



Beyond Information. Intelligence.

Database Marketing

Economic & Social Impact Studies

Evaluations

Research

Modeling/Forecasting

SMS

1042 Fort Street Mall
Suite 200
Honolulu, HI 96813
Ph: (808) 537-3356
Toll Free (877) 535-5767
Fax: (808) 537-2686
E-mail: info@smshawaii.com
Website: www.smshawaii.com

HAWAI'I HOUSING PLANNING STUDY, 2011

Prepared for the:

**Hawai'i Housing Finance and Development
Corporation**

SMS Affiliations and Associations:

Experian
International Survey Research
Solutions Pacific, LLC
SMS Consulting, LLC
3i Marketing & Communications

Prepared by **SMS** Research & Marketing Services, Inc.
November, 2011



Beyond Information. Intelligence.

Consulting

Database Marketing

Economic & Social Impact
Studies

Research

November 28, 2011

SMS

1042 Fort Street Mall
Suite 200
Honolulu, HI 96813
Ph: (808) 537-3356
Toll Free (877) 535-5767
Fax: (808) 537-2686
E-mail: info@smsHawaii.com
Website: www.smsHawaii.com

Ms. Janice Takahashi, Chief Planner
Hawai'i Housing Finance and Development
Corporation
Planning and Evaluation Office
677 Queen Street, Suite 300
Honolulu, Hawai'i 96813

Dear Ms. Takahashi:

It is with pleasure that SMS Research presents this Final Report of the findings of the Hawai'i Housing Planning Study 2011. We believe the results will be an important tool to be used by those who will plan for and develop new housing opportunities for Hawai'i's people in the remainder of this decade.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'James E. Dannemiller', written in a cursive style.

James E. Dannemiller
Executive Vice President

SMS Affiliations and Associations:

Alan Barker Associates
Warren Dastrup – Kaua'i Affiliate
Experian
International Survey Research
Solutions Pacific, LLC
3i Marketing & Communications

ACKNOWLEDGEMENTS

Hawai'i Housing Planning Study, 2011

This report is the culmination of months of work on the part of many people. It is appropriate to acknowledge the leaders of this effort and their continuing dedication to ensuring that housing planning in Hawai'i is based on the hard facts of our housing situation and the needs of Hawai'i residents. The people listed below, and the agencies they represent, have demonstrated the kind of wisdom and foresight required to maintain a comprehensive long-range data system for housing planning in Hawai'i and to use those facts to develop effective housing and plans. In their dedication to the successful resolution of Hawai'i's housing problems, they have provided the guidance and direction to put the project in motion, the resources to make it possible, and the tireless application of the data to make the system work for the people of Hawai'i.

- Hawai'i Housing Finance & Development Corporation: Karen Seddon, Janice Takahashi, Lisa Wond
- City and County of Honolulu: Gail Kaito, Dina Wong
- Maui County: Jo-Ann T. Ridao, Wayde Oshiro
- Hawai'i County: Stephen J. Arnett, Jeremy McComber
- Kaua'i County: Eugene Jimenez, Gary Mackler, Barbara Pendragon
- Department of Hawaiian Home Lands: Alapaki Nahale-a, Bob Freitas, Scottina Ruis
- U.S. Department of Housing and Urban Development: Mike Flores, Mark Chandler
- Hawai'i Department of Human Services, Benefit, Employment and Support Services Division, Homeless Programs Office: Sandra Miyoshi
- Castle and Cooke Homes Hawai'i: Harry Saunders
- Pacific Housing Assistance Corporation: Marvin Awaya

As in the past, a large number of housing experts in Hawai'i have contributed to the contents of this report. The people listed below have given their time and expertise to provide ideas and direction, facts and figures, and review and reaction throughout the last seven months. Without their time and talent, this project would not have succeeded. We are grateful to each one of them.

- Keith Ishida, City and County of Honolulu, Office of Housing
- David Arakawa, Land Use Research Foundation of Hawai'i
- Waynette Cabral, Hawai'i State Council on Developmental Disabilities
- Jennifer Cilfone and Keith Kuboyama, Family Programs Hawai'i
- Rona Fukumoto, Director of Intake, Catholic Charities Hawai'i
- Rick Hobson, Gentry Homes Ltd.
- Carol Ignacio, Office of Social Ministry, Roman Catholic Diocese of Honolulu
- Eva K. Kishimoto and Adam Y.C. Quon, Adult Mental Health Division, Department of Health
- Anastasia Keller-Collins, Senior Vice President, Programs, Easter Seals Hawai'i
- John Kirkpatrick, Belt Collins Hawai'i
- Chris Lau, Towne Realty
- Seng Lee, Gregory House
- Bobbie Jean Leithead, Director, Planning Department, County of Hawai'i
- Wesley Lum, Ph.D., Director, Executive Office on Aging
- David Nakamura, Mutual Housing Association of Hawai'i
- Sheryl Nelson, Executive Director, Statewide Independent Living Council
- Claudio Nigg, PhD, Associate Professor, Social & Behavioral Health Sciences, University of Hawai'i Office of Public Health Studies
- Kayle Perez, Administrator, Child Welfare Services, Department of Human Services
- Jeffrey Proster, President, Bridgestone Homes Hawai'i
- James Ramirez and Wendy K. Chong, Forest City Hawai'i
- Mark Richards, Maryl Group Inc.
- Richard Riegles and Jesse Wu, Stanford Carr Developers
- Ray Soon, Solutions Pacific, LLC
- John Summers, Maui County - Planning Department Long Range
- Michael Tamanaha, Director, Arc of Hawai'i
- Terry Nakano, Acting Director, Alcohol and Drug Abuse Division, Department of Health
- Martha Torney, Deputy Director, Department of Public Safety
- Maelyn Uyehara, Rider Levett Bucknall
- Michael Watkins, City and County of Honolulu, Department of Planning and Permitting
- Betty Wood, PHS Epidemiologist, Hawai'i State Department of Health
- Gwen Yamamoto-Lau, Hawai'i Community Reinvestment Corp.
- Steve Young, City and County of Honolulu, Department of Planning & Permitting

Our Consultant Team included:

- Mike Sklarz, Fidelity Hansen Quality
- Scott Kimball, Hawai'i Information Service

CONTENTS

INTRODUCTION	1
PURPOSE.....	1
METHODS	1
REPORT STRUCTURE	2
CURRENT HOUSING SITUATION IN HAWAII	3
HOUSING SUPPLY IN HAWAII	3
Current Housing Stock	3
<i>Available Housing Units.....</i>	<i>3</i>
<i>Vacancy Rates</i>	<i>4</i>
<i>Age and Condition of Units.....</i>	<i>4</i>
Housing Production	5
<i>Building Permits and Housing Starts</i>	<i>5</i>
<i>Changes to Housing Stock Characteristics</i>	<i>6</i>
HOUSING DEMAND IN HAWAII.....	7
Population and Growth Rates.....	7
<i>Components of Growth.....</i>	<i>8</i>
Households and Household Size	9
Household Conditions	10
<i>Homeownership.....</i>	<i>10</i>
<i>Shelter Cost & Shelter-to-Income Ratios.....</i>	<i>11</i>
<i>Crowding and Doubling Up.....</i>	<i>11</i>
<i>Out-of-State Ownership.....</i>	<i>12</i>
Current Demand	12
<i>Raw, Final, and Effective Demand Estimates</i>	<i>12</i>
<i>Housing Preferences (Buyers and Renters).....</i>	<i>14</i>
Buyer Preferences.....	14
Renter Preferences	15
QUALIFICATION FOR PURCHASE AND RENT.....	15
Households That Plan to Buy	15
<i>Current Renters That Plan to Buy</i>	<i>17</i>
Households That Plan to Rent.....	18
HOUSING PRICES	20
Rents	21
HOUSING FORECASTS, 2012-2030.....	22
HOUSING DEMAND.....	22
Modeled Demand	22
HOUSING SUPPLY	23
Modeled Supply	23
NEEDED UNITS	24
Total New Units Needed.....	24
Types of Units Needed	27

Units Needed for Elderly Housing	28
HOUSING ISSUES.....	31
SUSTAINABLE AFFORDABILITY.....	31
LOT SIZES.....	32
HOUSING AND TRANSPORTATION	34
Impact of Commuting on Housing Choice	34
Designing Housing with Distance in Mind	34
Housing and Transportation Alternatives.....	35
SPECIAL NEEDS HOUSING IN HAWAII	39
Elderly and Frail Elderly Persons	39
<i>Housing Needs and Challenges</i>	<i>39</i>
Exiting Offenders	41
<i>Housing Needs and Challenges</i>	<i>41</i>
Persons with Alcohol or Drug Addictions.....	41
<i>Housing Needs and Challenges</i>	<i>41</i>
Persons with Disabilities	42
<i>Housing Needs and Challenges</i>	<i>43</i>
Persons with Developmental Disabilities	43
<i>Housing Needs and Challenges</i>	<i>43</i>
Persons with HIV/AIDS.....	44
<i>Housing Needs and Challenges</i>	<i>44</i>
Persons with Severe Persistent Mental Illness.....	45
<i>Housing Needs and Challenges</i>	<i>45</i>
Victims of Domestic Violence	46
<i>Housing Needs and Challenges</i>	<i>46</i>
Emancipated Foster Youth	46
<i>Housing Needs and Challenges</i>	<i>47</i>
Special Needs Housing Summary	47
Special Needs Housing Issues	50
Issue Summary.....	51
HOMELESSNESS IN HAWAII.....	52
Homeless Data	52
Hidden Homeless	54
Households at Risk of Homelessness	55
COMMENTS FROM HOUSING DEVELOPERS, 2011	57
THE STATE OF THE MARKET.....	57
POLICY CHANGE	58
Other Viewpoints	59
Information from the Residents	59
PLANNING IMPLICATIONS FOR 2012-2015.....	60
RESETTING THE CONTEXT	60
HOUSING PLANNING – PUBLIC SECTOR	60
Past Planning Efforts: Spending.....	60
<i>Federal Allocations</i>	<i>61</i>

State Allocations.....	62
Planning Data	62
AFFORDABLE HOUSING CONSTRUCTION.....	64
RECOMMENDATIONS FOR FUTURE HOUSING PLANNING STUDIES	65
APPENDIX: SUPPORT MATERIALS.....	67
APPENDIX A: HOUSING TRENDS	68
APPENDIX B: DETAILED DATA WORKSHEETS	89
APPENDIX C: LAND USE REGULATION INDEX.....	90
APPENDIX D: SPECIAL NEEDS HOUSING	91
APPENDIX E: GLOSSARY	95
APPENDIX F: HAWAI'I STATE PLANNING ACT (SELECTED SECTIONS)	101
APPENDIX G: BIBLIOGRAPHY	103

LIST OF TABLES

Table 1. State of Hawai`i, Changes in Housing Stock, 2003-2010.....	7
Table 2. Total Population, 1990-2011.....	8
Table 3. Components of Population Change, Hawai`i, 1990-2010.....	9
Table 4. State of Hawai`i, Total Households, 1990-2010	10
Table 5: Shelter-to-Income Ratio by County, 2011.....	11
Table 6. Overcrowding, State and Counties of Hawai`i, 1992, 1997, 2003, 2006 and 2011	12
Table 7. Percent of Owners Who are Not Hawai`i Residents, 2011.....	12
Table 8. Interest in Moving to a New Home by County, 2006 and 2011	13
Table 9. Effective Demand by County, 1992, 1997, 2003, 2006 and 2011	14
Table 10a. Financial Qualification to Purchase a Single Family Home, Counties and State of Hawai`i, 2011	17
Table 10b. Financial Qualification to Purchase a Condominium, Counties and State of Hawai`i, 2011	17
Table 10c. Financial Qualification to Rent a Multi-Family Unit, Counties and State of Hawai`i, 2011	19
Table 10d. Financial Qualification to Rent a Single Family Unit, Counties and State of Hawai`i, 2011	19
Table 11. Needed Housing Units by HUD Income Classification, Counties and State of Hawai`i, 2012-2016	25
Table 12. Needed Housing Units by Housing Demand Survey Income Classification, Counties and State of Hawai`i, 2012-2016	26
Table 13. Needed Elderly Housing Units, Counties and State of Hawai`i, 2012-2016	30
Table 14. Sustainable Lease Considerations by County, 2006 and 2011	32
Table 15. Current and Preferred Housing, Kaua`i Buyers, 2011	33
Table 16. Current and Affordable Housing Payment, Kaua`i Movers, 2011	33
Table 17: Effect of Commuting on Housing Choice, 2011.....	36
Table 18: Commuter Household Characteristics, 2011	37
Table 19: Commuting and Preferred Housing Situation, 2011	38
Table 20. Elderly Residents, State of Hawai`i 1980-2030	40
Table 21. Housing Demand for Elderly Households, Forecast by County and State of Hawai`i for 2030	40
Table 22. Frail Elderly Households, Counties and State of Hawai`i, 2011	40
Table 23. Transitional and Supportive Housing Options for Exiting Offenders, 2011.....	42
Table 24. Dependence on Alcohol and/or Illicit Drugs, State and Counties of Hawai`i, 2008	42
Table 25. Disability, Employment, and Poverty Percentages, State and Counties of Hawai`i, 2009	43
Table 26. Total Persons with Disabilities, State and Counties of Hawai`i, 2009	44
Table 27. Summary of Special Needs Households in Need of Supportive Housing, State of Hawai`i	48
Table 28. Homeless PIT Counts, State and Counties of Hawai`i, 2009-2011	53
Table 29. People Served by Outreach Program, State and Counties of Hawai`i, 2008-2010.....	53
Table 30. Homeless PIT and HMIS Counts, State and Counties of Hawai`i, 2010	54
Table 31. Hidden Homeless Households, State and Counties of Hawai`i, 2011	54
Table 32. At-Risk and Hidden Homeless Households, State of Hawai`i, 1992, 1997, 2003, 2006 and 2011	55
Table 33. Responses if Forced to Move Out, State and Counties of Hawai`i, 2011.....	55
Table 34: Reasons for Not Buying a Home in Next Two Years, 2011	59
Table 35: Federal Housing Expenditures in Hawai`i, 2010.....	61
Table 36: Legislative Funding for Homeless and Affordable Housing, 2000 to 2010	62
Table 37. Types of Units Constructed, 2007-2010	65

Table A-1. Characteristics of Housing Units, 1992, 1997, 2003, 2006, and 2011	68
Table A-2. Household Income Data, 1992, 1997, 2003, 2006, and 2011	69
Table A-3. Households at HUD Income Guidelines by County, 1992, 1997, 2003, 2006, and 2011 ..	70
Table A-4a. Housing Unit Condition, Owned Units, 1992, 1997, 2003, 2006, and 2011	71
Table A-4b. Housing Unit Condition, Rented Units, 1992, 1997, 2003, 2006, and 2011	72
Table A-5: Average Monthly Housing Cost, 1992, 1997, 2003, 2006, and 2011	73
Table A-6: Mortgage Payments by Years in Unit, 1992, 1997, 2003, 2006, and 2011	74
Table A-7. Household Composition, 1992, 1997, 2003, 2006, and 2011	75
Table A-8. Household Crowding, 1992, 1997, 2003, 2006, and 2011	76
Table A-9. Shelter-to-Income Ratios, 1992, 1997, 2003, 2006, and 2011	77
Table A-10. Shelter-to-Income Ratios by Years in Unit, 1992, 1997, 2003, 2006, and 2011	78
Table A-11a. Intention to Move, 1992, 1997, 2003, 2006, and 2011	79
Table A-11b. Preferred Location for Next Move, 1992, 1997, 2003, 2006, and 2011	80
Table A-12. Tenancy Preference of Current Owners & Renters, 1992, 1997, 2003, 2006, and 2011 ..	81
Table A-13a. Preferred Unit Type, Buyers, 1992, 1997, 2003, 2006, and 2011	82
Table A-13b. Preferred Unit Type, Renters, 1992, 1997, 2003, 2006, and 2011	83
Table A-14a. Preferred Number of Bedrooms, Buyers, 1992, 1997, 2003, 2006, and 2011	84
Table A-14b. Preferred Number of Bedrooms, Renters, 1992, 1997, 2003, 2006, and 2011	85
Table A-15a. Affordable Housing Cost for New Units, Buyers, 1992, 1997, 2003, 2006, and 2011 ..	86
Table A-15b. Affordable Housing Cost for New Units, Renters, 1992, 1997, 2003, 2006, and 2011 ..	87
Table A-16. Preferred Location of New Housing Unit, 2011	88
Table B-1. Home Ownership Rates, 1990-2011	89
Table B-2 . Vacancy Rates, by State: 1986 to 2010	89
Table C-1. Wharton Residential Land Use Regulation Index by State	90
Table D-1. Special Needs Population and Housing Summary, City & County of Honolulu, 2011	91
Table D-2. Special Needs Population and Housing Summary, County of Hawai`i, 2011	91
Table D-3. Special Needs Population and Housing Summary, County of Maui, 2011	92
Table D-4. Special Needs Population and Housing Summary, County of Kaua`i, 2011	92
Table D-5a. AMHD Statewide Current and Planned Housing Inventory, 2004-2012	93
Table D-5b. AMHD Statewide Current and Planned Housing Inventory, 2004-2012 (continued)	94

LIST OF FIGURES

Figure 1. State of Hawai`i, Number of Housing Units, 1990-2010.....	3
Figure 2. Rental and Homeowner Vacancy Rates, U.S. and State of Hawai`i, 1986-2010.....	4
Figure 3. Rental and Homeowner Vacancy Rates, U.S. and State of Hawai`i, 2000-2010.....	4
Figure 4. State of Hawai`i, Building Permits Authorized, 1990-2010.....	6
Figure 5. Homeownership Rates, U.S. and State of Hawai`i, 1985-2010.....	10
Figure 6: State and Counties of Hawai`i, Homeownership Rates, 1990-2010	11
Figure 7. Housing Prices in Honolulu, 1980 to 2011	20
Figure 8. Housing Prices in Six High-Price Markets, 1985 to 2010	20
Figure 9. Average Rents, Counties and State of Hawai`i, 2003-2011	21
Figure 10. Average Rents in Five High-Price Markets, 2009-2011	21
Figure 11. Housing Unit Sales, State of Hawai`i, 1980-2030	22
Figure 12. New Construction, State of Hawai`i, 1985-2030.....	23
Figure 13: Summary of 2010 Public Housing Policy Goals	63
Figure 14: Affordable Housing Units Constructed, 2000-2010	64
Figure 15: Recommendations for Future Housing Planning Studies.....	66

INTRODUCTION

PURPOSE

The objectives of the Hawai'i Housing Planning Study (HHPS) have developed over the last 19 years. Since the HHPS series began in 1992, HHPS has produced a single, comprehensive compilation of data on Hawai'i's housing market accessible to all parties engaged in providing housing for Hawai'i's people. Since 1997, HHPS has also included some form of housing forecast to support planning for housing development across the State. Over the years, individual iterations of the HHPS have investigated specific topics of interest to Hawai'i's housing development community, some of which have remained as part of succeeding studies and some that have been replaced by issues of greater interest to planners and developers. In 2011, the attention of HHPS stakeholders expanded to include a greater interest in alternative housing production procedures, the interfaces between housing and transportation, and housing for special needs groups.

METHODS

The HHPS 2011 utilizes data from six data collection and analysis sources:

1. Housing Stock Inventory: An inventory of all housing units in the State at the end of 2010. In 2011, the inventory was expanded to include U.S. Decennial Census data and data taken from the American Community Survey (ACS)¹. Inventory data are the foundation for counting and describing housing stock and are fundamental to the Hawai'i Housing Model.
2. Rental Housing Study: A study of rental unit advertisements, prices, and characteristics from January 2006 through May 2011. The rent study was expanded this year to include data from the ACS, the Office of Housing and Urban Development's (HUD) Fair Market Rents, and other sources.
3. Production Data: A set of interviews with housing producers to enhance understanding of issues related to housing development and a review of County data on scheduled housing unit production aimed at developing reliable estimates of short-run housing production.
4. Housing for Special Needs Groups Study: This study included a set of stakeholder interviews with persons who work with special needs groups and understand their housing needs, as well as hard data on the special needs populations, including their numbers, housing needs, available housing units, and future prospects.
5. Housing Demand Survey: A statewide survey of more than 5,000 households to measure current housing conditions, expectations to move to a new unit, new unit preferences, financial qualifications for purchase or rent, and demographic characteristics of household members.
6. Hawai'i Housing Model: Changes made to the Model included updates to Hawai'i housing conditions, prices, and sales in order to permit forecasting of housing unit needs by income group through the year 2030.

Each of these project elements is described in detail in the HHPS 2011 Technical Report.

In 2011, the study team also reviewed housing plans and production, government spending on housing, and comparisons with housing data in other states and municipalities.

¹ For those unfamiliar with the American Community Survey, an excellent description appears on the U.S. Census website
http://www.census.gov/acs/www/about_the_survey/american_community_survey/

REPORT STRUCTURE

Presentation of the HHPS findings also takes a slightly different approach in 2011. We begin as usual with the description of current housing conditions in Hawai'i: demand, supply, and pricing of residential units over the last two decades or so. A separate section will discuss housing issues this year. That is followed by a section on housing forecasts that briefly presents forecasts for demand and supply and concentrates on the most requested output of the study called "Needed Units", the number of additional units required to house our people from 2011 through 2030. The last section of the report covers planning implications for the next five years. An appendix presents support materials for major elements of the report.²

² Additional support materials have been delivered separately as other reports in the series.

CURRENT HOUSING SITUATION IN HAWAII

The study of Hawai'i's housing market and housing needs begins with a review of the basic elements relevant to housing planning. The report covers those issues in three major sections – housing supply, housing demand, and qualification for purchase and rent.

HOUSING SUPPLY IN HAWAII

It is appropriate to begin a study of housing in Hawai'i by looking at the housing stock itself. In this section, we examine our current housing stock, review housing production over the last several years, and discuss a few issues of interest related to housing production these days.

Current Housing Stock

According to the U.S. Census for 2010, there were 519,508 total housing units in Hawai'i last year³. Some of those units were used for purposes other than housing residents – hotel and other visitor accommodations, second homes for seasonal use, and a few units used for housing agricultural workers. The remaining 481,026 housing units (92.6%) were available to house Hawai'i's residents. Of those available units, about 25,668 were vacant. That is, they were available for residents' use, but not occupied because they were on the market for sale or rent, or had been purchased or leased but were not yet occupied. The remaining 455,338 units are Hawai'i's occupied housing units.⁴ By convention, that number is exactly equal to the number of households in Hawai'i.

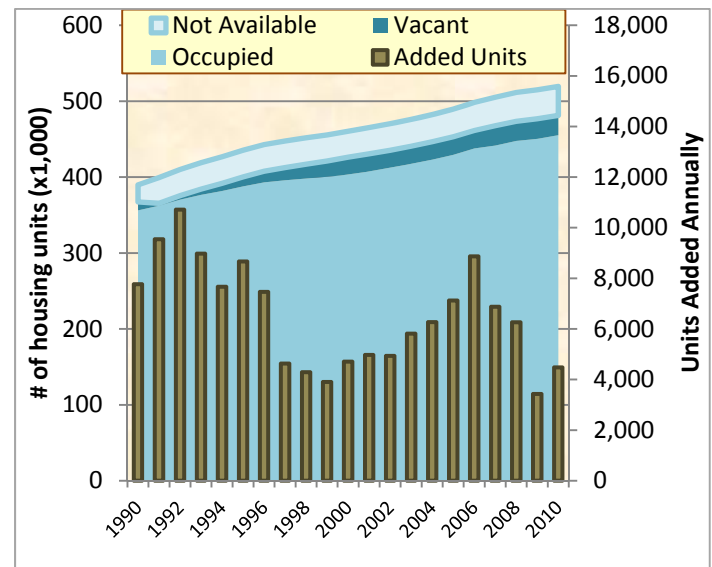
Available Housing Units

Figure 1 shows our best estimate of the State of Hawai'i housing stock for the last 20 years – total, available, and occupied units.

³ See Table IA-1 of the Housing Inventory Report for further details

⁴ See Table 4 for additional detail

Figure 1. State of Hawai'i, Number of Housing Units, 1990-2010



Source: Hawai'i Housing Model, 2011.

Despite the very smooth appearance of the growth in housing stock, the number of units added each year ranges from a low of 3,500 to a high of about 11,000 units. The change generally reflects the activity in the housing market over the last two decades, with higher growth corresponding to higher activity.

The number of units unavailable to the local housing market has increased steadily during this period. The growth in seasonal units, which includes second homes and temporary visitor residences (TVRs), is largely a phenomenon of the last two decades. In 1980, Hawai'i's housing stock consisted of 1.8 percent seasonal units and the State ranked 35th in the nation⁵. In 1990, the State ranked 20th, with seasonal units accounting for about 3.3 percent of the total. By 2000, Hawai'i ranked 10th among the 50 states with 5.6 percent of its housing stock reserved for seasonal or occasional use. We fully expect another significant rise in 2010⁶. Second homes

⁵ U.S. Census Bureau, Housing & Household Economic Statistics Division, Vacation Homes, December 2, 2004.

⁶ This data is not yet available from Census 2010.

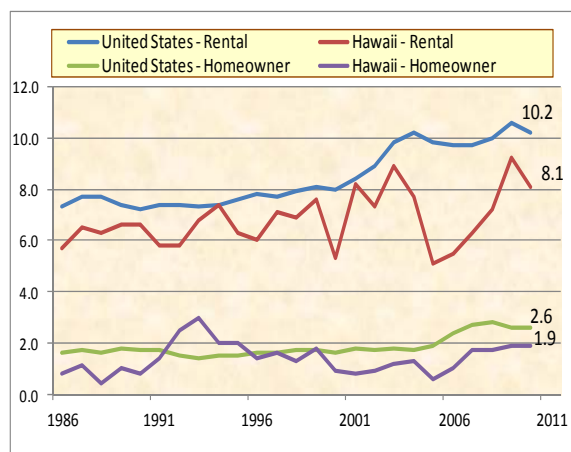
played an important role in the early years of the last period of rapidly increasing housing prices and contract rents (often referred to as a run-up). TVRs became involved in Hawai'i's community life and local housing politics during the late years of the run-up. TVRs have become contentious again in 2011 as our slow sales and stagnant-priced market lead local homeowners to seek alternatives to selling the family homestead. Visitor rentals provide a positive income stream, but sometimes face opposition from neighbors⁷.

The number of vacant and available units has also changed with the market and had a tendency to increase as a percentage of total units over the last two decades.

Vacancy Rates

In Hawai'i, the vacancy rate for ownership units was 0.8 percent in 1990, 0.9 percent in 2000, and 1.9 percent in 2010. Rental vacancy rates for 1990, 2000, and 2010 were 6.6 percent, 5.3 percent, and 8.1 percent, respectively.

Figure 2. Rental and Homeowner Vacancy Rates, U.S. and State of Hawai'i, 1986-2010



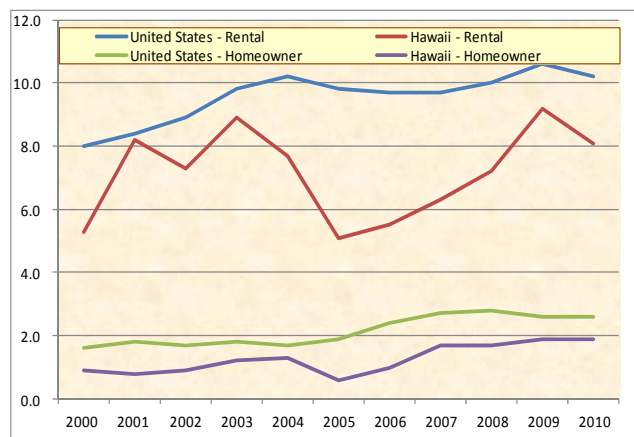
Source: Housing Vacancy and Homeownership Study, 1985-2010.

The vacancy rate among rental units in the State of Hawai'i has been notably lower than the national average for a quarter of a century. In 2005, rental

⁷ "City proposal takes aim at illegal vacation rentals," *Honolulu Star-Advertiser*, 2 August 2011.

vacancy rates in Hawai'i reached their lowest point in the past 25 years, indicating that rental units were in very high demand and short supply. The 2010 vacancy rate for rental units in the U.S. was 10.2 percent. The rate for the State of Hawai'i was 8.1 percent.

Figure 3. Rental and Homeowner Vacancy Rates, U.S. and State of Hawai'i, 2000-2010



Source: Housing Vacancy and Homeownership Study, 2000-2010.

Age and Condition of Units

There are housing units in Hawai'i that are in need of refurbishing. Compared with other States, however, the condition of Hawai'i's housing stock is not a serious problem.

Across the State, the median year built for our housing stock in 2009 was 1978⁸ and the median age of all housing units was 32 years. Median unit age differs little across the State: 35 years for the City and County of Honolulu, 25 for Maui County, 28 for Hawai'i County, and about 27 for Kaua'i County. The national figure was 34 years.

There are many large housing markets across the nation with much older housing stocks. The median age of housing units in Boston and San Francisco is 70 years. It is 63 years in Chicago and 62 years in Hartford, New York, and Detroit.

The condition of Hawai'i's housing units as measured by the Census is relatively good.

⁸ American Community Survey, 2009.

However, Census figures only identify units without suitable plumbing and kitchen facilities. Statewide less than one percent of our units have incomplete plumbing facilities and only 1.6 percent had incomplete kitchen facilities in 2009. The figures differed very little across the counties. Those figures get steadily better over time, and describe a housing stock in good condition. In the Housing Demand Survey conducted this year, about 76 percent of all household respondents rated the condition of their units excellent (32%) or satisfactory (45%).

As usual, renters were more likely than owners to be critical of the condition of their units. Ratings did not differ significantly across counties.

There are some areas where housing is getting quite old and its condition is deteriorating. Several stakeholders we interviewed mentioned the Mo'ili'ili area in Honolulu as a candidate for redevelopment in the near future. That was true, they told us because the type of residential housing in the area was inappropriate for the location, zoning, and land values in the area, and not because of the condition of the units.

Our housing units are smaller than in most other American housing markets. For the State as a whole, the average number of rooms for housing units in 2009 was 4.6. It differed little across the State: 4.7 in the City & County of Honolulu, 4.6 in Hawai'i and Kaua'i Counties, and 4.0 in Maui County. Nationally, the average housing unit had 5.5 rooms in 2009 (ACS), making Hawai'i's units some of the smallest in the nation. Some of the larger and more expensive markets in the country also had lower room counts -- New York (4.0), San Francisco (4.2), Boston (4.5) and Seattle (4.5).

Housing units have been getting smaller over time, but some say they are better constructed as building codes get stronger. As one of our stakeholders put it, "On O'ahu you have major redevelopment efforts and in the other counties you have a lot of new construction."

Our smaller housing units are also more crowded than in other places. Nationally, the average Census crowding rate was 3.2 percent in 2009. ACS reported that 8.5 percent of Hawai'i housing units were crowded by the Census definition of more than one person per room. For the counties, the figures were 8.7 percent on O'ahu, 7.6 percent in Hawai'i County, 9.0 percent in the County of Maui, and 7.9 percent on Kaua'i. Among the markets we reviewed, only Orange County had a higher crowding rate at 9.4 percent.

Housing Production

Measuring the annual production of new housing units has been a problem for HHPS from the beginning. This year we have new information on the subject.

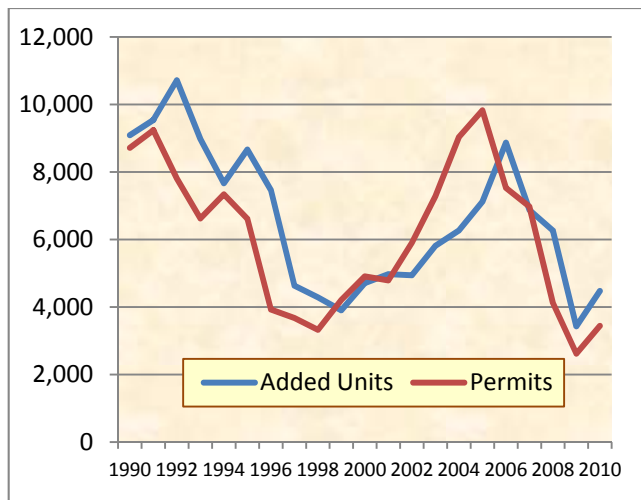
Building Permits and Housing Starts

The number of authorized building permits in each county has been part of HHPS since 1992. The actual number of units added to the housing stock each year has been more difficult to estimate. This year SMS used the Hawai'i Housing Model and new information from the Census and ACS to upgrade this analysis.

The number of housing units added each year is a function of the number of building permits authorized by county planning departments each year. Not surprisingly, authorized permits rise and fall with the local housing market. In times of high market activity, landowners and developers respond to higher demand and higher prices by supplying new units.

From 2003 through 2006, the County Planning Departments authorized about 36,700 new residential units. In the following four years, only about 17,150 units were authorized⁹.

Figure 4. State of Hawai'i, Building Permits Authorized, 1990-2010



Source: Hawai'i Housing Model, 2011. Building permits taken from U.S. Census, added units calculated from housing stock annual estimates.

Figure 4 shows that added units generally lag authorized permits by at least a year. In part, this is as expected, reflecting the time needed to bring units to market. The finding is inconsistent with the often-heard claims that supply lags demand by substantial margins in Hawai'i. Of course, the nature of those claims refers not to the lag between authorization and build-out, but the time required to get infrastructure built and permits authorized.

These data may underestimate the lag, however. Housing stock estimates (and, therefore, the number of added units) are in part an artifact of methods used to produce the Census estimates. It appears that the U.S. Census Bureau, in developing annual housing unit estimates, uses

data taken from authorized building permits. Therefore, the housing stock estimates we are using are partially defined by the permit counts.

Changes to Housing Stock Characteristics

We expect the unit mix produced each year to fluctuate with housing demand. Data based on the housing inventory developed for HHPS 2011 (Table 1) show changes to the housing stock for periods covered by the last two HHPS reports.

Approximately the same number of housing units were added to Hawai'i's housing stock between 2007 and 2010 (24,645 units) as were added in the previous four years (22,166 units). However, the units added in the last four years include more rental and multi-family units.

The larger number of rental units included newly constructed rental units, units rented out because they could not be sold in a down market, and units transferred from the visitor industry when the visitor counts fell after 2007. In years past, the number of newly constructed rental units would have been negligible. In the past four years, however, the public sector was able to add substantial numbers of affordable multi-family rentals (see Table 37).

