

Section 18

TRANSPORTATION

This section presents statistics relating to public roads, motor vehicles, bicycles, traffic accidents, local public transit, civil aviation, harbors, and water traffic. Other information bearing on transportation appears in Sections 7, 12, 14, and 24.

The chief source for transportation statistics is the Hawaii State Department of Transportation, its Highways, Harbors and Airports Divisions and the Motor Vehicle Safety Office. Other sources include the U.S. Coast Guard, Federal Aviation Administration, Federal Highway Administration, Army Corps of Engineers, U.S. Census of Transportation, Communications, and Utilities, Honolulu Public Transit Authority, county finance departments, Hawaii Automobile Dealers Association, and individual transportation companies. Data for the entire period of record through 1976 appear in *Historical Statistics of Hawaii*, Section 17. Another source of long-term trend information is *What People Paid to Travel*, published by the Hawaiian Historical Society in 1991. Similar statistics for other areas are reported in the *Statistical Abstract of the United States: 1996*, Sections 21 and 22.

Table 18.01-- HIGHWAY DISTANCES: 1995

Route	Statute miles	Route	Statute miles
HAWAII		MOLOKAI	
Hilo-Lyman Field	2.0	Kaunakakai-Sheraton Hotel	19.5
Hilo-Kalapana	26.1	Kaunakakai-Maunaloa	16.5
Hilo-Mauna Kea summit	39.3	Kaunakakai-Airport	7.0
Hilo-Mauna Loa summit	52.4	Kaunakakai-Halawa	27.6
Hilo-Volcano House	30.7	Airport-Sheraton Hotel	11.5
Hilo-Kailua, via Naalehu	125.2		
Hilo-Kailua, via Saddle Rd.	84.3	OAHU 1/	
Hilo-Kailua, via Hamakua	91.2	Honolulu-Ala Moana Center	1.6
Hilo-Waimea, via Saddle Rd.	57.9	Honolulu-UH, via King Street	3.2
Hilo-Waimea, via Hamakua	55.3	Honolulu-Waikiki	3.2
Hilo-Upolu Pt., via Hamakua	83.7	Honolulu-Waimanalo, via Koko Head	21.8
Hilo-Kawaihae, via Hamakua	69.5	Honolulu-Waimanalo, via Nuuanu	13.3
Waimea-Hawi	21.4	Honolulu-Kailua, via Nuuanu	11.6
Waimea-Kawaihae	11.5	Honolulu-Kaneohe, via Kalihi	10.8
Kawaihae-Hawi	18.0	Honolulu-Kahuku, via Kahaluu	36.2
Kawaihae-Kailua	48.4	Honolulu-Kahuku, via Wahiawa	46.2
Kailua-Keahole Airport	6.8	Honolulu-Kaena Pt., via Wahiawa	42.4
Kailua-Keauhou	6.9	Honolulu-Kaena Pt., via Waianae	44.3
		Honolulu-Wahiawa	20.5
MAUI		Honolulu-Pearl Harbor Shipyard	6.5
Wailuku-Kahului	2.3	Honolulu-Honolulu Airport	4.8
Wailuku-Kahului Airport	4.2	Waikiki-UH, via Kapahulu	3.2
Wailuku-Hana, via Keanae	53.7	Waikiki-Honolulu Airport	8.0
Wailuku-Hana, via Kaupo	59.8	Waimanalo-Kahuku	33.0
Wailuku-Haleakala summit	38.2	Circle island, via Makapuu	99.1
Wailuku-Makena	17.6	Circle island, via Nuuanu Pali	81.1
Wailuku-Lahaina, via Kahakuloa	38.0		
Wailuku-Lahaina, via Olowalu	20.9	KAUAI	
Kahului-Kihei	7.9	Lihue-Haena	38.0
Lahaina-Wailea	32.4	Lihue-Wailua	5.9
Lahaina-Napili	8.9	Lihue-Lihue Airport	2.0
Lahaina-Kaanapali	3.7	Lihue-Poipu	11.9
		Lihue-Mana	32.9
LANAI		Lihue-Kalalau Lookout	44.6
Lanai City-Lanai Airport	2.7	Poipu-Kalalau Lookout	36.8
Lanai City-Hulopoe	8.0	Poipu-Princeville	40.7

1/ Honolulu distances measured from South King and Bishop Streets; Waikiki, from Kalakaua Avenue and Lewers Street.

Source: Hawaii State Department of Transportation, Highways Division, records.

Table 18.02-- LENGTH OF STREETS AND HIGHWAYS, PAVED AND UNPAVED, BY ISLANDS: DECEMBER 31, 1993 AND 1994

[Excludes private thoroughfares and military roads not regularly open to public use]

Island	Total mileage	Paved		Unpaved
		Freeways	Other	
1993				
State total	4,105.94	96.82	3,811.12	198.00
Hawaii 1/	1,433.10	6.56	1,367.17	59.37
Maui 1/	621.90	3.21	561.99	56.70
Lanai	46.68	-	32.68	14.00
Molokai	129.33	-	117.33	12.00
Oahu	1,471.47	87.05	1,350.98	33.44
Kauai	403.46	-	380.97	22.49
Niihau	-	-	-	-
1994				
State total	4,100.07	77.33	3,824.74	198.00
Hawaii 1/	1,420.89	-	1,361.52	59.37
Maui 1/	609.24	-	552.54	56.70
Lanai	46.59	-	32.59	14.00
Molokai	129.26	-	117.26	12.00
Oahu	1,485.75	77.33	1,374.98	33.44
Kauai	408.34	-	385.85	22.49
Niihau	-	-	-	-

1/ Significant changes from previously published data are due to reinventories of roads to reflect extensive revisions in the functional classification of highway systems.

Source: Hawaii State Department of Transportation, Highways Division, records.

Table 18.03-- LENGTH OF STREETS AND HIGHWAYS, PAVED AND UNPAVED: 1970 TO 1994

[Excludes private thoroughfares and military roads not regularly open to public use]

Category	1970	1975	1980	1985	1990	1994
Total mileage	3,529	3,743	3,912	4,070	4,101	4,100
Paved	3,047	3,355	3,591	3,808	3,887	3,902
Unpaved	482	389	321	262	214	198

Source: Hawaii State Department of Transportation, Highways Division, records.

Table 18.04-- HIGHWAY BRIDGES, BY ISLANDS: DECEMBER 31, 1994

Island	Number of bridges 1/	Longest bridge		Highest bridge	
		Location	Length (feet)	Location	Height (feet)
State	714	Airport Viaduct	14,890	Nanue	208
Hawaii	129	Hakalau	775	Nanue	208
Maui	88	Honokahua	600	Uaoa	79
Lanai	-	None	...	None	...
Molokai	19	Manawainui	360	Manawainui	50
Oahu	427	Airport Viaduct	14,890	Kipapa	156
Kauai	51	Hanamaulu	1,150	Wahiawa, Koloa	90

1/ Limited to bridges under State jurisdiction and 20 feet or longer.

Source: Hawaii State Department of Transportation, Highways Division, records.

Table 18.05-- HIGHWAY TUNNEL LENGTHS: DECEMBER 31, 1994

Island and name of tunnel	Length (feet)
Oahu:	
Pali No. 1: Inbound (to Honolulu)	1,000
Outbound (from Honolulu)	1,080
Pali No. 2: Inbound	500
Outbound	497
Wilson: Inbound	2,775
Outbound	2,813
H-3: Inbound 1/	4,890
Outbound 1/	5,165
Middle Street	393
Structure No. 8, Waiawa Interchange	300
Maui:	
Olowalu	318
Kauai:	
Kipu-Mahaulepu (private road)	2,200

1/ Not yet open to public.

Source: Hawaii State Department of Transportation, Highways Division, records; McBryde Sugar Plantation, records.

