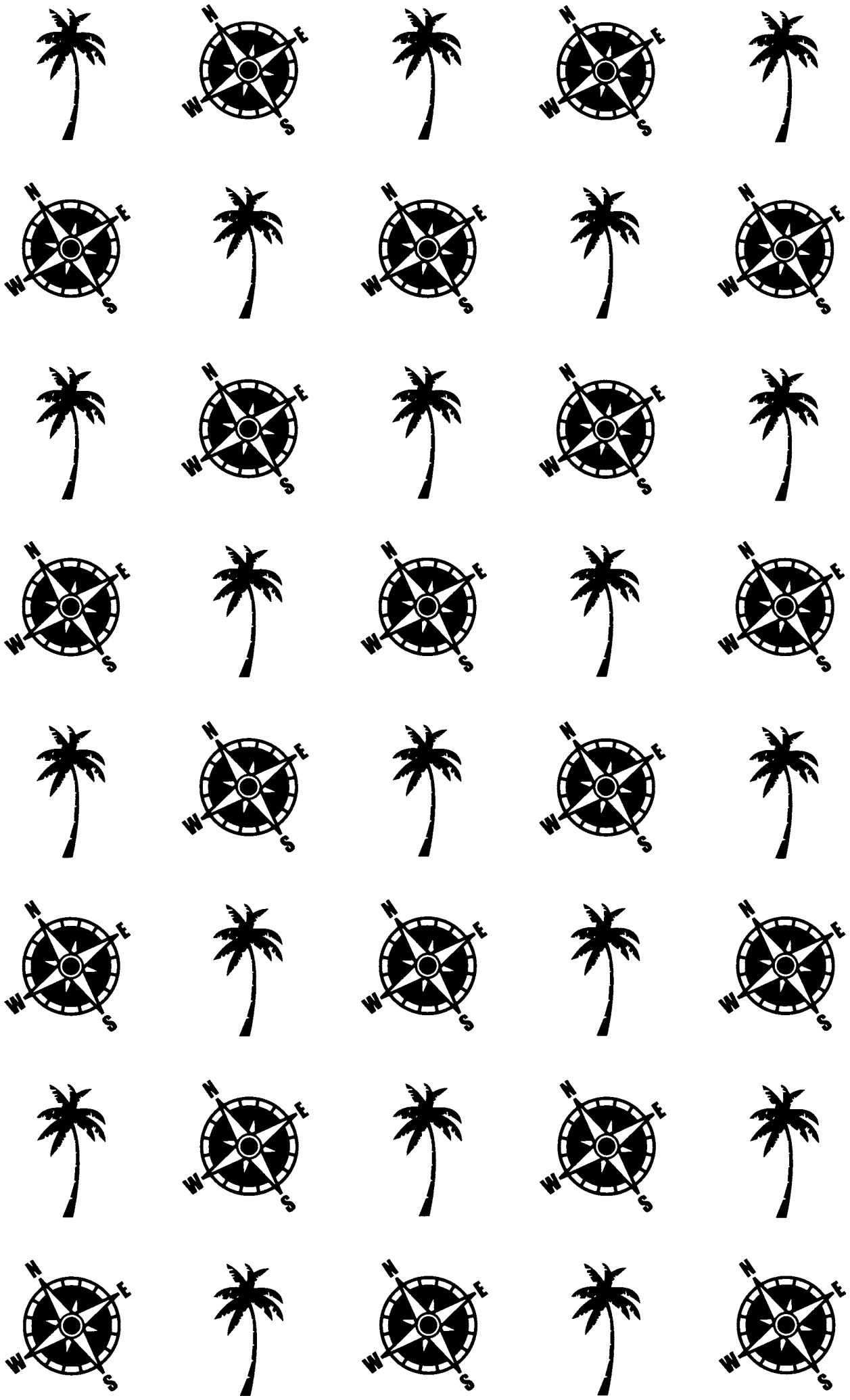


Geography & Land Use



Section 3

GEOGRAPHY & LAND USE

This section presents statistics on physical geography, water areas, climate, land use, value and ownership. Information on agriculture, forests and parks may be found in other sections of the book.

Maui County consists of four of the major eight islands in the State of Hawaii: Maui, Molokai, Lanai and Kahoolawe. The total land area of Maui County is 1,171.0 square miles with a general coastline of 210 statute miles. The highest peak in the county is Haleakala (Red Hill), Maui, at 10,023 feet; the largest stream is Kalialinui-Waiale Gulch, Maui, 18 miles; the most extensive lake or similar body, Kealia Pond (Marsh), Maui, 500 acres and the highest waterfall (in the county and in the state) is Kahiwa, Molokai, a 1,750-foot cascade.

The climate of Maui County is defined by average temperatures ranging from 80.6 degrees in the warmest month at Kahului Airport, Maui, to 71.7 degrees in the coolest month. Rainfall varies greatly. Annual averages for rainfall in the county range from 68 inches in Hana, to 24 inches in Molokai, to 12 inches in Kihei.

The State Land Use Commission has zoned 27,205 acres in Maui County as urban, 311,601 as conservation, 404,043 as agricultural and 8,051 as rural.

In the State of Hawaii, land ownership data indicates that the federal government owns 4.6 percent of all land, the state and counties own 33.6 percent, and private owners (chiefly large estates) have 61.8 percent. The island of Kahoolawe (28,800 acres) was transferred from the federal government to the State of Hawaii in May, 1994.

Considerable caution is necessary in comparing statistics from different sources on land use and ownership. Variations in definitions and survey dates seriously affect comparability.

Sources important to these tables are the U.S. National Climatic Data Center, the Atlas of Hawaii, 3rd edition, published by the University of Hawaii Press in 1998; Government in Hawaii, published annually by the Tax Foundation of Hawaii; and The State of Hawaii Data Book, published annually by the Department of Business, Economic Development and Tourism.

3.1.1

LAND AND WATER AREA OF COUNTIES AND ISLANDS

County or Island	SQUARE MILES			ACRES ¹	
	Total	Land ²	Inland Water ³	Total	Land
State Total	6,470.8	6,425.2	45.6	4,141,312	4,112,128
Counties⁴					
Hawaii	4,035.2	4,034.2	1.0	2,582,528	2,581,888
Maui	1,171.0	1,161.6	9.4	749,440	743,424
Kalawao	14.3	13.3	1.0	9,152	8,512
Honolulu ⁵	620.5	596.3	24.2	397,120	381,632
Kauai ⁵	629.8	619.8	10.0	403,072	396,672
Islands⁴					
Hawaii	4,035.2	4,034.2	1.0	2,582,528	2,581,888
Maui ⁶	734.5	728.6	5.9	470,080	466,304
Kahoolawe	45.9	45.0	0.9	29,376	28,800
Lanai	141.2	140.4	0.8	90,368	89,856
Molokai	263.7	260.9	2.8	168,768	166,976
Oahu	617.6	593.6	24.0	395,264	379,904
Kauai	558.2	549.4	8.8	357,248	351,616
Niihau ⁷	71.1	70.0	1.1	45,504	44,800
Kaula	0.4	0.4	–	256	256

¹ Areas in acres were calculated directly from the figures shown for square miles; these equivalents were independently rounded, and hence may not add exactly to the indicated totals and subtotals. One square mile = 640 acres.

