### **Section 2**

### VITAL STATISTICS AND HEALTH

This section presents data on births, deaths, marriages, divorces, diseases, accidents, drinking and smoking, hospitals, and health care personnel and expenditures.

The major source for data on vital statistics and health is the Hawaii State Department of Health. Long-term trends are traced in *Historical Statistics of Hawaii*, Section 2. Sections 2 and 3 of the *Statistical Abstract of the United States: 1998* contain data for the nation as a whole.

Table 2.01-- BIRTHS AND DEATHS: 1980 TO 1997

			Rates per 1,000 resident population 2/		Rates p	er 1,000 live l	oirths 3/
Calendar year	Resident births 1/	Resident deaths 1/	Births	Deaths	To unmarried mothers	Fetal deaths 4/	Infant deaths 5/
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994	18,129 18,174 18,675 19,090 18,667 18,267 18,253 18,555 18,937 19,335 20,438 19,880 19,837 19,567 19,438	4,903 4,927 5,123 5,409 5,571 5,751 5,788 6,149 5,970 6,381 6,687 6,696 6,846 7,226 7,206	18.7 18.6 18.8 18.2 17.6 17.4 17.5 17.7 18.4 17.6 17.2 16.8 16.5	5.1 5.0 5.2 5.3 5.4 5.5 5.5 5.8 5.5 5.8 6.0 5.9 5.9 6.2 6.1	175.6 181.8 186.3 197.8 191.8 201.3 203.9 213.7 223.3 239.0 249.3 262.5 264.5 273.0 283.8	15.3 13.1 12.7 11.4 9.5 9.7 11.0 9.2 10.8 9.9 10.4 10.5 11.1 11.7 12.0	10.8 10.5 8.9 10.0 10.9 9.1 9.2 8.8 7.4 8.4 7.1 7.0 6.5 7.6 6.8
1995 1996 1997	18,552 18,378 17,326	7,482 7,803 7,710	15.7 15.5 14.5	6.3 6.6 6.5	291.8 302.3 299.0	12.1 9.6 8.5	5.9 5.8 6.4

<sup>1/</sup> Events occurring in Hawaii. Data include births to military couples and deaths of armed forces and their dependents, but exclude nonresident births and deaths, as well as resident births and deaths occurring out of State.

Source: Hawaii State Department of Health, *Statistical Report* (annual), and Office of Health Status Monitoring, records; Rates per 1,000 resident population calculated by the Hawaii State Department of Business, Economic Development & Tourism.

<sup>2/</sup> Based on July 1 estimates by the U.S. Bureau of the Census, as revised through Dec. 31, 1998.

<sup>3/</sup> Place of occurrence basis.

<sup>4/ 20</sup> weeks gestation and over. Includes elective abortions.

<sup>5/</sup> Under 1 year of age.

Table 2.02-- BIRTHS AND DEATHS, BY MILITARY STATUS: 1993 TO 1997

[Place of occurrence basis]

				Civilians 1/		•
						Armed
	All	Armed	All	Military	Other	forces and
Subject	groups	forces	civilians	dependents	civilians	dependents
Live births:						
1993	19,650		19,650	3,564	16,086	3,564
1994	19,630	_	19,030	3,604 3,604	15,911	3,604
1995	,	_	18,636	,	15,911	· · · · · · · · · · · · · · · · · · ·
1995	18,636	-	18,451	3,172 3,132	15,464	3,172
1996	18,451	-	· ·	· · · · · · · · · · · · · · · · · · ·	•	3,132
1997	17,415	-	17,415	3,131	14,284	3,131
Deaths:						
1993	7,570	162	7,408	87	7,321	249
1994	7,529	154	7,375	76	7,299	230
1995	7,795	173	7,622	65	7,557	238
1996	8,148	185	7,963	77	7,886	262
1997	8,016	151	7,865	78	7,787	229
Dinth notes of						
Birth rates: 2/	45.0	0	40.0	<b>57.</b> 0	440	24.0
1993	15.6	0	16.3	57.3	14.0	31.0
1994	15.2	0	15.9	66.3	13.5	33.6
1995	14.5	0	15.1	68.2	13.0	32.6
1996	14.3	0	14.8	56.6	12.9	30.3
1997	13.5	0	14.0	56.3	12.0	31.3
Death rates: 2/						
1993	6.0	3.1	6.1	1.4	6.4	2.2
1994	5.9	2.9	6.0	1.4	6.2	2.1
1995	6.1	3.4	6.2	1.4	6.4	2.4
1996	6.3	3.9	6.4	1.4	6.6	2.5
1997	6.2	3.4	6.3	1.4	6.6	2.3

<sup>1/</sup> Death rates for military dependents based on 1990 age and sex composition of military dependents and 1990 age-sex-specific death rates for all civilians. Deaths of civilians other than military dependents calculated as residual.

Source: Hawaii State Department of Health, Office of Health Status Monitoring, records; birth and death rates calculated by the Hawaii State Department of Business, Economic Development & Tourism.

<sup>2/</sup> Per 1,000 de facto population in each group.

### Table 2.03-- LIVE BIRTHS, STANDARD FETAL DEATHS, AND ELECTIVE ABORTIONS: 1992 TO 1997

[Place of residence basis]

	Total deliveries				
Calendar year	Number	Rate 1/	Live births	Standard fetal deaths	Elective abortions
1992	27,297	23.7	19,837	1,518	5,942
1993 2/	26,765	23.0	19,567	1,392	5,806
1994	26,457	22.5	19,438	1,265	5,754
1995	25,139	21.2	18,552	1,086	5,501
1996	24,234	20.4	18,378	985	4,871
1996	24,234	20.4	18,378	985	4,871
	22,680	19.0	17,326	854	4,500

<sup>1/</sup> Per 1,000 resident population, July 1. Based on population estimates by the U.S. Census Bureau, as revised through Dec. 31, 1998.

<sup>2/</sup> Excludes one birth, four standard fetal deaths, and six elective abortions with unknown residence. Source: Hawaii State Department of Health, Office of Health Status Monitoring, records; Rates calculated by the Hawaii State Department of Business, Economic Development & Tourism.

