

SECTION 22

DISTRIBUTION AND SERVICES

This section presents statistics relating to retail trade, wholesale trade, and selected services.

These activities have undergone rapid growth in recent decades. Retail sales increased from \$121 million in 1939 to \$522 million in 1958 and \$1.1 billion in 1967. Wholesale sales rose from \$97 million to \$1.0 billion in the same 28-year period. Hotels, amusements, and other services reported receipts of \$295 million in 1967, compared with \$101 million in 1958 and only \$15 million in 1939. General excise and use tax base data for more recent years indicate continued increases; between 1967 and 1972, the retailing tax base rose 74 percent, the wholesaling base by 76 percent, and the base for services by 89 percent.

Growth has been especially rapid for hotels. The number of units in the State rose from 1,572 late in 1946 to 9,522 in 1960 and 36,608 in February 1973. Occupancy rates averaged 70 percent in Waikiki and 66 percent on the Neighbor Islands during 1972. The average daily room rate was \$24.28 in 1971. The hotel payroll in 1971 totalled \$78 million, compared with \$14 million ten years earlier.

The major source for these data is the United States Census of Business, most recently conducted in 1967. Statistics on the retailing, wholesaling, and services tax base are available from the Hawaii State Department of Taxation. Data on hotel room counts and occupancy are published by the Hawaii Visitors Bureau. The *Statistical Abstract of the United States: 1972*, Sections 29 and 30, presents similar data for the nation as a whole.

**Table 249.—RETAIL TRADE, WHOLESALE TRADE, AND SELECTED SERVICES,
FOR HAWAII: 1939 TO 1967**

(Coverage varies somewhat from year to year)

Year	Retail trade		Wholesale trade		Selected services ¹	
	Establishments	Sales (\$1,000)	Establishments	Sales (\$1,000)	Establishments	Receipts (\$1,000)
1939	4,256	120,681	704	97,045	2,186	15,340
1948	4,881	382,680	702	480,734	2,337	44,617
1954	4,807	426,115	594	581,940	2,595	64,726
1958	4,760	521,877	793	618,155	3,070	101,142
1963	4,578	751,411	974	735,205	3,431	163,094
1967	5,212	1,083,458	1,030	1,013,813	4,057	294,828

¹Includes hotels; personal services; miscellaneous business services; automobile repair, services, and garages; miscellaneous repair services; and motion pictures and other amusement and recreation services.

Source: U.S. Bureau of the Census, *U.S. Census of Business: 1948*, Bulletin No. 1-RWS-51; *U.S. Census of Business: 1958*, Bulletins BC58-RA52, BC58-SA52, and BC58-WA52; *U.S. Census of Business: 1967*, Bulletins BC67-RA13, BC67-SA13, and BC67-WA13.

Table 250.—RETAIL TRADE, BY GEOGRAPHIC AREA AND KIND OF BUSINESS: 1967

Subject	Number of establishments	Sales (\$1,000)	Proprietors	Payroll, entire year (\$1,000)	Paid employees, March 12
Total ¹	5,212	1,083,458	4,408	147,608	41,347
GEOGRAPHIC AREA					
City and County of Honolulu ²	3,837	899,741	3,245	126,411	35,135
City of Honolulu ²	2,965	734,546	2,459	107,532	29,566
Kailua	153	33,780	119	4,150	1,141
Remainder of county	719	131,415	667	14,729	4,428
County of Hawaii	642	83,635	547	9,523	2,911
Hilo	362	58,975	279	7,251	2,201
Remainder of county	280	24,660	268	2,272	710
County of Kauai	320	42,487	265	5,098	1,388
County of Maui	413	57,595	349	6,576	1,913
Lanai	11	1,803	10	(W)	(W)
Maui	375	52,921	313	6,131	1,779
Molokai	27	2,871	26	(W)	(W)
KIND OF BUSINESS					
Building materials, hardware, farm equipment dealers	68	26,016	50	4,087	691
General merchandise stores	279	187,258	225	26,155	7,540
Food stores	852	254,536	793	20,388	5,756
Automotive dealers	159	153,597	93	16,300	2,688
Gasoline service stations	457	72,987	437	8,437	3,225
Apparel and accessory stores	403	67,321	230	10,433	2,930
Furniture, home furnishings, equipment stores	274	40,650	197	5,581	1,170
Eating and drinking places	1,255	143,860	1,104	39,613	13,396
Drug stores, proprietary stores	101	40,717	53	4,511	1,133
Miscellaneous retail stores	1,065	78,943	925	9,699	2,258
Nonstore retailers	299	17,573	301	2,404	560

W Withheld to avoid disclosure.

