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# The State of Hawaii DATA BOOK

1991

# A Statistical Abstract



November 1991

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This report is largely the work of the DBED Research and Economic Analysis Division, headed by Richard Y. P. Joun, Ph.D. It was compiled and edited by Robert C. Schmitt, State Statistician, with the assistance of Emogene K. Estores, Jan N. Nakamoto, Michele Nishimoto, and Darcie Hayashikawa. The camera-ready copy was typed and proofread by Judy F. Noda, Charlotte N. L. Chow, and Jolly I. Ige. Stewart A. Wastell, illustrator in the Office of State Planning, drew the district and neighborhood maps. Printing arrangements were handled by the DBED's Communications and Publications Office.

Copies of this report are available from the DBED Information Office, 220 South King Street, 4th floor, Room 405, P. O. Box 2359, Honolulu, Hawaii 96804. The price per copy is \$8.00 in Hawaii, \$18.00 air-mailed postpaid to the Mainland United States, and \$35.00 air-mailed postpaid to foreign countries.

#### **ABOUT THIS BOOK**

The State of Hawaii Data Book: A Statistical Abstract is the standard official summary of statistics on the social, economic, and political organization of our island state.

In addition to serving as a reference, it is a guide to other sources of statistics.

The State of Hawaii State Data Book closely follows the organization and format of its counterpart, the Statistical Abstract of the United States, thus facilitating comparison of Hawaii and national data.

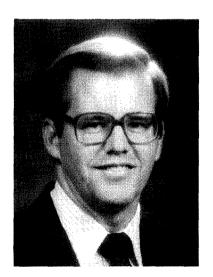
The State of Hawaii Data Book places the major emphasis on statewide data and less on counties, islands, urban places, and smaller areas. Source references for additional statistical detail are given in the introductions to the various sections and at the end of each table.

This is the 25th such abstract published by the State of Hawaii. Earlier editions appeared in 1962, 1967, 1968, and annually beginning in 1970. All before 1990 are now out of print, but copies can be found in many libraries in Hawaii.

Many Federal, State, County, and private organizations cooperated with the DBED Research and Economic Analysis Division in the preparation of this book. They are credited in the source references that accompany the tables to which they contributed.



John Waihee Governor of Hawaii



Murray E. Towill
Director of Business,
Economic Development & Tourism

# STATE OF HAWAII COUNTIES and DISTRICTS

KURE ATOLL.

MIDWAY
ISLANDS

PEARL AND HERMES ATOLL

LISIANSKI ISLAND

LAYSAN ISLAND

T MARO REEF

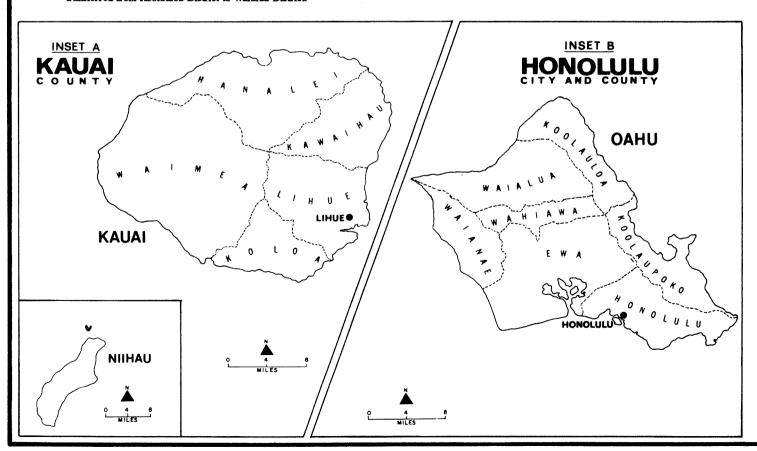
GARDNER PINNACLES

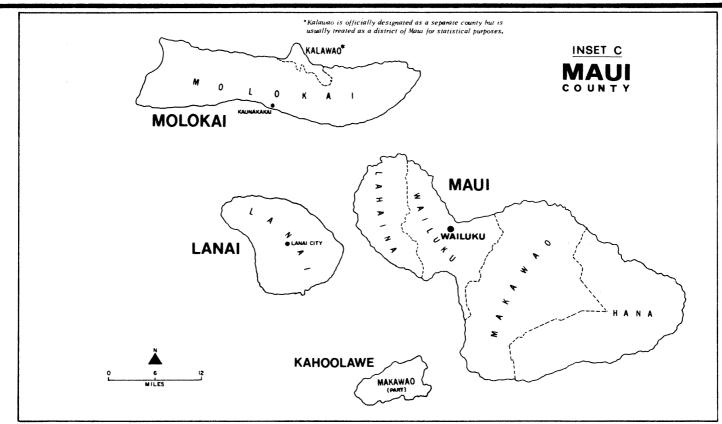
NOTE: The Northwestern Hawaiian Islands, from Nihoa to Kure Atoll (exclusive of the Midway Islands, a U.S. possession) are part of the Honolulu District.

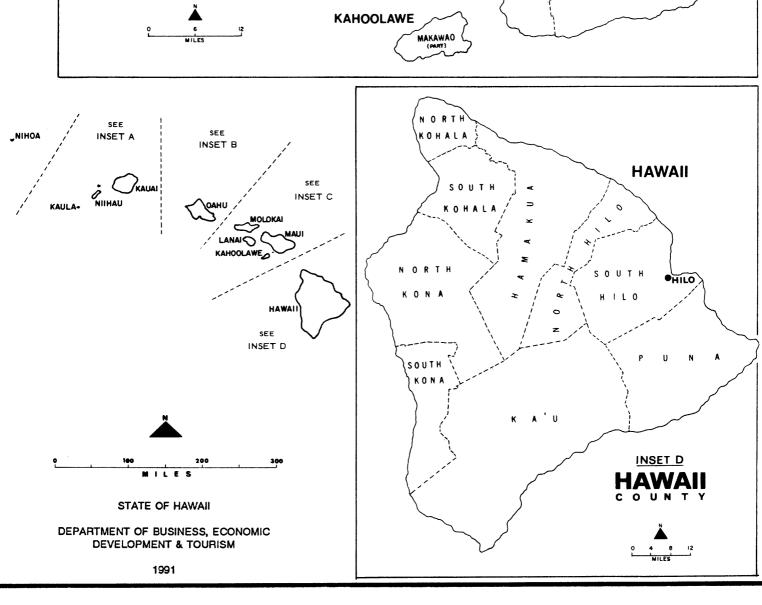
District boundaries shown are those in effect prior to 1989, when Waikakalaua, Waipio Acres, and Mililani Town were shifted from Ewa District to Wahiawa District, and 1991, when Sunset Beach was transferred from Koolauloa District to Waialua District.

FRENCH FRIGATE SHOALS

NECKER







#### **GUIDE TO TABULAR PRESENTATION**

The tables in this report generally follow the principles of tabular presentation used by the U.S. Bureau of the Census in its annual publication, Statistical Abstract of the United States, and described in Bureau of the Census Manual of Tabular Presentation, published by the Bureau in 1950. These principles have been accepted by the Department of Business and Economic Development for use in its publications and recommended to all other State agencies for official use.

Headnotes immediately below table titles provide information important for correct interpretation or evaluation of the table as a whole or for a major segment of it.

Unit indicators ("In thousands," "In millions of dollars," etc.) are usually given as the first element of the headnote. In tables where several units are used, the unit indicators are generally given in the stub or in the column headings.

Footnotes below the bottom rule of tables give information relating to specific items, figures or symbols within the table.

Parallel vertical rules are used to the right of a total column to indicate --

- (1) that the components which follow add to the total;
- (2) in the case of derived figures, that the underlying data are additive to their total.

A dash (-) represents zero in references to absolute values. In rates and percentages, a zero (0) is used.

In many tables, details will not add exactly to the totals shown because of rounding.

Geographic coverage should be understood as Statewide, unless otherwise indicated in the table title, headnote, boxhead, or stub. All annual statistics should be understood as referring to calendar years unless otherwise indicated.

#### UNITED STATES AND METRIC WEIGHTS AND MEASURES

| U.S.                |   |        | to | Metric         | Metric         |   |        | to | U.S.           |
|---------------------|---|--------|----|----------------|----------------|---|--------|----|----------------|
| Length              |   |        |    |                |                |   |        |    |                |
| Inches              | x | 25.4   | =  | millimeters    | millimeters    | Х | 0.039  | =  | inches         |
| Feet                | X | 0.305  | =  | meters         | meters         | X | 3.281  | =  | feet           |
| Statute miles       | X | 1.609  | =  | kilometers     | kilometers     | Х | 0.621  | =  | miles          |
| Area                |   |        |    |                |                |   |        |    |                |
| Sq. feet            | х | 0.093  | =  | sq. meters     | sq. meters     | Х | 10.764 | =  | sq. feet       |
| Acres               | X | 0.405  | =  | hectares       | hectares       | X | 2.471  | =  | acres          |
| Sq. miles           | X | 2.589  | =  | sq. kilometers | sq. kilometers | X | 0.386  | =  | sq. miles      |
| Volume and capacity |   |        |    |                |                |   |        |    |                |
| Cubic feet          | х | 0.028  | =  | cu. meters     | cu. meters     | Х | 35.315 | =  | cu. feet       |
| Cubic yards         | х | 0.765  | =  | cu. meters     | cu. meters     | х | 1.308  | =  | cu. yards      |
| Fluid ounces        | х | 29.573 | =  | milliliters    | milliliters    | Х | 0.034  | =  | fluid ounces   |
| Quarts (liq.)       | х | 0.946  | =  | liters         | liters         | X | 1.057  | =  | quarts (liq.)  |
| Gallons (liq.)      | X | 3.785  | =  | liters         | liters         | Х | 0.264  | == | gallons (liq.) |
| Mass                |   |        |    |                |                |   |        |    |                |
| Ounces (avdp.)      | х | 28.350 | =  | grams          | grams          | х | 0.035  | =  | ounces (avdp.) |
| Pounds (avdp.)      | X | 0.454  | =  | kilograms      | kilograms      | x | 2.205  | =  | pounds (avdp.) |
| Hundredweight       | X | 45.359 | =  | kilograms      | kilograms      | X | 0.022  | =  | hundredweight  |
| Short tons          | X | 0.907  | =  | metric tons    | metric tons    | X | 1.102  | =  | short tons     |

Miscellaneous conversions

1 statute mile = 5,280 ft. = 1,760 yards 1 acre = 43,560 sq. feet 1 square mile = 640 acres 1 short ton = 2,000 pounds

#### UNITED STATES AND METRIC WEIGHTS AND MEASURES -- Con.

| Fahrenheit | to Celsius | Celsius    | to | Fahrenheit |
|------------|------------|------------|----|------------|
| emperature |            |            |    |            |
| 100 °F     | 37.8 °C    | 40 °C      |    | 104.0 °F   |
| 90         | 32.2       | 35         |    | 95.0       |
| 80         | 26.7       | 30         |    | 86.0       |
| 70         | 21.1       | 25         |    | 77.0       |
| 60         | 15.6       | 20         |    | 68.0       |
| 50         | 10.0       | 15         |    | 59.0       |
| 40         | 4.4        | 10         |    | 50.0       |
| 30         | -1.1       | 5          |    | 41.0       |
| 20         | -6.7       | 0          |    | 32.0       |
| 10         | -12.2      | <b>-</b> 5 |    | 23.0       |
|            |            | -10        |    | 14.0       |

Source: U.S. National Bureau of Standards, Special Publication 304a; Department of Geography, University of Hawaii, Atlas of Hawaii, 2nd edition (1983), pp. 218-219.

#### **POPULATION**

This section presents statistics on the growth, geographic distribution, and composition of the population of Hawaii, and on the number and characteristics of migrants moving to and from the State.

Final results of the 1990 census reported a Statewide resident population of 1,108,229. This total is well above the 1980 census count of 964,691 and the earlier counts of 422,770 in 1940, 154,001 in 1900, and 84,165 in 1850. These census totals include members of the armed forces stationed in Hawaii and their local dependents, a group making up 10.4 percent of the resident total when last surveyed. The 1990 de facto population--which included over 158,000 visitors present on an average day in that year but excluded 18,000 residents temporarily absent--was 1,248,360. Almost 73 percent of the 1990 de facto total was on Oahu, giving that island a density of 1,513 persons per square mile. The population of the State is mostly male (51 percent), relatively young--the median age in 1990 was 32.6 years--and racially diversified. The major unmixed groups, based on a 1988 sample survey, were Caucasians (24 percent of the non-barracks, non-institutional population) and Japanese (22 percent). In addition, 32 percent were of mixed race, primarily part Hawaiian. There were 356,267 households in the State in 1990, with an average size of 3.01. Migration has been a major factor in the growth of the population: between 1980 and 1990, there was a net in-migration (excluding military personnel and dependents) of 71,000, accounting for 48 percent of the total civilian population growth during that time. Immigrant arrivals in fiscal 1990 numbered 7,858, mostly from the Philippines. About 18,000 civilians moved to Hawaii from the Mainland during the year.

The principal sources for these data are the decennial population censuses conducted by the U.S. Bureau of the Census, the estimates developed annually by the Hawaii State Department of Health and Department of Business, Economic Development & Tourism in cooperation with the Bureau of the Census, the Hawaii Health Surveillance Program conducted regularly since 1969 by the Department of Health, the ongoing series on visitors present and residents absent provided by the Hawaii Visitors Bureau, and the U.S. Immigration and Naturalization Service tabulations on immigration. Earlier figures on population and migration are given in Historical Statistics of Hawaii, Section 1 and 3. Comparable national statistics on population and migration appear in Section 1 of Statistical Abstract of the United States: 1991.

Table 1.-- POPULATION: 1831-32 TO 1991

[Missionary censuses for 1831-32 and 1835-36, Hawaiian government censuses for 1850-1896, U.S. government censuses for 1900-1990, and estimates for 1876, 1944, and 1991. Data through 1896 are on a de facto or unspecified basis; data for 1900 and later years are on a resident basis, and include armed forces stationed or homeported in Hawaii

| Date   | Popula-<br>tion   | Percent<br>change <u>1</u> /   |   | Date   | Popula-<br>tion  | Percent change <u>1</u> /  |
|--|---|--|---|--|--|--|
| 1831-1832<br>1835-1836<br>1850: Jan<br>1853: Dec. 26<br>1860: Dec. 24<br>1866: Dec. 7<br>1872: Dec. 27<br>1876: Jan. 1 2/<br>1878: Dec. 27<br>1884: Dec. 27<br>1890: Dec. 28<br>1896: Sept. 27 | 130,313<br>108,579<br>84,165<br>73,138<br>69,800<br>62,959<br>56,897<br>53,900<br>57,985<br>80,578<br>89,990<br>109,020 | -4.6<br>-1.8<br>-3.5<br>-0.7<br>-1.7<br>-1.7<br>-1.8<br>2.4<br>5.5<br>1.8<br>3.3 | 1900:<br>1910:<br>1920:<br>1930:<br>1940:<br>1950:<br>1960:<br>1970:<br>1980:<br>1990:<br>1991: | June 1 Apr. 15 Jan. 1 Apr. 1 Apr. 1 July 1 3/ Apr. 1 | 154,001<br>191,874<br>255,881<br>368,300<br>422,770<br>858,945<br>499,794<br>632,772<br>769,913<br>964,691<br>1,108,229<br>1,134,800 | 9.4<br>2.2<br>3.0<br>3.6<br>1.4<br>16.7<br>-9.4<br>2.4<br>2.0<br>2.3<br>1.4<br>1.9 |

<sup>1/</sup> Annual rate since the previous estimate or census, based on the formula for continuous compounding.

2/ Estimated population at 19th century low.
3/ Estimated population at World War II peak.
Source: Robert C. Schmitt, Historical Statistics of Hawaii (University) Press of Hawaii, 1977), pp. 8-10; U.S. Bureau of the Census, 1980 Census of Population, Number of Inhabitants, Hawaii, PC80-1-A13 (October 1981), table 1; U.S. Bureau of the Census, 1990 Census of Population and Housing, Summary Population and Housing Characteristics, Hawaii, 1990 CPH-1-13 (August 1991), table 1; Federal-State Cooperative Program for Population Estimates.

Table 2.-- RESIDENT POPULATION, BY MILITARY STATUS: 1970 TO 1991 [Excludes visitors present but includes residents temporarily absent]

|   |   |  |  | Ci   | vilian populat   | ion  |
|---|---|--|--|--|--|--|
| Year  |   | Total<br>resident<br>population  | Armed forces <u>1</u> /  | All<br>civilians   | Military<br>dependents <u>2</u> /  | Not<br>military<br>dependents  |
| 1970: 1971: 1972: 1973: 1974: 1975: 1976: 1977: 1978: 1980: 1981: 1982: 1983: 1984: 1985: 1986: 1987: 1988: 1989: | April 1 .  July 1  July 1 | 769,913 771,600 801,600 828,300 851,600 868,000 986,200 904,200 918,300 931,600 953,300  964,691 967,400 978,200 993,800 1,012,800 1,028,000 1,039,800 1,051,900 1,068,100 1,080,000 1,094,600 | 55,142<br>53,800<br>50,800<br>52,000<br>58,100<br>57,500<br>58,800<br>57,800<br>56,500<br>58,300<br>57,900<br>57,900<br>56,600<br>54,900<br>55,200<br>57,300<br>56,400<br>58,100<br>56,800<br>56,800<br>56,400 | 714,771 717,800 750,800 776,400 793,500 810,500 827,400 846,400 861,800 873,300 895,400  907,635 909,500 921,600 938,900 957,600 970,700 983,400 993,800 1,009,900 1,023,200 1,038,200 1,052,896 | 61,858<br>57,800<br>62,200<br>66,200<br>70,300<br>68,300<br>63,700<br>67,000<br>65,000<br>61,100<br>64,500<br>64,500<br>64,300<br>66,700<br>66,300<br>67,100<br>64,300<br>66,200<br>64,800<br>69,900<br>60,300<br>59,935 | 652,913<br>660,100<br>688,700<br>710,100<br>723,200<br>742,100<br>763,700<br>779,400<br>796,800<br>812,200<br>830,900<br>843,612<br>845,400<br>857,200<br>872,200<br>891,400<br>903,600<br>919,100<br>927,600<br>945,100<br>953,300<br>978,000 |
| 1991:   | July 1 July 1   | 1,113,500<br>1,134,800   | 55,200<br>54,700   | 1,058,300<br>1,080,000   | 60,600<br>63,300   | 997,700<br>1,016,700   |

<sup>1</sup>/ These figures are the estimates developed by the U.S. Bureau of the Census for use in population estimation. They differ somewhat from corresponding figures from other sources.

<sup>2/</sup> Dependents living in Hawaii, regardless of location of family head. Source: Hawaii State Department of Planning and Economic Development, Intercensal Population Estimates for Hawaii, 1940-1980 (Statistical Report 172, February 1, 1985), table 1; Federal-State Cooperative Program for Population Estimates, provisional intercensal and postcensal estimates, 1980-1991.

Table 3.-- RESIDENT AND DE FACTO POPULATION, BY RESIDENCE STATUS: 1970 TO 1990

|  |  |  | Do 4  | acto  |   |
|--|--|--|---|---|---|
|  | Resident p   | opulation <u>1</u> /   |   | tion <u>3</u> /   | De facto-   |
| Year   | Total  | Temporarily absent 2/  | Total   | Visitors<br>present <u>2</u> /  | resident ratio  |
| 1970: April 1 July 1 1971: July 1 1972: July 1 1973: July 1 1974: July 1 1975: July 1 1976: July 1 1977: July 1 1978: July 1 1979: July 1 1980: April 1 July 1 1981: July 1 1982: July 1 1983: July 1 1984: July 1 1985: July 1 1986: July 1 | 769,913 771,600 801,600 828,300 851,600 868,000 886,200 904,200 918,300 953,300  964,691 967,400 978,200 993,800 1,012,800 1,028,000 1,039,800 1,051,900 | 10,300<br>10,000<br>9,400<br>8,600<br>9,800<br>7,800<br>9,000<br>9,400<br>9,000<br>9,300<br>9,300<br>9,600<br>11,600<br>14,500<br>11,500<br>16,100<br>18,600<br>17,200 | 796,500<br>798,600<br>833,100<br>869,800<br>901,300<br>923,700<br>943,500<br>970,300<br>992,300<br>1,014,300<br>1,042,700<br>1,052,700<br>1,054,300<br>1,062,500<br>1,084,600<br>1,109,300<br>1,130,600<br>1,138,000<br>1,167,500 | 36,900<br>36,900<br>40,900<br>50,100<br>59,600<br>63,500<br>66,300<br>75,500<br>83,000<br>92,000<br>98,700<br>97,600<br>96,500<br>96,000<br>105,300<br>108,000<br>118,700<br>116,700<br>132,900 | 1.035<br>1.035<br>1.039<br>1.050<br>1.058<br>1.064<br>1.065<br>1.073<br>1.081<br>1.089<br>1.094<br>1.091<br>1.090<br>1.086<br>1.091<br>1.095<br>1.100<br>1.094<br>1.110 |
| 1987: July 1<br>1988: July 1<br>1989: July 1   | 1,068,100<br>1,080,000<br>1,094,600  | 15,700<br>20,800<br>18,700   | 1,186,600<br>1,200,600<br>1,245,500   | 134,300<br>141,400<br>169,700   | 1.111<br>1.112<br>1.138   |
| 1990: April 1<br>July 1  | 1,108,229<br>1,113,500   | 18,400<br>18,000   | 1,248,400<br>1,257,600  | 158,500<br>162,100  | 1.126<br>1.129  |

<sup>1/</sup> The resident population is defined as the number of persons whose usual place of residence is in an area, regardless of physical location on the estimate or census date. It includes military personnel stationed or homeported in the area but excludes persons of local origin attending school or in military service outside the area.

Source: Hawaii State Department of Planning and Economic Development, Intercensal Population Estimates for Hawaii, 1940-1980 (Statistical Report 172, February 1, 1985), table 2; Federal-State Cooperative Program for Population Estimates, provisional intercensal and postcensal estimates, 1981-1990.

<sup>2/ 12-</sup>month moving averages.3/ The de facto population is defined as the number of persons physically present in an area, regardless of military status or usual place of residence; it includes visitors present but excludes residents temporarily absent.

Table 4.-- RESIDENT POPULATION OF ISLANDS: 1950 TO 1990

|  |                  | ·····            |                        |                  |                  |
|--|------------------|------------------|------------------------|------------------|------------------|
| Island   | 1950             | 1960             | 1970                   | 1980             | 1990             |
| State of Hawaii  | 499,794          | 632,772          | 769,913                | 964,691          | 1,108,229        |
| Hawaii   | 68,350           | 61,332           | 63,468                 | 92,053           | 120,317          |
| Maui <u>1</u> /<br>Lanai                               | 40,103<br>3,136  | 35,717<br>2,115  | 38,691<br>2,204        | 62,823<br>2,119  | 91,361<br>2,426  |
| Molokai<br>Oahu 2/                                     | 5,280<br>353,006 | 5,023<br>500,394 | 5,261<br>630,497       | 6,049<br>762,534 | 6,717<br>836,207 |
| Kauai<br>Niihau 3/                                     | 29,683<br>222    | 27,922<br>254    | 29 <b>,</b> 524<br>237 | 38,856<br>226    | 50,947<br>230    |
| Northwestern Hawaiian Islands<br>French Frigate Shoals | 14<br>14         | 15<br>(NA)       | 31<br>(NA)             | 31<br>4          | 24               |
| Laysan Island  | <del>-</del>     | (NA)<br>(NA)     | (NA)<br>(NA)           | 5<br>22          | 24               |
| Other islands 4/                                       | -                | (NA)             | (NA)                   | -                | -                |
| Midway Islands $\frac{5}{5}$                           | 416<br>46        | 2,356<br>156     | 2,220<br>1,007         | 453<br>327       | (NA)<br>(NA)     |
| Palmyra Atoll 57                                       | -                | -                | -                      | _                | (NA)             |

NA Not available.

1/ Including Molokini, uninhabited.

3/ Including Lehua and Kaula, uninhabited.

5/ Not part of the State of Hawaii.

Source: U.S. Bureau of the Census, decennial census bulletins on number of inhabitants, census tracts, and block statistics, 1940-1980, and 1990 census printouts and tapes; U.S. Coast Guard, records (for Kure Atoll in 1990).

Z/ Including Sand Island (56 in 1970, 60 in 1980, 25 in 1990), Mokauea Island (12 in 1970, 11 in 1980, uninhabited in 1990), Ford Island (798 in 1970, 522 in 1980, 233 in 1990), and Moku o Loe (uninhabited in 1970, 16 in 1980, 6 in 1990). The combined total for Sand Island and Mokauea Island in 1960 was 36. These offshore islands were not reported separately in other years.

<sup>4/</sup> Nihoa, Necker Island, Gardner Pinnacles, Maro Reef, Lisianski Island, and Pearl and Hermes Atoll.

Table 5.-- RESIDENT POPULATION, BY COUNTIES: 1970 TO 1990

[Based on place of usual residence. Includes armed forces stationed or homeported in Hawaii and residents temporarily absent; excludes visitors present]

|  | Date  | State<br>total  | City and<br>County of<br>Honolulu   | Hawaii<br>County  | Kauai<br>County  | Maui<br>County <u>1</u> /  |
|--|---|---|---|---|--|--|
| 1970: 1971: 1972: 1973: 1974: 1975: 1976: 1977: 1978: 1979:                            | April 1 July 1                      | 769,913<br>771,600<br>801,600<br>828,300<br>851,600<br>868,000<br>886,200<br>904,200<br>918,300<br>931,600<br>953,300   | 630,528<br>631,600<br>654,600<br>674,900<br>691,400<br>707,600<br>718,600<br>728,300<br>737,000<br>742,600<br>756,000                       | 63,468<br>63,800<br>67,000<br>70,000<br>73,900<br>74,000<br>77,400<br>80,700<br>82,800<br>85,900<br>89,400                              | 29,761<br>29,800<br>30,900<br>31,900<br>32,900<br>32,600<br>33,400<br>34,900<br>35,500<br>36,800<br>38,100                     | 46,156<br>46,500<br>49,100<br>51,500<br>53,400<br>53,800<br>56,800<br>60,300<br>63,000<br>66,200<br>69,700 |
| 1980:<br>1981:<br>1982:<br>1983:<br>1984:<br>1985:<br>1986:<br>1987:<br>1988:<br>1989: | April 1 July 1 | 964,691<br>967,400<br>978,200<br>993,800<br>1,012,800<br>1,028,000<br>1,039,800<br>1,051,900<br>1,068,100<br>1,080,000<br>1,094,600<br>1,108,229<br>1,113,500 | 762,565<br>763,800<br>767,400<br>776,700<br>790,200<br>797,200<br>804,500<br>813,000<br>821,700<br>828,300<br>832,400<br>836,231<br>839,300 | 92,053<br>92,800<br>96,300<br>98,800<br>100,600<br>104,300<br>105,900<br>107,200<br>110,000<br>111,800<br>116,300<br>120,317<br>121,300 | 39,082<br>39,300<br>40,500<br>41,600<br>42,500<br>43,500<br>44,500<br>45,300<br>46,800<br>47,900<br>49,600<br>51,177<br>51,600 | 70,991<br>71,500<br>74,100<br>76,700<br>79,500<br>83,000<br>84,800<br>86,500<br>89,600<br>92,000<br>96,300 |

<sup>1/</sup> Including Kalawao County (Kalaupapa Settlement).

Source: Hawaii State Department of Planning and Economic
Development, Intercensal Population Estimates for Hawaii, 1940-1980
(Statistical Report 172, February 1, 1985), table 3; Federal-State
Cooperative Program for Population Estimates, provisional intercensal and postcensal estimates, 1981-1990.

Table 6.-- DE FACTO POPULATION, BY COUNTIES: 1970 TO 1990

[Includes all persons physically present in area, regardless of military status or usual place of residence. Includes visitors present but excludes residents temporarily absent, both calculated as averages for 12-month periods centered on estimate date]

|  | Date  | State<br>total  | City and<br>County of<br>Honolulu   | Hawaii<br>County  | Kauai<br>County  | Maui<br>County <u>1</u> /   |
|--|---|---|---|---|--|---|
| 1970: 1971: 1972: 1973: 1974: 1975: 1976: 1977: 1978: 1979:                            | April 1 July 1                      | 796,500<br>798,600<br>833,100<br>869,800<br>901,300<br>923,700<br>943,500<br>970,300<br>992,300<br>1,014,300<br>1,042,700                   | 650,700<br>650,200<br>675,300<br>702,200<br>726,400<br>746,500<br>757,100<br>772,900<br>786,800<br>797,200<br>816,000                       | 65,700<br>66,600<br>70,600<br>74,500<br>78,700<br>79,500<br>83,300<br>86,800<br>89,300<br>93,400<br>96,700          | 31,800<br>32,300<br>34,000<br>35,800<br>36,900<br>36,800<br>38,100<br>40,100<br>41,300<br>43,600<br>45,200 | 48,400<br>49,400<br>53,100<br>57,200<br>59,400<br>60,900<br>65,100<br>70,500<br>74,900<br>80,100<br>84,800        |
| 1980:<br>1981:<br>1982:<br>1983:<br>1984:<br>1985:<br>1986:<br>1987:<br>1988:<br>1989: | April 1 July 1 | 1,052,700<br>1,054,300<br>1,062,500<br>1,084,600<br>1,109,300<br>1,130,600<br>1,138,000<br>1,167,500<br>1,186,600<br>1,200,600<br>1,245,500 | 822,000<br>822,500<br>824,500<br>838,300<br>847,400<br>851,800<br>855,000<br>873,500<br>884,200<br>892,400<br>907,000<br>908,000<br>913,100 | 98,700<br>99,200<br>101,800<br>104,300<br>108,300<br>110,400<br>112,500<br>115,500<br>118,600<br>120,600<br>132,000 | 46,100<br>46,300<br>47,300<br>48,200<br>50,200<br>53,900<br>55,300<br>59,400<br>61,700<br>63,500<br>67,800 | 85,900<br>86,300<br>88,900<br>93,800<br>103,500<br>114,500<br>115,100<br>119,200<br>122,100<br>124,000<br>138,700 |

<sup>1/</sup> Including Kalawao County (Kalaupapa Settlement).

Source: Hawaii State Department of Planning and Economic
Development, Intercensal Population Estimates for Hawaii, 1940-1980
(Statistical Report 172, February 1, 1985), table 10; Federal-State
Cooperative Program for Population Estimates, provisional intercensal and postcensal estimates, 1980-1990.

Table 7.-- RESIDENT AND DE FACTO POPULATION, BY COUNTIES AND ISLANDS: APRIL 1, 1980 AND 1990

|  | Resi   | dent popula  | tion   | De facto population  |  |  |  |
|--|--|--|--|--|--|--|--|
| County and island  | 1980   | 1990   | Percent<br>change                                      | 1980   | 1990   | Percent<br>change                                |  |
| State total  | 964,691  | 1,108,229  | 14.9   | 1,052,659  | 1,248,360  | 18.6   |  |
| Counties: Hawaii Maui Kalawao Honolulu Kauai                     | 92,053<br>70,847<br>144<br>762,565<br>39,082                   | 120,317<br>100,374<br>130<br>836,231<br>51,177                       | 30.7<br>41.7<br>-9.7<br>9.7<br>30.9                    | 98,659<br>85,721<br>144<br>822,002<br>46,133                   | 135,080<br>137,170<br>128<br>908,019<br>67,963                   | 36.9<br>60.0<br>-11.1<br>10.5<br>47.3            |  |
| Island: Hawaii Maui Kahoolawe Lanai Molokai Oahu 1/ Kauai Niihau | 92,053<br>62,823<br>2,119<br>6,049<br>762,565<br>38,856<br>226 | 120,317<br>91,361<br>-<br>2,426<br>6,717<br>836,231<br>50,947<br>230 | 30.7<br>45.4<br><br>14.5<br>11.0<br>9.7<br>31.1<br>1.8 | 98,659<br>76,829<br>2,129<br>6,907<br>822,002<br>45,907<br>226 | 135,080<br>126,992<br>2,629<br>7,677<br>908,019<br>67,737<br>226 | 36.9<br>65.3<br><br>23.5<br>11.1<br>10.5<br>47.6 |  |

<sup>1</sup>/ Includes the Northwestern Hawaiian Islands, from Nihoa to Kure Atoll, except Midway (31 residents in 1980 and 24 in 1990).

Source: U.S. Bureau of the Census, 1980 Census of Population, Number of Inhabitants, Hawaii, PC80-1-Al3 (October 1981), tables 2 and 4, and 1990 Public Law 94-171 counts; Hawaii State Data Center estimates of de facto population based on Hawaii Visitors Bureau survey data on visitors present and residents absent.

Table 8.-- LAND AREA AND DE FACTO POPULATION DENSITY, BY COUNTIES AND ISLANDS: 1990

|  | Land a  | area   | De facto population density                              |   |  |
|--|---|--|--|---|--|
| County and island  | Square<br>km.   | Square<br>miles  | Per square   | Per square<br>mile  |  |
| State total  | 16,636.5  | 6,423.4  | 75.0   | 194.3   |  |
| Counties: Hawaii Maui Kalawao Honolulu Kauai                         | 10,433.1<br>3,002.5<br>34.2<br>1,554.5<br>1,612.2                             | 4,028.2<br>1,159.3<br>13.2<br>600.2<br>622.5                         | 12.9<br>45.7<br>3.7<br>584.1<br>42.2                     | 33.5<br>118.3<br>9.7<br>1,512.9<br>109.2                      |  |
| Islands: Hawaii Maui Kahoolawe Lanai Molokai Oahu 1/ Kauai Niihau 2/ | 10,433.1<br>1,883.7<br>115.6<br>364.0<br>673.4<br>1,554.5<br>1,430.5<br>181.7 | 4,028.2<br>727.3<br>44.6<br>140.5<br>260.0<br>600.2<br>552.3<br>70.2 | 12.9<br>67.4<br>0<br>7.2<br>11.4<br>584.1<br>47.4<br>1.2 | 33.5<br>174.6<br>0<br>18.7<br>29.5<br>1,512.9<br>122.6<br>3.2 |  |

<sup>1/</sup> Includes the Northwestern Hawaiian Islands, from Nihoa to Kure Atoll except Midway (7.0 sq. km., 2.7 sq. mi., 24 inhabitants).
2/ Includes Kaula (1.0 sq. km., 0.4 sq. mi.) and Lehua

(1.0 sq. km., 0.4 sq. mi.), both uninhabited.
Source: Area from U.S. Bureau of the Census, 1990 Census of Population and Housing, Summary Population and Housing Characteristics, Hawaii, 1990 CPH-1-13 (August 1991), table 15, and 1990 Public Law 94-171 data; population from present report, table 7; density computed.

Table 9.-- RESIDENT POPULATION OF COUNTIES AND DISTRICTS: 1970, 1980, AND 1990

|   | Anni 1   | Ammi 1   | Anni 1  | Percent  | change   |
|---|--|--|---|--|--|
| County and district (see map, pp. 6-7)  | April<br>1,<br>1970  | April<br>1,<br>1980  | April<br>1,<br>1990   | 1970 to<br>1980  | 1980 to<br>1990  |
| State total   | 769,913  | 964,691  | 1,108,229   | 25.3   | 14.9   |
| Hawaii County Puna South Hilo North Hilo Hamakua North Kohala South Kohala North Kona South Kona Ka'u | 63,468<br>5,154<br>33,915<br>1,881<br>4,648<br>3,326<br>2,310<br>4,832<br>4,004<br>3,398 | 92,053<br>11,751<br>42,278<br>1,679<br>5,128<br>3,249<br>4,607<br>13,748<br>5,914<br>3,699 | 120,317<br>20,781<br>44,639<br>1,541<br>5,545<br>4,291<br>9,140<br>22,284<br>7,658<br>4,438 | 45.0<br>128.0<br>24.7<br>-10.7<br>10.3<br>-2.3<br>99.4<br>184.5<br>47.7<br>8.9 | 30.7<br>76.8<br>5.6<br>-8.2<br>8.1<br>32.1<br>98.4<br>62.1<br>29.5<br>20.0 |
| Maui County 1/  Hana Makawao Wailuku Lahaina Lanai Molokai Kalawao                                    | 46,156<br>969<br>9,979<br>22,219<br>5,524<br>2,204<br>5,089<br>172                       | 70,991<br>1,423<br>19,005<br>32,111<br>10,284<br>2,119<br>5,905<br>144                     | 100,504<br>1,895<br>29,207<br>45,685<br>14,574<br>2,426<br>6,587<br>130                     | 53.8<br>46.9<br>90.4<br>44.5<br>86.2<br>-3.9<br>16.0<br>-16.3                  | 41.6<br>33.2<br>53.7<br>42.3<br>41.7<br>14.5<br>11.5                       |
| City & Co. of Honolulu Honolulu Koolaupoko Koolauloa Waialua Wahiawa 2/ Waianae Ewa 2/                | 630,528<br>324,871<br>92,219<br>10,562<br>9,171<br>37,329<br>24,077<br>132,299           | 762,565<br>365,048<br>109,373<br>14,195<br>9,849<br>41,562<br>31,487<br>191,051            | 836,231<br>377,059<br>117,694<br>18,443<br>11,549<br>43,886<br>37,411<br>230,189            | 20.9<br>12.4<br>18.6<br>34.9<br>7.4<br>11.3<br>30.8<br>44.4                    | 9.7<br>3.3<br>7.6<br>29.9<br>17.3<br>5.6<br>18.8<br>20.5                   |
| Kauai County Hanalei Kawaihau Lihue Koloa Waimea  | 29,761<br>1,182<br>7,393<br>6,766<br>6,851<br>7,569                                      | 39,082<br>2,668<br>10,497<br>8,590<br>8,734<br>8,593                                       | 51,177<br>4,631<br>15,627<br>10,663<br>11,368<br>8,888                                      | 31.3<br>125.7<br>42.0<br>27.0<br>27.5<br>13.5                                  | 30.9<br>73.6<br>48.9<br>24.1<br>30.2<br>3.4                                |

<sup>1/</sup> Including Kalawao County.

2/ 1980 boundaries.

Source: U.S. Bureau of the Census, 1980 Census of Population, Number of Inhabitants, Hawaii, PC80-1-A13 (October 1981), table 4 and 1990 census printouts transmitted February 21, 1991.

Table 10.-- RESIDENT POPULATION OF ISLANDS AND CENSUS DESIGNATED PLACES: 1990

[This table presents data for the 123 "census designated places" defined by the Hawaii State Department of Business, Economic Development & Tourism, in cooperation with the Bureau of the Census, for the 1990 decennial census, under authority granted by Sec. 26-18, Hawaii Revised Statutes. Although described in the legislation as "cities, towns, and villages," none of these places is an independent municipality with separate governmental and taxing powers; the boundaries determined for these places are statistical rather than political]

|  | Resident       | ·                | Resident       |
|--|----------------|------------------|----------------|
| Island and place   | population     | Island and place | population     |
|  |                |                  |                |
| Hawaii   | 120,317        | Hawaii (con.):   |                |
| Captain Cook   | 2,595          | Waimea           | 5 <b>,</b> 972 |
| Halaula  | 496            | Wainaku          | 1,243          |
| Hawaiian Beaches   | 2,846          |                  | ·              |
| Hawaiian Ocean View  | 969            | Maui             | 91,361         |
| Hawaiian Paradise Park   | 3,389          | Haiku-Pauwela    | 4,509          |
| Hawi   | 924            | Haliimaile       | 841            |
| Hilo   | 37,808         | Hana             | 683            |
| Holualoa   | 3,834          | Kaanapali        | 579            |
| Honalo   | 1,926          | Kahului          | 16,889         |
| Honaunau-Napoopoo  | 2,373          | Kapalua          | 408            |
| Honokaa  | 2,186          | Kiĥei            | 11,107         |
| Honomu   | 532            | Lahaina          | 9,073          |
| Kahaluu-Keauhou  | 1,990          | Maalaea          | 443            |
| Kailua   | 9,126          | Makawao          | 5,405          |
| Kalaoa   | 4,490          | Napili-Honokowai | 4,332          |
| Kapaau   | 1,083          | Paia             | 2,091          |
| Keaau  | 1,584          | Pukalani         | 5 <b>,</b> 879 |
| Kealakekua   | 1,453          | Waihee-Waiehu    | 4,004          |
| Kukuihaele   | 316            | Waikapu          | 729            |
| Kurtistown   | 910            | Wailea-Makena    | 3 <b>,</b> 799 |
| Laupahoehoe  | 508            | Wailuku          | 10,688         |
| Mountain View  | 3 <b>,</b> 075 |                  |                |
| Naalehu  | 1,027          | Kahoolawe        | -              |
| Paauilo  | 620            |                  |                |
| Pahala   | 1,520          | Lanai            | 2,426          |
| Pahoa  | 1,027          | Lanai City       | 2,400          |
| Papaikou   | 1,634          | · ·              |                |
| Paukaa   | 495            | Molokai          | 6 <b>,</b> 717 |
| Pepeekeo   | 1,813          | Kaunakakai       | 2,658          |
| Puako  | 397            | Kualapuu         | 1,661          |
| Volcano  | 1,516          | Maunaloa         | 405            |
| Waikoloa Village   | 2,248          |                  |                |
| Ç  |                |                  |                |
| The state of the s |                |                  |                |

Continued on next page.

Table 10.-- RESIDENT POPULATION OF ISLANDS AND CENSUS DESIGNATED PLACES: 1990 -- Con.

| Island and place              | Resident population | Island and place          | Resident<br>population |
|-------------------------------|---------------------|---------------------------|------------------------|
| Oahu 1/                       | 836,231             | Oahu (con.):              |                        |
| Ahuimanu                      | 8,387               | Waianae                   | 8,758                  |
| Aiea                          | 8,906               | Waikane                   | 717                    |
| Barbers Point Housing.        | 2,218               | Waimalu                   | 29,967                 |
| Ewa Beach                     | 14,315              | Waimanalo                 | 3,508                  |
| Ewa Gentry                    | 1,992               | Waimanalo Beach           | 4,185                  |
| Ewa Villages                  | 3,780               | Waipahu                   | 31,435                 |
| Halawa                        | 13,408              | Waipio                    | 11,812                 |
| Haleiwa                       | 2,442               | Waipio Acres              | 5,304                  |
| Hauula                        | 3,479               | Wheeler AFB               | 2,600                  |
| Heeia                         | 5,010               | Whitmore Village          | 3,373                  |
| Hickam Housing                | 6,553               | will choic village        | 3,373                  |
| Honolulu 2/                   | 377,059             | Kauai                     | 50,947                 |
| Iroquois Point                | 4,188               | Anahola                   | 1,181                  |
| Kaaawa                        | 1,138               | Eleele                    | 1,489                  |
| Kahaluu                       | 3,068               | Hanalei                   | 461                    |
| Kahuku                        | 2,063               | Hanamaulu                 | 3,611                  |
| Kailua                        | 36,818              | Hanapepe                  | 1,395                  |
| Kaneohe                       | 35,448              | Kalaheo                   | 3,592                  |
| Kawela Bay                    | 366                 | Kalihiwai                 | 435                    |
| Laie                          | 5 <b>,</b> 577      | Kapaa                     | 8,149                  |
| Maili                         | 6,059               | Kaumakani                 | 803                    |
| Makaha                        | 7,990               | Kekaha                    | 3,506                  |
| Makaha Valley                 | 1,012               | Kilauea                   | 1,685                  |
| Makakilo City                 | 9,828               | Koloa                     | 1,791                  |
| Maunawili                     | 4,847               | Lawai                     | 1,787                  |
| Mililani Town                 | 29,359              | Lihue                     | 5,536                  |
| Mokapu                        | 11,662              | Omao                      | 1,142                  |
| Mokuleia                      | 1,776               | Pakala Village            | 565                    |
| Nanakuli                      | 9,575               | Poipu                     | 975                    |
| Pearl City                    | 30,993              | Princeville               | 1,244                  |
| <u>-</u>                      | 672                 |                           |                        |
| Punaluu                       | 4,111               | Puhi                      | 1,210                  |
| Pupukea<br>Schofield Barracks | 4,111<br>19,597     | Wailua Homesteads         | 2,018<br>3,870         |
| Village Darb                  | 7,407               | Waimea                    | 1,840                  |
| Village Park                  |                     | натиса                    | 1,040                  |
| Waialua                       | 17,386<br>3,943     | Nijhan Labua and Vanle    | 230                    |
| nalalua                       | 3,943               | Niihau, Lehua and Kaula . | 230                    |

Footnotes and source on next page.

### Table 10.-- RESIDENT POPULATION OF ISLANDS AND CENSUS DESIGNATED PLACES: 1990 -- Con.

1/ Includes the Northwestern Hawaiian Islands, except Midway. This is the

area Tegally described as the City and County of Honolulu.

2/ Honolulu CDP is coterminous with Honolulu Census County Division and also  $\overline{\text{Honolulu}}$  District. It extends from Red Hill to Makapuu Point, south and west of the crest of the Koolau Mts. Like all other CDPs on Oahu, it is part of a single municipality, the City and County of Honolulu. The population count has been corrected from the published figure.

Source: U.S. Bureau of the Census, printouts dated February 21, 1991.

Table 11.-- POST-ENUMERATION SURVEY (PES) ESTIMATES OF THE TOTAL POPULATION OF THE UNITED STATES, HAWAII, AND SELECTED COUNTIES: 1990

|   |                                   | State                         | Counties over 100,000     |                           |                           |
|---|-----------------------------------|-------------------------------|---------------------------|---------------------------|---------------------------|
| Subject   | United<br>States                  | of<br>Hawaii                  | Hono-<br>lulu             | Hawaii                    | Maui                      |
| Enumerated population PES estimate Percent net undercount | 248,709,873<br>253,978,000<br>2.1 | 1,108,229<br>1,136,000<br>2.4 | 836,231<br>861,000<br>2.9 | 120,317<br>122,000<br>1.4 | 100,374<br>102,000<br>1.6 |

Source: U.S. Bureau of the Census, Release CB91-221 (June 13, 1991), tables 1 and 3.

Table 12.-- POPULATION RANKING OF THE STATE, HONOLULU, AND COUNTIES: 1980 AND 1990

|  | Resident                            | Ranking                    |                            |
|--|-------------------------------------|----------------------------|----------------------------|
| Comparison <u>1</u> /  | population,<br>1990                 | 1980                       | 1990                       |
| State of Hawaii: Among the 50 States and D.C Among the 50 States | 1,108,229<br>1,108,229              | 39<br>39                   | 41<br>41                   |
| Honolulu MSA: 2/<br>Among all MSAs and CMSAs                     | 836,231                             | 47                         | 51                         |
| City and County of Honolulu: 3/ Among all counties               | 836,231<br>836,231                  | 43<br>12                   | 40<br>11                   |
| Honolulu CDP: 4/ Among all incorp. places and CDPs               | 377,059                             | 36                         | 39                         |
| Hawaii County 5/   | 120,317<br>130<br>51,177<br>100,374 | 447<br>3,136<br>979<br>577 | 383<br>3,139<br>823<br>457 |

NA Not available.

<sup>1/</sup> MSA, Metropolitan Statistical Area; CMSA, Consolidated MSA; CDP, Census Designated Place, that is, an unincorporated urban place.

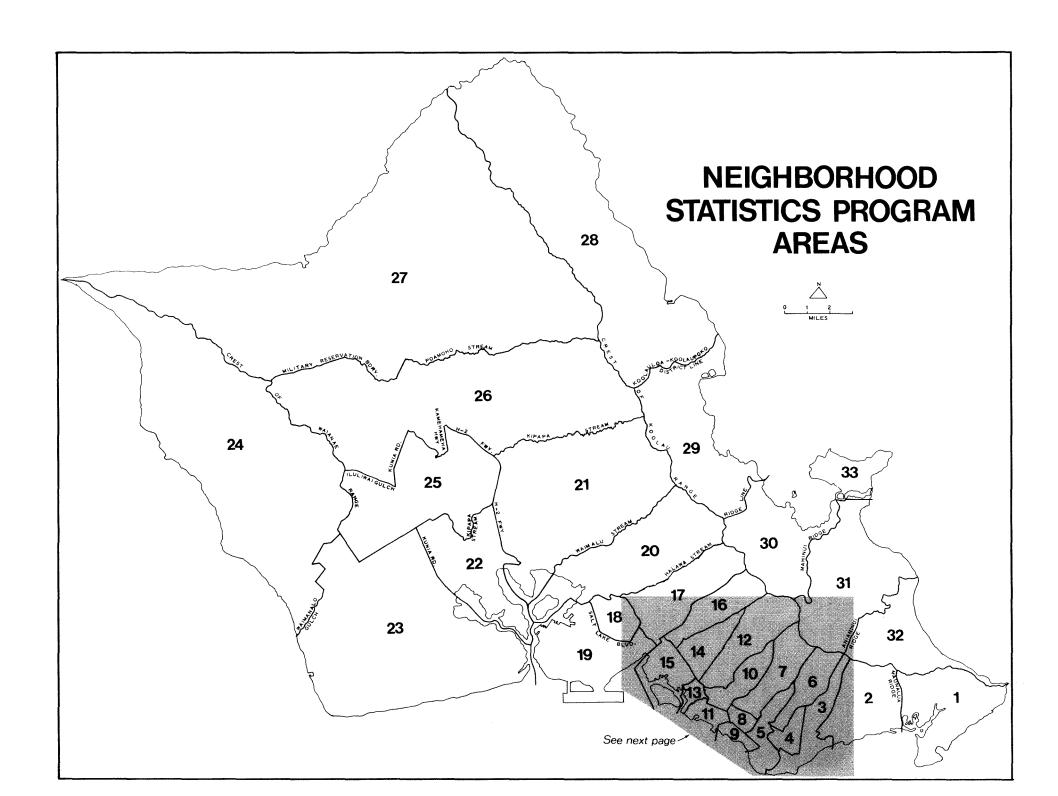
<sup>2/</sup> The Honolulu MSA consists of the City and County of Honolulu, comprising Oahu and the Northwestern Hawaiian Islands (except Midway).

<sup>3/</sup> The City and County of Honolulu consists of Oahu and the Northwestern Hawaiian Islands (except Midway).

<sup>4/</sup> The Honolulu CDP consists of Honolulu District, comprising the area between Red Hill and Makapuu Point, south and southwest of the crest of the Koolau Mountains, and the Northwestern Hawaiian Islands (except Midway). The 1990 count shown here has been corrected from the published total.

<sup>5/</sup> Among all U.S. counties.

Source: U.S. Bureau of the Census, 1980 Census of Population, PC80-1-A1, tables 16, 18, and 27, and press releases, printouts, and records.



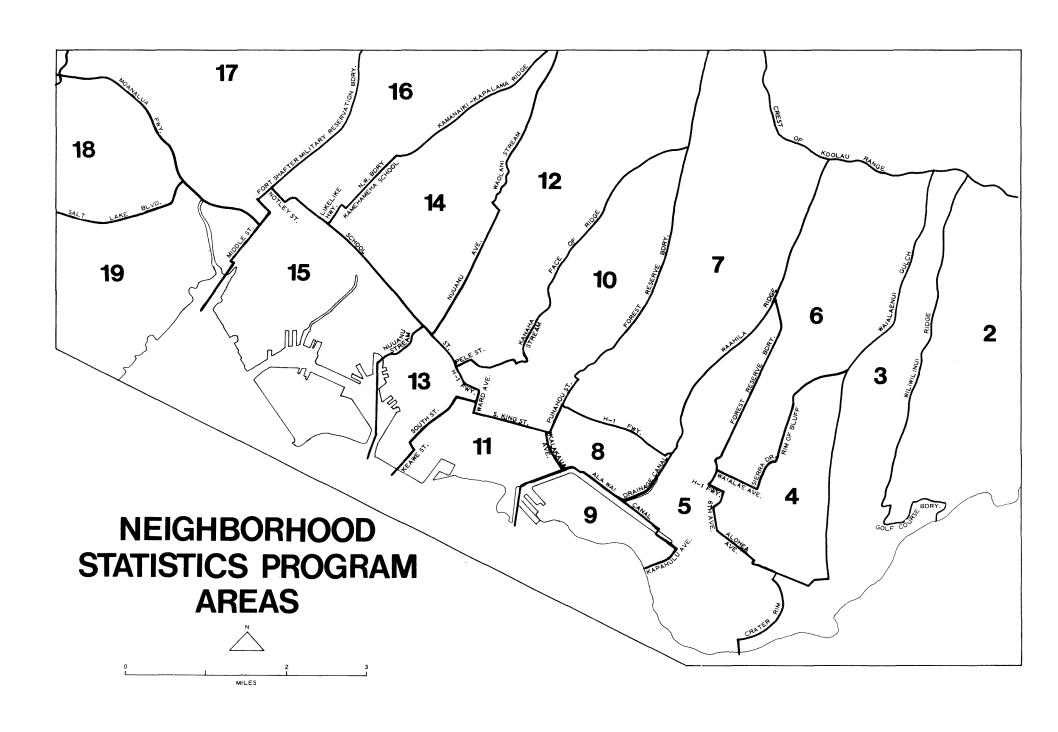
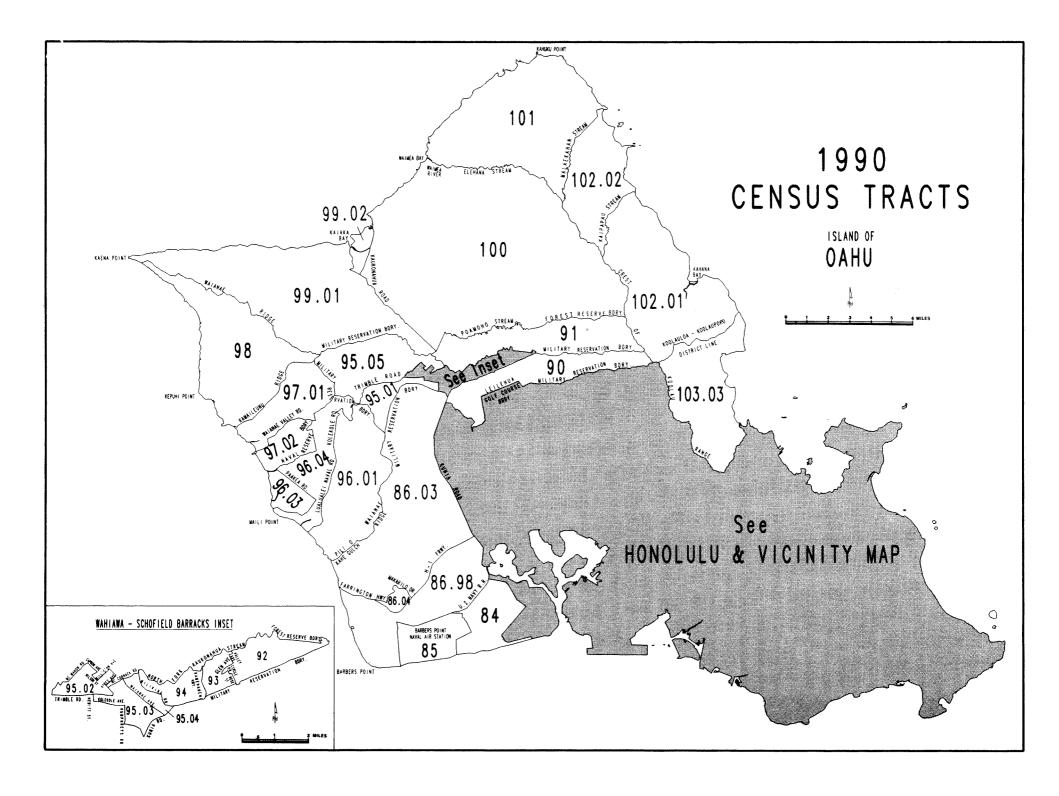
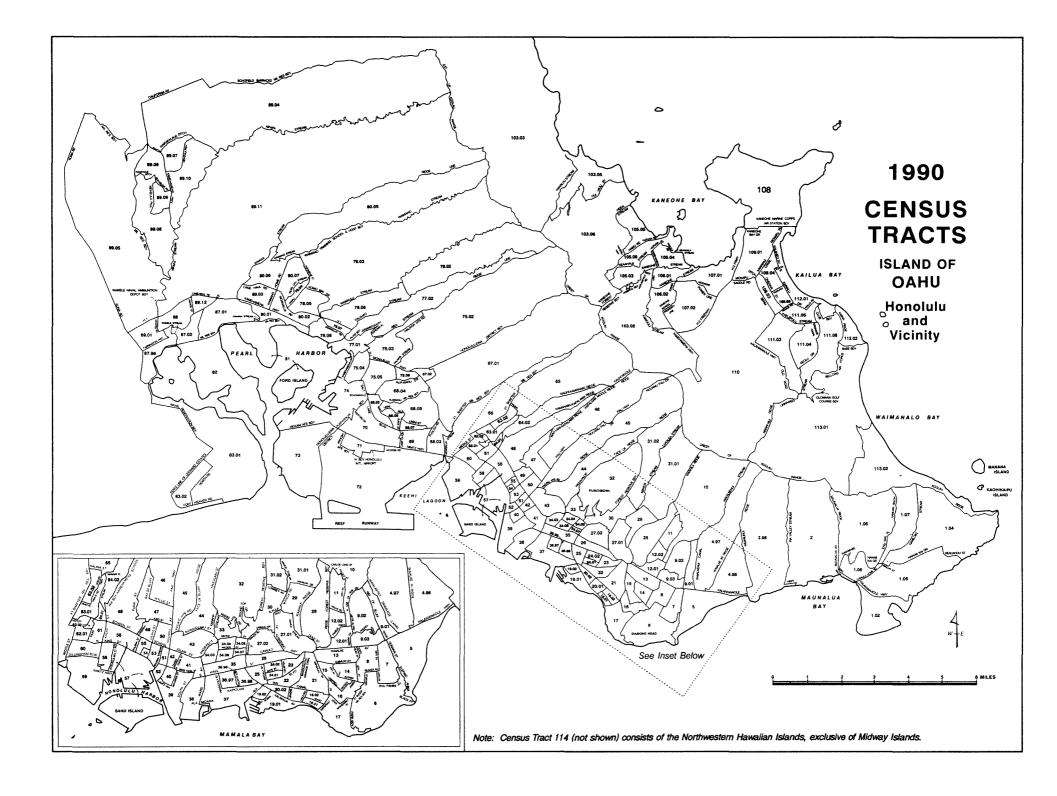


Table 13.-- POPULATION OF OAHU NEIGHBORHOODS: 1980 AND 1989

| Neighborhood (see maps<br>on pp. 25-26)   | April 1,<br>1980  | July 1,<br>1989  | Percent<br>increase  |
|---|---|--|--|
| Oahu total  | 762,564   | 841,600  | 10.4   |
| Oahu total  1 Hawaii Kai 2 Kuliouou 3 Waialae-Kahala 4 Kaimuki 5 Diamond Head/     Kapahulu 6 Palolo 7 Manoa 8 McCully/Moiliili 9 Waikiki 10 Makiki/Tantalus 11 Ala Moana/Kakaako 12 Nuuanu/Punchbowl 13 Downtown 14 Liliha/Kapalama 15 Kalihi/Palama 16 Kalihi Valley 17 Moanalua 18 Aliamanu/Salt Lake 19 Airport 20 Aiea 21 Pearl City | 762,564  25,603 14,187 11,459 19,742  21,206 13,793 23,213 26,644 17,384 28,340 10,091 16,145 8,598 21,046 40,144 17,613 12,948 30,785 28,436 30,363 42,816 | 28,737<br>15,933<br>11,362<br>19,930<br>21,574<br>14,103<br>23,961<br>26,471<br>18,680<br>28,456<br>11,327<br>16,847<br>11,653<br>23,331<br>40,118<br>17,809<br>12,927<br>37,247<br>28,514<br>34,522<br>49,451 | 10.4  12.2 12.3 -0.8 1.0  1.7 2.2 3.2 -0.6 7.5 0.4 12.2 4.3 35.5 10.9 -0.1 1.1 -0.2 21.0 0.3 13.7 15.5 |
| 21 Pearl City 22 Waipahu 23 Ewa 24 Waianae Coast 25 Mililani/Waipio 26 Wahiawa 27 North Shore 28 Koolauloa 29 Kahaluu 30 Kaneohe 31 Kailua/Mokapu 32 Waimanalo  | 42,816 34,861 35,632 31,564 24,363 42,169 12,921 11,123 11,330 36,125 52,771 9,139  | 49,451<br>51,625<br>39,516<br>35,121<br>32,813<br>43,882<br>14,008<br>12,388<br>13,058<br>42,086<br>55,058<br>9,091  | 15.5<br>48.1<br>10.9<br>11.3<br>34.7<br>4.1<br>8.4<br>11.4<br>15.2<br>16.5<br>4.3<br>-0.5              |

Source: Honolulu Department of General Planning, records.