Table 2.04-- BIRTHS AND DEATHS, BY RESIDENCE: 1994 TO 1997

		Occurring	Persons born in or current residents of Hawaii 1/			
Event and year	Total	Resident	Non- resident	Total	Out of State	
Births:						
1994	19,515	19,438	75	2	19,474	36
1995	18,636	18,552	81	3	18,578	26
1996	18,451	18,378	69	4	18,396	18
1997	17,415	17,326	87	2	(NA)	(NA)
Deaths:						
1994	7,530	7,206	309	15	7,441	235
1995	7,795	7,482	309	4	7,718	236
1996	8,148	7,803	338	7	8,124	321
1997	8,016	7,710	303	3	(NA)	(NA)

#### NA Not available.

<sup>1/</sup> Birth figures exclude mothers who were born in Hawaii but are now residents of another state. Death figures include deaths of Hawaii residents occurring in Hawaii or in other states as well as Guam, Canada, and other foreign countries as well as deaths of persons born in Hawaii but who were residents of other states at the time of death. The death, however, must have been reported to the Hawaii Department of Health by the health department in the location that the death occurred.

Table 2.05-- CHARACTERISTICS OF RESIDENT BIRTHS: 1995 TO 1997

[Excludes births to Hawaii residents occurring out of state]

Subject	1995	1996	1997
Number of resident births	18,552	18,378	17,326
	· ·		•
City and County of Honolulu  Percent on Oahu	13,791 74.3	13,728 74.7	12,860 74.2
			· · · · -
Hawaii County	2,028	1,979	1,891
Kauai County	842	807	742
Maui County (incl. Kalawao)	1,891	1,864	1,833
Percent attended by M.D. or O.D. in hospital	94.8	94.6	94.6
Males per 100 females	104.0	105.6	106.0
Median weight of single births (grams)	3,315	3,305	3,295
Percent low birth weight (under 2,500 grams)	6.6	6.7	7.1
Percent single births under 40 weeks gestation	54.0	51.7	56.9
Percent plural	1.9	1.9	1.6
Percent with 1 or more congenital malformations	4.0	3.7	4.0
Percent to unmarried mothers	29.3	30.3	30.0
Percent with prenatal visit in first three months	81.2	81.7	81.3
Percent first child born to mother 1/	29.4	27.3	29.9
Percent first child born alive to mother	42.9	42.7	42.1
Median age of mothers (years)	27	27	27
Median age of known fathers (years)	30	30	30
	30	30	30

<sup>1/</sup> Includes live births, fetal deaths, and abortions.

Table 2.06-- CHILDREN EVER BORN PER 1,000 WOMEN 15 TO 44 YEARS OLD, BY GEOGRAPHIC AREA: 1990

Age of women	State total	Oahu	Other islands
Women 15 to 24 years	289	281	316
Women 25 to 34 years	1,199	1,132	1,423
Women 35 to 44 years	1,812	1,778	1,911

Source: U.S. Bureau of the Census, 1990 Census of Population, Social and Economic Characteristics, Hawaii, 1990 CP-2-13 (September 1993), table 35.

### Table 2.07-- RESIDENT BIRTHS, MIXED AND UNMIXED RACE, BY MILITARY STATUS OF PARENTS: 1997

Military status of parents	Total births	Unmixed	Mixed 1/	Not reported 2/	Percent mixed 3/
Total	17,326	7,193	9,140	993	56.0
Military Civilian Status not reported	3,103 12,783 1,440	2,211 4,972 10	822 7,791 527	70 20 903	27.1 61.0 98.1

<sup>1/</sup> Includes all Part Hawaiian births, including those in which both parents were Part Hawaiian.

<sup>2/</sup> One or both parents of unspecified race (unless one was Part Hawaiian) or both parents classified as "other".

<sup>3/</sup> Based on number reporting.

# Table 2.08-- MOST COMMON FIRST NAMES ON BIRTH CERTIFICATES, BY SEX: 1997

A total of 7,374 first names, including variant spellings, was reported for the 17,415 babies born in Hawaii in 1997]

	nes	Girls' na	mes
Name	Number	Name	Number
Joshua	161	Taylor	89
Michael (tie)	114	-	73
` '	114	Jessica	61
Justin	103	Rachel	56
Jacob	93	Alyssa	54
Jordan	88	Ashley (tie)	52
Brandon (tie)	84	Jasmine (tie)	52
Noah (tie)	84	Sarah	51
Nicholas	81	Samantha	49
Matthew	78	Kiana (tie)	46
		Nicole (tie)	46
	Joshua Michael (tie) Tyler (tie) Justin Jacob Jordan Brandon (tie) Noah (tie) Nicholas	Joshua 161 Michael (tie) 114 Tyler (tie) 114 Justin 103 Jacob 93 Jordan 88 Brandon (tie) 84 Noah (tie) 84 Nicholas 81	Joshua         161         Taylor           Michael (tie)         114         Kayla           Tyler (tie)         114         Jessica           Justin         103         Rachel           Jacob         93         Alyssa           Jordan         88         Ashley (tie)           Brandon (tie)         84         Jasmine (tie)           Noah (tie)         84         Sarah           Nicholas         81         Samantha           Matthew         78         Kiana (tie)

Table 2.09-- MOST COMMON SURNAMES ON BIRTH AND DEATH CERTIFICATES: 1997

	Birth certificat	tes	Death certificates		
Rank	Surname	Births Surname		Deaths	
1	Lee	79	Lee	70	
2	Smith	79	Wong	49	
3	Wong	63	Nakamura (tie)	33	
4	Johnson	52	Young (tie)	33	
5	Brown	50	Chang (tie)	31	
6	Kim	48	Yamamoto (tie)	31	
7	Williams	41	Kim	30	
8	Jones	40	Higa (tie)	27	
9	Silva	39	Tanaka (tie)	27	
10	Nguyen	38	Ching (tie)	25	
			Oshiro (tie)	25	

# Table 2.10-- EXPECTATION OF LIFE AT BIRTH FOR BOTH SEXES COMBINED, BY RACE: 1910 TO 1990

[In years]

Year	All races	Caucasian	Chinese	Filipino	Hawaiian and Part- Hawaiian	Japanese	Other
1910	43.96	54.83	54.17	(NA)	32.58	49.34	15.62
1920	45.69	56.45	53.80	28.12	33.56	50.54	28.38
1930	53.95	61.90	60.07	46.14	41.87	60.07	32.58
1940	62.00	64.03	65.32	56.85	51.78	66.28	59.48
1950	69.53	69.21	69.74	69.05	62.45	72.58	68.29
1960	72.42	72.80	74.12	71.53	64.60	75.68	62.19
1970	74.20	73.24	76.11	72.61	67.62	77.44	76.74
1980	77.78	75.79	81.65	79.32	71.83	80.91	78.98
1990	78.85	75.53	82.93	78.94	74.27	82.06	80.37
	. 5.55	7 0.00	32.00	7 0.0 1		02.00	33.07

NA Not available.

