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HOUSING POLICY STUDY, 2006

Prepared for the:

**Hawaii Housing Finance and Development Corporation and
Housing Officers/Administrators for Honolulu, Maui,
Hawaii, and Kauai Counties**

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**Prepared by:
SMS Research & Marketing Services, Inc.
February, 2007**



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Dear Directors/Administrators:

It is with pleasure that SMS Research presents this report of the findings of the Hawaii Housing Policy Study Update, 2006. We believe the results will be an important tool to be used by those who will plan for and develop new housing opportunities for Hawaii's people in the remainder of this decade.

It has been a pleasure serving you during the course of this project, and we look forward to working with you in the future.

Sincerely,

James E. Dannemiller
Executive Vice President

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Housing Policy Study Update, 2006

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EXECUTIVE SUMMARY: STATE OF HAWAII HOUSING CONDITIONS, 2006

The objectives of the Hawaii Housing Policy Study Update (HPS), 2006 were to update the information gathered in previous studies and to continue the development of the Study as a comprehensive housing planning tool. Findings reported here are based on data from many sources, including but not limited to the five components of HPS 2006: the housing stock inventory, the rental price study; the housing production study; the Housing Demand Survey; and (5) the Hawaii Housing Model. In 2006, the housing model was restructured in response to the needs of data users. Interested users should also consult other reports in the series¹.

FUNDAMENTAL HOUSING DATA

Population: Between 1980 and 1989, Hawaii's population grew at a rate of 1.4 percent per year. During the nineties, growth rate slowed to 0.8 percent per year. In the first three years of the present decade, our population grew by 0.9 percent per year, and in the last three years the average annual growth rate of Hawaii's population was 1.1 percent. Since 1990, growth rates were notably higher in the neighboring counties than on Oahu.

Housing Stock: The total number of housing units in Hawaii in 2006 is just over 500,000 units. At least since 1990, the average annual growth rate for total units has been higher than the population growth rate. Hawaii housing stock grew by 1.6 percent per year between 1990 and 2000. Between 2000 and 2003, the growth rate slowed a bit to 1.2 percent per year. In the last three years, the growth rate has returned to 1.6 percent per year, statewide.

Households: The number of households, or occupied housing units², in Hawaii is a better indicator of housing stock available to Hawaii residents. The total number of households in Hawaii in 2006 was 435,817 compared with 501,956 total housing units. Growth rates have been lower for occupied units than for total housing stock and that is a reflection of several recent trends including the increased resort construction, increased out-of-state real estate purchases, increased numbers of second homes, and the movement of some units from resident to visitor use. Between 1990 and 2006, the housing stock used by Hawaii households dropped from 92.0 to 86.8 percent.

Home Ownership: Housing stock growth from 1990 to 2006 fueled increasing home ownership rates across the State. The percent of occupied units that were owner occupied rose from 54 percent in 1990 to nearly 61 percent in 2006. The growth rate was slow at first, rising two points between 1990 and 2000, one point between 2000 and 2003, and then three points in the last three years.

Out-of-State Ownership: In the last six years, as West Coast real estate prices passed those in Hawaii, out-of-state demand increased dramatically and helped to push Hawaii home prices to record highs. In 2006, 6.2 percent of Hawaii's single-family housing units and 13 percent of our condominium units are owned by persons from outside of the State.

¹ See p. iii.

² Throughout the analysis and reporting of data for HPS 2006 we have followed the U.S. Census convention of defining households and occupied housing units as identical. The number of occupied housing units, or households, is equal to the total housing stock minus units held for use by non-residents and vacant units.

Housing Prices: The most salient characteristic of Hawaii's housing market in the last three years has been rapidly rising prices. Sales prices and rents are now at historic highs. Home resale prices³ fell in Hawaii from 1990 through 1998, and then rose at an increasing rate from 1998 through 2005. In 2006, sales prices continued to rise, but at a slower pace. In the last three years, sales prices in the State of Hawaii for single-family units topped out at over \$610,000. Condominium sales followed suit, rising from \$195,000 in 2003 to \$330,000 in 2006.

Average shelter costs for renter households in Hawaii rose by 40 percent between 2003 and 2006. Advertised rents⁴ went up 20 percent during the same period. Increases in advertised rents began in 2001 and began to slow in 2005. As the percentage of renters paying the higher rents increased, the average shelter cost for all renters rose sharply between 2003 and 2005⁵. The peak of the current run-up in advertised rents was July of 2006. Since that time, advertised rents have been falling.

CURRENT HOUSING SITUATION FOR HAWAII RESIDENTS

Among Hawaii's 435,817 households in 2006, about 60 percent were homeowners and 93 percent of them owned their property fee simple. Sixty-five percent of all households were located in single-family detached dwelling units. Seventeen percent were renting apartments, and about ten percent were living in condominium units, either owned or rented. Most of the rest were in multifamily units. The average monthly mortgage payment was \$1,550 a month and the average rent was \$1,050 per month.

With our record low unemployment rates, Hawaii household incomes were up since 2003. The Census Bureau reported Hawaii's median household income in 2005 at \$58,112, up 14.4 percent from \$50,787 in 2003. Our survey found similar medians. U.S. Department of Housing and Urban Development (HUD) income guidelines express income in terms of the median household income for each County in Hawaii, adjusted for household size. Median incomes for the State of Hawaii in their calculations rose from \$46,086 to \$53,571 between 2003 and 2006.

But how are Hawaii households doing relative to soaring housing costs and general inflation? In 2006, just over 41 percent of Hawaii households had shelter-to-income ratios less than .30. That means 59 percent were paying more than 30 percent of their incomes for shelter each month. Twenty-five percent (25%) were paying more than 40 percent of their income for shelter. Shelter-to-income ratios dropped steadily between 1992 and 2003. The depressed housing market of the nineties held prices and rents in check while the burgeoning economy of the late nineties raised household incomes. But between 2003 and 2006, rapidly rising housing costs pushed the shelter-to-income ratio back to its 1997 level.

Other conditions in Hawaii households haven't changed much as a result of higher housing prices. About the same number of people (78%) rated the condition of their units as excellent or satisfactory. Crowding, which fell steadily since 1992 dropped to 15 percent in 2006. Doubling up had also dropped between 1992 and 2003, but rose in 2006.

³ New unit sales prices are unavailable. They are expected to be higher than for resale prices, and to vary according to the same patterns as resale prices.

⁴ Rent data are taken from two sources. The Housing Demand Survey measured monthly rent for all renter households. The Rent Study measured average monthly advertised rents.

⁵ That is, rents paid by all renter households lagged advertised rents.

HOUSING DEMAND

The Housing Demand Survey measures demand as interest in moving to a new housing unit, whether to buy or to rent. In 2006, nearly 40 percent of all Hawaii households expressed a desire to move to a new home in the near future. The rest said they had no intention of moving in the foreseeable future.

Just less than 20 percent of those who want to move wanted to move to a home outside of Hawaii. If we subtract those households from the total who want to move, the resulting measure of “effective demand” indicates pressure on the housing market over the next several years. Effective demand was equal to 33 percent in 2006. It has fallen continuously from 42 percent in 1992 to 38 percent in 1997, 35 percent in 2003, and 33 percent in 2006.

Nearly 30 percent of those who expect to move out of Hawaii mentioned housing prices as their main reason for leaving. That’s up from 12 percent in 1997 and 19 percent in 2003.

HOUSING PREFERENCES

Preferences for new housing unit characteristics have changed little over the past 15 years. Among households that want to move, 56 percent want to own their next unit. But in 2006, about 16 percent of those who want to buy were not sure they could afford it and may continue renting. That would drop purchase incidence to about 47 percent, less than the current homeowner rate.

Buyer Preferences: Most potential buyers (80%) wanted single-family homes purchased in fee. About half (49.7%) would accept a condominium unit if they could not find a single-family unit in their price range. About 44 percent said they could start with one-bedroom units and 38 percent said they needed at least two. The preferred number of bedrooms was lower than in the past. Perhaps buyers are more willing to settle for smaller units in the face of high prices. The same was true for bathrooms. More than 90 percent of buyers said they would need one-and-a-half or two bathrooms. Thirty-seven percent said they needed 1,500 square feet or more of floor space. Thirty percent said they could accept units smaller than 1,200 square feet.

Renter Preferences: Among those who wanted to rent, 46 percent wanted single family homes. About 34 percent preferred an apartment or condo, and another nine percent chose a townhouse. The 2006 renters, too, were more willing to accept smaller units than in the past. Nearly all potential renters needed fewer than three bedrooms and 82 percent said they could accept one-and-a-half baths. Fifteen percent of potential renters said they needed 1,500 or more square feet of space and more than double that number (31%) said they could get along with less than 1,000 square feet of space.

FINANCIAL QUALIFICATIONS

Several indicators of financial qualifications of Hawaii households are assembled in each iteration of the Hawaii Housing Policy Study. In 2006, we found that 36 percent of potential buyers own their homes and 53 percent have owned the unit for more than three years. This suggests that perhaps 20 percent of would-be buyers will have sufficient equity to buy another home. About 57 percent of them have at least \$5,000 in savings or investments. But only 27 percent said they could gather \$60,000 as a down payment.

Among potential buyers, 35 percent had household incomes in excess of 140 percent of the County median. Seventy-two percent reported had more than one adult employed. One quarter of them felt their current indebtedness would cause problems with mortgage financing.

Monthly mortgage payments may be easier to manage. More than 40 percent of potential buyers said they could afford to pay \$2,000 or more each month. Among current homeowners, 46 percent were already paying more than \$1,800 a month. Among renters who wanted to buy, however, only 20 percent were paying more than \$1,800 a month for shelter.

MODELING HOUSING FUTURES, DEVELOPING HOUSING POLICY

The new Hawaii Housing Model was developed to estimate long-range changes in affordability, price, supply, and demand for housing units in Hawaii. It is driven by affordability, the ratio the affordable housing price to the median home price in Hawaii. Some of the first-cut results from the model as presented below.

Market Behavior: In 2006, affordability is lower than it has been for 25 years. The forecast predicts housing prices will be relatively flat for about 6 to 7 years, at which time they will start to increase at a modest rate. That assumes a fairly aggressive rate of increase in household income increase of 4.6 percent a year.

Housing prices in Hawaii are unaffordable for households at all income levels and it may be many years before housing is affordable again. Past market performance after a price run-up shows that home prices remain stable for a while and decrease slowly thereafter. Household income rises at a fairly stable rate. After a short run-up, housing costs and affordable prices reach parity after a few years. The current run-up is the largest in history. The price/income adjustment needed to reach parity will take longer to achieve.

Needed Units: The Housing Model includes a procedure for developing estimates of “needed units” based on the number of potential households that currently cannot obtain a housing unit in the current market. There is currently a need for 22,650 housing units in the State. This is up about 10 percent from 2003, the last time the Hawaii Housing Study was conducted.

In 2006, for the first time, it is possible to analyze housing need separately for single family and multi-family units. For families who want to own single family units, about 55 percent will not be able to locate an affordable unit in the 2006 housing market. Units affordable to households below 80 percent of the county median are in very low supply and the price adjustment period may be particularly stressful for these low-income households.

For those who want multi-family units, the situation is more favorable. Families with incomes below 50 percent of the median for their county, and those with incomes above 120 percent of

median, will have difficulty finding an affordable unit. For those with incomes between 50 and 120 percent of the median for their counties, affordable units seem to be in ample supply. As the affordability curve approaches parity (where a household with median income can afford a median-priced housing unit), the middle-income groups will have real opportunities to become homeowners in Hawaii. The situation remains unchanged for families with household incomes below 50 percent of the median income. These low-income households will not be able to find affordable single-family housing units.

ISSUES

HPS 2006 data are rich and comprehensive. They can be applied to a broad range of housing issues and policy alternatives. Some issues that have been addressed at this point are briefly summarized below.

Trading Off Distance and Traffic of Affordability: Some of the best locations for developing housing units at affordable prices are distant from population and job centers. For buyers this describes a trade-off between affordable and increased commute time. For planners the trade-off is that between producing housing for Hawaii's people and strain on infrastructure, especially on traffic congestion. Most buyers (70%) want to buy new homes in the same area in which they currently live and work. Of those, about 36 percent would be willing to consider a more distant location if they can find a home at an affordable price. And of those, 16 percent would give up their jobs and look for a new job. That means most of the residents in these new developments will be added to the long-range commute traffic. Traffic tradeoff is illustrative of similar development issues. Developing large numbers of units at some distance from job centers, without creating jobs there, causes serious strain on infrastructure.

Sustainable Lease: A sustainable lease is a leasehold arrangement that maintains property in an affordable price range. They are of interest in Hawaii because: (a) they allow government to maintain affordable housing developments as affordable over long periods of time; (b) sustainable leases on government land can reduce development costs and produce affordable units for median income households; and (c) they are generally more acceptable to prospective buyers than conventional leases. Any sustainable property arrangement requires limitations on ownership and resale. The property must be owner occupied, must be sold back to the sponsoring agency, and there is a ceiling on the resale price. Other aspects of the ownership agreement usually offset these features.

Study results showed that there is a role for sustainable leases in developing affordable housing for Hawaii. Once they understand how a sustainable lease works, between 22 and 50 percent of people will be willing to take advantage of a sustainable lease to get into their own homes.

More important, sustainable leases appealed to buyers who most need them. Sustainable leases appealed to renters, potential buyers who had no down payment, and those with debt. They appealed to crowded households, to those with shelter-to-income ratios between 30 and 40 percent, and to prospective home buyers with incomes between 80 and 140 percent of median income. Finally, the sustainable lease was attractive to households that included "hidden homeless" persons.

HOUSING IN HAWAII, 2006

The objectives of the Hawaii Housing Policy Study Update (HPS), 2006 were to update the information gathered in previous studies and to continue the development of the Study as a comprehensive housing planning tool. In past Housing Policy Studies, the results have slowly evolved toward the latter goal. In 2006, the Study was expanded to include an analysis of housing production data over the last five years.

Two other changes were implemented in 2006. First, the Study's time schedule was changed to include major updates every three years with interim updates on an annual basis. Second, the housing model was radically restructured in response to the needs of housing analysts in Hawaii. The new housing model is more comprehensive and fitted with additional front-end programming to make it usable by a much broader group of housing analysts and planners.

PROJECT STRUCTURE

The Housing Policy Study, 2006 has five parts:

1. **A Housing Stock Inventory:** An inventory of all housing units in the State at the end of 2004. In 2006, the inventory was used to develop a long-range model of housing production to serve as input to the housing model.
2. **Rental Housing Study:** A study of rental unit advertisements, prices, and characteristics from January 2003 through November 2006. The rent study was also institutionalized to produce trackable data into the future.
3. **Production Data:** A review of County data on scheduled housing unit production and a set of interviews with housing producers to develop more reliable estimates of short-run housing production and better understand the issues related to housing development.
4. **Demand Survey:** A statewide survey of adults in 4,995 households to measure current housing conditions, and expectations to move to a new unit, new unit preferences, financial qualifications for purchase or rent, and demographic characteristics of household members.
5. **Housing Model:** A model of Hawaii housing conditions, prices, and sales, that permits forecasting of housing unit needs by income group through the year 2030.

Each of these project elements is described in greater detail in the Technical Report for HPS 2006 and in several companion documents in the series⁶.

⁶ See list of reports on p. iii.

POPULATION

The need for housing in Hawaii begins with increases in population. As population grows, due to natural increase and net in-migration, new households are formed. New units are required to house the new households. Between 1980 and 1990, Hawaii's population grew from 964,660 to 1,113,491 for an average annual increase of about 1.4 percent per year. Table 1 shows population increases since 1990.

Table 1. Total Population, 1990-2006

	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
1990	1,113,491	836,231	120,317	100,504	51,177
1992	1,158,613	863,959	131,630	108,585	54,439
1997	1,211,640	886,711	144,445	122,772	57,712
1999	1,210,300	878,906	146,970	126,160	58,264
2000	1,212,125	875,377	148,677	128,241	58,463
2003	1,248,200	890,818	158,896	137,586	60,900
2004	1,262,124	893,614	166,035	140,644	61,831
2005	1,275,194	899,296	169,356	142,574	63,968
2006	1,287,022	903,028	172,949	144,775	66,271
Percent change 1990-2000 ^a	0.8%	0.4%	2.0%	2.4%	1.3%
Percent change 2000-2003 ^a	0.9%	0.6%	2.1%	2.3%	1.3%
Percent change 2003-2006 ^a	1.1%	0.4%	2.7%	1.6%	2.7%

Sources: 1990 Census, 2000 Census, American Community Survey, 2003, 2004, 2005; 2006 is an SMS estimate.

a. average annual increase for the period noted.

During the nineties, Hawaii's population growth rate was notably lower than in the previous decade. The average annual rate of growth dropped from 1.4 to 0.8 percent. In the first six years of the present decade, population growth has been spurred, principally by net in-migration, to about one percent per year. Population growth patterns were different for each county. The City and County of Honolulu's population growth was less than half a percent per year in the last decade. It grew to about 0.6 percent per year between 2000 and 2003, and then settled back to about 0.4 percent in the last three years. In Maui County the growth rate was very high during the nineties and through to 2003. Growth rates of nearly 2.4 percent per year fell sharply to 1.6 percent between 2003 and 2006. In Hawaii and Kauai Counties, growth rates have been rising steadily during the last 16 years, culminating in a growth of 2.7 percent per year between 2003 and 2006.

HOUSING STOCK

Another major factor in estimating housing need is the housing stock itself. If the rate of housing unit production keeps pace with population increase, then housing availability will be sufficient to handle the need generated by new households. According to U.S. Census estimates, Hawaii's housing stock grew from about 322,845 units in 2003 to 332,196 units in 2006. That amounts to an average annual growth rate of about 1.6 percent per year, about a half a percent higher than the population growth rate during the same period.

Table 2. Total Housing Units, 1990-2006

	State of Hawaii	County Of Honolulu	County of Hawaii	County of Maui	County of Kauai
1990	389,810	281,683	48,253	42,261	17,613
1992	411,494	290,571	49,394	51,578	19,951
1997	449,385	311,398	59,098	54,321	24,568
1999	456,091	314,448	61,108	55,475	25,060
2000	460,542	315,988	62,674	56,549	25,331
2003	477,333	322,845	67,878	59,788	26,822
2004	484,936	325,888	70,927	60,888	27,233
2005	491,671	329,300	71,984	62,178	28,209
2006	501,956	332,196	77,577	63,364	28,819
Percent change 1990-2000 ^a	1.6%	1.1%	2.5%	2.8%	3.5%
Percent change 2000-2003 ^a	1.2%	0.7%	2.6%	1.8%	1.8%
Percent change 2003-2006 ^a	1.6%	0.9%	4.3%	1.9%	2.3%

Sources: 1990 Census, 2000 Census, American Community Survey, 2003, 2004, 2005; 2006 is an SMS estimate.

a. Average annual increase for the period noted.

During the previous decade, the housing stock grew by the same rate (1.6%), or about double the population growth rate. It slowed to 1.2 percent per year between 2000 and 2003, closer to the population growth rate during the same period. The situation in the last three years saw both rates increase, with stock growth staying ahead of population growth 1.6 percent to 1.1 percent.

Another important piece of the story is conditions at the beginning of the period under study. The Housing Policy Study 1992 described a housing market in Hawaii with very high pent-up demand. The very rapid population growth in the eighties, combined with production patterns that favored high-end units followed by rapidly declining economic conditions, caused major decreases in supply. Crowding⁷ and doubling up were at record high levels, survey indicators of pent-up demand were all high, and affordable units were in low supply. The same factors worked toward lower population growth during the nineties. Birth rates fell, and people left the State to find better economic conditions and lower priced housing. Housing production, while slow, favored affordable units. And as the economy improved between 1997 and 2000, housing production rose to meet new demand, now reinforced by out-of-state buyers.

⁷ Crowding was measured according to the US Census definition, "more than 1.01 persons per room". Doubling up was measured as the number of households with more than one family per household.

