

## Section 6

# 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 is given elsewhere: parks in section 7, farms in section 19, forests in section 20, cane land and industrial parks in section 22, and shopping centers in section 23.

Out of the 4,128,000 acres in the State, almost 2,200,000 are in unused open space. Other major categories include agriculture, with 1,347,000 acres, services (including military installations), with 123,000, and recreation, with 280,000. In the Honolulu Standard Metropolitan Statistical Area (which is coterminous with Oahu), land in residential use increased from 16,500 acres in 1964 to 27,200 in 1979; during the same 15-year span, agricultural land declined from 94,500 to 75,100 acres. For the State as a whole, the Land Use Commission has zoned 154,000 acres as "urban," 1,976,000 as "conservation," 1,972,000 as "agricultural," and 9,000 as "rural."

Recent data on land ownership indicate that the Federal government owns 7.3 percent of all land, the State and counties own 34.8 percent, and private owners (chiefly large estates) have 57.9 percent. Total Federal holdings reported by the General Services Administration come to 402,900 acres, exclusive of leased land (48,500 acres); most of the Federal land is in park and military use. The State Department of Hawaiian Home Lands holds about 192,000 acres, divided among 3,004 lessees. Total land parcels in the State number 370,000.

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 Federal totals ranging from 297,000 acres to 403,000. 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 U.S. Department of Agriculture and General Services Administration, Hawaii State Department of Hawaiian Home Lands, Department of Land and Natural Resources, Department of Planning and Economic Development, Department of Taxation, and Land Use Commission, and county planning departments provided the data for this section. Greater detail appears in DPED Statistical Report 98, Land Use and Ownership Trends in Hawaii, issued December 28, 1973. Historical Statistics of Hawaii, Section 12, contains limited information for earlier years. Statistics for the nation as a whole are available in Sections 8 and 24 of the Statistical Abstract of the United States: 1980.

Table 131.-- MAJOR USES OF LAND: 1974

[In thousands of acres.]

Use	Area
Approximate land area .....	4,112
Cropland <u>1/</u> .....	357
Crops <u>2/</u> .....	151
Idle .....	169
Pasture <u>3/</u> .....	37
Grassland pasture and range <u>4/</u> .....	1,018
Forest land <u>5/</u> .....	1,626
Grazed .....	460
Not grazed .....	1,166
Special uses .....	842
Urban areas .....	178
Rural transportation areas <u>6/</u> .....	35
Rural parks <u>7/</u> .....	273
Wildlife refuges .....	162
Defense and industrial areas .....	174
Farmsteads, farm roads, and lanes .....	20
Other land <u>8/</u> .....	269

1/ Total acreage in the crop rotation.

2/ Includes cropland harvested, crop failure, and cultivated summer fallow.

3/ Cropland used only for pasture.

4/ Grassland and other nonforested pasture, excluding cropland used only for pasture.

5/ Forest land, excluding reserved forest land and some unreserved areas duplicated in parks and other special uses of land.

6/ Includes rural highways and roads, railroads, and civilian airports.

7/ Areas in National and State parks systems.

8/ Miscellaneous areas with low agricultural use value, such as marshes, bare rock areas, and deserts.

Source: H. Thomas Frey, Major Uses of Land in the United States: 1974 (U.S. Department of Agriculture, Agricultural Economic Report No. 440, November 1979).

Table 132.-- LAND USE, BY COUNTY AND ISLAND: 1972-1979

[In acres.]