¹Excludes commissaries, exchanges, and eating and drinking places operated for military personnel by the U.S. Department of Defense. Total sales for these groups amounted to \$109,467,000 in 1967.

²Revised since publication of the census bulletin.

Source: U.S. Bureau of the Census, *Census of Business, 1967. Retail Trade: Hawaii*, BC67-RA13, and special tabulation for the County of Maui.

Table 251.—RETAIL TRADE FOR MAJOR RETAIL CENTERS ON OAHU: 1948 TO 1967

Retail center	Sales (\$1,000)			Percent distribution		
	1948	1958	1967	1948	1958	1967
Oahu	285,710	415,471	884,069	100.0	100.0	100.0
Honolulu ¹	249,850	346,094	720,371	87.4	83.3	81.5
Central business district	71,648	64,059	55,138	25.1	15.4	6.2
Waikiki	14,824	31,881	84,005	5.2	7.7	9.5
Ala Moana Center	—	—	122,051	—	—	13.8
Waialae-Kahala	—	4,152	15,984	—	1.0	1.8
Kapalama	(NA)	(NA)	23,896	(NA)	(NA)	2.7
Remainder of Oahu ¹	35,860	69,377	163,698	12.6	16.7	18.5
Kailua Shopping Center	(NA)	8,835	22,769	(NA)	2.1	2.6
Wahiawa Shopping Center	(NA)	(NA)	18,883	(NA)	(NA)	2.1

NA Not available.

¹Includes areas not shown separately.

Source: Honolulu Redevelopment Agency, *Redevelopment and Housing Research*, No. 7, January 1957, pp. 25-26; U.S. Bureau of the Census, *U.S. Census of Business, 1958*, BC58-CBD36, and *U.S. Census of Business, 1967*, BC67-MRC-12.

Table 252.—MERCANDISE LINE SALES OF RETAIL ESTABLISHMENTS: 1967

Merchandise line	The State		Oahu	
	Establishments	Sales (\$1,000)	Establishments	Sales (\$1,000)
All lines	3,537	1,041,540	2,644	869,784
Groceries, other foods	807	217,420	540	166,248
Meals, snacks	1,047	107,012	815	96,349
Alcoholic drinks	454	35,627	350	32,782
Packaged alcoholic beverages	392	22,913	244	18,700
Cigars, cigarettes, tobacco	613	14,601	406	11,862
Cosmetics, drugs, cleaners	501	42,223	317	37,655
Men's, boys' clothing, exc. footwear	382	39,779	227	34,507
Women's, girls' clothing, exc. footwear	493	75,472	317	67,150
All footwear	286	17,719	187	15,746
Curtains, draperies, dry goods	252	23,298	133	19,878
Major appl., radio, TV, musical inst.	264	35,400	172	30,177
Furniture, sleep equip., floor cov.	164	19,978	105	17,323
Kitchenware, home furnishings	306	15,728	196	14,090
Jewelry, optical goods	323	17,195	221	15,241
Sporting, recreation equipment	176	9,577	112	8,587
Hardware, gardening equipment	251	11,890	132	9,365
Lumber, building materials	129	15,515	72	8,175
Automobiles, trucks	100	128,359	72	106,807
Auto fuels, lubricants	477	57,175	337	47,018
Auto tires, batteries, access.	479	28,426	354	21,789
Farm equipment machinery	16	1,766	6	1,462
Hay, grain, feed, farm supplies	103	7,278	36	4,952
All other merchandise	764	57,334	519	49,484
Nonmerchandise receipts	1,074	39,479	828	34,188
Miscellaneous merchandise	—	376	—	248

Source: U.S. Bureau of the Census, *Census of Business, 1967. Retail Trade. Merchandise Line Sales. Hawaii*, BC67-MLS-13, pp. 3 and 12.

