

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.

Motor vehicle registration in Hawaii increased from 535,000 in 1976 to 772,000 in 1986. Vehicle miles rose during the same period from 4.3 billion to 7.0 billion. Hawaii residents purchased 58,000 new passenger cars and 10,000 trucks in 1986. By the end of that year, 612,000 licensed drivers had access to 4,040 miles of streets and highways throughout the State. Bus passengers carried by the Honolulu Mass Transit Lines increased from 65 million in 1976 to 74 million in 1986. Registered bicycles numbered 94,000 in 1986.

Most scheduled interisland travel is by air. In 1986, airlines and air taxis reported 8.3 million interisland passengers, some 42 percent more than in 1976, and carried 57,000 tons of cargo. The State has 8 commercial airports, 13 general aviation, military or semi-private airports, 10 civilian heliports, 3,300 active pilots, and about 350 active civil aircraft in general aviation.

Rapid growth is similarly evident in transpacific air travel. Although surface passenger arrivals dropped from 54,000 in 1959 to 828 in 1986, air arrivals increased during the same 27-year span from 224,000 to 6.0 million. Overseas cargo received in the State in 1984 amounted to 77,000 tons by air and 9.0 million tons by ship.

Undocumented State-registered vessels as of December 31, 1986 numbered 14,052, compared with about 8,000 in 1970. Median length was 17.4 feet, and four-fifths were stored on land. There were 1,389 documented vessels in the State in 1987, more than double the 1970 total.

The chief source for transportation statistics is the Hawaii State Department of Transportation and its Highways, Harbors and Airports Divisions. Other sources include the U.S. Coast Guard, Federal Aviation Administration, Federal Highway Administration, Army Corps of Engineers, Honolulu Department of Transportation Services and Department of Data Systems, 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. Similar statistics for other areas are reported in Statistical Abstract of the United States: 1987, Sections 21 and 22.

Table 517.-- HIGHWAY DISTANCES: 1987

Route	Statute miles	Route	Statute miles
HAWAII		MOLOKAI	
Hilo-Lynnan Field	2.0	Kaunakakai-Kaluakoi 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 <u>1/</u>	
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		
Wailuku-Makena	17.6	KAUAI	
Wailuku-Lahaina, via Kahakuloa	38.0	Lihue-Haena	38.0
Wailuku-Lahaina, via Olowalu .	20.9	Lihue-Wailua	5.9
Kahului-Kihei	7.9	Lihue-Lihue Airport	2.0
Lahaina-Wailea	32.4	Lihue-Poipu	11.9
Lahaina-Napili	8.9	Lihue-Mana	32.9
Lahaina-Kaanapali	3.7	Lihue-Kalalau Lookout	44.6
		Poipu-Kalalau Lookout	36.8
LANAI		Poipu-Princeville	40.7
Lanai City-Lanai Airport	2.7		
Lanai City-Hulopoe	8.0		

1/ Honolulu distances measured from King and Bishop Streets; Waikiki, from Kalakāua and Lewers.

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

Table 518.-- LENGTH OF STREETS AND HIGHWAYS, PAVED AND UNPAVED:
1923 TO 1986

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

Category	1923	1938	1958	1972	1986
Total mileage ...	1,479	2,040	2,967	3,611	4,040
Paved	565	1,367	2,393	3,117	3,829
Unpaved	914	673	575	494	211

Source: Robert C. Schmitt, *Historical Statistics of Hawaii* (University Press of Hawaii, 1977), p. 429; present report, table 519.

Table 519.-- LENGTH OF STREETS AND HIGHWAYS, PAVED AND UNPAVED,
BY ISLANDS: DECEMBER 31, 1986

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

Island	Total mileage	Paved		Unpaved
		Freeways	Other	
State total	4,040.11	94.44	3,734.42	211.25
Hawaii	1,456.23	7.04	1,376.57	72.62
Maui	584.22	3.21	524.31	56.70
Lanai	45.83	-	31.83	14.00
Molokai	125.63	-	113.63	12.00
Oahu	1,439.03	84.19	1,321.40	33.44
Kauai	389.17	-	366.68	22.49
Niihau	-	-	-	-

Source: Hawaii State Department of Transportation, records.

Table 520.-- HIGHWAY BRIDGES, BY ISLANDS: DECEMBER 31, 1986

Island	Number of bridges	Longest bridge		Highest bridge	
		Location	Length (feet)	Location	Height (feet)
State .	1,109	Airport Viaduct .	14,890	Nanue	208
Hawaii	255	Hakalau	775	Nanue	208
Maui	151	Kalialinui	324	Uaoa	79
Lanai	-	None .....	...	None .....	...
Molokai	19	Manawainui	325	Manawainui	50
Oahu	609	Airport Viaduct .	14,890	Kipapa	156
Kauai	75	Kalihiwai	798	Wahiawa, Koloa ..	90

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

Table 521.-- HIGHWAY TUNNEL LENGTHS: DECEMBER 31, 1986

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
Middle Street	393
Structure No. 8, Waiawa Interchange	300
Maui:	
Olowalu	318
Kauai:	
Kipu-Mahaulepu (private road)	2,200

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

Table 522.-- SIGNALIZED INTERSECTIONS AND METERED PARKING SPACES,
BY ISLANDS: DECEMBER 31, 1985

Type of facility	State total	Hawaii	Maui	Lanai	Molokai	Oahu	Kauai
Signalized intersections	580	38	18	-	-	516	8
Metered on-street parking spaces	3,630	816	-	-	-	2,814	-
Metered off-street parking spaces <u>1/</u>	3,226	277	68	-	18	2,797	66

1/ Limited to spaces under State or county control. Excludes about 900 spaces on Oahu converted to contract operation.

Source: Compiled by Hawaii State Department of Planning and Economic Development from Hawaii State Department of Accounting and General Services, Hawaii State Department of Transportation, City and County of Honolulu Department of Transportation Services, Hawaii County Department of Public Works, Kauai County Department of Public Works, and Maui County Department of Public Works.

Table 523.-- VEHICLE DENSITIES: 1923 TO 1986

Measure	1923	1938	1958	1972	1986
Motor vehicles per --					
1,000 persons <u>1/</u>	65.6	151.2	330.9	513.2	654.9
Mile of street or highway	13.3	30.4	68.2	123.6	191.0
Persons per <u>1/</u> --					
Motor vehicle	15.2	6.6	3.0	1.9	1.5
Mile of street or highway	202.5	201.0	206.2	240.9	291.6

1/ Based on de facto population after 1938.

Source: Robert C. Schmitt, Historical Statistics of Hawaii (University Press of Hawaii, 1977), tables 1.4 and 17.2; present report, tables 3, 518, and 524.

Table 524.-- VEHICLE REGISTRATION, BY TYPE OF VEHICLE: 1976 TO 1986

[Taxable and non-taxable, including military non-resident exempt vehicles]

Year	All vehicles registered	Motor vehicles			
		All motor vehicles	Passenger vehicles <u>1/</u>	Ambulances, hearses, patrol wagons	Buses
1976	551,438	535,217	452,616	82	2,624
1977	580,380	563,964	475,368	81	2,888
1978	599,990	583,601	489,878	84	3,052
1979	626,841	610,570	510,353	91	3,267
1980	633,846	617,571	514,669	85	3,366
1981	667,019	649,350	541,932	88	3,577
1982	689,468	671,513	566,060	80	3,863
1983	(NA)	702,854	(NA)	(NA)	(NA)
1984	735,458	717,171	599,845	68	4,034
1985	767,892	749,034	625,823	66	4,189
1986	790,855	771,575	642,636	60	4,158
Motor vehicles -- continued					
Year	Trucks <u>1/</u>	Truck tractors, tow trucks	Truck crane, misc.	Motor-cycles, motor scooters <u>2/</u>	Trailers and semi-trailers
1976	68,215	1,866	680	9,134	16,221
1977	73,762	1,848	609	9,408	16,416
1978	78,447	1,809	560	9,771	16,389
1979	84,578	1,784	511	9,986	16,271
1980	87,542	1,725	488	9,696	16,275
1981	90,954	1,641	458	10,700	17,669
1982	88,410	1,395	388	11,317	17,955
1983	(NA)	(NA)	(NA)	(NA)	(NA)
1984	101,233	1,428	364	10,199	18,287
1985	106,673	1,334	342	10,607	18,858
1986	112,053	1,290	323	11,055	19,280

Footnotes and source on next page.