**Table 18.06-- VEHICLE REGISTRATION, BY TYPE OF VEHICLE:
1986 TO 1996**

[Taxable and exempt vehicles. Includes vehicles registered but subsequently scrapped or shipped out of the State]

Year	All vehicles registered	Motor vehicles			
		All motor vehicles	Passenger vehicles 1/	Ambulances, hearses, patrol wagons	Buses
1986	790,855	771,575	642,636	60	4,158
1987	818,430	798,317	661,674	54	4,198
1988	838,327	817,609	670,877	52	4,215
1989	876,848	855,057	695,397	54	4,203
1990	911,283	889,096	718,204	55	4,308
1991	920,124	897,193	717,907	54	4,309
1992	908,738	885,761	703,983	53	4,282
1993	903,550	880,152	693,283	48	4,032
1994	898,008	875,144	691,158	53	3,772
1995	901,291	877,756	694,239	54	3,660
1996	907,770	884,617	703,094	59	3,468
		Motor vehicles -- continued			
Year	Trucks 1/	Truck tractors, tow trucks	Truck crane, misc.	Motor-cycles, motor-scooters 2/	Trailers and semi-trailers
1986	112,053	1,290	323	11,055	19,280
1987	119,338	1,220	318	11,515	20,113
1988	129,452	1,176	293	11,544	20,718
1989	141,845	1,107	292	12,159	21,791
1990	152,453	1,043	313	12,720	22,187
1991	159,831	972	323	13,797	22,931
1992	160,952	871	298	15,322	22,977
1993	165,209	757	283	16,540	23,398
1994	162,348	630	249	16,934	22,864
1995	161,609	567	239	17,388	23,535
1996	160,013	504	225	17,254	23,153

1/ Vans, pickups, and other trucks under 6,500 lb. in personal use, legally classified as passenger vehicles, are included in the totals for trucks.

2/ Excluding mopeds (1.5 HP or less), which are legally classified as bicycles.

Source: Hawaii State Department of Transportation, Motor Vehicle Safety Office, records.

**Table 18.07-- MOTOR VEHICLES REGISTERED, BY COUNTIES:
1986 TO 1996**

[Taxable and exempt vehicles. Includes passenger cars, ambulances, buses, trucks, motorcycles and vehicles registered but subsequently scrapped or shipped out of the State. Excludes trailers and semi-trailers]

Year	State total	City and County of Honolulu	County of Hawaii	County of Kauai	County of Maui
1986	771,575	556,935	89,918	40,585	84,137
1987	798,317	571,738	93,095	43,925	89,559
1988	817,609	579,998	96,360	47,235	94,016
1989	855,057	599,379	103,724	51,455	100,499
1990	889,096	612,742	110,834	55,927	109,593
1991	897,193	613,119	113,265	57,751	113,058
1992	885,761	611,513	113,080	51,165	110,003
1993	880,152	604,602	111,138	54,068	110,344
1994	875,144	600,087	111,532	52,817	110,708
1995	877,756	601,239	111,624	52,364	112,529
1996	884,617	598,772	115,647	52,984	117,214

Source: Hawaii State Department of Transportation, Motor Vehicle Safety Office, records.

**Table 18.08-- VEHICLE REGISTRATION, BY TYPE OF VEHICLE, FOR
COUNTIES: 1995 AND 1996**

[Taxable and exempt vehicles. Includes vehicles registered but subsequently scrapped or shipped out of the State]

Type of vehicle	State total	City and County of Honolulu	County of Hawaii	County of Kauai	County of Maui
1995					
All vehicles	901,291	614,368	116,751	54,860	115,312
Motor vehicles	877,756	601,239	111,624	52,364	112,529
Passenger vehicles 1/	694,239	485,281	84,475	37,594	86,889
Ambulances	54	30	12	-	12
Buses	3,660	2,965	216	39	440
Trucks 1/	161,609	100,097	24,565	13,921	23,026
Truck tractors	567	244	121	65	137
Truck cranes	239	110	23	17	89
Motorcycles 2/	17,388	12,512	2,212	728	1,936
Trailers and semi-trailers	23,535	13,129	5,127	2,496	2,783
1996					
All vehicles	907,770	611,647	120,783	55,379	119,961
Motor vehicles	884,617	598,772	115,647	52,984	117,214
Passenger vehicles 1/	703,094	485,724	88,037	38,266	91,067
Ambulances	59	32	15	0	12
Buses	3,468	2,798	235	30	405
Trucks 1/	160,013	97,537	24,961	13,905	23,610
Truck tractors	504	227	107	52	118
Truck cranes	225	105	20	14	86
Motorcycles 2/	17,254	12,349	2,272	717	1,916
Trailers and semi-trailers	23,153	12,875	5,136	2,395	2,747

1/ Vans, pickups, and other trucks under 6,500 lb. in personal use, legally classified as passenger vehicles, are included in the totals for trucks.

2/ Including motorscooters but excluding mopeds (1.5 HP or less), legally classified as bicycles.

Source: Hawaii State Department of Transportation, Motor Vehicle Safety Office, records.

**Table 18.09-- VEHICLE REGISTRATION, BY TAXATION STATUS, FOR
COUNTIES: DECEMBER 31, 1996**

[Includes vehicles registered but subsequently scrapped or shipped out of state. Excludes
trailers, semi-trailers and motorcycles]

Taxation status	State total	City and County of Honolulu	County of Hawaii	County of Kauai	County of Maui
Total registered	867,363	586,423	113,375	52,267	115,298
Taxable vehicles	798,996	521,145	112,214	51,516	114,121
Exempt vehicles	68,367	65,278	1,161	751	1,177
Federal government	339	326	11	-	2
State government	4,642	4,642	-	-	-
County government	5,834	3,878	538	505	913
Fire department	189	56	107	-	26
Police department	1,512	1,180	330	-	2
Consulates	66	65	-	-	1
Disabled veterans	115	79	12	18	6
Military non-resident	55,227	54,858	98	210	61
Farm	396	159	55	16	166
Horseless carriage	47	35	10	2	-

Source: Hawaii State Department of Transportation, Motor Vehicle Safety Office, records.

**Table 18.10-- VEHICLES AVAILABLE TO OCCUPIED HOUSING UNITS,
BY COUNTIES: 1990**

Vehicles available	State total	Hawaii	Honolulu	Kalawao	Kauai	Maui
Occupied units	356,267	41,461	265,304	62	16,295	33,145
None	35,159	3,100	29,406	26	777	1,850
1	128,513	14,676	98,542	6	4,573	10,716
2	127,011	16,154	91,032	24	6,699	13,102
3	43,580	5,316	30,415	6	2,874	4,969
4	15,187	1,606	10,996	-	907	1,678
5 or more	6,817	609	4,913	-	465	830

Source: U.S. Bureau of the Census, *1990 Census of Housing, Detailed Housing Characteristics, Hawaii*, 1990 CH-2-13 (August 1993), tables 14 and 67.

Table 18.11-- TRUCK CHARACTERISTICS: 1977 TO 1992

Vehicular and operational characteristics	1977	1982	1987	1992
Total trucks (1,000)	...	...	160.8	280.3
Percent	100.0	100.0	100.0	100.0
Major use: Personal transportation	50.0	54.3	60.5	61.7
Body type: Pickup, panel, or mini-van	85.1	89.1	91.2	93.8
Vehicle size: Light	89.0	92.9	94.6	95.6
Annual miles: Less than 10,000	54.1	59.7	57.0	50.0
Year model: Over 4 years old	68.1	75.8	62.1	66.8
Vehicle acquisition: Purchased new	54.6	47.3	49.6	54.3
Truck type: Single-unit, 2 axles	95.7	96.6	96.4	91.9
Range of operation: Local	87.3	78.2	80.2	79.3
Fuel type: Diesel and LPG	4.6	3.7	5.4	4.7

Source: U.S. Bureau of the Census, *1992 Census of Transportation, Truck Inventory and Use Survey, Hawaii*, TC92-T-12 (December 1994), tables 1 and 2.

**Table 18.12-- NEW PASSENGER CARS AND MOTOR TRUCKS
REGISTERED: 1988 TO 1993**

Year	Total	Passenger cars	Motor trucks
1988	78,454	56,278	22,176
1989	84,485	59,893	24,592
1990	97,754	71,950	25,804
1991	97,267	71,924	25,343
1992	78,617	55,394	23,223
1993	76,216	53,943	22,273

Source: R.L. Polk and Co., cited in American Automobile Manufacturers Association, *AAMA Motor Vehicle Facts and Figures* (annual).

**Table 18.13-- NEW PASSENGER CAR AND TRUCK REGISTRATIONS,
BY COUNTIES: 1991 TO 1996**

Year	State total	Honolulu	Maui	Hawaii	Kauai
1991	98,698	52,002	21,054	14,389	11,253
1992	83,357	47,082	17,503	10,928	7,844
1993	79,168	45,833	16,918	10,111	6,306
1994	83,093	46,664	18,940	10,660	6,829
1995	72,526	41,880	15,786	9,359	5,501
1996	68,765	40,425	14,497	8,527	5,316

Source: Hawaii Automobile Dealers Association, *HADA* (annual).