**Table 253.—WHOLESALE TRADE, BY GEOGRAPHIC AREA, TYPE OF OPERATION,
AND KIND OF BUSINESS: 1967**

Subject	Establishments	Sales (\$1,000)	Payroll, entire year (\$1,000)	Paid employees, March 12	Proprietors
Total	1,030	1,013,813	76,054	12,442	311
GEOGRAPHIC AREA					
City and Co. of Honolulu	849	912,333	67,698	10,742	267
City of Honolulu	802	891,432	66,673	10,545	243
Remainder of county	47	20,901	1,025	197	24
County of Hawaii	99	61,709	4,960	1,035	17
County of Kauai	29	14,821	1,504	284	11
County of Maui	53	24,950	1,892	381	16
Maui	49	23,461	1,757	357	16
Molokai	4	1,489	135	24	—
TYPE OF OPERATION					
Merchant wholesalers	754	537,555	—	—	—
Manufacturers' sales branches	118	201,273	—	—	—
Mdse. agents, brokers	82	144,500	—	—	—
Other operating types	76	130,485	—	—	—
KIND OF BUSINESS					
Motor vehicles, automotive equipment	70	62,804	5,381	914	19
Groceries, related products	232	244,888	11,876	2,283	88
Electrical goods	62	84,760	6,494	1,031	12
Machinery, equip., supplies	159	86,835	13,439	2,004	41
Petroleum bulk terminals	43	118,063	2,374	335	3
Lumber and construction materials	34	57,366	4,841	839	9
Other products	430	359,097	31,649	5,036	139

Source: U.S. Bureau of the Census, *Census of Business, 1967. Wholesale Trade: Hawaii*, BC67-WA13, and special tabulation for Maui County.

Table 254.—SELECTED SERVICES, BY GEOGRAPHIC AREA AND KIND OF BUSINESS: 1967

Subject	Establishments	Receipts (\$1,000)	Proprietors	Payroll, entire year (\$1,000)	Paid employees, March 12
Total	4,057	294,828	2,784	88,024	22,004
GEOGRAPHIC AREA					
City and Co. of Honolulu	3,208	236,858	2,141	71,587	17,362
City of Honolulu	2,454	218,623	1,530	67,124	16,125
Remainder of County	754	18,235	611	4,463	1,237
County of Hawaii	387	26,503	302	7,723	2,134
County of Kauai	184	13,850	130	3,822	1,039
County of Maui	278	17,617	211	4,892	1,469
Lanai	7	(W)	(W)	(W)	(W)
Maui	245	16,655	179	4,675	1,382
Molokai	26	(W)	(W)	(W)	(W)
KIND OF BUSINESS					
Hotels, motels, camps	212	113,216	105	32,744	8,509
Personal services	1,541	40,512	1,119	14,975	4,032
Miscellaneous business services	895	60,520	593	21,331	4,515
Automobile repair, services, garages	487	39,283	375	7,823	1,791
Miscellaneous repair services	384	9,731	298	2,380	440
Motion pictures	68	9,531	24	1,662	701
Amusement and recreation, except motion pictures	470	22,035	270	7,109	2,016

W Withheld to avoid disclosure

Source: U.S. Bureau of Census, *Census of Business, 1967. Selected Services: Hawaii*, BC67-SA13, and special tabulation for Maui County.