² Dry land and land temporarily or partially covered by water, as marshland, swamps, etc. streams and canals under one-eighth statute mile wide; and lakes, reservoirs, and ponds under 40 acres of area.

³ Permanent inland water surface, such as lakes, reservoirs, and ponds having 40 acres or more of area; streams, sloughs, estuaries, and canals one-eighth statute mile or more in width; deeply indented embayments and sounds, and other coastal waters behind or sheltered by headlands or islands separated by less than 1 nautical mile of water and islands having less than 40 acres of area.

⁴ Because of rounding, island figures may not add to county figures.

⁵ Reflect inclusion of Kaula in the County of Kauai rather than in the City and County of Honolulu (Act 245, S.L.H. 1988, approved June 9, 1988).

⁶ Molokini, offshore of Maui, not measured; other sources give the area of Molokini as 18.6 acres (0.03 square miles).

⁷ Includes Lehua, previously reported as 243 acres (0.38 square miles).

SOURCE: Hawaii State Department of Planning and Economic Development, *Remeasurements of the Area of Hawaii, 1982* (Statistical Memorandum 83-6, May 18, 1983); Hawaii State Department of Business and Economic Development, *State of Hawaii Data Book*.

3.1.2

GENERAL COASTLINE AND TIDAL SHORELINE OF HAWAII, BY COUNTY AND ISLAND

	GENERAL COASTLINE ¹		TIDAL SHORELINE ²	
	Statute Miles	Kilometers ³	Statute Miles	Kilometers
State Total	750	1,207	1,052	1,693
Counties				
Hawaii	266	428	313	504
Maui and Kalawao	210	338	343	552
Honolulu	137	220	234	377
Kauai	137	220	162	261
Islands⁴				
Hawaii	266	428	313	504
Maui	120	193	149	240
Kahoolawe	29	47	36	58
Lanai	47	76	52	84
Molokai	88	142	106	171
Oahu	112	180	209	336
Kauai	90	145	110	177
Niihau	45	72	50	80
Kaula	2	3	2	3
Northwestern Hawaiian Islands⁵	25	40	25	40
Nihoa	3	5	3	5
Necker Island	2	3	2	3
French Frigate Shoals	6	10	6	10
Laysan Island	6	10	6	10
Lisianski Island	3	5	3	5
Kure Atoll	5	8	5	8

¹ Figures are lengths of general outline of seacoast. Data for the four islands of Maui County are not consistent with the reported county total.

² Shoreline of outer coast, offshore islands, bays, rivers, and creeks is included to the head of tidewater or to a point where tidal waters narrow to a width of 100 feet.

³ Derived from data expressed in statute miles; independently rounded and accordingly may not add exactly to indicated totals and subtotals. 1 mile = 1.609 km.

⁴ Data are not available for 4 minor islands: Molokini, Lehua, Gardner Pinnacles, Maro Reef, and Pearl and Hermes Atoll.

⁵ Excludes the Midway Islands, which are part of the Hawaiian archipelago but not legally part of the State of Hawaii. (Midway has a general coastline of 20 miles and a tidal shoreline of 33 miles.)

3.1.3

MAJOR NAMED WATERFALLS, MAUI COUNTY

Waterfall ¹	Cascade Height (feet)	Horizontal Distance (feet)	Average Discharge (million gal/day)
Maui			
Honokohau	1,120	500	26.6
Waihiumalu	400	150	
Waimoku	40	50	37.1
Molokai			
Kahiwa	1,750	1,000	
Papalaua	1,200	500	
Wailele	500	150	
Haloku	500	200	
Hipuapua	500	300	
Olupena	300	150	
Moaula	250	200	19.7

¹ Includes the largest named waterfall in each major island, either in height or average discharge; all other named falls 250 feet high or over; and well-known small falls. Many unnamed falls have sheer drops of 200 feet or more.

SOURCE: U.S. Geological Survey, records; Hawaii State Department of Land and Natural Resources, Division of Water and Land Development, records, and Hawaii State Department of Planning and Economic Development, *Hawai'i, the Natural Environment*(1974), p.18.

3.1.4

ELEVATIONS OF MAJOR SUMMITS

Elevation of the highest point on each island and other important peaks

Island and Summit	Feet	Meters
Hawaii		
Mauna Kea ¹	13,796	4,205
Mauna Loa ²	13,679	4,169
Hualalai	8,271	2,521
Kaunu o Kaleihoochie	5,480	1,670
Kilauea (Uwekahuna)	4,093	1,248
Kilauea (Halemaumau Rim)	3,660	1,116
Kahoolawe		
Puu Moaulanui	1,483	452
Puu Moaulaiki	1,434	437
Molokini		
	160	49
Maui		
Haleakala (Red Hill)	10,023	3,055
Haleakala (Kaupo Gap)	8,201	2,500
Puu Kukui	5,788	1,764
Iao Needle	2,250	686
Lanai		
Lanaihale	3,366	1,026
Molokai		
Kamakou	4,961	1,512
Olokui	4,606	1,404
Kaunuohua	4,535	1,382
Kalaupapa Lookout	1,600	488
Mauna Loa (Kukui)	1,430	436
Oahu		
Kaala	4,003	1,220
Puu Kalena	3,504	1,068
Konahuanui	3,150	960
Tantalus	2,013	614
Olomana	1,643	501
Koko Crater (Kohelepelepe)	1,208	368
Nuuanu Pali Lookout	1,186	361
Diamond Head	760	232
Koko Head	642	196
Punchbowl	500	152

3.1.4

CONTINUED

Island and Summit	Feet	Meters
Kauai		
Kawaikini	5,243	1,598
Waialeale	5,148	1,569
Namolokama Mountain	4,421	1,348
Kalalau Lookout	4,120	1,256
Haupu	2,297	700
Sleeping Giant (Nonou)	1,241	378
Niihau		
Paniau	1,250	381
Lehua		
	699	213
Kaula		
	548	167
Nihoa		
Millers Peak	903	275
Necker Island		
Summit Hill	276	84
French Frigate Shoal		
La Perouse Pinnacles	120	37
Gardner Pinnacles		
	190	58
Maro Reef		
	Awash	Awash
Laysan Island		
	40	12
Lisianski Island		
	40	12
Pearl and Hermes Atoll		
	10	3
Midway Islands		
	12	4
Kure Atoll		
	20	6

¹ According to the 1991 *Guinness Book of World Records* (p. 142), "The world's tallest mountain measured from its submarine base (3,280 fathoms) in the Hawaiian Trough to its peak is Mauna Kea ... with a combined height of 33,476 ft., of which 13,796 ft. are above sea level."

² *Guinness* (p. 142-143) describes Mauna Loa as having "dimensions, but not height, [which] exceed those of Mt. Everest The axes of its elliptical base, 16,322 ft. below sea level, have been estimated at 74 miles and 53 miles."

SOURCE: Hawaii State Department of Accounting and General Services, Survey Division, data provided April 21, 1992; U.S. National Cartographic Information Center, data provided October 11, 1978; U.S. Geological Survey topographic maps, 1981-1984; Hawaiian Government Survey (for Nihoa and Molokini); U.S.S. Tanager survey, 1923 (for Necker Island, French Frigate Shoals, Laysan, Lisianski, Pearl and Hermes Atoll and Kure Atoll).