**Table 18.14-- NEW PASSENGER CAR AND TRUCK REGISTRATIONS,
BY NAMEPLATE: 1994 TO 1996**

Nameplate 1/	1994		1995		1996	
	Rank	Units	Rank	Units	Rank	Units
All nameplates	...	82,645	...	72,526	...	68,375
Ford	1	20,992	1	14,178	1	11,003
Chevrolet/Geo	2	9,057	2	9,348	2	7,902
Toyota	3	7,595	4	6,572	3	7,355
Nissan	5	4,854	3	7,360	4	7,160
Dodge	10	2,846	6	5,030	5	5,485
Honda	4	5,169	5	5,103	6	4,708
All others	...	32,132	...	24,935	...	24,762

1/ Shown separately for first six in 1996.

Source: Hawaii Automobile Dealers Association, *HADA Yearbook* (annual).

**Table 18.15-- NEW PASSENGER CAR AND TRUCK REGISTRATIONS,
RETAIL AND RENTAL, BY PLACE OF MANUFACTURE: 1995 AND 1996**

Year and place of manufacture	Cars and trucks	Cars			Trucks (all retail)
		Total	Retail	Rental	
1995, total	72,526	65,994	34,551	31,443	6,532
Domestic	45,964	41,416	15,343	26,073	4,548
Imports	26,562	24,578	19,208	5,370	1,984
Percent imports	36.6	37.2	55.6	17.1	30.4
1996, total	68,765	61,240	33,955	27,285	7,525
Domestic	42,783	37,948	15,811	22,137	4,835
Imports	25,982	23,292	18,144	5,148	2,690
Percent imports	37.8	38.0	53.4	18.9	35.8

Source: Hawaii Automobile Dealers Association, *HADA* (annual).

**Table 18.16-- HAWAII DRIVERS LICENSES IN FORCE, BY COUNTIES:
1991 TO 1996**

[As of December 31]

Year	State total	City and County of Honolulu	County of Hawaii	County of Kauai	County of Maui
1991	699,664	501,260	86,181	38,894	73,329
1992	716,545	510,901	89,436	39,947	76,261
1993	734,381	522,016	92,264	41,910	78,191
1994	745,392	527,756	94,257	42,736	80,643
1995	732,508	516,780	94,048	42,041	79,639
1996	733,486	515,780	94,943	41,775	80,988

Source: Hawaii State Department of Transportation, Motor Vehicle Safety Office, records.

**Table 18.17-- HAWAII DRIVERS LICENSES IN FORCE, BY AGE
AND SEX: DECEMBER 31, 1995 AND 1996**

Age	Both sexes		Male		Female	
	1995	1996	1995	1996	1995	1996
Total	732,508	733,486	390,225	389,483	342,283	344,003
15 to 19 years	38,283	37,456	20,695	20,385	17,588	17,071
20 to 24 years	61,947	59,862	32,941	31,688	29,006	28,174
25 to 34 years	161,342	157,320	84,008	81,578	77,334	75,742
35 to 44 years	174,383	173,455	90,188	89,422	84,195	84,033
45 to 54 years	134,188	139,829	71,529	74,126	62,659	65,703
55 to 64 years	75,702	76,881	40,663	41,416	35,039	35,465
65 to 74 years	60,671	60,687	33,618	33,211	27,053	27,476
75 to 84 years	23,460	25,215	14,769	15,672	8,691	9,543
85 years and over	2,532	2,781	1,814	1,985	718	796
Median age (years)	41.0	41.5	41.4	41.8	40.6	41.1

Source: Hawaii State Department of Transportation, Motor Vehicle Safety Office, records.

Table 18.18-- VEHICLE DENSITIES: 1970 TO 1994

Measure	1970	1975	1980	1985	1990	1994
Motor vehicles per --						
1,000 persons 1/	506	532	585	657	707	680
Mile of street or highway	115	134	158	184	217	213
Persons per 1/ --						
Motor vehicle	2.0	1.9	1.7	1.5	1.4	1.5
Mile of street or highway	226	252	270	280	307	314

1/ Based on DBEDT estimates of de facto population.

Source: Hawaii State Department of Transportation, Highways Division, records.

**Table 18.19-- MOTOR VEHICLE-MILES OF TRAVEL PER MILE OF
HIGHWAY, 1970 TO 1994, AND BY COUNTIES, 1994**

[1,000]

Year	Vehicle-miles per highway mile	County	Vehicle-miles per highway mile
1970	966	State, 1994	1,933
1975	1,108		
1980	1,424	Hawaii	772
1985	1,661	Maui	1,266
1990	1,967	Honolulu	3,550
1994	1,933	Kauai	1,371

Source: Calculated from data supplied by Hawaii State Department of Transportation, Highways Division.

Table 18.20-- DRIVING COST, FOR HONOLULU AND SELECTED MAINLAND CITIES: 1995

[Total annual vehicle costs shown are based on a 1995 Ford Taurus GL, 6-cylinder, 4-door sedan driven 15,000 miles per year with a 4-year, 60,000-mile retention cycle. Costs include both ownership expenses of insurance, depreciation, license and registration fees and miscellaneous taxes; and operating expenses of fuel, oil, tires and maintenance]

City	Rank 1/	Annual cost (dollars)	Cost per mile (cents)
Los Angeles	1	8,375	55.8
San Francisco	7	7,152	47.7
Honolulu	8	6,832	45.5
Phoenix	9	6,772	45.1
Detroit	10	6,731	44.9
Sioux Falls	80	5,368	35.8

1/ Among 80 cities surveyed.

Source: Runzheimer International, cited in *The Honolulu Advertiser*, April 4, 1995, p. A1.

**Table 18.21-- MOTOR VEHICLE FUEL CONSUMPTION AND VEHICLE MILES,
1984 TO 1994, AND BY COUNTIES, 1993 AND 1994**

Year and county	Highway fuel consumption 1/		Vehicle miles of travel	
	Total (1,000 gallons)	Gallons per vehicle 2/	Total (millions)	Per vehicle 2/
1984	339,491	473	6,486.3	9,044
1985	345,672	461	6,761.5	9,027
1986	357,716	464	6,970.7	9,034
1987	367,984	461	7,217.2	9,041
1988	378,988	464	7,400.8	9,052
1989	395,945	463	7,748.1	9,062
1990	395,185	444	8,065.4	9,071
1991	406,819	453	8,142.2	9,075
1992	405,963	457	8,065.5	9,070
1993	409,940	468	7,945.3	9,063
1994	428,558	490	7,925.2	9,056
COUNTIES: 1993				
Honolulu	273,496	456	5,296.9	8,837
Hawaii	62,088	554	1,092.0	9,742
Kauai	23,641	429	567.9	10,315
Maui	50,715	460	988.5	8,971
COUNTIES: 1994				
Honolulu	284,305	476	5,274.1	8,828
Hawaii	65,234	579	1,097.3	9,736
Kauai	25,086	462	559.9	10,315
Maui	53,933	487	993.9	8,973

1/ Includes gasoline, diesel oil, and butane gas.

2/ Based on motor vehicle total by county of inspection; includes both taxable and nontaxable vehicles, and all military nonresident exempt vehicles. Data include passenger cars, buses, trucks, and motorcycles but exclude trailers and semi-trailers.

Source: Hawaii State Department of Transportation, Highways Division, Planning Branch, records.

**Table 18.22-- TOTAL 24-HOUR TRAFFIC VOLUMES AT SELECTED OAHU
SURVEY SITES: 1992 TO 1994**

Site	1992	1993	1994
Pali Highway at tunnels	58,384	52,720	52,626
Likelike Highway at tunnels	59,678	56,497	54,170
H-1 Freeway at Manoa-Palolo Drainage Canal 1/	129,811	110,852	110,356
H-1 Freeway at Kapalama Drainage Canal Bridge	209,922	226,747	222,139
Nimitz Highway at Kapalama Drainage Canal Bridge	76,555	80,909	77,558
Kalaniana'ole Highway east of Ainakoa Ave.	73,944	77,292	77,875

1/ Includes Kapiolani on- and off-ramps prior to 1993.

Source: Hawaii State Department of Transportation, Highways Division, Planning Branch, records.