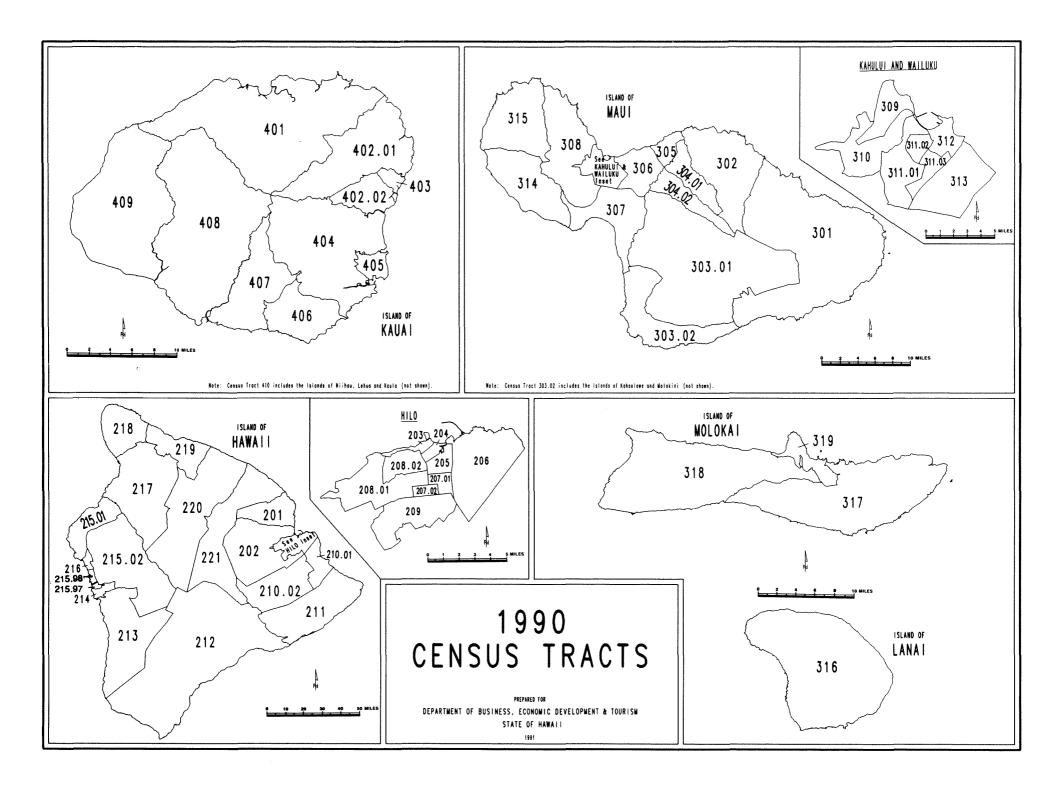


Table 14.-- RESIDENT POPULATION AND HOUSEHOLDS FOR THE CITY AND COUNTY OF HONOLULU, BY DISTRICTS AND CENSUS TRACTS: 1990

[See maps, pp. 6-7 and 28-29]

|                              | <b>+</b>        |                 |                                      |                 |                 |
|------------------------------|-----------------|-----------------|--------------------------------------|-----------------|-----------------|
| District 1/ and census tract | Popu-<br>lation | House-<br>holds | District <u>1</u> / and census tract | Popu-<br>lation | House-<br>holds |
| Total                        | 836,231         | 265,304         | 26                                   | 4,957           | 2,103           |
| Honolulu                     | 377,059         | 137,801         | 27.01<br>27.02                       | 4,340<br>4,998  | 622<br>2,000    |
| 1.02                         | 1,674           | 545             | 28                                   | 4,075           | 1,431           |
| 1.04                         | 8,376           | 2,455           | 29                                   | 1,383           | 438             |
| 1.05                         | 5,251           | 1,591           | 30                                   | 4,236           | 1,531           |
| 1.06                         | 6,292           | 2,249           | 31.01                                | 3,851           | 1,246           |
| 1.07                         | 3,009           | 908             | 31.02                                | 3,537           | 1,108           |
| 1.08                         | 2,830           | 1,008           | 32                                   | 853             | 314             |
| 2                            | 5,742           | 1,838           | 33                                   | 876             | 290             |
| 3.98                         | 5,617           | 1,833           | 34.03                                | 5,177           | 2,652           |
| 4.97                         | 2,771           | 949             | 34.04                                | 4,757           | 2,284           |
| 4.98                         | 3,372           | 1,100           | 34.05                                | 3,080           | 1,768           |
| 5                            | 3,744           | 1,353           | 34.06                                | 5,924           | 2,863           |
| 6                            | 1,311           | 491             | 34.07                                | 1,136           | 620             |
| 7                            | 2,993           | 971             | 35                                   | 4,688           | 2,364           |
| 8                            | 3,856           | 1,233           | 36.97                                | 2,369           | 1,195           |
| 9.01                         | 2,334           | 906             | 36.98                                | 5,235           | 3,220           |
| 9.02                         | 3,779           | 1,338           | 37                                   | 2,325           | 1,305           |
| 9.03                         | 2,760           | 973             | 38                                   | 721             | 368             |
| $10 \dots \dots$             | 3,194           | 1,005           | 39                                   | 181             | 24              |
| 11                           | 4,072           | 1,132           | 40                                   | 991             | 626             |
| 12.01                        | 3,118           | 1,127           | 41                                   | 4,742           | 2,150           |
| 12.02                        | 3,081           | 1,020           | 42                                   | 2,672           | 1,508           |
| 13                           | 4,488           | 1,572           | 43                                   | 5,632           | 2,312           |
| 14                           | 2,595           | 855             | 44                                   | 5,429           | 1,594           |
| 15                           | 3,664           | 1,243           | 45                                   | 5,264           | 2,061           |
| $\frac{16}{17}$              | 3,911           | 1,373           | 46                                   | 3,687           | 1,212           |
| 17                           | 2,536           | 1,384           | 47                                   | 4,837           | 1,567           |
| $18.01 \dots$                | 1,307           | 723             | 48                                   | 5,991           | 1,645           |
| 18.02                        | 4,411           | 2,518           | 49                                   | 2,978           | 948             |
| 19.01                        | 1,190           | 702             | 50                                   | 4,724           | 1,599           |
| 19.02                        | 6,000           | 3,568           | 51                                   | 2,399           | 1,133           |
| $20.01 \dots$                | 3,037           | 1,714           | 52                                   | 2,480           | 1,169           |
| 20.02                        | 3,823           | 2,183           | 53                                   | 4,208           | 1,490           |
| 21                           | 3,691           | 1,648           | 54                                   | 1,609           | 402             |
| 22                           | 7,292           | 3,552           | 55                                   | 2,144           | 622             |
| 23                           | 5,687           | 2,659           | 56                                   | 6,185           | 1,877           |
| 24.01                        | 3,016           | 1,356           | 57                                   | 1,867           | 624             |
| 24.02                        | 3,285           | 1,645           | 57.99 <u>2</u> /                     | 298             |                 |
| 25                           | 4,229           | 2,144           | 58                                   | 3,404           | 1,073           |
|                              |                 |                 |                                      |                 |                 |

Continued on next page.

Table 14.-- RESIDENT POPULATION AND HOUSEHOLDS FOR THE CITY AND COUNTY OF HONOLULU, BY DISTRICTS AND CENSUS TRACTS: 1990 - Con.

| District 1/ and  | Popu-          | House- | District 1/ and | Popu-          | House-       |
|------------------|----------------|--------|-----------------|----------------|--------------|
| census tract     | lation         | holds  | census tract    | lation         | holds        |
|                  |                |        |                 |                |              |
| 50               | 7 - 70         | 700    | <b>.</b>        | F 750          | 0.760        |
| 59               | 3,570          | 782    | 78.07           | 5,759          | 2,768        |
| 60               | 5,857          | 1,367  | 78.08           | 2,960          | 959          |
| 61               | 3,575          | 794    | 80.01           | 1,610          | 501          |
| 62.01            | 5,040          | 1,228  | 80.02           | 2,914          | 866          |
| 62.02            | 2 <b>,</b> 390 | 618    | 80.03           | 5,055          | 1,697        |
| 63.01            | 3,433          | 818    | 80.05           | 7,313          | 1,975        |
| 63.02            | 2,781          | 560    | 80.06           | 5,383          | 1,463        |
| 64.01            | 1,827          | 379    | 80.07           | 5,904          | 1,600        |
| 64.02            | 5,680          | 1,331  | 81              | 2,384          | 624          |
| 65               | 4,077          | 974    | 82              | _              | -            |
| 66               | 2,952          | 911    | 83.01           | 5,786          | 1,513        |
| 67.01            | 6,894          | 1,909  | 83.02           | 6,699          | 1,387        |
| 67.02            | 2,758          | 868    | 84              | 9,677          | 2,696        |
| 68.02            | 5,845          | 1,386  | 85              | 4,529          | 1,313        |
| 68.03            | 36             | 1,550  | 86.03           | 6,509          | 2,086        |
| 68.04            | 8,835          | 2,327  | 86.04           | 4,015          | 1,026        |
| 68.05            | 4,326          | 1,569  | 86.98           | 5,521          | 1,333        |
|                  |                | 548    | 86.99 2/        | 23             | 1,000        |
| 68.06            | 1,922          |        |                 |                | 1 715        |
| 68.07            | 10,084         | 4,000  | 87.01           | 7,598          | 1,715<br>969 |
| 69               | 3,182          | 925    | 87.02           | 4,161          |              |
| 70               | 4,796          | 1,441  | 87.98           | 4,471          | 1,324        |
| 71               | 2,618          | 781    | 88              | 6,172          | 1,415        |
| 72               | 1,003          | 62     | 89.01           | 8,084          | 2,079        |
| 114              | -              | -      | 89.04           | 5,183          | 1,750        |
|                  |                |        | 89.05           | 7,561          | 2,086        |
| Ewa              | 230,189        | 64,948 | 89.06           | 4,025          | 1,287        |
| 73               | 6,689          | 1,858  | 89.07           | 4,560          | 1,304        |
| 73.99 <u>2</u> / | 53             | -      | 89.08           | 6,688          | 1,910        |
| 74               | 3,633          | 711    | 89.09           | 3 <b>,</b> 779 | 1,145        |
| 74.99 2/         | 4,331          | -      | 89.10           | 10,444         | 3,174        |
| 75.02            | 1,236          | 21     | 89.11           | 11,893         | 4,055        |
| 75.03            | 4,952          | 1,481  | 89.12           | 2,193          | 461          |
| 75.04            | 3,080          | 814    |                 |                |              |
| 75.05            | 5,189          | 1,715  | Wahiawa         | 43,886         | 10,849       |
| 75.06            | 1,367          | 400    | 90              | 2,600          | 702          |
| 77.01            | 4,206          | 1,170  | 91              | 4,303          | 1,024        |
| 77.02            | 4,689          | 1,456  | 92              | 7,930          | 2,461        |
| 78.03            | 9,136          | 2,703  | 93              | 4,214          | 1,382        |
| 78.04            | 2,034          | 584    | 94              | 5,242          | 1,776        |
| 78.05            | 5,300          | 1,687  | 95.01           | 3,532          | 873          |
| 78.06            | 5,441          | 1,867  | 95.02           | 7,307          | 1,472        |
| /0.00            | 3,441          | 1,00/  | 33.04           | 7,507          | 1,474        |
|                  | l              | L      |                 |                |              |

Continue on next page.

Table 14.-- RESIDENT POPULATION AND HOUSEHOLDS FOR THE CITY AND COUNTY OF HONOLULU, BY DISTRICTS AND CENSUS TRACTS: 1990 - Con.

| District 1/ and  | Popu-     | House- | District 1/ and | Popu-  | House- |
|------------------|-----------|--------|-----------------|--------|--------|
| census tract     | lation    | holds  | census tract    | lation | holds  |
|                  |           |        |                 |        |        |
| 95.03            | 4,339     | 1      | 103.05          | 4,663  | 1,357  |
| 95.04            | 1,178     | 301    | 103.06          | 6,562  | 2,064  |
| 95.05            | 3,241     | 857    | 105.03          | 2,111  | 567    |
| 33.03            | 3,241     | 037    | 105.04          | 5,373  | 1,461  |
| Waianae          | 37,411    | 9,417  | 105.05          | 3,612  | 1,056  |
| 96.01            | 5,974     | 1,232  | 105.06          | 7,804  | 2,573  |
| 96.03            | 6,820     | 1,612  | 106.01          | 3,200  | 945    |
| 96.04            | 4,733     | 1,083  | 106.02          | 5,480  | 1,578  |
| 97.01            | 5,523     | 1,614  | 107.01          | 3,551  | 1,193  |
| 97.02            | 6,153     | 1,442  | 107.02          | 4,336  | 1,256  |
| 98               | 8,208     | 2,434  | 108             | 11,662 | 2,014  |
| 50               | 0,200     | 2,454  | 109.01          | 3,208  | 1,009  |
| Waialua          | 11,549    | 3,468  | 109.03          | 4,253  | 1,328  |
| 99.01            | 5,792     | 1,864  | 109.04          | 3,391  | 1,034  |
| 99.02            | 3,956     | 1,113  | 109.05          | 2,568  | 846    |
| 100              | 1,801     | 491    | 110             | 3,910  | 1,101  |
| 100              | 1,001     | 152    | 111.03          | 3,884  | 1,123  |
| Koolauloa        | 18,443    | 4,935  | 111.04          | 4,937  | 1,470  |
| 101              | 6,909     | 2,127  | 111.05          | 3,732  | 1,508  |
| 102.01           | 4,608     | 1,458  | 111.06          | 5,774  | 1,704  |
| 102.02           | 6,926     | 1,350  | 112.01          | 4,687  | 1,556  |
| 102.02           | 0,520     | 1,000  | 112.02          | 1,536  | 596    |
| Koolaupoko       | 117,694   | 33,886 | 113.01          | 4,859  | 1,189  |
| 103.02 · · · · · | 3,745     | 1,081  | 113.02          | 4,196  | 940    |
| 103.03           | 4,660     | 1,337  |                 | .,     |        |
| 100.00           | ,,,,,,,,, | 1,00   |                 |        |        |
|                  | l         |        | <u> </u>        |        |        |

<sup>1/ 1980</sup> boundaries.

\[
\bar{2}\]/ Persons living aboard vessels.

\[
\bar{S}\]

ource: U.S. Bureau of the Census, Summary Tape File 1A, tabulated by Hawaii State Data Center.

Table 15.-- RESIDENT POPULATION AND HOUSEHOLDS FOR HAWAII, KALAWAO, KAUAI, AND MAUI COUNTIES, BY DISTRICTS AND CENSUS TRACTS: 1990

[See maps, pp. 6-7 and 30]

|                   |         |              | Particular de la constant de la cons |                |             |
|-------------------|---------|--------------|--|----------------|-------------|
| County, district, | Popu-   | House-       | County, district,  | Popu-          | House-      |
| and census tract  | lation  | holds        | and census tract   | lation         | holds       |
|                   |         |              |  |                |             |
| TTAYNA TT         |         |              |  | E E4E          | 1 706       |
| HAWAII            |         |              | Hamakua  | 5,545          | 1,796       |
|                   |         |              | 219  | 3,681          | 1,209       |
| Total             | 120,317 | 41,461       | 220  | 1,864          | 587         |
| Couth Hilo        | 44 670  | 15 550       | North Hilo   | 1,541          | 506         |
| South Hilo        | 44,639  | 15,558       | 221  | •              | 506         |
| 201               | 5,102   | 1,705        | 221  | 1,541          | 300         |
| 202               | 1,871   | 579          | I/AIIA T   |                |             |
| 203               | 3,723   | 1,633        | KAUAI  |                |             |
| 204               | 3,612   | 1,410        |  | 100            | 16 005      |
| 205               | 5,576   | 2,096        | Total  | 51,177         | 16,295      |
| 206               | 3,902   | 1,355        |  |                |             |
| 207.01            | 4,399   | 1,559        | Hanalei  | 4,631          | 1,628       |
| 207.02            | 4,693   | 1,460        | 401  | 4,631          | 1,628       |
| 208.01            | 3,062   | 868          |  |                |             |
| 208.02            | 5,081   | 1,746        | Kawaihau   | 15,627         | 4,938       |
| 209               | 3,618   | 1,147        | 402.01   | 2,178          | 656         |
|                   |         | -            | 402.02   | 6,622          | 2,151       |
| Puna              | 20,781  | 7,136        | 403  | 6,827          | 2,131       |
| 210.01            | 6,844   | 2,262        |  |                |             |
| 210.02            | 7,235   | 2,603        | Lihue  | 10,663         | 3,330       |
| 211               | 6,702   | 2,271        | 404  | 5,384          | 1,345       |
| 211               | 0,702   | 2,2/1        | 405  | 5 <b>,</b> 275 | 1,985       |
| Ka'u              | 4,438   | 1,530        | 405.99 1/  | 4              | 1,505       |
| 212               | 4,438   | 1,530        | 403.99 1/  | 7              |             |
| 212               | 4,430   | 1,330        | Koloa  | 11,368         | 3,689       |
| South York        | 7 650   | 2 501        | 406  | 4,900          |             |
| South Kona        | 7,658   | 2,591        | 1  | •              | 1,617       |
| 213               | 4,998   | 1,654        | 407  | 6,468          | 2,072       |
| 214               | 2,660   | 937          | Y17 *  | 0 000          | 2 710       |
| 1 **              | 22.224  | <b>-</b> 000 | Waimea   | 8,888          | 2,710       |
| North Kona        | 22,284  | 7,898        | 408  | 2,913          | 919         |
| 215.01            | 6,486   | 2,166        | 409  | 5,745          | 1,749       |
| 215.02            | 2,944   | 1,058        | 410  | 230            | 42          |
| 215.97            | 104     | 33           |  |                |             |
| 215.98            | 3,089   | 1,142        | KALAWAO  |                |             |
| 216               | 9,661   | 3,499        |  |                |             |
|                   |         | 1            | Total  | 130            | 62          |
| South Kohala      | 9,140   | 3,095        |  |                |             |
| 217               | 9,140   | 3,095        | Kalawao  | 130            | 62          |
|                   |         |              | 319  | 130            | 62          |
| North Kohala      | 4,291   | 1,351        |  |                |             |
| 218               | 4,291   | 1,351        |  |                |             |
|                   |         | ]            |  |                |             |
|                   |         |              | <u> </u>   |                | <del></del> |

Continue on next page.

Table 15.-- RESIDENT POPULATION AND HOUSEHOLDS FOR HAWAII, KALAWAO, KAUAI, AND, MAUI COUNTIES, BY DISTRICTS AND CENSUS TRACTS: 1990 - Con.

| County, district, | Popu-   | House- | County, district, | Popu-   | House- |
|-------------------|---------|--------|-------------------|---------|--------|
| and census tract  | lation  | holds  | and census tract  | lation  | holds  |
|                   |         |        |                   | 2002011 |        |
| 344777            |         |        | 700               | 0.770   | 2 500  |
| MAUI              |         |        | 309               | 8,372   | 2,509  |
|                   |         |        | 310               | 5,060   | 1,849  |
| Total             | 100,374 | 33,145 | 311.01            | 4,516   | 1,297  |
|                   |         |        | 311.02            | 4,332   | 1,475  |
| Hana              | 1,895   | 589    |                   |         |        |
| 301               | 1,895   | 589    | 311.03            | 4,438   | 1,099  |
|                   |         |        | 312               | 3,386   | 1,099  |
| Makawao           | 29,207  | 9,798  | 313               | 217     | 47     |
| 302               | 5,695   | 1,916  | 0.20              |         |        |
| 303.01            | 5,525   | 1,960  | Lahaina           | 14,574  | 4,868  |
|                   | , ,     | 1,029  | 314               | 9,189   | 2,683  |
| 303.02            | 2,496   |        | 1                 |         | •      |
| 304.01            | 7,271   | 2,290  | 315               | 5,385   | 2,185  |
| 304.02            | 6,127   | 1,929  |                   |         | 0.45   |
| 305               | 2,093   | 674    | Lanai             | 2,426   | 847    |
|                   |         |        | 316               | 2,426   | 847    |
| Wailuku           | 45,685  | 15,017 |                   |         |        |
| 306               | 213     | 85     | Molokai           | 6,587   | 2,026  |
| 307               | 12,869  | 4,902  | 317               | 4,419   | 1,407  |
| 307.99 1/         | 9       | _      | 318               | 2,168   | 619    |
| 308               | 2,273   | 655    |                   | -,      |        |
| JUU               | 2,2/3   |        |                   |         |        |
|                   |         |        | V                 |         |        |

1/ Persons living aboard vessels.
 Source: U.S. Bureau of the Census, Summary Tape File 1A, tabulated by
Hawaii State Data Center.

Table 16.-- RESIDENT AND DE FACTO POPULATION AND EMPLOYED PERSONS, FOR WAIKIKI: 1960 TO 1990

[For definitions of resident and de facto population, see table 3, footnotes 1 and 3. For earlier years, 1920-1950, see Data Book 1987, table 14. Waikiki is bounded by the Ala Wai Canal, Kapahulu Avenue, and the Pacific Ocean]

|  |        |        |        |        | Densi | ty <u>1</u> / |
|--|--------|--------|--------|--------|-------|---------------|
| Subject  | 1960   | 1970   | 1980   | 1990   | 1980  | 1990          |
| Resident population  Temporarily absent 2/  De facto population  Visitors present 2/ | 11,075 | 13,124 | 17,384 | 19,768 | 34.3  | 39.0          |
|  | 36     | 176    | 174    | 327    | 0.3   | 0.6           |
|  | 18,753 | 34,874 | 63,710 | 95,979 | 125.7 | 189.3         |
|  | 7,714  | 21,926 | 46,500 | 76,538 | 91.7  | 151.0         |
| Employed persons: 3/ Living in Waikiki Working in Waikiki                            | 6,327  | 7,866  | 9,593  | (NA)   | 18.9  | (NA)          |
|  | (NA)   | (NA)   | 30,011 | (NA)   | 59.2  | (NA)          |

NA Not available.

 $<sup>\</sup>frac{1}{2}$  Per acre. Based on land area of 205 hectares (507 acres).  $\frac{2}{4}$  Annual averages. Estimated.  $\frac{2}{3}$  Includes armed forces.

Source: Visitors present and residents absent estimated by Hawaii State Data Center from Hawaii Visitors Bureau survey data. Area, resident population, and employment from U.S. Bureau of the Census, census tract bulletins, 1960-1980, and 1990 P.L. 94-171 tape, and Data Book 1987, table 380.

Table 17.-- POPULATION AND LAND AREA, URBAN AND RURAL, BY COUNTIES: 1990

| Subject                                   | State<br>total | Hono-<br>lulu | Hawaii  | Kauai  | Maui &<br>Kalawao |
|---|----------------|---------------|---------|--------|-------------------|
| Land area (square miles)  Urban 1/  Rural | 6,423.4        | 600.2         | 4,028.2 | 622.5  | 1,172.5           |
|   | 644.4          | 197.8         | 322.6   | 28.2   | 95.8              |
|   | 5,779.0        | 402.3         | 3,705.7 | 594.3  | 1,076.7           |
| Resident population  Urban 1/  Rural      | 1,108,229      | 836,231       | 120,317 | 51,177 | 100,504           |
|   | 986,171        | 806,429       | 73,135  | 28,264 | 78,343            |
|   | 122,058        | 29,802        | 47,182  | 22,913 | 22,161            |

<sup>1/</sup> Includes both the Honolulu Urbanized Area (138./ square miles, 632,6 $\overline{0}$ 3 inhabitants) and Kailua Urbanized Area (35.0 square miles, 114,506 inhabitants).

Source: U.S. Bureau of the Census, 1990 Census of Population and Housing, printout, and Geography Division, records.

Table 18.-- CENTERS OF POPULATION, BY COUNTIES: 1980

| County  | North<br>latitude<br>(degrees) | West<br>longitude<br>(degrees) | Approximate location     |
|---|--------------------------------|--------------------------------|--------------------------|
| State of Hawaii Hawaii County Maui County Kalawao County Honolulu County Kauai County | 21.2009                        | 157.6129                       | 7 mi. SE of Koko Head    |
|   | 19.7015                        | 155.3667                       | 17 mi. W of Hilo         |
|   | 20.8809                        | 156.5184                       | 1 mi. SW of Wailuku PO   |
|   | 21.1930                        | 156.9766                       | Kalaupapa                |
|   | 21.3704                        | 157.8946                       | 1457 Ala Aolani St.      |
|   | 22.0065                        | 159.4659                       | 3.5 mi. N of Knudsen Gap |

Source: Hawaii State Census Statistical Areas Committee, Centers of Population, 1960-1980 (Report CTC-59, August 17, 1984).

Table 19.-- RESIDENT POPULATION, BY AGE AND SEX: 1980 AND 1990

|  | Ap  | ril 1, 19   | 80   | Apr  | il 1, 1990   | <u> </u>   |
|--|---|---|--|--|--|--|
| Age  | Both<br>sexes   | Male  | Female   | Both<br>sexes  | Male   | Female   |
| All ages   | 964,691   | 494,683   | 470,008  | 1,108,229  | 563,891  | 544,338  |
| Under 5 years  5 to 9 years  10 to 14 years  20 to 24 years  25 to 29 years  30 to 34 years  40 to 44 years  45 to 49 years  50 to 54 years  50 to 54 years  65 to 69 years  70 to 74 years  75 to 79 years  80 to 84 years  85 years and over | 77,848<br>73,057<br>74,870<br>86,446<br>105,682<br>95,287<br>84,314<br>63,948<br>47,468<br>45,240<br>49,204<br>47,383<br>37,794<br>29,153<br>20,222<br>13,673<br>7,541<br>5,561 | 40,004<br>37,555<br>38,459<br>45,673<br>59,070<br>48,864<br>42,990<br>32,684<br>23,765<br>21,589<br>23,298<br>23,502<br>18,871<br>15,384<br>10,991<br>6,796<br>3,177<br>2,011 | 37,844<br>35,502<br>36,411<br>40,773<br>46,612<br>46,423<br>41,324<br>31,264<br>23,703<br>23,651<br>25,905<br>23,881<br>18,923<br>13,769<br>9,231<br>6,877<br>4,364<br>3,550 | 83,223<br>80,907<br>73,896<br>72,491<br>90,794<br>100,178<br>100,518<br>95,782<br>82,557<br>61,963<br>46,812<br>45,375<br>48,728<br>45,375<br>48,728<br>45,584<br>33,069<br>22,694<br>13,261<br>10,397 | 42,748<br>41,579<br>38,144<br>38,097<br>50,552<br>52,738<br>51,325<br>48,955<br>42,368<br>31,253<br>23,019<br>21,087<br>22,651<br>21,848<br>15,696<br>11,255<br>6,599<br>3,977 | 40,475<br>39,328<br>35,752<br>34,394<br>40,242<br>47,440<br>49,193<br>46,827<br>40,189<br>30,710<br>23,793<br>24,288<br>26,077<br>23,736<br>17,373<br>11,439<br>6,662<br>6,420 |
| Under 18 years 18 to 64 years 65 years and over Median age (years)   | 275,583<br>612,958<br>76,150<br>28.3  | 141,516<br>314,808<br>38,359<br>27.6  | 134,067<br>298,150<br>37,791<br>29.1   | 280,126<br>703,098<br>125,005  | 144,278<br>360,238<br>59,375<br>30.8   | 135,848<br>342,860<br>65,630<br>32.6   |

Source: U.S. Bureau of the Census, 1980 Census of Population, General Population Characteristics, Hawaii, PC80-1-B13 (July 1982), table 20, and 1990 Summary Tape File 1A, tabulated by Hawaii State Data Center.

Table 20.-- RESIDENT POPULATION, BY AGE AND SEX, BY COUNTIES: 1990

|  |  | Other counties  |   |                        |  |   |
|--|--|---|---|------------------------|--|---|
| Subject  | State<br>total   | Co. of Honolulu   | Hawaii  | Kalawao                | Kauai  | Maui  |
| Total persons  | 1,108,229  | 836,231   | 120,317   | 130                    | 51,177   | 100,374   |
| Male   | 563,891<br>544,338<br>103.6<br>280,126<br>703,098<br>125,005 | 425,994<br>410,237<br>103.8<br>204,613<br>539,786<br>91,832 | 60,665<br>59,652<br>101.7<br>34,515<br>70,716<br>15,086 | 50<br>160.0<br>-<br>86 | 25,951<br>25,226<br>102.9<br>14,115<br>30,378<br>6,684 | 51,201<br>49,173<br>104.1<br>26,883<br>62,132<br>11,359 |
| Percent: Under 18 years 18 to 64 years 65 years and over | 25.3<br>63.4<br>11.3   | 24.5<br>64.5<br>11.0  | 28.7<br>58.8<br>12.5                                    | 66.2<br>33.8           | 27.6<br>59.4<br>13.1                                   | 26.8<br>61.9<br>11.3                                    |
| Median age (years)  In group quarters  Percent           | 32.6<br>37,632<br>3.4  | 32.2<br>33,893<br>4.1                                       | 34.3<br>1,685<br>1.4                                    | 45                     | 33.9<br>654<br>1.3                                     | 33.4<br>1,355<br>1.3                                    |

Source: U.S. Bureau of the Census, Summary Tape File 1A, tabulated by Hawaii State Data Center.  $\,$ 

Table 21.-- ETHNIC STOCK BY MILITARY STATUS: 1988

[Excludes persons in institutions or military barracks, on Niihau, or in Kalawao. Based on a sample survey of 17,024 persons]

|  | Total   |   | Armed   | Military  | Other  |
|--|---|---|---|---|--|
| Ethnic stock $\underline{1}/$  | Number  | Percent   | forces  | dependents  | civilians  |
| All groups   | 1,048,702   | 100.0   | 38,815  | 67,323  | 942,564  |
| Unmixed Caucasian Japanese Chinese Filipino Hawaiian Korean Black Puerto Rican Samoan Other unmixed or unknown | 717,415<br>249,586<br>228,567<br>48,476<br>126,200<br>9,417<br>11,205<br>19,392<br>4,591<br>6,734<br>13,247 | 68.4<br>23.8<br>21.8<br>4.6<br>12.0<br>0.9<br>1.1<br>1.8<br>0.4<br>0.6<br>1.3 | 36,463<br>24,669<br>965<br>2,003<br>63<br>73<br>-<br>7,917<br>341<br>324<br>108 | 52,933<br>33,364<br>1,905<br>626<br>5,503<br>-<br>485<br>8,272<br>914<br>1,304<br>560 | 628,019<br>191,553<br>225,697<br>47,787<br>118,694<br>9,344<br>10,720<br>3,203<br>3,336<br>5,106<br>12,579 |
| Mixed  Part Hawaiian  Non Hawaiian   | 331,287<br>207,146<br>124,141   | 31.6<br>19.8<br>11.8  | 2,352<br>556<br>1,796   | 14,390<br>4,456<br>9,934  | 314,544<br>202,134<br>112,411  |

<sup>1/</sup> Definitions used in this table differ from those in reports of the U.S. Bureau of the Census. Persons of mixed race are shown separately in this table but in 1980 and 1990 census tabulations are assigned to one of the unmixed groups on the basis of self-identification or race of mother.

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

Table 22.-- ETHNIC STOCK, BY COUNTIES: 1988

[Excludes persons in institutions or military barracks, on Niihau, or in Kalawao. Based on a sample survey of 17,024 persons]

| Ethnic stock <u>1</u> /   | State<br>total   | City and<br>Co. of<br>Honolulu   | Hawaii<br>County  | Kauai<br>County  | Maui<br>County  |
|---|--|--|---|--|---|
| All groups  | 1,048,702  | 796,654  | 113,690   | 47,343   | 91,015  |
| Unmixed Caucasian Japanese Chinese Filipino Hawaiian Korean Black Puerto Rican Samoan Other unmixed and unknown  Mixed Part Hawaiian Non Hawaiian | 717,415<br>249,586<br>228,567<br>48,476<br>126,200<br>9,417<br>11,205<br>19,392<br>4,591<br>6,734<br>13,247<br>331,287<br>207,146<br>124,141 | 558,987<br>187,047<br>178,396<br>45,999<br>91,795<br>5,405<br>10,141<br>19,055<br>3,514<br>6,546<br>11,089<br>237,667<br>142,793<br>94,874 | 70,172 28,918 24,913 1,661 11,673 1,314 425 35 497 134 602 43,518 29,824 13,694 | 30,191<br>8,663<br>9,743<br>304<br>10,298<br>388<br>177<br>20<br>151<br>23<br>424<br>17,152<br>11,166<br>5,986 | 58,065<br>24,958<br>15,515<br>512<br>12,434<br>2,310<br>462<br>282<br>429<br>31<br>1,132<br>32,950<br>23,363<br>9,587 |

<sup>1/</sup> Definitions used in this table differ from those in reports of the U.S. Bureau of the Census. Persons of mixed race are shown separately in this table but in 1980 and 1990 census tabulations are assigned to one of the unmixed groups on the basis of self-identification or race of mother.

Source: Hawaii State Department of Health, Hawaii Health Surveillance

Program, special tabulation.

Table 23.-- RACE AND HISPANIC ORIGIN: 1980 AND 1990

[Persons of mixed race classified by self-identification or by race of mother]

|   |   |   | Percent<br>distribution  |   | Percent  |  |
|---|---|---|--|---|--|--|
| Race or Hispanic origin   | 1980 <u>1</u> /   | 1990  | 1980   | 1990  | change   |  |
| All races   | 964,691   | 1,108,229   | 100.0  | 100.0   | 14.9   |  |
| White Black American Indian, Eskimo, or Aleut Asian or Pacific Islander Chinese Filipino Japanese Korean Vietnamese Hawaiian Samoan | 318,770<br>17,364<br>2,768<br>583,252<br>56,285<br>133,940<br>239,748<br>17,962<br>3,463<br>115,500<br>14,073 | 369,616<br>27,195<br>5,099<br>685,236<br>68,804<br>168,682<br>247,486<br>24,454<br>5,468<br>138,742<br>15,034 | 33.0<br>1.8<br>0.3<br>60.5<br>5.8<br>13.9<br>24.9<br>1.9<br>0.4<br>12.0<br>1.5 | 33.4<br>2.5<br>0.5<br>61.8<br>6.2<br>15.2<br>22.3<br>2.2<br>0.5<br>12.5 | 16.0<br>56.6<br>84.2<br>17.5<br>22.2<br>25.9<br>3.2<br>36.1<br>57.9<br>20.1<br>6.8 |  |
| Other Asian or Pacific 2/. Other race   | 2,281<br>42,537   | 16,566<br>21,083  | 0.2<br>4.4   | 1.5<br>1.9  | <b>}</b> -16.0   |  |
| Hispanic origin 3/  | 71,263  | 81,390  | 7.4  | 7.3   | 14.2   |  |

<sup>1/</sup> Based on 100-percent tabulations. The Asian or Pacific Islander category includes only groups listed separately in the race question. Write-in responses for groups such as Thai, Laotian, and Tongan were not included in 100-percent totals for the Asian or Pacific Islander population and were instead included with the "other race" group.

<sup>2/ 1980</sup> figure limited to Asian Indians and Guamanians.

<sup>3/</sup> Persons of Hispanic origin can be of any race. The 1990 total included 21,972 Whites, 1,279 Blacks, 1,098 American Indians, Eskimos, and Aleuts, 38,832 Asians and Pacific Islanders, and 18,209 persons of other race.

Source: U.S. Bureau of the Census, 1980 Census of Population, General Population Characteristics, Hawaii, PC80-1-B13 (July 1982), tables 15 and 16; U.S. Bureau of the Census, Release CB91-42 (February 1991) and Summary Tape File 1A.

Table 24.-- PLACE OF BIRTH, CITIZENSHIP, AND LENGTH OF RESIDENCE IN HAWAII, BY MILITARY STATUS: 1988

[Excludes persons in institutions or military barracks, in Kalawao, or on Niihau. Based on a sample survey of 17,024 persons]

| Subject   | All<br>groups | Armed<br>forces | Military<br>dependents | Other civilians |
|---|---------------|-----------------|------------------------|-----------------|
| Total  PLACE OF BIRTH   | 1,048,686     | 38,815          | 67,323                 | 942,548         |
| Native born  Hawaii  Mainland U.S.  American Samoa  U.S. territory, possession  Foreign born  China  Indo-China  Japan  Korea  Philippines  Other foreign  Not reported | 896,467       | 35,442          | 55,588                 | 805,437         |
|   | 650,215       | 2,497           | 14,123                 | 633,595         |
|   | 236,265       | 32,021          | 40,345                 | 163,899         |
|   | 4,835         | 256             | 461                    | 4,118           |
|   | 5,152         | 668             | 659                    | 3,825           |
|   | 148,607       | 3,227           | 11,524                 | 133,856         |
|   | 13,599        | 0               | 768                    | 12,831          |
|   | 6,511         | 54              | 341                    | 6,116           |
|   | 21,754        | 341             | 1,556                  | 19,857          |
|   | 9,094         | -               | 541                    | 8,553           |
|   | 71,452        | 1,675           | 4,804                  | 64,973          |
|   | 26,197        | 1,157           | 3,514                  | 21,526          |
|   | 3,612         | 146             | 211                    | 3,255           |
| U.S. citizen  Native born  Naturalized  U.S. national  Alien  Not reported  LENGTH OF RESIDENCE   | 984,071       | 38,011          | 62,420                 | 883,640         |
|   | 913,687       | 36,386          | 59,401                 | 817,900         |
|   | 70,384        | 1,625           | 3,019                  | 65,740          |
|   | 2,087         | -               | -                      | 2,087           |
|   | 51,584        | 658             | 4,548                  | 46,378          |
|   | 10,960        | 146             | 355                    | 10,459          |
| IN HAWAII  Less than 1 year   | 48,090        | 5,523           | 10,978                 | 31,589          |
|   | 184,422       | 26,373          | 44,432                 | 113,617         |
|   | 119,708       | 3,146           | 5,543                  | 111,019         |
|   | 222,969       | 1,118           | 2,777                  | 219,074         |
|   | 463,462       | 2,348           | 2,592                  | 458,522         |
|   | 10,051        | 307             | 1,001                  | 8,743           |

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

Table 25.-- LANGUAGE SPOKEN AT HOME BY PERSONS FIVE YEARS OLD AND OVER, BY ABILITY TO SPEAK ENGLISH: 1980

[Unless otherwise specified, data are based on a 15.7-percent sample]

|   |   | Speak English                                 |   |  |  |  |
|---|---|---|---|--|--|--|
| Language  | Total   | Very<br>well                                  | Well  | Not<br>well  | Not at all   |  |
| Persons 5 and over  | 887,707   | • • •   | • • •   | • • •  | • • •  |  |
| Speak only English at home  Speak a language other than English at home Chinese 1/ Japanese 1/ Korean Philippine language 1/ Spanish All others | 658,752<br>228,955<br>20,066<br>80,230<br>9,231<br>66,655<br>11,933<br>40,840 | 110,338<br>9,057<br>39,640<br>2,707<br>26,550 | 74,946<br>6,096<br>24,705<br>3,317<br>26,311<br>2,460<br>12,057 | 37,797<br>4,014<br>13,475<br>2,749<br>12,533<br>697<br>4,329 | 5,874<br>899<br>2,410<br>458<br>1,261<br>24<br>822 |  |
| Speak a Polynesian language at home 2/  | 21,740<br>9,060<br>11,020<br>1,180<br>480                                     | 12,220<br>6,580<br>5,000<br>360<br>280        | 7,200<br>2,200<br>4,320<br>560<br>120                           | 2,220<br>240<br>1,640<br>260<br>80                           | 100<br>40<br>60<br>-                               |  |

<sup>1/</sup> For statistics on individual Chinese, Japanese, and Philippine languages or dialects, see Data Book 1984, tables 38 and 39.

home, see <u>Data Book 1986</u>, table 32.

Source: U.S. Bureau of the Census, <u>1980 Census of Population</u>,

Detailed Population Characteristics, Hawaii, <u>PC80-1-D13 (October 1983)</u>, table 197, and Census of Population and Housing, 1980, Public Use Microdata Sample A--5 Percent (Hawaii), special tabulation by Hawaii State Data Center.

<sup>2/</sup> Based on the 5-percent Public Use Microdata Sample.
3/ For demographic characteristics of persons speaking Hawaiian at

Table 26.-- HOUSEHOLD TYPE AND RELATIONSHIP: 1990

| Household type and relationship   | State<br>total   | Oahu  | Other<br>islands   |
|---|--|---|--|
| Total persons In households Householder Family householder Nonfamily householder: Male Female Spouse Child Other relative Nonrelatives  In group quarters Inmate of institution   | 1,108,229<br>1,070,597<br>356,267<br>263,456<br>49,705<br>43,106<br>210,468<br>345,365<br>96,494<br>62,003 | 836,231<br>802,338<br>265,304<br>197,294<br>35,873<br>32,137<br>158,438<br>259,193<br>74,876<br>44,527<br>33,893<br>6,365 | 271,998<br>268,259<br>90,963<br>66,162<br>13,832<br>10,969<br>52,030<br>86,172<br>21,618<br>17,476 |
| Other  Householder 65 years and over living alone Persons per household Persons per family  | 29,827   | 27,528  | 2,299  |
|   | 20,933   | 14,868  | 6,065  |
|   | 3.01   | 3.02  | 2.95   |
|   | 3.48   | 3.50  | 3.42   |
| Persons under 18 years  Householder or spouse Own child In married-couple family With female householder, no husband present With male householder, no wife present Other relatives Nonrelatives Inmate of institution Other, in group quarters | 280,126  | 204,313   | 75,813   |
|   | 205  | 134   | 71   |
|   | 236,257  | 172,112   | 64,145   |
|   | 194,497  | 144,180   | 50,317   |
|   | 32,140   | 21,729  | 10,411   |
|   | 9,620  | 6,203   | 3,417  |
|   | 36,462   | 27,515  | 8,947  |
|   | 5,670  | 3,896   | 1,774  |
|   | 320  | 300   | 20   |
|   | 1,212  | 356   | 856  |
| Persons 65 years and over  Family householder  Spouse Other relatives Nonrelatives Nonfamily householder:  Male Female  Inmate of institution Other, in group quarters  | 125,005  | 91,832  | 33,173   |
|   | 49,612   | 36,068  | 13,544   |
|   | 27,848   | 19,980  | 7,868  |
|   | 17,549   | 13,891  | 3,658  |
|   | 1,990  | 1,597   | 393  |
|   | 7,296  | 5,016   | 2,280  |
|   | 15,219   | 11,019  | 4,200  |
|   | 3,861  | 2,964   | 897  |
|   | 441  | 391   | 50   |

Source: U.S. Bureau of the Census, Summary Tape File 1A, tabulated by the Hawaii State Data Center.

Table 27.-- HOUSEHOLDS, FAMILIES, AND GROUP QUARTERS: 1940 TO 1990

|   |   |  | Per  | Average  | size   |  |  |
|---|---|--|--|--|--|--|--|
| Year  | House-<br>holds   | Famil-<br>ies  | House-<br>holds  | Famil-<br>ies  | Group<br>quarters  | House-<br>holds                              | Famil-<br>ies                                |
| 1940 <u>1</u> /<br>1950<br>1960<br>1970<br>1980 | 86,855<br>111,858<br>153,064<br>203,088<br>294,052<br>356,267 | (NA)<br>96,460<br>129,481<br>170,358<br>226,035<br>263,456 | 387,223<br>463,230<br>592,807<br>730,095<br>925,092<br>1,070,597 | (NA)<br>(NA)<br>555,894<br>678,343<br>814,983<br>915,783 | 36,107<br>36,564<br>39,965<br>38,466<br>39,599<br>37,632 | 4.46<br>4.14<br>3.87<br>3.59<br>3.15<br>3.01 | (NA)<br>(NA)<br>4.29<br>3.98<br>3.61<br>3.48 |

NA Not available.

Source: U.S. Bureau of the Census, 16th Census of the U.S.: 1940,
Housing, General Characteristics, Hawaii: (1943), table 8; U.S. Census of
Population: 1950, General Characteristics, Hawaii, P-B52 (1952), table 15;
U.S. Census of Population: 1960, General Population Characteristics, Hawaii,
PC (1)-13B, table 19; 1970 Census of Population, General Population
Characteristics, PC (1)-B13 (May 1971), table 22; 1980 Census of Population,
General Population Characteristics, Hawaii, PC80-1-B13 (July 1982), table 21;
1990 Summary Tape File 1A, tabulated by Hawaii State Data Center.

<sup>1/</sup> Persons in households, persons in group quarters, and average household size assume average of 12 persons per household in households with 11 persons or more.

Table 28.-- HOUSEHOLDS, POPULATION IN HOUSEHOLDS, AND POPULATION PER HOUSEHOLD, BY COUNTIES AND ISLANDS: 1980 AND 1990

|  | Households  |   | Popula<br>house  | Population<br>per<br>household                                  |  |  |
|--|---|---|--|---|--|--|
| County and island                                    | 1980  | 1990  | 1980   | 1990  | 1980   | 1990   |
| State total  | 294,052   | 356,267   | 925,092  | 1,070,597   | 3.15   | 3.01   |
| Counties: Hawaii Maui Kalawao Honolulu Kauai         | 29,237<br>22,510<br>71<br>230,214<br>12,020                 | 41,461<br>33,145<br>62<br>265,304<br>16,295                 | 90,436<br>70,008<br>104<br>725,865<br>38,679                   | 118,632<br>99,019<br>85<br>802,338<br>50,523                    | 3.09<br>3.11<br>1.46<br>3.15<br>3.22                 | 2.86<br>2.99<br>1.37<br>3.02<br>3.10                 |
| Islands: Hawaii Maui Lanai Molokai Oahu Kauai Niihau | 29,237<br>20,162<br>650<br>1,769<br>230,214<br>11,979<br>41 | 41,461<br>30,272<br>847<br>2,088<br>265,304<br>16,253<br>42 | 90,436<br>62,134<br>1,986<br>5,992<br>725,865<br>38,453<br>226 | 118,632<br>90,031<br>2,426<br>6,647<br>802,338<br>50,293<br>230 | 3.09<br>3.08<br>3.06<br>3.39<br>3.15<br>3.21<br>5.51 | 2.86<br>2.97<br>2.86<br>3.18<br>3.02<br>3.09<br>5.48 |

Source: U.S. Bureau of the Census, 1980 Census of Population, General Population Characteristics, Hawaii, PC80-1-B13 (July 1982), table 21 and 47, and 1980 Census of Population and Housing, Census Tracts, Hawaii, Selected Areas, PHC80-2-13 (June 1983), table P-1; U.S. Bureau of the Census, printouts transmitted February 21, 1991.

Table 29.-- MARITAL STATUS, BY SFX: 1980 AND 1990

|   | 198   | 30  | 1990                                 |  |  |
|---|---|---|--------------------------------------|--|--|
| Marital status  | Male  | Female  | Male                                 | Female                                 |  |
| Total, 15 years and over  Single  Now married, except separated  Separated  Widowed | 378,665<br>137,448<br>208,968<br>4,354<br>7,198 | 360,251<br>94,160<br>204,446<br>5,639<br>29,220 | 152,188<br>241,961<br>6,425<br>9,053 | 428,783<br>106,715<br>237,260<br>7,539 |  |
| Divorced  | 20,697  | 26,786  | 31,793                               | 38,530<br>38,739                       |  |

Source: U.S. Bureau of the Census, 1980 Census of Population, General Population Characteristics, Hawaii, PC80-1-B13 (July 1982), table 21, and 1990 Summary Tape File 1A, tabulated by Hawaii State Data Center.

Table 30.-- CHURCH MEMBERSHIP, FOR SELECTED DENOMINATIONS: 1982 AND 1987

| Denomination               | 1982 <u>1</u> /   | 1987   |
|----------------------------|---|--|
| Buddhist: Honpa Hongwanji  | 21,500  | 10,308   |
| Christian: Assembly of God | 7,000<br>31,027<br>10,541<br>209,000<br>11,340<br>17,485<br>6,242 | 12,681<br>45,000<br>10,876<br>220,000<br>13,926<br>18,540<br>6,618 |

<sup>1/</sup> For 1982 data for other denominations, see Data Book 1988, table 37.

Source: Geography Department, University of Hawaii, Atlas of Hawaii, 2nd ed. (1983), p. 133; Honolulu Advertiser, August 20, 1988, p. A-8.

Table 31.-- COMPONENTS OF CHANGE IN THE RESIDENT POPULATION, BY MILITARY STATUS: 1970 TO 1980 AND 1980 TO 1990

|                                       |                              |                  | Civilian population         |                             |                          |                     |  |
|---------------------------------------|------------------------------|------------------|-----------------------------|-----------------------------|--------------------------|---------------------|--|
|                                       |                              |                  | Not mil                     |                             | itary dependents         |                     |  |
| Period and component                  | All<br>groups                | Armed<br>forces  | Military<br>depend-<br>ents | Number                      | Annual<br>average        | Percent<br>distrib. |  |
| 1970 TO 1980 <u>1</u> /               |                              |                  |                             |                             |                          |                     |  |
| Net change                            | +194,778                     | +1,911           | +2,165                      | +190,702                    | +19,070                  | 100.0               |  |
| Natural increase Live births Deaths   | 118,654<br>161,831<br>43,177 | -447<br>-<br>447 | 36,233<br>37,234<br>1,001   | 82,868<br>124,597<br>41,729 | 8,287<br>12,460<br>4,173 | 43.5                |  |
| Net mil. separations $\underline{2}/$ | -                            | -1,815           | -                           | +1,815                      | +181                     | 1.0                 |  |
| Net migration $3/\ldots$              | +76,124                      | +4,173           | -34,068                     | +106,019                    | +10,602                  | 55.6                |  |
| 1980 TO 1990 <u>4</u> /               |                              |                  |                             |                             |                          |                     |  |
| Net change                            | +143,538                     | -1,723           | -4,088                      | +149,349                    | +14,935                  | 100.0               |  |
| Natural increase Live births Deaths   | 112,148<br>168,523<br>56,375 | -604<br>-<br>604 | 34,007<br>34,847<br>840     | 78,745<br>133,676<br>54,931 | 7,875<br>13,368<br>5,493 | 52.7                |  |
| Net mil. separations $\underline{2}/$ | -                            | +734             | -                           | -734                        | -73                      | -0.5                |  |
| Net migration                         | +31,390                      | -1,853           | -38,095                     | +71,338                     | +7,134                   | 47.8                |  |

4/ April 1, 1980 to June 30, 1990. Source: Estimated by Hawaii State Data Center from census counts, DBED surveys of military population, special tabulations by the Hawaii State Department of Health, and data from the Federal-State Cooperative Program for Population Estimates.

 $<sup>\</sup>frac{1}{2}$  April 1, 1970 to March 31, 1980. Separations less inductions for armed forces.

 $<sup>\</sup>frac{3}{3}$ / Includes error of closure.

Table 32.-- COMPONENTS OF CHANGE IN THE RESIDENT POPULATION, BY ISLANDS: 1980 TO 1990

|   |  | Natural increase  |  |  | Net   |
|---|--|---|--|--|---|
| Island  | Net<br>change  | Total   | Live<br>births   | Deaths   | migra-<br>tion <u>1</u> /   |
| State total   | +143,538   | 112,148   | 168,523  | 56,375   | +31,390   |
| Oahu Armed forces Military dependents Other civilians  Other islands Hawaii Maui Lanai Molokai Kauai Niihau | +73,666<br>-1,703<br>-4,031<br>+79,400<br>+69,872<br>+28,264<br>+28,538<br>+307<br>+668<br>+12,091<br>+4 | 87,572<br>-566<br>33,153<br>54,985<br>24,222<br>10,435<br>8,442<br>60<br>732<br>4,541<br>12 | 128,990<br>-33,989<br>95,001<br>38,953<br>17,408<br>12,673<br>2442<br>1,215<br>7,394<br>21 | 41,418<br>566<br>836<br>40,016<br>14,731<br>6,973<br>4,231<br>182<br>483<br>2,853<br>9 | -13,906<br>-1,137<br>-37,184<br>+24,415<br>+45,650<br>+17,829<br>+20,096<br>+247<br>-64<br>+7,550 |
| Island not reported   | -  | 354   | 580  | 226  | -354  |

<sup>1/</sup> Includes net movement into or out of armed forces.
 Source: Hawaii State Department of Business, Economic Development &
Tourism, The Population of Hawaii, 1990 (Statistical Report 219, July 1991),
table 16.

Table 33.-- INTENDED RESIDENTS ARRIVING IN HAWAII, BY DIRECTION OF TRAVEL AND MILITARY STATUS: 1985 TO 1990

|                                      | A11  | We  | Eastbound                                |   |   |  |
|--------------------------------------|--|---|--|---|---|--|
| Year                                 | intended<br>residents                            | Total   | Military<br>service                      | Military<br>dependent                             | All<br>other  | and northbound 1/                              |
| 1985<br>1986<br>1987<br>1988<br>1989 | (NA)<br>(NA)<br>(NA)<br>(NA)<br>22,530<br>38,170 | 25,770<br>21,650<br>14,640<br>7,850<br>16,010<br>29,320 | 11,247<br>8,913<br>6,215<br>3,097<br>6,7 | 11,599<br>7,991<br>5,525<br>1,914<br>700<br>5,640 | 2,924<br>4,746<br>2,900<br>2,839<br>9,310<br>18,210 | (NA)<br>(NA)<br>(NA)<br>(NA)<br>6,520<br>8,850 |

NA Not available.

1/ Not available by military status.

Source: Hawaii Visitors Bureau, special tabulations of Basic Data Survey.

Table 34.-- CHARACTERISTICS OF INTENDED RESIDENTS ARRIVING IN HAWAII: 1990

|   | Persons                                  |                  |  | Westbound  |                                  |
|---|--|------------------|--|--|----------------------------------|
| Characteristics   | West-<br>bound                           | Other <u>1</u> / | Characteristics  | Party<br>heads   | Persons                          |
| Previous residence United States Foreign  Age: Median (years) 60 and over | 29,320<br>28,760<br>570<br>26.5<br>1,460 | 920<br>7,930     | Occupation of head  Management  Professional  Military service  Mil. dependent  Student  Retired | 16,210<br>1,990<br>2,970<br>5,470<br>670<br>1,000<br>490 | 5,370<br>9,890<br>1,220<br>1,820 |
| Males per 100 females   | 106.0                                    | (NA)             | All others   | 3,620  | 1                                |

NA Not available.

1/ Eastbound or northbound.

Source: Hawaii Visitors Bureau, Basic Data Survey, special tabulation.

## Table 35.-- IMMIGRANTS ADMITTED, BY COUNTRIES OF BIRTH: 1986 TO 1990

[Years ended September 30. Data refer to immigrants admitted to the United States, reporting Hawaii as their State of intended permanent residence, and include non-immigrant arrivals who changed their status after entry]

| Country of birth | 1986  | 1987  | 1988  | 1989 <u>1</u> /                                   | 1990  |
|------------------|---|---|---|---|---|
| All countries    | 7,814   | 6 <b>,</b> 796                                  | 6,637   | 7,086   | 7,858   |
| Canada           | 115<br>724<br>240<br>894<br>4,508<br>296<br>1,037 | 131<br>678<br>265<br>912<br>3,784<br>144<br>882 | 139<br>579<br>285<br>913<br>3,410<br>330<br>981 | 140<br>766<br>333<br>828<br>3,587<br>350<br>1,082 | 158<br>664<br>335<br>721<br>4,167<br>543<br>1,270 |

<sup>1/</sup> Includes immigrants admitted under Section 245A of the Immigration Reform and Control Act of 1986. These formerly illegal aliens must have resided in the United States since 1982 to qualify, therefore, they are not new residents.

Source: U.S. Immigration and Naturalization Service, records.

Table 36.-- PERSONS NATURALIZED, BY COUNTRIES OF FORMER ALLEGIANCE: 1985 TO 1990

[Years ended September 30]

| Year                                 | All<br>countries                                   | China<br>and<br>Taiwan                 | Korea                                  | Philip-<br>pines                                   | United<br>Kingdom                   | Viet-<br>nam  | Other<br>countries                         |
|--------------------------------------|--|--|--|--|-------------------------------------|---|--|
| 1985<br>1986<br>1987<br>1988<br>1989 | 4,291<br>4,760<br>4,070<br>3,763<br>6,426<br>5,802 | 238<br>286<br>253<br>272<br>870<br>474 | 561<br>594<br>485<br>431<br>670<br>635 | 2,434<br>2,669<br>2,306<br>2,097<br>3,292<br>2,683 | 93<br>105<br>97<br>98<br>158<br>114 | $ \begin{array}{c} (1/) \\ (\overline{1}/) \\ (\overline{1}/) \\ (\overline{1}/) \\ (\overline{1}/) \\ \overline{3}41 \end{array} $ | 965<br>1,106<br>929<br>865<br>1,436<br>835 |

<sup>1/</sup> Included with "other countries."

Source: U.S. Immigration and Naturalization Service, records.

Table 37.-- RESIDENCE ONE YEAR EARLIER, 1981-1984 AND 1986-1989, AND FIVE YEARS EARLIER, 1985

[Excludes persons in military group quarters. Based on a sample of 2,428 households (7,512 persons of all ages) for 1981-1984, 532 households (1,616 persons) for 1985, 2,041 households (6,064 persons) for 1986-1989]

|   | Total           |         | Di      | fferent hou | se        |
|---|-----------------|---------|---------|-------------|-----------|
| Subject   | popula-         | Non-    | Same    | Different   | Different |
|   | tion <u>1</u> / | movers  | State   | State       | country   |
| Residence 1 year earlier: Annual average, 1981-1984 Annual average, 1986-1989 Residence 5 years earlier, 1985 | 960,402         | 782,172 | 129,081 | 39,473      | 9,676     |
|   | 1,034,158       | 847,399 | 121,468 | 52,961      | 12,331    |
|   | 921,236         | 534,131 | 252,978 | 107,359     | 26,768    |

 $<sup>\</sup>underline{1}$ / Excludes persons under 1 year old in 1981-1984, 1986-1989, and under 5 years old in 1985.

Source: U.S. Bureau of the Census for U.S. Bureau of Labor Statistics, Current Population Survey (March), annual, 1981 to 1988; machine-readable data file, special tabulation by Hawaii State Data Center.

Table 38.-- RESIDENCE ONE YEAR EARLIER, BY MILITARY STATUS: 1987 AND 1988

[Excludes persons under one year old and residents of military barracks, institutions, Kalawao, and Niihau. Based on a sample survey of 17,733 persons 1 year old and over in 1987 and 17,024 persons 1 year old and over in 1988]

| Place of residence one year earlier  | All<br>groups   | Armed<br>forces   | Military<br>dependents   | Other<br>civilians  |
|--|---|---|--|---|
| 1987   |   |   |  |   |
| Population 1 and over  | 1,028,244   | 37,626  | 61,437   | 929,181   |
| Same house   | 846,706<br>117,383<br>5,920<br>40,845<br>1,545<br>7,802<br>8,043<br>50,192<br>4.9 | 23,608<br>6,235<br>9<br>5,764<br>123<br>1,238<br>649<br>7,125<br>18.9 | 40,092<br>7,404<br>26<br>11,564<br>-<br>1,404<br>947<br>12,968<br>21.1 | 783,006<br>103,744<br>5,885<br>23,517<br>1,422<br>5,160<br>6,447<br>30,099<br>3.2 |
| 1988   |   |   |  |   |
| Population 1 and over  | 1,032,703   | 38,723  | 64,118   | 929,862   |
| Same house  Different house, same island  Different island  U.S. territory or possession  Different country  Previous residence not reported . | 863,570<br>101,442<br>5,832<br>38,532<br>1,704<br>8,812<br>12,811                 | 23,505<br>6,602<br>180<br>6,484<br>145<br>1,281<br>526                | 44,625<br>7,407<br>11<br>9,457<br>182<br>872<br>1,564                  | 795,440<br>87,433<br>5,641<br>22,591<br>1,377<br>6,659<br>10,721                  |
| Migrants 1/  Percent of number reporting   | 49,048<br>4.7   | 7,910<br>20.4   | 10,511<br>16.4   | 30,627<br>3.3   |

<sup>1/</sup> From different state, territory, or country.