Table 524.-- VEHICLE REGISTRATION, BY TYPE OF VEHICLE:
1976 TO 1986 -- Con.

NA Not available.

1/ Beginning in 1979, vans and other trucks under 6,500 lb. in personal use were legally classified as passenger vehicles, but the data shown here have been adjusted to continue inclusion of such vehicles in the totals for trucks.

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

Source: City and County of Honolulu, Department of Data Systems, unpublished tabulations, provided by the Hawaii State Department of Transportation, Motor Vehicle Safety Office; present report, table 527.

Table 525.-- MOTOR VEHICLES REGISTERED, BY COUNTIES:
1976 TO 1986

[Taxable and non-taxable, including military non-resident exempt vehicles. Includes passenger cars, buses, trucks, and motor-cycles but excludes trailers and semi-trailers]

Year	State total	City and County of Honolulu	County of Hawaii	County of Kauai	County of Maui
1976	535,217	406,149	57,151	25,300	46,617
1977	563,964	424,892	60,374	26,920	51,778
1978	583,601	436,347	63,025	27,614	56,615
1979	610,570	452,449	67,718	29,492	60,911
1980	617,571	454,316	70,047	30,604	62,604
1981	649,350	476,995	75,812	32,932	63,611
1982	671,513	495,629	77,024	33,931	64,929
1983	702,854	515,002	80,090	35,365	72,397
1984	717,171	525,599	80,840	35,236	75,496
1985	749,034	544,976	85,806	37,659	80,593
1986	771,575	556,935	89,918	40,585	84,137

Source: City and County of Honolulu, Department of Data Systems, unpublished tabulations provided by the Hawaii State Department of Transportation, Motor Vehicle Safety Office; present report, table 527.

Table 526.-- PASSENGER VEHICLES REGISTERED, BY COUNTIES:
1976 TO 1986

[Taxable and non-taxable, including military non-resident exempt vehicles. Excludes ambulances, hearses, buses, trucks, motorcycles, and trailers]

Year	State total	City and County of Honolulu	County of Hawaii	County of Kauai	County of Maui
1976	452,616	352,148	43,826	19,882	36,760
1977	475,368	367,398	46,072	21,001	40,897
1978	489,878	376,260	47,764	21,411	44,443
1979 ^{1/} ...	510,353	388,788	51,159	22,790	47,616
1980	514,669	389,576	52,682	23,561	48,850
1981	541,932	409,305	57,397	25,363	49,867
1982	566,060	429,244	59,103	26,297	51,416
1983	(NA)	(NA)	(NA)	(NA)	(NA)
1984	599,845	447,872	63,182	27,376	61,415
1985	625,823	460,906	68,602	29,890	66,425
1986	642,636	466,938	73,356	32,853	69,489

NA Not available.

^{1/} Beginning in 1979, vans and other trucks under 6,500 lb. in personal use were legally classified as passenger vehicles, but the 1979 and subsequent data shown here have been adjusted to continue inclusion of such vehicles in the totals for trucks.

Source: City and County of Honolulu, Department of Data Systems, unpublished tabulations provided by Hawaii State Department of Transportation, Motor Vehicle Safety Office.

Table 527.-- VEHICLE REGISTRATION, BY TYPE OF VEHICLE, FOR COUNTIES:
1986 AND 1983

[Taxable and non-taxable, including military non-resident exempt vehicles]

Type of vehicle	State total	City and County of Honolulu	County of Hawaii	County of Kauai	County of Maui
1986					
All vehicles	790,855	567,527	94,270	42,695	86,363
Motor vehicles	771,575	556,935	89,918	40,585	84,137
Passenger vehicles <u>1/</u>	642,636	466,938	73,356	32,853	69,489
Ambulances <u>2/</u>	60	46	10	1	3
Buses	4,158	3,281	230	142	505
Trucks <u>1/</u>	112,053	76,999	14,740	7,117	13,197
Truck tractors <u>3/</u>	1,290	660	308	124	198
Truck cranes <u>4/</u>	323	131	84	37	71
Motorcycles <u>5/</u>	11,055	8,880	1,190	311	674
Trailers and semi-trailers ..	19,280	10,592	4,352	2,110	2,226
1983					
Motor vehicles	702,854	515,002	80,090	35,365	72,397
U-drive	30,442	18,580	2,891	1,478	7,493
All others	672,412	496,422	77,199	33,887	64,904

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

2/ Including hearses and patrol wagons.

3/ Including tow trucks.

4/ Including miscellaneous vehicles.

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

Source: 1987 from City and County of Honolulu, Department of Data Systems, unpublished tabulation provided by Hawaii State Department of Transportation, Motor Vehicle Safety Office; 1983 from Applied Analysis, Inc., Estimating Annual Vehicle-miles Traveled (VMT) in the State of Hawaii (August 1987), and records.

Table 528.-- AUTOMOBILES, TRUCKS, AND VANS AVAILABLE TO OCCUPIED HOUSING UNITS, BY COUNTIES: 1980

Number of vehicles available	The State	Hawaii	Honolulu	Kalawao	Kauai	Maui
Occupied units	294,052	29,237	230,214	71	12,020	22,510
None	30,509	2,463	25,628	8	788	1,622
1	115,357	9,193	95,735	18	3,209	7,202
2	94,699	10,775	71,456	25	4,440	8,003
3 or more	53,487	6,806	37,395	20	3,583	5,683

Source: U.S. Bureau of the Census, 1980 Census of Housing, Detailed Housing Characteristics, Hawaii, HC80-1-B13 (May 1983), tables 61 and 94.

Table 529.-- TAXABLE VEHICLES, BY TYPE AND EMPTY WEIGHT: 1986

Empty weight	Passenger vehicles	Buses	Trucks ^{1/}	Truck tractors, tow trucks	Motorcycles	Trailer
All taxable vehicles	582,478	3,016	39,598	813	6,176	13,300
Under 2,000 lb.	48,856	1	19	-	6,169	10,219
2,000 to 2,999 lb.	311,412	50	9,286	7	4	449
3,000 to 3,999 lb.	174,084	86	11,379	9	1	159
4,000 to 4,999 lb.	44,473	795	9,196	10	2	170
5,000 to 5,999 lb.	3,099	961	2,370	12	-	204
6,000 to 9,999 lb.	345	341	3,455	126	-	927
10,000 lb. and over	209	782	3,893	649	-	1,172
Median weight (lb.)	2,778	5,599	3,922	14,233	<2,000	<2,000

^{1/} Vans and other trucks under 6,500 lb. in personal use are classified as passenger vehicles.

Source: Hawaii State Department of Transportation, Highways Division, printouts from Honolulu Department of Data Systems; medians calculated by Hawaii State Department of Planning and Economic Development.

Table 530.-- TRUCK CHARACTERISTICS: 1972, 1977, AND 1982

[Percent]

Vehicular and operational characteristics	1972	1977	1982 ^{1/}
Major use: Personal transportation	37.6	50.0	54.3
Body type: Pickup, panel, multistop, or walk-in .	73.5	86.4	89.6
Vehicle size: Light	71.6	89.0	92.9
Annual miles: Less than 10,000	59.8	54.1	59.7
Year model: Over 4 years old	59.3	68.1	75.8
Vehicle acquisition: Purchased new	55.9	54.6	47.3
Fleet size: 1 truck	53.4	64.0	72.3
Truck type: Single-unit, 2 axles	91.2	95.7	96.6
Range of operation: Local	84.6	87.3	78.2
Fuel type: Diesel and LPG	6.2	4.6	3.7

^{1/} There were 120,000 trucks in Hawaii in 1982, which traveled 1,071,700,000 truck miles, or 8,900 per truck.

Source: U.S. Bureau of the Census, 1982 Census of Transportation, Truck Inventory and Use Survey, Hawaii, TC82-T-12 (June 1985), tables 1 and 2.