Table 18.23-- HIGHWAY SPEEDS, BY TYPE OF HIGHWAY: 1988 TO 1993

[Average speeds, in miles per hour. Years ended September 30]

Year	Statewide	Urban interstate	Rural	
			Arterials 1/	Major collectors
1988	56.2	59.5	52.0	52.3
1989	55.7	58.2	52.4	53.1
1990	56.7	58.9	53.5	54.9
1991	55.0	57.0	52.0	52.1
1992	56.2	57.8	53.4	55.5
1993	2/ 56.3	58.4	53.6	52.7

1/ Other than freeways and expressways.

2/ The corresponding U.S. average was 56.9. Hawaii ranked 39th among the 50 states.

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* (annual).

Table 18.24-- MAJOR TRAFFIC ACCIDENTS, TRAFFIC INJURIES, AND TRAFFIC DEATHS, 1984 TO 1994, AND BY COUNTIES, 1992 TO 1994

Year	Major traffic accidents 1/		Persons injured or killed	
	Total	Fatal	Injured only	Killed
1984	17,657	127	12,390	136
1985	19,577	118	12,613	126
1986	20,854	108	10,941	117
1987	23,625	126	11,996	138
1988	26,071	129	12,818	149
1989	26,891	127	12,835	147
1990	26,639	154	14,048	176
1991	21,824	119	12,792	135
1992	21,834	121	13,403	128
1993	21,464	121	13,879	133
1994	(NA)	110	(NA)	122
COUNTIES: 1992				
Honolulu	16,617	64	9,308	66
Hawaii	2,932	26	2,055	27
Kauai	784	10	671	10
Maui	1,501	21	1,369	25
COUNTIES: 1993				
Honolulu	16,456	71	9,803	76
Hawaii	2,857	29	2,165	31
Kauai	680	6	553	9
Maui	1,471	15	1,358	17
COUNTIES: 1994				
Honolulu	(NA)	61	(NA)	65
Hawaii	(NA)	28	(NA)	33
Kauai	(NA)	9	(NA)	12
Maui	(NA)	12	(NA)	12

NA Not available.

1/ Through 1990, includes traffic accidents with damage of \$300 or more or causing injury or death. Effective 1991, includes only accidents with damage of \$1,000 or more or causing injury or death.

Source: Hawaii State Department of Transportation, Highways Division, Motor Vehicle Safety Office, records.

**Table 18.25-- REGISTERED TAXICABS AND BICYCLES, BY ISLANDS:
1993 AND 1994**

[As of December 31]

Island	Taxicabs 1/		Bicycles and mopeds 2/	
	1993	1994	1993	1994
Hawaii	97	109	6,039	5,623
Maui	178	178	3,424	4,554
Lanai	-	-	67	53
Molokai	4	4	106	92
Oahu	1,683	1,808	100,572	106,491
Kauai	-	-	3/ 1,834	2,403

1/ Licensed during the calendar year. Taxicabs are licensed annually, except in Kauai County, where registration is not required.

2/ Bicycles with wheels having a diameter of 20 inches or more and all mopeds, both of which were formerly licensed on an annual basis, have, since November 1, 1988, been registered biennially; see SLH 1988, Act 264, sec. 1.

3/ 1992 total.

Source: Compiled by the Hawaii State Department of Business, Economic Development & Tourism from the County departments of finance.

Table 18.26-- U-DRIVE WEEKDAY AVERAGE DAILY RATES, BY SIZE OF PASSENGER CAR, FOR OAHU: 1989 TO 1995

[Average rates in dollars for nonresidents, including collision damage waiver insurance, reported by Avis, Hertz, National, and Alamo]

Date	Sub-compact	Compact	Mid-size	Full-size
October 18, 1989	37.93	38.92	43.68	48.94
August 13, 1990	39.97	46.46	49.71	57.21
August 28, 1991	30.62	34.19	37.44	43.19
September 3, 1992	46.49	45.96	50.71	57.96
September 8, 1993	44.73	45.99	49.49	56.99
January 20, 1995	54.23	54.98	61.23	67.23

Source: Information provided by listed companies.

**Table 18.27-- AUTOMOTIVE RENTAL AND LEASING WITHOUT DRIVERS
(SIC 751) ESTABLISHMENTS WITH PAYROLL, BY COUNTIES: 1992**

Subject	State total 1/		Counties (SIC 751)			
	SIC 751	SIC 7514	Honolulu	Hawaii	Kauai	Maui
No. of establishments	82	64	36	18	6	22
Receipts (mil. dol.)	332.1	320.0	195.0	38.6	23.6	74.8

1/ Most of the receipts for SIC 751 were reported in SIC 7514, passenger car rental. Other subgroups under SIC 751 were SIC 7513, truck rental and leasing, without drivers; SIC 7515, passenger car leasing; and SIC 7519, utility trailer and recreational vehicle rental.

Source: U.S. Bureau of the Census, *1992 Census of Service Industries, Hawaii*, SC92-A-12 (August 1994), tables 1a, 6, and 7a.

**Table 18.28-- MOTOR CARRIER CHARACTERISTICS, BY COUNTIES:
SEPTEMBER 1995**

County	Passenger carriers 1/			Property carriers 2/	
	Number of carriers	Number of vehicles	Seating capacity	Number of carriers	Number of vehicles
State total	1,345	8,228	223,693	5,518	31,481
Hawaii	119	1,167	36,840	1,391	4,462
Maui	219	1,786	45,926	849	3,979
Honolulu	908	4,517	120,924	2,862	19,990
Kauai	99	758	20,003	416	2,181

1/ Includes mostly tour bus operators; excludes public transit, school buses, taxicabs, and rental car companies.

2/ Includes truckers, moving companies, etc.

Source: Compiled by Hawaii State Department of Transportation, Motor Vehicle Safety Office, from Hawaii State Department of Commerce and Consumer Affairs, Public Utilities Commission.

Table 18.29-- PUBLIC TRANSIT, FOR OAHU: 1984 TO 1994

[Service provided by City and County of Honolulu bus system]

Year	Number of buses, Dec. 31	Bus mileage 1/	Total passengers 2/	Revenues (dollars)
1984	440	16,774,564	76,260,187	18,819,782
1985	440	16,938,692	74,816,485	18,952,566
1986	459	17,065,875	74,410,104	18,802,330
1987	460	16,733,510	74,066,369	18,659,459
1988	470	17,124,317	74,467,760	18,824,046
1989	475	17,525,608	74,964,453	18,843,083
1990	475	18,080,500	75,648,930	18,914,500
1991	475	18,308,282	76,540,997	19,283,803
1992	475	18,437,228	78,416,523	19,534,923
1993	495	18,507,642	79,343,403	20,751,058
1994	495	19,323,877	79,309,437	24,849,857

1/ Estimated number of vehicle miles.

2/ Estimated number of passengers, including senior citizens and handicapped.

Source: City and County of Honolulu, Honolulu Public Transit Authority, records.

**Table 18.30-- PUBLIC TRANSIT PASSENGERS, BY FARE CATEGORY, AND
AVERAGE BUS SPEED, FOR OAHU: 1992 TO 1994**

[Calendar year data for City and County of Honolulu bus system]

Fare category	1992	1993	1994
All passengers	78,416,523	79,343,403	79,309,437
Adults, full fare	46,773,053	47,953,391	48,012,829
Students	11,174,889	11,074,425	11,251,311
School subsidy	201,451	235,487	263,596
Stadium express	8,365	8,608	7,428
Senior citizens and handicapped	15,002,787	15,356,463	15,990,937
Free transfers	5,255,978	4,715,029	3,783,336
Average bus speed (m.p.h.)	14.8	14.8	15.0

Source: City and County of Honolulu, Honolulu Public Transit Authority, records.

Table 18.31-- BUS FARE CHRONOLOGY, FOR OAHU: 1971 TO 1995

[In dollars]

Effective date	Cash fares 1/		Monthly passes	
	Adult	School	Adult	School
March 1, 1971	.25	.15	...	...
March 2, 1971	.25	.10	...	...
June 9, 1972 2/	.25, .50	.10, .25	...	...
March 15, 1974	.25	.10	...	...
November 1, 1979	.50	.25	15.00	7.50
June 18, 1984	.60	.25	15.00	7.50
October 1, 1993	.85	.25	20.00	7.50
July 1, 1995 3/	1.00	.50	25.00	12.50

1/ In addition, there have been special fares for children, handicapped persons, senior citizens, service to and from Pearl Harbor, and the Stadium Express during many of these years.

2/ Zone fares initiated.

3/ Current fares as of July 14, 1995.

Source: City and County of Honolulu, Public Transit Authority, records.