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

Table 39.-- LIKELIHOOD OF OUT-MIGRATION, BY MILITARY STATUS: 1987 AND 1988

[Based on response to question, "How likely is it that this person will be living some place other than Hawaii one year from today?" asked of samples of 17,733 persons in 1987 and 17,024 persons in 1988. Excludes persons living in institutions or barracks, in Kalawao, or on Niihau]

| Likelihood of out-migration   | All<br>groups                                   | Armed<br>forces                          | Military<br>dependents                      |  |
|---|---|--|---|--|
| 1987  |   |  |   |  |
| Total   | 1,044,031                                       | 37,626                                   | 65,134                                      | 941,271  |
| Almost certain to be living in Hawaii Some possibility of living elsewhere A good chance of living elsewhere Almost certain to be living elsewhere Not reported | 965,588<br>21,040<br>13,203<br>34,452<br>9,748  | 24,640<br>2,040<br>1,149<br>9,301<br>496 | 47,671<br>2,994<br>2,328<br>11,275<br>866   | 893,277<br>16,006<br>9,726<br>13,876<br>8,386  |
| Total   | 1,048,702                                       | 38,815                                   | 67,323                                      | 942,564  |
| Almost certain to be living in Hawaii Some possibility of living elsewhere A good chance of living elsewhere Almost certain to be living elsewhere Not reported | 965,535<br>23,059<br>12,250<br>34,484<br>13,374 | 26,893<br>1,512<br>1,865<br>8,028<br>517 | 47,931<br>3,203<br>3,431<br>11,259<br>1,499 | 890,711<br>18,344<br>6,954<br>15,197<br>11,358 |

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

## Section 2

## **VITAL STATISTICS AND HEALTH**

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

Vital indexes generally reflect the high health standards of Hawaii. Expectation of life at birth in 1984-86 was 75.37 years for males and 80.92 years for females. There were 6,687 resident deaths in 1990, or 6.0 per 1,000 resident population. Deaths under one year of age per 1,000 live births numbered 7.1 in 1990. Diseases of the heart have accounted for almost a third of all deaths in recent years; cancer, for one-fourth. Resident live births in 1990 numbered 20,438, or 18.4 per 1,000 resident population. The total fertility rate for civilians fell from 3,360 per 1,000 women in 1960 to 2,013 in 1988. Fully 98.2 percent of all babies were born in hospitals in 1990, and one-fifth were born to military couples. One out of four births was to an unmarried woman. There were 6,396 fetal deaths in 1990, including 4,707 elective abortions. Marriages numbered 18,306 in 1990, with about 46 percent accounted for by nonresidents. Divorces reached a 1990 total of 5,179. The State had 25 acute care hospitals (with 3,175 beds), 40 long-term care facilities (with 3,416 beds), and 11 specialty care facilities (with 810 beds) in 1990. There were 2,563 physicians and surgeons, 915 dentists, 8,848 professional nurses, and 591 pharmacists licensed and living in Hawaii as of February 1991. Acute conditions per 100 persons numbered 245 in 1988, with respiratory conditions the most common complaint (at 168 cases per 100 persons). Among chronic conditions reported in the 1988 survey data, the most frequently mentioned were hypertension (7.8 per 100 persons), impairments of the back or spine (6.7), and hayfever (6.4). The most common communicable diseases reported to authorities in 1990 were scarlet fever, with 4,771 cases, and chicken pox, with 2,007, but the most fatal was AIDS (60 deaths). State mental health facilities served 8,044 patients in 1990, but the number of in-patients at the end of the year was only 205. Among persons 18 years old and over in 1988, 9.4 percent were heavy drinkers and 23.8 percent were current regular cigarette smokers. Tooth decay was a serious problem among Island children. The average adult male was 67.5 inches tall and weighed 159.5 lbs.; the average adult female was 62.6 inches and 127.9 lbs.

The major source for data on vital statistics and health is the annual statistical report of the Hawaii State Department of Health. Long-term trends are traced in <u>Historical Statistics of Hawaii</u>, Section 2. Sections 2 and 3 of the <u>Statistical Abstract of the United States: 1991</u> contain data for the nation as a whole.

Table 40.-- BIRTHS AND DEATHS: 1970 TO 1990

|  |  |   | Rates per 1,000 resident population 2/   |   | Rates per 1,000<br>live births <u>3</u> /   |  |  |  |
|--|--|---|--|---|---|--|--|--|
| Calendar<br>year   | Resident<br>births <u>1</u> /  | Resident<br>deaths <u>1</u> /   | Births   | Deaths  | Illegiti-<br>mate<br>births   | Fetal<br>deaths <u>4</u> /   | Infant<br>deaths <u>5</u> /  |  |
| 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 | 16,361<br>15,780<br>15,364<br>15,328<br>15,472<br>15,689<br>16,292<br>16,874<br>16,717<br>17,513<br>18,129<br>18,174<br>18,675<br>19,090<br>18,667<br>18,267<br>18,253<br>18,253<br>18,555<br>18,937<br>19,335 | 3,971 4,130 4,245 4,356 4,286 4,272 4,349 4,349 4,508 4,791 4,903 4,927 5,123 5,409 5,571 5,751 5,788 6,149 5,970 6,380 | 21.2<br>19.7<br>18.5<br>18.0<br>17.8<br>17.7<br>18.0<br>18.4<br>17.9<br>18.4<br>17.9<br>18.6<br>18.8<br>18.2<br>17.6<br>17.4<br>17.4 | 5.1<br>5.2<br>5.1<br>5.1<br>4.9<br>4.8<br>4.8<br>4.7<br>4.8<br>5.0<br>5.1<br>5.2<br>5.3<br>5.4<br>5.5<br>5.5<br>5.8 | 95.8<br>88.4<br>93.0<br>104.0<br>108.8<br>123.2<br>125.0<br>143.3<br>160.1<br>163.5<br>175.6<br>181.8<br>186.3<br>197.8<br>191.8<br>201.3<br>203.9<br>213.7<br>223.3<br>239.0 | 20.6<br>23.5<br>22.8<br>16.4<br>16.3<br>18.9<br>20.8<br>21.6<br>13.5<br>13.1<br>15.3<br>13.1<br>12.7<br>11.4<br>9.5<br>9.7<br>11.0<br>9.2<br>10.8<br>9.9 | 19.1<br>16.0<br>17.5<br>13.7<br>16.0<br>13.7<br>11.2<br>12.3<br>12.0<br>10.9<br>10.8<br>10.5<br>8.9<br>10.0<br>10.9<br>9.1<br>9.2<br>8.8<br>7.4<br>8.4 |  |
| 1990   | 20,438   | 6,687   | 18.4   | 6.0   | 249.3   | 10.4   | 7.1  |  |

<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.

<sup>2/</sup> Based on estimates in present report, table 2.

3/ Place of occurrence basis.

4/ 20 weeks gestation and over. Includes elective abortions.

<sup>5/</sup> Under 1 year of age.
Source: Hawaii State Department of Health, Statistical Report (annual), and Office of Health Status Monitoring, records.

Table 41.-- BIRTHS AND DEATHS, BY MILITARY STATUS: 1989 AND 1990

[Place of occurrence basis]

|   |                  |                 |                  | Armed                  |                    |                       |
|---|------------------|-----------------|------------------|------------------------|--------------------|-----------------------|
| Subject                                 | All<br>groups    | Armed<br>forces | All<br>civilians | Military<br>dependents | Other<br>civilians | forces and dependents |
| Live births: 1989 1990                  | 19,428<br>20,528 | -               | 19,428<br>20,528 | 3,816<br>4,091         | 15,612<br>16,437   | 3,816<br>4,091        |
| Deaths:<br>1989<br>1990                 | 6,730<br>7,055   | 48<br>40        | 6,682<br>7,015   | 78<br>78               | 6,604<br>6,937     | 126<br>118            |
| Birth rates: <u>2</u> /<br>1989<br>1990 | 15.6<br>16.3     | 0               | 16.3<br>17.1     | 63.3<br>68.3           | 13.8<br>14.4       | 32.7<br>35.5          |
| Death rates: <u>2/</u><br>1989<br>1990  | 5.4<br>5.6       | 0.9<br>0.7      | 5.6<br>5.8       | 1.3<br>1.3             | 5.8<br>6.1         | 1.1                   |

<sup>1/</sup> Death rates for military dependents based on 1980 age and sex composition of military dependents and 1980 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.

<sup>2/</sup> Per 1,000 de facto population in each group, based on estimates in present report, tables 2 and 3.

Table 42.-- LIVE BIRTHS, STANDARD FETAL DEATHS, AND ELECTIVE ABORTIONS: 1985 TO 1990

## [Place of residence basis]

| Calendar                             | Total o  | deliveries                                   | Live   | Standard<br>fetal                                  | Elective<br>abortions                              |  |
|--------------------------------------|--|--|--|--|--|--|
| year                                 | Number   | Rate <u>1</u> /                              | births   | deaths   |  |  |
| 1985<br>1986<br>1987<br>1988<br>1989 | 25,335<br>25,312<br>25,931<br>26,346<br>26,083<br>26,834 | 24.4<br>24.1<br>24.3<br>24.4<br>23.8<br>24.1 | 18,267<br>18,253<br>18,555<br>18,937<br>19,335<br>20,438 | 1,473<br>1,412<br>1,405<br>1,411<br>1,468<br>1,689 | 5,595<br>5,647<br>5,971<br>5,998<br>5,280<br>4,707 |  |

<sup>1/</sup> Per 1,000 resident population, July 1. From present report, table 2.

Source: Hawaii State Department of Health, Office of Health Status Monitoring, records.

Table 43.-- BIRTHS AND DEATHS, BY PLACE OF OCCURRENCE AND RESIDENCE: 1989 AND 1990

|                         |                  | Occurring        | Hawaii residents |                 |                  |                            |
|-------------------------|------------------|------------------|------------------|-----------------|------------------|----------------------------|
| Event and year          | Total            | Resident         | Non-<br>resident | Not<br>reported | Total            | Out of<br>State <u>1</u> / |
| Births:<br>1989<br>1990 | 19,428<br>20,528 | 19,335<br>20,438 | 93<br>89         | -<br>1          | 19,361<br>20,466 | 26<br>28                   |
| Deaths:<br>1989<br>1990 | 6,730<br>7,055   | 6,380<br>6,687   | 211<br>364       | 139<br>4        | 6,551<br>6,879   | 171<br>192                 |

<sup>1/</sup> Data received from other States.

Source: Hawaii State Department of Health, Office of Health Status Monitoring, records.

<sup>2/</sup> Excludes one birth, five standard fetal deaths and three elective abortions with unknown residence.

Table 44.-- CHARACTERISTICS OF RESIDENT BIRTHS: 1988 TO 1990 [Excludes births to Hawaii residents occurring out of state]

| Subject   | 1988  | 1989  | 1990  |
|---|---|---|---|
| Number of resident births  City and County of Honolulu  Percent on Oahu  Hawaii County  Kauai County  Maui County (incl. Kalawao)  Percent attended by M.D. or O.D. in hospital 1/  Males per 100 females  Median weight of single births (grams)  Percent low birth weight (under 2,500 grams)  Percent single births under 40 weeks gestation  Percent plural  Percent with 1 or more congenital  malformations | 18,937<br>14,430<br>76.2<br>1,980<br>873<br>1,654<br>98.6<br>103.6<br>3,315<br>6.9<br>51.1<br>1.8 | 19,335<br>14,736<br>76.2<br>2,007<br>861<br>1,731<br>98.3<br>104.8<br>3,317<br>7.1<br>48.9<br>2.3 | 20,438<br>15,380<br>75.3<br>2,228<br>945<br>1,885<br>98.2<br>105.3<br>3,318<br>7.1<br>48.6<br>2.0 |
| Percent illegitimate  | 71.6<br>30.3<br>42.1<br>27.1<br>29.6  | 70.5<br>29.9<br>42.1<br>27<br>29  | 25.0<br>68.9<br>29.1<br>42.5<br>27<br>29  |

<sup>1/</sup> Place of occurrence basis.  $\overline{2}/$  Includes live births, fetal deaths, and abortions. Source: Hawaii State Department of Health, Office of Health Status Monitoring, records.

Table 45.-- FERTILITY RATES, BY MILITARY STATUS: 1980 AND 1988

[Military dependents are included in the military category. For 1960 and 1970 data, see Data Book 1987, table 60]

|                         | Crude birth General fertility rate 1/ rate 2/ |                      | Total<br>fertility<br>rate <u>3</u> / |                       |                         |                         |
|-------------------------|---|----------------------|---------------------------------------|-----------------------|-------------------------|-------------------------|
| Military status         | 1980  | 1988                 | 1980                                  | 1988                  | 1980                    | 1988                    |
| Total Civilian Military | 18.8<br>16.5<br>35.0                          | 17.4<br>15.7<br>30.2 | 78.7<br>68.9<br>147.5                 | 73.5<br>66.5<br>126.9 | 2,084<br>1,871<br>3,496 | 2,158<br>2,013<br>2,930 |

Source: 1980 calculated by Eleanor C. Nordyke, East-West Population Institute: 1988 estimated by Hawaii State Data Center.

Table 46.-- RESIDENT BIRTHS, MIXED AND UNMIXED, BY MILITARY STATUS OF PARENTS: 1990

| Military status of parents            | Total<br>births          | Unmixed             | Mixed <u>1</u> /    | Not<br>certain <u>2</u> / |
|---------------------------------------|--------------------------|---------------------|---------------------|---------------------------|
| All groups                            | 20,438                   | 8,921               | 10,379              | 1,138                     |
| Military Civilian Status not reported | 4,059<br>14,531<br>1,848 | 2,998<br>5,922<br>1 | 971<br>8,604<br>804 | 90<br>5<br>1,043          |

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

Source: Hawaii State Department of Health, records.

 $<sup>\</sup>frac{1}{2}$  Annual number of live births per 1,000 resident population.  $\frac{2}{2}$  Annual number of live births per 1,000 women 15-44 years of age.

<sup>3/</sup> Average number of children to whom 1,000 women would give birth according to a set of fertility rates providing the women survive the childbearing years.

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

Table 47.-- MOST COMMON FIRST NAMES ON BIRTH CERTIFICATES, BY SEX: 1990

[A total of 6,789 first names, including variant spellings, was reported for the 20,528 babies born in Hawaii in 1990]

|                                      | Boys' names  | Girls' names  |  |  |
|--------------------------------------|--|---|--|--|
| Rank                                 | Name   | Number  | Name   | Number   |
| 1<br>2<br>3<br>4<br>5<br>6<br>8<br>9 | Joshua Michael Christopher Justin Matthew Jordan Ryan Brandon James Daniel | 213<br>204<br>183<br>169<br>143<br>137<br>126<br>120<br>118 | Ashley Jessica Nicole Brittany Jennifer Sarah Amanda Michelle Lauren Chelsea | 186<br>147<br>118<br>109<br>94<br>93<br>87<br>86<br>84 |

Source: Hawaii State Department of Health, Office of Health Status Monitoring, special tabulation.

Table 48.-- MOST COMMON SURNAMES ON BIRTH AND DEATH CERTIFICATES: 1990

|   | Birth certific   | cates   | Death certificates |  |  |
|---|--|---|--------------------|--|--|
| Rank                                      | Surname  | Surname Births  |                    | Deaths   |  |
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9 | Lee Smith Wong Johnson Williams Kim Brown Jones Martin Ramos | 105<br>74<br>71<br>67<br>65<br>62<br>55<br>48<br>40<br>40 | Lee                | 51<br>37<br>28<br>27<br>27<br>23<br>23<br>23<br>23<br>22<br>21 |  |

Source: Hawaii State Department of Health, Office of Health Status Monitoring, special tabulation.

Table 49.-- SELECTED LIFE TABLE VALUES, BY SEX: 1984-1986

[For earlier years and rankings relative to other States, see Data Book 1987, tables 69 and 70]

| Ago in voore                         |   | Of 100,000 b  | orn alive  |  | Average remaining   |   |
|--------------------------------------|---|---|--|--|---|---|
| Age in years (period of life between | Number living at beginning of year of age   |   |  | ving during of age   | lifetime at beginning of year of age <u>1</u> /                                       |   |
| two exact ages stated)               | Male  | Female  | Male   | Female   | Male  | Female  |
| 0-1                                  | 100,000<br>98,814<br>98,573<br>97,650<br>96,469<br>94,660<br>90,060<br>80,321<br>61,250<br>31,274 | 100,000<br>99,023<br>98,831<br>98,453<br>98,013<br>96,998<br>94,310<br>88,116<br>75,146<br>49,110 | 1,020<br>17<br>57<br>117<br>134<br>281<br>719<br>1,387<br>2,492<br>( <u>2</u> /) | 833<br>22<br>31<br>36<br>67<br>162<br>430<br>923<br>1,946<br>( <u>2</u> /) | 75.37<br>71.27<br>61.43<br>51.96<br>42.53<br>33.24<br>24.64<br>16.95<br>10.53<br>5.56 | 80.92<br>76.72<br>66.85<br>57.09<br>47.32<br>37.76<br>28.67<br>20.29<br>12.83<br>6.73 |

<sup>1/</sup> For males and females combined, the average remaining lifetime at birth was 77.98 years. For the entire United States in 1985, the corresponding figure was 74.7 years (71.2 years for males and 78.2 years for females).

2/ Not calculated for this and higher ages.

Source: Robert W. Gardner, East-West Population Institute, Complete Life Tables by Age and Sex for Hawaii, 1984-86 (unpublished, September 11, 1987); Statistical Abstract of the United States: 1989, p. 71.

Table 50.-- CHARACTERISTICS OF RESIDENT DEATHS: 1987 TO 1990 [Excludes deaths of Hawaii residents occurring out of state]

| Subject                                     | 1987  | 1988  | 1989  | 1990  |
|---|-------|-------|-------|-------|
| Number of resident deaths                   | 6,147 | 5,970 | 6,380 | 6,687 |
| City and County of Honolulu                 | 4,534 | 4,304 | 4,634 | 4,796 |
| Hawaii County                               | 784   | 793   | 845   | 889   |
| Kauai County                                | 305   | 339   | 323   | 341   |
| Maui County (incl. Kalawao)                 | 522   | 534   | 578   | 661   |
| Males per 100 females                       | 144.4 | 145.1 | 139.7 | 139.2 |
| Median age (years)                          | 72.2  | 72.9  | 73    | 73    |
| Centenarian deaths: Male                    | 14    | 14    | 13    | 14    |
| Female                                      | 21    | 24    | 27    | 36    |
| Oldest (years): Male                        | 107   | 102   | 104   | 105   |
| Female                                      | 103   | 107   | 106   | 104   |
| Percent married                             | 46.9  | 48.2  | 45.9  | 46.7  |
| Deaths under 1 year                         | 164   | 131   | 156   | 132   |
| Per 1,000 live births                       | 8.8   | 7.4   | 8.1   | 6.5   |
| Fetal deaths 1/                             | 7,264 | 7,409 | 6,748 | 6,396 |
| Per 1,000 deliveries                        | 392   | 281   |       | 238   |
| Fetal deaths, 20 or more weeks gestation 2/ | 183   | 205   | 193   | 213   |
| Per 1,000 live births                       | 9.2   | 10.8  | 10.0  | 10.4  |
| Standard fetal deaths 3/                    | 1,405 | 1,411 | 1,468 | 1,689 |
| Elective abortions                          | 5,971 | 5,998 | 5,280 | 4,707 |
| Per 1,000 live births                       | 321.8 | 314.8 | 273.1 | 230.3 |

 $<sup>\</sup>frac{1}{2}$  Includes elective abortions.  $\frac{2}{7}$  Place of occurrence basis. Includes elective abortions if 20 weeks or more.

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

Source: Hawaii State Department of Health, Statistical Report (annual), and Office of Health Status Monitoring.

Table 51.-- CAUSE OF DEATH, BY SEX: 1990
[Place of residence basis]

|  | Both     |       |                |
|--|----------|-------|----------------|
| Cause of death                         | sexes    | Males | Females        |
|  | SOROS    | PATOS | 10000103       |
|  |          |       | _              |
| Total deaths                           | 6,687    | 3,892 | 2 <b>,</b> 795 |
|  |          |       |                |
| Tuberculosis                           | 4        | 3     | 1              |
| Syphilis                               | 1        | -     | 1              |
| Other infective                        | 176      | 135   | 41             |
| Malignant neoplasm                     | 1,644    | 961   | 683            |
| Digestive organs                       | 536      | 342   | 194            |
| Respiratory system                     | 412      | 277   | 135            |
| Breast                                 | 123      | _     | 123            |
| Genital organs                         | 167      | 105   | 62             |
| Urinary organs                         | 44       | 29    | 15             |
| Leukemia                               | 54       | 44    | 10             |
| Other                                  | 308      | 164   | 144            |
| Diabetes mellitus                      | 163      | 88    | 75             |
| Heart disease                          | 2,084    | 1,188 | 896            |
| Rheumatic                              | 2,004    | 1,100 | 12             |
|  | 55       | 25    | 30             |
| Hypertensive                           | 1        | 632   | 446            |
| Ischemic                               | 1,078    |       | 1              |
| Other heart                            | 926      | 518   | 408            |
| Hypertension                           | 13       | 7     | 6              |
| Cerebrovascular disease                | 514      | 263   | 251            |
| Arteriosclerosis                       | 34       | 16    | 18             |
| Other circulatory                      | 103      | 62    | 41             |
| Aneurysm                               | -        | -     | -              |
| Influenza/pneumonia                    | 282      | 148   | 134            |
| Chronic obstructive pulmonary diseases | 224      | 132   | 92             |
| Peptic ulcer                           | 13       | 9     | 4              |
| Cirrhosis of liver                     | 77       | 47    | 30             |
| Nephritis and nephrosis                | 48       | 26    | 22             |
| Pregnancy, birth & puerperium          | 2        | -     | 2              |
| Congenital anomalies                   | 36       | 14    | 22             |
| Perinatal conditions                   | 63       | 37    | 26             |
| Ill-defined conditions                 | 62       | 36    | 26             |
| Other diseases                         | 504      | 263   | 241            |
| Accidents                              | 291      | 219   | 72             |
| Motor vehicles                         | 173      | 126   | 47             |
| Other                                  | 118      | 93    | 25             |
| Suicide                                | 132      | 102   | 30             |
| Homicide & legal intervention          | 42       | 32    | 10             |
| Other external causes                  | 175      | 104   | 71             |
| Other external causes                  | 1/3      | 104   | /              |
|  | <u> </u> |       | l              |

Source: Hawaii State Department of Health, Office of Health Status Monitoring, records.

Table 52.-- CATASTROPHIC MORTALITY: 1981 TO 1991
[Includes all accidents, natural disasters, and other events causing five or

more deaths. Complete through September 30, 1991]

|   | Date   | Place   | Kind of disaster   | Deaths                                 |
|---|--------|---|--|--|
| 1981:<br>1982:<br>1983:<br>1985:<br>1987:<br>1988:<br>1989: | Dec. 5 | Pearl Harbor Near Wahiawa, Oahu Honopu, Kauai 540 mi. N. of Honolulu At sea W. of Molokai Near Waimanalo, Oahu Near Kawaihae, Hawaii Texas  100 mi. S. of Honolulu Waimanu, Hawaii Halawa, Molokai Near Puunene, Maui | Helicopter crash Airplane disappearance 2-car auto crash 2-car auto crash Crash of Hawaii-bound airplane Airplane door lost Airplane crash | 5<br>14<br>7<br>8<br>5<br>6<br>19<br>9 |

Source: Robert C. Schmitt, "Catastrophic Mortality in Hawaii: An Update," <u>The Hawaiian Journal of History</u>, Vol. 23 (1989), pp. 217-227; DBED file of newspaper accounts.

Table 53.-- DEATHS OCCURRING IN HAWAII, BY METHOD OF DISPOSITION: 1970 TO 1990

| Method      | 1970                             | 1980                                       | 1987  | 1988                             | 1989                                       | 1990                             |
|-------------|----------------------------------|--|---|----------------------------------|--|----------------------------------|
| All methods | 4,197                            | 5,204                                      | 6,490                                       | 6,315                            | 6,730                                      | 7,055                            |
| Burial      | 2,197<br>1,509<br>470<br>13<br>3 | 2,343<br>2,241<br>567<br>44<br>-<br>1<br>8 | 2,690<br>3,185<br>565<br>39<br>-<br>-<br>11 | 2,543<br>3,145<br>591<br>29<br>- | 2,740<br>3,369<br>594<br>19<br>-<br>-<br>8 | 2,798<br>3,564<br>656<br>35<br>- |

Source: Hawaii State Department of Health, <u>Statistical Report</u> (annual) and Office of Health Status Monitoring, records.

Table 54.-- PERCENT OF PERSONS 18 YEARS AND OVER AFFECTED BY SPECIFIED HEALTH RISK FACTORS, BY SEX: 1988

[Based on a telephone survey of the noninstitutional population]

| Health risk factor   | Both<br>sexes | Male | Female |
|--|---------------|------|--------|
| Overweight Sedentary life-style Current regular cigarette smokers Ever smoked cigarettes Smoking quit ratio Binge drinkers Heavy drinkers Drinking drivers Seatbelt nonuse Cholesterol ever measured Cholesterol level ever told Cholesterol level known | 16.4          | 17.4 | 15.3   |
|  | 53.3          | 48.2 | 58.4   |
|  | 23.8          | 26.4 | 21.2   |
|  | 45.2          | 52.4 | 38.1   |
|  | 47.3          | 49.6 | 44.3   |
|  | 19.6          | 29.3 | 10.0   |
|  | 9.4           | 16.3 | 2.7    |
|  | 3.6           | 5.9  | 1.2    |
|  | 6.5           | 9.2  | 3.9    |
|  | 48.0          | 50.6 | 45.5   |
|  | 28.7          | 32.0 | 25.5   |
|  | 13.1          | 15.2 | 11.1   |

Source: U.S. Department of Health and Human Services, Centers for Disease Control, "Behavioral Risk Factor Surveillance, 1988," Mobidity and Mortality Weekly Report, Vol. 39, No. SS-2, June 1990.

Table 55.-- PERSONS ON THE STATE BLIND REGISTER, BY COUNTIES: 1990 AND 1991

| Date          | City and | County | County | County |     |
|---------------|----------|--------|--------|--------|-----|
|               | Co. of   | of     | of     | of     |     |
|               | Honolulu | Hawaii | Kauai  | Maui   |     |
| 1990: June 30 |          | 1,742  | 183    | 87     | 185 |
| 1991: June 30 |          | 1,707  | 201    | 87     | 190 |

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

Table 56.-- CHRONIC CONDITIONS: 1988

| Selected chronic conditions   | Prevalence<br>of<br>condition   | Conditions<br>per 1,000<br>persons  |
|---|---|---|
| Malignant neoplasms Benign and unspecified neoplasms Thyroid disease Diabetes Mental and nervous condition Heart condition Hypertension Varicose veins Hemorrhoids Bronchitis/emphysema Asthma Hayfever Chronic sinusitis Stomach ulcer Gallbladder Kidney stone Skin condition Arthritis Visual impairment Hearing impairment Impairment of back or spine Gout | 7,373 5,404 11,887 23,581 11,172 27,671 82,539 8,646 14,262 17,391 48,196 67,322 48,520 9,822 9,198 6,843 49,731 37,719 10,162 42,427 71,119 39,119 | 6.9<br>5.1<br>11.2<br>23.3<br>10.6<br>26.2<br>78.1<br>8.2<br>13.5<br>16.5<br>45.6<br>63.7<br>45.9<br>9.3<br>8.7<br>6.5<br>47.1<br>35.7<br>9.6<br>40.2<br>67.3<br>37.0 |
|   |   |   |

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

Table 57.-- ACUTE CONDITIONS: 1988

| Condition  | Incidence<br>of<br>condition<br>per year                         | Conditions<br>per 100<br>persons<br>per year |
|--|--|--|
| All acute conditions  Infective parasitic diseases Respiratory condition Digestive system condition Injuries | 2,590,589<br>90,760<br>1,776,650<br>71,212<br>241,134<br>410,833 | 8.6<br>168.1<br>6.7<br>22.8<br>38.9          |

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

Table 58.-- LIMITATION OF ACTIVITY DUE TO CHRONIC OR ACUTE CONDITIONS: 1988

| Type of limitation   | Number   |
|--|--|
| Persons with one or more chronic conditions  No limitation of activity  Limited, but not in major activity  Limited in amount or kind of activity  Unable to carry on major activity  Not reported | 441,362<br>339,299<br>26,102<br>41,859<br>12,882<br>21,220 |
| Restricted days in past 12 months $\underline{1}/$   | 12,672,145   |

<sup>1/</sup> A restricted activity day is one in which a person had to cut down on his usual activity for all or most of the day.

<sup>2/</sup> Base includes persons without chronic or acute conditions or restricted activities.

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

Table 59.-- TOOTH DECAY AMONG PUBLIC SCHOOL PUPILS, FOR THE UNITED STATES, 1986-1989, AND HAWAII, 1989

| Characteristics  | U.S.           | Hawaii         |
|--|----------------|----------------|
| Dental caries prevalence per child:  Primary or deciduous teeth 1/   | 1.884<br>0.818 | 3.658<br>0.897 |
| Percent of 5-year old students with baby bottle tooth decay (3 or more decayed maxillary anterior teeth).                                    | 5.0            | 14.3           |
| Percent of 6- to 8-year old students with<br>Untreated primary or permanent tooth decay 3/<br>One or more decayed primary or permanent teeth | 27.0<br>53.0   | 36.2<br>96.9   |

<sup>1/</sup> Mean decayed or filled for ages 5-9, cumulative. U.S. rate is for  $1\overline{9}87$ .

4/ Decayed, missing due to decay, or filled.
Source: Hawaii from Hawaii State Department of Health, Dental Health Division. U.S. from National Survey of Dental Caries in U.S. School Children: 1986-1987; Louis Ripa, "Nursing Caries: A Comprehensive Review," Pediatric Dentistry, Dec. 1988; and National Year 2000 Oral Health Objectives (1990).

<sup>2/</sup> Mean decayed, missing or filled for ages 5-12, cumulative. U.S. rate is for 1987.

<sup>3/</sup> Teeth with active decay and in need of treatment. U.S. rate is for  $1\overline{9}86$ .

Table 60.-- SPECIFIED COMMUNICABLE DISEASES: 1988 TO 1990

|   | Cases   |  |  | Deaths  |  |                        |
|---|---|--|--|---------|--|------------------------|
| Disease   | 1988  | 1989   | 1990   | 1988    | 1989   | 1990                   |
| All reportable diseases   | 9,683   | 11,303   | 9,394  | 110     | 95   | 87                     |
| AIDS 1/ Chickenpox Gonorrhea Hansen's Disease 2/ Hepatitis, all types Influenza Leptospirosis 3/ Malaria 4/ Measles (Rubeola) Meningitis, all types Mumps Rubella Salmonellosis Scarlet fever, other strep Syphilis Tuberculosis All others | 140<br>840<br>875<br>20<br>127<br>660<br>67<br>10<br>17<br>170<br>24<br>33<br>508<br>5,671<br>122<br>171<br>228 | 127 2,211 731 17 250 1,638 69 8 29 199 20 13 371 5,085 18 193 5/ 324 | 144<br>2,007<br>639<br>19<br>171<br>199<br>43<br>8<br>41<br>136<br>26<br>8<br>458<br>4,771<br>19<br>205<br>500 | 91 4 15 | 68<br>-<br>1<br>5<br>1<br>1<br>-<br>9<br>-<br>3<br>-<br>4<br>3 | 60 - 8 3 - 6 - 2 - 6 2 |

<sup>1/</sup> By date of diagnosis, with deaths allocated back to year when first reported. Data prior to 1990 are revised.

<sup>2/</sup> Excludes reinstated cases.
3/ Includes previously unreported cases.
4/ Acquired outside the State.

 $<sup>\</sup>frac{1}{5}$ / Includes 31 incidents of gastroenteritis involving 2 or more persons. Source: Hawaii State Department of Health, Office of Health Status Monitoring and AIDS Surveillance Program, records.

Table 61.-- NUMBER AND BED CAPACITY OF HOSPITALS AND CARE HOMES, BY TYPE OF FACILITY: 1986 TO 1991

### [Includes Tripler Army Medical Center]

|                            |   | Hospit   | Care  | Care homes                              |  |  |
|----------------------------|---|--|---|---|--|--|
| Category and year          | Total <u>1</u> /                                  | Acute<br>care  | Long-<br>term<br>care                             | Spec-<br>ialty<br>care                  | Fam-<br>ily <u>2</u> /                             | Resi-<br>dent-<br>tial <u>3</u> /      |
| Number of facilities: 1986 | 48<br>51<br>51<br>52<br>57<br>(NA)                | 23<br>23<br>22<br>22<br>25<br>(NA)                         | 33<br>36<br>36<br>38<br>40<br>(NA)                | 9<br>9<br>9<br>8<br>11<br>(NA)          | 633<br>633<br>531<br>515<br>501<br>494             | 17<br>17<br>16<br>16<br>15<br>14       |
| Number of beds: 1986       | 6,595<br>6,820<br>6,671<br>6,854<br>7,401<br>(NA) | 2,870<br>2,887<br>2,855<br>2,855<br>2,855<br>3,175<br>(NA) | 2,769<br>2,977<br>2,995<br>3,191<br>3,416<br>(NA) | 956<br>956<br>821<br>808<br>810<br>(NA) | 2,547<br>2,547<br>2,235<br>2,184<br>2,162<br>2,159 | 540<br>540<br>490<br>481<br>449<br>450 |

NA Not available.

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

<sup>2/</sup> Four or fewer beds for 1986, thereafter five beds or less.

3/ Five or more beds for 1986, six or more thereafter.

Source: Hawaii State Department of Health, State Health Planning and Development Agency, records, and Hospital and Medical Facilities Branch, records.

Table 62.-- OCCUPANCY CHARACTERISTICS OF ACUTE AND LONG-TERM CARE CIVILIAN HOSPITALS: 1985 TO 1990

## [Excludes Tripler Army Medical Center]

| Type of facility and year | Beds<br>Dec. 31 | Admis-<br>sions | Average<br>daily<br>census | Average<br>length<br>of stay<br>(days) | Average daily percent occupancy |
|---------------------------|-----------------|-----------------|----------------------------|--|---------------------------------|
| Acute care:  1985         | 2,361           | 84,473          | 1,566                      | 6.8                                    | 66.3                            |
|                           | 2,378           | 91,704          | 1,586                      | 6.3                                    | 66.7                            |
|                           | 2,346           | 93,256          | 1,661                      | 6.5                                    | 70.8                            |
|                           | 2,835           | 117,548         | 2,074                      | 6.4                                    | 73.3                            |
|                           | 2,351           | 91,686          | 1,722                      | 6.7                                    | 73.3                            |
|                           | 2,532           | 93,511          | 1,755                      | 6.8                                    | 69.4                            |
| Long-term care: 1985      | 2,769           | 2,575           | 2,590                      | 367                                    | 93.5                            |
|                           | 2,977           | 2,901           | 2,602                      | 327                                    | 87.4                            |
|                           | 2,995           | 2,553           | 2,779                      | 397                                    | 92.8                            |
|                           | 3,187           | 2,746           | 2,907                      | 376                                    | 91.7                            |
|                           | 3,212           | 2,653           | 2,993                      | 409                                    | 93.5                            |
|                           | 3,401           | 3,137           | 3,165                      | 368                                    | 93.1                            |

<sup>1/</sup> Excludes statistics for Lanai.
Source: Hawaii State Department of Health, Statistical Report (annual);
State Health Planning and Development Agency, Utilization of Inpatient
Facilities (various years), and records.

Table 63.-- NUMBER AND BED CAPACITY OF HOSPITALS AND CARE HOMES, BY TYPE OF FACILITY, BY ISLANDS: 1990-1991

[Except for Tripler Army Medical Center, data are for facilities recognized by the Hawaii State Health Planning and Development Agency]

|                         | Hospita                                | ls, Decem                                | Care homes,                               | July 1991                     |                                |                            |
|-------------------------|--|--|---|-------------------------------|--------------------------------|----------------------------|
| Category and island     | Total <u>1</u> /                       | Acute<br>care <u>2</u> /                 | Long-<br>term<br>care                     | Specialty<br>care             | Type I <u>3</u> /              | Type II <u>4</u> /         |
| NUMBER OF<br>FACILITIES |  |  |   | ·                             |                                |                            |
| State total             | 57                                     | 25                                       | 40  | 11                            | 494                            | 14                         |
| Oahu                    | 38<br>7<br>5<br>4<br>2<br>1            | 12<br>5<br>3<br>3<br>1<br>1              | 24<br>7<br>5<br>2<br>1                    | 9<br>-<br>-<br>1<br>1<br>-    | 397<br>47<br>24<br>17<br>9     | 10<br>0<br>3<br>-<br>1     |
| State total             | 6 <b>,</b> 772                         | 2,532                                    | 3,401                                     | 839                           | 2,159                          | 450                        |
| Oahu                    | 5,138<br>706<br>372<br>498<br>44<br>14 | 2,017<br>236<br>114<br>/65 151<br>8<br>6 | 2,304<br>470<br>258<br>339<br>22<br>369 8 | 817<br>-<br>-<br>8<br>14<br>- | 1,773<br>187<br>86<br>73<br>40 | 370<br>14<br>52<br>-<br>14 |

Institutions providing more than one kind of care are counted only once.

 $\frac{2}{3}$  Includes Tripler Army  $\frac{3}{4}$  Five beds or less.  $\frac{4}{4}$  More than five beds.

Source: Hawaii State Department of Health, State Health Planning and Development Agency, Utilization of Inpatient Facilities, 1990, and Hospital and Medical Facilities Branch, records.

Includes Tripler Army Medical Center which had a bed capacity of 525.

Table 64.-- OCCUPANCY CHARACTERISTICS OF ACUTE AND LONG-TERM CARE CIVILIAN HOSPITALS, BY ISLANDS: 1990

[Excludes Tripler Army Medical Center]

|                             | <del></del>                                     |                                       |  |  |
|-----------------------------|---|---------------------------------------|--|--|
| Type of facility and island | Admissions                                      | Average<br>daily<br>census            | Average<br>length<br>of stay<br>(days) | Average<br>daily<br>percent<br>occupancy     |
| ACUTE CARE                  |   |                                       |  |  |
| State total                 | 93,511  | 1,755                                 | 6.8                                    | 69.4   |
| Oahu                        | 68,608<br>11,123<br>4,901<br>8,650<br>164<br>65 | 1,403<br>166<br>60<br>124<br>1        | 7.4<br>5.4<br>4.5<br>5.2<br>2.4<br>3.7 | 69.7<br>70.2<br>52.9<br>82.2<br>13.7<br>11.1 |
| State total                 | 3,137   | 3,166                                 | 368                                    | 93.1   |
| Oahu                        | 2,040<br>492<br>328<br>212<br>55<br>10          | 2,140<br>452<br>233<br>314<br>19<br>6 | 383<br>335<br>259<br>544<br>128<br>225 | 92.9<br>96.1<br>90.2<br>93.2<br>87.4<br>77.2 |

NA Not available.

Source: Data by islands from Hawaii State Department of Health, State Health Planning and Development Agency, <u>Utilization of Inpatient Facilities by County</u>.

Table 65.-- COMMUNITY HOSPITAL AVERAGE COSTS AND ROOM CHARGES: 1983 TO 1990

| Average<br>length<br>of stay<br>Year (days) |  | Average cost   | Hospital semiprivate room charges 1/ (dollars)                     |  |
|---|--|--|--|--|
|   |  | length Per in-<br>of stay patient day                                    |  |  |
| 1983  | 8.2<br>8.3<br>8.3<br>7.5<br>7.9<br>8.9<br>(NA)<br>(NA) | 357.87<br>383.05<br>420.11<br>489.93<br>512.48<br>517.16<br>(NA)<br>(NA) | 2,964<br>3,186<br>3,522<br>3,707<br>4,106<br>4,651<br>(NA)<br>(NA) | 216<br>224<br>231<br>253<br>242<br>257<br>317<br>348 |

NA Not available.

Table 66.-- PATIENTS SERVED BY STATE MENTAL HEALTH FACILITIES: 1985 TO 1990

|                                      | Patients active, end of period Admissions          |  | Admissions   |  |  |  | Patients   |
|--------------------------------------|--|--|--|--|--|--|--|
| Year                                 | Total  | In-<br>patients                        | Out-<br>patients                                   | Total  | Undupli-<br>cated                                  | Termina-<br>tions                                  | served (undup.)                                    |
| 1985<br>1986<br>1987<br>1988<br>1989 | 6,328<br>5,852<br>5,754<br>5,234<br>5,448<br>5,487 | 251<br>252<br>248<br>260<br>251<br>205 | 6,077<br>5,600<br>5,506<br>4,974<br>5,197<br>5,282 | 3,933<br>3,826<br>3,678<br>3,694<br>3,943<br>3,660 | 3,268<br>3,292<br>3,122<br>3,147<br>3,306<br>3,237 | 4,221<br>3,725<br>3,452<br>4,143<br>3,644<br>3,569 | 8,891<br>8,342<br>8,220<br>8,389<br>8,003<br>8,044 |

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

<sup>1/</sup> January data, except 1983, which refers to July.
Source: Health Insurance Association of America, Source Book of Health Insurance Data (biennial) and Update (biennial).

Table 67.-- HAWAII STATE HOSPITAL BEDS AND OCCUPANCY: 1989 TO 1991

# [Includes children's unit at Leahi Hospital assigned to the Hawaii State Hospital]

|                      | Number<br>of beds, |                   |                   | Patients in hospital 2/ |                   |  |
|----------------------|--------------------|-------------------|-------------------|-------------------------|-------------------|--|
| Year                 | 1 - 1              | Total             | First             | Average <u>1</u> /      | June 30           |  |
| 1989<br>1990<br>1991 | 240<br>240<br>215  | 863<br>811<br>354 | 711<br>618<br>293 | 242<br>242<br>195       | 238<br>209<br>165 |  |

Source: Hawaii State Hospital, records.

Table 68.-- WAIMANO TRAINING SCHOOL AND HOSPITAL: 1989 TO 1991 [Waimano Training School and Hospital is the State institution for the mentally retarded]

|                      | Beds,             |                       | Patients in        | Patients on leave, |             |
|----------------------|-------------------|-----------------------|--------------------|--------------------|-------------|
| Year                 | June 30           | Admissions <u>1</u> / | Average <u>2</u> / | June 30            | June 30     |
| 1989<br>1990<br>1991 | 205<br>205<br>195 | 10<br>2               | 183<br>153<br>148  | 165<br>158<br>134  | 4<br>6<br>6 |

<sup>1/</sup> Year ended June 30. Excluding returns from community placement.  $\overline{2}/$  Year ended June 30.

Source: Waimano Training School and Hospital, records.

 $<sup>\</sup>frac{1}{2}$ / Year ended June 30.  $\frac{1}{2}$ / Includes patients on leave and absent without leave.

Table 69.-- HANSEN'S DISEASE PATIENTS REGISTERED: 1986 TO 1990

| Subject                       | 1986 | 1987 | 1988 | 1989 | 1990 |
|-------------------------------|------|------|------|------|------|
|                               |      | 120, |      |      | 1330 |
| Patients on register, Dec. 31 | 653  | 633  | 571  | 541  | 498  |
| Medically released            | 653  | 633  | 571  | 541  | 498  |
| At home                       | 549  | 532  | 474  | 447  | 405  |
| Kalaupapa                     | 99   | 97   | 93   | 90   | 89   |
| Hale Mohalu at Leahi          | 5    | 4    | 4    | 4    | 4    |
| New cases                     | 37   | 24   | 20   | 18   | 18   |
| Deaths                        | 4    | 6    | 13   | 14   | 9    |

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

Table 70.-- PHYSICIANS, DENTISTS, NURSES, AND PHARMACISTS LICENSED IN HAWAII, BY PLACE OF ADDRESS: FEBRUARY 15, 1991

| Place of address  | Physicians<br>and<br>surgeons <u>1</u> /                   | Dentists   | Regis-<br>tered<br>nurses                                     | Pharma-<br>cists                                   |
|---|--|--|---|--|
| Total licensed  | 4,610  | 1,208  | 11,874  | 1,018  |
| Hawaii addresses Hawaii Maui Lanai Molokai Oahu Kauai Niihau Out of State | 2,563<br>201<br>181<br>1<br>7<br>2,080<br>93<br>-<br>2,047 | 915<br>83<br>56<br>1<br>4<br>738<br>33<br>-<br>293 | 8,848<br>731<br>631<br>10<br>39<br>7,081<br>356<br>-<br>3,026 | 591<br>56<br>48<br>1<br>2<br>454<br>30<br>-<br>427 |

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

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

Table 71.-- PRESCRIPTIONS AND PHARMACISTS: 1987

| Subject                                      | Number  |
|--|---|
| Number of establishments with payroll, total | 97<br>437,083<br>2,614<br>263<br>4,799<br>1,091 |

Source: U.S. Bureau of the Census, 1987 Census of Retail Trade, Miscellaneous Subjects, RC87-S-4 (October 1990), tables 17 and 19.

Table 72.-- HEIGHT AND WEIGHT OF PERSONS 18 YEARS OLD AND OVER, BY SEX: 1975-1980

[Based on a sample of approximately 48,000 Hawaii residents 18 years old and over. Height and weight values are those reported by respondents; inclusion or exclusion of clothing or shoes not specified. Fractional values of 1/2 and over have been rounded upward. For further information, see Data Book 1984, tables 104-107]

|              | Height (inches)              |                              | Weight (pounds)                  |                                  |  |
|--------------|------------------------------|------------------------------|----------------------------------|----------------------------------|--|
| Measure      | Men                          | Women                        | Men                              | Women                            |  |
| 10th centile | 63.1<br>67.4<br>72.1<br>67.5 | 59.3<br>62.4<br>66.5<br>62.6 | 126.4<br>158.3<br>199.5<br>159.5 | 100.8<br>123.8<br>166.9<br>127.9 |  |

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

Table 73.-- MARRIAGES AND DIVORCES: 1970 TO 1990 [Place of occurrence basis]

|  | Mar  | riages  | Divorces<br>and  |  | per 1,000<br>t population  | Percent of marriages   |  |  |
|--|--|---|--|--|--|--|--|--|
| Calendar<br>year   | Total  | Resi-<br>dent <u>1</u> /  | annul-<br>ments <u>2</u> /   | Resident<br>marriages  | Divorces, annulments 2/  | Nonresi-<br>dent <u>3</u> /  | Inter-<br>racial <u>4</u> /  |  |
| 1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978         | 10,599<br>9,734<br>9,750<br>9,776<br>9,649<br>9,673<br>9,769<br>10,266<br>10,736<br>11,678       | 7,889<br>8,104<br>8,482<br>8,656<br>8,500<br>8,440<br>8,318<br>8,427<br>8,650<br>9,424    | 2,589<br>3,691<br>3,891<br>4,170<br>4,111<br>4,265<br>4,712<br>4,601<br>4,837<br>5,055 | 10.2<br>10.1<br>10.2<br>10.2<br>9.8<br>9.5<br>9.2<br>9.2<br>9.3<br>9.9 | 3.4<br>4.6<br>4.7<br>4.9<br>4.7<br>4.8<br>5.2<br>5.0<br>5.2<br>5.3 | 25.6<br>16.7<br>13.0<br>11.5<br>11.9<br>12.7<br>14.9<br>17.9<br>19.4<br>19.3 | 40.7<br>42.7<br>41.7<br>43.7<br>43.2<br>43.1<br>43.2<br>43.3<br>44.5<br>44.6 |  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 11,856<br>12,218<br>13,483<br>14,062<br>14,982<br>15,421<br>16,219<br>16,567<br>17,281<br>17,974 | 9,442<br>9,445<br>10,053<br>10,216<br>10,020<br>9,893<br>9,571<br>9,714<br>9,708<br>9,952 | 4,438<br>4,253<br>4,233<br>4,583<br>4,769<br>4,887<br>4,674<br>4,419<br>5,020<br>5,613 | 9.7<br>9.7<br>10.1<br>10.1<br>9.7<br>9.5<br>9.1<br>9.1<br>9.0<br>9.1   | 4.6<br>4.3<br>4.3<br>4.5<br>4.6<br>4.7<br>4.4<br>4.1<br>4.6<br>5.1 | 20.4<br>22.7<br>25.4<br>27.3<br>33.3<br>35.8<br>30.4<br>41.3<br>43.8<br>44.6 | 44.4<br>44.5<br>45.0<br>45.5<br>46.3<br>46.9<br>46.5<br>44.6<br>42.9<br>44.3 |  |

NA Not available.

<sup>1/</sup> One or both partners residents of Hawaii.
2/ Final decrees only. An interlocutory decree of six months was abolished July 1, 1971.

<sup>3/</sup> Both partners nonresidents of Hawaii.
4/ Excludes nonresident marriages.
Source: Hawaii State Department of Health, Statistical Report (annual), and records.

Table 74.-- CHARACTERISTICS OF MARRIAGES AND DIVORCES: 1987 TO 1990

[Place of occurrence basis]

| Subject                              | 1987        | 1988        | 1989        | 1990        |
|--------------------------------------|-------------|-------------|-------------|-------------|
| MARRIAGES                            |             |             |             |             |
| Number                               | 16,567      | 17,281      | 17,974      | 18,306      |
| Percent on Oahu                      | 61.4        | 58.8        | 57.7        | 58.3        |
| Percent Hawaii residents:            | 54.5        | 52.0        | F1 7        | 57.1        |
| Both bride and groom                 | 54.5<br>4.2 | 52.2<br>4.0 | 51.3<br>4.1 | 53.1<br>3.7 |
| One partner only                     | 41.3        | 43.8        | 44.6        | 43.1        |
| Median age (years):                  | 41.3        | 43.6        | 44.0        | 43.1        |
| Groom                                | 30.7        | 31          | 31          | 31          |
| Bride                                | 28.4        | 28          | 28          | 28          |
| Percent previously married:          |             |             |             |             |
| Groom                                | 39.6        | 40.4        | 39.8        | 39.5        |
| Bride                                | 39.0        | 39.8        | 40.4        | 40.1        |
| DIVORCES AND ANNULMENTS              |             |             |             |             |
| Number                               | 4,419       | 5,020       | 5,613       | 5,179       |
| Divorces                             | 4,404       | 5,005       | 5,600       | 5,163       |
| Annulments                           | 15          | 14          | 13          | 10          |
| Not reported                         | _           | 1           | -           | 6           |
| Percent occurring on Oahu            | 75.3        | 79.8        | 78.5        | 77.5        |
| Percent Hawaii residents:            |             |             |             |             |
| Both partners                        | 75.0        | 76.1        | 75.4        | 73.9        |
| One partner only                     | 24.7        | 23.6        | 23.1        | 26.0        |
| Neither partner                      | 0.2         | 0.3         | 0.1         | 0.2         |
| Median age (years): Husband          | 35.2        | 34.9        | 35          | 35          |
| Wife                                 | 32.7        | 32.6        | 32          | 33          |
| Percent interracial 1/               | 38.9        | 40.5        | 39.4        | 40.3        |
| Percent with children under 18 years | 51.8        | 52.2        | 55.3        | 52.1        |
| Median years married                 | 6.4         | 6.6         | 6.2         | 6.3         |
|                                      |             |             |             |             |

<sup>1/</sup> For these calculations, marriages where both bride and groom are in the 'Part Hawaiian' or 'Other races' categories are classified as non-interracial.

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

Table 75.-- MARRIAGES OCCURRING IN HAWAII, RESIDENT AND NONRESIDENT, BY RACE MIXTURE AND TYPE OF CEREMONY: 1990

| Race mixture and type of ceremony  | Total  | At least one<br>partner Hawaii<br>resident | Both partners<br>nonresidents |
|--|--------|--|-------------------------------|
| All marriages  | 18,306 | 10,407                                     | 7,899                         |
| Race of partners:  Both partners same race 1/ Different  Percent different | 12,904 | 5,630                                      | 7,274                         |
|  | 5,402  | 4,777                                      | 625                           |
|  | 29.5   | 45.9                                       | 7.9                           |
| Type of ceremony: Civil ceremony Religious ceremony Unknown                | 4,683  | 3,815                                      | 868                           |
|  | 13,622 | 6,591                                      | 7 <b>,</b> 031                |
|  | 1      | 1  | -                             |

<sup>1/</sup> Includes marriages with both partners of unknown race.
Source: Hawaii State Department of Health, special tabulations.

Table 76.-- MARITAL DISSOLUTION: 1970 TO 1990

|  | ,                                       |   |   | Percent                         |                                 |                                 |
|--|---|---|---|---------------------------------|---------------------------------|---------------------------------|
| Subject  | 1970                                    | 1980                                    | 1990                                    | 1970                            | 1980                            | 1990                            |
| Married couples  | 154,678                                 | 185,698                                 | 210,468                                 | 100.0                           | 100.0                           | 100.0                           |
| Marriages ended  By divorce  By death  Husbands  Wives | 4,466<br>2,589<br>1,877<br>1,312<br>565 | 6,782<br>4,438<br>2,344<br>1,678<br>666 | 8,292<br>5,172<br>3,120<br>2,234<br>886 | 2.9<br>1.7<br>1.2<br>0.8<br>0.4 | 3.7<br>2.4<br>1.3<br>0.9<br>0.4 | 3.9<br>2.5<br>1.5<br>1.1<br>0.4 |

Source: Hawaii State Department of Health, <u>Statistical Report</u> (annual), and records. U.S. Bureau of the Census, <u>1970 Census of Population</u>, PC(1)-Cl3, table 52; <u>1980 Census of Population</u>, PC80-1-Bl3, table 21; and Release CB91-133 (April 22, 1991).

# **EDUCATION**

This section presents statistics on enrollment in public and private schools, colleges and universities; students graduated and degrees awarded; the highest grade of school completed; achievement test results; school facilities, personnel, and expenditures; and libraries.

Enrollment in elementary, intermediate and high schools in 1990-1991 totaled 207,558, slightly more than in the preceding year but well below the all-time high of 216,000 reached in 1971-1972. There were 238 public schools with 10,721 classroom teachers and 171,793 students (82.8 percent of the total). There were also 134 private schools with 2,485 teachers and 35,765 pupils. Students graduating from public and private high schools in 1989-1990 numbered 11,717. Some 56,500 students attended colleges and universities in the State in 1990-1991, including 18,800 on the Manoa Campus of the University of Hawaii, 650 at UH-West Oahu, 4,400 at UH-Hilo, 21,800 at six community colleges, and 10,800 in four private colleges and universities. Ninety-two percent of the children 5 and 6 years old were in school in 1980 (compared with 87 percent in 1970), and 47 percent in the 18- and 19-year-old group were enrolled (compared with 53 percent a decade earlier). The expenditure per pupil in public schools rose from \$2,457 in 1980-1981 to \$5,337 in 1990-1991. scholastic aptitude tests, Hawaii students scored somewhat above national norms in the math component but considerably below in the verbal component. Among adults, an estimated 19 percent were functionally illiterate in English as of 1988. Almost one-fourth of all residents 25 years of age or more have completed four or more years of college. The Hawaii State Library System, with 49 locations on six islands, had 2.4 million books, 9,500 periodical subscriptions, and 84,000 phonodisks and phonotapes in 1990, with an annual circulation of 6.2 million. University of Hawaii libraries in 1991 counted 3.0 million volumes.

The principal sources of data on education are the U.S. Bureau of the Census, Hawaii State Department of Education, University of Hawaii, and private colleges and universities. Historical Statistics of Hawaii, Section 9, contains Island data back to 1820. Section 4 of the Statistical Abstract of the United States: 1991 presents comparable information for the nation as a whole.

Table 77.-- SCHOOL ENROLLMENT BY AGE: 1970 AND 1980

|   | Number e<br>in so  |   | Percent enrolled in school  |   |  |
|---|--|---|---|---|--|
| Age   | 1970   | 1980  | 1970  | 1980  |  |
| Persons 3 years old and over enrolled in school.  3 and 4 years old | 7,097<br>27,683<br>108,757<br>30,409<br>26,362<br>14,486<br>7,672<br>6,357<br>6,942<br>3,160 | 266,181<br>11,436<br>26,070<br>102,604<br>31,741<br>31,711<br>16,869<br>11,164<br>10,907<br>15,254<br>8,425 | 24.5<br>87.4<br>96.7<br>95.8<br>90.8<br>53.1<br>22.4<br>13.6<br>6.4 | 39.0<br>92.0<br>98.9<br>98.6<br>93.4<br>46.9<br>25.6<br>17.5<br>8.5 |  |

Source: U.S. Bureau of the Census, 1970 Census of Population, General Social and Economic Characteristics, Hawaii, PC(1)-Cl3 (December 1971), table 51; 1980 Census of Population, General Social and Economic Characteristics, Hawaii, PC80-1-C-13 (June 1983), table 66.

Table 78.-- PERCENT ENROLLED IN SCHOOL, FOR SELECTED AGE GROUPS, BY COUNTIES: 1980

| County                                 | 5 and 6 | 7 to 13 | 14 and 15 | 16 and 17 | 18 and 19 | 20 and 21 |
|--|---------|---------|-----------|-----------|-----------|-----------|
|  | years   | years   | years     | years     | years     | years     |
| State total Hawaii Honolulu Kauai Maui | 92.0    | 98.9    | 98.6      | 93.4      | 46.9      | 25.6      |
|  | 90.3    | 99.1    | 98.0      | 94.2      | 51.3      | 27.8      |
|  | 92.2    | 98.9    | 98.6      | 93.6      | 46.7      | 26.5      |
|  | 94.9    | 98.9    | 100.0     | 95.0      | 52.0      | 18.1      |
|  | 90.9    | 98.9    | 98.4      | 90.3      | 40.7      | 11.5      |

Source: U.S. Bureau of the Census, 1980 Census of Population, General Social and Economic Characteristics, Hawaii, PC80-1-C-13 (June 1983), tables 66 and 175.

Table 79.-- YEARS OF SCHOOL COMPLETED BY PERSONS 25 YEARS OLD AND OVER: 1940 TO 1989

| Years completed   | 1940 | 1950 | 1960 | 1970 | 1980 | 1989 |
|---|------|------|------|------|------|------|
| Percent 4 years of high school or more Percent 4 years of college or more |      | 31.6 |      | 61.9 |      | 82.3 |

Source: U.S. Bureau of the Census, U.S. Census of Population: 1960, Final Report PC(1)-13C, table 47; U.S. Census of Population: 1970, Final Report PC(1)-Cl3, table 46; 1980 Census of Population, PC80-1-C-13, table 61; "Educational Attainment in the United States: March 1989 and 1988," Current Population Reports, Population Characteristics, Series P-20, No. 451 (August 1991), p. 89.

Table 80.-- YEARS OF SCHOOL COMPLETED BY PERSONS 25 YEARS OLD AND OVER: ANNUAL AVERAGES, 1981-83, 1984-86, AND 1987-89

[Based on pooled samples of 1,831 households (5,676 persons of all ages) for 1981-1983, 1,630 households (4,987 persons) for 1984-1986, and 1,540 households (4,529 persons) for 1987-1989]

| Years of school completed   | 1981-1983   | 1984-1986   | 1987-1989   |
|---|---|---|---|
| Persons 25 years and over   | 561,575   | 622,737   | 678,012   |
| None or unknown Elementary High school, 1 to 3 years High school, 4 years College, 1 to 3 years College, 4 years College, 5 or more years | 5,838<br>76,698<br>52,950<br>203,057<br>104,577<br>72,476<br>45,979 | 9,199 70,822 57,464 236,708 116,565 78,938 53,042 | 7,278<br>66,557<br>56,411<br>257,060<br>137,675<br>90,508<br>62,523 |
| Median (years)  | 12.7  | 12.7  | 12.8  |

Source: U.S. Bureau of the Census for the U.S. Bureau of Labor Statistics, Current Population Survey (March), annual, 1981 to 1989; machine-readable data file, special tabulation by Hawaii State Data Center.

Table 81.-- LITERACY IN ENGLISH: NOV. 1988-JAN. 1989 [Based on results of a test given to a sample of 814 Hawaii residents 18 years and over]

|  | Estimated                 |               | nal lev<br>rcent) | al level <u>l</u> /cent) |  |
|--|---------------------------|---------------|-------------------|--------------------------|--|
| Characteristic   | population<br>18 and over | 1             | 2                 | 3                        |  |
| State total  | 796,001                   | <u>2</u> / 19 | 28                | 53                       |  |
| County of residence: Honolulu Hawaii Maui Kauai  Age: 18 to 34 years 35 to 49 years 50 to 64 years 65 years and over | 623,524                   | 15            | 26                | 59                       |  |
|  | 75,783                    | 37            | 34                | 29                       |  |
|  | 63,240                    | 36            | 34                | 30                       |  |
|  | 33,454                    | 26            | 32                | 42                       |  |
|  | 326,232                   | 13            | 26                | 61                       |  |
|  | 228,353                   | 14            | 27                | 59                       |  |
|  | 119,628                   | 25            | 30                | 45                       |  |
|  | 121,788                   | 42            | 30                | 28                       |  |
| Sex: Male Female   | 392,747                   | 19            | 30                | 52                       |  |
|  | 403,254                   | 20            | 26                | 54                       |  |
| Years of school completed: Less than 9 years 9 to 11 years   | 54,924                    | 77            | 21                | 2                        |  |
|  | 81,192                    | 54            | 35                | 11                       |  |
|  | 659,885                   | 6             | 21                | 73                       |  |

<sup>1/</sup> Level 1 refers to "adults who function with difficulty,"
that is, those who are "functually illiterate." Level 2 refers to
"functional adults." Level 3 includes adults classified as "competent" or "proficient."

2/ Estimated at 153,664.

Source: Omnitrack Research and Marketing Group, Inc., for the Governor's Office of Children and Youth, Governor's Council on Literacy, Hawaii Statewide Literacy Assessment (HSLA), November 1988-January 1989 (1989), tables 1, 1a, 2, and 6.