3.1.5

MISCELLANEOUS GEOGRAPHIC STATISTICS, BY ISLAND

	State	Hawaii	Maui	Kahoolawe	Lanai	Molokai	Oahu	Kauai	Niihau
Extreme Length (miles)		93	48	11	18	38	44	33	8
Extreme Width (miles)		76	26	6	13	10	30	25	6
Miles of Sea Cliffs with Heights of 1,000 Feet or More ¹	33	4	–	–	1	14	–	11	3
Miles from Coast of Most Remote Point	28.5	28.5	10.6	2.4	5.2	3.9	10.6	10.8	2.4
Percent of Area Within 5 Miles of Coast	48.6	30.0	76.1	100.0	100.0	100.0	79.0	65.0	100.0
Percent of Area with Elevation of Less than 500 Feet	20.8	12.0	24.9	38.9	24.8	37.3	45.3	35.6	78.2
Percent of Area with Elevation of 2000 Feet or More	50.9	68.4	41.4	0.0	6.3	17.8	4.6	24.0	0.0
Approximate Mean Altitude (feet)	3030	3950	2390	600	1140	1150	860	1380	530
Percent of Area with Slope Less Than 10 Percent	63.5	76.0	38.5	60.0	61.0	53.0	42.5	33.5	68.0
Percent of Area with Slope 20 Percent or More	17.0	4.0	36.0	9.0	16.0	26.0	45.5	50.5	12.5

¹ According to Lee S. Motteler, Geography and Map Division, Bernice P. Bishop Museum, the sea cliffs along the northeastern coast of Molokai between Umilehi Point and Puukaoku Point drop 3,250 feet at an average slope of 58 degrees. These cliffs have been described by *The Guinness Book of World Records* (1991 edition, p. 148) as "the highest sea cliffs yet pinpointed anywhere in the world."

SOURCE: Hawaii State Department of Planning and Economic Development, *Hawai'i, the Natural Environment* (1974), p. 19; and U.S. Geological Survey, *Elevations and Distances in the United States* (1978), p. 4-5.

3.1.6

TEMPERATURE AND PRECIPITATION
AVERAGES AND EXTREMES, MAUI COUNTY

	STATION DATA				TEMPERATURES				Record High		Record Low		
	Elevation ft.	1st Year of Record	Daily Average		Warmest Month		Coolest Month		°F	Date	°F	Date	
			High	Low	High	Low	High	Low					Month
Maui													
Haleakala													
Ranger Station	6,960	1949	62.7	44.6	66.1	47.5	Aug	59.1	45.1	80	07/25/1953	27	02/26/1965
Hana Airport	61	1950	80.8	67.4	83.5	70.3	Aug	78.2	63.8	94	11/03/1979	50	01/09/1953
Kahului Airport	48	1954	83.7	67.4	87.2	71.3	Aug	80.1	63.3	97	08/31/1994	48	01/20/1969
Kailua (NE Maui, inland)	700	1949	76.7	63.9	79.7	66.4	Sep	74.4	60.9	88	09/18/1968	50	02/21/1962
Lahaina	45	1949	84.9	66.4	88.1	69.7	Aug	81.4	63.0	97	08/18/1985	52	12/23/1962
Molokai													
Molokai Airport	450	1953	81.4	67.6	85.2	71.4	Aug	77.3	63.2	96	04/14/1974	46	03/04/1987
Lanai													
Lanai Airport	1,300	1949	79.2	62.7	82.6	65.7	Aug	75.8	59.2	89	09/05/1954	46	01/22/1955
Lanai City	1,620	1949	75.4	62.4	78.1	65.8	Aug	72.5	59.5	89	09/07/1994	47	02/22/1973
	Annual Average				PRECIPITATION				1 Day Record				
	in.	in.	Days Precip. >=0.01 in.	Wettest Year	Driest Year	Wettest Month	Driest Month	in.	Month	in.	Date		
Maui													
Haleakala Ranger Station	52.97	146	121.16	1980	17.71	1962	Jan	1.22	Jun	18.50	01/09/1980		
Hana Airport	80.62	269	126.23	1965	49.64	1953	Mar	4.06	Jun	17.57	04/16/1968		
Kahului Airport	19.94	97	40.63	1989	6.76	1998	Feb	0.24	Jun	5.82	12/21/1955		
Kailua (NE Maui, inland)	119.45	268	161.82	1969	79.20	1953	Nov	6.57	Jun	15.20	11/15/1965		
Lahaina	14.62	33	34.78	1950	3.20	1953	Jan	0.08	Jun	7.01	12/27/1983		
Molokai													
Molokai Airport	25.59	104	43.70	1963	11.06	2001	Jan	0.53	Jun	9.03	02/12/1989		
Lanai													
Lanai Airport	19.12	59	47.66	1951	5.28	1999	Dec	0.49	Aug	10.45	11/10/1955		
Lanai City	35.37	114	66.87	1968	15.64	1999	Jan	1.28	Jun	11.25	11/10/1955		

SOURCE: U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration, Western Regional Climate Center, Hawaii Climate Summaries.

3.1.7

MONTHLY RAINFALL AND TEMPERATURE AT SPECIFIED LOCATIONS
IN MAUI COUNTY

Station	2003												Departure from Normal	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Annual
RAINFALL¹														
Maui														
Haleakalala Ranger Station	3.95	5.85	2.69	2.25	1.56	0.09	3.36	0.95	2.39	2.22	2.63	3.84	32.60	-20.52
Hana Airport	5.73	9.68	6.08	7.32	1.24	3.64	3.28	5.09	6.64	4.39	6.55	7.29	66.93	-12.97
Kahului Airport (WSO)	2.40	5.33	1.70	0.01	T	0.02	0.07	0.21	0.17	0.15	1.05	2.72	13.83	-4.97
Kapalua-West Maui Airport	7.83	5.01	1.45	0.60	0.67	0.76	0.86	0.67	0.12	0.33	5.11	3.66	27.07	0.90
Keanae	7.50	23.50	8.50	17.00	5.50	9.00A	18.50	24.40	5.00A	9.00	0.00	24.00A	151.90	M
Kihei	2.18	2.16	1.63	0.00	0.00	0.05	0.00	0.00	0.08	0.00	0.91	4.57	11.58	-1.05
Kula Hospital	6.21	0.73	2.87	1.48	0.00	0.94	1.39	1.98	1.17	1.26	3.73	3.91	25.67	-3.00
Lahaina														
Makana Golf Course	2.22	0.66	1.31	0.00	0.00	0.03	0.23	0.72	0.00	M	0.11	3.61	M	M
Puu Kukui	12.98	34.03	12.00	30.66	11.89	18.54A	37.42	43.74	14.59A	14.80	47.41	61.46	339.52	M
Molokai														
Kalaupapa	8.41	9.28	8.24	0.72	0.26	1.08	0.03	0.43	0.14	1.55	2.73	7.16A	40.03	M
Molokai Airport	8.44	2.49	2.30	0.06	0.00	0.29	0.33	0.20	0.75	0.26	4.16	4.10	24.38	-0.26
Lanai														
Lanai Airport	4.46	2.87	2.41	2.01	0.00	0.46	0.00	M	M	M	0.44	M	M	M
Lanai City	4.35	7.62	2.05	1.15	0.00	0.64	0.69	0.17	M	0.76	1.15	4.85A	M	M

¹ Precipitation for month.

A: Accumulated amount. May include data from a previous month.

M: Insufficient or partial data; m appears alone if 10 or more daily values are missing.