Conditions favored an increase in the ratio of housing stock growth to population growth. That meant that pent-up demand decreased steadily between 1992 and 2006. Both the 2003 and 2006 Housing Policy Study Updates showed that to be the case.

Components of Housing Stock Growth

Recent housing stock growth was led by significant increases in the number of single-family homes in all four counties. Statewide, the number of single-family homes went up by 2.5 percent per year between 2003 and 2006. The increase for condominium units was only 1.8 percent per year⁸.

Table 3. Types of Single Family and Condominium Housing Units in Hawaii Stock, 1990-2006

	2003	2006	Difference	
			Units	Pct. Chg.
City & County of Honolulu	311,466	329,534	18,068	1.8%
Single family homes	150,957	160,686	9,729	2.0%
Condominium units	91,913	94,640	2,727	0.9%
County of Maui	58,358	65,484	7,126	3.7%
Single family homes	34,853	38,993	4,140	3.6%
Condominium units	19,592	20,388	796	1.3%
County of Hawaii	55,014	62,250	7,236	1.3%
Single family homes	47,302	52,703	5,401	3.5%
Condominium Units	7,712	9,547	1,835	7.1%
County of Kauai	24,907	26,871	1,964	2.4%
Single family homes	18,301	19,494	1,193	2.0%
Condominium units	5,653	5,818	165	0.9%
State of Hawaii	453,697	490,711	37,014	2.5%
Single family homes	251,413	271,906	20,493	2.5%
Condominium units	124,870	130,400	5,530	1.4%

Source: Hawaii Tax Map Key records, special tabulations by Hawaii Information Services: SFD & Condo units only. Pct. Chg. = average annual percent increase between 2003 and 2006.

In Kauai and Honolulu Counties, the growth rates for single family and condominium units were similar at 2.0 percent and less than 1.0 percent respectively. Hawaii and Maui Counties experienced greater growth rates for single-family units, in the neighborhood of 3.5 percent per year. The County of Hawaii growth rate for condominium units was a surprising 6.9 percent per year between 2003 and 2006.

⁸ The growth rates for apartments, military housing units, dormitories, and cooperative apartment units were also high between 2003 and 2006. The method of measuring these units in the housing inventory changed somewhat between 2003 and 2006, making their comparison difficult to interpret. We look forward to tracking them effectively in the future.

Home Ownership

The growth in housing stock between 1990 and 2006 was accompanied by a steady increase in homeownership rates across the State. As shown in Table 4, the percent of occupied units that were owner occupied rose from 54 percent in 1990 to nearly 61 percent in 2006. The growth rate was slow at first, rising two points between 1990 and 2000, one point between 2000 and 2003, and then three points in the last three years.

Table 4. Home Ownership Rates, 1990-2006

	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
1990	53.9	52.6	61.1	57.5	58.6
1992	54.5	52.7	61.4	57.4	59.7
1997	56.1	54.2	63.8	57.4	61.2
1999	56.4	54.5	64.2	57.4	61.3
2000	56.5	54.6	64.5	57.4	61.4
2003	57.2	54.9	66.1	58.3	62.0
2004	59.0	57.2	66.9	58.5	62.9
2005	59.4	57.6	67.2	58.6	64.0
2006	60.7	58.9	67.2	61.4	65.2

Source: 1990 and 2000, U.S. Census; Honolulu 2003, 2004, American Community Survey; Honolulu, Hawaii, Maui Counties from American Community Survey, 2005; all other estimated by SMS.

Homeownership rates for the City and County of Honolulu have traditionally been somewhat lower than for the other three counties. And while homeownership is higher today on all islands, Honolulu's rate is still the lowest in the State. The surprising finding was that Maui's homeownership rate was stable during the nineties. Even with a growth spurt in the last three years, homeownership is closer to Honolulu's rate than to those of Hawaii and Kauai Counties.

Out of State Ownership

Out-of-state demand for Hawaii housing units has been a substantial feature of the housing market for many years. In the last six years, as major West Coast real estate prices surpassed those in Hawaii, out-of-state demand increased dramatically and helped to push Hawaii home prices to record highs. Table 5 presents figures for all four counties in 2006.

Table 5. Out-of-State Owners, 2006

	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
Single family homes	6.2	3.6	9.9	9.5	11.0
Condominium units	26.2	15.1	49.5	59.7	51.6
Total Units	12.7	7.8	16.0	26.7	20.3

Out-of-State owners calculated as percent of all units for which the tax bill is mailed to an out-of-state address. Source: Hawaii Tax Map Key records, tabulated by Hawaii Information Services for SMS.

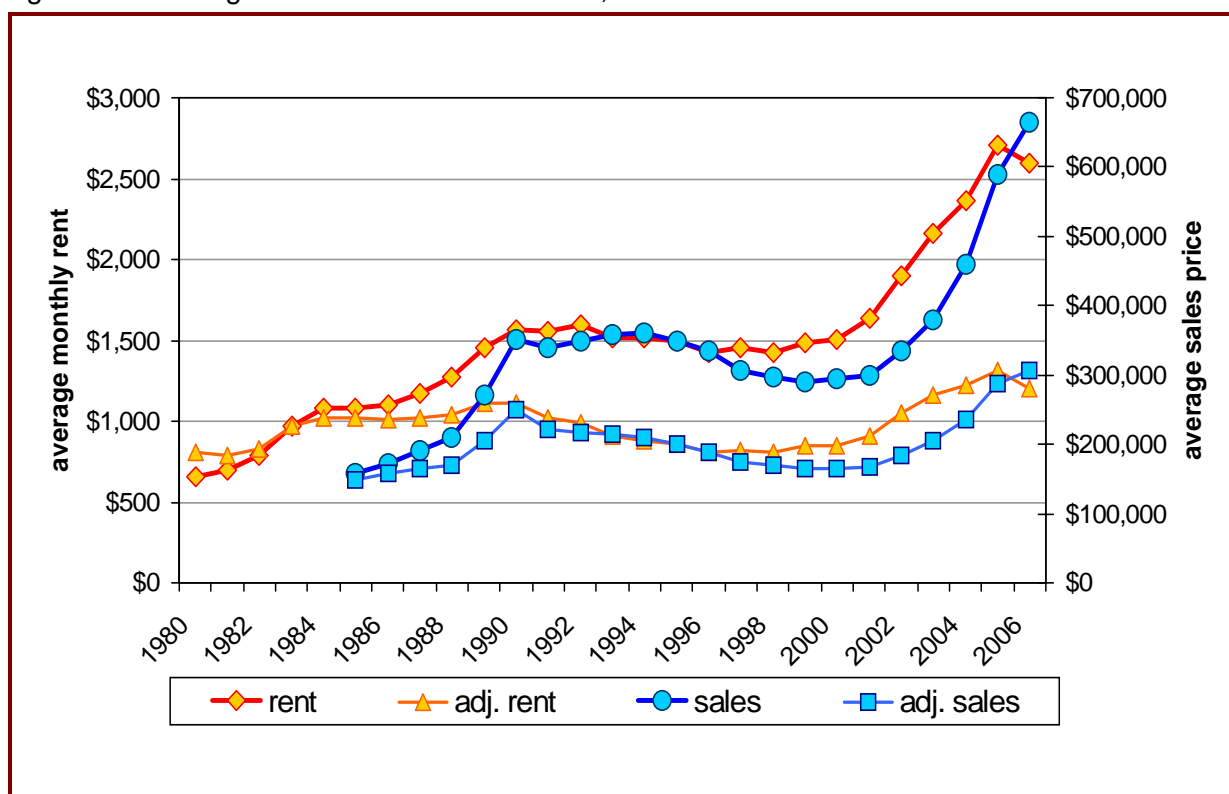
Overall, persons from outside of the State own 12.7 percent of Hawaii single-family housing units and 26 percent of our condominium units. In all but the City and County of Honolulu, the out-of-state figure for single-family units is about 10 percent. For Maui and Kauai counties, the percent of out-of-state condominium ownership is about 50 percent.

HOUSING PRICES

Most Hawaii housing observers are aware that housing prices, whether sale or rents, have been rising sharply over the last three years. Housing prices are at historical highs. Availability was low in 2003 and for many months in 2004. By 2005-2006, for-sale units began to appear on the market in larger numbers, but rentals continued to be in short supply. By 2006, rental units were available in numbers similar to 2002-2003. Before we turn to the details of housing prices for all the islands, it will be useful to look at the impact of housing prices over the long haul.

Figure 1 presents representative⁹ data for Hawaii housing prices and rents in current dollars and in 1982-84 dollars adjusted for inflation. The rent data are average monthly advertised rents for 2-bedroom single-family homes on Oahu. The home sales data are average annual sales prices for 2-bedroom homes on Oahu.

Figure 1. Housing Prices and Rents in Hawaii, 1990 to 2006



Source: SMS Rental data, MLS sales data.

⁹ Some data are available for other islands and for other unit types, but the series are of differing lengths and for differing unit types. No reliable data are available for the State as a whole for such a long series. Most available data suggest that the behavior of these series – as distinct from the actual rent or sale amounts – are roughly the same for all counties.

Two sharp price run-ups, one in the late eighties, and a more recent one between 1999 and 2006 dominates the picture. The rent data show an earlier run-up between 1982 and 1985. Since we are near or at the end of the current run-up, our attention is drawn to “what happens next”. The recovery after the early 80s run-up was short, only two or three years. It ended when interest rates began to drop in 1987. The nineties recovery took nearly a decade and seems to have occurred in two steps – a no-growth period between 1991 and 1996, followed by a notable drop in prices that ended in 1999. The current dollar data show that housing prices stayed relatively stable, and even increased a bit about 1994 and 1995. The inflation-adjusted data, on the other hand, show a relatively constant decline in housing values and rents that began to turn around by the end of the decade. This suggests a true “adjustment” in economic terms, in which housing values dropped from their run-up peak but did not fall below their pre-run-up levels. The next run-up drives housing value well above values at the previous peak. We might expect a similar adjustment following the current run-up.

Finally, we note that in purely graphic terms, rents seem to lead housing sales prices. That makes recent trends very interesting. Oahu average monthly advertised rents actually began to fall in 2005 and have continued to fall throughout 2006. This and other factors noted throughout this report suggest that the recent increase in Hawaii housing costs may be at an end.

Sales Prices

Sales prices for housing units across the State rose rapidly in the last three years. Sales prices for single-family units topped out at over \$610,000 in late 2006. Condominium sales followed suit, rising from \$195,000 in 2003 to \$330,000 in late 2006. News stories in the last quarter of 2006 noted that prices had leveled off, and sales volumes had begun to drop.

Rents

Rental price data in Housing Policy Studies come from two different sources. The Housing Demand Survey measures average monthly rent for all renters in current dollars. The rental price study measures average monthly advertised rent, the price renters will have to pay as they move to new units. Table 6 identifies the difference between the two.

Table 6. Average and Advertised Rents, 2003 and 2006

County	Average Monthly rents							
	Apartments				Single Family Units			
	Studio		2-Bedroom		2-Bedroom		3&4 Bedroom	
	All Households	Ad Rents	All Households	Ad Rents	All Households	Ad Rents	All Households	Ad Rents
Honolulu								
2003	\$680	\$728	\$866	\$1,446	\$1,002	\$1,013	\$1,136	\$1,559
2006	\$807	\$960	\$1,362	\$1,798	\$1,374	\$1,603	\$1,819	\$2,467
Maui								
2003	\$584	\$1,032	\$825	\$1,338	\$1,016	\$1,347	\$1,136	\$1,926
2006	\$809	\$984	\$1,123	\$1,498	\$1,227	\$1,508	\$1,661	\$2,254
Hawaii								
2003	\$615	\$693	\$745	\$1,072	\$754	\$1,318	\$930	\$1,560
2006	\$588	\$855	\$1,028	\$1,408	\$1,097	\$1,303	\$1,424	\$1,504
Kauai								
2003	\$509	\$747	\$1,023	\$1,249	\$796	\$1,367	\$1,055	\$1,712
2006	\$925	\$929	\$1,061	\$1,469	\$1,344	\$1,600	\$1,516	\$2,017
STATE								
2003	\$631	\$872	\$858	\$1,373	\$969	\$1,287	\$1,096	\$1,841
2006	\$794	\$929	\$1,310	\$1,693	\$1,312	\$1,597	\$1,690	\$2,287

Source: Rent Study, review of rental advertisements on all islands, monthly from January 2003 through November 2006.

Across all categories, rents rose by about 40 percent between 2003 and 2006. Advertised rents rose by about 20 percent during the same period. Major increases in advertised rents began in 2001 and began to slow in 2005. As the percentage of renters paying the higher rents increased, the average rent for all renters rose more sharply between 2003 and 2005. That is, overall rents lag advertised rents.

In all four counties, advertised rents showed the same pattern between 1985 and 2006¹⁰. Rents rose through the last half of the eighties, fell sharply in the early nineties and remained at relatively low levels until 1999. In the present decade rents have risen at a faster rate than in the past culminating in historic highs by 2005.

¹⁰ Rents for Maui and Kauai Counties show an uncharacteristic rise for the period between 2000 and 2002. This may be the result of slightly different data collection methods used for that period. Sample sizes were much lower than in other years, allowing for greater error variance in the estimates.

Figure 2a. West Hawaii Rents, 1985-2006

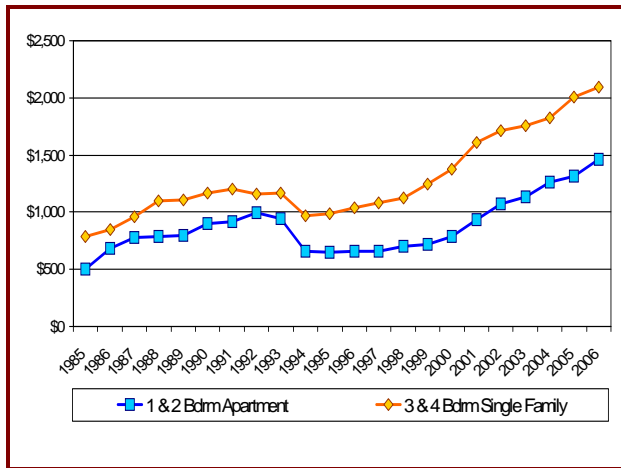


Figure 2b. Maui Rents, 1985-2006

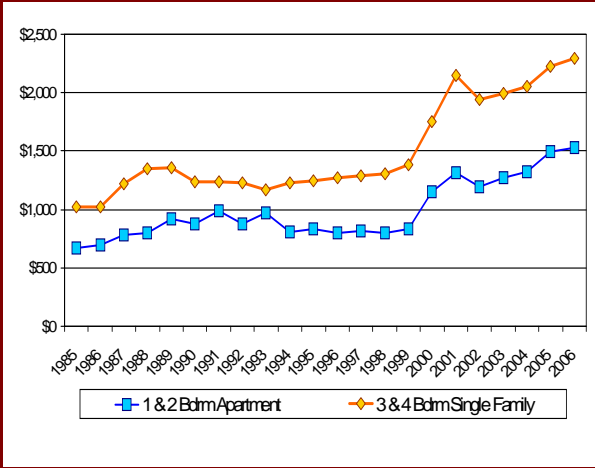


Figure 2c. Kauai Rents 1985-2006

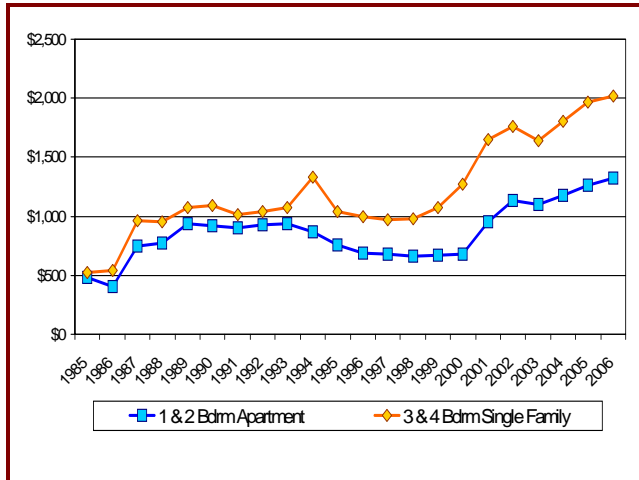
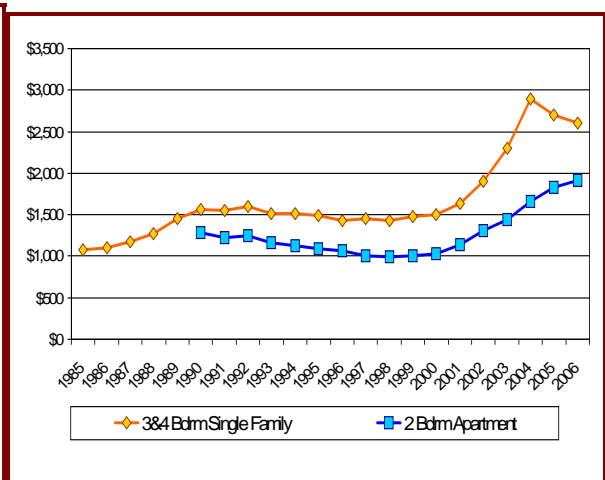


Figure 2d. Oahu Rents, 1985-2006



In all counties, the rate of increase slows between 2005 and 2006. Quarterly data for all but Hawaii County show significant decreases in average advertised monthly rents. The peak of the current run-up in advertised rents was about July of 2006. Since that time, advertised rents have been dropping. Continued increases for the County of Hawaii are led by high rents in West Hawaii. East Hawaii rents have leveled off.

CURRENT HOUSING SITUATION OF HAWAII RESIDENTS

Among Hawaii's 435,818 households in 2006, about 60 percent were homeowners. Even on Oahu home ownership rose to 58 percent. It was as high as 68 percent in Hawaii County, 65 percent on Kauai, and 60 percent in Maui County. Among homeowners, ownership in fee was higher than in the past, reaching 93 percent for the State as a whole, and differing only slightly across counties¹¹.

About 65 percent of all households were living in single-family detached dwelling units. Seventeen percent were renting apartments, and about ten percent were living in condominium units, either owned or rented. Most of the rest were in multi-family units including townhouses, duplexes, and other multiplex units. On Oahu, about 58 percent of households were living in single-family units and more were in all of the other unit types. The Counties of Hawaii and Kauai found around 85 percent of the households in single-family units with fewer families housed in other types of units, especially condominium units. Only about 3.5 percent of their households are in condos, compared with 11.5 percent on Oahu. Maui County's housing pattern is roughly between Oahu and the other two counties, with 75 percent in single-family units and nine percent in condos.

We have already noted the rapidly rising cost of housing on all counties since 2003. At present, the average homeowner in Hawaii has a monthly mortgage payment of about \$1,553 a month and the average renter is paying nearly \$1,100 per month in rent. Maui County housing costs, both rent and mortgage payments, were the highest in the state according to survey data. That finding was corroborated by the rent study as well (see Table 6 and Figures 2a through 2d).