Table 531.-- NEW PASSENGER CARS AND MOTOR TRUCKS REGISTERED: 1981 TO 1986

Year	Total	Passenger cars	Motor trucks
1981	46,995	39,188	7,807
1982	44,489	37,137	7,352
1983	52,927	42,772	10,155
1984	63,625	48,791	14,834
1985	67,875	51,330	16,545
1986	68,060	49,680	18,380

Source: R.L. Polk and Co., cited in Motor Vehicle Manufacturers Association of the United States, Inc., MVMA Motor Vehicle Facts and Figures (annual).

Table 532.-- NEW PASSENGER CAR AND TRUCK REGISTRATIONS,
BY COUNTIES: 1985 AND 1986

Year	State total	Hono- lulu	Maui	Hawaii	Kauai
1985	68,676	50,058	8,095	7,660	2,863
1986	68,379	48,497	8,535	7,896	3,451

Source: Hawaii Automobile Dealers' Association, HADA
Yearbook '87, p. 6.

Table 533.-- NEW PASSENGER CAR AND TRUCK REGISTRATIONS,
BY MAKE, 1986, AND RANK, 1984 TO 1986

Make	New registrations, 1986			Rank		
	Total	Passenger cars	Trucks	1984	1985	1986
All makes ..	68,379	58,336	10,043	...	...	...
Toyota	11,597	9,855	1,742	2	1	1
Nissan	10,053	9,035	1,018	1	2	2
Ford	7,110	5,019	2,091	3	4	3
Chevrolet	6,322	5,091	1,231	4	3	4
Honda	6,017	6,017	-	5	5	5
Mazda	3,525	2,643	882	6	6	6
Dodge	3,398	2,552	846	7	7	7
Oldsmobile	1,924	1,924	-	9	8	8
Buick	1,710	1,710	-	8	9	9
Suzuki	1,657	1,514	143	21	17	10
All others <u>1/</u> ...	15,066	12,976	2,090	...	...	...

1/ For details, see source.

Source: Hawaii Automobile Dealers Association, HADA
Yearbook '87, p. 12.

Table 534.-- NEW PASSENGER CAR AND TRUCK REGISTRATIONS, BY PLACE OF MANUFACTURE: 1985 AND 1986

[Percent distributions]

Place of manufacture <u>1/</u>	All types		Passenger cars		Trucks	
	1985	1986	1985	1986	1985	1986
Total ...	100.0	100.0	100.0	100.0	100.0	100.0
Imports:						
Japanese ...	54.4	53.2	54.9	54.3	51.6	45.3
European ...	3.0	1.0	3.5	2.2	0.6	0.1
Domestics	41.5	45.6	40.8	42.7	45.7	51.3
Unclassified <u>2/</u>	1.1	0.2	0.8	0.8	2.2	3.3

1/ Japanese cars sold in the U.S. with U.S. nameplates are classified as domestic. Cars assembled in the U.S. with Japanese nameplates are classified as imports. Volkswagen is classified as domestic.

2/ AMC (except Jeep), Jaguar, Rolls-Royce, and other cars with small market share in Hawaii.

Source: Hawaii Automobile Dealers' Association, HADA Yearbook '87, p. 13, as corrected.

Table 535.-- HAWAII DRIVERS LICENSES IN FORCE, BY COUNTIES:
1976 TO 1986

[As of December 31]

Year	State total	City and County of Honolulu	County of Hawaii	County of Kauai	County of Maui
1976	541,180	429,559	49,184	22,662	39,775
1977	541,353	424,242	51,773	23,557	41,781
1978	541,263	420,005	53,504	24,381	43,373
1979	543,202	418,751	53,735	25,606	45,110
1980	541,842	411,102	57,780	26,333	46,627
1981	541,279	407,062	60,171	27,261	46,785
1982	561,345	419,468	63,610	28,446	49,821
1983	574,533	428,897	64,560	29,169	51,907
1984	582,218	434,053	65,778	28,801	53,586
1985	593,952	441,278	68,177	29,188	55,309
1986	612,101	453,220	70,493	30,374	58,014

Source: Tabulations by City and County of Honolulu, Department of Data Systems, provided by Hawaii State Department of Transportation, Motor Vehicle Safety Office.

Table 536.-- HAWAII DRIVERS LICENSES IN FORCE, BY AGE
AND SEX: DECEMBER 31, 1986

Age	Both sexes	Male	Female
Total	612,101	334,433	277,668
15 to 19 years	36,567	21,215	15,352
20 to 24 years	65,275	35,112	30,163
25 to 34 years	161,316	84,169	77,147
35 to 44 years	138,312	72,997	65,315
45 to 54 years	80,478	43,116	37,362
55 to 64 years	74,649	41,472	33,177
65 to 74 years	42,999	27,205	15,794
75 to 84 years	11,772	8,573	3,199
85 years and over	733	574	159
Median age (years)	38.1	38.7	37.5

Source: Tabulation by City and County of Honolulu, Department of Data Systems, provided by Hawaii State Department of Transportation, Motor Vehicle Safety Office.

Table 537.-- TOTAL 24-HOUR TRAFFIC VOLUMES AT SELECTED OAHU
SURVEY SITES: 1983 TO 1986

Site	1983	1984	1985	1986
Pali Highway at tunnels	47,753	46,812	47,835	49,242
Likelike Highway at tunnels	44,644	43,840	48,501	47,452
H-1 Freeway at Manoa-Palolo Drainage Canal (includes ramps)	101,817	110,712	118,028	122,603
H-1 Freeway at Kapalama Drainage Canal Bridge	174,308	164,969	172,655	193,962
Nimitz Highway at Kapalama Drainage Canal Bridge	(NA)	55,312	62,410	63,626
Kalaniana'ole Highway east of Ainako Ave.	69,939	73,941	79,830	75,852

NA Not available.

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

Table 538.-- MOTOR VEHICLE FUEL CONSUMPTION AND VEHICLE MILES:
1976 TO 1986

Year and county	Highway fuel consumption <u>1/</u>		Vehicle miles of travel	
	Total (1,000 gallons)	Gallons per vehicle <u>2/</u>	Total (millions)	Per vehicle <u>2/</u>
1976	308,151	574	4,314.1	8,041
1977	324,449	578	4,542.3	8,088
1978	338,440	583	4,738.2	8,164
1979	339,989	560	4,759.9	7,834
1980	330,734	536	5,570.0	9,019
1981	319,588	492	5,855.7	9,018
1982	323,827	482	6,048.3	9,007
1983	327,769	(NA)	(NA)	(NA)
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
COUNTIES: 1986				
Honolulu	252,138	456	4,882.9	8,825
Hawaii	46,815	513	892.7	9,776
Kauai	19,383	460	435.9	10,341
Maui	39,380	464	759.2	8,951

NA Not available.

1/ Includes gasoline, gasohol, diesel oil, and butane gas. Gasohol was no longer used in motor vehicles after June 1982.

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, records.

Table 539.-- COMMUTING: 1980

Commuting characteristics	State total	Oahu	Other islands
MEANS OF TRANSPORTATION TO WORK			
Workers 16 years and over	457,717	369,523	88,194
Private vehicle	359,207	282,479	76,728
Drive alone: Car	225,767	179,823	45,944
Truck or van	27,401	15,904	11,497
Carpool: Car	93,203	78,997	14,206
Truck or van	12,836	7,755	5,081
Public transportation	38,100	37,042	1,058
Bus or streetcar	37,362	36,447	915
Subway, elevated train, or railroad	38	38	-
Taxicab	700	557	143
Bicycle	5,021	4,679	342
Motorcycle	2,979	2,740	239
Walked only	37,112	31,069	6,043
Other means	6,445	5,134	1,311
Worked at home	8,853	6,380	2,473
PRIVATE VEHICLE OCCUPANCY			
Workers 16 and over using private vehicles	359,207	282,479	76,728
Drive alone	253,168	195,727	57,441
In 2-person carpool	72,188	59,311	12,877
In 3-person carpool	19,417	16,642	2,775
In 4-person carpool	7,828	6,373	1,455
In 5-or-more-person carpool	6,606	4,426	2,180
Persons per private vehicle	1.20	1.21	1.17
TRAVEL TIME TO WORK			
Workers 16 and over who did not work at home ...	448,492	362,086	86,406
Less than 10 minutes	76,444	51,687	24,757
10 to 19 minutes	145,010	113,454	31,556
20 to 29 minutes	89,345	76,166	13,179
30 to 44 minutes	87,941	77,414	10,527
45 or more minutes	49,752	43,365	6,387
Mean	21.5	22.6	17.2

Source: U.S. Bureau of the Census, 1980 Census of Population, General Social and Economic Characteristics, Hawaii, PC80-1-C13 (June 1983), table 65.