Land use	State total	Hawaii County (Sept. 1978)	Maui County (Spring 1972)			City and County of Honolulu (Dec. 1979)	Kauai County (May 1972)	
			Maui and Kahoolawe	Lanai	Molokai		Kauai	Niihau
All uses <u>1/</u> .....	4,045,343	2,519,709	490,232	89,072	168,258	373,006	357,978	47,088
Residential .....	66,527	12,337	17,292	256	2,963	27,702	5,968	9
Manufacturing .....	3,836	625	774	-	754	1,503	177	3
Mfg. services <u>2/</u> .....	11,023	1,566	657	54	54	2,805	5,880	7
Commercial <u>3/</u> .....	2,390	430	233	13	38	1,563	113	-
Services <u>4/</u> .....	122,854	35,588	30,986	80	810	52,669	2,336	385
Social and cultural <u>5/</u> .	7,821	1,910	1,302	15	93	4,135	361	5
Recreation <u>6/</u> .....	280,481	250,034	18,778	89	34	6,322	5,224	-
Agriculture .....	1,346,704	810,458	197,900	15,020	37,199	75,096	167,650	43,381
Transportation <u>7/</u> .....	6,120	2,119	776	165	24	1,763	1,273	-
Unused open spaces <u>8/</u> ..	2,197,587	1,404,642	221,534	73,380	126,289	199,448	168,996	3,298

1/ Excludes public streets and highways.

2/ Includes warehousing, construction services, and public utilities.

3/ Retail and wholesale trade.

4/ Includes commercial amusement and recreation, hotels, military installations, government offices, parking, cemeteries, personal services, business and repair services, professional services, and finance, insurance, and real estate.

5/ Educational, cultural, and religious.

6/ Excludes commercial amusement and recreation services.

7/ Includes airports, docks, and land transportation facilities.

8/ Includes vacant land, forest reserve, lakes, steep land, and undedicated streets.

Source: Hawaii State Department of Planning and Economic Development, Kauai County Land Inventory Report: 1972 (1974), and Maui County Land Inventory Report: 1972 (1974); City and County of Honolulu, Department of General Planning, Generalized Land Use, 1979, special tabulation; County of Hawaii, Department of Research and Development, County of Hawaii Data Book 1980, p. 84.

Table 133.-- LAND USE AND STRUCTURAL CHARACTERISTICS OF OAHU: 1979

Subject	Oahu total	City of Honolulu <u>1/</u>	Rest of Oahu
<b>LAND USE (IN ACRES)</b>			
All existing uses .....	373,006	51,452	321,554
Single family .....	24,953	8,135	16,818
Multi-family .....	2,258	1,053	1,205
Industrial .....	6,694	2,927	3,767
Commercial .....	4,290	1,733	2,557
Hotel .....	239	123	116
Agriculture .....	75,097	309	74,788
Usable vacant .....	39,322	3,365	35,957
Other .....	220,153	33,807	186,346
<b>STRUCTURES BY YEAR BUILT</b>			
All structures .....	137,753	62,641	75,112
Before 1930 .....	9,041	6,946	2,095
1930 to 1939 .....	10,388	6,642	3,746
1940 to 1949 .....	16,970	9,649	7,321
1950 to 1959 .....	31,274	15,188	16,086
1960 to 1969 .....	41,851	15,891	25,960
1970 and later .....	25,262	7,399	17,863
Not reported and unknown .....	2,967	926	2,041
<b>NONRESIDENTIAL FLOOR AREA <u>2/</u> (1,000 SQUARE FEET)</b>			
All nonresidential floor area .	113,439	93,828	19,611
Transportation .....	4,149	4,004	145
Manufacturing .....	8,947	6,583	2,364
Utilities and communications .....	2,018	1,642	376
Contract construction .....	2,840	2,214	626
Wholesale trade and warehousing ....	11,125	8,913	2,212
Commercial retail .....	17,878	12,376	5,502
Commercial services .....	19,304	17,046	2,258
Public and quasi-public buildings ..	22,502	18,375	4,127
Hotel .....	19,411	18,642	769
Vacant or unknown uses .....	5,265	4,033	1,232

Continued on next page.

Table 133.-- LAND USE AND STRUCTURAL CHARACTERISTICS OF OAHU: 1979 --  
Con.

Subject	Oahu total	City of Honolulu <u>1/</u>	Rest of Oahu
DWELLING UNITS BY TYPE			
All dwelling units .....	234,722	138,256	96,466
Single family and duplex .....	125,367	54,557	70,810
Low density multi-family .....	9,832	1,007	8,825
High density multi-family .....	99,523	82,692	16,831

1/ As defined for statistical purposes. The entire island of Oahu is a single municipality.