Table 7. Average Monthly Housing Costs by County, 2006

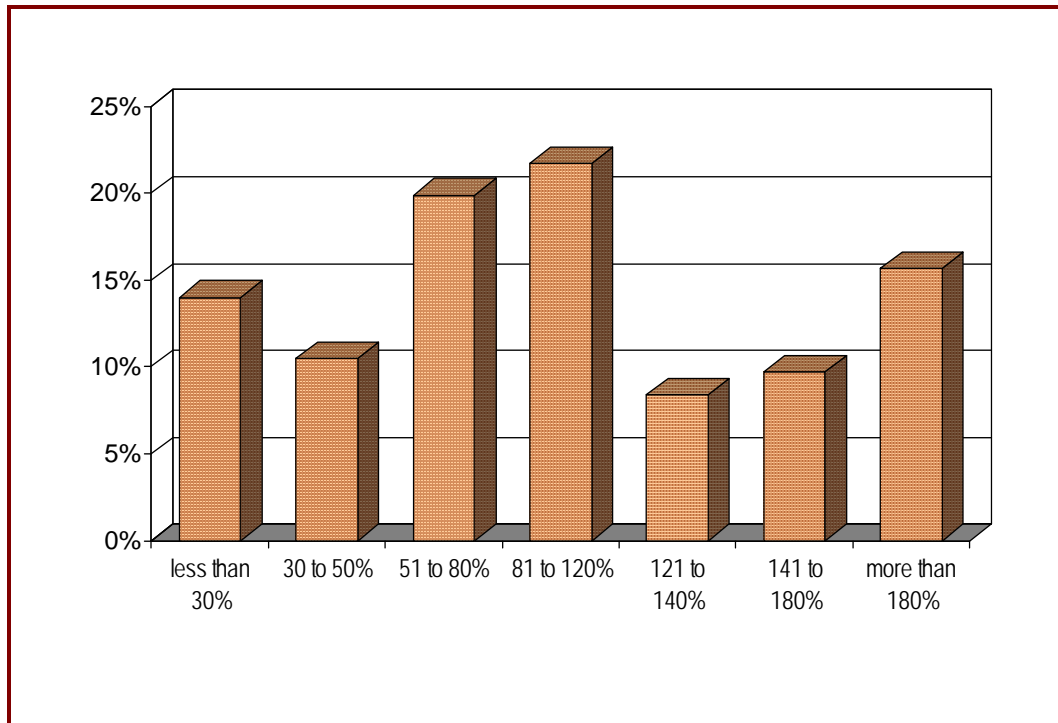
	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
Average monthly mortgage payment	\$ 1,550	\$ 1,590	\$ 1,250	\$ 1,820	\$ 1,460
Average Monthly rent	\$ 1,050	\$ 1,060	\$ 1,000	\$ 1,080	\$ 1,050

Monthly housing costs rounded to the nearest \$10. See Table A1 for details.

With nearly two years of the lowest unemployment rates in the nation, Hawaii household incomes increased between 2003 and 2006. In part, our higher incomes are due to much larger household sizes with several earners per household. For this reason, housing analysts seek a measure of economic well-being that takes household size into account. Housing Policy Studies since 1992 have used the income guidelines set forth by the U.S. Department of Housing and Urban Development (HUD) for that purpose. HUD guidelines express income in terms of the median household income for each of Hawaii's four Counties. Figure 3 shows the distribution of Hawaii households according to HUD guidelines in 2006.

¹¹ For details on finding reported in this section, see Table A1 in the appendix.

Figure 3. Hawaii Households at HUD Guideline Levels, 2006



The distribution of households at HUD guidelines across the counties is nearly identical because the guidelines are based on the median household income for each county. The distributions also differ very little across time. The guidelines are particularly useful since they describe the types of housing suited to each income level. Households with incomes below 30 percent of the median income are very likely to require assisted housing of some sort. Those between 30 and 50 percent of the median are unlikely to qualify for financing to buy units. Those between 50 and 80 percent of median income may have difficulty qualifying for conventional financing. The ability of those from the 80 to 120 percent group to secure housing depends on the market. With Hawaii's very high housing costs, they will have difficulty finding the housing they might want to have this year. Households with incomes between 120 and 140 percent of median income will need affordable housing units. Those with incomes between 140 and 180 percent of median will do well in the lower half of the market, and those above 180 percent of median are expected to be able to secure housing without difficulty.

The more important question is how Hawaii's households are doing in the current boom housing market. Between 2003 and 2006 both purchase price for housing and rent costs soared. During the first half of that period, availability was very low. By the time the Housing Policy Demand Survey was conducted, availability was somewhat better, but costs were at all-time highs. We might expect that the shelter-to-income ratio increased as a result.

Table 8. Shelter-to-Income Ratios by County, 2006

	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
Less than 30% household Income	40.7	40.6	43.4	36.5	43.0
30 to 40% of household income	12.8	12.4	12.4	15.8	12.0
More than 40% household income	25.7	25.1	26.1	30.0	24.0
No shelter cost	20.8	21.9	18.1	17.7	20.9

"No shelter cost" includes those renting without payment of cash rent and homeowners with paid-up mortgages.

In 2006, just over 40 percent of Hawaii residents were paying less than 30 percent of their monthly income for shelter. That level is considered to be the norm for homeowners. It would be an asset for a family applying for a home loan. But nearly one in four households across the State was paying more than 40 percent of the monthly income for shelter.

The market has affected the ratio over time. The percent of households paying more than 40 percent of their income for shelter dropped steadily between 1992 and 2003. The depressed housing market of the nineties held prices and rents in check while the burgeoning economy raised household incomes. Between 2003 and 2006, however, rapidly rising housing costs pushed the shelter-to-income ratio back to its 1997 level.

High rents in the County of Maui have clearly had a negative impact on county residents. Fully 30 percent of Maui residents live with shelter payments taking up more than 40 percent of their income. Nearly half of all Maui households (46%) are spending more than 30 percent of their income on housing.

Conditions within Hawaii households have not changed significantly as a result of the rising prices for housing. Residents rate the condition of their units about the same as they did in 2003. About 78 percent reported that their units were in excellent or satisfactory condition¹². As usual, renters were more likely than owners to be critical of their unit condition. Ratings did not differ significantly across counties.

Crowding and doubling up, which had fallen steadily since 1992, were a bit lower than in 2003. Fifteen percent of all households were either living in crowded units or living with more people in the household than they would choose. We note, however, that it was the crowding index that caused the drop. The new units built since 2000 are generally larger than those built during the nineties, and that reduced the number of persons per-room overall. Doubling-up, either living with several generations in the household or living with non-family members, increased since 2003. That suggests that the higher prices and lower availability between 2004 and 2006 slowed the rate of household formation.

¹² These were the top two categories in a four-point scale used by Demand Survey respondents to describe their relative satisfaction with the condition of their current unit.

HOUSING DEMAND

This section deals with a unique measure of housing demand. It measures demand as interest in moving to a new housing unit, whether to buy or to rent. It considers interest in moving at any time in the relatively near future¹³. The inverse of this measure (one minus the percent who want to move) is the percentage of households who told us that they were in the housing unit where they wanted to live and had no intention of moving in the foreseeable future. This measure of demand should not be confused with other less comprehensive measures of demand used elsewhere. It should not be confused with the number of housing units that should be built in Hawaii. Many, if not most, of the units shown at the bottom of Table 9 will be supplied from current inventory.

Our measure of demand suggests the level of real estate activity that can be expected in the relatively near future. Table 9 shows that about 40 percent of all Hawaii households are interested in moving to a new unit. Interest is somewhat higher in Hawaii and Maui Counties. Price increases have been higher in those two counties and while more units have been added to the inventory than in other counties (see table 32), the rate of out-of-state ownership has also been much higher (see Table 5). This suggests that pent-up demand may be higher in these two counties than in Honolulu or Kauai Counties.

Table 9. Interest in Moving to a New Home by County, 2006

	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
Want to move to a new home	39.8	38.8	42.1	45.1	35.6
Will move out-of-state	19.7	22.5	12.7	13.2	20.6
Effective demand for homes	32.6	30.9	37.2	39.6	29.0
Estimated number of movers	142,362	93,528	22,796	19,577	6,362

"Will move out of state" measured as first choice out of state. Effective demand eliminates those moving out of state from the overall demand estimate. Percent is percent of all movers. "Estimated number of movers" is the number of households wishing to move to a new unit minus those who will move to units outside of Hawaii.

Just less than 20 percent of all those who want to move expressed a desire to move to a new home outside of Hawaii. As usual, there were more residents planning to move out from Honolulu than from other counties. We were surprised to see Kauai County's figure at 21 percent this year, much higher than the 13 percent for Maui and Hawaii Counties.

If we subtract those who want to leave Hawaii from those who want to move, we get an estimate of effective demand that is comparable across time and measures of pressure on the housing market over the next several years. Across the state, effective demand is expected to be equal to about 33 percent of all 2006 households. The difference between Hawaii and Maui Counties (40%) on one hand, and Honolulu and Kauai Counties on the other (30%), is even greater by this measure.

¹³ Data were taken from the Housing Demand Survey. All respondents were asked if and when they intended to move to their next housing unit.

Effective demand has changed notably since 1992, reflecting the changing condition of Hawaii's housing market. Across the State, effective demand fell continuously from 42 percent in 1992 to 38 percent in 1997, 35 percent in 2003, and 33 percent in 2006. In the City and County of Honolulu, effective demand fell from the highest in the state (42%) in 1992 to the lowest in the State (31%) in 2006. Kauai County demand also dropped in the Study years. In Hawaii and Maui Counties, effective demand dropped from 1992 through 2003, and has since risen to nearly 40 percent of 2006 households.

Table 10. Effective Demand by County, 2006

	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
1992	41.6	42.5	39.7	39.1	38.4
1997	37.5	36.4	34.8	42.5	36.0
2003	35.1	35.1	35.3	35.8	33.0
2006	32.6	30.9	37.2	39.6	29.0

There is little doubt that housing prices have affected demand estimates. Nearly 30 percent of all those who expect to be moving out of Hawaii mentioned housing prices as their main reason for leaving. That's up from 12 percent in 1997 and 19 percent in 2003. And two-thirds of those who said they would not be buying a home on their next move said that housing costs were one of the major reasons for that decision.

All of this causes some concern about the drop in demand and its implications for Real Estate activity in the next several years. To what extent does low effective demand reflect despair prompted by a market in which the average price of a 2-bedroom house rose from \$375,000 to \$665,000 in less than three years? The market has also produced steadily increasing home ownership rates, interest rates remain low, and housing production is at an all-time high. With the leveling off of prices and a drop in rents in the last half of 2006, will demand revive? Or will it take some time to work a market adjustment that will change the outlook at the middle of the market?

HOUSING PREFERENCES

Buyer and renter preferences for certain housing unit characteristics were measured in 2006 as in the past. The objective was to provide information on preferences to support a broad range of housing issue analysis over the next few years. In this section of the report we will briefly describe the most salient of those preferences. See Table A3 in the appendix for details.

Among all households that want to move, 63 percent want to own their next unit. This figure has changed little over the last 15 years. This year the preference for ownership was unusually high for Hawaii County (71%), and somewhat lower than usual for Kauai County (55%). Overall, single family units remain the first choice of the majority of would-be buyers.

The preference for ownership units is not always translated into reality in the marketplace. About six percent of survey respondents who said they would be moving to an owned unit next time also said they were not sure they would be able to afford it and may continue renting. That

would drop the purchase incidence to about 59 percent from the initial estimate. That would be a more reliable estimate of the actual buyer rate in the market. And if that is the case, we might expect that the growth in home ownership in Hawaii will stabilize or even drop a bit over the next few years.

Buyer Preferences

Once again, the majority of potential buyers (83%) preferred single-family detached homes. Single-family units are more important to buyers in Hawaii (92%), Kauai (86%), and Maui Counties (89%) than in Honolulu (79%). The County of Hawaii, with the lowest percentage of condominium units in the State, also showed the lowest preference for condo units (5% vs. 10%). When asked if they would accept a condominium unit if they could not find a single-family unit in their price range, half of the buyers (53%) statewide said they would. In Hawaii County, that figure dropped to 40 percent of potential buyers.

About 43 percent of potential buyers said they would be looking for a one-bedroom unit and 49 percent said they would need at least two bedrooms. The preferred number of bedrooms was a bit lower than in the past, perhaps reflecting a willingness to settle for smaller units in the face of high prices. The same was true for the preferred number of bathrooms. More than 90 percent of buyers said they would need one-and-a-half or two bathrooms.

Asked what would be the smallest size unit they would accept. More than a third (39%) of the would-be buyers said they would need 1,500 square feet or more. Thirty-eight percent said they could accept units smaller than 1,200 square feet.

Renter Preferences

Among those who would rent their next unit, 49 percent preferred to rent a single-family house. About 43 percent preferred an apartment or condo, and another six percent chose a townhouse. Preference for single-family homes was once again much higher on the neighbor Islands than on Oahu, and Oahu renters were more interested in townhomes.

Across the State, nearly all of the potential renters were willing to take units with fewer than three bedrooms. Forty-two percent were willing to take studio apartments or cottages. One-bedroom units were acceptable to 37 percent and 20 percent said they would need at least two bedrooms. Again, these figures suggest a willingness to take smaller units than in the past. The number of bathrooms was also relatively low, with 83 percent reporting that they could accept one-and-a-half baths.

About 22 percent of potential renters said they would need 1,500 or more square feet of space in their next unit. Almost double that number (38%) said they could get along with less than 1,000 square feet of living space.

FINANCIAL QUALIFICATIONS

Of course not everyone who wants to buy or rent a new unit will be able to do so in the next few years. The Demand Survey typically includes many items to measure the relative ability of potential buyers or renters to purchase certain housing products. Although no particular product is being evaluated here, it will be useful to review the qualification factors and get an idea how they may affect purchasing capacity in the near future.

Complete descriptions of financial qualification data are presented in Table A4 in the appendix. We have selected certain of those factors for presentation in Table 11. For this presentation we chose the levels for each factor that might qualify a potential buyer to obtain conventional financing for a home priced at about \$450,000.

Table 11. Financial Qualifications by County, 2006

	State of Hawaii	County of Honolulu	County of Hawaii	County Of Maui	County of Kauai
Factors affecting down payment					
Percent homeowners	47.5	43.0	59.1	50.2	62.4
Have adequate equity ^a	60.2	62.3	60.8	49.9	61.8
Have more than \$5,000 in savings	72.3	78.3	54.8	69.2	71.9
Can get \$60,000+ down payment	38.6	38.7	38.9	37.6	38.8
Factors affecting financing					
Income above 140% of median	34.7	34.0	38.0	34.0	35.6
Debt will cause financing problems	15.1	14.7	17.2	14.1	16.7
Factors affecting monthly payment					
Can afford to pay \$2,000 or more	53.9	56.9	43.2	52.0	55.7
Currently pay more than \$1,700 ^b	56.9	63.1	38.9	60.0	49.3

a. Percent of current homeowners who want to buy another unit. All other percentages based on total households who want to move and will stay in Hawaii.

b. Current homeowners' monthly payments for mortgage and utilities.

Homeownership in Hawaii may involve substantial appreciation. Assuming the homeowner has been in the unit for three or more years, sufficient equity may be available for a down payment on a new unit. About 48 percent of all potential buyers own their own homes, and 60 percent of those have been living in that unit for more than three years.

If home equity is not available, the prospective buyer may have sufficient savings to apply toward a down payment. Over 72 percent of all prospective buyers have at least \$5,000 in family savings or investments. Nevertheless, by their own best estimate, only 39 percent of all would-be buyers will be able to gather \$60,000 as a down payment.

About 35 percent of all potential buyers have household incomes in excess of 140 percent of the County median. While there is no set income required for financing of this type, the 140 percent level is usually about right for borrowing 85 percent of \$450,000. That may be offset if there is more than one person employed, and about 72 percent of buyers pass that test. But by

their own estimate, 15 percent of buyers felt their current level of indebtedness would cause problems if they sought mortgage financing.

The monthly mortgage payment may be easier to manage. About 54 percent of potential buyers say they can afford to pay \$2,000 or more each month. Among current homeowners, 57 percent are already paying more than \$1,700 a month in mortgage and utilities. Many renters who want to buy will have to increase their monthly shelter payment substantially when they move up to home ownership. Only 38 percent of them are paying more than \$1,700 a month for shelter now.

MODELING HOUSING FUTURES, DEVELOPING HOUSING POLICY

In each last three Hawaii Housing Policy Studies, the Hawaii Housing Model was reconstructed and updated. The model was developed to estimate long-range changes in the affordability, price, supply, and demand for housing units in Hawaii. In the past, the Housing Model has been a time series model based on a simple combination of population growth and housing production. Over time, it has become a key piece of the Housing Policy Study. It summarizes the most important findings of a mammoth data collection effort to give policymakers a long-range view of housing and an understanding of how the housing market works.

Improvements to the 2006 Model

In 2006, the Hawaii Housing Model was completely redesigned. The amount of baseline information used to develop the model was greatly expanded, as were the types of information generated from the model. The structure of the model was redesigned as a supply and demand model. The population and housing inventory elements have remained as central factors in the model, and major components have been added to drive the affordability estimation procedure. Interested readers can refer to the Technical Report for a more detailed explanation of the structure and function of the Hawaii Housing Model.

Functionally, the new Housing Model depends to a greater extent on the affordability curve. The affordability ratio is defined as the ratio of the affordable housing price to the median home price in Hawaii.¹⁴ Affordability increases when household income grows at a faster rate than housing prices. It decreases when housing prices rise swiftly ahead of household income.

In 2006, affordability was the lowest it has been in 25 years. Housing prices in Hawaii are very unaffordable right now for households at all income levels and it may be many years before housing is affordable again. Past performance of the Hawaii housing market following a price run-up suggests that home prices remain stable for a while and decrease slowly thereafter. Household income rises at a fairly stable rate. After a short run-up housing costs and prices affordable to a median income household reach parity after a few years. The current run-up is the largest in history. The price/income adjustment needed to reach parity will take longer to achieve.

¹⁴ That is, affordability is equal to the estimated price of a housing unit that can be purchased with conventional financing by a household with median income, to the median price of the same type of unit, calculated annually over time.

Figure 4. Affordability Curve for State of Hawaii, 1980 to 2030

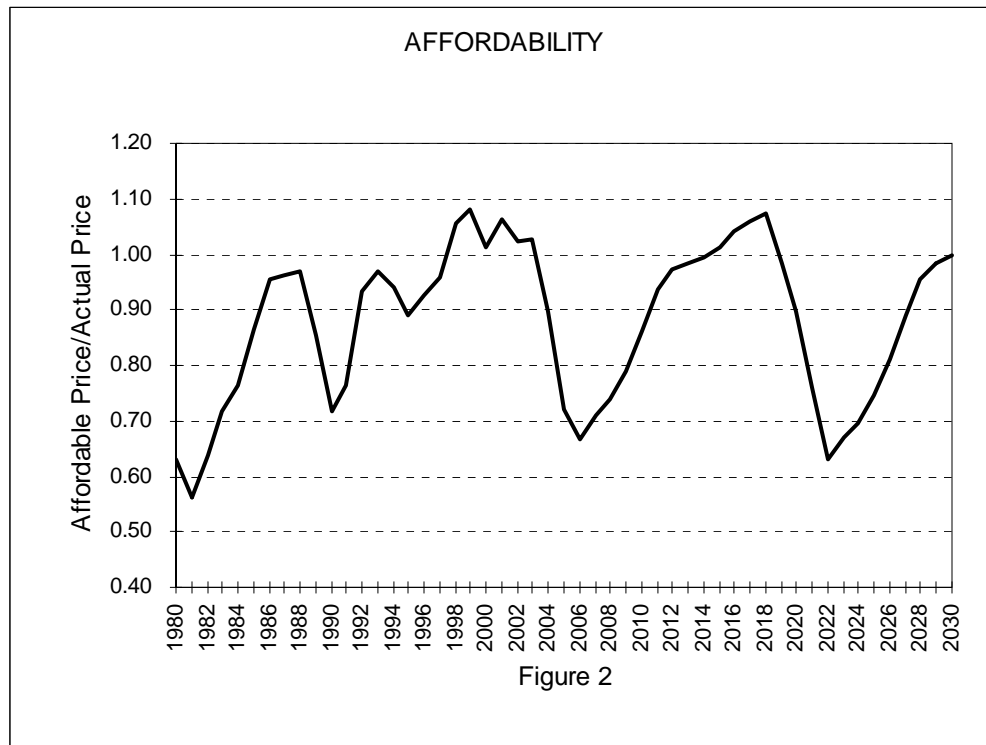


Figure 4 shows the affordability curve for the State of Hawaii. Actual ratios have been calculated from existing data up to 2006. Ratios have been estimated by SMS for 2007 through 2030. Periods of greater affordability occur when household income increases at a higher rate than housing prices increase (assuming interest rates remain relatively stable). Low points in the affordability cycle occur when prices have risen faster than income.