Table 540.-- SELECTED POPULATION CHARACTERISTICS, BY MEANS OF TRANSPORTATION TO WORK: 1980

Means of transportation to work	Age (percent)		Females (percent)	High-school graduates ^{1/} (percent)	Median household income ^{2/} (dollars)	Owner occupants ^{2/} (percent)
	25 to 64 years	65 years and over				
Workers 16 and over	74.6	2.3	40.6	83.3	27,649	58.1
Private vehicle	79.0	2.0	39.9	84.9	28,830	62.0
Drive alone:						
Car	79.1	2.1	39.2	87.0	28,527	61.5
Truck or van	87.5	1.7	8.7	77.8	27,683	66.8
Carpool:						
Car	76.8	1.7	53.6	83.7	30,376	62.9
Truck or van	75.0	1.7	22.4	72.4	26,204	53.8
Public transportation	64.6	3.4	63.9	71.9	23,894	45.0
Bus	64.7	3.4	64.0	71.6	24,024	46.0
Taxi or other	60.8	3.9	62.7	81.8	20,000	21.7
Bicycle	64.2	-	10.2	93.5	16,939	20.4
Motorcycle	59.6	-	2.7	95.4	19,239	22.7
Walked only	49.5	3.0	32.1	73.3	19,748	32.6
Other means	61.5	2.8	25.0	83.6	20,987	39.8
Worked at home	66.5	9.7	40.8	80.2	26,719	56.8

^{1/} Persons 25 years and over.

^{2/} For persons in households.

Source: U.S. Bureau of the Census, Census of Population and Housing, 1980, Public Use Microdata Sample A -- 5 Percent (Hawaii), special tabulation by Hawaii State Data Center.

Table 541.-- HIGHWAY SPEEDS, BY TYPE OF HIGHWAY: 1981 TO 1986

[Years ended September 30]

Measurement and year	State-wide	Urban inter-state	Rural		
			Inter-state	Other arterials	Major collectors
AVERAGE SPEEDS (MILES PER HOUR)					
1981	53.0	54.0	55.1	51.1	52.8
1982	54.1	56.6	56.2	51.5	52.4
1983	54.0	56.7	56.5	51.6	51.8
1984	54.7	56.8	56.8	52.4	53.1
1985	54.8	56.9	58.0	52.3	53.0
1986	55.1	58.4	(NA)	51.4	52.6
1985					
Miles per hour:					
Median speed	55.1	57.3	58.7	52.7	53.1
85th percentile speed ..	61.8	63.8	65.2	59.4	60.8
Percent exceeding --					
55 miles per hour	43.4	58.4	67.4	29.0	19.1
60 miles per hour	18.8	26.3	34.9	10.5	8.5
65 miles per hour	6.5	8.5	11.5	3.8	5.3
1986					
Miles per hour:					
Median speed	55.4	58.9	(NA)	51.6	52.8
85th percentile speed ..	62.5	65.8	(NA)	59.1	59.0
Percent exceeding --					
55 miles per hour	49.5	67.9	(NA)	31.8	26.3
60 miles per hour	23.1	37.3	(NA)	8.7	7.8
65 miles per hour	8.6	14.1	(NA)	3.0	2.7

NA Not available.

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

Table 542.-- MAJOR TRAFFIC ACCIDENTS, TRAFFIC INJURIES, AND TRAFFIC DEATHS: 1976 TO 1986

Year	Major traffic accidents <u>1/</u>		Persons injured or killed	
	Total	Fatal	Injured only	Killed
1976	14,860	137	11,667	149
1977	16,188	139	12,245	154
1978	18,545	175	13,327	195
1979	19,158	183	13,963	205
1980	18,301	165	13,026	185
1981	16,582	136	11,999	150
1982	16,407	143	11,865	161
1983	16,372	131	11,852	139
1984	17,657	127	12,390	136
1985	19,577	118	12,613	126
1986	20,726	108	10,915	117
COUNTIES: 1986				
Honolulu	15,871	60	7,647	67
Hawaii	2,441	21	1,751	23
Kauai	895	11	523	11
Maui	1,519	16	994	16

1/ Traffic accidents with damage of \$300 or more or causing injury or death.

Source: Hawaii State Department of Transportation, Highways Division, Major Traffic Accidents, State of Hawaii (annual) and records.

Table 543.-- REGISTERED TAXICABS AND BICYCLES, BY ISLANDS:
1985 AND 1986

[As of December 31]

Island	Taxicabs		Bicycles	
	1985	1986	1985	1986
State total	<u>1/</u> 1,722	1,618	85,041	93,873
Hawaii	90	90	2,487	2,980
Maui	123	123	2,832	2,572
Lanai	2	2	149	215
Molokai	-	-	256	268
Oahu	<u>1/</u> 1,458	1,366	<u>2/</u> 75,400	<u>2/</u> 84,228
Kauai	49	37	3,917	3,610

1/ Revised from Data Book 1986, table 517.

2/ Excludes mopeds (10,144 in 1985 and 10,398 in 1986).

Source: Compiled by the Hawaii State Department of Planning and Economic Development from the County Departments of Finance.

Table 544.-- MOTOR CARRIER CHARACTERISTICS, BY COUNTIES: JUNE 1987

County	Passenger carriers <u>1/</u>			Property carriers <u>2/</u>	
	Number of carriers	Number of vehicles	Seating capacity	Number of carriers	Number of vehicles
State total	1,031	4,843	131,417	2,779	16,343
Hawaii	74	527	20,456	509	2,911
Maui	142	802	21,718	370	1,914
Honolulu	756	3,138	77,934	1,710	10,483
Kauai	59	376	11,309	190	1,035

1/ Includes mostly tour bus operators; excludes public transit (such as MTL, Inc.), 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 Regulatory Agencies, Public Utilities Commission.

Table 545.-- STEAM RAILROAD MILEAGE AND PASSENGERS:
1979 TO 1986

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

Calendar year	Miles of track	Passengers <u>1/</u>	Calendar year	Miles of track	Passengers <u>1/</u>
1979	6	103,105	1983 ...	6	171,892
1980	6	111,699	1984 ...	6	197,876
1981	6	128,178	1985 ...	6	199,759
1982	6	155,059	1986 ...	6	215,735

1/ Data for 1979-1984 revised from Data Book 1985, table 493.
Source: Lahaina, Kaanapali and Pacific Rail Road, data submitted February 7, 1987.

Table 546.-- BUS PASSENGERS, BY FARE CATEGORY, FOR OAHU:
1984 TO 1986

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

Fare category	1984	1985	1986
All passengers	76,260,187	74,816,485	74,410,104
Adults, full fare	41,846,716	41,997,746	42,296,391
Students	13,548,302	12,717,660	12,185,244
School subsidy	342,857	350,346	368,135
Stadium express	20,320	10,173	10,861
Senior citizens and handicapped	14,381,117	14,207,457	14,151,242
Chartered service	8,930	12,981	17,261
Free transfers	6,111,945	5,520,122	5,380,970

Source: MTL, Inc., data provided by the City and County of Honolulu, Department of Transportation Services.

