

SECTION 17

TRANSPORTATION

This section presents statistics relating to public roads, motor vehicles, local public transit, civil aviation, and water traffic.

Most local travel in Hawaii is by private automobile. Motor vehicle registration increased from 72,000 in 1940 to 231,000 in 1960 and 404,000 in 1970. Vehicle miles rose during the same period from 716 million to 3.4 billion. By 1971, 503,500 licensed drivers had access to over 3,500 miles of streets and highways throughout the State. There was a corresponding decline in the use of local bus service: revenue passengers of the Honolulu Rapid Transit Company dropped from 93 million in 1944 to 23.7 million in 1970.

All scheduled interisland travel is now by air. As recently as 1941, interisland steamers carried 163,000 passengers, while the single airline then operating carried 49,000. In 1970, two scheduled airlines and a number of air taxis reported 3.0 million interisland passengers, triple their 1960 total.

Similar growth is evident in transpacific travel. Although surface passengers dropped from 95,000 in 1940 to 27,000 in 1970, air passengers increased during the same 29-year span from 639 to 5.2 million. Between 1936 and 1971, sharp declines occurred in both scheduled flight time between California and Hawaii (from 20 to 5 hours) and minimum round-trip fare (from \$712 to \$177). Overseas cargo reported received in the state now amounts to 27,000 tons by air and 7.8 million tons by ship.

Table 114.—MOTOR VEHICLE REGISTRATION, FUEL CONSUMPTION, AND VEHICLE MILES: 1900 TO 1970

Year and county	Motor vehicle registration ¹			Fuel consumption per vehicle (gal.)	Vehicle miles	
	Total	Passenger cars	Other vehicles ²		Total (millions)	Per vehicle
1900	4	—	—	—	—	—
1910	861	—	—	—	—	—
1922	15,336	—	—	—	—	—
1932	48,717	39,495	9,222	488	1,333.0	6,835
1940	71,596	58,541	13,055	714	715.6	9,995
1950	137,917	110,622	27,295	642	1,240.3	8,993
1960	230,791	199,829	30,962	616	1,989.6	8,621
1961	244,898	212,650	32,248	602	2,063.7	8,427
1962	257,215	225,086	32,129	595	2,142.9	8,331
1963	270,176	237,422	32,754	580	2,192.3	8,114
1964	288,452	254,249	34,203	574	2,316.7	8,031
1965	309,331	273,559	35,772	566	2,449.8	7,920
1966	323,843	286,836	37,007	566	2,565.6	7,922
1967	335,326	297,766	37,560	580	2,721.0	8,114
1968	353,888	315,024	38,864	592	2,934.3	8,292
1969	373,541	332,213	41,328	605	3,162.8	8,467
1970	404,463	358,255	46,208	602	3,408.7	8,428
COUNTIES: 1970						
Honolulu	318,553	287,656	30,897	598	2,668.7	8,377
Hawaii	39,548	32,059	7,489	640	354.6	8,965
Maui	28,230	23,545	4,685	590	233.3	8,263
Kauai	18,132	14,995	3,137	600	152.3	8,398

¹Taxable and non-taxable, exclusive of scooters and motorcycles (10,834 in 1970), trailers and semi-trailers (11,580), and military vehicles (not reported).

²Includes trucks (45,089 in 1970), buses (1,119).

Source: Hawaii State Department of Transportation, Highways, Division, records; Robert C. Schmitt, "Automobile Ownership in Hawaii Before 1931: Dates and Data," *Hawaii Historical Review*, Vol. II, No. 10, January 1968, pp. 426-432.

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. Bureau of Public Roads, Civil Aeronautics Board, Federal Aviation Administration, Army Corps of Engineers, Hawaii State Public Utilities Commission, and individual transportation companies. Similar statistics for other areas are reported in *Statistical Abstract of the United States: 1970*, Sections 21 and 22.

Table 115.—STREET AND HIGHWAY MILEAGE, 1970, AND DRIVERS LICENSES IN FORCE, 1971, BY ISLAND

Island	Mileage in public streets and highways, December 31, 1970	Drivers licenses in force (unduplicated), January 23, 1971
All islands	3,527.43	503,542
Hawaii	1,361.33	35,662
Maui	517.32	} 29,810
Lanai	62.47	
Molokai	89.03	
Oahu	1,192.25	420,675
Kauai	305.03	17,395

Source: Hawaii State Department of Transportation, Highways Division, records; City and County of Honolulu, Department of Information Systems, records.

