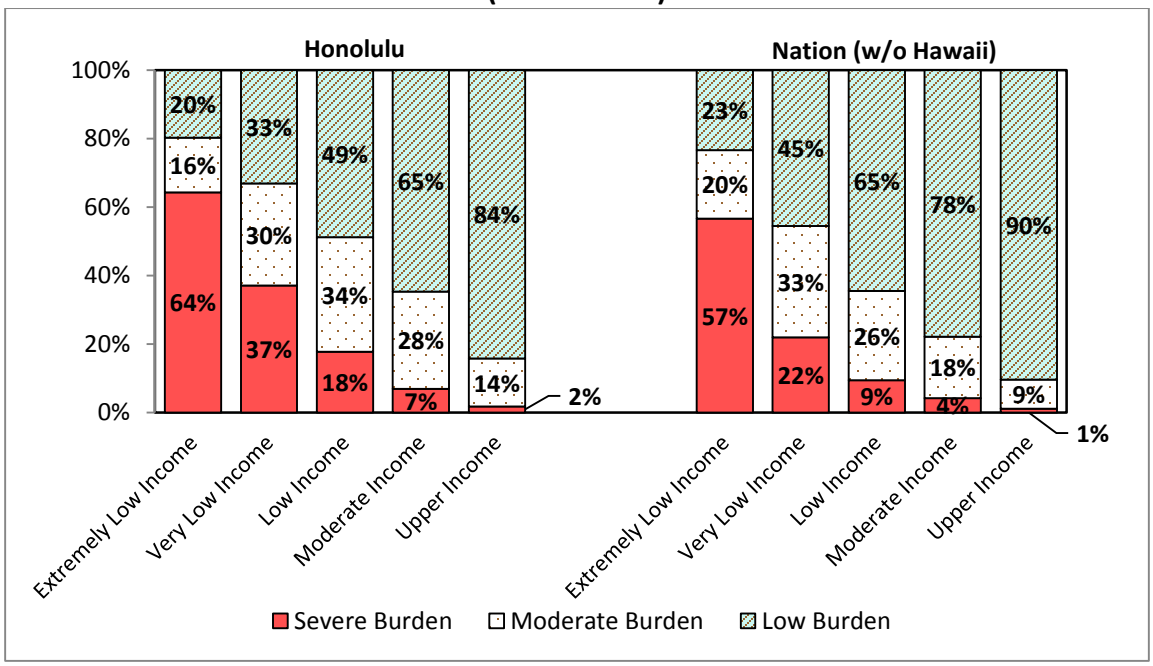
1. Extremely Low (less than or equal to 30 percent of AMI)
2. Very Low (greater than 30 percent but not exceeding 50 percent of AMI)
3. Low (greater than 50 percent but not exceeding 80 percent of AMI)
4. Moderate (greater than 80 percent but not exceeding 120 percent of AMI)
5. Upper (greater than 120 percent of AMI)

Housing cost includes all cost items associated with owning or renting a housing unit. These costs include: mortgage payment or rent, property tax, utility cost, maintenance fees, etc. Three levels of burden are defined in terms of the ratio of housing cost to income of the household:

1. Low (housing cost less than or equal to 30 percent of gross household income).
2. Moderate (housing cost greater than 30 percent but less than 50 percent of gross household income)
3. Severe (housing cost greater than or equal to 50 percent of gross household income)

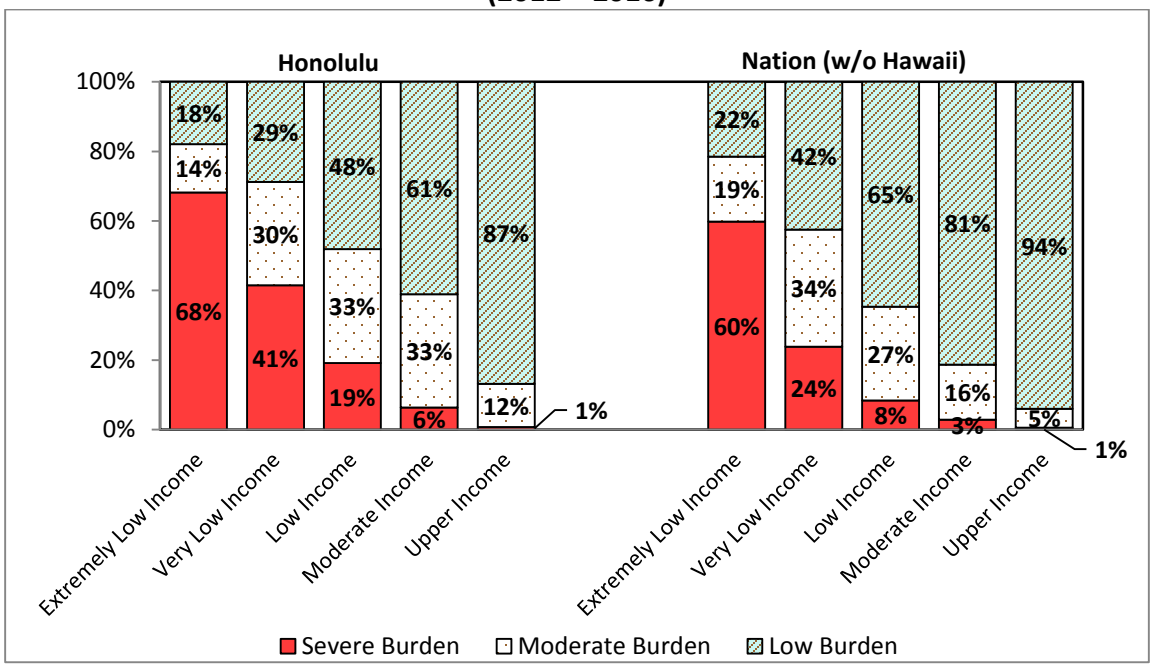
FIGURE II-5 shows the average housing cost burdens of households in Honolulu for the period 2006-2010. They can be interpreted as the baseline cost burden against which future cost burdens can be compared. **FIGURE II-6** shows the average cost burden for the latest five years available, from 2012 to 2016. They can be interpreted as the cost burdens experienced by households in recent years.

FIGURE II-5: HOUSING COST BURDEN BY INCOME BRACKET (2006 – 2010)



SOURCE: American Community Survey 5-Year Public Use Microdata Sample, 2006-2010

FIGURE II-6: HOUSING COST BURDEN BY INCOME BRACKET (2012 – 2016)



SOURCE: American Community Survey 5-Year Public Use Microdata Sample, 2012-2016

Comparing these two sets of cost burdens, the following observations can be made about households in Honolulu during the past seven years:

1. Upper income households were better off. Their share of households experiencing severe housing cost burden declined by half, from 2 percent to 1 percent.

2. The share of moderate income households experiencing severe housing cost burden decreased by 1 percent.

3. The remaining lower income bracket households were worse off. The Low, Very Low and Extremely Low income households all shouldered an increasing share of severe cost burden, increasing by 1, 4, and 4 percentage points, respectively.

Taking into account the fact that these differences in cost burden occurred while affordable housing increased by 5,055 units from 2010 to 2017, it can be argued that these units did not help the lower strata households at all. On the contrary, it was the upper income households that benefited the most from the affordable units. However, it can also be argued that had there been no increase in affordable units, then even the moderate income households would have been worse off. The AMI for Honolulu was $81,700 in 2010 and $87,900 in 2016.

FIGURE II-5 and **FIGURE II-6** also show the national (excluding Hawaii) household cost burdens, using the national median income to parse households into the different income brackets. The same pattern of increasing inequality also applies to the national scene, though not as severe as that of Honolulu. Specifically, over the same seven-year period, households in the rest of the country experienced the following:

1. Upper income households stayed the same, maintaining their share of severe cost burden at 1 percent.

2. The share of moderate income households experiencing severe housing cost burden decreased by 1 percent.

3. The share of low income households experiencing severe housing cost burden decreased by 1 percent. Very low and extremely low income households were worse off, increasing their share of severe cost burden by 2 and 3 percentage points, respectively.

Another way to evaluate affordability is to compare the housing cost burden of Honolulu households against the national experience. Again, the difference is dependent on income. In 2016, only 1 percent of Upper income households experienced severe cost burden, both in Honolulu and nationally. For Moderate income households, 6 percent of Honolulu households experienced severe cost burden, as compared to 3 percent nationally, but the gap of 3 percentage points did not change from 2010. In contrast, the gap for the Low, Very Low, and Extremely Low income households, increased by about 2 percentage points each in the

seven-year period, making the housing cost burden borne Honolulu households increasingly severe, as compared to the rest of the country.

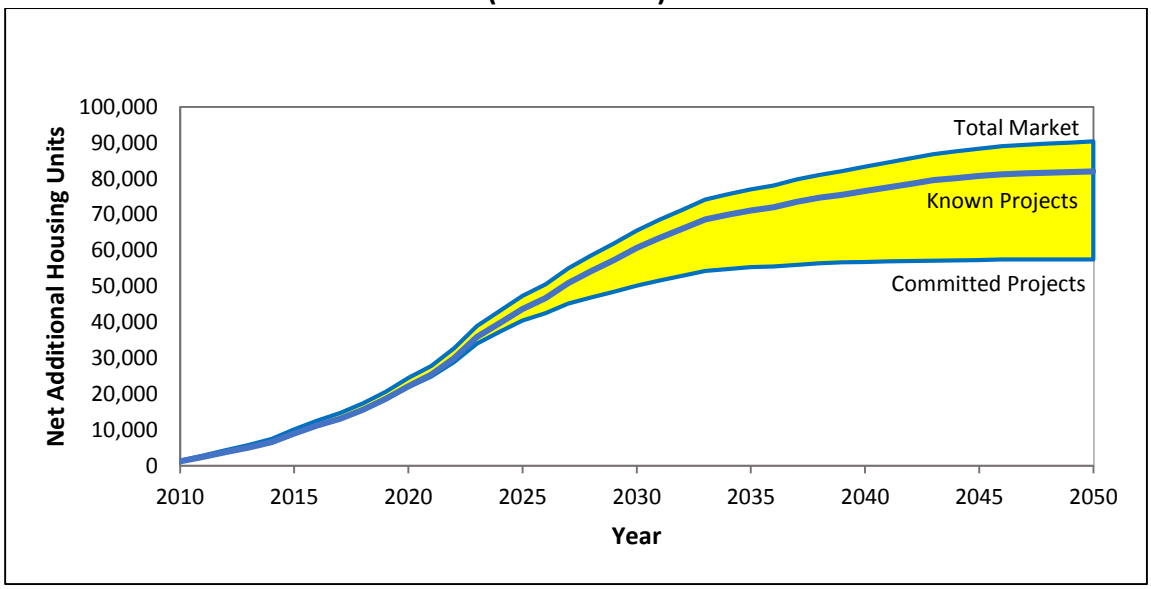
3. Unknown Projects

The housing production data described previously captures only projects that are known to the DPP. In reality there are projects which are "unknown" because they fall outside of the process used to identify the known projects. They comprise basically of 1) individual projects on isolated vacant lots and 2) projects by small developers which generate little or no publicity (or exist outside the permitting process).