Table 255.—HOTEL UNITS, OCCUPANCY RATES, EMPLOYMENT, AND PAYROLL: 1939 TO 1972

Year	Number of hotel units ¹			Percent occupied ²		Hotel employment ²	Payroll (\$1,000)
	State total	Oahu	Neighbor islands	Waikiki	Neighbor islands		
1939	(NA)	(NA)	(NA)	(NA)	(NA)	1,579	1,623
1940	2,634	2,101	533	(NA)	(NA)	1,735	1,742
1941	(NA)	(NA)	(NA)	(NA)	(NA)	1,881	2,136
1942	(NA)	(NA)	(NA)	(NA)	(NA)	1,488	2,099
1943	(NA)	(NA)	(NA)	(NA)	(NA)	1,115	1,802
1944	(NA)	(NA)	(NA)	(NA)	(NA)	1,192	2,147
1945	(NA)	(NA)	(NA)	(NA)	(NA)	1,206	2,416
1946	1,572	1,006	566	(NA)	(NA)	1,313	2,675
1947	1,958	1,392	566	(NA)	(NA)	1,898	4,294
1948	1,958	1,392	566	(NA)	(NA)	1,929	4,448
1949	1,980	1,392	588	(NA)	(NA)	1,821	3,954
1950	2,003	1,415	588	(NA)	(NA)	1,830	4,219
1951	2,197	1,597	600	(NA)	(NA)	2,109	5,173
1952	2,412	1,788	624	(NA)	(NA)	2,283	5,501
1953	2,925	2,212	713	(NA)	(NA)	2,362	6,151
1954	3,101	2,372	729	84.3	(NA)	2,535	6,663
1955	4,115	3,300	815	81.5	(NA)	2,913	7,784
1956	4,327	3,500	827	80.5	(NA)	3,175	8,480
1957	4,754	3,877	877	84.6	(NA)	3,464	9,398
1958	5,494	4,454	1,040	78.9	(NA)	3,654	9,835
1959	6,802	5,657	1,145	88.3	(NA)	3,677	10,946
1960	9,522	8,118	1,404	75.3	(NA)	4,235	13,364
1961	10,193	8,720	1,473	70.1	(NA)	4,666	14,227
1962	10,915	9,098	1,817	74.2	65.5	4,629	15,158
1963	11,403	9,203	2,200	77.4	66.0	5,621	19,070
1964	12,903	10,031	2,872	74.5	68.0	5,834	21,080
1965	14,827	11,083	3,744	82.1	68.2	6,308	23,438
1966	17,217	12,598	4,619	83.7	67.1	7,316	28,173
1967	18,235	13,004	5,231	90.0	72.8	8,944	34,927
1968	21,243	15,138	6,105	89.2	75.2	10,783	46,730
1969	25,822	18,209	7,613	81.3	69.3	12,546	58,212
1970	30,323	21,217	9,106	74.1	64.8	13,613	66,924
1971	35,349	24,612	10,737	58.9	63.5	15,550	78,222
1972	35,653	24,441	11,212	70.0	66.4	(NA)	(NA)

NA Not available.

¹Month unspecified, 1940 to 1959; December, 1960 to 1967; November, 1968; October, 1969 and later years.

²Annual averages.

Source: Hawaii State Department of Labor and Industrial Relations, *Employment and Payrolls in Hawaii* (annual), and records; Hawaii State Department of Planning and Economic Development, *Hawaii Tourism Data Book 1969*, pp. 25 and 28; Hawaii Visitors Bureau, *Annual Research Report* (annual), *Visitor Plant Inventory* (periodic), and records; U.S. Office of Business Economics, *Income of Hawaii* (1953), pp. 19-20.

**Table 256.—HOTEL UNITS, 1972 AND 1973, AND OCCUPANCY RATES,
1971 AND 1972, BY GEOGRAPHIC AREA**

Geographic area	Number of units			Percent occupied ¹	
	Feb. 1972 (existing)	February 1973		1971	1972
		Existing	Planned ²		
State total	35,797	36,608	13,124	(NA)	(NA)
Oahu					
Waikiki and Kahala ³	24,742	25,108	2,262	(NA)	(NA)
Ala Moana	21,612	21,540	1,621	58.9	70.0
Central Honolulu	1,629	1,629	—	(NA)	(NA)
Airport	127	127	—		
Leeward Oahu	501	496	210		
Windward Oahu	746	703	181		
Hawaii	127	613	250		
Hilo and Honokaa	4,241	4,796	4,404	62.9	61.9
Volcano	1,547	1,817	290	63.6	65.1
Ka'u	37	37	—	69.8	72.4
North and South Kohala	13	21	200		
North and South Kona	338	339	54		
Maui	2,306	2,582	3,860	60.8	57.8
Wailuku and Kahului	3,979	3,976	4,206	66.9	70.6
Lahaina to Napili	398	384	83	77.1	78.5
Kihei and Maalaea	3,026	2,954	1,027	66.9	71.4
Kula, Makawao, and Paia	444	526	3,096	61.5	59.4
Hana	24	25	—		
Kauai	87	87	—		
Kapaa and Wailua	2,719	2,629	1,282	60.1	67.7
Lihue	1,348	1,333	901	58.7	67.8
Poipu and Kukuiula	660	661	4		
Kalaheo	521	422	29		
Kokee	23	23	—	54.6	53.7
Hanalei	12	12	—		
Molokai	155	178	348		
Molokai	105	88	970	(NA)	(NA)
Lanai	11	11	—	(NA)	(NA)