Table 116.—MAJOR TRAFFIC ACCIDENTS, PERSONS INJURED, AND TRAFFIC DEATHS: 1920 TO 1970

Year	Major traffic accidents ¹	Persons injured in traffic accidents	Traffic deaths ²
1920	(NA)	(NA)	41
1930	(NA)	(NA)	86
1940	(NA)	(NA)	63
1950	6,599	2,112	61
1960	7,254	4,754	96
1965	9,495	7,493	99
1966	10,225	8,051	116
1967	11,529	8,707	138
1968	13,989	10,082	147
1969	16,174	10,603	133
1970	18,172	11,744	152

NA Not available.

¹Traffic accidents with damage of \$100 or more, or causing injury or death.

²Data for 1920, 1930 and 1940 include non-traffic motor vehicle deaths (such as those occurring on military bases or private property). Prior to 1966, the highest annual number of traffic deaths was 107 in 1945.

Source: Hawaii State Department of Transportation, Highways Division, *Major Traffic Accidents, Summary and Analysis* (annual) and records; Hawaii State Department of Health, records.

Table 117.—LICENSED BICYCLES, PRIVATE AIRCRAFT, AND UNDOCUMENTED STATE-REGISTERED VESSELS: 1970

Type of conveyance	Number
Licensed bicycles (Oahu only), 1970	28,749
Private airplanes, 1970	300
Active	180-190
Undocumented State-registered vessels, Dec. 31, 1970	8,042
Cabin motorboat	842
Open motorboat	3,301
Runabout	2,433
Sail/inboard	199
Sail/outboard	325
Sail only	907
Other	35
Under 16 feet	4,051
16 to less than 26 feet	3,333
26 to less than 40 feet	561
40 feet and over	97
Pleasure	7,439
Commercial fishing	319
Other uses	284
Oahu	6,049
Other islands	1,993
Moored on water	2,040
Stored on land	6,002

Source: Honolulu Police Department, Division of Licenses; Hawaii State Department of Transportation, Airports Division; and Harbors Division.

Table 118.—REVENUE PASSENGERS, BY MEANS OF TRANSPORTATION: 1860 TO 1970

Year	Bus or street car (Honolulu only) ¹	Steam railway ²		Ship		Airline	
		All railroads	Oahu Rwy. & Land Co.	Interisland ³	Transpacific ⁴	Interisland ⁵	Transpacific ⁶
1860	—	—	—	(NA)	1,348	—	—
1870	—	—	—	(NA)	2,495	—	—
1880	—	(NA)	—	(NA)	7,521	—	—
1890	(NA)	(NA)	36,352	(NA)	11,010	—	—
1900 ⁷	(NA)	(NA)	278,872	(NA)	41,788	—	—
1910 ⁸	8,979,874	694,793	617,719	62,236	29,178	—	—
1920 ⁹	16,926,617	2,760,585	2,033,756	95,237	30,170	—	—
1930	14,505,045	591,069	322,685	143,806	70,000	10,356	—
1940	23,390,745	354,159	331,587	158,328	94,582	28,624	639
1950 ⁹	41,787,045	—	—	—	35,643	438,938	118,738
1960	29,083,700	—	—	—	80,903	955,610	785,589
1961	26,116,687	—	—	—	68,102	939,336	926,072
1962	24,530,398	—	—	—	66,925	979,756	1,084,076
1963	22,922,296	—	—	—	62,760	1,144,265	1,295,740
1964	22,945,470	—	—	—	56,177	1,340,996	1,516,259
1965	23,190,704	—	—	—	53,990	1,538,392	1,794,255
1966	23,694,206	—	—	—	54,511	1,754,970	2,125,479
1967 ⁹	18,301,341	—	—	—	52,876	2,117,557	2,735,151
1968	23,514,205	—	—	—	49,099	2,347,949	3,171,259
1969	24,079,233	—	—	—	45,428	2,724,622	3,806,147
1970	23,693,547	114,000	—	—	26,966	2,992,777	5,243,276

NA Not available.

¹Calendar year data for the Honolulu Rapid Transit Co., Ltd. Street railway service, using mule cars, was initiated in Honolulu in 1888. Since 1903, HRT (which commenced operations in 1901) has provided the only large scale public transit service in Honolulu.

²Calendar years, except for the year ended June 30, 1910. The Oahu Railway and Land Company, the only passenger railroad on Oahu, provided passenger service from 1890 to 1947. Other companies operated on the Neighbor Islands, offering passenger service from 1879 to 1946, and from May 1970 forward. Total track mileage in the State was 209 in 1910, 325 in 1920, 374 in 1930, 323 in 1940, 59 in 1950, and 6 in 1970.

³Years ended June 30, 1910 to 1930, and December 31, 1940. Except for limited accommodations aboard freighters, scheduled interisland passenger service was discontinued in January 1949.

⁴Calendar years 1860-1899 and 1930; years ended June 30, 1911, 1920, and 1940-1970. This series shows combined totals for arrivals and departures, excluding through passengers (1,134 in 1870, 1,903 in 1880, 3,965 in 1890, and 44,621 in 1969; not available for other years). There were 13,267 arrivals and 13,699 departures in 1970.