3.1.7

CONTINUED

2003

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
TEMPERATURE²													
Maui													
Haleakalala Ranger Station	57.2	51.0	53.0	51.6	57.0X	56.2	58.2	57.6X	47.1	48.5X	45.3X	45.5X	46.2X
Hana Airport	71.5	70.8X	73.2	73.1X	74.6	75.5X	76.8X	M	70.7X	71.5X	65.5X	M	M
Kahului Airport	71.9	71.7	73.9	74.9	76.2	78.6	80.2	80.6	79.6	79.0	76.5	73.2	76.4
Kailua	64.7	64.5X	66.3	66.0	67.2	69.1	70.0	70.2	70.1	69.9	66.8	65.4	67.5X
Kapalua-West Maui Airport	71.9X	71.9X	74.1	74.7	76.5	77.9X	78.8	79.3	79.4	79.2	75.5	73.4	76.0X
Kula Branch Stn.	60.2	59.9	63.0	63.0	65.0	65.4	67.5	68.1	67.4	67.0	64.8	62.7	64.5
Kula Hospital	59.8X	58.9X	62.0X	62.4X	64.1	65.5X	66.7	67.7	66.7	66.4	64.3	74.4	MX
Makena Golf Course	72.1X	70.8	73.9X	75.4X	76.5X	77.3X	78.9	79.6X	78.8	M	75.9	73.4X	MX
Oheo	73.4X	72.9X	74.5X	73.1X	75.3	76.5X	77.7X	77.7X	77.8X	78.5X	75.9X	75.6X	75.7X
Molokai													
Kalaupapa	M	72.0	73.6	75.5	77.1	78.3	M	M	M	M	M	M	M
Molokai Airport	70.1	70.5	72.7	73.7	75.2	77.2	78.9X	73.0	71.7	71.5	69.5X	67.4	68.6
Lanai													
Lanai Airport	66.7	66.9	67.5	69.9	71.9	73.4	74.2	M	M	M	M	M	M
Lanai City	M	66.2X	M	68.3X	M	M	M	M	M	M	M	M	M

² Average temperature for month.

A: Accumulated amount. May include data from a previous month.

M: Insufficient or partial data; m appears alone if 10 or more daily values are missing.

X: Monthly means or totals based on incomplete time series. 1 to 9 days are missing.

T: Trace precipitation.

SOURCE: U.S. Department of Commerce, National Oceanographic and Atmospheric Administration, National Climatic Data Center, *Climatological Data Annual Summary, Hawaii and Pacific*, 2002.

3.1.8

ANNUAL RAINFALL AND TEMPERATURE AT SPECIFIED LOCATIONS, MAUI COUNTY

Station	1997	1998	1999	2000	2001	2002	2003
ANNUAL RAINFALL							
Maui							
Haleakala Ranger Station	70.19	34.16	52.24	37.30	40.62	42.56	32.60
Hana Airport	92.31	56.44	60.44	86.85	48.37	66.47	66.93
Kahului Airport (WSO)	23.08	6.76	9.66	9.72	10.53	15.07	13.83
Kapalua-West Maui Airport	36.79	19.20	21.66	18.92	20.61	27.98	27.07
Keanae	m	m	79.90m	94.50m	82.10	96.23	151.90
Kihei	19.96	4.47	7.13	3.26	6.20	13.33	11.58
Kula Branch Stn.	29.95	10.12	12.38	11.89	15.83	30.31	25.67
Lahaina	16.68	1.86	2.62	6.01	NA	NA	NA
Makena Golf Course	23.32	5.58	10.16	7.47	7.01	18.24	m
Puukolii	27.34	14.81	m	19.23	19.19	NA	NA
Puu Kukui	407.65	446.45	379.88	320.67m	307.26	242.54	m
Wailuku	49.00	17.16	18.57	16.14	24.58	m	NA
Molokai							
Kalaupapa	61.66	m	30.81	29.62	m	39.78	40.03
Molokai Airport	33.91	12.66	13.52	11.38	11.06	22.95	24.38
Lanai							
Lanai Airport	20.91	10.69	5.28	10.60	17.58	26.49	m
Lanai City	42.76	19.85	15.64	18.39	m	42.58	m
AVERAGE ANNUAL TEMPERATURE							
Maui							
Haleakala Ranger Station	54.5m	53.7	53.8m	54.9	54.95	55.6m	46.2x
Hana Airport	74.9m	74.0m	m	m	m	74.2m	m
Kahului Airport (WSO)	76.7	75.1	75.1	75.3	75.7	75.4	76.4
Kapalua-West Maui Airport	75.5m	74.3m	74.5m	75.0m	75.3m	75.4	76.0x
Kula Branch Stn.	m	63.2m	62.2m	63.8m	64.2m	64.0	64.5
Kula Hospital	64.1m	62.6m	62.8m	m	63.8m	63.4m	63.9
Lahaina ¹	m	m	m	m	NA	NA	NA
Makena Golf Course	75.3m	74.4m	74.8m	75.4m	75.7m	75.2m	mx
Molokai							
Molokai Airport	74.4m	73.9	73.8	m	m	74.9m	68.6x
Lanai							
Lanai Airport	71.4m	71.0m	70.9m	71.8m	72.0m	71.7m	m
Lanai City	m	m	68.4m	m	m	m	m

m: Insufficient or partial data; m appears alone if 10 or more daily values are missing.
NA: Not available.

¹ Lahaina station no longer in service as of 2001.

SOURCE: U.S. Department of Commerce, National Oceanographic and Atmospheric Administration, National Weather Service Forecast Office, Honolulu.

3.2.1

TRENDS IN REAL PROPERTY TAX BASE, MAUI COUNTY

*Gross valuation in thousands
As of January 1 unless otherwise noted*

	1998	1999	2000	2001	2002	2003	2004
Improved Residential							
Land	1,592,910	1,568,983	1,629,787	1,778,535	2,105,914	2,229,559	2,760,153
Improvements	803,783	817,079	883,993	980,638	1,147,963	1,221,288	1,184,331
Unimproved Residential							
Land	258,915	282,747	327,362	312,704	291,068	295,995	339,207
Improvements	1,963	1,872	122	2,373	348	10,245	2,710
Homeowner							
Land	2,283,499	2,225,415	2,383,931	2,645,650	3,068,710	3,448,058	4,587,953
Improvements	2,080,557	2,143,098	2,253,350	2,494,417	2,753,442	3,024,256	3,353,718
Hotel/Resort							
Land	975,562	1,066,582	1,066,560	1,118,337	1,212,092	1,178,686	1,391,638
Improvements	2,346,723	2,681,250	2,841,594	3,173,969	3,424,136	3,739,235	4,522,441
Apartment							
Land	500,857	496,335	570,516	576,269	660,144	630,001	677,004
Improvements	1,032,209	1,096,639	1,220,117	1,429,635	1,677,822	1,895,848	1,847,497
Commercial							
Land	572,824	611,007	631,941	672,344	698,764	675,803	756,533
Improvements	382,338	391,668	393,739	471,205	492,228	509,617	553,713
Industrial							
Land	572,949	577,667	593,621	607,145	600,716	539,019	556,447
Improvements	415,419	411,845	416,315	439,790	471,526	468,954	483,615
Agricultural							
Land	880,448	894,855	944,608	1,024,089	1,128,381	1,152,951	1,474,200
Improvements	362,129	363,055	379,565	422,948	450,050	500,406	548,376
Conservation							
Land	244,888	271,170	278,967	289,466	340,554	328,518	306,918
Improvements	28,128	27,759	29,723	29,829	30,985	33,323	36,788
TOTAL¹	15,336,101	15,929,026	16,845,811	18,469,342	20,554,842	21,881,760	25,383,244