Source: Hawaii State Department of Health, "Life Tables by Ethnic Group for Hawaii, 1980," by Robert W. Gardner, *R & S Report*, No. 47, (March 1984), p. 7, and "Life Expectancy in the State of Hawai'i 1980 and 1990," *R & S Report*, No. 63 (August 1996), pp. 18-33.

### Table 2.11-- EXPECTATION OF LIFE AT BIRTH, BY SEX, FOR THE UNITED STATES AND HAWAII: 1910 TO 1996

[Average expectation of life (e<sub>o</sub>) in years]

		United States		Hawaii			
Year	Both sexes	Male	Female	Both sexes	Male	Female	
1910 1920	50.0 54.1	48.4 53.6	51.8 54.6	43.96 45.69	44.04 45.64	43.83 45.75	
1930 1940	59.7 62.9	58.1 60.8	61.6 65.2	53.95 62.00	52.70 59.92	55.86 64.86	
1950 1960	68.2 69.7 70.8	65.6 66.6 67.1	71.1 73.1 74.7	69.53 72.42 74.20	67.77 70.39 72.12	71.67 74.75 76.44	
1970 1980 1990	70.6 73.7 75.4	70.0 71.8	74.7 77.4 78.8	74.20 77.78 78.85	74.54 75.90	81.51 82.06	
1996	76.1	73.1	79.1	(NA)	(NA)	(NA)	

NA Not available.

Source: U.S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, Part 1 (1975), p. 55; U.S. Department of Health and Human Services, National Center for Health Statistics, "Deaths: Final Data for 1996," *National Vital Statistics Reports*, Vol. 47, No. 9, November 10, 1998, p.22; Hawaii State Department of Health, Office of Health Status Monitoring, "Life Tables by Ethnic Group for Hawaii, 1920-1970," *R & S Report*, No. 26 (June 1979), pp. 8-26; and "Life Expectancy in the State of Hawaii, 1980 and 1990," *R & S Report*, No. 63 (August 1996), p. 9; *Statistical Abstract of the United States: 1997*, p. 88.

Table 2.12-- AVERAGE LIFETIME, BY SEX: 1959-61 TO 1989-91

	Years			Rank 1/		
Period	Both sexes	Male	Female	Both sexes	Male	Female
1959-1961	71.55	69.79	74.01	7	(NA)	(NA)
1969-1971	73.60	71.02	76.79	1	1	3
1979-1981	77.02	74.08	80.33	1	1	1
1989-1991 2/	78.21	75.37	81.26	1	1	1

#### NA Not available.

- 1/ Among the 50 states and D.C., with the highest average lifetime in years ranking 1.
- 2/ Average lifetime for all states combined was 75.37 years for both sexes combined, 71.83 years for males, and 78.81 years for females.

Source: U.S. Department of Health, Education, and Welfare, National Center for Health Statistics, *Life Tables: 1959-61*, Vol. 2, No. 12, *Hawaii State Life Tables: 1959-61* (June 1966), p. 160, and unpublished tabulations; U.S. Department of Health, Education, and Welfare, National Center for Health Statistics, *U.S. Decennial Life Tables for 1969-71*, Vol. II, No. 12, *Hawaii State Life Tables: 1969-71* (June 1975), p. 12-6; and U.S. Department of Health and Human Services, National Center for Health Statistics, *U.S. Decennial Life Tables for 1979-81*, Vol II, *State Life Tables*, No. 12, *Hawaii* (December 1985) p. 12-3, and *U.S. Decennial Life Tables for 1989-91*, Vol. II, *State Life Tables*, No. 12, *Hawaii* (March 1998), p. 4.

Table 2.13-- SELECTED LIFE TABLE VALUES: 1989-91

		Average expectation of life in years (e <sub>x</sub> )			urviving to spe 00,000 born ali	_
Exact age in years (x)	Both sexes	Male	Female	Both sexes	Male	Female
0	78.21	75.37	81.26	100,000	100,000	100,000
5	77.80	75.01	80.78	99,253	99,154	99,358
	73.95	71.18	76.92	99,053	98,925	99,189
15	64.12	61.37	67.06	98,817	98,647	98,997
25	54.53	51.89	57.32	98,128	97,739	98,570
35	45.04	42.58	47.59	97,132	96,291	98,063
45	35.74	33.49	38.06	95,418	93,989	96,982
55	26.98	24.93	29.06	91,637	89,354	94,067
65	18.98	17.31	20.66	83,847	79,600	88,093
75	12.01	10.88	13.07	68,406	61,075	76,007
85	6.55	5.71	7.07	40,617	32,940	49,596
95	3.29	2.92	3.40	8,840	5,002	12,652

Source: U.S. Department of Health and Human Services, National Center for Health Statistics, U.S. Decennial Life Tables for 1989-91, Vol. II, State Life Tables, No. 12, Hawaii (March 1998), pp. 6-11.

Table 2.14-- CHARACTERISTICS OF RESIDENT DEATHS: 1995 TO 1997

[Excludes deaths to Hawaii residents occurring out of state]

Subject	1995	1996	1997
Number of resident deaths	7,488	7,803	7,710
City and County of Honolulu	5,438	5,557	5,484
Hawaii County	973	1,064	1,052
Kauai County	374	403	419
Maui County (incl. Kalawao)	703	779	755
Males per 100 females	137.4	132.7	133.1
Median age (years)	74	75	75
Centenarian deaths: Male	13	11	14
Female	47	52	42
Oldest (years): Male	108	106	105
Female	106	110	110
Percent married	44.7	46.4	46.3
Deaths under 1 year	106	98	104
Per 1,000 live births	5.7	5.3	6.0
Fetal deaths 1/	6,587	5,856	5,354
Per 1,000 deliveries	262	242	236
Fetal deaths, 20 or more weeks gestation 2/	226	178	148
Per 1,000 live births	12.1	9.6	8.5
Standard fetal deaths 3/	1,086	985	854
Elective abortions	5,501	4,871	4,500
Per 1,000 live births	296.5	265.0	259.7

<sup>1/</sup> Includes elective abortions.

