

## SECTION 7

# LAND USE AND OWNERSHIP

General statistics on the use, ownership, and tenure of land appear in this section. Information on specific use or ownership categories, such as farms, forests, parks, or military land, is given elsewhere.

Out of 4,050,176 acres on the six largest islands of the State, only 155,705 are in urban use. The largest uses are grazing (1,150,534 acres), forest reserve (1,190,954), and *pali* or other barren land (503,308). Approximately half of the 55,000 acres in Honolulu were unused open space when last surveyed in 1969; the second largest category at that time was residential use, with over 8,300 acres. For the State as a whole, the Land Use Commission has zoned 134,300 acres as "urban," 2,038,400 as "conservation," 1,932,500 as "agricultural," and 6,300 as "rural." Approximately 9 percent of the land in the State is owned by the Federal government, 38 percent by State government, 46 percent by major private owners (those with 1,000 or more acres), and less than 7 percent by small landowners.

Considerable caution is necessary in comparing statistics from different sources on land use, ownership, or tenure. Variations in definitions and survey dates seriously affect comparability in many instances, even where terminology is relatively unambiguous and misinterpretation seems unlikely. An example of such difficulties is the wide range in estimates of Federal land, with State totals ranging from 356,000 to 397,000 acres. Recent statistics on military land use are likewise confusing, going as high as 175,000 acres and as low as 56,000.

Reports of the Hawaii State Department of Land and Natural Resources, Department of Taxation, and Department of Transportation, the Land Study Bureau of the University of Hawaii, and the Congressional Committee on Government Operations provided the data for this section. Statistics for the nation as a whole are available in Sections 7 and 23 of the *Statistical Abstract of the United States: 1972*.

**Table 86.—LAND USE ACREAGES, BY ISLAND: 1968**

Land Use	Six Islands	Kauai	Oahu	Molokai	Lanai	Maui	Hawaii
All uses .....	4,050,176	354,112	388,928	167,104	89,280	466,432	2,584,320
Pineapple .....	69,276	2,699	18,987	17,276	16,236	14,078	—
Sugar cane .....	262,377	58,927	40,852	4	—	47,819	114,775
Nonplantation agriculture .....	1,197,688	55,311	51,741	90,072	—	180,511	820,053
Vegetable .....	6,708	339	2,102	845	—	1,506	1,916
Orchard .....	24,294	455	1,670	104	—	536	21,529
Grazing .....	1,150,534	53,637	38,608	86,850	—	176,810	794,629
Other <sup>1</sup> .....	2,567	547	1,434	2	—	331	253
Idle agricultural land .....	13,585	333	7,927	2,271	—	1,328	1,726
Forest .....	289,039	38,716	30,033	2,037	5,926	14,504	197,823
Forest reserve .....	1,190,954	157,555	118,766	48,338	—	156,035	710,260
Recreation <sup>2</sup> .....	334,256	11,244	5,184	415	66,683	18,980	231,750
Military .....	38,048	1,886	35,055	316	—	—	791
Urban .....	155,705	4,550	56,850	1,091	435	6,204	86,575
Civilian .....	61,233	4,400	36,957	1,091	435	6,204	12,146
Military .....	17,658	150	17,508	—	—	—	—
Undeveloped subdivision .....	76,814	—	2,385	—	—	—	74,429
Pali and barren land .....	503,308	22,235	23,799	7,477	—	27,852	421,945
Quarry .....	1,462	23	1,077	30	—	85	247
Water .....	8,063	966	6,584	48	—	364	101

<sup>1</sup>Includes water crop (974), forage (423), dairy (738), poultry (275), swine (103), feed lot (38), and salt bed (16).

<sup>2</sup>Includes game management areas (87,585), national parks (299,423), and other recreation areas (17,248).

Source: A.Y. Ching and T. Sahara, *Land Use and Productivity Rating, State of Hawaii, 1968*, Land Study Bureau Circular No. 15 (University of Hawaii, Land Study Bureau, July 1969), pp. 18-19.

**Table 87.—LAND USE SUMMARY, FOR OAHU: 1969**

Land use	Area (in acres)		
	Oahu	Honolulu	Rest of Oahu
Total area <sup>1</sup> .....	381,934.85	54,738.26	327,196.59
Residential <sup>2</sup> .....	22,676.00	8,309.47	14,366.53
Industrial .....	6,304.94	2,622.62	3,682.32
Commercial .....	1,645.23	1,024.57	620.66
Hotel .....	97.87	90.73	7.14
Public buildings .....	5,226.08	2,372.90	2,853.18
Public open spaces .....	7,795.17	2,660.40	5,134.77
Highways and streets .....	8,495.00	3,718.00	4,777.00
Agriculture .....	88,739.90	1,004.95	87,734.95
Military .....	47,650.43	5,394.53	42,255.90
Unused open space <sup>2</sup> .....	193,304.23	27,540.09	165,764.14

<sup>1</sup>Differs somewhat from measurement by the Bureau of the Census (379,328 for Oahu, 53,504 for Honolulu, and 325,824 for the rest of Oahu).

<sup>2</sup>Not directly comparable to 1964 data in *State of Hawaii Data Book 1970*, table 39, p. 36; for 1969, large parcels containing both residential and vacant areas were divided and reported separately.

Source: Hawaii State Department of Transportation, Advance Transportation Planning Office, 1969 land use files.