The existence of these "unknown" projects means that the data on current housing production may be understated. To correct for these unknowns, an analysis was carried out comparing the known projects from 2000 to 2014 to the total housing units completed during the same time period based on building permit completion records. The analysis showed that the "unknown" projects can be captured from two quantities. The first quantity is a constant of about 150 units every year. These are likely to be the individual projects on isolated lots that normally occur in any given year. The second quantity is a variable that depends on the market, amounting to about 3 percent of the units in the known projects. This can be interpreted as the housing production of small developers who take their cue on whether (and how much) to develop from the action of larger developers. The net effect of adding in these unknown units is to expand the known project data by about 12 percent. The resultant "expanded" project data is referred to in the report as the "total market" production.

FIGURE II-7 shows the total market productions for the period 2010-2050, along with the projected units from known projects and committed projects. The lines representing these units form a band that depicts the range of variability in the certainty of these supply projections, with "committed projects" being the most certain and "total market" the least. As expected, the band increases over time, reflecting the increasing uncertainty of the supply projections over time.

FIGURE II-7: SUPPLY PROJECTIONS
(2010 – 2050)



D. ASSESSMENT

For a long term assessment, the projected demand is compared to the foreseeable supply. A recent survey of residents' preferences for new housing units is used to assess unmet demand as a near term assessment.

1. Long Term

One way to credibly assess the state of housing production on Oahu is to first establish the validity of the demand projections. The validation process has two requirements. First, the demand projections, when applied backward in time, must reasonably replicate the housing productions in the past. Second, the demand projections, in the short-term, must reasonably account for the market-based projects in the supply projections. For validation purposes, "short-term" is generally considered to be about 10 years beyond the present.

FIGURE II-8 compares the replicated historical productions with the actual housing production from 1967 to 2010. It can be seen that the "projected" productions adequately captured the actual conditions in the past five decades. Specifically, the "projections" differ from the actual housing production by an average deviation of about 1,100 units in any given year.

To assess how well the projected demand compares with the foreseeable supply, particularly in the short-term, the long-range housing demand projection is shown in **FIGURE II-9** together with the supply projections. Note that the demand projection ends at the official planning horizon of 2040, but the supply projections extend beyond to account for projects that cannot be completed by the planning horizon.

FIGURE II-8: ACTUAL HOUSING PRODUCTION VS. HISTORICAL NORM (1967 – 2010)

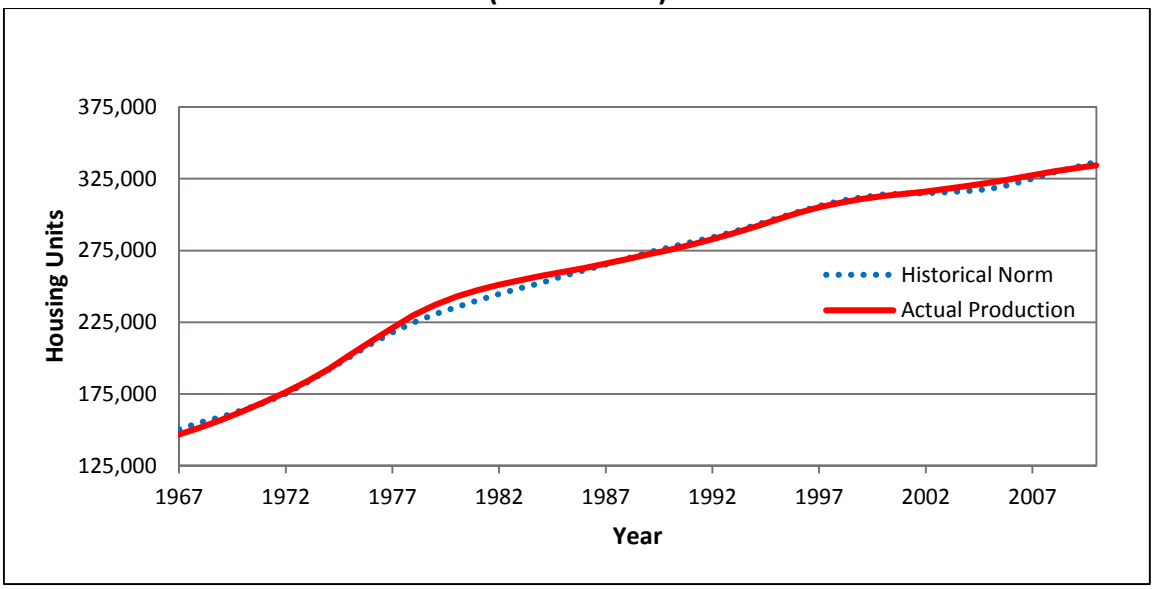
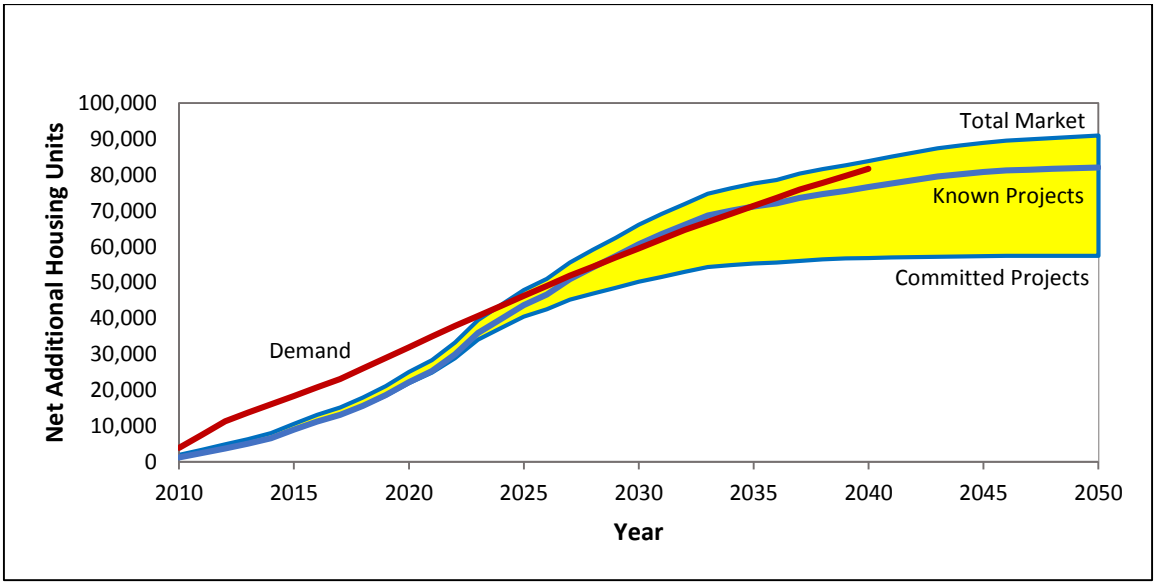


FIGURE II-9: DEMAND VS. SUPPLY PROJECTIONS



It can be seen that as a consequence of the Great Recession that followed the financial meltdown of 2007, housing production entered 2010 far short of the demand indicated by the historical-norm housing projection. The deficit is anticipated to reach a peak of almost 8,700 units in 2018. Housing production is expected to rise to within 300 units of the demand projection by 2024. Since the mean deviation of the demand projection is about 1,100 units, this means that by about 2024, the current set of market projects will, for practical purposes, match the housing needs of the population based on historical norm.

The gap between demand and supply is seen to increasingly widen beyond 2024, with housing supply exceeding demand. After 2040, the current set of market projects will, for practical purposes, match the housing needs of the population once again. However, this is by no means an indication of market or supply deficiencies. Rather it is a reflection of the fact the supply projections are based only on currently known projects and on current knowledge about the known projects. As additional future projects emerge and as construction become more efficient, the supply and demand gap is expected to diminish over time.

Supply and demand is shown in greater detail in **TABLE II-7**. For each DPA on Oahu, demand over the period 2010-2040 is obtained from the housing projections described in Chapter I. The corresponding supply is derived from the DPA's known projects and controlled to the total market capacity of the island. Before comparing each area's supply and demand, their base year is updated from 2010 to 2018 by accounting for the housing units built over the period 2010-2017. The resultant comparison yields either a market capacity excess or a deficit at the 2040 planning horizon from the perspective of 2018. The market capacity beyond 2040 is then taken into account to give a measure of whether the totality of market capacity as of 2018 would be adequate to meet the projected housing needs of the 2040 population.

TABLE II-7: MARKET CAPACITY AS OF 2018 VS. PROJECTED HOUSING NEED

DP AREA	UNITS NEEDED TO HOUSE POPULATION (2010-2040)	NEED MET BY MARKET CAPACITY (2010-2040)	EXCESS MARKET CAPACITY (2010-2040)	MARKET CAPACITY BEYOND 2040	TOTAL EXCESS MARKET CAPACITY (2010-2050)
OAHU TOTAL	**77,800**	**83,300**	**5,500**	**7,100**	**12,600**
Primary Urban Center	29,500	26,600	-2,900	800	-2,100
Ewa	26,800	39,000	12,200	1,600	13,800
Central Oahu	12,700	14,200	1,500	1,600	3,100
East Honolulu	1,500	400	-1,100	0	-1,100
Koolau Poko	2,300	500	-1,800	0	-1,800
Koolau Loa	900	0	-900	2,600	1,700
North Shore	1,300	300	-1,000	500	-500
Waianae	2,800	2,400	-400	0	-400

It should be pointed out that areas with capacity deficit are generally of greater interest than areas with excess capacity. This is because the former suggests that the market had underestimated the underlying demand for housing in the area and that effort would have to be made to increase the capacity. Areas with excess capacity, on the other hand, indicate only that current developers had overestimated the demand. Little or no effort would be needed to reduce the capacity since the excess consists mainly of proposed projects, and they can be dropped without much consequence or left in place to be developed in the more distant future.

TABLE II-7 also shows that island-wide supply by 2040 exceeds demand by 6,300 units. If the 7,100-unit capacity available beyond 2040 is taken into account, the total excess market capacity is 13,400 units. This means that in order to meet the projected housing needs on Oahu

as a whole in 2050, no new housing projects will need to be proposed beyond those already identified as of 2018.

There are, however, regional differences. Excess capacity exists in five of the eight DPAs. It is dominated by Ewa, whose overall excess capacity of 7,000 units consists of 5,500 units by 2040 and 1,600 units beyond 2040. The PUC follows, with an overall excess capacity of 4,100. In contrast, Koolau Loa actually has a capacity deficit of 900 units in 2040. This deficit, however, is offset by 2,600 units available beyond 2040, resulting in a net excess capacity of 1,700 units. This capacity is due to major projects that extend beyond the planning horizon because they are not expected to be completed by 2040, such as the 2,000-unit Envision Laie project. Waianae has an excess capacity of 500 units by 2040 with no major projects planned beyond 2040. Koolau Poko has the biggest capacity deficit at 1,600 units. East Honolulu and the North Shore show deficits of 800 and 400 units, respectively. This translates to an additional 20 to 65 units a year by 2040, which is not a significant quantity.