<sup>2/</sup> Place of occurrence basis. Includes elective abortions if 20 weeks or more.

<sup>3/</sup> Excludes elective abortions.

Table 2.15-- CAUSE OF DEATH, BY SEX: 1997

[Place of residence basis]

Cause of death	Both sexes	Males	Females
Total deaths	7,710	4,402	3,308
Tuberculosis	10	6	4
Other infective 1/	182	119	63
Malignant neoplasm	1,799	1,031	768
Digestive organs	560	330	230
Respiratory system	494	315	179
Breast	110	1	109
Genital organs	164	105	59
Urinary organs	75	50	25
Leukemia	62	38	24
Other	334	192	142
Diabetes mellitus	195	96	99
Heart disease	2,307	1,306	1,001
Rheumatic	14	4	10
Hypertensive	90	43	47
Ischemic	1,172	697	475
Other heart	1,031	562	469
Hypertension	30	19	11
Cerebrovascular disease	683	353	330
Arteriosclerosis	11	6	5
Other circulatory	103	51	52
Influenza/pneumonia	358	199	159
Chronic obstructive pulmonary diseases	249	144	105
Peptic ulcer	24	17	7
Cirrhosis of liver	59	46	13
Nephritis and nephrosis	89	59	30
Pregnancy, birth & puerperium	1	-	1
Congenital anomalies	37	22	15
Perinatal conditions	46	24	22
Symptoms, signs & ill-defined conditions	67	36	31
Other diseases 2/	884	457	427
Unintentional injury	306	212	94
Motor vehicles	136	86	50
Other	170	126	44
Suicide	132	104	28
Homicide & legal intervention	49	37	12
Other external causes	89	58	31

<sup>1/</sup> Includes AIDS.

<sup>2/</sup> Includes other respiratory.

### Table 2.16-- GREATEST CATASTROPHIC MORTALITY OF RECORD, BY TYPE OF DISASTER: 1778 TO 1999

[Complete through May 18, 1999]

aths
66
8
6
32
163
1/ 10
7
14
5
5
5
8
8
410
7
7
5
159
r 400
2,500
100
20
2

<sup>1/</sup> Death toll in burning houses; in addition, 4 airmen perished.

Source: Robert C. Schmitt, "Catastrophic Mortality in Hawaii," *The Hawaiian Journal of History*, Vol. 3 (1969), pp. 66-86, and "Catastrophic Mortality in Hawaii: An Update," *The Hawaiian Journal of History*, Vol. 23 (1989), pp. 217-227; *Data Book 1997*, table 2.14, as updated.

<sup>2/</sup> Of Boki's two-ship expedition to New Hebrides, the *Kamehameha* and its crew of 250 vanished; the *Becket* survived but lost 160 of its crew.

### Table 2.17-- CATASTROPHIC MORTALITY: 1989 TO 1999

[Includes all accidents, natural disasters, and other events causing five or more deaths. Complete through May 18, 1999]

Date	Place	Kind of disaster	Deaths
1989: Jan. 31	Texas	Crash of Hawaii-bound	
1909. Jan. 51	Texas	airplane	19
Feb. 24	100 mi. S. of Honolulu	Airplane door lost	9
June 11	Waimanu, Hawaii	Airplane crash	11
Oct. 28	Halawa, Molokai	Airplane crash	20
1990: Nov. 13	Near Puunene, Maui	3-car auto crash	5
1991: Aug. 25-26	Waipahu and Kailua	Murder spree	5
1992: Jan. 14	Between Oahu and Maui	Airplane disappearance	5
Apr. 22	Haleakala summit, Maui	Airplane crash	9
Sept. 11	Kauai and Oahu	Hurricane Iniki	8
Sept. 16	Haleakala slope, Maui	Helicopter crash	7
1994: Jan. 21	Keawaula Bay, Oahu	1-car auto crash	5
1995: Nov. 10	Kuliouou, Oahu	1-car auto crash	5
1996: Nov. 1	Halawa, Molokai	Airplane crash	5
1997: Oct. 15	Palolo Valley, Honolulu	3 houses destroyed by fire	7
1998: June 25	Waialeale Crater, Kauai	Helicopter crash	6
1999: May 9	Sacred Falls, Oahu	Landslide	8
			<u> </u>

Source: Hawaii State Department of Business, Economic Development & Tourism file of newspaper accounts.

Table 2.18-- DEATHS OCCURRING IN HAWAII, BY METHOD OF DISPOSITION: 1970 TO 1997

Method	1970	1980	1990	1995	1996	1997
All methods	4,197	5,204	7,055	7,795	8,148	8,016
			-			
Burial	2,197	2,343	2,798	2,813	2,861	2,811
Cremation	1,509	2,241	3,564	4,386	4,670	4,616
Removal	470	567	656	558	580	548
Entombment	13	44	35	11	11	20
Medical science	3	-	-	24	22	20
Other	-	1	-	-	1	-
Unknown	5	8	2	3	3	1

Table 2.19-- PERSONS ON THE STATE BLIND REGISTER, BY COUNTIES: 1994 TO 1998

Date	State total	City and County of Honolulu	Hawaii County	Kauai County	Maui County
1994: June 30	2,377	1,783	255	102	237
1995: June 30	2,358	1,760	261	107	230
1996: June 30	2,509	1,873	285	109	242
1997: June 30	2,559	1,919	277	114	249
1998: June 30	2,600	1,974	287	112	227

Source: Hawaii State Department of Human Services, Services for the Blind Branch, records.

#### Table 2.20-- SELECTED CHRONIC CONDITIONS: 1996 AND 1997

[Provisional data. Based on a sample survey of 13,608 persons]

	Prevalence	of condition	Conditions per 1,000 persons 1/		
Selected chronic conditions	1996	1997	1996	1997	
Diabetes	48,423	45,838	42	40	
Hypertension	144,823	145,232	126	127	
High blood cholesterol	123,967	143,407	108	125	
Asthma	100,706	123,316	88	108	
Arthritis	(NA)	75,861	(NA)	66	
Alzheimer 2/	2,096	(NA)	6	(NA)	

#### NA Not available.

Source: Hawaii State Department of Health, Hawaii Health Surveillance Program, special tabulation.