In Hawaii, the low points on the affordability curve occur in 1982, 1991, and 2006, corresponding to the endpoints of the last three housing price run-ups. Peaks in Hawaii's affordability curve occurred between 1985 and 1989, and from 1998 to 2002, corresponding to downturns and slow periods in Hawaii's real estate market.

The affordability forecast predicts housing prices will be relatively flat for about 6 to 7 years, at which time they will start to increase at a modest rate. The model is currently based on a growth rate of 4.6 percent per year for household income, which is an aggressive rate and assumes that Hawaii's real GSP will continue to grow at rates near two percent per annum through 2013.

The forecast suggests that the next price run-up can be expected sometime between 2018 and 2022. Hawaii has had a few large price run-ups in the past and recovery patterns were very different for the last two. The model is not designed to predict exactly what will happen and when, but it shows a rough approximation of how supply and demand functions in the housing market.

The Housing Model develops independent forecasts for each of Hawaii's four counties. Table 12 shows affordability ratios for each county. Lower affordability ratios indicate housing markets in greater stress. Affordability is highest on Oahu and in Hawaii County. Ratios are very low for Maui and Kauai Counties, two counties with the longest price run-ups.

Table 12. 2006 Prices and Affordability by County, 2006

County	Actual Price	Affordable Price	Affordability Ratio
City & County of Honolulu	\$434,508	\$311,783	.72
County of Maui	\$562,614	\$296,773	.53
County of Hawaii	\$362,425	\$250,128	.69
County of Kauai	\$543,661	\$270,690	.50
State of Hawaii	\$448,932	\$299,551	.67

Source: Prices from MLS, ratios calculated by SMS.

Needed Units

One impact of rapid price run-ups and lower affordability is an increase in the number of households with inadequate housing. Inadequate housing might be defined to include households affected by pent-up demand¹⁵, doubling up¹⁶, and homelessness¹⁷. Between 2003 and 2006, despite decreasing intention to move in Hawaii, it appears that pent-up demand, doubling-up, and homelessness all went up. One method of dealing with those problems is to increase the number of affordable housing units available.

The Hawaii Housing Model includes a procedure for developing estimates of “needed units” for each county and for the State as a whole. Needed units were calculated as the number of households that cannot obtain a housing unit in the current market. The 2006 estimates were based on the number of households that were doubled up. The current estimate does not include those who are homeless¹⁸.

Method and Definitions

The estimate of needed housing units presented here was taken from the Hawaii Housing Model 2006. Inherent in that supply and demand housing model is an estimate of the number of

¹⁵ Pent up demand: households with the desire to move to a new unit but unable to do so. The number of households who will be moving out of State to find affordable housing, and those who cannot buy because of soaring housing costs, have increased since 2003.

¹⁶ Doubling-up: multi-generational families or families living with unrelated individuals in one unit who would rather split up. The number of doubled-up households has increased since 2003.

¹⁷ The number of homeless persons and families has not been measured since 2003. Those who deliver services to homeless people in Hawaii expect that the new measures will show an increase in homelessness since 2003.

¹⁸ The Hawaii Homeless Point-in-Time Count, 2007 is currently under way. Results will be included in the Hawaii Housing Model in 2007.

units that would provide all potential buyers and renters with an appropriate housing unit. Over several years, that estimate is not a specific number of housing units, but rather the number of sales or rental agreements completed during the period. Some of those agreements will involve re-sales or rental contracts involving existing housing units, others will require new units be produced in Hawaii.

New Units Needed, An Estimate: The new unit estimate was developed from data collected in the Housing Demand Survey, 2006. The estimate begins with the assumption that the housing market in Hawaii is saturated, i.e. that all existing units (except a reasonable vacancy rate) are being used by current residents. Potential buyers who are currently living in units housing other residents would represent the need for new units. The Housing Demand Survey measures doubled-up households, those in which more than one family is residing in a single household, and thus provides an estimate of new units needed to facilitate the housing market. The initial estimate therefore reflects the number of housing units needed to eliminate pent-up demand and accommodate new household formation.

Estimating Need for Specific Unit Types and Sizes: The initial estimate of needed units did not provide any further details on the types and sizes of units that might be needed. The Housing Demand Survey 2006 did not identify unit characteristics preferred by the specific family within doubled-up households that wanted to move. Therefore a method of estimating an appropriate distribution of needed units was required. The logic of the estimation method was as follows. By definition, the family within doubled-up households that wanted to move could not do so because they could not afford to buy or rent in the current market. Therefore, we might reasonably expect that their unit preferences might be very similar to those of other households who wanted to move but could not afford to buy in Hawaii's current market. The Housing Demand Survey has a very large sample size (n=4,997), and includes a lengthy battery of items¹⁹ to measure qualifications to buy or rent. Those items were used to identify within the total number of potential buyers and renters, those who could not afford to buy or rent the unit of their choice²⁰. Estimates were developed separately for each of HUD's income classifications. The next step was to develop a demand profile by summarizing, for each HUD income classification, the number of buyers and renters, and the number who preferred single-family and multi-family units, within the group who could not afford the unit they needed. Finally, we expanded the survey profile to the number of need units produced in the previous step. The result was the configuration of needed units shown in Table 13 on the following page.

The estimation procedure is sound and based on reasonable assumptions. Befitting the realities of Hawaii's housing market, it is also complex and involves numerous factors that affect buyer decisions. The estimation method was developed to replace the simpler and somewhat more arbitrary method of estimating needed units in past iterations of the Housing Policy Study. In the end, its utility will depend on the extent to which policies based on the estimates are successful in managing Hawaii's housing needs. We look forward to monitoring its use for that purpose and to refining the estimation methods as required.

¹⁹ The battery includes questions on current tenancy, years in unit, estimated unit value, current rent or mortgage payment, household income, household size, preferred tenancy, preferred unit type, number of bedrooms and bathrooms required, affordable down payment, affordable monthly rent or mortgage payment, household savings, and household debt.

²⁰ Note that the "choice" was not their first choice, but rather the type and size unit they would be willing to accept in order to buy or rent a unit they could afford.

Table 13. Needed Housing Units by County

	Total Units Needed, 2007 through 2011							
	HUD Income Classification							
	LT 30	30 to 50	50 to 80	80 to 120	120 to 140	140 to 180	180+	Total
Honolulu	3,683	1,477	5,069	3,608	780	1,865	1,530	18,013
Ownership Units	1,559	701	3,874	3,311	753	1,319	989	12,507
Single-Family	147	564	368	370	260	415	488	2,613
Multi-Family	1,412	137	3,506	2,941	493	904	500	9,894
Rental Units	2,124	776	1,195	297	26	546	541	5,506
Single-Family	753	293	556	159	-	-	55	1,815
Multi-Family	1,372	482	639	138	26	546	486	3,691
Maui	1,115	710	747	738	108	495	311	4,224
Ownership Units	653	362	499	612	108	293	288	2,815
Single-Family	156	38	300	372	3	155	119	1,143
Multi-Family	497	324	199	239	105	138	170	1,672
Rental Units	462	349	248	126	-	202	22	1,409
Single-Family	440	333	30	65	-	115	-	982
Multi-Family	22	15	218	61	-	88	22	426
Hawaii	1,146	458	1,056	537	106	365	619	4,286
Ownership Units	469	286	754	418	71	251	593	2,841
Single-Family	275	121	259	294	21	193	437	1,599
Multi-Family	195	165	495	124	49	58	156	1,242
Rental Units	677	171	302	119	36	114	26	1,444
Single-Family	375	71	144	-	36	70	26	722
Multi-Family	301	100	158	119	-	44	-	722
Kauai	374	157	369	316	187	54	158	1,615
Ownership Units	114	24	285	178	118	54	123	895
Single-Family	75	8	151	67	60	46	79	485
Multi-Family	39	16	135	111	58	8	44	410
Rental Units	260	133	83	139	69	-	35	720
Single-Family	231	29	30	67	26	-	-	383
Multi-Family	29	104	53	72	43	-	35	337
State of Hawaii	6,318	2,802	7,240	5,200	1,181	2,779	2,617	28,137
Ownership Units	2,795	1,373	5,412	4,519	1,050	1,916	1,993	19,058
Single-Family	653	731	1,077	1,104	344	809	1,123	5,841
Multi-Family	2,142	642	4,335	3,415	706	1,108	870	13,217
Rental Units	3,523	1,429	1,828	681	131	863	624	9,079
Single-Family	1,799	727	760	290	62	184	80	3,902
Multi-Family	1,724	702	1,068	390	69	678	544	5,176

Housing units needed to eliminate pent-up demand and accommodate new household Formation between 2007 and 2011 for the State of Hawaii and its four counties, by preferred tenancy and unit type.

Interpretation

The figures in Table 13 represent the profile of new housing units needed to accommodate pent-up demand and new household formation in Hawaii between 2007 and 2011. The total number of units needed is 28,137, including 19,058 ownership units and 13,217 rental units²¹.

The configuration of needed units across counties, income groups, and unit types has clear policy implications. At this early stage of development and application of the needed units estimate, it may be useful to review some of the salient implications of these numbers and their application to policy formation.

1. Total units needed

The total number of units needed, 28,317, is survey a ceiling on production estimates for the next five years. The figures represent units that must be developed in addition to expected production under normal market conditions. That level of production is probably an unrealistic goal for any set of policy initiatives. First of all, that level of production has never been possible in the past and seems outside the scope of current resources. Second, producing units at the ceiling level will result in a significant supply surplus. By definition, all of these units are desired by households that cannot afford to buy or rent in the current market. It is likely that some of them will not be able to afford their desired unit prices that are well below “affordable” levels by any definition. Finally, at income levels above 120 percent of median, there is no guarantee that the new units would be available to the particular households that need them. Thus, policy initiative designed to produce 28,317 housing units are likely to be ineffective and inefficient.

But the total number of needed units is not without policy significance. The 28,317 units needed is a measure of the extent to which the Hawaii housing market might be called “unhealthy”, or unable to produce sufficient units at the right price and configuration for the market. Over time, if that number goes down, either in absolute terms or as a percentage of the total number of households in Hawaii, the housing market might be call more healthy.

2. Need Units Profile

The profile of units needed – the relative numbers of single-family and multi-family owned and rented units suited to different income groups in each county – appears to be reasonable and suited to policy development.

The estimate includes housing units at all levels of buyer qualifications, from 6,318 units required to house people in the lowest of HUD’s income levels and 2,617 units required to fill the needs of households in HUD’s highest income class. As expected, the number of units required to fill the needs of households with income below 80 percent of each county’s median households income is notable higher than needs among those with higher incomes.

The numbers in each category should not be considered to be absolute. Table 13 might best be treated as a set of guidelines for development of new units. It is clear that single-family ownership units are in greater demand than multi-family rental units at the high end of the

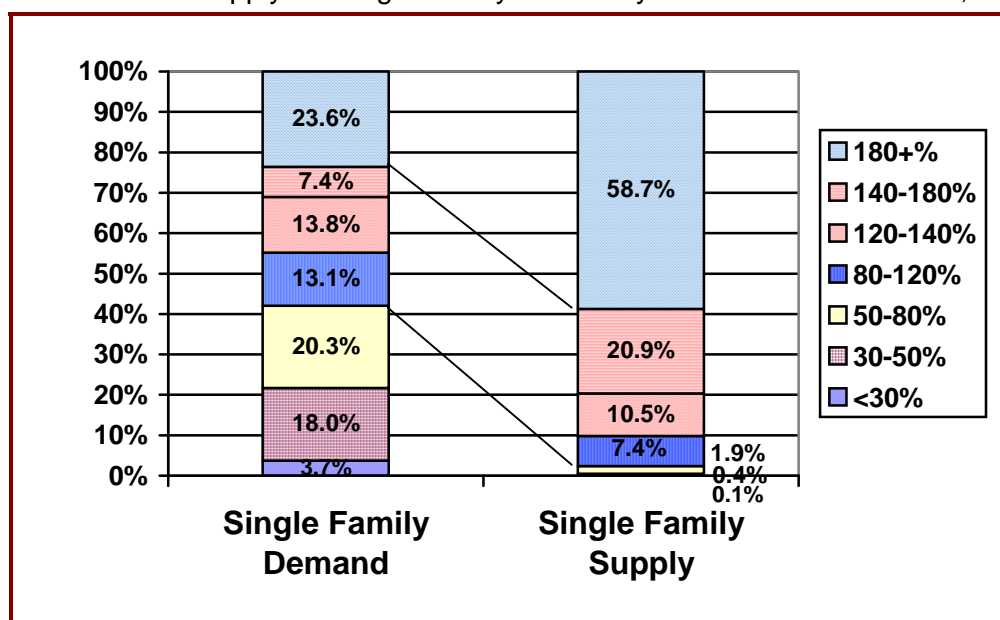
²¹ The number of significant digits in each estimate is an artifact of the estimation procedure. It should not be interpreted as an indication of the precision of the estimate in any cell of the table.

market, and that the reverse is true for the low end of the market. Policies that ignore that basic relationship will probably be ineffective. But forcing policy to conform to the low-level details of Table 1 may be equally ineffective. The data show a need for 29 multifamily rental units for households with incomes below 30 percent of the Kauai County median over five years. Slavish reliance on this number would ignore the fact that developing 114 ownership units for this group will be difficult if not impossible. In the meantime, those 114 households need a place to live and we can expect that many would take advantage of multi-family rentals if available.

Supply and Demand for Single Family Housing Units

After a large price run-up like we saw from 2003-2006, the demand for affordable units grows significantly. In 2006, there are many more households needing units at an affordable price than there are units available at that price. Figures 5 and 6 show supply and demand by HUD household income guidelines for Honolulu. The charts demonstrate the dramatic divide between what households can afford and what is available on the market.

Figure 5. Demand and Supply for Single Family Homes by HUD levels in Honolulu, 2006



Demand measured in Housing Demand Survey, 2006; supply calculated from MLS average sales prices 3rd quarter 2006.

In Figure 5, demand for single-family units was based on 2006 Hawaii Housing Demand Survey housing preferences by HUD household income levels. Supply of single-family units was estimated by classifying all MLS units available in 2006 according to sales prices affordable to households in each of the HUD income categories. The chart shows that the current supply of ownership units will serve the needs of households with incomes above 140 percent of the county median. It will be somewhat short of units affordable to households with incomes between 80 and 140 percent of median. It includes almost no units affordable to households with incomes below 80 percent of median. More than half (55%) of all households who want to buy cannot afford to buy in this market.

On the other hand, the number of units available at affordable prices for those with household incomes greater than 140 percent of the county median far outstrips demand. That is consistent with recent price leveling and decreases in sales activity reported by MLS.

The magnitude of the difference between affordable prices and average sales prices suggests a long period of price adjustment. Units affordable to households below 80 percent of the county median are in very low supply²². This suggests the price adjustment period may be particularly stressful to low income households. There is a large demand for single-family units in all income groups. In 2006, few of them will have their housing needs met. Even as the affordability curve approaches parity (where a household with median income can afford a median-priced housing unit), the lower income groups may not be able to find a single family housing solution.

Supply and Demand for Multi-family Housing Units

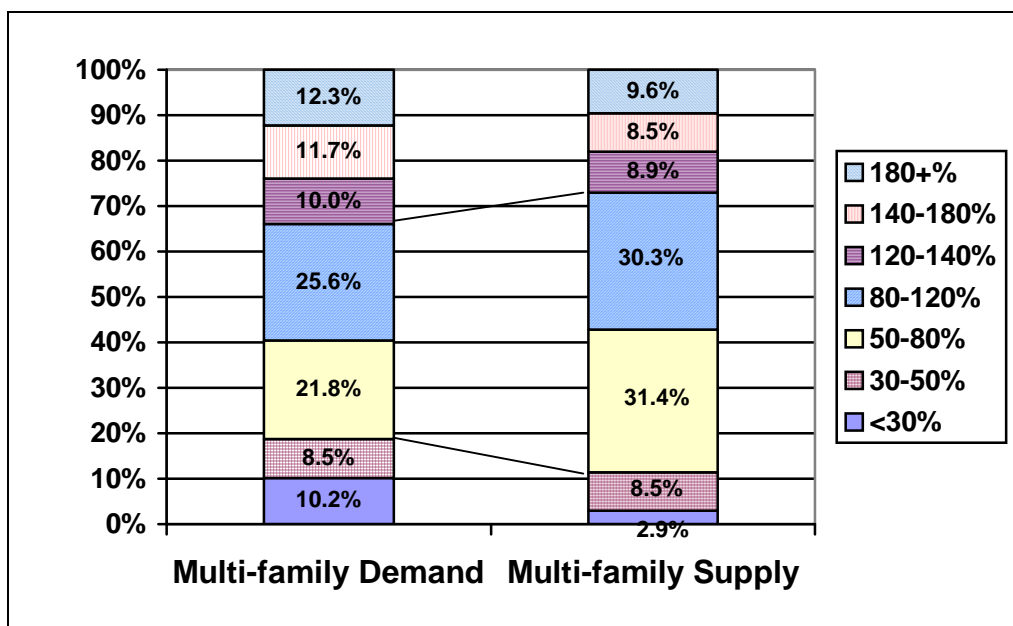
Figure 6, the multi-family supply and demand chart, was prepared using the same procedures as the previous charts, but based on demand and supply of multi-family housing units in the City and County of Honolulu, 2006. The results were unexpected. In past iterations of HPS, the old housing model was not capable of separate estimates for SFD and MFD units. Since there are many more single-family units in the market, SFD results dominated the total-market analysis.

Figure 6 shows that the markets for the two different types of units differ substantially. Based on current supply of multi-family units, demand among households with incomes above 120 percent of the county median is underserved. There is greater demand than supply for those units. The same is true for households with incomes below 50 percent of median income. But there are more units available to households with incomes between 50 and 120 percent of median than are needed by that group.

The comparisons in Figures 5 and 6 are based on crude estimates of supply and demand by HUD income classifications. The estimates do not take into consideration unit size, quality, or location. They do not take into consideration the fact that buyers can switch between the single family and multi-family markets as they see fit. More important, they involve the assumption that all households in a given HUD classification are equally qualified to purchase in the short-run. Our initial review of qualifications in an earlier section of this report suggests that may not be a viable assumption. We note, however, that data are available to refine these analyses and to test specific policy alternatives should the need arise.

²² The percent of units available to households below 80 percent of median is an underestimate of the situation because many units at that level are tear-downs that could not be eliminated for the data.

Figure 6. Demand and Supply for Multi-Family Homes by HUD levels in Honolulu, 2006



The ability to go beyond the gross concept of needed units used in past studies suggests that the Hawaii housing market may provide more affordable options for buyers than was previously thought. It also suggests that housing policy can benefit from taking a more complex view of the alternatives for providing affordable housing. In future studies, as the affordability curve approaches parity, this chart will likely show that the multi-family resale market provides opportunities for lower income households, even households at 50 percent of median income, to purchase their own home in the resale market.