⁵Calendar years. Service began in 1929. Includes non-revenue passengers for 1970.

⁶Calendar years. Includes Hilo as well as Honolulu. Data for 1970 include non-revenue passengers. This series shows combined totals for arrivals, departures, and through passengers. In 1970 there were 2,190,809 arrivals, 2,158,577 departures, and 893,890 through passengers. Scheduled service started in Honolulu in 1936 and in Hilo in 1967.

⁷The transpacific ship total refers to calendar 1899.

⁸The transpacific ship total refers to the year ended June 30, 1911.

⁹Passenger volumes affected by major strikes.

Source: Hawaii State Department of Planning and Economic Development, *Passenger Statistics of Hawaii* (Statistical Report 75, August 25, 1970), as updated.

Table 119.—AIR FARES AND FLIGHT TIMES FOR SPECIFIED INTERISLAND AND TRANSPACIFIC FLIGHTS: 1930 TO 1971

Year (as of Jan. 1)	Honolulu-Hilo by Hawaiian Airlines				Honolulu-San Francisco by Pan American World Airways			
	Aircraft	1-way fare ¹	Round trip fare ¹	Time ²	Aircraft	1-way fare ¹	Round trip fare ¹	Time ²
1930	S-38	30.00	60.00	1:40	—	—	—	—
1935	S-38	30.00	45.00	1:40	—	—	—	—
1940	S-43	23.00	41.40	1:25	B-314	278.00	556.00	17:30
1945	DC-3	20.70	37.26	1:20	B-314	319.70	575.00	17:30
1950	DC-3	15.53	31.05	1:20	B-377	184.00	331.20	9:25
1955	CV-340	16.50	33.00	1:02	B-377	137.50	275.00	9:25
1960	CV-340	19.36	38.72	1:02	B-707	133.08	266.16	4:55
1965	Viscount	20.10	40.19	0:53	B-707	100.03	200.06	4:55
1970	DC-9	25.20	50.40	0:42	B-707	85.03	170.05	4:55
1971	DC-9	26.00	52.00	0:42	B-747	88.28	176.56	4:55

¹Least expensive regular fare, including tax, in dollars.

²Average scheduled flight time in hours and minutes.

Source: Hawaii State Department of Planning and Economic Development, *Chronology of Transpacific and Interisland Airline Fares and Flight Times, 1929-1971* (memorandum, February 19, 1971).

Table 120—AIR CARGO AND AIR MAIL: 1950 TO 1970

Year	Overseas air cargo (1,000 lb.) ¹			Overseas air mail (1,000 lb.) ¹			Interisland (1,000 lb.) ²	
	Outgoing	Incoming	Through	Outgoing	Incoming	Through	Air cargo	Air mail
1950 ³	1,144	1,935	1,389	1,214	1,230	1,121	17,126	863
1960 ⁴	8,240	10,878	3,837	7,955	8,702	(NA)	25,803	1,139
1961	10,902	14,028	6,170	12,992	15,767	1,060	26,207	1,279
1962	16,497	20,705	8,099	15,202	16,954	962	29,427	1,429
1963	14,840	17,082	4,996	15,388	17,193	723	32,634	1,698
1964	19,611	22,826	9,218	14,824	16,812	46	40,298	2,062
1965	31,732	40,985	11,948	26,208	27,700	230	39,565	4,897
1966	43,490	57,907	13,877	64,356	67,036	128	38,767	11,736
1967	65,156	80,198	11,515	117,969	121,386	78	41,978	12,039
1968	66,960	83,986	21,075	117,929	121,096	2,534	38,215	12,236
1969	42,391	77,760	23,666	80,405	81,051	1,335	44,150	12,534
1970	37,553	54,285	(NA)	21,362	18,109	(NA)	52,139	14,141

NA Not available.

¹For Honolulu International Airport and (beginning in 1967) General Lyman Field, Hilo. The decline after 1968 may be attributable to incomplete reporting.

²For all airports under state jurisdiction. The air mail data reflect the airlifting of all interisland third- and fourth-class mail beginning in October 1965.

³Year ended June 30.

⁴Year ended June 30 for overseas air mail and December 31 for all other series.

Source: Hawaii Aeronautics Commission, *Annual Report* for 1950 and 1960, and Hawaii State Department of Transportation, Airports Division, annual tabular releases.