<sup>1/</sup> Population base includes persons under 18 years, not usually subject to some of these conditions.

<sup>2/</sup> Asked only for persons 45 years of age and over in households. Deleted from survey in 1997.

Table 2.21-- SPECIFIED COMMUNICABLE DISEASES: 1993 TO 1997

[1997 data reported as of 2/2/99; earlier data not updated. However, new categories added this year which are E. coli 0157:H7, Giardiasis, Hepatitis B (Acute), Pertussis, and Meningitis (bacterial) have data reported as of 2/2/99 for the years 1993 through 1997]

Disease	1993	1994	1995	1996	1997
Cases:					
AIDS	373	238	222	192	98
Campylobacteriosis	403	601	699	854	823
E. coli 0157:H7	(1/)	(1/)	17	8	11
Fish poisoning 2/	95	119	129	43	92
Giardiasis	190	131	182	229	162
Gonorrhea	864	699	565	501	507
Hansen's Disease 3/	17	21	19	15	26
Hepatitis A	69	59	166	120	148
Hepatitis B (Acute)	22	28	32	14	11
Influenza	2,531	1,233	255	129	4/ 1,051
Leptospirosis 5/	24	22	23	42	60
Malaria 6/	7	15	12	12	13
Measles (Rubeola)	20	17	3	51	6
Meningitis, bacterial 7/	10	9	5	8	7
Mumps	30	19	14	31	27
Pertussis (whooping cough)	14	19	65	35	19
Pneumococcal disease	73	77	110	98	52
Rubella	28	4	5	3	9
Salmonellosis	337	304	303	428	387
Shigella	98	202	102	87	65
Syphilis (Primary & Secondary)	7	4	-	4	1
Tuberculosis	251	247	193	200	167
Deaths: 8/					
AIDS	129	145	130	73	38
Hansen's Disease 3/	-	1	-	-	-
Hepatitis A	-	-	-	1	-
Hepatitis B (Acute)	13	4	8	11	11
Influenza	1	-	1	3	3
Pneumococcal disease	-	1	2	1	-
Salmonellosis	-	-	1	1	-
Tuberculosis	5	4	6	5	10

Footnotes and source on next page.

#### Table 2.21--SPECIFIED COMMUNICABLE DISEASES: 1993 TO 1997 -- Cont.

- 1/ Reportable disease beginning in 1995.
- 2/ Scombroid, ciguatera and hallucinogenic fish poisoning.
- 3/ Excludes reinstated cases.
- 4/ Of the 1,051 reported cases, 252 cases were confirmed illnesses and 799 were influenza-like illnesses.
- 5/ Includes previously unreported cases.
- 6/ Acquired outside the State.
- 7/ Category changed from "meningitis, all types" to "meningitis, bacterial". Viral meningitis is no longer reported.
- 8/ Resident data. For the years shown, no deaths were reported from campylobacteriosis, fish poisoning, giardiasis, gonorrhea, leptospirosis, malaria, measles (rubeola), meningitis (bacterial), mumps, pertussis, rubella, shigella or syphilis. No data were available for deaths caused by E. coli 0157:H7.

Source: Hawaii State Department of Health, Office of Health Status Monitoring, Epidemiology Branch, and AIDS Surveillance Program, records.

## Table 2.22-- HEALTH RISK BEHAVIORS AND CONDITIONS FOR PERSONS 18 YEARS AND OLDER: 1995 TO 1998

[Weighted percent of adults who reported the health risk behaviors or conditions]

Risk factor 1/	1995	1996	1997	1998
Seatbelt non-use Acute drinking 2/ Chronic drinking 3/	12.6	(NA)	12.8	(NA)
	12.4	(NA)	17.1	(NA)
	2.9	(NA)	5.0	(NA)
Drinking and driving High cholesterol Hypertension	2.1	(NA)	2.4	(NA)
	27.1	(NA)	31.5	(NA)
	21.1	(NA)	23.9	(NA)
Lack of exercise 4/ Poor nutrition 5/ Diabetes	(NA)	71.9	(NA)	69.7
	(NA)	74.9	(NA)	72.5
	3.2	4.6	5.0	5.6
Current smokers 6/	17.8	22.2	18.7	19.5
Overweight 7/	22.4	23.9	26.6	27.8

NA Not available.

- 1/ Certain risk factor data are collected only on alternating years.
- 2/ Five or more drinks on at least one occasion, in the past month.
- 3/ Sixty or more drinks in the past month.
- 4/ No regular and sustained physical activity.
- 5/ Less than five fruits and vegetables a day.
- 6/ Listed as "cigarette smoking" in previous Data Book tables.
- 7/ Body mass index (BMI) greater than or equal to 27.3 for females; body mass index greater than or equal to 27.8 for males.

Source: Hawaii State Department of Health, Office of Health Status Monitoring, Behavioral Risk Factor Surveillance System (BRFSS) 1995-1998 at http://www.hawaii.gov/health/stats/hs\_hsp.html and records.

Table 2.23-- NUMBER AND BED CAPACITY OF STATE-APPROVED HOSPITALS AND CARE HOMES, BY TYPE OF FACILITY: 1993 TO 1998

	Hospitals				Care homes	
Category and year	Total 1/	Acute care	Long- term care	Specialty care	Type I 2/	Type II 3/
Number of facilities:						
1993	57	23	41	13	486	13
1994 4/	73	23	41	29	489	12
1995	74	23	42	29	499	12
1996	71	23	42	26	5/ 523	5/ 12
1997	76	24	43	30	521	11
1998	(NA)	(NA)	(NA)	(NA)	530	12
Number of licensed beds: 5/						
1993	6,818	2,600	3,510	708	2,164	413
1994 4/	7,130	2,600	3,492	1,038	2,216	407
1995	7,130	2,642	3,504	984	2,274	393
1996	7,433	2,633	3,814	986	5/ 2,403	5/ 393
1997	7,611	2,654	3,827	1,130	2,410	349
1998	(NA)	(NA)	(NA)	(NA)	2,463	363

#### NA Not available.

- 1/ Institutions providing more than one kind of care are only counted once.
- 2/ Five beds or fewer.
- 3/ Six beds or more.
- 4/ Additional specialty care facilities were added to the survey.
- 5/ Number of beds licensed by the State Department of Health Medical Facilities Branch. "Number of beds" in *The State of Hawaii Data Book 1996* and earlier referred to the number of beds with Certificate of Need approval. Certificate of Need approved beds included beds completed and beds being developed (not yet in service).