Table 547.-- BUS SERVICE, FOR OAHU: 1970 TO 1986

[Service provided by Honolulu Rapid Transit Co., Ltd., through December 31, 1970 and by City and County of Honolulu beginning March 1, 1971]

Year	Number of buses, Dec. 31	Bus mileage <u>1/</u>	Total passengers <u>2/</u>	Revenues <u>3/</u> (dollars)
1970 <u>4/</u>	141	4,611,357	30,434,906	4,970,000
1971 <u>5/</u>	108	2,986,724	19,413,259	1,246,351
1972	143	4,964,044	31,031,764	4,445,817
1973	315	7,973,393	36,741,009	5,254,908
1974	333	11,670,774	50,519,626	6,807,147
1975	350	13,328,501	58,295,732	7,990,505
1976	350	15,547,127	64,585,334	9,007,134
1977	350	16,242,537	66,311,882	9,629,349
1978	350	15,991,798	67,746,396	9,686,876
1979	350	15,915,000	68,765,000	9,931,000
1980	400	16,579,392	71,601,744	17,388,760
1981	400	16,748,338	73,546,802	17,991,735
1982	400	16,767,816	74,109,528	18,269,144
1983	395	16,654,568	75,051,618	18,157,876
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

1/ All categories of service through 1978 and revenue vehicle miles (estimated) thereafter. Calendar year data.

2/ All categories of service through 1978 and revenue passengers (including senior citizens and handicapped) as estimated thereafter. Calendar year data.

3/ Calendar year 1970; 4-month period ended June 30, 1971; fiscal years ended June 30, 1972 to 1979; calendar years, 1980 forward. The fiscal year figure for 1980 was \$14,817,639.

4/ Passenger total excludes 2,277,502 zone fares.

5/ Bus service by HRT was terminated by a strike that began January 1. The City and County of Honolulu commenced service March 1.

Source: HRT, Ltd., data provided by Hawaii State Department of Regulatory Agencies, Public Utilities Division; MFL, Inc., data provided by the City and County of Honolulu, Department of Transportation Services.

Table 548.-- BUS FARE CHRONOLOGY, FOR OAHU: 1961 TO 1987

[In dollars. Service was provided by Honolulu Rapid Transit, Ltd., from August 31, 1901 until December 31, 1970, and by the City and County of Honolulu beginning March 1, 1971. For earlier data, see The State of Hawaii Data Book 1978, table 305, pp. 273-274]

Effective date	Cash fares ^{1/}		Tickets		Monthly passes	
	Adult	School	Adult	School	Adult	School
May 29, 1961 .....	.25	.15	5/1.00	5/.50	...	...
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 ^{3/} ..	.60	.25	...	...	15.00	7.50

^{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 (August 28, 1987).

Source: Honolulu Rapid Transit Co., Ltd., records; City and County of Honolulu, Department of Transportation Services, records.

Table 549.-- PASSENGER CAR RENTAL AND LEASING (SIC 7512) ESTABLISHMENTS WITH PAYROLL, BY COUNTIES: 1982 AND 1985

Year	State total	Hono- lulu	Hawaii	Kauai	Maui
1982	79	39	14	10	16
1985	88	37	19	10	22

Source: U.S. Bureau of the Census, County Business Patterns, Hawaii (annual).

Table 550.-- AIRPORTS AND HELIPORTS, BY CONTROL, BY ISLANDS:
DECEMBER 31, 1987

Island	Airports <u>1/</u>				Helicopters <u>2/</u>	
	State		Military	Semi-private	State: commercial	Semi-private
	Com-mercial	General aviation				
State total	7	7	6	2	1	9
Hawaii <u>3/</u>	2	2	1	-	-	4
Maui <u>4/</u>	1	1	-	1	-	2
Kahoolawe	-	-	-	-	-	-
Lanai	1	-	-	-	-	-
Molokai	1	1	-	-	-	-
Oahu	1	2	3	-	1	-
Kauai	1	1	1	1	-	3
Niihau	-	-	-	-	-	-
Kure Atoll	-	-	1	-	-	-

1/ Excludes private airports (not available).

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

3/ Waimea-Kohala Airport reclassified from commercial to general aviation during 1987.

4/ West Maui Airport opened during 1987.

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

Table 551.-- AIRCRAFT OPERATIONS FOR SPECIFIED AIRPORTS:
1976 TO 1986

[An aircraft operation is an aircraft arrival or departure]

Year	Honolulu International Airport	General Lyman Field, Hilo	Keahole Airport	Kahului Airport	Lihue Airport
1976	320,565	52,982	58,425	90,455	58,865
1977	329,926	60,377	83,616	100,655	65,636
1978	379,106	52,677	91,033	125,291	74,583
1979	412,739	51,703	92,235	127,477	71,033
1980	375,408	49,969	66,944	111,573	62,829
1981	339,359	53,274	57,488	102,760	59,404
1982	308,728	47,964	51,889	112,428	65,305
1983	333,038	54,470	66,581	124,288	71,739
1984	343,818	62,543	83,320	142,311	100,992
1985	357,511	61,225	93,879	157,231	131,755
1986	368,049	61,514	81,467	174,560	143,905

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

Table 552.-- AIRCRAFT OPERATIONS, BY TYPE OF AIRCRAFT, AT MAJOR STATE OWNED AIRPORTS: 1986

Airport	All movements	Air carrier	Air taxi	General aviation	Military
Honolulu International ..	368,049	191,890	69,918	78,985	27,256
Gen. Lyman	61,514	17,965	5,587	18,776	19,186
Kahului	174,560	78,820	56,361	30,338	9,041
Lihue	143,905	41,750	82,244	11,622	8,289
Keahole	81,467	30,265	20,679	17,360	13,163
Molokai	52,268	5,471	35,913	8,267	2,617

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

Table 553.-- CIVIL FLYING: 1982 TO 1985

Item	1982	1983	1984	1985
Aircraft facilities, Dec. 31	49	51	51	50
Airports	36	37	37	36
Heliports	13	14	14	14
Public aircraft facilities, Dec. 31 ...	18	14	14	16
Paved and lighted facilities, Dec. 31 .	11	12	12	12
Aircraft in operation, Dec.	28	32	38	49
Aloha Airlines, Inc. <u>1/</u>	8	8	9	8
Hawaiian Airlines, Inc. <u>1/</u>	12	13	18	21
Mid Pacific Airlines, Inc.	8	11	11	20
General aviation: <u>2/</u>				
Active civil aircraft, Dec.	426	381	463	348
Standard error	158	152	143	109
Hours flown (1,000)	86	97	206	137
Standard error (1,000)	34	34	95	56
Active personnel, Dec. 31:				
Pilots, except instructors	3,327	3,224	3,187	3,256
Flight instructors	291	260	303	267
Nonpilot airmen <u>3/</u>	3,118	3,099	3,191	2,498

1/ Large aircraft only.

2/ Aircraft based in Hawaii. Data based on samples with specified standard errors.

3/ Mechanics, parachute riggers, ground instructors, dispatchers, control tower operators, flight navigators, and flight engineers.

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

Table 554.-- HELICOPTER TOURS: 1977 TO 1987

Subject	1977	1982	1985	1987
Companies	9	14	25	36
Aircraft	15	26	48	71

Source: Hawaii Helicopter Operators Association, records.

Table 555.-- TRANSPACIFIC AND INTERISLAND AIR CARRIERS SERVING
HAWAII: 1984 TO 1987

[As of June 30. Includes both scheduled and nonscheduled services]

Service	1984 <u>1/</u>	1985 <u>1/</u>	1986 <u>1/</u>	1987 <u>2/</u>
All air carriers <u>3/</u>	31	32	32	33
Transpacific	29	30	30	27
Domestic	16	17	18	14
Foreign	13	13	12	13
Interisland	4	4	4	8
Passenger carriers	3	3	3	8
Cargo and mail only	1	1	1	-

1/ Excludes commuter lines and other air taxi service.

2/ Includes commuter lines and other air taxi service (5 interisland carriers).

3/ Unduplicated totals. Two carriers provided both transpacific and interisland service in all four years.

