

# 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 374,000 in 1969. Vehicle miles rose during the same period from 716 million to 3.2 billion. By the end of 1968, 375,000 licensed drivers had access to 3,442 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 42 million in 1950 to 24 million in 1969.

All scheduled interisland travel is now by air. As recently as 1940, interisland steamers carried 159,000 passengers, while the single airline then operating carried 24,000. In 1969, two scheduled airlines and a number of air taxis reported 2.7 million interisland passengers, triple their 1960 total.

Similar growth is evident in transpacific travel. Although surface passengers dropped from 95,000 in 1940 to 45,000 in 1969, air passengers increased during the same 29-year span from 639 to 3.8 million. Between 1936 and 1969, sharp declines occurred in both scheduled flight time between California and Hawaii (from 20 to 5 hours) and minimum roundtrip fare (from \$712 to \$170). Overseas cargo received in the State now amounts to 39,000 tons by air and 7.8 million tons by ship.

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: 1969*, Sections 21 and 22.

Table 102. -- MOTOR VEHICLE REGISTRATION, FUEL CONSUMPTION, AND VEHICLE MILES:  
1900 TO 1969

Year and county	Motor vehicle registration <sup>1</sup>			Fuel consumption per vehicle (gal.)	Vehicle miles	
	Total	Passenger cars	Other vehicles <sup>2</sup>		Total (millions)	Per vehicle
1900 .....	4	--	--	--	--	--
1910 .....	861	--	--	--	--	--
1922 .....	15,336	--	--	--	--	--
1932 .....	48,717	39,495	9,222	488	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
COUNTIES: 1969						
Honolulu .....	294,089	266,823	27,266	606	2,493.2	8,478
Hawaii .....	35,331	28,663	6,668	627	310.2	8,780
Maui .....	27,222	22,642	4,580	575	219.2	8,052
Kauai .....	16,899	14,085	2,814	593	140.2	8,296

1. Taxable and non-taxable, exclusive of scooters and motorcycles (8,579 in 1969), trailers and semi-trailers (9,254), and military vehicles (not reported).

2. Trucks (38,724 in 1969), buses (887), and tow cars, truck tractors, tractors tow trucks, patrols, ambulances, hearses, sweepers, hilifts, etc., (1,717).

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.

Table 103. -- HIGHWAY MILEAGE, DRIVERS LICENSES, AND TRAFFIC ACCIDENTS,  
BY ISLAND: 1968

Island	Highway mileage, Dec. 31	Drivers licenses in force, Dec. 31	Traffic accidents <sup>1</sup>		
			Accidents	Persons injured	Deaths <sup>2</sup>
All islands . . . . .	3,442.4	374,616	13,989	10,082	147
Hawaii . . . . .	1,354.7	28,713	1,161	868	18
Maui . . . . .	511.7				
Lanai . . . . .	49.7	19,289	682	596	9
Molokai . . . . .	81.6				
Oahu . . . . .	1,140.8	313,845	11,741	8,349	109
Kauai . . . . .	303.9	12,769	405	269	11

1. With damage of \$100 or more, or causing injury or death.

2. Five traffic accidents have caused five or more deaths; seven-fatality accidents on Oahu in 1944 and 1969, and five-fatality accidents on Hawaii in 1945, Kauai in 1959, and Maui in 1967. See Robert C. Schmitt, "Catastrophic Mortality in Hawaii," The Hawaiian Journal of History, Vol. 3 (1969), p. 78.

Source: Hawaii State Department of Transportation, Highways Division, Major Traffic Accidents, Summary and Analysis, State of Hawaii, 1968, pp. 4-5, and records of highway mileage and drivers licenses.

Table 104. -- REVENUE PASSENGERS, BY MEANS OF TRANSPORTATION: 1860 TO 1969

Year	Bus or street car (Honolulu only) <sup>1</sup>	Steam railway <sup>2</sup>		Ship		Airline	
		All railroads	Oahu Rwy. and Land Co.	Inter-island <sup>3</sup>	Trans-pacific <sup>4</sup>	Inter-island <sup>5</sup>	Trans-pacific <sup>6</sup>
1860 .....	--	--	--	(NA)	1,348	--	--
1870 .....	--	--	--	(NA)	2,495	--	--
1880 .....	--	(NA)	--	(NA)	7,521	--	--
1890 .....	(NA)	(NA)	36,352	(NA)	11,010	--	--
1900 <sup>7</sup> .....	(NA)	(NA)	278,872	(NA)	41,788	--	--
1910 <sup>8</sup> .....	8,979,874	694,793	617,719	62,236	29,178	--	--
1920 <sup>9</sup> .....	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 <sup>9</sup> .....	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 <sup>9</sup> .....	18,301,341	--	--	--	52,876	2,117,557	2,735,151
1968 .....	23,514,205	--	--	--	49,099	2,358,964	3,171,259
1969 .....	24,079,233	--	--	--	45,428	2,724,622	3,806,147

NA Not available.

1. Calendar 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.

2. Calendar years through 1930; unspecified for 1940. 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. Total track mileage in the State was 209 in 1910, 325 in 1920, 374 in 1930, 323 in 1940, 59 in 1950, and 10 in 1969.

3. Years 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.

4. Calendar years 1860-1899 and 1930; years ended June 30, 1911, 1920, and 1940-1969. 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 24,089 arrivals, 21,339 departures, and 44,621 through passengers in 1969.