2. Short Term

Another way to assess the state of housing production on Oahu is to evaluate the extent to which the housing market is producing the kind of housing needed by Oahu residents. Because of data limitations, a short-term assessment, to the year 2027, was carried out. Three sets of characteristics were used to measure how well the housing market, as represented by the known projects, responds to the housing needs of Oahu residents. These characteristics relate to:

1. Structure: Single-Family vs. Multi-Family
2. Tenure: Owner vs. Renter
3. Affordability: 80 percent AMI (or below) vs. 80 percent-to-140 percent AMI

TABLE II-8 summarizes the estimated current and future housing shortages over the next ten years. Current shortage is defined as the unmet housing demand calculated for the period 2016-2018. In terms of the above demand characteristics, the current housing shortage totals to 8,490 units, of which 4,660 units are for single-family dwellings and 5,500 units are for rentals. Affordable housing is shown as having a shortage of 6,230 low income units and 2,410 moderate-income units. Note that the sum of these two affordable shortages exceeds the total Oahu shortage of 8,490 units. This difference can be explained by the fact that market-rate housing is shown to have a current surplus or excess supply of 150 units.

These shortages are all expected to decline over time. They all show small shortages by 2027 except for the 1,380-unit shortage for low-income housing, which is shown to be almost entirely accounted for by the excess supply of 1,300 market-rate units. This means that if DPP's housing demand projection holds, and the known projects identified in this report are fulfilled precisely in the manner assumed, then housing shortage will be substantially lower over the next 10 years. This conclusion should be viewed more as the logical consequence of the supply and demand assumptions made in this report. To the extent these assumptions are wrong, the

magnitude of the estimated shortage will be different. The reality is that housing shortage is certain to exist in some form on Oahu because of structural reasons such as limited land, geographic isolation, global demand, and income inequality. These results and their derivation are detailed in the following sections.

TABLE II-8: HOUSING UNIT SHORTAGE

CHARACTERISTIC	HOUSING SHORTAGE	
	Now	In 10 Years
STRUCTURE TYPE		
Single-Family	4,660	290
Multi-Family	3,830	-120
TENURE		
Own	2,990	200
Rent	5,500	-30
AFFORDABILITY		
Low-Income	6,230	1,380
Moderate-Income	2,410	90
Market-Rate	-150	-1,300

a. Demand

Housing demand in terms of the above characteristics was derived from unpublished, raw data developed by the *Hawaii Housing Planning Study (HHPS)*[4], a series of studies conducted by SMS Research and sponsored by the Hawaii Housing Finance and Development Corporation and other State and County agencies to assess the housing market in Hawaii. The HHPS conducted a series of Housing Demand Surveys from 2010 through 2016 to identify the structure, tenure and affordability needs of residents. The surveys measured residents' opinions of their current housing conditions, their plans to move to new units, their new unit preferences, their financial qualifications for purchase or rent, and the demographic characteristics of household members.

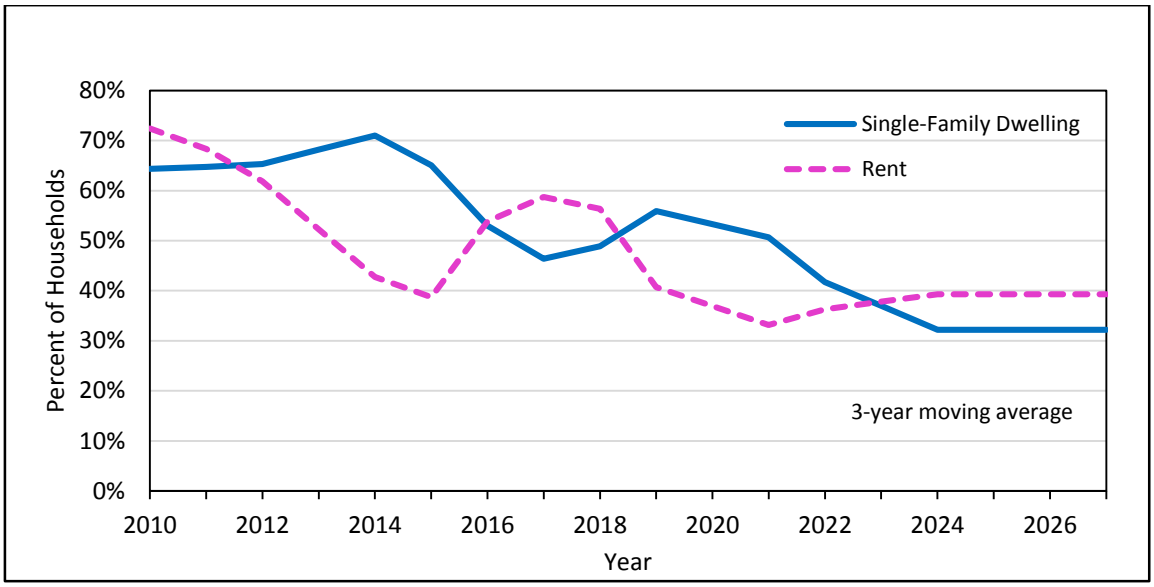
The HHPS results are displayed in **FIGURE II-10** and **FIGURE II-11**. The graphs track the housing choices revealed through the SMS demand surveys by households who plan to move within Oahu and are qualified to realize that choice during the period 2010 to 2027.

FIGURE II-10 shows the housing preferences with respect to structure and tenure choices. Note that only Single-Family (SF) is shown for structure choice; Multi-Family (MF) is not shown because it is simply the complement of SF. Similarly, only Renter is shown for tenure choice. It can be seen that over time, the preference for SF housing drops by over half, from 65 percent in 2010 to slightly over 30 percent by 2024 and through 2027. (Alternatively, this means that the preference for MF housing is expected to double over the same period.) The preference for Renter housing is also seen to decline, but changes in the opposite direction. That is, a rise in SF preference corresponds to a decline in Renter

[4] *Hawaii Housing Planning Study, 2016*, https://dbedt.hawaii.gov/hhfdc/files/2017/03/State_HHPS2016_Report_031317_final.pdf

preference, and vice versa. This suggests that SF is associated with owning, and MF is associated with renting. This relationship is consistent with expectation and historical experience.

FIGURE II-10: HOUSING PREFERENCE BY STRUCTURE AND TENURE



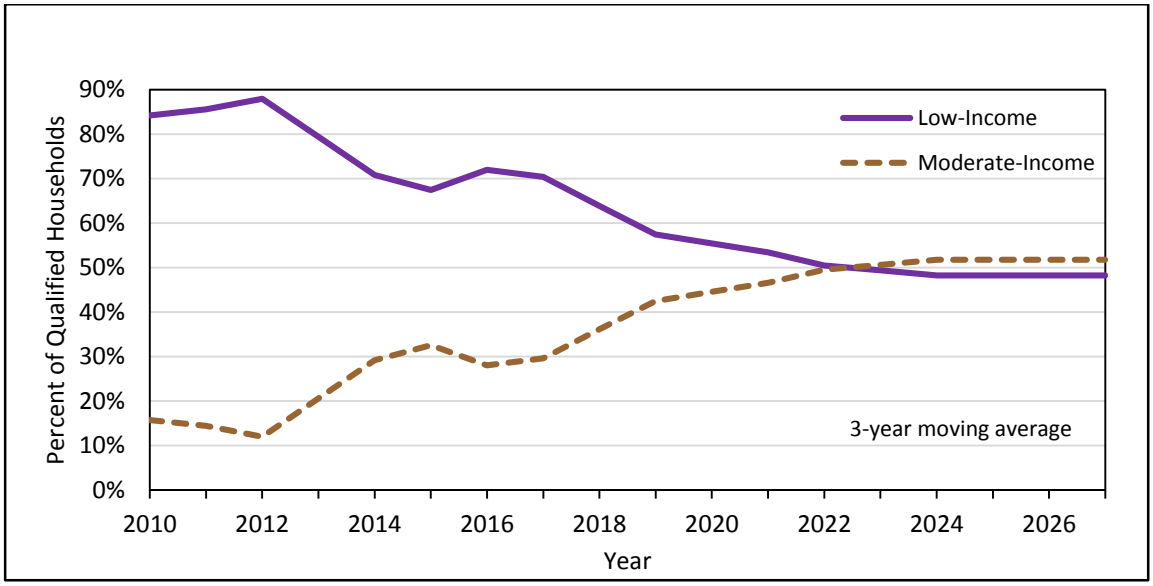
Interestingly, a new relationship emerges at about 2023, when the two trends may converge to a constant 30 percent preferring SF and 40 percent preferring Rental housing. In other words 60 percent of households prefer to own, and 70 percent prefer MF housing. This suggests that the traditional aspiration of owning a SF house may be changing to owning a condominium unit. This shift is likely due to the confluence of two factors. First, the high cost of SF dwellings makes SF ownership out of reach for many, forcing these households to the realization that owning MF housing may be the only realistic choice. Second, housing in a MF setting is becoming more available and acceptable, as evidenced by the advent of livable MF communities in areas like Kakaako. If this shift in demand holds, and confirmed by future surveys, then low-density projects in areas like Ewa may be facing significant competition in the housing marketplace.

FIGURE II-11 shows the demand for two types of affordable housing based on income. The HHPS defined affordable housing as housing that is affordable to households earning up to 140 percent of the AMI, adjusted for household size. Based on data from the demand survey on the current and expected income of the respondents, the study found that 86.9 percent of all households on Oahu qualified under this threshold. The income data further enabled the households that qualify for affordable housing to be divided into two groups: 1) households earning up to 80 percent of AMI, and 2) households earning more than 80 percent but less than 140 percent of AMI. The former is referred to here as Low-Income and the latter as Moderate-Income.

It can be seen that in 2010, close to 85 percent of the demand for affordable housing came from low-income households, as compared to 15 percent coming from moderate-income

households. The HHPS data show that the demand for low-income housing is expected to drop to a little under 50 percent by 2023, while the demand for moderate-income housing is expected to rise to a little over 50 percent by 2023. This results in a situation where the demand from low- and moderate-income households split equally the pool of affordable housing.

FIGURE II-11: PERCENT AFFORDABLE HOUSING BY INCOME LEVEL



It must be emphasized that this result is based entirely on the respondents' expectation of their future income as obtained from the demand surveys. There is no underlying economic study or analysis. Specifically, the demand surveys revealed that low-income households expect their future income to rise, while moderate-income households expect theirs' to fall, though to different degree.

These demand preferences were applied to the housing projections described in Section II.B to arrive at housing demand projections specific by structure, tenure and affordability characteristics.

b. Supply

For purposes of this short-term assessment, housing supply is defined to consist only of known projects, as discussed in Section II.C.1. Information is generally provided by developers to enable the classification of projects in terms of their structure, tenure, and affordability characteristics and to specify the construction schedule of these projects. However, it must be recognized that project delays are frequently encountered during the planning, permitting and construction stage and schedules can easily change. Also, estimates are based on developers' ***current*** plans and timelines. Developers often alter their plans and schedules in response to real or perceived changes in the marketplace. Where the information from developers is not sufficient, statistical relationships inferred from historical data and

professional judgment were used to attribute the necessary characteristics and timing. It is therefore important to recognize the inherent imprecision of the supply data, and to take this uncertainty into account when interpreting the result of this assessment.