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

Table 556.-- AIR CARGO AND AIRMAIL: 1981 TO 1986

[In thousands of pounds]

Calendar year	Overseas air cargo		Overseas airmail		Interisland	
	Out-going	In-coming	Out-going	In-coming	Air cargo: incoming	Airmail: incoming
1981	151,513	101,301	22,388	19,887	132,559	14,131
1982	155,278	105,388	21,280	25,006	114,038	15,014
1983	174,582	136,354	23,620	28,288	109,828	16,024
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

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

Table 557.-- TRANSPACIFIC AND INTERISLAND AIR
PASSENGER MOVEMENTS: 1970 TO 1986

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

Year	Transpacific passengers			Inter- island passenger arrivals <u>1/</u>
	Arrivals	Departures	Through	
1970 ..	2,190,809	2,158,577	893,890	2,992,777
1971 ..	2,296,119	2,304,570	729,237	3,380,031
1972 ..	2,540,472	2,550,199	733,362	4,093,338
1973 ..	2,866,003	2,913,446	870,378	4,809,097
1974 ..	3,009,769	2,964,992	885,122	5,174,914
1975 ..	3,181,580	3,134,774	956,576	5,321,616
1976 ..	3,496,645	3,432,908	816,915	5,873,138
1977 ..	3,667,756	3,615,717	714,150	6,413,847
1978 ..	4,131,466	4,054,544	854,276	7,341,815
1979 ..	4,245,032	4,148,645	971,452	7,578,877
1980 ..	4,270,633	4,174,739	1,118,987	6,737,894
1981 ..	4,290,752	4,292,159	1,032,264	6,724,113
1982 ..	4,669,747	4,641,716	882,832	7,327,447
1983 ..	4,760,459	4,714,689	777,490	7,037,687
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

1/ Air taxi service was seriously underreported before 1977.

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

Table 558.-- CHARACTERISTICS OF INTRA-HAWAII CERTIFICATED ROUTE AIRLINES: 1984 AND 1985

[Data for Aloha Airlines, Inc., Hawaiian Airlines, Inc., and Mid Pacific Airlines, Inc.]

Subject	1984	1985
Number of airlines	3	3
Aircraft revenue departures ^{1/} (1,000)	119.9	121.5
Aircraft revenue miles ^{1/} (1,000)	15,143	17,490
Average airborne speed ^{1/} (miles per hour) ..	261	284
Average available seats per aircraft mile flown ^{1/}	110.9	138.7
Revenue passengers: ^{1/}		
Enplanements (1,000)	6,706	6,876
Load factor (percent)	57.4	59.4
Revenue ton-miles (1,000): ^{2/}		
Freight	8,516	5,802
Mail	2,949	1,847
Number of employees ^{3/}	1,810	2,731
Operating revenues ^{4/} (\$1,000)	223,250	251,521
Operating profit or loss ^{4/} (\$1,000)	3,782	2,919
Average passenger revenues per revenue passenger-mile ^{4/} (cents)	22.5	14.8
Average freight revenues per revenue ton-mile ^{4/} (dollars)	2.64	1.66

^{1/} Scheduled service only.

^{2/} Scheduled service only; excludes Mid Pacific.

^{3/} Weighted average for year; excludes Mid Pacific for 1984.

^{4/} Excludes Mid Pacific.

Source: U.S. Department of Transportation, Research and Special Programs Administration, Office of Aviation Information Management. Aloha Airlines, Inc. and Hawaiian Airlines, Inc. from Department of Transportation (DOT) Form 41. Mid Pacific Airlines, Inc. traffic data from DOT Form 298C.

Table 559.-- PASSENGERS, CARGO, AND MAIL, BY AIRPORT: 1986

Airport	Passengers <u>1/</u>		Cargo (tons)		Mail (tons)	
	Enplaned	Deplaned	Enplaned	Deplaned	Enplaned	Deplaned
OVERSEAS						
Total	6,083,508	6,041,078	100,128	92,447	11,421	11,863
Honolulu	5,490,360	5,384,490	98,053	87,748	11,248	11,862
General Lyman ...	10,610	10,304	517	137	103	-
Kahului	478,557	521,232	1,070	4,082	70	1
Keahole	73,410	85,686	455	417	-	-
Lihue	30,571	39,366	33	63	-	-
INTERISLAND						
Total	8,340,048	8,340,048	57,329	57,329	8,456	8,456
Honolulu	3,659,556	3,700,748	36,833	17,967	4,842	3,513
General Lyman ...	541,564	565,647	11,966	9,202	1,126	1,253
Upolu	438	436	-	-	-	-
Waimea-Kohala ...	9,585	9,649	4	13	-	-
Keahole	779,328	752,918	2,859	5,104	631	917
Kahului	1,876,065	1,853,476	3,046	16,423	1,187	1,836
Hana	8,769	8,469	-	-	-	-
Kaanapali <u>2/</u>	3,986	3,672	-	-	-	-
Molokai	164,262	165,913	219	250	50	8
Kalaupapa	3,568	3,497	1	40	-	-
Lanai	24,917	25,286	3	14	4	-
Lihue	1,244,608	1,226,544	2,398	8,315	616	929
Other airports <u>3/</u>	23,402	23,793	-	1	-	-

1/ Revenue and non-revenue, excluding Military Airlift Command (MAC). Also excludes overseas passengers in transit (841,241, all through Honolulu International Airport).

2/ Closed January 1986.

3/ Princeville and Waikoloa.

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

Table 560.-- AIRLINE PASSENGER ORIGINS AND DESTINATIONS: 1985

[Year ended December 31, 1985. Top city pairs originating or terminating passengers and revenue passenger-miles, ranked by passengers. Data limited to domestic operations in scheduled service. Figures are combined totals in both directions]

City pair in both directions 1/ (in order of passenger rank)	Inter-city distance (miles)	Passengers		Passenger-miles	
		U.S. rank	Number (1,000)	U.S. rank	Number (1,000)
Honolulu-Kahului	100	17	1,121	394	112,536
Honolulu-Los Angeles	2,568	24	966	3	2,487,530
Honolulu-Lihue	102	37	762	552	79,555
Honolulu-San Francisco	2,399	52	587	13	1,423,559
Honolulu-Kona	169	83	465	539	81,344
Honolulu-Chicago	4,251	129	309	30	791,997
Honolulu-New York	4,971	167	258	15	1,296,430
Honolulu-Seattle	2,678	294	155	65	443,976
Honolulu-Las Vegas	2,762	341	132	87	372,013
Honolulu-Boston	5,095	592	75	80	389,575
Honolulu-Washington	4,828	599	74	91	363,517

1/ Includes all cities in Hawaii included in top 100 U.S. city pairs, as ranked either by number of passengers or number of passenger-miles.

Source: U.S. Department of Transportation, Research and Special Programs Administration, records.

Table 561.-- REGULAR ONE-WAY FARES AND SCHEDULED FLIGHT TIMES FOR FLIGHTS
BY UNITED AIRLINES BETWEEN SAN FRANCISCO AND HONOLULU: 1980 TO 1987

[Updated to September 23, 1987]

Effective date of change in fare	Regular one-way fares, including taxes (dollars)			Flight time ^{1/} (hours, min.)
	First class	Coach, weekend	Coach weekday	
1980: Jan. 1	302.12	209.08	199.08	5:02
June 1	319.13	221.09	211.08	5:02
Aug. 1	351.14	243.10	233.09	5:02
Oct. 1	365.11	252.08	252.08	5:02
1981: Jan. 20 ...	384.12	265.08	265.08	5:02
Mar. 31 ...	415.12	286.09	286.09	5:02
June 17 ...	425.13	296.09	296.09	5:02
Oct. 1	392.12	280.08	280.08	5:00
1982: Mar. 1	412.12	219.07	219.07	5:00
Apr. 1	412.12	310.09	310.09	5:00
June 1	412.12	328.10	328.10	5:00
Sept. 1 ...	415.16	331.13	331.13	5:00
1983: June 15 ...	415.16	353.14	353.14	5:00
1984: Sept.	415.00	353.14	353.14	5:00
Oct.	415.00	353.00	353.00	5:02
Dec.	454.00	364.00	364.00	5:02
1986: Nov. 14 ...	576.00	459.00	459.00	5:03
1987: Apr. 11 ...	588.00	469.00	469.00	5:00
June 5	598.00	479.00	479.00	5:00
June 30 ...	605.00	486.00	486.00	5:00
Aug. 7	613.00	494.00	494.00	5:00

^{1/} Average scheduled flight time eastbound and westbound, by B-747 or DC-10 aircraft. Flight time varies seasonally.

Source: United Airlines, records.