**Table 18.32-- STEAM RAILROAD MILEAGE AND PASSENGERS:
1984 TO 1994**

[Data are for the Lahaina, Kaanapali and Pacific Rail Road, the only
passenger railroad in the State]

Calendar year	Miles of track	Passengers	Calendar year	Miles of track	Passengers
1984	6	197,876	1990	6	308,910
1985	6	199,759	1991	6	316,079
1986	6	215,735	1992	6	385,261
1987	6	244,555	1993	6	388,484
1988	6	285,139	1994	6	390,862
1989	6	296,391			

Source: Lahaina, Kaanapali and Pacific Rail Road, records.

**Table 18.33-- AIRPORTS AND HELIPORTS, BY CONTROL, BY ISLANDS:
DECEMBER 31, 1994**

Island	Airports 1/				Heliports 2/	
	State 3/		Military	Semi-private	State: commercial	Semi-private
	Com-mercial	General aviation				
State total	9	7	6	-	-	13
Hawaii	2	2	1	-	-	8
Maui	2	1	-	-	-	-
Kahoolawe	-	-	-	-	-	-
Lanai	1	-	-	-	-	-
Molokai	1	1	-	-	-	-
Oahu	1	2	3	-	-	1
Kauai	2	1	1	-	-	2
Niihau	-	-	-	-	-	2
Kure Atoll	-	-	1	-	-	-

1/ Excludes private airports (not available).

2/ Excludes military and private heliports (not available).

3/ Three airports classified as general aviation fields (Waimea-Kohala, Hana, and Kalaupapa) provided regular air service.

Source: Hawaii State Department of Transportation, Airports Division, records.

**Table 18.34-- RANK OF HONOLULU INTERNATIONAL AIRPORT IN
OPERATIONS AND ENPLANED PASSENGERS: 1991 TO 1993**

Subject	Rank 1/			Number		
	1991	1992	1993	1991	1992	1993
Total aircraft operations	16	22	24	403,570	403,708	358,543
Air carrier operations	21	21	23	196,047	202,559	185,959
Total enplaned passengers 2/	15	15	19	8,772,316	8,740,091	8,484,364

1/ Among all FAA-operated airport traffic control towers in the United States.

2/ For large scheduled certificated air carriers, both scheduled and nonscheduled operations.

Source: U.S. Department of Transportation, Federal Aviation Administration, *FAA Statistical Handbook of Aviation* (annual).

**Table 18.35-- AIRCRAFT OPERATIONS FOR SPECIFIED AIRPORTS:
1984 TO 1994**

[An aircraft operation is an aircraft arrival or departure]

Year	Honolulu Inter- national Airport	Hilo Inter- national Airport 1/	Kona International Airport 2/	Kahului Airport	Lihue Airport	Molokai Airport
1984	343,818	62,543	83,320	142,311	100,992	53,513
1985	357,511	61,225	93,879	157,231	131,755	56,048
1986	368,049	61,514	81,467	174,560	143,905	52,268
1987	385,275	80,123	67,497	165,920	134,495	50,829
1988	377,919	85,267	56,584	173,053	122,268	50,456
1989	403,635	93,202	55,674	177,803	116,742	47,208
1990	407,048	98,755	60,086	182,686	113,860	43,509
1991	403,566	88,206	56,140	180,857	112,679	47,898
1992	403,628	91,055	63,939	178,752	103,686	35,662
1993	358,505	92,297	59,904	172,265	70,910	39,057
1994	359,569	86,292	66,438	179,227	91,582	38,369

1/ Formerly General Lyman Field; new name became effective July 1, 1989.

2/ Formerly Keahole Airport; new name became effective April 26, 1993.

Source: Hawaii State Department of Transportation, Airports Division, records.

Table 18.36-- AIRCRAFT OPERATIONS, BY TYPE OF AIRCRAFT, AT MAJOR STATE-OWNED AIRPORTS: 1994

[An FAA directive dated December 8, 1987, requires all aircraft with 60 seats or less to be designated as air taxis, even if such aircraft are operated by a designated air carrier. This reclassification especially affects the data for Molokai Airport]

Airport	All movements	Air carrier	Air taxi	General aviation	Military
Honolulu International	359,569	193,615	56,067	87,986	21,901
Hilo International	86,292	21,194	36,564	20,519	8,015
Kahului	179,227	56,393	85,373	33,292	4,169
Lihue	91,582	24,133	54,199	7,674	5,576
Kona International	66,438	24,923	14,460	21,003	6,052
Molokai	38,369	1,445	25,637	8,452	2,835

Source: Hawaii State Department of Transportation, Airports Division, records.

**Table 18.37-- TRANSPACIFIC AND INTERISLAND AIR CARRIERS SERVING
HAWAII: 1992 TO 1995**

[As of June 30. Includes both scheduled and nonscheduled service, and also commuter lines
and other air taxi service]

Service	1992	1993	1994	1995
All carriers	45	41	46	44
Transpacific only	25	24	28	26
Domestic	9	10	11	12
Foreign	16	14	17	14
Transpacific and interisland	5	5	5	4
Interisland only	15	12	13	14
Passenger carriers	9	8	9	11
Cargo and mail only	6	4	4	3

Source: Hawaii State Department of Transportation, Airports Division, records.

**Table 18.38-- ESTIMATED SCHEDULED AIRLINE SEAT CAPACITY FOR
ARRIVING FLIGHTS: 1989 TO 1994**

Year	Total	Westbound and southbound	Eastbound and northbound
1989	11,005,765	7,241,987	3,763,778
1990	11,779,602	7,367,305	4,412,297
1991	11,851,900	7,157,210	4,694,690
1992	11,424,600	6,362,440	5,062,160
1993	10,752,580	5,882,450	4,870,130
1994	9,946,830	5,551,880	4,394,950

Source: Hawaii Visitors Bureau, records.

Table 18.39-- CIVIL FLYING: 1990 TO 1993

Item	1990	1991	1992	1993
Aircraft facilities, Dec. 31	50	48	47	47
Airports	34	33	32	32
Heliports	16	15	15	15
Public aircraft facilities, Dec. 31	16	17	17	18
Paved and lighted facilities, Dec. 31	12	12	13	13
Large aircraft in operation, Dec.	52	56	59	50
Aloha Airlines	17	19	21	17
Hawaiian Airlines	35	29	29	24
Mid Pacific Airlines	-	8	9	9
General aviation: 1/				
Active civil aircraft, Dec.	561	484	372	312
Hours flown (1,000)	278	259	176	140
Active personnel, Dec. 31:				
Pilots, except instructors	3,505	3,339	3,293	3,088
Flight instructors	309	350	388	360
Nonpilot airmen 2/	3,306	3,492	3,711	3,828

1/ Aircraft based in Hawaii. Data based on small samples with large standard errors (in 1993, 29.8 percent for aircraft and 42.2 percent for hours).

2/ Mechanics, parachute riggers, ground instructors, dispatchers, flight navigators, and flight engineers.

Source: U.S. Department of Transportation, Federal Aviation Administration, *FAA Statistical Handbook of Aviation* (annual).

**Table 18.40-- OVERSEAS AND INTER-ISLAND AIR PASSENGER
MOVEMENTS: 1984 TO 1994**

[Calendar years. Data include both revenue and non-revenue passengers]

Year	Overseas passengers 1/			Inter-island passenger arrivals
	Arrivals	Departures	Through	
1984	5,263,213	5,261,373	727,947	7,632,239
1985	5,317,862	5,293,528	858,501	7,878,598
1986	6,041,078	6,083,508	841,241	8,340,048
1987	6,265,211	6,317,747	1,109,850	8,802,594
1988	6,653,346	6,713,621	1,421,707	8,964,928
1989	7,022,986	7,234,653	1,167,954	9,634,077
1990	7,310,635	7,562,156	1,065,408	9,907,154
1991	7,135,595	7,215,323	1,020,464	9,368,576
1992	7,248,645	7,087,463	1,318,044	9,568,434
1993	6,924,571	6,907,236	1,298,684	9,345,320
1994	7,309,894	7,478,052	956,926	9,920,709

1/ Includes West Coast, Canada, Europe, and the Central and South Pacific.

Source: Hawaii State Department of Transportation, Airports Division, records.