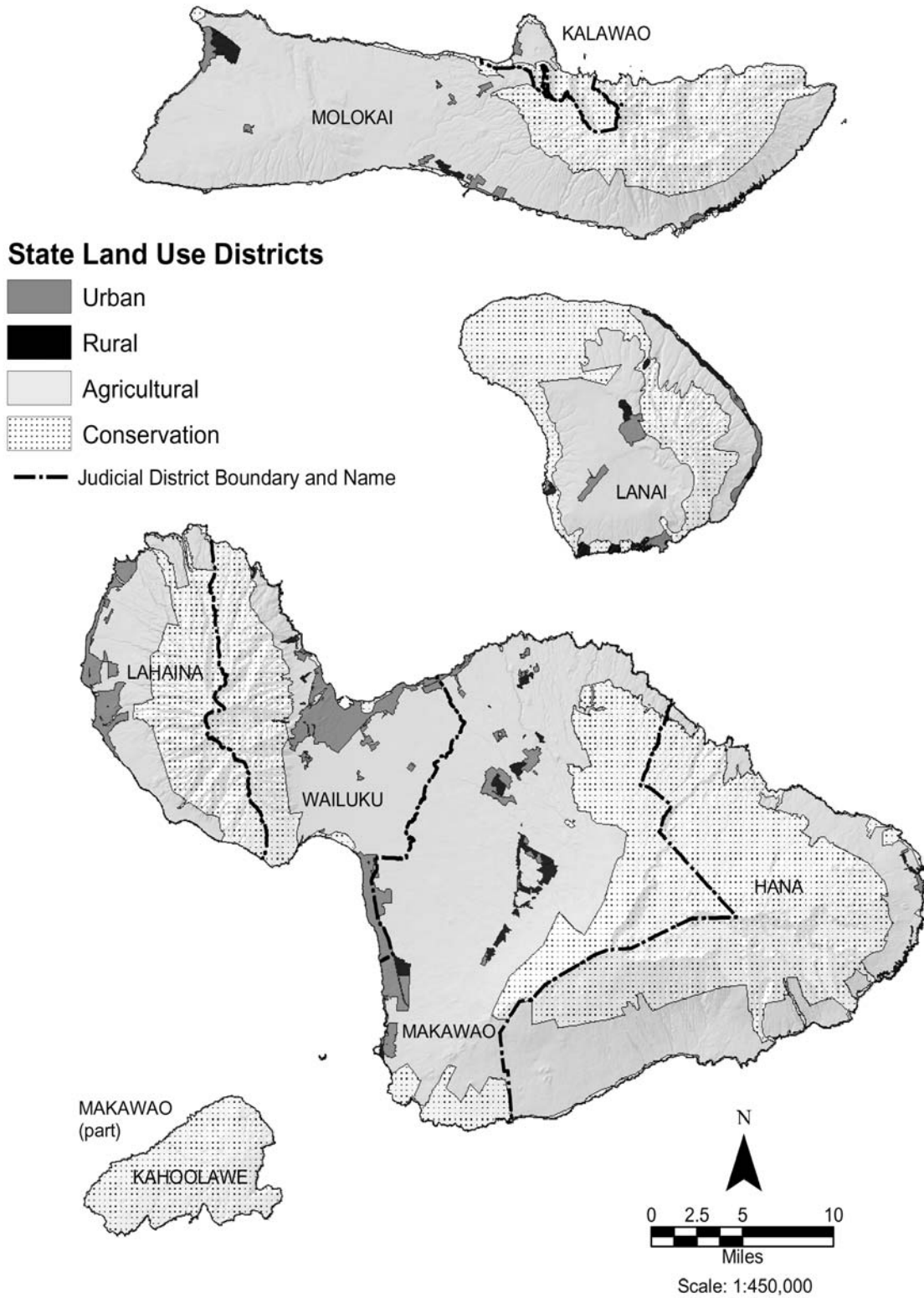
NOTES: Gross valuations do not include nontaxable properties. Detail may not add to totals due to rounding.

1. Total maybe different than sum due to rounding.

SOURCE: County of Maui, Department of Finance, Real Property Tax Division, records.

3.2.2

LAND USE DISTRICTS, MAUI COUNTY



Source: State of Hawaii, Office of Planning, Hawaii Statewide GIS Program.

3.2.3

ESTIMATED ACREAGE OF LAND USE DISTRICTS, BY ISLANDS

Total acreage, including inland water, as classified by the Hawaii State Land Use Commission under the provisions of Chapter 205, Hawaii Revised Statutes, as amended; all data are approximate

Island	Total Area ²	CLASSIFICATION BY STATE LAND USE COMMISSION ¹			
		Urban	Conservation	Agricultural	Rural
As of December 31, 2003					
Maui	465,800	21,409	194,836	245,777	3,778
Lanai	90,500	3,257	38,197	46,639	2,407
Molokai	165,800	2,539	49,768	111,627	1,866
Kahoolawe	28,800	—	28,800	—	—
Hawaii	2,573,400	53,722	1,304,347	1,214,527	804
Oahu	386,188	100,730	156,619	128,839	—
Kauai	353,900	14,558	198,769	139,320	1,253
Niihau	45,700	—	—	45,700	—
Kaula and Lehua	400	—	400	—	—
Other Islands ³	1,900	—	1,900	—	—
State Total	4,112,388	196,215	1,973,636	1,932,429	10,108

¹ For definitions, see Hawaii Revised Statutes, Section 205-2.