5. Calendar years. Service began in 1929.

6. Calendar years. Includes Hilo (35,173 in 1967, 321,613 in 1968, and 341,629 in 1969) as well as Honolulu. This series shows combined totals for arrivals, departures, and through passengers. In 1969 there were 1,766,720 arrivals, 1,769,087 departures, and 270,340 through passengers. Scheduled service started in Honolulu in 1936 and in Hilo in 1967.

7. The transpacific ship total refers to calendar 1899.

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

9. Passenger volumes affected by major strikes.

Source: Hawaii State Department of Planning and Economic Development, Passenger Statistics of Hawaii (in preparation).

Table 105. -- AIR FARES AND FLIGHT TIMES, HONOLULU TO HILO AND SAN FRANCISCO:  
1929 TO 1969

Date fare was initiated	Honolulu-Hilo <sup>1</sup>		Date fare was initiated	Honolulu-San Francisco <sup>2</sup>	
	Regular round trip fare <sup>3</sup> (dollars)	Scheduled flight time (hours)		Lowest round trip fare <sup>3</sup> (dollars)	Scheduled flight time (hours)
1929, Nov. 11 .....	60.00	1:40	1936, Oct. 12 .....	712.00	20:00
1933, Apr. 17 .....	45.00	1:40	1939, Mar. 8 .....	556.00	17:30
1939, July 31 .....	41.40	1:25	1940, Aug. 1 .....	500.00	17:30
1941, Jan. 11 .....	37.80	1:25	1946, Apr. 1 .....	350.00	11:45
1943, Feb. 1 .....	32.40	1:20	1947, May 1 .....	243.00	11:45
1945, Oct. 15 .....	30.00	1:20	1947, Nov. ....	270.00	11:45
1946, July 10 .....	27.00	1:20	1949, Mar. ....	288.00	9:25
1948, Feb. 15 .....	30.00	1:20	1952, Nov. 1 .....	302.40	9:25
1949, July 1 .....	27.00	1:20	1952, Dec. 3 .....	250.00	9:25
1954, Feb. 17 .....	30.00	1:02	1958, Apr. 10 .....	266.00	8:25
1957, Apr. 1 .....	33.00	1:02	1963, Nov. 1 .....	200.00	4:50
1958, Apr. 1 .....	35.20	1:02	1969, Oct. 1 .....	170.00	4:50
1960, Sept. 12 .....	38.18	1:02			
1962, Nov. 16 .....	38.28	1:02			
1968, Mar. 1 .....	40.00	0:32			
1969, Mar. 1 .....	44.00	0:32			
1969, Nov. 1 .....	48.00	0:32			

1. By Hawaiian Airlines. Flight time is average for the following equipment: 1929-1936, Sikorsky-38; 1936-1941, Sikorsky-43; Nov. 1941 - Nov. 1952, Douglas DC-3; Nov. 1952 - Aug. 1963, Convair CV-340; Aug. 1963 - March 1966, Viscount; 1966-1969, Douglas DC-9.

2. By Pan American World Airways. Flight time is average (eastbound and westbound) block to block for the following equipment: 1936-1938, Martin M-130; 1939-1945, Boeing B-314; 1946-1948, Douglas DC-4; 1949-1956, Boeing B-377; 1957-1959, Douglas DC-7C; 1960-1969, Boeing B-707.

3. Excludes Federal tax of 5 percent effective October 10, 1941; raised to 10 percent effective November 1, 1942; raised to 15 percent effective April 1, 1944; lowered to 10 percent effective April 1, 1954; lowered to 5 percent effective November 16, 1962. Since October 1, 1956, the tax has not been imposed on that part of transpacific flights outside the three-mile limit; it amounts to \$0.06 on a \$200.00 round trip fare.

Source: Hawaiian Airlines and Pan American World Airways, records.

Table 106. -- AIR CARGO AND AIR MAIL: 1950 TO 1969

Year	Overseas air cargo (1,000 lb.) <sup>1</sup>			Overseas air mail (1,000 lb.) <sup>1</sup>			Interisland (1,000 lb.) <sup>2</sup>	
	Outgoing	Incoming	Through	Outgoing	Incoming	Through	Air cargo	Air mail
1950 <sup>3</sup> .....	1,144	1,935	1,389	1,214	1,230	1,121	17,126	863
1960 <sup>4</sup> .....	8,240	10,878	3,837	7,955	8,702	--	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

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

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

3. Year ended June 30.

4. Year 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 107. -- SHIP ARRIVALS AND GROSS TONNAGE, 1824 TO 1969, AND CARGO TONS, 1910 TO 1969

Calendar year	Overseas vessel arrivals <sup>1</sup>		Calendar year	Overseas vessel arrivals <sup>1</sup>	
	Number	Tonnage (1,000)		Number	Tonnage (1,000)
1824 .....	105	(NA)	1860 <sup>2</sup> .....	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 <sup>1</sup>		Interisland vessel arrivals <sup>1</sup>		Overseas cargo (1,000 tons) <sup>3</sup>		Interisland cargo (1,000 tons) <sup>3</sup>	
	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.

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

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

3. State and private piers on all islands. Data for 1910-1940 are limited to freight carried by Inter-Island 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.