Table 562.-- REGULAR ONE-WAY FARES AND SCHEDULED FLIGHT TIMES FOR SPECIFIED INTERISLAND FLIGHTS BY HAWAIIAN AIRLINES, BY TYPE OF AIRCRAFT: 1982 TO 1987

[Updated to September 15, 1987]

Effective date of change in fare	Honolulu-Lihue		Honolulu-Kahului		Honolulu-Hilo	
	DC-9 <u>1/</u>	DASH-7	DC-9 <u>1/</u>	DASH-7	DC-9 <u>1/</u>	DASH-7
FARES <u>2/</u>						
1982: May 1	46.00	46.00	46.00	46.00	56.00	56.00
June 1	48.00	48.00	48.00	48.00	58.00	58.00
Aug. 1	53.00	53.00	53.00	53.00	63.00	63.00
Sept. 1	54.50	54.50	54.50	54.50	65.00	65.00
1983: Feb. 1	45.00	45.00	45.00	45.00	45.00	45.00
July 1	49.95	49.95	49.95	49.95	49.95	49.95
Oct. 30	49.95	29.95	49.95	29.95	49.95	29.95
Dec. 16	49.95	41.95	49.95	41.95	49.95	41.95
Dec. 22	49.95	33.95	49.95	33.95	49.95	33.95
1984: Jan. 20	49.95	41.95	49.95	41.95	49.95	41.95
May 28	49.95	43.95	49.95	43.95	49.95	43.95
Nov. 15	52.95	46.95	52.95	46.95	52.95	46.95
Dec. 16	52.95	37.95	52.95	37.95	52.95	37.95
1985: Jan. 7	52.95	34.95	52.95	34.95	52.95	34.95
Mar. 11	52.95	36.95	52.95	36.95	52.95	36.95
Apr. 28	52.95	38.95	52.95	38.95	52.95	38.95
July 1	44.95	37.95	44.95	37.95	44.95	37.95
Aug. 1	46.95	38.95	46.95	38.95	46.95	38.95
1987: Mar. 1	48.95	46.95	48.95	46.95	48.95	46.95
FLIGHT TIMES <u>3/</u>						
1982-1984	26	34	27	34	40	60
1985-1987	25	33	26	33	40	58

1/ DC-9-50 and DC-9-80 from May 1981 through 1985; DC-9-15, DC-9-50, and DC-9-80 thereafter.

2/ Total regular one-way fare, including taxes and other charges, in dollars.

3/ Average non-stop scheduled flight time eastbound and westbound, in minutes.

Source: Hawaiian Airlines, records.

Table 563.-- STATE COMMERCIAL HARBORS: 1987

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	446
Kawaihae	40	35	1,500	1,450	1,012	23	166
Maui:							
Kahului	35	35	2,400	2,050	3,010	124	586
Molokai:							
Kaunakakai	23	23	1,500	600	691	10	123
Oahu:							
Honolulu:							
Main	} 45	{ 40	3,300	1,520	} 28,007	} 1,779	} 7,596
Kapalama			3,400	1,000			
Barbers Point .	42	38	2,100	1,800	-	-	-
Kauai:							
Nawiliwili	40	35	1,950	1,540	1,216	66	247
Port Allen	35	35	1,500	1,200	1,200	35	32

Source: Hawaii State Department of Transportation, Harbors Division, unpublished data, December 16, 1987.

Table 564.-- UNDOCUMENTED STATE-REGISTERED VESSELS: DECEMBER 31, 1986

Subject	Number	Subject	Number
Certificates outstanding .	14,052	Type of vessel:	
Length:		Cabin motorboat	2,017
Under 16 feet	5,641	Open motorboat	5,119
16 to less than 20 feet	4,062	Runabout	2,811
20 to less than 40 feet	4,119	Sail/inboard	637
Over 40 feet	205	Sail/outboard	661
Dealers, manufacturers	25	Sail only	1,158
Median (feet)	17.4	Motor vessel over 65 feet .	5
		Other	1,644
Hull material:		Uses:	
Wood	1,767	Pleasure	12,032
Fiberglass	10,674	Commercial fishing	1,201
Metal	497	Charter fishing	19
Inflatable	826	Commercial passenger	204
Other	263	Other commercial	60
Propulsion:		Livery	202
Inboard	976	Dealer or manufacturer	65
Outboard	8,136	Youth group	29
Inboard/outboard	2,093	Government	176
Sail/inboard	609	Other	64
Sail/outboard	617	Island kept:	
Sail only	1,169	Hawaii	2,038
Other	427	Kauai	1,169
Type of storage:		Lanai	48
On water	2,613	Mauai	1,272
On land	11,439	Molokai	189
		Oahu	9,336

Source: Hawaii State Department of Transportation, Harbors Division, Report of Undocumented Vessel Registration (annual).

Table 565.-- DOCUMENTED AND NUMBERED VESSELS REGISTERED IN HAWAII:
1982 TO 1987

Category	1982	1983	1984	1985	1986	1987
Documented 1/	1,225	1,300	1,203	1,306	1,348	1,389
Numbered 2/.....	12,999	12,604	13,122	13,443	14,052	...

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. The data for 1982 and 1983 are Coast Guard estimates. All data as of June 30.

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. All data as of December 31.

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

Table 566.-- BOATING ACCIDENTS: 1984 TO 1986

Year	Number of accidents		Number of persons		Number of vessels involved	Amount of damage (\$1,000)
	Total	Fatal	Killed	Injured non-fatally		
1984	42	6	8	9	52	304.8
1985	41	2	5	10	50	417.3
1986	54	3	3	14	69	293.0

Source: U.S. Department of Transportation, Coast Guard, Boating Statistics (annual).

Table 567.-- VESSELS ARRIVING AT SPECIFIED HARBORS: 1985

[Excludes domestic fishing craft]

Harbor	Total inbound vessels	By type of vessel		
		Self propelled vessels		
		Passenger and dry cargo	Tanker	Towboat or tugboat
Hilo	748	64	1	274
Kawaihae	444	9	-	142
Kahului	1,085	58	5	388
Kaunakakai	685	-	-	293
Kalaupapa	5	-	-	1
Honolulu	8,604	4,472	34	1,743
Barbers Point	398	2	79	237
Nawiliwili	677	25	-	211
Port Allen	12	-	1	8
Harbor	By type of vessel -- con.		By draft	
	Non-self propelled vessels		18 feet and less	19 feet and more
	Dry cargo	Tanker		
Hilo	347	62	722	26
Kawaihae	287	6	431	13
Kahului	563	71	988	97
Kaunakakai	384	8	(1/)	(1/)
Kalaupapa	4	-	5	-
Honolulu	2,010	345	7,893	711
Barbers Point	35	45	319	79
Nawiliwili	409	32	670	7
Port Allen	2	1	(1/)	(1/)

1/ Not available. All vessels were 22 feet and less.

Source: U.S. Department of the Army, Corps of Engineers, Waterborne Commerce of the United States, Calendar Year 1985, Part 4 (1987), pp. 108-109.

Table 568.-- SHIP ARRIVALS AT THE PORT OF HONOLULU:
1976 TO 1986

[Years ended June 30]

Year	Overseas vessels		Interisland vessels	
	Number	Gross tonnage	Number	Gross tonnage
1976	1,386	11,700,000	2,733	2,064,320
1977	1,589	12,568,896	2,700	2,249,446
1978	1,651	12,676,469	1,981	1,947,893
1979	1,757	12,101,936	2,875	2,838,609
1980	1,963	10,483,989	2,338	2,572,778
1981	1,968	10,959,161	2,597	2,670,405
1982	1,943	9,604,985	2,496	2,598,632
1983	1,775	10,406,544	2,662	2,623,321
1984	1,686	10,397,905	2,660	3,649,085
1985	1,749	9,398,179	2,412	4,480,660
1986	1,825	9,450,373	2,697	4,913,219

Source: Hawaii State Department of Transportation, Harbors Division, unpublished data, November 10, 1986.