**Table 88.—LAND AND FLOOR AREA IN COMMERCIAL AND HOTEL USE, FOR OAHU: 1964 AND 1969**

Land use	Number of establishments	Land area (acres)	Floor area (square feet)	
			Total	Per establishment
<b>Retailing:</b>				
1964 .....	3,746	1,016	10,986,345	2,933
1969 .....	3,906	1,036	13,375,672	3,424
<b>Services, exc. hotels:</b>				
1964 .....	4,862	434	9,146,100	1,881
1969 .....	5,696	602	13,933,747	2,446
<b>Hotels:</b>				
1964 .....	60	73	5,001,017	83,350
1969 .....	81	116	7,571,981	93,481

Source: State of Hawaii and City and County of Honolulu, *Oahu Transportation Study*, Vol. I, *Economic, Population, and Land Use* (1967), p. IV-A-3; Hawaii State Department of Transportation, 1969 land use files from Oahu Transportation Planning Program.

**Table 89.—ESTIMATED ACREAGE OF LAND USE DISTRICTS: FEBRUARY 15, 1972**

(Total acreage, including inland water, as classified by the  
Hawaii State Land Use Commission under the provisions of  
Chapter 205, Hawaii Revised Statutes.)

Island	Total area <sup>1</sup>	Classification by State Land Use Commission			
		Urban <sup>2</sup>	Conservation <sup>3</sup>	Agricultural <sup>4</sup>	Rural <sup>5</sup>
State total .....	4,111,500	134,300	2,038,400	1,932,500	6,300
Hawaii .....	2,573,400	25,600	1,355,100	1,191,600	1,100
Maui .....	465,800	14,300	193,000	255,200	3,300
Kahoolawe .....	28,800	—	28,800	—	—
Lanai .....	90,500	500	57,300	32,700	—
Molokai .....	165,800	5,100	49,900	109,900	900
Oahu .....	385,300	79,700	156,700	148,900	—
Kauai .....	353,900	9,100	195,300	148,500	1,000
Niihau .....	45,700	—	—	45,700	—
Kaula and Lehua .....	400	—	400	—	—
Northwestern Haw'n I. ....	1,900	—	1,900	—	—

<sup>1</sup>These totals differ somewhat from the official figures based on measurements by the Geography Division of the U.S. Bureau of the Census: State total, 4,128,256; Hawaii, 2,584,320; Maui, 466,432; Kahoolawe, 28,800 (same); Lanai, 89,280; Molokai, 167,104; Oahu, 388,928; Kauai, 354,112; Niihau, 46,720; Kaula and Lehua, 512; the Northwestern Hawaiian Islands, excluding Midway, 2,048.

<sup>2</sup>Defined as "those lands now in urban use and a sufficient reserve for future urban growth" (H.R.S. § 205-2).

<sup>3</sup>Includes all areas formerly designated "forest and water reserve zones" and includes, among others, "areas necessary for protecting watersheds and water sources; preserving scenic areas; providing park lands, wilderness, and beach reserves..." (*ibid.*).

<sup>4</sup>Defined as lands with a "high capacity for intensive cultivation" (*ibid.*).

<sup>5</sup>Defined as areas "primarily of small farms mixed with very low density residential lots" (*ibid.*).

Source: Hawaii State Land Use Commission, unpublished estimates.

**Table 90.—LAND OWNERSHIP OR TENURE, BY ISLAND: JUNE 30, 1968**

Island	Ownership or tenure (in acres)				
	Total land area	Federal government <sup>1</sup>	State government <sup>2</sup>	Major private owners	Other owners <sup>3</sup>
State total .....	4,128,263	355,769	1,584,715	1,917,560	270,219
Hawaii .....	2,584,320	241,858	1,106,126	1,052,583	183,753
Maui .....	466,439	26,478	204,895	221,223	13,843
Kahoolawe .....	28,800	28,800	—	—	—
Lanai .....	89,280	8	—	87,832	1,440
Molokai .....	167,104	78	53,019	110,444	3,563
Oahu .....	388,928	56,241	64,810	221,820	46,057
Kauai .....	354,112	2,306	153,305	176,953	21,548
Niihau .....	46,720	—	—	46,705	15
Other islands <sup>4</sup> .....	2,560	—	2,560	—	—

<sup>1</sup>Includes fee simple and ceded land.

<sup>2</sup>Includes State land managed by the County governments and various State agencies, and Hawaiian Homes Commission lands.

<sup>3</sup>Land owned by private landowners with less than 1,000 acres in fee simple and County land acquired by purchase or gift in the name of the Counties.

<sup>4</sup>Kaula, Lehua, and the Northwestern Hawaiian Islands.

Source: Hawaii State Department of Land and Natural Resources, *Report to the Governor, 1971-1972*, p. 50.

**Table 91.—FEDERALLY OWNED PROPERTY IN HAWAII: 1960 AND 1970**

Subject	June 30, 1960	June 30, 1970
Number of installations .....	167	160
Land (acres), total .....	234,074.1	396,900.7
Urban .....	23,530.2	57,202.3
Rural .....	210,543.9	339,698.4
Number of buildings .....	11,506	11,479
Cost (\$1,000), total .....	877,162	1,115,240
Land .....	21,910	40,083
Buildings .....	407,478	545,140
Structures and facilities .....	447,774	530,017

Source: Committee on Government Operations, U.S. House of Representatives, *Federal Real and Personal Property Inventory (Civilian and Military) of the United States Government Covering Its Properties Located in the United States, in the Territories, and Overseas* (biennial report).