Table 121.—SHIP ARRIVALS AND GROSS TONNAGE, 1824 TO 1969, AND CARGO TONS, 1910 TO 1969

Calendar year	Overseas vessel arrivals ¹		Calendar year	Overseas vessel arrivals ¹	
	Number	Tonnage (1,000)		Number	Tonnage (1,000)
1824	105	(NA)	1860 ²	286	39
1830	133	(NA)	1870	239	118
1840	78	(NA)	1880	217	138
1850	467	137	1890	252	213

Year ended June 30	Overseas vessel arrivals ¹		Interisland vessel arrivals ¹		Overseas cargo (1,000 tons) ³		Interisland cargo (1,000 tons) ³	
	Number	Gross tonnage (1,000)	Number	Gross tonnage (1,000)	In	Out	In	Out
1901	559	853	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1910	373	1,239	(NA)	(NA)	(NA)	(NA)	414	414
1920	839	4,530	(NA)	(NA)	(NA)	(NA)	393	393
1930	903	7,607	1,365	1,638	(NA)	(NA)	355	355
1940	872	7,236	2,622	1,917	(NA)	(NA)	235	235
1950	861	7,281	2,210	1,059	2,520	2,046	617	589
1960	1,411	12,305	2,272	1,061	3,773	2,095	974	976
1961	1,518	12,699	2,460	1,143	4,830	2,496	1,170	1,173
1962	1,818	13,094	2,522	1,150	4,988	2,678	1,224	1,232
1963	1,799	12,487	2,550	1,119	4,566	2,603	1,240	1,219
1964	2,064	13,103	2,446	1,275	5,185	2,732	1,334	1,372
1965	1,948	12,992	2,551	1,125	5,840	2,922	1,427	1,354
1966	1,941	14,654	2,877	1,220	6,165	3,031	1,600	1,511
1967	1,684	13,821	2,652	1,422	6,830	3,051	2,424	1,990
1968	1,774	15,277	2,474	1,414	7,818	3,105	1,651	1,505
1969	1,903	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

¹Port of Honolulu only. Data before 1901 exclude national vessels; such as warships and government survey vessels.

²Tonnage total excludes 179 whaling vessels, included in the number of arrivals.

³State and private piers on all Islands. Data from 1910-1940 are limited to freight carried by Interisland Steam Navigation Co.

Source: *The Friend*, May 1, 1844, p. 49; *The Polynesian*, February 1, 1851; Collector General of Customs, *Custom House Statistics* for 1860, 1870, and 1880, and *Report* for 1890; *Report of the Governor of Hawaii* for 1902 and 1910; Territorial Planning Board, *First Progress Report* (1939), Plate 142; Board of Harbor Commissioners, *Annual Report*, 1920-1961; Hawaii State Department of Transportation, Harbors Division, *Shipping Information*, 1962-1968 and records; Anson Chong, *Economic Development of Hawaii and the Growth of Tourism* (1963), p. 74.

Table 122.—FREIGHT TRAFFIC FOR SPECIFIED HARBORS: 1968

(Short tons)

Harbor and commodity ¹	Total	Foreign		Coastwise		Internal receipts
		Imports	Exports	Receipts	Shipments	
Hilo	991,111	206	3,476	479,239	507,860	330
Sugar	290,558	—	—	1,665	288,893	—
Kawaihae	342,614	—	—	68,425	274,177	12
Kahului	957,198	21,835	16,126	377,486	541,593	158
Sugar	269,451	—	—	1,736	267,715	—
Kaunakakai	322,766	—	—	93,397	229,375	4
Barbers Point	2,472,532	1,717,360	—	742,467	12,705	—
Crude petroleum	1,794,056	1,717,360	—	76,696	—	—
Distillate fuel oil	277,794	—	—	277,794	—	—
Residual fuel oil	381,114	—	—	378,783	2,331	—
Honolulu ²	6,828,855	1,313,109	150,810	3,207,751	2,156,053	92
Fresh fruits, tree nuts	482,246	709	1,086	458,365	22,086	—
Prep. fruit, veg. juice	586,705	1,300	41,011	112,183	432,211	—
Gasoline	334,375	—	8,939	160,976	164,460	—
Kerosene	1,318,850	1,008,027	12,740	166,044	132,039	—
Distillate fuel oil	371,914	14	39,010	272,266	60,624	—
Nawiliwili	561,132	8,372	—	183,759	368,982	19
Sugar	268,616	—	—	1,080	267,536	—
Port Allen	129,189	(NA)	(NA)	(NA)	(NA)	(NA)
Kaumalapau	274,061	(NA)	(NA)	(NA)	(NA)	(NA)
Pearl Harbor	1,142,898	(NA)	(NA)	(NA)	(NA)	(NA)
Residual fuel oil	488,081	(NA)	(NA)	(NA)	(NA)	(NA)
Other Honolulu area ports	532,780	(NA)	(NA)	(NA)	(NA)	(NA)
Sand, gravel, crushed rock	518,350	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

¹Commodities under 250,000 short tons not shown separately.

²Total includes 1,040 short tons of local traffic.

Source: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 1968, Part 4* (1970), pp. 54-71.