Table 569.-- OVERSEAS AND INTERISLAND PASSENGER ARRIVALS AND DEPARTURES, FOR HONOLULU HARBOR: 1982 TO 1987

[Fiscal years ended June 30]

Type of passenger	1982	1983	1984	1985	1986	1987
Overseas:						
In	7,150	9,559	9,492	5,337	6,537	8,681
Out	7,033	9,679	5,906	5,276	6,190	8,103
Interisland:						
In	26,553	35,529	58,571	72,665	84,943	71,049
Out	27,584	33,638	59,293	74,304	82,895	69,337

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

Table 570.-- TRANSPACIFIC AND INTERISLAND SURFACE REVENUE PASSENGERS:
1981 TO 1986

Year	Transpacific passengers <u>1/</u>			Inter-island passenger arrivals <u>2/</u>
	Disembarking	Embarking	Intransit	
1981	614	510	9,847	33,108
1982	542	461	6,785	39,057
1983	741	740	8,419	56,073
1984	726	361	6,692	78,443
1985	1,360	1,479	3,249	69,864
1986	828	370	6,189	80,127

1/ Data refer to years ended June 30 through 1983 and calendar years thereafter. Data limited to the Port of Honolulu.

2/ Calendar year statistics. Data exclude interisland travel by transpacific cruise ships.

Source: TheoDavies Marine Agencies, records, and American Hawaii Cruises, records.

Table 571.-- OVERSEAS AND INTERISLAND SHIPPING: 1979 TO 1984

[In short tons]

Calendar year	Overseas cargo			Interisland cargo		
	Total	In	Out	Total	In	Out
1979 ...	11,823,885	9,255,026	2,568,859	5,631,539	2,917,854	2,713,685
1980 ...	11,666,648	9,395,453	2,271,195	5,745,346	2,965,962	2,779,384
1981 ...	11,683,330	9,389,458	2,293,872	7,230,395	3,691,297	3,539,098
1982 ...	10,503,229	8,168,339	2,334,890	7,204,456	3,697,785	3,506,671
1983 ...	11,853,502	9,371,317	2,482,185	8,337,860	4,285,416	4,052,444
1984 ...	11,506,043	8,972,870	2,533,173	8,973,092	4,530,456	4,442,636

Source: Hawaii State Department of Transportation, Harbors Division, unpublished data, November 10, 1986.

Table 572.-- FREIGHT AND PASSENGER TRAFFIC FOR SPECIFIED HARBORS:
1975 TO 1985

Subject and year	Hilo	Kawaihae	Kahului	Hono- lulu <u>1/</u>	Barbers Point	Nawiliwili
FREIGHT TRAFFIC <u>2/</u> (SHORT TONS)						
1975	1,053,879	279,687	1,109,485	7,935,183	5,185,659	532,978
1976	995,544	263,562	1,276,424	7,189,538	6,593,497	460,900
1977	1,013,430	318,197	1,301,095	6,881,556	6,630,994	557,798
1978	1,272,734	502,451	1,922,112	7,750,537	6,306,580	765,877
1979	1,220,438	447,521	1,473,307	7,463,663	6,154,541	757,899
1980	1,102,019	518,116	1,441,524	7,646,270	5,725,722	785,212
1981	1,441,590	432,704	1,551,944	8,269,671	5,589,741	906,595
1982	1,381,996	441,130	1,483,955	7,593,097	5,707,386	808,153
1983	1,522,442	441,458	1,842,568	8,039,850	7,051,230	1,008,699
1984	1,570,528	545,508	1,889,204	8,469,971	6,564,687	944,770
1985	1,318,518	526,639	1,516,509	7,986,131	6,751,709	933,477
PASSENGERS <u>3/</u>						
1975	13,613	-	11,296	1,073,125	-	13,934
1976	1,313	-	1,307	1,390,524	-	40,674
1977	8,381	-	8,390	303,291	3,504	70,063
1978	3,207	-	3,879	183,721	4,441	6,384
1979	-	-	-	311,899	-	-
1980	-	-	-	547,242	-	-
1981	-	-	-	521,624	-	-
1982	-	-	-	465,466	-	-
1983	-	-	-	688,689	-	-
1984	-	-	-	741,922	-	-
1985	-	-	-	1,102,398	-	-

1/ For discussion of the accuracy of these data, see the Data Book 1982, table 441.

2/ Excludes cargo carried by Army and Navy vessels and cargo in transit.

3/ Total arrivals and departures for transpacific, interisland, and local travel.

Source: U.S. Department of the Army, Corps of Engineers, Waterborne Commerce of the United States, Calendar Year 1985, Part 4 (1987), pp. 31-36.

Table 573.-- FREIGHT TRAFFIC, BY COMMODITIES, FOR SPECIFIED HARBORS: 1985

[In short tons. Commodities under 150,000 tons not shown separately]

Harbor and commodity	Total <u>1/</u>	Foreign		Interstate		Interisland	
		Im-ports	Ex-ports	Re-ceipts	Ship-ments	Re-ceipts	Ship-ments
Hilo	1,318,518	44,993	15,016	19,012	178,230	682,401	378,866
Sugar	178,309	-	-	-	178,230	79	-
Fabricated metal products	328,461	-	-	-	-	158,374	170,087
Kawaihae	526,639	-	-	-	154,988	225,575	146,076
Sugar	154,988	-	-	-	154,988	-	-
Kahului	1,516,509	50,579	17,217	1,658	201,416	812,332	433,307
Sugar	203,106	-	4	-	201,416	-	1,686
Fabricated metal products	296,796	871	-	-	-	185,407	110,518
Motor vehicles, parts, equipment	166,603	1,148	-	-	-	114,837	50,618
Barbers Point	6,751,709	2,900,638	689,350	2,977,134	54,025	14,910	115,652
Crude petroleum	4,931,582	2,695,255	-	2,236,327	-	-	-
Residual fuel oil	1,507,685	130,281	641,601	645,837	37,888	14,910	37,168
Honolulu	7,986,133	721,505	130,162	2,364,983	871,978	1,464,204	2,313,332
Fresh fruits	261,901	1,272	227	15,008	78,420	165,409	1,565
Crude petroleum	520,650	260,498	-	260,152	-	-	-
Vegetables and prepara- tions, canned	180,006	3,366	137	86,167	5,850	60,338	24,148
Prep. fruit, veg. juice .	351,436	2,808	4,386	6,390	227,266	109,806	780
Sugar	160,982	-	613	871	157,772	1,664	62
Molasses	370,180	-	-	-	212,942	157,238	-
Alcoholic beverages	160,390	5,740	746	121,924	432	45	31,503
Misc. food products	252,909	4,791	2,948	31,999	3,292	107,695	102,184
Lumber	192,437	1,154	1,520	169,457	1,121	1,883	17,302
Gasoline	229,445	23,856	-	-	9,566	-	196,023

Continued on next page.

Table 573.-- FREIGHT TRAFFIC, BY COMMODITIES, FOR SPECIFIED HARBORS: 1985 - Con.

[In short tons. Commodities under 150,000 tons not shown separately]

Harbor and commodity	Total <u>1/</u>	Foreign		Interstate		Interisland	
		Im-ports	Ex-ports	Re-ceipts	Ship-ments	Re-ceipts	Ship-ments
Honolulu - Con.							
Residual fuel oil	192,889	-	-	-	-	28,508	44,412
Fabricated metal products	1,070,231	6,359	455	54,669	1,777	450,780	556,191
Motor vehicles, parts, equipment	631,053	49,521	185	76,511	31,078	118,328	355,430
Nawiliwili	933,477	10,016	2	8,176	218,453	444,579	252,251
Sugar	218,458	-	-	-	218,453	5	-
Fabricated metal products	243,702	-	-	-	-	125,697	118,005
Hana	-	-	-	-	-	-	-
Pearl	(NA)	(NA)	(NA)	-	17,490	1,444	41,976
Kalaupapa	1,590	-	-	-	-	1,263	327
Kaunakakai	154,325	-	-	-	-	97,149	57,176
Port Allen	18,580	(NA)	(NA)	-	-	11,454	-
Kaumalapau	(NA)	(NA)	(NA)	-	-	80,802	144,698

NA Not available.

1/ Includes internal receipts and local traffic, not separately shown. Internal receipts amounted to 49,753 tons, all residual fuel oil at Honolulu. Local traffic amounted to 70,216 tons, also all residual fuel oil at Honolulu.

Source: U.S. Department of the Army, Corps of Engineers, Waterborne Commerce of the United States, Calendar Year 1985, Part 4 (May 1987), pp. 31-38, and unpublished printouts.