NA Not available.

¹Annual averages.

²Under construction or announced for future construction. Includes 1,935 to be completed in 1973, 2,804 in 1974, 1,202 in 1975, and 7,183 indefinite.

³Occupancy data limited to Waikiki and Diamond Head.

Source: Hawaii Visitors Bureau, *1971 Annual Research Report*, pp. 25-28; *Visitor Plant Inventory, February 1973*; and records.

Table 257.—OPERATIONS OF SELECTED RESORT HOTELS: 1967 TO 1971

Year	Average number of rooms	Percentage of occupancy	Guests per occupied room	Average daily rate: (dollars)		Total sales and income per guest day (dollars)	Gross operating profit (percent)
				Per room	Per guest		
1967	281	87.0	1.81	22.38	12.37	23.12	28.4
1968	269	84.6	1.87	23.85	12.72	23.08	28.7
1969	298	75.6	1.87	23.98	12.84	22.65	30.4
1970	356	72.6	1.88	25.74	13.71	24.61	27.9
1971	409	67.1	1.88	24.28	12.93	23.44	25.1

Source: Harris, Kerr, Forster & Company, *Trends in the Hotel-Motel Business* (annual).

**Table 258.—FOREIGN, INTERSTATE, AND LOCAL TRADE, AND AREA
IN SHOPPING CENTERS: 1948 TO 1971**

Year	Direct foreign trade (millions of dollars)		Interstate trade (millions of dollars)		Local trade (millions of dollars)		Shopping center area ¹ (1,000 square feet)
	Imports	Exports	Imports	Exports	Retail	Wholesale	
1948	12.7	6.7	(NA)	(NA)	512.6	263.5	6
1949	16.0	3.5	(NA)	(NA)	(NA)	(NA)	(NA)
1950	13.6	2.2	349.4	227.4	481.0	255.6	(NA)
1951	19.2	3.5	355.6	234.9	569.8	291.9	(NA)
1952	20.1	4.1	318.1	235.3	562.3	279.3	(NA)
1953	19.7	6.3	383.0	260.3	593.0	284.1	(NA)
1954	19.6	8.2	350.2	250.4	589.1	269.4	(NA)
1955	19.8	8.6	399.6	261.7	636.7	284.9	(NA)
1956	22.8	18.2	406.8	268.1	680.9	292.6	(NA)
1957	26.9	19.8	461.7	258.6	733.7	303.9	(NA)
1958	33.6	17.0	426.1	236.2	739.0	307.8	614
1959	34.1	18.0	486.7	258.1	844.6	350.4	1,430
1960	47.0	20.3	519.1	243.5	948.2	383.6	1,666
1961	58.0	22.4	515.5	258.9	949.0	394.1	1,746
1962	68.3	28.1	480.1	265.5	1,027.6	418.0	1,861
1963	74.0	26.7	497.9	307.8	1,026.8	430.0	2,104
1964	85.8	38.2	567.1	283.4	1,101.8	468.9	2,259
1965	95.9	34.7	615.1	296.7	1,200.7	517.2	2,509
1966	107.2	40.6	688.8	310.6	1,297.2	790.0	3,565
1967	125.1	47.4	822.4	325.3	1,394.3	861.1	3,771
1968	142.5	48.6	886.7	329.1	1,559.2	1,014.2	4,014
1969	171.0	46.4	1,029.1	321.7	1,763.1	1,235.1	4,043
1970	174.7	51.2	1,194.1	339.8	2,024.7	1,498.9	4,742
1971	223.6	46.3	1,201.4	365.7	2,227.3	1,503.8	4,987

NA Not available.