2/ For definitions, see City and County of Honolulu, Department of General Planning, Planning Data for Oahu: 1975 Land Use Data by Small Area (May 1978).

Source: City and County of Honolulu, Department of General Planning, records.

Table 134.-- RESIDENTIAL LOTS APPROVED BY  
THE CITY AND COUNTY OF HONOLULU, BY  
DISTRICTS: 1979 AND 1980

District	1979	1980
Oahu total .....	2,005	1,792
Honolulu .....	530	686
Koolaupoko .....	356	190
Koolauloa .....	336	68
Waialua .....	137	73
Wahiawa .....	26	37
Waianae .....	38	36
Ewa .....	582	702

Source: City and County of Honolulu  
Department of General Planning, records.

Table 135.-- LAND PARCELS, BY COUNTIES: 1971 TO 1981

[As of July 1, 1971-1976 and January 1, 1977-1981.]

Year	State total	City and County of Honolulu	County of Maui	County of Hawaii	County of Kauai
1971 .....	270,336	128,153	24,557	106,037	11,589
1972 .....	280,540	134,880	25,472	108,314	11,874
1973 .....	290,512	141,651	26,633	109,809	12,419
1974 .....	302,987	149,521	28,474	111,463	13,529
1975 .....	316,240	158,069	31,137	112,283	14,751
1976 .....	329,695	167,044	34,148	113,406	15,097
1977 .....	335,411	170,554	34,869	114,618	15,370
1978 .....	342,284	174,125	36,283	115,832	16,044
1979 <u>1/</u> .....	352,430	177,818	38,336	119,049	17,227
1980 <u>1/</u> .....	366,375	186,555	39,375	121,688	18,757
1981 .....	370,367	192,755	41,601	115,958	20,053

1/ Figures for Hawaii County for 1979 and 1980 may not be comparable to those for 1971-1978 and 1981, because of the possibility of double-counting for parcels with multi-pitt codes.

Source: Hawaii State Department of Taxation, Tax Research and Planning, records.

Table 136.-- ACREAGE OF LAND USE CLASSES, BY COUNTIES: JULY 25, 1980

[Based on land use classifications used for real property assessment purposes.]

Land use class <u>1/</u>	State total	City and County of Honolulu	County of Maui	County of Hawaii	County of Kauai
All uses <u>2/</u> .....	4,049,952	371,150	750,268	2,526,909	401,625
Residential .....	87,062	63,890	6,873	11,793	4,506
Hotel-apartment .....	7,659	2,618	2,131	2,045	865
Commercial .....	6,197	2,706	612	1,129	1,750
Industrial .....	16,161	8,027	1,539	6,010	585
Agricultural .....	1,939,803	136,111	405,807	1,199,936	197,949
Conservation .....	1,961,027	147,158	328,498	1,293,278	192,093
Unimproved residential .	32,046	10,640	4,809	12,719	3,878

1/ "Pitt codes" as established by the "Pittsburgh Law" of differential tax rates for real property assessment and taxation in Sec. 246-10, Hawaii Revised Statutes (1976 Replacement).

2/ Excludes public streets and highways and other areas not in parcels of record, and thus differs somewhat from the official figures based on measurements of the Geography Division of the U.S. Bureau of Census. The Bureau's data for total area (including inland water) are: State, 4,128,256 acres; Honolulu, 390,976; Maui, 751,616; Hawaii, 2,584,320; Kauai, 401,344.

Source: Hawaii State Department of Taxation, Systems and Procedures Office, records.

Table 137.-- ESTIMATED ACREAGE OF LAND USE DISTRICTS: 1964 TO 1981

[Total acreage, including inland water, as classified by the Hawaii State Land Use Commission under the provisions of Chapter 205, Hawaii Revised Statutes. All data are approximate.]