Table 82.-- SCHOOLS, TEACHERS, ENROLLMENT, AND HIGH SCHOOL GRADUATES, FOR PUBLIC AND PRIVATE SCHOOL SYSTEMS: 1980-1981 TO 1990-1991

|   |   | Schools 1   | _/   |  | Teachers   | 1/  |
|---|---|---|--|--|--|---|
| School year   | Total   | Public  | Private  | Total  | Public   | Private   |
| 1980-81 1981-82 1982-83 1983-84 1984-85 1985-86 1987-88 1988-89 1989-90         | 371<br>376<br>373<br>374<br>372<br>373<br>377<br>369<br>376<br>374<br>372   | 230<br>230<br>233<br>233<br>231<br>232<br>232<br>231<br>235<br>238<br>238   | 141<br>146<br>140<br>141<br>141<br>145<br>138<br>141<br>136<br>134           | 10,324<br>10,447<br>10,302<br>10,344<br>10,453<br>10,677<br>10,788<br>11,168<br>11,485<br>11,856<br>13,206 | 8,113<br>8,139<br>8,083<br>7,997<br>8,060<br>8,221<br>8,244<br>8,632<br>8,973<br>9,202<br>10,721       | 2,211<br>2,308<br>2,219<br>2,347<br>2,393<br>2,456<br>2,544<br>2,536<br>2,512<br>2,654<br>2,485 |
| **************************************  | Enrol1  | ment or memb  | ership <u>1</u> /  | High so  | chool gradu  | ates  |
| School year   | Total   | Public  | Private  | Total  | Public   | Private   |
| 1980-81 1981-82 1982-83 1983-84 1984-85 1986-87 1986-87 1988-89 1989-90 1990-91 | 202,972<br>200,844<br>200,129<br>200,240<br>200,869<br>200,952<br>201,188<br>202,419<br>203,358<br>205,591<br>207,558 | 165,094<br>162,805<br>162,024<br>162,241<br>163,860<br>164,169<br>164,640<br>166,240<br>167,899<br>169,904<br>171,793 | 37,878 38,039 38,105 37,999 37,009 36,783 36,548 36,179 35,459 35,687 35,765 | 14,647<br>13,948<br>13,248<br>12,992<br>12,516<br>12,468<br>13,097<br>13,448<br>13,100<br>11,717<br>(NA)   | 12,088<br>11,563<br>10,757<br>10,454<br>10,092<br>9,958<br>10,491<br>10,800<br>10,597<br>9,335<br>(NA) | 2,559<br>2,385<br>2,491<br>2,538<br>2,424<br>2,510<br>2,606<br>2,648<br>2,503<br>2,382<br>(NA)  |

NA Not available.

1/ September data for all years.
Source: Hawaii State Department of Education, records.

Table 83.-- SCHOOLS, TEACHERS, AND ENROLLMENT, SEPTEMBER 12, 1990, AND HIGH SCHOOL GRADUATES, 1989-1990, FOR PUBLIC AND PRIVATE SCHOOL SYSTEMS, BY ISLANDS

|   |   | mber of schootember 12,                                    | Number of teachers,<br>September 12, 1990       |  |   |  |
|---|---|--|---|--|---|--|
| Island                                      | Total   | Public   | Private   | Total  | Public  | Private                                  |
| State total                                 | 372   | 238  | 134   | 13,206   | 10,721  | 2,485                                    |
| Hawaii Maui Lanai Molokai Oahu Kauai Niihau | 44<br>35<br>1<br>7<br>263<br>21<br>1                        | 31<br>22<br>1<br>5<br>165<br>13<br>1                       | 13<br>13<br>-<br>2<br>98<br>8<br>-              | 16,89<br>1,107<br>37<br>100<br>9,590<br>681<br>2 | 1,503<br>981<br>37<br>95<br>7,484<br>619<br>2 | 186<br>126<br>-<br>5<br>2,106<br>62<br>- |
|   | Sept  | Enrollment<br>tember 12,                                   | High school graduates,<br>1989-1990 school year |  |   |  |
| Island                                      | Total   | Public   | Private   | Total  | Public  | Private                                  |
| State total                                 | 207,558   | 171,793  | 35,765  | 11,717   | 9,335   | 2,382                                    |
| Hawaii Maui Lanai Molokai Oahu Kauai Niihau | 26,745<br>17,823<br>502<br>1,708<br>150,233<br>10,515<br>32 | 24,595<br>15,658<br>502<br>1,669<br>119,768<br>9,569<br>32 | 2,150<br>2,165<br>-<br>39<br>30,465<br>946      | 1,465<br>876<br>46<br>89<br>8,636<br>605         | 1,325<br>780<br>46<br>89<br>6,493<br>602      | 140<br>96<br>-<br>2,143<br>3             |

Source: Hawaii State Department of Education, records.

Table 84.-- PUBLIC AND PRIVATE SCHOOL ENROLLMENT, BY GRADES: 1989 AND 1990

|  | September 12, 1989   |   |   | Septer  | mber 12, 1  | 990   |
|--|--|---|---|---|---|---|
| Grade  | Total  | Public  | Private   | Total   | Public  | Private   |
| All grades   | 205,591  | 169,904   | 35,687  | 207,558   | 171,793   | 35,765  |
| Nursery Kindergarten  1 2 3 4 5 6 7 8 9 10 11 12 Specials 1/ | 2,950<br>17,024<br>17,084<br>16,714<br>16,084<br>15,562<br>14,766<br>14,133<br>14,303<br>13,934<br>14,500<br>13,382<br>13,262<br>11,906<br>9,987 | 379 14,157 14,552 14,188 13,671 13,256 12,509 11,935 11,455 11,200 11,874 10,858 10,798 9,500 9,572 | 2,571<br>2,867<br>2,532<br>2,526<br>2,413<br>2,306<br>2,257<br>2,198<br>2,848<br>2,734<br>2,626<br>2,524<br>2,464<br>2,466<br>415 | 2,918<br>16,794<br>17,005<br>16,737<br>16,380<br>15,788<br>15,286<br>14,682<br>14,281<br>14,267<br>15,085<br>13,362<br>13,053<br>11,719<br>10,201 | 407<br>13,942<br>14,540<br>14,329<br>13,959<br>13,458<br>13,055<br>12,420<br>11,381<br>11,488<br>12,347<br>10,822<br>10,596<br>9,271<br>9,778 | 2,511<br>2,852<br>2,465<br>2,408<br>2,421<br>2,330<br>2,231<br>2,262<br>2,900<br>2,779<br>2,738<br>2,540<br>2,457<br>2,448<br>423 |

<sup>1/</sup> Public school data include ungraded students in special schools.
Source: Hawaii State Department of Education, records.

Table 85.-- SCHOOL ENROLLMENT BY GRADES, BY COUNTIES: SEPTEMBER 12, 1990

[Combined totals for public and private systems]

| Grade   | State<br>total  | Hawaii  | Maui  | Honolulu   | Kauai   |
|---|---|---|---|--|---|
| All grades  | 207,558   | 26,745  | 20,033  | 150,233  | 10,547  |
| Nursery Kindergarten  1 2 3 4 5 6 7 8 9 10 11 12 Special 1/ | 2,918<br>16,794<br>17,005<br>16,737<br>16,380<br>15,788<br>15,286<br>14,682<br>14,281<br>14,267<br>15,085<br>13,362<br>13,053<br>11,719<br>10,201 | 174 2,112 2,065 2,179 2,166 2,114 2,114 1,984 1,929 1,964 1,925 1,613 1,649 1,371 1,386 | 152<br>1,699<br>1,750<br>1,672<br>1,610<br>1,580<br>1,469<br>1,437<br>1,349<br>1,364<br>1,483<br>1,261<br>1,223<br>1,051<br>933 | 2,425<br>12,124<br>12,330<br>11,992<br>11,732<br>11,250<br>10,934<br>10,442<br>10,251<br>10,234<br>10,988<br>9,865<br>9,865<br>9,591<br>8,725<br>7,350 | 167<br>859<br>860<br>894<br>872<br>844<br>769<br>819<br>752<br>705<br>689<br>623<br>590<br>572<br>532 |

<sup>1/</sup> Includes ungraded students in special schools. Source: Hawaii State Department of Education, records.

Table 86.-- FEDERALLY-CONNECTED PUPILS IN PUBLIC SCHOOLS: FALL, 1987 TO 1990

| Category  | 1987   | 1988   | 1989   | 1990   |
|---|--------|--------|--------|--------|
| All federally-connected pupils  Percent of total enrollment  Military dependents  Others 1/ | 37,721 | 36,965 | 36,899 | 36,159 |
|   | 22.7   | 22.1   | 21.8   | 21.1   |
|   | 20,540 | 20,104 | 20,228 | 19,889 |
|   | 17,181 | 16,861 | 16,671 | 16,270 |

 $<sup>\</sup>underline{1}/$  Includes dependents of civilian employees of armed forces. Source: Hawaii State Department of Education, records.

Table 87.-- PRIVATE SCHOOLS, TEACHERS, AND ENROLLMENT, SEPTEMBER 12, 1990, AND PRIVATE HIGH SCHOOL GRADUATES, 1989-1990, BY CHURCH AFFILIATION

| Church affiliation  | Schools              | Teachers                     | Enroll-<br>ment                     | High school<br>graduates   |
|---|----------------------|------------------------------|-------------------------------------|----------------------------|
| Total   | 134                  | 2,485                        | 35,765                              | 2,382                      |
| Church-affiliated  Roman Catholic  Other church-affiliated  Non-church-affiliated | 91<br>41<br>50<br>43 | 1,279<br>707<br>572<br>1,206 | 21,353<br>12,553<br>8,800<br>14,412 | 978<br>693<br>285<br>1,404 |

Source: Hawaii State Department of Education, records.

Table 88.-- EXPENDITURES, COST PER PUPIL, AVERAGE SALARIES, AND DAYS OF SCHOOL, FOR PUBLIC ELEMENTARY AND SECONDARY EDUCATION: 1980-1981 TO 1990-1991

|   | Expenditure   | s (dollars)  |  | Average<br>annual  | ·   |
|---|---|--|--|--|---|
| Fiscal<br>year  | Current<br>operations   | Capital<br>outlay  | Cost per pupil <u>1</u> / (dollars)  | salary of<br>teachers<br>(dollars)   | Number<br>of days<br>of school  |
| 1980-1981 1981-1982 1982-1983 1983-1984 1984-1985 1985-1986 1986-1987 1987-1988 1988-1989 1989-1990 | 402,344,699<br>432,228,402<br>497,763,951<br>509,710,506<br>526,741,742<br>585,533,781<br>589,592,735<br>622,638,850<br>661,605,931<br>727,501,992<br>863,592,130 | 30,860,000<br>17,237,000<br>23,304,890<br>11,941,000<br>13,652,707<br>27,812,430<br>23,445,100<br>32,211,000<br>37,505,200<br>50,569,700<br>50,464,700 | 2,457.32<br>2,700.72<br>3,098.23<br>3,255.97<br>3,351.18<br>3,795.31<br>3,748.38<br>3,950.49<br>4,171.74<br>4,605.11<br>5,336.74 | 21,085<br>22,473<br>21,504<br>25,380<br>25,648<br>26,595<br>27,546<br>28,353<br>29,835<br>32,252<br>34,448 | 176<br>177<br>2/ 174<br>176<br>174<br>176<br>176<br>177<br>174<br>175 |

<sup>1/</sup> Based on average daily membership.

Source: Hawaii State Department of Education, records.

 $<sup>\</sup>frac{\overline{2}}{2}$  One day missed due to Hurricane Iwa.

Table 89.-- SCHOLASTIC APTITUDE TEST SCORE AVERAGES: 1975 TO 1991

| Component | 1974-75 | 1979-80 | 1985-86 | 1988-89 | 1989-90 | 1990-91 |
|-----------|---------|---------|---------|---------|---------|---------|
| Verbal    | 414     | 396     | 403     | 406     | 404     | 405     |
| Math      | 478     | 472     | 477     | 482     | 481     | 478     |

<sup>1/</sup> The U.S. averages in 1990-91 were 422 for verbal and 474 for math. Source: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics 1990 (February 1991), p. 126; Honolulu Advertiser, August 27, 1991, pp. Al and A5.

Table 90.-- STANFORD ACHIEVEMENT TEST RESULTS FOR PUBLIC SCHOOL GRADES 3, 6, 8, AND 10: 1991

[Percent of students taking test]

| Subject and level  | Norm | Grade<br>3 | Grade<br>6 | Grade<br>8 | Grade<br>10 |
|--|------|------------|------------|------------|-------------|
| Reading: Below average Average Above average Math: Below average Average Average Above average | 23   | 24         | 22         | 26         | 24          |
|  | 54   | 58         | 57         | 55         | 60          |
|  | 23   | 18         | 21         | 19         | 16          |
|  | 23   | 18         | 20         | 27         | 21          |
|  | 54   | 50         | 46         | 48         | 50          |
|  | 23   | 32         | 34         | 25         | 29          |

Source: Honolulu Advertiser, December 19, 1991, p. A-3.

Table 91.-- ENROLLMENT AT THE UNIVERSITY OF HAWAII, BY CAMPUS: FALL 1980 TO 1990

[Fall enrollment in regular credit programs, including concurrent registrants and early admits]

|      | Total,   | Univ   | ersity of F | Hawaii a       | ıt Manoa         | Univ. of Hawaii-  |       |
|------|----------|--------|-------------|----------------|------------------|-------------------|-------|
|      | all      |        | Under-      | Grad-          |                  | Hawaii            | West  |
| Year | }        | Total  | 1           |                | 0+hor 1/         | at Hilo 2/        | 0ahu  |
| 1eai | campuses | 10ta1  | graduates   | uates          | 0ther <u>1</u> / | at niio <u>2/</u> | Vanu  |
| 1980 | 43,542   | 20,319 | 14,402      | 4,235          | 1,682            | 3,504             | 247   |
| 1981 | 45,425   | 20,629 | 14,487      | 4,324          | 1,818            | 3,478             | 369   |
| 1982 | 47,527   | 21,065 | 14,879      | 4,328          | 1,858            | 3,752             | 410   |
| 1983 | 46,468   | 21,112 | 15,091      | 4,339          | 1,682            | 3,613             | 433   |
| 1984 | 43,970   | 20,023 | 14,234      | 4,255          | 1,534            | 3,237             | 435   |
| 1985 | 43,369   | 19,666 | 13,565      | 4,283          | 1,818            | 3,200             | 443   |
| 1986 | 42,837   | 18,977 | 12,762      | 4,438          | 1,777            | 3,300             | 480   |
| 1987 | 43,054   | 18,448 | 12,254      | 4,400          | 1,794            | 3,553             | 482   |
| 1988 | 42,767   | 18,477 | 12,121      | 4,382          | 1,974            | 3,634             | 492   |
| 1989 | 43,785   | 18,622 | 12,021      | 4,601          | 2,000            | 3,973             | 601   |
| 1990 | 45,742   | 18,810 | 12,073      | 4,809          | 1,928            | 4,449             | 652   |
|      |          | ı      | Commun      | ity Col        | leges <u>3</u> / |                   |       |
|      |          | Hono-  | Kapio-      | Lee-           | Wind-            |                   |       |
| Year | Total    | lulu   | lani        | ward           | ward             | Kauai             | Maui  |
| 1980 | 19,472   | 4,509  | 4,978       | 5 <b>,</b> 575 | 1,442            | 1,082             | 1,886 |
| 1981 | 20,949   | 5,211  | 5,089       | 6,032          | 1,489            | 1,201             | 1,927 |
| 1982 | 22,300   | 5,331  | 5,560       | 6,261          | 1,568            | 1,272             | 2,308 |
| 1983 | 21,310   | 5,131  | 5,284       | 6,060          | 1,462            | 1,190             | 2,183 |
| 1984 | 20,275   | 4,554  | 5,281       | 5,785          | 1,366            | 1,176             | 2,113 |
| 1985 | 20,060   | 4,539  | 5,058       | 5,667          | 1,543            | 1,177             | 2,076 |
| 1986 | 20,080   | 4,275  | 5,226       | 5,703          | 1,644            | 1,248             | 1,984 |
| 1987 | 20,571   | 4,527  | 5,505       | 5,748          | 1,650            | 1,183             | 1,958 |
| 1988 | 20,164   | 4,303  | 5,599       | 5,445          | 1,558            | 1,239             | 2,020 |
| 1989 | 20,589   | 4,199  | 5,741       | 5,652          | 1,606            | 1,313             | 2,078 |
| 1990 | 21,831   | 4,379  | 6,275       | 5,805          | 1,622            | 1,413             | 2,337 |
|      |          |        |             |                |                  |                   |       |

Footnotes and source follow next table.

Table 92.-- DEGREES, DIPLOMAS, AND CERTIFICATES AWARDED BY THE UNIVERSITY OF HAWAII: 1980 TO 1990

|  |  | Univ  | ersity of H   | lawaii at Mar   | noa   |   |
|--|--|---|---|---|---|---|
| Year ended<br>June 30  | Associate  | Bachelor  | Master  | Doctor  | First<br>profes-<br>sional <u>4</u> /                                     | Other <u>5</u> /  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989   | 46<br>57<br>52<br>52<br>60<br>90<br>66<br>65<br>54<br>92<br>87 | 2,859<br>2,701<br>2,588<br>2,639<br>2,698<br>2,642<br>2,679<br>2,601<br>2,521<br>2,404<br>2,431 | 969<br>968<br>993<br>938<br>945<br>914<br>837<br>794<br>830<br>833<br>804 | 102<br>115<br>111<br>120<br>101<br>138<br>132<br>130<br>111<br>162<br>114 | 136<br>152<br>137<br>132<br>131<br>137<br>131<br>137<br>126<br>119<br>113 | 124<br>106<br>122<br>120<br>166<br>189<br>244<br>249<br>259<br>224<br>235                       |
| Manager of the Control of the Section of the Control of the Contro | University   | of Hawaii   | at Hilo <u>2</u> /  | Univ. of<br>Hawaii-   | Community (   | Colleges <u>3</u> /   |
| Year ended<br>June 30  | Certifi-<br>cates <u>6</u> /                                   | Associate<br>degrees  | Bachelor<br>degrees   | West Oahu:<br>Bachelor  | Certifi-<br>cates <u>6</u> /  | Associate<br>degrees  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987 7/<br>1988 7/<br>1989 7/<br>1990 7/   | 86<br>57<br>74<br>68<br>80<br>67<br>56<br>56<br>48<br>74       | 256<br>261<br>263<br>242<br>239<br>229<br>196<br>202<br>206<br>180<br>175                       | 160<br>171<br>160<br>193<br>188<br>180<br>183<br>201<br>208<br>154<br>203 | 48<br>47<br>46<br>91<br>136<br>77<br>98<br>139<br>108<br>116<br>126       | 481<br>483<br>519<br>509<br>473<br>454<br>478<br>378<br>345<br>201<br>220 | 1,807<br>1,763<br>1,882<br>2,008<br>2,026<br>1,875<br>1,933<br>1,840<br>1,731<br>1,609<br>1,744 |

<sup>1/</sup> Includes unclassified, special and no data on student level.

2/ Hilo College, College of Agriculture, and Hawaii Community College.

3/ Excludes Hawaii Community College, which is part of UHH.

5/ Certificates in Dental Hygiene and professional diplomas.

Source: University of Hawaii, Office of Institutional Research and Analysis, records.

<sup>4/</sup> Includes Doctor of Jurisprudence (J.D.) and Doctor of Medicine (M.D.).

 $<sup>\</sup>overline{6}$ / Certificates of Achievement. At UHH, includes Certificates in Education beginning 1989 (30 in 1989).

<sup>7/</sup> For community colleges, excludes no data (64 in 1987, 15 in 1988, 21 in 1989, 68 in 1990).

Table 93.-- UNIVERSITY OF HAWAII CURRICULA, TUITION, FINANCES, AND FACULTY AND STAFF: 1988 TO 1990

| Subject   | 1988    | 1989    | 1990    |
|---|---------|---------|---------|
| Curricula offered at Manoa Campus, Fall 1/  Bachelor's degree programs  Master's degree programs  Doctoral programs (DrPH, EdD, PhD)  Other programs 1/   | 257     | 260     | 264     |
|   | 88      | 88      | 88      |
|   | 84      | 85      | 86      |
|   | 49      | 49      | 49      |
|   | 36      | 38      | 41      |
| Tuition per semester (full-time undergraduate, regular session):  | ·       |         |         |
| Manoa Campus:  Resident Nonresident Nonresident Nonresident Nonresident Nonresident Resident Nonresident Nonresident Nonresident Nonresident Community colleges: Resident Nonresident | \$ 565  | \$ 615  | 615     |
|   | 1,840   | 1,840   | 1,840   |
|   | 525     | 575     | 575     |
|   | 1,720   | 1,720   | 1,720   |
|   | 390     | 415     | 415     |
|   | 1,240   | 1,240   | 1,240   |
|   | 175     | 200     | 200     |
|   | 1,130   | 1,230   | 1,230   |
| Current fund revenues (\$1,000)  Current fund expenditures (\$1,000)  Number of students receiving financial aid .  | 392,143 | 422,113 | 472,527 |
|   | 374,529 | 407,831 | 456,760 |
|   | 15,556  | (NA)    | (NA)    |
| Faculty and staff, October  Board of Regents appointees  Full-time Part-time Civil Service personnel Full-time Part-time  | 7,168   | 7,388   | 7,790   |
|   | 5,482   | 5,806   | 6,180   |
|   | 3,528   | 3,682   | 3,974   |
|   | 1,954   | 2,124   | 2,206   |
|   | 1,686   | 1,582   | 1,610   |
|   | 1,637   | 1,540   | 1,567   |
|   | 49      | 42      | 43      |

NA Not available.

1/ Includes 2-year, undergraduate, and graduate certificate programs first professional degree programs (JD, MD), and other programs.

Source: Office of Institutional Research and Analysis, University of Hawaii, Facts About the University of Hawaii (annual), and records.

Table 94.-- ENROLLMENT AND EARNED DEGREES CONFERRED, FOR PRIVATE COLLEGES AND UNIVERSITIES: 1988 TO 1991

[Excludes extension programs of mainland and foreign schools and other limited or specialized curriculum programs]

|   | Fal]   | enrol1me       | ent <u>2</u> / | Earned         | erred 3/   |          |
|---|--------|----------------|----------------|----------------|------------|----------|
| Year and institution <u>1</u> /                                 | Total  | Under-<br>grad | Grad-<br>uate  | Assoc-<br>iate | Bachelor's | Master's |
| 1988, total Brigham Young Chaminade Hawaii Loa Hawaii Pacific . | 9,612  | 8,957          | 655            | 342            | 884        | 136      |
|   | 2,055  | 2,055          | -              | 74             | 220        | -        |
|   | 2,507  | 2,169          | 338            | 85             | 268        | 125      |
|   | 490    | 490            | -              | 3              | 103        | -        |
|   | 4,560  | 4,243          | 317            | 180            | 293        | 11       |
| 1989, total Brigham Young Chaminade Hawaii Loa Hawaii Pacific . | 10,500 | 9,723          | 777            | 346            | 977        | 165      |
|   | 2,040  | 2,040          | -              | 62             | 246        | -        |
|   | 2,903  | 2,588          | 315            | 109            | 293        | 126      |
|   | 595    | 595            | -              | -              | 104        | -        |
|   | 4,962  | 4,500          | 462            | 175            | 334        | 39       |
| 1990, total Brigham Young Chaminade Hawaii Loa Hawaii Pacific . | 10,761 | 9,947          | 814            | 338            | 988        | 196      |
|   | 2,140  | 2,140          | -              | 46             | 198        | -        |
|   | 2,446  | 2,164          | 282            | 115            | 291        | 136      |
|   | 618    | 618            | -              | 2              | 93         | -        |
|   | 5,557  | 5,025          | 532            | 175            | 406        | 60       |
| 1991, total Brigham Young Chaminade Hawaii Loa Hawaii Pacific . | 11,429 | 10,450         | 979            | 368            | 999        | 245      |
|   | 2,110  | 2,110          | -              | 71             | 203        | -        |
|   | 2,481  | 2,201          | 280            | 85             | 219        | 155      |
|   | 514    | 514            | -              | 4              | 138        | -        |
|   | 6,324  | 5,625          | 699            | 208            | 439        | 90       |

<sup>1/</sup> Brigham Young University, Hawaii Campus (in Laie); Chaminade University of Honolulu; Hawaii Loa College (in Kaneohe); Hawaii Pacific University (in Honolulu).

<sup>2/</sup> In regular credit programs.

3/ Year ended June 30. Revised from Data Book 1990, table 98.

Source: Compiled by Hawaii State Department of Business, Economic Development & Tourism from college officials.

Table 95.-- RESIDENCE AND MIGRATION OF ALL FRESHMEN STUDENTS GRADUATING FROM HIGH SCHOOL IN THE PAST 12 MONTHS: FALL 1988

| Category  | Total                   | In 4-year colleges      |
|---|-------------------------|-------------------------|
| Students enrolled in State 1/ Students residents of State 2/ Students remaining in State 3/ | 4,872<br>5,960<br>4,521 | 2,494<br>3,463<br>2,162 |
| Migration of students: Out of State Into State Net migration                                | 1,439<br>351<br>-1,088  | 1,301<br>332<br>-969    |

<sup>1/</sup> All new freshmen students, whether in-migrants or "remaining."

Source: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics 1990 (February 1991), pp. 195-196.

Table 96.-- FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES: 1986 TO 1989

[In thousands of dollars. Fiscal year data]

| Institution   | 1986   | 1987   | 1988   | 1989 <u>1</u> / |
|---|--------|--------|--------|-----------------|
| All universities and colleges University of Hawaii at Manoa | 47,676 | 58,671 | 58,779 | 84,753          |
|   | 38,815 | 39,899 | 45,190 | 63,215          |

<sup>1/</sup> The U.S. total in fiscal 1989 was \$15,658 million. Hawaii ranked 36th among the 50 States, and UH/Manoa ranked 59th among all universities and colleges.

<sup>2/</sup> All new freshmen students residing in Hawaii when first admitted to the reporting institution, whether in Hawaii or on the Mainland.

<sup>3</sup>/ New freshmen students attending institutions in their home State.

Source: National Science Foundation, Federal Support to Universities, Colleges, and Nonprofit Institutions: Fiscal Year 1989, NSF 91-316 Final (1991), pp. 128 and 130.

Table 97.-- CHARACTERISTICS OF THE HAWAII STATE LIBRARY SYSTEM: 1985 TO 1990

| Subject                                       | 1985                       | 1986                       | 1987           | 1988                       | 1989                       | 1990                       |
|---|----------------------------|----------------------------|----------------|----------------------------|----------------------------|----------------------------|
| Library locations, June 30 Oahu Other islands | 49<br>23<br>26             | 49<br>23<br>26             | 49<br>23<br>26 | 49<br>23<br>26             | 49<br>23<br>26             | 49<br>23<br>26             |
| Personnel, June 30 1/<br>Librarians           | 497.05<br>134.00<br>363.05 | 497.55<br>133.00<br>364.55 |                | 532.05<br>146.00<br>386.05 | 543.05<br>153.00<br>390.05 | 557.05<br>162.50<br>394.55 |
| Hours open $\underline{2}/\ldots$             | 54                         | 54                         | 54             | 54                         | 54                         | 54                         |
| Collections, June 30: Books 3/                | 1,976.8                    | 2,096.8                    | 2,073.8        | 2,225.7                    | 2,320.8                    | 2,391.7                    |
| Circulation, year ended June 30 <u>3</u> /    | 6,011.4                    | 6,500.2                    | 6,480.5        | 6,552.9                    | 6,561.9                    | 6,225.2                    |

<sup>1/</sup> Full-time equivalent basis, but including permanent and temporary State general-funded positions and temporary Federal funded positions but excluding student help.

<sup>2/</sup> Regular weekly totals for Hawaii State Library, Honolulu.
3/ In thousands.
Source: Hawaii State Public Library System, Research & Evaluation Services, records.

Table 98.-- CHARACTERISTICS OF THE HAWAII STATE LIBRARY SYSTEM BY DISTRICTS: 1990

| 149 555<br>22 296<br>1 88<br>12 122<br>9 84<br>26 144<br>13 65<br>5 33<br>8 48 | sonnel,<br>e 30 <u>1</u> /<br>57.05<br>98.00<br>88.00<br>25.50<br>84.50<br>45.55<br>63.55<br>33.50<br>48.50 | Circulatio<br>year ende<br>June 30<br>6,225,224<br>4,252,178<br>534,780<br>2,162,635<br>1,552,763<br>1,930,072<br>903,322<br>446,962<br>579,788<br>44,974 |  |
|--|---|---|--|
| 22 290<br>1 83<br>12 122<br>9 84<br>26 145<br>13 63<br>5 33<br>8 43            | 98.00<br>88.00<br>25.50<br>84.50<br>45.55<br>63.55<br>33.50<br>48.50  | 4,252,178<br>534,780<br>2,162,635<br>1,552,763<br>1,930,072<br>903,322<br>446,962<br>579,788  |  |
| 1 88<br>12 12:<br>9 82<br>26 14:<br>13 6:<br>5 3:<br>8 4:                      | 88.00<br>25.50<br>84.50<br>45.55<br>63.55<br>33.50<br>48.50   | 534,780<br>2,162,635<br>1,552,763<br>1,930,072<br>903,322<br>446,962<br>579,788   |  |
| 99   | 99.00   |   |  |
| Collections, June 30   |   |   |  |
| Period<br>subscriptions  | rip-   Ph   | nono- Vide<br>sk <u>3</u> / tape  |  |
| 9,50   | 505 8   | 33,770 4,8  |  |
| 2,954 5,74   | 033   1   | 3,278 3,39<br>8,307 1,04<br>22,636 1,59<br>22,335 79<br>27,221 1,44<br>7,681 42   |  |
| 1  |   | 53,369 1,426 1  |  |

 $<sup>\</sup>frac{1}{2}$  See previous table footnote 1.  $\frac{2}{2}$  Includes libraries on Lanai (1 location), Maui (6 locations), and Molokai (1 location).

<sup>3/</sup> Includes phonotapes and CD-ROM.

4/ Includes print, braille, and recorded media.

5/ Includes music recordings only.

Source: Hawaii State Public Library System, Research & Evaluation services, records.

Table 99.-- UNIVERSITY OF HAWAII LIBRARY SYSTEM HOLDINGS AND CIRCULATION, BY CAMPUS: 1990 AND 1991

|   | Number of<br>June   | volumes,  | Circulation, year ended June 30   |   |  |
|---|---|---|---|---|--|
| Campus  | 1990  | 1991  | 1990  | 1991  |  |
| All campuses  | 2,877,676   | 3,008,359   | 585,609   | 741,708   |  |
| University of Hawaii at Manoa 1/ University of Hawaii-West Oahu University of Hawaii at Hilo 2/ Community colleges, total 2/ Honolulu Kapiolani Leeward Windward Kauai Maui | 2,385,601<br>23,710<br>206,068<br>262,297<br>52,604<br>40,253<br>57,143<br>34,748<br>41,500<br>36,049 | 2,500,175<br>24,575<br>211,568<br>272,041<br>52,695<br>44,157<br>58,733<br>36,353<br>42,713<br>37,390 | 369,243<br>6,000<br>72,152<br>138,214<br>42,027<br>19,312<br>26,088<br>11,123<br>20,862<br>18,802 | 509,749<br>6,000<br>77,924<br>148,035<br>45,264<br>22,422<br>19,524<br>14,047<br>20,447<br>26,331 |  |

<sup>1/ 1991</sup> volumes total includes Government Documents Collection, not previously included. 1991 circulation total includes media use at Wong Audiovisual Center, not previously included.

Source: University of Hawaii at Manoa, University Libraries, records.

<sup>2/</sup> Hawaii Community College and UHH West Hawaii (Kona) are included with the University of Hawaii at Hilo.

#### Section 4

# LAW ENFORCEMENT, COURTS AND PRISONS

Statistics in this section refer to crimes known to the police, stolen property, arrests, police personnel, attorneys, the judiciary system, prisons, and youth correctional facilities.

Major offenses reported to the police in 1990 numbered 68,000. compared with 69,600 in 1989 and 71,300 in 1980. The rate per 1,000 resident population increased from 53 in 1985 to 61 in 1990. Seventy-five percent of the serious crimes in 1990 occurred on Oahu. For the State as a whole, major offenses known to police in 1990 included 44 murders, 352 rapes, 1,016 robberies, 1,605 aggravated assaults, 13,577 burglaries, 46,699 cases of larceny, and 4,224 auto thefts. The value of property reported stolen in 1990 amounted to \$41 million, exclusive of motor vehicles; only 4.4 percent was recovered. Authorities confiscated 1,277,000 marijuana plants, with a potential value of \$7.7 billion, during the year. Confirmed instances of child abuse and neglect numbered 2,092 in 1990. Eighteen percent of the major offenses known to police were cleared by arrest or otherwise during the year. Thirty-nine percent of the persons arrested for major crimes and 23 percent of those arrested for lesser offenses in 1990 were less than 18 years of age. The number of inmates in the 10 State correctional institutions averaged 2,430 during fiscal 1991; of this number, 1,462 were adults serving time for felonies. Cases concluded in the State Supreme Court, Intermediate Court of Appeals, four circuit courts, and four district courts and their divisions during fiscal 1990 numbered 964,000, including 825,000 traffic cases. Filings in the United States District Court for Hawaii in 1990 included 1,025 civil cases, 1,758 criminal cases, and 909 bankruptcy The last legal execution in Hawaii took place in 1947. There were 4,969 attorneys licensed in Hawaii as of mid-1991, more than 11 times the 1960 total. Criminal justice system expenditures amounted to \$273 million in fiscal 1988.

Statistics on law enforcement, courts, and corrections in Hawaii appear in the annual reports of the county police departments, the State Judiciary, the Department of Public Safety (formerly Corrections), and the Administrative Office of the United States Courts. The Department of the Attorney General issues quarterly and annual reports titled Crime in Hawaii. Figures on crime, the courts, and corrections in earlier years appear in Historical Statistics of Hawaii, Section 10. National data are summarized in the Statistical Abstract of the United States: 1991, Section 5.

Table 100.-- ACTUAL MAJOR (PART I) OFFENSES KNOWN TO THE POLICE, BY COUNTIES: 1979 TO 1990

[Part I offenses include murder, negligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson. Actual offenses include reported or known offenses, less unfounded cases. Revised from Data Book 1990, table 104]

|  | State   | total  | City and<br>County of  | Hawaii  | waii Kauai   |  |  |
|--|---|--|--|---|--|--|--|
| Year   | Number  | Rate <u>1</u> /  | Honolulu   | County  | County   | Maui<br>County   |  |
| 1979<br>1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 66,026 71,727 63,903 65,089 59,545 57,340 55,355 60,652 63,453 65,666 69,601 67,957 | 69.3<br>74.1<br>65.3<br>65.5<br>58.8<br>55.8<br>53.2<br>57.7<br>59.4<br>60.8<br>63.6<br>61.1 | 52,600<br>57,155<br>49,275<br>50,168<br>46,258<br>44,918<br>42,455<br>46,779<br>49,296<br>49,589<br>52,709<br>51,175 | 4,675 5,307 5,674 5,556 4,918 4,737 5,147 5,370 4,955 5,939 6,860 7,518 | 2,467<br>2,646<br>2,512<br>2,520<br>2,310<br>2,157<br>2,146<br>2,428<br>2,555<br>2,548<br>2,781<br>2,605 | 6,284<br>6,619<br>6,442<br>6,845<br>6,059<br>5,528<br>5,607<br>6,075<br>6,647<br>7,590<br>7,251<br>6,659 |  |

1/ Annual rate per 1,000 resident population, July 1.

Source: Crime Prevention Division, Department of the Attorney
General. Data compiled from police department annual reports and
records. Negligent manslaughter statistics revised to exclude traffic
cases. The revised manslaughter statistics, the numbers of arsons
reported in Honolulu in 1980-1987, and the number of forcible rapes
reported in Honolulu in 1989 were compiled from reports to the Uniform
Crime Reporting (UCR) Program.

Table 101.-- ACTUAL PART I OFFENSES KNOWN TO THE POLICE, BY TYPE OF OFFENSE, FOR THE STATE OF HAWAII: 1981 TO 1990

[Revised from Data Book 1990, table 105]

| Offense   | 1981   | 1982  | 1983   | 1984   | 1985   |
|---|--|---|--|--|--|
| All Part I offenses 1/  | 63,903   | 65,089  | 59,545   | 57,340   | 55,355   |
| Murder Manslaughter (neg.) 1/ Forcible rape 2/ Robbery Aggravated assault Burglary Larceny Motor vehicle theft Arson 3/ | 47<br>1<br>314<br>1,444<br>570<br>16,611<br>40,102<br>4,268<br>546 | 31<br>319<br>1,561<br>590<br>16,337<br>41,568<br>4,244<br>439 | 57<br>-<br>300<br>1,315<br>868<br>13,589<br>38,585<br>4,343<br>488 | 34<br>-<br>311<br>1,181<br>843<br>12,552<br>38,301<br>3,607<br>511 | 43<br>-<br>312<br>1,041<br>913<br>12,159<br>37,345<br>2,981<br>561 |
| Offense   | 1986   | 1987  | 1988   | 1989   | 1990   |
| All Part I offenses  Murder  Manslaughter (neg.) 1/   | 60,652<br>51   | 63,453<br>51  | 65,666<br>45<br>2  | 69,601<br>53   | 67,957<br>44<br>2  |
| Robbery Aggravated assault Burglary Larceny Motor vehicle theft Arson 3/  | 325<br>1,103<br>1,082<br>14,184<br>39,935<br>3,486<br>486          | 396<br>1,043<br>1,364<br>12,500<br>43,669<br>3,986<br>502     | 353<br>914<br>1,502<br>13,665<br>44,859<br>3,927<br>399            | 353<br>908<br>1,427<br>14,879<br>47,204<br>4,385<br>391            | 352<br>1,016<br>1,605<br>13,577<br>46,699<br>4,224<br>438          |

<sup>1/</sup> Manslaughter offenses due to traffic accidents have been deleted for consistency in statewide reporting. However, arrests for all traffic offenses are counted.

Source: Compiled by Crime Prevention Division, Department of the Attorney General, primarily from annual reports of the county police departments unless as otherwise indicated. Since 1989, statistics for Honolulu are compiled from a special report obtained specifically for this publication.

<sup>2/</sup> The number of forcible rapes for 1989 has been revised, using updated figures from the Uniform Crime Reporting Program (UCR). (UCR figures for Honolulu offenses during the July-December, 1989, period were revised late in 1990 due to the discovery of substantial over-reporting of forcible rapes.)

<sup>3/</sup> Because Honolulu's method of reporting arson statistics prior to 1988 differed from the method used by other counties, UCR statistics were used as the source of the 1980-1987 arson statistics for Honolulu.

Table 102.-- ACTUAL OFFENSES KNOWN TO POLICE AND OFFENSES CLEARED BY ARREST OR OTHERWISE, BY CLASS OF OFFENSE: 1979 TO 1990

### [Revised]

|  | ľ   | offenses<br>to police   |   | cleared by otherwise <u>1</u> /  | Clearances per 100 offenses <u>1</u> /   |  |  |
|--|---|---|---|--|--|--|--|
| Year   | Part I  | Part II,<br>except<br>traffic <u>2</u> /  | Part I  | Part II,<br>except<br>traffic <u>2</u> /   | Part I   | Part II,<br>except<br>traffic <u>2</u> /   |  |
| 1979<br>1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 66,026 71,727 63,903 65,089 59,545 57,340 55,355 60,652 63,453 65,666 69,601 67,957 | 88,801<br>93,150<br>93,701<br>92,582<br>87,927<br>93,849<br>97,170<br>100,283<br>107,259<br>113,073<br>120,461<br>119,366 | 13,943<br>14,374<br>11,445<br>11,468<br>11,081<br>10,103<br>10,870<br>11,175<br>12,247<br>11,846<br>9,592<br>12,534 | 61,994<br>58,841<br>62,946<br>57,867<br>59,202<br>61,294<br>63,187<br>62,556<br>66,416<br>72,026<br>63,279<br>68,645 | 21.1<br>20.0<br>17.9<br>17.6<br>18.6<br>17.6<br>19.6<br>18.4<br>19.3<br>18.0<br>13.8 | 69.8<br>63.2<br>67.2<br>62.5<br>67.3<br>65.3<br>65.0<br>62.4<br>61.9<br>63.7<br>52.5<br>57.5 |  |

 $<sup>\</sup>underline{1}/$  Annual data on clearances include prior years' offenses cleared in the current year.

<sup>2/</sup> Part II data include "hit and run" cases in Honolulu 1979-1988. All traffic cases excluded effective 1989.

Source: Data compiled by Department of the Attorney General, Crime Prevention Division, from Police Department annual reports and Uniform Crime Reporting Program.

Table 103.-- ACTUAL OFFENSES KNOWN TO POLICE AND OFFENSES CLEARED BY ARREST OR OTHERWISE, BY CLASS OF OFFENSE, BY COUNTIES: 1990

|                                     | Actual offenses<br>known to police |                                     |                              | leared by otherwise <u>1</u> /    | Clearances per 100 offenses 1/ |                               |  |
|-------------------------------------|------------------------------------|-------------------------------------|------------------------------|-----------------------------------|--------------------------------|-------------------------------|--|
| County                              | Part I                             | Part II,<br>except<br>traffic       | Part I                       | Part II,<br>except<br>traffic     | Part I                         | Part II,<br>except<br>traffic |  |
| State total                         | 67,957                             | 119,366                             | 12,534                       | 68,645                            | 18.4                           | 57.5                          |  |
| Honolulu<br>Hawaii<br>Kauai<br>Maui | 51,175<br>7,518<br>2,605<br>6,659  | 87,082<br>10,275<br>5,304<br>16,705 | 8,932<br>1,961<br>649<br>992 | 51,343<br>6,201<br>2,579<br>8,522 | 17.5<br>26.1<br>24.9<br>14.9   | 59.0<br>60.4<br>48.6<br>51.0  |  |

<sup>1/</sup> Includes prior years' offenses cleared in current year.
Source: Crime Prevention Division, from data provided by county police departments.

Table 104.-- MARIJUANA CONFISCATED OR DESTROYED BY AUTHORITIES, BY COUNTIES: 1990

| Subject   | State<br>total                               | Hawaii | Maui                               | Hono-<br>lulu | Kauai                                |
|-----------|--|--------|------------------------------------|---------------|--------------------------------------|
| Plants 1/ | 1,277,119<br>738,468<br>538,651<br>7,662,714 |        | 62,073<br>61,825<br>248<br>372,438 | 11,332        | 19,820<br>18,450<br>1,370<br>118,920 |

<sup>1/</sup> Of any size. Plants vary in height from seedings to more than ten feet.

Source: Compiled from county police departments and DLNR by Hawaii Criminal Justice Data Center.

 $<sup>\</sup>underline{2}$ / Division of Conservation and Resources Enforcement (DOCARE), Department of Land and Natural Resources.

<sup>3/</sup> Based on an estimated street value of \$6,000-\$8,000 per pound and yield of one pound or more per mature plant, or approximately \$6,000 per plant, as agreed by DOCARE and county vice divisions in April 1991. Excludes value of confiscated processed marijuana. Earlier estimates were based on a potential value of \$1,000 per plant; see Data Book 1990, table 108.

Table 105.-- ACTUAL PART I OFFENSES KNOWN TO POLICE AND PART I OFFENSES CLEARED BY ARREST OR OTHERWISE, FOR THE STATE AND OAHU: 1990

|                     | Actual offenses<br>known to police |              | by arr         | cleared<br>est or<br>vise <u>l</u> / | Clearances<br>per 100<br>offenses <u>1</u> / |              |
|---------------------|------------------------------------|--------------|----------------|--------------------------------------|--|--------------|
| Type of offense     | State<br>total                     | Oahu<br>only | State<br>total | Oahu<br>only                         | State<br>total                               | Oahu<br>only |
| All Part I offenses | 67 <b>,</b> 957                    | 51,175       | 12,534         | 8,932                                | 18.4   | 17.5         |
| Murder              | 44                                 | 34           | 32             | 23                                   | 72.7   | 67.6         |
| excluding traffic   | 2                                  | 1            | 2              | -                                    | 100.0  | -            |
| Rape                | 352                                | 270          | 217            | 179                                  | 61.6   | 66.3         |
| Robbery             | 1,016                              | 892          | 239            | 188                                  | 23.5   | 21.1         |
| Aggravated assault  | 1,605                              | 1,120        | 840            | 507                                  | 52.3   | 45.3         |
| Burglary            | 13,577                             | 9,751        | 1,722          | 1,131                                | 12.7   | 11.6         |
| Larceny             | 46,699                             | 35,478       | 8,728          | 6,415                                | 18.7   | 18.1         |
| Auto theft          | 4,224                              | 3,324        | 718            | 475                                  | 17.0   | 14.3         |
| Arson               | 438                                | 305          | 36             | 14                                   | 8.2  | 4.6          |

 $<sup>\</sup>underline{1}/$  Includes prior years' offenses cleared in current year.  $\overline{\text{Source:}}$  Crime Prevention Division from data provided by county police departments.

Table 106.-- POLICE PERSONNEL, BY COUNTIES: 1990

| Subject                       | State<br>total | Honolulu | Hawaii | Kauai | Maui |
|-------------------------------|----------------|----------|--------|-------|------|
| Police personnel, December 31 | 3,051          | 2,230    | 334    | 156   | 331  |
| Per 1,000 de facto population | 2.43           | 2.45     | 2.46   | 2.26  | 2.38 |

Source: County police department records.

Table 107.-- PERSONS ARRESTED FOR PART I AND PART II OFFENSES, BY AGE AND SEX, FOR COUNTIES: 1990

|                                   |                           |                           | Countie               | s                     |                       |
|-----------------------------------|---------------------------|---------------------------|-----------------------|-----------------------|-----------------------|
| Subject                           | State<br>total            | Honolulu                  | Hawaii                | Maui                  | Kauai                 |
| PART I OFFENSES                   |                           |                           |                       |                       |                       |
| Total                             | 12,612                    | 9,220                     | 1,723                 | 934                   | 735                   |
| Juveniles  Male  Female           | 4,901<br>3,634<br>1,267   | 3,542<br>2,653<br>889     | 725<br>503<br>222     | 356<br>266<br>90      | 278<br>212<br>66      |
| Adults  Male  Female              | 7,711<br>5,736<br>1,975   | 5,678<br>4,177<br>1,501   | 998<br>731<br>267     | 578<br>459<br>119     | 457<br>369<br>88      |
| PART II OFFENSES (EXCEPT TRAFFIC) |                           |                           |                       |                       |                       |
| Total                             | 51,307                    | 38,481                    | 5,177                 | 4,108                 | 3,541                 |
| Juveniles  Male  Female           | 11,635<br>7,524<br>4,111  | 7,819<br>5,267<br>2,552   | 1,728<br>989<br>739   | 802<br>484<br>318     | 1,286<br>784<br>502   |
| Adults  Male  Female              | 39,672<br>33,275<br>6,397 | 30,662<br>25,767<br>4,895 | 3,449<br>2,912<br>537 | 3,306<br>2,726<br>580 | 2,255<br>1,870<br>385 |

Source: Crime Prevention Division, Department of the Attorney General, from Uniform Crime Reports.

Table 108.-- CHILD ABUSE AND NEGLECT REPORTS: 1983 TO 1990

[Data for 1989 and 1990 are incomplete and do not include cases reported to the new Child Protection Services System]

| Subject   | 1983  | 1984  | 1985  | 1986  | 1987  | 1988  | 1989  | 1990  |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| Reports   | 3,181 | 3,979 | 4,414 | 4,598 | 4,809 | 4,637 | 3,437 | 3,601 |
| Confirmed | 1,549 | 1,791 | 2,289 | 2,590 | 2,543 | 2,620 | 2,122 | 2,092 |

Source: Hawaii State Department of Human Services, Central Registry of Reported Child Abuse and Neglect Cases, records.

Table 109.-- VALUE OF PROPERTY REPORTED STOLEN AND VALUE OF STOLEN PROPERTY RECOVERED, BY CATEGORY: 1980 TO 1990

|  | Locally stolen motor vehicles  |  |  | Other stolen property  |   |  |  |
|--|--|--|--|--|---|--|--|
|  | 37-1   | Value reco   | overed <u>1</u> /  |  |   | overed 1/  |  |
| Year   | Value<br>stolen<br>(\$1,000)   | Amount (\$1,000)   | Percent  | Value<br>stolen<br>(\$1,000)   | Amount (\$1,000)  | Percent  |  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 14,075.2<br>12,033.6<br>12,524.0<br>13,904.4<br>12,327.9<br>10,376.8<br>11,491.6<br>13,222.5<br>15,956.0<br>11,067.8<br>10,152.1 | 10,296.9<br>9,387.9<br>8,328.0<br>9,474.9<br>9,110.0<br>7,683.9<br>7,857.3<br>10,021.0<br>12,312.1<br>7,397.7<br>7,752.2 | 73.2<br>78.0<br>66.5<br>68.1<br>73.9<br>74.0<br>68.4<br>75.8<br>77.2<br>76.2<br>76.4 | 31,832.9<br>31,667.8<br>26,001.2<br>25,941.6<br>26,576.6<br>24,114.3<br>28,236.2<br>32,071.0<br>37,895.0<br>45,311.0<br>41,026.4 | 2,102.2<br>2,380.6<br>2,028.3<br>2,151.1<br>1,861.3<br>2,003.5<br>1,931.2<br>3,089.0<br>1,965.8<br>2,310.9<br>1,824.3 | 6.6<br>7.5<br>7.8<br>8.3<br>7.0<br>8.3<br>6.8<br>9.6<br>5.2<br>5.1 |  |

<sup>1/</sup> Annual data include prior years' stolen property recovered in current year.

Source: Crime Prevention Division, data from Uniform Crime Reports.

Table 110.-- VALUE OF PROPERTY REPORTED STOLEN AND VALUE OF STOLEN PROPERTY RECOVERED, BY COUNTIES: 1990

|  |   |                                 | Count                         | ies                           |                             |
|--|---|---------------------------------|-------------------------------|-------------------------------|-----------------------------|
| Subject  | State<br>total                              | Honolulu                        | Hawaii                        | Maui                          | Kauai                       |
| Value of property stolen (\$1,000)  Motor vehicles Other property  Value of stolen property recovered 1/ (\$1,000) | 51,178.5<br>10,152.1<br>41,026.4<br>9,576.5 | 37,094.4<br>5,440.7<br>31,653.7 | 4,904.4<br>1,570.7<br>3,333.8 | 6,958.8<br>2,317.6<br>4,641.2 | 2,220.9<br>823.1<br>1,397.7 |
| Motor vehicles Other property  | 7,752.2<br>1,824.3                          | 3,887.7<br>927.1                | 1,273.0<br>164.3              | 2,001.2<br>603.8              | 590.1<br>129.1              |
| Percent of value recovered Motor vehicles  | 18.7<br>76.4<br>4.4                         | 13.0<br>71.5<br>2.9             | 29.3<br>81.1<br>4.9           | 37.4<br>86.3<br>13.0          | 32.4<br>71.7<br>9.2         |

<sup>1</sup>/ See previous table, footnote 1.

Source: Crime Prevention Division, data from Uniform Crime Reports.

Table 111.-- STATE AND COUNTY GOVERNMENT EMPLOYMENT AND EXPENDITURES FOR CRIMINAL JUSTICE ACTIVITIES: 1988

| Subject                                     | Total            | Police<br>protec-<br>tion | Correc-<br>tion | Judicial<br>and<br>legal |
|---|------------------|---------------------------|-----------------|--------------------------|
| Full-time equivalent employment, October    | <u>1</u> / 4,515 | 2,959                     | 1,556           | •••                      |
| Expenditures, fiscal year (million dollars) | 273              | 118                       | 72              | 83                       |

<sup>1/</sup> Excludes judicial and legal employment, not reported.
Source: Data from U.S. Bureau of the Census, cited in Statistical
Abstract of the United States: 1991, p. 187.

Table 112.-- CRIMINAL JUSTICE POSITIONS AND EXPENDITURES: FISCAL YEAR 1980-1981 TO 1985-1986

[Annual totals exclude data for Attorney General and Public Defender, not available before 1984-1985]

| Fiscal year and agency  | Authorized positions (full-time equiva-<br>lent <u>1</u> /)             | Expenditures (\$1,000)   |
|---|---|--|
| 1980-1981   | 4,449.5<br>4,886.5<br>5,046.0<br>5,339.0<br>5,659.0<br>6,013.0          | 111,446<br>143,289<br>143,826<br>145,490<br>177,947<br>197,249         |
| AGENCY: 1985-1986   |   |  |
| Police Prosecutors Judiciary Corrections Intake Service Centers Paroling Authority Public Defender 2/ Attorney General 2/ | 2,901.0<br>291.0<br>1,438.0<br>1,287.0<br>70.0<br>26.0<br>98.0<br>223.0 | 98,263<br>9,142<br>52,813<br>34,762<br>1,725<br>545<br>3,233<br>11,389 |

<sup>1/</sup> Except for police, which are based on full-time
positions only (sworn and non-sworn).

<sup>2/</sup> Not included in all agency totals (see headnote).

Source: Hawaii State Department of the Attorney General,
Hawaii Criminal Justice Data Center, Management and
Administrative Statistics for the Criminal Justice System in the
State of Hawaii (February 1989), p. 136.

Table 113.-- COURTS, JUDGES, MAGISTRATES, AND ATTORNEYS: 1989 TO 1991

#### [As of June 30]

| Subject  | 1989  | 1990   | 1991  |
|--|---|--|---|
| Federal judges and magistrates: 1/ U.S. Bankruptcy Court   | 1 8   | 1<br>11  | 1<br>11   |
| State justices and judges: 2/ Supreme Court Intermediate Court of Appeals Circuit Courts 3/ Assigned to Family Court District Courts 4/ Assigned to Family Court Land Court Tax Appeal Court Attorneys licensed in Hawaii 6/ | 5<br>3<br>24<br>1<br>32<br>8<br>(5/)<br>( <u>5</u> /) | 5<br>3<br>24<br>1<br>32<br>10<br>(5/)<br>( <u>5</u> /) | 5<br>3<br>24<br>1<br>35<br>9<br>(5/)<br>( <u>5</u> /) |

<sup>1/</sup> Full-time and part-time. Excludes visiting judges and magistrates. In addition, one judge of the U.S. Court of Appeals maintains an office in Honolulu.

2/ Authorized full-time positions.

5/ Caseload assigned to Circuit Court judges.

6/ Effective November 1, 1989, the number of licensed attorneys includes both active and inactive members of the Hawaii State Bar. Data for all years include judges. Earlier totals for attorneys licensed in Hawaii are as follows: June 30, 1960, 432; June 30, 1970, 759; June 30, 1980, 2,202.

Source: Office of the Clerk, U.S. District Court, records; Office of the Administrative Director of the Courts, State Judiciary, records.

<sup>3/</sup> Includes one judge assigned to the Family Court, a division of the Circuit Courts. In addition, Circuit Court judges may be assigned to hear matters before the Land Court and Tax Appeal Court, both of which are specialized courts separate from the Circuit Courts. There are four Circuit Courts, convened in five locations.

<sup>4/</sup> Includes judges assigned to the Family Courts, a division of the Circuit Courts. There are four District Courts, one in each of the four judicial circuits, convened in 22 locations.

Table 114.-- UNITED STATES DISTRICT COURT CASES: 1988 TO 1991

### [Years ended June 30]

| Subject  | 1988  | 1989  | 1990  | 1991  |
|--|-------|-------|-------|-------|
| Civil cases: Commenced (filings) Terminated Pending, end of period                               | 1,278 | 983   | 1,025 | 784   |
|  | 1,391 | 1,471 | 1,148 | 823   |
|  | 2,408 | 1,919 | 1,756 | 1,717 |
| Criminal cases: 1/ Commenced (filings) Terminated Pending, end of period                         | 1,550 | 1,447 | 1,758 | 1,892 |
|  | 1,879 | 1,237 | 1,483 | 1,466 |
|  | 549   | 748   | 1,006 | 1,427 |
| Bankruptcy: Commenced (filings), total Business 2/ Nonbusiness Terminated Pending, end of period | 935   | 855   | 909   | 964   |
|  | 158   | 117   | 103   | 75    |
|  | 777   | 738   | 806   | 889   |
|  | 1,326 | 1,079 | 1,152 | 1,014 |
|  | 1,910 | 1,686 | 1,432 | 1,382 |

 $<sup>\</sup>frac{1}{2}/$  Excludes transfers.  $\frac{2}{2}/$  Business filings for 1991 may be understated because of improper classification of cases in the automated docketing system.

Source: Annual Report of the Director of the Administrative Office of the United States Courts for 1988 and 1989, and Appendix I, Detailed Statistical Tables, Annual Report for 1990 and 1991.

Table 115.-- STATE JUDICIARY TERMINATIONS: 1986 TO 1991
[Years ended June 30]

| Court and type of case   | 1986    | 1987    | 1988    | 1989    | 1990    | 1991    |
|--|---------|---------|---------|---------|---------|---------|
| Supreme Court 1/ Civil cases Criminal cases Other proceedings  | 2,588   | 2,371   | 2,883   | 3,046   | 2,170   | 2,350   |
|  | 287     | 262     | 247     | 246     | 199     | 179     |
|  | 312     | 254     | 287     | 427     | 266     | 333     |
|  | 1,989   | 1,855   | 2,349   | 2,373   | 1,705   | 1,838   |
| Intermediate Court of Appeals 2/ Civil cases Criminal cases Other proceedings                                    | 224     | 248     | 188     | 186     | 186     | 196     |
|  | 87      | 91      | 68      | 78      | 32      | 35      |
|  | 42      | 49      | 60      | 59      | 56      | 54      |
|  | 95      | 108     | 60      | 49      | 98      | 107     |
| Circuit Courts proper Civil cases Criminal cases  Part I offenses Part II offenses Other proceedings             | 13,467  | 10,604  | 11,321  | 15,079  | 15,644  | 14,061  |
|  | 7,465   | 5,622   | 4,977   | 5,405   | 6,418   | 6,421   |
|  | 2,717   | 2,305   | 2,752   | 2,951   | 3,567   | 2,936   |
|  | 1,073   | 925     | 1,013   | 1,126   | 1,211   | 1,044   |
|  | 1,644   | 1,380   | 1,739   | 1,825   | 2,356   | 1,892   |
|  | 3,285   | 2,677   | 3,592   | 6,723   | 5,659   | 4,704   |
| Family Courts Civil cases Criminal cases Other proceedings   | 34,635  | 40,130  | 34,433  | 34,450  | 48,438  | 39,342  |
|  | 16,038  | 14,294  | 11,709  | 11,301  | 20,128  | 12,977  |
|  | 163     | 650     | 309     | 2,395   | 3,027   | 3,373   |
|  | 18,434  | 25,186  | 22,415  | 20,754  | 25,283  | 22,992  |
| District Courts  Civil cases  Traffic cases  Other violations  Criminal cases  Part I offenses  Part II offenses | 899,473 | 807,513 | 771,287 | 892,480 | 897,864 | 974,031 |
|  | 20,354  | 20,402  | 21,643  | 24,179  | 21,968  | 17,872  |
|  | 822,295 | 730,573 | 708,365 | 821,080 | 824,692 | 903,331 |
|  | 26,842  | 24,885  | 9,284   | 10,565  | 10,984  | 11,811  |
|  | 29,982  | 31,653  | 31,995  | 36,656  | 40,220  | 41,017  |
|  | 4,326   | 4,567   | 5,208   | 5,186   | 5,778   | 5,770   |
|  | 25,656  | 27,086  | 26,787  | 31,470  | 34,442  | 35,247  |

<sup>1/</sup> Data exclude cases transferred to the Intermediate Court of Appeals: 135 in 1986, 137 in 1987, 120 in 1988, 138 in 1989, 139 in 1990, and 123 in 1991.

<sup>2/</sup> Data exclude cases transferred back to the Supreme Court: 1 in 1987. Source: Hawaii State Judiciary, Office of the Administrative Director of the Courts, records.

Table 116.-- STATE JUDICIARY CASES FILED, BY TYPE OF ACTION: 1988 TO 1990

[Years ended June 30]

| Court and type of action  | 1988  | 1989                                 | 1990  |
|---|---|--------------------------------------|---|
| Supreme Court, total  Primary cases   | 3,119   | 3,083                                | 2,218   |
|   | 835   | 787                                  | 624   |
|   | 778   | 727                                  | 567   |
|   | 57  | 60                                   | 57  |
|   | 2,284   | 2,298                                | 1,594   |
| Intermediate Court of Appeals, total  Primary cases   | 180   | 188                                  | 204   |
|   | 120   | 140                                  | 138   |
|   | 119   | 140                                  | 138   |
|   | 60  | 48                                   | 65  |
| Circuit Courts Proper, total  Primary proceedings  Civil actions  Probate proceedings  Guardianship proceedings  Miscellaneous proceedings  Criminal actions  Part I offenses  Part II offenses  Supplemental proceedings  Family Courts, total  Primary proceedings, referrals  Marital actions, proceedings  Adoption proceedings | 13,588  | 13,720                               | 13,910  |
|   | 13,052  | 13,295                               | 13,484  |
|   | 5,732   | 5,524                                | 5,876   |
|   | 1,884   | 1,606                                | 1,673   |
|   | 524   | 418                                  | 474   |
|   | 1,386   | 1,984                                | 1,629   |
|   | 3,526   | 3,763                                | 3,832   |
|   | 1,197   | 1,364                                | 1,294   |
|   | 2,329   | 2,399                                | 2,538   |
|   | 536   | 425                                  | 426   |
|   | 40,058  | 39,950                               | 43,499  |
|   | 33,199  | 32,546                               | 36,524  |
|   | 7,484   | 6,085                                | 6,596   |
|   | 717   | 724                                  | 822   |
| Parental proceedings  Miscellaneous proceedings  Criminal actions  Adults' referrals  Children's referrals  Supplemental proceedings  | 1,982<br>3,458<br>2,185<br>3,417<br>13,956<br>6,859 | 1,789 3,733 3,453 3,612 11,682 7,404 | 2,260<br>3,579<br>4,156<br>4,118<br>14,351<br>6,975 |
| District Court, total Civil Regular civil Small claims Traffic Moving - arrest and citation Non-moving Parking Other violations Criminal actions Part I offenses Part II offenses   | 857,676   | 941,008                              | 892,362   |
|   | 23,693  | 26,185                               | 24,510  |
|   | 17,744  | 21,209                               | 19,603  |
|   | 5,949   | 4,976                                | 4,907   |
|   | 790,166   | 866,329                              | 814,847   |
|   | 125,294   | 148,038                              | 160,787   |
|   | 90,821  | 98,248                               | 112,676   |
|   | 574,051   | 620,043                              | 541,384   |
|   | 9,347   | 11,238                               | 11,327  |
|   | 34,470  | 37,256                               | 41,678  |
|   | 5,326   | 5,119                                | 5,723   |
|   | 29,144  | 32,137                               | 35,955  |

Source follows next table.