The number of condominium units in the stock remained fairly stable, increasing by about 25 percent in both periods. The number of new leasehold units, whether single-family or multi-family, dropped dramatically in the last four years. With the exception of DHHL homes, new for sale units were almost exclusively fee simple.

⁹ All four counties use some version of a Certificate of Completion (COC). Because those documents are not required for occupancy in residential structures, their number is generally considered to be an underestimate of actual production in any given year. The Tax Map Key (TMK) system, while beset with its own sources of error, is generally considered a more accurate source of annual production than is the sum of COCs issued over 12 months.

Table 1. State of Hawai'i, Changes in Housing Stock, 2003-2010

Characteristic	2003 to 2006	2007 to 2010	Percent Change
Estimated Units Added	22,166	24,645	11%
Unit Type			
single-family	20,493	18,618	-9%
multi-family	1,673	6,027	260%
Regime			
Single unit	20,493	18,618	-9%
Condominium	5,530	6,270	13%
Other	-3,857	-243	-94%
Purchase type-SFD			
Fee Simple	19,468	20,592	6%
Leasehold	1,025	-1,974	-293%
Purchase type-Condo			
Fee Simple	14,745	12,226	-17%
Leasehold	-9,215	-5,956	-35%

Source: HHPS Inventory Report, 2011. a. Units built between July 1, 2002 and July 1, 2006. b. Units built between July 1, 2006 and July 1, 2010. See "Years" in Glossary for definitions of time periods used in this report.

HOUSING DEMAND IN HAWAII

Changes in demand are grounded in population growth and household formation, changes in the number of families, and income distributions. Most of these items are accessible in published data sources. The details of housing demand require deeper investigation, however, and that has been the purpose of Housing Demand Surveys since 1992. All of these and other factors are covered in this section of the report.

Population and Growth Rates

The need for housing in Hawai'i begins with population growth. Population grows when natural increase (the excess of births over deaths) and net in-migration combine and when new households are formed from older ones. When the number of households grows, new housing units are required to house them¹⁰.

¹⁰ Standard demographic texts cover this topic in greater detail and the book by Imhoff, *et.al.* in the bibliography covers its impact on housing modeling. The Hawai'i Department of Business, Economic Development and

Between 1980 and 1990, Hawai'i's population grew from 964,660 to 1,113,491 for an average annual increase of about 1.4 percent per year. Table 2 shows population increases since 1990.

During the nineties, Hawai'i's population growth rate was lower than in the previous decade. The average annual rate of growth dropped from 1.4 to 0.88 percent. From 200 through 2006 population growth increased, principally by net in-migration, to 1.23 percent per year.

According to the U.S. Census, population growth for the State of Hawaii was even higher from 2006 through 2010 than it was in the first part of the decade. The average annual growth rate rose from 1.23 percent to 1.47 percent.

In the years since the last HHPS, population growth returned to pre-1990 levels for most of the State. During the nineties, the population of Hawai'i grew slowly consistent with an economic downturn that lasted nearly the entire decade. As expected, the return to reasonable levels of economic growth after 2000 resulted in an increase in population.

Population growth patterns differed for each of the four counties. The City and County of Honolulu's population growth has been slower than in other counties, rising by less than one percent per year until the last half of the most recent decade.

In Maui County, the growth rates were very high during the nineties and then dropped a bit in the years 2000 through 2006. Since 2006, the average annual growth rate has been a bit higher at 2.22 percent per year.

In Hawai'i County, the pattern of growth was similar to Maui's until 2003. In the period 2003 through 2006 Hawai'i County's growth rate jumped to 2.68 percent per year, the highest growth rate in the State. The county population growth rate was 2.39 percent in the last half of the last decade, still the highest in the State.

Tourism, Research and Economic Analysis Division reports figures on the components of population growth in Hawai'i. See *Hawai'i Data Book*, annual.

Kaua'i County had a moderate growth rate (1.32 percent per year) during the nineties, slowed a bit during the next six years, and has returned to a 1.70 percent per annum rate in the last part of the last decade.

Table 2. Total Population, 1990-2011

Year	State of Hawai'i	City & County of Honolulu	County of Hawai'i	County of Maui	County of Kaua'i
1990	1,113,491	838,534	121,572	101,709	51,676
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	1,211,566	875,061	149,095	128,899	58,511
2003	1,239,298	888,026	156,340	134,871	60,061
2004	1,252,782	894,406	160,170	137,136	61,070
2005	1,266,117	900,340	164,887	139,131	61,759
2006	1,284,954	910,913	168,925	142,290	62,826
2007	1,303,791	921,487	172,964	145,448	63,892
2008	1,322,627	932,060	177,002	148,607	64,958
2009	1,341,464	942,634	181,041	151,924	65,865
2010	1,360,301	953,207	185,079	154,924	67,091
Average Annual Percent Change ^a					
1990-2000	0.88%	0.44%	2.26%	2.67%	1.32%
2000-2003	0.76%	0.49%	1.62%	1.54%	0.88%
2003-2006	1.23%	0.86%	2.68%	1.83%	1.53%
2006-2010	1.47%	1.16%	2.39%	2.22%	1.70%
2000-2010	1.23%	0.89%	2.41%	2.02%	1.47%

Sources: U.S. Census 1990, 2000, and 2010; ACS 2003-2009.

^a average annual increase calculated as $r = ((P_b / P_e)^{1/n}) - 1$. Note that Census definitions are based on the population as of July 1 each year. See "Years" in the Glossary for detailed definitions of time periods used in this report.

Components of Growth

Going beyond the simple growth patterns of the last twenty years in Hawai'i provides some interesting results that are relevant to housing issues. Table 3 summarizes growth factors for the two decades.

Net migration for Hawai'i is the number of people moving to the State minus the number of people moving out of the State. Natural increase is births minus deaths. Net change is the population in the final year of a decade minus the population in the final year of the previous decade.

After 2000, Hawai'i's population grew faster than in the nineties. That was true in all counties except Maui, which experienced its growth spurt before 2000. Across the state, the years between 2000 and 2010 saw slower population

growth. The population aged, birth rates slowed, and deaths exceeded births in all counties.

Net migration was up more than 600 percent. The State lost 9,804 more residents than it gained during the nineties. In the last decade, however, we had 55,646 more people move to Hawai'i than left the State.

The nineties' recession slowed growth in Hawai'i by maintaining natural increase and dampening in-migration. During the growth years 2002 through 2007, natural increase seems to have slowed and the number of people moving to the Aloha State expanded notably. Even during the last three years of the decade, when the economic situation was reversed, indications are that the influx of new residents continued. Between 2002 and 2007, most new residents were from other U.S. states. After 2007, however, the percentage of new Hawai'i residents from other countries increased significantly, especially from Micronesia¹¹.

This kind of growth pattern will tend to increase demand at the lower end of the market. Immigrants from the Pacific tend to have fewer economic resources, less education, and fewer job skills than the host population. It takes time for them to gain the economic resources needed to compete in Hawai'i's housing market.

¹¹ For 2000, See American FactFinder2, Table PCT043, Sex by Place of Birth by Citizenship Status. For recent figures, American Factfinder2, Table S0201: Selected Population Profile 2008-2010, ACS. For analysis and comment, see Pobutsky, Ann M., Dmitry Krupitsky, and Seiji Yamada, Micronesian Migrant Health Issues in Hawai'i: Part 2: An assessment of health, language and key social determinants of Health, *California Journal of Health Promotion*, 2009, Vol., 7, Issue 2, pp. 32-55; and Essoyan, Susan, Homeless in plain sight: Shelters see jump in Pacific Islanders and Micronesian and Marshallese immigrants have a special claim to U.S. services, February 16, 2010.

Table 3. Components of Population Change, Hawai'i, 1990-2010

	Natural Increase	New Migration	Net Change
1990 to 2000			
State	113,112	-9,804	103,308
Honolulu	86,733	-46,808	39,925
Hawai'i	10,477	17,883	28,360
Kaua'i	4,601	2,685	7,286
Maui	11,301	16,436	27,737
2000 to 2010			
State	93,118	55,646	148,764
Honolulu	68,958	8,093	77,051
Hawai'i	9,914	26,488	36,402
Kaua'i	3,517	5,111	5,111
Maui	10,729	15,954	15,954
Percent Difference			
State	-17.7%	667.6%	44.0%
Honolulu	-20.5%	117.3%	93.0%
Hawai'i	-5.4%	48.1%	28.4%
Kaua'i	-23.6%	90.4%	18.4%
Maui	-5.1%	-2.9%	-3.8%

Source: DBEDT Data Book, 2009, Table 1.59 and 2010, Table 1.56. calculated as $(P_e - P_b) / P_b \times 100$. Census definitions are based on the population on July 1 each year.

growth, but did not quite reach the level seen in the years before 2000.

Data in Table 4 also reflect the uncertainties of ACS estimates of population and households in the middle years of the last decade¹². We might expect, however, that the initial upswing in employment and housing sales between 2002 and 2007 reduced pent-up demand and decreased doubling-up over the same period. That would result in smaller households.

As the period of rapidly increasing housing prices ended and the recession began, the opposite trends prevailed, leading to an increase in household size once again.

Households and Household Size

Population growth contributes to housing demand through the filter of household formation. We generally measure household formation in terms of the increase in households as reported by the U.S. Census. Table 4 shows household growth and average household size for the State of Hawai'i and each of its four counties. Data are shown for selected years between 1990 and 2010.

We expect the growth pattern for households to be very similar to the growth pattern for the population (Table 2). The tables suggest a slightly different pattern for households.

Population growth was relatively slow during the nineties and increased a bit during the last decade, largely in response to economic growth. The average household size fell off a bit by 2003 and a bit more by 2006. It then resumed faster

¹² ACS was first conducted in 2003 and covered the City and County of Honolulu only. Coverage was expanded to the Counties of Hawai'i and Maui in 2005. In all years, separate estimates were developed for the State as a whole. The estimate for Kaua'i County is taken as the ACS State estimate, minus estimates for the other three counties. The statistical accuracy of ACS improves every year, especially with the advent of three- and five-year aggregations after 2007. Nevertheless, estimates for the County of Kaua'i remained unstable throughout the past decade.

Table 4. State of Hawai'i, Total Households, 1990-2010

	State of Hawai'i	County of Honolulu	County of Hawai'i	County of Maui	County of Kaua'i
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	56,377	25,331
2003	475,972	322,845	68,260	59,558	26,698
2004	482,873	325,775	70,122	61,018	27,153
2005	491,071	329,300	71,984	62,178	27,609
2006	500,021	332,718	75,185	63,610	28,508
2010	519,508	336,899	82,324	70,492	29,793
Average Annual Increase					
1990-2000 ^a	1.81%	1.22%	2.99%	3.34%	4.38%
2000-2003 ^a	1.12%	0.72%	2.97%	1.88%	1.80%
2003-2006 ^a	1.68%	1.02%	3.38%	2.27%	2.30%
2006-2010 ^a	0.97%	0.31%	2.37%	2.70%	0.83%

^a Average annual increase for the period noted.

Sources: 2009 DBEDT Data Book, 2010 Census.

Household Conditions

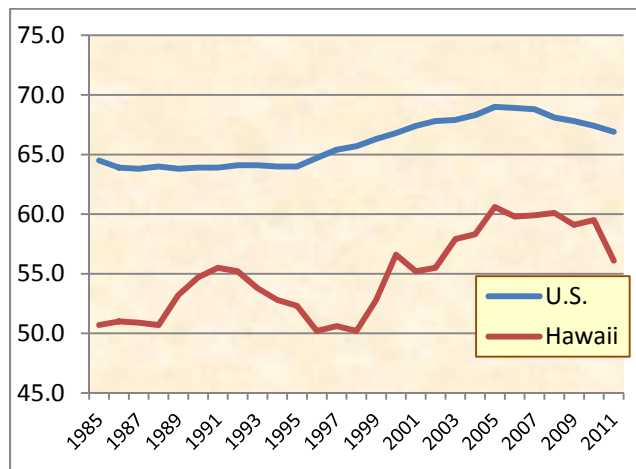
Conditions in Hawai'i's households reflect our high-priced housing market. We investigated homeownership, shelter costs, crowding, and out-of-state ownership.

Homeownership

Growth in housing stock between 1990 and 2010 was matched by higher homeownership rates across the State (Figure 5)¹³. Homeownership rates in Hawai'i rose from just over 50 percent in 1985 to 57 percent in 2010. Homeownership rose during the market run-up in the early nineties, fell during the late nineties, and rose

again during the last housing market boom. The rate has been drifting down since 2007.

Figure 5. Homeownership Rates, U.S. and State of Hawai'i, 1985-2010



Source: Federal Reserve Bank of St. Louis, Economic Research Division.

The trend in homeownership has been upward, but we haven't moved ahead of other states. In 1985, Hawai'i ranked 49th out of the 51 markets (50 states and Washington, D.C.). Only the District of Columbia and New York State had lower ownership rates. In 2009, Hawai'i still ranked 48th ahead of D.C., New York, and California.¹⁴

The federal government did not publish annual home ownership rates for Hawai'i counties until 2005. Figure 6 shows the comparison of county rates as they drifted downward from a high in 2005¹⁵.

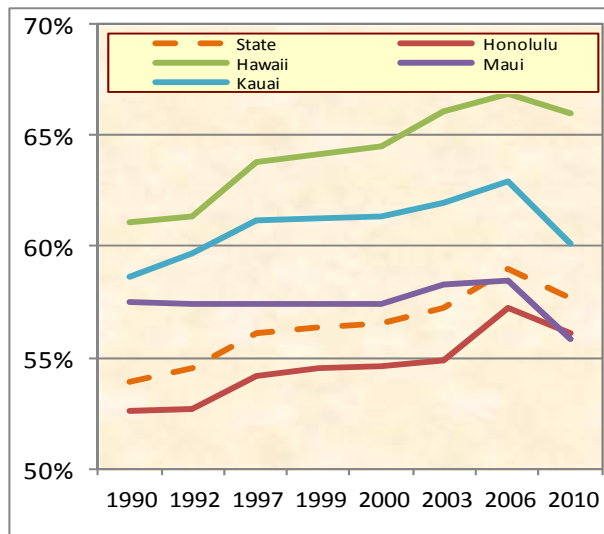
Hawai'i and Kaua'i Counties have higher homeownership rates and the City and County of Honolulu has the lowest rate among the four counties. Maui's home ownership rate was similar to that of Kaua'i and Hawai'i Counties until the late 1980s, when it began moving toward O'ahu's rate.

¹³ Note that Federal homeownership figures (Figure 5) do not match Hawaii's demand survey data (Figure 6) exactly. The Federal data suggest a significant dip in homeownership in the late nineties.

¹⁴ U.S. Census 2010

¹⁵ The ACS rates are slightly different from those of the Federal Reserve Bank. The FED shows the peak as 2007, which is a more likely scenario. ACS figures for counties are reliable.

Figure 6: State and Counties of Hawaiʻi, Homeownership Rates, 1990-2010



Sources: U.S. Decennial Census 1990 and 2000; HHPS Housing Demand Survey 1992, 1997, 2003, 2006, and 2010; SMS estimate 1999.

Shelter Cost & Shelter-to-Income Ratios

In 2011, about 51 percent of Hawaiʻi residents were paying less than 30 percent of their monthly income for shelter (Table 5). That level is considered to be an appropriate shelter to income ratio for most homeowners. Loan applicants whose mortgage payments are no more than 30 percent of their monthly income will have sufficient cash to support their families and make loan payments on time.

About 14 percent of all households paid between 30 and 40 percent of their income for shelter and close to 40 percent of households across the State paid more than 40 percent of their monthly income for shelter. Having relatively high percentages of owners with high shelter-to-income ratios is not unusual in high-priced housing markets.

The shelter-to-income ratios have changed somewhat from 2006. The 2011 figures showed that about three percent fewer households were below the 30 percent mark. However, the percentage of families with shelter payments higher than 40 percent of their monthly income

was also higher – almost seven percentage points higher.

Table 5: Shelter-to-Income Ratio by County, 2011

Shelter payment as % of HH income	State of Hawaiʻi	City & County of Honolulu	County of Hawaiʻi	County of Maui	County of Kauaʻi
Less than 30	51.4%	54.1%	49.1%	40.8%	46.0%
30 to 40	10.4%	8.2%	12.5%	18.0%	17.3%
Over 40	27.7%	28.0%	25.1%	30.2%	24.2%

Source: Housing Demand Survey, 2011. Households with no shelter payment and those that did not provide sufficient information to calculate a shelter-to-income ratio are not included. See Table A-9 in the appendix.

The market has affected the ratio over time. The percent of households paying more than 40 percent of their income for shelter held steady around 18 percent between 1992 and 2003. The depressed housing market of the nineties held prices and rents in check while the emerging economy raised household incomes. Between 2003 and 2006, however, rapidly rising housing costs pushed the shelter-to-income ratio to new highs. This year, the situation is even more difficult for Hawaiʻi residents.

The shelter-to-income picture was very similar across counties. High housing costs, particularly in the City and County of Honolulu and Maui County, have had a negative impact on those residents. About 30 percent of households must dedicate more than 40 percent of their income each month to shelter payments.

Crowding and Doubling Up

Statewide, 21 percent of our households were crowded by the census definition, and fully 30 percent were either doubled up or crowded.

In 1997, the recession was ending and the situation was better. By 2003 and the beginning of a new period of construction, crowding and doubling up were still lower. Congestion in our households reached its lowest point in 2006, just at the peak of the boom. This year crowding and doubling-up increased significantly.

Table 6. Overcrowding, State and Counties of Hawai'i, 1992, 1997, 2003, 2006 and 2011

	Year	Total Households	Crowding Indicators		
			Crowded ^a	Doubled Up ^b	Both ^c
Honolulu	1992	247,349	23.2%		32.0%
	1997	272,234	10.6%		27.2%
	2003	292,003	10.0%	10.0%	17.6%
	2006	303,149	8.0%	9.7%	15.2%
	2011	310,882	13.3%	13.8%	22.9%
Maui	1992	34,266	26.8%		25.9%
	1997	39,252	10.4%		24.8%
	2003	43,687	11.0%	8.7%	17.3%
	2006	49,484	8.0%	9.6%	15.3%
	2011	54,132	11.4%	12.6%	19.4%
Hawai'i	1992	39,789	18.7%		26.0%
	1997	46,271	7.9%		24.3%
	2003	54,644	7.0%	9.3%	14.4%
	2006	61,213	7.0%	11.2%	15.9%
	2011	67,096	8.6%	10.7%	17.2%
Kaua'i	1992	16,981	17.4%		26.3%
	1997	18,817	9.1%		25.4%
	2003	20,460	6.0%	12.5%	16.1%
	2006	21,971	7.1%	11.9%	15.5%
	2011	23,201	10.0%	11.0%	16.9%
State	1992	338,385	22.2%		30.3%
	1997	376,574	10.2%		26.5%
	2003	410,794	9.6%	10.0%	17.1%
	2006	435,818	8.2%	10.0%	15.3%
	2011	455,311	12.1%	13.2%	21.4%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, 2011.

^a Based on more than 1.01 persons per room.

^b More than one family group in a single housing unit (See Glossary).

^c Percent of households crowded, doubled up, or both. Before 2003, HHPS measured crowding and "crowded or doubled up". After 2003, HHPS included separate measures for crowding and doubled up.

Out-of-State Ownership

In the first half of the last decade, West Coast real estate prices surpassed those in Hawai'i and out-of-state demand increased dramatically. That helped move Hawai'i home prices to record highs and brought about monitoring of our out-of-state demand in planning studies. Table 7 presents figures for all four counties in 2011.

Table 7. Percent of Owners Who are Not Hawai'i Residents, 2011

	City & County of Honolulu	County of Maui	County of Hawai'i	County of Kaua'i	State of Hawai'i
Single Family Homes	4.2	10.5	11.5	12.3	7.3
Condo Units	15.4	62.9	49.2	73.5	27.1
Total Units	8.4	27.6	17.8	21.5	13.7

"Out-of-State Owners" is the percent of all units for which the tax bill is mailed to an out-of-state address. Source: Hawai'i Tax Map Key records, tabulated by Hawai'i Information Services for SMS.

Overall, people from outside of the State own more than seven percent of Hawai'i single-family housing units and over 27 percent of our condominium units. In all counties except Honolulu, out-of-state ownership for single-family units is about 10 percent. For Hawai'i County, nearly 50 percent of condominium units are owned by persons who live outside of Hawai'i, and the comparable figures for Maui and Kaua'i are 63 and 74 percent, respectively.

Current Demand

Raw, Final, and Effective Demand Estimates

Data collected in the Housing Demand Survey allows us to calculate three distinct measures of housing demand. Raw demand is the number of households planning to move at some point in the future, whether to buy or to rent. This measure should not be confused with needed housing units. Many, if not most, of the units shown at the right in Table 8 will be supplied from current inventory.

Statewide, raw demand was at 51 percent, up from 40 percent in 2006. Raw demand is equal to just over 232,000 households statewide and includes all households except those who reported that they would never move. For the counties, the percentage of households planning to move to a different unit at some point in the future ranged from 42 percent in Hawai'i County

to 55 percent for the City and County of Honolulu.

From raw demand we subtracted households that stated they plan to move but had no time frame for doing so. That produced an estimate of final demand that is comparable across time. Final demand includes those households that plan to move and have a definite time frame for doing so. In 2011, final demand was 40 percent statewide. At 43 percent of all households, the City and County of Honolulu had the highest final demand. The Counties of Hawai'i and Kaua'i had the lowest final demand at 33 percent.

The most narrowly defined measure of demand, effective demand, includes only those households that plan to move, have a definite time frame for doing so, and plan to remain in the State of Hawai'i when they move to their next home. Nearly one-quarter of all those who want to move expressed a desire to move out of the State of Hawai'i, up from 18 percent in 2006.

As usual, there were more residents from Honolulu planning to move out of State than from other counties. We were surprised to see Hawai'i County's figure jump from 12 percent to 22 percent this year. Residents on Maui and Kaua'i continue to enjoy the Aloha State and plan to stay in Hawai'i when they move to new homes.

Across the state, effective demand is expected to be equal to about 30 percent of all 2011 households. Demand was highest for Maui and Honolulu (31%), and lowest in the County of Hawai'i (26%). Price increases have been higher on Maui and, while more units have been added to the inventory than in other counties, the level of out-of-state ownership has also been much higher (see Table 7). This suggests that pent-up demand may be higher for Maui than for the other counties.

Table 8. Interest in Moving to a New Home by County, 2006 and 2011

County	Year	Want to move to a new home	Has formed plans to move	Final demand for homes	Will not move out-of-state	Effective Demand	Estimated number of movers
City & County of Honolulu	2006	39%	85%	33%	79%	31%	93,528
	2011	54%	79%	43%	73%	31%	97,429
County of Maui	2006	45%	88%	40%	88%	39%	19,577
	2011	47%	78%	37%	86%	31%	16,937
County of Hawai'i	2006	42%	86%	39%	88%	37%	22,796
	2011	42%	79%	33%	78%	26%	17,412
County of Kaua'i	2006	36%	86%	31%	81%	29%	6,362
	2011	42%	79%	33%	84%	27%	6,339
State of Hawai'i	2006	40%	85%	34%	82%	33%	142,263
	2011	51%	79%	40%	76%	30%	138,116

Source: Housing Demand Survey, 2006 and 2011

Note. "Will move out of state" is the number of households whose first choice was out-of-state. Final demand eliminates out-of-state movers from the raw demand estimate. Percentages shown in Table 8 are percent of all households. "Estimated number of movers" is the number of households planning to move to a new unit less the number of households whose next home will be outside Hawai'i. Improved sampling techniques in 2011 suggest that demand on O'ahu was underestimated and homeownership was overestimated in 2006 due to the absence of cell-phone-only households in the sample.

The effective demand decreased across all counties. A decrease in demand is consistent with Hawai'i's slow growth economy and soft housing market.

Effective demand has changed notably since 1992, reflecting the changing condition of Hawai'i's housing market. Across the State, effective demand fell continuously from 48 percent in 1992 to 44 percent in 1997, then 38 percent in 2003, 34 percent in 2006 and to 30 percent in 2011. In the City and County of Honolulu, effective demand fell from the highest in the State (52%) in 1992 to 31 percent in 2011. Kaua'i County demand dropped markedly in the HHPs years, but not nearly as much as demand in Hawai'i County. Effective demand in Hawai'i County, which was as high as 40 percent in 1992, is now the lowest among the Counties at 26 percent. In Maui County, effective demand dropped from 1992 through 2003, rebounded between 2003 and 2006, and fell again to 31 percent in 2011.

There is little doubt that housing prices have affected demand estimates. Nearly 30 percent of all those who expect to be moving out of Hawai'i mentioned housing prices as their main reason for leaving. That is up from 12 percent in 1997, 19 percent in 2003 and 26 percent in 2006. 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.

Table 9. Effective Demand by County, 1992, 1997, 2003, 2006 and 2011

	City & County of Honolulu	County of Maui	County of Hawai'i	County of Kaua'i	State of Hawai'i
1992	51.7%	38.8%	40.2%	38.5%	48.4%
1997	47.3%	41.4%	34.3%	34.2%	44.4%
2003	38.9%	35.7%	33.8%	31.4%	37.5%
2006	33.2%	39.6%	36.3%	30.6%	34.2%
2011	31.3%	31.3%	26.0%	27.3%	30.3%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

Housing Preferences (Buyers and Renters)

Buyer and renter preferences for certain housing unit characteristics were measured in 2011 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.

Among all households that want to move, 42 percent plan to purchase their next unit. Until 2011, this figure had changed very little. This year the preference for ownership was unusually low, with notable decreases across all counties. This shift away from homeownership is more likely a reaction to the current economic climate, difficulties obtaining financing, and probable delays for homeowners who must sell their current units to purchase a new home, rather than a genuine change in the preference for owning a home.

The preference for ownership units is not always translated into reality in the marketplace. About 14 percent of survey respondents statewide who said they would choose to move 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 be a more reliable estimate of the actual buyer rate in the market. If that is the case, we might expect that the growth in home ownership in Hawai'i will stabilize or even drop a bit over the next few years.

Buyer Preferences

Once again, the majority of potential buyers statewide (68%) preferred single-family detached homes. Single-family units are more important to buyers in Hawai'i (87%), Maui (83%), and Kaua'i Counties (82%) than in Honolulu (61%). The County of Hawai'i, with the lowest percentage of condominium units in the State, also showed the lowest preference for condo units (6%).

About 40 percent of potential buyers said they would be looking for at least a two-bedroom unit and 29 percent said they would need at least three bedrooms. The willingness to settle for fewer bedrooms was higher than in the past, perhaps reflecting a willingness to compromise on unit size in the face of high prices. The same was true for the preferred number of bathrooms. Half of buyers conceded that they would be willing to accept a unit with only one or one-and-a-half bathrooms.

When asked about the smallest size unit they would accept, nearly half of the would-be buyers (46%) said they could live with 800 to 1,200 square feet. An additional 16 percent said they could accept units between 1,200 and 1,500 square feet.

Renter Preferences

Households that plan to rent their next home are predominantly current renters (87%). Among those who would rent their next unit statewide, 43 percent preferred to rent a single-family house. About 47 percent preferred an apartment or condo, and another five percent chose a townhouse. Preference for single-family homes was once again much higher on the Neighbor Islands than on O`ahu, where renters were more interested in townhomes.

Across the State, renters first choice would be larger units with two (43%) or three bedrooms (31%). Nearly all of the potential renters, however, were willing to take units with fewer than three bedrooms, if necessary (83%). Again, these figures suggest a willingness to accept smaller units than in the past. The number of bathrooms required was also relatively low, with 69 percent reporting that they could accept one or one-and-a-half baths.

About 41 percent of potential renters said they would need less than 1,000 square feet of space in their next unit. An almost equal number of renters reported a need for between 1,000 and 1,500 square feet (39%).

Sixty-five percent of households that plan to rent their next unit indicated that they would like to purchase a home in the future. Their reasons for not doing so now most often included the high cost of housing and insufficient funds for a down payment. These households reported their intention to buy a unit in an average of eight years.

QUALIFICATION FOR PURCHASE AND RENT

HHPS 2011 includes a third measure of demand, qualified demand. Not everyone who plans to buy or rent a different unit (raw demand) within a given time period (final demand) in the State of Hawai`i (effective demand) will be able to do so in the next few years. This third tier of demand evaluates those households that are financially able to make a move.

The Housing Demand Survey 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 is useful to review the qualification factors to get an idea how they may affect purchasing capacity in the near future.

Households That Plan to Buy

To evaluate the financial readiness of those households wishing to purchase a housing unit in Hawai`i, we examined their income, savings, and total amount available for a down payment. These elements were evaluated against a median priced home assuming a fixed rate, 30-year loan, a 5 percent interest rate, and a 20 percent down payment. The results are outlined in Tables 10a and 10b.

The story was essentially the same across all Counties...many households planning to purchase their next home earn enough money to cover the monthly payments, but far fewer have the ability to marshal sufficient funds for the down payment. Between 33 and 71 percent of prospective buyers could purchase a median price home and still dedicate less than 30

percent of their income to housing expenses each month. Only 14 to 21 percent of these households, however, have enough money in savings, from the sale of their current home, or from other sources to provide a substantial down payment. When both of these financial qualification measures are applied, the percentage of households likely to end up with the keys to a new home falls to between 11 and 18 percent.

At nearly 18 percent, Kauaʻi has the largest percentage of fully qualified buyers. Just over 13 percent of potential homebuyers in Honolulu and Maui are well qualified. While only 11 percent of prospective homebuyers on the Big Island would be fully qualified to buy their next home, nearly three-quarters could afford to make the monthly payments if they could pull together sufficient funds for the down payment.

The same set of financial qualification measures was applied to potential homebuyers who wish to purchase a condo unit. Using the current median sales price for condos in each county, the financial readiness of these households was determined. As shown in Table 10a, Hawaiʻi residents planning to purchase a multi-family rather than a single-family unit are somewhat more likely to be financially able to do so.

Between 22 percent (Kauaʻi County) and 89 percent (Hawaiʻi County) of these households could afford to make the monthly housing payment on a multi-family ownership unit. Because the median price, and therefore the down payment required, is lower for condominiums, a significantly greater percentage of these households would have enough money for the down payment.

Unlike the 13 percent of single-family homebuyers who are fully qualified, 27 percent of prospective condo buyers statewide are fully qualified. It is interesting to note that Hawaiʻi County, which had the lowest percentage of fully qualified homebuyers (11%) has the largest percentage of fully qualified condo buyers among Hawaiʻi's counties (35%).

These results suggest that multi-family ownership units may be an attractive alternative for those households that wish to purchase their next home but cannot meet the financial obligations that accompany a single-family unit. When households with a preference for a single family home were asked if they would consider a condo unit if a single-family unit in their price range was not available, three-quarters of prospective home buyers indicated that they would consider that option. Nearly all of those households willing to accept a multi-family unit were current renters trying to transition to home ownership (95%).

Although there is a substantial number of Hawaiʻi residents fully qualified to purchase their next home, many are not planning to do so in the near future. About half of the well-qualified buyers expect to move sometime in the next couple of years (52%), but more than one-quarter of well-qualified buyers (27%) reported no plans to move for at least 5 years. An additional 12 percent indicated that it would likely be more than 10 years before they began seriously to consider a move.

Table 10a. Financial Qualification to Purchase a Single Family Home, Counties and State of Hawai'i, 2011

	Honolulu	Maui	Hawaii	Kauai	State
Median Sales Price	\$570,000	\$415,000	\$224,500	\$415,000	\$513,300
Down Payment Required	\$114,000	\$83,000	\$44,900	\$81,000	\$102,660
Monthly Mortgage Payment	\$2,448	\$1,782	\$964	\$1,771	\$2,204
Total Effective Demand Buyers	24,355	6,281	7,605	1,658	39,899
Can Afford Monthly Payments	35.6%	40.9%	71.0%	49.4%	32.7%
Have Adequate Down Payment	19.9%	15.8%	13.8%	20.9%	17.4%
Fully Qualified	13.5%	13.2%	11.0%	17.8%	13.1%

Source: Median sales price from Multiple Listing Service (MLS) Sept. 2011. Data about buyer qualifications from Housing Demand Survey, 2011. Base is households that plan to purchase their next SFD unit in the State of Hawai'i.

Table 10b. Financial Qualification to Purchase a Condominium, Counties and State of Hawai'i, 2011

	Honolulu	Maui	Hawaii	Kauai	State
Median Sales Price	\$316,500	\$310,000	\$212,500	\$235,000	\$315,800
Down Payment Required	\$63,300	\$62,000	\$42,500	\$47,000	\$63,160
Monthly Mortgage Payment	\$1,359	\$1,331	\$913	\$1,009	\$1,356
Total Effective Demand Buyers	14,309	1,168	1,196	275	16,947
Can Afford Monthly Payments	58.7%	55.7%	89.0%	22.2%	59.2%
Have Adequate Down Payment	31.6%	25.4%	34.7%	26.2%	28.5%
Fully Qualified	30.1%	24.6%	34.7%	11.6%	27.0%

Source: Source: Median sales price from Multiple Listing Service (MLS) Sept. 2011. Data about buyer qualifications from Housing Demand Survey, 2011. Base is households that plan to purchase their next MFD unit in the State of Hawai'i.

Current Renters That Plan to Buy

There are approximately 25,000 households in the State of Hawai'i who currently rent their residence and plan to purchase their next home in the State of Hawai'i. While buying a unit would be the first choice for these households, upon further questioning, 21 percent conceded that they might have to rent their next home instead.

Current renters often do not have adequate savings or other assets to make the necessary down payment on a home. About forty percent of renters reported have at least \$5,000 in savings to put toward a down payment and only eight percent could gather enough resources to put \$60,000 down on their next home. Sixteen percent of renter households said they had no money to put toward the down payment on a home.

While homeowners planning to buy are already making substantial monthly housing payments, the same is not true among current renters who plan to purchase their next home. Many renters who want to buy will have to increase their monthly shelter payment substantially when they move up to home ownership. Only 21 percent of them are paying more than \$1,700 a month for shelter now. Fully 85 percent of these households earn less than 140 percent of the AMI for the County.