Table 18.41-- PASSENGERS, CARGO, AND MAIL, OVERSEAS AND INTERISLAND, BY AIRPORT: 1994

Airport	Passengers 1/		Cargo (tons)		Mail (tons)	
	Enplaned	Deplaned	Enplaned	Deplaned	Enplaned	Deplaned
OVERSEAS						
Total	7,478,052	7,309,894	169,543	154,480	23,961	60,981
Honolulu	6,621,058	6,387,930	157,771	144,024	23,961	60,981
Hilo	-	-	-	-	-	-
Kahului	710,174	771,304	4,533	7,016	-	-
Keahole	146,820	150,660	7,239	3,440	-	-
Lihue	-	-	-	-	-	-
INTERISLAND						
Total	9,920,709	9,920,709	74,452	74,452	13,982	13,982
Honolulu	4,489,460	4,540,602	45,857	26,487	8,800	5,162
Hilo	790,172	813,449	15,518	9,501	1,210	2,077
Upolu	-	-	-	-	-	-
Waimea-Kohala	1,513	1,455	4	8	-	-
Keahole	981,913	959,190	4,329	8,474	1,038	1,783
Kahului	2,173,862	2,119,178	5,104	18,250	1,991	3,182
Hana	6,966	6,789	-	-	-	-
Kapalua	95,994	92,610	253	470	1	35
Molokai	128,466	125,054	168	381	69	29
Kalaupapa	7,340	6,930	-	4	-	-
Lanai	81,990	89,252	24	668	21	16
Lihue	1,146,319	1,151,971	3,195	10,272	852	1,698
Princeville 2/	13,714	14,229	-	-	-	-

1/ Revenue and non-revenue, excluding Military Airlift Command (MAC). Also excludes overseas passengers in transit (956,926, passing through Honolulu International Airport).

2/ Privately owned.

Source: Hawaii State Department of Transportation, Airports Division, records.

Table 18.42-- AIR CARGO AND AIRMAIL: 1984 TO 1994

[In thousands of pounds]

Calendar year	Overseas air cargo		Overseas airmail		Interisland	
	Outgoing	Incoming	Outgoing	Incoming	Air cargo: incoming	Airmail: incoming
1984	196,215	153,654	23,356	29,497	111,472	16,282
1985	180,470	150,295	21,657	22,119	101,700	16,072
1986	200,255	184,894	22,842	23,725	114,657	16,913
1987	234,098	212,717	23,560	29,004	122,481	17,561
1988	284,783	247,174	27,764	31,028	130,203	18,847
1989	313,402	301,674	28,258	33,542	146,960	20,706
1990	295,326	337,724	32,022	38,198	145,418	22,848
1991	306,376	342,032	33,658	44,281	144,104	23,673
1992	305,224	305,658	39,268	66,052	153,912	25,594
1993	307,302	255,516	52,324	112,970	147,054	26,406
1994	339,086	308,962	47,921	121,964	148,904	27,964

Source: Hawaii State Department of Transportation, Airports Division, records.

Table 18.43-- HELICOPTER TOURS: 1977 TO 1994

Subject	1977	1982	1987	1991	1992	1993	1994
Companies	9	14	33	33	31	25	25
Aircraft	15	35	72	88	89	87	82

Source: Hawaii Helicopter Operators Association, records.

**Table 18.44-- FLIGHTS SCHEDULED TO DEPART HONOLULU
INTERNATIONAL AIRPORT, BY DESTINATION: JULY 1994**

[Data for the 652 transpacific flights scheduled to depart from Honolulu during a one-week period]

Destination	Flights during week		
	Total	Final destination	Intermediate point
Tokyo	83	64	19
Nagoya	14	14	-
Osaka	22	22	-
Fukuoka	11	11	-
Sapporo	4	4	-
Taipei	19	19	-
Seoul	27	20	7
Manila	12	12	-
Sydney	11	11	-
Auckland	13	13	-
Guam	24	19	5
Vancouver	9	9	-
Toronto	4	4	-
Seattle	21	14	7
San Francisco	74	60	14
Los Angeles	153	97	56
Las Vegas	9	9	-
Denver	14	7	7
Dallas/Fort Worth	28	21	7
Chicago	35	28	7
Atlanta	12	12	-
New York	7	7	-
All others	123	91	32

Source: Greeters of Hawaii, *Jiffisked* ^[tm] July 1994. Courtesy of Greeters of Hawaii, P. O. Box 29638, Honolulu, HI 96820.

**Table 18.45-- AIR FARES BETWEEN HONOLULU AND SELECTED MAINLAND
CITIES, BY UNITED AIRLINES: 1990 TO 1995**

[As of July 1. Unrestricted one-way weekday coach fares in dollars to San Francisco,
Los Angeles, and Chicago]

Between Honolulu and--	1990	1991	1992	1993	1994	1995
San Francisco	560	642	400	566	566	596
Los Angeles	478	560	420	586	586	716
Chicago	741	905	690	886	886	916

Source: United Airlines, Customer Relations, records.

Table 18.46-- ONE-WAY FARES FOR INTERISLAND FLIGHTS BY HAWAIIAN AIRLINES: 1991 TO 1996

[As of August 1. Fares are identical between Honolulu and each of the Neighbor Islands]

Category	1991 1/	1992	1993	1994	1995	1996
Regular fare	65.95	69.95	74.00	74.00	74.00	85.00
Kamaaina fare: 2/						
Monday - Thursday	57.95	57.95	51.00	56.00	56.00	48.00
Friday - Sunday	57.95	57.95	59.00	64.00	64.00	48.00

1/ For a complete chronology of interisland air fares, 1929 to 1990, see Robert C. Schmitt, *What People Paid to Travel* (Hawaiian Historical Society, January 1991), table 11, pp. 38-39.

2/ Available only to Hawaii residents.

Source: Hawaiian Airlines, records.

Table 18.47-- AIR FARES BETWEEN HONOLULU AND LOS ANGELES, SAN FRANCISCO, AND SEATTLE, FOR MAJOR AIRLINES: AUGUST 1, 1996

[Dollars. Includes taxes but does not reflect \$3.00 airport charge where applicable]

Carrier and fare category	Los Angeles	San Francisco	Seattle
United Airlines, one-way:			
First class	935	1,169	1,246
Coach (unrestricted)	530	1/ 530	648
United Airlines, round-trip:			
First class	1,870	2,338	2,492
Coach (unrestricted)	1,060	1,060	1,296
Major carriers, lowest round-trip: 2/			
United Airlines	352	352	398
Lowest carrier	352	352	398
Highest carrier	352	352	398

1/ For annual midyear (July 1) data on United Airlines unrestricted one-way coach fares, 1980-1995, see *Data Book 1996*, table 7.26. For earlier years, see Robert C. Schmitt, *What People Paid to Travel* (Hawaiian Historical Society, January 1991), table 12, pp. 40-41.

2/ Restrictions apply. Fares are subject to change without notice. Payment up to 21 days before travel may be required. Fare may not be available for travel on certain days of the week or holidays.

Source: International Travel Service, records.

Table 18.48-- STATE COMMERCIAL HARBORS: 1995

Island and harbor	Harbor entrance depth (feet)	Harbor basin			Piers (linear feet)	Storage area (1,000 square feet)	
		Depth (feet)	Length (feet)	Width (feet)		Shedded	Open
Hawaii:							
Hilo	35	35	2,300	1,400	2,787	122	566
Kawaihae	40	35	1,500	1,450	1,562	23	427
Maui:							
Kahului	35	35	2,400	2,050	3,019	124	850
Molokai:							
Kaunakakai	23	23	1,500	600	691	7.4	129
Oahu:							
Honolulu:							
Main	} 45	{ 40	3,300	1,520	} 28,007	1,560	8,460
Kapalama			3,400	1,000			
Barbers Point	42	38	2,100	1,800	1,860	-	1,647
Kauai:							
Nawiliwili	40	35	1,950	1,540	1,291	109	1,150
Port Allen	35	35	1,500	1,200	1,200	35	32

Source: Hawaii State Department of Transportation, Harbors Division, unpublished data.

Table 18.49-- HARBOR DEPTHS: 1995

[In feet]

Harbor	Controlling depth		Project depth	
	Entrance channel	Basin	Entrance channel	Basin
Hilo	...	34	...	35
Kawaihae	42	36	40	35
Kahului	...	34	...	35
Honolulu	45	40	45	40
Barbers Point	42	37	42	38
Nawiliwili	41	34	40	35

Source: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 1995*, Part 4 (November 1996), pp. 83-97.