Table 117.-- STATE JUDICIARY CASE TERMINATIONS, BY TYPE:  $1988\ \ \text{TO}\ 1990$ 

## [Years ended June 30]

| Court and type of termination       1988       1989       19         Supreme Court, total       3,003       3,184       2,         Opinion filed       321       396         Dismissal motion granted       28       30         Withdrawn or discontinued       92       158         Transferred       120       138         Other disposition       2,442       2,316       1,         Intermediate Court of Appeals, total       188       186         Opinion filed       120       134         Dismissal motion granted       -       -         Withdrawn or discontinued       5       3         Transferred       -       -         Other disposition       63       48         Circuit Courts Proper, total       11,321       15,079       15,         No service       319       208         No service       326       326  |
|---|
| Opinion filed       321       396         Dismissal motion granted       28       30         Withdrawn or discontinued       92       158         Transferred       120       138         Other disposition       2,442       2,316       1,         Intermediate Court of Appeals, total       188       186         Opinion filed       120       134         Dismissal motion granted       -       -         Withdrawn or discontinued       5       3         Transferred       -       -         Other disposition       63       48         Circuit Courts Proper, total       11,321       15,079       15,         No service       319       208  |
| Opinion filed       321       396         Dismissal motion granted       28       30         Withdrawn or discontinued       92       158         Transferred       120       138         Other disposition       2,442       2,316       1,         Intermediate Court of Appeals, total       188       186         Opinion filed       120       134         Dismissal motion granted       -       -         Withdrawn or discontinued       5       3         Transferred       -       -         Other disposition       63       48         Circuit Courts Proper, total       11,321       15,079       15,         No service       319       208  |
| Withdrawn or discontinued       92       158         Transferred       120       138         Other disposition       2,442       2,316       1,         Intermediate Court of Appeals, total       188       186         Opinion filed       120       134         Dismissal motion granted       -       -         Withdrawn or discontinued       5       3         Transferred       -       -         Other disposition       63       48         Circuit Courts Proper, total       11,321       15,079       15,         No service       319       208   |
| Transferred       120       138         Other disposition       2,442       2,316       1,         Intermediate Court of Appeals, total       188       186         Opinion filed       120       134         Dismissal motion granted       -       -         Withdrawn or discontinued       5       3         Transferred       -       -         Other disposition       63       48         Circuit Courts Proper, total       11,321       15,079       15,         No service       319       208  |
| Other disposition       2,442       2,316       1,         Intermediate Court of Appeals, total       188       186         Opinion filed       120       134         Dismissal motion granted       -       -         Withdrawn or discontinued       5       3         Transferred       -       -         Other disposition       63       48         Circuit Courts Proper, total       11,321       15,079       15,         No service       319       208  |
| Intermediate Court of Appeals, total       188       186         Opinion filed       120       134         Dismissal motion granted       -       -         Withdrawn or discontinued       5       3         Transferred       -       -         Other disposition       63       48         Circuit Courts Proper, total       11,321       15,079         No service       319       208   |
| Opinion filed       120       134         Dismissal motion granted       -       -         Withdrawn or discontinued       5       3         Transferred       -       -         Other disposition       63       48         Circuit Courts Proper, total       11,321       15,079       15,         No service       319       208  |
| Dismissal motion granted       - </td |
| Withdrawn or discontinued       5       3         Transferred       -       -         Other disposition       63       48         Circuit Courts Proper, total       11,321       15,079         No service       319       208   |
| Transferred       - <td< td=""></td<> |
| Other disposition       63       48         Circuit Courts Proper, total       11,321       15,079       15,         No service       319       208   |
| Circuit Courts Proper, total 11,321 15,079 15, No service   |
| No service  |
|   |
| Ma  |
| No answer   |
| No statement of readiness 77 71   |
| Dismissal: Notice of  |
| Stip. for   |
| By judge 646 631 1, Nonjury: Trial 248 291  |
| Trial not completed 10 9  |
| Jury: Verdict 333 353   |
| Trial not completed 8 7   |
| No trial held   |
| Hearings: Contested   |
| Uncontested   |
| Others  |
| Family Courts, total  |
| Nolle prosequi  |
| Dismissal 82 622  |
| Nonjury: Trial 101   797  |
| Trial not completed 2 488 1,  |
| Jury: Verdict 9   |
| Trial not completed   |
| No trial held   |
| Hearings: Contested   |
| Uncontested   |
| Counseling service  |
| 7,073 0,700 3,  |

Continued on next page.

Table 117.-- STATE JUDICIARY CASE TERMINATIONS, BY TYPE: 1988 TO 1990 -- Con.

|  |  |   | · · · · · · · · · · · · · · · · · · ·   |
|--|--|---|---|
| Court and type of termination  | 1988   | 1989  | 1990  |
| Court and type of termination  District Court, total   | 1988  771,287 1,852 229 17 1,606 30,143 8,078 2,102 1,616 2,213 796 15,338 21,643 8,239  | 1989  892,480 2,348 409 33 1,906 34,308 9,845 3,048 2,065 2,058 1,727 15,565 24,179 9,532 | 897,864 3,156 508 34 2,614 37,064 10,388 2,870 2,320 2,573 2,166 16,747 21,968 7,967      |
| By default or confession By trial By commitment to Circuit Court Traffic and other violations By discharge or dismissal By nolle prosequi Stricken By bail forfeiture By commitment to Circuit Court By conviction | 12,752<br>559<br>93<br>717,649<br>46,673<br>15,509<br>27,149<br>537,903<br>219<br>90,196 | 13,641<br>913<br>93<br>821,080<br>63,219<br>14,919<br>23,529<br>609,701<br>250<br>109,462 | 13,076<br>880<br>45<br>824,692<br>70,514<br>13,181<br>62,229<br>551,433<br>419<br>126,846 |

Source: The Judiciary, State of Hawaii, Annual Report, Statistical Supplement for 1988, 1989, and 1990.

Table 118.-- INMATES PRESENT IN STATE CORRECTIONAL FACILITIES: ANNUAL AVERAGES, 1981 TO 1991

[Mean head count for fiscal years ended June 30]

|  |   | Adu   | Juve<br>facili  | nile<br>ties <u>3</u> /   |  |  |
|--|---|---|---|---|--|--|
| Year   | Total <u>1</u> /  | Sentenced<br>felons   | Sentenced jail 4/   | Not<br>sentenced  | Boys   | Girls  |
| 1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989<br>1990 | 952<br>1,155<br>1,402<br>1,652<br>1,898<br>2,009<br>2,094<br>2,194<br>2,193<br>2,382<br>2,430 | 561<br>681<br>812<br>974<br>1,223<br>1,331<br>1,429<br>1,414<br>1,428<br>1,482<br>1,462 | 82<br>86<br>120<br>166<br>204<br>240<br>202<br>219<br>206<br>212<br>239 | 210<br>295<br>391<br>435<br>392<br>348<br>374<br>484<br>494<br>629<br>667 | 88<br>85<br>73<br>71<br>72<br>78<br>79<br>63<br>56<br>53<br>52 | 11<br>8<br>6<br>6<br>7<br>12<br>10<br>14<br>9<br>6 |

<sup>1/</sup> Includes "other jurisdiction" population, not separately shown.

3/ Hawaii Youth Correctional Facility.

<sup>2/</sup> As of 1991, includes nine facilities: Oahu, Hawaii, Kauai, and Maui Community Correctional Centers, Kulani Correctional Facility, Halawa High Security Facility, Halawa Medium Security Facility, Women's Community Correctional Center, and Waiawa Correctional Facility.

<sup>4/</sup> Includes felon probationers serving jail terms under one year. Source: Hawaii State Department of Public Safety, records.

Table 119.-- MEDIAN AGES AND AVERAGE SENTENCES OF SENTENCED FELON POPULATION: 1981 TO 1991

[Years ended June 30. These data cover only sentenced felons under the jurisdiction of the State's correctional facilities, in hospitals, in mainland facilities, and on community release status. Parolees are not included. Average sentence calculations include life with parole sentences]

|  | Median age<br>(years) <u>1</u> /   |  | Average sentences (months)   |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  | C  | Felons admitted  |  | Felons released  |  |  |
| Year   | At<br>admission  | Currently<br>as of<br>June 30  | Minimum  | Maximum  | Minimum  | Maximum  | Time<br>served   |
| 1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989<br>1990 | 27.0<br>26.8<br>27.5<br>27.9<br>29.3<br>30.4<br>27.0<br>29.0<br>30.1<br>30.2<br>32.1 | 27.8<br>27.3<br>29.2<br>30.3<br>28.2<br>29.4<br>31.0<br>29.0<br>28.7<br>30.7<br>33.6 | 40.7<br>38.8<br>49.2<br>53.8<br>47.5<br>33.3<br>45.9<br>46.9<br>43.9<br>(NA) | 173.5<br>135.8<br>127.2<br>142.2<br>145.7<br>148.9<br>115.6<br>115.9<br>132.6<br>122.6<br>(NA) | 55.7<br>58.8<br>40.5<br>39.7<br>53.0<br>54.1<br>42.5<br>61.1<br>73.5<br>(NA) | 124.9<br>131.6<br>98.5<br>112.8<br>126.0<br>122.7<br>132.4<br>126.9<br>109.2<br>(NA)<br>(NA) | 47.4<br>52.2<br>47.5<br>46.2<br>42.7<br>41.5<br>40.3<br>39.4<br>43.9<br>42.8<br>43.2 |

NA Not available.

Source: Hawaii State Department of Public Safety, A Statistical Report on Hawaii's Sentenced Felons, Fiscal Years 1985-86 to 1989-90 (July 1991), and records.

<sup>1/</sup> For sentenced felon population on June 30. Due to a change in computerized data systems, data for 1983 and later years are not directly comparable with figures for previous years.

# Table 120.-- HAWAII PAROLING AUTHORITY STATISTICAL SUMMARY: 1988 AND 1989

### [Years ended June 30]

| Item   | 1988                        | 1989                         |
|--|-----------------------------|------------------------------|
| Number of parolees, June 30 1/   | 1,076<br>718<br>192<br>166  | 1,217<br>820<br>219<br>178   |
| Minimum imprisonment terms fixed   | 1,379<br>477                | 1,027<br>722                 |
| Persons considered for parole  | 538<br>451<br>87            | 605<br>463<br>142            |
| Persons reconsidered for minimum terms previously set . Terms reset              | 333<br>14<br>271<br>42<br>6 | 436<br>28<br>371<br>29<br>18 |
| Parole violation hearings  | 147<br>139<br>7<br>1        | 231<br>170<br>12<br>25       |
| Pardon investigations  | 11<br>10                    | 21<br>18                     |
| Persons whose paroles were suspended because their whereabouts unknown           | 65                          | 88                           |
| Discharges  Discharged from parole  Final discharge  Deceased  Administrative 2/ | 130<br>88<br>36<br>1<br>5   | 135<br>94<br>33<br>1<br>6    |

<sup>1</sup>/ In addition, provided courtesy supervision to 32 interstate cases on June 30, 1988 and 46 on June 30, 1989.

Source: Hawaii State Department of Corrections, 1989 Annual Report, Hawaii Paroling Authority.

<sup>2/</sup> Persons convicted prior to 1970, age 65 or older and classified absconder or suspended.

#### Section 5

## **GEOGRAPHY AND ENVIRONMENT**

This section relates to land and water areas, physical geography, climate, air and water quality, and other geographic and environmental measurements of Hawaii. Most statistics on land use and ownership, however, appear in Section 6.

The State consists of eight major islands and 124 minor islands with a total land area of 6,423 square miles and a general coastline of 750 miles. Honolulu is 214 miles from Hilo, 1,367 miles from Kure Atoll (the westernmost end of the State), 2,397 miles from San Francisco, and 4,829 miles from Washington, D.C. The highest peak in the State is Mauna Kea, 13,796 feet above sea level; the longest stream is Kaukonahua Stream, Oahu, 33 miles in length; the most extensive lake or similar body is Kawainui Marsh, 1,000 acres; and the highest named waterfall is Kahiwa, Molokai, a 1,750-foot cascade. Various measures of air pollution, such as suspended particulate matter, indicate that Honolulu is one of the cleanest cities in the nation. The 167 major beaches and streams surveyed in 1990 were found to have enterococci levels per 100 ml. ranging from 0.5 to 258.3, and 78 percent were within EPA standards. More than 500 species, subspecies, and varieties of native fauna and flora have been proposed or accepted for inclusion on lists of endangered, threatened, or extinct organisms.

Climatically, Hawaii is marked by remarkably balmy temperatures and wide variations in rainfall. The all-time temperature range at Honolulu International Airport, for example, was from 53° to 94°F. Average precipitation, however, ranges from less than nine inches at Kawaihae to 444 inches atop Waialeale. The volcanic eruption that began in 1983 had produced more than 1.5 billion cubic meters of lava by September 1991. Hawaii's worst recorded earthquake (1868) attained 7.5 on the Richter scale by retrospective estimate, the highest tsunami wave (1946) reached 56 feet, and the most destructive hurricane (Iwa, 1982) gusted to 117 miles per hour. Water withdrawn for use in 1985 averaged 1.4 billion gallons per day, compared with 2.9 billion in 1980 and 2.8 billion in 1975.

Important sources of data include the U.S. Geological Survey, National Ocean Survey, National Weather Service, U.S. Bureau of the Census Geography Division, the Division of Water and Land Development of the State Department of Land and Natural Resources, the State Department of Health, and the University of Hawaii Institute of Geophysics. Detailed information is given in Atlas of Hawaii, 2nd edition, published by the University of Hawaii Press in 1983. National data are reported in Statistical Abstract of the United States: 1991, Section 6.

Table 121.-- GREAT CIRCLE DISTANCES BETWEEN SPECIFIED PLACES

| Places  DISTANCES FROM HONOLULU INTERNATIONAL AIRPORT  Hawaiian Islands locations: Hilo, Hawaii Kailua, Kona, Hawaii Kahului, Maui | Statute<br>miles<br>214<br>168 | Nautical<br>miles | Kilo-<br>meters |
|--|--------------------------------|-------------------|-----------------|
| Hawaiian Islands locations: Hilo, Hawaii Kailua, Kona, Hawaii Kahului, Maui  |                                | 186               |                 |
| Hilo, Hawaii<br>Kailua, Kona, Hawaii<br>Kahului, Maui  |                                | 186               |                 |
| Kailua, Kona, Hawaii   |                                | 186               |                 |
| Kahului, Maui  | 168                            |                   | 344             |
| Kahului, Maui  |                                | 146               | 270             |
|  | 98                             | 85                | 158             |
| Lanai Airport  | 72                             | 63                | 116             |
| Molokai Airport  | 54                             | 47                | 87              |
| Lihue, Kauai   | 103                            | 90                | 166             |
| Puuwai, Niihau   | 152                            | 132               | 245             |
| Nihoa  | 283                            | 246               | 455             |
| Necker Island  | 520                            | 452               | 837             |
| French Frigate Shoals  | 556<br>688                     | 483<br>598        | 895             |
| Gardner Pinnacles  | 851                            | 739               | 1,107<br>1,369  |
| Maro Reef  | 936                            | 813               | 1,506           |
| Lisianski Island   | 1,065                          | 925               | 1,714           |
| Pearl and Hermes Atoll   | 1,208                          | 1,050             | 1,944           |
| Midway Islands   | 1,309                          | 1,137             | 2,106           |
| Kure Atoll   | 1,367                          | 1,188             | 2,200           |
| Other Pacific locations:   |                                |                   |                 |
| Apra Harbor, Guam  | 3,806                          | 3,307             | 6,124           |
| Auckland, New Zealand  | 4,393                          | 3,817             | 7,068           |
| Hong Kong  | 5,541                          | 4,815             | 8,915           |
| Johnston Atoll   | 820                            | 713               | 1,319           |
| Kingman Reef   | 1,073                          | 932               | 1,726           |
| Kiritimati (Christmas Island), Kiribati  | 1,344                          | 1,168             | 2,163           |
| Majuro, Marshall Islands   | 2,271                          | 1,973             | 3,654           |
| Manila, Philippines  | 5,293                          | 4,599             | 8,516           |
| Nuku Hiva, Marquesas Islands   | 2,400                          | 2,086             | 3,864           |
| Pago Pago, American Samoa  | 2,606                          | 2,265             | 4,193           |
| Palmyra Atol1  | 1,101                          | 957               | 1,772           |
| Papeete, Tahiti  | 2,741                          | 2,382             | 4,410           |
| Suva, Fiji   | 3,159                          | 2,745             | 5,083           |
| Sydney (Port Jackson), Australia   | 5,070                          | 4,406             | 8,158           |
| Tokyo, Japan   | 3,847<br>2,294                 | 3,343<br>1,993    | 6,190<br>3,691  |
| North and South American locations:  |                                |                   |                 |
| Anchorage, Alaska  | 2,781                          | 2,417             | 4,475           |
| Cape Horn, Chile   | 7,457                          | 6,480             | 11,998          |

Continued on next page.

Table 121.-- GREAT CIRCLE DISTANCES BETWEEN SPECIFIED PLACES -- Con.

| Places  | Statute   | Nautical   | Kilo-  |
|---|---|--|--|
|   | miles   | miles  | meters   |
| DISTANCES FROM HONOLULU INT. AIRPORTCon.  |   |  |  |
| North and South American locations, con: Chicago, Illinois Cristobal, Canal Zone Los Angeles, California Miami, Florida New York, New York Portland, Oregon San Diego, California San Francisco, California Seattle, Washington Vancouver, B.C. Ti juana, Mexico Washington, D.C. | 4,179 5,214 2,557 4,856 4,959 2,595 2,610 2,397 2,679 2,709 2,616 4,829 | 3,631<br>4,531<br>2,222<br>4,220<br>4,309<br>2,255<br>2,268<br>2,083<br>2,328<br>2,354<br>2,273<br>4,196 | 6,724<br>8,389<br>4,114<br>7,813<br>7,979<br>4,175<br>4,199<br>3,857<br>4,311<br>4,359<br>4,209<br>7,770 |
| London, England Bombay, India Ghanzi, Botswana 1/ Equator, due south of Honolulu North Pole   | 7,226   | 6,279  | 11,627   |
|   | 8,010   | 6,960  | 12,888   |
|   | 12,417  | 10,790   | 19,979   |
|   | 1,470   | 1,277  | 2,367  |
|   | 4,740   | 4,119  | 7,631  |
| OTHER DISTANCES   |   |  |  |
| Hilo to Los Angeles, California San Francisco, California   | 2,447   | 2,126  | 3,937  |
|   | 2,315   | 2,012  | 3,725  |
| Kure Atoll to Cape Kumukahi, Puna, Hawaii 2/ Log Point, Elliot Key, Florida 3/ Tokyo, Japan West Quoddy Head, Maine   | 1,523   | 1,323  | 2,451  |
|   | 5,852   | 5,085  | 9,416  |
|   | 2,486   | 2,160  | 4,000  |
|   | 5,788   | 5,030  | 9,313  |

<sup>1</sup>/ Ghanzi, Botswana, is Honolulu's antipode, that is, the point precisely opposite to it on the globe.

<sup>2/</sup> Cape Kumukahi and Kure Atoll are the points farthest apart in the Hawaiian Archipelago and State of Hawaii.

<sup>3/</sup> Log Point and Kure Atoll are the points farthest apart in the 50 states.

Source: U. S. Department of the Interior, Geological Survey, <u>Elevations</u> and Distances in the United States (1980), pp. 22-23, and records.

Table 122.-- TIME DIFFERENTIALS BETWEEN HONOLULU AND SELECTED CITIES: 1991

|   |  | June  |  | December   |  |
|---|--|---|--|--|--|
| City  | Day  | Hour  | Day  | Hour   |  |
| Honolulu Los Angeles Denver Houston Chicago Atlanta Washington New York | Same<br>Same<br>Same<br>Same<br>Same<br>Same<br>Same | 12:00 N<br>3:00 PM<br>4:00 PM<br>5:00 PM<br>5:00 PM<br>6:00 PM<br>6:00 PM | Same<br>Same<br>Same<br>Same<br>Same<br>Same<br>Same | 12:00 N<br>2:00 PM<br>3:00 PM<br>4:00 PM<br>4:00 PM<br>5:00 PM<br>5:00 PM<br>5:00 PM |  |
| London Singapore Hong Kong Manila Tokyo Sydney                          | Same<br>Next<br>Next<br>Next<br>Next<br>Next         | 11:00 PM<br>6:00 AM<br>6:00 AM<br>6:00 AM<br>7:00 AM<br>8:00 AM           | Same<br>Next<br>Next<br>Next<br>Next<br>Next         | 10:00 PM<br>6:00 AM<br>6:00 AM<br>6:00 AM<br>7:00 AM<br>9:00 AM                      |  |

Source: Hawaiian Telephone Co., Oahu Telephone Book 1991-1992, p. 37A; consulates; airlines.

Table 123.-- LATITUDES AND LONGITUDES OF SELECTED PLACES

| Island and place                       | Latitude<br>(North) | Longitude<br>(West) |
|--|---------------------|---------------------|
| Hawaii:                                |                     | ·                   |
| Hilo (International Airport)           | 19°43'              | 155°04'             |
| Cape Kumukahi                          | 19°31'              | 154°49'             |
| Ka Lae                                 | 18°56'              | 155°41'             |
| Keahole Point                          | 19°44'              | 156°04'             |
| Upolu Point                            | 20°16'              | 155°51'             |
| Geographic center of State (off Maui). | 20°15'              | 156°20'             |
| Maui:                                  | 20 13               | 130 20              |
|  | 20°53'              | 156°30'             |
| Wailuku                                | 20°54'              | 156°26'             |
| Kahului (Airport)                      | 20°45'              | 155°59'             |
| Hana                                   | 20°35'              | 156°25'             |
| Cape Hanamanioa                        | 20°52'              | 156°41'             |
| Lahaina                                | 20-32               | 150-41              |
| Puu Moaulanui                          | 20°34'              | 156°34'             |
| Lanai:                                 | 20 34               | 130 34              |
| Airport                                | 20°48'              | 156°57'             |
| Molokai:                               | 20 40               | 130 37              |
| Kaunakakai                             | 21°05'              | 157°02'             |
| Laau Point                             | 21°06'              | 157°19'             |
| Cape Halawa                            | 21°10'              | 156°43'             |
| Oahu:                                  | 21 10               | 130 43              |
| Honolulu: International Airport        | 21°20'              | 157°55'             |
| Aloha Tower                            | 21°19'              | 157°52'             |
| Kaena Point                            | 21°35'              | 158°17'             |
| Kahuku Point                           | 21°43'              | 157°59'             |
| Makapuu Point                          | 21°19'              | 157°39'             |
| Diamond Head                           | 21°16'              | 157°49'             |
| Kauai:                                 | 21 10               | 13/ 49              |
| Lihue (Kauai Airport)                  | 21°59'              | 159°21'             |
| Mana                                   | 22°02'              | 159°46'             |
| Kilauea Point                          | 22°14'              | 159°24'             |
| Niihau:                                | 22 14               | 139 44              |
|  | 210541              | 160°12'             |
| Puuwai                                 | 21°54'<br>28°25'    | 178°22'             |
| Nuice Atom                             | 48-45.              | 1/6-22              |

Source: U.S. Board on Geographic Names, Gazetteer No. 24, Hawaiian Islands (1956); U.S. Geological Survey, Elevations and Distances in the United States (1980), pp. 17 and 22-23; U.S. Department of Commerce, National Climatic Data Center, Local Climatological Data, Annual Summary with Comparative Data, 1984 for Hilo, Kahului, Honolulu, and Lihue; Bernice P. Bishop Museum, records; Hawaii State Department of Accounting and General Services, Survey Division, records.

Table 124.-- WIDTHS AND DEPTHS OF CHANNELS

|   | Width <u>2</u> / |            | Dept   | th <u>3</u> / |
|---|------------------|------------|--------|---------------|
| Channel <u>1</u> /  | Statute<br>miles | Kilometers | Feet   | Meters        |
| Alenuihaha (Hawaii-Maui) Alalakeiki (Kahoolawe-Maui) Kealaikahiki (Kahoolawe-Lanai) Auau (Lanai-Maui) Kalohi (Lanai-Molokai) Pailolo (Maui-Molokai) Kaiwi (Molokai-Oahu) Kauai (Oahu-Kauai) Kaulakahi (Kauai-Niihau)  | 29.6             | 47.6       | 6,810  | 2,076         |
|   | 6.7              | 10.8       | 822    | 251           |
|   | 17.8             | 28.6       | 1,086  | 331           |
|   | 9.5              | 15.3       | 252    | 77            |
|   | 9.2              | 14.8       | 540    | 165           |
|   | 8.8              | 14.2       | 846    | 258           |
|   | 25.8             | 41.5       | 2,202  | 671           |
|   | 72.1             | 116.0      | 10,890 | 3,319         |
|   | 17.2             | 27.7       | 3,570  | 1,088         |
| Niihau-Kaula Niihau-Nihoa Niihau-Nihoa Nihoa-Necker I. Necker IFrench Frigate Shoals French Frigate Shoals-Gardner Pinnacles Gardner Pinnacles-Maro Reef Maro Reef-Laysan I. Laysan ILisianski I. Lisianski IPearl and Hermes Atoll Pearl and Hermes Atoll-Midway Islands Midway Islands-Kure Atoll | 21.5             | 34.6       | 5,364  | 1,635         |
|   | 133.9            | 215.5      | 14,550 | 4,435         |
|   | 179.6            | 289.0      | 12,600 | 3,840         |
|   | 100.3            | 161.4      | 12,780 | 3,895         |
|   | 137.0            | 220.5      | 11,448 | 3,489         |
|   | 155.5            | 250.3      | 12,300 | 3,749         |
|   | 65.9             | 106.1      | 8,280  | 2,524         |
|   | 137.4            | 221.1      | 16,830 | 5,130         |
|   | 162.6            | 261.7      | 17,400 | 5,304         |
|   | 86.9             | 139.9      | 15,840 | 4,828         |
|   | 57.1             | 91.9       | 12,960 | 3,950         |

<sup>1/</sup> Listed in geographic order, from east to west. The channels between major islands were measured between the following points:

Alenuihaha: Upolu Pt., Hawaii, to Puhilele Pt., Maui;

Alalakeiki: Lae o ka Üle, Kahoolawe, to Nukuele Pt., Maui;

Kealaikahiki: Makaalae, Kahoolawe, to Kamaiki Pt., Lanai;

Auau: Kikoa Pt., Lanai, to Lahaina, Maui;

Kalohi: Wahie Pt., Lanai, to Kamalo, Molokai;

Pailolo: Lipoa Pt., Maui, to Pohakuloa, Molokai;

Kaiwi: Ilio Pt., Molokai, to Makapuu Pt., Oahu; Kauai: Kaena Pt., Oahu, to Kamilo Pt., Kauai;

Kaulakahi: Mana Pt., Kauai, to Kaunuopou, Niihau.

2/ Width measured in statute miles between designated points on National Ocean Survey and Coast and Geodetic Survey charts. Width in kilometers calculated from miles (1 mile = 1.60934 km.).

3/ Depths given are the deepest soundings noted at or near the line joining the two designated points, on National Ocean Survey and Coast and Geodetic Survey charts. Depths measured in fathoms and converted to feet and meters (1 fathom = 6 feet = 1.8288 meters).

Source: Compiled by Lee S. Motteler, Geography and Map Division, Bernice P. Bishop Museum, in November 1980.

Table 125.-- GENERAL COASTLINE AND TIDAL SHORELINE OF COUNTIES AND ISLANDS

|   | General c   | coastline <u>1</u> /   | Tidal sh  | oreline <u>2</u> /  |
|---|---|--|---|---|
| County and island   | Statute<br>miles  | Kilo-<br>meters <u>3</u> /   | Statute<br>miles  | Kilo-<br>meters <u>3</u> /  |
| State total   | 750   | 1,207  | 1,052   | 1,693   |
| Counties:     Hawaii     Maui, including Kalawao     Honolulu     Kauai  Islands: 4/     Hawaii     Maui     Kahoolawe     Lanai     Molokai     Oahu     Kauai     Niihau     Kaula     Northwestern Hawaiian Islands 5/     Nihoa | 266<br>210<br>137<br>137<br>266<br>120<br>29<br>47<br>88<br>112<br>90<br>45<br>2<br>25<br>3 | 428<br>338<br>220<br>220<br>220<br>428<br>193<br>47<br>76<br>142<br>180<br>145<br>72<br>3<br>40<br>5 | 313<br>343<br>234<br>162<br>313<br>149<br>36<br>52<br>106<br>209<br>110<br>50<br>2<br>25<br>3 | 504<br>552<br>377<br>261<br>504<br>240<br>58<br>84<br>171<br>336<br>177<br>80<br>3<br>40<br>5 |
| Necker Island   | 6<br>6<br>3<br>5  | 10<br>10<br>5<br>8   | 6<br>6<br>3<br>5  | 10<br>10<br>5<br>8  |

<sup>1/</sup> Figures are lengths of general outline of seacoast. Data for the four islands of Maui County are not consistent with the reported county total.

Source: U.S. Department of Commerce, National Ocean Survey, The Coastline of the United States (1975) and records.

<sup>2/</sup> Shoreline of outer coast, offshore islands, bays, rivers, and creeks is included to the head of tidewater or to a point where tidal waters narrow to a width of 100 feet.

<sup>3/</sup> Derived from data expressed in statute miles; independently rounded and accordingly may not add exactly to indicated totals and subtotals. 1 mi. = 1.609 km.

<sup>4/</sup> Data are not available for five minor islands: Molokini, Lehua, Gardner Pinnacles, Maro Reef, and Pearl and Hermes Atoll.

<sup>5/</sup> Excludes the Midway Islands, which are part of the Hawaiian Archipelago but not legally part of the State of Hawaii. Midway has a general coastline of 20 miles and a tidal shoreline of 33 miles.

Table 126.-- LAND AND WATER AREA OF COUNTIES AND ISLANDS: 1989
[See maps on pages 6 and 7]

|   | Square miles  |   |   |  |
|---|---|---|---|--|
| County or island  | Total   | Land <u>2</u> /   | Inland<br>water <u>3</u> /  |  |
| State total   | 6,470.8   | 6,425.2   | 45.6  |  |
| Counties: 4/ Hawaii Maui Kalawao Honolulu 5/ Kauai 5/ Kauai 5/  Islands: 4/ Hawaii Maui 6/ Kahoolawe Lanai Molokai Oahu Kauai Niihau 7/ Kaula Northwestern Hawaiian Islands 8/ Nihoa Necker Island French Frigate Shoals Gardner Pinnacles Maro Reef Laysan Island Lisianski Island Pearl and Hermes Atol1 Kure Atol1 | 4,035.2<br>1,171.0<br>14.3<br>620.5<br>629.8<br>4,035.2<br>734.5<br>45.9<br>141.2<br>263.7<br>617.6<br>558.2<br>71.1<br>0.4<br>2.910<br>0.238<br>0.105<br>0.081<br>0.011<br>Awash<br>1.454<br>0.586<br>0.106<br>0.329 | 4,034.2<br>1,161.6<br>13.3<br>596.3<br>619.8<br>4,034.2<br>728.6<br>45.0<br>140.4<br>260.9<br>593.6<br>549.4<br>70.0<br>0.4<br>2.690<br>0.238<br>0.105<br>0.081<br>0.011<br>Awash<br>1.234<br>0.586<br>0.106<br>0.329 | 1.0<br>9.4<br>1.0<br>24.2<br>10.0<br>1.0<br>5.9<br>0.9<br>0.8<br>2.8<br>24.0<br>8.8<br>1.1<br>-<br> |  |

Continued on next page.

Table 126.-- LAND AND WATER AREA OF COUNTIES AND ISLANDS: 1989 -- Con.

|   |   | are<br>ters <u>1</u> /  |   |   |
|---|---|---|---|---|
| County or island  | Total   | Land <u>2</u> /   | Total   | Land <u>2</u> /   |
| State total   | 16,759.3  | 16,641.2  | 4,141,312   | 4,112,128   |
| Counties: 4/ Hawaii  Maui  Kalawao  Honolulu 5/ Kauai 5/  Islands: 4/   | 10,451.1<br>3,032.9<br>37.0<br>1,607.1<br>1,631.2   | 10,448.5<br>3,008.5<br>34.4<br>1,544.4<br>1,605.3   | 2,582,528<br>749,440<br>9,152<br>397,120<br>403,072   | 2,581,888<br>743,424<br>8,512<br>381,632<br>396,672   |
| Islands: 4/ Hawaii  Maui 6/ KahooTawe Lanai  Molokai Oahu Kauai  Niihau 7/ Kaula  Northwestern Hawaiian Islands 8/ Nihoa Necker Island French Frigate Shoals Gardner Pinnacles Maro Reef Laysan Island Lisianski Island Pearl and Hermes Atoll Kure Atoll | 10,451.1<br>1,902.3<br>118.9<br>365.7<br>683.0<br>1,599.6<br>1,445.7<br>184.1<br>1.0<br>7.5<br>0.6<br>0.3<br>0.2<br>0.0<br>Awash<br>3.8<br>1.5<br>0.3 | 10,448.5<br>1,887.1<br>116.5<br>363.6<br>675.7<br>1,537.4<br>1,422.9<br>181.3<br>1.0<br>7.0<br>0.6<br>0.3<br>0.2<br>0.0<br>Awash<br>3.2<br>1.5<br>0.3 | 2,582,528<br>470,080<br>29,376<br>90,368<br>168,768<br>395,264<br>357,248<br>45,504<br>256<br>1,862<br>152<br>67<br>52<br>7<br>Awash<br>931<br>375<br>68<br>211 | 2,581,888<br>466,304<br>28,800<br>89,856<br>166,976<br>379,904<br>351,616<br>44,800<br>256<br>1,722<br>152<br>67<br>52<br>7<br>Awash<br>790<br>375<br>68<br>211 |

<sup>1/</sup> Areas in square kilometers and acres were calculated directly from the figures shown for square miles; these equivalents were independently rounded, and hence may not add exactly to the indicated totals and subtotals. 1 square mile = 640 acres = 2.58999 square kilometers.

Continued on next page.

<sup>2/</sup> Dry land and land temporarily or partially covered by water, as marshland, swamps, etc.; streams and canals under one-eighth statute mile wide; and lakes, reservoirs, and ponds under 40 acres of area.

- 3/ Permanent inland water surface, such as lakes, reservoirs, and ponds having 40 acres or more of area; streams, sloughs, estuaries, and canals one-eighth statute mile or more in width; deeply indented embayments and sounds, and other coastal waters behind or sheltered by headlands or islands separated by less than 1 nautical mile of water, and islands having less than 40 acres of area.
  - 4/ Because of rounding, island figures may not add to county figures.
- $\overline{5}/$  Reflects inclusion of Kaula in the County of Kauai rather than in the City and County of Honolulu. Kaula was transferred to the County of Kauai by Act 245, S.L.H. 1988, approved June 9, 1988.
- 6/ Molokini, offshore of Maui, not measured; other sources give the area of Molokini as 18.6 acres (0.03 square miles or 0.075 square kilometers).
- $\frac{7}{1}$  Includes Lehua, elsewhere reported as 243 acres (0.38 square miles or 0.98 square kilometers).
- 8/ Exclusive of the Midway Islands, which are part of the Hawaiian Archipelago but not legally part of the State of Hawaii.

Source: Unpublished data supplied by the Geography Division, U.S. Bureau of the Census, May 5, 1983; cited in the Hawaii State Department of Planning and Economic Development, Remeasurements of the Area of Hawaii, 1982 (Statistical Memorandum 83-6, May 18, 1983).

Table 127.-- LAND AND WATER AREA WITHIN THE FISHERY CONSERVATION ZONE

[Land and water area within the 200 nautical mile Fishery Conservation Zone surrounding the Hawaiian Archipelago]

| Uniț   | Total     | Land   | Water     |
|--|-----------|--------|-----------|
|  | area      | area   | area      |
| Square nautical miles  Square statute miles  Square kilometers | 634,023   | 4,852  | 629,171   |
|  | 839,623   | 6,425  | 833,198   |
|  | 2,174,626 | 16,641 | 2,147,985 |

Source: Marine Surveys and Maps, National Ocean Survey, National Oceanic and Atmospheric Administration, information supplied September 15, 1978.

Table 128.-- MAJOR AND MINOR ISLANDS IN THE HAWAIIAN ARCHIPELAGO

|                   | Number                          | I and anaa                    |  |
|-------------------|---------------------------------|-------------------------------|--|
| Classification    | Total                           | Inhabited,<br>1990 <u>1</u> / | Land area<br>(square<br>miles)             |
| All named islands | 137                             | 12                            | 6,427.0                                    |
| Major islands     | 8<br>129<br>96<br>33<br>28<br>5 | 7<br>5<br>3<br>2<br>1<br>1    | 6,419.4<br>7.6<br>2.6<br>4.9<br>2.9<br>2.0 |

Table 129. -- AREA AND DEPTH OF SELECTED CRATERS

| Island and crater                                      | Area<br>(acres)  | Maximum<br>depth (feet) |
|--|------------------|-------------------------|
| Hawaii: Kilauea Caldera Mokuaweoweo Crater 1/          | 2,319<br>2,221   | 476<br>572              |
| Maui: Haleakala Crater <u>2</u> /                      | 12,575           | 3,028                   |
| Oahu: Diamond Head Crater Koko Crater Punchbowl Crater | 255<br>133<br>62 | 562<br>968<br>140       |

 <sup>1/</sup> For populations, see present volume, table 4.
 2/ For individual data, see DPED Report GN-6, pp. 3-7.
 3/ Includes individual islets in the 10 Northwestern Hawaiian Islands. Source: Hawaii State Department of Planning and Economic Development, Geographic Names Approved, Second Quarter 1969 (Report GN-6, July 8, 1969), p. 8; Data Book 1986, table 152.

<sup>1/</sup> Data exclude North and South Pits.  $\overline{2}/$  Data exclude Koolau and Kaupo Gaps.  $\overline{\text{Source:}}$  Measured from U.S. Geological Survey maps by DBED.

Table 130.-- ELEVATIONS OF MAJOR SUMMITS

[Elevation of the highest point on each island and other important peaks]

| Island and summit  | Feet  | Meters   |
|--|---|--|
| Hawaii:  Mauna Kea 1/  Mauna Loa 2/  Hualalai  Kaumu o Kaleihoohie  Kilauea (Uwekahuna)  Kilauea (Halemaumau Rim)                  | 13,796<br>13,679<br>8,271<br>5,480<br>4,093<br>3,660  | 4,205<br>4,169<br>2,521<br>1,670<br>1,248<br>1,116                     |
| Kahoolawe: Puu Moaulanui Puu Moaulaiki   | 1,483<br>1,434  | 452<br>437   |
| Molokini   | 160   | 49   |
| Maui: Haleakala (Red Hill)   | 10,023<br>8,201<br>5,788<br>2,250                     | 3,055<br>2,500<br>1,764<br>686   |
| Lanai: Lanaihale   | 3,366   | 1,026  |
| Molokai: Kamakou Olokui Kaunuohua Kalaupapa Lookout Mauna Loa (Kukui)  | 4,961<br>4,606<br>4,535<br>1,600<br>1,430             | 1,512<br>1,404<br>1,382<br>488<br>436                                  |
| Oahu: Kaala Puu Kalena Konahuanui Tantalus Olomana Koko Crater (Kohelepelepe) Nuuanu Pali Lookout Diamond Head Koko Head Punchbowl | 4,003 3,504 3,150 2,013 1,643 1,208 1,186 760 642 500 | 1,220<br>1,068<br>960<br>614<br>501<br>368<br>361<br>232<br>196<br>152 |

Continued on next page.

Table 130. -- ELEVATIONS OF MAJOR SUMMITS -- Con.

| Island and summit      | Feet  | Meters |
|------------------------|-------|--------|
| Kauai:                 |       |        |
| Kawaikini              | 5,243 | 1,598  |
| Waialeale              | 5,148 | 1,569  |
| Namolokama Mountain    | 4,421 | 1,348  |
| Kalalau Lookout        | 4,120 | 1,256  |
| Haupu                  | 2,297 | 700    |
| Sleeping Giant (Nonou) | 1,241 | 378    |
| Ni ihau:               |       |        |
| Paniau                 | 1,250 | 381    |
| Lehua                  | 699   | 213    |
| Kaula                  | 548   | 167    |
| Nihoa:                 |       |        |
| Millers Peak           | 903   | 275    |
| Necker Island:         |       |        |
| Summit Hill            | 276   | 84     |
| French Frigate Shoals: |       |        |
| La Perouse Pinnacles   | 120   | 37     |
| Gardner Pinnacles      | 190   | 58     |
| Maro Reef              | Awash | Awash  |
| Laysan Island          | 40    | 12     |
| Lisianski Island       | 40    | 12     |
| Pearl and Hermes Atoll | 10    | 3      |
| Midway Islands         | 12    | 4      |
| Kure Atoll             | 20    | 6      |

<sup>1/</sup> According to the 1991 Guinness Book of World Records (p. 142), "The world's tallest mountain measured from its submarine base (3,280 fathoms) in the Hawaiian Trough to its peak is Mauna Kea ... with a combined height of 33,476 ft., of which 13,796 ft. are above sea level."

Source: Hawaii State Department of Accounting and General Services, Survey Division, data provided July 15, 1991; U.S. National Cartographic Information Center, data provided October 11, 1978; U.S. Geological Survey topographic maps, 1981-1984; Hawaiian Government Survey (for Nihoa and Molokini); U.S.S. Tanager survey, 1923 (for Necker Island, French Frigate Shoals, Laysan, Lisianski, Pearl and Hermes Atoll and Kure Atoll).

<sup>2/</sup> Guinness (pp. 142-143) describes Mauna Loa as having ''dimensions, but not height, [which] exceed those of Mt. Everest .... The axes of its elliptical base, 16,322 ft below sea level, have been estimated at 74 miles and 53 miles."

Table 131-- LENGTH AND WIDTH OF SELECTED BEACHES

[Includes the longest white sand beach on each inhabited island, plus other important beaches]

| Island and beach  | Length (miles)                            | Width 1/<br>(feet)                                 |
|---|---|--|
| Hawaii:     Hapuna Maui:     Spreckelsville     Kaanapali Lanai:     Polihua Molokai:     Papohaku Oahu:     Waikiki     Waimanalo     Sunset Kauai:     Polihale to Kekaha     Polihale Niihau:     Keawanui | 0.5+ 2+ 1.5 1.5+ 2+ 3.5-4.5 2-3+ 15 3 3.5 | 200+ (NA) 60-80 (NA) 300 (NA) (NA) 200 300 300 175 |

NA Not available.

1/ Summer averages. Many beaches in Hawaii are seasonally reduced in width by winter storms.

Source: Hawaii State Department of Planning and Economic Development, Hawaii's Shoreline (1965), pp. 33, 47, 55, 62, 68, and 100; John R. K. Clark, Beaches of the Big Island (1985), p. 132, The Beaches of Maui County (1980), pp. 10, 62, 84-85, and 114, The Beaches of O'ahu (1977), pp. 45, 125, and 177, and Beaches of Kaua'i and Ni'ihau (1990), pp. 48-49 and 84.

Table 132.-- MAJOR STREAMS, BY ISLANDS: 1991

| Island  | Feature or stream  | Length<br>or ave.<br>discharge                            |
|---|--|---|
| Longest water feature (miles): Hawaii Maui Kahoolawe Lanai Molokai Oahu Kauai Niihau                            | Wailuku River  | 32.0<br>18.0<br>4.0<br>12.9<br>6.5<br>33.0<br>19.5<br>5.9 |
| Largest perennial stream (miles): 1/         Hawaii          Maui          Molokai          Oahu          Kauai | Wailuku River Palikea Stream Wailau-Pulena Stream Kaukonahua Stream Waimea River | 22.7<br>7.8<br>6.5<br>30.0<br>19.7                        |
| Streams with greatest average discharge (million gal./day): Hawaii Maui Molokai Oahu Kauai                      | Wailuku River  | 250<br>45<br>30<br>25<br>140                              |

<sup>1/</sup> Estimated on basis of drainage area rather than stream runoff. Other major streams include Wailoa River, Hawaii (1/2-mile long); Honokohau Stream (9.4 miles long) and Iao Stream (5), both on Maui; Halawa Stream (6.4), Waikolu Stream (4.7), and Pelekunu (2.3), all on Molokai; Waikele Stream (15.3), Kipapa Stream (12.8), Waiakakalaua Stream (11.8), Nuuanu Stream (4), and Ala Wai Canal (1.9), all on Oahu; and the Makaweli River (15.1), Wainiha River (13.8), Hanapepe River (13.3), and Wailua River (11.8), all on Kauai.

Source: Longest water feature from U.S. Geological Survey, records; other data from Hawaii State Department of Land and Natural Resources, Division of Water and Land Development, records.

Table 133.-- LAKES AND LAKE-LIKE WATERS, BY ISLANDS: 1991

| Island and lake   | Туре                                | Elevation (feet)            | Area <u>1</u> /<br>(acres) | Maximum<br>depth<br>(feet) |
|---|-------------------------------------|-----------------------------|----------------------------|----------------------------|
| Hawaii: Aimakapa Green Lake Lake Waiau 2/ Waiakea Pond            | Coastal pool . Lake Lake Tidal pond | (SL)<br>3<br>13,020<br>(SL) | 15<br>2<br>2<br>2<br>27    | (NA)<br>20<br>10<br>7      |
| Maui: Kanaha Pond Kealia Pond Waieleele                           | Marsh<br>Marsh<br>Pond              | (SL)<br>(SL)<br>6,690       | 41<br>500<br>0.5           | 3<br>(NA)<br>21            |
| Molokai: Kauhako Kualapuu Reservoir Meyer Lake                    | Pool<br>Reservoir<br>Impoundment    | (SL)<br>821<br>2,021        | 0.9<br>100<br>6-10         | 814<br>50<br>5             |
| Oahu: Ho'omaluhia Kaelepulu Pond Kawainui Marsh Wahiawa Reservoir | Reservoir Lake Marsh Reservoir      | 202<br>(SL)<br>(SL)<br>842  | 90<br>198<br>1,000<br>302  | 90<br>(NA)<br>(NA)<br>85   |
| Kauai: Nomilu Fishpond Waita Reservoir                            | Pond<br>Reservoir                   | (SL)<br>241                 | 20<br>424                  | 66<br>23                   |
| Niihau:<br>Halalii Lake<br>Halulu Lake                            | Playa<br>Playa                      | (SL)<br>(SL)                | 841-865<br>182-371         | (NA)<br>(NA)               |
| Laysan: Laysan Lagoon   | Closed lagoon                       | (SL)                        | 161                        | 16                         |

NA Not available.

Continued on next page.

SL Sea level.

<sup>1/</sup> Ranges shown for Meyer Lake, Halalii Lake, and Halulu Lake reflect differences in estimates between sources.

<sup>2</sup>/ Highest lake in the State and third highest in the United States.

Table 133. -- LAKES AND LAKE-LIKE WATERS, BY ISLANDS: 1991 - Con.

Source: J.A. Maciolek, Lakes and Lake-like Waters of the Hawaiian Archipelago (Bernice P. Bishop Museum, Occasional Papers, Vol. XXV, No. 1, April 30, 1982); Hawaii State Department of Land and Natural Resources, Division of Water and Land Development, April 15, 1991; Hawaii State Department of Planning and Economic Development, Resource Management Plan for Kawainui Marsh (March 1983); William H. Meyer, U.S. Fish and Wildlife Service, transmittal letter (to DPED, Coastal Zone Management Program), for Kealia Pond National Wildlife Refuge, Maui, Hawaii, Final EIS (August 1981).

Table 134.-- MAJOR NAMED WATERFALLS, BY ISLANDS: 1991

|                                  |  | Height (feet)       |   | Horizontal<br>distance                            |
|----------------------------------|--|---------------------|---|---|
| Island                           | Waterfall  | Sheer drop          | Cascade   | (feet)  |
| Hawaii Maui Molokai . Oahu Kauai | Kaluahine Akaka Honokohau Kahiwa Papalaua Kaliuwaa (Sacred) Waipoo (2 falls) Awini | 442<br><br>1/80<br> | 620<br>1,120<br>1,750<br>1,200<br>1,520<br>800<br>480 | 400<br>500<br>1,000<br>500<br>3,000<br>600<br>500 |

<sup>1/</sup> Refers to northernmost fall of a cascade of six falls. Source: U.S. Geological Survey, records; Hawaii State Department of Land and Natural Resources, Division of Water and Land Development, records.

Table 135.-- MISCELLANEOUS GEOGRAPHIC STATISTICS, BY ISLANDS

| Island    | Extreme<br>length<br>(miles)                                 | Extreme<br>width<br>(miles)                     | Miles of sea cliffs with heights 1,000 ft. or more 1/          | Miles from<br>coast of<br>most re-<br>mote point             | Percent<br>of area<br>within 5<br>miles of<br>coast              |
|-----------|--|---|--|--|--|
| The State | • • •  | • • •   | 33   | 28.5   | 48.6   |
| Hawaii    | 93<br>48<br>11<br>18<br>38<br>44<br>33<br>8                  | 76<br>26<br>6<br>13<br>10<br>30<br>25<br>6      | 4<br>-<br>-<br>1<br>14<br>-<br>11<br>3                         | 28.5<br>10.6<br>2.4<br>5.2<br>3.9<br>10.6<br>10.8<br>2.4     | 30.0<br>76.1<br>100.0<br>100.0<br>100.0<br>79.0<br>65.0<br>100.0 |
|           | Percent of area with elevation                               |   | Approximate<br>mean  | Percent of area with slope                                   |  |
| Island    | Less than<br>500 feet  | 2,000 feet<br>or more                           | altitude<br>(feet)   | Less than<br>10 percent                                      | 20 percent<br>or more  |
| The State | 20.8   | 50.9  | 3,030  | 63.5   | 17.0   |
| Hawaii    | 12.0<br>24.9<br>38.9<br>24.8<br>37.3<br>45.3<br>35.6<br>78.2 | 68.4<br>41.4<br>0<br>6.3<br>17.8<br>4.6<br>24.0 | 3,950<br>2,390<br>600<br>1,140<br>1,150<br>860<br>1,380<br>530 | 76.0<br>38.5<br>60.0<br>61.0<br>53.0<br>42.5<br>33.5<br>68.0 | 4.0<br>36.0<br>9.0<br>16.0<br>26.0<br>45.5<br>50.5               |

<sup>1/</sup> According to Lee S. Motteler, Geography and Map Division,
Bernice P. Bishop Museum, the sea cliffs along the northeastern coast of
Molokai between Umilehi Point and Puukaoku Point drop 3,250 feet at an
average slope of 58 degrees. These cliffs have been described by The
Guinness Book of World Records (1991 edition, p. 148) as "the highest sea
cliffs yet pinpointed anywhere in the world."

Source: Hawaii State Department of Planning and Economic Development, Hawai'i the Natural Environment (1974), p. 19; U.S. Geological Survey, Elevations and Distances in the United States (1978), pp. 4-5.

Table 136.-- VOLCANIC ERUPTIONS: 1969 TO 1991

[Complete through September 1, 1991. Four volcanoes have erupted in historical times: Haleakala, last active around 1790; Hualalai, last active in 1800-1801; and Kilauea and Mauna Loa, both active in recent years and included in this table]

| Volcano<br>and date<br>of outbreak  | Repose period since previous eruption (months)  | Duration<br>(days)  | Location <u>1</u> /   | Elevation (meters)  | Area<br>(square<br>km.)  | Volume (mil. cubic meters)   |
|---|---|---|---|---|--|--|
| Mauna Loa:<br>1975: July 5<br>1984: March 25  | 301<br>104  | <1<br>22  | S<br>S, ER  | 3,900<br>4,030-2,870  | 13.5<br>28.5±  | 30.0<br>176.0  |
| Kilauea:  1969: Feb. 22  May 24  1971: Aug. 14  Sept. 24  1972: Feb. 4  1973: May 5  Nov. 10  Dec. 12  1974: July 19  Sept. 19  Dec. 31  1975: Nov. 29  1977: Sept. 13  1979: Nov. 16  1982: April 31 | 4.0<br>2.0<br>-<br>4.3<br>-<br>0.1<br>-<br>2.0<br>3.4<br>11.0<br>21.5<br>26.3<br>29.5 | 6<br>867<br><1<br>5<br>455<br><1<br>30<br>203<br>3<br><1<br><1<br><1<br>18<br>1 | ER ER C, SWR ER ER ER ER C, ER C SWR C ER ER C C SWR C ER C C C C C C C C C C C C C C C C C | 930-870<br>940<br>1,100-1,080<br>1,120-820<br>940<br>1,000-980<br>980-870<br>940<br>1,080-980<br>1,100<br>1,080<br>1,080-1,060<br>620-480<br>980-960<br>1,080 | 6.0<br>12.5<br>3.1<br>3.9<br>35.1<br>0.3<br>1.0<br>8.1<br>3.1<br>1.0<br>7.5<br>0.3<br>7.8<br>0.3 | 16.1<br>176.7<br>9.1<br>7.7<br>119.6<br>1.2<br>2.7<br>28.7<br>6.6<br>10.2<br>14.3<br>0.2<br>32.9<br>0.6<br>0.5 |
| Sept. 25<br>1983: Jan. 3 <u>2</u> /   | 4.8<br>3.3  | <1<br>3,162   | C<br>ER   | 1,080<br>780-650  | >1.0<br>75.0   | 3.0<br>1,493.0   |

<sup>1/</sup> C, caldera; ER, east rift; S, summit; SWR, southwest rift.

 $<sup>\</sup>overline{2}$ / Still in progress, September 1, 1991. As of that time, there had been  $\overline{48}$  separate episodes. These had destroyed 179 housing units and added over 290 acres to the area of the island.

Source: Gordon A. Macdonald, Agatin T. Abbott, and Frank L. Peterson, Volcanoes in the Sea, 2nd ed. (1983), pp. 64-65 and 80-81, as updated by the staff of the Hawaiian Volcano Observatory.

Table 137.-- EARTHQUAKES OF MAGNITUDE 5 OR GREATER: 1975 TO 1991

[Complete to August 31, 1991]

| Dat   | e and time (HST)                  | Location                                  | Magnitude<br>(Richter<br>scale) |
|-------|-----------------------------------|---|---------------------------------|
| 1975: | Jan. 2, 3:27 AM                   | Near Pahala, Hawaii                       | 5.0                             |
|       | Nov. 29, 3:35 AM                  | Puna, Hawaii                              | 5.7                             |
| 1076  | Nov. 29, 4:47 AM                  | Puna, Hawaii                              | 7.2                             |
| 1976: | Feb. 20, 7:51 PM                  | Between Maui and Hawaii                   | 5.1                             |
| 1977: | Jan. 22, 12:36 PM.                | 100 miles S. of Kauai                     | 5.1                             |
|       | Apr. 20, 6:49 PM                  | Hamakua, Hawaii                           | 5.0                             |
| 1070  | Jun. 5, 11:42 PM                  | Puna, Hawaii                              | 5.1                             |
| 1979: | Mar. 29, 11:06 PM.                | 40 miles S.W. of Oahu                     | 5.5                             |
| 1001. | Sept. 21, 9:59 PM .               | Puna, Hawaii                              | 5.5                             |
| 1981: | Mar. 5, 4:09 AM                   | Molokai area                              | 5.3                             |
| 1002. | Nov. 10, 3:02 AM                  | Kilauea, Hawaii                           | 5.3                             |
| 1982: | Jan. 21, 11:52 AM.                | Mauna Loa, Hawaii                         | 5.5<br>5.5                      |
|       | Jan. 21, 12:29 PM.                | Mauna Loa, Hawaii                         | 5.0                             |
| 1983: | May 14, 6:26 AM                   | Off Kawaihae, Hawaii                      | 5.0                             |
| 1905: | Mar. 20, 5:18 PM Sept. 9, 6:30 AM | Off Kalapana, Hawaii Off Kalapana, Hawaii | 5.4                             |
|       | Nov. 16, 6:13 AM                  | S.E. flank of Mauna Loa                   | 6.7                             |
| 1984: | Jun. 8, 5:34 PM                   | 80 miles S. of Honolulu                   | 5.3                             |
| 1986: | Apr. 26, 7:19 AM                  | 28 miles N.E. of Maui                     | 5.1                             |
| 1987: | Feb. 3, 4:22 PM                   | 26 miles S. of Kahoolawe .                | 5.0                             |
| 1988: | March 24, 2:30 PM.                | 30 miles S. of Kahoolawe .                | 5.0                             |
| 1300. | March 27, 5:33 PM.                | 30 miles S. of Kahoolawe .                | 5.5                             |
|       | June 7, 12:49 AM                  | S. flank of Kilauea                       | 5.0                             |
|       | July 3, 7:38 PM                   | Near Pahala                               | 5.3                             |
|       | July 22, 10:29 AM.                | Near French Frigate Shoals                | 5.0                             |
| 1989: | June 25, 5:27 PM                  | Kalapana area                             | 6.1                             |
| 1303. | Dec. 27, 11:13 PM.                | Kilauea East Rift Zone                    | 5.1                             |
| 1990: | Aug. 8, 4:06 PM                   | Kilauea East Rift Zone                    | 5.4                             |
| 1991: | May 7, 10:21 PM                   | 13 miles W. of Kailua-Kona                | 5.3                             |
| ~~~.  | , , 10 tal 121 tee                |   |                                 |

Source: Hawaii Institute of Geophysics, records; Hawaii Volcano Observatory Summaries; U.S. Geological Survey, National Earthquake Information Service. Data provided by Professor Augustine S. Furumoto, Hawaii Institute of Geophysics, University of Hawaii at Manoa, November 4, 1991.

# Table 138.-- EARTHQUAKES WITH HONOLULU INTENSITIES OF V OR GREATER: 1859 TO 1991

[Complete to August 31, 1991]

| Date   | Epicentral location   | Magnitude<br>(Richter<br>scale)  | Honolulu average intensity (Modified Mercalli Scale 1/)   |
|--|---|--|---|
| Dec. 15 .  1868: Apr. 2    Apr. 4  1871: Feb. 19 .  1895: Dec. 8  1926: Mar. 19 .  1929: Oct. 5  1938: Jan. 22 .  1948: June 28 .  1964: Oct. 11 . | SE coast of Hawaii  Maui group vicinity (?)  S coast of Lanai  Oahu vicinity (?)  N of Kohala, Hawaii  W of Kona, Hawaii  N of Maui  S coast of Oahu  Ka Lae, Hawaii  Hamakua coast, Hawaii | (NA)<br>(NA)<br>7.5<br>(NA)<br>7.0<br>(NA)<br>(NA)<br>6.5<br>6.8<br>4.8<br>5.5<br>6.2<br>5.0 | Mid V Lower V - mid V Upper IV - lower V Lower V Upper VI - lower VII Mid V Upper IV - lower V Lower V Upper V - lower VI Mid VI Upper IV - lower V Mid V Mid V Mid V Mid V |

NA Not available.

1/ Modified Mercalli Scale of 1931, 1956 abridged version further simplified. This scale, which extends from I to XII, reads in part:

IV. Hanging objects swing. Vibration like passing of heavy trucks or sensation of a jolt. Standing autos rock. Windows, dishes, doors rattle. Crockery clashes. In the upper part of range wooden construction creaks.

V. Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors, shutters, pictures swing. Pendulum clocks stop.

VI. Felt by all. Many frightened, run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books thrown off shelves, pictures off walls. Furniture moved, overturned. Weak plaster and masonry cracked. Small bells ring. Trees, bushes noticeably shaken.

VII. Difficulty in standing. Noticed by drivers of autos. Hanging objects quiver. Furniture broken. Damage to weak masonry. Weak chimneys broken at roof line. Fall of plaster, loose bricks, etc. Some cracks in ordinary masonry. Waves on ponds. Small slides on sand and gravel banks. Large bells ring. Irrigation ditches damaged.