Year and month	Classification by State Land Use Commission <u>2/</u>				
	Total area <u>1/</u>	Urban	Conservation	Agricultural	Rural
1964: August ...	4,111,500.0	117,800.0	1,862,600.0	2,124,400.0	6,700.0
1969: August ...	4,111,500.0	140,163.3	2,009,086.7	1,955,875.0	6,375.0
1974: March ....	4,111,500.0	147,472.0	1,986,428.9	1,968,727.2	8,871.9
1975: February .	4,111,500.0	148,921.4	1,976,995.7	1,976,695.4	8,887.5
1977: January ..	4,111,500.0	149,262.9	1,976,995.7	1,976,327.2	8,914.2
1978: January ..	4,111,500.0	151,012.5	1,976,931.4	1,974,339.5	9,216.7
1979: January ..	4,111,500.0	151,929.6	1,976,105.9	1,974,229.8	9,234.7
1980: January ..	4,111,500.0	152,199.2	1,975,865.1	1,974,195.5	9,240.3
1981: January ..	4,111,500.0	154,318.8	1,975,836.4	1,972,103.5	9,241.3

Footnotes and source follow next table.



Table 138.-- ESTIMATED ACREAGE OF LAND USE DISTRICTS, BY ISLANDS:  
JANUARY 1981

[See headnote of preceding table.]

Island	Classification by State Land Use Commission <u>2/</u>				
	Total area <u>1/</u>	Urban	Conservation	Agricultural	Rural
State total	4,111,500.0	154,318.8	1,975,836.4	1,972,103.5	9,241.3
Hawaii .....	2,573,400.0	35,388.2	1,309,461.8	1,227,938.0	612.0
Maui .....	465,800.0	15,630.4	193,678.7	252,710.9	3,780.0
Kahoolawe .....	28,800.0	-	28,800.0	-	-
Lanai .....	90,500.0	2,338.5	38,202.5	47,239.0	2,720.0
Molokai .....	165,800.0	3,293.1	49,767.7	111,843.2	896.0
Oahu .....	385,300.0	86,851.0	154,893.9	143,555.1	-
Kauai .....	353,900.0	10,817.6	198,731.8	143,117.3	1,233.3
Niihau .....	45,700.0	-	-	45,700.0	-
Kaula and Lehua	400.0	-	400.0	-	-
Other islands <u>3/</u>	1,900.0	-	1,900.0	-	-

1/ These totals differ somewhat from the official figures based on measurements by the Geography Division of the U.S. Bureau of the Census, cited in Section 5.

2/ For definitions, see Hawaii Revised Statutes, 1976 Replacement, Section 205-2.

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

Source: Hawaii State Department of Planning and Economic Development, Land Use Commission, data supplied February 17, 1981.

Table 139.-- LAND OWNERSHIP, BY ISLANDS: 1968-1978

[In acres. Includes area in public thoroughfares on Hawaii but excludes it for other islands.]

Island	Survey date	All land <u>1/</u>	Land owned by government <u>2/</u>			Privately owned land <u>3/</u>
			Federal	State	Counties	
State total ..	...	4,045,511	296,803	1,394,552	13,335	2,340,821
Percent .....	...	100.0	7.3	34.5	0.3	57.9
Hawaii .....	1971	2,516,979	200,995	985,269	839	1,329,876
Maui .....	1972	461,402	12,275	155,284	365	293,478
Kahoolawe .....	1972	28,832	28,819	13	-	-
Lanai .....	1972	89,071	8	169	2	88,892
Molokai .....	1972	168,257	1,839	39,652	2	126,764
Oahu .....	1978	373,216	50,634	62,073	11,008	249,501
Kauai .....	1972	357,977	1,977	149,276	1,119	205,605
Niihau .....	1972	47,217	256	256	-	46,705
Other islands <u>4/</u> ..	1968	2,560	-	2,560	-	-

1/ Because of the omission of public thoroughfares and for other reasons, totals by island may differ considerably from official area estimates in other tables in this volume.