Source: Hawaii State Department of Health, State Health Planning and Development Agency, *Utilization of Inpatient Facilities by County 1994* (September 1995); State Health Planning and Development Agency, *Utilization of Inpatient Facilities by County 1995* (March 1997); State Health Planning and Development Agency, *Inpatient Facilities Utilization Report 1996 Data* (June 1997); State Health Planning and Development Agency, *Inpatient Facilities and Home Health Services Utilization Report 1997 Data* (July 1998); and Hospital and Medical Facilities Branch, records.

# Table 2.24-- OCCUPANCY CHARACTERISTICS OF STATE-APPROVED ACUTE AND LONG-TERM CARE CIVILIAN HOSPITALS: 1992 TO 1997

[Excludes Tripler Army Medical Center]

Type of facility and year	Admissions	Average daily census	Average length of stay (days)	Average daily percent occupancy
Acute care:				
1992	98,973	1,837	6.8	71.1
1993	100,290	1,848	6.7	71.1
1994	101,057	1,849	6.7	71.2
1995	101,001	1,802	6.5	68.2
1996	100,519	1,689	6.1	64.2
1997	100,353	1,715	6.2	64.5
Long-term care:				
1992	3,255	3,343	375	96.2
1993	3,346	3,339	364	95.1
1994	3,149	3,413	395	97.8
1995	3,577	3,308	335	94.4
1996	4,577	3,520	279	92.3
1997	5,098	3,472	247	90.7

Source: Hawaii State Department of Health, Statistical Report (annual); State Health Planning and Development Agency, Utilization of Inpatient Facilities by County 1994; State Health Planning and Development Agency, Utilization of Inpatient Facilities by County 1995; State Health Planning and Development Agency, Inpatient Facilities Utilization Report 1996 Data; State Health Planning and Development Agency, Inpatient Facilities Utilization Report 1997 Data and records.

# Table 2.25-- NUMBER AND BED CAPACITY OF STATE-APPROVED CIVILIAN HOSPITALS AND CARE HOMES, BY TYPE OF FACILITY, BY ISLANDS: DECEMBER 1997

[Facilities recognized by the Hawaii State Health Planning and Development Agency. Excludes Tripler Army Medical Center]

		Н	ospitals		Care	homes
Category and island	Total 1/	Acute care	Long- term care	Specialty care	Type I 2/	Type II 3/
NUMBER OF FACILITIES						
State total	76	24	43	30	521	11
Oahu Hawaii Kauai Maui Molokai Lanai NUMBER OF LICENSED BEDS 4/	54 8 5 6 2 1	11 6 3 2 1 1	26 8 5 2 1	25 - - 4 1 -	436 51 16 12 6	8 - 2 - 1 -
State total	7,611	2,654	3,827	1,130	2,410	349
Oahu Hawaii Kauai Maui Molokai Lanai	5,644 827 390 692 44 14	2,082 264 114 182 8 4	2,490 563 276 466 22 10	1,072 - - 44 14 -	2,040 224 62 56 28	280 - 57 - 12 -

<sup>1/</sup> Institutions providing more than one kind of care are counted only once.

Source: Hawaii State Department of Health, Hawaii State Health Planning and Development Agency, *Inpatient Facilities and Home Health Services Utilization Report 1997 Data* (July 1998), and Hospital and Medical Facilities Branch, records.

<sup>2/</sup> Five beds or fewer.

<sup>3/</sup> More than five beds.

<sup>4/</sup> Number of beds licensed by the State Department of Health Medical Facilities Branch. "Number of beds" in the the *State of Hawaii Data Book 1996 and earlier* referred to the number of beds with Certificate of Need approval. Certificate of Need approved beds included beds completed and beds being developed (not yet in service).

Table 2.26-- OCCUPANCY CHARACTERISTICS OF STATE-APPROVED ACUTE AND LONG-TERM CARE CIVILIAN HOSPITALS, BY ISLANDS: 1997

[Excludes Tripler Army Medical Center]

Type of facility and island	Admissions	Average daily census	Average length of stay (days)	Average daily percent occupancy
ACUTE CARE				
State total	100,353	1,715	6.2	64.5
Oahu Hawaii Kauai Maui Molokai Lanai  LONG-TERM CARE State total	74,093 11,708 5,182 9,248 114 8	1,368 154 54 139 1 -	6.7 4.6 3.8 5.5 2.5 1.3	65.7 56.4 47.0 76.1 9.9 0.9
Oahu Hawaii Kauai Maui Molokai Lanai	3,608 541 477 365 102 5	2,275 550 266 358 18 6	230 361 203 358 66 318	91.4 97.2 96.3 76.8 83.3 58.1

Source: Hawaii State Department of Health, Hawaii State Health Planning and Development Agency, *Inpatient Facilities Utilization Report 1997 Data* (July 1998).

Table 2.27-- ADULT PATIENTS SERVED BY STATE MENTAL HEALTH FACILITIES: 1988 TO 1998

Facilities and year	Persons active, Dec. 31	Admissions	Discharges	Persons served
Hawaii State Hospital:				
1988 1/	237	712	689	926
1989 1/	220	777	794	1,014
1990 1/	193	738	765	958
1991 1/	159	311	345	504
1992	198	394	355	553
1993	195	446	449	644
1994	199	275	271	470
1995 2/	172	107	123	295
1996	164	102	110	274
1997	163	100	101	264
1998	161	137	132	293
State-supported outpatient				
community mental health				
centers:				
1988	2,612	2,092	2,043	4,655
1989	2,369	1,840	2,083	4,452
1990	2,505	1,764	1,628	4,133
1991	3,037	2,494	1,962	4,999
1992	3,509	2,182	1,710	5,219
1993	3,410	2,004	2,103	5,513
1994	3,246	1,692	1,856	5,102
1995	2,798	804	866	3,664
1996	2,867	818	749	3,616
1997	3,024	804	647	3,671
1998	3,395	539	743	3/ 3,557

<sup>1/</sup> Figures include children and adolescents who were part of Hawaii State Hospital up until the end of June 1991.

Source: Hawaii State Department of Health, Mental Health Division, records.

<sup>2/</sup> Prior to 1995, a patient's administrative leave for treatment at a facility outside Hawaii State Hospital was counted as a discharge when the patient left, then counted as an admission when the patient returned to the Hawaii State Hospital. From 1995, this type of patient leave was handled as an internal transfer.