Households that are presently renting their home but intend to buy their next unit are on a substantially different timetable than are current homeowners. Nearly all of the current renters who intend to buy (94%) plan to purchase a home within the next five years. Based on their financial qualifications, however, homeownership

may be a more distant reality for many who are currently in a rental unit.

Households That Plan to Rent

Nearly three-quarters of the households planning to rent their next home cited financial reasons for their decision. Their reasons most often include an inability to afford the monthly payment, insufficient down payment, or that purchasing a home in Hawai'i is just "too expensive". These households were also asked if they would opt to purchase a home now instead of renting if there was a unit available they could afford. Close to 70 percent responded affirmatively.

The financial qualification of Hawai'i households planning to rent their next home was evaluated using the current average monthly rent rate for single-family homes and multi-family units in the State of Hawai'i and each County. Three measures, current household income, current monthly shelter payment, and affordable monthly rent amount, were examined to determine the financial fitness of Hawai'i's prospective renters.

Among the approximately 35,000 households across the State that intend to rent an apartment or other multi-family unit when they move, one-quarter indicated that making the average monthly rent payment would not be a problem. Indeed, one-quarter of these households are currently making monthly rent payments equal to

or higher than the average rent amount. For 22 percent of prospective multi-family unit renters, it would require less than 30 percent of their household income each month.

Among renters who desire a multi-family unit, those in Hawai'i County are the most financially prepared to do so. The majority of future renters in the City & County of Honolulu, however, do not earn enough to comfortably make the average rent payment each month.

The remaining 43 percent of households (27,383) planning to rent their next residence in Hawai'i would prefer a single-family dwelling. As with all of the groups, those planning to rent a house claimed they could afford higher monthly rent payments than was suggested by either their current rent payments or their annual income. While 22 percent reported that a higher than average monthly payment would be within their budget, only 18 percent were currently making shelter payments at or above that level.

Further, annual household income figures suggested that relatively few of these households (7%) are capable of making the average rent payment for a single family home. This was especially true for the City and County of Honolulu, where less than one percent of prospective renters looking for a single-family dwelling earned enough to make the rent payments.

Table 10c. Financial Qualification to Rent a Multi-Family Unit, Counties and State of Hawai'i, 2011

	Honolulu	Maui	Hawaii	Kauai	State
Median Monthly Rent Amount	\$1,582	\$1,122	\$861	\$1,147	\$1,431
Security Deposit + 1st Mo. Rent	\$3,164	\$2,244	\$1,722	\$2,294	\$2,862
Total Effective Demand Renters	29,457	2,515	1,696	1,005	34,673
Can Afford Monthly Payments					
Self-Reported Affordable Rent					
Same or Higher	27.9%	36.7%	60.7%	44.3%	25.0%
Currently Monthly Rent					
Same or Higher	20.5%	25.2%	43.6%	30.9%	24.9%
Income Based Qualification	14.9%	37.4%	61.8%	33.0%	22.2%

Source: Housing Demand Survey, 2011. Base is households that plan to rent their next MFD unit in the State of Hawai'i.

Table 10d. Financial Qualification to Rent a Single Family Unit, Counties and State of Hawai'i, 2011

	Honolulu	Maui	Hawaii	Kauai	State
Average Monthly Rent Amount	\$2,508	\$1,742	\$1,218	\$1,657	\$1,935
Security Deposit + 1st Mo. Rent	\$5,016	\$3,484	\$2,436	\$3,314	\$3,870
Total Effective Demand Renters	15,598	4,309	5,064	2,412	27,383
Can Afford Monthly Payments					
Self-Reported Affordable Rent					
Same or Higher	1.5%	16.0%	28.0%	55.7%	21.8%
Currently Monthly Rent					
Same or Higher	4.9%	4.8%	25.9%	49.9%	17.6%
Income Based Qualification	0.8%	20.5%	23.8%	11.9%	7.4%

Source: Housing Demand Survey, 2011. Base is households that plan to rent their next SFD unit in the State of Hawai'i.

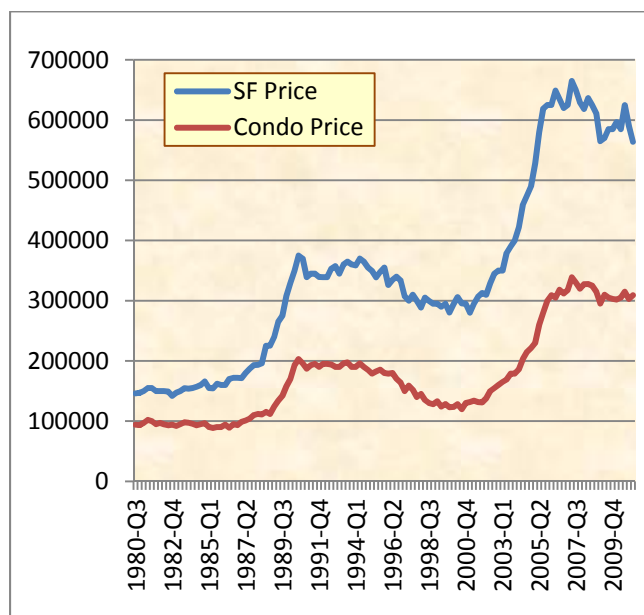
HOUSING PRICES

The most distinguishing characteristics of Hawai'i's housing market are its high prices and cyclical nature. Figure 7 shows representative data¹⁶ for Honolulu housing prices in current dollars and Figure 8 compares Hawai'i housing prices with those of other states.

Our last two price run-ups are clearly indicated. In both cycles, housing prices more than doubled in a few years. Both periods of expansion ended quickly, after which prices dropped slightly, held in place, and then dropped again. The period of adjustment following the last run-up was nearly a decade long.

The intensity of the run-up periods is not unique to Hawai'i. West Coast States, New England, New York, Washington D.C., and Miami have similar profiles. New York, Boston, and Los Angeles have had higher home prices than Hawai'i in some recent years. San Francisco's price history is a bit more volatile than Hawai'i's.

Figure 7. Housing Prices in Honolulu, 1980 to 2011



Source: University of Hawai'i Economic Research Organization (UHRO)

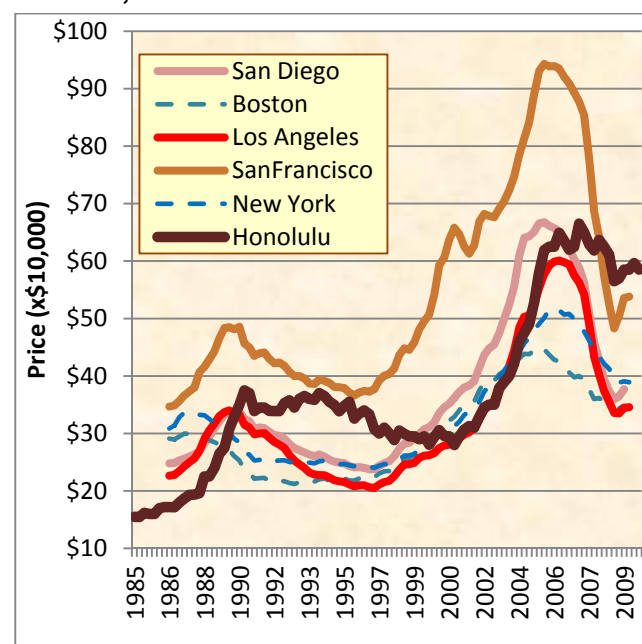
¹⁶ Some data are available for other counties and for other unit types are not fully comparable. No reliable data are available for the State as a whole for such a long series.

The unique aspect of Hawai'i's housing market history is the length of time that prices remain fairly steady after a run-up. Prices drop, but by lesser amounts and at a slower pace than in other high-priced markets.

At the beginning of a run-up in a high-priced housing market prices are relatively low, household incomes have caught up with or even passed home prices, and affordability is high. People start buying houses and prices rise. The inability of incomes to keep up with housing prices eventually stalls even the most persistent run-up. Sales drop off quickly and the process begins anew. The length of time the average price holds after a run-up defines the recovery period.

In other high-priced markets, prices fall, incomes rise, and affordability is recovered. In Hawai'i, prices remain relatively high and it takes longer for incomes to catch up and restore affordability to the market. Nationwide, high-priced real estate markets lost more than 50 percent of their boom-years gain by the end of 2009 (Glaeser, 2009). In Hawai'i, prices have been steadier than that.

Figure 8. Housing Prices in Six High-Price Markets, 1985 to 2010



Source: National Association of Realtors, 2011

Rents

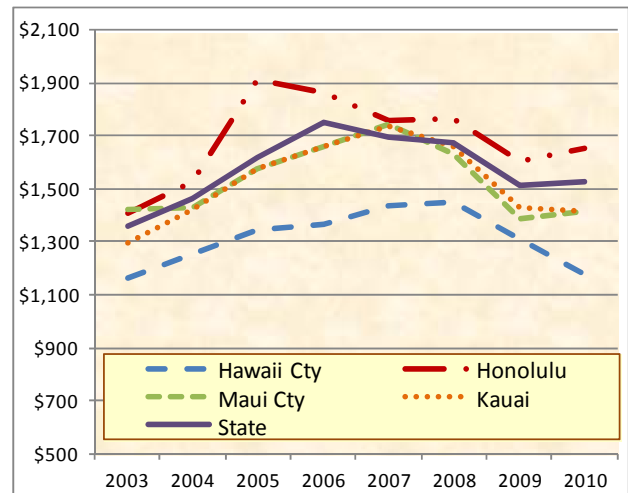
The Rental Housing Study 2011 shows that Hawai'i asking rents were on the rise from 2003 through 2006, then fell notably from 2007 to 2010, but have begun to show signs of a slight reversal in the last half of 2010 and first half of 2011. Data for the first half of 2011 indicate that asking rents are on the rise for the State and each County except Hawai'i County.

Contract rents throughout the State rose between 2003 and 2009, with a slight decrease in the rate of growth for 2009. In keeping with the findings for asking rents, data for 2011 suggests that renters have begun paying more for their homes in recent months as contract rents are higher across all counties.

The U.S. Department of Housing and Urban Development's Fair Market Rents in all of Hawai'i's counties have remained steady or increased every year since 2000, but leveled off notably after 2009.¹⁷ Overall, the rental data for 2011 suggest that rents across Hawai'i are at the beginning of an upward trend.

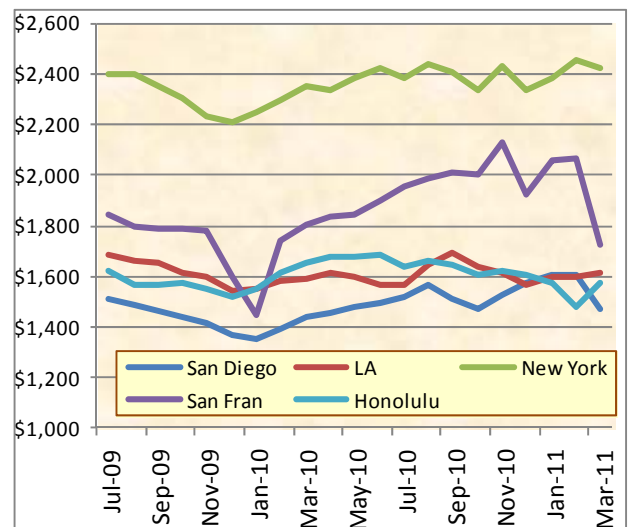
Households in the City & County of Honolulu, 42 percent of whom are renters, consistently have the highest median contract rent and tend to drive the overall median for the State. Renters in the County of Maui represent 44 percent of households and pay the second highest amount to cover their monthly housing expenses. Residents of Kaua'i who are renting their current home have experienced more significant increases in their contract rents over the past couple of years than residents of any other county (13% from 2008 to 2009). Increases in contract rents among the other counties in Hawai'i during that same period were five percent or less. The 2011 median contract rent in the County of Hawai'i is the lowest in the state at \$1,121 per month.

Figure 9. Average Rents, Counties and State of Hawai'i, 2003-2011



Source: Rental Housing Study, 2011. Base is all rental units.

Figure 10. Average Rents in Five High-Price Markets, 2009-2011



Source: National Association of Realtors, 2011

¹⁷ See <http://www.huduser.org/portal/datasets/fmr.html> for detailed historical FMR data provided by HUD.

HOUSING FORECASTS, 2012-2030

The focus of the HHPS is on planning – using housing market information to develop wise courses of action in housing development in the next few years. Planning’s future-oriented component requires more than information on past performance. We will need a forecast of how the housing market will function in the future.

The Hawai‘i Housing Model was developed to provide forecasts. Initiated in 1992, the Model was expanded each time the Study was updated. It exists today as a supply and demand model of Hawai‘i’s housing market. It treats each County as an independent housing market that can be summed to describe housing activity for the entire State. For those who are interested, the most recent version of the Hawai‘i Housing Model is further described in the Technical Report¹⁸.

HOUSING DEMAND

The Hawai‘i Housing Model summarizes demand in terms of units sold each year¹⁹ and produces separate estimates for single-family and multi-family units. For past years, demand is based heavily on the unit sales reported by county boards of realtors and subsequently reported by DBEDT. Sales forecasts for future years are based on past performance of the housing market and several other factors including population growth, household formation, household income, and expected interest rates.

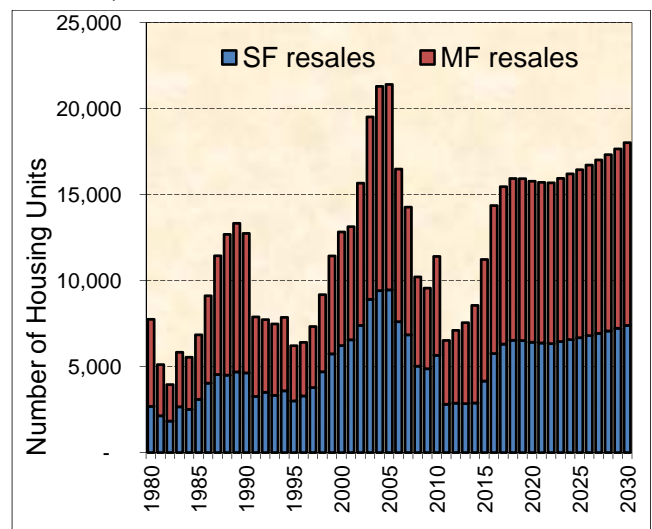
Important parameters set for the statewide forecasts shown here are as follows: a

population growth rate of 1.0 percent per annum, household size dropping by .01 points per decade, household income growth rate of about 2.6 percent per annum, and interest rates beginning at 4.0 percent in 2011 and rising to 6.25 percent by 2030.

Modeled Demand

Figure 11 presents demand estimates for the State housing market from 1980 through 2030. Data are shown for single-family and multi-family unit sales. In years before 2011, the sales figures were based on resales reported by boards of realtors. In the last two studies, estimates for new unit sales and sales prices have become available. Post-2010 new unit counts reflect the assumptions noted above and the history of the housing market since 1980.

Figure 11. Housing Unit Sales, State of Hawai‘i, 1980-2030



Source: Hawai‘i Housing Model, 2011

As noted earlier, the Hawai‘i housing market has been cyclical over the last 35 years. Very generally, we have had three major market expansions followed by periods of post-expansion adjustment. The cyclical nature of sales is definitely a feature of our housing market

¹⁸ HHPS, 2011 Technical Report.

¹⁹ Note: The discussion of demand in the previous section was based on the Demand Survey where “demand” is identified by housing consumers. Data from past Demand Surveys have been incorporated in the Housing Model. What appears here is the end result of supply and demand characteristics of the local housing market in terms of the total number of units sold each year.

and there is no indication that the underlying factors responsible for those cycles will change significantly in the future. The model, therefore, forecasts continuation of that pattern. It produces another housing run-up beginning later in this decade. We note that the quality and quantity of housing-related data has improved notably since 1992. The model and its forecasts benefit from the improvement and reflect improvement in detail through the years.

The forecast suggests continued slow growth in Hawai'i's housing market in the short term. It predicts slow sales between 2011 and 2017. We do not expect any further decreases in sales.

Obviously, changes in model assumptions would alter results. Increasing employment, for instance, would push up household incomes, shortening the current adjustment period and increasing the volume of the next run-up. Increasing interest rates would have the opposite effect. The results shown in Figure 11 represent our current best estimate of housing demand over the next twenty years²⁰.

HOUSING SUPPLY

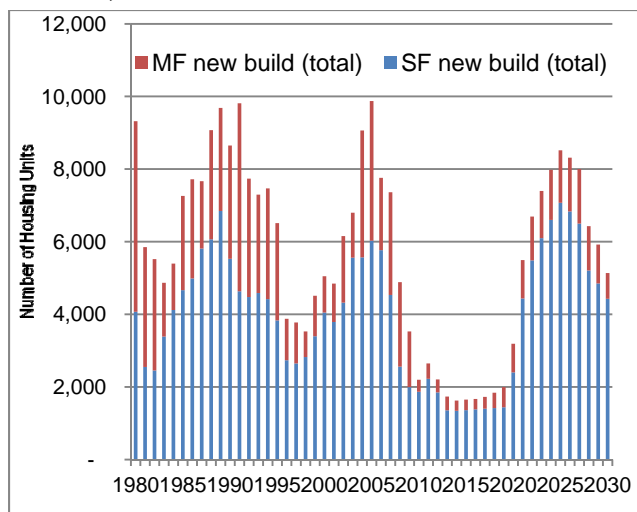
The Hawai'i Housing Model measures supply in terms of housing units added each year with separate estimates for single-family and multi-family units. For past years, added units are the difference between housing unit counts for two adjacent years. Forecasts of added units are based on past performance of the housing market, population growth, household formation, household income, and expected interest rates. The assumptions applied for the supply forecast are the same as those noted above for the demand forecast.

Modeled Supply

Estimated production of new housing units for Hawai'i between 1980 and 2030 is shown in Figure 12. For years before 2011, the housing unit counts are based on decennial census and

ACS data as well as authorized county building permits. Post-2010 new unit counts reflect the previously noted assumptions and the history of the housing market since 1980.

Figure 12. New Construction, State of Hawai'i, 1985-2030



Source: Hawai'i Housing Model, 2011

The market cycles are apparent in the supply forecast just as they are in the demand estimates. The forecast follows a similar pattern of rapid growth and longer adjustment periods during which housing prices fall slightly and production is reduced significantly.

The forecast suggests continued slow growth in Hawai'i's housing market. Specifically, it predicts slow sales between 2011 and 2017. We do not expect any further decreases in sales.

Again, changing assumptions would alter the forecast. Increasing population growth, decreasing unemployment, and low interest rates all work toward increasing demand and therefore the need for more housing units. Slower growth in any of those assumptions would decrease the need for new units. Table 11 shows our current best estimate of housing supply changes for the next twenty years.

²⁰ With the standard caveat that reliability of forecast estimates decreases in later years.

NEEDED UNITS

The ultimate objective of the modeling exercise was to estimate the number of new housing units needed in Hawai'i in the near future. As in the past, we accomplished this in two steps: (1) estimate the total number of units required in the Hawai'i Housing Model; (2) estimate the types of units needed (by market level and units per structure) based on the Housing Demand Survey. In 2011, we added a further step intended to estimate the numbers of elderly and family housing units needed in each county.

Total New Units Needed

Based on the model, the total number of housing units that will change hands in the period between 2012 and 2016 is approximately 60,000 to 75,000 units. This is the number of units that would be required to meet the needs of everyone who wanted to move. Most of those would be resales and not require any construction.

The number of new units that would have to be built during that five-year period to meet new demand generated by changing demographic and economic conditions might be as high as 50,000. Some of those units will be produced by Hawai'i's housing industry (public and private). Some will not.

Units that are not built represent the shortage of units needed to fill total demand for housing units. The shortage results from market inefficiencies (lack of information or coordination, lag times, etc.), regulations that dampen supply, and economic realities (difficulties of producing units below market prices, etc.).

This shortage has come to be known as "needed units" and is defined as the difference between total demand and expected supply.

The supply forecast shown in Table 11 represents the needed units by HUD income guidelines. HUD guidelines define the income qualifications for service under most HUD programs.

Table 12 shows the same supply forecast distributed according to the survey income in each county as measured in the Housing Demand Survey. The 2011 Survey median income for the State was \$58,700.

As identified by the Housing Demand Survey, the median household income for the State was \$58,700. The median was slightly higher for the City and County of Honolulu (\$59,076) and approximately equal for the County of Maui (\$58,424). Both Kauai and Hawai'i Counties had median household incomes well below the statewide median (\$49,730 and \$49,696, respectively).

Table 11. Needed Housing Units by HUD Income Classification, Counties and State of Hawai'i, 2012-2016

	Total Units Needed, 2012 through 2016							
	HUD Income Classification							
	LT 30	30 to 50	50 to 80	80 to 120	120 to 140	140 to 180	180+	Total
State of Hawai'i	8,136	4,891	6,221	2,857	1,944	1,320	2,768	28,137
Ownership Units	2,248	1,149	2,833	1,364	1,297	886	1,961	11,738
Single-Family	1,225	674	2,207	1,014	994	828	1,383	8,325
Multi-Family	1,023	475	626	350	303	58	578	3,413
Rental Units	5,888	3,742	3,388	1,493	647	434	807	16,399
Single-Family	559	337	422	83	40	135	282	1,858
Multi-Family	5,329	3,405	2,966	1,410	607	299	525	14,541
City and County of Honolulu	6,006	3,549	4,268	1,976	1,561	632	1,865	19,857
Ownership Units	1,850	669	2,038	929	1,046	364	1,344	8,240
Single-Family	887	277	1,499	643	752	364	779	5,201
Multi-Family	963	392	539	286	294	0	565	3,039
Rental Units	4,156	2,880	2,230	1,047	515	268	521	11,617
Single-Family	134	69	183	0	0	92	195	673
Multi-Family	4,022	2,811	2,047	1,047	515	176	326	10,944
County of Maui	803	690	924	374	101	302	260	3,454
Ownership Units	130	249	380	131	10	261	199	1,360
Single-Family	88	212	331	117	10	203	190	1,151
Multi-Family	42	37	49	14	0	58	9	209
Rental Units	673	441	544	243	91	41	61	2,094
Single-Family	83	90	104	49	15	0	31	372
Multi-Family	590	351	440	194	76	41	30	1,722
County of Hawai'i	1,013	493	577	339	237	316	539	3,514
Ownership Units	243	184	286	224	201	236	387	1,761
Single-Family	225	172	277	179	192	236	387	1,668
Multi-Family	18	12	9	45	9	0	0	93
Rental Units	770	309	291	115	36	80	152	1,753
Single-Family	231	145	32	12	24	29	52	525
Multi-Family	539	164	259	103	12	51	100	1,228
County of Kaua'i	315	159	451	167	45	71	104	1,312
Ownership Units	26	46	128	79	40	26	31	376
Single-Family	26	13	99	74	40	26	26	304
Multi-Family	0	33	29	5	0	0	5	72
Rental Units	289	113	323	88	5	45	73	936
Single-Family	111	34	102	22	0	15	4	288
Multi-Family	178	79	221	66	5	30	69	648

Sources: Housing Demand Survey, 2011 and Hawai'i Housing Model, 2011.

Note. The sum of the needed units for the four counties may not equal the total number of needed units for the State due to rounding. Needed units are those housing units needed to eliminate pent-up demand and accommodate new household formation between 2012 and 2016 for the State of Hawai'i and its four counties, by preferred tenancy and unit type.

Table 12. Needed Housing Units by Housing Demand Survey Income Classification, Counties and State of Hawai'i, 2012-2016

	Total Units Needed, 2012 through 2016							
	Income Classification							
	LT \$30k	\$30k to \$45k	\$45k to \$60k	\$60k to \$75k	\$75k to \$100k	\$100k to \$125k	\$120k +	Total
State of Hawai'i	10,050	4,584	3,988	2,392	2,390	2,440	2,293	28,137
Ownership Units	2,837	1,013	1,770	1,129	1,889	1,328	1,772	11,738
Single-Family	1,584	763	1,240	898	1,445	1,113	1,282	8,325
Multi-Family	1,253	250	530	231	444	215	490	3,413
Rental Units	7,213	3,571	2,217	1,263	501	1,113	521	16,399
Single-Family	751	213	154	269	73	319	79	1,858
Multi-Family	6,462	3,358	2,063	994	428	794	442	14,541
City and County of Honolulu	7,142	3,192	2,571	1,792	1,547	1,899	1,714	19,857
Ownership Units	2,175	481	1,150	762	1,364	921	1,387	8,240
Single-Family	1,017	284	739	551	984	716	910	5,201
Multi-Family	1,158	197	411	211	380	205	477	3,039
Rental Units	4,967	2,711	1,421	1,030	183	978	327	11,617
Single-Family	134	41	28	183	0	287	0	673
Multi-Family	4,833	2,670	1,393	847	183	691	327	10,944
County of Maui	1,000	673	799	231	382	138	231	3,454
Ownership Units	194	225	315	133	208	108	177	1,360
Single-Family	148	201	259	124	143	108	168	1,151
Multi-Family	46	24	56	9	65	0	9	209
Rental Units	806	448	484	98	174	30	54	2,094
Single-Family	126	94	57	16	48	7	24	372
Multi-Family	680	354	427	82	126	23	30	1,722
County of Hawai'i	1,492	402	385	259	379	295	302	3,514
Ownership Units	420	219	215	190	256	284	177	1,761
Single-Family	390	219	172	179	256	275	177	1,668
Multi-Family	30	0	43	11	0	9	0	93
Rental Units	1,072	183	170	69	123	11	125	1,753
Single-Family	358	17	17	46	25	11	51	525
Multi-Family	714	166	153	23	98	0	74	1,228
County of Kaua'i	415	317	233	110	81	108	48	1,312
Ownership Units	47	88	91	44	61	14	31	376
Single-Family	29	59	71	44	61	14	26	304
Multi-Family	18	29	20	0	0	0	5	72
Rental Units	368	229	142	66	20	94	17	936
Single-Family	132	60	53	24	0	15	4	288
Multi-Family	236	169	89	42	20	79	13	648

Sources: Housing Demand Survey, 2011 and Hawai'i Housing Model, 2011.

Note. The sum of the needed units for the four counties may not equal the total number of needed units for the State due to rounding. Needed units are those housing units needed to eliminate pent-up demand and accommodate new household formation between 2012 and 2016 for the State of Hawai'i and its four counties, by preferred tenancy and unit type.

Types of Units Needed

Table 11 shows the distribution of needed units by county, tenure and unit type for the next five years. They have been estimated for each of seven market levels following U.S. Department of Housing and Urban Development (HUD) income guidelines. Table 12 shows a similar distribution of needed units, in this case distributed according to the 2011 median household income of each county and the State of Hawai'i as measured in the HGPS Demand Survey.

The Hawai'i Housing Model 2011 was used to develop the total number of needed units by county and for the State as a whole. The distribution of needed units by tenure, type, and market level was developed from Housing Demand Survey data.

The analysis employs the assumption that needed units are distributed according to the effective and qualified demand estimates from the survey.

Effective demand means that only Hawai'i residents who are planning to move to a unit in the State of Hawai'i in the next five years were included in the analysis. The analysis did include people who are currently doubled-up for economic reasons.

The estimates are based on qualified demand in the sense that their housing choices have been adjusted to reflect their current economic situations. If a survey respondent expressed a desire to move from a rented unit to an owned unit, but did not have the financial resources to support that move, we added that case to the list of rental units needed rather than the ownership unit needed.

The process of estimating needed units is crucial to housing planning because it identifies housing units other than those that will be produced by the local market under normal conditions. Not surprisingly, in a very high-priced housing market like Hawai'i's the number of needed units is

relatively high – as many as 3,500 to 6,000 units per year in recent decades.

Needed units are concentrated in market levels below 180 percent of AMI. This finding suggests that the market is more effective in producing high-end units than low-end units. Inefficiencies are exacerbated in periods of rapid market expansion when fewer low-end units are built. More middle-market and low-end units are built during periods of market adjustment.

Needed units are also concentrated in the rental market rather than the ownership market. Again, the current housing market produces units for sale more efficiently than units for rent.

The detail produced in this analysis will be useful in a variety of housing planning efforts in the next five years. It is relevant, reliable, and utilitarian.

One conclusion of the 2011 modeling exercise supports major conclusions of every housing study and blue-ribbon housing task force conducted in Hawai'i for the last twenty years – what we need is more affordable rental housing.

Finally, we need to explain how each of four housing types -- market level units, affordable units, special needs housing, and units for those impacted by homelessness – are treated in the Hawai'i Housing Model.

Market Level Units: Units needed for households with incomes above 80 percent²¹ of AMI are referred to in the housing model as "market level" housing units. It is assumed that most of those will be produced by the private sector. The model does not assume that market level housing units will be produced on schedule as they are needed. Hawai'i's housing market is marked by high prices and restricted supply. By

²¹ This is strictly a characteristic of the Model and not an assertion that 80 percent, or any other level, is the "true" definition of market level housing. Many other levels are used even within Hawai'i. Maui County classifies anything under 160 percent of AMI as public sector projects. Affordable housing developers tell us 60 percent is an appropriate level because the private sector uses Low Income Housing Tax Credits below that level.

any method of reckoning, there will be a need for units at nearly every market level for a long time to come.

Affordable Units: Rental housing units intended for households with incomes below 80 percent of AMI have, for the most part, been assisted by the public sector. Failure to produce sufficient units for low- and moderate-income households will cause pent-up demand in these market segments.

Affordable housing includes two types of public sector-generated housing units. The first is **public housing**, which includes units developed and maintained in perpetuity by the public sector. It is “affordable” in the sense that it is available to qualified persons at below market prices. The second is **government-assisted housing**, which is usually produced in partnership with private sector or non-profit affordable housing developers²².

Government assistance extends beyond funding. Public sector programs and partnerships often involve government contributions in the form of financing, permitting, planning and zoning variances, land and many other forms of assistance. In some cases, affordable housing requires post-production services including property management and services required by residents with special needs. Public sector agencies often help pay for or subsidize those services.

Special Needs Housing Units: Housing units that might be used by persons with special needs are included Tables 11 and 12. They are not specifically identified there, however. The housing needs of those subpopulations and their impact on housing planning are discussed later in this report.

²² There may be affordable units produced solely by government agencies and there are some affordable units produced by private sector agencies acting on their own. The typical affordable project is usually a collaborative effort involving multiple agencies and sources of funding.

Homeless Housing Needs: Housing units that might result from homeless persons re-entering the housing market are not included in Tables 11 or 12. By definition, homeless persons are not included in the Hawai'i Housing Model. The model is built on data on households or housing units. For the first time in 2011, the Housing Demand Survey did make provision for including homeless persons. By incorporating cell phone interviews rather than relying solely on landline phone numbers associated with a housing unit, the 2011 Housing Demand Survey was able to solicit information from a very small number of homeless persons. Any units needed to house homeless people in Hawai'i properly must be added to the table of needed units. We will return to this topic later in this report.

Units Needed for Elderly Housing

Table 13 presents the estimated number of units needed to house Hawai'i's senior citizens. The base number for the table is the same as in the previous two tables. We will need an additional 28,137 units to fill the gap between housing units wanted and housing units produced over the next five years. Among those needed units, 3,205 are needed for elderly households – households containing one or more persons 60 years of age or older with no children under the age of 18 and no persons other than immediate family. The remaining housing units, referenced here as “family units,” would be for the use of all other types of households.

The units needed to serve elderly households accounts for about 11.4 percent of the total needed units. The rates are similar for all counties except Kaua'i County, where they account for 19 percent of the need.

Considering just the units needed for elderly households, about two-thirds (2,092 units) are needed for low- and moderate-income households (under 80% AMI). Here the pattern is different across counties. The City and County of Honolulu and Maui County are similar in the percentage of needed elderly units for low- and moderate-income households (64% and

60%, respectively). Sixty-nine percent of the units needed to house the elderly in Hawai'i County would serve households earning 80 percent AMI or less. The number of housing units needed to accommodate low- and moderate-income elderly households in Kaua'i County, however, accounts for 82 percent of the total elderly units needed.

Within the units needed for households earning up to 80 percent of the HUD median, about one-quarter (26%) would be ownership units if their preferences could be filled. As suggested in our earlier discussions of qualification to own, very few of these households would be able to afford to buy a unit. The planning reality is that all 2,092 of the units for elderly households earning up to 80 percent of HUD median income should be rental units. Rental units will fill the need for housing at a level that the residents can afford.

Table 13 also shows the preferences pattern for single-family and multi-family needed units. In general, the preference for single-family units is still visible in the estimates, but there is much greater acceptance of multi-family units among the elderly households. That is especially true among those with household incomes below 80 percent of AMI.

As with the estimates in Tables 11 and 12, these estimates should be treated very loosely. Demand for any class of units might easily fulfill the housing needs of our elderly households. The pattern shown here is generated primarily by the preferences measured in the demand survey. The figures can be used by planners as ceiling estimates for needed units.

Table 13. Needed Elderly Housing Units, Counties and State of Hawai'i, 2012-2016

	Total Elderly Units Needed, 2012 through 2016			Total Family Units Needed, 2012 through 2016			Total
	HUD Income Classification			HUD Income Classification			
	Under 80%	Over 80%	Total	Under 80%	Over 80%	Total	
State of Hawai'i	2,092	1,113	3,205	17,156	7,776	24,932	28,137
Ownership Units	547	1,005	1,552	5,683	4,503	10,186	11,738
Single-Family	254	418	672	3,852	3,801	7,653	8,325
Multi-Family	293	587	880	1,831	702	2,533	3,413
Rental Units	1,545	108	1,653	11,473	3,273	14,746	16,399
Single-Family	119	15	134	1,199	525	1,724	1,858
Multi-Family	1,426	93	1,519	10,274	2,748	13,022	14,541
City and County of Honolulu	1,368	779	2,147	12,455	5,255	17,710	19,857
Ownership Units	345	779	1,124	4,212	2,904	7,116	8,240
Single-Family	96	237	333	2,567	2,301	4,868	5,201
Multi-Family	249	542	791	1,645	603	2,248	3,039
Rental Units	1,023	0	1,023	8,243	2,351	10,594	11,617
Single-Family	0	0	0	386	287	673	673
Multi-Family	1,023	0	1,023	7,857	2,064	9,921	10,944
County of Maui	248	164	412	2,169	873	3,042	3,454
Ownership Units	60	107	167	699	494	1,193	1,360
Single-Family	50	62	112	581	458	1,039	1,151
Multi-Family	10	45	55	118	36	154	209
Rental Units	188	57	245	1,470	379	1,849	2,094
Single-Family	54	0	54	223	95	318	372
Multi-Family	134	57	191	1,247	284	1,531	1,722
County of Hawai'i	272	125	397	1,811	1,306	3,117	3,514
Ownership Units	89	109	198	624	939	1,563	1,761
Single-Family	77	109	186	597	885	1,482	1,668
Multi-Family	12	0	12	27	54	81	93
Rental Units	183	16	199	1,187	367	1,554	1,753
Single-Family	17	0	17	391	117	508	525
Multi-Family	166	16	182	796	250	1,046	1,228
County of Kaua'i	205	45	250	720	342	1,062	1,312
Ownership Units	53	10	63	147	166	313	376
Single-Family	30	10	40	108	156	264	304
Multi-Family	23	0	23	39	10	49	72
Rental Units	152	35	187	573	176	749	936
Single-Family	48	15	63	199	26	225	288
Multi-Family	104	20	124	374	150	524	648

Sources: Housing Demand Survey, 2011 and Hawai'i Housing Model, 2011.