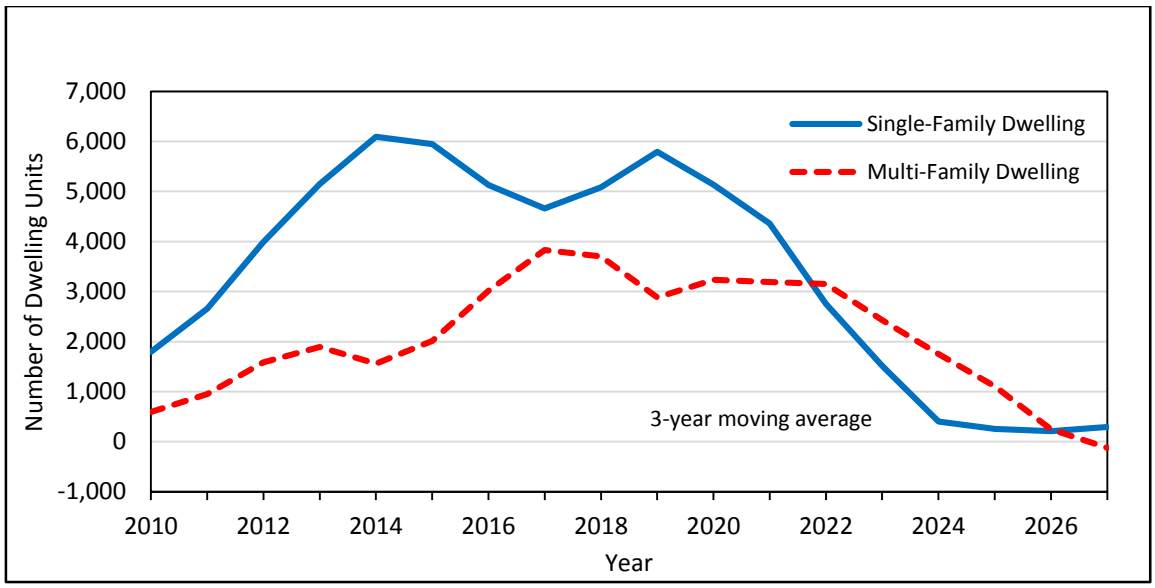
c. Shortage

The known projects associated with a given set of characteristics in a given year were then compared against the corresponding set of demand for that year. Any excess or unmet demand from one year was carried over to the subsequent year, until the year 2027, which was the last year for which survey data was available. This process yielded a determination of whether the known projects in the short-term are producing sufficient housing units to meet demand in terms of the demand characteristics. **FIGURE II-12**, **FIGURE II-13** and **FIGURE II-14** display the results of comparing supply and demand by structure type, tenure and affordability, respectively. Note that the data shown in the graphs are 3-year moving averages. This served to smooth out the graphs and eliminated spikes, but it also made the references to the timeline less precise – something that should be taken into account when the discussion involves time.

FIGURE II-12 shows housing production shortages by type of structure. That is, it describes the adequacy of the known projects in terms of producing sufficient SF and MF dwellings to meet the underlying demand from 2010 to 2027. It can be seen that housing production falls short of demand for both SF and MF for almost the entire 18-year time period. There are, however, differences in how and when the shortages occur as described below in three stages.

The first stage from 2010 to 2014 depicts a housing market in recovery in the aftermath of the financial meltdown of 2007. SF and MF were respectively producing about 600 and 700 units per year, which is well below their historical rate. Demand meanwhile continued forward because of the need to house the growing population. Because the market could not fully accommodate the underlying demand, the unmet demand accumulated over time, resulting in the production shortages shown. Because households preferred SF over MF housing by up to 70 percent during this period, as shown in **FIGURE II-10**, SF shortage steadily outpaced that of MF. The gap reached a peak in 2014, when SF shortage exceeded MF shortage by more than 4,000 units.

FIGURE II-12: PRODUCTION SHORTAGE BY STRUCTURE TYPE



The ensuing seven years represent a transitory stage in two respects. First, after a steady climb, both SF and MF shortages may reach a plateau during his period. This reflects the fact that the cumulative unmet demand may exceed 11,000 units by 2018. SF shortages may remain higher than MF shortages throughout the period because of the anemic SF production rate, which may rise to only 700 units a year. In contrast the MF production rate may almost triple, to over 2,000 units per year, due in part to proposals such as the 2,140-unit Mayor Wright housing project. The transitory nature of this period is also evidenced by the fluctuations displayed by the SF and MF shortages. Specifically, the fluctuations move in opposing directions. When SF shortage increases, MF shortage decreases, and vice versa. As a result, total shortage from 2015 through 2021 may remain relatively constant, averaging about 8,400 units. This shortage characterizes the current situation. This also suggests that households during this period may be rethinking their attitudes, as reflected in the actions of developers, with respect to accepting a greater substitutability between SF and MF housing.

In the final six years, two trends are apparent. First, after 12 years of increasing shortages, SF and MF production may finally appear to make a difference in a sustained way on the accumulated unmet demand. Recall that the average total production shortage from 2015 through 2021 was 8,400 units. By 2022, both SF and MF shortages may drop to the 3,000-unit level, which means the total shortage would fall to 6,000 units. SF and MF shortages may continue to decline as they both approach zero. It should be emphasized however that the absence of a shortage by 2026 should not be taken as an end state. Production shortages can and will appear in the future depending on future supply and demand conditions. The second trend is the reversal of role between SF and MF in the overall shortages. Historically, shortages have always been greater for SF than for MF. This may change in 2022, when the two streams of shortages may intersect and emerge in different directions. For the first time, MF shortage may exceed that of SF. Basically, this is because MF demand may

average almost 4,200 units per year, which is more than twice the projected SF demand. While MF production may also increase substantially, producing more than 2,700 units per year on average, it may not be enough to make an impact on the MF shortages. In contrast, SF may produce about 1,400 units per year on average, which may be sufficient to impact the diminished SF demand, resulting in the reduced SF shortages as compared to MF.

The result for 2027 is unclear because the data is not definitive. However, it should be noted that this short-term assessment is based on DBEDT's 2040 population projection series, where the 2020 population is only an estimate. The 2020 U.S. Census is expected to result in a population count for 2020 that is higher than the estimate. This will mean a higher housing demand for 2027, and in turn greater production shortages. Thus, it can be said that there will likely be a production shortage by 2027, and that shortage will likely be greater for MF than for SF, but that both shortages will likely be much lower than the shortages observed in the past.

FIGURE II-13 shows production shortages by tenure. That is, it compares Owner units (defined as housing units built to be individually owned) with Renter units (defined as units in rental buildings) in term of their production adequacy. It should be pointed out that the timeline of Renter projects are not known with the same degree of specificity as structure types. Therefore describing the timeline with great detail is neither helpful nor advisable. With this in mind, it can be said that up to about 2018, Renter units face a greater production shortage. For the next five years, Owner units may face a greater shortage. Beyond 2023, the production shortages are likely to be about the same for Owner units and Renter units.

FIGURE II-13: PRODUCTION SHORTAGE BY TENURE

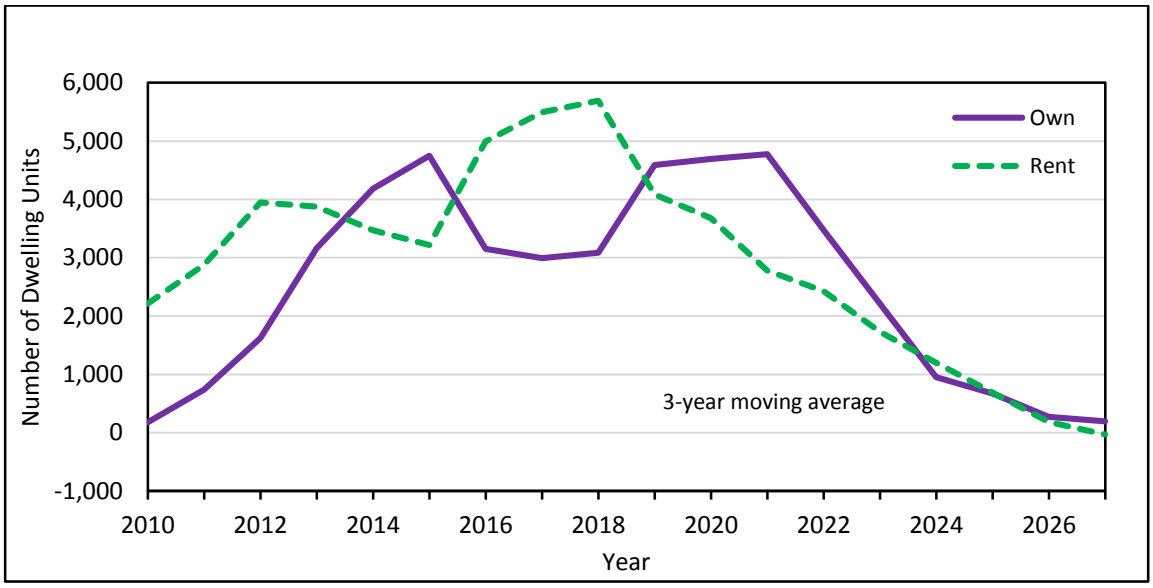
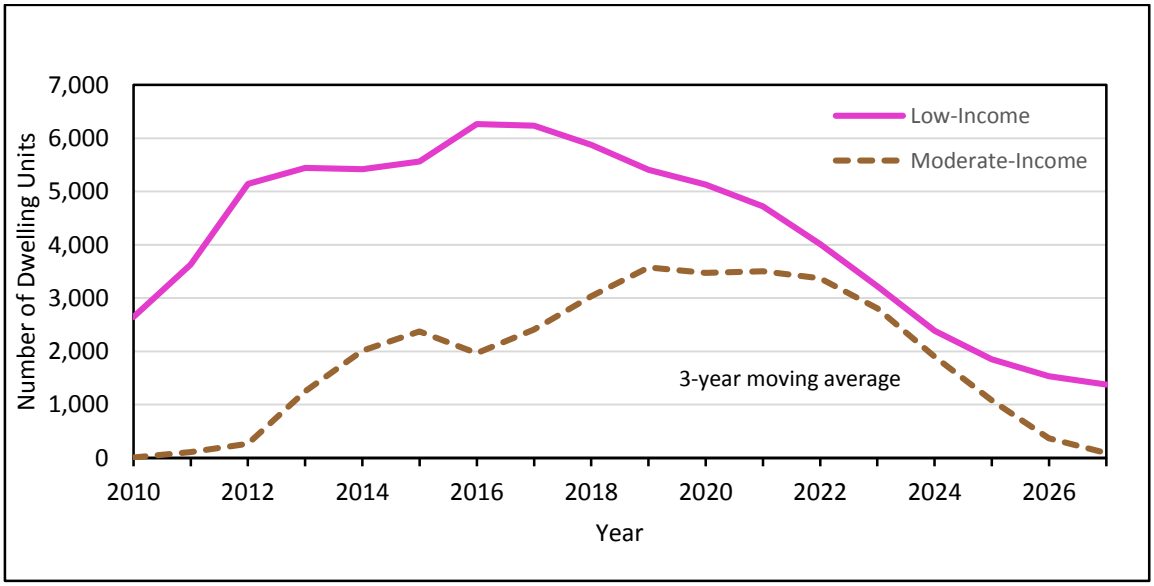


FIGURE II-14 shows the production shortages by affordability. Two types of affordable housing are described: Low-Income and Moderate-Income, which were defined previously in Section II.D.2.a. in terms of percent AMI. Like Renter housing, the timeline of affordable housing projects is not known with great specificity. In addition, the percent AMI

definition of the affordable projects is often not known. Where this information is not available, assumptions are often made based on the socioeconomic condition of the project location. Therefore, only general statements can be made with regard to housing shortages by affordability. First of all, the data confirms the obvious fact that production shortages exist throughout the 18-year period for both types of affordable housing. Also as expected, that shortage is greater for low-Income than for moderate-Income housing. The low-Income housing shortage reached a peak of about 6,300 units around 2016. It may fall steadily to about 1,400 units by 2027. Housing affordable to moderate-Income households displays a lower shortage. It began with a low shortage in 2010, reflecting in part the depressed housing market in recovery after the 2007 financial meltdown. The shortages then may increase steadily through the next nine years and reach a plateau of about 3,500 units for the next three years. The production shortage for moderate-income housing is then expected to decline to a low level by 2027.