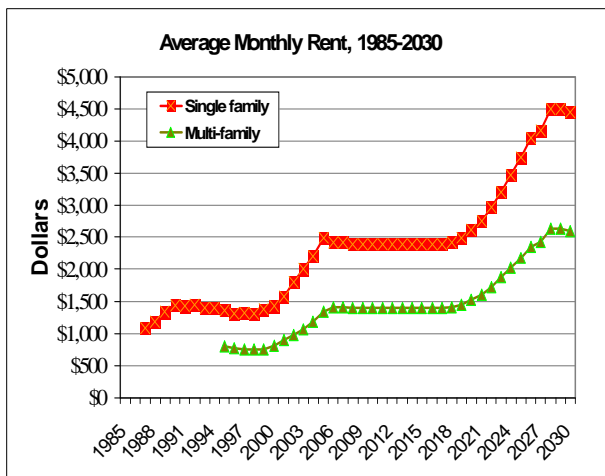
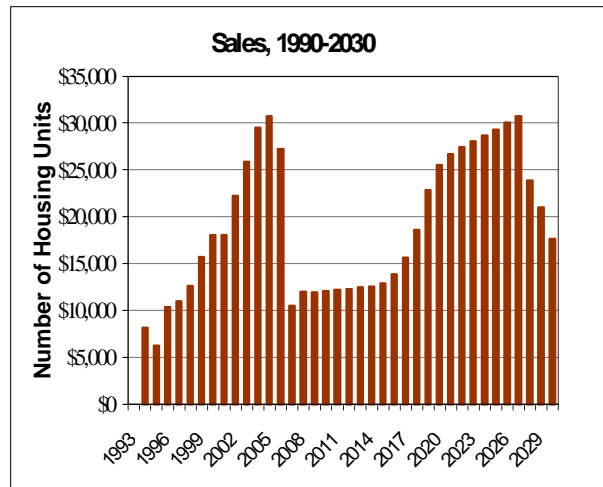
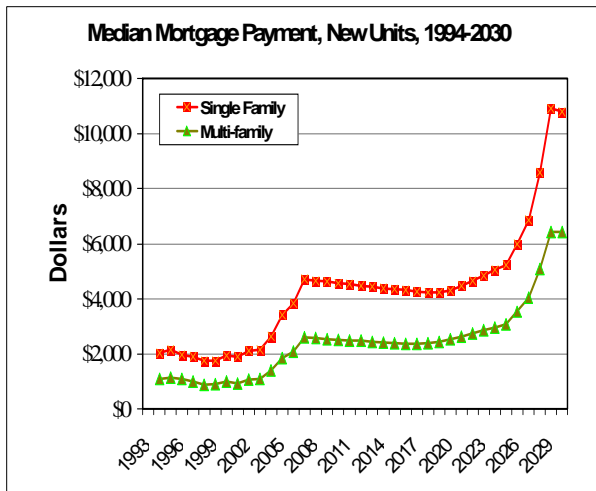
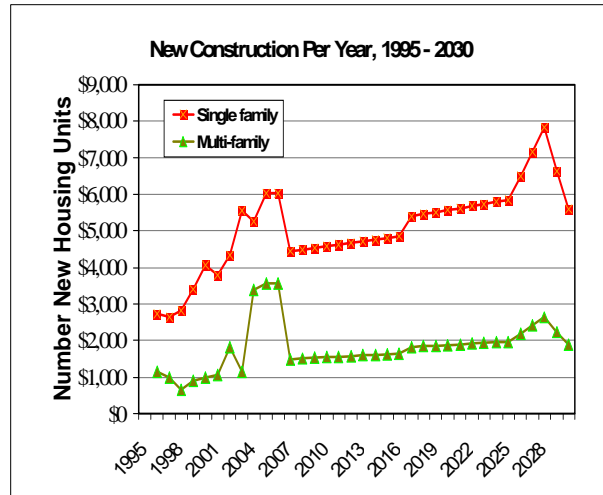
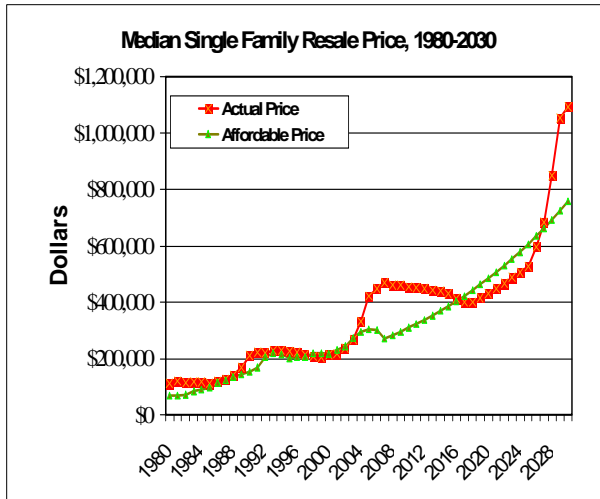
Model Outputs

Figure 7 presents some selected outputs from the Hawaii Housing Model. The data shown there are for the State as a whole. Similar outputs are available for each of the four counties. The median sales price data is presented along with the affordable price for households with median household incomes in each year -- the basis for the affordability ratio.

New construction figures are driven by the affordability index. As affordability increases, demand increases, and new construction follows. Mortgage payments follow affordable sales prices, increasing as prices increase, assuming constant interest rates. The sales chart shows actual and forecasted sales. Levels of real estate activity follow demand.

The latest addition to the model is a set of components being developed for the Hawaii rental market. Rental prices are shown for the last 15 years. The model is based on advertised rents rather than average rents paid, because the market drives those prices directly. In 2007 we will begin to develop the indirect mechanism by which total shelter payments for renters are affected by advertised rents.

Figure 7. Outputs for the State of Hawaii from the 2006 Hawaii Housing Model



ISSUE: DISTANCE TRADE-OFF AND TRAFFIC

The Housing Policy Study has looked into the issue of moving to less populated areas since 1997. The greatest opportunities for developing large numbers of housing units at affordable prices are usually located at some distance from population and job centers on all islands. From the buyer's point of view, this usually involves a trade-off between lower priced housing and increased time on the road. As traffic becomes an ever more vexing issue in all counties, the trade-off is of greater interest to all developers and housing policy specialists. In 2006, the Demand Survey asked a series of questions to gather reactions to moving to a new home at some distance from one's job. Results are shown briefly in Table 14, and in greater detail in the appendix to this report.

Most buyers would like to buy new homes in the same general area in which they currently live. In part, that is due to the fact that they are relatively near their jobs now²³. In 2006, about 70 percent of all prospective buyers wanted to buy a unit in the same area where they live now, and an additional 19 percent wanted to mover even closer to their jobs. The rest wanted to move farther away or said the location didn't make any different to them. There were few meaningful differences from one county to another.

Table 14. Moving to Distant Areas

	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
Would you like to move....					
closer to your job	19.2	19.6	21.6	15.5	16.6
Stay in the same area	69.6	70.5	63.8	71.2	69.3
move farther away	3.1	2.4	5.2	4.7	3.6
If you found the right home at the right price, would you move to (loc ^a)?					
Yes, would move	36.3	37.8	22.0	35.5	54.9
no, too far away	62.6	62.2	77.6	56.5	44.6
Live in that area now	1.1	0.0	0.4	8.0	0.6
If you moved to (loc ^a), would you....?					
keep the job you have now	79.3	86.6	42.8	61.1	75.9
Get a job closer to new home	15.9	8.7	56.6	32.0	18.8
Not sure	4.7	4.8	0.6	7.0	5.3
Net addition to traffic	---	20,300	-390	1,250	1,470

a. "Loc" was different for each County: Oahu = Kapolei, Maui = West Maui, Hawaii = other side of Hawaii Island, and Kauai = Poipu.

But in a tight housing market, many people would be willing to move away from their current neighborhoods if they can find a home at an affordable price. Overall, about 36 percent of residents who wanted to buy would be willing to move to a more distant location for that reason.

²³ We do not dispute that being near friends and family, church and other community organizations, have as much or more impact on the desire to stay in the same community, but the job is our major concern this year.

Responses differed significantly from one county to another. In part that reflects the specific locations used in the survey. In part it reflects the traffic situations on each island. Those least willing to move were Hawaii County residents who would have to move “to the other side of the island”. Only 22 percent of them would be willing to do that, even for an affordable housing unit. Honolulu and Maui county residents, who would have to move to Kapolei or West Maui, respectively, were more likely to move. Between 36 and 38 percent of them would move for the chance to get an affordable home. On Kauai, we asked prospective buyers if they would be willing to move to the Poipu area. Almost 55 percent of them said they would do that if an affordable housing unit were available.

We can also get an idea of the impact on traffic caused by developing units in distant areas of each island. Prospective buyers who said they would be willing to move were asked if they would keep the same job they have now or get a new job closer to their new home. Responses in each county differed dramatically. Overall, about 16 percent of those who would move to a distant location would give up their jobs to get new ones closer to home. On Oahu, only nine percent would look for a new job in Kapolei. On Kauai, about 19 percent would try to get a job in Poipu. But on Maui, 32 percent of people willing to move the West Maui would try to get a new job there. And in Hawaii County, nearly 57 percent would get a new job on the other side of the island.

All that would have some very interesting impacts on traffic. A crude estimate of the impact can be calculated by subtracting the number of households where a new job was sought from the total households who might move and keep their old job²⁴. On Oahu, for instance, fulfilling the survey demand would put over 20,000 additional cars on the road from Kapolei to Honolulu every morning. On Maui, traffic on the road to Ka’anapali would go up by about 4,500 cars at commute times. On Kauai, the road from Poipu to Lihue might see an additional 2,800 cars each morning and afternoon. But on the Island of Hawaii, the net change in traffic would be to decrease cross-island traffic by 390 cars per peak traffic period.

The traffic tradeoff issue is illustrative of many similar development issues. Developing large numbers of units at some distance from job centers, without creating jobs there, may cause serious strain on infrastructure.

ISSUE: SUSTAINABLE LEASE

In recent months the concept of the sustainable lease has been suggested by Hawaii housing planners as a feasible method of producing more affordable housing in the State. The sustainable lease concept is very broadly defined in the industry and it can take many different forms. At base, a sustainable lease is a leasehold arrangement that sustains a property in an affordable price range. Details of the arrangement are generally developed to favor lessees who need affordable housing to a greater extent than might be available in conventional lease agreements.

Sustainable leases are of interest in Hawaii for several reasons. First, it is an arrangement that allows government to maintain affordable housing developments as affordable over long periods of time. The alternative might be to develop properties for sale at affordable prices, but once they are sold the next buyer pays a market price. Second, sustainable leases on government land can be written to reduce development costs and to greatly enhance the availability of the

²⁴ This assumes only one car added to the commute traffic per household.

property to buyers below the level of current market housing. Ground leases can be reduced or even eliminated, down payments can be reduced or even fully absorbed in the sale, and lease prices can be maintained over the course of the lease period. Third, sustainable lease agreements can be written to include features that increase the acceptability of leases in general, and controlled property agreements of a specific nature. Past research has shown, for instance, that one of the chief problems with the lease concept in Hawaii is the inability to pass leased property on to one's heirs. Sustainable leases can be written to allow such transfers. Any sustainable property agreement also entails other limitations on ownership and resale. The property must be owner occupied, must be sold back to the community, and there is usually a ceiling on the resale price. Other aspects of the lease agreement usually offset these features.

The Housing Demand Survey 2006 includes a brief set of items to begin the investigation of sustainable lease as an affordable housing development tool. The objective was to test the acceptability of the sustainable lease concept among potential home buyers. Some results are shown in Table 15.

Table 15. Sustainable Lease Responses

Would consider as lease that...	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
...was a 60-year renewable lease	49.4	47.6	54.5	52.1	53.3
...had no ground lease payment	56.9	55.4	61.1	60.5	56.3
...required no down payment	59.5	58.8	61.4	61.8	56.6
...could pass it to your heirs	64.8	63.5	70.1	68.0	59.7
All things considered, what is your reaction to a sustainable lease?					
Prefer sustainable lease	22.5	22.7	23.9	20.6	20.1
Would consider sustainable lease	30.0	29.5	26.8	36.6	30.3
Not sure	13.4	12.3	15.3	13.8	21.5
Still want fee simple	34.1	35.5	34.0	29.0	28.1

Asked of potential buyers who were not interested in leasehold property, even if fee simple property was unavailable in their price range.

The sustainable lease questions were asked of potential buyers who had already stated that: (1) they preferred to buy fee simple; and (2) that they would probably not consider leasehold property even if they could not find a home in their price range.

Statewide, between 49 and 65 percent of buyers who were unwilling to accept leasehold property found the characteristics of the sustainable lease to be acceptable. More than 49 percent said they would consider leasehold property if they could get a 60-year, renewable lease. Fifty-seven percent said they would consider a lease that had no ground lease payment for the duration of the agreement. Almost 60 percent said they would consider buying leasehold property if it required no down payment. And finally, almost 65 percent reported that they would consider leasehold if they were able to pass the lease on to their heirs and the new leaseholder would automatically receive a new 60-year lease. The order of acceptance follows findings of past research on the major problems with leasehold property. Solving the most important problems results in bringing in more people to consider the option.

After considering these options, many potential buyers changed their minds about leasehold property. Table 15 also shows that, all things considered, about 53 percent of those who had already stated their opposition to leasehold property would consider a sustainable lease with one or more of the options discussed above. A little more than 22 percent of them said they would prefer a sustainable lease. Thirty percent said they would seriously consider it. And there were still 34 percent who would hold out for fee simple property.

The results suggest that there is a role for the sustainable lease concept in developing affordable housing for Hawaii. Leasehold arrangements can be used to produce more affordable housing units and maintain them in the affordable housing stock in perpetuity. These data show that, even where leasehold property is unpopular, the sustainable lease appeals to a substantial number of potential home buyers. Once they understand how a sustainable lease works, between 22 and 50 percent of people will be willing to take advantage of a sustainable lease to get into their own homes.

Further analysis showed that sustainable leases were most appealing to buyers who most need them. Sustainable leases appealed to more renters than current owners, to those who weren't sure they could come up with a down payment, and to those with debt that might cause financing problems. They appealed to households that were crowded. And they appealed more often to households with shelter-to-income ratios between 30 and 40 percent. Equally important, sustainable leases appealed to prospective homebuyers with incomes between 80 and 140 percent of median income – those perhaps most qualified to buy. Finally, the sustainable lease was attractive to disproportionately high numbers of households that included “hidden homeless” persons – multigenerational households or those doubled-up with non-family members.

APPENDIX

Table A-1. Characteristics of Housing Units By County, 1990 through 2006

Table A-1a: Total Housing Units, 1990-2006

	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
1990	389,810	281,683	48,253	42,261	17,613
1992	411,494	290,571	49,394	51,578	19,951
1997	449,385	311,398	59,098	54,321	24,568
1999	456,091	314,448	61,108	55,475	25,060
2000	460,542	315,988	62,674	56,549	25,331
2003	477,333	322,845	67,878	59,788	26,822
2004	484,936	325,888	70,927	60,888	27,233
2005	491,671	329,300	71,984	62,178	28,209
2006	501,956	332,196	77,577	63,364	28,819
Avg. Ann. Rate of Change					
1990-2000	1.7%	1.1%	2.6%	2.9%	3.6%
2003-2006	1.7%	1.0%	4.5%	1.9%	2.4%

Table A-1b: Occupied Housing Units, 1990-2006

	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
1990	356,267	265,304	41,461	33,207	16,295
1992	370,627	270,783	42,373	39,998	17,473
1997	395,545	283,621	50,127	41,998	19,799
1999	400,120	285,501	51,734	42,839	20,046
2000	403,240	286,450	52,985	43,622	20,183
2003	422,443	297,204	56,610	46,367	22,262
2004	428,915	300,046	58,734	47,300	22,835
2005	432,617	300,557	59,470	48,393	24,197
2006	435,818	303,149	61,213	49,484	21,971

Table A-1c: Owner Occupied Housing Units, 1990-2006

	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
1990	191,911	137,910	25,336	19,083	9,582
1992	202,105	142,672	26,035	22,967	10,431
1997	222,031	153,831	31,983	24,110	12,107
1999	225,557	155,465	33,215	24,591	12,286
2000	227,888	156,290	34,175	25,039	12,384
2003	238,927	161,163	37,402	27,017	13,344
2004	252,346	171,755	39,293	27,688	13,609
2005	255,845	173,182	39,949	28,476	14,238
2006	260,986	175,488	41,685	29,502	14,311

Table A-1d: Hawaii Home Ownership Rates, 1999 to 2006

	State of Hawaii	County of Honolulu	County of Hawaii	County of Maui	County of Kauai
1990	53.9	52.0	61.1	57.5	58.8
1992	54.5	52.7	61.4	57.4	59.7
1997	56.1	54.2	63.8	57.4	61.2
1999	56.4	54.5	64.2	57.4	61.3
2000	56.5	54.6	64.5	57.4	61.4
2003	56.6	54.2	66.1	58.3	59.9
2004	58.8	57.2	66.9	58.5	59.6
2005	59.1	57.6	67.2	58.8	58.8
2006	60.9	59.0	69.1	60.2	66.1

Table A-2. Characteristics of Housing Units By County, 1992, 1997, 2003 and 2006

County	Year	Tenancy		Unit Size (bedrooms)			
		Own	Rent	Studio or 1 bedroom	2 bedrooms	3 bedrooms	4+ bedrooms
Honolulu	1992	48%	52%	20%	32%	30%	19%
	1997	54%	46%	16%	27%	36%	21%
	2003	61%	39%	15%	25%	35%	25%
	2006	59%	41%	18%	25%	37%	20%
Maui	1992	61%	39%	14%	26%	46%	15%
	1997	65%	35%	12%	23%	46%	19%
	2003	61%	40%	13%	28%	42%	17%
	2006	60%	40%	15%	27%	43%	17%
Hawaii	1992	68%	32%	7%	25%	53%	14%
	1997	72%	28%	8%	21%	54%	17%
	2003	70%	30%	12%	19%	50%	19%
	2006	69%	31%	11%	22%	49%	18%
Kauai	1992*	60%	40%	12%	19%	53%	15%
	1997	67%	33%	8%	19%	57%	15%
	2003	66%	34%	11%	20%	53%	17%
	2006	66%	34%	10%	21%	51%	18%
Total	1992	52%	48%	17%	30%	35%	18%
	1997	58%	42%	14%	25%	40%	20%
	2003	62%	38%	14%	24%	39%	23%
	2006	61%	39%	17%	24%	39%	20%

Note. Percentages may not sum to 100 percent due to rounding.

* Pre-Hurricane Iniki

** For number of bedrooms and bathrooms, half-rooms are included with the next highest category.

Table A-3a. Household Income Data By County, 1992, 1997, 2003 and 2006

County	Year	Total Households	Household Income							
			Less than \$15,000	\$15,000 to \$24,999**	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 to \$74,999	\$75,000 to \$99,999	\$100,000 or more	Refused
Honolulu	1992	247,349	N/A	24%	13%	16%	12%	6%	7%	21%
	1997	272,234	9%	9%	12%	16%	15%	9%	6%	24%
	2003	292,003	8%	10%	14%	22%	18%	11%	17%	----
	2006	303,149	13%	7%	12%	14%	22%	12%	21%	----
Maui	1992	34,266	N/A	20%	17%	20%	11%	2%	3%	27%
	1997	39,252	10%	8%	16%	18%	15%	7%	6%	20%
	2003	43,687	9%	13%	13%	22%	19%	14%	11%	----
	2006	49,484	11%	8%	11%	18%	20%	15%	17%	----
Hawaii	1992	39,789	N/A	24%	19%	20%	11%	3%	4%	20%
	1997	46,271	14%	14%	15%	15%	12%	4%	4%	22%
	2003	54,644	14%	12%	17%	22%	17%	9%	9%	----
	2006	61,213	13%	10%	13%	16%	22%	10%	16%	----
Kauai	1992	16,981	N/A	20%	14%	22%	10%	5%	3%	26%
	1997	18,817	11%	13%	15%	16%	15%	5%	3%	23%
	2003	20,460	13%	12%	16%	21%	18%	9%	12%	----
	2006	21,971	10%	10%	12%	15%	23%	11%	19%	----
Total	1992	338,385	N/A	24%	14%	17%	12%	5%	6%	22%
	1997	376,574	10%	10%	13%	16%	15%	8%	6%	24%
	2003	410,794	10%	10%	14%	21%	19%	10%	15%	----
	2006	435,818	13%	7%	12%	15%	21%	12%	20%	----

Table A-3b. Households at HUD Income Guidelines By County, 1992, 1997, 2003 and 2006

County	Year	HUD Household Income Guidelines							Median
		30% or less	Over 30% to 50%+	Over 50% to 80%	Total Under 80%	Over 80% to 120%	Over 120% to 140%	Over 140%	
Honolulu	1992	N/A	20%	19%	40%	23%	10%	27%	\$ 36,974
	1997	8%	15%	21%	36%	30%	7%	20%	\$ 42,234
	2003	5%	19%	22%	41%	22%	7%	25%	\$ 47,917
	2006	14%	10%	20%	22%	9%	9%	15%	\$ 54,545
Maui	1992	N/A	20%	19%	39%	24%	9%	28%	\$ 35,843
	1997	7%	11%	27%	38%	24%	10%	21%	\$ 38,908
	2003	10%	17%	28%	45%	18%	7%	21%	\$ 44,297
	2006	13%	11%	19%	21%	7%	13%	15%	\$ 52,500
Hawaii	1992	N/A	20%	18%	38%	24%	10%	29%	\$ 34,063
	1997	3%	19%	21%	40%	23%	10%	24%	\$ 31,831
	2003	5%	14%	28%	43%	22%	6%	25%	\$ 36,905
	2006	14%	11%	18%	20%	5%	12%	19%	\$ 48,125
Kauai	1992	N/A	21%	18%	39%	21%	9%	30%	\$ 36,966
	1997	9%	18%	27%	45%	25%	9%	12%	\$ 34,891
	2003	6%	23%	27%	49%	20%	7%	18%	\$ 42,205
	2006	12%	11%	18%	21%	10%	13%	15%	\$ 53,261
Total	1992	N/A	20%	19%	39%	22%	11%	28%	\$ 36,289
	1997	7%	15%	22%	37%	28%	7%	20%	\$ 39,883
	2003	9%	15%	20%	36%	22%	8%	24%	\$ 46,086
	2006	14%	11%	20%	22%	8%	10%	16%	\$ 53,571

Percentages may not sum to 100.0 due to rounding.