Note. The sum of the needed units for the four counties may not equal the total number of needed units for the State due to rounding. Needed units are those housing units needed to eliminate pent-up demand and accommodate new household formation between 2012 and 2016 for the State of Hawai'i and its four counties, by preferred tenancy and unit type.

HOUSING ISSUES

In 2011, several issues were of interest to HHPS users in both the government and private sectors. These issues included the production of affordable housing units, generating units for which affordability is sustainable, housing needs of special needs groups, homelessness, and the relationship between housing and transportation needs as they may affect housing development over the next decade.

SUSTAINABLE AFFORDABILITY

The sustainable lease has been of interest to Hawai'i housing planners as a feasible method of producing affordable housing units that remain affordable over time. The sustainable lease concept is broadly defined in the industry and may take 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 Hawai'i for several reasons. First, it is an arrangement that allows government to maintain 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 greatly enhance the availability of the 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 shown²³, for instance, that one of the chief problems with the lease concept in Hawai'i 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 2011 Housing Demand Survey includes a set of items to support 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 homebuyers.

Statewide, 41 percent of prospective buyers were willing to consider a sustainable lease if no fee simple homes were affordable. When survey respondents were asked about the appeal of a renewable lease with terms between 60 and 99 years, a greater percentage were willing to considering buying a leasehold property (52%). The ability to pass the property on to one's heirs, who would then receive a 60 to 99 year lease, would prompt 62 percent of buyers to consider a lease.

Overall, survey results for the sustainable lease questions changed very little between 2006 and 2011. In 2011, people who planned to purchase their next home were somewhat less willing than 2006 respondents to consider a sustainable lease. They were also less likely to be swayed once they understand the nature and terms of the sustainable lease options.

²³ Housing Policy Study, 2006.

Table 14. Sustainable Lease Considerations by County, 2006 and 2011

	State of Hawai'i	County			
		Honolulu	Hawai'i	Maui	Kaua'i
Would consider a lease if...					
...there was a nominal monthly payment for the lease.					
2011	41.4%	37.4%	56.9%	41.9%	57.1%
...the lease term was 60 to 99 years and renewable					
2006	54.4%	50.8%	67.9%	58.0%	57.0%
2011	52.3%	49.4%	62.7%	54.6%	59.7%
... could pass the home to heirs with new 60 to 99 year lease					
2006	64.1%	58.5%	81.5%	71.0%	77.4%
2011	62.3%	57.1%	78.1%	69.3%	77.2%
If all above were true, would buy your next home sustainable leasehold or fee simple?					
Prefer sustainable lease					
2006	48.9%	43.8%	64.5%	64.4%	64.7%
2011	46.9%	41.8%	64.2%	48.8%	68.2%
Would consider sustainable lease					
2006	10.3%	11.0%	4.7%	4.9%	11.8%
2011	10.3%	11.2%	4.8%	11.8%	10.2%
Still want fee simple					
2006	44.8%	47.5%	30.8%	30.7%	23.5%
2011	42.8%	47.0%	31.1%	39.4%	21.6%

Base 2006: Asked of potential buyers who were not interested in leasehold property, even if fee simple property was unavailable in their price range. Base 2011: Asked of all potential buyer households planning to purchase a unit in the State of Hawai'i.

Further analysis showed that those households most likely to find sustainable leases appealing were the ones who most need them. Sustainable leases appealed to more renters than current owners, to those who were not sure they could come up with a down payment. They appealed to households that were crowded and had strong support among households earning less than 120 percent of the County AMI. Finally, sustainable leases were attractive to disproportionately high numbers of households that were doubled up, crowded or included "hidden homeless" persons.

The results suggest that there is a role for the sustainable lease concept in developing affordable housing for Hawai'i. Leasehold arrangements can be used to produce more affordable housing units and maintain them in the affordable housing stock indefinitely. These data show that, even where leasehold property is unpopular, the sustainable lease appeals to a substantial number of potential homebuyers.

Once they understand how a sustainable lease works, many people will be willing to take advantage of a sustainable lease to get into their own homes.

LOT SIZES

In the 2011 Housing Demand Survey, only residents of Kaua'i County who are planning to move in the future, and residents of other islands who plan to move to Kaua'i, were asked additional questions concerning the relative importance of lot size and the unit type (single-family or multi-family). The question posed was: "One way to bring down the cost of a single-family house is to use smaller lot sizes. If you had a choice between a house on a smaller lot or a multifamily unit like a townhouse, which would you prefer?" Respondents who indicated that they would accept a smaller lot in order to have a single-family dwelling (SFD) were then asked to specify the smallest lot size they would consider.

Among the 6,751 households questioned, about 32 percent (2,191 households) plan to purchase their next home. Among these prospective buyers, 92 percent currently live on Kaua'i and the remaining eight percent reside in one of the other three counties.

When Kaua'i County's 2,191 prospective buyer households were asked about their preference for a single-family dwelling on a small lot or a multi-family dwelling, 85 percent opted for the small lot SFD (1,869 households). Close to eleven percent expressed a preference for a MFD (233 households) and the remaining four percent (89 households) were unsure.

Nine percent of prospective buyers who reported a preference for a small-lot SFD originally stated their intention to live in a MFD when they moved. When presented with the small-lot SFD scenario, however, 168 households changed their preference to SFD. This suggests that the idea of living in a SFD is highly appealing to many Kaua'i households, in spite of the small lot condition.

Sixty-five percent of the prospective buyer households who prefer a small-lot SFD are current homeowners, 32 percent currently occupy their residence without payment. The majority (81%) currently live in a single-family home, while the rest live in multi-family dwellings such as condos or apartments.

Just over 36 percent of the potential small-lot SFD buyer households earn less than 80 percent of the HUD median income for their county, while nearly one-quarter (24%) earn between 80 and 140 percent and 40 percent have household incomes of over 140 percent of the HUD median.

Table 15. Current and Preferred Housing, Kaua'i Buyers, 2011

	Small-Lot SFD	MFD	Not Sure	Total
Total Households	1,869	233	89	2,191
Current Tenancy				
Own	65.4%	22.1%	56.4%	61.2%
Rent	31.6%	65.8%	43.6%	35.2%
Occupy w/o pmt	2.9%	12.1%		3.6%
Current Home Type				
SFD	80.7%	100%	100%	83.6%
MFD	19.3%			16.4%
HUD Income Category				
less than 30%	7.5%	12.1%		7.7%
30 to 50%	6.2%			5.3%
51 to 80%	22.6%	41.5%	16.6%	24.4%
81% to 120%	9.3%		43.1%	9.7%
121% to 140%	14.5%	28.6%		15.4%
141% to 180%	18.9%		26.9%	17.2%
more than 180%	21.0%	17.8%	13.3%	20.3%

Source: Housing Demand Survey, 2011.

Those who prefer to live in a MFD generally paid less each month for housing than those who prefer a smaller-lot SFD (Table 16). Residents who are unsure how much they can afford to pay each month were also more likely to prefer the MFD option, while those with higher current housing payments or with the ability to afford higher monthly amounts in the future opted for the smaller-lot SFD.

It was interesting to note that 23 percent of households interested in a MFD reported that they could afford to pay more than \$2,000 for monthly rent while only 17 percent of those who prefer a SFD could afford payments at that level. There were 52 percent of households with a preference for MFD that indicated they were not sure how much they could afford to pay, which might suggest that other households in this category may have overestimated their ability to pay.

Table 16. Current and Affordable Housing Payment, Kaua'i Movers, 2011

	Small-Lot SFD	MFD	Not Sure	Total
Total Monthly Mortgage Payment				
Up to \$499	9.0%		23.6%	9.3%
\$500 to \$1,099	4.1%			3.8%
\$1,100 to \$1,399	8.5%			7.8%
\$1,400 to \$1,999	23.1%		76.4%	24.4%
\$2,000 to \$3,000	26.7%	28.5%		25.7%
Over \$3,000	22.9%	71.5%		23.6%
Already paid for	5.7%			5.4%
Total Monthly Rent Payment				
Less than \$800	14.7%	72.8%		23.9%
\$800 to \$1,099	19.5%	11.2%	61.5%	20.2%
\$1,100 to \$1,399	18.2%			14.1%
\$1,400 to \$1,699	18.8%		38.5%	16.6%
\$1,700 to \$1,999	21.6%	16.0%		19.5%
Over \$2,000	7.2%			5.6%
Affordable Monthly Mortgage Payment				
Up to \$499	5.9%	12.0%		6.4%
\$500 to \$1,099	10.6%			9.1%
\$1,100 to \$1,399	6.5%			5.6%
\$1,400 to \$1,999	18.6%	8.6%		16.8%
\$2,000 to \$3,000	30.8%	5.2%	13.5%	27.3%
Over \$3,000	17.4%	22.7%	27.0%	18.3%
Not Sure	10.2%	51.5%	59.6%	16.5%

Source: Housing Demand Survey, 2011.

While a substantial number of Kauai's prospective buyers were willing to accept a SFD on a small lot, the lot size requirements among these households varied. Close to forty percent reported the need for a lot with more than 6,000 square feet. Eighteen percent of small-lot SFD buyers need at least 5,000 square feet and an additional 26 percent require between 4,000 and

5,000 square feet of space. An equal number of these households indicated that they could accept 3,000 to 4,000 square feet or were unsure what size lot they needed (9% each).

HOUSING AND TRANSPORTATION

Impact of Commuting on Housing Choice

As housing and transportation choices become more aligned, housing planners focus greater attention on public transportation solutions. This is especially true in high-priced housing markets like Hawai'i. Our normal fuel and operational costs are high relative to other states, and the fuel crises of recent years exacerbate the problem. In response, the 2011 Housing Demand Survey included our first set of items on transportation alternatives.

Several items in the Survey were devoted to measuring transportation need generated by commuting to school or work in Hawai'i households. We were able to gather commuting requirements for all adults in the household, ascertain zip codes for homes and associated commuting destinations, and measure commuting time. Those data provide a rich source of information on the issue that will support further analysis for a long time.

Only respondents who planned to move within the State answered the transportation questions. As a result, the transportation preferences represent the relationship between transportation and housing choice as opposed to a population-wide study of commuter transportation issues.

For this report, we combined all of that information in one scale measuring commuter travel time. That measure will be our focus in this section of the report.

Table 17 presents the profile of households with different commuter travel times. Table 18 shows the housing preferences for commuters and non-commuters, and Table 19 shows commuter reactions to housing and transportation issues.

The income levels of people who will be active in Hawai'i's housing market over the next few years tend to reflect their transportation behavior. People who use public transportation have the lowest incomes. Non-commuters are a close second, followed by short commuters. Households with medium and long commutes also have median or higher incomes.

When we looked at housing preferences among this group, we found relationships that were much stronger than those for current living arrangements. Commuters were likely to prefer home ownership and single-family units. Non-commuters and users of public transportation were more likely to opt for rental units and multi-family structures.

Designing Housing with Distance in Mind

Respondents to the Housing Demand Survey that are planning to move within the State were asked about how many days that they commute each week, commute times, use of public transportation, and the importance of proximity to school or work.

Nearly 70 percent of respondents statewide said they commute further than one mile at least 4 days each week. Across the State of Hawai'i, the median travel time for daily commuters is 25 minutes one way. Commuters on O'ahu spend about 30 minutes each day commuting to work or school, while commuters on the Neighbor Islands spend about 20 minutes commuting to their destination.

Twenty-four percent of households include one or more members who use public transportation to get from home to work or school three or more times each week. These households that use public transportation are disproportionately renters and parents with children or multi-family households.

Housing and Transportation Alternatives

For our straightforward tradeoff question to measure the strength of price versus a short commute, results were mixed. Overall, about 46 percent of prospective movers would opt for a shorter commute and 41 percent would opt for the lower price. The remaining 13 percent were not sure how they would decide.

Respondents with a long commute frequently opted for the shorter commute time. People who use public transportation were much more likely (57%) to prefer a lower price over an increased commute time.

In two different locations in the Housing Demand Survey, we asked people in the market about how transportation issues might affect their unit choices the next time they move. Asked if they would prefer a unit that is closer to their workplace, 57 percent of all mover households said “no” and 40 percent said “yes”. With the exception of non-commuter households, in which 78 percent said they would not choose to move closer to their workplace, commuting time had very little influence on the results.

When we asked about moving closer to the bus stop, respondents were again divided. Overall, about 50 percent of people who will move said that being closer to the bus stop was not critical to them in making their housing decisions (49%). About 47 percent said they would like to be closer to a bus stop. However, on this item, 71 percent of current public transportation users were interested in moving closer to a stop. Commuters with a commute time of 15 minutes or less were least interested in living near a bus stop in the future.

With the new rail transit system under development, residents on O’ahu will soon have an alternative to the bus. Over thirty percent (31%) of mover households in the City and County of Honolulu said they would like their next home to be in close proximity to the light rail stations currently under development. About 31 percent said “yes”, 61 percent said “no”, and

eight percent said they were not certain²⁴. On this issue, commute time had almost no impact and the majority of all commuter groups said the option did not interest them.

While commute time did not have a significant impact on interest in living near the rail stations, planned tenancy was influential. When households that plan to buy their next unit on O’ahu were presented with the rail station scenario, 19 percent of buyers rated this as an extremely important consideration, while an additional 67 percent rated it as somewhat important.²⁵

When those who intend to rent their next unit were presented with the same scenario involving apartments located near a rail station, 45 percent rated it as an extremely important consideration and an equal number judged it a somewhat important consideration. As frequent users of the public transportation system, it is not surprising that renters would be more likely to factor the rail system into decisions regarding the location of their next housing unit.

As the rail stations are not yet in place, the prospect of them may have been difficult to incorporate into respondents’ set of housing alternatives.

²⁴ Having many years experience asking questions about options that do not currently exist, we should caution the reader against over-interpreting this information. It does represent popular opinion at this time. As we move closer to having rail stations in place, acceptance may increase dramatically.

²⁵ Since the majority of households that plan to buy their next unit expressed a preference for single-family dwellings and were unlikely to use public transportation, the importance attributed may be related to the rail station, the multi-family unit, the concept of using public transportation or all of these.

Table 17: Effect of Commuting on Housing Choice, 2011

	Commuter Travel Time Situation					Total Households
	Use Public Transit	Short Commute Only	Moderate Commute	Long Commute	Not a Commuter Household	
Total Effective Demand Mover Households	33,286	24,965	33,956	18,362	27,547	138,116
Tradeoff: Commute vs. Price						
Prefer a Shorter Commute	32%	48%	55%	56%	44%	46%
Prefer a Lower Price	57%	38%	33%	32%	38%	41%
Undecided	11%	14%	12%	12%	18%	13%
Prefer to Move Closer to Work						
Yes	56%	35%	45%	42%	18%	40%
No	39%	64%	51%	56%	78%	57%
Not Sure	4%	1%	4%	2%	4%	3%
Prefer to Move Closer to Bus Stops						
Yes	71%	26%	42%	35%	53%	47%
No	26%	66%	54%	62%	44%	49%
Not Sure	3%	9%	4%	3%	3%	4%
City and County of Honolulu Effective Demand Mover Households	27,413	14,974	24,462	13,321	17,259	97,429
Interested in Moving Close to Rail Stations						
Yes	35%	17%	32%	35%	33%	31%
No	48%	75%	64%	64%	63%	61%
Not Sure	17%	9%	4%	1%	4%	8%
Importance of Rail Stations in my Next Housing Choice						
Extremely Important	36%	100%	25%	23%	36%	28%
Somewhat Important	53%		55%	53%	34%	54%
Not Very Important	10%		18%	3%	19%	12%
Would Never Move Next to a Rail Station	1%		2%	19%	1%	4%
Not Sure				2%	11%	2%

Source: Housing Demand Survey, 2011.

Note: Trade-off, Closer to Work and Closer to Bus Stops data are for the State of Hawai'i. Data regarding rail stations are for the City and County of Honolulu only.

The estimated number of households who were planning to move in the next several years was 138,116. Of those, 81 percent were commuter households – had one or more adult members who traveled to work or school at least three days a week during peak travel times. Just less than a quarter of the population (24%) made that commute using public transportation. The remaining 57 percent were commuters who use their own vehicles to travel to work or school.

There were more commuters on O'ahu than in Hawai'i, Maui or Kaua'i Counties. Public transportation was used by 28 percent of the potential movers on O'ahu and about half that

percentage (14% to 17%) in all other counties. Long commutes affected about the same proportion of people in all counties (12% to 14%). Commuters in Maui and Hawai'i typically made short commutes, while moderate commute times were more common among commuters on O'ahu and Kaua'i.

We also see that the majority of those who use public transportation are renters, while homeowners most often make a moderate daily commute. Because renters are more likely to be in multi-family dwellings, it follows that residents of multi-family dwellings are more likely than

residents in single-family homes to utilize public transportation or to be a non-commuter.

Results also indicated that the majority of non-commuters and those using public transportation

earn 80 percent of the HUD median or less. Members of higher income households, however, account for the majority of commuters with a moderate (16 to 35 minutes) to long (more than 35 minutes) daily commute.

Table 18: Commuter Household Characteristics, 2011

	Commuter Travel Time Situation					Total Households
	Use Public Transit	Short Commute Only	Moderate Commute	Long Commute	Not a Commuter Household	
Total Effective Demand Mover Households	33,286	24,965	33,956	18,362	27,547	138,116
County of Residence						
City & County of Honolulu	82%	60%	72%	73%	65%	71%
County of Maui	7%	18%	12%	10%	12%	12%
County of Hawai'i	8%	16%	11%	12%	18%	13%
Count of Kaua'i	3%	6%	5%	5%	5%	5%
Current Housing Tenure						
Own	18%	32%	45%	46%	33%	34%
Rent	82%	68%	55%	54%	67%	66%
Type of Unit						
Single-family	42%	39%	63%	71%	46%	51%
Multi-family	58%	61%	37%	29%	54%	49%
HUD						
30% or less	38%	31%	14%	12%	22%	24%
30% to 50%	23%	8%	19%	9%	19%	17%
50% to 80%	21%	26%	15%	21%	28%	22%
80% to 120%	6%	9%	18%	9%	6%	10%
120% to 140%	4%	3%	6%	19%	5%	7%
140% to 180%	4%	8%	9%	11%	7%	8%
Over 180%	4%	14%	19%	19%	13%	13%

Source: Housing Demand Survey, 2011. Non-Commuters do not commute further than one mile at least 4 days each week.

Note. Short Commute: 15 minutes or less; Moderate Commute: 16-35 minutes; Long Commute: more than 35 minutes;

Table 19: Commuting and Preferred Housing Situation, 2011

	Commuter Travel Time Situation					Total Households
	Use Public Transit	Short Commute Only	Moderate Commute	Long Commute	Not a Commuter Household	
Total Effective Demand Mover Households	33,286	24,965	33,956	18,362	27,547	138,116
Preferred Housing Tenure						
Homeowner	31%	53%	52%	53%	29%	43%
Renter	57%	41%	40%	40%	51%	46%
Other	13%	7%	9%	7%	20%	11%
Preferred Unit Type						
Single-family	58%	49%	61%	61%	44%	55%
Multi-family	40%	45%	35%	35%	49%	41%
Other/Undecided	2%	6%	4%	4%	7%	4%

Source: Housing Demand Survey, 2011.

SPECIAL NEEDS HOUSING IN HAWAII

The present HHPS marks the first time the study focused attention on housing demand and requirements among special needs populations.

Included in the special needs populations are

- Elderly;
- Frail Elderly;
- Exiting Offenders;
- Persons with Alcohol and Other Drug Addictions;
- Persons with Disabilities;
- Persons Diagnosed with HIV or AIDS;
- Persons with Severe Mental Illness;
- Victims of Domestic Violence; and
- Emancipated Foster Youth.

Elderly and Frail Elderly Persons

Among the 1.36 million residents of the State of Hawai'i, approximately 18 percent (241,984 persons) are age 62 or older²⁶. An additional 35,376 Hawai'i residents will age into the elderly classification within the next two years. As the baby boomers age, elderly persons are projected to account for more than one-quarter of Hawai'i's population by 2030.

The Hawai'i Public Housing Authority (HPHA) maintains 6,404 affordable housing units across the State. Of these, 1,771 units are designated for the elderly.²⁷

The number of families on the public housing waiting list is an indicator of the need for affordable rental housing opportunities. Of the close to 9,000 households on the public housing wait list, elderly families account for one-fifth of these (1,767 households). In 2009, of the more than 17,000 families on the wait lists for housing

vouchers statewide, 1,144 were elderly households.

The Hawai'i Department of Business, Economic Development and Tourism (DBEDT) predicts that, by 2030, there will be an additional 142,000 elderly households across Hawai'i (see Table 20). In order to accommodate the large number of elderly residents, DBEDT has forecasted the need for close to 55,000 new housing units equipped with amenities designed to serve elderly households by 2030 (see Table 21). Sixty percent of the new elderly housing units would be ownership units, with the remaining 40 percent for elderly renter households.

A subset of the elderly population, frail elderly are identified as those persons with physical or mental disabilities that may interfere with the ability to independently perform activities of daily living (i.e., bathing, dressing, toileting, and meal preparation). In the State of Hawai'i, there are 22,752 households that include one or more frail elderly persons (Table 22).

Housing Needs and Challenges

In 2011, the Housing Demand Survey evaluated the need for specific housing unit amenities among the elderly and frail elderly. The survey found that approximately 38 percent of elderly residents needed housing unit amenities such as ramps, railings, grab bars and emergency call systems.

Not only do the frail elderly need these kinds of quality of life modifications in their homes, they also need to be in close proximity to retail establishments and medical facilities with convenient access to public transportation.

²⁶ U.S. Census Bureau Decennial Census 2010.

²⁷ <http://hawaii.gov/dbedt/hhfdc/resources/Affordable-Housing-Inventory.pdf>

Table 20. Elderly Residents, State of Hawai'i 1980-2030

Age of Hawaii Residents	1980	1990	2000	2010	2020	2030
Total 60+	113,940	173,730	207,001	277,054	351,650	410,450
% of Total Population	11.8%	15.7%	17.1%	20.3%	23.6%	25.2%
% change		52.5%	19.2%	33.8%	26.9%	16.7%
Total 85+	5,560	10,397	17,564	30,238	33,800	40,350
% of Total Population	0.6%	0.9%	1.4%	2.2%	2.3%	2.5%
% change		87.0%	68.9%	72.2%	11.8%	19.4%
Total Population	964,690	1,108,230	1,211,540	1,360,301	1,489,550	1,630,450
% change		14.9%	9.3%	12.3%	9.5%	9.5%

Source: U.S. Census Bureau; Hawai'i Department of Business, Economic Development and Tourism.

Table 21. Housing Demand for Elderly Households, Forecast by County and State of Hawai'i for 2030

	County of Residence				State
	Honolulu	Hawaii	Maui	Kauai	
New Elderly Households ^a	97,524	18,521	6,979	18,714	141,738
New Units with Amenities Needed by 2030	38,799	8,398	2,644	4,480	54,816
For Owners	21,435	6,301	1,971	2,410	32,560
For Renters	17,364	2,097	673	2,070	22,256
Additional Needed Units Per Year					
For Owners	893	263	82	100	1,357
For Renters	724	87	28	86	927

^a DBEDT Estimated elderly population in 2030 minus elderly population in 2006

Source: Department of Business, Economic Development and Tourism.

Table 22. Frail Elderly Households, Counties and State of Hawai'i, 2011

	County of Residence								State	
	Honolulu		Hawaii		Maui		Kauai			
	Count	Pct	Count	Pct	Count	Pct	Count	Pct	Count	Pct
Households with One or More Members Age 60+	165,709	69.2%	34,123	14.2%	26,487	11.1%	12,781	5.3%	239,493	100.0%
Households with Frail Elderly Members	15,577	9.4%	3,958	11.6%	2,331	8.8%	984	7.7%	22,752	9.5%

Source: Housing Demand Survey, 2011

Exiting Offenders

When incarcerated offenders are released from one of Hawai'i's correctional facilities, housing is often their most immediate concern. Although some exiting offenders will return to their pre-imprisonment residence upon their release, most will be in need of affordable rental housing options.

In 2009, approximately 1,230 offenders entered probation following incarceration. An additional 733 inmates were paroled back into the community.²⁸

According to the State Judiciary System, each year there are about 495 probationers in the state who have special housing needs. Of these, 25 percent are drug court probationers, 10 percent are considered "high-risk," and the rest are general probationers. In addition, the Hawai'i Paroling Authority reports that approximately 375 people released from prison on parole each year have special housing needs.

Housing Needs and Challenges

Hawai'i currently offers several housing alternatives to exiting offenders. These options are summarized in Table 23.

The importance of alternative housing options for exiting offenders is underscored by the results of several recent studies. Offenders participating in halfway house programs were found to commit fewer and less severe offenses during a one-year outcome analysis (at a statistically significant level) than those who did not participate²⁹. Participants also performed better on a range of other outcome measures, such as finding and holding a job, being self-supporting, and participating in self-improvement programs.

Persons with Alcohol or Drug Addictions

In 2004, the statewide total number of persons in need of alcohol and/or drug treatment was estimated to be 78,896. This represents an increase of approximately 10 percent between 1998 and 2004.

Approximately five percent of these individuals (3,759) are adolescents in grades 6 through 12 who are in need of treatment for alcohol or drug use, or both.

Alcohol is the drug of choice among the majority of the 78,896 adults in need of substance abuse treatment. Three out of four persons are in need of treatment for alcohol abuse, 13 percent for illegal drug abuse, and 10 percent for abuse of both drugs and alcohol.

Housing Needs and Challenges

According to providers, there is a need for more clean and sober housing during the recovery period. The most pressing need is for clean and sober houses for women with children, followed by a similar housing option for single women.

²⁸ Probation and Parole in the United States. Bureau of Justice Statistics. 2009.

²⁹ Seiter, Richard and Kadela, Karen. Prisoner Reentry: What Works, What Does Not, and What Is Promising. Crime & Delinquency, Vol. 49 No. 3, July 2003. pp. 360-388.

Table 23. Transitional and Supportive Housing Options for Exiting Offenders, 2011

Program	County	Capacity	Gender Served	Duration
Ponahawai Ola	Hawaii	20 studio & two 2BR units	Both	max. 2 years
Home of Reawakening	Oahu	100 women/year	Women	min. 6 months
BEST House	Maui	25 residents	Men	min. 2 years

*Being Empowered and Safe Together

Table 24. Dependence on Alcohol and/or Illicit Drugs, State and Counties of Hawai'i, 2008

		Alcohol Dependence/ Abuse in Past Year	Illicit Drug Dependence/ Abuse in Past Year ¹	Dependence on/Abuse of Illicit Drugs, Alcohol or Both in Past Year ¹
Honolulu	Count	84,263	23,163	98,848
	Percent	8.8%	2.4%	10.4%
Hawaii	Count	14,880	5,016	17,749
	Percent	8.0%	2.7%	9.6%
Maui	Count	12,108	3,484	13,734
	Percent	7.8%	2.3%	8.9%
Maui and Kauai**	Count	16,933	5,149	19,618
	Percent	7.6%	2.3%	8.8%
State	Count	116,170	33,327	136,302
	Percent	8.5%	2.5%	10.0%

*Count represents unduplicated individuals

**A separate Kauai estimate is not being reported because of low precision.

NOTE: Dependence or abuse is based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

¹ Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically; these estimates are based on data from original questions, excluding those on the use of over-the-counter drugs or new methamphetamine items that were added in 2005 and 2006.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006, 2007, and 2008.

Persons with Disabilities

In 2009, there were approximately 130,500 people in the state of Hawai'i with a form of disability³⁰. This represents approximately 10.6 percent of the State of Hawai'i's non-institutionalized population.

Persons with disabilities require special housing considerations not only to accommodate physical limitations, but also as a result of their financial challenges. Hawai'i's residents with disabilities

are more likely than residents without disabilities to have incomes below the poverty line.

Among Hawai'i residents with disabilities, 45 percent are between the ages of 18 and 64 and considered as being of working age. More than half of all persons with disabilities, however, are not in the labor force (53%; 62,300 individuals). Among persons with disabilities in the work force, 14 percent are presently unemployed compared to eight percent of persons without disabilities³¹.

³¹ Source: Department of Labor's Bureau of Labor Statistics <http://www.bls.gov/cps/cpsdisability.htm>

³⁰ American Community Survey, 2009.

Table 25. Disability, Employment, and Poverty Percentages, State and Counties of Hawai'i, 2009

	Honolulu	Hawai'i	Maui	Kauai	State
Total Disabled Population	87,950	22,004	13,186	7,295	130,435
Type of Disability					
Sensory	17.5	21.9	13.4	17	17.6
Physical	34.7	39.9	31.8	29	34.6
Mental	19.8	27.8	15.4	17.1	20.5
Self-care	11.5	12.9	13.6	9.3	11.6
Go-outside-home	21.2	21.9	14.1	17.5	20.4
Employment/Poverty Status					
Employed	42.5	39.1	55	42.7	42.9
Below poverty level	14.7	21	9.7	18.5	15.5

Sources: ACS 2009; Center on Disability Studies Annual Report 2009-2010.

Nearly one-quarter of Hawai'i residents with disabilities (23%) lives below the poverty line, compared to only ten percent of those without disabilities in the population. The median income for households with persons with disabilities statewide was \$59,100, 22 percent lower than the median for households with no disability. The disparity varied by County. Incomes for workers without disabilities for the City & County of Honolulu were 72 percent higher than the incomes of workers with disabilities.

Housing Needs and Challenges

All of these factors contribute to difficulties finding affordable housing for people with disabilities.

Hawai'i households that include a member with a disability are almost evenly divided between homeowners and renters, 58 and 42 percent, respectively. Housing units used by persons with disabilities are most often single-family homes (72%) or apartments (13%).

Statewide, about 19 percent of households with at least one person with a disability currently live in public housing³². An additional 1,774 households with a member with a disability are on the wait list for public housing units,

accounting for 17 percent of the close to 9,000 households on the public housing wait list.

Households with persons with disabilities on public housing wait lists may also be on the wait list for Section 8 housing vouchers. About one-fourth of Hawai'i residents with disabilities (21%) receive Section 8 assistance. Nearly 3,000 of the over 17,000 families waiting for Section 8 rental assistance have members with disabilities (17%).

Persons with Developmental Disabilities

The Department of Health, Developmental Disabilities Division reported that 3,292 Hawai'i residents with developmental disabilities were being served.³³

In 2008, there were 2,426 adults with Developmental Disabilities/Mental Retardation (DD/MR) living in various residential settings³⁴. Of that number, 2,230 lived with their family and 196 lived in settings other than with family. There were 14 individuals who wanted to live independently in their own home (with or without supports), but would require a rental subsidy to help pay for rent. These individuals lived with their family, relatives, in an Adult Residential Care Home (ARCH) or Adult Foster Home (AFH), or were homeless, but remained in their current living situation due to limited resources to assist them to live independently.

Housing Needs and Challenges

Although the process may be in place to address the individual's choice of residential setting, limited resources are available to support their choices, like initial deposits and monthly rent payments. Limited resources for Section 8 vouchers, low cost rentals, and rent subsidies, and the high cost of living in Hawai'i make it challenging for individuals with DD/MR to obtain housing and live independently.

³² HHPS Housing Demand Survey 2011

³³ City & County of Honolulu Consolidated Plan 2011-2015.

³⁴ Report to the Twenty-Fifth Legislature State of Hawai'i, 2009.

Table 26. Total Persons with Disabilities, State and Counties of Hawai'i, 2009

	Honolulu	Hawaii	Maui	Kauai	State
Total Population	849,255	174,676	144,047	63,571	1,231,549
Under 18 years:	23.4%	23.4%	23.1%	23.0%	23.4%
With one type of disability	0.5%	0.5%	0.4%	0.1%	0.4%
With two or more types of disability	0.1%	0.1%	0.1%	0.3%	0.1%
18 to 64 years:	61.3%	62.6%	64.4%	63.2%	62.0%
With one type of disability	2.7%	3.2%	3.3%	2.9%	2.8%
With two or more types of disability	1.7%	3.4%	1.3%	2.3%	1.9%
65 years and over:	15.2%	14.0%	12.5%	13.8%	14.7%
With one type of disability	2.2%	2.5%	2.2%	2.9%	2.3%
With two or more types of disability	3.2%	3.0%	1.9%	3.0%	3.0%
Total Disabled Population	10.4%	12.6%	9.2%	11.5%	10.6%

Source: ACS 2009

Persons with HIV/AIDS

Included in this population are persons with acquired immunodeficiency syndrome (AIDS) or related diseases or any condition arising from the etiologic agent for acquired immunodeficiency syndrome, including infection with human immunodeficiency virus (HIV).

According to the annual HIV/AIDS Surveillance Report issued by the Hawai'i State Department of Health at the end of 2010, the cumulative number of individuals diagnosed with HIV/AIDS in Hawai'i is 4,209. Of those, 55 percent (2,318 persons) are confirmed living. Due to recent changes in the method for counting HIV and AIDS cases, a notable increase in the number of HIV cases will likely appear in the 2011 report.

The 2008 Hawai'i AIDS Clinical Research Program (HACRP) Statewide HIV/AIDS Medical Care Needs Assessment indicates that there are 2,700 confirmed people with HIV living in Hawai'i.