Source: Doak C. Cox, "Earthquake Experience in Honolulu," The Hawaiian Journal of History, Vol. 21 (1987), pp. 98-109, as updated by Augustine S. Furumoto, Hawaii Institute of Geophysics, University of Hawaii at Manoa, November 4, 1991.

Table 139.-- TSUNAMIS WITH RUN-UP OF 2 METERS (6.6 FEET) OR MORE: 1946 TO 1991

[Complete to October 7, 1991]

|                |                   | Maximum height in Hawaii |              | Deaths       | Damage in              |
|----------------|-------------------|--------------------------|--------------|--------------|------------------------|
|                | Date              | Meters                   | Feet         | in<br>Hawaii | Hawaii<br>(dollars)    |
| 1946:          | April 1           | 17.0                     | 55.8         | 159          | 26,000,000             |
| 1952:<br>1957: | Nov. 4<br>March 9 | 6.1                      | 20.0<br>52.5 | -            | 1,000,000<br>5,000,000 |
| 1960:          | May 22            | 10.5                     | 34.5         | 61           | 23,000,000             |
| 1964:          | March 27          | 4.8                      | 15.7         | -            | 67,590                 |
| 1975:          | Nov. 29           | 14.6                     | 48.0         | 2            | 1,500,000              |

Source: George Pararas-Carayannis, Catalog of Tsunamis in the Hawaiian Islands (U.S. Coast and Geodetic Survey, May 1969); Harold G. Loomis, The Tsunami of November 29, 1975 in Hawaii (Hawaii Institute of Geophysics, December 1975), pp. 1 and 10; D.C. Cox and J. Morgan, Local Tsunamis and Possible Local Tsunamis in Hawaii (Hawaii Institute of Geophysics, Report HIG 77-14, November 1977); Doak C. Cox, Tsunami Casualties and Mortality in Hawaii (University of Hawaii, Environmental Center, June 1987), p. 39; Hawaii Institute of Geophysics, records.

Table 140.-- MAJOR DAMS: 1991

| Name  | Location            | Height<br>(ft.) | Length (ft.) | Volume<br>of water<br>impounded<br>(acre-ft.) |
|---|---------------------|-----------------|--------------|---|
| Wahiawa Dam Waita Kualapuu Alexander Dam . Ho'omaluhia Dam Nuuanu No. 4 | Wahiawa, Oahu       | 98              | 460          | 7,671   |
|   | Koloa, Kauai        | 28              | 3,250        | 6,500   |
|   | Kualapuu, Molokai . | 58              | 7,100        | 4,265   |
|   | Kalaheo, Kauai      | 119             | 600          | 2,500   |
|   | Luluku, Oahu        | 132             | 2,200        | 2,500   |
|   | Honolulu, Oahu      | 73              | 1,730        | 1,420   |

Source: Hawaii State Department of Land and Natural Resources, Division of Water and Land Development, records.

Table 141.-- WATER USE, BY TYPE, BY ISLANDS: 1985
[Million gallons per day]

| Use  | State<br>total  | Hawaii                                    | Maui                                       | Lanai                | Molo-<br>kai                   | 0ahu  | Kauai  | Niihau                         |
|--|---|---|--|----------------------|--------------------------------|---|--|--------------------------------|
| Total  | 1,405.14  | 165.80                                    | 471.96                                     | 2.99                 | 12.76                          | 401.56  | 349.53   | 0.54                           |
| Ground water  Domestic Agricultural Industrial Thermoelectric Commercial       | 649.43<br>182.81<br>333.35<br>16.19<br>86.04<br>31.04 | 72.89<br>15.71<br>0.30<br>5.26<br>51.62   | 149.72<br>14.09<br>135.04<br>0.59          | 2.99<br>0.41<br>2.58 | 5.31<br>1.32<br>3.99           | 358.14<br>140.53<br>144.62<br>10.03<br>34.42<br>28.54 | 59.84<br>10.48<br>46.55<br>0.31<br>-<br>2.50       | 0.54<br>0.27<br>0.27<br>-<br>- |
| Surface water  Domestic Agricultural Industrial Thermoelectric Hydroelectric . | 755.71<br>16.96<br>567.86<br>2.70<br>3.80<br>164.39   | 92.91<br>9.00<br>46.12<br>-<br>-<br>37.79 | 322.24<br>7.56<br>310.26<br>-<br>-<br>4.42 | -                    | 7.45<br>0.07<br>7.38<br>-<br>- | 43.42<br>-<br>43.42<br>-<br>-                         | 289.69<br>0.33<br>160.68<br>2.70<br>3.80<br>122.18 | -<br>-<br>-<br>-               |

Source: Data compiled by the U.S. Geological Survey and provided by the Hawaii State Department of Land and Natural Resources, Division of Water and Land Development.

Table 142.-- WATER SERVICES AND CONSUMPTION, FOR COUNTY WATERWORKS: 1990 AND 1991

|  | Number of services,<br>June 30                |   | Consumption (million gallons) 1/        |  |  |
|--|---|---|---|--|--|
| Geographic area  | 1990  | 1991  | 1990                                    | 1991                                     |  |
| State total  | 209,475                                       | 213,194                                       | 70,088                                  | 72,642                                   |  |
| City and County of Honolulu  Honolulu 2/  Rest of Oahu | 141,038<br>60,387<br>80,651                   | 142,466<br>60,480<br>81,986                   | 49,727<br>27,161<br>22,566              | 50,663<br>27,111<br>23,552               |  |
| Hawaii County Kauai County Maui County Maui Molokai    | 29,820<br>14,338<br>24,279<br>22,886<br>1,393 | 30,848<br>14,949<br>24,931<br>23,513<br>1,418 | 7,064<br>4,139<br>9,158<br>8,849<br>309 | 7,356<br>4,465<br>10,158<br>9,838<br>320 |  |

### Table 143.-- POLLUTION ABATEMENT COSTS AND EXPENDITURES: 1986 AND 1988

## [Millions of dollars. Statistics cover manufacturing establishments with 20 employees or more]

| Subject   | 1986                       | 1988                                  |
|---|----------------------------|---------------------------------------|
| Total pollution abatement capital expenditures  | 1.8                        | 7.9                                   |
| Gross annual cost of pollution abatement  Payments to government units  Operating costs, total  Cost recovered through abatement activities | 15.3<br>0.7<br>14.6<br>0.5 | 16.2<br>0.5<br>15.7<br><u>1</u> / 0.8 |
| Operating costs by form of pollutants abated: Air Water Solid waste, hazardous Solid waste, non-hazardous                                   | 3.8<br>5.6<br>1.1<br>4.1   | 4.8<br>5.5<br>1.3<br>4.2              |
| Operating costs by kind of cost: Depreciation   | 2.3<br>3.4<br>3.8<br>5.1   | 2.4<br>3.6<br>4.7<br>4.9              |

1/ For water and solid waste pollution only.

Source: U.S. Bureau of the Census, "Pollution Abatement Costs and Expenditures, 1986," Current Industrial Reports, MA-200 (86)-1 (April 1989), pp. 20, 37, and 53, and "Manufacturers" Pollution Abatement Capital Expenditures and Operating Costs, Final Report for 1988," Current Industrial Reports, MA 200 (88)-1 (September 1990), pp. 14, 31, and 40 and 48.

Table 144.-- ENVIRONMENTAL HEALTH SCORES AND RANKS: 1991

|                           | Number of        | Median                  | Hawaii                  |                 |  |
|---------------------------|------------------|-------------------------|-------------------------|-----------------|--|
| Category                  | indicators       | State score             | Score                   | Rank <u>1</u> / |  |
| Total Conditions Policies | 256<br>179<br>77 | 6,869<br>4,530<br>2,296 | 5,522<br>3,283<br>2,239 | 12<br>1<br>24   |  |

1/ Among 50 States.

Source: Bob Hall and Mary Lee Kerr, 1991-1992 Green Index: A State-by-State Guide to the Nation's Environmental Health (1991), pp. 3-5.

Table 145.-- WATER QUALITY AT PUBLIC BEACHES, BY ISLANDS: 1990

|   | Number                                     | Number  | Ent                                    | erococci den   | sity <u>1</u> /                    |   |
|---|--|---|--|--|------------------------------------|---|
| Island  | of<br>locations                            | of samples  | Lowest 2/                              | Highest <u>3</u> /   | Number<br>over 7                   | Mean <u>4</u> /   |
| State total   | 167  | 2,585   | 0.5                                    | 258.3  | 37                                 | 9.6   |
| Hawaii  Hilo Shoreline  Kona Shoreline  Maui  Lanai  Molokai  Oahu  Kauai | 44<br>24<br>20<br>31<br>2<br>2<br>66<br>22 | 274<br>177<br>97<br>329<br>19<br>20<br>1,789<br>154 | 0.6<br>0.9<br>0.8<br>0.8<br>5.5<br>0.5 | 107.0<br>107.0<br>15.4<br>9.8<br>3.4<br>5.8<br>258.3<br>76.1 | 14<br>10<br>4<br>1<br>-<br>17<br>5 | 11.0<br>16.7<br>4.2<br>1.7<br>2.1<br>5.6<br>12.9<br>8.8 |

<sup>1</sup>/ Geometric mean, number per 100 ml. The geometric mean standard for Enterococci density is 7 per 100 ml.

Source: Hawaii State Department of Health, Clean Water Branch, records.

<sup>2/</sup> The lowest average value in 1990 was that reported for four Oahu locations (three in Kaneohe Bay and one off Sand Island).

<sup>3/</sup> The highest average value in 1990 was that reported for the Ala Wai Canal at the McCully Street Bridge on Oahu.

<sup>4/</sup> Not weighted by number of samples.

Table 146.-- WATER QUALITY AT SELECTED PUBLIC BEACHES: 1989 AND 1990

|  | Number                               | of samples                                   | Enterococci<br>density <u>1</u> / |  |  |
|--|--------------------------------------|--|-----------------------------------|--|--|
| Island and beach   | 1989                                 | 1990   | 1989                              | 1990   |  |
| Hawaii: Hapuna Beach Kahaluu Beach Kealakekua Bay (curio stand) Mooheau Park Spencer Beach Park                                | 12<br>12<br>12<br>12<br>3<br>12      | 4<br>8<br>5<br>11<br>4                       | 1.5<br>1.0<br>1.5<br>3.4<br>6.5   | 5.2<br>1.2<br>3.9<br>5.2<br>2.0                        |  |
| Maui: Kapalua (Fleming) Beach Kihei (north) Makena Beach Seven Pools Sheraton Kaanapali  | 3<br>-<br>4<br>2<br>5                | 11<br>12<br>11<br>6<br>11                    | 1.1<br>0.7<br>16.7<br>0.8         | 2.3<br>0.9<br>0.8<br>1.2                               |  |
| Lanai: Hulopoe Bay   | 2                                    | 9  | 6.5                               | 0.8  |  |
| Molokai: Kaunakakai Harbor   | 2                                    | 10   | 26.4                              | 5.5  |  |
| Oahu: Ala Moana Park (center) Ewa Beach Park Haleiwa Beach Hanauma Bay Kailua Beach Park Kuhio Beach Makaha Beach Waimea Beach | 12<br>21<br>-<br>29<br>26<br>22<br>- | 16<br>49<br>35<br>68<br>42<br>49<br>40<br>36 | 1.8<br>1.8<br>8.3<br>4.2<br>4.9   | 2.4<br>1.4<br>12.4<br>7.1<br>4.3<br>11.9<br>2.1<br>6.4 |  |
| Kauai: Anini Park Pavilion Kalapaki Beach Kekaha (Oomano Pt.) Poipu Beach Pavilion W. of Lydgate Park (wading pool)            | 4<br>5<br>5<br>5<br>4                | 8<br>11<br>9<br>11<br>9                      | 6.0<br>21.8<br>0.8<br>2.2<br>3.3  | 4.9<br>4.7<br>1.2<br>1.1<br>6.5                        |  |

<sup>1/</sup> See previous table, footnote 1.
 Source: Hawaii State Department of Health, Clean Water Branch, records.

Table 147.-- REFUSE AND SEWAGE STATISTICS FOR OAHU: 1980 TO 1991 [Fiscal years]

|   | Tons   | of refuse deliver  | ed <u>1</u> /  |  |
|---|--|--|--|--|
| Year  | Total  | City and County<br>refuse vehicles   | Other<br>vehicles  | Sewage treated 2/<br>(millions of gallons)   |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989<br>1990  | 613,549<br>714,017<br>665,276<br>626,835<br>611,386<br>615,574<br>681,874<br>678,392<br>739,820<br>778,673<br>954,740<br>1,209,105 | 325,976<br>370,946<br>363,471<br>360,545<br>297,215<br>272,905<br>375,847<br>380,810<br>403,528<br>302,851<br>274,509<br>293,857 | 287,573<br>343,071<br>301,805<br>266,290<br>314,171<br>342,669<br>306,027<br>297,582<br>336,292<br>474,822<br>680,231<br>915,248 | 36,885<br>35,945<br>34,830<br>37,395<br>38,283<br>37,817<br>37,608<br>38,199<br>39,757<br>39,918<br>41,763<br>44,484 |
| Year  | Sewage pumped 2/ (millions of gallons)   | Miles of sewers 2/   | City and<br>County<br>pump<br>stations   | City and<br>County<br>treatment<br>plants  |
| 1980<br>1981<br>1982<br>1983<br>1984  | 45,165<br>43,744<br>44,687<br>48,442<br>48,320<br>49,361   | 1,592<br>1,623<br>1,646<br>1,670<br>1,691<br>1,711   | 47<br>48<br>50<br>52<br>51<br>51   | 19<br>19<br>21<br>20<br>18<br>17   |
| 1986       48,559         1987       49,542         1988       51,713         1989       51,623         1990       50,858         1991       52,849 |  | 1,736<br>1,752<br>1,769<br>1,805<br>1,828<br>1,859   | 55<br>57<br>59<br>59<br>62<br>64   | 17<br>17<br>17<br>14<br>13<br>13   |

Source: City and County of Honolulu, <u>Departmental</u> and Agency Reports (annual), and City Refuse Division, records.

<sup>1/</sup> Excludes small landfill controlled by armed forces.  $\overline{2}/$  Data limited to system maintained by the City and County of Honolulu Public Works Department.

Table 148.-- HAZARDOUS WASTE SITES ON THE NATIONAL PRIORITY LIST: 1989 AND 1990

| Category | Number | Rank <u>1</u> / |
|----------|--------|-----------------|
| 1989     | 7      | 42              |
| 1990     | 7      | 42              |

1/ Among the 50 States. The national total was 1,219 sites in 1989 and 1,207 in 1990.

Source: EPA data cited in Statistical Abstract of the United States for 1990 (p. 205) and 1991 (p. 211).

Table 149.-- LITTER ALONG OAHU HIGHWAYS: 1979 TO 1988

| Measure   | 1979  | 1981  | 1985  | 1988 |
|---|-------|-------|-------|------|
| Visible litter items per mile<br>Visible beer/soft drink con- | 1,381 | 1,672 | 1,038 | 892  |
| tainers per mile  | 144   | 80    | 49    | 26   |
| Indiscriminate dumps per 1,000 miles of driving               | 8.2   | 15.7  | 19.6  | 14.1 |
| Abandoned vehicles per 1,000 miles of driving                 | 4.9   | 23.6  | 57.4  | 6.8  |

Source: Daniel B. Syrek, <u>Hawaii Litter: 1988</u> (Sacramento: The Institute for Applied Research, for the Hawaii State Department of Health, Litter Control Office, May 13, 1988).

# Table 150.-- AIR QUALITY IN DOWNTOWN HONOLULU: 1980 TO 1990

[Annual arithmetic means, in micrograms per cubic meter, for total suspended particulates and sulfur oxides. Sampling is conducted about 46 feet above ground on the roof of the State Health Department building, 1250 Punchbowl Street, Honolulu, Hawaii]

| Year   | Par-<br>ticu-<br>lates                       | Sulfur<br>oxides                             | Year  | Par-<br>ticu-<br>lates     | Sulfur<br>oxides |
|--|--|--|---|----------------------------|------------------|
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986 | 37<br>40<br>29<br>26<br>25<br>24<br>25<br>26 | 18<br>19<br>11<br><5<br><5<br><5<br><5<br><5 | 1988<br>1989<br>1990<br>Standards: 1/<br>Primary<br>Secondary . | 26<br>30<br>30<br>75<br>60 | <5<br><5<br><5   |

1/ Primary and secondary national ambient air quality standards have been promulgated by the Federal government. Primary standards are designed to prevent adverse effects on public health, while secondary standards are designed to prevent adverse effects on public welfare, including effects on comfort, visibility, vegetation, animals, aesthetic values, and soiling and deterioration of materials.

Source: Hawaii State Department of Health, Clean Air Branch, data supplied July 3, 1991.

Table 151.-- AIR QUALITY AT SPECIFIED LOCATIONS: 1990 [24-hour sampling, in micrograms per cubic meter]

|  | Total su                  | spended pa                 | rticulates                 | Sulfur dioxide |              |                 |
|--|---------------------------|----------------------------|----------------------------|----------------|--------------|-----------------|
|  | Annual range              |                            | Arith- Annual rang         |                | range        | Arith-<br>metic |
| Sampling station   | Minimum                   | Maximum                    | metic<br>average           | Minimum        | Maximum      | average         |
| Oahu: Barbers Point 1/ Downtown Honolulu Liliha Pearl City 1/ Waimanalo 17 | 21<br>20<br>24<br>9<br>11 | 38<br>35<br>36<br>16<br>20 | 28<br>30<br>31<br>14<br>15 | <5<br><5<br>   | <5<br><5<br> | <5<br><5<br>    |
| Maui:<br>Lahaina <u>1</u> /, <u>2</u> /                                    | 10                        | 24                         | 17                         | •••            | • • •        | •••             |
| Kauai:<br>Lihue <u>1</u> /, <u>3</u> /                                     | 13                        | 20                         | 17                         | •••            | •••          | •••             |

<sup>1/</sup> Particulates data from PM<sub>10</sub> samplers (measuring inhalable
particulates of less than 10 micrograms).
2/ Ten months of data.
3/ Seven months of data.
Source: Hawaii State Department of Health, Clean Air Branch, data

supplied July 3, 1991.

Table 152.-- ATMOSPHERIC CARBON DIOXIDE MEASUREMENTS AT MAUNA LOA: ANNUAL MEAN VALUES, 1958 TO 1990

## [Parts per million]

| Year   | Annual<br>average  | Year   | Annual<br>average  | Year   | Annual<br>average  |
|--|--|--|--|--|--|
| 1958<br>1959<br>1960<br>1961<br>1962<br>1963<br>1964<br>1965<br>1966<br>1967 | 1/ 315.17<br>315.83<br>316.75<br>317.49<br>318.30<br>318.83<br>2/ 319.04<br>319.87<br>321.21<br>322.02<br>322.83 | 1969<br>1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978 | 323.93<br>325.27<br>326.17<br>327.26<br>329.45<br>1/ 329.72<br>3/ 331.14<br>332.04<br>333.79<br>335.35<br>336.73 | 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 338.72<br>340.12<br>341.21<br>342.87<br>344.48<br>345.85<br>347.21<br>348.98<br>351.34<br>352.89<br>354.26 |

1/ Based on data for 8 months.

2/ Based on data for 9 months.

3/ Based on data for 11 months.

Source: National Oceanic and Atmospheric Administration, Geophysical Monitoring for Climatic Change, records; provided by Saul Price, National Weather Service, Pacific Region, Honolulu.

Table 153.-- TEMPERATURES AND PRECIPITATION FOR SELECTED PLACES

| Tition (feet)   Tition (feet | Average<br>annual<br>orecipi- | tempera-<br>ecord ( <sup>O</sup> F.) |        |      | Average ture | Ground<br>eleva- |                                |
|--|-------------------------------|--------------------------------------|--------|------|--------------|------------------|--------------------------------|
| Hilo Airport   | tation<br>(inches)            | Highest                              | Lowest |      |              | tion             | Island and station             |
| Hilo Airport   |                               |                                      |        |      |              |                  | Hawaii:                        |
| Naalehu     675     70.2     75.2     55     90       Kailua     30     72.1     77.3     54     93       Puako 1/2     5     73.1     79.8     52     98       Waimea (Kamuela)     2,670     61.3     66.8     34     90       Honokaa     1,070     67.6     75.5     (NA)     (NA)       Mauna Kea summit 2/     13,796     31.3     42.5     11     66       Maui:     120     71.3     76.8     50     90       Haleakala summit     10,025     42.6     50.0     14     73       Kihei 3/     85     70.9     78.4     49     98       Kahului Airport     40     71.5     79.2     48     96       Lahaina     45     71.5     78.0     52     93       Molokai:     Kaunakakai     10     (NA)     (NA)     (NA)     (NA)       Kaunakakai     10     (NA)     (NA)     (NA)     (NA)       Molokai Airport     450     70.2     77.6     48     90       Lanai:     1,620     65.8     72.8     46     88  | 128                           | 94                                   | 53     | 75.9 | 71.2         | 30               |                                |
| Kailua     30     72.1     77.3     54     93       Puako 1/     5     73.1     79.8     52     98       Waimea (Kamuela)     2,670     61.3     66.8     34     90       Honokaa     1,070     67.6     75.5     (NA)     (NA)       Mauna Kea summit 2/     13,796     31.3     42.5     11     66       Maui:     120     71.3     76.8     50     90       Haleakala summit     10,025     42.6     50.0     14     73       Kihei 3/     85     70.9     78.4     49     98       Kahuluī Airport     40     71.5     79.2     48     96       Lahaina     45     71.5     78.0     52     93       Molokai:     Kaunakakai     10     (NA)     (NA)     (NA)     (NA)       Molokai Airport     450     70.2     77.6     48     90       Lanai:     Lanai City     1,620     65.8     72.8     46     88       Oahu:  | 101                           | 85                                   | 37     | 63.2 | 57.6         | 3,970            | Hawaii Volcanoes Nat. Park Hdq |
| Puako 1/       5       73.1       79.8       52       98         Waimea (Kamuela)       2,670       61.3       66.8       34       90         Honokaa       1,070       67.6       75.5       (NA)       (NA)         Mauna Kea summit 2/       13,796       31.3       42.5       11       66         Maui:       120       71.3       76.8       50       90         Haleakala summit       10,025       42.6       50.0       14       73         Kihei 3/       85       70.9       78.4       49       98         Kahului Airport       40       71.5       79.2       48       96         Lahaina       45       71.5       78.0       52       93         Molokai:       Kaunakakai       10       (NA)       (NA)       (NA)       (NA)         Molokai Airport       450       70.2       77.6       48       90         Lanai:       Lanai:       1,620       65.8       72.8       46       88         Oahu:       1,620       65.8       72.8       46       88  | 47                            |                                      |        |      | · ·          | 675              |                                |
| Waimea (Kamuela)       2,670       61.3       66.8       34       90         Honokaa       1,070       67.6       75.5       (NA)       (NA)         Mauna Kea summit 2/       13,796       31.3       42.5       11       66         Maui:       120       71.3       76.8       50       90         Haleakala summit       10,025       42.6       50.0       14       73         Kihei 3/       85       70.9       78.4       49       98         Kahului Airport       40       71.5       79.2       48       96         Lahaina       45       71.5       78.0       52       93         Molokai:       Kaunakakai       10       (NA)       (NA)       (NA)       (NA)         Molokai Airport       450       70.2       77.6       48       90         Lanai:       Lanai City       1,620       65.8       72.8       46       88         Oahu:   | 25                            |                                      |        |      |              | 30               |                                |
| Honokaa  | 10                            |                                      |        |      |              | -                |                                |
| Mauna Kea summit 2/       13,796       31.3       42.5       11       66         Maui:       120       71.3       76.8       50       90         Haleakala summit       10,025       42.6       50.0       14       73         Kihei 3/       85       70.9       78.4       49       98         Kahuluī Airport       40       71.5       79.2       48       96         Lahaina       45       71.5       78.0       52       93         Molokai:       Kaunakakai       10       (NA)       (NA)       (NA)       (NA)         Molokai Airport       450       70.2       77.6       48       90         Lanai:       1,620       65.8       72.8       46       88         Oahu:   | 31                            |                                      | 1      |      |              |                  |                                |
| Maui: Hana   | 86                            |                                      |        |      |              |                  |                                |
| Hana   | 20                            | 66                                   | 11     | 42.5 | 31.3         | 13,796           | Mauna Kea summit $2/\ldots$    |
| Haleakala summit   |                               |                                      |        |      |              |                  | Maui:                          |
| Haleakala summit       10,025       42.6       50.0       14       73         Kihei 3/       85       70.9       78.4       49       98         Kahului Airport       40       71.5       79.2       48       96         Lahaina       45       71.5       78.0       52       93         Molokai:       Kaunakakai       10       (NA)       (NA)       (NA)       (NA)         Molokai Airport       450       70.2       77.6       48       90         Lanai:       1,620       65.8       72.8       46       88         Oahu:       1,620       65.8       72.8       46       88  | 69                            | 90                                   | 50     | 76.8 | 71.3         | 120              | Hana                           |
| Kihei 3/       85       70.9       78.4       49       98         Kahului Airport       40       71.5       79.2       48       96         Lahaina       45       71.5       78.0       52       93         Molokai:       10       (NA)       (NA)       (NA)       (NA)         Molokai Airport       450       70.2       77.6       48       90         Lanai:       1,620       65.8       72.8       46       88         Oahu:       1,620       65.8       72.8       46       88   | 44                            | 73                                   | 14     | 50.0 | 42.6         | 10,025           | Haleakala summit               |
| Kahuluī Airport       40       71.5       79.2       48       96         Lahaina       45       71.5       78.0       52       93         Molokai:       10       (NA)       (NA)       (NA)       (NA)         Molokai Airport       450       70.2       77.6       48       90         Lanai:       1,620       65.8       72.8       46       88         Oahu:       1,620       65.8       72.8       46       88   | 13                            | 98                                   | 49     | 78.4 | 70.9         |                  |                                |
| Lahaina       45       71.5       78.0       52       93         Molokai:       10       (NA)       (NA)       (NA)       (NA)         Molokai Airport       450       70.2       77.6       48       90         Lanai:       1,620       65.8       72.8       46       88         Oahu:       1,620       65.8       72.8       46       88  | 20                            | 96                                   | 48     | 79.2 | 71.5         | 40               |                                |
| Kaunakakai       10       (NA)       (NA)       (NA)       (NA)       90         Molokai Airport       450       70.2       77.6       48       90         Lanai:       1,620       65.8       72.8       46       88         Oahu:       1,620       65.8       72.8       46       88  | 15                            | 93                                   | 52     | 78.0 | 71.5         | 45               | Lahaina                        |
| Kaunakakai       10       (NA)       (NA)       (NA)       (NA)       90         Lanai:       1,620       65.8       72.8       46       88         Oahu:       0ahu:       0ahu  |                               |                                      |        |      |              |                  | Molokai:                       |
| Molokai Airport  | 14                            | (NA)                                 | (NA)   | (NA) | (NA)         | 10               |                                |
| Lanai: Lanai City  | 27                            | , , ,                                |        |      |              | 1                |                                |
| Lanai City   | 27                            |                                      | 40     | ,,,, | 70.2         | 130              | rotokai Airport                |
| Oahu:  |                               |                                      |        |      |              |                  | Lanai:                         |
|  | 37                            | 88                                   | 46     | 72.8 | 65.8         | 1,620            | Lanai City                     |
|  |                               |                                      |        |      |              |                  | Oahu:                          |
| HONOLULU INTERNATIONAL AIRPORT 10   72.6   81.0   5.5   94   | 23                            | 94                                   | 53     | 81.0 | 72.6         | 10               | Honolulu International Airport |
| Waikiki (Honolulu Zoo)   | 25                            |                                      |        |      |              | t .              |                                |
|  | 158                           | 1                                    |        |      |              | 1                |                                |
| Kaneohe (State Hospital) 200 71.0 77.5 43 93   | 71                            | , , ,                                |        |      | L            |                  |                                |

Continued on next page.

Table 153.-- TEMPERATURES AND PRECIPITATION FOR SELECTED PLACES -- Con.

|   | Ground<br>eleva-               | Average ture                         | tempera-<br>(°F.)                    |                            | tempera-<br>ecord ( <sup>O</sup> F.) | Average<br>annual              |
|---|--------------------------------|--------------------------------------|--------------------------------------|----------------------------|--------------------------------------|--------------------------------|
| Island and station  | tion<br>(feet)                 | Coolest<br>month                     | Warmest<br>month                     | Lowest                     | Highest                              | precipi-<br>tation<br>(inches) |
| Oahu (con.): Kahuku Wheeler AFB Waianae   | 25<br>845<br>10                | 71.6<br>68.2<br>72.1                 | 78.8<br>75.5<br>79.7                 | 49<br>52<br>45             | 95<br>89<br>96                       | 40<br>40<br>20                 |
| Kauai: Kilauea (town) Lihue Airport Poipu (Makahuena Pt.) Kekaha Kokee (Kanalohuluhulu) | 315<br>100<br>50<br>9<br>3,600 | 68.7<br>71.3<br>72.4<br>71.0<br>54.9 | 75.6<br>79.1<br>79.4<br>78.5<br>65.5 | 49<br>50<br>50<br>48<br>31 | 94<br>90<br>93<br>95<br>83           | 68<br>44<br>35<br>21<br>70     |
| Northwestern Hawaiian Islands: Midway   | 10                             | 65.0                                 | 78.6                                 | 52                         | 89                                   | 44                             |

NA Not available.

<sup>1/</sup> Temperature data are for Mahukona.

Z/ Based on incomplete and non-continuous data for 1966-1972. Precipitation estimated.
 Z/ Temperature data refer to Puunene Airport.
 Source: Hawaii State Department of Land and Natural Resources, Division of Water and Land Development, data supplied May 20, 1991 and September 16, 1991.

Table 154.-- CLIMATIC NORMALS, MEANS, AND EXTREMES FOR HILO, KAHULUI, HONOLULU, AND LIHUE AIRPORTS

| Subject  | Hilo   | Kahului | Honolulu   | Lihue |
|--|--------|---------|------------|-------|
| Normal temperatures (°F.): Daily maximum Daily minimum Monthly: Coolest month Warmest month Annual | 81.2   | 83.8    | 84.2       | 81.1  |
|  | 65.9   | 67.2    | 69.7       | 69.3  |
|  | 71.2   | 71.5    | 72.6       | 71.3  |
|  | 75.9   | 79.2    | 81.0       | 79.1  |
|  | 73.6   | 75.5    | 77.0       | 75.2  |
| Extreme temperatures (°F.): Record highest   | 94     | 96      | 94         | 90    |
|  | 53     | 48      | 53         | 50    |
| Normal degree days, base 65°F.: Heating  | 3,134  | 3,851   | -<br>4,389 | 3,758 |
| Precipitation (inches): Normal  Maximum monthly  Minimum monthly                                   | 128.15 | 19.85   | 23.47      | 44.02 |
|  | 50.82  | 14.46   | 20.79      | 22.91 |
|  | 0.28   | 0.00    | T          | T     |
| Relative humidity (percent): 8 A.M   | 80     | 75      | 72         | 78    |
|  | 68     | 58      | 56         | 67    |
| Wind speed (m.p.h.):  Mean  Fastest observation, 1 minute 1/                                       | 7.2    | 12.8    | 11.4       | 12.2  |
|  | 35     | 44      | 46         | 65    |
| Percent of possible sunshine   | 41     | 67      | 69         | 56    |
| Mean number of days: Clear Partly cloudy Cloudy Precipitation .01 inch or more .                   | 35.5   | 131.5   | 88.2       | 53.9  |
|  | 129.6  | 143.0   | 180.3      | 182.2 |
|  | 200.2  | 90.7    | 96.6       | 129.3 |
|  | 278.7  | 99.6    | 99.3       | 201.0 |

T Trace amount.

<sup>1/</sup> Kahului figure refers to fastest mile.

Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Data Center, Local Climatological Data, Annual Summary with Comparative Data, 1990 for Hilo, Kahului, Honolulu, and Lihue.

15.

Table 155.-- MONTHLY AND ANNUAL CLIMATIC DATA FOR HONOLULU INTERNATIONAL AIRPORT

|  | Norm   | al temp<br>(°F)  | erature  | Extreme temper-<br>ature (OF)                            |  | per-<br>Precipitation (inches)   |   |  | )   |
|--|--|--|--|--|--|--|---|--|---|
| Month  | Daily<br>maxi-<br>mum  | Daily<br>mini-<br>mum  | Monthly  | Record<br>highest  | Record<br>lowest   | Normal<br>total  | Maximum<br>monthly  | Minimum<br>monthly   | Maximum<br>in 24<br>hours   |
| January February March April June July August September October November | 79.9<br>80.4<br>81.4<br>82.7<br>84.8<br>86.2<br>87.1<br>88.3<br>88.2<br>86.7<br>83.9 | 65.3<br>65.3<br>67.3<br>68.7<br>70.2<br>71.9<br>73.1<br>73.6<br>72.9<br>72.2<br>69.2 | 72.6<br>72.9<br>74.4<br>75.7<br>77.5<br>79.1<br>80.1<br>81.0<br>80.6<br>79.5<br>76.6 | 87<br>88<br>88<br>89<br>93<br>92<br>92<br>93<br>94<br>94 | 53<br>53<br>55<br>57<br>60<br>65<br>66<br>67<br>66<br>64<br>57 | 3.79<br>2.72<br>3.48<br>1.49<br>1.21<br>0.49<br>0.54<br>0.60<br>0.62<br>1.88<br>3.22 | 14.74<br>13.68<br>20.79<br>8.92<br>7.23<br>2.46<br>2.33<br>3.08<br>2.74<br>11.15<br>14.72 | 0.18<br>0.06<br>0.01<br>0.01<br>0.05<br>T<br>0.03<br>T<br>0.05<br>0.11<br>0.03 | 6.72<br>6.88<br>17.07<br>4.21<br>3.44<br>2.28<br>2.20<br>2.35<br>1.40<br>7.57<br>9.15 |
| December   | 81.4   | 66.5   | 74.0   | 89<br>94   | 54<br>53   | 3.43   | 17.29<br>20.79  | 0.06<br>T  | 8.25<br>17.07   |

Continued on next page.

Table 155.-- MONTHLY AND ANNUAL CLIMATIC DATA FOR HONOLULU INTERNATIONAL AIRPORT -- Con.

|                       | hum:   | ative<br>idity |       | nd              |       |                | Mean number of days |           |          |
|-----------------------|--------|----------------|-------|-----------------|-------|----------------|---------------------|-----------|----------|
|                       | (pe    | rcent)         | (mile | s/hour)         |       |                | Sunrise             | to sunset | Precip.  |
|                       |        |                | Mean  | Fastest         | sun-  | to sun-        |                     |           | .01 inch |
| Month                 | 8 A.M. | 2 P.M.         | speed | obs. <u>1</u> / | shine | set <u>2</u> / | Clear               | Cloudy    | or more  |
| Tanuary               | 81     | 62             | 9.7   | 32              | 63    | 5.5            | 9.3                 | 8.8       | 9.8      |
| January<br>February . | 79     | 59             | 10.3  | 35              | 65    | 5.6            | 7.9                 | 7.9       | 9.3      |
| March                 | 73     | 57             | 11.4  | 30              | 70    | 5.8            | 7.2                 | 9.4       | 8.9      |
| April                 | 70     | 56             | 11.9  | 31              | 67    | 6.2            | 5.2                 | 10.5      | 9.1      |
| May                   | 67     | 54             | 11.9  | 30              | 69    | 5.9            | 6.3                 | 9.4       | 7.3      |
| June                  | 66     | 52             | 12.7  | 26              | 71    | 5.6            | 5.9                 | 6.8       | 5.8      |
| July                  | 67     | 51             | 13.3  | 28              | 74    | 5.3            | 7.7                 | 5.2       | 7.4      |
| August                | 68     | 52             | 12.9  | 28              | 75    | 5.2            | 8.0                 | 6.0       | 6.2      |
| September             | 68     | 52             | 11.4  | 26              | 76    | 5.2            | 8.0                 | 5.9       | 7.1      |
| October               | 70     | 55             | 10.6  | 25              | 68    | 5.6            | 7.4                 | 8.3       | 8.8      |
| November .            | 75     | 58             | 10.7  | 46              | 61    | 5.7            | 6.9                 | 9.3       | 9.3      |
| December .            | 79     | 61             | 10.4  | 30              | 59    | 5.5            | 8.5                 | 9.2       | 10.2     |
| Annual                | 72     | 56             | 11.4  | 46              | 68    | 5.6            | 88.2                | 96.6      | 99.3     |

T Trace amount.

Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Data Center, Local Climatological Data, Annual Summary With Comparative Data, Honolulu, 1990.

<sup>1/</sup> Fastest observation, 1 minute, during 10-year period of record.

Z/ Sky cover is expressed in a range of 0 for no clouds or obscuring phenomena to 10 for complete sky cover.

Table 156. -- CLIMATIC DATA FOR HONOLULU INTERNATIONAL AIRPORT: ANNUALLY, 1980 TO 1990

|  | Average  | temperatu  | re ( <sup>O</sup> F)   | Extreme  | temp. (°F)   |  |
|--|--|--|--|--|--|--|
| Year   | Annua1   | Coolest<br>month   | Warmest<br>month   | Lowest   | Highest  | Precipitation (inches)   |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 77.5<br>77.1<br>76.9<br>77.2<br>78.1<br>76.9<br>78.3<br>77.9<br>78.5<br>77.6 | 71.9<br>73.2<br>71.7<br>71.3<br>74.1<br>71.4<br>72.6<br>71.2<br>73.1<br>72.9<br>71.5 | 81.6<br>80.7<br>81.4<br>82.4<br>81.7<br>81.9<br>82.9<br>82.9<br>82.1<br>81.9<br>82.3 | 56<br>53<br>56<br>53<br>57<br>54<br>56<br>55<br>57<br>56       | 91<br>90<br>92<br>92<br>94<br>93<br>94<br>94<br>94<br>92<br>93 | 26.90<br>13.41<br>34.92<br>5.03<br>17.08<br>17.38<br>13.93<br>23.53<br>16.47<br>27.52<br>19.84 |
|  | hu   | lative<br>midity<br>ercent)  |  | speed<br>s/hour)   | Percent<br>of possible   | Days with precipitation  |
| Year   | 8 A.M.   | 2 P.M.   | average  | gust 1/  | sunshine   | or more  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 75<br>76<br>73<br>75<br>72<br>72<br>74<br>70<br>71<br>72<br>69               | 59<br>59<br>59<br>52<br>53<br>55<br>54<br>53<br>55                                   | 11.9<br>10.7<br>10.4<br>9.8<br>10.2<br>10.6<br>10.1<br>9.9<br>9.8<br>10.5<br>11.2    | 35<br>30<br>46<br>23<br>40<br>46<br>41<br>41<br>39<br>41<br>46 | 69<br>72<br>56<br>64<br>71<br>69<br>77<br>73<br>75<br>79       | 115<br>97<br>124<br>78<br>81<br>87<br>88<br>99<br>88<br>99                                     |

1/ Before 1984, figures refer to fastest mile.
Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Data Center, Local Climatological Data, Annual Summary With Comparative Data, Honolulu, Hawaii (annual).

Table 157.-- CLIMATIC DATA FOR THE PERIOD OF RECORD

| Subject  | Date   | Place  | Magnitude           |
|--|--|--|---------------------|
| Long-term averages: Lowest monthly average minimum temp. (°F.) Lowest monthly average daily temp. (°F.) Highest monthly average maximum temp. (°F.). Highest monthly average daily temp. (°F.) Lowest average annual rainfall (inches) | February February September September                | Mauna Kea summit  Mauna Kea summit  Kawaihae 1/  Kawaihae 1/  Kawaihae  Waialeale      | 91.9<br>80.8<br>8.7 |
| Single events: Lowest temperature of record (°F.) Highest temperature of record (°F.) Lowest annual rainfall of record (inches) Highest annual rainfall of record (inches) Highest wind speed of record (m.p.h.)                       | Jan. 20, 1970 April 27, 1931 1953 1982 Nov. 23, 1982 | Mauna Kea summit <u>2/</u> Pahala<br>Kawaihae<br>Waialeale<br>Makahuena Pt. <u>3</u> / | 100<br>0.2          |

<sup>1/</sup> Puukohola Heiau National Historical Site, Kawaihae, Hawaii.

 $<sup>\</sup>frac{7}{2}$ / Recorded by Dr. Alfred Woodcock 60 meters inside the Mauna Kea summit cone, at 6:50 a.m. The rim at that time had a temperature of 39° F.

<sup>3/</sup> Makahuena Point Coast Guard Station, Poipu, Kauai. Source: Hawaii State Department of Land and Natural Resources, Division of Water and Land Development, data supplied May 20, 1991.

Table 158.-- RAINFALL AT SPECIFIED LOCATIONS: ANNUALLY, 1980 TO 1990 [In inches]

|  |  | Hawa   | <br>ii   |   |   | Maui  |   |  |
|--|--|--|--|---|---|---|---|--|
| Year   | Hilo<br>Airport  | Wai-<br>mea <u>1</u> /   | Kona<br>Village  | Naalehu   | Kahului<br>Airport  | Kihei   | Lahaina   |  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 127.74<br>89.91<br>170.36<br>68.09<br>100.08<br>112.96<br>171.03<br>142.41<br>140.19<br>166.71<br>211.22 | 28.31<br>13.30<br>56.29<br>12.95<br>8.87<br>16.58<br>34.67<br>19.43<br>12.52<br>(NA)<br>23.54  | 16.90<br>7.02<br>26.88<br>8.51<br>8.15<br>8.60<br>12.41<br>10.24<br>11.70<br>13.32<br>19.80              | 45.46<br>45.86<br>65.75<br>21.08<br>39.51<br>48.74<br>64.55<br>49.13<br>38.21<br>74.79<br>89.83 | 27.87<br>12.85<br>34.04<br>13.05<br>8.56<br>20.00<br>18.39<br>24.31<br>26.79<br>40.63<br>35.20  | 20.27<br>9.72<br>29.11<br>8.60<br>5.64<br>13.86<br>7.25<br>14.03<br>17.03<br>27.00<br>19.17     | 22.69<br>8.13<br>34.36<br>9.70<br>6.30<br>13.48<br>7.38<br>19.72<br>14.91<br>26.95<br>19.84         |  |
|  |  | Oahu   | <del> </del>   |   | Kauai   |   |   |  |
| Year   | Waikiki  | Univ. of<br>Hawaii   | Nuuanu<br>Res. 4   | Kane-<br>ohe <u>2</u> /   | Koloa   | Lihue<br>Airport  | Prince-<br>ville  |  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 28.50<br>19.09<br>39.96<br>9.80<br>19.35<br>25.61<br>22.39<br>27.56<br>24.50<br>(NA)<br>26.15            | 48.52<br>31.71<br>57.98<br>19.77<br>33.13<br>42.19<br>32.39<br>46.52<br>(NA)<br>39.53<br>40.66 | 140.70<br>112.46<br>168.16<br>74.32<br>71.32<br>101.20<br>120.60<br>134.29<br>124.42<br>129.50<br>137.81 | 78.36<br>69.65<br>120.40<br>43.49<br>(NA)<br>(NA)<br>77.66<br>77.79<br>81.10<br>73.53<br>131.69 | 78.78<br>66.26<br>96.75<br>50.69<br>48.82<br>48.70<br>64.64<br>72.53<br>63.23<br>87.81<br>73.27 | 54.64<br>38.14<br>74.40<br>16.40<br>30.12<br>28.91<br>27.99<br>42.95<br>43.06<br>56.77<br>39.37 | 130.55<br>130.72<br>241.22<br>46.93<br>71.58<br>55.22<br>90.28<br>94.61<br>77.10<br>116.65<br>86.44 |  |

NA Not available.

 $<sup>\</sup>frac{1}{2}$  Lalamilo Field Office.  $\overline{2}$  Hawaii State Hospital. The August 1990 value is for a comparable station (Pali Golf Course).

Source: U.S. Department of Commerce, National Climatic Data Center, Climatological Data, Annual Summary, Hawaii and Pacific (annual); and Hawaii State Department of Land and Natural Resources, Division of Water and Land Development, records.

# Table 159.-- MAJOR HURRICANES: 1950 TO 1991 [Complete to May 20, 1991]

|                                      |   |                          | Maximum<br>ashore                            | winds (m.p.h.)                               |                       | Prop-<br>erty                                      |
|--------------------------------------|---|--------------------------|--|--|-----------------------|--|
| Hurricane<br>name                    | Date <u>1</u> /   | Islands most<br>affected | Sus-<br>tained                               | Gusts  | Deaths                | damage<br>(mil.<br>dol.)                           |
| Hiki Della Nina Dot Fico Iwa Estelle | Dec. 1-2, 1957<br>Aug. 6, 1959<br>July 18-20, 1978<br>Nov. 23, 1982 | Kauai                    | 68<br>82<br>(NA)<br>81<br>(NA)<br>65<br>(NA) | (NA)<br>109<br>92<br>103<br>58+<br>117<br>55 | 1<br>-<br>1<br>-<br>1 | 0.2<br>Minor<br>0.1<br>5.5+<br>0.2<br>234.0<br>2.0 |

NA Not available.

1/ Period affecting the Hawaiian Islands.

Source: Samuel L. Shaw, A History of Tropical Cyclones in the Central North Pacific and the Hawaiian Islands, 1832-1979 (U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, September 1981); Hawaii State Department of Defense, Civil Defense Division, Catalogue of Natural and Man-Caused Incidents and Disasters in the Hawaiian Islands (December 1978); The Governor's Ad Hoc Committee on the Economic Impact of Hurricane Iwa, Hurricane Iwa's Economic Impact on Hawaii (January 1983); "The History of Hurricanes in Hawaii," Honolulu Star-Bulletin, July 18, 1983, p. A-5; "20-Foot Waves Hit Big Isle As Storm Brushes Coastline," Honolulu Advertiser, July 23, 1986, pp. A-1, A-2; "Hawaii Hurricanes," Honolulu Star-Bulletin, August 4, 1988, p. A-8; Hawaii State Department of Land and Natural Resources, Division of Water and Land Development, data provided May 20, 1991.

Table 160.-- TRADE WINDS, HIGH SURF, AND TEMPERATURES IN HAWAIIAN WATERS, BY MONTHS

|                                   | Trade wind                             | Expected days of strong            | 1                       | surf <u>3</u> /<br>mber of days) | Water tem<br>(°F                                     | perature 4/                                  |
|-----------------------------------|--|------------------------------------|-------------------------|----------------------------------|--|--|
| Month                             | frequency 1/<br>(percent)              | trade<br>winds 2/                  | Flat or<br>1 foot       | 6 feet or<br>more                | Mean<br>maximum                                      | Mean<br>minimum                              |
| Jan Feb March April May June July | 42<br>55<br>61<br>74<br>86<br>91<br>95 | 9<br>7<br>10<br>10<br>7<br>7<br>10 | 1<br>1<br>3<br>8<br>15  | 19<br>16<br>12<br>7<br>3<br>-    | 74.7<br>75.6<br>76.5<br>77.7<br>79.5<br>81.1<br>81.1 | 71.1<br>70.3<br>71.8<br>73.0<br>74.7<br>77.7 |
| Sept Oct Nov Dec                  | 83<br>71<br>64<br>57                   | 4<br>4<br>8<br>9                   | 10<br>1<br>-<br>-<br>71 | 2<br>12<br>19<br>20<br>110       | 81.9<br>81.1<br>79.3<br>75.9<br>78.6                 | 78.4<br>77.2<br>74.5<br>71.4<br>74.8         |

1/ Mean monthly frequency of trade winds in Hawaiian waters.

4/ Observations at Kaneohe, Oahu. The mean ranged from 73.0 in January and February to 80.2 in August. Absolute maximums and minimums were respectively 84 (in July, August, and October) and 68 (December and February).

Source: Paul Haraguchi, Weather in Hawaiian Waters (Honolulu: Pacific Weather, Inc., 1979), pages 14, 22, 56, and 74; Hawaii State Department of Land and Natural Resources, Division of Water and Land Development, data provided May 20, 1991.

 $<sup>\</sup>overline{2}$ / Expected number of hazardous days in Hawaiian waters due to strong trade winds.

<sup>3/</sup> Observations at Sunset Beach, Oahu. Annual averages were: flat or 1 foot, 71 days; 2-5 feet, 184 days; 6-10 feet, 71 days; 11-15 feet, 26 days; 16 feet or higher, 13 days.

Table 161.-- AVERAGE WATER TEMPERATURES AT WAIKIKI BEACH
[In Fahrenheit degrees]

| Month | Morning  | Afternoon |
|-------|----------|-----------|
| March | 75<br>77 | 77<br>82  |

Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Data Center, Local Climatological Data, Annual Summary With Comparative Data, Honolulu, Hawaii, 1983.

Table 162.-- SUNRISE, SUNSET, AND HOURS OF DAYLIGHT AT SELECTED LOCATIONS, AT BEGINNING OF EACH SEASON

[Hawaiian Standard Time]

| Subject                                     | Hilo  | Kahului | Honolulu | Lihue | Barking<br>Sands |
|---|-------|---------|----------|-------|------------------|
| Sumrise (A.M.): March 21 June 21            | 6:24  | 6:29    | 6:35     | 6:41  | 6:42             |
|   | 5:42  | 5:45    | 5:50     | 5:55  | 5:56             |
| Sept. 23                                    | 6:09  | 6:15    | 6:21     | 6:26  | 6:28             |
| Dec. 22                                     | 6:51  | 6:58    | 7:05     | 7:12  | 7:14             |
| Sunset (P.M.):  March 21  June 21  Sept. 23 | 6:32  | 6:37    | 6:43     | 6:49  | 6:51             |
|   | 7:02  | 7:10    | 7:16     | 7:23  | 7:25             |
|   | 6:16  | 6:21    | 6:27     | 6:33  | 6:35             |
| Dec. 22 Hours of daylight:                  | 5:47  | 5:50    | 5:55     | 6:00  | 6:01             |
| March 21  June 21  Sept. 23  Dec. 22        | 12:08 | 12:08   | 12:08    | 12:08 | 12:09            |
|   | 13:20 | 13:25   | 13:26    | 13:28 | 13:29            |
|   | 12:07 | 12:06   | 12:06    | 12:07 | 12:07            |
|   | 10:56 | 10:52   | 10:50    | 10:48 | 10:47            |

Source: Nautical Almanac Office, U.S. Naval Observatory, Tables of Sunrise and Sunset, No. 1083 and 1084, and records. Data provided by Saul Price, Staff Meteorologist, National Weather Service, Pacific Region.

Table 163.-- HAWAII AUDUBON SOCIETY BIRD COUNTS OF THE HONOLULU AREA: 1987 TO 1990

[Counts are made in late December, in a circle, 15 miles in diameter, centered near Nuuanu Pali]

| Species 1/   | 1987   | 1988            | 1989   | 1990   |
|--|--------|-----------------|--------|--------|
| All species: Species Individual birds  | 50     | 48              | 48     | 48     |
|  | 29,009 | 29 <b>,</b> 909 | 25,405 | 18,705 |
| Endemic species: 'Apapane Hawaiian Coot Hawaiian Stilt Oahu 'Amakihi   | 79     | 173             | 21     | 4      |
|  | 10     | 38              | 34     | 8      |
|  | 149    | 135             | 149    | 143    |
|  | 155    | 108             | 107    | 151    |
| Indigenous species: Great Frigatebird Red-footed Booby   | 15     | 24              | 62     | 82     |
|  | 785    | 748             | 1,359  | 363    |
| Introduced species: Cattle Egret Common Myna House Sparrow Japanese White-eye Red-vented Bulbul Spotted Dove Zebra (Barred) Dove | 1,009  | 789             | 289    | 378    |
|  | 5,752  | 5,417           | 2,756  | 2,732  |
|  | 2,156  | 1,426           | 1,642  | 849    |
|  | 1,455  | 1,024           | 1,061  | 1,061  |
|  | 2,361  | 2,256           | 2,196  | 1,705  |
|  | 2,398  | 2,284           | 1,972  | 1,642  |
|  | 5,830  | 8,739           | 7,047  | 4,179  |
| Migratory species: Lesser Golden-Plover Ruddy Turnstone  | 1,673  | 2,046           | 1,601  | 1,594  |
|  | 272    | 373             | 230    | 314    |

<sup>1/</sup> Separate data are shown for endemic birds averaging more than  $\overline{25}$  individuals in 1975-1979, indigenous birds more than 200, introduced birds more than 500, and migratory species and stragglers more than 100. Endemic birds are those peculiar to a particular region, in this case Hawaii, and therefore found nowhere else in the world; indigenous birds are those native to a given region, in this case Hawaii, but with a total range of distribution encompassing a much wider area. The classification is that in Andrew J. Berger, Hawaiian Birdlife (1972).

Source: Hawaii Audubon Society, 'Elepaio (monthly).

Table 164.-- HAWAII AUDUBON SOCIETY BIRD COUNT OF THE HONOLULU AREA, BY TYPE OF SPECIES: DECEMBER 16, 1990

| Type of species 1/ | Number of species | Number of individuals         |
|--------------------|-------------------|-------------------------------|
| All species        | 48                | 18,705                        |
| Endemic            | 7<br>6<br>29<br>6 | 323<br>551<br>16,175<br>1,947 |

<sup>1/</sup> For definitions, see preceding table, footnote 1. Source: Hawaii Audubon Society, records.

Table 165.-- TREES ALONG STREETS OR IN PARKS UNDER THE JURISDICTION OF THE CITY AND COUNTY OF HONOLULU: 1986 TO 1990

[As of June 30]

| Location   | 1986    | 1987    | 1988             | 1989             | 1990    |
|--|---------|---------|------------------|------------------|---------|
| Along City and County streets and highways 1/ In City and County parks | 120,029 | 121,100 | 122 <b>,</b> 253 | 123 <b>,</b> 533 | 124,650 |
|  | 96,896  | 97,101  | 97 <b>,</b> 434  | 97 <b>,</b> 672  | 98,330  |

<sup>1/</sup> Excludes Federal, State, and private thoroughfares. Source: City and County of Honolulu, Department of Parks and Recreation, records.

Table 166.-- THREATENED, ENDANGERED, AND EXTINCT SPECIES OF NATIVE FAUNA AND FLORA: DECEMBER 1990

| Type of fauna or flora                   | Native<br>species   | Candi-<br>date <u>1</u> / | Proposed<br>endan-<br>gered <u>1</u> / | Threat-<br>ened <u>1</u> / | Endan-<br>gered <u>1</u> / | Ex-<br>tinct <u>2</u> / |
|--|---------------------|---------------------------|--|----------------------------|----------------------------|-------------------------|
| Land mammals Marine mammals Reptiles and | 1<br>17             | -                         | -                                      | -<br>-                     | 1<br>8                     | -<br>-                  |
| amphibians<br>Birds<br>Freshwater fish . | 5<br>77             | -                         | -                                      | 3<br>1                     | 2<br>29                    | 23                      |
| Invertebrates Plants                     | ( <u>3/)</u><br>956 | 150<br>280                | -<br>52                                | -                          | 1<br>19                    | 4/ 88<br>(NA)           |

<sup>1/</sup> Categories of the Federal List of Endangered and Threatened Species, as published in the Federal Register. Candidate species are those being officially considered for listing as threatened or endangered.

4/ Incomplete and probably much higher.

Source: U.S. Department of the Interior, Fish and Wildlife Service, Endangered and Threatened Wildlife and Plants (January 1989); P. Q. Tomich, Mammals in Hawaii (1969); Robert L. Pyle, "Checklist of Birds of Hawaii," The 'Elepaio, November 1983; correspondence from W. C. Gagne, Entomology Department, Bishop Museum, July 3, 1985; H. St. John, List and Summary of the Flowering Plants in the Hawaiian Islands (1973), p. 519; University of Hawaii Department of Geography, Atlas of Hawaii (1983), pp. 80 and 83; Gordon Nishida, Entomology Department, Bishop Museum; Warren L. Wagner, Derral R. Herbst, S.H. Sohmer, Manual of Flowering Plants of Hawaii (1990).

<sup>2/</sup> Since 1778.3/ Not known, but nearly 10,000 native species of insects and more than 1,000 native species of land snails have been estimated.

#### Section 6

# LAND USE AND OWNERSHIP

General statistics on the use, ownership, and tenure of land appear in this section. Information on specific use or ownership categories is given elsewhere: parks in Section 7, military land in Section 10, agriculture in Section 19, forests in Section 20, and cane land in Section 22.

Out of the 4,100,000 acres of land in the State in 1987, 347,000 were in cropland and 923,000 in grazing land. Other major categories included forestland, with 1,419,000 acres, urban and built-up, with 157,000, and miscellaneous nonfarm, with 852,000. On Oahu, land in residential use increased from 22,600 acres in 1969 to 29,200 in 1989; during the same 20-year span, agricultural land declined from 88,900 to 74,200 acres. For the State as a whole, the Land Use Commission has zoned 178,000 acres as urban, 1,961,000 as conservation, 1,963,000 as agricultural, and 10,000 as rural.

Recent data on land ownership indicate that the Federal government owns 8.4 percent of all land, the State and counties own 29.8 percent, and private owners (chiefly large estates) have 61.8 percent. Total Federal holdings reported by the General Services Administration in 1989 came to 677,000 acres, exclusive of leased land (8,400 acres); most of the Federal land was in wildlife, park and military use. The State Department of Hawaiian Home Lands holds about 187,000 acres, divided among 5,800 lessees. Total land parcels in the State as of 1991 numbered 431,000.

Considerable caution is necessary in comparing statistics from different sources on land use, ownership, or tenure. Variations in definitions and survey dates seriously affect comparability in many instances, even where terminology is relatively unambiguous and misinterpretation seems unlikely. An example of such difficulties is the wide range in estimates of Federal land, with totals ranging from 338,000 acres to 677,000.

Tabulations by the U.S. Department of Agriculture and General Services Administration, Hawaii State Department of Hawaiian Home Lands, Department of Land and Natural Resources, Department of Business, Economic Development & Tourism, and Land Use Commission, Honolulu Department of Finance, and Honolulu Department of General Planning provided the data for this section. Historical Statistics of Hawaii, Section 12, contains limited information for earlier years. Statistics for the nation as a whole are available in Sections 6, 7, 23, and 24 of the Statistical Abstract of the United States: 1991.

Table 167.-- LAND OWNERSHIP, COVER, OR USE: 1982 AND 1987

[In thousands of acres. Based on sample data and subject to sampling variation. Small differences between 1982 and 1987 values accordingly may not be statistically significant]

| Land ownership, cover, or use  | 1982  | 1987  | Change  |
|--|---|---|---|
| Total surface  | 4,141.3   | 4,141.3   | 0.0   |
| Federal land   | 341.6<br>3,758.2<br>148.5<br>3,609.7<br>41.5        | 443.2<br>3,656.6<br>156.8<br>3,499.8<br>41.5        | 101.6<br>-101.6<br>8.3<br>-109.9<br>0.0         |
| Total nonfederal rural land  | 3,609.7   | 3,499.8   | -109.9  |
| Cropland Cultivated Noncultivated Grazing land Forest land Minor land cover/uses | 333.2<br>309.6<br>23.6<br>973.9<br>1,473.7<br>828.9 | 347.5<br>305.7<br>41.8<br>922.6<br>1,419.0<br>810.7 | 14.3<br>-3.9<br>18.2<br>-51.3<br>-54.7<br>-18.2 |

Source: U.S. Department of Agriculture, Soil Conservation Service, Summary Report, 1987 National Resources Inventory (Statistical Report No. 790, December 1989), tables 1, 2, and 3.

Table 168.-- LAND USE AND STRUCTURAL CHARACTERISTICS OF OAHU: 1987 AND 1991

|  | Dec.<br>1987:  |   | June 1991  |   |
|--|--|---|--|---|
| Subject  | Oahu<br>total  | Oahu<br>total   | Honolulu<br>district   | Rest of<br>Oahu   |
| LAND USE (IN ACRES)  |  |   |  |   |
| All existing uses  | 375,476  | 375,345   | 54,129   | 321,216   |
| Single family Multi-family Industrial Commercial Hotel Agriculture Usable vacant Other                   | 26,182<br>2,633<br>10,326<br>4,383<br>301<br>76,842<br>36,684<br>218,125 | 26,931<br>2,815<br>10,262<br>4,442<br>305<br>70,565<br>40,105<br>219,920  | 8,571<br>1,112<br>4,113<br>1,806<br>132<br>302<br>2,650<br>35,444    | 18,360<br>1,704<br>6,149<br>2,637<br>172<br>70,264<br>37,455<br>184,475 |
| STRUCTURES BY YEAR BUILT 1/  | ·  |   |  |   |
| All structures   | 149,086  | 154,392   | 63,957   | 90,435  |
| Before 1930 1930 to 1939 1940 to 1949 1950 to 1959 1960 to 1969 1970 to 1979 1980 to 1989 1990 and later | 7,951<br>9,482<br>15,834<br>30,543<br>41,513<br>28,253<br>15,510         | 7,327<br>8,998<br>15,089<br>29,940<br>41,132<br>28,155<br>20,267<br>3,484 | 5,570<br>5,702<br>8,652<br>14,417<br>15,563<br>8,162<br>5,262<br>629 | 1,757 3,296 6,437 15,523 25,569 19,993 15,005 2,855                     |
| DWELLING UNITS BY TYPE $1/$  |  |   | ·  |   |
| All dwelling units   | 258,823  | 266,996   | 146,717  | 120,279   |
| Single family and duplex  Low density multi-family  High density multi-family                            | 137,892<br>13,482<br>107,449   | 143,161<br>15,209<br>108,626  | 57,290<br>1,015<br>88,412  | 85,871<br>14,194<br>20,214  |

<sup>1/</sup> Data exclude structures on military bases.
Source: City and County of Honolulu, Department of General Planning,

records.