**Table 18.50-- SMALL CRAFT MOORING FACILITIES CAPACITY,
BY ISLANDS: DECEMBER 31, 1994**

Island	State-operated 1/				Non-State	
	Catwalks and piers		Other moorage		Slips	Other moorage 2/
	Total	Vacant	Total	Vacant		
State total	1,740	113	481	40	2,748	1,747
Hawaii	251	2	121	2	-	375
Maui	46	-	144	-	-	50
Lanai	28	3	5	-	-	10
Molokai	2	-	27	2	-	50
Oahu	1,331	100	154	22	2,748	1,211
Kauai	82	74	30	8	-	51

1/ 2,068 vessels were moored (1,627 at catwalks and piers, 441 at other moorage), and valid applications on file numbered 2,072.

2/ Includes moorings (142), ramps (16), and dry storage (1,589).

Source: Hawaii State Department of Land and Natural Resources, Division of Boating and Ocean Recreation, *Small Craft Mooring Facilities Utilization Report* (quarterly), and records.

**Table 18.51-- LIGHTHOUSES AND RELATED FACILITIES, BY ISLANDS:
1993**

[Includes all lights, day beacons, buoys, and similar aids to navigation in the Hawaiian Archipelago]

Island	Number of aids to navigation				Greatest nominal range (naut. miles)	Highest above--	
	By control			Light-houses		Sea level (feet)	Ground (feet)
	Total	Federal	Other 1/				
Total	627	311	316	20	2/ 25	3/ 913	4/ 138
Hawaii	70	57	13	8	24	156	115
Maui	52	22	30	2	24	170	48
Molokini	1	1	-	-	7	182	30
Kahoolawe	1	1	-	-	7	120	20
Lanai	14	8	6	-	8	91	13
Molokai	18	11	7	1	25	213	138
Oahu	324	152	172	5	25	913	71
Kauai	48	28	20	4	25	174	80
Niihau	-	-	-	-	-	-	-
Lehua	1	1	-	-	7	704	10
Midway	25	25	-	-	4	43	(NA)
At sea	73	5	68	-	-	-	-

NA Not available.

1/ State and private. Includes State-maintained fish aggregating buoys at sea.

2/ Molokai Light, Kaena Point Light, and Kilauea Light.

3/ Kaena Point Light.

4/ Molokai Light.

Source: 14th Coast Guard District, April 15, 1993.

**Table 18.52-- UNDOCUMENTED STATE-REGISTERED VESSELS:
DECEMBER 31, 1994**

Subject	Number	Subject	Number
Certificates outstanding	13,839	Type of vessel:	
Length:		Cabin motorboat	2,195
Under 16 feet	5,573	Open motorboat	5,102
16 to less than 26 feet	6,732	Runabout	2,653
26 to less than 40 feet	1,336	Sail/inboard	601
40 to 65 feet	182	Sail/outboard	564
Over 65 feet	16	Sail only	789
Median (feet)	18.0	Motor vessel over 65 feet	9
Hull material:		Other	1,926
Wood	897	Uses:	
Fiberglass	11,093	Pleasure	12,305
Metal	520	Commercial fishing	580
Inflatable	1,122	Charter fishing	23
Other	207	Commercial passenger	255
Propulsion:		Other commercial	76
Inboard	881	Livery	197
Outboard	8,103	Dealer or manufacturer	30
Inboard/outboard	1,979	Youth group	62
Sail/inboard	601	Government	261
Sail/outboard	564	Other	50
Sail only	789	Island kept:	
Manual	207	Hawaii	1,887
Other	715	Kauai	1,261
Type of storage:		Lanai	59
On water	2,449	Maui	1,353
On land	11,390	Molokai	156
		Oahu	9,123

Source: Hawaii State Department of Land and Natural Resources, Division of Boating and Ocean Recreation, *Report of Undocumented Vessel Registration* (annual).

**Table 18.53-- DOCUMENTED AND NUMBERED VESSELS REGISTERED
IN HAWAII: 1989 TO 1994**

Category	1989	1990	1991	1992	1993	1994
Documented 1/ Numbered 2/	1,600 13,501	1,700 14,081	1,775 13,592	(NA) 13,973	(NA) 13,832	(NA) 13,839

NA Not available.

1/ Vessels documented under the laws of the United States with the U.S. Coast Guard in Hawaii. All vessels over five net tons, used for commercial purposes, must be documented. In addition, yachts over five net tons may be documented. As of June 30 through 1990 and December 4, 1991. Series discontinued after 1991.

2/ Non-documented numbered vessels registered with the Hawaii State Department of Transportation. Any mechanically propelled boat (including those with auxiliary engines), and any boat powered solely by sail if over eight feet in length, must be numbered. As of December 31.

Source: U.S. Coast Guard, Marine Safety Office, records; Hawaii State Department of Land and Natural Resources, *Report of Undocumented Vessel Registration* (annual).

Table 18.54-- BOATING ACCIDENTS: 1989 TO 1994

Year	Number of accidents		Number of persons		Number of vessels involved	Amount of damage (\$1,000)
	Total	Fatal	Killed	Injured, not fatally		
1989	40	1	1	28	48	216.8
1990	21	2	3	6	25	271.7
1991	19	3	5	14	19	189.5
1992	19	(NA)	3	5	(NA)	472.4
1993	19	3	3	4	25	219.4
1994	25	3	4	9	28	256.9

NA Not available.

Source: U.S. Department of Transportation, Coast Guard, *Boating Statistics* (annual); Hawaii State Department of Transportation, Harbors Division, Boating Branch, *Reportable Boating Accident Statistics for Period 1988 to 1990* and *Recreational Boating Accident Statistics (Reportable) 1989 to 1991*; Hawaii State Department of Land and Natural Resources, *Recreational Boating Accident Statistics 1991 through 1993*, and records.

Table 18.55-- VESSEL ARRIVALS, BY DRAFT: ANNUALLY, 1994 AND 1995

[Excludes domestic fishing craft]

Harbor	1994			1995		
	Total	18 feet and less	19 feet and more	Total	18 feet and less	19 feet and more
Hilo	817	793	24	835	798	37
Kawaihae	643	643	-	705	703	2
Kahului	1,228	1,202	26	1,238	1,211	27
Kaunakakai	1,581	1,581	-	1,802	1,802	-
Kalaupapa	19	19	-	31	31	-
Honolulu	7,760	5,983	1,777	7,999	6,215	1,784
Barbers Point	1,050	915	135	1,227	1,096	131
Nawiliwili	607	584	23	620	593	27
Port Allen	264	264	-	299	1/ 299	-

1/ 29 feet and less.

Source: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States*, (annual), Part 4.

**Table 18.56-- SHIP ARRIVALS AND CARGO TONNAGE AT THE PORT OF
HONOLULU: 1983 TO 1994**

[Years ended June 30]

Year	Overseas vessels		Interisland vessels	
	Number	Cargo tonnage	Number	Cargo tonnage
1983	1,775	4,868,930	2,662	2,322,957
1984	1,686	4,870,182	2,660	2,369,863
1985	1,749	5,071,250	2,412	1,884,925
1986	1,825	5,379,135	2,697	2,121,858
1987	2,080	5,736,005	2,848	2,135,235
1988	2,014	6,586,749	3,172	2,746,776
1989	2,024	6,877,963	3,101	2,892,709
1990	2,159	7,439,568	3,212	2,917,984
1991	2,066	6,939,735	3,190	3,962,085
1992	2,104	8,235,947	3,207	3,101,050
1993	1,918	7,462,619	2,440	2,731,645
1994	1,603	6,434,257	2,737	2,372,971

Source: Hawaii State Department of Transportation, Harbors Division, records.

**Table 18.57-- OVERSEAS AND INTERISLAND PASSENGER ARRIVALS
AND DEPARTURES, FOR HONOLULU HARBOR: 1989 TO 1994**

[Fiscal years ended June 30]

Type of passenger	1989	1990	1991	1992	1993	1994
Overseas:						
In	15,993	9,770	17,503	15,730	14,712	14,502
Out	16,716	9,084	17,812	15,766	14,942	14,502
Interisland:						
In	78,710	67,199	67,409	72,493	61,563	68,229
Out	78,711	67,199	67,409	72,493	61,563	68,229

Source: Hawaii State Department of Transportation, Harbors Division, records.