¹Gross leaseable area. Data before 1960 limited to Oahu (1,430 in 1960).

Source: Bank of Hawaii, *Hawaii '68* (August 1968), p. 45, *Hawaii '69* (August 1969), p. 43; *Hawaii '72* (August 1972), p. 45; and records.

Table 259.—GENERAL EXCISE TAX BASE FOR TRADE AND SERVICE ACTIVITIES: 1936 TO 1972
 (In thousands of dollars.)

Year reported ¹	Retailing	Services ²	Theater, amusement, broadcasting, etc.	Wholesaling
1936	105,714	15,310	3,115	(NA)
1937	122,696	18,407	3,514	(NA)
1938	125,203	16,797	4,110	(NA)
1939	128,556	16,674	4,327	75,113
1940	144,795	20,566	5,038	91,707
1941	190,256	25,630	7,106	127,854
1942	255,482	33,488	7,394	144,371
1943	333,567	41,411	12,310	178,119
1944	386,426	50,595	17,184	219,780
1945	427,387	56,425	15,425	219,110
1946	416,313	61,140	14,033	226,290
1947	472,242	72,351	14,389	277,462
1948	495,048	72,812	13,278	242,359
1949	499,044	68,361	12,857	209,846
1950	480,472	69,271	13,293	219,924
1951	539,005	75,635	13,275	251,417
1952	521,189	80,622	14,308	242,511
1953	541,294	83,323	13,452	251,119
1954	540,742	93,235	13,235	249,472
1955	588,987	108,527	16,686	264,297
1956	612,109	108,380	18,786	268,478
1957	666,468	128,548	24,159	277,651
1958	664,973	135,730	19,305	282,734
1959	756,003	165,402	21,174	320,194
1960	846,729	188,752	21,940	354,598
1961	859,563	203,354	21,911	359,725
1962	920,956	228,420	22,654	386,135
1963	928,895	231,777	22,919	396,462
1964	998,510	240,909	25,095	435,707
1965	1,097,826	260,693	27,681	482,563
1966	1,184,736	276,833	29,425	547,031
1967	1,271,932	305,691	30,924	570,678
1968	1,423,835	358,852	36,203	651,512
1969	1,670,288	451,814	39,220	747,204
1970	1,895,089	504,191	43,588	854,660
1971	2,030,170	523,824	48,503	918,425
1972	2,213,704	578,260	53,108	1,002,214

NA Not available.

¹Calendar year in which reported, including "prior years" reports. Income received in December is reported the following January, hence these annual totals generally refer to an "income year" ended November 30.

²Includes both business and professional services but excludes hotels, theater, amusement, broadcasting, and intermediary services.

Source: *Report of the Tax Commissioner* for 1940, 1941-1947, and 1954; Hawaii State Department of Taxation, "General Excise and Use Tax Base" (annual tabular release) for 1955-1972.

**Table 260.—OPERATIONS OF FOREIGN-TRADE ZONE NO. 9, HONOLULU:
JULY 1, 1971 TO JUNE 30, 1972**

Subject	Amount
Area of primary zone in square feet, June 30	218,276
Firms using zone during year	132
Continuously	17
Merchandise received: Value (dollars)	10,550,539
Weight (short tons)	5,190
Merchandise forwarded: Value (dollars)	10,097,861
Weight (short tons)	5,251
Occupancy (annual average percent)	81
Total income (dollars)	296,605
Total expenses (dollars)	236,683
Net income (dollars)	59,922
Assets, June 30 (dollars)	1,034,571

Source: *Annual Report, Foreign-Trade Zone No. 9, Honolulu, Hawaii, July 1, 1971-June 30, 1972.*

Table 261.—TRADE WITH NATIONS IN ASIA AND THE PACIFIC: 1961 TO 1971
 (In thousands of dollars. Includes commodities transshipped through Hawaii.)