Table 169.-- LAND PARCELS, BY COUNTIES: 1986 TO 1991

[As of January 1]

| Year                                 | State<br>total   | City and<br>County<br>of<br>Honolulu                           | County<br>of<br>Maui                                     | County<br>of<br>Hawaii   | County<br>of<br>Kauai                                    |
|--------------------------------------|--|--|--|--|--|
| 1986<br>1987<br>1988<br>1989<br>1990 | 404,018<br>409,069<br>412,862<br>417,875<br>424,111<br>431,271 | 212,868<br>215,207<br>217,971<br>220,763<br>224,339<br>227,449 | 47,321<br>48,568<br>48,863<br>49,765<br>50,966<br>52,362 | 121,349<br>122,180<br>122,788<br>123,801<br>124,902<br>126,497 | 22,480<br>23,114<br>23,240<br>23,546<br>23,904<br>24,963 |

Source: City and County of Honolulu, Department of Finance, Real Property Assessment Division, Real Property Tax Valuations, Tax Rates, & Exemptions, State of Hawaii (annual).

Table 170.-- CEMETERIES, CHURCHES, HOSPITALS, AND SCHOOLS, BY COUNTIES: 1991

[Privately-owned parcels exempt from real property taxes]

| Category   | State<br>total | Honolulu               | Maui                | Hawaii               | Kauai              |
|------------|----------------|------------------------|---------------------|----------------------|--------------------|
| Cemeteries | ,              | 48<br>789<br>67<br>102 | 5<br>203<br>11<br>7 | 48<br>267<br>-<br>39 | 7<br>131<br>3<br>2 |

Source: City and County of Honolulu, Department of Finance, Real Property Assessment Division, Real Property Tax Valuations, Tax Rates & Exemptions, 1991-1992 Tax Year, State of Hawaii (July 1991), p. 6.

Table 171. -- ACREAGE OF LAND USE CLASSES, BY COUNTIES: JUNE 1989

[Based on land use classifications used for real property assessment purposes. Data exclude public streets and highways and other areas not in parcels of record. For unknown reasons, totals in this table differ significantly from the corresponding 1988 figures in <a href="Data Book 1988">Data Book 1988</a>, table 184]

| Land use class <u>1</u> /  | State<br>total  | City and<br>County of<br>Honolulu   | County of<br>Maui  | County of<br>Hawaii  | County of<br>Kauai   |
|--|---|---|--|--|--|
| All uses <u>2</u> /  | 4,029,908   | 372,027   | 748,668  | 2,513,392  | 395,820  |
| Improved residential Apartment Commercial Industrial Agricultural Conservation Hotel and resort Unimproved residential . | 63,687<br>5,908<br>9,967<br>20,231<br>1,924,606<br>1,955,082<br>2,827<br>47,600 | 40,470<br>2,279<br>7,266<br>10,662<br>129,974<br>160,822<br>255<br>20,299 | 6,608<br>1,082<br>885<br>1,782<br>403,897<br>327,983<br>1,250<br>5,240 | 12,311<br>1,888<br>1,263<br>6,474<br>1,187,852<br>1,285,319<br>557<br>17,729 | 4,298<br>659<br>554<br>1,313<br>202,883<br>181,018<br>764<br>4,332 |

<sup>1/</sup> Based on 'Pitt codes' as established by the 'Pittsburgh Law' of differential tax rates for real property assessment and taxation as specified in Sec. 246-10, Hawaii Revised Statutes, 1985 Replacement.

Source: City and County of Honolulu, Department of Finance, Real Property Assessment Division, records.

<sup>2/</sup> Because of excluded categories, these totals differ from figures for total area shown elsewhere in the Data Book.

Table 172.-- ESTIMATED ACREAGE OF LAND USE DISTRICTS: 1964 TO 1991

[Total acreage, including inland water, as classified by the Hawaii State Land Use Commission under the provisions of Chapter 205, Hawaii Revised Statutes, as amended. All data are approximate]

|   |  | Classification by State Land Use Commission   |   |  |  |  |
|---|--|---|---|--|--|--|
| Year and month  | Total<br>area <u>1</u> /   | Urban   | Conservation  | Agricultural   | Rural  |  |
| UNADJUSTED 3/   |  |   |   |  |  |  |
| 1964: August 1969: August 1974: March 1979: January 1980: January 1981: January 1982: January 1983: January 1984: January 1985: January 1986: January 1987: January 1987: January 1988: January | 4,111,500<br>4,111,500<br>4,111,500<br>4,111,500<br>4,111,500<br>4,111,500<br>4,112,388<br>4,112,388<br>4,112,388<br>4,112,388<br>4,112,388<br>4,112,388 | 117,800<br>140,163<br>147,472<br>151,929<br>152,199<br>154,319<br>154,726<br>156,413<br>156,568<br>158,620<br>163,211<br>165,165<br>166,507 | 1,862,600 2,009,087 1,986,429 1,976,106 1,975,865 1,975,672 1,975,473 1,975,473 1,969,351 1,968,804 1,967,638 1,967,168 | 2,124,400<br>1,955,875<br>1,968,727<br>1,974,230<br>1,974,196<br>1,972,104<br>1,971,279<br>1,970,146<br>1,974,236<br>1,970,189<br>1,969,401<br>1,968,524 | 6,700<br>6,375<br>8,872<br>9,235<br>9,240<br>9,241<br>9,216<br>9,223<br>10,201<br>10,181<br>10,184<br>10,184 |  |
| 1988: January<br>1989: January<br>1990: January<br>1991: January  | 4,112,388<br>4,112,388<br>4,112,388<br>4,112,388   | 165,607<br>171,230<br>175,285<br>178,114  | 1,967,247<br>1,967,194<br>1,960,976<br>1,960,608  | 1,969,345<br>1,963,766<br>1,965,935<br>1,963,491   | 10,189<br>10,198<br>10,192<br>10,175   |  |

<sup>1/</sup> These totals differ somewhat from the official figures based on measurements by the Geography Division of the U.S. Bureau of the Census, cited in Section 5. The increase in the 1983 total area reflects additions to the Urban District on Oahu at Honolulu International Airport (Reef runway and South Ramp refill) created from former submerged lands.

<sup>2/</sup> For definitions, see Hawaii Revised Statutes, 1985 Replacement, Section 205-2.

<sup>3/</sup> For changes in classification resulting from court decisions on past Commission actions.

Source: Hawaii State Department of Business, Economic Development & Tourism, Land Use Commission, records.

# Table 173.-- ESTIMATED ACREAGE OF LAND USE DISTRICTS, BY ISLANDS: JANUARY 1991

[Total acreage, including inland water, as classified by the Hawaii State Land Use Commission under the provisions of Chapter 205, Hawaii Revised Statutes, as amended. All data are approximate]

|  |   | Classification by State Land Use Commission 2               |  |   |   |  |
|--|---|---|--|---|---|--|
| Year and month   | Total<br>area <u>1</u> /  | Urban   | Conservation   | Agricultural  | Rural   |  |
| State total  | 4,112,388   | 178,114   | 1,960,608  | 1,963,491   | 10,175  |  |
| Hawaii Maui Kahoolawe Lanai Molokai Oahu Kauai Niihau Kaula and Lehua Other islands 3/ | 2,573,400<br>465,800<br>28,800<br>90,500<br>165,800<br>386,188<br>353,900<br>45,700<br>400<br>1,900 | 46,650<br>19,337<br>-<br>2,338<br>2,509<br>94,200<br>13,080 | 1,294,309<br>193,652<br>28,800<br>38,201<br>49,768<br>154,846<br>198,732<br>400<br>1,900 | 1,231,813<br>249,064<br>47,280<br>111,657<br>137,142<br>140,835<br>45,700 | 628<br>3,747<br>-<br>2,681<br>1,866<br>-<br>1,253 |  |

<sup>1</sup>/ These totals differ somewhat from the official figures based on measurements by the Geography Division of the U.S. Bureau of the Census, cited in Section 5.

Source: Hawaii State Department of Business, Economic Development & Tourism, Land Use Commission, records.

<sup>2/</sup> For definitions, see Hawaii Revised Statutes, 1985 Replacement, Section 205-2.

<sup>3/</sup> The Northwestern Hawaiian Islands, from Nihoa to Kure Atoll, excluding Midway.

Table 174.-- LAND OWNERSHIP OR TENURE, BY ISLANDS: FALL 1988

[In acres. Government land leased to private users is included with privately owned land]

|  | A11  | Land own   | Land owned by government 2/  |  |   |
|--|--|--|--|--|---|
| Island   | 1and <u>1</u> /  | Federal  | State  | Counties   | owned<br>land   |
| State total 3/ Percent  Hawaii  Maui  Kahoolawe  Molokini  Molokai  Oahu  Kauai  Niihau  Lehua and Kaula | 4,035,601<br>100.0<br>2,497,055<br>448,170<br>28,800<br>19<br>88,985<br>170,910<br>403,154<br>351,292<br>46,705<br>512 | 338,035<br>8.4<br>229,848<br>26,875<br>28,800<br>19<br>5<br>211<br>48,861<br>3,158 | 1,188,242<br>29.4<br>817,391<br>102,345<br>-<br>124<br>47,601<br>69,541<br>150,984<br>-<br>256 | 14,898<br>0.4<br>1,278<br>1,568<br>-<br>14<br>265<br>11,162<br>610 | 2,494,426<br>61.8<br>1,448,537<br>317,381<br>-<br>88,843<br>122,831<br>273,590<br>196,540<br>46,705 |

<sup>1/</sup> Because of the omission of public thoroughfares and for other reasons, totals by island may differ considerably from official area estimates in other tables in this volume.

<sup>2/</sup> State land ceded by presidential proclamation or governor's executive order to the federal government appears in most cases to have been classified for this table as federal land, even though title to it technically remains with the state. Land ceded by the state to the counties, in contrast, has probably been classified as state land. For both types of ceded land, treatment may have varied from parcel to parcel.

<sup>3/</sup> Data exclude the Northwestern Hawaiian Islands (1,722 acres).
Source: City and County of Honolulu, Department of Finance, Real Property
Assessment Division, records. Tabulation by State Department of Business and
Economic Development.

Table 175.-- LAND IN HAWAII OWNED BY LARGE AND SMALL LANDOWNERS: 1988, 1989, AND 1990

| Ownership   | 1988  | 1989  | 1990   |
|---|---|---|--|
| Land area of State (acres) 1/  Owned by government 1/ Owned privately 1/  Six large owners 2/  Bernice P. Bishop Estate 3/  Richard S. Smart  (Parker Ranch) 4/  Castle and Cooke, Inc. 5/  Samuel M. Damon Estate 5/  Alexander and Baldwin, Inc. 5/  C. Brewer and Company, Ltd. 5/  All others | 4,035,601<br>1,541,175<br>2,494,426<br>912,853<br>339,197<br>139,301<br>129,220<br>121,598<br>92,848<br>90,689<br>1,581,573 | 4,035,601<br>1,541,175<br>2,494,426<br>909,006<br>338,414<br>139,301<br>129,125<br>121,608<br>91,952<br>88,606<br>1,585,420 |  |
| Percent of total land area  Owned by government  Owned privately  Six large owners  All others  Percent of privately owned land  Six large owners  All others   | 100.0<br>38.2<br>61.8<br>22.6<br>39.2<br>100.0<br>36.6<br>63.4  | 100.0<br>38.2<br>61.8<br>22.5<br>39.3<br>100.0<br>36.4<br>63.6  | 100.0<br>38.2<br>61.8<br>22.5<br>39.3<br>100.0<br>36.4<br>63.6 |

<sup>1/</sup> Fall data. Not surveyed in 1989 or 1990, and 1988 amount has been repeated. Because of the omission of public thoroughfares and for other reasons, the State total may vary from year to year and also may differ from official area estimates in other tables of this volume.

<sup>2/</sup> Some of these figures are not exact accountings but are the landowners' best estimates.

<sup>3/</sup> As of June 30. 4/ As of December 31. The total size of the Parker Ranch, including leased land, was 225,000 acres during this period.

<sup>5/</sup> As of December 31.

Source: State total, government total, and private total from The State of Hawaii Data Book 1988, table 187; six large owners from DBED surveys of those owners; all other owners calculated as a residual.

Table 176.-- REAL PROPERTY OWNED BY OR LEASED TO THE FEDERAL GOVERNMENT: 1987 TO 1989

| Subject  | Sept. 30,<br>1987  | Sept. 30,<br>1988 <u>1</u> /                           | Sept. 30,<br>1989  |
|--|--|--|--|
| OWNED  |  |  |  |
| Number of installations  Land area, total (acres)  Urban  Rural  Number of buildings  Floor area of bldgs. (1,000 sq. ft.)  Cost, total (\$1,000) 2/  Land  Buildings  Structures and facilities  Predominant usage (acres):  Agriculture and grazing  Forest and wildlife  Parks and historic sites  Power development and distribution  Military, excluding airfields  Airfields  Harbor and port facilities  Reclamation and irrigation  Office building locations  Flood control and navigation  Vacant  Institutional  Housing  Storage  Industrial  Research and development  Other land  LEASED | 317 673,845.8 53,486.3 620,359.5 10,705 (NA) 2,217,625 163,426 1,250,462 803,737 | (NA) 673,464.2 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA) | 320 676,823.9 68,903.3 607,920.6 15,533 73,033 2,153,155 157,980 1,375,116 620,059 |
| Number of leases   | 248<br>9,416.5<br>309.2<br>9,107.3<br>172<br>408,382<br>3,383                    | 263 7,418.9 309.7 7,109.2 182 548,240 4,377            | 300<br>8,419.9<br>312.8<br>8,107.1<br>235<br>689,146<br>6,822                      |

Footnote and source on next page.

# Table 176.-- REAL PROPERTY OWNED BY OR LEASED TO THE FEDERAL GOVERNMENT: 1987 TO 1989 -- Con.

NA Not available.

1/ Land owned corrected from published total (284,719.5 acres).

 $\overline{2}/$  At time of acquisition. Includes estimated equivalent cost of properties acquired through donation, exchange, devise, forfeiture, or judicial process.

Source: U.S. General Services Administration, Summary Report of Real Property Owned by the United States Throughout the World (annual) and Summary Report of Real Property Leased by the United States Throughout the World (annual); GSA letter to DBED dated August 1, 1990.

Table 177.-- DEPARTMENT OF HAWAIIAN HOME LANDS ACREAGE, LESSEES, AND APPLICANTS, BY ISLANDS: JUNE 30, 1990

[The Department of Hawaiian Home Lands administers land set aside for the benefit of qualified native Hawaiians, who receive homestead leases and financial assistance from the Department]

|             | Acreage  |                                      | Homestead<br>leases                 |                                     | Applicant<br>waiting list                 |   |
|-------------|--|--------------------------------------|-------------------------------------|-------------------------------------|---|---|
| Island      | Total  | In home-<br>stead<br>use             | Total <u>1</u> /                    | Resi-<br>dential                    | Total <u>1</u> /                          | Resi-<br>dential                        |
| State total | 187,413  | 32,713                               | 5,778                               | 4,592                               | 20,001                                    | 11,819                                  |
| Hawaii      | 107,883<br>28,995<br>25,366<br>6,600<br>18,569 | 20,943<br>541<br>9,477<br>921<br>831 | 1,547<br>560<br>795<br>2,429<br>447 | 1,017<br>492<br>319<br>2,365<br>399 | 7,480<br>3,978<br>1,147<br>5,176<br>2,220 | 3,525<br>1,974<br>554<br>4,703<br>1,063 |

<sup>1/</sup> Residence, agriculture, or pasture. Applicants may appear on waiting lists for more than one type of property; if so, they are counted more than once. The Department estimates the unduplicated Statewide total at about 12,000.

Source: Hawaii State Department of Hawaiian Home Lands, records.

Table 178.-- STATE PUBLIC AND SET-ASIDE LAND INVENTORY, BY COUNTIES: MAY 6, 1991

## [In thousands of acres]

| Type of document | State<br>total  | City and<br>County of<br>Honolulu  | County of<br>Hawaii   | County of<br>Kauai   | County of<br>Maui  |
|------------------|---|--|---|--|--|
| All types        | 1,413.9   | 70.8   | 979.9   | 155.6  | 207.8  |
| Public lands     | 422.1<br>222.3<br>82.5<br>117.3<br>781.1<br>258.6<br>522.5<br>191.6<br>1.8<br>1.5<br>15.8 | 18.2<br>4.5<br>1.9<br>11.8<br>42.5<br>13.3<br>29.2<br>4.8<br>0.7<br>1.2<br>3.4 | 326.8<br>186.5<br>46.4<br>93.9<br>536.5<br>196.2<br>340.3<br>107.8<br>0.5<br>0.1<br>8.2 | 37.9<br>22.8<br>11.9<br>3.2<br>96.6<br>23.9<br>72.7<br>19.0<br>0.4<br>0.5<br>1.2 | 39.1<br>8.4<br>22.2<br>8.5<br>105.6<br>25.2<br>80.4<br>60.0<br>0.1<br>0.1<br>2.9 |

<sup>1/</sup> Long-term leases. Mostly agricultural and pasture land. Includes land covered by water licenses not set aside to other government agencies.

<sup>2/</sup> Month-to-month leases. Mostly agricultural and pasture land. Includes land licenses.

<sup>3/</sup> Parcels with no documents and not in use.

Source: Hawaii State Department of Land and Natural Resources, Land Management Division, records.

#### Section 7

# RECREATION AND TRAVEL

Statistics on tourism, recreation, sports, museums, parks, pets, and the performing arts appear in this section. Additional information on recreational and resort land use is given in Section 6; on transportation, in Section 18; and on hotels and hotel workers, in Sections 12, 13, 15 and 23.

Approximately 6,971,000 visitors stayed overnight or longer in Hawaii during 1990, compared with 3,935,000 in 1980 and only 1,747,000 in 1970. The average number present at any given time during 1990 was 162,000. Total visitor expenditures (exclusive of trans-Pacific fares) in 1990 were estimated by the Hawaii Visitors Bureau at \$9.4 billion, compared with \$2.9 billion a decade earlier. The 1990 visitor total included 4.43 million from other States, 318,000 from Canada, and 1.44 million from Japan. Expenditures per visitor day in 1990 averaged \$137 for westbound visitors and \$294 for the Japanese. Visitor-related spending in 1989 resulted in tax revenues of \$1.1 billion and generated 243,000 jobs.

Both visitors and residents have access to a wide range of recreational and cultural facilities. The State has seven national parks and similar areas, 77 State parks, 582 county parks, 65 golf courses, 279 public tennis courts, 1,600 recognized surfing sites, and 24.4 miles of safe, sandy, accessible beach. Recreational, scenic and cultural facilities reporting more than two million annual visits each in 1990 included Waikiki Beach, the National Memorial Cemetery of the Pacific, Wailua River State Park, and Hawaii Volcanoes National Park. visits to 75 museums, State monuments, zoos, and similar attractions in 1990 numbered 21 million. About 444,000 Hawaii residents traveled to the Mainland or abroad in 1990. Twelve theatrical groups on Oahu reported 1,419 performances of 377 productions for the 1989-1990 season, with a combined audience of 967,000. During the 1990-1991 season, the Honolulu Symphony Orchestra gave 101 concerts, with a total attendance of 160,000. During the 1990-1991 school year, attendance at UH-Manoa varsity baseball, basketball, football and volleyball home games was 637,000.

Information on recreation and tourism is issued periodically by the Hawaii Visitors Bureau (particularly in its annual research reports), the State Parks Division of the Department of Land and Natural Resources, the Hawaii State Department of Business, Economic Development & Tourism, U.S. National Park Service, County park and recreation departments, and other organizations. Long-term trends are summarized in <u>Historical Statistics of Hawaii</u>, Section 11. National statistics are given in Section 7 of Statistical Abstract of the United States: 1991.

Table 179.-- PASSENGERS ARRIVING, BY DIRECTION OF TRAVEL AND TRANSIT STATUS: 1981 TO 1990

| Direction and status   | 1981  | 1982  | 1983  | 1984  | 1985  |
|--|---|---|---|---|---|
| All directions Landing Intransit  Westbound 1/ Landing Intransit Eastbound 2/ Landing Intransit        | 5,305,809<br>4,211,250<br>1,094,559<br>3,780,383<br>3,223,653<br>556,730<br>1,525,426<br>987,597<br>537,829 | 5,580,240<br>4,582,020<br>998,220<br>4,078,360<br>3,589,625<br>488,735<br>1,501,880<br>992,390<br>509,490     | 5,546,540<br>4,653,450<br>893,090<br>4,098,720<br>3,654,560<br>444,160<br>1,447,820<br>998,890<br>448,930     | 6,107,730<br>5,242,770<br>864,960<br>4,543,890<br>4,082,070<br>461,820<br>1,563,840<br>1,160,700<br>403,140 | 6,314,290<br>5,338,170<br>976,120<br>4,675,690<br>4,137,830<br>537,860<br>1,638,600<br>1,200,340<br>438,260   |
| Direction and status   | 1986  | 1987  | 1988  | 1989  | 1990  |
| All directions  Landing  Intransit  Westbound 1/  Landing  Intransit  Eastbound 2/  Landing  Intransit | 7,063,710<br>6.068,990<br>994,720<br>5,245,690<br>4,689,480<br>556,210<br>1,818,020<br>1,379,510<br>438,510 | 7,324,280<br>6,248,550<br>1,075,730<br>5,214,520<br>4,617,230<br>597,290<br>2,109,760<br>1,631,320<br>478,440 | 7,894,680<br>6,715,600<br>1,179,080<br>5,443,980<br>4,793,580<br>650,400<br>2,450,700<br>1,922,020<br>528,680 | 8,236,250 7,149,700 1,086,550 5,734,910 5,115,410 619,500 2,501,340 2,034,290 467,050                       | 8,507,330<br>7,453,550<br>1,053,780<br>5,692,950<br>5,127,690<br>565,260<br>2,814,380<br>2,325,860<br>488,520 |

<sup>1/</sup> Arriving from North America.
2/ Arriving from Asia or Oceania.
Source: Hawaii Visitors Bureau, 1988 Westbound Visitors to Hawaii, p. 5, and records.

Table 180.-- PASSENGER STATUS OF PARTIES AND PASSENGERS ARRIVING IN HAWAII, BY DIRECTION OF TRAVEL: 1988 TO 1990

|   |              | Visitors                 | Visitors destined<br>beyond Hawaii |               | Return-               |                            |
|---|--------------|--------------------------|------------------------------------|---------------|-----------------------|----------------------------|
| Year and direction of travel                      | All<br>types | destined<br>to<br>Hawaii | Overnight<br>or<br>longer          | In<br>transit | ing<br>resi-<br>dents | Intended<br>resi-<br>dents |
| PARTIES 1/  |              |                          |                                    |               |                       |                            |
| 1988, total Westbound Eastbound 2/                | (NA)         | (NA)                     | (NA)                               | (NA)          | (NA)                  | (NA)                       |
|   | 2,719,110    | 2,136,630                | 219,300                            | (NA)          | 357,780               | 5,400                      |
|   | (NA)         | (NA)                     | (NA)                               | (NA)          | (NA)                  | (NA)                       |
| 1989, total Westbound Eastbound 2/                | (NA)         | (NA)                     | (NA)                               | (NA)          | (NA)                  | (NA)                       |
|   | 2,232,200    | 1,919,710                | 126,080                            | (NA)          | 179,130               | 7,280                      |
|   | (NA)         | (NA)                     | (NA)                               | (NA)          | (NA)                  | (NA)                       |
| 1990, total Westbound Eastbound $\underline{2}$ / | 3,316,820    | 2,800,420                | 253,050                            | (NA)          | 242,480               | 20,870                     |
|   | 2,250,220    | 1,875,720                | 154,370                            | (NA)          | 203,920               | 16,210                     |
|   | 1,066,600    | 924,700                  | 98,680                             | (NA)          | 38,560                | 4,660                      |
| PASSENGERS  |              |                          |                                    |               |                       |                            |
| 1988, total Westbound Eastbound $\underline{2}$ / | 7,894,680    | (NA)                     | (NA)                               | 1,179,080     | (NA)                  | (NA)                       |
|   | 5,443,980    | 3,903,640                | 361,090                            | 650,400       | 521,000               | 7,850                      |
|   | 2,450,700    | (NA)                     | (NA)                               | 528,680       | (NA)                  | (NA)                       |
| 1989, total Westbound Eastbound $\underline{2}$ / | 8,236,250    | 6,159,530                | 482,290                            | 1,093,340     | 478,560               | 22,530                     |
|   | 5,734,910    | 4,415,350                | 289,970                            | 619,500       | 394,080               | 16,010                     |
|   | 2,501,340    | 1,744,180                | 192,320                            | 473,840       | 84,480                | 6,520                      |
| 1990, total Westbound Eastbound $\underline{2}$ / | 8,507,330    | 6,425,780                | 545,400                            | 1,053,780     | 444,200               | 38,170                     |
|   | 5,692,950    | 4,391,430                | 328,300                            | 565,260       | 378,640               | 29,320                     |
|   | 2,814,380    | 2,034,350                | 217,100                            | 488,520       | 65,560                | 8,850                      |

NA Not available.

 <sup>1/</sup> Not surveyed for in-transit passengers.
 2/ Including northbound.
 Source: Hawaii Visitors Bureau, Market Research Department, records.

Table 181.-- VISITOR ARRIVALS AND AVERAGE VISITOR CENSUS: 1964 TO 1990 [For earlier years, 1921-1963, see Data Book 1987, table 210]

|  |  | itors stayin<br>night or lon   |  | rage number<br>itors prese   |  |   |
|--|--|--|--|--|--|---|
| Year   | Total  | West-<br>bound <u>1</u> /  | Other  | Total  | West-<br>bound <u>1</u> /  | Other   |
| 1964<br>1965<br>1966<br>1967<br>1968<br>1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1979<br>1980<br>1981<br>1982 | 563,925<br>686,928<br>835,456<br>1,124,818<br>1,314,571<br>1,527,012<br>1,746,970<br>1,818,944<br>2,244,377<br>2,630,952<br>2,786,489<br>2,829,105<br>3,220,151<br>3,433,667<br>3,670,309<br>3,960,531<br>3,934,504<br>3,934,623<br>4,242,925<br>4,368,105 | 460,290<br>567,218<br>686,886<br>893,103<br>1,015,844<br>1,181,029<br>1,326,135<br>1,430,325<br>1,782,737<br>2,067,861<br>2,184,620<br>2,207,417<br>2,551,601<br>2,763,312<br>3,030,999<br>3,139,455<br>3,046,132<br>2,974,791<br>3,278,525<br>3,396,115 | 103,635<br>119,710<br>148,570<br>231,715<br>298,727<br>345,983<br>420,835<br>388,619<br>461,640<br>563,091<br>601,869<br>621,688<br>668,550<br>670,355<br>639,310<br>821,076<br>888,372<br>959,832<br>964,400<br>971,990 | 16,037<br>17,369<br>20,918<br>27,630<br>32,335<br>37,198<br>36,943<br>40,889<br>50,143<br>59,578<br>63,535<br>66,308<br>75,532<br>83,030<br>92,034<br>98,676<br>96,497<br>95,968<br>105,310<br>108,045 | 14,901<br>16,057<br>19,271<br>24,898<br>28,784<br>33,088<br>32,028<br>36,504<br>45,098<br>53,407<br>56,939<br>59,495<br>68,225<br>75,684<br>85,028<br>89,678<br>86,788<br>85,449<br>94,740<br>97,395 | 1,136<br>1,312<br>1,647<br>2,732<br>3,551<br>4,110<br>4,915<br>4,385<br>5,045<br>6,171<br>6,596<br>6,813<br>7,307<br>7,346<br>7,006<br>8,998<br>9,709<br>10,519<br>10,570<br>10,650 |
| 1984<br>1985<br>1986<br>1987<br>1988<br>1989   | 4,855,580<br>4,884,110<br>5,606,980<br>5,799,830<br>6,142,420<br>6,641,820<br>6,971,180  | 3,721,380<br>3,708,610<br>4,256,390<br>4,204,010<br>4,264,730<br>4,705,320<br>4,719,730  | 1,134,200<br>1,175,500<br>1,350,590<br>1,595,820<br>1,877,690<br>1,936,500<br>2,251,450  | 118,660<br>116,700<br>132,910<br>134,270<br>141,410<br>169,670<br>162,070  | 106,260<br>103,820<br>118,110<br>116,780<br>115,760<br>135,480<br>125,590  | 12,400<br>12,880<br>14,800<br>17,490<br>25,650<br>34,190<br>36,480  |

<sup>1/</sup> Arriving from the Mainland United States or Canada.
 Source: Hawaii Visitors Bureau, Annual Research Report (annual) and records.

Table 182.-- RESIDENCE OF OVERNIGHT AND LONGER VISITORS TO HAWAII: 1990

| Country of residence  | Total  | Westbound  | Eastbound  |
|---|--|--|--|
| All visitors  | 6,971,180  | 4,719,730  | 2,251,450  |
| United States Canada Asia Japan Taiwan Korea Hong Kong China Philippines Singapore Indonesia Other Asia South Pacific Australia New Zealand Other South Pacific Europe United Kingdom West Germany Other Europe Other foreign countries | 4,431,260<br>317,900<br>1,657,250<br>1,439,710<br>64,590<br>58,030<br>21,160<br>17,450<br>10,450<br>15,960<br>9,910<br>19,990<br>324,060<br>220,160<br>93,360<br>10,540<br>221,840<br>84,460<br>54,230<br>83,150<br>18,870 | 3,958,860<br>264,140<br>144,830<br>95,820<br>6,210<br>17,140<br>6,950<br>860<br>5,710<br>4,830<br>3,020<br>4,290<br>186,310<br>132,500<br>51,080<br>2,730<br>153,760<br>50,040<br>44,020<br>59,700<br>11,830 | 472,400 53,760 1,512,420 1,343,890 58,380 40,890 14,210 16,590 4,740 11,130 6,890 15,700 137,750 87,660 42,280 7,810 68,080 34,420 10,210 23,450 7,040 |

Source: Hawaii Visitors Bureau, records.

Table 183.-- VISITOR DAYS, BY DIRECTION OF TRAVEL: 1989 AND 1990

| · :          |                          |                          |                          |
|--------------|--------------------------|--------------------------|--------------------------|
| Year         | Total                    | Westbound                | Eastbound and northbound |
| 1989<br>1990 | 58,588,970<br>59,155,920 | 46,582,670<br>45,840,750 | 12,006,300<br>13,315,170 |

Source: Hawaii Visitors Bureau, records.

Table 184.-- AVERAGE VISITOR CENSUS, BY COUNTIES AND ISLANDS: 1989 AND 1990

|                  | 1989   |  |   | 1990   |  |  |
|------------------|--|--|---|--|--|--|
| County or island | Total  | West-<br>bound   | Other   | Total  | West-<br>bound   | Other  |
| State total      | 169,670  | 135,480  | 34,190  | 162,070  | 125,590  | 36,480   |
| Oahu             | 88,750<br>17,760<br>19,140<br>44,020<br>240<br>42,690<br>1,090 | 61,480<br>15,560<br>18,090<br>40,350<br>210<br>39,240<br>900 | 27,270<br>2,200<br>1,050<br>3,670<br>30<br>3,450<br>190 | 87,400<br>16,970<br>18,200<br>39,500<br>250<br>38,150<br>1,100 | 56,750<br>15,390<br>17,200<br>36,250<br>230<br>34,980<br>1,040 | 30,650<br>1,580<br>1,000<br>3,250<br>20<br>3,170<br>60 |

Source: Hawaii Visitors Bureau, 1990 Domestic Market, Visitors to Hawaii (1991), p. 77, and records.

Table 185.-- VISITOR ARRIVALS, WESTBOUND AND OTHER, BY AREAS VISITED: 1989 AND 1990

[Covers visitors staying overnight or longer anywhere in the State, and any overnight or non-overnight interisland trips reported by these visitors]

|   | 1989  |                        |  | 1990   |   |   |
|---|---|------------------------|--|--|---|---|
| Areas visited   | Total   | West-<br>bound         | Other  | Total  | West-<br>bound  | Other   |
| State total <u>2</u> /  | 6,641,820   | 4,705,320              | 1,936,500  | 6,971,180  | 4,719,730   | 2,251,450   |
| Oahu  Kauai  Maui County 2/  Maui  Molokai  Lanai  Hawaii County 2/  Kona side  Hilo side | 1,291,210<br>2,513,960<br>2,468,870<br>101,510<br>46,790<br>1,120,830 | 857,770                | 152,980<br>400,860<br>393,110<br>15,490<br>3,870<br>174,290<br>141,370 | 5,350,940<br>1,286,360<br>2,389,970<br>2,345,060<br>103,630<br>45,930<br>1,170,830<br>1,030,900<br>391,470 | 1,118,930<br>1,995,160<br>1,954,770<br>95,130<br>41,760<br>982,900<br>877,930 | 167,430<br>394,810<br>390,290<br>8,500<br>4,170<br>187,930<br>152,970 |
| One island only Oahu only   |   | 2,795,610<br>1,595,270 |  |  |   |   |

<sup>1</sup>/ Eastbound or northbound. Distribution by areas visited based on data for fourth quarter only.

Source: Hawaii Visitors Bureau, records.

 $<sup>\</sup>underline{2}$ / Because many visitors visited more than one area, detail sums to more than the totals and subtotals shown here.

Table 186.-- SUMMARY CHARACTERISTICS OF OVERNIGHT AND LONGER VISITORS, BY DIRECTION OF TRAVEL: 1989 AND 1990

|  |  | 1990   |  |  |  |
|--|--|--|--|--|--|
| Subject  | 1989:<br>West-<br>bound <u>1</u> /   | Total  | West-<br>bound   | Eastbound<br>and<br>northbound   |  |
| Residence (percent):    United States     Pacific and Mountain States     California  Males per 100 females Median age (years) High-status occupations 2/ (percent) Persons per party Arriving June-August (percent) Repeat visitors 3/ (percent) Pleasure trip (percent) In hotel only Destined beyond Hawaii (percent) | 84.8<br>43.8<br>28.8<br>90.8<br>37.3<br>68.2<br>2.3<br>27.6<br>53.9<br>84.1<br>58.5<br>6.2 | 63.6<br>33.7<br>23.0<br>(NA)<br>(NA)<br>45.0<br>2.3<br>28.5<br>50.9<br>83.1<br>63.9<br>7.8 | 83.9<br>46.2<br>31.6<br>92.3<br>38.8<br>54.3<br>2.3<br>28.0<br>56.1<br>84.8<br>55.0<br>7.0 | 21.0<br>7.5<br>4.9<br>(NA)<br>(NA)<br>25.6<br>2.0<br>29.4<br>40.1<br>79.6<br>82.5<br>9.6 |  |

NA Not available.

<sup>1/</sup> Eastbound and northbound survey began in fourth quarter of 1989.

2/ Managerial and professional and their dependents as a percent of all visitors.

<sup>3/</sup> Dependents assumed same as party heads. Source: Hawaii Visitors Bureau, records.

Table 187.-- DEMOGRAPHIC CHARACTERISTICS OF VISITORS, BY DIRECTION OF TRAVEL: 1990

[Limited to visitors staying overnight or longer. Includes both visitors destined to and beyond Hawaii]

| Subject   | Total   | Westbound   | Eastbound<br>and<br>northbound  |
|---|---|---|---|
| All visitors  | 6,971,180   | 4,719,730   | 2,251,450   |
| Age:     Under 10 years   | (NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)  | 303,000<br>356,990<br>829,930<br>985,870<br>967,710<br>621,630<br>654,600<br>38.8   | (NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)  |
| Sex: Male Female  | (NA)<br>(NA)  | 2,265,628<br>2,454,102  | (NA)<br>(NA)  |
| Residence: Pacific Alaska California Oregon Washington Mountain West North Central West South Central East North Central East North Central East South Central South Atlantic U.S. territories Canada Japan Other foreign | 1,984,690 38,770 1,601,540 94,920 249,460 362,560 229,390 274,550 460,560 89,350 163,830 407,720 416,610 42,000 317,900 1,439,710 782,310 | 1,840,520<br>35,850<br>1,490,740<br>88,710<br>225,220<br>338,480<br>207,250<br>249,710<br>403,530<br>80,010<br>141,760<br>350,920<br>339,800<br>6,880<br>264,140<br>95,820<br>400,910 | 144,170<br>2,920<br>110,800<br>6,210<br>24,240<br>24,080<br>22,140<br>24,840<br>57,030<br>9,340<br>22,070<br>56,800<br>76,810<br>35,120<br>53,760<br>1,343,890<br>381,400 |

NA Not available.

Source: Hawaii Visitors Bureau, Basic Data Survey, records.

Table 188.-- TRIP CHARACTERISTICS OF VISITORS, BY DIRECTION OF TRAVEL: 1990

[Limited to visitors staying overnight or longer. Includes both visitors destined to and beyond Hawaii]

| Subject  | Total  | Westbound   | Eastbound<br>or<br>northbound |
|--|--|---|-------------------------------|
| All visitors <u>1</u> /  | 6,971,180  | 4,719,730   | 2,251,450                     |
| Purpose of visit: 1/ Pleasure Meetings, conventions, incentive 1/ Convention Corporate meeting Incentive Other business Visit friends or relatives Government or military Other  Traveler method: Tour group Non-group Package | 5,795,080<br>502,990<br>265,180<br>93,190<br>153,060<br>221,720<br>382,080<br>61,750<br>324,250<br>2,261,050<br>4,710,130<br>3,763,850 | 4,002,080<br>352,140<br>232,910<br>70,660<br>56,380<br>179,730<br>314,290<br>47,250<br>120,670<br>635,850<br>4,083,880<br>1,984,380 |                               |
| Non-package  | 3,207,330  | 2,735,350   | 471,980                       |
| Accommodations: Hotel Hotel only Condo Condo only Friends, relatives Cruise ship Other accommodations  | 5,154,450<br>4,454,110<br>1,672,560<br>1,089,550<br>611,590<br>100,340<br>188,320  | 3,207,060<br>2,596,360<br>1,386,250<br>876,080<br>540,110<br>95,790<br>150,040  | 71,480                        |

 $<sup>\</sup>underline{1}/$  Because of multiple responses, detail may add to more than the indicated total.

Source: Hawaii Visitors Bureau, 1990 Domestic Market, Visitors to Hawaii (1991), p. 79.

Table 189.-- CHARACTERISTICS OF VISITOR PARTY HEADS, BY DIRECTION OF TRAVEL: 1990

[Limited to visitor party heads staying overnight or longer. Includes both visitors destined to and beyond Hawaii]

| Subject   | Total  | Westbound   | Eastbound<br>and<br>northbound   |
|---|--|---|--|
| All visitor party heads   | 3,053,480  | 2,030,090   | 1,023,390  |
| Occupation: Senior management Middle management Sales, marketing Clerical Professional Technical, trade Labor Military service Military dependent Student Self-employed Retired Other | 231,930<br>461,780<br>261,750<br>239,840<br>669,320<br>175,430<br>71,140<br>36,790<br>(NA)<br>171,080<br>181,740<br>263,750<br>282,790 | 143,620<br>386,560<br>155,520<br>71,080<br>571,320<br>62,550<br>29,240<br>27,640<br>6,130<br>91,680<br>81,090<br>229,100<br>174,560 | 88,310<br>75,220<br>106,230<br>168,760<br>98,000<br>112,880<br>41,900<br>9,150<br>(NA)<br>79,400<br>100,650<br>34,650<br>108,230 |
| Trips to Hawaii: First trip Second trip Third trip Four trip and over  Persons in party: 1 person 2 persons 3 persons 4 persons 5 persons or more                                     | 1,504,220<br>598,450<br>287,880<br>662,920<br>939,700<br>1,334,150<br>248,270<br>288,870<br>242,500                                    | 891,210<br>401,960<br>211,130<br>525,790<br>470,990<br>1,039,410<br>174,590<br>215,190<br>129,920                                   | 613,010<br>196,490<br>76,750<br>137,130<br>468,710<br>294,740<br>73,680<br>73,680<br>112,580                                     |

NA Not available.

Source: Hawaii Visitors Bureau, records.

Table 190.-- LENGTH OF STAY OF VISITORS STAYING OVERNIGHT OR LONGER, BY DIRECTION OF TRAVEL: 1988 TO 1990

[Eastbound and northbound data not available before 4th quarter of 1989]

| Length of stay            | 1988:<br>West-<br>bound                                    | 1989:<br>West-<br>bound                              | Total  | West-<br>bound | Eastbound<br>and<br>northbound                   |
|---------------------------|--|--|--|----------------|--|
| All visitors              | 4,264,730  | 4,705,320  | 6,971,180  | 4,719,730      | 2,251,450  |
| 1 to 6 days               | 679,960<br>2,756,930<br>784,770<br>43,070<br>( <u>1</u> /) | 768,190<br>2,720,430<br>876,740<br>42,030<br>297,930 | 2,957,900<br>2,957,390<br>977,940<br>77,950<br>( <u>1</u> /) | 2,617,070      | 1,811,700<br>340,320<br>86,030<br>13,400<br>(1/) |
| Median (days) Mean (days) | 9.7<br>9.9   | 9.7<br>9.9   | 7.5<br>8.5   | 8.4<br>9.7     | 5.5<br>5.9                                       |

<sup>1/</sup> Nonresponse distributed in 1988 and 1990.

Source: Hawaii Visitors Bureau, Basic Data survey, records.

Table 191.-- JAPANESE VISITOR ARRIVALS AND EXPENDITURES: 1985 TO 1990

| Subject          | 1985 | 1986  | 1987  | 1988  | 1989  | 1990  |
|------------------|------|-------|-------|-------|-------|-------|
| Arrivals (1,000) | 709  | 731   | 905   | 1,217 | 1,319 | 1,440 |
|                  | 5.9  | 5.9   | 5.8   | 6.0   | 6.0   | 5.9   |
|                  | 983  | 1,296 | 1,702 | 2,252 | 2,514 | 2,500 |

<sup>1</sup>/ Revised estimates for 1985-1989.

Source: Hawaii Visitors Bureau, records.

Table 192.-- FAMILY INCOME, TRIP CHARACTERISTICS, AND OPINIONS OF MAINLAND VISITORS TO HAWAII: 1987 TO 1990

| Subject   | 1987  | 1988  | 1989  | 1990   |
|---|---|---|---|--|
| Number of respondents in sample   | 5,185   | 5,004   | 6,983   | 6,001  |
| Family income before taxes (percent) Under \$15,000 \$15,000 to \$24,999 \$25,000 to \$34,999 \$35,000 to \$49,999 \$50,000 to \$74,999 \$75,000 and over Median income (dollars) Mean income (dollars) | 100.0<br>2.1<br>8.2<br>14.1<br>25.4<br>29.2<br>21.0<br>50,100<br>56,000 | 100.0<br>1.2<br>6.4<br>11.7<br>22.9<br>29.5<br>28.3<br>56,600<br>61,400 | 100.0<br>1.5<br>5.5<br>11.6<br>20.0<br>29.3<br>32.1<br>59,700<br>63,600 | 100.0<br>0.9<br>4.1<br>9.9<br>23.0<br>27.9<br>34.2<br>56,100<br>72,800 |
| Education: college graduates (percent)  | 56.4  | 62.7  | 64.6  | 59.5   |
| Using travel agent (percent)  | 85.1  | 81.8  | 80.7  | 79.8   |
| Islands visited (percent): Oahu  Kauai  Maui  Hawaii  | 70.0<br>30.4<br>42.1<br>28.0  | 65.6<br>31.3<br>42.6<br>25.7  | 67.1<br>36.8<br>52.3<br>26.0  | 64.0<br>39.9<br>48.3<br>30.1   |
| Hawaii compared with other vacation areas visited (percent) Far superior Above average Average Below average Quite inferior   | 100.0<br>36.0<br>55.4<br>7.7<br>0.8<br>0.2                              | 100.0<br>39.6<br>53.2<br>6.8<br>0.4<br>(Z)                              | 100.0<br>38.9<br>53.5<br>6.9<br>0.5                                     | 100.0<br>30.4<br>56.8<br>10.9<br>1.8<br>0.1                            |

Z Less than 0.05 percent. Source: Hawaii Visitors Bureau, <u>Visitor Reaction Survey</u>, 1988 (1990), 1990 Visitor Satisfaction Report (1991), and unpublished data.

Table 193.-- MEETINGS AND CONVENTIONS, BY ISLANDS: 1989 AND 1990

|   | Number of<br>meetings held        |                                   | Estimated<br>attendance                            |  |  |
|---|-----------------------------------|-----------------------------------|--|--|--|
| Island                                    | 1989                              | 1990                              | 1989   | 1990   |  |
| State total                               | 754                               | 743                               | 259,399  | 201,534  |  |
| Hawaii: Hilo Kona Maui Molokai Oahu Kauai | 3<br>130<br>160<br>1<br>362<br>98 | 5<br>132<br>148<br>1<br>387<br>70 | 837<br>34,851<br>60,111<br>88<br>137,329<br>26,183 | 1,588<br>34,293<br>37,569<br>80<br>115,262<br>12,742 |  |

Source: Hawaii Visitors Bureau, Meetings and Conventions Department.

Table 194.-- MEETINGS AND CONVENTIONS: 1985 TO 1990

| Year | No. of<br>meetings<br>held | Estimated attendance | Estimated<br>guest<br>rooms | Estimated revenue (\$1,000) |
|------|----------------------------|----------------------|-----------------------------|-----------------------------|
| 1985 | 740                        | 247,166              | 104,354                     | 219,882                     |
|      | 810                        | 250,703              | 98,591                      | 249,042                     |
|      | 903                        | 317,101              | 126,181                     | 300,721                     |
|      | 886                        | 301,654              | 131,273                     | 354,363                     |
|      | 754                        | 259,399              | 121,533                     | 343,965                     |
|      | 743                        | 201,534              | 100,717                     | 295,952                     |

NA Not available.

Source: Hawaii Visitors Bureau, Meetings and Conventions Department.

Table 195.-- AVERAGE EXPENDITURE PER VISITOR DAY, BY ORIGIN OF VISITORS: 1931-1932 TO 1990

### [Dollars]

| Year  | Main-<br>landers  | Japanese  | Year | Main-<br>landers                                       | Japanese                               |
|---|---|---|------|--|--|
| 1931-32 <u>1</u> /<br>1951<br>1960-61<br>1965-66 <u>1</u> /<br>1974<br>1977 | 17.50<br>28.00<br>32.00<br>37.23<br>46.20<br>54.62<br>71.24 | (NA)<br>(NA)<br>(NA)<br>(NA)<br>123<br>147<br>185 | 1983 | 85.88<br>95.40<br>102.49<br>121.44<br>127.84<br>137.40 | 227<br>299<br>324<br>350<br>322<br>294 |

NA Not available.

<sup>1/</sup> Oahu only.

Source: Hawaii Visitors Bureau, 1983 Visitor Expenditure Survey (1985), p. 31; 1989 Expenditures, Westbound Visitors to Hawaii (1990), pp. 29, 30; and revised estimates of Mainlander expenditures, 1989-1990, and Japanese expenditures, 1986-1990.

Table 196. -- EXPENDITURES PER VISITOR DAY BY VISITORS FROM THE MAINLAND, 1989 AND 1990, AND VISITORS FROM JAPAN, 1990, BY EXPENDITURE TYPE

[In dollars. Excludes transpacific travel costs]

|  |  |  | <del> </del>  |
|--|--|--|---|
|  | Visitors fr  | om Mainland  | Visitors  |
| Expenditure type   | 1989   | 1990   | from Japan:   |
| All items  | 126.57   | 136.30   | 294.04  |
| Food and beverage Restaurants Dinner shows Nightclubs Groceries  Entertainment Attractions Other entertainment | 26.41<br>18.70<br>2.61<br>2.40<br>2.70<br>8.41<br>6.17<br>2.24 | 28.90<br>20.62<br>2.14<br>3.03<br>3.11<br>8.86<br>6.21<br>2.65 | 41.70<br>25.65<br>4.23<br>2.89<br>8.92<br>16.05<br>6.97<br>9.08 |
| Transportation   | 13.93<br>1.01<br>5.42<br>5.04<br>2.46                          | 14.07<br>0.97<br>6.48<br>3.90<br>2.72                          | 14.31<br>1.78<br>2.76<br>4.74<br>5.03                           |
| Clothing   | 9.76   | 8.74   | 27.98   |
| Gifts and souvenirs  | 10.97  | 9.41   | 77.48   |
| Lodging  | 49.43  | 57.76  | 73.77   |
| All other and unclassified   | 5.31   | 6.42   | 38.92   |
| Adjustment <u>2</u> /  | 2.35   | 2.14   | 3.83  |

<sup>1/</sup> Includes telephone, beauty and barber shop, postage, laundry,

gasoline, photography, etc.

2/ Visitors estimate of amount excluded from listed categories.

Source: Hawaii Visitors Bureau, The 1990 Visitor Expenditure Report (1991), pp.18 and 44.

Table 197.-- EXPENDITURES PER VISITOR DAY BY WESTBOUND VISITORS, 1989 AND 1990, AND JAPANESE VISITORS, 1990, BY VISITOR OR TRIP CHARACTERISTICS

# [Dollars]

|   | Westbound                            | visitors                     | Japanese                    |
|---|--------------------------------------|------------------------------|-----------------------------|
| Visitor or trip characteristics   | 1989                                 | 1990                         | visitors:                   |
| All visitors  | 126.57                               | 136.30                       | 294.04                      |
| Islands: Oahu Neighbor Islands  | 122.23                               | 120.00                       | 296.76                      |
|   | 145.76                               | 163.02                       | 240.91                      |
| Group tour status: Organized group tour   | 126.83                               | 145.79                       | 296.50                      |
|   | 126.73                               | 135.23                       | 285.39                      |
| Accommodations: Hotel only Condo only Guests of friends and relatives Hotel/condo combination               | 129.73                               | 144.46                       | 308.66                      |
|   | 103.09                               | 97.10                        | 175.69                      |
|   | *55.71                               | *37.28                       | (NA)                        |
|   | 119.03                               | 128.21                       | (NA)                        |
| Length of stay:  1 to 6 days  7 to 12 days  13 to 18 days  19 days or longer                                | 144.68<br>122.27<br>126.72<br>104.93 | 151.51<br>131.71<br>} 138.35 | 310.94<br>270.52<br>*132.53 |
| Residence: 1/ Pacific  Mountain W.N. Central E.N. Central E.S. Central New England Mid-Atlantic S. Atlantic | 121.54                               | 135.90                       | (NA)                        |
|   | 111.69                               | 126.97                       | (NA)                        |
|   | 123.55                               | 107.92                       | (NA)                        |
|   | 131.63                               | 135.14                       | (NA)                        |
|   | 122.01                               | 137.76                       | (NA)                        |
|   | 116.24                               | 143.46                       | (NA)                        |
|   | 122.27                               | 135.60                       | (NA)                        |
|   | 137.00                               | 139.14                       | (NA)                        |
|   | 137.55                               | 145.17                       |                             |
| Previous visits: First trip   | 125.11                               | 134.66                       | 317.20                      |
|   | 127.15                               | 137.56                       | 270.13                      |

Continued on next page.

Table 197.-- EXPENDITURES PER VISITOR DAY BY WESTBOUND VISITORS, 1989 AND 1990, AND JAPANESE VISITORS, 1990, BY VISITOR OR TRIP CHARACTERISTICS--Con.

|   | Westbound          | l visitors                      | Japanese                 |
|---|--------------------|---------------------------------|--------------------------|
| Visitor or trip characteristics   | 1989               | 1990                            | visitors:                |
| Party size: 1 person 2 persons 3 persons 4 persons or more  Purpose of trip: Pleasure | 161.94             | 161.87                          | (NA)                     |
|   | 125.28             | 138.16                          | (NA)                     |
|   | 94.40              | 107.41                          | (NA)                     |
|   | 84.32              | 104.00                          | (NA)                     |
| Business: Meetings, conventions, incentive Other business                             | 3 150.08<br>111.94 | \$ 160.70<br>\$ 134.66<br>96.03 | 340.30<br>299.90<br>(NA) |
| Time of year: First quarter   | 127.35             | 135.10                          | 275.76                   |
|   | 127.02             | 144.83                          | 327.27                   |
|   | 124.13             | 139.74                          | 263.75                   |
|   | 128.10             | 125.35                          | 309.39                   |
| Arrived on package tour: Yes  | 124.38             | 128.83                          | 299.04                   |
|   | 129.78             | 144.00                          | 256.34                   |
| Children in party: Yes  | 87.33              | 95.35                           | 192.03                   |
|   | 130.97             | 140.01                          | 319.16                   |
| On honeymoon: Yes No  | (NA)               | (NA)                            | 417.54                   |
|   | (NA)               | (NA)                            | 274.57                   |

<sup>\*</sup> Sample under 25; subject to considerable sampling variation.

NA Not available.

<sup>1/</sup> Census divisions.

Source: Hawaii Visitors Bureau, 1989 Expenditures, Westbound Visitors to Hawaii (1990), pp. 14-27, and The 1990 Visitor Expenditure Report (1991), pp. 18-32, 44-56.

Table 198.-- ESTIMATED VISITOR EXPENDITURES: 1958 TO 1990

[Millions of dollars. Excludes expenditures by Hawaii residents for all years and additional business expenditures by MCI (meetings, conventions, and incentive) visitors before 1985. Estimates for 1985-1989 revised from Data Book 1990, tables 205 and 383]

| Year   | Personal<br>expend-<br>itures  | Year   | Personal<br>expend-<br>itures   | Year   | Personal<br>expend-<br>itures                                     | Additional business expend. 1/               |
|--|--|--|---|--|---|--|
| 1958<br>1959<br>1960<br>1961<br>1962<br>1963<br>1964<br>1965<br>1966<br>1967 | 83<br>109<br>131<br>137<br>154<br>186<br>205<br>225<br>280<br>380<br>440 | 1969<br>1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978 | 550<br>595<br>705<br>840<br>1,020<br>1,225<br>1,360<br>1,640<br>1,845<br>2,146<br>2,537 | 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 2,875 3,200 3,700 3,974 4,582 4,963 5,776 6,500 7,813 8,748 9,363 | 22.9<br>26.7<br>30.0<br>36.1<br>37.4<br>46.5 |

<sup>1/</sup> By MCI (meetings, conventions, and incentive) visitors. For discussion, see Hawaii Visitors Bureau, The 1990 Visitor Expenditure Report (1991), pp. 35-40. Not available before 1985.

Source: Hawaii Visitors Bureau, 1986 Annual Research Report, p. 1, and records.

Table 199.-- VISITOR EXPENDITURES, BY DIRECTION OF TRAVEL, COUNTRY OF RESIDENCE, AND ISLANDS: 1989 AND 1990

[In thousands of dollars. Revised from Data Book 1990, tables 205 and 383]

|  | Country of residence 1/ |                  |           |                    |  |
|--|-------------------------|------------------|-----------|--------------------|--|
| Year and direction of travel or island   | Total                   | United<br>States | Japan     | Other<br>countries |  |
| 1989, all visitors Westbound Eastbound and northbound Oahu Maui, Molokai, Lanai Kauai Hawaii | 8,785,289               | 5,197,905        | 2,513,723 | 1,073,661          |  |
|  | 5,771,856               | 4,967,883        | 118,684   | 685,289            |  |
|  | 3,013,433               | 230,022          | 2,395,039 | 388,372            |  |
|  | 5,163,063               | 2,440,311        | 2,101,914 | 620,838            |  |
|  | 1,917,800               | 1,422,095        | 256,415   | 239,290            |  |
|  | 891,147                 | 717,908          | 65,325    | 107,914            |  |
|  | 813,279                 | 617,591          | 90,069    | 105,619            |  |
| 1990, all visitors Westbound Eastbound   | 9,409,772               | 5,661,847        | 2,500,138 | 1,247,787          |  |
|  | 6,224,829               | 5,276,369        | 169,026   | 779,434            |  |
|  | 3,184,943               | 385,478          | 2,331,112 | 468,353            |  |
| Oahu   | 5,441,149               | 2,533,197        | 2,111,416 | 796,536            |  |
|  | 2,023,032               | 1,553,008        | 211,640   | 258,384            |  |
|  | 58,985                  | 45,340           | 4,274     | 9,371              |  |
|  | 15,165                  | 11,283           | 129       | 3,753              |  |
|  | 945,777                 | 787,304          | 68,915    | 89,558             |  |
|  | 925,664                 | 731,715          | 103,764   | 90,185             |  |

<sup>1/</sup> Additional business expenditures by MCI (meetings, conventions, and incentive) visitors are included with "other countries;" see preceding table for annual totals.

Source: Hawaii Visitors Bureau, The 1990 Visitor Expenditure Report (1991), pp. 5 and 64; The 1990 Island Supplement (1991), p. 37; and records.

Table 200.-- ESTIMATED DIRECT VISITOR-RELATED EXPENDITURES: 1970 TO 1990

#### [In millions of dollars]

| Year   | Total  | Visitors   | Airline and ship crews   | Overseas<br>airlines <u>1</u> /  |
|--|--|--|--|--|
| 1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978<br>1979 | 714.6<br>835.8<br>982.2<br>1,181.6<br>1,408.6<br>1,559.4<br>1,890.8<br>2,093.8<br>2,427.4<br>2,947.7       | 595<br>705<br>840<br>1,020<br>1,225<br>1,360<br>1,640<br>1,845<br>2,146<br>2,537       | 8.0<br>9.0<br>8.0<br>12.6<br>8.4<br>6.8<br>7.8<br>11.4<br>11.6               | 111.6<br>122.8<br>133.2<br>153.6<br>171.0<br>191.0<br>244.0<br>270.0<br>399.1          |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 3,406.2<br>3,775.0<br>4,235.0<br>4,483.0<br>5,139.0<br>5,544.0<br>6,362.0<br>7,180.0<br>8,587.0<br>9,628.0 | 2,875<br>3,200<br>3,700<br>3,974<br>4,582<br>4,986<br>5,802<br>6,530<br>7,849<br>8,785 | 13.2<br>15.0<br>15.0<br>14.0<br>15.0<br>16.0<br>18.0<br>20.0<br>22.0<br>24.0 | 518.0<br>560.0<br>520.0<br>495.0<br>542.0<br>542.0<br>542.0<br>630.0<br>716.0<br>819.0 |

1/ Includes payroll, fuel taxes, and landing fees.
Source: Hawaii State Department of Planning and
Economic Development, The Economic Impact of Tourism in
Hawaii: 1970 to 1980, Research Report 1983-2 (April 1983),
and unpublished 1981-1990 estimates based on the DBED
Input-Output Model and Hawaii Econometric Model.

Table 201.-- ECONOMIC ACTIVITY GENERATED BY VISITOR-RELATED EXPENDITURES: 1970 TO 1990

|  | Visitor-<br>related<br>expendi-<br>tures 1/<br>(million<br>dollars)  | Total sales or output 2/ (million dollars)   | Household income (million dollars)   | State and county tax revenues (million dollars)  | Jobs 2/<br>(1,000)  |
|--|--|--|--|--|---|
| 1974<br>1975<br>1976<br>1977<br>1978<br>1979<br>1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 714.6<br>835.8<br>982.2<br>1,181.6<br>1,408.6<br>1,559.4<br>1,890.8<br>2,093.8<br>2,427.4<br>2,947.7<br>3,406.2<br>3,775.0<br>4,235.0<br>4,483.0<br>5,139.0<br>5,544.0<br>6,362.0<br>7,180.0<br>8,587.0<br>9,628.0 | 1,290.8<br>1,507.0<br>1,766.2<br>2,122.0<br>2,522.3<br>2,751.7<br>3,263.0<br>3,642.9<br>4,238.7<br>5,005.0<br>5,719.5<br>6,265.2<br>7,162.3<br>7,587.9<br>8,655.9<br>9,210.9<br>10,263.7<br>12,028.3<br>12,744.0<br>15,393.4 | 459.7<br>538.6<br>633.6<br>763.5<br>910.7<br>995.9<br>1,184.0<br>1,324.9<br>1,544.2<br>1,826.8<br>2,091.0<br>2,294.1<br>2,627.1<br>2,788.9<br>3,185.6<br>3,390.2<br>3,782.5<br>4,455.2<br>5,100.8<br>5,712.7 | 69.7<br>82.8<br>96.7<br>118.7<br>141.0<br>165.7<br>201.4<br>225.0<br>262.1<br>316.7<br>353.0<br>390.1<br>436.9<br>461.6<br>537.0<br>578.8<br>657.2<br>3/831.0<br>938.4<br>1,049.1<br>1,123.9 | 76.6<br>87.3<br>96.2<br>105.6<br>112.8<br>113.5<br>123.1<br>127.3<br>132.4<br>143.3<br>150.0<br>154.4<br>165.4<br>166.2<br>180.7<br>186.5<br>196.3<br>207.3<br>216.7<br>222.9 |

 $<sup>\</sup>underline{1}$ / Direct expenditures by visitors, airline and ship crews, and overseas airlines.