**Table 18.58-- WATERBORNE COMMERCE FOR SPECIFIED HARBORS:
1981 TO 1995**

[1,000 short tons. Excludes cargo carried by Army and Navy vessels and cargo in transit]

Year	Hilo	Kawaihae	Kahului	Honolulu	Barbers Point	Nawiliwili
1981	1,442	433	1,552	8,270	5,590	907
1982	1,382	441	1,484	7,593	5,707	808
1983	1,522	441	1,843	8,040	7,051	1,009
1984	1,571	546	1,889	8,470	6,565	945
1985	1,319	527	1,517	7,986	6,752	933
1986	1,199	592	1,627	8,604	5,629	745
1987	1,366	871	2,035	9,737	7,135	916
1988	1,456	655	2,157	10,655	7,511	876
1989	1,569	732	2,279	10,360	7,374	1,038
1990	1,690	887	2,409	11,341	8,034	959
1991	1,556	745	2,434	11,208	9,002	1,005
1992	1,588	790	2,357	11,522	8,824	1,143
1993	1,469	655	2,216	10,595	9,357	1,283
1994	1,455	736	2,368	11,672	9,022	1,151
1995	1,354	873	2,586	11,545	8,233	1,130

Source: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States*, Calendar Year 1990, Part 4, pp. 82-101 and 1995, Part 4, pp. 83-97.

Table 18.59-- WATERBORNE COMMERCE, FOREIGN AND DOMESTIC, FOR SPECIFIED HARBORS: 1994

[In thousands of short tons]

Category	Hilo	Kawaihae	Kahului	Honolulu	Barbers Point	Nawiliwili
All freight traffic	1,455	735	2,368	11,672	9,022	1,151
Foreign, except Canadian:						
Imports	80	-	23	1,413	4,255	5
Exports	-	-	-	301	799	-
Canadian:						
Imports	7	-	5	43	-	7
Exports	7	-	1	-	-	-
Domestic, total	1,362	735	2,339	9,915	3,969	1,139
Coastwise: 1/						
Receipts	900	526	1,467	5,558	3,194	672
Shipments	462	209	873	4,230	765	467
Internal, total 2/	-	-	-	127	9	-

1/ Includes interisland and interstate.

2/ Includes intraport.

Source: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 1994*, Part 4 (December 1995), pp. 83-99.

**Table 18.60-- WATERBORNE COMMERCE, BY COMMODITIES, FOR
SPECIFIED HARBORS: 1994**

[In thousands of short tons]

Port and commodity	Total	Receipts 1/	Shipments 2/
Hilo	1,455	987	469
Fabricated non-iron metal products	405	239	166
Food and farm products	352	134	211
Kawaihae	735	526	209
Kahului	2,368	1,495	874
Petroleum and petroleum products	297	289	8
Fabricated non-iron metal products	682	403	280
Food and farm products	640	204	436
Manufactured equipment, machinery and products	467	321	146
Kaunakakai	189	(NA)	(NA)
Honolulu	11,672	7,014	4,658
Petroleum and petroleum products	2,096	1,524	572
Lumber	275	223	52
Fabricated non-iron metal products	2,195	925	1,269
Food and farm products	2,870	1,800	1,070
Manufactured equipment, machinery and products	2,663	1,471	1,192
Vehicles and parts	924	423	502
Barbers Point	9,022	7,449	1,573
Petroleum and petroleum products	8,431	7,024	1,408
Nawiliwili	1,151	684	467
Fabricated non-iron metal products	461	260	201
Manufactured equipment, machinery and products	284	202	82
Port Allen	1	(NA)	(NA)

NA Not available.

1/ Includes foreign imports and coastwise receipts.

2/ Includes foreign exports and coastwise, internal and intraport shipments.

Source: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 1994*, Part 4 (December 1995), pp. 83-100.

Table 18.61-- WATERBORNE COMMERCE, FOREIGN AND DOMESTIC, FOR SPECIFIED HARBORS: 1995

[In thousands of short tons]

Category	Hilo	Kawaihae	Kahului	Honolulu	Barbers Point	Nawiliwili
All freight traffic	1,354	873	2,586	11,545	8,233	1,130
Foreign, except Canadian:						
Imports	46	-	66	1,891	3,974	6
Exports	-	-	-	247	751	-
Canadian:						
Imports	4	-	9	33	-	10
Exports	-	-	-	-	-	-
Domestic, total	1,304	873	2,511	9,375	3,508	1,114
Coastwise: 1/						
Receipts	929	662	1,593	5,096	2,716	611
Shipments	375	211	917	4,172	783	503
Internal, total 2/	-	-	-	107	9	-

1/ Includes interisland and interstate.

2/ Includes intraport.

Source: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 1995*, Part 4 (November 1996), pp. 83-97.

**Table 18.62-- WATERBORNE COMMERCE, BY COMMODITIES, FOR
SPECIFIED HARBORS: 1995**

[In thousands of short tons]

Port and commodity	Total	Receipts 1/	Shipments 2/
Hilo	1,354	979	375
Fabricated non-iron metal products	452	253	199
Food and farm products	205	112	93
Kawaihae	873	662	211
Kahului	2,586	1,668	917
Petroleum and petroleum products	434	434	-
Fabricated non-iron metal products	859	474	385
Food and farm products	546	172	374
Manufactured equipment, machinery and products	442	291	151
Kaunakakai	191	(NA)	(NA)
Honolulu	11,545	7,020	4,526
Petroleum and petroleum products	2,662	2,003	659
Lumber	215	162	53
Fabricated non-iron metal products	2,591	1,105	1,486
Food and farm products	2,347	1,510	837
Manufactured equipment, machinery and products	2,406	1,298	1,108
Vehicles and parts	839	375	464
Barbers Point	8,233	6,690	1,543
Petroleum and petroleum products	7,385	6,016	1,369
Nawiliwili	1,130	627	503
Fabricated non-iron metal products	557	286	271
Manufactured equipment, machinery and products	249	171	78
Port Allen	6	(NA)	(NA)

NA Not available.

1/ Includes foreign imports and coastwise receipts.

2/ Includes foreign exports and coastwise, internal and intraport shipments.

Source: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 1995*, Part 4 (November 1996), pp. 83-98.

**Table 18.63-- TRANSPORTATION, COMMUNICATION, AND UTILITY INDUSTRIES,
WITH AND WITHOUT PAYROLL: 1992**

SIC code	Kind of business	Number of establishments			Revenue (million dollars)		
		Total	With payroll	Without payroll	Total	With payroll	Without payroll
41	Passenger transportation	1,534	117	1,417	205	179	26
42	Motor freight transportation, warehousing	601	312	289	404	393	11
44	Water transportation	147	97	50	453	452	1
45pt.	Air transportation 1/	164	113	51	415	412	3
46	Pipelines, exc. natural gas	-	-	-	-	-	-
47	Transportation services	1,477	626	851	421	401	20
48	Communications	311	211	100	926	924	2
49	Electric, gas, sanitary services	90	57	33	946	944	1

1/ Data exclude large, certificated passenger carriers that report to the Office of Airline Statistics.

Source: U.S. Bureau of the Census, *1992 Census of Transportation, Communications, and Utilities, Nonemployer Statistics Series, Summary*, UC92-N-1 (March 1995), table 3.

**Table 18.64-- SHIPMENT CHARACTERISTICS BY STATES OF ORIGIN AND
DESTINATION: 1993**

Characteristics	Value (million dollars)	Tons (thousands)	Ton-miles (millions)
Total originating in Hawaii	11,462	24,748	(S)
Destination:			
Hawaii	10,616	22,071	700
Other states	846	2,677	(S)
California	578	1,472	3,818
Washington	32	90	256
Rest of U.S.	236	1,115	(S)
Mode of transportation:			
Single modes:	7,033	12,549	155
Truck	110	(S)	(S)
Air	(D)	(D)	(D)
Other			
Multiple modes:			
Truck and air	284	39	21
Truck and water	676	1,131	1,994
Other multiple	(S)	(S)	(S)
Other and unknown modes	1,469	(S)	(S)
Distance shipped:			
Less than 50 miles	8,848	19,890	282
50 to 1,999 miles	1,768	2,182	(S)
2,000 miles or more	847	2,676	(S)
Commodity:			
Farm products	555	387	(S)
Food or kindred products	2,882	3,015	2,837
Chemicals or allied products	969	(S)	(S)
Petroleum or coal products	2,849	12,901	(S)
Transportation equipment	531	53	-
Other commodities	3,676	(S)	(S)

(D) Withheld to avoid disclosing data for individual companies.

(S) Data do not meet publication standards due to high sampling variability or other reasons.

Source: U.S. Bureau of the Census, *1992 Census of Transportation, Communications, and Utilities, 1993 Commodity Flow Survey, Hawaii*, TC92-CF-12 (March 1996), pp. 3, 4, 10, 23.