Year	Imports	Exports	Year	Imports	Exports	Year	Imports	Exports
1961	33,174	9,843	1965	48,102	18,425	1969	94,601	33,899
1962	34,612	8,585	1966	50,394	23,932	1970	106,774	38,288
1963	37,397	9,481	1967	64,931	33,964	1971	141,982	32,778
1964	45,807	19,577	1968	70,996	37,490			
Country of origin or destination			Imports, 1971	Exports, 1971	Commodity			1971
Specified nations	141,982	32,778	All imports to Hawaii			141,983		
Hong Kong	6,509	1,870	Animal and vegetable products			25,432		
Japan	92,391	8,827	Wood and paper; printed matter			4,172		
Nansei & Nanpo Islands	32	163	Textile fibers and products			12,571		
People's Republic of China	54	—	Chemicals and related products			21,500		
Republic of China	3,268	1,239	Non-metallic products and minerals			2,792		
Republic of Korea	585	813	Metals and metal products			61,121		
			Miscellaneous			13,390		
Australia	6,631	8,436	Special classification provisions			697		
British Pacific Islands	3,082	70	Special statist. rptg. numbers			307		
Fiji, Nauru, & Tonga	333	946						
French Pacific Islands	34	1,873						
New Guinea	15	1,683	All exports from Hawaii			32,764		
New Zealand	8,162	1,039						
Trust Territory	57	1,001	Food and live animals			1,548		
Afghanistan	5	—	Crude materials, inedible			2,879		
Burma	—	4	Mineral fuels, lubricants			1,727		
Cambodia	5	—	Animal and vegetable oils and fats			439		
Ceylon	3	1	Chemicals			1,082		
India	57	85	Manufactured goods class by material			801		
Indonesia	7,947	1,266	Machinery and transport. equipment			19,702		
Laos	—	—	Miscellaneous manufactured articles			4,452		
Macao	773	—	Commodities not classified by kind			134		
Malaysia	8,975	61						
Nepal	—	3						
Pakistan	5	264						
Philippines	2,489	2,499						
Singapore	200	463						
South Vietnam	64	34						
Thailand	305	138						

Source: Hawaii State Department of Planning and Economic Development, Hawaii International Services Agency, *Hawaii's Foreign Trade, 1961-1971*, tables 1 to 4.

WEIGHTS AND MEASURES

AVOIRDPOIS AND TROY WEIGHTS

U.S. equivalents			Metric equivalent
Avoirdupois weight: ¹			
1 grain .....	.....	.....	. 64.799 milligrams
437.5 grains	1 ounce, avoirdupois	0.911 ounce, troy .....	. 28.35 grams
16 ounces, avoirdupois	1 pound, avoirdupois	1.215 pounds, troy .....	. 453.59237 grams
100 pounds, avoirdupois	1 short hundredweight .....	.....	. 45.3592 kilograms
2,000 pounds	{ 1 short ton .....	.....	. 0.907 metric ton
20 short hundredweights	1 long hundredweight .....	.....	. 50.802 kilograms
112 pounds, avoirdupois	{ 1 long ton .....	.....	. 1.016 metric tons
2,240 pounds			
20 long hundredweights			
Troy weight: ²			
1 grain .....	.....	.....	. 64.799 milligrams
24 grains	1 pennyweight .....	.....	. 1.555 grams
20 pennyweights	1 ounce, troy	1.097 ounces, avoirdupois .....	. 31.103 grams
12 ounces, troy	1 pound, troy	0.823 pound, avoirdupois .....	. 373.242 grams

¹The system used in weighing all commodities except precious stones, precious metals, and drugs.

²The system used in weighing precious stones and precious metals such as silver and gold.