** In 1992, the lowest household income category was "less than \$25,000." That category was split into two categories thereafter.

In 2003 and 2006, household income was imputed for cases with missing data.

Table A-4a. Housing Unit Condition, Owned Units, by County, 1992, 1997, 2003 and 2006

County	Year	Total Housing Units	Owner Occupied			
			Excellent condition	Satisfactory condition	Fair condition	Poor condition
Honolulu	1992	285,487	47%	43%	9%	2%
	1997	309,473	31%	47%	18%	4%
	2003	292,003	42%	46%	11%	1%
	2006	303,149	39%	46%	12%	3%
Maui	1992	48,850	52%	38%	10%	1%
	1997	54,639	35%	48%	15%	3%
	2003	43,687	45%	42%	10%	3%
	2006	49,484	44%	43%	11%	2%
Hawaii	1992	45,408	52%	41%	6%	1%
	1997	54,643	42%	42%	13%	4%
	2003	54,644	46%	44%	9%	2%
	2006	61,213	44%	44%	11%	1%
Kauai	1992*	20,643	49%	42%	7%	2%
	1997	24,112	42%	42%	13%	3%
	2003	20,460	48%	42%	9%	2%
	2006	21,971	44%	43%	11%	2%
Total	1992	400,388	49%	42%	8%	2%
	1997	442,867	34%	46%	17%	4%
	2003	410,795	43%	45%	10%	2%
	2006	435,818	41%	45%	12%	3%

Table A-4b. Housing Unit Condition, Rented Units, by County, 1992, 1997, 2003 and 2006

County	Year	Total Housing Units	Renter Occupied			
			Excellent condition	Satisfactory condition	Fair condition	Poor condition
Honolulu	1992	285,487	23%	52%	20%	6%
	1997	309,473	21%	46%	27%	6%
	2003	292,003	22%	52%	22%	4%
	2006	303,149	24%	42%	25%	10%
Maui	1992	48,850	27%	43%	24%	6%
	1997	54,639	25%	48%	22%	5%
	2003	43,687	28%	47%	20%	6%
	2006	49,484	31%	40%	22%	7%
Hawaii	1992	45,408	29%	46%	16%	9%
	1997	54,643	26%	45%	20%	10%
	2003	54,644	27%	46%	23%	5%
	2006	61,213	22%	48%	20%	10%
Kauai	1992*	20,643	25%	55%	15%	5%
	1997	24,112	27%	44%	22%	7%
	2003	20,460	30%	47%	18%	5%
	2006	21,971	24%	46%	25%	6%
Total	1992	400,388	24%	51%	20%	6%
	1997	442,867	22%	46%	26%	6%
	2003	410,795	24%	51%	21%	4%
	2006	435,818	24%	43%	24%	9%

Percentages may not sum to 100.0 due to rounding.

* Pre-Hurricane Iniki

Table A-5a: Housing Cost By County, 1992, 1997, 2003 and 2006

	Year	Total Households	Average Monthly Mortgage Payment			Average Monthly Rent	
			Total	Single-family	Multi-family	Total	2-bedroom apartment
Honolulu	1992	247,349	\$821	\$915	\$832	\$864	
	1997	272,234	\$1,430	\$1,369	\$1,335	\$928	\$923
	2003	292,003	\$1,546	\$1,650	\$1,239	\$1,014	\$1,072
	2006	303,149	\$1,142	\$1,173	\$1,029	\$1,300	\$1,393
Maui	1992	34,266	\$776	\$831	\$719	\$730	
	1997	39,252	\$1,210	\$1,664	\$789	\$850	\$1,138
	2003	43,687	\$1,310	\$1,346	\$1,104	\$979	\$1,072
	2006	49,484	\$1,461	\$1,451	\$1,458	\$1,256	\$1,253
Hawaii	1992	39,789	\$651	\$691	\$579	\$556	
	1997	46,271	\$954	\$1,069	\$840	\$697	\$644
	2003	54,644	\$1,072	\$1,078	\$919	\$859	\$843
	2006	61,213	\$1,057	\$1,039	\$1,407	\$1,146	\$1,152
Kauai	1992*	16,981	\$726	\$773	\$612	\$807	
	1997	18,817	\$1,151	\$1,290	\$881	\$830	\$860
	2003	20,460	\$1,284	\$1,306	\$1,014	\$983	\$885
	2006	21,971	\$1,165	\$1,178	\$974	\$1,230	\$1,271
Total	1992	338,385	\$800	\$863	\$813	\$793	
	1997	376,574	\$1,319	\$1,330	\$1,286	\$897	
	2003	410,794	\$1,433	\$1,488	\$1,213	\$992	\$1,037
	2006	435,818	\$1,167	\$1,183	\$1,081	\$1,274	\$1,346

Table A5b: Mortgage Payments by Years in Unit By County, 1992, 1997, 2003 and 2006

	Year	Total Households	Average Monthly Mortgage by Years in Unit			
			Less than 1 year	1 to 5 years	6 to 10 years	More than 10 years
Honolulu	1992	247,349	\$886	\$879	\$656	\$564
	1997	272,234	\$1,431	\$1,668	\$1,697	\$1,241
	2003	292,003	\$1,616	\$1,729	\$1,689	\$1,414
	2006	303,149	\$2,865	\$1,865	\$1,445	\$824
Maui	1992	34,266	\$824	\$781	\$755	\$609
	1997	39,252	\$1,497	\$1,519	\$1,339	\$986
	2003	43,687	\$1,972	\$1,448	\$1,436	\$1,091
	2006	49,484	\$2,245	\$2,037	\$1,565	\$1,072
Hawaii	1992	39,789	\$752	\$707	\$455	\$314
	1997	46,271	\$1,030	\$1,168	\$1,122	\$730
	2003	54,644	\$1,455	\$1,143	\$1,174	\$953
	2006	61,213	\$1,700	\$1,662	\$987	\$725
Kauai	1992*	16,981	\$888	\$722	\$559	\$552
	1997	18,817	\$1,448	\$1,304	\$1,167	\$968
	2003	20,460	\$1,673	\$1,490	\$1,373	\$1,089
	2006	21,971	\$2,666	\$1,634	\$1,442	\$824
Total	1992	338,385	\$867	\$853	\$634	\$553
	1997	376,574	\$1,387	\$1,548	\$1,501	\$1,135
	2003	410,794	\$1,636	\$1,559	\$1,577	\$1,299
	2006	435,818	\$2,468	\$1,837	\$1,378	\$835

* Pre-Hurricane Iniki

** Average monthly rents for 2003 taken from the Housing Inventory Study, 2003. See Section III.

Table A-6a. Household Composition and Crowding By County, 1992, 1997, 2003 and 2006

County	Year	Total Households	Household type ^b					
			Single member	Married, no children	Parent(s) & children	Unrelated roommates	Multiple families	Undetermined
Honolulu	1992	247,349	11.9%	24.4%	26.3%	1.7%	32.0%	3.7%
	1997	272,234	14.1%	25.6%	27.3%	4.2%	27.2%	1.6%
	2003	292,003	22.0%	28.9%	21.2%	3.2%	22.9%	1.8%
	2006	303,149	24.1%	21.8%	20.9%	3.3%	29.3%	0.5%
Maui	1992	34,266	12.6%	24.4%	32.9%	1.6%	25.9%	2.3%
	1997	39,252	14.1%	25.0%	27.9%	5.4%	24.8%	2.7%
	2003	43,687	21.9%	29.6%	25.4%	3.2%	17.6%	2.3%
	2006	49,484	21.5%	24.8%	24.0%	3.6%	25.8%	0.3%
Hawaii	1992	39,789	9.6%	27.2%	32.3%	0.6%	26.0%	4.3%
	1997	46,271	14.8%	27.0%	28.4%	3.5%	24.3%	2.1%
	2003	54,644	22.3%	30.6%	24.4%	3.2%	18.1%	1.4%
	2006	61,213	19.5%	25.6%	22.6%	2.6%	28.7%	1.0%
Kauai	1992 ^a	16,981	12.7%	26.1%	31.0%	0.5%	26.3%	3.5%
	1997	18,817	13.2%	27.1%	30.0%	1.7%	25.4%	2.5%
	2003	20,460	20.9%	26.9%	26.8%	3.2%	20.5%	1.7%
	2006	21,971	19.8%	25.0%	23.3%	3.3%	28.2%	0.4%
Total	1992	338,385	11.7%	24.9%	27.9%	1.5%	30.3%	3.6%
	1997	376,574	14.2%	25.8%	27.6%	4.1%	26.5%	1.9%
	2003	410,794	22.0%	29.1%	22.3%	3.2%	21.6%	1.8%
	2006	435,818	22.9%	22.8%	21.6%	3.2%	28.8%	0.6%

Percentages may not sum to 100.0 due to rounding.

a. Pre-Hurricane Iniki

b. Data after 1997 weighted by household size, resulting in some difference for single member households.

Table A-6b. Household Composition and Crowding By County, 1992, 1997, 2003 and 2006

County	Year	Total Households	Crowding Indicators ^b		
			Percent overcrowded (1.01 persons or more per room)	Percent overcrowded (1.01 persons or more per bedroom ^c)	Percent of households that are overcrowded or doubled up ^d
Honolulu	1992	247,349	23%		32%
	1997	272,234	11%		27%
	2003	292,003	10%		23%
	2006	303,149	8%	35%	15%
Maui	1992	34,266	27%		26%
	1997	39,252	10%		25%
	2003	43,687	11%		18%
	2006	49,484	8%	36%	15%
Hawaii	1992	39,789	19%		26%
	1997	46,271	8%		24%
	2003	54,644	7%		18%
	2006	61,213	7%	34%	16%
Kauai	1992 ^a	16,981	17%		26%
	1997	18,817	9%		25%
	2003	20,460	6%		21%
	2006	21,971	7%	35%	16%
Total	1992	338,385	22%		30%
	1997	376,574	10%		27%
	2003	410,794	10%		22%
	2006	435,818	8%	35%	15%

a. Pre-Hurricane Iniki

b. Data weighed by household size after 2003.

c. Not a standard crowding measure. Applicable to data with known bedrooms, unknown number of rooms.

d. Based on 1.01 persons or more per room or multiple families in one household.

Table A-7a. Shelter-to-Income Ratios, 1992, 1997, 2003 and 2006

County	Year	Total Households	Monthly Shelter Payment as a Percent of Monthly Household Income			
			Under 30 percent	30 to 40 percent	Over 40 percent	Not enough information
Honolulu	1992	247,349	55.7%	14.1%	20.2%	10.0%
	1997	272,234	55.1%	18.9%	18.4%	7.5%
	2003	292,003	55.7%	18.5%	18.0%	7.8%
	2006	303,149	54.8%	10.9%	22.0%	12.0%
Maui	1992	34,266	59.3%	18.1%	15.8%	6.7%
	1997	39,252	47.9%	16.0%	19.8%	16.4%
	2003	43,687	52.2%	18.3%	15.7%	15.9%
	2006	49,484	49.1%	14.3%	27.1%	9.4%
Hawaii	1992	39,789	70.2%	12.4%	11.5%	5.9%
	1997	46,271	51.8%	18.1%	20.4%	9.7%
	2003	54,644	52.5%	19.1%	15.9%	12.4%
	2006	61,213	54.9%	11.1%	22.0%	12.0%
Kauai	1992*	16,981	60.3%	17.7%	13.7%	8.1%
	1997	18,817	44.9%	18.7%	24.7%	11.7%
	2003	20,460	51.8%	16.8%	18.0%	13.3%
	2006	21,971	57.6%	10.8%	21.6%	10.0%
Total	1992	338,385	58.0%	14.5%	18.4%	9.1%
	1997	376,574	53.5%	18.5%	19.1%	8.9%
	2003	410,794	54.7%	18.5%	17.5%	9.5%
	2006	435,818	54.2%	11.3%	22.7%	11.8%

Includes both rent and mortgage payments.

Table A-7b. Shelter-to-Income Ratios by Years in Unit, 1992, 1997, 2003 and 2006

County	Year	Total Households	Percent with shelter-to-income ratio of 30% or more by years of occupancy				by tenancy	
			Less than 1 year	1 to 5 years	6 to 10 years	More than 10 years	Rented or no cash	Owner occupied
Honolulu	1992	247,349	61.1%	43.7%	34.9%	12.7%	44.6%	23.0%
	1997	272,234	40.8%	43.2%	46.9%	35.1%	41.4%	39.2%
	2003	292,003	42.5%	49.6%	37.6%	24.9%	48.9%	28.0%
	2006	303,149	53.0%	43.1%	36.9%	22.1%	47.2%	22.7%
Maui	1992	34,266	47.3%	49.8%	30.6%	17.0%	43.8%	27.6%
	1997	39,252	41.4%	50.0%	47.3%	33.7%	38.6%	46.1%
	2003	43,687	52.2%	38.3%	26.5%	26.0%	40.5%	30.0%
	2006	49,484	66.3%	46.8%	44.8%	26.3%	54.6%	32.6%
Hawaii	1992	39,789	51.5%	35.8%	18.5%	6.7%	37.8%	17.2%
	1997	46,271	49.6%	52.5%	42.6%	30.8%	52.0%	37.0%
	2003	54,644	42.4%	41.7%	31.2%	26.8%	49.0%	27.8%
	2006	61,213	60.8%	43.7%	27.5%	20.3%	48.3%	27.1%
Kauai	1992*	16,981	46.3%	31.1%	18.5%	15.6%	36.9%	28.1%
	1997	18,817	61.2%	56.5%	41.4%	39.6%	53.4%	46.1%
	2003	20,460	43.2%	43.2%	31.4%	26.0%	44.4%	29.7%
	2006	21,971	51.6%	45.2%	37.1%	18.8%	47.7%	24.3%
Total	1992	338,385	57.8%	43.3%	31.1%	12.6%	43.7%	23.0%
	1997	376,574	42.2%	45.6%	46.0%	34.7%	40.1%	40.1%
	2003	410,794	43.6%	46.2%	35.3%	25.3%	28.3%	28.3%
	2006	435,818	56.4%	43.8%	36.7%	22.1%	48.2%	24.6%

Includes both rent and mortgage payments.

Table A-8a. Intention to Move By County, 1992, 1997, 2003 and 2006

County	Year	Total Households	Intention to Move		Total will move	When Household Will Move				
			Probably will not move	Will move to a new unit		in one year	in two years	3 to 5 years	more than 5 years	not sure when
Honolulu	1992	247,349	42.6%	57.4%	142,090	29.2%	21.5%	19.0%	10.2%	20.1%
	1997	272,234	44.8%	55.2%	150,194	23.5%	20.9%	16.2%	10.9%	28.5%
	2003	292,003	56.3%	43.7%	127,683	27.9%	20.5%	19.3%	10.3%	22.0%
	2006	303,149	61.2%	38.8%	117,597	24.5%	22.9%	15.5%	8.2%	29.0%
Maui	1992	34,266	56.8%	43.2%	14,793	28.6%	24.7%	17.1%	9.2%	20.4%
	1997	39,252	51.9%	48.1%	18,894	23.1%	17.2%	13.4%	18.2%	28.1%
	2003	43,687	58.3%	48.1%	18,205	22.1%	20.6%	18.6%	10.0%	28.7%
	2006	49,484	54.9%	45.1%	22,318	19.6%	26.9%	15.0%	14.0%	24.5%
Hawaii	1992	39,789	55.6%	44.4%	17,685	28.8%	20.8%	17.8%	14.0%	18.6%
	1997	46,271	60.0%	40.0%	18,491	22.3%	18.1%	15.5%	15.9%	28.2%
	2003	54,644	61.1%	44.4%	21,252	21.4%	19.2%	15.9%	17.3%	26.2%
	2006	61,213	57.9%	42.1%	25,769	22.4%	19.3%	19.4%	11.2%	27.7%
Kauai	1992*	16,981	56.8%	43.2%	7,337	32.8%	17.4%	21.4%	6.4%	22.0%
	1997	18,817	58.0%	42.0%	7,907	17.1%	13.9%	16.3%	15.3%	37.4%
	2003	20,460	63.5%	36.5%	7,468	22.1%	22.4%	15.6%	12.1%	27.9%
	2006	21,971	64.4%	35.6%	7,826	23.4%	17.5%	13.6%	17.1%	28.4%
Total	1992	338,385	46.2%	53.8%	181,904	29.2%	21.5%	18.8%	10.4%	20.1%
	1997	376,574	48.1%	51.9%	195,485	23.1%	20.0%	15.9%	12.3%	28.8%
	2003	410,794	57.5%	42.5%	174,607	26.3%	20.5%	18.6%	11.2%	23.5%
	2006	435,818	60.2%	39.8%	173,511	23.5%	22.6%	15.9%	9.8%	28.2%

Note: Percentages may not sum to 100.0 due to rounding.

* Pre-Hurricane Iniki

Table A-8b. Preferred Location for Next Move By County, 1992, 1997, 2003 and 2006

	Year	Total Households	Preferred Location for Next Move				
			Total will move	Same Island	Different island	out-of-state	not sure
Honolulu	1992	247,349	142,090	62.2%	5.3%	26.1%	6.3%
	1997	272,234	150,194	52.5%	4.3%	32.2%	11.0%
	2003	292,003	127,683	65.7%	2.8%	19.8%	11.6%
	2006	303,149	117,597	66.1%	4.5%	20.5%	8.9%
Maui	1992	34,266	14,793	71.7%	13.3%	9.4%	5.7%
	1997	39,252	18,894	72.5%	2.7%	11.8%	13.0%
	2003	43,687	18,205	68.3%	6.9%	14.0%	10.8%
	2006	49,484	22,318	71.5%	9.5%	12.3%	6.7%
Hawaii	1992	39,789	17,685	80.9%	4.2%	10.6%	4.4%
	1997	46,271	18,491	74.3%	4.0%	14.0%	7.7%
	2003	54,644	21,252	73.4%	5.4%	9.1%	12.1%
	2006	61,213	25,769	73.0%	6.0%	11.5%	9.4%
Kauai	1992*	16,981	7,337	76.7%	6.2%	11.1%	6.0%
	1997	18,817	7,907	69.8%	5.7%	14.3%	10.1%
	2003	20,460	7,468	71.8%	9.7%	9.5%	9.0%
	2006	21,971	7,826	64.8%	7.4%	18.7%	9.1%
Total	1992	338,385	181,904	65.4%	5.9%	22.6%	6.1%
	1997	376,574	195,485	57.2%	4.2%	27.8%	10.9%
	2003	410,794	174,607	67.2%	3.9%	17.5%	11.5%
	2006	435,818	173,511	67.8%	5.5%	18.0%	8.7%

Note: Percentages may not sum to 100.0 due to rounding.