2/ State land ceded by presidential proclamation or governor's executive order to the federal government appears in most cases to have been classified for this table as federal land, even though title to it technically remains with the state. Land ceded by the state to the counties, in contrast, has probably been classified as state land. For both types of ceded land, treatment may have varied from parcel to parcel, and no firm statement is possible.

3/ For data on the leasehold status of privately owned land, see the two following tables.

4/ Lehua, Kaula, and the Northwestern Hawaiian Islands other than Midway. Source follows next table.

Table 140.-- PRIVATELY OWNED LAND, LEASED AND UNLEASED, BY ISLANDS:  
1968-1978

[In acres.]

Island	Survey date	All private land	Not leased	Leased <u>1/</u>
State total ....	...	2,340,821	1,872,207	468,614
Hawaii .....	1971	1,329,876	1,026,003	303,873
Maui .....	1972	293,478	255,272	38,206
Kahoolawe .....	1972	-	-	-
Lanai .....	1972	88,892	88,882	10
Molokai .....	1972	126,764	104,089	22,674
Oahu .....	1978	249,501	165,727	83,774
Kauai .....	1972	205,605	185,529	20,076
Niihau .....	1972	46,705	46,705	-
Other islands <u>2/</u> ....	1968	-	-	-

1/ To either governmental or private lessees. For Oahu data by type of lessee, see the following table.

2/ Lehua, Kaula, and the Northwestern Hawaiian Islands (except Midway).

Source: Hawaii State Department of Planning and Economic Development, Hawaii Urban Planning Information Center, Land Inventory Report; 1972 for Hawaii County (1974, p. 19), Maui County (1974, pp. 25-26), and Kauai County (1974, pp. 25 and 29), and underlying data; Hawaii State Department of Land and Natural Resources, Report to the Governor 1973-1974, p. 54 (for Lehua, Kaula, and the N.W.H.I.); Honolulu Department of General Planning records.

Table 141.-- LAND OWNERSHIP AND CONTROL, FOR OAHU: 1978

[In acres.]

Lessee	Owner				
	All owners	Federal	State	City and County	Private
Total land ..	373,216	50,634	62,074	11,007	249,501
None .....	272,532	45,990	50,045	10,770	165,727
Federal .....	2,816	-	2,706	-	110
State .....	193	33	-	157	3
City and County ..	1,187	25	1,148	-	14
Private .....	96,488	4,586	8,175	80	83,647

Source: City and County of Honolulu, Department of General Planning, records.

Table 142.-- ACRES OWNED IN FEE BY SELECTED MAJOR LANDOWNERS:  
1964, 1979 AND 1980

[Many of these figures are not exact accountings of acres owned but are the landowners' best estimates.]

Landowner	1964	1979	1980
Bernice P. Bishop Estate .....	369,700	341,749	341,764
Richard S. Smart (Parker Ranch) .....	185,610	120,000	120,000
Castle & Cooke, Inc. ....	154,759	<sup>1/</sup> 150,370	150,370
C. Brewer & Company, Ltd. ....	145,147	98,520	98,491
Samuel M. Damon Estate .....	143,842	122,969	122,955
Alexander & Baldwin, Inc. ....	122,788	95,400	94,100

<sup>1/</sup> As of March 1980, but figure does not differ significantly from the 1979 figure.

Source: State Legislative Reference Bureau, Public Land Policy in Hawaii: Major Landowners, Report No. 3 (1967), p. 17; data for 1979 and 1980 supplied by landowners listed.