Housing Needs and Challenges

The HACRP survey found that 74 percent of the 2,700 confirmed Hawai'i residents with HIV were in need of housing assistance (63% long term and 11% short term). This finding indicates a need for nearly 2,000 housing units.

Gregory House is a non-profit agency in Honolulu serving around 165 persons with HIV/AIDS. The agency maintains 46 rental assistance dwellings designated for low-income Hawai'i families with HIV or AIDS. It also has 11 beds in transitional housing for single adults with HIV/AIDS. Gregory House currently has 75 individuals on a wait list for housing, all of whom are homeless or at risk for homelessness.

According to the National Coalition for the Homeless, lack of affordable housing is a critical problem facing a growing number of people living with AIDS and other illnesses caused by HIV³⁵. People with HIV/AIDS may lose their jobs due to discrimination or because of the fatigue and periodic hospitalization caused by HIV-related illness. They may also find their incomes drained by the costs of health care.

Persons living with HIV/AIDS who do not have stable housing may lack ongoing HIV care and often rely on more costly care from emergency and acute care facilities. They have poorer health outcomes and shorter lives³⁶. Stable

³⁵ "HIV/AIDS and Homelessness." NCH Fact Sheet #9. National Coalition for the Homeless. August, 2007. <http://www.nationalhomeless.org/publications/facts/HIV.pdf>

³⁶ *Housing is Cost-Effective HIV Prevention and Care*. The North American Housing & HIV/AIDS Research Summit Series. February 2011.

housing for those people can reduce emergency visits by 35 percent and hospitalizations by 57 percent³⁷. Housing assistance leads to savings in avoidable health services that more than offset the costs of housing interventions³⁸

The Maui AIDS Foundation serves as a centralized administrative agency to provide tenant-based rental assistance; short-term rental, mortgage and utility payments; permanent housing placement and supportive services for 350 eligible residents in the Counties of Hawai'i, Kaua'i and Maui.

Also serving the HIV/AIDS population is the Neighbor Island HIV/AIDS Coalition (NIHAC). Established in 1998, NIHAC is a cooperative effort of the three community-based AIDS service organizations (Malama-Pono Kaua'i AIDS Project, the Maui AIDS Foundation, and the Hawai'i Island HIV/AIDS Foundation) serving the islands of Kaua'i, Moloka'i, Lana'i, Maui and Hawai'i. Out of this coalition arose the Neighbor Island Housing Program (NIHP), which is funded by both formula and competitive HOPWA grants. NIHP provides tenant-based rental assistance, short-term rental, mortgage and utility payments, housing placement assistance services, as well as supportive services/ case management at the respective islands AIDS Service Organizations.

Persons with Severe Persistent Mental Illness

According a report issued by the National Alliance on Mental Illness (NAMI) in 2010, close to 32,000 of Hawai'i's residents live with severe mental illness. Of those, about 11,000 are receiving services from the State Department of Health's Adult Mental Health Division (AMHD).³⁹

<http://nationalaidshousing.org/PDF/Factsheets-Cost%20Effective.pdf>

³⁷ Op. cit.

³⁸ Bauer, J., Battist, A., & Bamberger, J.D. *Housing the Homeless with HIV in San Francisco*. Presented at the North American Housing and HIV/AIDS Research Summit V. Toronto, Ontario, June 2010.

³⁹ AMHD. *Community Housing Plan for Adults with Severe and Persistent Mental Illness, 2008-2012*. Nov. 2007.

While many mentally ill individuals receive treatment from private physicians, it is highly likely that a large number of Hawai'i residents with severe mental illness are not receiving treatment or support.

Housing Needs and Challenges

Service providers and advocates who work closely with Hawai'i's mentally ill population note four types of challenges related to finding adequate housing for members of this group.

1. Insufficient funding to provide Section 8 housing vouchers needed is historically a challenge, and was exacerbated when the economic crisis led to severe budget cuts.
2. Because there are rules barring persons with a history of drug abuse from public housing, and substance abuse is extremely common among persons with SPMI, finding appropriate housing for persons with SPMI is difficult.
3. Employment opportunities for mentally ill individuals are often very limited so the likelihood of them becoming and remaining gainfully employed is not high.
4. A lack of blended housing that provides both shelter and supportive services makes it difficult to place SPMI patients in suitable housing.

According to the Community Housing Plan 2008-2012 published by the AMHD, approximately 9,600 of the persons with severe and persistent mental illness have extremely low incomes and are in need of housing assistance. Of these, approximately 30 percent (2,880) are living in stabilized housing. Another 2,094 mentally ill persons currently receive AMHD subsidized housing.

Although the need for affordable housing among the remaining 4,626 will be addressed by AMHD's anticipated production of 1,670 units by

2012⁴⁰, nearly 3,000 Hawai'i residents with SPMI will still need housing.

Victims of Domestic Violence

It is estimated that 1 in 4 women will experience domestic violence at some point during her lifetime. With females accounting for half of Hawai'i's population of 1.36 million, that is close to 170,000 women subjected to domestic violence. In Hawai'i, as in the nation, domestic violence is one of the most under-reported crimes so the true number of victims is unknown.

On September 15, 2010, the National Network to End Domestic Violence (NNEDV) conducted a Census of Domestic Violence Services among sixteen agencies in Hawai'i that provide services to victims of domestic violence⁴¹. On that day, 525 Hawai'i residents sought assistance. Among them, 253 domestic violence victims (48%) found refuge in emergency shelters or transitional housing provided by domestic violence programs.

The remaining 272 adults and children received non-residential assistance and services, including individual counseling, legal advocacy, and children's support groups. In addition, there were 95 unmet requests for service during the study period, five of which were for emergency shelter or transitional housing.

Bridge to Success, a transitional shelter for women and children on O`ahu, has eight housing units. Family House on O`ahu has 15 units.

Housing Needs and Challenges

Many victims of domestic violence are forced to stay with or return to their abusive partners due to a lack of available shelter or affordable housing. One study found that 46 percent of

homeless women reported staying in an abusive relationship because they had nowhere else to go.⁴²

As communities continue to experience job losses and lower community resources, 75 percent of programs surveyed in the 2010 NNEDV study reported a rise in demand for services. At the same time, 94 percent reported funding decreases.

The number of people in need of federal rent subsidies to afford housing outweighs the number of units available, causing some people to remain on the waiting list for years⁴³.

Victims and survivors of domestic violence often encounter difficulties finding housing, as their history of abuse may have caused poor employment, credit or rental histories⁴⁴. These individuals need access to safe, adequate, and affordable housing in order to achieve independence and permanently end the cycle of violence.

Emancipated Foster Youth

Estimates by the Hawai'i Department of Human Services in 2010 indicate that 150 youth per year leave the foster care system through emancipation at age 18, and an additional 50 youth leave the system at age 16 for other reasons.⁴⁵ The vast majority of these youth (85%) live on O`ahu.

⁴⁰ AMHD. *Community Housing Plan for Adults with Severe and Persistent Mental Illness, 2008-2012*. Nov. 2007. p.22.

⁴¹ Domestic Violence Counts: Hawai'i Summary. National Network to End Domestic Violence, 2010. http://www.nnedv.org/docs/Census/DVCounts2010/DVCounts10_StateSummary_HI_Color.pdf

⁴² *Homeless in Minnesota, 2003*. Wilder Research Center. February 2004.

⁴³ Davies, J. & Hammeal-Urban, R. *Federal Housing and Domestic Violence: Introduction to Programs, Policy, and Advocacy Opportunities*. National Resource Center on DV, 1999.

⁴⁴ Reif, Susan & Krishner, Lisa. *Subsidized Housing and the Unique Needs of DV Victims*. National Center on Law and Policy, 2000.

⁴⁵ "Statement of Need for Family Unification Program and Certification of Cooperation with the U.S. Department of Housing and Urban Development" from Lillian Koller, Director, Hawai'i Department of Human Services. January 21, 2009. As cited in City & County of Honolulu Consolidated Plan 2011-2015.

Upon exiting the foster care system, some youth may be able to remain with their foster parents or return to living with their immediate or extended family. Many of these young adults, however, transition into tenuous living arrangements, often in substandard and/or overcrowded conditions. National studies suggest that approximately 30 percent of former foster youth will experience homelessness shortly after leaving foster care. When applied to O`ahu, this would suggest that between 32 and 45 former foster care youths are at risk for homelessness each year.

Housing Needs and Challenges

Most of the 150 youth exiting the foster care system each year need assistance to find or maintain permanent housing. While connections to housing resources have improved, more could be done to support foster youth planning for transition and finding affordable housing.

A number of service providers emphasized the need to create affordable housing for former foster youth and/or improve access to Section 8 housing. The need for more “youth-friendly” independent living programs and group homes⁴⁶ that serve the particular needs of foster youth has also been emphasized. Some potentially viable residential alternatives would need to make simple changes to their policies in order to allow youth to work late hours or attend evening courses, for example.⁴⁷

Special Needs Housing Summary

Table 27 presents a summary of the data assembled as part of this study. It shows population counts, housing demand, and

supportive housing options for each of the nine groups targeted this year.

The data have several shortcomings. They are incomplete; based on different definitions of size, type, and need; and may include significant duplication. Some of the data we collected are several years old, and based on self-report or rough estimation. Total population counts are often based on individuals served rather than persons affected. Figures are rarely taken from systematic records of housing need. This type of data is obviously not ideal for quantifying the actual number of individuals in need of housing assistance.

At this time, it is not possible to estimate housing needs among Hawai`i's special needs groups accurately. We believe the data will allow us to improve on the numbers used in previous Consolidated Plans, but developing estimates that can support effective housing planning will take additional time and effort.

⁴⁶ The term group home is used here to represent the various types of community-based, residential facilities where a number of individuals with special needs live and receive services, including foster homes and other therapeutic residential settings.

⁴⁷ Center on the Family, University of Hawai`i at Manoa prepared for Hawai`i Community Foundation and Victoria S. Bradley L. Geist Foundation, “Jim Casey Youth Opportunities Initiative,” May 2009

Table 27. Summary of Special Needs Households in Need of Supportive Housing, State of Hawai'i

Special Needs Population	Special Needs Pop. Count	% of Total Population	Affordable Housing Inventory	HH In Need of Supportive Housing
Elderly	247,678	18.2%	6,184	2,081
Frail elderly	8,396	0.6%		219
Exiting offenders	1,963	0.1%	Data UA*	870
Persons with alcohol/drug addictions	136,302	10.0%	Data UA	Data UA
Persons with disabilities	130,435	9.6%	Data UA	Data UA
Persons with developmental disabilities	2,426	0.2%	Data UA	14
Persons with HIV/AIDS	2,317	0.2%	Data UA	600-1600
Persons with severe mental illness	32,000	2.4%	284	9,600
Victims of domestic violence	575	0.0%	Data UA	Data UA
Youth exiting foster care	150	0.0%	Data UA	150

*Data Unavailable

Elderly data from Census 2010

Frail elderly data from HPS Housing Demand Survey 2011

Exiting offenders data from Bureau of Justice Statistics, Probation and Parole in the United States-2009. Not available at the County level so State data was distributed according to proportion of the population.

Substance abuse data from SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006-2008

Persons with disabilities data from ACS 2009

Persons with developmental disabilities data from DDD, CMISB - Report to the 2009 Legislature pursuant to Act 303, SLH 2006

HIV/AIDS data from 2011 HIV/AIDS Surveillance Report

Mental illness data from Hawai'i Department of Health, Adult Mental Health Division

Domestic violence data from the Hawai'i Department Of Human Services (DHS)

As we now move to a discussion of data issues in estimating housing need among Hawai'i's special needs groups, many issues will be brought to light. It is sometimes a very human reaction to look to the providers of information to find fault or lay blame. The investigators in this research found absolutely no evidence that any government agency or service provider at any level has ever neglected, ignored, or even accidentally overlooked the needs of the people under their charge. Quite the contrary, they are capable administrators, sensitive caregivers, and concerned advocates for their clients. If we have used words or phrases that convey any other characterization of their work, it was not intended on our part. Any problems we identified are systemic, not personal, and their solutions should look to procedures and tactics, not fault finding.

Group Size: Figures in the first data column in Table 27 are based on very different definitions. In the case of elderly persons, for instance, the figures are population counts -- U.S. Census counts of persons 60 years of age or older residing in non-institutionalized housing units in the State of Hawai'i. In the case of persons with HIV/AIDS, the estimate is a registry count, the number of persons on the Department of Health registry of persons with HIV/AIDS.

There may indeed be some persons with HIV/AIDS who do not appear on the list, but most observers believe it is a reasonably accurate estimate of the target group size. In the case of children exiting foster care programs, the counts are management information reports. In some cases, these definitions may be problematic. A reliable count of persons with physical or mental disabilities, for instance, may never be known.

Persons in Need of Housing Assistance: The numbers shown in the fourth data column are very rough estimates for most groups and, in some cases, even rough estimates were not available. Estimates for larger groups like the elderly were taken from Census and survey data. For most groups, estimates of housing need were based on experience of agency staff or

service providers. Some respondents concluded that all their clients had housing needs and there were rational bases for that opinion. The estimates fall short, however, of the kind of data required for effective housing planning.

Housing Inventories: There are two types of data on housing supply for special needs groups. First, there are units dedicated to the use of members of a specific group. Second, there are housing units in the public, affordable, and market level inventory that can be used by special needs groups. We concentrated on the first category.

While many agencies could count at least some units available to their clients, very few had exhaustive counts of dedicated units. According to our informants, there are no units available specifically for populations like youth exiting foster care or persons with physical disabilities.

A major issue related to special needs group housing is the level of service required by members of those groups. We found it useful to discuss services needs according to three levels of service required.

Low service clients are members of a special needs group whose need for services housing is very low. Their needs can be met by occasional access to off-site services and their housing needs accommodated by affordable or even market level housing.

Medium service clients have need for services that can be met with off-site or home delivered services. Their housing needs can be met by affordable units with access to services. Although not a requirement, public housing provides particularly useful solution to both those issues.

High service needs clients may need extensive services, security, and supervision, the kind of services usually available in group homes.

This characterization of clients with different level of service need is particularly useful in dealing with housing issues because it make definitions of types of units needed easier. Our informants

understood the system, and reported that this kind of classification is behind their development of treatment plans or continuum of care for their clients. None of them had specific classification system of counts of client according to this classification system at this time.

Unmet Housing Need: Estimating the need for three types of housing requires group population estimates for the three types of clients. Even if we limit our counts to units to serve the high need group, figures are spotty. There are group homes reserved for the needs of specific groups with high need for services and some of those are included in Table 26. Where group homes are managed or licensed by the state, full counts are available.

Special Needs Housing Issues

The government agencies and service providers who care for Hawai'i's special needs groups manage extensive and effective programs to serve those groups. While housing plays a very important role in caring for clients, documenting housing need is not a specific part of their programs. There are several reasons for this.

First, most government programs and service providers do not have programmatic elements designed specifically to address housing needs. As one provider put it, "We don't do housing." That stems from the fact that their programs are not funded to solve housing problems.

That does not mean that they do not deal with housing. They all agree it is difficult or even impossible to deliver effective services to clients who have no place to live. Further, among all their clients' problems, finding a place to live is the most difficult to solve. With the exception of agencies that provide group homes or similar accommodations, housing is often handled by service delivery personnel in the field. For some agencies, that means referring clients to public housing agencies.

Virtually all the providers with whom we spoke would agree with the "housing first" philosophy applied to homelessness. It is very difficult to

solve social or health problems when the client has no sustainable housing.

Second, even when housing referrals or placements are part of the program, there is no outreach or follow-up to ensure that appropriate housing is sustained. That means the client may relapse or return to the program for services.

Third, most agencies serving Hawai'i's special needs groups do not record data on housing need and have no data reporting system designed to support housing planning. Many were able to provide data for us only by requesting special tabulations or polling their staff or contractors. Housing data are not routinely reported to legislators, funders, or evaluators. The numbers are ancillary (at best) to their program outcomes and internal planning efforts. There is no reason to make formal definitions, collect data, or make reports on an ongoing basis.

Finally, the agencies and service providers do not gather housing data because they are unaware that providing those data can do any good. They do not think that housing assistance for their clients is available. If there were a place to go to obtain housing resources for their clients, they would use it. In preparation for obtaining those resources or services, they would prepare housing needs data on a regular basis.

That does not mean they do not currently use or benefit from federal state and county housing programs. There are HUD-funded group homes in Hawai'i that were negotiated through our housing agencies. There are special needs group clients who reside in public or affordable housing supplied by housing agencies. They are not, however, considered day-to-day solutions to the housing needs of special needs populations.

It also does not mean that agencies that serve special needs groups are uninterested in collaboration that would serve their clients. If housing solutions can be found, they are interested in helping plan for them. If that means data are required, they would gather those data.

Issue Summary

The intent behind the special needs group housing table in the ConPlan is to provide reliable data to support housing plans. Current data for that table are less than reliable and do not support effective housing planning.

Government agencies and service providers that serve special needs groups have housing needs and are willing and interested in pursuing possibilities for solving them. We believe that includes willingness to provide the data necessary for effective planning.

This study found that communication and coordination between housing agencies and special needs groups agencies can be improved to the benefit of all. The current situation does not provide needs group agencies with the service they need, nor the incentive to provide

needed data. The housing agencies cannot provide and reasonably plan to improve the housing situation of special needs groups without data for planning.

It is likely that without improved communication and collaboration the periodic effort to fill out the ConPlan tables is quite likely to continue to produce inadequate data.

Any effort to initiate communication between the housing agencies and those who serve the special needs groups is likely to improve the situation. It will, of course be necessary to avoid generating unreasonable expectations at the beginning, and to expect the full benefits of the communication to manifest itself with time.

HOMELESSNESS IN HAWAII

Since we began counting homeless people in 1992, Hawai'i has worked diligently to understand the origins and nature of the problem. In past HHPS studies, we have sided with those who view homelessness as a housing problem⁴⁸ rather than an economic or social problem. That viewpoint is also found in Hawai'i's primary source of housing policy and planning, the Consolidated Plan⁴⁹.

Certainly, homelessness has roots in both poverty and in housing stock. There is another school of thought in homeless literature that sees the housing market as the prime source of the problem and the focus of its solution.

In the 1980s, low-end housing units began to disappear from the spectrum of units that serve our housing markets. We lost single-room occupancy (SRO) units, rooming houses, dilapidated homes, as well as temporary housing units and informal or squatters' housing. The losses occurred due to deterioration, abandonment, destruction, redevelopment, gentrification, more stringent regulations and codes, and replacement housing. All of these eliminated low-end housing units and drove up the quality and the cost of our housing stock. It was about that time, during the mid-1980s, that homelessness surfaced as a public issue⁵⁰.

Some also believe that the plight of the poor worsened during the same period -- that as their housing options were shortened, unemployment lightened their wallets, and their buying power slipped⁵¹. The issue is not that there were more poor people or that people who were not poor

before suddenly became poor. Rather, low-end housing units disappeared and the poor were without units to rent.

To those scholars, homeless people are not homeless because of their situation. They are poor because of their situation. They are homeless because there are no low-priced housing units that poor people can buy or rent.

Some apply this idea to the most difficult group to house, those with pathologies to match their poverty: "Even if there was a way to stabilize the mentally ill homeless, or treat the alcoholic and drug-addicted homeless, or reintegrate the estranged homeless with their families and friends, almost all would still be poor. As poor people, they would then face the same housing problem that all poor people face -- an insufficient and dwindling supply of low-income housing"⁵².

This is an important point. Glaeser notes that providing housing for people with very low incomes is not a housing policy issue. The inability of the poor to secure housing has nothing to do with the housing market in which they live. The solution lies in providing resources to the poor. But if, as HUD suggests, the problem is actually tied to the number of housing units available in a specific market, then there might be a malfunctioning of the market itself, specifically, the inability of the market to produce units when demand is expressed. We believe this is at least one of the causes of homelessness in Hawai'i.

Homeless Data

There are two main sources of data on Hawai'i's homeless population: the Homeless Point-in-Time (PIT) Count and the state's Homeless Management Information System (HMIS).

⁴⁸ Hawaii Housing Policy Study, 2006, Homeless Study Report, State of Hawaii, p. 89.

⁴⁹ State of Hawai'i, Consolidated Plan, 2010—2014, prepared by Housing Development and Finance Corporation.

⁵⁰ Angel, Shlomo, (2000). Housing policy matters: A global analysis. Cambridge, England: Oxford University Press, p. 324.

⁵¹ Rossi, Peter H. (1989), Down and out in America: The origins of homelessness. Chicago: University of Chicago Press.

⁵² Wright, James D., Beth A. Rubin, 1991. Is homelessness a housing problem? Housing Policy Debate, 5 (Issue 2): 177-202.

The PIT Count is a “snapshot” of the homeless population designed to produce statistically reliable, unduplicated counts or estimates of homeless persons in sheltered and unsheltered locations on a single night⁵³. PIT Counts conducted during the last three years reported a less than one percent increase in the State’s total homeless population between 2009 and 2010. Between 2010 and 2011, however, the total number of homeless persons statewide increased by more than six percent. The City and County of Honolulu had the most dramatic increase between 2009 and 2010 (14%), while Maui and Kaua’i had the most dramatic increases between 2010 and 2011 (33% and 23%, respectively).

Table 28. Homeless PIT Counts, State and Counties of Hawai‘i, 2009-2011

PIT Counts	2009	2010	2011	% chg '09-'10	% chg '10-'11
Sheltered	3,268	3,535	3,632	8.2%	2.7%
Honolulu	2,445	2,797	2,912	14.4%	4.1%
Maui	422	392	394	-7.1%	0.5%
Kaua’i	80	60	97	-25.0%	61.7%
Hawai‘i	321	286	229	-10.9%	-19.9%
Unsheltered	2,514	2,299	2,556	-8.6%	11.2%
Honolulu	1,193	1,374	1,322	15.2%	-3.8%
Maui	581	399	658	-31.3%	64.9%
Kaua’i	125	213	239	70.4%	12.2%
Hawai‘i	615	313	337	-49.1%	7.7%
Total	5,782	5,834	6,188	0.9%	6.1%
Honolulu	3,638	4,171	4,234	14.7%	1.5%
Maui	1,003	791	1,052	-21.1%	33.0%
Kaua’i	205	273	336	33.2%	23.1%
Hawai‘i	936	599	566	-36.0%	-5.5%

Source: State of Hawai‘i PIT Counts 2009-2011.

The 2011 PIT Count also showed an eleven percent rise in unsheltered homeless across the State. This was following a decline in the number of unsheltered homeless persons of nearly nine percent the prior year. The current PIT Count also identified a three percent increase in sheltered homelessness.

⁵³ Usually in the last 10 days of January, when the weather is typically coldest.

HMIS is a centralized electronic data system to which homeless service providers receiving State or Federal funds submit intake and exit data on clients they serve. The annual Homeless Service Utilization Report, produced by the Center on the Family at the University of Hawai‘i and the Hawai‘i Department of Human Services (DHS), provides detailed information on homeless persons served through Shelter and Outreach Programs during a 12-month period.

Table 29. People Served by Outreach Program, State and Counties of Hawai‘i, 2008-2010

County	FY 2008	FY 2009	FY 2010	% Change 2008-09	% Change 2009-10
Honolulu	5,194	5,248	5,368	1.0%	2.3%
Hawai‘i	835	961	1,092	15.1%	13.6%
Maui	1,260	1,251	1,163	-0.7%	-7.0%
Kaua’i	496	392	374	-21.0%	-4.6%
State	7,785	7,852	7,997	0.9%	1.8%

Source: HMIS, 2008-2010.

According to HMIS data, the Shelter Program served 7,630 individuals (3,758 households) statewide in 2010⁵⁴. The numbers have been stable since 2009 after four years of growth.

At the county level, the City and County of Honolulu showed continuous growth since 2008 (from 5,023 to 5,660 in 2010). The rate of growth was slower last year -- four percent for 2009–2010 versus nine percent for 2008–2009. The increase was offset by a decrease in other counties. The number of shelter clients served in Maui County continued to decline and dropped from 1,189 to 1,016 over the last three years. Also in decline were the numbers for Kaua’i and Hawai‘i, which were on an upward trend from 2007, then dropped last year at a rate of 16 percent and 12 percent, respectively.

The ratio of PIT Count homeless to HMIS-served homeless is about 0.44. That suggests that on any given night we might encounter 44 percent of all the homeless served during the year. That unrefined churn rate reflects a high degree of

⁵⁴ Yuan, S., Trundle, H., and Fong, G. (2010). *Homeless Service Utilization Report: Hawai‘i 2010*. Honolulu: University of Hawai‘i, Center on the Family.

turnover in the population served during the year. City and County of Honolulu and Hawai'i County ratios are .46 and .47, respectively. Maui is close behind at .37. Kaua'i is only .20, suggesting very high churn on Kaua'i.

Table 30. Homeless PIT and HMIS Counts, State and Counties of Hawai'i, 2010

Homeless Counts	HMIS 2010	PIT 2010	Percent HMIS	Percent PIT
Sheltered	7,630	3,535	48.9%	60.6%
Honolulu	5,660	2,797	36.3%	47.9%
Maui	1,016	392	6.5%	6.7%
Kauai	331	60	2.1%	1.0%
Hawaii	623	286	4.0%	4.9%
Unsheltered	7,974	2,299	51.1%	39.4%
Honolulu	5,350	1,374	34.3%	23.6%
Maui	1,161	399	7.4%	6.8%
Kauai	373	213	2.4%	3.7%
Hawaii	1,090	313	7.0%	5.4%
Total	15,604	5,834	100.0%	100.0%
Honolulu	11,010	4,171	70.6%	71.5%
Maui	2,177	791	14.0%	13.6%
Kauai	704	273	4.5%	4.7%
Hawaii	1,713	599	11.0%	10.3%

Sources: State of Hawai'i PIT Count 2010 and HMIS 2010.

The number of individuals served by the Outreach Program statewide and in the City & County of Honolulu increased by only about 2 percent between 2009 and 2010. The largest increase occurred in Hawai'i County, where the number of individuals served has increased 14 to 15 percent per year since 2008. In contrast, fewer individuals were served by the Outreach Program in Kaua'i and Maui in 2010 (5% and 7% fewer, respectively).

Hidden Homeless

Doubled-up households are households in which more than one family share accommodations. These households include multigenerational families (two or more families or groups of persons who are related by birth, marriage or adoption) and unrelated families (two or more

families or groups whose members are not related by birth, marriage, or adoption).

Hidden homeless persons are those who are doubled up for economic (rather than social or familial) reasons. Their numbers do not include double-up households sharing accommodations because they prefer to live as extended families.

In previous HHPS, the method of estimating the number of hidden homeless was complicated and based on eight different questions in the Housing Demand Survey, including the number of persons in the household, their relationship to the survey respondent, intention to move with all household members, and having separate incomes. In 2011, we used a new question that asked, "Is anyone living in your home who is not a member of your immediate family, not paying rent, and does not have the resources to buy or rent their own place?" Those respondents who answered affirmatively were then asked how many individuals in the household fit that description. Results are shown in Table 31.

Table 31. Hidden Homeless Households, State and Counties of Hawai'i, 2011

	City & County of Honolulu	County of Maui	County of Hawai'i	County of Kaua'i	State of Hawai'i
Total Households	310,882	54,132	67,096	23,201	248,017
Hidden Homeless in Household					
Yes	7%	8%	8%	7%	7%
No	92%	91%	91%	92%	92%
Not Sure	1%	1%	1%	1%	1%
Total Households with Hidden Homeless	15,606	3,327	4,286	1,372	455,311
Number of Hidden Homeless Members					
One	62%	67%	68%	76%	64%
Two	24%	15%	20%	10%	21%
Three or More	15%	19%	12%	15%	15%

Source: Housing Demand Survey, 2011. Note: Single-person households and respondents to the Maui mail survey were not asked this question.

The older and more complicated method of estimating hidden homelessness found 6.3 percent of all households in the State included some hidden homeless persons. The newer method found 6.7 percent included hidden

homeless persons. We believe the new method is a bit more accurate because it is more direct.

Across the State, housing problems associated with homelessness are more likely to affect people who are younger, non-Asian, relatively recent arrivals to our state, and persons with fewer economic resources. The at-risk group included a disproportionately higher number of individuals who had been in Hawai'i less than 10 years.

The average household size for the hidden homeless group was 4.5 persons statewide. That is consistent with the definition of hidden homeless households as having more than one family.

Hidden homeless households are likely to be living in a unit owned by a member of their household. This suggests that doubling-up and sharing is more likely to involve an owned housing unit rather than a rented one.

The superficial observation of household characteristics will mask the need for housing among the hidden homeless and may give a false impression of financial stability. We note for instance, that when asked of the intention to move in the future, more hidden homeless respondents stated a desire to move in the next five years (30% compared to 24%). Further, hidden homeless households have a much lower income per household member and are less likely to have incomes that amount to more than \$25,000 per person (22% compared to 44%).

Table 32. At-Risk and Hidden Homeless Households, State of Hawai'i, 1992, 1997, 2003, 2006 and 2011

	1992	1997	2003	2006	2011
Households	375.0	396.0	410.8	435.8	455.3
Hidden	4.7%	6.8%	4.2%	4.3%	6.3%
At-Risk	29.8%	18.1%	12.7%	19.6%	24.3%
Avg. HH Size	3.09	3.06	2.91	2.94	2.88
Hidden	5.14	5.35	5.47	5.19	4.49
At-Risk	2.89	3.1	2.91	3.07	2.91

Source: Housing Demand Survey, 1992, 1997, 2003, 2006 and 2011.

Households at Risk of Homelessness

Households at risk of homelessness are those who report that losing three or more paychecks in a row would force them out of their homes without recourse. In 2011, about 24 percent of all households in the State of Hawai'i reported being at risk of homelessness by that definition.

Table 33 shows that the number of households at risk has fluctuated considerably over the course of the HHPS carried out since 1992. In part, that may have been due to slight changes in question wording. The "three paychecks" definition has always been less than precise and prompted us in 2011 to use another question we borrowed from the McCarther Group. The question reads: "What would you do if you or your family were forced to move out of your home and had no place to live?" Results of its use in 2011 are shown in Table 33.

Table 33. Responses if Forced to Move Out, State and Counties of Hawai'i, 2011

	COUNTY				State
	O'ahu	Maui	Hawai'i	Kaua'i	
Be Homeless	13%	21%	21%	20%	15%
Seek Help	48%	41%	47%	43%	47%
Other Resources	37%	35%	30%	34%	36%
Don't Know/Refused	3%	3%	3%	3%	3%

Source: Housing Demand Survey, 2011.

The question was asked of all homeowners and renters. Responses were classified in the four groups shown in Table 33. The first group is people who stated that, if they lost the income of the chief wage earner and were forced to leave their current residence, they would be homeless. They said they would have to go to a shelter, or would camp out in a park or some other place not intended for human occupation.

The second group said they were confident that they would receive help from family and friends, government or private agencies. They did not see themselves as becoming homeless, but perhaps being temporarily in need of shelter or financial assistance from someone outside their households.

The third group told us there was no way they would become homeless or need assistance. This group included those who simply said that losing the income of the chief wage earner would not render them incapable of staying in their housing units. Some said they had other resources, including deep savings, investments, or other real estate they could use. The group also included people who simply denied that losing their homes was a possibility and refused to discuss it further.

The last group, which accounted for about three percent of all households, said they did not know what they would do. They did not deny that losing their home would be a possibility, but claimed that did not know where they would go or how they would handle the situation.

The new question format produces an estimated 15 percent of all households that would become homeless if they lost the income of the chief wage earner. That is slightly less than the questions we have used in the past. The “three paychecks from homelessness” finding makes a better sound bite, but the new question is probably more accurate in terms of estimating the risk that a household will actually end up homeless.

It also allows us to look at some of the characteristics of our respondents. People who claim they would be homeless, for instance are paying low rents or have no mortgages, many are already doubled up or expect to be doubled

up the next time they move. They are “less established” single parents, members of unmarried couples, have very young children. They include disproportionately high numbers of widowed and divorced persons, and more of them are found in counties other than Honolulu. People, who would seek help or assistance from family, friends, or agencies, on the other hand, are usually low- to middle-market renters and surprising number of low-end owners. They are disproportionately more of them in the 80 to 120 percent of median groups. They are younger, likely to be single, or young married couples with one or two young children. Most of them are not crowded or doubled up at present.

Respondents, either renters or owners, who say they have the resources to avoid losing their homes are currently paying high prices for housing and have been in their units for at least three years. Homeowners in this group have relatively low monthly housing costs and include most of the households with paid-up mortgages. Their incomes are relatively high and most are married but without children in the household.

The renters in this group expect to continue renting if they are forced out of their current units. Their rents are mid-range to high and they have been in their current units for shorter periods of time. They too, are fairly established and their units are in the higher end of the rental market. They may move to another unit, perhaps at a slightly lower rent, but they are fairly certain they would not be homeless.

COMMENTS FROM HOUSING DEVELOPERS, 2011

THE STATE OF THE MARKET

Housing developers in Hawai'i are not optimistic about the short-run future of the housing market. None that we interviewed expected significant improvement in market conditions over the next 12 months and several thought it might be 24 months or longer before any significant turnaround occurred. There were two main reasons offered for that assessment.

Tight Credit: Interest rates are low but financing is very difficult to obtain. That affects developers on both sides of the balance sheet. It is difficult to get the financing they need for development, and their prospective customers cannot qualify for home mortgages. Everyone expects mortgage rates to remain low for at least another two years. Individual opinions about when credit might loosen drive estimates of when the market will return to normal.

Consumer Confidence: Consumer confidence is very low. According to most developers, no one is willing to spend money; no one is willing to invest in real estate. They mentioned at least three causes for buyers' lack of confidence. First, job growth has not been fast enough to instill confidence. People who cannot get a job or who are worried about keeping the job they have, do not make major expenditures. Second, the publicity surrounding the meltdown of the real estate market at the end of the last decade has made people wary of the housing market. As one developer put it, "They would rather buy trucks than houses." Third, real estate prices are still too high⁵⁵. Some prospective buyers felt that real estate prices have not reached bottom yet and it is better to wait.

⁵⁵ Not all developers think prices are high. One developer told us that it was a sign of a troubled market that Hawaii units were "being sold at very low prices." Others define a return to a "normal market" as one in which prices are higher. In fact, prices are quite high relative to other US markets, and relative to their price at the peak of the last run-up.