FIGURE II-14: PRODUCTION SHORTAGE BY AFFORDABILITY



CHAPTER III: LAND USE PLANS AND INFRASTRUCTURE PROJECTS

This chapter, unlike prior chapters, incorporates information available as of the date that this report was prepared. Chapters I and II contain data as of June 2017.

A. CHANGES TO THE DEVELOPMENT PLANS

The City's long-range land use planning tool consists of eight regional plans, called Development Plans or Sustainable Communities Plans. Each plan provides a guide for all public and private decisions on physical development within the region, and describes: (1) the region's role within the islandwide growth policy, (2) the plan's vision for the area's future, (3) detailed regional or area-specific policy guidance on land use and infrastructure development, (4) tools to implement the plan, and (5) conceptual maps and other illustrations of the plan's policies.

These long-range plans serve as a guide to both the City's zoning controls and its infrastructure plans and expenditures. They provide a policy bridge between the State Land Use Districts and county land use regulations. There is also a separate Public Infrastructure Map (PIM) system that depicts specific types of future infrastructure projects. The PIM for each region shows the general location of certain major public infrastructure that affects regional development capacity and growth.

TABLE III-1 provides the status of the development plans as of April 2018.

TABLE III-1: STATUS OF DEVELOPMENT PLANS

DEVELOPMENT PLAN / SUSTAINABLE COMMUNITIES PLAN	STATUS
North Shore	Revised plan; effective 5/3/11
Waianae	Revised plan; effective 3/2/12
Ewa	Revised plan; effective 7/22/13
Koolau Poko	Revised plan; effective 8/24/17
East Honolulu	Effective 7/27/99; review underway; draft plan pending
Koolau Loa	Effective 2/14/00; revised plan under consideration by the City Council
Central Oahu	Effective 2/18/03; revised plan under consideration by the City Council
Primary Urban Center	Effective 6/21/04; review underway

Changes to these plans on specific matters can be proposed at any time, but the main avenue for plan revisions is their required periodic review, which must begin five years after approval, and which includes a thorough analysis of: (1) the validity of each plan's vision and policies, and (2) the effectiveness of its implementation measures. As of this writing, four revised plans have been adopted; two revised plans are pending before the City Council; one is pending release of a Public Review Draft (East Honolulu SCP); and one (Primary Urban Center DP) started in late 2017.

B. STATE LAND USE DISTRICT BOUNDARY AMENDMENTS

There were no State Land Use district boundary amendments adopted during the period FY 2015 through FY 2017.

C. ZONE CHANGES

TABLE III-2 provides data on the several zone changes adopted during this period, with the table showing separately which projects rezone lands to urban uses and which do not.

TABLE III-2: ZONE CHANGES APPROVED IN FYS 2015-2017

ORD. NO.	ORD. DATE	DPP NUMBER	LOCATION OR PROJECT NAME	APPROVED ZONE CHANGES		CHANGED TO URBAN USE?
				FROM/TO	ACRES	
FY 2015						
14-23	7/23/14	2013/Z-9	Plaza at Kaneohe	from B-2 to A-2	1.6	
14-32	10/23/14	2014/Z-1	Hakimo Road LDS Meeting House	from AG-1 to AG-2	5	
15-2	2/11/15	2014/Z-3	Assets School Redevelopment	from F-1 to R-5	9	
15-9	5/7/15	2014/Z-8	Galatia/Nitahara correction of lot-size nonconformities	from AG-1 to AG-2	5	
15-13	5/20/15	2014/Z-5	Hoopili master planned community	from AG-1 to various	1,289	Yes
FY 2016						
15-31	7/23/15	2014/Z-7	The Church of Jesus Christ of Latter-Day Saints Newtown Meetinghouse	AG-1 to R-5	3.1	Yes
15-47	11/23/15	2015/Z-2	Extending mixed-use zoning further down Kuhio Avenue in Waikiki (various lot owners)	Apartment Precinct to Apartment Mixed Use Subprecinct	2.6	
FY 2017						
16-23	8/17/16	2015/Z-4	Waimanalo farm lot subdivision (Kole Group)	AG-1 to AG-2	8	
16-27	10/21/16	2015/Z-1	Hoakalei Master Plan Update, Ocean Pointe	adjustments to zoning district boundaries	60	

D. PUBLIC INFRASTRUCTURE MAPS

TABLE III-3 provides data on all currently-active PIM projects, and lists each project's title, description, and status as of June 30, 2015, as reported by four City agencies. Data for FY 2016 and FY 2017 is not currently available. Note that the table includes only projects that are actively being pursued; it does not include all projects represented by a symbol on the PIMs.

TABLE III-3: PUBLIC INFRASTRUCTURE MAPS – STATUS OF ACTIVE PROJECTS AS OF JUNE 2015

PIM NO.	PROJECT	STATUS[5]	AGENCY
PRIMARY URBAN CENTER			
1	Sand Island Wastewater Treatment Plant Modifications, including upgrading to secondary treatment and expanding the plant's capacity from 82 mgd to 90 mgd	various projects under construction	ENV
7	Kalawahine 180 Reservoir – construct a 2.0 mgd potable water reservoir near Roosevelt High School	design underway	BWS
11	Fire Training Center – complete master planned improvements at the existing facility, including adding a classroom building and a new fire station	in planning phase	DDC
14	Honolulu Zoo Improvements – various upgrades, including exhibits with more natural habitats	ongoing progress	DDC
15	Waikiki Shell Improvements – various upgrades	ongoing progress	DDC
16	Neil Blaisdell Center Improvements – various upgrades	ongoing progress	DDC
18	Ala Wai Community Park Improvements – renovate the community center, etc.	*completed in FY 2015*	DDC
19	Ala Moana Regional Park Improvements – various upgrades	ongoing progress	DDC
20	Kapiolani Regional Park Improvements – various upgrades	ongoing progress	DDC
21	Makiki District Park Improvements – various upgrades	ongoing progress	DDC
28	Salt Lake Boulevard (Maluna Street to Ala Lilikoi Street)	planning underway	DDC
123	Manoa Stream Tributary Flood Control Project (crossing East Manoa Road near Kaamilo Drive)	design underway	DDC
125	Alapai Emergency Operations Center, Traffic Management Center, and Transit Center	under construction	DTS
130	Manana DPR Corporation Yard – further improvements	in planning phase	DDC
139	Kuakini Street Extension (Lanakila Avenue to Keola Street)	under construction	DTS
148	Honolulu High-Capacity Transit Corridor Project – the current rail rapid transit project	under construction	HART
149	Wastewater Centralized Spare Parts Warehouse - buy a warehouse, as per a consent decree	building purchased	ENV
EWA			
2	Honouliuli WWTP Modifications – capacity expansion to 51 mgd and influent pump station upgrades (the improvements to solids handling facilities are substantially complete)	planning work	ENV
12	Ewa Mahikō District Park - create a new park with a gym and swimming pool on the mill site	*completed in FY 2013*	DDC
13	Honouliuli WWTP Site Expansion – acquire land north of the existing WWTP, so that capacity can be expanded beyond 51 mgd	planning work	ENV
35	Ewa Shaft Renovation – convert an existing private irrigation source into a municipal water production facility	under construction	BWS

[5] Completed projects that were not identified as "completed" in prior *Annual Reports* are included for information. These projects will be deleted in future reports.

TABLE III-3, CONTINUED

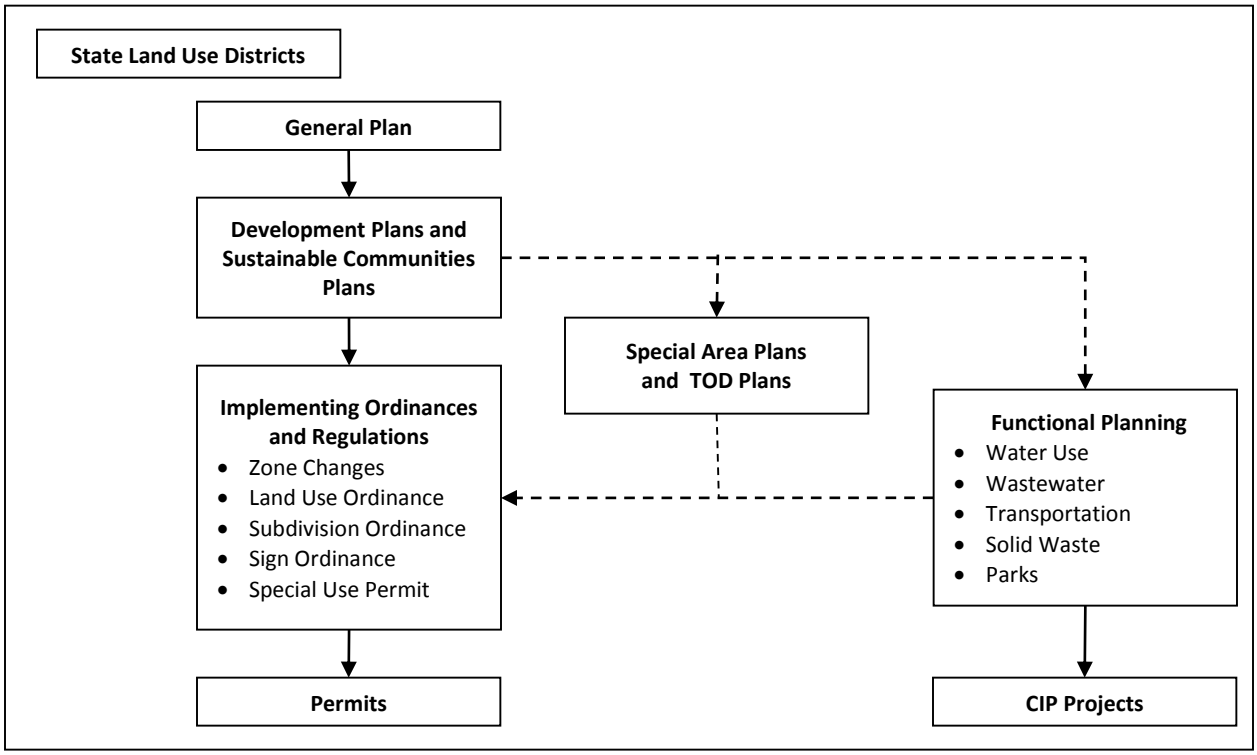
PIM NO.	PROJECT	STATUS	AGENCY
36	H-POWER Expansion – either expand the existing plant or build a second plant on an adjacent site, incorporating an improved technology for burning solid waste in order to generate electricity	current phase has been completed	ENV
37	Alternative Disposal Technology Park - use this vacant site for various new ENV functions	planning work	ENV
38	Kapolei Parkway – construct a new 4-lane boulevard across much of the Ewa plain, from Ko Olina to Ocean Pointe. Private developers already have completed their sections; the City is doing two sections one, in the Ewa Villages area and one within the City of Kapolei.	*completed in FY 2015*	DTS
43	Kapolei Corporation Yard – second phase of this maintenance and warehouse facility	design underway	DDC
46	Honolulu High-Capacity Transit Corridor Project – the current rail rapid transit project	under construction	HART
CENTRAL OAHU			
7	Waipio Point Access Road Improvements – widen this military road (under an easement) as part of improving two access roads to the existing Waipio Peninsula Recreation Complex	planning and design work	DTS
11	Ted Makalena Golf Course Modification – construct a driving range, a replacement maintenance building, a pond, other course improvements, and minor site improvements	various improvements underway	DDC
37	Waipahū Ash Landfill Closure – site remediation, groundwater monitoring wells, and drainage and landscaping improvements	*completed in FY 2015*	ENV
38	Mililani Mauka District Park – a new park with a gymnasium, recreation building, ball fields and courts, etc.	ongoing progress	DDC
40	Wahiawa WWTP Modifications – upgrade the plant to address peak wet-weather flows	nearly complete	ENV
41	Mililani WWPTF Headworks Upgrade – modernize the existing pre-treatment facilities	*completed in FY 2015*	ENV
42	Honolulu High-Capacity Transit Corridor Project – the current rail rapid transit project	under construction	HART
KOOLAU POKO			
4	Waimanalo Well III – construct a new potable water well mauka of the former Meadow Gold Dairies pasture land	*completed in FY 2012*	BWS
8	Kawa Stream Improvements – construct concrete retaining walls, where needed	design underway	DDC
11	Kailua Beach Park Improvements – construct a new pavilion, canoe halau, relocated comfort station, and various grounds improvements	various improvements underway	DDC
19	Pali Golf Course Improvements – an ongoing project to replace the clubhouse, improve all areas of the course, etc.	various improvements underway	DDC
25	Kualoa Regional Park – upgrades include a new sewage system, building and road repairs, etc.	ongoing progress	DDC
29	Kailua Wastewater Treatment Plant Improvements	under construction	ENV