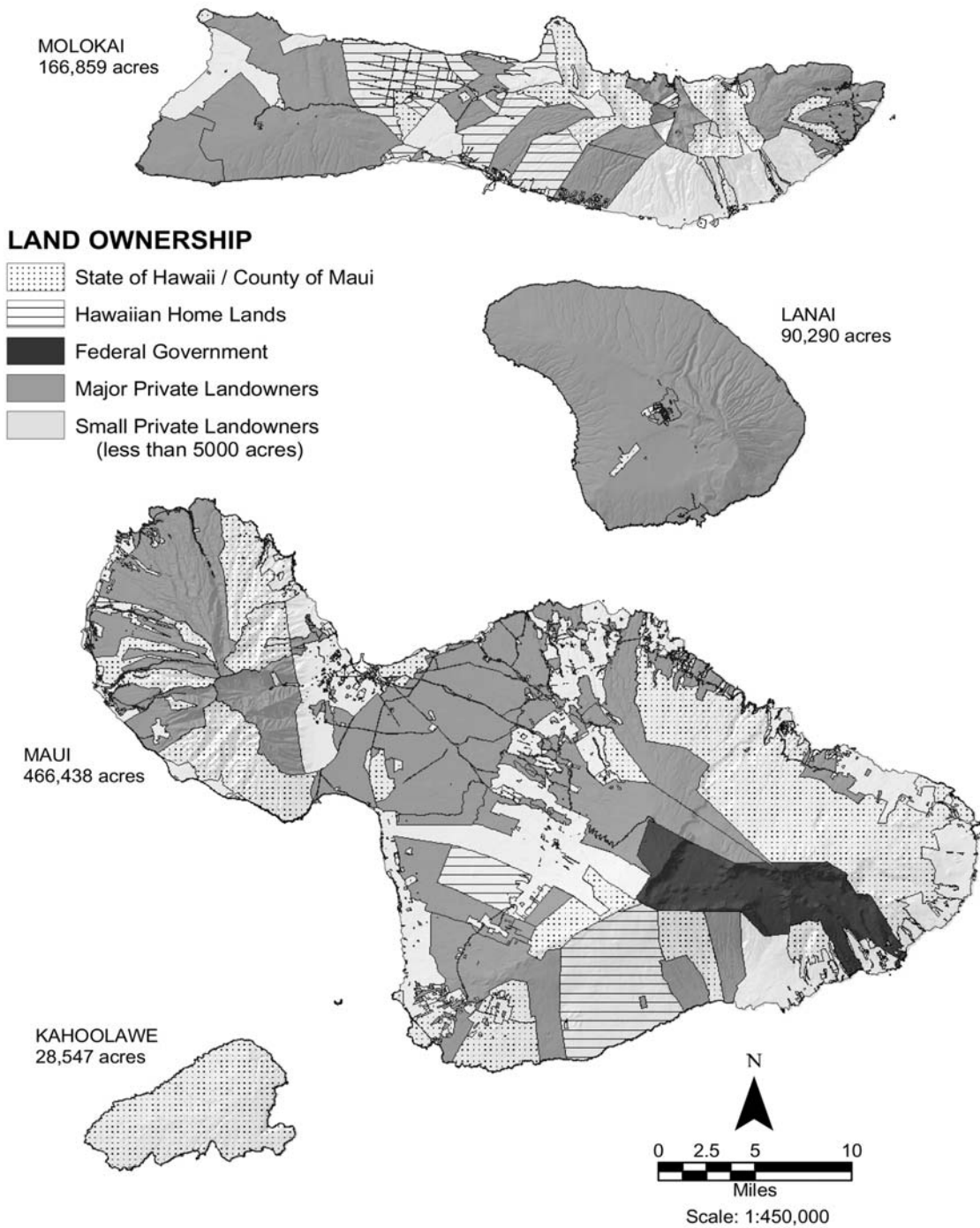
² These totals differ somewhat from the official figures based on measurements by the Geography Division of the U.S. Bureau of the Census.

³ The Northwestern Hawaiian Islands, from Nihoa to Kure Atoll, excluding Midway.

SOURCE: Hawaii State Department of Business, Economic Development & Tourism, Land Use Commission, records.

3.2.4

LAND OWNERSHIP, MAUI COUNTY



Source: State of Hawaii, Office of Planning, Hawaii Statewide GIS Program.

3.2.5

NATIONAL AND STATE HISTORIC PLACES, MAUI COUNTY

Island of Maui

Alae Petroglyphs
Alena Habitation Site
Bank of Hawaii - Haiku Branch
Cave of Seven Coffins
CHINESE SOCIETY HALLS:
 Wo Hing Society Hall
 Ket Hing
Crater Historic Dist. - Haleakala
Frank Baldwin/H.F. Rice Res
Gomes Residence
Ha'iku Mill
Hale Ho'ike'ike
Hale Pa'I
Haleki'i-Pihana Heiau
Hale-o-Lono Heiau
Hamoia Complex
Hana Belt Road
Hana Police Station & Courthouse
Hana Store
Hanamau'uloa Complex
Hardy House
Holy Ghost Catholic Church
Hongwanji Temple
Honokalani Village
Honokowai Petroglyphs
Iao Theater
Ka'ahumanu Church
Kahikinui House
Kaiapuni Ho'a
Kaimupe'elua Heiau
Kalepolepo Fishpond
Kaluakakalioa Cave
Kaluanui Heiau Complex

Island of Maui Continued

Kama'ole House Site
Kauhihale Complex
Ka'umi'umia Heiau
Keone'oio Archaeological Dist.
Kilolani Congregational Church
Kipahulu Historic District
Kipapa Archaeological District
Lahaina Historic District (60 Sites)
Lo'alo'a Heiau
Luala'ilua Cave
Luala'ilua Heiau
Luala'ilua Terrace Complex
Lufkin Residence
Makawao Union Church
Maui Jinsha Mission
Molohai heiau
Paia School
Papakea heiau
Papakea Petroglyphs
Pi'ilanihale Heiau
SCHOOLS
 Wailuku School
 Puunene School
 Henry Perrine Baldwin HS
 Paia School
 Keanae School
 Kaupo School
Wahene Platform
Waiale Bridge
Waihe'e Church
Waikapu Stone Church
Wailuku Civic Center
Wananalua Cong. Church

Island of Molokai

Ahina Heiau
FISHPONDS (mostly submerged)
 Fishponds (numerous)
 Mikiawa Fishpond
 Weheleau'ulu Fishpond
 Halemahana Fishpond
 Ualapu'e Fishpond
 Kalua'aha Fishpond
 Mahilika Fishpond
 Panahana Fishpondh
 Ipukaiole Fishpond
 Kainalu Fishpond
 Kahinapohaku Fishpond
 Honouliwai Fishtrap
 Hokukano-'Ualapu'e Complex
 Keawanui Fishpond
 Kukui Heiau
 Pu'u 'Olelo Heiau
 Kaluakapi'ioho Heiau
 Kahokukano Heiau
 Pakui Heiau
 Kalauonakukui Heiau
 'Ualapu'e Fishpond
 'Ili'ili'opae Heiau
 Kalua'aha Church
 Kilohana School
 St. Joseph Catholic Church

Island of Lanai

Kealiakapu Complex
Pu'upehe Platform

Island of Kahoolawe

Kaho'olawe Archaeological Dist.

Source: Hawaii State Department of Land and Natural Resources, State Historic Preservation Division, records.

3.2.6

LAND IN HAWAII OWNED BY SELECTED LARGE LANDOWNERS

Ownership	2000	2001	2002	2003
Eight Large Landowners	976,693	NA	954,207	822,606
Percent of Total Land Area ¹	23.8	NA	23.2	20.0
Kamehameha Schools ²	366,042	366,458	365,794	365,760
Richard S. Smart (Parker Ranch)	136,332	136,686	135,312	134,446
Castle and Cooke, Inc.	95,200	NA	94,760	94,737
Dole Food Company, Inc.	28,515	NA	28,507	28,472
Samuel M. Damon Estate	121,360	121,360	121,357	5,336 ³
Alexander and Baldwin, Inc.	91,100	91,000	90,900	90,000
C. Brewer and Company, Ltd.	75,744	71,188	55,377	44,210
James Campbell Estate	62,400	62,200	62,200	59,645

NA Not available.

¹ Based on area of 4,110,966 acres.

² As of July 1. Formerly known as the Bernice P. Bishop Estate.

³ A significant amount of land was conveyed to various entities in 2003.

SOURCE: Department of Business, Economic Development & Tourism survey of major landowners.