These problems affect all housing products -- high-end, middle market, and even affordable housing. Out-of-state markets are also affected and some developers said in their opinion, out-of-state demand is nearly zero at present.

In the non-profit, affordable housing arena, developers know there is strong demand for affordable units and especially for affordable rentals. They believe that at current capacity, they may be able to serve 10 to 15 percent of that demand. That would normally mean that whatever they build would be used. However, in today's market, even affordable housing developers are concerned that their new units might go unsold or unrented. Development and construction costs push their prices against the top of the affordable range and their customers are affected by the same market malaise that exists in the conventional market. They note that jobs are few, incomes low, and doubling up is acceptable in Hawai'i. Even low-income families are hunkered down to wait out the slump.

There are a few promising signs. The market for new, high-end, custom residences was beginning to grow. Limited opportunities to develop high-density affordable units might arise out of the slow market for those who could strike deals with government partners. O'ahu landowners were beginning to push planning forward to meet opportunities that would arise from rail development. Others noted that it might be a good time for public sector to make grants or tax credits available for refurbishing our deteriorating housing stock.

Most developers felt those opportunities were not the solution to our housing market problems. They are limited, require too much time in development, and tend to be smaller in scale. They require public/private partnerships that can be difficult and time consuming. In short, they are the kind of enterprises developers engage in when the market tells them not to build. For the most part, developers expect more waiting.

POLICY CHANGE

Concerns about the economy and the financial markets were prominent in 2011. That was a change from 2006 when developer confidence was high. However, the list of regulatory issues that concerned developers changed very little.⁵⁶

Inclusionary housing policy: Opinions were fairly consistent across the group. Inclusionary housing policy costs are onerous. Our affordable unit requirements range from thirty to fifty percent while California's are about 16 percent. Inclusionary housing rules seem unfair. Developers must pay the entire cost of new developments. No other entity, public or private, regardless of the extent to which they might benefit from development, pays inclusionary fees. Worse yet, Hawai'i's inclusionary policies have resulted in very high unit costs to consumers and very few affordable units have been constructed⁵⁷.

Hawai'i's inclusionary policies and procedures are difficult to work with, we were told, because they originate from several sources, are sometimes complicated and difficult to understand, and differ across governments and administrative agencies. Specifically, developers ask for improvement in the dual zone land designations for counties and state, alignment of state and county procedures, and a review and revision of special management area rules. They would also ask that requirements for TOD development on O'ahu be freed of some of the more problematic issues, especially parking space requirements. "After all, this is a transit project."

Call for Cooperation: Some developers, especially non-profits, want a more cooperative environment for development. They see a need for government to take an active hand in moving

projects forward. They also feel the need to eliminate some of the duplication of effort that results from different rules at the state and county levels. The most obvious way to handle that would be for state and counties to cooperate in reconciling the regulations. Most were not confident that would ever occur. As an alternative, they would rather deal with the counties alone.

To accomplish all of this, several people called for the counties to take a more active role in housing policy. That would include pressing for reconciliation of regulations, actively seeking to move projects forward, and pressing for more public/private partnerships.

Finally, there was a call to make more land available for residential development.

All of these issues have been recorded since the first HHPS in 1992.

Not all comments were negative. Developers agreed there were positive aspects to the housing market today, even on the regulatory side. In addition to the plans for transit oriented development on O'ahu, they pointed to Act 55. Act 55 established the Public Land Optimization Plan, which will create public-private investment opportunities to develop all public lands currently under the authority of the Department of Land and Natural Resources. Although the Act is relatively new, most felt it would provide opportunities to partner with state agencies to develop affordable housing. The City and County of Honolulu has established the Affordable Housing Fund, which shall be used to provide and maintain affordable housing for persons earning 50 percent or less of the median household income. Many are awaiting the development of administrative rules for distributing those funds.

Affordable housing developers point out that the housing crisis can have its good side. Slower development in the commercial market sector can bring construction costs down, make labor available for self-help housing efforts, and cause developers to look toward the middle market and lower end products.

⁵⁶ Many of the issues brought forth by the housing developers interviewed are not new. Appendix G provides a summary of previous studies in which similar housing issues and recommendations for resolution were identified.

⁵⁷ Bonham, Carl S., et.al. (2010) Inclusionary Zoning: Implications for O'ahu's housing market, Honolulu: UHERO.

Other Viewpoints

After the last real estate downturn, some housing experts began talking about a new American attitude toward home ownership as well. People are beginning to recognize that not everyone needs to be a homeowner, and that our market desperately needs rental units. Real estate is not a foolproof investment, and home ownership is not a panacea for social ills. Private sector developers are not all pleased with that idea, but advocates for the non-owner group see it as a short-term benefit.

National experts would agree with the way Hawai'i's housing leaders assess the housing market in 2011. In general, they see the causes of the continuing market slump as "tight underwriting requirements" and "uncertainty about the direction of home prices"⁵⁸. Both of those are causing weak demand, which is slowing housing production even while vacancy rate are rising and despite some growth in employment and income and very low interest rates.

Nevertheless, unlike our local developers, the Harvard experts would say the consumer confidence deficit is caused by higher housing prices to a greater extent than to uncertainty about employment.

Information from the Residents

The 2011 Housing Demand Survey respondents seem to agree with national experts. We asked people who were interested in moving to a new home, but not interested in buying, why they would not buy. Fully 70 percent of them told us that home prices were too high, or out of reach (Table 34).

Table 34: Reasons for Not Buying a Home in Next Two Years, 2011

	COUNTY				State
	O'ahu	Maui	Hawai'i	Kaua'i	
Housing prices	74%	60%	60%	69%	70%
Family finances	19%	30%	31%	23%	22%
Consumer confidence	4%	8%	4%	4%	4%
Prefer to rent	3%	3%	5%	5%	4%

Source: Housing Demand Survey, 2011.

Twenty-two percent said their current financial situation would not support a home purchase right now. These people told us they could not afford the increased monthly cost, had no down payment, or did not think they could qualify for a loan.

Four percent of the respondents mentioned worry or uncertainty about the future. Most of their comments were about housing prices and some were about job security. A few said they were worried that real estate may not be a good investment right now.

Another four percent said they preferred to rent. They were not going to be in Hawai'i for a long time, they did not want to be tied down to any one place, or they were not ready for the kind of commitment that home ownership requires.

Information from the survey therefore suggests that high prices might be a larger problem than consumer confidence in Hawai'i.

⁵⁸ The State of the Nation's Housing 2011, Joint Center for Housing Studies for the Harvard University, p1.

PLANNING IMPLICATIONS FOR 2012-2015

RESETTING THE CONTEXT

Hawai'i's housing market is the environment for housing planning. Our market is complicated, it changes frequently, and it is anything but normal. Its extremes make housing planning difficult and its uniqueness makes it hard to borrow policies developed in other places.

Hawai'i's housing market has America's highest home prices and its highest rents. It is also one of the most volatile markets in the nation. When things change, they often change dramatically. Our housing prices are high because:

- ❖ land costs are high
- ❖ we have the second or third highest construction costs in the nation
- ❖ our average household income is quite high
- ❖ we have great advantages⁵⁹ and spend the most money telling people about them
- ❖ we have the most highly regulated housing market in the nation by a large margin.

Overall, that gives Hawai'i the lowest rate of homeownership in the country, some of the highest crowding rates, and the fourth highest rate of homelessness among the 50 states and the District of Columbia.

Our housing policy in the face of those issues has led us to make heavy use of multi-family units and leasehold residential properties. The Census tells us we have unusually high rates of both of those in our housing stock. Our housing stock is not, however, of poor quality. The housing stock is getting older, but by comparison to the rest of the country the average unit age is still low and the percentage of non-standard or mobile housing units is extremely low. HPS has been reporting for years that the most troublesome feature of Hawai'i's housing stock is a lack of units suited to the needs of low-income households. From their point of view, the quality of our housing stock may be too high.

⁵⁹ Weather, scenery, friendly people, cultural richness, slow-paced living, etc.

Some observers point to poverty itself as an issue in high-priced housing markets like Hawai'i's, but Hawai'i does not have particularly high poverty rates⁶⁰. Our average household income is relatively high and so is our average household size. Our average wages are also relatively high. Hawai'i's average wage in 2010 was \$43,740 compared with the national average at \$41,250. Our wages rank 17th in the nation. Overall, it is not a lack of income that causes our housing problems. Neither is it the gap between the very poor and the very rich. Hawai'i's Gini score, which measure that gap, is well below average.

HOUSING PLANNING – PUBLIC SECTOR

HPS has always focused on housing across all price levels. However, when it comes to planning, the study has been applied primarily to public sector housing. In part that is because HPS has been largely funded by public sector and its reports are published by government agencies. Even more important, the study has always found that housing need is greatest at the lower end of the market. Supply and demand analyses and needed units estimates show that the biggest gaps between demand and supply are at the bottom of the market. It seems appropriate then that HPS ends up supporting planning efforts for public sector housing.

Past Planning Efforts: Spending

One way of looking at past housing planning efforts in Hawai'i is to look at how we spend our housing dollars. In the public sector, funding comes largely from two sources: federal and state government. It is fair to say that funding is

⁶⁰ ACS 2009 gave Hawaii 43rd highest poverty rate among the states and District of Columbia and our income to poverty ratio (a measure of the depth or seriousness of poverty) was 42nd.

one of the main parameters of housing planning, at least for public sector.

Typical of expenditures data in any industry, accounting systems do not always preserve the information of greatest interest to planners. They are built to provide working information for business accountability and not necessarily to report detailed expenditures for planning goals and objectives. These figures are not, however, without their value to a planning study.

Federal Allocations

Details on Federal expenditures in Hawai'i have become more readily available in recent years.

Total HUD expenditures in Hawai'i since 2000 amounted to a reported \$ 1.46 billion or about \$133 million per year. The allocations were fairly high in 2000 and 2001, and then leveled off at about \$70 million a year during the middle of the decade. With added funds from the American Recovery and Reinvestment Act of 2009 (ARRA), HUD spending rose to over \$200 million a year in 2008 and 2009 and settled back to \$161.3 million in 2010.

Table 35 shows the distribution of HUD funds allocated to Hawai'i in the federal fiscal years from FY2008 through FY 2010.

Table 35: Federal Housing Expenditures in Hawai'i, 2010

	Federal Fiscal Year		
	2008	2009	2010
Total Federal Allocations	\$ 202,678,737	\$269,447,727	\$ 161,251,851
Contracts	\$ 786,903	\$ 205,189	\$ 15,948,826
Assistance	\$ 201,891,834	\$269,242,538	\$ 145,303,025
Grants	\$ 74,787,452	\$147,956,567	\$ 78,254,581
Direct Pay	\$ 121,255,893	\$121,285,971	\$ 67,048,444
Other	\$ 5,848,489	\$ -	\$ -
Recipient			
Government	\$ 191,569,018	\$244,840,120	\$ 131,131,195
for profit		\$ 1,907,897	\$ 11,284,688
non-profit	\$ 8,122,781	\$ 8,950,218	\$ 2,420,485
Individuals		\$ 12,028,498	
universities	\$ 2,200,035		
Other	\$ -	\$ 1,515,805	\$ 466,657

Source: USASpending.gov, Prime Award Spending Data, FY 2008-2010.

The distribution of funds for 2010 is similar to the pattern before 2008 when the stimulus spending began. About ten percent of total funding was in the form of direct contracts for services received by HUD in Hawai'i. Of the remaining 90 percent, about 45 percent is in direct payments to individuals in need of services.

Of the \$145.3 million assistance payments in 2010, about 90 percent or \$131.1 was received by government agencies (nearly all of it by State

and county housing agencies). A total of \$78.2 million was received in the form of grants, which allow the housing agencies some discretion in deciding how those funds are expended. The rest was in direct payments to individuals. Funds that were received by agencies other than the five housing agencies were used to pay for direct services to individuals as opposed to construction, rehabilitation, or maintenance of housing units. Providing new units is government business.

State Allocations

Nationally, most of the money spent by local governments on housing comes from federal funds. States generally do not contribute substantial funding to housing development. In Hawai'i, State allocations to housing have been fairly substantial over the last decade (Table 36).

Over the last 11 years, the total State allocation to housing amounted to about \$271.5 million or

\$25 million per year. The allocation pattern has been uneven, reflecting economic changes in State revenues during the decade. The prosperity of the first two years of the decade produced large allocations to housing. The post 9/11 economy resulted in cutbacks that forced transfer of housing funds to other uses. The housing boom years brought significant legislative allocations to housing and homelessness, and the economic downturn of 2009 brought the return of lower allocations.

Table 36: Legislative Funding for Homeless and Affordable Housing, 2000 to 2010

	Funding	Bond Revenue	Tax Expenditures	Withdrawals	Net Allocation
2000		\$2,080,000	-\$1,296,041		\$783,959
2001	\$2,100,000	\$44,920,000			\$47,020,000
2002	\$150,000	\$2,600,000		-\$25,747,458	-\$22,997,458
2003	\$150,000			-\$23,097,181	-\$22,947,181
2004	\$325,000	\$2,560,000		-\$10,000,000	-\$7,115,000
2005	\$37,517,306	\$10,500,000			\$48,017,306
2006	\$42,656,863	\$6,950,000			\$49,606,863
2007	\$7,200,000	\$50,850,000	\$7,761,604		\$65,811,604
2008		\$68,864,000			\$68,864,000
2009		\$62,413,000	-\$2,038,022	-\$600,000	\$59,774,978
2010		-\$13,500,000	-\$1,772,279		-\$15,272,279
Total	\$90,099,169	\$238,237,000	\$2,655,262	-\$59,444,639	\$271,546,792

Source: Hawai'i State Legislature, Regular Session Package: Housing and Homeless Legislative Package, 2011.

Legislative allocations were of two types. First, general obligation bonds were issued to fund specific projects. They were usually associated with public housing and homeless shelters. In addition, special funds and tax expenditures were allocated to revolving loan funds and development funds. These were also the targets of withdrawals allocations in later years.

Formal housing planning is summarized in the Consolidated Plans submitted to HUD by Hawai'i's five housing coordinating agencies⁶¹. It might be said that the State's public sector housing policy is summed up in those documents. Figure 13 presents a brief overview of the five Consolidated Plans published in 2010.

Planning Data

As in all States, spending on housing production and assistance is distributed according to formal plans. This section looks at State and County strategies to approach housing issues given each of their resources and constraints.

⁶¹ The full set of HUD documents designed to develop and monitor housing planning includes the Consolidated Plan, annual reports to update the ConPlan, the CAPER to evaluate progress toward objectives.

Figure 13: Summary of 2010 Public Housing Policy Goals

	Support	BUILD	ASSIST	EDUCATE
Honolulu	Home Ownership		Low interest loans and closing costs to support home ownership.	Homeownership counseling for about 200.
	Low Income Rentals	Fund or finance repair or rehab approx. 90 units.		
	Special Needs Housing	Build/rehab structure for special needs approx. 25 units.	Emergency payments for HIV/AIDS persons	
Hawai'i	Home Ownership	60 homes <80% AMI Support 10 self-help Rehab 50 homes	Down payment & closing costs for 5 homes	Homeownership counseling, 20 workshops.
	Low Income Rentals		Add 100 vouchers for low-income Rent subsidies for 25	
	Special Needs Housing	100 elderly	ES operations for 20 homeless ES for 300 homeless ES operations for 176 homeless	
Maui	Home Ownership	Dev 17 Self-Help units 33 affordable homes	Down payment and closing costs for 105 low-mod persons	
	Low Income Rentals	32 long-term rentals 92 affordable rentals Rehab affordable rental units		
	Special Needs Housing	44 rental units 10 transition homeless 5 facilities for SA 4 support facilities	ES operations for 135 homeless Mortgage and utilities assistance for 4 HH with HIV/AIDS	Info to assist 28 persons with HIV/AIDS
Kaua'i	Home Ownership	40 self-help units 5 home rehabs.	Low cost financing for 10 first time homebuyers	Homebuyer education for 125
	Low Income Rentals	50 affordable rentals		
	Special Needs Housing	Acquire or rehab 50 units for homeless transition	ES operations for 150 homeless ES operations for 200 homeless	
State	Home Ownership	25 affordable homes Rehab 33 affordable 40 self-help units	Support homebuyer loan programs	Homeownership counseling, 20 workshops.
	Low Income Rentals	32 affordable rentals 202 affordable rentals	Rental assistance for 125	
	Special Needs Housing	60 affordable rentals 144 affordable rentals 18 transitional units	Rent/deposit assistance for HIV Rental assistance for HIV Operations for 385 homeless	

The summary shown in Figure 14 is a gross oversimplification of the work planned by Hawai'i's five major housing agencies for the next five years. It is intended to provide a high-level overview of what is scheduled as an indication of our housing planning.

The Consolidated Plan describes the strategies that housing agencies in Hawai'i apply to manage the housing issues that affect the low end of the housing market⁶². Very broadly considered, those strategies can be summed up as three strategies applied to three targets.

The three strategies are construction, buyer and renter assistance, and consumer education. Construction is aimed at producing additional housing units and includes construction financing, planning and design work, building units, managing them, funding and supporting rehabilitation, and refurbishing existing units. Assistance includes transfer payments and other services intended to increase or sustain home ownership or rental stability among low-income households. Education programs are directed at current or intended owners or renters.

The three target groups are homeowners or prospective homeowners, low-income renters, and special needs groups. All three of these groups and their housing needs have been covered in previous sections of this report.

The allocation of effort shown in Figure 14 reflects the goals and objectives of the five housing agencies for the people they serve. All five agencies have plans for all three groups and employ all three strategies. The education strategy is applied only to homeownership except for a Maui County program to assist homeless persons with HIV/AIDS.

State and county ConPlans describe how Federal and State funds are to be allocated to

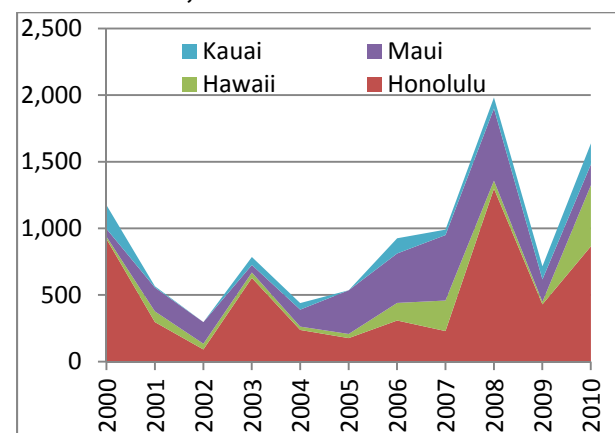
the achievement of planning objectives summarized in Figure 13.

AFFORDABLE HOUSING CONSTRUCTION

From 2007 through 2010, and as a result of public sector housing planning, more than 10,000 affordable housing units⁶³ were constructed in the State of Hawai'i⁶⁴. A total of 10,058 units were completed under the aegis of the five Housing Offices of the State and using federal and state funds. In addition, at least 4,793 affordable housing units were constructed under unilateral agreement with private housing developers.

Public sector housing construction was notably higher in the last four years than in the earlier part of the last decade. Figure 14 shows the affordable housing units developed each year during the last decade.

Figure 14: Affordable Housing Units Constructed, 2000-2010



The pattern of construction over time is very similar to that for housing production in general

⁶³ The term "affordable" as used here means that the units were developed as programs under federal program guidelines and made use of federal and/or state funds. They were developed as affordable units according to definitions that changed throughout the decade.

⁶⁴ The numbers that appear in this section are conservative estimates of actual affordable housing production. The current list of projects and units produced is incomplete at the publication of this report. Some units produced by the Department of Hawaiian Home Lands are missing and there may be a small number of units from Hawaii County missing. The units developed under unilateral agreements with developers are taken only from the County of Honolulu at this time.

⁶² Note that ConPlans include other housing plan elements such as eliminating impediments to Fair Housing. Here we deal only with the direct housing issues.

and for housing sales. Production was low in the first part of the decade, grew rapidly to a peak in 2008, then rose sharply again in 2010. The peak is about a year later than the market peak in response to stimulus funding.

By definition, market mechanisms do not directly cause an increase in the supply of units priced below market levels. They can, however, signal distress in the housing marketplace that is translated into demand for affordable units from public sector housing providers. It is precisely this function that is filled by housing planning in the public sector.

Table 37 shows some additional detail for affordable housing units developed by the public sector in the last four years. Consistent with housing plans across the state, affordable units constructed under federal program guidelines and using public sector funding, were concentrated on multi-family and rental units. The single exception was Maui County, where the majority of affordable units constructed were single-family units intended for sale.

Table 37. Types of Units Constructed, 2007-2010

	Total Units Completed	Tenure				Unit Type			
		For Sale		For Rent		Single-family		Multi-family	
		Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.
State of Hawai'i	10,058	4,190	41.7%	5,868	58.3%	3,039	30.2%	7,019	69.8%
Honolulu	5,491	1,605	29.2%	3,886	70.8%	873	15.9%	4,618	84.1%
Hawai'i	1,138	358	31.5%	780	68.5%	336	29.5%	802	70.5%
Maui	2,637	1,964	74.5%	673	25.5%	1,653	62.7%	984	37.3%
Kaua'i	792	263	33.2%	529	66.8%	177	22.3%	615	77.7%

RECOMMENDATIONS FOR FUTURE HOUSING PLANNING STUDIES

Throughout this report, we have noted that the environment for housing studies has changed substantially since the HPS series began. In addition, the pace at which those changes are occurring is quickening. The issues involved are greater in number and more complicated. The call for greater planning relevance is louder and more urgent. The data needed to evaluate the issues and their solutions is more abundant and more accurate, but it is also more difficult to bring those data together in a single model for assessing housing issues.

It may be useful to draw up a set of recommendations for improving the study. Figure 16 presents a short list of those recommendations.

Figure 15: Recommendations for Future Housing Planning Studies

A.	Monitoring Housing Stock ACS data on housing and population will be the standard for the nation on the next decade. We will have to adopt these data as the foundation for housing studies in Hawai'i. The inventory component of the study will likely become less important in the future, and the need to gather ancillary data on leasehold and condominium units as well as military housing will become a separate task.
B.	Monitoring Rents ACS data will also be more important for measuring rental contracts and rental prices. We cannot be certain at this point what will happen to the current rent study component of HHPS. It is likely that a combination of ACS and Hawai'i rental data will be required for HHPS in the future.
C.	Monitoring Housing Planning and Policy The need to make HHPS more directly planning related, should it continue, will require a more comprehensive and continuous effort to monitor housing planning objectives, activities, and outcomes.
D.	Monitoring Special Needs Group Housing Conditions The most challenging of the new additions to HHPS in 2011 was the requirement to produce hard data in support of planning for housing for special needs groups. The <i>ad hoc</i> effort of HHPS 2011, though inadequate to the task, points out the need to develop theory and systems, definitions and communications for the research, for the housing agencies, and for the agencies that serve special needs groups.

APPENDIX: SUPPORT MATERIALS

APPENDIX A: HOUSING TRENDS

The tables presented in Appendix A, referred to in prior iterations of the HHPS as the “A Tables” or “Trend Tables”, provide detailed demographic and housing related data for the State of Hawai‘i and its counties. This data is taken from the Housing Demand Survey from each year. The fundamental components of the Housing Demand Survey were designed to ensure compatibility with previous versions. These tables allow for the evaluation of trends in the Hawai‘i housing market across the past 20 years.

Table A-1. Characteristics of Housing Units, 1992, 1997, 2003, 2006, and 2011

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%
	2011	56%	44%	15%	21%	37%	26%
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%
	2011	54%	46%	17%	26%	37%	20%
Hawai‘i	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%
	2011	67%	33%	13%	21%	47%	19%
Kaua‘i	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%
	2011	59%	41%	12%	19%	51%	18%
State	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%
	2011	57%	43%	15%	22%	39%	24%

Source. Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

Note. Sum of County figures may not equal the State total due to rounding.

Table A-2. Household Income Data, 1992, 1997, 2003, 2006, and 2011

County	Year	Total Households	Household Income						Median HH Income
			Less than \$15,000	\$15,000 to \$24,999	\$25,000 to \$49,999	\$50,000 to \$74,999	\$75,000 to \$99,999	\$100,000 or more	
Honolulu	1992	247,349	N/A	24%	29%	12%	6%	7%	\$36,974
	1997	272,234	9%	9%	28%	15%	9%	6%	\$42,234
	2003	292,003	8%	10%	36%	18%	11%	17%	\$47,917
	2006	303,149	13%	7%	26%	22%	12%		\$58,385
	2011	310,882	12%	7%	25%	22%	9%	25%	\$59,076
Maui	1992	34,266	N/A	20%	36%	11%	2%	3%	\$35,843
	1997	39,252	10%	8%	33%	15%	7%	6%	\$38,908
	2003	43,687	9%	13%	34%	19%	14%	11%	\$44,297
	2006	49,484	11%	8%	29%	20%	15%	17%	\$49,795
	2011	54,132	12%	10%	27%	19%	11%	21%	\$58,424
Hawai'i	1992	39,789	N/A	24%	39%	11%	3%	4%	\$34,063
	1997	46,271	14%	14%	30%	12%	4%	4%	\$31,831
	2003	54,644	14%	12%	39%	17%	9%	9%	\$36,905
	2006	61,213	13%	10%	29%	22%	10%	16%	\$51,920
	2011	67,096	18%	13%	25%	17%	10%	17%	\$44,696
Kaua'i	1992	16,981	N/A	20%	36%	10%	5%	3%	\$36,966
	1997	18,817	11%	13%	30%	15%	5%	3%	\$34,891
	2003	20,460	13%	12%	37%	18%	9%	12%	\$42,205
	2006	21,971	10%	10%	27%	23%	11%	19%	\$53,116
	2011	23,201	13%	11%	25%	19%	9%	19%	\$49,730
State	1992	338,385	N/A	24%	31%	12%	5%	6%	\$36,289
	1997	376,574	10%	10%	29%	15%	8%	6%	\$39,883
	2003	410,794	10%	10%	36%	19%	10%	15%	\$46,086
	2006	435,818	13%	7%	27%	21%	12%	20%	\$58,393
	2011	455,311	13%	8%	26%	21%	10%	23%	\$58,700

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

Note. The number of total households for the Housing Demand survey represents an SNS estimate developed using ACS 2009 data prior to the release of Census 2010. The total number of households for each county differs by less than one percent from Census 2010 figures presented in Table 4.

Note. Sum of County figures may not equal the State total due to rounding.

Table A-3. Households at HUD Income Guidelines by County, 1992, 1997, 2003, 2006, and 2011

County	Year	Total Households	HUD Household Income Guidelines					
			30% or less	Over 30% to 50%	Over 50% to 80%	Over 80% to 120%	Over 120% to 140%	Over 140%
Honolulu	1992	247,349	N/A ^a	20%	19%	23%	10%	27%
	1997	272,234	8%	15%	21%	30%	7%	20%
	2003	292,003	5%	19%	22%	22%	7%	25%
	2006	303,149	14%	10%	20%	22%	9%	24%
	2011	310,882	19%	16%	25%	12%	7%	21%
Maui	1992	34,266	N/A ^a	20%	19%	24%	9%	28%
	1997	39,252	7%	11%	27%	24%	10%	21%
	2003	43,687	10%	17%	28%	18%	7%	21%
	2006	49,484	13%	11%	19%	21%	7%	28%
	2011	54,132	20%	19%	22%	9%	5%	25%
Hawai'i	1992	39,789	N/A ^a	20%	18%	24%	10%	29%
	1997	46,271	3%	19%	21%	23%	10%	24%
	2003	54,644	5%	14%	28%	22%	6%	25%
	2006	61,213	14%	11%	18%	20%	5%	31%
	2011	67,096	21%	16%	19%	13%	6%	24%
Kaua'i	1992	16,981	N/A ^a	21%	18%	21%	9%	30%
	1997	18,817	9%	18%	27%	25%	9%	12%
	2003	20,460	6%	23%	27%	20%	7%	18%
	2006	21,971	12%	11%	18%	21%	10%	28%
	2011	23,201	19%	18%	23%	13%	6%	22%
State	1992	338,385	N/A ^a	20%	19%	22%	11%	28%
	1997	376,574	7%	15%	22%	28%	7%	20%
	2003	410,794	9%	15%	20%	22%	8%	24%
	2006	435,818	14%	11%	20%	22%	8%	26%
	2011	455,311	20%	17%	24%	12%	7%	22%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

^a In 1992, the lowest income category in the Housing Demand Survey was "less than \$25,000. It was split into two categories thereafter.

Note. Sum of County figures may not equal the State total due to rounding.

Table A-4a. Housing Unit Condition, Owned Units, 1992, 1997, 2003, 2006, and 2011

County	Year	Total Households	Owner Occupied			
			Excellent condition	Satisfactory condition	Fair condition	Poor condition
Honolulu	1992	247,349	47%	43%	9%	2%
	1997	272,234	31%	47%	18%	4%
	2003	292,003	42%	46%	11%	1%
	2006	303,149	39%	46%	12%	3%
	2011	310,882	40%	45%	12%	4%
Maui	1992	34,266	52%	38%	10%	1%
	1997	39,252	35%	48%	15%	3%
	2003	43,687	45%	42%	10%	3%
	2006	49,484	44%	43%	11%	2%
	2011	54,132	49%	37%	11%	2%
Hawai'i	1992	39,789	52%	41%	6%	1%
	1997	46,271	42%	42%	13%	4%
	2003	54,644	46%	44%	9%	2%
	2006	61,213	44%	44%	11%	1%
	2011	67,096	48%	38%	11%	3%
Kaua'i	1992	16,981	49%	42%	7%	2%
	1997	18,817	42%	42%	13%	3%
	2003	20,460	48%	42%	9%	2%
	2006	21,971	44%	43%	11%	2%
	2011	23,201	44%	39%	15%	2%
State	1992	338,385	49%	42%	8%	2%
	1997	376,574	34%	46%	17%	4%
	2003	410,794	43%	45%	10%	2%
	2006	435,818	41%	45%	12%	3%
	2011	455,311	43%	42%	12%	3%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

Note. Sum of County figures may not equal the State total due to rounding.

Table A-4b. Housing Unit Condition, Rented Units, 1992, 1997, 2003, 2006, and 2011

County	Year	Total Households	Renter Occupied			
			Excellent condition	Satisfactory condition	Fair condition	Poor condition
Honolulu	1992	247,349	23%	52%	20%	6%
	1997	272,234	21%	46%	27%	6%
	2003	292,003	22%	52%	22%	4%
	2006	303,149	24%	42%	25%	10%
	2011	310,882	31%	46%	19%	5%
Maui	1992	34,266	27%	43%	24%	6%
	1997	39,252	25%	48%	22%	5%
	2003	43,687	28%	47%	20%	6%
	2006	49,484	31%	40%	22%	7%
	2011	54,132	35%	43%	16%	6%
Hawai'i	1992	39,789	29%	46%	16%	9%
	1997	46,271	26%	45%	20%	10%
	2003	54,644	27%	46%	23%	5%
	2006	61,213	22%	48%	20%	10%
	2011	67,096	37%	42%	15%	7%
Kaua'i	1992	16,981	25%	55%	15%	5%
	1997	18,817	27%	44%	22%	7%
	2003	20,460	30%	47%	18%	5%
	2006	21,971	24%	46%	25%	6%
	2011	23,201	26%	42%	27%	5%
State	1992	338,385	24%	51%	20%	6%
	1997	376,574	22%	46%	26%	6%
	2003	410,794	24%	51%	21%	4%
	2006	435,818	24%	43%	24%	9%
	2011	455,311	32%	45%	19%	5%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

Note. Sum of County figures may not equal the State total due to rounding.

Table A-5: Average Monthly Housing Cost, 1992, 1997, 2003, 2006, and 2011

County	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
	2011	310,882	\$1,415	\$1,393	\$1,510	\$1,502	\$1,487
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
	2011	54,132	\$1,461	\$1,468	\$1,411	\$1,280	\$1,303
Hawai'i	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
	2011	67,096	\$1,106	\$1,102	\$1,389	\$1,121	\$986
Kaua'i	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
	2011	23,201	\$1,273	\$1,254	\$983	\$1,311	\$1,292
State	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
	2011	455,311	\$1,355	\$1,332	\$1,495	\$1,421	\$1,398

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

Note. Sum of County figures may not equal the State total due to rounding.

Table A-6: Mortgage Payments by Years in Unit, 1992, 1997, 2003, 2006, and 2011

County	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
	2011	310,882	\$2,488	\$2,255	\$2,007	\$1,088
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
	2011	54,132	\$1,671	\$1,962	\$1,720	\$1,202
Hawai'i	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
	2011	67,096	\$1,591	\$1,531	\$1,403	\$792
Kaua'i	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
	2011	23,201	\$2,285	\$2,039	\$1,587	\$1,026
State	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
	2011	455,311	\$2,157	\$2,013	\$1,805	\$1,049

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

Note. Sum of County figures may not equal the State total due to rounding.

Table A-7. Household Composition, 1992, 1997, 2003, 2006, and 2011

County	Year	Total Households	Household Type					
			Single member	Married, no children	Parent(s) & children	Unrelated roommates	Other	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%
	2011	310,882	22.2%	19.6%	14.1%	5.0%	37.6%	1.4%
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%
	2011	54,132	24.7%	22.2%	12.8%	7.0%	30.7%	2.6%
Hawai'i	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%
	2011	67,096	24.6%	25.0%	13.5%	6.5%	29.0%	1.4%
Kaua'i	1992	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%
	2011	23,201	22.5%	23.6%	14.8%	4.4%	32.5%	2.2%
State	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%
	2011	455,311	22.9%	21.0%	13.9%	5.5%	35.2%	1.6%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011.

Note. Single member households have one adult member only. "Married, no children" households consist of two married adults with no children under the age of 18. "Parent(s) with children" households contain one or two married adults and one or more children. It is not certain that the children are the own children of the parent or parents. "Unrelated roommates" households contain two or more adults, none related to the others by birth or marriage, and no children. "Other" households include all other types of households that could be classified. This category includes many complex households such as those with many adults and many children, related and unrelated individuals, and more than two generations in a single household. "Undetermined" households were those for which one or more pieces of information required to classify the household type was missing. Household classification variables included household size, age of respondent and ages of other members of the household, marital status of respondent, and questions about the relationships of household members. Note. Sum of County figures may not equal the State total due to rounding.