TABLE III-3, CONTINUED

PIM NO.	PROJECT	STATUS	AGENCY
30	Kaneohe Stream Bank Restoration – upgrade the banks to concrete or rubble, and make repairs	design underway	DDC
KOOLAU LOA			
5	Opana Wells (Kuilima area) – construct a new potable water well	*completed in FY 2013*	BWS
9	Hauula Fire Station - build a replacement fire station outside of the flood plain	design underway	DDC
12	Kahuku Municipal Golf Course - acquire the land under this 9-hole municipal golf course	land acquisition funds budgeted	DDC
NORTH SHORE			
20	Waialua Fire Station Relocation – replace a substandard station with one outside the flood plain	in planning phase	DDC
WAIANAE			
22	Waianae Police Station Replacement - replace the old substation with a 2-story district station	under construction	DDC

The relationship between the different parts of the City's land-use and infrastructure planning system is depicted in **FIGURE III-1**.

FIGURE III-1: LAND USE PLANNING AND IMPLEMENTATION SYSTEM



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APPENDIX A: MASTER LIST OF KNOWN PROJECTS

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TABLE A-1: MASTER LIST OF KNOWN PROJECTS

STATUS	DPSA	PROJECT NAME	TOTAL UNITS[i]	START YEAR	END YEAR	UNITS COMPLETED									UNITS REMAINING						AFFORDABLE UNITS COMPLETED									AFFORDABLE UNITS REMAINING					RENTAL PROJECTS	
						BEFORE 2010	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	BEYOND 2021	TOTAL AFFORD. UNITS	BEFORE 2010	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	BEYOND 2021	TOTAL UNITS	AFFORD. UNITS
		OAHU TOTAL	**101,451**			**19,378**	**1,197**	**1,269**	**1,299**	**1,307**	**1,483**	**2,401**	**2,276**	**1,864**	**2,487**	**3,016**	**3,625**	**3,124**	**56,725**	**37,497**	**8,260**	**339**	**661**	**492**	**509**	**826**	**856**	**616**	**756**	**595**	**1,202**	**1,816**	**1,485**	**19,084**	**20,164**	**14,252**
Completed	110	15 Craigside	170	2011	2011	0	0	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	170	0
Committed	109	1500 Kapiolani	84	2030	2030	0	0	0	0	0	0	0	0	0	0	0	0	0	84	78	0	0	0	0	0	0	0	0	0	0	0	0	0	78	78	78
Proposed	106	1700 Kalakaua	170	2037	2037	0	0	0	0	0	0	0	0	0	0	0	0	0	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	109	400 Keawe	95	2016	2016	0	0	0	0	0	0	0	95	0	0	0	0	0	0	20	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0
Completed	306	60 Parkside	48	2012	2013	0	0	0	30	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	109	690 Pohukaina	600	2023	2025	0	0	0	0	0	0	0	0	0	0	0	0	0	600	440	0	0	0	0	0	0	0	0	0	0	0	0	0	440	600	440
Completed	401	7000 Hawaii Kai	269	2016	2016	0	0	0	0	0	0	0	269	0	0	0	0	0	0	54	0	0	0	0	0	0	0	54	0	0	0	0	0	0	269	54
Completed	109	801 South Street	1,045	2015	2017	0	0	0	0	0	0	635	0	410	0	0	0	0	0	943	0	0	0	0	0	0	533	0	410	0	0	0	0	0	0	0
Proposed	109	888 Ala Moana Boulevard	262	2037	2037	0	0	0	0	0	0	0	0	0	0	0	0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	109	Aalii	751	2020	2020	0	0	0	0	0	0	0	0	0	0	0	751	0	0	150	0	0	0	0	0	0	0	0	0	0	0	150	0	0	0	0
Committed	109	Aeo	466	2019	2019	0	0	0	0	0	0	0	0	0	0	466	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	107	Ainahau Vista	168	2006	2018	106	0	0	0	0	0	0	0	0	62	0	0	0	0	168	106	0	0	0	0	0	0	0	0	62	0	0	0	0	168	168
Committed	109	Alder Street Mixed Use Development	198	2023	2023	0	0	0	0	0	0	0	0	0	0	0	0	0	198	198	0	0	0	0	0	0	0	0	0	0	0	0	0	198	198	198
Completed	107	Allure Waikiki	291	2010	2010	0	291	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	109	Aloha Kai	128	2040	2040	0	0	0	0	0	0	0	0	0	0	0	0	0	128	39	0	0	0	0	0	0	0	0	0	0	0	0	0	39	0	0
Completed	109	Anaha	317	2018	2018	0	0	0	0	0	0	0	0	0	317	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	502	Bay View Estates	26	2009	2017	8	0	1	2	4	1	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	207	City of Kapolei Mixed Use	500	2020	2021	0	0	0	0	0	0	0	0	0	0	0	250	250	0	500	0	0	0	0	0	0	0	0	0	0	0	250	250	0	0	0
Proposed	805	Cottages at Mauna Olu	120	2021	2021	0	0	0	0	0	0	0	0	0	0	0	0	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	209	DHHL East Kapolei II	1,022	2018	2030	0	0	0	0	0	0	0	0	0	60	90	100	77	695	1,022	0	0	0	0	0	0	0	0	0	60	90	100	77	695	0	0
Proposed	601	Envision Laie	2,000	2041	2050	0	0	0	0	0	0	0	0	0	0	0	0	0	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	202	Ewa Makai by Gentry	1,620	2009	2021	609	155	93	131	143	122	30	74	21	80	50	100	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	201	Ewa Villages (completed)	797	2006	2006	797	0	0	0	0	0	0	0	0	0	0	0	0	0	797	797	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	202	Ewa by Gentry	6,900	2009	2023	6,158	0	0	0	0	3	109	40	76	50	80	30	118	236	2,657	2,657	0	0	0	0	0	0	0	0	0	0	0	0	0	112	112
Completed	109	Flats at Puunui	88	2017	2017	0	0	0	0	0	0	0	0	88	0	0	0	0	0	88	0	0	0	0	0	0	0	0	88	0	0	0	0	0	88	88
Committed	201	Franciscan Vistas Ewa	293	2011	2027	0	0	150	0	0	0	0	0	0	0	0	0	0	143	293	0	0	150	0	0	0	0	0	0	0	0	0	0	143	150	0
Committed	109	Gateway Towers	236	2018	2018	0	0	0	0	0	0	0	0	0	236	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	201	Golf Villas at Lokahi Greens	54	2014	2016	0	0	0	0	0	7	44	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	801	Green Homes at Lualualei	25	2014	2018	0	0	0	0	0	3	5	13	2	2	0	0	0	0	25	0	0	0	0	0	3	5	13	2	2	0	0	0	0	0	0
Proposed	107	H & M Apartments	200	2027	2028	0	0	0	0	0	0	0	0	0	0	0	0	0	200	60	0	0	0	0	0	0	0	0	0	0	0	0	0	60	200	60
Committed	109	Hale Kewalo	128	2020	2020	0	0	0	0	0	0	0	0	0	0	0	128	0	0	128	0	0	0	0	0	0	0	0	0	0	0	128	0	0	128	128
Committed	110	Hale Kuike	28	2020	2020	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0
Proposed	119	Hale Laulima	960	2026	2030	0	0	0	0	0	0	0	0	0	0	0	0	0	960	960	0	0	0	0	0	0	0	0	0	0	0	0	0	960	960	960
Committed	802	Hale Makana O Maili	51	2021	2021	0	0	0	0	0	0	0	0	0	0	0	0	51	0	51	0	0	0	0	0	0	0	0	0	0	0	0	51	0	51	51
Completed	801	Hale Makana O Nanakuli	48	2014	2014	0	0	0	0	0	48	0	0	0	0	0	0	0	0	48	0	0	0	0	0	48	0	0	0	0	0	0	0	0	48	48
Completed	119	Hale Mohalu II	331	2014	2016	0	0	0	0	0	163	84	84	0	0	0	0	0	0	331	0	0	0	0	0	163	84	84	0	0	0	0	0	0	331	331
Committed	205	Hale Uhiwai Nalu Veteran Housing	130	2009	2018	80	0	0	0	0	0	0	0	0	50	0	0	0	0	130	80	0	0	0	0	0	0	0	0	50	0	0	0	0	130	130
Completed	804	Hale Wai Vista I & II	215	2010	2012	0	83	0	132	0	0	0	0	0	0	0	0	0	0	215	0	83	0	132	0	0	0	0	0	0	0	0	0	0	215	215
Proposed	703	Haleiwa Mixed Use	156	2023	2025	0	0	0	0	0	0	0	0	0	0	0	0	0	156	156	0	0	0	0	0	0	0	0	0	0	0	0	0	156	156	156
Proposed	703	Haleiwa Plantation Village	29	2027	2027	0	0	0	0	0	0	0	0	0	0	0	0	0	29	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0
Proposed	703	Haleiwa Residential Village	470	2040	2045	0	0	0	0	0	0	0	0	0	0	0	0	0	470	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	109	Halekauwila Place	204	2014	2014	0	0	0	0	0	204	0	0	0	0	0	0	0	0	204	0	0	0	0	0	204	0	0	0	0	0	0	0	0	204	204
Committed	111	Halewaiolu Senior Residence	151	2027	2027	0	0	0	0	0	0	0	0	0	0	0	0	0	151	151	0	0	0	0	0	0	0	0	0	0	0	0	0	151	151	151
Committed	109	Hawaii City Plaza	164	2023	2023	0	0	0	0	0	0	0	0	0	0	0	0	0	164	33	0	0	0	0	0	0	0	0	0	0	0	0	0	33	0	0
Committed	402	Hawaii Loa Ridge	522	2009	2023	480	1	0	4	3	0	3	3	2	2	1	0	8	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	109	Hawaii Ocean Plaza	216	2023	2023	0	0	0	0	0	0	0	0	0	0	0	0	0	216	33	0	0	0	0	0	0	0	0	0	0	0	0	0	33	33	33
Committed	401	Hokupaa (Mokuhano Cluster)	14	2023	2024	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A-1, CONTINUED