3.2.7

DEPARTMENT OF HAWAIIAN HOME LANDS ACREAGE, LESSEES, AND APPLICANTS, BY ISLANDS

The Department of Hawaiian Home Lands administers land set aside for the benefit of qualified Native Hawaiians, who receive homestead leases and financial assistance from the Department

June 30, 2003	Maui	Molokai	Lanai	Hawaii	Kauai	Oahu	State Total
Acreage ¹	31,688	25,769	50	117,313	20,588	7,273	202,658
Homestead Leases	761	835	-	2,085	513	3,156	7,350
Residential	619	389	-	1,307	464	3,096	5,875
Agricultural	66	419	-	497	47	60	1,089
Pastoral	76	27	-	281	2	-	386
Applicant Waiting List ²	6,483	1,683	-	12,083	3,454	9,776	33,479
Residential	2,926	693	-	4,925	1,453	7,595	17,592
Agricultural	3,186	837	-	5,737	1,782	2,181	13,723
Pastoral	371	153	-	1,421	219	-	2,164

¹ Data based on latest figures from the trust resolution project. Acreages are rounded to the nearest acre and include 14,615 acres of new lands from the 16,518-acre land transfer from the Public Land Trust and 483 acres from the Hawaiian Home Lands Recovery Act. Oahu total includes 14.4 acres of Kalawahine land provided under Act 150, SLH 1990, 1,356 acres at Lualualei under Executive Orders to the U.S. Navy, 53.615 acres at Princess Kahanu Estates, and 20.114 acres at Waianae Kai. Act 95, SLH 1996, also transferred 51.324 acres at Kealakehe (La'i'opua) and 37.839 acres at Kapolei, Oahu, as part of the land claims settlement. DHHL also purchased 57.160 acres at Waiehu Kou, Maui, and 60.433 acres at Kealakehe, Hawaii.

² Residence, agriculture, or pasture. Since applicants may apply for two types of leases, duplications occur. The Department estimates the unduplicated Statewide total number of applicants at about 20,000.

Data are subject to audit.

SOURCE: Hawaii State Department of Hawaiian Home Lands, *Annual Reports* and records.

3.2.8

LAND DISPOSITIONS MADE OF PUBLIC LANDS FOR CALENDAR YEAR 2003

Documnet Number	Permittee or Grantee Name	Locataion	Acres	Use	Payment
Revocable Permits¹					
RP7205	Pacific Radio Group, Inc.	Makawao	1.000	Utility	\$9,000
RP7220	DLNR, Division of Forestry and Wildlife	Hana	0.344	Baseyard/Storage	\$0
RP7305	Norman D. Martin, Jr.	Hana	0.560	Agriculture	\$168
RP7324	Charles J. Boerner	Hana	14.354	Pasture	\$156
RP7330	AOAO Maui Kamaole, Inc.	Wailuku	0.894	Landscaping	\$156
RP7343	Castle & Cooke Lanai Properties, LLC	Lahaina	2.073	Pier/Dock	\$21,528
RP7345	Murray Hunter	Makawao	79.100	Pasture	\$204
RP7347	Kaupo Ranch, Ltd.	Hana	20.900	Pasture	\$216
RP7349	Gerald Lindsey	Makawao	14.100	Pasture	\$264
RP7351	James L. Johnson and Nancy K. Johnson	Hana	0.214	Landscaping	\$156
RP7354	Steven DeCoite and Adv. on Horseback Ltd.	Makawao	25.040	Pasture	\$168
RP7357	Sasha Smith	Makawao	2.539	Pasture	\$156
General Leases & Term Easements²					
GL5647	Mary Sanford and Claire Sanford, Trustees	Wailuku	0.008	Seawall	\$4,740
GL5648	Maui Ocean Center, Inc.	Wailuku	0.553	Waterline	\$17,250
GL5666	Elliott William Lane and Jayme Janelle Lane	Makawao	0.196		\$1,500
Executive Orders - Set Asides					
3960	Department of Transportation, Harbors Division	Lanai,	22.5	Comm. Maritime	n/a
3961	Department of Transportation, Harbors Division	Kaunakakai,	16.306	Comm. Maritime	n/a
3963	Kahoolawe Island Reserve Commission	Wailuku	8.261	Info. Center	n/a
3966	Department of Agriculture	Molokai	28.148	Agriculture	n/a
3985	Department of Water Supply, County of Maui	Ualapue	1.591	Reservoir	n/a
3997	County of Maui	Wailuku	3.185	Animal Shelter	n/a
4016	Department of Transportation, Airports Division	Kahului	82.342	Airport	n/a
4018	County of Maui	Omaopio	3.91	Agriculture	n/a
4024	County of Maui	Wailuku	222.626	Recreation	n/a
4028	Department of Accounting and General Services	Kaunakakai	4.211	Civic Center	n/a
4031	Department of Education	Lahaina	0.273	School	n/a
Perpetual Easements					
LOD28542	Kahui Pono LLC	Makawao	0.231	Utility	\$7,000
LOD28545	Evelyn Iwankiw, Brian Iwankiw, & Sally Iwankiw	Makawao	0.021	Utility	\$570
LOD28590	Barron Thomas Souza Jr. and Melissa-Ann Souza	Makawao	0.198	Utility	\$0
LOD28628	Elliott William Lane and Jayme Janelle Lane	Makawao	0.188	Utility	\$2,900
LOD28677	James Loomis and Cynthia L. Guild	Makawao	0.455	Utility	\$0
LOD28678	Jeffrey A. Guild and Cynthia L. Guild	Makawao	0.267	Utility	\$0
LOD28679	Hana Beachfront Associates	Hana	0.158	Utility	\$20,000
Dispositions to Public Utilities					
LOD28489	Verizon Hawaii Inc.	Wailuku	0.008	Utility	\$486
LOD28637	Maui Electric Company and Verizon Hawaii Inc.	Wailuku	0.06	Utility	\$0
LOD28649	Verizon Hawaii Inc.	Lahaina	0.015	Utility	\$1,390
Fee Conveyances					
LOD28506	State of Hawaii	Lahaina	0.274	School	\$0
Quitclaims of Interest					
LOD28595	County of Maui	Makawao	0.208	Por. of Olinda Road	\$0
LOD28632	County of Maui	Makawao	1.548	NW of Hana Rd	\$9,400

1 Annual Payments

2 May be annual payments or one time payment.

Source: State of Hawaii, Department of Land and Natural Resources.