<sup>3/</sup> Number of persons served is for fiscal year 1998. Data reports were unavailable since August 1998 due to the fire in Kinau Hale which destroyed some files. Reports from the new data system are estimated to be available in August 1999.

Table 2.28-- HAWAII STATE HOSPITAL BEDS AND OCCUPANCY: 1994 TO 1998

		Admissions 2/		Patients in hospital 4/	
Year	Number of beds, June 30 1/	Total	First 3/	Average 2/	June 30
1994	202	273	216	196	199
1995	202	117	112	186	171
1996	202	89	87	170	167
1997	202	101	100	164	168
1998	202	113	106	164	163

<sup>1/</sup> Number of licensed beds. The number of beds available for use, however, is dependent upon the staff/patient ratio.

Source: Hawaii State Hospital, records.

<sup>2/</sup> Year ended June 30.

<sup>3/</sup> Admissions in which a person has entered the facility for the first time during the fiscal year that data are being collected for.

<sup>4/</sup> Includes patients on leave and absent without leave. In 1998, about .4% of the patients were on leave or absent without leave.

### Table 2.29-- WAIMANO TRAINING SCHOOL AND HOSPITAL: 1994 TO 1998

[Waimano Training School and Hospital is the State institution for the mentally retarded]

			Patients in residence		
Year	Beds, June 30	Admissions 1/	Average 2/	June 30	Patients on leave, June 30
1994	172	-	82	80	-
1995	172	3	77	75	3
1996	101	-	57	46	5
1997	101	-	38	36	3
1998 3/	30	-	26	25	2

<sup>1/</sup> Year ended June 30. Excluding returns from community placement.

Source: Waimano Training School and Hospital, records.

<sup>2/</sup> Year ended June 30.

<sup>3/</sup> Anticipate that individuals in the large institution will be integrated into the community by June 1999, then program will focus on providing community support services.

Table 2.30-- HANSEN'S DISEASE PATIENTS REGISTERED: 1993 TO 1997

Subject	1993	1994	1995	1996	1997
Patients on register, Dec. 31 Department of Health's Hansen's Disease	460	419	390	365	357
Community Program 1/	378	342	320	301	297
Kalaupapa	79	74	68	64	60
Hale Mohalu at Leahi	3	3	2	-	-
New cases	17	21	19	15	26
Deaths	10	11	15	11	6

<sup>1/</sup> Previously categorized as "at home". Patients are registered to this community program, but reside at home.

Source: Hawaii State Department of Health, Hansen's Disease Community Program, records.

Table 2.31--COMMUNITY HOSPITAL CHARACTERISTICS, FOR THE UNITED STATES AND HAWAII: 1995

		Hawaii		
Characteristic	United States	Number	Rank 1/	
Number of community hospitals Beds Admissions Average stay (days) Average cost to hospital Per patient day Per stay	5,194 872,736 30,945,657 6.5 \$967.69 \$6,215.51	21 3,030 97,268 9.1 \$955.79 \$8,444.64	45 45 43 4 24 1	

<sup>1/</sup> Among 50 states; largest number, longest number of days or highest average cost to hospital ranking 1.

Source: Health Insurance Association of America, *Source Book of Health Insurance Data* 1997-1998 (1998), pp. 110.

# Table 2.32-- PHYSICIANS, DENTISTS, NURSES, AND PHARMACISTS LICENSED IN HAWAII, BY PLACE OF ADDRESS: JUNE 30, 1998

[Excludes inactive licenses]

Place of address	Physicians and surgeons 1/	Dentists	Registered nurses	Pharmacists
Total licensed	5,576	1,326	11,558	1,326
Hawaii addresses	2,997	1,013	9,484	786
Hawaii	244	93	979	74
Maui	222	71	808	67
Lanai	1	1	12	-
Molokai	8	3	34	2
Oahu	2,420	804	7,258	605
Kauai	102	41	393	38
Mainland U.S.	2,511	302	1,954	533
Foreign	68	11	120	7

<sup>1/</sup> Permanent licenses only. Does not include interns, residents, or physicians who provided State government services only.

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Source: Hawaii State Department of Commerce and Consumer Affairs, Professional and Vocational Licensing Division, Licensing Branch, records.

Table 2.33-- PERSONAL HEALTH CARE EXPENDITURES, BY TYPE: 1993

[Data represent spending for services produced by Hawaii's health care providers, as opposed to those consumed by Hawaii residents or supplied by Hawaii employers]

Expenditure type	Million dollars	Percent
Personal health care expenditures, total	3,485	100.0
Hospital care	1,460	41.9
Physician services	771	22.1
Dental services	235	6.7
Other professional services	222	6.4
Home health care	32	0.9
Drugs and other medical nondurables	416	11.9
Vision products and other medical durables	64	1.8
Nursing home care	181	5.2
Other personal health care	104	3.0
Medicare personal health care expenditures	496	
Medicaid personal health care expenditures	354	

Source: Statistical Abstract of the United States: 1995 (1995), p. 111.

Table 2.34-- MARRIAGES AND DIVORCES: 1980 TO 1997

[Place of occurrence basis]

	Marriages			Rates per 1,000 resident population 3/		Percent of marriages	
Calendar			Divorces and annul-	Resident	Divorces, annul-	Nonresi-	Inter-
year	Total	Resident 1/	ments 2/	marriages	ments 2/	dent 4/	racial 5/
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	11,856 12,218 13,483 14,062 14,982 15,421 16,219 16,567 17,281 17,974	9,442 9,445 10,053 10,216 10,020 9,893 9,571 9,714 9,708 9,952	4,438 4,253 4,233 4,583 4,769 4,887 4,674 4,419 5,020 5,613	9.7 9.7 10.1 10.1 9.7 9.5 9.1 9.1 9.0	4.6 4.3 4.5 4.6 4.7 4.4 4.1 4.6 5.1	20.4 22.7 25.4 27.3 33.3 35.8 30.4 41.3 43.8 44.6	44.4 44.5 45.0 45.5 46.3 46.9 46.5 44.6 42.9 44.3
1990 1991 1992 1993 1994 1995 1996 1997	18,306 17,764 17,725 17,252 18,118 18,669 19,589 19,901	10,407 10,051 10,049 9,744 9,317 9,277 9,003 8,878	5,179 5,184 5,040 4,888 4,993 5,505 4,903 4,877	9.4 8.9 8.7 8.4 7.9 7.8 7.6 7.4	4.7 4.6 4.4 4.2 4.2 4.7 4.1	43.1 43.4 43.3 43.5 48.6 50.3 54.0 55.5	45.9 43.9 44.3 44.1 44.5 45.0 45.6 44.8

<sup>1/</sup> One or both partners residents of Hawaii.