STATUS	DPSA	PROJECT NAME	TOTAL UNITS[1]	START YEAR	END YEAR	UNITS COMPLETED									UNITS REMAINING						AFFORDABLE UNITS COMPLETED									AFFORDABLE UNITS REMAINING					RENTAL PROJECTS	
						BEFORE 2010	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	BEYOND 2021	TOTAL AFFORD. UNITS	BEFORE 2010	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	BEYOND 2021	TOTAL UNITS	AFFORD. UNITS
Completed	108	Holomua	176	2013	2013	0	0	0	0	176	0	0	0	0	0	0	0	0	0	90	0	0	0	0	90	0	0	0	0	0	0	0	0	0	0	0
Completed	201	Hoonani (Area H single family)	62	2014	2014	0	0	0	0	0	62	0	0	0	0	0	0	0	0	62	0	0	0	0	0	62	0	0	0	0	0	0	0	0	0	0
Committed	209	Hoopili	11,750	2019	2033	0	0	0	0	0	0	0	0	0	0	203	487	1,080	9,980	3,525	0	0	0	0	0	0	0	0	0	0	0	0	271	3,254	0	0
Committed	501	Hui Koolau Habitat for Humanity	1	2019	2019	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Proposed	109	Iliilani	328	2028	2028	0	0	0	0	0	0	0	0	0	0	0	0	0	328	166	0	0	0	0	0	0	0	0	0	0	0	0	0	166	0	0
Completed	207	Ilima at Leihano	84	2017	2017	0	0	0	0	0	0	0	0	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	113	KPT Redevelopment, Phase 2 (HPHA)	250	2022	2023	0	0	0	0	0	0	0	0	0	0	0	0	0	250	250	0	0	0	0	0	0	0	0	0	0	0	0	0	250	250	250
Committed	503	Ka Malanai	213	2014	2018	0	0	0	0	0	42	111	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	308	Kaala Highlands	25	2027	2030	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	210	Kahiwelo, Ph. 1 & 2 (Makakilo East)	471	2009	2016	50	65	60	41	45	80	85	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	504	Kakaina Subdivision	45	2018	2020	0	0	0	0	0	0	0	0	0	15	15	15	0	0	45	0	0	0	0	0	0	0	0	0	15	15	15	0	0	0	0
Proposed	205	Kalaeloa Master Plan	4,000	2027	2046	0	0	0	0	0	0	0	0	0	0	0	0	0	4,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	205	Kalaeloa Rental Apartments	100	2022	2022	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100
Completed	109	Kalakaua Gardens	136	2016	2016	0	0	0	0	0	0	0	136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	136	0
Proposed	113	Kalanihuia Redevelopment (HPHA)	350	2024	2025	0	0	0	0	0	0	0	0	0	0	0	0	0	350	350	0	0	0	0	0	0	0	0	0	0	0	0	0	350	350	350
Proposed	113	Kamehameha Homes & Kaahumanu Redevelopment (HPHA)	2,127	2025	2034	0	0	0	0	0	0	0	0	0	0	0	0	0	2,127	2,127	0	0	0	0	0	0	0	0	0	0	0	0	0	2,127	2,127	2,127
Proposed	112	Kanakila Affordable Housing (HPHA)	550	2022	2024	0	0	0	0	0	0	0	0	0	0	0	0	0	550	550	0	0	0	0	0	0	0	0	0	0	0	0	0	550	550	550
Committed	209	Kanehili (DHHL East Kapolei II)	403	2009	2019	13	178	63	32	40	15	5	6	11	20	20	0	0	0	403	13	178	63	32	40	15	5	6	11	20	20	0	0	0	0	0
Committed	109	Kapiolani Residence	485	2019	2019	0	0	0	0	0	0	0	0	0	0	485	0	0	0	292	0	0	0	0	0	0	0	0	0	0	292	0	0	0	0	0
Committed	110	Kapiwai	24	2020	2025	0	0	0	0	0	0	0	0	0	0	0	2	1	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	207	Kapolei Lofts	499	2016	2016	0	0	0	0	0	0	0	499	0	0	0	0	0	0	300	0	0	0	0	0	0	0	300	0	0	0	0	0	0	499	300
Committed	205	Kapolei West	2,500	2027	2038	0	0	0	0	0	0	0	0	0	0	0	0	0	2,500	750	0	0	0	0	0	0	0	0	0	0	0	0	0	750	185	0
Committed	802	Kaukamana Hale (self help)	25	2023	2023	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0
Committed	109	Ke Kilohana	424	2020	2020	0	0	0	0	0	0	0	0	0	0	0	424	0	0	375	0	0	0	0	0	0	0	0	0	0	0	375	0	0	0	0
Committed	209	Keahumoa Place (East Kapolei II, Phase III)	320	2022	2025	0	0	0	0	0	0	0	0	0	0	0	0	0	320	320	0	0	0	0	0	0	0	0	0	0	0	0	0	320	320	320
Proposed	208	Kealii at Kapolei Golf Course	63	2019	2021	0	0	0	0	0	0	0	0	0	0	20	20	23	0	19	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0
Committed	109	Keauhou Lane Mid-Rise Apartment Rentals	209	2018	2018	0	0	0	0	0	0	0	0	0	209	0	0	0	0	209	0	0	0	0	0	0	0	0	0	209	0	0	0	0	209	209
Committed	109	Keauhou Place High Rise Condominium	388	2018	2018	0	0	0	0	0	0	0	0	0	388	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	109	Keauhou Place Townhomes	35	2018	2018	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	111	Kekaulike Courtyards	76	2020	2020	0	0	0	0	0	0	0	0	0	0	0	76	0	0	76	0	0	0	0	0	0	0	0	0	0	0	76	0	0	76	76
Committed	503	Kihapai Place Apartments	42	2018	2018	0	0	0	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	0
Committed	308	Kilanikoa Development	18	2020	2025	0	0	0	0	0	0	0	0	0	0	0	3	3	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	206	Ko Olina Residential	4,450	2009	2025	1,164	0	0	0	0	0	0	0	0	0	0	0	0	3,286	392	392	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	304	Koa Ridge	3,500	2019	2027	0	0	0	0	0	0	0	0	0	0	467	467	467	2,099	1,050	0	0	0	0	0	0	0	0	0	0	350	350	350	0	1,308	0
Proposed	113	Kokea Center	309	2023	2023	0	0	0	0	0	0	0	0	0	0	0	0	0	309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110	0
Completed	209	Kooloaula (East Kapolei, Ph. I & II)	308	2013	2017	0	0	0	0	120	0	0	32	156	0	0	0	0	0	308	0	0	0	0	120	0	0	32	156	0	0	0	0	0	308	308
Committed	207	Kulana Hale II (Kapolei Mixed Use)	297	2020	2022	0	0	0	0	0	0	0	0	0	0	0	154	0	143	227	0	0	0	0	0	0	0	0	0	0	0	154	0	73	154	154