APPROXIMATE WEIGHTS PER BUSHEL FOR SPECIFIED COMMODITIES

Item	Pounds	Kilograms
Wheat, dry beans, dry peas, potatoes (Irish or white), soybeans	60	27.22
Rye, shelled corn (maize), linseed (flaxseed), sorghum grain	56	25.40
Barley, buckwheat	48	21.77
Castor beans	46	20.87
Rough rice	45	20.41
Malt	34	15.42
Oats, cottonseed	32	14.51
Peanuts, green, in shell	22	9.98

APPROXIMATE WEIGHTS PER BARREL OF NONLIQUID PRODUCTS

Item	Pounds	Kilograms
Wheat flour, barley flour, rye flour, and corn meal (net)	196	88.90
Rosin, tar and pitch (gross)	500	226.80
Fish, pickled (net)	200	90.72
Lime (net)	200	90.72
Cement (4 bags counted as 1 barrel) (net) ¹	376	170.55

¹Except as noted in the tables.

CAPACITIES OR VOLUMES

U.S. equivalents

1 barrel (liquid) ¹	31 to 42 gallons .....	.....	.....
1 barrel (dry) ²	7,056 cubic inches	105 dry quarts	3,281 bushels (struck measure) ³

¹There are various "barrels" established by law or usage. Federal law recognizes a 31- and a 40-gallon barrel, depending on the type of liquor. In addition, the number of gallons recognized as making up a barrel differs among various States.

²Standard for fruits and vegetables and other dry commodities, except cranberries, recognized by the Dept. of Agriculture.

³Standard bushel as measured by U.S. Government.

APPROXIMATE WEIGHT OF PETROLEUM AND PRODUCTS

(In the United States, petroleum and its products are measured by bulk, not weight. Quantities are customarily reduced to the equivalent of barrels of 42 U.S. gallons (158.984 liters). In many foreign countries these commodities are measured by weight. The specific gravity of the different grades of crude petroleum and of the finished products varies materially. On the basis of approximate averages, the Dept. of Commerce uses the following factors for converting foreign weight statistics to gallons or to barrels of 42 gallons.)

Item	U.S. gallon		Barrel of 42 gallons	
	U.S. equivalent	Metric equivalent	U.S. equivalent	Metric equivalent
Crude petroleum	7.3 pounds	3.311 kilograms	306.6 pounds	139.07 kilograms
Lubricating oils	7.0 pounds	3.175 kilograms	294.0 pounds	133.36 kilograms
Illuminating oils (kerosene)	6.6 pounds	2.994 kilograms	277.2 pounds	125.74 kilograms
Gasoline and related products (motor spirit, benzine, etc.)	6.1 pounds	2.767 kilograms	256.2 pounds	116.21 kilograms
Fuel and gas oils	7.7 pounds	3.493 kilograms	323.4 pounds	146.69 kilograms

LIQUID MEASURES

U.S. equivalents		Metric equivalent
1 fluid dram .....	.....	3.697 milliliters
8 fluid drams	1 fluid ounce	29.573 milliliters
4 fluid ounces	1 gill	0.118 liter
4 gills	1 pint	0.473 liter
2 pints	1 quart	0.9464 liter
4 quarts	1 gallon	3.785 liters

DRY MEASURES

U.S. equivalents			Metric equivalent
1 pint .....	.....	33.600 cubic inches	0.551 liter
2 pints	1 quart	67.2006 cubic inches	1.101 liters
8 quarts	1 peck	537.605 cubic inches	8.810 liters
4 pecks	1 bushel (struck measure) ¹ ...	2,150.42 cubic inches	35.239 liters

¹Standard bushel as measured by U.S. Government.

LENGTH MEASURES

U.S. equivalents	Metric equivalent
1 inch	2.540 centimeters
12 inches	0.3048 meter
3 feet	0.9144 meter
5½ yards	5.029 meters
5,280 feet	1.609 kilometers
6076.11549 feet	1.852 kilometers

AREA MEASURES

U.S. equivalents	Metric equivalent
1 square inch	6.452 square centimeters
144 square inches	929.030 square centimeters
9 square feet	0.8361 square meter
30¼ square yards	25.293 square meters
160 square rods	0.4047 hectare
4,840 square yards	258,999 hectares
640 acres	

CUBIC MEASURES

U.S. equivalents	Metric equivalent
1 cubic inch	16.387 cubic centimeters
1,728 cubic inches	28,317 cubic decimeters
27 cubic feet	0.7646 cubic meter