* Pre-Hurricane Iniki

Table A-9. Tenancy Preference of Current Owners & Renters, 1992, 1997, 2003 and 2006

County	Year	Total Will Move ^b	Current Owners			Current Renters ^a		
			Total	Preferred Tenancy		Total	Preferred Tenancy	
				Own ^c	Rent		Own	Rent
Honolulu	1992	127,810	33,243	89.7%	10.3%	94,567	32.7%	67.3%
	1997	128,791	44,335	89.1%	10.9%	84,456	44.0%	56.0%
	2003	113,638	41,616	85.5%	14.5%	72,022	55.4%	44.6%
	2006	100,545	30,973	86.8%	13.2%	69,572	55.4%	44.6%
Maui	1992	13,284	4,600	87.6%	12.4%	8,684	49.5%	50.5%
	1997	16,239	6,450	84.8%	15.2%	9,789	46.8%	53.2%
	2003	15,593	5,657	95.1%	4.9%	9,936	52.4%	47.6%
	2006	19,584	7,083	92.0%	8.0%	12,501	52.3%	47.7%
Hawaii	1992	16,004	7,132	93.7%	6.3%	8,872	64.9%	35.1%
	1997	15,884	7,694	87.5%	12.5%	8,190	49.6%	50.4%
	2003	18,471	8,679	90.0%	10.0%	9,792	57.1%	42.9%
	2006	22,200	10,264	93.8%	6.2%	11,936	54.7%	45.3%
Kauai	1992 ^d	6,530	2,264	95.9%	4.1%	4,266	54.9%	45.1%
	1997	6,428	2,054	92.9%	7.1%	4,374	48.2%	51.8%
	2003	6,426	2,737	90.5%	9.5%	3,689	51.6%	48.4%
	2006	6,715	2,614	87.6%	12.4%	4,101	39.3%	60.7%
Total	1992	163,664	47,239	90.4%	9.6%	116,425	37.2%	62.8%
	1997	167,343	60,533	88.6%	11.4%	106,810	44.9%	55.1%
	2003	154,129	58,689	87.6%	12.4%	95,440	55.1%	44.9%
	2006	149,044	50,934	89.0%	11.0%	98,110	54.3%	45.7%

Note: Percentages may not sum to 100.0 due to rounding.

a. Includes renters who pay no cash rent.

b. Differs from Table A-9 by exclusion of about 50 percent of "not sure" category to account for those who said they would like to move but did not supply any preferences for unit type, number bedrooms, etc.

c. Eg.: the percent of current homeowners who would like to move to a different owned unit.

d. Pre-Hurricane Iniki.

Table A-10. Preferences of Buyers and Renters Statewide, 1992, 1997, 2003 and 2006

	County	Year	Total Will Move	Preferred Unit Type					
				Single Family	town House	Condo	Apartment	other	no preference
P r e f e r t o O w n	Honolulu	1992	60,724	73.9%	14.3%	8.7%	1.1%	0.0%	2.0%
		1997	76,663	78.7%	4.2%	12.7%	0.2%	1.3%	2.9%
		2003	75,482	78.6%	5.1%	6.8%	1.8%	1.3%	6.4%
		2006	65,495	69.7%	7.5%	12.7%	1.0%	1.3%	8.6%
	Maui	1992	8,328	89.7%	2.5%	5.3%	0.6%	1.9%	0.0%
		1997	10,051	87.1%	2.2%	8.0%	0.8%	0.0%	1.9%
		2003	10,586	85.0%	1.2%	7.4%	1.6%	0.1%	4.7%
		2006	12,539	85.6%	2.7%	7.6%	0.0%	0.4%	3.7%
	Hawaii	1992	12,441	91.8%	3.3%	2.2%	1.0%	0.8%	0.9%
		1997	10,794	91.7%	1.9%	4.8%	0.2%	0.2%	1.1%
		2003	13,402	91.4%	1.8%	2.1%	0.5%	0.2%	4.0%
		2006	15,940	84.2%	4.4%	4.9%	0.0%	2.1%	4.4%
	Kauai	1992*	4,513	95.1%	1.1%	2.9%	0.0%	0.0%	0.9%
		1997	4,016	91.0%	4.1%	4.9%	0.0%	0.0%	0.0%
		2003	4,381	86.9%	3.8%	5.8%	0.0%	1.7%	1.8%
		2006	3,879	79.0%	5.3%	8.2%	0.0%	1.3%	6.1%
	Total	1992	86,006	79.2%	10.9%	7.1%	1.0%	0.1%	1.7%
		1997	101,524	81.4%	3.8%	11.0%	0.3%	1.0%	2.5%
		2003	103,851	81.3%	4.3%	6.2%	1.5%	1.0%	5.7%
		2006	97,853	74.5%	6.3%	10.6%	1.0%	1.3%	7.2%
P r e f e r t o R e n t e r O t h e r	Honolulu	1992	67,086	64.3%	3.9%	12.5%	13.6%	0.6%	5.1%
		1997	52,128	50.8%	8.3%	11.4%	19.3%	1.1%	9.1%
		2003	38,156	56.0%	9.1%	4.1%	21.1%	2.9%	6.8%
		2006	40,585	41.3%	10.7%	8.3%	28.8%	2.8%	8.2%
	Maui	1992	4,956	82.1%	3.8%	6.3%	4.1%	3.7%	0.0%
		1997	6,188	60.3%	3.9%	14.0%	17.6%	2.0%	2.2%
		2003	5,007	77.9%	6.7%	4.7%	7.2%	1.8%	1.7%
		2006	7,265	65.1%	0.8%	11.4%	14.1%	0.5%	8.0%
	Hawaii	1992	3,563	80.1%	5.4%	4.7%	4.7%	0.0%	5.1%
		1997	5,090	65.3%	4.1%	4.7%	16.4%	3.4%	6.1%
		2003	5,069	69.9%	1.3%	5.0%	18.1%	3.4%	2.3%
		2006	7,659	61.6%	4.5%	7.7%	15.8%	5.4%	5.0%
	Kauai	1992*	2,017	84.4%	3.6%	8.1%	0.8%	3.2%	0.0%
		1997	2,412	79.3%	2.3%	1.1%	5.3%	2.3%	9.7%
		2003	2,045	77.3%	0.0%	1.7%	12.9%	0.0%	8.1%
		2006	3,177	64.4%	2.0%	9.8%	10.9%	5.7%	7.1%
	Total	1992	77,622	66.7%	4.0%	11.6%	12.3%	0.8%	4.6%
		1997	65,818	53.9%	7.3%	10.8%	18.4%	1.4%	8.2%
		2003	50,277	60.4%	7.7%	4.2%	19.1%	2.7%	5.9%
		2006	58,686	48.1%	8.2%	8.7%	24.3%	3.0%	7.7%

Table A-11. Preferred Number of Bedrooms for Buyers and Renters, 1992, 1997, 2003 and 2006

	County	Year	Total Will Move	Preferred Number of Bedrooms				
				studio or one	two	three	four or more	no preference
P r e f e r r e d t o O w n	Honolulu	1992	60,724	2.9%	30.5%	43.3%	23.3%	0.0%
		1997	76,663	1.4%	17.6%	49.1%	31.0%	0.8%
		2003	75,482	3.9%	22.3%	46.7%	25.5%	1.6%
		2006	65,495	0.1%	15.1%	41.6%	39.0%	4.2%
	Maui	1992	8,328	0.4%	27.5%	56.9%	15.2%	0.0%
		1997	10,051	6.4%	19.7%	44.5%	28.1%	1.2%
		2003	10,586	4.1%	21.8%	37.7%	36.0%	0.4%
		2006	12,539	1.7%	19.9%	46.0%	31.7%	0.7%
	Hawaii	1992	12,441	1.1%	25.4%	55.9%	17.3%	0.3%
		1997	10,794	6.2%	22.7%	40.3%	29.0%	1.7%
		2003	13,402	4.0%	18.4%	45.9%	31.7%	0.0%
		2006	15,940	3.1%	17.1%	41.2%	35.4%	3.3%
	Kauai	1992*	4,513	0.7%	29.3%	48.3%	21.7%	0.0%
		1997	4,016	1.6%	21.9%	51.6%	24.9%	0.0%
		2003	4,381	5.0%	19.5%	37.6%	37.5%	0.4%
		2006	3,879	0.8%	18.5%	46.3%	34.1%	0.3%
Total	1992	86,006	2.3%	29.4%	46.7%	21.6%	0.1%	
	1997	101,524	2.5%	18.5%	47.8%	30.3%	0.9%	
	2003	103,851	4.0%	21.6%	45.2%	28.0%	1.2%	
	2006	97,853	0.8%	16.2%	42.3%	37.3%	3.5%	
P r e f e r r e d t o R e n t e r O r O t h e r	Honolulu	1992	67,086	15.2%	40.0%	35.3%	9.5%	0.0%
		1997	52,128	7.3%	40.2%	32.4%	19.7%	0.4%
		2003	38,156	17.7%	40.6%	28.0%	12.4%	1.3%
		2006	40,585	11.8%	35.1%	33.4%	16.3%	3.5%
	Maui	1992	4,956	6.4%	41.0%	49.0%	1.0%	2.6%
		1997	6,188	17.9%	34.3%	34.8%	12.7%	0.2%
		2003	5,007	9.1%	37.4%	34.0%	18.1%	1.4%
		2006	7,265	7.5%	43.7%	35.9%	11.9%	1.0%
	Hawaii	1992	3,563	5.1%	43.9%	38.7%	12.3%	0.0%
		1997	5,090	10.7%	31.7%	40.1%	16.8%	0.6%
		2003	5,069	18.0%	35.9%	37.5%	8.6%	0.0%
		2006	7,659	9.3%	31.6%	41.2%	16.6%	1.3%
	Kauai	1992*	2,017	0.8%	38.1%	47.8%	13.3%	0.0%
		1997	2,412	4.6%	14.7%	63.8%	14.3%	2.6%
		2003	2,045	17.8%	23.7%	44.3%	11.7%	2.5%
		2006	3,177	7.3%	33.3%	41.7%	17.1%	0.5%
Total	1992	77,622	13.8%	40.2%	36.6%	9.2%	0.2%	
	1997	65,818	8.5%	38.0%	34.4%	18.6%	0.5%	
	2003	50,277	17.7%	40.6%	28.0%	12.4%	1.3%	
	2006	58,686	10.7%	35.6%	35.1%	15.8%	2.7%	

Table A-12. Preferred Location of New Housing Unit, 2006

	County of Residence									
	Honolulu		Hawaii		Kauai		Maui		Group Total	
	Count	Pct.	Count	Pct.	Count	Pct.	Count	Pct.	Count	Pct.
HONOLULU										
PUC	67,328	67.0%	890	4.0%	250	3.7%	329	1.7%	68,798	46.2%
Central Oahu	48,082	47.8%	867	3.9%	158	2.4%	213	1.1%	49,320	33.1%
East Honolulu	8,491	8.4%	202	0.9%	22	0.3%	22	0.1%	8,737	5.9%
Windward Oahu	31,022	30.9%	604	2.7%	46	0.7%	107	0.5%	31,778	21.3%
Leeward Oahu	14,343	14.3%	283	1.3%	58	0.9%	107	0.5%	14,791	9.9%
Oahu, any	1,616	1.6%	448	2.0%	190	2.8%	177	0.9%	2,431	1.6%
HAWAII										
South Kona-Kau	460	0.5%	1,034	4.7%	99	1.5%	21	0.1%	1,614	1.1%
Puna	703	0.7%	3,444	15.5%	38	0.6%	60	0.3%	4,245	2.8%
North & South Hilo	603	0.6%	8,843	39.8%	70	1.0%	358	1.8%	9,874	6.6%
North Hawaii	1,893	1.9%	9,189	41.4%	45	0.7%	111	0.6%	11,238	7.5%
North Kona	70	0.1%	7,072	31.9%	12	0.2%	32	0.2%	7,186	4.8%
Hawaii island, any	1,316	1.3%	1,045	4.7%	150	2.2%	531	2.7%	3,042	2.0%
MAUI										
Hana	130	0.1%			304	4.5%	689	3.5%	1,123	0.8%
Makawao-Pukalani-Kula	484	0.5%			138	2.1%	9,273	47.4%	9,896	6.6%
Wailuku-Kahului	183	0.2%			20	0.3%	6,197	31.6%	6,400	4.3%
Paia-Haiku	1,209	1.2%			17	0.3%	2,399	12.2%	3,625	2.4%
Kihei-Makena			112	0.5%			5,516	28.2%	5,628	3.8%
West Maui			204	0.9%	11	0.2%	4,442	22.7%	4,657	3.1%
Molokai			148	0.7%	38	0.6%	1,085	5.5%	1,271	0.9%
Lanai			95	0.4%	12	0.2%	312	1.6%	419	0.3%
Maui, any	594	0.6%	408	1.8%	160	2.4%	1,274	6.5%	2,435	1.6%
KAUAI										
Waimea					941	14.0%			941	0.6%
Koloa			55	0.2%	1,772	26.4%	6	0.0%	1,834	1.2%
Lihue			91	0.4%	2,360	35.1%			2,451	1.6%
Kawaihau	329	0.3%	63	0.3%	1,750	26.1%	9	0.0%	2,151	1.4%
Hanalei	136	0.1%	123	0.6%	1,859	27.7%			2,118	1.4%
Kauai, any	682	0.7%	457	2.1%	546	8.1%	79	0.4%	1,764	1.2%
Total no preference	7,037	7.0%	1,584	7.1%	750	11.2%	1,612	8.2%	10,983	7.4%
Total will move	100,545	100%	22,200	100.0%	6,715	100.0%	19,584	100.0%	149,044	100.0%

Percentages do not add to 100% because multiple responses were allowed.

This table combines respondents' first, second, and third choices for preferred location of their next unit.

Table includes both preferred owners and preferred renters.

Table A-13. Affordable Housing Cost for New Units, 1992, 1997, 2003 and 2006

	County	Year	Total Will Move	Affordable monthly housing cost*									Median Monthly Payment
				Less than \$200	\$200 to \$499	\$500 to \$799	\$800 to \$1,099	\$1,100 to \$1,399	\$1,400 to \$1,699	\$1,700 to \$2,000	\$2,000 to \$3,000	More than \$3,000	
P r e f e r t o w n	Honolulu	1992	60,724	0.9%	1.1%	14.7%	29.9%	10.7%	22.0%	7.7%	5.9%	7.2%	\$ 1,197
		1997	76,663	0.0%	0.6%	9.3%	21.7%	18.4%	20.7%	11.6%	14.2%	3.4%	\$ 1,398
		2003	75,482	2.4%	1.3%	4.5%	14.1%	15.5%	17.3%	19.4%	19.1%	6.5%	\$ 1,612
		2006	65,495	1.8%	3.9%	6.7%	9.3%	9.2%	12.0%	6.0%	21.5%	13.3%	\$ 1,674
	Maui	1992	8,328	3.1%	5.5%	36.5%	23.6%	12.7%	8.4%	4.7%	4.0%	1.5%	\$ 862
		1997	10,051	1.1%	6.2%	20.5%	30.8%	13.5%	14.6%	5.4%	6.3%	1.6%	\$ 1,016
		2003	10,586	1.8%	5.9%	11.9%	26.8%	13.4%	12.7%	9.6%	12.1%	5.8%	\$ 1,181
		2006	12,539	2.0%	2.5%	4.3%	7.9%	9.3%	13.8%	8.7%	28.8%	12.4%	\$ 1,874
	Hawaii	1992	12,441	0.9%	3.4%	17.6%	31.0%	22.8%	11.3%	4.9%	5.0%	3.2%	\$ 1,072
		1997	10,794	0.9%	3.1%	9.6%	25.0%	12.6%	26.0%	9.6%	10.7%	2.5%	\$ 1,371
		2003	13,402	1.3%	1.7%	7.2%	16.9%	15.2%	15.6%	20.5%	13.8%	7.9%	\$ 1,550
		2006	15,940	1.4%	3.2%	6.3%	17.8%	8.2%	12.8%	2.3%	18.6%	10.7%	\$ 1,488
	Kauai	1992*	4,513	0.0%	1.6%	14.5%	31.3%	23.6%	14.7%	8.5%	4.6%	1.2%	\$ 1,133
		1997	4,016	1.0%	4.5%	13.1%	28.0%	17.2%	16.6%	9.6%	7.5%	2.4%	\$ 1,159
		2003	4,381	1.5%	1.2%	5.7%	21.3%	15.8%	22.3%	14.4%	12.6%	5.2%	\$ 1,461
		2006	3,879	1.4%	2.4%	3.6%	12.9%	12.4%	12.9%	5.4%	20.1%	13.5%	\$ 1,623
	Total	1992	86,006	1.0%	1.9%	17.2%	29.5%	13.4%	18.7%	7.0%	5.5%	5.7%	\$ 1,108
		1997	101,524	0.3%	1.6%	10.6%	23.2%	17.3%	20.5%	10.7%	12.8%	3.1%	\$ 1,349
		2003	103,851	2.1%	1.8%	5.6%	16.0%	15.3%	16.8%	18.3%	17.4%	6.5%	\$ 1,562
		2006	97,853	1.8%	3.5%	6.2%	10.5%	9.2%	12.4%	5.8%	21.9%	12.8%	\$ 1,663
P r e f e r t o r O t h e r	Honolulu	1992	67,086	1.5%	2.8%	29.6%	35.1%	16.3%	9.6%	2.8%	2.3%	0.0%	\$ 938
		1997	52,128	2.0%	7.5%	26.1%	31.6%	16.7%	10.6%	3.1%	2.4%	0.0%	\$ 937
		2003	38,156	4.4%	10.2%	19.0%	24.9%	11.4%	11.4%	10.3%	5.2%	3.2%	\$ 997
		2006	40,585	0.0%	7.8%	13.6%	21.1%	13.3%	9.5%	8.8%	6.7%	5.0%	\$ 1,109
	Maui	1992	4,956	0.9%	7.6%	53.2%	29.2%	6.8%	2.2%	0.2%	0.0%	0.0%	\$ 734
		1997	6,188	4.6%	18.7%	41.7%	21.8%	5.1%	4.5%	1.8%	1.9%	0.0%	\$ 692
		2003	5,007	8.0%	11.0%	38.6%	22.2%	9.0%	8.0%	0.0%	1.7%	1.5%	\$ 741
		2006	7,265	0.0%	10.2%	12.9%	19.9%	12.5%	17.3%	5.2%	9.1%	3.6%	\$ 1,156
	Hawaii	1992	3,563	0.1%	6.6%	23.8%	32.4%	25.2%	9.7%	1.0%	1.0%	0.0%	\$ 980
		1997	5,090	6.0%	15.5%	26.5%	31.6%	15.3%	2.9%	0.6%	1.7%	0.0%	\$ 819
		2003	5,069	7.8%	5.3%	17.7%	33.2%	10.0%	11.2%	3.8%	11.0%	0.0%	\$ 974
		2006	7,659	0.0%	18.3%	16.5%	19.1%	10.7%	9.9%	5.8%	8.6%	1.6%	\$ 964
	Kauai	1992*	2,017	1.0%	8.2%	30.3%	21.4%	22.2%	17.0%	0.0%	0.0%	0.0%	\$ 948
		1997	2,412	6.7%	16.2%	43.0%	24.3%	4.4%	3.7%	1.8%	0.0%	0.0%	\$ 689
		2003	2,045	4.2%	2.2%	13.8%	34.9%	15.7%	15.0%	2.5%	11.7%	0.0%	\$ 1,056
		2006	3,177	0.0%	9.1%	5.2%	17.7%	15.3%	25.0%	4.5%	7.1%	4.9%	\$ 1,343
	Total	1992	77,622	1.4%	3.4%	30.8%	34.2%	16.3%	9.3%	2.5%	2.0%	0.0%	\$ 926
		1997	65,818	2.7%	9.5%	28.2%	30.4%	15.0%	9.2%	2.7%	2.2%	0.0%	\$ 895
		2003	50,277	5.1%	9.5%	20.6%	25.9%	11.2%	11.2%	8.3%	5.7%	2.6%	\$ 972
		2006	58,686	0.0%	9.5%	13.4%	20.5%	13.0%	11.4%	7.8%	7.2%	4.4%	\$ 1,105