TABLE A-1, CONTINUED

STATUS	DPSA	PROJECT NAME	TOTAL UNITS[i]	START YEAR	END YEAR	UNITS COMPLETED									UNITS REMAINING						AFFORDABLE UNITS COMPLETED									AFFORDABLE UNITS REMAINING					RENTAL PROJECTS	
						BEFORE 2010	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	BEYOND 2021	TOTAL AFFORD. UNITS	BEFORE 2010	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	BEYOND 2021	TOTAL UNITS	AFFORD. UNITS
Completed	504	Kumuhau Subdivision	52	2011	2016	0	0	22	23	0	6	0	1	0	0	0	0	0	0	52	0	0	22	23	0	6	0	1	0	0	0	0	0	0	0	0
Committed	301	Kunia Village Redevelopment	104	2018	2021	0	0	0	0	0	0	0	0	0	37	0	0	67	0	104	0	0	0	0	0	0	0	0	0	37	0	0	67	0	104	104
Proposed	703	Leoole Subdivision	25	2041	2041	0	0	0	0	0	0	0	0	0	0	0	0	0	25	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0
Committed	118	Live Work Play Aiea	1,500	2037	2046	0	0	0	0	0	0	0	0	0	0	0	0	0	1,500	450	0	0	0	0	0	0	0	0	0	0	0	0	0	450	0	0
Proposed	804	Lualualei Homestead Road Subdivision	21	2022	2022	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	802	Maili Beach Place	63	2013	2015	0	0	0	0	25	29	9	0	0	0	0	0	0	0	63	0	0	0	0	25	29	9	0	0	0	0	0	0	0	0	0
Committed	802	Maili III Self Help	72	2014	2019	0	0	0	0	0	13	13	6	13	13	14	0	0	0	72	0	0	0	0	0	13	13	6	13	13	14	0	0	0	0	0
Completed	802	Maili Kai, Phase 2	823	2009	2015	540	20	40	56	61	60	46	0	0	0	0	0	0	0	326	254	0	0	4	11	12	45	0	0	0	0	0	0	0	0	0
Completed	805	Makaha Oceanview Estates, Phase 2	76	2013	2016	0	0	0	0	7	30	17	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	805	Makaha Rental Housing	90	2027	2029	0	0	0	0	0	0	0	0	0	0	0	0	0	90	90	0	0	0	0	0	0	0	0	0	0	0	0	0	90	90	90
Proposed	805	Makaha Valley Subdivision	100	2040	2040	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	210	Makaiwa Hills	4,200	2023	2035	0	0	0	0	0	0	0	0	0	0	0	0	0	4,200	205	0	0	0	0	0	0	0	0	0	0	0	0	0	205	205	205
Completed	210	Makakilo (completed)	2,320	2005	2005	2,320	0	0	0	0	0	0	0	0	0	0	0	0	0	355	355	0	0	0	0	0	0	0	0	0	0	0	0	0	300	0
Committed	210	Makakilo Heights Lots	395	2009	2022	376	0	2	0	0	2	3	0	0	3	0	1	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	208	Makalii II at Kapolei	35	2014	2014	0	0	0	0	0	35	0	0	0	0	0	0	0	0	35	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0
Proposed	109	Makua Alii & Paoakalani Redevelopment (HPHA)	490	2027	2029	0	0	0	0	0	0	0	0	0	0	0	0	0	490	490	0	0	0	0	0	0	0	0	0	0	0	0	0	490	490	490
Committed	109	Manaolana Place	109	2021	2021	0	0	0	0	0	0	0	0	0	0	0	0	109	0	20	0	0	0	0	0	0	0	0	0	0	0	0	20	0	20	20
Committed	113	Mayor Wright Homes Redevelopment (HPHA)	2,140	2021	2030	0	0	0	0	0	0	0	0	0	0	0	0	214	1,926	1,290	0	0	0	0	0	0	0	0	0	0	0	0	0	1,290	2,140	1,290
Committed	207	Mehana at Kapolei	1,110	2009	2018	20	45	212	18	140	129	60	278	148	60	0	0	0	0	178	0	0	162	16	0	0	0	0	0	0	0	0	0	0	0	0
Committed	307	Meheula Vista	301	2017	2020	0	0	0	0	0	0	0	0	76	75	75	75	0	0	301	0	0	0	0	0	0	0	0	76	75	75	75	0	0	301	301
Committed	115	Moanalua Hillside Apartments Expansion	475	2018	2019	0	0	0	0	0	0	0	0	0	238	237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	475	0
Committed	401	Na Pali Haweo (by lot owners)	190	2009	2034	170	1	1	0	1	0	1	0	0	1	0	1	1	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	801	Nanaikeola Senior Apartments	70	2009	2022	40	0	0	0	0	0	0	0	0	0	0	0	0	30	70	40	0	0	0	0	0	0	0	0	0	0	0	0	30	70	70
Proposed	801	Nanaikeola Village (self-help)	142	2027	2027	0	0	0	0	0	0	0	0	0	0	0	0	0	142	41	0	0	0	0	0	0	0	0	0	0	0	0	0	41	0	0
Committed	109	Nohona Hale	107	2020	2020	0	0	0	0	0	0	0	0	0	0	0	107	0	0	107	0	0	0	0	0	0	0	0	0	0	0	107	0	0	107	107
Committed	107	OM Kuhio at Waikiki	444	2022	2022	0	0	0	0	0	0	0	0	0	0	0	0	0	444	89	0	0	0	0	0	0	0	0	0	0	0	0	0	89	444	89
Committed	203	Ocean Pointe/Hoakalei Residences SF & MF	4,850	2009	2024	2,555	200	184	140	174	190	138	144	129	131	100	216	137	412	787	787	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	106	Ohana Hale	180	2019	2019	0	0	0	0	0	0	0	0	0	0	180	0	0	0	108	0	0	0	0	0	0	0	0	0	0	108	0	0	0	0	0
Committed	109	Ola Ka Ilima Artspace Lofts	84	2019	2019	0	0	0	0	0	0	0	0	0	0	84	0	0	0	84	0	0	0	0	0	0	0	0	0	0	84	0	0	0	84	84
Proposed	504	Olomana Heights	20	2030	2039	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	109	One Ala Moana	209	2015	2015	0	0	0	0	0	0	209	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	805	Pacific Links	475	2027	2037	0	0	0	0	0	0	0	0	0	0	0	0	0	475	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	109	Pacifica Honolulu	489	2012	2012	0	0	0	489	0	0	0	0	0	0	0	0	0	0	124	0	0	0	124	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	210	Palailai Residential	350	2030	2031	0	0	0	0	0	0	0	0	0	0	0	0	0	350	105	0	0	0	0	0	0	0	0	0	0	0	0	0	105	0	0
Completed	109	Park Lane Ala Moana	215	2018	2018	0	0	0	0	0	0	0	0	0	215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	107	Pau Street Multifamily Dwelling	6	2029	2029	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	804	Pokai Bay	125	2008	2036	42	7	2	3	0	0	0	1	0	0	0	6	9	55	70	0	0	0	0	0	0	0	0	0	0	0	6	9	55	0	0
Committed	109	Prospac Tower	429	2022	2022	0	0	0	0	0	0	0	0	0	0	0	0	0	429	78	0	0	0	0	0	0	0	0	0	0	0	0	0	78	78	78
Proposed	118	Puuwai Momi Redevelopment (HPHA)	1,240	2023	2029	0	0	0	0	0	0	0	0	0	0	0	0	0	1,240	1,240	0	0	0	0	0	0	0	0	0	0	0	0	0	1,240	1,240	1,240
Committed	302	Puuwai Place	40	2018	2019	0	0	0	0	0	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	111	Queen Emma Tower Redevelopment	71	2021	2021	0	0	0	0	0	0	0	0	0	0	0	0	71	0	71	0	0	0	0	0	0	0	0	0	0	0	0	71	0	71	71
Committed	108	Residence at Makiki	35	2019	2019	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	301	Royal Kunia, Phase 2	2,007	2021	2027	0	0	0	0	0	0	0	0	0	0	0	0	300	1,707	602	0	0	0	0	0	0	0	0	0	0	0	0	300	302	0	0

TABLE A-1, CONTINUED

STATUS	DPSA	PROJECT NAME	TOTAL UNITS[i]	START YEAR	END YEAR	UNITS COMPLETED									UNITS REMAINING					TOTAL AFFORD. UNITS	AFFORDABLE UNITS COMPLETED									AFFORDABLE UNITS REMAINING					RENTAL PROJECTS	
						BEFORE 2010	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	BEYOND 2021		BEFORE 2010	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	BEYOND 2021	TOTAL UNITS	AFFORD. UNITS
Completed	109	Rycroft Terrace	162	2015	2015	0	0	0	0	0	0	162	0	0	0	0	0	0	0	162	0	0	0	0	0	0	162	0	0	0	0	0	0	0	0	0
Completed	804	Sea Winds Apartments	50	2011	2011	0	0	50	0	0	0	0	0	0	0	0	0	0	0	50	0	0	50	0	0	0	0	0	0	0	0	0	0	0	50	50
Completed	113	Senior Residence at Iwilei	160	2014	2014	0	0	0	0	0	160	0	0	0	0	0	0	0	0	160	0	0	0	0	0	160	0	0	0	0	0	0	0	0	160	160
Completed	208	Senior Residence at Kapolei	80	2009	2011	60	0	20	0	0	0	0	0	0	0	0	0	0	0	80	60	0	20	0	0	0	0	0	0	0	0	0	0	0	80	80
Completed	109	Six Eighty	54	2013	2013	0	0	0	0	54	0	0	0	0	0	0	0	0	0	54	0	0	0	0	54	0	0	0	0	0	0	0	0	0	54	54
Proposed	109	Sky Ala Moana	514	2029	2029	0	0	0	0	0	0	0	0	0	0	0	0	0	514	77	0	0	0	0	0	0	0	0	0	0	0	0	0	77	114	77
Committed	110	Skyline Honolulu	110	2019	2019	0	0	0	0	0	0	0	0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	705	Sunset Beach Colony (by lot owners)	28	2009	2027	8	1	4	1	1	1	0	1	1	1	1	1	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	109	Symphony Honolulu	388	2016	2016	0	0	0	0	0	0	0	388	0	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0
Committed	109	The Block 803 Waimanu	153	2019	2019	0	0	0	0	0	0	0	0	0	0	153	0	0	0	153	0	0	0	0	0	0	0	0	0	0	153	0	0	0	0	0
Committed	109	The Central	513	2023	2023	0	0	0	0	0	0	0	0	0	0	0	0	0	513	310	0	0	0	0	0	0	0	0	0	0	0	0	0	310	0	0
Completed	109	The Collection Lofts	54	2017	2017	0	0	0	0	0	0	0	0	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	109	The Collection Tower	397	2017	2017	0	0	0	0	0	0	0	0	397	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	109	The Collection Townhomes	14	2017	2017	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	107	The Cove Waikiki	117	2015	2015	0	0	0	0	0	0	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	307	The Plaza at Mililani	72	2010	2010	0	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	0
Completed	115	The Plaza at Moanalua	122	2013	2013	0	0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122	0
Completed	119	The Plaza at Pearl City	166	2015	2015	0	0	0	0	0	0	166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166	0
Completed	106	The Plaza at Waikiki	125	2016	2016	0	0	0	0	0	0	0	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125	0
Completed	109	The Vanguard Lofts	36	2012	2012	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	501	The Woods at Ahuimanu	44	2025	2025	0	0	0	0	0	0	0	0	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	802	Villages at Maili (Voice of America Site)	250	2019	2020	0	0	0	0	0	0	0	0	0	0	100	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	208	Villages of Kapolei (completed)	3,225	2008	2008	3,225	0	0	0	0	0	0	0	0	0	0	0	0	0	2,541	2,541	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	207	Villages of Kapolei Northwest Corner	414	2022	2024	0	0	0	0	0	0	0	0	0	0	0	0	0	414	210	0	0	0	0	0	0	0	0	0	0	0	0	0	210	338	210
Completed	208	Villages of Kapolei Townhomes	645	2009	2013	178	78	194	90	105	0	0	0	0	0	0	0	0	0	645	178	78	194	90	105	0	0	0	0	0	0	0	0	0	144	0
Committed	208	Villages of Kapolei Village 8 (remnant)	90	2027	2027	0	0	0	0	0	0	0	0	0	0	0	0	0	90	90	0	0	0	0	0	0	0	0	0	0	0	0	0	90	0	0
Committed	201	Villages of Moae Ku (Area H apartments)	192	2013	2018	0	0	0	0	64	76	0	0	0	52	0	0	0	0	192	0	0	0	0	64	76	0	0	0	52	0	0	0	0	192	192
Completed	208	Villas at Maluohai	71	2012	2012	0	0	0	71	0	0	0	0	0	0	0	0	0	0	71	0	0	0	71	0	0	0	0	0	0	0	0	0	0	71	71
Committed	210	Wai Kaloi (Palehua East B)	275	2009	2022	251	0	0	0	3	1	3	6	2	1	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	402	Waialae Iki V, Phase 2	143	2009	2026	128	0	1	0	1	1	1	1	1	1	1	1	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	305	Waiawa Castle and Cooke	1,500	2030	2033	0	0	0	0	0	0	0	0	0	0	0	0	0	1,500	450	0	0	0	0	0	0	0	0	0	0	0	0	0	450	0	0
Proposed	305	Waiawa Ridge, Phases I & II	5,900	2030	2043	0	0	0	0	0	0	0	0	0	0	0	0	0	5,900	1,770	0	0	0	0	0	0	0	0	0	0	0	0	0	1,770	295	0
Completed	109	Waiea	174	2017	2017	0	0	0	0	0	0	0	0	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Completed	109	Waihonua	341	2015	2015	0	0	0	0	0	0	341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed	502	Waikalua Bayside	20	2017	2019	0	0	0	0	0	0	0	0	3	11	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proposed	302	Waipahu I & II & Hoolulu/Kamalu Redevelopment (HPHA)	740	2026	2029	0	0	0	0	0	0	0	0	0	0	0	0	0	740	740	0	0	0	0	0	0	0	0	0	0	0	0	0	740	740	740
Committed	106	Young Street Affordable Housing	30	2020	2020	0	0	0	0	0	0	0	0	0	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	0	0	30	0	0	30	30

[i] The units tabulated for the projects in this report are not necessarily the total number of units associated with the projects. Housing units represent the new units constructed or planned for construction after accounting for the units demolished or relocated.