Table A-8. Household Crowding, 1992, 1997, 2003, 2006, and 2011

	Year	Total Households	Crowding Indicators		
			Crowded ^a	Doubled Up ^b	Both ^c
Honolulu	1992	247,349	23.2%		32.0%
	1997	272,234	10.6%		27.2%
	2003	292,003	10.0%	10.0%	17.6%
	2006	303,149	8.0%	9.7%	15.2%
	2011	310,882	13.3%	13.8%	22.9%
Maui	1992	34,266	26.8%		25.9%
	1997	39,252	10.4%		24.8%
	2003	43,687	11.0%	8.7%	17.3%
	2006	49,484	8.0%	9.6%	15.3%
	2011	54,132	11.4%	12.6%	19.4%
Hawai'i	1992	39,789	18.7%		26.0%
	1997	46,271	7.9%		24.3%
	2003	54,644	7.0%	9.3%	14.4%
	2006	61,213	7.0%	11.2%	15.9%
	2011	67,096	8.6%	10.7%	17.2%
Kaua'i	1992	16,981	17.4%		26.3%
	1997	18,817	9.1%		25.4%
	2003	20,460	6.0%	12.5%	16.1%
	2006	21,971	7.1%	11.9%	15.5%
	2011	23,201	10.0%	11.0%	16.9%
State	1992	338,385	22.2%		30.3%
	1997	376,574	10.2%		26.5%
	2003	410,794	9.6%	10.0%	17.1%
	2006	435,818	8.2%	10.0%	15.3%
	2011	455,311	12.1%	13.2%	21.4%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, 2011.

^a Based on more than 1.01 persons per room.

^b More than one family group in a single housing unit (See Glossary).

^c Percent of households crowded, doubled up, or both. Before 2003, HHPS measured crowding and "crowded or doubled up". After 2003, HHPS measured crowding and doubled up and combined the two.

Note. Sum of County figures may not equal the State total due to rounding.

Table A-9. Shelter-to-Income Ratios, 1992, 1997, 2003, 2006, and 2011

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%
	2011	310,882	54.1%	8.2%	28.0%	9.7%
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%
	2011	54,132	40.8%	18.0%	30.2%	11.0%
Hawai'i	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%
	2011	67,096	49.1%	12.5%	25.1%	13.3%
Kaua'i	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%
	2011	23,201	46.0%	17.3%	24.2%	12.6%
State	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%
	2011	455,311	51.4%	10.4%	27.7%	10.5%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

Note. "Not enough information" households include those with no shelter payment and those that did not provide sufficient information to calculate a shelter-to-income ratio.

Note. Sum of County figures may not equal the State total due to rounding.

Table A-10. Shelter-to-Income Ratios by Years in Unit, 1992, 1997, 2003, 2006, and 2011

County	Year	Total Households	Percent with shelter-to-income ratio of 30% or more					
			by Years in Unit				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%
	2011	310,882	65.8%	55.7%	44.9%	25.9%	61.9%	24.5%
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%
	2011	54,132	60.2%	51.5%	40.6%	27.6%	52.7%	31.1%
Hawai'i	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%
	2011	67,096	66.4%	48.7%	38.4%	23.0%	57.3%	28.1%
Kaua'i	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%
	2011	23,201	65.8%	53.9%	42.9%	29.3%	56.0%	31.7%
State	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%
	2011	455,311	65.0%	53.9%	43.2%	25.8%	59.8%	26.3%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

Note. Sum of County figures may not equal the State total due to rounding.

Table A-11a. Intention to Move, 1992, 1997, 2003, 2006, and 2011

County	Year	Total Households	Intention to Move		Raw Demand-Total Will Move	When Household Will Move				
			Probably Will Not Move	Will Move to a New Unit		In 1 Year	In 2 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%
	2011	310,882	45.4%	54.6%	168,946	21.5%	21.4%	20.1%	15.6%	21.5%
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	51.9%	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%
	2011	54,132	52.9%	47.1%	25,282	24.8%	19.4%	17.6%	16.1%	22.2%
Hawai'i	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	55.6%	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%
	2011	67,096	58.4%	41.6%	28,223	20.9%	12.9%	24.9%	20.8%	20.6%
Kaua'i	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%
	2011	23,201	57.2%	42.8%	9,628	30.3%	15.5%	15.1%	18.3%	20.8%
State	1992	338,385	46.2%	53.8%	181,905	29.2%	21.5%	18.8%	10.4%	20.1%
	1997	376,574	48.1%	51.9%	195,486	23.1%	20.0%	15.9%	12.3%	28.8%
	2003	410,794	57.5%	42.5%	174,608	26.3%	20.5%	18.6%	11.2%	23.5%
	2006	435,817	60.2%	39.8%	173,510	23.5%	22.6%	15.9%	9.8%	28.2%
	2011	455,311	49.2%	50.8%	232,079	22.1%	19.8%	20.2%	16.4%	21.4%

Source. Housing Demand Survey, 1992, 1997, 2003, 2006 and 2011

Base for Intention to Move is all respondent households.

Base for When Household Will Move is 232,078 households who provided a time frame or said not sure (excludes probably never move)

Note. Sum of County figures may not equal the State total due to rounding.

Table A-11b. Preferred Location for Next Move, 1992, 1997, 2003, 2006, and 2011

County	Year	Total Households	Final Demand - Total Will Move ^a	Preferred Location for Next Move			
				Same Island	Different Island	Not Sure	Out-of-State
Honolulu	1992	247,349	142,090	62.2%	5.3%	6.3%	26.1%
	1997	272,234	150,194	52.5%	4.3%	11.0%	32.2%
	2003	292,003	127,683	65.7%	2.8%	11.6%	19.8%
	2006	303,149	117,597	66.1%	4.5%	8.9%	20.5%
	2011	310,882	132,696	63.4%	4.3%	5.6%	26.6%
Maui	1992	34,266	14,793	71.7%	13.3%	5.7%	9.4%
	1997	39,252	18,894	72.5%	2.7%	13.0%	11.8%
	2003	43,687	18,205	68.3%	6.9%	10.8%	14.0%
	2006	49,484	22,318	71.5%	9.5%	6.7%	12.3%
	2011	54,132	19,774	58.5%	5.4%	24.9%	11.2%
Hawai'i	1992	39,789	17,685	80.9%	4.2%	4.4%	10.6%
	1997	46,271	18,491	74.3%	4.0%	7.7%	14.0%
	2003	54,644	21,252	73.4%	5.4%	12.1%	9.1%
	2006	61,213	25,769	73.0%	6.0%	9.4%	11.5%
	2011	67,096	22,327	61.9%	7.8%	8.3%	22.1%
Kaua'i	1992	16,981	7,337	76.7%	6.2%	6.0%	11.1%
	1997	18,817	7,907	69.8%	5.7%	10.1%	14.3%
	2003	20,460	7,468	71.8%	9.7%	9.0%	9.5%
	2006	21,971	7,826	64.8%	7.4%	9.1%	18.7%
	2011	23,201	7,586	62.8%	7.0%	11.1%	19.2%
State	1992	338,385	181,904	65.4%	5.9%	6.1%	22.6%
	1997	376,574	195,485	57.2%	4.2%	10.9%	27.8%
	2003	410,794	174,607	67.2%	3.9%	11.5%	17.5%
	2006	435,818	173,511	67.8%	5.5%	8.7%	18.0%
	2011	455,311	182,384	62.6%	5.0%	8.7%	23.8%

Source. Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

^a The total number of Total Will Move households differs from Table A-11a because in 2011 the 21.4% of mover households (49,695) who said they might move but had no idea when were not asked subsequent questions regarding where they were moving, preferences for their next unit, etc.

Note. Sum of County figures may not equal the State total due to rounding.

Table A-12. Tenancy Preference of Current Owners & Renters, 1992, 1997, 2003, 2006, and 2011

County	Year	Effective Demand-Total Will Move ^a	Current Owners			Current Renters		
			Total	Planned Next Tenancy		Total ^c	Planned Next Tenancy	
				Buy	Rent ^b		Buy	Rent ^b
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%
	2011	97,429	32,688	74.2%	25.8%	64,621	25.1%	68.3%
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%
	2011	16,937	5,370	72.0%	28.0%	11,396	29.4%	70.6%
Hawai'i	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%
	2011	17,412	6,838	70.1%	29.9%	10,540	37.2%	62.8%
Kaua'i	1992	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%
	2011	6,339	1,700	61.3%	38.7%	4,521	20.9%	79.1%
State	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%
	2011	138,116	46,595	72.9%	27.1%	91,079	26.8%	73.2%

Source. Housing Demand Survey, 1992, 1997, 2003, 2006 and 2011

Base for Total Will Move is households who plan to move, have some idea when they will move, and plan to stay in the State of Hawai'i when they move

Base for Current Owners is 46,494 households included in the 138,116 Total Will Move households that own their current residence.

Base for Current Renters is 91,088 households included in the 138,116 Total Will Move households that currently rent their unit or occupy without paying cash rent.

^a The total number of mover households differs from Table A-11b because in 2011 the 23.8% of mover households (44,268) who planned to move out of the State were not asked subsequent questions regarding preferences for their next unit, financial qualifications, etc. Total Current Owners and Total Current Renters do not sum to Total Will Move because those households that refused to provide their current tenancy were excluded from the analysis.

^b Includes households that plan to rent or are not sure about their next tenancy.

^c Includes households that currently rent or occupy without payment of cash rent.

Note. Sum of County figures may not equal the State total due to rounding.

Table A-13a. Preferred Unit Type, Buyers, 1992, 1997, 2003, 2006, and 2011

	County	Year	Total Will Move ^a	Preferred Unit Type					
				Single Family	Townhouse	Condo	Apartment	Other	No Preference
P L A N T O B U Y	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%
		2011	40,483	61.0%	7.2%	26.7%	0.0%	2.0%	3.1%
	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%
		2011	7,156	83.0%	5.7%	9.7%	0.0%	0.4%	1.2%
	Hawai'i	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%
		2011	8,711	87.3%	4.0%	5.9%	0.0%	1.0%	1.8%
	Kaua'i	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%
		2011	2,046	81.8%	4.4%	8.3%	0.0%	2.8%	2.6%
	State	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%
		2011	58,395	68.3%	6.5%	20.9%	0.0%	1.7%	2.6%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

^a Total Will Move is households that plan to move, have some idea when they will move, plan to stay in the State when they move, and want to buy their next unit rather than rent.

Note. Sum of County figures may not equal the State total due to rounding.

Table A-13b. Preferred Unit Type, Renters, 1992, 1997, 2003, 2006, and 2011

	County	Year	Total Will Move ^a	Preferred Unit Type					
				Single Family	Townhouse	Condo	Apartment	Other	No Preference
P L A N T O R E N T	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%
		2011	46,396	34.5%	4.3%	13.8%	44.2%	2.0%	1.2%
	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%
		2011	7,751	57.3%	7.8%	5.0%	14.8%	5.4%	9.7%
	Hawai'i	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%
		2011	6,294	74.1%	4.8%	2.8%	11.7%	1.8%	4.8%
	Kaua'i	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%
		2011	3,525	66.5%	1.8%	11.9%	10.6%	3.9%	5.3%
	State	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%	10.8%	19.1%	2.7%	5.9%
		2006	58,686	48.1%	8.2%	10.8%	24.3%	3.0%	7.7%
		2011	63,697	42.9%	4.6%	11.6%	35.6%	2.5%	2.8%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

^a Total Will Move is households that plan to move, have some idea when they will move, plan to stay in the State when they move, and want to rent their next unit. Households who planned to move in with friends or family, some other tenancy, or did not know what their next tenancy would be were not asked subsequent questions regarding preferences for their next unit, financial qualifications, etc. and are not included in the data presented.

Note. Sum of County figures may not equal the State total due to rounding.

Table A-14a. Preferred Number of Bedrooms, Buyers, 1992, 1997, 2003, 2006, and 2011

	County	Year	Total Will Move ^a	Preferred Number of Bedrooms				
				Studio or One	Two	Three	Four or More	No Preference
P L A N T O B U Y	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%
		2011	40,483	4.5%	23.6%	37.8%	34.1%	0.0%
	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%
		2011	7,156	1.1%	20.2%	49.1%	29.3%	0.4%
	Hawai'i	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%
		2011	8,711	9.5%	29.7%	34.5%	25.3%	1.1%
	Kaua'i	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%
		2011	2,046	1.2%	16.5%	49.1%	33.2%	0.0%
	State	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%
		2011	58,395	4.7%	23.8%	39.1%	32.1%	0.2%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

^a Total Will Move is households that plan to move, have some idea when they will move, plan to stay in the State when they move, and want to buy their next unit rather than rent.

Note. Sum of County figures may not equal State total due to rounding.

Table A-14b. Preferred Number of Bedrooms, Renters, 1992, 1997, 2003, 2006, and 2011

	County	Year	Total Will Move ^a	Preferred Number of Bedrooms				
				Studio or One	Two	Three	Four or More	No Preference
P L A N T O R E N T	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%
		2011	46,396	21.2%	42.8%	29.9%	5.7%	0.4%
	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%
		2011	7,751	11.6%	47.3%	34.8%	6.3%	0.0%
	Hawai'i	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%
		2011	6,294	7.6%	37.6%	34.7%	20.1%	0.0%
	Kaua'i	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%
		2011	3,525	12.9%	44.6%	31.9%	8.6%	2.1%
	State	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%
		2011	63,697	18.3%	42.9%	31.0%	7.4%	0.4%

Source: Housing Demand Survey, 1992, 1997, 2003, 2006, and 2011

^a Total Will Move is households that plan to move, have some idea when they will move, plan to stay in the State when they move, and want to rent their next unit. Households who planned to move in with friends or family, some other tenancy, or did not know what their next tenancy would be were not asked subsequent questions regarding preferences for their next unit, financial qualifications, etc. and are not included in the data presented.

Note. Sum of County figures may not equal State total due to rounding.

Table A-15a. Affordable Housing Cost for New Units, Buyers, 1992, 1997, 2003, 2006, and 2011

	County	Year	Total Will Move ^b	Affordable Monthly Housing Cost ^a								
				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 \$1,999	\$2,000 to \$3,000	More than \$3,000
P l a n t o B u y	Honolulu	1992	60,724	0.9%	1.1%	14.7%	29.9%	10.7%	22.0%	7.7%	5.9%	7.2%
		1997	76,663	0.0%	0.6%	9.3%	21.7%	18.4%	20.7%	11.6%	14.2%	3.4%
		2003	75,482	2.4%	1.3%	4.5%	14.1%	15.5%	17.3%	19.4%	19.1%	6.5%
		2006	65,495	1.8%	3.9%	6.7%	9.3%	9.2%	12.0%	6.0%	21.5%	13.3%
		2011	40,483	0.1%	0.8%	3.1%	7.0%	9.0%	4.3%	8.8%	27.4%	39.5%
	Maui	1992	8,328	3.1%	5.5%	36.5%	23.6%	12.7%	8.4%	4.7%	4.0%	1.5%
		1997	10,051	1.1%	6.2%	20.5%	30.8%	13.5%	14.6%	5.4%	6.3%	1.6%
		2003	10,586	1.8%	5.9%	11.9%	26.8%	13.4%	12.7%	9.6%	12.1%	5.8%
		2006	12,539	2.0%	2.5%	4.3%	7.9%	9.3%	13.8%	8.7%	28.8%	12.4%
		2011	7,156	0.0%	0.2%	0.6%	7.7%	5.8%	19.1%	5.3%	32.7%	28.8%
	Hawai'i	1992	12,441	0.9%	3.4%	17.6%	31.0%	22.8%	11.3%	4.9%	5.0%	3.2%
		1997	10,794	0.9%	3.1%	9.6%	25.0%	12.6%	26.0%	9.6%	10.7%	2.5%
		2003	13,402	1.3%	1.7%	7.2%	16.9%	15.2%	15.6%	20.5%	13.8%	7.9%
		2006	15,940	1.4%	3.2%	6.3%	17.8%	8.2%	12.8%	2.3%	18.6%	10.7%
		2011	8,711	1.7%	1.6%	6.8%	10.5%	11.2%	18.3%	6.0%	22.2%	21.6%
	Kaua'i	1992	4,513	0.0%	1.6%	14.5%	31.3%	23.6%	14.7%	8.5%	4.6%	1.2%
		1997	4,016	1.0%	4.5%	13.1%	28.0%	17.2%	16.6%	9.6%	7.5%	2.4%
		2003	4,381	1.5%	1.2%	5.7%	21.3%	15.8%	22.3%	14.4%	12.6%	5.2%
		2006	3,879	1.4%	2.4%	3.6%	12.9%	12.4%	12.9%	5.4%	20.1%	13.5%
		2011	2,046	2.3%	6.3%	2.1%	11.7%	4.8%	14.7%	9.4%	24.0%	24.8%
	State	1992	86,006	1.0%	1.9%	17.2%	29.5%	13.4%	18.7%	7.0%	5.5%	5.7%
		1997	101,524	0.3%	1.6%	10.6%	23.2%	17.3%	20.5%	10.7%	12.8%	3.1%
		2003	103,851	2.1%	1.8%	5.6%	16.0%	15.3%	16.8%	18.3%	17.4%	6.5%
		2006	97,853	1.8%	3.5%	6.2%	10.5%	9.2%	12.4%	5.8%	21.9%	12.8%
		2011	58,395	0.4%	1.0%	3.3%	7.8%	8.8%	8.7%	7.9%	27.1%	34.9%

Source. Housing Demand Survey, 1992, 1997, 2003, 2006 and 2011

^a Based on self-report from respondents regarding the level of monthly payment they would be able to afford.

Note. Sum of County figures may not equal State total due to rounding.

Table A-15b. Affordable Housing Cost for New Units, Renters, 1992, 1997, 2003, 2006, and 2011

	County	Year	Total Will Move ^b	Affordable Monthly Housing Cost ^a								
				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 \$1,999	\$2,000 to \$3,000	More than \$3,000
P l a n t R e n t	Honolulu	1992	67,086	1.5%	2.8%	29.6%	35.1%	16.3%	9.6%	2.8%	2.3%	0.0%
		1997	52,128	2.0%	7.5%	26.1%	31.6%	16.7%	10.6%	3.1%	2.4%	0.0%
		2003	38,156	4.4%	10.2%	19.0%	24.9%	11.4%	11.4%	10.3%	5.2%	3.2%
		2006	40,585	0.0%	7.8%	13.6%	21.1%	13.3%	9.5%	8.8%	6.7%	5.0%
		2011	46,396	0.0%	2.2%	14.6%	22.5%	18.7%	12.2%	6.6%	18.5%	4.7%
	Maui	1992	4,956	0.9%	7.6%	53.2%	29.2%	6.8%	2.2%	0.2%	0.0%	0.0%
		1997	6,188	4.6%	18.7%	41.7%	21.8%	5.1%	4.5%	1.8%	1.9%	0.0%
		2003	5,007	8.0%	11.0%	38.6%	22.2%	9.0%	8.0%	0.0%	1.7%	1.5%
		2006	7,265	0.0%	10.2%	12.9%	19.9%	12.5%	17.3%	5.2%	9.1%	3.6%
		2011	7,751	3.1%	5.2%	8.1%	30.8%	14.3%	18.9%	8.6%	7.2%	3.9%
	Hawaii	1992	3,563	0.1%	6.6%	23.8%	32.4%	25.2%	9.7%	1.0%	1.0%	0.0%
		1997	5,090	6.0%	15.5%	26.5%	31.6%	15.3%	2.9%	0.6%	1.7%	0.0%
		2003	5,069	7.8%	5.3%	17.7%	33.2%	10.0%	11.2%	3.8%	11.0%	0.0%
		2006	7,659	0.0%	18.3%	16.5%	19.1%	10.7%	9.9%	5.8%	8.6%	1.6%
		2011	6,294	4.8%	10.5%	21.0%	22.9%	8.1%	8.8%	12.5%	7.6%	3.8%
	Kauai	1992	2,017	1.0%	8.2%	30.3%	21.4%	22.2%	17.0%	0.0%	0.0%	0.0%
		1997	2,412	6.7%	16.2%	43.0%	24.3%	4.4%	3.7%	1.8%	0.0%	0.0%
		2003	2,045	4.2%	2.2%	13.8%	34.9%	15.7%	15.0%	2.5%	11.7%	0.0%
		2006	3,177	0.0%	9.1%	5.2%	17.7%	15.3%	25.0%	4.5%	7.1%	4.9%
		2011	3,525	3.4%	5.3%	8.1%	14.9%	15.7%	16.7%	7.1%	25.9%	2.9%
	State	1992	77,622	1.4%	3.4%	30.8%	34.2%	16.3%	9.3%	2.5%	2.0%	0.0%
		1997	65,818	2.7%	9.5%	28.2%	30.4%	15.0%	9.2%	2.7%	2.2%	0.0%
		2003	50,277	5.1%	9.5%	20.6%	25.9%	11.2%	11.2%	8.3%	5.7%	2.6%
		2006	58,686	0.0%	9.5%	13.4%	20.5%	13.0%	11.4%	7.8%	7.2%	4.4%
		2011	63,697	1.3%	3.8%	14.1%	23.2%	16.6%	13.0%	7.6%	16.1%	4.3%

Source. Housing Demand Survey, 1992, 1997, 2003, 2006 and 2011

^a Based on self-report from respondents regarding the level of monthly payment they would be able to afford.

^b The total number of mover households differs from Table B-12 because in 2011 the 11.3% of mover households (15,558) who did not know whether they planned to buy, rent, or move in with friends or family were not asked subsequent questions regarding preferences for their next unit, financial qualifications, etc.

Note. Sum of County figures may not equal the State total due to rounding.

Table A-16. Preferred Location of New Housing Unit, 2011

Preferred Next Location	County of Residence									
	Honolulu		Maui		Hawaii		Kauai		State	
	Count	Pct.	Count	Pct.	Count	Pct.	Count	Pct.	Count	Pct.
HONOLULU										
PUC	40,591	46.8%	416	2.9%	780	5.3%	58	1.2%	41,846	34.6%
Central Oahu	10,775	12.4%	103	0.7%	140	1.0%	157	3.1%	11,175	9.2%
East Honolulu	7,673	8.9%	18	0.1%	223	1.5%	139	2.8%	8,052	6.7%
Windward Oahu	8,475	9.8%	73	0.5%	189	1.3%			8,736	7.2%
Leeward Oahu	10,142	11.7%	222	1.5%	185	1.3%	52	1.0%	10,601	8.8%
Oahu, any	2,662	3.1%			258	1.8%	84	1.7%	3,003	2.5%
HAWAII										
South Kona-Ka'u			139	1.0%	133	0.9%	236	4.7%	507	0.4%
Puna					1,965	13.4%	37	0.7%	2,002	1.7%
North & South Hilo	788	0.9%	351	2.4%	3,520	24.0%	26	0.5%	4,685	3.9%
North Hawai'i	570	0.7%	155	1.1%	1,713	11.7%	34	0.7%	2,471	2.0%
North Kona			622	4.3%	3,040	20.7%			3,662	3.0%
Waimea (BI)					713	4.9%			713	0.6%
Hawai'i island, any	426	0.5%	160	1.1%	969	6.6%	17	0.3%	1,571	1.3%
MAUI										
Hana			105	0.7%	147	1.0%	381	7.6%	633	0.5%
Makawao-Pukalani-Kula			2,464	16.9%	47	0.3%	27	0.5%	2,539	2.1%
Wailuku-Kahului	810	1.0%	2,657	18.2%			10	0.2%	3,477	2.9%
Paia-Haiku	782	0.9%	1,061	7.3%	55	0.4%			1,899	1.6%
Kihei-Makena	782	0.9%	2,681	18.4%			112	2.2%	3,576	3.0%
West Maui			1,315	9.0%	135	0.9%	162	3.2%	1,613	1.3%
Moloka'i			325	2.2%			24	0.5%	349	0.3%
Lana'i	116	0.1%	45	0.3%					161	0.1%
Maui, any	763	0.9%	1,549	10.6%	63	0.4%			2,374	2.0%
KAUAI										
Waimea (Kaua'i)							75	1.5%	75	0.1%
Koloa					34	0.2%	841	16.7%	875	0.7%
Lihue			40	0.3%	176	1.2%	869	17.3%	1,085	0.9%
Kawaihau	524	0.6%			129	0.9%	417	8.3%	1,070	0.9%
Hanalei							698	13.9%	698	0.6%
Kaua'i, any	810	1.0%	74	0.5%	38	0.3%	576	11.4%	1,499	1.2%
<i>Total</i>	86,689	89.0%	14,574	86.1%	14,653	84.2%	5,033	79.4%	120,948	87.6%
Total No Preference	10,740	11.0%	2,363	13.9%	2,759	15.8%	1,306	20.6%	17,168	12.4%
Total Will Move	97,429	100.0%	16,937	100.0%	17,412	100.0%	6,339	100.0%	138,116	100.0%

Source: Housing Demand Survey, 2011. Note. Districts reported correspond to definitions required by the Counties in the Request for Proposal. Windward includes Ko'olaupoko and Ko'olaupoko, Leeward includes Ewa, and Central O'ahu includes the North Shore. Respondents were permitted to provide up to four responses for preferred next location. Sum of County figures may not equal the State total due to rounding.

APPENDIX B: DETAILED DATA WORKSHEETS

Table B-1. Home Ownership Rates, 1990-2011

	State of Hawai'i	County of Honolulu	County of Hawai'i	County of Maui	County of Kaua'i
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	59.0	57.2	66.9	58.5	62.9
2011	57.7	56.1	66.0	55.8	60.1

Sources: U.S. Census 1990 and 2000; HHPS Housing Demand Survey, 1992, 1997, 2003, 2006 and 2011; Honolulu 2003, 2004, and 2005, ACS; Hawai'i and Maui Counties 2005, ACS; All others are SMS estimates.

Table B-2 . Vacancy Rates, by State: 1986 to 2010

	Rental Rate		Homeowner Rate	
	U.S.	Hawai'i	U.S.	Hawai'i
1986	7.7	5.7	1.6	0.8
1987	7.7	6.5	1.7	1.1
1988	7.7	6.3	1.6	0.4
1989	7.4	6.6	1.8	1.0
1990	7.2	6.6	1.7	0.8
1991	7.4	5.8	1.7	1.4
1992	7.4	5.8	1.5	2.5
1993	7.3	6.8	1.4	3.0
1994	7.4	7.4	1.5	2.0
1995	7.6	6.3	1.5	2.0
1996	7.8	6.0	1.6	1.4
1997	7.7	7.1	1.6	1.6
1998	7.9	6.9	1.7	1.3
1999	8.1	7.6	1.7	1.8
2000	8.0	5.3	1.6	0.9
2001	8.4	8.2	1.8	0.8
2002	8.9	7.3	1.7	0.9
2003	9.8	8.9	1.8	1.2
2004	10.2	9.7	1.7	1.3
2005	9.8	5.1	1.9	0.6
2006	9.7	5.5	2.4	1.0
2007	9.7	6.3	2.7	1.7
2008	10.0	7.2	2.8	1.7
2009	10.6	9.2	2.6	1.9
2010	10.2	8.1	2.6	1.9

Source: Homeownership and Vacancy Rate Survey, 1986-2010

APPENDIX C: LAND USE REGULATION INDEX

Table C-1. Wharton Residential Land Use Regulation Index by State

Rank	State	Index Value	Observations
1	Hawai'i	2.32	1
2	Rhode Island	1.58	17
3	Massachusetts	1.56	79
4	New Hampshire	1.36	32
5	New Jersey	0.88	104
6	Maryland	0.79	18
7	Washington	0.74	49
8	Maine	0.68	44
9	California	0.59	182
10	Arizona	0.58	40
11	Colorado	0.48	48
12	Delaware	0.48	5
13	Connecticut	0.38	65
14	Pennsylvania	0.37	182
15	Florida	0.37	987
16	Vermont	0.35	24
17	Minnesota	0.08	80
18	Oregon	0.08	42
19	Wisconsin	0.07	93
20	Michigan	0.02	111
21	New York	-0.01	93
22	Utah	-0.07	41
23	New Mexico	-0.11	16
24	Illinois	-0.19	139
25	Virginia	-0.19	35
26	Georgia	-0.21	56
27	North Carolina	-0.35	64
28	Montana	-0.36	6
29	Ohio	-0.36	135
30	Texas	-0.45	165
31	Nevada	-0.45	7
32	Wyoming	-0.45	7
33	North Dakota	-0.54	8
34	Kentucky	-0.57	28
35	Idaho	-0.63	19
36	Tennessee	-0.68	41
37	Nebraska	-0.68	22
38	Oklahoma	-0.70	36
39	South Carolina	-0.76	30
40	Mississippi	-0.82	21
41	Arkansas	-0.86	23
42	West Virginia	-0.90	15
43	Alabama	-0.94	37
44	Iowa	-0.99	59
45	Indiana	-1.01	47
46	Missouri	-1.03	67
47	South Dakota	-1.04	11
48	Louisiana	-1.06	19
49	Alaska	-1.07	7
50	Kansas	-1.13	46

Source: Gyourko, Joseph, Albert Saiz, and Anita A. Summers, 2007. A New Measure of the Local Regulatory Environment for Housing Markets: The Wharton Residential Land Use Regulatory Index. The Wharton School, University of Pennsylvania, Final Version: March 29, 2007.

Note. Observations are the number of individual respondents (state or county agencies, university offices, Realtor groups, etc.) that offered evidence for specific housing markets in each state.

APPENDIX D: SPECIAL NEEDS HOUSING

Table D-1. Special Needs Population and Housing Summary, City & County of Honolulu, 2011

Special Needs Population	Total SN Pop. Count	% of Total Population	Affordable Housing Inventory	HH In Need of Supportive Housing	Unmet Housing Need
Elderly	169,361	17.8%			
Frail elderly	5,281	0.6%	4603		
Exiting offender	1,376	0.1%	144		
Persons with alcohol or other drug addictions	98,848	10.4%			
Persons with disabilities	87,950	9.2%			
Persons with developmental disabilities	1,700	0.2%			
Persons with HIV/AIDS	1,624	0.2%			
Persons with severe mental illness	47,660	5.0%			
Victims of domestic violence	unknown	unknown			
Youth exiting foster care	128	<0.1%			

Table D-2. Special Needs Population and Housing Summary, County of Hawai'i, 2011

Special Needs Population	Total SN Pop. Count	% of Total Population	Affordable Housing Inventory	HH In Need of Supportive Housing	Unmet Housing Need
Elderly	34,368	18.6%	651		
Frail elderly	1,674	0.9%			
Exiting offenders	267	0.1%	46		
Persons with alcohol or other drug addictions	17,749	9.6%			
Persons with disabilities	22,004	11.9%			
Persons with developmental disabilities	330	0.2%			
Persons with HIV/AIDS	315	0.2%			
Persons with severe mental illness	9,254	5.0%			
Victims of domestic violence	1,078	0.6%			
Youth exiting foster care	20	<0.1%			

Table D-3. Special Needs Population and Housing Summary, County of Maui, 2011

Special Needs Population	Total SN Pop. Count	% of Total Population	Affordable Housing Inventory	HH In Need of Supportive Housing	Unmet Housing Need
Elderly	25,328	16.4%	684		
Frail elderly	1,021	0.7%			
Exiting offenders	223	0.1%	53		
Persons with alcohol or other drug addictions	12,108	7.8%			
Persons with disabilities	13,186	8.5%			
Persons with developmental disabilities	276	0.2%			
Persons with HIV/AIDS	264	0.2%			
Persons with severe mental illness	7,742	5.0%			
Victims of domestic violence	unknown	unknown			
Youth exiting foster care	17	<0.1%			

Table D-4. Special Needs Population and Housing Summary, County of Kauaʻi, 2011

Special Needs Population	Total SN Pop. Count	% of Total Population	Affordable Housing Inventory	HH In Need of Supportive Housing	Unmet Housing Need
Elderly	12,594	18.8%	246		
Frail elderly	725	1.1%			
Exiting offenders	97	0.1%	41		
Persons with alcohol or other drug addictions	5,884	8.8%			
Persons with disabilities	7,295	10.9%			
Persons with developmental disabilities	120	0.2%			
Persons with HIV/AIDS	115	0.2%			
Persons with severe mental illness	3,355	5.0%			
Victims of domestic violence	unknown	unknown			
Youth exiting foster care	7	<0.1%			

Table D-5a. AMHD Statewide Current and Planned Housing Inventory, 2004-2012

	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
24-Hour Group Homes										
Oahu	36	53	68	75	24	16	32	24	16	344
Maui	0	8	0	8	16	0	8	8	0	48
Hawaii	24	0	24	8	24	16	8	8	8	120
Kauai	0	10	0	0	8	8	8	0	0	34
Total	60	71	92	91	72	40	56	40	24	546
8-16 Hour Group Homes										
Oahu	57	24	14	44	32	16	32	16	16	251
Maui	5	6	0	8	18	8	0	8	8	61
Hawaii	16	0	20	8	16	8	8	8	8	92
Kauai	4	0	5	0	9	0	8	0	0	26
Total	82	30	39	60	75	32	48	32	32	430
Semi-Independent Living										
Oahu	55	72	5	0	0	0	5	0	5	142
Maui	21	0	-5	0	0	5	0	5	0	26
Hawaii	30	0	5	5	5	0	0	0	5	50
Kauai	18	-4	0	0	0	0	0	5	0	19
Total	124	68	5	5	5	5	5	10	10	237
Licensed TLP										
Oahu	0	0	0	0	40	0	5	0	0	45
Maui	0	0	0	0	0	8	0	0	0	8
Hawaii	0	0	0	0	0	16	0	5	0	21
Kauai	0	0	0	0	0	0	5	0	0	5
Total	0	0	0	0	40	24	10	5	0	79
Licensed Specialized Residential										
Oahu	37	-15	0	0	16	0	0	0	0	38
Maui	0	0	0	0	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0	0	0	0
Kauai	0	0	0	0	0	0	0	0	0	0
Total	37	-15	0	0	16	0	0	0	0	38
Licensed Specialized Residential (Dual)										
Oahu	69	0	8	0	5	0	5	0	5	92
Maui	0	4	4	0	0	0	5	0	5	18
Hawaii	0	0	0	0	0	16	0	0	0	16
Kauai	0	0	0	0	0	0	0	0	0	0
Total	69	4	12	0	5	16	10	0	10	126
Licensed Crisis Residential										
Oahu	19	-3	0	0	0	0	0	0	0	16
Maui	8	-4	4	0	0	0	0	0	0	8
Hawaii	5	4	0	8	0	0	0	0	0	17
Kauai	0	0	0	0	5	0	0	0	0	5
Total	32	-3	4	8	5	0	0	0	0	46
Safe Haven (Homeless)										
Oahu	25	0	0	0	0	0	0	0	0	25
Maui	0	0	0	0	12	0	0	0	0	12
Hawaii	0	0	0	0	0	0	0	0	0	0
Kauai	0	0	0	0	0	0	5	0	0	5
Total	25	0	0	0	12	0	5	0	0	42

Table D-5b. AMHD Statewide Current and Planned Housing Inventory, 2004-2012 (continued)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
Supported Housing / Bridge Subsidy										
Oahu	185	0	0	0	0	50	0	50	0	285
Maui	50	0	0	0	0	40	0	25	0	115
Hawaii	70	0	0	0	0	40	0	30	0	140
Kauai	27	0	0	0	0	10	0	5	0	42
Total	332	0	0	0	0	140	0	110	0	582
Consumers Moved from Bridge to Section 8					8					
Oahu	67	26	50	45	35	25	25	25	25	323
Maui	13	15	8	20	20	30	18	15	10	149
Hawaii	5	12	7	25	25	25	15	10	10	134
Kauai	5	2	3	15	10	15	10	8	7	75
Total	90	55	68	105	90	95	68	58	52	681
Shelter Plus Care to Rental Subsidies (Homeless)										
Oahu	85	144	12	0	0	14	20	20	25	320
Maui	0	0	18	0	0	0	12	0	14	44
Hawaii	0	24	10	14	0	18	0	14	12	92
Kauai	0	0	0	10	0	0	0	10	0	20
Total	85	168	40	24	0	32	32	44	51	476
Consumers Moved from Shelter Plus Care to Section 8										
Oahu	0	15	20	35	25	25	20	25	20	185
Maui	0	0	1	1	8	10	10	12	10	52
Hawaii	0	0	7	7	15	15	15	15	10	84
Kauai	0	0	0	0	3	3	5	3	5	19
Total	0	15	28	43	51	53	50	55	45	340
Office of Social Ministry in partnership with HPHA and AMHD										
Beyond Shelter Apts.	0	0	41	0	0	0	0	0	0	41
Kihei Pua	0	0	72	0	0	0	0	0	0	72
Ponahawaiola Apts.	0	0	28	0	0	0	0	0	0	28
Total	0	0	141	0	0	0	0	0	0	141
Total Housing Capacity-Year										
Total Housing	936	393	429	336	371	437	284	354	224	3,764

APPENDIX E: GLOSSARY

At-Risk (Precariously Housed): Households in which members would become homeless in less than three months if they suddenly lost their primary source of income. Also called “precariously housed,” these people are three monthly paychecks away from homelessness.