Table 143.-- REAL PROPERTY OWNED OR LEASED BY THE FEDERAL GOVERNMENT:  
1969 TO 1979

Subject	June 30, 1969	Sept. 30, 1977	Sept. 30, 1978 <u>1/</u>	Sept. 30, 1979 <u>2/</u>
OWNED				
Number of installations .....	152	271	284	295
Land area, total (acres) .....	397,011.8	407,904.3	402,938.6	660,620.1
Urban .....	55,236.8	54,810.1	(NA)	55,696.9
Rural .....	341,775.0	353,094.2	(NA)	604,923.2
Number of buildings .....	11,424	14,512	14,610	14,481
Cost, total (\$1,000) <u>3/</u> .....	1,069,833	1,438,050	1,448,743	1,474,050
Land .....	26,592	52,152	52,150	62,462
Buildings .....	529,721	772,361	786,375	789,851
Structures and facilities .....	513,520	613,537	610,218	621,737
Predominant usage (acres):				
Agriculture and grazing .....	-	-	-	-
Forest and wildlife <u>2/</u> .....	1,767.4	3,106.4	3,108.6	255,620.2
Parks and historic sites .....	218,318.0	228,898.9	228,898.9	228,904.1
Power development and distribution .....	-	-	-	-
Reclamation and irrigation .....	-	-	-	-
Office building locations .....	19.7	52.3	50.5	54.6
Military, excluding airfields <u>4/</u> .	175,207.7	163,835.7	163,439.8	169,258.8
Airfields .....		3,738.0	3,738.0	3,745.0
Harbor and port facilities .....	35.1	156.6	23.6	23.6
Flood control and navigation .....	625.7	1,480.8	1,480.8	1,480.8
Vacant .....	13.1	1.5	1.5	1.5
Institutional .....	1.5	359.5	359.5	359.5
Housing .....	81.4	84.5	85.1	84.2
Storage .....	34.0	529.8	139.2	139.2
Industrial .....	48.6	5,179.7	1,132.5	203.0
Research and development .....	5.2	6.2	6.2	6.2
Other land .....	854.4	474.4	474.4	739.4
LEASED				
Number of leases .....	237	226	229	(NA)
Land area, total (acres) .....	29,596.0	47,262.0	48,542.9	(NA)
Urban .....	36.1	147.0	147.2	(NA)
Rural .....	29,559.9	47,115.0	48,395.7	(NA)
Number of building locations .....	155	157	153	(NA)
Floor area of buildings (sq. ft.) ..	450,025	352,876	307,246	(NA)
Annual rental (\$1,000) .....	1,517.5	1,346	1,414	(NA)

Footnotes and source on next page.

Table 143.-- REAL PROPERTY OWNED OR LEASED BY THE FEDERAL GOVERNMENT:  
1969 TO 1979 -- Con.

NA Not available.

1/ Corrected from published data, which overstated Navy acreage and the State total by 195,359.7 acres.

2/ Data for 1979 are not comparable to figures for earlier years. According to a letter from the General Services Administration, "this increase of nearly 258,000 acres is almost entirely due to a correction of acreage holdings submitted by the U.S Fish and Wildlife Service. That office revised a Hawaiian Islands National Wildlife Refuge holding from 1,906.5 acres to 254,418.1 acres to include the lagoon water acreage of the circular reefs and shoals."

3/ At time of acquisition. Includes estimated equivalent cost of properties acquired through donation, exchange, devise, forfeiture, or judicial process.

4/ Figure for 1969 refers to all Department of Defense land used for military functions.

Source: General Services Administration, Summary Report of Real Property Owned by the United States Throughout the World (annual) and Summary Report of Real Property Leased to the United States Throughout the World (annual). The 1978 corrections were telephoned to DPED on February 26, 1980.

Table 144.-- DEPARTMENT OF HAWAIIAN HOME LANDS ACREAGE, LESSEES, AND APPLICANTS, BY ISLANDS: JUNE 30, 1980

[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.]

Island	Acreage		Lessees		Applicant list	
	Total	In home- stead use	Total awards	Resi- dential only	Total	Resi- den- tial
State total ..	191,727	29,030	3,004	2,591	6,928	6,098
Hawaii .....	111,584	21,036	701	554	1,600	1,040
Maui .....	29,068	17	89	89	477	443
Molokai .....	27,723	6,743	378	117	370	253
Oahu .....	5,083	645	1,646	1,644	4,013	4,005
Kauai .....	18,269	589	190	187	468	357

Source: Annual Report, Department of Hawaiian Home Lands, 1979-80, pp. 7, 8, and 12.