3.2.9

SINGLE FAMILY HOME AND CONDOMINIUM SALES BY AREA, MAUI COUNTY

Area	Number of Sales		Average Sales Price		Median Sales Price		Total Dollar Volume	
	2003 Sales	% Chg Last Yr	2003 Average	% Chg Last Yr	2003 Median	% Chg Last Yr	2003 Volume	% Chg Last Yr
SINGLE FAMILY HOMES								
Central	244	10%	\$376,397	21%	\$340,000	19%	\$91,840,766	34%
Haiku	77	10%	\$662,568	21%	\$620,000	34%	\$51,017,750	33%
Hana	9	350%	\$559,444	94%	\$450,000	56%	\$5,035,000	774%
Kaanapali	40	11%	\$1,074,863	-7%	\$969,500	3%	\$42,994,500	3%
Kahakuloa	1	0%	\$1,150,000	557%	\$1,150,000	557%	\$1,150,000	557%
Kapalua	9	N/A	\$3,479,667	N/A	\$2,900,000	N/A	\$31,317,000	N/A
Keanae	0	100%	\$0	-100%	\$0	-100%	\$0	-100%
Kihei	450	89%	\$451,692	9%	\$410,000	8%	\$203,261,484	107%
Kipahulu	1	0%	\$1,500,000	-20%	\$1,500,000	-20%	\$1,500,000	-20%
Kula/Ulupalakua/Kanaio	129	28%	\$681,126	22%	\$549,000	22%	\$87,865,200	55%
Lahaina	37	9%	\$562,557	40%	\$520,000	46%	\$20,814,600	52%
Lanai	16	100%	\$196,875	21%	\$182,500	15%	\$3,150,000	142%
Maalaea	1	N/A	\$2,500,000	N/A	\$2,500,000	N/A	\$2,500,000	N/A
Makawao/Olinda/Haliimaile	88	22%	\$421,752	31%	\$389,500	34%	\$37,114,205	61%
Maui Meadows	35	21%	\$820,759	30%	\$780,000	26%	\$28,726,550	56%
Molokai	4	300%	\$1,038,975	160%	\$979,950	145%	\$4,155,900	939%
Nahiku	1	-50%	\$795,000	145%	\$795,000	145%	\$795,000	22%
Napili/Kahana/Honokowai	72	47%	\$588,809	-6%	\$553,500	12%	\$42,394,240	38%
Olowalu	0	100%	\$0	-100%	\$0	-100%	\$0	-100%
Pukalani	80	45%	\$449,219	31%	\$426,500	25%	\$35,937,500	90%
Sprecklesville/Paia/Kuau	64	83%	\$663,070	28%	\$390,000	10%	\$42,436,470	133%
Wailea/Makena	52	33%	\$1,915,712	34%	\$1,287,500	36%	\$99,617,000	78%
Maui Summary:	1410	42%	\$591,222	21%	\$440,000	17%	\$833,623,165	71%
CONDOMINIUMS								
Central	144	24%	\$142,014	26%	\$141,000	18%	\$20,450,000	57%
Haiku	1	N/A	\$125,000	N/A	\$125,000	N/A	\$125,000	N/A
Hana	4	300%	\$136,250	148%	\$132,500	141%	\$545,000	891%
Kaanapali	133	10%	\$662,454	10%	\$535,000	5%	\$88,106,410	20%
Kapalua	61	27%	\$1,054,955	38%	\$685,000	40%	\$64,352,250	76%
Kihei	850	36%	\$219,548	17%	\$190,000	20%	\$186,615,386	59%
Kula/Ulupalakua/Kanaio	1	N/A	\$475,000	N/A	\$475,000	N/A	\$475,000	N/A
Lahaina	43	10%	\$446,055	28%	\$195,000	-13%	\$19,180,350	41%
Lanai	4	-33%	\$1,053,750	-23%	\$922,500	-18%	\$4,215,000	-48%
Maalaea	63	-10%	\$283,636	10%	\$285,000	14%	\$17,869,050	-1%
Napili/Kahana/Honokowai	489	17%	\$294,160	30%	\$275,000	28%	\$143,844,456	52%
Pukalani	3	-57%	\$380,000	20%	\$385,000	20%	\$1,140,000	-48%
Sprecklesville/Paia/Kuau	4	300%	\$343,200	166%	\$163,900	27%	\$1,372,800	964%
Wailea/Makena	186	51%	\$836,746	9%	\$560,000	9%	\$155,634,760	65%
Maui Summary:	1986	26%	\$354,444	18%	\$241,622	24%	\$703,925,462	49%

N/A: Not applicable.

SOURCE: Maui Board of REALTORS, *MLS Resale Data, December 2003.*

3.2.10

LAND SALES BY AREA, MAUI COUNTY

Area	Number of Sales		Average Sales Price		Median Sales Price		Total Dollar Volume	
	2003 Sales	% Chg Last Yr	2003 Average	% Chg Last Yr	2003 Median	% Chg Last Yr	2003 Volume	% Chg Last Yr
LAND SALES								
Central	87	64%	\$283,555	35%	\$290,900	46%	\$24,669,326	122%
Haiku	47	17%	\$502,503	17%	\$380,000	31%	\$23,617,650	38%
Hana	10	0%	\$431,760	-29%	\$350,050	33%	\$4,317,600	-29%
Honokohau	0	-100%	\$0	-100%	\$0	-100%	\$0	-100%
Kaanapali	60	58%	\$433,750	-10%	\$405,000	21%	\$26,025,000	42%
Kahakuloa	8	-33%	\$276,688	7%	\$274,750	9%	\$2,213,500	-29%
Kapalua	9	-61%	\$1,432,000	74%	\$900,000	38%	\$12,888,000	-32%
Kaupo	2	-33%	\$780,000	290%	\$780,000	247%	\$1,560,000	160%
Keanae	0	-100%	\$0	-100%	\$0	-100%	\$0	-100%
Kihei	29	7%	\$529,655	16%	\$275,000	20%	\$15,360,000	24%
Kula/Ulupalakua/Kanaio	57	2%	\$508,175	-3%	\$400,000	75%	\$28,966,000	-1%
Lahaina	20	122%	\$684,563	38%	\$485,000	28%	\$13,691,257	207%
Lanai	4	33%	\$996,250	49%	\$1,072,500	138%	\$3,985,000	99%
Maalaea	1	N/A	\$3,950,000	N/A	\$3,950,000	N/A	\$3,950,000	N/A
Makawao/Olinda/Haliimaile	21	-43%	\$306,000	13%	\$282,500	-5%	\$6,426,000	-36%
Maui Meadows	2	100%	\$407,500	10%	\$407,500	10%	\$815,000	119%
Molokai	13	225%	\$217,615	42%	\$155,000	-8%	\$2,829,000	360%
Nahiku	2	-33%	\$337,500	52%	\$337,500	70%	\$675,000	2%
Napili/Kahana/Honokowai	23	-18%	\$919,783	383%	\$238,000	28%	\$21,155,000	297%
Olowalu	0	-100%	\$0	-100%	\$0	-100%	\$0	-100%
Pukalani	14	40%	\$212,393	22%	\$220,000	28%	\$2,973,500	71%
Sprecklesville/Paia/Kuau	7	-42%	\$440,963	20%	\$509,740	16%	\$3,086,740	-30%
Wailea/Makena	23	-18%	\$906,500	-16%	\$545,000	31%	\$20,849,500	-31%
Maui Summary:	439	9%	\$501,260	8%	\$329,900	24%	\$220,053,073	18%

N/A: Not applicable.

Source: Maui Board of REALTORS, MLS Resale Data, December 2003.

3.2.11

**FOREST AND NATURAL AREA ACREAGE,
BY ISLAND JUNE 30, 2003**

Island	Conservation district forest land		Natural areas ³	
	Forest reserve land ¹	Private forest land ²	Number of areas	Acres
2003				
State total	643,134	328,742	19	109,164
Hawaii	438,416	106,745	8	82,535
Maui	73,227	53,180	4	17,123
Kahoolawe	-	-	-	-
Lanai	-	6,150	-	-
Molokai	16,030	-	2	2,950
Oahu	32,462	88,817	3	1,770
Kauai	82,999	73,850	2	4,786
Niihau	-	-	-	-

Note: data have remain constant since 1996.

¹ State-owned and privately-owned lands under surrender agreement in forest reserve system.

² Private forest land within conservation district. The majority of these lands were previously in the forest reserve system.

³ Includes Waimanu Research Reserve (3,600 acres) and Alakai Wilderness Preserve (9,939 acres).

Source: Hawaii State Department of Land and Natural Resources, Division of Forestry and Wildlife, records.