Hidden Homeless: Households in which more than one family share accommodations. These households include families that are doubled up (two or more families or groups of persons who are related by birth, marriage or adoption) and those that are sharing (two or more families or groups whose members are not related by birth, marriage, or adoption).

Adequately Housed: Households that are not classified as at-risk or hidden homeless.

50% Hawaiian: An individual is 50 percent Hawaiian if they claimed that status in the Housing Demand Survey. Only Respondents were asked to self-report ethnic status. A household is classified as 50 percent Hawaiian if the household includes at least one adult member who is 50 percent or more Hawaiian. Respondents were asked if there were other members of the household who were 50 percent or more Hawaiian. 50 percent Hawaiian households may or may not be DHHL beneficiaries (lessees or applicants).

ADLs: Activities of Daily Living, which include assistance with eating, bathing, getting dressed, getting in or out of bed, or getting to the toilet.

Acceptable Bathrooms: The number of bathrooms that are absolutely required in a new unit. Typically, an acceptable bathroom is a more accurate measure of housing characteristic for planning than first-choice preferred bedrooms.

Acceptable Bedrooms: The number of bedrooms that are absolutely required in a new unit. Typically, an acceptable bedroom is a more accurate measure of housing characteristic for planning than first-choice preferred bedrooms.

Affordable Housing: refers to the generalized concept of housing that residents have sufficient income and financial resources to be able to purchase or rent.

In the U.S., commonly accepted guideline for housing affordability is a housing cost that does not exceed 30% of a household's gross income. Housing costs considered in this guideline generally include taxes and insurance for owners, and usually include utility costs. When the monthly carrying costs of a home exceed 30–35 percent of household income, then the housing is considered unaffordable for that household.

Affordable Housing Cost: The average dollar amount that a respondent reported they would be able to pay per month for a new housing unit.

Annual Periods: Data reported for more than one year in this report (e.g., 2003-2006 or 2007-2010) are inclusive of both years. That is, “2003-2006” means from January 1, 2003 through December 31, 2006 and includes both end dates. If disaggregated data were based on Census estimates [see also **Years**], the original figures are annual estimates centered on July 1 but those estimates include all cases that occurred from January 1 through December 31 in the disaggregated data.

Applicant Only: Households in which at least one adult member has applied for, but has not yet been awarded, land from the Department of Hawaiian Home Lands.

At Risk for Homelessness: Households in which members would become homeless is less than three months if they suddenly lost their primary source of income. Also called “precariously housed,” these people are three monthly paychecks away from homelessness.

Available Down Payment: The amount of money available to be used as a cash down payment for new housing.

Churn Rate: For any given period of time, the number of participants who discontinue their use of a service divided by the average number of total participants. Churn rate provides insight into the growth or decline of the subscriber base, as well as the average length of participation in the service.

COL %: Represents the percentage of the column total for an individual cell in a table [Also referred to as **Count Percent** or vertical percent].

Contract Type: Refers to the two major ownership contracts: leasehold and fee simple.

Count Percent: [See **Col %**].

Crowding Ratio: The average number of household members per bedroom per household.

Crowding Ratio by Bedrooms: Number of persons per bedroom. Does not include any rooms other than bedrooms. Households with more than 1.01 persons per bedroom are considered overcrowded [See also **Overcrowded**].

Crowding Ratio by Rooms: Number of persons per room. Includes all rooms other than closets, hallways, utility rooms, foyers, and lanais.

DHHL: Department of Hawaiian Home Lands. This state agency has been responsible for administering the land trust that in 1921 established about 200,000 acres of land for homesteading by Native Hawaiians. For more information visit: <http://www.Hawaii.gov/dhhl/>.

Doubled-up: A single household that includes more than one family group, either members of two or more different generations (e.g., a parental family group and the family of one of their children), or of the same generation (two family groups headed by siblings or cousins). Doubled-up households may also include other either related to or unrelated to the family groups.

Elderly: A person 60, 62 or 65 years of age or older.

Elderly Alone: Single member households, member is 62 years of age or older.

Elderly Couple: Two-member households, male and female, at least one of which is 62 years of age or older.

Emancipated foster youth: Youth who are aging out of the foster care system.

Exiting offender: Inmates released from the prison system.

Family: Two or more persons, related by birth, marriage, or adoptions, residing in a single housing unit.

Family Group: Two or more persons, related by birth, marriage or adoption, who may be sharing a housing units with other persons either related or unrelated.

Fee Simple: A fee simple estate is the least limited and the most complete and absolute ownership in land. It is of indefinite duration, freely transferable and inheritable. The phrase “fee simple absolute” came about because the estate is of potentially infinite duration (thus “fee”); there is no limitation on its inheritability (thus simple); and it is indefeasible⁶⁵ and cannot be divested (thus absolute).

Frail elderly: Elderly afflicted with physical or mental disabilities that may interfere with the ability to perform activities of daily living independently (i.e., bathing, dressing, toileting, and meal preparation).

Guamanian or Chamorro: Ethnicity of persons from Guam or the Mariana Islands region.

HH: Household, person residing in a housing unit for five or more months of the year.

Hidden Homeless: Households in which more than one family or family groups share a housing unit. Hidden homeless households include those that are doubled-up, households that consist of two or more unrelated family groups, and households in which a family group shares accommodations with other unrelated household members.

Homestead Land: Land entrusted by the Hawaiian Homes Commission Act for homesteading by Native Hawaiians. This trust is current administered by the Department of Hawaiian Homelands

Honolulu PUC: Honolulu Primary Urban Center, census tracts 4.01 thru 72, 75.02, and 75.06. For information on Census Tracts visit: http://factfinder.census.gov/home/saff/main.html?_lang=en

HUD: U.S. Department of Housing and Urban Development. HUD's mission is to increase home ownership, support community development, and increase access to affordable housing free from discrimination. To fulfill this mission, HUD will embrace high standards of ethics, management and accountability and forge new partnerships -- particularly with faith-based and community organizations that leverage resources and improve HUD's ability to be effective on the community level. For more information visit: <http://www.hud.gov/>

HUD Income Guidelines: [See **HUD Income Limits**]

HUD Income Limits: Calculates income as percentage of the HUD median income for a household of a given size in a given geographic area. For information on the HUD median income and HUD income limits visit: <http://www.huduser.org/datasets/il/il06/BRIEFING-MATERIALS.pdf>

HUD Median Income: The median income for a household of a given size in a specific geographic area. For detailed information on the HUD median income and HUD income limits visit: <http://www.huduser.org/datasets/il/il06/BRIEFING-MATERIALS.pdf>

IADLs: Instrumental Activities for Daily Living which include preparing meals, taking medications, making phone calls or managing money.

Imputation: A method of replacing missing values for specific variables in survey work. SMS uses a multivariate regression technique to replace missing values with the best estimate of the value for each case, based on reported values of several other related variables. For the Housing Demand Survey, imputation was applied to age and household income.

⁶⁵ Indefeasible: cannot be altered or voided, usually in reference to an interest in real property.

Income: Self-reported household income from all sources, for all employed [persons in the households, estimated before taxes, for the calendar year preceding the survey (2010). [See also **Imputation**.]

Income as a % of HUD Median: [See **HUD Income Limits**].

Income Per Household Member: Household income divided by the number of persons living in the household.

Intention to Move: The desire to seek a new housing unit at some time in the future. Includes the desire to seek a new ownership units and the desire to seek a new rental unit.

Leasehold: A less than freehold estate by which a tenant possesses real property. In a lease situation, the tenant possesses a leasehold and the landlord possesses the reversion estate; i.e. when the lease terminates, the property will revert to the landlord.

Lessee and Applicant: A classification of households used in the Native Hawaiian tabulations and reports referring to a households in which at least one member is a DHHL lessee and at least one is an applicant for a land award from DHHL.

Lessee Only: A households occupied by virtue of a Department of Hawaiian Home Lands lease, and having no adult member who is on a DHHL awards applicant list.

MFD: Multi-Family Dwelling. This includes townhouses, apartments, duplexes, and multiplexes.

Multi-Generation Household With Elderly Member: Households with at least two generations present and at least one member 62 years of age or older.

Non-Hawaiian: A non-Hawaiian individual is a person that reports no Hawaiian ancestry.

O'ahu SF Ads: The number of advertisements for single-family homes in the City & County of Honolulu.

O'ahu SF Rents: The number of advertisements for single-family homes for rent in the City & County of Honolulu.

Occupy without Payment: A type of tenancy in which the respondent occupies a housing units without payment of cash rent. Includes persons living in rent-free public units, those living in private sector, family-owned units, property managers occupying units in exchange for services, clerics living in church owner units, military dependents in on-base units, etc. Does not include individuals who have paid off their mortgage.

Other Hawaiian: Other Hawaiian individuals are those who claimed some Hawaiian ethnicity in the survey, but were not 50 percent or more Hawaiian, and therefore were not DHHL beneficiaries. Other Hawaiian households are households that include no individual with more than 50 percent Hawaiian ancestry, and include at least one individual who is less than 50 percent Hawaiian.

Overcrowded: A household with more than 1.01 persons per room.

Persons with alcohol or other drug addictions: Persons whose impairment or disability is due to alcoholism or drug addiction.

Persons with developmental disability: Persons with a severe, chronic disability that: (1) is attributable to a mental or physical impairment or combination of mental and physical impairments; (2) is manifested before the individual attains age 22; (3) is likely to continue indefinitely; (4) results in substantial functional limitations in three or more of the following areas of major life activity: self-care; receptive and expressive language; learning; mobility; self-direction; capacity for independent living; economic self-sufficiency; and (5) reflects the individual's need for a combination and sequence of special interdisciplinary, or generic services, individualized supports, or other forms of assistance that are of lifelong or extended duration and are individually planned and coordinated. An individual from birth to age nine, inclusive, who has a substantial developmental delay or specific congenital or acquired condition, may be considered to have a developmental disability without meeting three or more of the criteria described above, if the individual, without services and supports, has a high probability of meeting those criteria later in life.

Persons with disabilities: Any person who has a physical or mental impairment that substantially limits one or more major life activities; has a record of such impairment; or is regarded as having such impairment. In general, a physical or mental impairment includes hearing, mobility and visual impairments, chronic alcoholism, chronic mental illness, AIDS, AIDS Related Complex, and mental retardation that substantially limit one or more major life activities. Major life activities include walking, talking, hearing, seeing, breathing, learning, performing manual tasks, and caring for oneself.

Persons with HIV/AIDS: A person with: the disease of acquired immunodeficiency syndrome or related diseases, or any conditions arising from the etiologic agent for acquired immunodeficiency syndrome, including infection with the human immunodeficiency virus (HIV).

Persons with severe mental illness: Persons with a severe and persistent mental or emotional impairment that seriously limits his or her ability to live independently, and which impairment could be improved by more suitable housing conditions.

Potential Movers: Households in which the Housing Demand Survey respondent reported an interest in moving to a new unit in the future.

Potential Owners: Households in which the Housing Demand Survey respondent reported intent to own their next home.

Potential Renters: Households in which the Housing Demand Survey respondent reported intent to rent their next unit.

Precariously Housed: [See **At Risk for Homelessness**]

Preferred Bathrooms: The number of bathrooms desired in a new unit.

Preferred Bedrooms: The number of bedrooms desired in a new unit.

Seniors: See **Elderly**

Shelter to Income Ratio: The percentage of total monthly household income that is used to pay for shelter costs (rent or mortgage payments). In this study, a shelter-to-income ratio in excess of .30 is considered to indicate some level of financial disadvantages. A shelter-to-income ratio in excess of .40 indicates severe financial disadvantage.

SFD: A single-family detached dwelling unit

Sustainable Housing: Housing that designed to be affordable in perpetuity. Affordability is defined as having a sales or rental price below market values – usually at or below the price affordable to a family with a household income at the median or at specific HUD income qualification levels. Perpetuity is accomplished through limited equity arrangements incorporated in the deed or lease agreement. [See also: **Sustainable Lease**]

Sustainable Lease: A housing contract that does not include ownership of the land. The perpetuity is accomplished through a lease agreement. Sustainable lease contracts may be used to eliminate high down payments, can allow property to be passed on to heirs, require no ground rent, and typically have a lease term greater than 60 years. [See also **Leasehold** and **Fee Simple**]

Tenancy: There are three types of tenancy: own, rent, and occupy without payment

Unit Condition: Self-reported assessment of the overall condition of the current unit, rated on a scale from excellent to poor.

Unit Type: There are several different types of units reported in the HHPS Housing Demand Survey, including: single-family detached units, duplexes, multiplexes, townhouses, condominiums, and apartments. The units are self-reported by the survey respondents. For most analyses we simply recode them to either single-family or multi-family units. Note “condominium” is an ownership regime and not a unit type. In Hawai‘i nearly all condominiums are multifamily units and we code them all as multi-family.

Victims of domestic violence: Victims of felony or misdemeanor crimes of violence committed by a current or former spouse of the victim, by a person with whom the victim shares a child in common, by a person who is cohabitating with or has cohabitated with the victim as a spouse, by a person similarly situated to a spouse of the victim under the domestic or family violence laws of the jurisdiction receiving grant monies, or by any other person against an adult or youth victim who is protected from that person's acts under the domestic, violence or family violence laws of the jurisdiction.

Years: Data in this report come from different sources and use different definitions for years and other time periods. We have adopted a single rubric – the calendar year. In fact, however, the definitions of “year” depend on the data source. The following are the major sources and definitions used in this report:

- a. U.S. Census: Data for any given year are annual estimates centered on July 1 of that year.
- b. American Community Survey: They are annual estimates centered on July 1 of that year.
- c. HHPS Demand Survey: Surveys were conducted in different months each time the study was done. In every year, however, survey data were weighted to U.S. Census estimates or population estimates based on U.S. Census data. Therefore, the demand survey data reflect annual estimates centered on July 1 of the survey year.
- d. Inventory: Data were extracted from property transactions and entered to the TMK system in different months each year. More important, the timing of TMK data depends heavily on the resources available to enter data in each county. Data entry has usually been behind schedule in the last two decades, thus, for greatest comparability and accuracy, we used data as of December 31 of the year preceding the HHPS. Thus in 2003, the data represent units in the system as of December 31, 2002. In some years, the data entry was not up to date in all counties and the data may under represent housing stock for the last year reported.
- e. Housing Production: For any given year, the number of units constructed is actually the total number of authorized building permits recorded from January 1 through December 31 of that year. As such, our figures are likely to overestimate housing unit production in any given year.

In every case, we have attempted to bring all data reported by year into one system based on annual estimates centered on July 1 or annual cumulated counts from January 1 through December 1 for the year noted [see also **Annual Periods**].

APPENDIX F: HAWAII STATE PLANNING ACT (SELECTED SECTIONS)

All state agencies, including the Office of Planning, are guided by two statewide planning documents (1) the [Hawaii State Planning Act](#), which is a broad policy document that sets the table for all activities, programs, and decisions made by local and state agencies; and (2) the [New Day Comprehensive Plan](#), which outlines the Administration's priorities.

The Hawaii State Planning Act was signed into law in 1978 to "improve the planning process in this state, to increase the effectiveness of government and private actions, to improve coordination among different agencies and levels of government, to provide for wise use of Hawaii's resources and to guide the future development of the state" ([HRS § 226-1](#)). The Act is codified under [HRS Chapter 226](#).

The Act sets forth the Hawaii state plan, which is a long-range comprehensive plan that includes an [overall theme](#), [goals](#), [objectives](#), [policies](#), [priority guidelines](#), and [implementation mechanisms](#). The Hawaii state plan:

- Serves as a guide for the future long-range development of the state
- Identifies the goals, objectives, policies, and priorities for the state
- Provides a basis for determining priorities and allocating limited resources, such as public funds, services, human resources, land, energy, water, and other resources
- Improves coordination of federal, state, and county plans, policies, programs, projects, and regulatory activities
- Establishes a system for plan formulation and program coordination to provide for an integration of all major state, and county activities

§226-102 Overall direction. The State shall strive to improve the quality of life for Hawaii's present and future population through the pursuit of desirable courses of action in five major areas of statewide concern that merit priority attention: economic development, population growth and land resource management, affordable housing, crime and criminal justice, and quality education. [L 1978, c 100, pt of §2; am L 1986, c 276, §29]

§226-104 Population growth and land resources priority guidelines. (a) Priority guidelines to effect desired statewide growth and distribution:

(5) Explore the possibility of making available urban land, low-interest loans, and housing subsidies to encourage the provision of housing to support selective economic and population growth on the neighbor islands.

§226-106 Affordable housing. Priority guidelines for the provision of affordable housing:

(1) Seek to use marginal or nonessential agricultural land and public land to meet housing needs of low- and moderate-income and gap-group households.

(2) Encourage the use of alternative construction and development methods as a means of reducing production costs.

(3) Improve information and analysis relative to land availability and suitability for housing.

(4) Create incentives for development which would increase home ownership and rental opportunities for Hawaii's low- and moderate-income households, gap group households, and residents with special needs.

(5) Encourage continued support for government or private housing programs that provide low interest mortgages to Hawaii's people for the purchase of initial owner-occupied housing.

(6) Encourage public and private sector cooperation in the development of rental housing alternatives.

- (7) Encourage improved coordination between various agencies and levels of government to deal with housing policies and regulations.
- (8) Give higher priority to the provision of quality housing that is affordable for Hawai'i's residents and less priority to development of housing intended primarily for individuals outside of Hawai'i. [L 1986, c 276, §33; am L 1989, c 250, §3]

APPENDIX G: BIBLIOGRAPHY

- Analysis of Impediments to Fair Housing - State of Hawai'i, 2010. Prepared for the Hawai'i Public Housing Authority and Hawai'i Housing Finance and Development Corporation, SMS Research & Marketing Services, Inc., September, 2010.
- Analysis of the Honolulu, Hawai'i Housing Market: as of January 1, 2005. U.S. Department of Housing and Urban Development, Policy Development & Research Division, Comprehensive Market Analysis Reports, 2005.
- Angel, Shlomo, (2000). Housing policy matters: A global analysis. Cambridge, England: Oxford University Press.
- Bauer, J., Battist, A, & Bamberger, J.D. Housing the Homeless with HIV in San Francisco. Presented at the North American Housing and HIV/AIDS Research Summit V, Toronto, Ontario, June 2010.
- Behavioral Risk Factor Surveillance System (BRFSS). State of Hawai'i Department of Health. May 23, 2011.
http://www.hhdw.org/cms/uploads/Data%20Source_%20BRFSS/Alcohol%20Consumption%20Fruits/BRFSS_Disability_IND_00001.pdf
- Brewbaker, Paul H. 21 February 2007. Dynamic aspects of Hawai'i housing affordability [PowerPoint slides]. http://www.frbsf.org/community/resources/Hawai'i_housing/dynamicspects.pdf.
- Bonham, Carl S., Kimberly Burnett, and Andrew Kato, (2010) Inclusionary Zoning: Implications for O'ahu's housing market, Honolulu: UHERO.
- Callies, David L., Regulating paradise: Land use controls in Hawai'i, Second Edition, Honolulu, University of Hawai'i Press, 2010.
- Center on Disability Studies Annual Report 2009-2010. University of Hawai'i - Manoa.
http://www.cds.Hawai'i.edu/main/downloads/annualReports/2009_2010/CDSAnnualReport2009_2010.pdf
- City and County of Honolulu, 2009. Annual report on the status of land use on O'ahu: Fiscal year 2009, Department of Planning and Permitting, August 2010.
- Clarey, Aaron. Behind the Housing Crash: Confessions from an Insider. New York: BookSurge Publishing, 2008.
- Consumer & Market Insights, LLC, Housing needs study preparation and outreach – Honolulu, Hawai'i, Proceedings Report, January 12-13, 2001.
- County of Hawai'i, Consolidated Plan, 2010—2014, prepared by the County of Hawai'i Office of Housing and Community Development, January 29, 2010.
- Davies, J. & Hammeal-Urban, R. Federal Housing and Domestic Violence: Introduction to Programs, Policy and Advocacy Opportunities. National Resource Center on DV, 1999.
- Davis, Morris A. and Michael G. Palumbo, 2007, "The Price of Residential Land in Large US Cities," Journal of Urban Economics, vol. 63 (1), p. 352-384; data located at Land and Property Values in the U.S., Lincoln Institute of Land Policy <http://www.lincolninst.edu/resources/>.
- DHS Annual Report.

"Domestic Violence Counts: Hawai'i Summary." National Network to End Domestic Violence. 2010.
http://www.nnedv.org/docs/Census/DVCounts2010/DVCounts10_StateSummary_HI_Color.pdf

Essoyan, Susan. "Homeless in Plain Sight: Shelters see jump in Pacific islanders and Micronesian and Marshallese migrants have a special claim to U.S. services," February 16, 2010.

Fawcett, Denby. "Expert Says 30 Percent Of Hawai'i Homeless From Out Of State-Service Providers Say That Drains Scarce Resources." KITX News, June 2, 2010.

Fernandes, Ritabelle and Gandy, Hortense. "Housing Options for Seniors on O`ahu." Kokua Kalihi Valley, 2011. <http://www1.honolulu.gov/dcs/kkvhousingguide2011.pdf>

Gallagher, Mike. O`ahu Single Family Home & Condo Real Estate Report, February 2011.

Glaeser, Edward L. 14 July 2009. How to (Sort Of) Predict Housing Prices.
<http://economix.blogs.nytimes.com/2009/07/14/how-to-sort-of-predict-housing-prices/>.

Glaeser, Edward L. (2009), How to (sort of) predict housing prices, Today's Economist, July 14, 2009.

Glaeser, Edward L. and Joseph Gyourko (2008), Rethinking federal housing policy: How to make housing plentiful and affordable, The AEI Press, 2008.

Glaeser, Edward, Joseph Gyourko, and Raven Saks, 2005. Why have house prices gone up? American Economic Review 95, No. 2:329-33.

Goldman Sachs Global ECS Research. "US Economic Outlook 2011." US Economics Analyst 10/50 (17 December 2010). Web, 30 March 2011. <http://www2.goldmansachs.com/ideas/global-economic-outlook/2011-economic-outlook/right-column/us-econ-12-17-pdf.pdf>

Gomes, Andrew. "O`ahu Home Prices: Skid Ends." Star Advertiser, 11 January 2011. Web, 22 February 2011. http://www.staradvertiser.com/news/20110111_Skid_ends.html.

Greenberg, George D., Jeffrey A. Miller, Lawrence B. Mohr, and Bruce C. Vladek, (1977), Developing public policy theory: Perspectives from Empirical Research, American Political Science Review, Vol. 17, No 4, December 1977, p. 1532+.

Gyourko, Joseph, Albert Saiz, and Anita A. Summers 2007. A New Measure of the Local Regulatory Environment for Housing Markets: The Wharton Residential Land Use Regulatory Index. The Wharton School, University of Pennsylvania, Final Version, March 29, 2007.

Hawai'i Housing Finance and Development Corporation, State of Hawai'i Consolidated Plan for program years 2010 through 2014, Honolulu, January 2010.

Hawai'i Housing Forecast 2011. Web, 31 March 2011. <http://www.housingpredictor.com/Hawai'i.html>.

Hawai'i Real Estate Market Reports. Web, 20 January 2011. <http://www.zillow.com/local-info/#metric=mt%3D34%26dt%3D1%26tp%3D5%26rt%3D14%26r%3D102001%252C394913%252C394806%252C394463%26el%3D0>.

"Hawai'i Receives HIV/AIDS Housing Grant." KITV News, July 22, 2009.
<http://www.kitv.com/r/20149618/detail.html>

Hawai'i State Plan on Aging: 2008-2011. State of Hawai'i, Executive Office on Aging, June, 2007.
http://www.Hawai'iadrc.org/Portals/_AgencySite/Hawai'iADRC/Plan.pdf

- Hawai'i State Planning Act. Accessed August 2011.
http://Hawai'i2050.org/images/uploads/HRS226_StatePlanningAct.pdf
- "HIV/AIDS and Homelessness." NCH Fact Sheet #9. National Coalition for the Homeless, August, 2007.
<http://www.nationalhomeless.org/publications/facts/HIV.pdf>
- HIV, AIDS and Housing Issues. Interagency Coalition on AIDS and Development. http://www.icad-cisd.com/pdf/Housing_Fact_Sheet_Final_EN.pdf
- Home Builders Association, On Common Ground: Joint principles on inclusionary housing policies, July, 2005.
- Homeless in Minnesota, 2003. Wilder Research Center, February 2004.
- Honolulu Area Local Market Report, Third Quarter 2010. National Association of Realtors. January 2011. Web, 14 March 2011. http://www.realtor.org/files/research/localmarket/hi_honolulu.pdf.
- Housing is Cost-Effective HIV Prevention and Care. The North American Housing & HIV/AIDS Research Summit Series, February 2011. <http://nationalaidshousing.org/PDF/Factsheets-Cost%20Effective.pdf>
<http://www.topproducerwebsite.com/users/16541/downloads/O`ahu%20Feb'11%20Report.pdf>.
- HUD Strategic Plan: FY 2010-2015, (2010). U.S. Department of Housing and Urban Development, May 2010.
- James, Nathan. "Offender Reentry: Correctional Statistics, Reintegration into the Community, and Recidivism". Congressional Research Service, June 1, 2011.
- Kiviat, Barbara, The case against homeownership, Time, vol. 176, no. 10, 2010, pp 40-46.
- Lai, M.C., Yuen, S., Yuan, S., Zhang, J., and Okano, S.Y. (2009). Alcohol and Drug Treatment Services Report: Hawai'i, 2000-2008. Honolulu: University of Hawai'i, Center on the Family.
- Lakin, K. Charlie, Sheryl Larson, Patricia Salmi, and Amanda Webster. Residential Services for Persons with Developmental Disabilities: Status and Trends Through 2009. University of Minnesota Institute on Community Integration. Accessed June 2011. <http://rtc.umn.edu/risp09>
- Laney, Leroy O. (2011), Economic Forecast, 2010-2011 Edition, First Hawaiian Bank, Honolulu, 2010.
- Making Home Possible in Hawai'i. Freddie Mac, 2008. Web, 3 February 2011.
<http://www.freddiemac.com/corporate/about/pdf/Hawai'i.pdf>.
- Maui Real Estate Report. Prudential Locations, LLC. Web, 20 February 2011.
<http://www.prudentiallocations.com/O`ahu-real-estate-report.aspx>.
- McCullagh, Amber C. and Robert W. Gilmer. "Houston Business—A Perspective on the Houston Economy." Houston Economic Update, January 2008. Web, 21 January 2011.
<http://www.dallasfed.org/research/houston/2008/hb0801.html>
- McDonald, Lawrence G. and Lawrence G. McDonald (Author) Non-profit Housing Association of Northern California, Affordable by Choice: Trends in California inclusionary housing programs, San Francisco, 2006.
- O`ahu Households: Change from 2007 to 2035. O`ahu Metropolitan Planning Organization, 2007. Web, 7 February 2011.
http://www.O`ahumpo.org/ortp_docs/02%20O`ahu%20Households%202007%202035.pdf.

- O`ahu Real Estate Report. Prudential Locations, LLC. Web, 20 February 2011.
<http://www.prudentiallocations.com/O`ahu-real-estate-report.aspx>.
- Omori, Jill. "Reasons for Homelessness among Micronesians at a Transitional Shelter in Hawai`i".
 Developing Human Resources in the Pacific, Vol 14. No 1. 2007.
- Out of Reach 2011, National Low Income Housing Coalition, June 2011, <http://www.nlihc.org/oor/oor2011>.
- Patrick Robinson. A Colossal Failure of Common Sense: The Inside Story of the Collapse of Lehman
 Brothers. New York: Crown Business, 2009.
- Plan to End Homelessness in Hawai`i. Hawai`i Interagency Council on Homelessness. September, 2008.
- Population and Economic Projections for the State of Hawai`i to 2035. State of Hawai`i Department of
 Economic Development & Tourism, 5 August 2009. Web. 31 March 2011.
http://Hawai`i.gov/dbedt/info/economic/data_reports/2035LongRangeSeries/.
- Rajan, Raghuram. Fault Lines: How Hidden Fractures Still Threaten the World Economy, New Jersey,
 Princeton University Press, 2010.
- Record of Decision on the Honolulu High Capacity Transit Corridor Project in Metropolitan Honolulu,
 Hawai`i. Federal Transit Administration, 18 January 2011. Web, 30 January 2011.
<http://www.slideshare.net/civilbeat/fta-record-of-decision-to-honolulu-2011>.
- Reif, Susan & Krishner, Lisa. Subsidized Housing and the Unique Needs of DV Victims. National Center
 on Law and Policy. 2000.
- Retsinas, Nicolas P., and Eric S. Belsky, Eds., Revisiting rental housing: Policies, programs, and
 priorities, Washington, D.C., The Brookings Institute, 2008.
- Saiz, Albert (2010) The geographic determinants of housing supply, Quarterly Journal of Economics, R13,
 January 5, 2010.
- Schwartz, Alex F. Housing Policy in the United States, second edition, New York: Rutledge, Taylor and
 Francis Group, 2010.
- Seiter, Richard and Kadela, Karen. Prisoner Reentry: What Works, What Does Not, and What Is
 Promising. Crime & Delinquency, Vol. 49 No. 3, July 2003. pp. 360-388.
- State of Hawai`i Consolidated Plan – for Program Years July 1, 2005 through June 30, 2010. Prepared by
 Housing and Community Development Corporation of Hawai`i, September 16, 2004.
- State of Hawai`i Consolidated Plan Action Plan – Fourth Program Year; Concentrating on the Counties for
 Hawai`i, Kaua`i, and Maui. Prepared by Hawai`i Housing Finance and Development Corporation,
 May 2008.
- State of Hawai`i Consolidated Plan, Consolidated Annual Performance and Evaluation Report (CAPER),
 Fifth Program Year, September 2010.
- State of Hawai`i Consolidated Plan Action Plan - Program Year 2011. Prepared by Hawai`i Housing
 Finance and Development Corporation, May 2011.
- Successful Aging in Hawai`i: A Survey of Developers, Landowners, and Other Land Use Stakeholders.
 AARP Research & Strategic Analysis, January, 2011. www.aarp.org/research

Testimony on House Bill 130 Relating to Community Reintegration. Jodie F. Maesake-Hirata, Interim Director Department of Public Safety, February 17, 2011.

The State of the Nation's Housing, 2011. Joint Center for Housing Studies, Harvard University, 2011.

U.S. Census Bureau, Housing and Household Economic Statistics Division, Historical Census of Housing Tables, Vacation Homes, Source, last revised: December 02, 2004.

U.S. Department of Housing and Urban Development, 2009 Worst case housing needs of people with disabilities: Supplemental findings of the Worst Case Housing Needs 2009: Report to Congress, Office of Policy Development and Research, March 2011.

Vandenbroucke, David A. 1 March 2007. Housing Affordability Data System.
<http://www.huduser.org/portal/datasets/hads/hads.html>.

Wallace, R., 1989. "Homelessness": Contagious destruction of housing and municipal service cuts in New York City:1. The demographics of a housing deficit, Environment and Planning, A2:485-498.

Worst Case Housing Needs of People with Disabilities: Supplemental Findings of the Worst Case Housing Needs 2009: Report to Congress. U.S. Department of Housing and Urban Development Office of Policy Development and Research, March 2011. www.huduser.org

Wright, James D., and Beth A. Rubin, 1991. Is homelessness a housing problem? Housing Policy Debate, 5 (Issue 2): 177-202.

Yuan, S., Trundle, H., and Fong, G. (2010). Homeless Service Utilization Report: Hawai'i 2010. Honolulu: University of Hawai'i, Center on the Family.