Source: Hawaii State Department of Health, *Statistical Report* (annual), and records; Rates calculated by the Hawaii State Department of Business, Economic Development & Tourism.

9/30/99

<sup>2/</sup> Final decrees only.

<sup>3/</sup> Based on July 1 estimates by the U.S. Bureau of the Census, as revised through Dec. 31, 1998.

<sup>4/</sup> Both partners nonresidents of Hawaii.

<sup>5/</sup> Excludes nonresident marriages. Also, for these calculations, marriages where both bride and groom are in the "Part Hawaiian" or "Other races" categories are classified as non-interracial.

Table 2.35-- MARRIAGE AND DIVORCE RATES BASED ON RISK POPULATION: 1910 TO 1990

	Females 15 years old and over 1/		Marria	Marriages 2/		Divorces 2/	
Census year	Unmarried 3/	Married 4/	Number	Rate 5/	Number	Rate 6/	
4040	0.007	24.200	0.440	040	040	7	
1910	9,667	31,380	2,112	218	210	7	
1920	14,616	45,550	2,070	142	548	12	
1930	26,059	53,948	2,504	96	546	10	
1940	51,669	66,569	4,659	90	906	14	
1950	58,995	94,520	5,446	92	1,112	12	
1960	65,156	128,528	5,098	78	1,324	10	
1970	98,016	166,596	7,312	75	2,452	15	
1980	150,166	210,085	9,148	61	4,144	20	
1990	183,984	244,799	10,180	55	5,396	22	

- 1/ Females 14 years old and over for 1940-1970.
- 2/ Annual averages for two-year periods centering on each census date. Place of occurrence basis. Marriage data for 1969-1970 and later years exclude nonresident marriages.
  - 3/ Single, widowed or divorced.
  - 4/ Includes separated persons.
  - 5/ Per 1,000 unmarried females 15 (or 14) years old and over.
  - 6/ Per 1,000 married females 15 (or 14) years old and over.

Source: Robert C. Schmitt, *Demographic Statistics of Hawaii: 1778-1965* (University of Hawaii Press, 1968), pp. 214-215 and underlying data; *U.S. Census of Population: 1970*, Final Report PC (1)-B13, table 22; *U.S. Census of Population; 1980*, PC80-1-B13, table 21; Hawaii State Data Center, 1990 census tapes; Hawaii State Department of Health, *Annual Report, Statistical Supplement* for 1969, 1970, 1979, 1980, and records.

Table 2.36-- CHARACTERISTICS OF MARRIAGES AND DIVORCES: 1994 TO 1997

[Place of occurrence basis]

Subject	1994	1995	1996	1997
MARRIAGES				
Number	18,118	18,669	19,589	19,901
Percent on Oahu	53.0	51.1	49.0	46.5
Percent Hawaii residents:				
Both bride and groom	47.8	46.6	42.4	41.3
One partner only	3.6	3.1	3.5	3.2
Neither bride nor groom	48.6	50.3	54.0	55.5
Median age (years):				
Groom	31	32	32	32
Bride	29	29	30	30
Percent previously married:				
Groom	37.6	38.4	38.8	39.1
Bride	38.5	38.7	38.8	39.8
DIVORCES AND ANNULMENTS				
Number	4,993	5,505	4,903	4,877
Divorces	4,981	5,494	4,883	4,858
Annulments	11	9	20	17
Not reported	1	2	-	2
Percent occurring on Oahu	73.4	76.1	73.9	74.3
Percent Hawaii residents:				
Both partners	75.3	75.5	76.0	75.7
One partner only	23.1	23.0	23.0	23.4
Neither partner	0.1	<0.1	<0.1	0.1
Not reported 1/	1.4	1.4	0.9	0.8
Median age (years):				
Husband	36	36	37	37
Wife	34	34	35	34
Percent interracial 2/	41.6	41.9	41.5	43.2
Percent with children under 18 years	49.3	50.1	50.9	50.1
Median years married	6.4	6.4	6.8	6.7

<sup>1/</sup> Couples where the residence of one or more partners is unknown.

Source: Hawaii State Department of Health, Statistical Report (annual), and records.

<sup>2/</sup> For these calculations, divorces where both bride and groom are in the "Part Hawaiian" or

<sup>&</sup>quot;Other races" categories are classified as non-interracial.

Table 2.37-- MARRIAGES OCCURRING IN HAWAII, RESIDENT AND NONRESIDENT, BY RACE MIXTURE AND TYPE OF CEREMONY: 1997

Race mixture and type of ceremony	Total	At least one partner Hawaii resident	Both partners nonresidents	Residence unknown
All marriages	19,901	8,878	11,020	3
Race of partners: Both partners same race 1/ Different Percent different	14,447 5,454 27.4	4,848 4,030 45.4	9,596 1,424 12.9	3 - -
Type of ceremony: Civil ceremony Religious ceremony Unknown	3,465 16,433 3	2,777 6,101 -	686 10,331 3	2 1 -

<sup>1/</sup> Includes marriages with both partners of unknown race.

Table 2.38-- MARITAL DISSOLUTION: 1980 TO 1997

				Percent		
Subject	1980	1990	1997	1980	1990	1997
Married couples	185,698	210,468	226,388	100.0	100.0	100.0
Marriages ended	6,782	8,292	8,446	3.7	3.9	3.7
By divorce	4,438	5,172	4,873	2.4	2.5	2.2
By death	2,344	3,120	3,573	1.3	1.5	1.6
Husbands	1,678	2,234	2,562	0.9	1.1	1.1
Wives	666	886	1,011	0.4	0.4	0.4

Source: Hawaii State Department of Health, *Statistical Report* (annual), and records; U.S. Bureau of the Census, *1980 Census of Population*, PC80-1-B13, table 21, and *1990 Census of Population*, 1990 CP-1-13, table 30; 1997 DBEDT estimate of married couples, based on 1990-97 percent increase in estimated population.