Table B-1. 2006 Housing Demand Characteristics, by County (Honolulu)

	Demand for Housing Units, 2006								Group Total	
	want to buy		want to rent		want to other		not sure			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Preferred Unit Type (Adj.)										
single family	38,771	66.0	12,665	44.1	2,393	65.1			53,830	53.2
condominium	3,598	6.1	3,905	13.6					7,504	7.4
apartment	8,171	13.9	3,131	10.9	367	10.0			11,669	11.5
other	1,713	2.9	5,334	18.6	789	21.5			7,836	7.7
no preference	6,483	11.0	3,683	12.8	129	3.5	9,989	100.0	20,285	20.1
Total	58,737	100.0	28,718	100.0	3,679	100.0	9,989	100.0	101,123	100.0
Prefer Lease or Fee Simple?										
1 Leasehold	2,278	3.9	1,515	5.4					3,792	4.2
2 Fee simple	48,656	82.8	21,039	75.2	1,195	40.2			70,889	79.0
3 can't afford either	4,162	7.1	186	0.7	732	24.6			5,080	5.7
9 no preference	3,641	6.2	5,254	18.8	1,049	35.2			9,945	11.1
Total	58,737	100.0	27,994	100.0	2,976	100.0			89,707	100.0
Willing to take a condo if SFD too expensive?										
1 Yes	20,033	51.7	7,398	58.4	1,919	77.6			29,349	54.4
2 No	16,407	42.3	3,521	27.8					19,929	37.0
9 not sure, depends	2,331	6.0	1,746	13.8	555	22.4			4,632	8.6
Total	38,771	100.0	12,665	100.0	2,473	100.0			53,910	100.0
What is the smallest number of bedrooms you can live with										
0 None - studio	6,608	11.2	9,948	34.6	1,223	33.2			17,779	17.6
1 one	26,636	45.3	9,238	32.2	1,319	35.9			37,194	36.8
2 two	19,344	32.9	8,838	30.8	965	26.2			29,146	28.8
3 three	4,575	7.8	405	1.4					4,979	4.9
4 four	577	1.0	17	0.1					594	0.6
7 no response	998	1.7	272	0.9	172	4.7	9,989	100.0	11,431	11.3
Total	58,737	100.0	28,718	100.0	3,679	100.0	9,989	100.0	101,123	100.0
What is the smallest number of bathrooms you can live with										
one or one and a half	31,413	53.5	22,289	77.6	2,412	65.6			56,115	55.5
two	22,036	37.5	5,003	17.4	1,094	29.7			28,133	27.8
two and a half	2,514	4.3	1,119	3.9					3,634	3.6
three	2,082	3.5	35	0.1					2,117	2.1
four or more	576	1.0							576	0.6
7 no response	116	0.2	272	0.9	172	4.7	9,989	100.0	10,549	10.4
Total	58,737	100.0	28,718	100.0	3,679	100.0	9,989	100.0	101,123	100.0
What is the smallest size home you would be willing to live in										
Please give your answer in terms of square feet.										
about 800 sq. ft.	4,159	7.1	4,029	14.0	815	22.2			9,003	8.9
800 to 999 sq. ft.	3,356	5.7	4,214	14.7	274	7.5			7,844	7.8
1,000 to 1,199 sq. ft.	13,351	22.7	5,159	18.0	893	24.3			19,404	19.2
1,200 to 1,499 sq. ft.	9,955	16.9	2,410	8.4	307	8.3			12,672	12.5
1,500 to 1,999 sq. ft.	8,076	13.7	2,640	9.2					10,715	10.6
2,000 sq. ft. or more	9,509	16.2	2,340	8.1	118	3.2			11,968	11.8
not sure	10,331	17.6	7,926	27.6	1,271	34.5	9,989	100.0	29,517	29.2
Total	58,737	100.0	28,718	100.0	3,679	100.0	9,989	100.0	101,123	100.0

Table B-2. 2006 Housing Qualifiers, by County (Maui)

	Demand for Housing Units, 2006								Group Total	
	want to buy		want to rent		want to other		not sure			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Preferred Unit Type (Adj.)										
single family	8,979	83.2	4,363	69.4	725	77.2	107	4.5	14,174	69.5
condominium	309	2.9	65	1.0	9	0.9			383	1.9
apartment	858	7.9	763	12.1	41	4.4			1,662	8.1
other	220	2.0	627	10.0	133	14.2			980	4.8
no preference	423	3.9	467	7.4	31	3.3	2,283	95.5	3,204	15.7
Total	10,789	100.0	6,285	100.0	939	100.0	2,390	100.0	20,402	100.0
Prefer Lease or Fee Simple?										
1 Leasehold	737	6.8	557	9.0	115	12.3			1,409	7.8
2 Fee simple	8,546	79.2	4,305	69.2	387	41.6	103	96.0	13,341	73.9
3 can't afford either	583	5.4	246	4.0	258	27.7			1,087	6.0
9 no preference	923	8.6	1,117	17.9	172	18.4	4	4.0	2,216	12.3
Total	10,789	100.0	6,225	100.0	932	100.0	107	100.0	18,052	100.0
Willing to take a condo if SFD too expensive?										
1 Yes	3,945	43.9	3,023	69.3	449	59.4	47	44.1	7,465	52.5
2 No	4,828	53.8	1,254	28.7	299	39.6	56	51.9	6,436	45.3
9 not sure, depends	207	2.3	86	2.0	8	1.0	4	4.0	305	2.1
Total	8,979	100.0	4,363	100.0	756	100.0	107	100.0	14,205	100.0
What is the smallest number of bedrooms you can live with										
0 None - studio	1,711	15.9	1,389	22.1	316	33.7	4	0.2	3,420	16.8
1 one	4,764	44.2	4,060	64.6	363	38.7	103	4.3	9,290	45.5
2 two	3,807	35.3	645	10.3	109	11.6			4,561	22.4
3 three	354	3.3	137	2.2	138	14.7			629	3.1
4 four	153	1.4							153	0.8
7 no response			54	0.9	13	1.4	2,283	95.5	2,349	11.5
Total	10,789	100.0	6,285	100.0	939	100.0	2,390	100.0	20,402	100.0
What is the smallest number of bathrooms you can live with										
one or one and a half	5,806	53.8	4,858	77.3	777	82.7	107	4.5	11,548	56.6
two	4,651	43.1	1,420	22.6	151	16.0			6,221	30.5
two and a half	165	1.5							165	0.8
three	83	0.8	7	0.1	5	0.5			95	0.5
four or more	84	0.8							84	0.4
7 no response					6	0.7	2,283	95.5	2,289	11.2
Total	10,789	100.0	6,285	100.0	939	100.0	2,390	100.0	20,402	100.0
What is the smallest size home you would be willing to live in										
Please give your answer in terms of square feet.										
about 800 sq. ft.	560	5.2	1,114	17.7	299	31.8	47	2.0	2,019	9.9
800 to 999 sq. ft.	1,489	13.8	1,339	21.3	54	5.7	4	0.2	2,886	14.1
1,000 to 1,199 sq. ft.	2,154	20.0	1,156	18.4	61	6.5			3,370	16.5
1,200 to 1,499 sq. ft.	2,192	20.3	924	14.7	393	41.9	56	2.3	3,564	17.5
1,500 to 1,999 sq. ft.	2,217	20.5	372	5.9	106	11.3			2,694	13.2
2,000 sq. ft. or more	1,078	10.0	234	3.7					1,312	6.4
not sure	1,099	10.2	1,148	18.3	26	2.8	2,283	95.5	4,556	22.3
Total	10,789	100.0	6,285	100.0	939	100.0	2,390	100.0	20,402	100.0

Table B-3. 2006 Housing Qualifiers, by County (Hawaii)

	Demand for Housing Units, 2006								Group Total	
	want to buy		want to rent		want to other		not sure			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Preferred Unit Type (Adj.)										
single family	11,571	82.1	4,200	66.1	1,119	72.1			16,890	70.5
condominium	552	3.9	236	3.7	187	12.1			976	4.1
apartment	779	5.5	368	5.8	223	14.4			1,370	5.7
other	170	1.2	962	15.1					1,131	4.7
no preference	1,029	7.3	585	9.2	24	1.5	1,969	100.0	3,606	15.0
Total	14,101	100.0	6,351	100.0	1,553	100.0	1,969	100.0	23,975	100.0
Prefer Lease or Fee Simple?										
1 Leasehold	736	5.2	498	8.3					1,235	5.7
2 Fee simple	11,398	80.8	3,392	56.5	786	50.6			15,576	71.9
3 can't afford either	327	2.3	131	2.2	704	45.4			1,163	5.4
9 no preference	1,639	11.6	1,985	33.1	63	4.1			3,687	17.0
Total	14,101	100.0	6,006	100.0	1,553	100.0			21,661	100.0
Willing to take a condo if SFD too expensive?										
1 Yes	4,353	37.6	2,403	57.2	664	53.1			7,420	43.6
2 No	6,489	56.1	1,473	35.1	557	44.6			8,519	50.0
9 not sure, depends	728	6.3	325	7.7	29	2.4			1,082	6.4
Total	11,571	100.0	4,200	100.0	1,251	100.0			17,022	100.0
What is the smallest number of bedrooms you can live with										
0 None - studio	2,019	14.3	2,004	31.6	514	33.1			4,538	18.9
1 one	5,917	42.0	2,898	45.6	826	53.2			9,641	40.2
2 two	5,583	39.6	1,427	22.5	70	4.5			7,080	29.5
3 three	460	3.3	22	0.3	54	3.5			536	2.2
4 four					88	5.7			88	0.4
7 no response	122	0.9					1,969	100.0	2,091	8.7
Total	14,101	100.0	6,351	100.0	1,553	100.0	1,969	100.0	23,975	100.0
What is the smallest number of bathrooms you can live with										
one or one and a half	6,737	47.8	4,683	73.7	945	60.8			12,365	51.6
two	6,503	46.1	1,613	25.4	300	19.3			8,415	35.1
two and a half	322	2.3							322	1.3
three	487	3.5	55	0.9	110	7.1			652	2.7
four or more	53	0.4			88	5.7			141	0.6
7 no response					111	7.2	1,969	100.0	2,080	8.7
Total	14,101	100.0	6,351	100.0	1,553	100.0	1,969	100.0	23,975	100.0
What is the smallest size home you would be willing to live in										
Please give your answer in terms of square feet.										
about 800 sq. ft.	793	5.6	461	7.3	134.0229	8.6			1,389	5.8
800 to 999 sq. ft.	1,217	8.6	1,159	18.2	260.8321	16.8			2,636	11.0
1,000 to 1,199 sq. ft.	2,416	17.1	1,597	25.2	227.5724	14.7			4,241	17.7
1,200 to 1,499 sq. ft.	3,130	22.2	1,247	19.6	405.4141	26.1			4,783	19.9
1,500 to 1,999 sq. ft.	2,781	19.7	672	10.6	29.45399	1.9			3,482	14.5
2,000 sq. ft. or more	1,514	10.7	192	3.0	197.7915	12.7			1,904	7.9
not sure	2,251	16.0	1,022	16.1	298.1753	19.2	1,969	100.0	5,540	23.1
Total	14,101	100.0	6,351	100.0	1553.262	100.0	1,969	100.0	23,975	100.0

Table B-4. 2006 Housing Qualifiers, by County (Kauai)

	Demand for Housing Units, 2006								Group Total	
	want to buy		want to rent		want to other		not sure			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Preferred Unit Type (Adj.)										
single family	2,539	79.4	1,821	69.0	290	73.9	17	2.4	4,666	67.5
condominium	105	3.3	65	2.4					169	2.5
apartment	222	7.0	250	9.5	13	3.2			485	7.0
other	51	1.6	264	10.0	20	5.2			335	4.8
no preference	279	8.7	241	9.1	69	17.7	667	97.6	1,257	18.2
Total	3,196	100.0	2,641	100.0	392	100.0	684	100.0	6,912	100.0
Prefer Lease or Fee Simple?										
1 Leasehold	31	1.0	160	6.2					191	3.1
2 Fee simple	2,772	86.7	1,739	67.0	249	68.8	17	100.0	4,776	77.4
3 can't afford either	144	4.5	17	0.7	113	31.2			274	4.4
9 no preference	249	7.8	679	26.2					928	15.0
Total	3,196	100.0	2,596	100.0	361	100.0	17	100.0	6,169	100.0
Willing to take a condo if SFD too expensive?										
1 Yes	1,078	42.5	1,173	64.4	142	48.9			2,393	51.3
2 No	1,287	50.7	519	28.5	102	35.2	17	100.0	1,924	41.2
9 not sure, depends	173	6.8	130	7.1	46	15.9			349	7.5
Total	2,539	100.0	1,821	100.0	290	100.0	17	100.0	4,666	100.0
What is the smallest number of bedrooms you can live with										
0 None - studio	436	13.6	817	30.9	158	40.4			1,410	20.4
1 one	1,115	34.9	1,162	44.0	170	43.4			2,447	35.4
2 two	1,376	43.0	635	24.1	64	16.3			2,083	30.1
3 three	262	8.2	9	0.4			8	1.2	279	4.0
4 four	8	0.3							8	0.1
7 no response			17	0.7			667	97.6	685	9.9
Total	3,196	100.0	2,641	100.0	392	100.0	684	100.0	6,912	100.0
What is the smallest number of bathrooms you can live with										
one or one and a half	1,430	44.8	1,898	71.9	172	43.8			3,500	50.6
two	1,516	47.4	661	25.0	221	56.2	8	1.2	2,406	34.8
two and a half	41	1.3							41	0.6
three	144	4.5	72	2.7			8	1.2	224	3.2
four or more	36	1.1	9	0.4					46	0.7
7 no response	28	0.9					667	97.6	696	10.1
Total	3,196	100.0	2,641	100.0	392	100.0	684	100.0	6,912	100.0
What is the smallest size home you would be willing to live in										
Please give your answer in terms of square feet.										
about 800 sq. ft.	267	8.3	398	15.1	153	39.1			818	11.8
800 to 999 sq. ft.	301	9.4	352	13.3	12	3.1	8	1.2	673	9.7
1,000 to 1,199 sq. ft.	675	21.1	400	15.2					1,076	15.6
1,200 to 1,499 sq. ft.	451	14.1	510	19.3	91	23.2			1,053	15.2
1,500 to 1,999 sq. ft.	563	17.6	141	5.3	54	13.8			758	11.0
2,000 sq. ft. or more	649	20.3	256	9.7	36	9.1	8	1.2	949	13.7
not sure	290	9.1	583	22.1	46	11.8	667	97.6	1,587	23.0
Total	3,196	100.0	2,641	100.0	392	100.0	684	100.0	6,912	100.0

Note: "Preferred unit type" was self-reported in the Demand Survey. Condominium and apartment units are both multi-family units. Respondent who want to buy and apartment usually prefer condominium units by those who wish to rent.

Table B-5. 2006 Housing Qualifiers, by County (State of Hawaii)

	Demand for Housing Units, 2006								Group Total	
	want to buy		want to rent		want to other		not sure			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Preferred Unit Type (Adj.)										
single family	61,860	71.2	23,049	52.4	4,527	69.0	123	0.8	89,560	58.8
condominium	4,564	5.3	4,272	9.7	196	3.0			9,032	5.9
apartment	10,030	11.6	4,512	10.3	644	9.8			15,186	10.0
other	2,153	2.5	7,186	16.3	943	14.4			10,283	6.7
no preference	8,214	9.5	4,976	11.3	252	3.8	14,909	99.2	28,351	18.6
Total	86,822	100.0	43,995	100.0	6,563	100.0	15,032	100.0	152,412	100.0
Prefer Lease or Fee Simple?										
1 Leasehold	3,782	4.4	2,730	6.4	115	2.0			6,627	4.9
2 Fee simple	71,372	82.2	30,474	71.2	2,617	44.9	119	96.6	104,582	77.1
3 can't afford either	5,216	6.0	581	1.4	1,807	31.0			7,604	5.6
9 no preference	6,452	7.4	9,036	21.1	1,284	22.1	4	3.4	16,776	12.4
Total	86,822	100.0	42,821	100.0	5,823	100.0	123	100.0	135,589	100.0
Willing to take a condo if SFD too expensive?										
1 Yes	29,410	47.5	13,997	60.7	3,174	66.5	47	38.2	46,627	51.9
2 No	29,011	46.9	6,766	29.4	959	20.1	72	58.4	36,808	41.0
9 not sure, depends	3,439	5.6	2,286	9.9	638	13.4	4	3.4	6,368	7.1
Total	61,860	100.0	23,049	100.0	4,770	100.0	123	100.0	89,803	100.0
What is the smallest number of bedrooms you can live with										
0 None - studio	10,773	12.4	14,158	32.2	2,212	33.7	4	0.0	27,147	17.8
1 one	38,432	44.3	17,359	39.5	2,678	40.8	103	0.7	58,572	38.4
2 two	30,110	34.7	11,546	26.2	1,207	18.4	8	0.1	42,871	28.1
3 three	5,650	6.5	573	1.3	192	2.9	8	0.1	6,423	4.2
4 four	738	0.8	17	0.0	88	1.3			843	0.6
7 no response	1,120	1.3	343	0.8	185	2.8	14,909	99.2	16,557	10.9
Total	86,822	100.0	43,995	100.0	6,563	100.0	15,032	100.0	152,412	100.0
What is the smallest number of bathrooms you can live with										
one or one and a half	45,387	52.3	33,728	76.7	4,305	65.6	107	0.7	83,527	54.8
two	34,706	40.0	8,697	19.8	1,765	26.9	8	0.1	45,176	29.6
two and a half	3,042	3.5	1,119	2.5					4,161	2.7
three	2,795	3.2	169	0.4	115	1.7	8	0.1	3,087	2.0
four or more	748	0.9	9	0.0	88	1.3			846	0.6
7 no response	144	0.2	272	0.6	290	4.4	14,909	99.2	15,614	10.2
Total	86,822	100.0	43,995	100.0	6,563	100.0	15,032	100.0	152,412	100.0
What is the smallest size home you would be willing to live in										
Please give your answer in terms of square feet.										
about 800 sq. ft.	5,778	6.7	6,003	13.6	1,401	21.3	47	0.3	13,229	8.7
800 to 999 sq. ft.	6,362	7.3	7,064	16.1	601	9.2	12	0.1	14,039	9.2
1,000 to 1,199 sq. ft.	18,596	21.4	8,313	18.9	1,182	18.0			28,091	18.4
1,200 to 1,499 sq. ft.	15,729	18.1	5,091	11.6	1,196	18.2	56	0.4	22,072	14.5
1,500 to 1,999 sq. ft.	13,636	15.7	3,824	8.7	189	2.9			17,650	11.6
2,000 sq. ft. or more	12,750	14.7	3,023	6.9	352	5.4	8	0.1	16,133	10.6
not sure	13,972	16.1	10,678	24.3	1,642	25.0	14,909	99.2	41,200	27.0
Total	86,822	100.0	43,995	100.0	6,563	100.0	15,032	100.0	152,412	100.0