Source: Hawaii State Department of Planning and Economic Development, The Economic Impact of Tourism in Hawaii: 1980, Research Report 1983-2 (April 1983), and revised 1970-1989 estimates based on the DBED Input-Output Model and Hawaii Econometric Model.

<sup>2/</sup> Direct, indirect, and induced.
3/ Partly reflects visitor accommodations tax enacted in 1986 and effective January 1, 1987.

Table 202. -- ECONOMIC ACTIVITY GENERATED BY VISITOR-RELATED EXPENDITURES, BY INDUSTRY: 1990

|                   | Direct visitor- related expend- itures 1/   | Total<br>sales<br>or out-<br>put 2/  | Total<br>house-<br>hold<br>income  | Jol<br>(1,(   | os<br>000)   |
|-------------------|---|--|--|---|--|
| Year and industry | (million dollars)   | (milTion   | (million dollars)  | Total <u>3</u> /  | Direct<br>only   |
| All industries    | 10,357.0  | 16,478.9   | 6,115.5  | 227.2   | 126.9  |
| Agriculture       | 57.0<br>93.6<br>277.6<br>607.1<br>289.0<br>241.7<br>1,789.3<br>955.8<br>2,902.3<br>705.2<br>1,994.3 | 126.1<br>165.6<br>544.0<br>1,068.6<br>595.4<br>510.0<br>3,489.2<br>2,055.1<br>6,472.2<br>1,452.7 | 55.9<br>57.1<br>144.3<br>346.1<br>228.3<br>220.0<br>1,055.7<br>955.8<br>2,467.0<br>585.3 | 0.7<br>3.6<br>7.0<br>13.6<br>4.4<br>8.3<br>54.7<br>43.4<br>62.8<br>28.7 | 0.4<br>2.2<br>2.2<br>6.1<br>2.2<br>4.0<br>31.8<br>28.4<br>32.5<br>17.1 |

<sup>1/</sup> Direct expenditures by visitors, airline and ship crews, and overseas airlines.

 <sup>2/</sup> Direct, indirect, and induced sales.
 3/ Direct, indirect and induced jobs.
 4/ Expenditure figure refers to mark-up earned, not total sales revenue. Source: Hawaii State Department of Business, Economic Development & Tourism, unpublished estimates based on the DBED Input-Output Model and Hawaii Econometric Model.

Table 203.-- VISITOR INDUSTRY PRICES, PRICE DEFLATOR, AND PRICE INDEXES: 1970 TO 1990

|  | Implicit  | Average  | 1-way ai<br>(doll  | ir fares<br>lars)   | Honolulu<br>index <u>5</u> /                                | consumer<br>(1982-84                                 | price<br>=100)  |
|--|---|--|--|---|---|--|---|
| Year   | price<br>deflator 1/<br>(1982=100)                          | daily room<br>rate 2/<br>(dollars)                           | San Fran-<br>cisco-Hon-<br>olulu <u>3</u> /                        | Honolulu-<br>Kahului <u>4</u> /                             | Eating<br>out   | Apparel,<br>upkeep                                   | All<br>items  |
| 1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976 | 45.2<br>46.1<br>47.1<br>48.9<br>53.0<br>58.3<br>62.5        | 25.74<br>24.28<br>21.83<br>23.64<br>26.56<br>29.75<br>29.54  | 97.30<br>111.35<br>111.35<br>110.63<br>126.64<br>126.64<br>126.64  | 19.00<br>19.00<br>19.00<br>19.64<br>20.64<br>21.38<br>23.00 | 38.6<br>40.4<br>41.7<br>44.3<br>49.9<br>56.9<br>61.5        | 56.2<br>57.4<br>58.9<br>60.6<br>65.1<br>69.0<br>71.6 | 41.5<br>43.2<br>44.6<br>46.6<br>51.5<br>56.3<br>59.1        |
| 1978<br>1979<br>1980<br>1981<br>1982<br>1983         | 73.6<br>81.0<br>88.9<br>95.8<br>100.0<br>104.4              | 38.49<br>44.41<br>47.28<br>49.73<br>51.78<br>54.78           | 129.05<br>141.05<br>211.08<br>296.09<br>328.10<br>353.14           | 27.00<br>29.00<br>41.00<br>51.00<br>48.00<br>49.95          | 69.7<br>75.2<br>81.0<br>88.5<br>95.5<br>100.1               | 78.8<br>83.9<br>89.8<br>94.5<br>98.4<br>101.4        | 66.9<br>74.3<br>83.0<br>91.7<br>97.2<br>99.3                |
| 1984<br>1985<br>1986<br>1987<br>1988<br>1989         | 108.9<br>116.5<br>119.5<br>125.0<br>132.0<br>140.0<br>147.7 | 59.25<br>68.84<br>73.20<br>80.09<br>87.94<br>95.83<br>102.10 | 353.14<br>364.00<br>364.00<br>486.00<br>494.00<br>524.00<br>554.00 | 49.95<br>44.95<br>46.95<br>48.95<br>48.95<br>44.95<br>49.95 | 104.5<br>108.6<br>111.4<br>115.6<br>121.0<br>122.2<br>128.0 | 100.2<br>99.6<br>99.8<br>102.5<br>106.8<br>104.3     | 103.5<br>106.8<br>109.4<br>114.9<br>121.7<br>128.7<br>138.1 |

<sup>1/</sup> For visitor and crew expenditures. From DBED, <u>Hawaii Gross State</u> Product Accounts: 1958-1988 (June 1989), table 1-5, and records.

Source: See above footnotes.

<sup>2/</sup> From Pannell Kerr Forster, Trends in the Hotel Industry, Hawaii (monthly).

<sup>3/</sup> Coach or Economy weekday fare, including taxes, as of July 1, by Pan American World Airways through 1979 and United Airlines thereafter. From chronology in DPED, Statistical Report 103, and Data Book, 1979-1990.

<sup>4/</sup> Kamaaina fare, including taxes, as of July 1, by Hawaiian Airlines. From Chronology in DPED, Statistical Report 103, and Data Book, 1979-1990.

<sup>5/</sup> Honolulu CPI for all urban consumers, from U.S. Bureau of Labor Statistics.

Table 204.-- PER DIEM COST OF BUSINESS TRAVEL TO HONOLULU: 1988

[Average daily expenditure of a business traveler for lodging, food, and car rental in the Honolulu Metropolitan Statistical Area]

| Item                     | Amount<br>(dollars) | Percent<br>of U.S.<br>average 1/ | Rank <u>1</u> /      |
|--------------------------|---------------------|----------------------------------|----------------------|
| Total per diem cost Food |                     | 96.8<br>95.3<br>105.7<br>85.6    | 37<br>40<br>32<br>94 |

NA Not available.

Table 205.-- HAWAII VISITORS BUREAU INCOME AND EXPENDITURES: 1985 TO 1990 [In dollars. Years ended June 30]

| Year                                 | Total   | State appropriations <u>1</u> /   | Private subscriptions  | Other <u>2</u> /   | Expenditures  |
|--------------------------------------|---|---|--|--|---|
| 1985<br>1986<br>1987<br>1988<br>1989 | 5,345,724<br>6,657,841<br>8,652,826<br>13,926,560<br>14,898,387<br>17,666,926 | 4,009,391<br>5,169,391<br>7,069,391<br>12,230,000<br>13,042,708<br>15,888,527 | 1,125,914<br>1,200,112<br>1,242,111<br>1,353,259<br>1,475,965<br>1,566,861 | 210,419<br>288,338<br>341,324<br>343,301<br>379,714<br>211,538 | 5,347,648<br>6,657,704<br>8,652,487<br>13,720,078<br>14,103,399<br>18,534,888 |

<sup>1/</sup> Net after refunds (if any) to the State.

Based on the 100 leading business travel MSAs in the U.S.

<sup>2/</sup> Breakfast, \$7.51; lunch, \$9.81; dinner, \$26.75; tax and 15 percent tip, \$8.48.

Source: "1989 Corporate Travel Index," <u>Corporate Travel</u> (offprint, 1989); Honolulu Star-Bulletin, May 18, 1989, pp. C-1 and C-4.

<sup>2/</sup> May include income from Federal grants, mainland promotional

programs, literature sales, convention servicing, and interest.

Source: Peat, Marwick, Mitchell & Co., Hawaii Visitors Bureau, Financial Statements and Schedules (annual).

# Table 206.-- STATE TOURISM OFFICE BUDGET AND RANK: 1989-90 ACTUAL AND 1990-91 PROJECTED

[Includes Hawaii Visitors Bureau and DBED Tourism Branch]

|                                 | Amount (\$1,000) |                 | Rank (50 states) |         |
|---------------------------------|------------------|-----------------|------------------|---------|
| Category                        | 1989-90          | 1990-91         | 1989-90          | 1990-91 |
| Total budget Advertising budget | 21,999<br>3,337  | 22,348<br>4,714 | 2<br>13          | 2<br>5  |

Source: U.S. Travel Data Center, Survey of State Travel Offices 1990-1991 (March 1991).

Table 207.-- CHARACTERISTICS OF RESIDENTS RETURNING FROM THE MAINLAND: 1985 TO 1990

|                                      | Number   | Median                                       | Males<br>per                                  | Per-<br>sons                                 | Days a                                     | bsent  | Average  |
|--------------------------------------|--|--|---|--|--|--|--|
| Year                                 | return-<br>ing   | age<br>(years)                               | 100<br>females                                | per<br>party <u>1</u> /                      | Median                                     | Mean   | number<br>absent   |
| 1985<br>1986<br>1987<br>1988<br>1989 | 403,450<br>411,440<br>398,580<br>521,000<br>394,080<br>378,640 | 39.2<br>39.7<br>41.7<br>40.0<br>(NA)<br>37.7 | 100.5<br>98.8<br>96.4<br>96.5<br>(NA)<br>83.9 | 1.43<br>1.45<br>1.45<br>1.46<br>2.20<br>1.86 | 12.2<br>11.0<br>10.7<br>10.8<br>9.1<br>9.8 | 15.3<br>14.0<br>13.1<br>13.2<br>12.7<br>13.9 | 16,900<br>15,735<br>14,036<br>18,886<br>13,712<br>14,400 |

NA Not available.

Source: Hawaii State Department of Business and Economic Development, Out-of-State Travel by Hawaii Residents During 1986 (Statistical Report 202, September 22, 1987), table 2; Hawaii Visitors Bureau, 1989 Westbound Visitors to Hawaii (1990), pp. 30-33, and Basic Data Survey, special tabulations.

<sup>1/</sup> Increase after 1988 reflects revised editing procedures, in which nonresponse, previously imputed as 1, was distributed.

Table 208.-- CHARACTERISTICS OF HAWAII RESIDENTS RETURNING FROM OUT-OF-STATE TRIPS, BY DIRECTION OF TRAVEL: 1990

|   | ·  |  |  |
|---|--|--|--|
| Subject   | Total  | Westbound  | Eastbound<br>and<br>northbound                               |
| All returning residents   | 444,200  | 378,640  | 65,560   |
| Purpose of trip: Pleasure Meetings, conventions, incentive Other business Visit friends or relatives Government or military Attend school | 220,090<br>46,910<br>44,510<br>111,990<br>30,920<br>9,470    | 190,500<br>41,290<br>34,310<br>103,240<br>20,410<br>7,530                  | 29,590<br>5,620<br>10,200<br>8,750<br>10,520<br>1,940        |
| Age:     Under 10 years   | (NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA) | 42,747<br>33,509<br>58,393<br>71,365<br>67,909<br>47,841<br>56,877<br>37.7 | (NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA) |
| Sex:  Males  Females  Males per 100 females   | (NA)<br>(NA)<br>(NA)   | 172,701<br>205,939<br>83.9   | (NA)<br>(NA)<br>(NA)   |
| Persons per party   | 1.83   | 1.86   | 1.70   |
| Days absent: Median Mean  | (NA)<br>(NA)   | 9.8  | 14.3<br>19.9   |
| Average number absent   | 17,970   | 14,400   | 3,570  |

NA Not available.

Source: Hawaii Visitors Bureau, Basic Data Survey, special tabulation.

# Table 209.-- INTERISLAND, MAINLAND, AND FOREIGN ROUND TRIPS BY ADULT RESIDENTS OF THE STATE DURING THE PAST 12 MONTHS: 1988 AND 1990

## [Percent distributions]

| Number of trips   | 1988 <u>1</u> /                   | 1990 2/                                 |
|---|-----------------------------------|---|
| INTERISLAND TRIPS   |                                   |   |
| All adult residents  None  1 or 2  3 to 5  6 to 10  11 or more  Average number of trips | 100<br>42<br>30<br>14<br>9<br>5   | 100<br>37<br>29<br>17<br>10<br>6<br>3.3 |
| MAINLAND ROUND TRIPS  |                                   |   |
| All adult residents  None  1  | 100<br>49<br>27<br>21<br>3<br>1.1 | 100<br>44<br>28<br>24<br>4              |
| FOREIGN ROUND TRIPS   |                                   |   |
| All adult residents   | 100<br>83<br>11<br>6<br>0.3       | 100<br>80<br>14<br>7<br>0.6             |

<sup>1/</sup> Based on a telephone survey of 600 adult residents, May 12-19, 1988.

2/ Based on a telephone survey of 511 adult residents January 4-9, 1991.

Source: Omnitrak Research and Marketing Group, Inc., survey cited in

Honolulu Star-Bulletin, May 31, 1988 (p. C-1), June 7, 1988 (p. C-1), and June

14, 1988 (p. B-1), and data supplied January 25, 1991.

Table 210.-- PASSPORTS ISSUED BY HONOLULU OFFICE: 1987 TO 1990

[Calendar year data. The area served by the Honolulu Passport Office includes Hawaii and American Samoa for all years and Guam and the Northern Mariana Islands beginning November 1988]

| Mailing address   | 1987   | 1988 <u>1</u> / | 1989   | 1990   |
|---|--------|-----------------|--------|--------|
| Issued by Honolulu Office Mailed to Hawaii addresses Mailed outside the State | 47,979 | 43,875          | 47,401 | 51,703 |
|   | (NA)   | (NA)            | 36,034 | 33,762 |
|   | (NA)   | (NA)            | 11,367 | 17,941 |

NA Not available.

Table 211.-- ATTENDANCE AT MUSEUMS AND OTHER CULTURAL ATTRACTIONS, BY ISLANDS: 1988 TO 1990

|             | Number of attractions reported      |                                    | I                                  |  |  |  |
|-------------|-------------------------------------|------------------------------------|------------------------------------|--|--|--|
| Island      | 1988                                | 1989                               | 1990                               | 1988   | 1989   | 1990   |
| State total | 76                                  | 74                                 | 75                                 | 20,656,062   | 19,499,480   | 21,045,077   |
| Hawaii      | 13<br>14<br>-<br>3<br>36<br>10<br>- | 13<br>14<br>-<br>3<br>36<br>8<br>- | 11<br>14<br>-<br>3<br>39<br>8<br>- | 5,489,823<br>988,207<br>-<br>18,709<br>13,424,032<br>735,291 | 4,229,628<br>927,470<br>-<br>18,285<br>13,658,342<br>665,755 | 4,411,741<br>908,042<br>-<br>15,463<br>15,004,365<br>705,466 |

<sup>1/</sup> Lahaina Restoration Foundation attractions counted separately. Source: Table 212.

<sup>1/</sup> Includes some passports issued in California.

Source: U.S. Department of State, Passport Services, Honolulu Region, records.

Table 212.-- ATTENDANCE AT MUSEUMS AND OTHER CULTURAL ATTRACTIONS: 1988 TO 1990

[Calendar year data unless otherwise specified. Some 1988 and 1989 data have been revised]

| Island and cultural attraction                           | 1988               | 1989                 | 1990                 |
|--|--------------------|----------------------|----------------------|
| Oahu:  |                    |                      |                      |
| Bernice P. Bishop Museum 1/                              | 362,906            | 302,127              | 325,679              |
| The Contemporary Museum 27                               | 5,000              | 27,009               | 28,098               |
| Damien Museum and Archives                               | 11,026             | 11,598               | 10,848               |
| Dole Cannery Square                                      | 302,000            | 362,000              | 517,000              |
| Dole Plantation  | (NA)               | (NA)                 | 1,029,000            |
| Foster Botanic Garden                                    | 57,532             | 54,865               | 61,240               |
| Fred Ohrt Water Museum                                   | 3,334              | 4,510                | 4,048                |
| Halawa Tunnel  | (NA)               | (NA)                 | 3,091                |
| Halawa Xeriscape Garden 3/                               | -                  | 4,284                | 4,412                |
| Harold L. Lyon Arboretum                                 | 11,795             | 15,371               | 27,100               |
| Hawaii Maritime Center $4/\ldots$                        | 1,952              | 66,500               | 109,200              |
| Hawaii Nature Center                                     | 23,142             | 32,466               | 34,836               |
| Honolulu Academy of Arts 5/                              | 230,736            | 299,219              | 256,654              |
| The Honolulu Advertiser Gallery                          | 27,100             | 27,400               | 27,800               |
| Honolulu Zoo   | 875,825            | 752,207              | 652,276              |
| Hoomaluhia Park  | 59,323             | 59,774               | 70,630               |
| Iolani Palace State Monument 1/                          | 72,000             | 74,000               | 72,000               |
| Mission Houses Museum                                    | 26,746             | 29,788               | 24,902               |
| Moanalua Gardens   | 10,318             | (NA)                 | 21,600               |
| Mormon Temple Grounds (Church of Jesus                   |                    |                      |                      |
| Christ of Latter-Day Saints, Hawaii                      | 272 767            | 210 010              | 245 702              |
| Temple Visitor's Center)                                 | 232,767            | 219,818              | 245,782              |
| National Memorial Cemetery of the Pacific                | 5,623,916          | 6,049,931<br>264,743 | 6,281,431<br>250,354 |
| Paradise Cove Luau Park                                  | 298,198            | 185,457              | 75,142               |
| Paradise Park 6/   | 215,677<br>881,500 | 850,185              | 884,043              |
| Polynesian Cultural Center                               | 7,000              | 9,000                | 6,000                |
| Queen Emma Summer Palace                                 | 23,793             | 20,766               | 23,627               |
| Royal Mausoleum State Monument 1/                        | 74,000             | 77,000               | 18,000               |
| Sea Life Park Hawaii                                     | 739,041            | 740,170              | 692,607              |
| Senator Fong's Plantation and Gardens 7/                 | 32,578             | 55,690               | 79,483               |
| Tropic Lightning Museum 8/                               | 4,500              | 5,350                | 4,416                |
| Ulu Po Heiau State Monument 1/                           | 2,000              | 2,000                | 2,000                |
|  | 108,123            | 125,680              | 137,267              |
| U.S. Army Museum, Ft. DeRussy<br>U.S.S. Arizona Memorial | 1,778,347          | 1,768,587            | 1,870,805            |
| Visiting either Memorial or                              | 1,770,577          | 1,700,507            | 1,070,003            |
| Visitor Center   | 1,462,395          | 1,444,639            | 1,469,676            |
| Aboard non-landing tour boats                            | 315,952            | 323,948              | 401,129              |
| U.S.S. Bowfin WWII Submarine Exhibit                     | 245,742            | 202,571              | 193,172              |
| University of Hawaii Art Gallery                         | 50,000             | 50,000               | 50,000               |
| Wahiawa Botanical Garden                                 | 17,400             | 13,248               | 19,298               |
| Waikiki Aquarium 1/                                      | 341,819            | 300,750              | 303,297              |
| manage reposit and an                                    |                    | ,                    |                      |

Table 212.-- ATTENDANCE AT MUSEUMS AND OTHER CULTURAL ATTRACTIONS: 1988 TO 1990 -- Con.

| Talandan 1 and and a share a single                             | 1000              | 1000                | 1000                |
|---|-------------------|---------------------|---------------------|
| Island and cultural attraction                                  | 1988              | 1989                | 1990                |
| Oahu - con.:  |                   |                     |                     |
| Waimea Falls Park 9/  | 654,896           | 580,020             | 567,952             |
| Waipahu Cultural Garden Park                                    | 12,000            | 14,258              | 19,275              |
| Hawaii:   |                   |                     |                     |
| Hawaii Tropical Botanical Garden                                | 33,051            | 35,466              | 42,440              |
| Greenwell Store Museum  | 5,000             | 5,000               | 5,000               |
| Hulihee Palace  | 25,470            | 27,716              | 27,368              |
| Jagger Museum   | 1,900,000         | 2,000,000           | 2,000,000           |
| Kealakekua Bay State Historical Park 1/. Kilauea Visitor Center | 62,000            | 47,000<br>1,800,000 | 51,000<br>2,000,000 |
| Lapakahi State Historical Park 1/                               | 69,000            | 77,000              | 101,000             |
| Lyman House Memorial Museum                                     | 16,414            | 16,847              | 18,913              |
| Panaewa Rainforest Zoo  | 69,814            | 77,133              | 76,118              |
| Parker Ranch Historic Homes 10/                                 | (NA)              | 28,710              | (NA)                |
| Parker Ranch Visitor Center                                     | 28,000            | 31,000              | (NA)                |
| Volcano Art Center 11/  | 52,470            | 55,450              | 58,500              |
| Wahaula Visitor Center 12/                                      | 1,400,000         | (NA)                | -                   |
| Wailoa Center   | 28,604            | 28,306              | 31,402              |
| Maui:   |                   |                     |                     |
| Alexander & Baldwin Sugar Museum                                | 24,517            | 28,629              | 30,676              |
| Halekii-Pihana Heiaus State Monument $1$ /.                     | 38,000            | 35,000              | 11,000              |
| Hale Wai Wai O Hana   | 8,266             | 8,035               | 9,664               |
| Kula Botanical Gardens  | 19,750            | 20,021              | 20,305              |
| Lahaina Restoration Foundation  Baldwin Missionary Home Museum  | 174,827<br>46,302 | 159,320<br>50,969   | 187,637<br>47,667   |
| Brig Carthaginian 13/   | 52,185            | 21,139              | 48,400              |
| Hale Pa'ahao (Old Lahaina Prison) 14/.                          | 17,650            | 25,340              | 30,770              |
| Hale Pa'i Printing House  | 6,200             | 5,400               | 4,800               |
| Kalaupapa Lighthouse Lens Exhibit 15/.                          | 19,910            | 22,082              | 12,600              |
| Wo Hing Temple Museum   | 32,580            | 34,390              | 43,400              |
| Maui Historical Society Museum                                  | 17,682            | 18,495              | 14,207              |
| Maui Tropical Plantation  | 455,000           | 397,458             | 381,843             |
| Maui Zoological & Botanical Gardens                             | 67,000            | 70,200              | 36,000              |
| Whalers Village Museum  | 183,165           | 190,312             | 216,710             |
| Kauai:  |                   |                     |                     |
| Coco Palms Zoo <u>16</u> /                                      | 6,142             | (NA)                | (NA)                |
| Grove Farm Homestead 17/  | 4,408             | 3,627               | 4,290               |
| Hanalei Museum 18/  | 6,500             | (NA)                | 1 265               |
| Ho'opulapula Haraguchi Rice Mill 19/                            | 350               | 625                 | 1,265               |
| Kauai Museum 20/  | 29,268            | 29,756              | 28,656              |
| Kilauea National Wildlife Refuge                                | 247,698           | 204,731             | 242,215             |
| Kokee Natural History Museum                                    | 95,213            | 101,000             | 96,684              |

Continued on next page.

Table 212. -- ATTENDANCE AT MUSEUMS AND OTHER CULTURAL ATTRACTIONS: 1988 TO 1990 -- Con.

| Island and cultural attraction   | 1988             | 1989             | 1990             |
|--|------------------|------------------|------------------|
| Kauai - con.:  |                  |                  |                  |
| National Tropical Botanical Garden Russian Fort Elizabeth State Historical | 12,000           | 16,000           | 15,000           |
| Park 21/<br>Waioli Mission House 17/                                       | 331,000<br>2,712 | 308,000<br>1,956 | 315,000<br>2,356 |
| Molokai:   |                  |                  |                  |
| Kalaupapa Settlement   | 7,900            | 8,439            | 8,264            |
| Molokai Ranch Wildlife Park  | 5,919<br>4,890   | 5,920<br>3,926   | 4,854<br>2,345   |

- NA Not available.
- Years ended June 30. 1/
- $\frac{\overline{2}}{3}$ / Opened October 1988.
- Opened September 30, 1989.
- Closed for renovation during first 11 months of 1988.
- 5/ Includes Academy Theatre (56,151 in 1988, 109,119 in 1989, and 63,430 in  $199\overline{0}$ ).
  - Closed June 1990-January 1991. 6/
  - 7/ Opened April 11, 1988.
  - Closed November 1, 1990-October 1991.
  - Closed November 20, 1990-early 1991 for repairs. ছ/
  - $1\overline{0}/$ Opened December 1, 1988.
  - $\overline{11}$ / Revised figure for 1987 was 50,750.
  - Destroyed July 1989.
  - $\frac{\overline{12}}{\overline{13}}$ Closed September 1, 1988 to June 30, 1989 for repairs.
  - $\overline{14}$ Opened in April 1988.
  - $\overline{15}/$ Opened April 1987. Closed June 30, 1990.
  - Closed February 8, 1990. 16/
  - Closed 2 months in 1989 for repairs.
  - Closed July 1989.
  - Open primarily for school children and senior groups.
- 20/ Closed one week in September 1990. 21/ Years ended June 30. Attendance estimates reflect heavy use of restrooms by tour bus passengers.
  - 22/ Opened to general public December 5, 1988.

Source: Hawaii State Department of Business, Economic Development & Tourism, annual mail and telephone survey of attractions.

Table 213.-- HONOLULU SYMPHONY ORCHESTRA: 1980-1981 TO 1990-1991

| Season  | Average<br>number of<br>orchestra<br>personnel     | Number of performances  | Total<br>attendance   | Operating expenses (dollars)  |
|---|--|---|---|---|
| 1980-1981<br>1981-1982<br>1982-1983<br>1983-1984<br>1984-1985<br>1985-1986<br>1986-1987 1/<br>1987-1988<br>1988-1989<br>1989-1990 | 80<br>80<br>80<br>80<br>80<br>80<br>79<br>80<br>80 | 107<br>109<br>142<br>133<br>120<br>137<br>85<br>127<br>134<br>141 | 155,622<br>168,900<br>204,193<br>194,600<br>167,500<br>208,370<br>139,703<br>184,897<br>215,808<br>183,434<br>160,214 | 2,211,082<br>2,627,293<br>2,817,196<br>2,562,500<br>2,966,700<br>3,053,257<br>2,394,804<br>4,143,347<br>4,234,275<br>4,978,813<br>5,465,467 |

<sup>1/</sup> Season shortened by musicians' strike, Aug. 8-Nov. 26, 1986. Source: Honolulu Symphony Society, records.

Table 214.-- PERFORMING ARTS STATISTICAL SUMMARY, FOR OAHU: 1979-1980 TO 1989-1990 SEASONS

| Season    | Number<br>of groups<br>reporting                               | Productions  | Performances  | Attendance  |
|-----------|--|--|---|---|
| 1979-1980 | 12<br>13<br>12<br>13<br>13<br>12<br>12<br>12<br>12<br>12<br>12 | 183<br>254<br>500<br>502<br>695<br>773<br>353<br>439<br>385<br>385<br>382<br>377 | 1,178 1,128 1,300 1,376 1,734 1,809 1,245 1,354 1,610 1,545 1,419 | 723,581<br>830,585<br>804,647<br>936,821<br>1,060,367<br>1,086,930<br>845,328<br>875,063<br>1,248,828<br>1,154,107<br>967,105 |

Source: DBED mail and telephone surveys.

Table 215.-- PERFORMING ARTS, FOR OAHU: 1989-1990 SEASON

| Name of organization and type of performance   | Produc-<br>tions                              | Perform-<br>ances                           | Attend-<br>ance   |
|--|---|---|---|
| All reporting groups   | 377   | 1,419                                       | 967,105   |
| Brigham Young University - Hawaii Campus Chaminade University of Honolulu Hawaii Loa College 1/ Diamond Head Theatre (formerly Honolulu Community Theatre)  Honolulu Department of Auditoriums, total Ballets Concerts Operas Rock shows | 6<br>2<br>2<br>8<br>105<br>1<br>75<br>3<br>11 | 14<br>8<br>8<br>121<br>188<br>6<br>107<br>9 | 4,700<br>840<br>560<br>42,957<br>447,304<br>13,866<br>232,200<br>17,697<br>63,270 |
| Other dramatic and musical productions  Honolulu Theatre for Youth  Leeward Community College  Manoa Valley Theatre  The Starving Artists' Theatre Company  Adults  Children   | 15<br>8<br>53<br>7<br>11<br>6<br>5            | 54<br>286<br>193<br>129<br>165<br>90<br>75  | 120,271<br>121,771<br>79,678<br>21,266<br>39,424<br>5,824<br>33,600               |
| U.S. Army Support Command, total   | 153<br>4<br>72<br>77                          | 177<br>28<br>72                             | 163,577<br>11,992<br>31,044<br>120,541  |
| University of Hawaii at Manoa  | 19<br>3                                       | 110<br>20                                   | 42,012<br>3,016   |

Source: DBED mail and telephone survey.

Table 216.-- RESIDENT AND VISITOR PARTICIPATION IN RECREATIONAL ACTIVITIES: 1989

[Percent. Based on a telephone survey of 1,017 responding residents, made in Nov.-Dec. 1989, and an intercept survey of 1,002 responding visitors, questioned at four airports during August 1989]

|  | Residents                                   |  |   |   | Visitors                                |   |
|--|---|--|---|---|---|---|
|  | At least once A                             |  | Average day   |   | At                                      |   |
| Activity                               | Week-<br>end <u>1</u> /                     | Week-<br>day <u>2</u> /                        | Week-<br>end <u>3</u> /                             | Week-<br>day <u>4</u> /                                   | least<br>once <u>5</u> /                | Average<br>day <u>6</u> /                 |
| Bodysurfing or bodyboarding .  Surfing | 3<br>(Z)<br>(Z)<br>1<br>1<br>2<br>15        | 2<br>1<br>(Z)<br>(Z)<br>1<br>1<br>1<br>1<br>6  | 2<br>(Z)<br>(Z)<br>(Z)<br>(Z)<br>1<br>(Z)<br>1<br>8 | 1<br>(Z)<br>(Z)<br>(Z)<br>(Z)<br>(Z)<br>(Z)<br>(Z)<br>(Z) | 16<br>5<br>1<br>2<br><br>26<br>39<br>85 | 6<br>1<br>(Z)<br>(Z)<br><br>5<br>11<br>30 |
| Swimming at public pools 7/.  Golfing  | 1<br>2<br>3<br>3<br>(Z)<br>1<br>1<br>8<br>4 | 1<br>2<br>3<br>4<br>(Z)<br>(Z)<br>1<br>16<br>6 | (Z)<br>1<br>2<br>2<br>(Z)<br>(Z)<br>1<br>7<br>3     | (Z)<br>1<br>1<br>(Z)<br>0<br>(Z)<br>7<br>3                | 8<br><br>10<br><br>2<br>16<br>          | <br>2<br><br>3<br><br>4<br>               |

- Z Less than one-half of 1 percent.
- 1/ Percent of residents participating at least once during last two weekend days.
- 2/ Percent of residents participating at least once during last five weekdays.
  - 3/ Percent of residents participating on any given weekend day.
  - 4/ Percent of residents participating on any given weekday.
- $\overline{5}$ / Percent of visitors participating at least once during stay on given island.
  - 6/ Percent of visitors participating any given August day.
  - 7/ Not tabulated for visitors.
  - 8/ Snorkeling, scuba, or extended freediving.
  - 9/ Swimming, sunbathing, picknicking, etc.

Source: Hawaii State Department of Land and Natural Resources, State Recreation Functional Plan, Technical Reference Document (Dec. 1990), pp. 27-28 and 38.

Table 217.-- NATIONAL PARKS: 1980 TO 1990

|  | Acrea  |  |  |   |
|--|--|--|--|---|
| Year and area  | Total  | Federa1  | Non-<br>federal  | Visits <u>2</u> /   |
| 1980   | 247,488<br>247,488<br>247,349<br>247,349<br>247,349<br>247,349<br>247,349<br>247,349<br>247,349<br>247,349 | 235,243<br>235,243<br>235,243<br>235,243<br>235,243<br>235,565<br>235,565<br>235,662<br>235,624<br>235,885 | 12,245<br>12,245<br>12,245<br>12,106<br>12,106<br>12,106<br>11,784<br>11,784<br>11,725<br>11,725<br>11,464 | 3,479,797<br>4,225,217<br>4,950,621<br>5,252,385<br>5,429,289<br>4,029,929<br>4,736,281<br>5,225,641<br>5,198,428<br>5,558,227<br>5,607,148 |
| Hawaii Volcanoes National Park Haleakala National Park Pu'uhonua o Honaunau National Historical Park Kaloko-Honokohau National Historical Park Pu'ukohola Heiau National Historic Site U.S.S. Arizona Memorial 3/ Kalaupapa National Historical Park | 207,643<br>27,350<br>181<br>1,161<br>100<br>12<br>10,902   | 207,643<br>27,350<br>181<br>616<br>60<br>12<br>23  | 545<br>40<br>-<br>10,879   | 2,368,219<br>1,289,903<br>392,366<br>23,586<br>63,398<br>1,469,676<br>(NA)  |

NA Not available.

Source: U.S. Department of the Interior, National Park Service, Pacific Area Office, records.

<sup>1/</sup> Data exclude the Olaa Forest Tract. This 9,654-acre tract is entirely in Federal ownership, is managed by the National Park Service, and has been designated as part of the wilderness system by the Congress, but it is not within the legally authorized boundary of Hawaii Volcanoes National Park.

<sup>2/</sup> Decline in 1985 reflects use of new benchmark data for Hawaii Volcanoes National Park estimates, rather than an actual drop in visits.

<sup>3/</sup> The U.S.S. Arizona Memorial is wholly within the Pearl Harbor Naval Base. The acreage figure is the approximate extent of the total area over which the National Park Service has been granted use rights by the U.S. Navy.

Table 218.-- STATE PARKS AND HISTORIC SITES: 1981 TO 1991

|  | Number<br>of areas,                                      | Acreage  | Recreation<br>visits,<br>year ended<br>June 30  |   |
|--|--|--|---|---|
| Year and island  | June 30  | Total  | Developed   | (1,000)   |
| 1980          1981          1982          1983          1984          1985          1986          1987          1988          1989          1990          1991 | 66<br>71<br>72<br>74<br>74<br>74<br>76<br>76<br>77<br>77 | 20,637<br>20,836<br>20,885<br>20,564<br>24,751<br>24,799<br>24,865<br>24,909<br>24,853<br>24,877<br>24,857<br>24,857 | 916.7<br>937.8<br>937.8<br>980.1<br>979.1<br>882.1<br>882.1<br>883.6<br>884.9<br>887.6<br>887.3 | 17,169 15,611 18,111 17,246 19,406 19,908 19,680 20,068 18,488 17,270 19,727 19,022 |
| ISLANDS: 1990  |  |  | ·   |   |
| Hawaii   | 20<br>12<br>1<br>33<br>11                                | 1,361.4<br>343.1<br>233.7<br>9,130.6<br>13,788.0   | 281.6<br>56.0<br>10.0<br>396.7<br>143.0   | 4,307<br>3,611<br>81<br>2,984<br>8,744  |
| ISLANDS: 1991  |  |  |   |   |
| Hawaii   | 20<br>12<br>1<br>33<br>11                                | 1,355.0<br>348.6<br>233.7<br>9,170.5<br>13,788.0   | 281.6<br>56.0<br>10.0<br>406.7<br>143.0   | 4,592<br>2,698<br>72<br>3,178<br>8,482  |

Source: Hawaii State Department of Land and Natural Resources, Division of State Parks, records.

Table 219.-- MAJOR STATE PARKS: 1990 AND 1991
[Parks having at least 700,000 recreation visits or 1,000 acres]

| Acreage, June 30   |  | Recreation<br>visits, year<br>ended June 30  |  |
|--|--|--|--|
| Total  | Developed  | (1,000)  |  |
|  |  |  |  |
| 1,125.9<br>65.7<br>61.8<br>1,866.4<br>122.1<br>4,345.0<br>103.7<br>6,175.0<br>5,220.3<br>1,374.2 | 50.4<br>2.0<br>20.7<br>10.0<br>18.0<br>55.0<br>20.4<br>4.0<br>20.0<br>10.0   | 3,880<br>1,974<br>1,135<br>930<br>879<br>867<br>796  |  |
|  |  |  |  |
| 1,125.9<br>65.7<br>4,345.0<br>1,866.4<br>61.8<br>16.3<br>103.7<br>6,175.0<br>5,248.2<br>1,374.2  | 50.4<br>2.0<br>55.0<br>10.0<br>20.7<br>3.5<br>20.4<br>4.0<br>20.0<br>10.0  | 3,610<br>1,864<br>1,078<br>901<br>846<br>806<br>768<br>102<br>67<br>70   |  |
|  | Total  1,125.9 65.7 61.8 1,866.4 122.1 4,345.0 103.7 6,175.0 5,220.3 1,374.2  1,125.9 65.7 4,345.0 1,866.4 61.8 16.3 103.7 6,175.0 5,248.2 | Total Developed  1,125.9 50.4 65.7 2.0 61.8 20.7 1,866.4 10.0 122.1 18.0 4,345.0 55.0 103.7 20.4  6,175.0 4.0 5,220.3 20.0 1,374.2 10.0  1,125.9 50.4 65.7 2.0 4,345.0 55.0 1,866.4 10.0 61.8 20.7 16.3 3.5 103.7 20.4  6,175.0 4.0 5,248.2 20.0 |  |

<sup>1/</sup> Seven separate areas in both 1990 and 1991.
 Source: Hawaii State Department of Land and Natural Resources,
Division of State Parks, records.

Table 220.-- NATIONAL AND STATE HISTORIC SITES, BY ISLANDS: 1991

| Island   | Total sites <u>1</u> /                 | Listed<br>Hawaii<br>Register<br>only | Listed<br>National<br>Register<br>only | Listed both<br>Hawaii and<br>National<br>Register | Eligible<br>for Nat'l<br>Register <u>1</u> / |
|--|--|--------------------------------------|--|---|--|
| State total                                    | 464                                    | 188                                  | 99                                     | 137   | 40   |
| Hawaii Maui Kahoolawe Lanai Molokai Oahu Kauai | 116<br>45<br>1<br>3<br>44<br>182<br>73 | 60<br>30<br>-<br>1<br>14<br>42<br>41 | 19<br>5<br>1<br>1<br>3<br>65<br>5      | 28<br>9<br>-<br>1<br>24<br>53<br>22               | 9<br>1<br>-<br>-<br>3<br>22<br>5             |

<sup>1/</sup> Sites declared eligible for National Register listing by the National Board.

Source: Hawaii State Department of Land and Natural Resources, Historic Sites Division, records.

Table 221.-- COUNTY PARKS, BY ISLANDS: 1985 TO 1990
[As of December 31]

| Subject   | 1985  | 1986  | 1987  | 1988  | 1989  | 1990  |
|---|-------|-------|-------|-------|-------|-------|
| Number, total Hawaii Maui Lanai Molokai Oahu Kauai  | 551   | 560   | 561   | 569   | 575   | 582   |
|   | 134   | 141   | 141   | 142   | 142   | 142   |
|   | 80    | 82    | 83    | 85    | 86    | 90    |
|   | 3     | 3     | 3     | 4     | 4     | 4     |
|   | 11    | 11    | 12    | 13    | 13    | 13    |
|   | 266   | 266   | 265   | 266   | 271   | 274   |
|   | 57    | 57    | 57    | 59    | 59    | 59    |
| Acreage, total Hawaii Maui Lanai Molokai Oahu Kauai | 8,222 | 8,227 | 8,324 | 8,336 | 8,506 | 8,593 |
|   | 1,434 | 1,424 | 1,428 | 1,430 | 1,430 | 1,430 |
|   | 899   | 905   | 917   | 926   | 928   | 942   |
|   | 7     | 7     | 7     | 15    | 15    | 15    |
|   | 54    | 54    | 58    | 73    | 73    | 73    |
|   | 5,242 | 5,251 | 5,328 | 5,356 | 5,524 | 5,599 |
|   | 586   | 586   | 586   | 536   | 536   | 534   |

Source: Compiled by the Hawaii State Department of Business, Economic Development & Tourism from data provided by County parks and recreation departments.

Table 222.-- AQUATIC COLLECTIONS: DECEMBER 31, 1990 [For annual attendance, 1988-1990, see table 220]

|                 | Sea L                         | ife Park                    | Waikiki Aquarium     |                      |  |
|-----------------|-------------------------------|-----------------------------|----------------------|----------------------|--|
| Phylum or class | Species                       | Individuals                 | Species              | Individuals          |  |
| Total           | 265                           | 16,123                      | 289                  | 1,200                |  |
| Fishes          | 145<br>3<br><u>1/6</u><br>111 | 4,000<br>42<br>81<br>12,000 | 170<br>3<br>1<br>115 | 530<br>4<br>2<br>664 |  |

1/ Plus 1 hybrid.

Source: Sea Life Park, records; Waikiki Aquarium, records.

Table 223.-- ZOOS: 1988 TO 1990

| Subject and zoo  | 1988    | 1989    | 1990    |
|--|---------|---------|---------|
| Species: 1/ Honolulu Zoo   | 222     | 197     | 221     |
|  | 33      | 35      | 33      |
|  | 10      | 10      | 10      |
|  | 53      | 57      | 57      |
| Individuals: 1/ Honolulu Zoo   | 877     | 711     | 832     |
|  | 157     | 153     | 164     |
|  | 806     | 1,019   | 969     |
|  | 175     | 195     | 185     |
| Attendance: Honolulu Zoo Maui Zoological & Botanical Gardens . Molokai Ranch Wildlife Park Panaewa Rainforest Zoo (Hilo) | 875,825 | 752,207 | 652,276 |
|  | 67,000  | 70,200  | 36,000  |
|  | 5,919   | 5,920   | 4,854   |
|  | 69,814  | 77,133  | 76,118  |

<sup>1/</sup> Animal and bird inventory, December 31.

Source: Data obtained by Hawaii State Department of Business,
Economic Development & Tourism from Molokai Ranch Wildlife Park and the
parks and recreation departments of the City and County of Honolulu and Counties of Hawaii and Maui.

Table 224.-- ATTENDANCE AND WATER SAFETY AT GUARDED BEACH PARKS, FOR THE CITY AND COUNTY OF HONOLULU: 1991

[Year ended June 30]

| <u></u>    |                 |      |          |         |      |        |         |
|------------|-----------------|------|----------|---------|------|--------|---------|
|            |                 | Acti | vity (pe | ercent) |      |        | Surfing |
|            | Attend-         | _    |          | _       | Res- | Drown- | acci-   |
| Beach park | ance <u>1</u> / | Sun  | Swim     | Surf    | cues | ings   | dents   |
|            |                 |      |          |         |      |        |         |
| All parks  | 18,938,860      | 65   | 22       | 13      | 625  | 10     | 202     |
| Ala Moana  | 1,380,347       | 60   | 31       | 9       | 34   | 2      | 12      |
| Waikiki    | 11,339,162      | 84   | 11       | 6       | 79   | 1      | 51      |
| Hanauma    | 1,952,795       | 74   | 26       | _       | 74   | 2      | 3       |
| Sandy      | 677,896         | 61   | 13       | 26      | 150  | 2      | 61      |
| Makapuu    | 255,244         | 47   | 21       | 32      | 61   | 2      | 12      |
| Bellows    | 114,117         | 65   | 17       | 18      | 3    | _      | -       |
| Kailua     | 472,876         | 71   | 20       | 9       | 14   | _      | 1       |
| Kualoa     | 30,709          | 69   | 30       | ĺ       |      | _      | -       |
| Sunset     | 280,196         | 70   | 16       | 15      | 13   | · _    | 5       |
| Ehukai     | 181,639         | 63   | 11       | 26      | 16   | 1      | 15      |
| Ke Waena   | 189,944         | 63   | 12       | 25      | 7    | -      | 10      |
| Waimea     | 450,638         | 80   | 19       | 1       | 59   | _      | 11      |
| Alii       | 259,409         | 71   | 18       | 12      | 23   | -      | 10      |
| Nanakuli   | 400,380         | 64   | 35       | 1       | 32   |        | 6       |
| Maili      | 167,139         | 57   | 29       | 14      | 18   | -      | 1       |
| Pokai Bay  | 436,870         | 59   | 40       | 1       | 8    | -      | -       |
| Makaha     | 349,499         | 55   | 24       | 21      | 34   |        | 4       |
|            | ·               |      |          |         |      |        |         |

<sup>1/</sup> Based on headcounts taken at approximately two-hour intervals by Water Safety Officers over an 8-hour work day.

Source: City and County of Honolulu, Department of Parks and Recreation, Water Safety Division, records.

Table 225.-- SWIMMING AND SURFING SITES, BY ISLANDS

| Subject                                       | Six<br>islands         | Hawaii              | Maui                | Lanai | Molo-<br>kai | Oahu                 | Kauai               |
|---|------------------------|---------------------|---------------------|-------|--------------|----------------------|---------------------|
| Miles of sandy shoreline 1/  Primary 2/ Other | 184.9<br>24.4<br>160.5 | 19.4<br>1.2<br>18.2 | 32.6<br>7.9<br>24.7 | 18.2  | 23.2         | 50.3<br>12.5<br>37.8 | 41.2<br>2.8<br>38.4 |
| Number of surfing sites 3/                    | 1,600                  | 185                 | 212                 | 99    | 180          | 594                  | 330                 |

<sup>1/</sup> Surveyed in 1962. For specific beaches, see present volume, table 131.

Source: Hawaii State Department of Planning and Economic Development, Hawaii's Shoreline (1965), p. 7; Surfing Education Association, The 1971
Statewide Surfing Site Survey, Vol. 1, p. 93.

Table 226.-- COUNTY TENNIS FACILITIES: 1989 AND 1990
[As of December 31]

| Subject                 | State<br>total | Hawaii   | Maui     | Lanai  | Molokai | Oahu       | Kauai    |
|-------------------------|----------------|----------|----------|--------|---------|------------|----------|
| Locations: 1989         | 89<br>89       | 20<br>20 | 11<br>11 | 1<br>1 | 1<br>1  | 46<br>46   | 10<br>10 |
| Courts:<br>1989<br>1990 | 282<br>279     | 44<br>44 | 33<br>32 | 2<br>2 | 4<br>2  | 175<br>175 | 24<br>24 |

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

 <sup>2/</sup> Safe, clean, accessible, and generally suitable for swimming.
 3/ Surveyed in 1971. A surfing site is defined as "a specific

<sup>3/</sup> Surveyed in 1971. A surfing site is defined as 'a specific wave-breaking zone caused by a shoal and having sufficient consistency to be identified as a surfable riding area, either seasonally or in a combination of seasons, e.g., Queen's Surf, Waikiki."

Table 227.-- GOLF COURSES, BY NUMBER OF HOLES, OWNERSHIP, AND ISLANDS: FEBRUARY 1991

| Chatus inland                      |                    | Number of        | golf course        | S           | Number<br>of            |
|------------------------------------|--------------------|------------------|--------------------|-------------|-------------------------|
| Status, island, and ownership      | Total              | 9-hole           | 18-hole            | 27-hole     | holes                   |
| State total                        | 65                 | 11               | 52                 | 2           | 1,089                   |
| Hawaii                             | 12<br>1<br>11      | 2<br>-<br>2      | 9<br>1<br>8        | 1<br>-<br>1 | 207<br>18<br>189        |
| Maui  Municipal  Private           | 11<br>1<br>10      | 1<br>-<br>1      | 10<br>1<br>9       | -<br>-<br>- | 189<br>18<br>171        |
| Lanai<br>Private                   | 1<br>1             | 1<br>1           | -<br>-             | -<br>-      | 9<br>9                  |
| Molokai<br>Private                 | 2<br>2             | 1<br>1           | 1<br>1             | -           | 27<br>27                |
| Oahu  Military  Municipal  Private | 30<br>9<br>5<br>16 | 5<br>3<br>1<br>1 | 25<br>6<br>4<br>15 | -<br>-<br>- | 495<br>135<br>81<br>279 |
| Kauai                              | 9<br>1<br>8        | 1 - 1            | 7<br>1<br>6        | 1<br>-<br>1 | 162<br>18<br>144        |

Source: Compiled by Hawaii State Department of Business, Economic Development & Tourism from county departments of parks and recreation.

Table 228.-- COUNTY GOLF COURSES AND CAMPING PERMITS, FOR OAHU: 1985 TO 1990

|               | Pu                    | Camping                          |  |  |
|---------------|-----------------------|----------------------------------|--|--|
| Calendar year | Courses               | Holes                            | Rounds<br>played   | permits<br>issued 1/                               |
| 1985          | 4<br>4<br>4<br>5<br>5 | 63<br>63<br>63<br>63<br>81<br>81 | 484,594<br>536,204<br>548,668<br>545,547<br>555,671<br>519,563 | 6,937<br>8,049<br>8,352<br>8,261<br>7,773<br>9,865 |

1/ By the City and County of Honolulu.

Source: City and County of Honolulu, Department of Parks and Recreation, records.

Table 229.-- HAWAIIAN OPEN SCORES AND PURSES: 1986 TO 1991

[The Hawaiian Open is held at the Waialae Country Club golf course. Distance is 6,975 yards; par is 72. For annual data back to 1965, see <u>Data Book 1986</u>, table 247]

|   |                                  | Winning                                 | g score                         | Purse (dollars)  |   |  |
|---|----------------------------------|---|---------------------------------|--|---|--|
| Year                                    | Holes                            | Total                                   | Below<br>par                    | Total  | Winner  |  |
| 1986<br>1987<br>1988<br>1989 1/<br>1990 | 72<br>72<br>72<br>54<br>72<br>72 | 272<br>*270<br>271<br>197<br>279<br>270 | 16<br>18<br>17<br>19<br>9<br>18 | 500,000<br>600,000<br>600,000<br>750,000<br>1,000,000<br>1,100,000 | 90,000<br>108,000<br>108,000<br>135,000<br>180,000<br>198,000 |  |

<sup>\*</sup> Sudden-death playoff.

1/ Reduced to 54 holes because of rain delays.

Source: Sunday Star-Bulletin and Advertiser, February 1, 1987, p. D-13; Honolulu Advertiser, February 9, 1987, p. F-1, February 15, 1988, p. C-1, and February 13, 1989, pp. C-1 and C-4, and February 12, 1990, p. C-4; Hawaiian Open, records.

Table 230.-- PUBLIC HUNTING AREAS AND WILDLIFE SANCTUARIES AND REFUGES, BY ISLANDS: APRIL 1991

|  | Public hunting areas          |   | Nati<br>Wild<br>Refug      | life                                    | Other wildlife<br>sanctuaries<br>and refuges |                                     |
|--|-------------------------------|---|----------------------------|---|--|-------------------------------------|
| Island   | Number                        | 1,000<br>acres                                  | Number                     | 1,000<br>acres                          | Number                                       | 1,000<br>acres                      |
| State total  | 61                            | 1,044.8   | 7                          | 271.0                                   | 12   | 83.9                                |
| Hawaii Maui Lanai Molokai Oahu Kauai Other islands | 27<br>8<br>1<br>3<br>11<br>11 | 747.4<br>103.6<br>35.6<br>27.5<br>24.0<br>106.7 | 1<br>-<br>1<br>2<br>3<br>1 | 15.0<br>-<br>0.0<br>0.2<br>1.2<br>254.6 | 5<br>2<br>-<br>-<br>5<br>( <u>2</u> /)       | 82.8<br>0.1<br>-<br>0.7<br>-<br>0.3 |

<sup>1/</sup> U.S. Fish and Wildlife Service.

Source: Hawaii State Department of Land and Natural Resources, Division of Forestry and Wildlife, records.

Table 231.-- FISHING AND HUNTING LICENSES ISSUED: 1986 TO 1991

[Years ended June 30]

| Type of license         | 1986   | 1987   | 1988   | 1989   | 1990   | 1991   |
|-------------------------|--------|--------|--------|--------|--------|--------|
| Freshwater game fishing | 8,200  | 8,669  | 10,512 | 9,565  | 10,010 | 9,250  |
|                         | 12,776 | 12,748 | 13,469 | 12,714 | 13,805 | 10,529 |

Source: Hawaii State Department of Land and Natural Resources, Division of Conservation and Resources Enforcement, records.

 $<sup>\</sup>overline{2}$ / The Hawaii State Seabird Sanctuary is comprised of 36 islets offshore all major islands, including Kure Atoll in the Northwestern Hawaiian Islands. This sanctuary is administered out of the Oahu District office.

Table 232.-- SPORTS FISHING AND HUNTING BY PERSONS 16 YEARS AND OVER, BY RESIDENCE STATUS: 1985

|   | In Hawa   | Hawaii<br>residents, |         |
|---|-----------|----------------------|---------|
| Activity and characteristic   | Hawaii    | Nonres-              | outside |
|   | residents | idents               | Hawaii  |
| Fishing: Persons fishing (1,000) Days of fishing (1,000) Per person | 140       | 55                   | 14      |
|   | 3,197     | 291                  | 116     |
|   | 23        | 5                    | 8       |
| Hunting: Persons hunting (1,000) Days of hunting (1,000) Per person | 22        | 2                    | 2       |
|   | 542       | 5                    | 36      |
|   | 25        | (B)                  | (B)     |

B Sample size too small to report data reliably. Source: U.S. Department of the Interior, Fish and Wildlife Service, 1985 National Survey of Fishing, Hunting, and Wildlife Associated Recreation (November 1988), pp. 117, 118, 128, and 129.

Table 233.-- HONOLULU MARATHON REGISTRANTS, FINISHERS AND WINNING TIMES: 1985 TO 1991

|  | Number of   | Number of   | Winning time (hr., min., sec  |   |  |
|--|---|---|---|---|--|
| Year   | registrants   | finishers   | Men   | Women   |  |
| 1985<br>1986<br>1987<br>1988<br>1989<br>1990 | 9,310<br>10,354<br>10,413<br>10,205<br>10,814<br>13,268<br>14,603 | 8,287<br>8,563<br>8,793<br>8,808<br>9,673<br>11,849<br>13,038 | 2:12:08<br>2:11:43<br>2:18:26<br>2:12:47<br>2:11:47<br>2:17:29<br>2:18:24 | 2:35:51<br>2:31:01<br>2:35:11<br>2:41:52<br>2:31:50<br>2:33:34<br>2:40:11 |  |

Source: Honolulu Marathon Association, records.

Table 234.-- IRONMAN TRIATHLON WORLD CHAMPIONSHIP REGISTRANTS, FINISHERS, AND WINNING TIMES: 1986 TO 1991

|                                      | Number of  | Number of  | Winning time (hr., min., sec.)                                 |  |  |
|--------------------------------------|--|--|--|--|--|
| Year                                 | registrants  | Number of finishers                              | Men  | Women  |  |
| 1986<br>1987<br>1988<br>1989<br>1990 | 1,039<br>1,381<br>1,277<br>1,286<br>1,386<br>1,379 | 951<br>1,286<br>1,189<br>1,231<br>1,235<br>1,312 | 8:28:37<br>8:34:13<br>8:31:00<br>8:09:15<br>8:28:17<br>8:18:32 | 9:49:14<br>9:35:25<br>9:01:01<br>9:00:56<br>9:13:43<br>9:07:52 |  |

Source: Ironman Triathlon World Championship, records.

Table 235.-- TRANSPACIFIC YACHT CLUB'S HONOLULU RACE ENTRIES AND WINNING TIMES: 1981 TO 1991

[The Honolulu Race, sponsored by the Transpacific Yacht Club of Los Angeles, is run biennially between San Pedro, California, and Diamond Head Lighthouse, a great circle distance of 2,217 nautical miles]

|                                      | Boats                            | Winning times (days, h  | ours, minutes, seconds)  |
|--------------------------------------|----------------------------------|---|--|
| Year                                 | entered                          | Elapsed   | Corrected  |
| 1981<br>1983<br>1985<br>1987<br>1989 | 70<br>66<br>65<br>55<br>45<br>42 | 8:11:02:31<br>1/ 9:01:53:48<br>13:06:31:19<br>8:12:00:40<br>8:12:50:35<br>10:08:59:35 | 7:21:44:48<br>7:22:55:15<br>9:14:07:40<br>8:00:56:41<br>8:02:54:08<br>9:22:34:13 |

<sup>1/</sup> A catamaran, not officially entered in the race, recorded an elapsed time of 7:7:30:56.

Source: The Transpacific Yacht Club, 1982-83 Transpacific Yacht Club Year Book (1983); Honolulu Advertiser, July 12, 1983, July 4, 1985, July 19, 1985, and July 10, 1989; Honolulu Star-Bulletin, July 15, 1983; Sunday Star-Bulletin and Advertiser, July 10, 1983; Transpac Honolulu Committee, records.

Table 236.-- TOTAL ATTENDANCE AT FOOTBALL BOWL GAMES: 1985-1986 TO 1990-1991 SEASONS

| Bow1                          | 1985-  | 1986-  | 1987-  | 1988-  | 1989-  | 1990-  |
|-------------------------------|--------|--------|--------|--------|--------|--------|
|                               | 1986   | 1987   | 1988   | 1989   | 1990   | 1991   |
| Aloha Bowl Hula Bowl Pro Bowl | 30,574 | 20,666 | 20,093 | 18,967 | 39,267 | 14,185 |
|                               | 20,943 | 15,774 | 26,737 | 28,896 | 20,274 | 17,789 |
|                               | 47,906 | 46,799 | 46,692 | 46,464 | 45,135 | 45,097 |

Source: Hawaii State Department of Accounting and General Services, Stadium Authority, records.

Table 237.-- VARSITY SPORTS SUMMARY FOR THE UNIVERSITY OF HAWAII AT MANOA: 1989-1990 AND 1990-1991

[Includes only games played against four-year collegiate teams]

|  | Games played <u>1</u> /          |                                 |                                | Home games            |                                  |   |
|--|----------------------------------|---------------------------------|--------------------------------|-----------------------|----------------------------------|---|
| Sports   | Total                            | Won                             | Lost                           | Tied                  | Home<br>dates                    | Attendance  |
| 1989-1990: Baseball Basketball (men's) Basketball (women's) . Football Volleyball (men's) Volleyball (women's) . | 62<br>35<br>30<br>13<br>27<br>32 | 37<br>25<br>26<br>9<br>18<br>29 | 24<br>10<br>4<br>3<br>9<br>3   | 1<br>-<br>-<br>1<br>- | 50<br>16<br>17<br>10<br>12<br>18 | 118,305<br>93,565<br>9,549<br>445,348<br>13,488<br>37,760 |
| 1990-1991: Baseball Basketball (men's) Basketball (women's) Football Volleyball (men's) Volleyball (women's)     | 69<br>29<br>27<br>12<br>24<br>34 | 51<br>16<br>12<br>7<br>7<br>28  | 18<br>13<br>15<br>5<br>17<br>6 | -                     | 44<br>17<br>15<br>8<br>10<br>23  | 143,027<br>97,370<br>12,663<br>331,041<br>7,991<br>44,803 |

1/ Volleyball data refer to matches.
Source: University of Hawaii, Office of Intercollegiate Athletics, Sports Information Office, records.

Table 238.-- PUBLIC HIGH SCHOOL INTERSCHOLASTIC SPORTS: 1990-1991 SEASON

| Sport                        | Players        | Games <u>1</u> / | Attendance | Expenditure <u>2</u> / (dollars) |
|------------------------------|----------------|------------------|------------|----------------------------------|
| Baseball Basketball Football | Boys           | 406              | 67,482     | 289,788                          |
|                              | Boys and girls | 1,036            | 135,218    | 524,698                          |
|                              | Boys           | 278              | 416,963    | 821,614                          |

<sup>1/</sup> Junior varsity and varsity games, based on published schedules from public school leagues. Data exclude pre-season and post-season games.

Source: Hawaii State Department of Education, Office of Instructional Services Section, Athletics Program, records.

Table 239.-- PROFESSIONAL BOXING: 1985 TO 1990

| Year                                 | Number of promoters        | Number of shows             | Paid<br>attendance                               | Gross receipts<br>(dollars)                            |
|--------------------------------------|----------------------------|-----------------------------|--|--|
| 1985<br>1986<br>1987<br>1988<br>1989 | 1<br>2<br>1<br>-<br>3<br>3 | 9<br>6<br>2<br>-<br>10<br>8 | 18,278<br>7,181<br>1,152<br>-<br>14,869<br>9,246 | 201,852<br>67,105<br>15,560<br>-<br>218,810<br>172,900 |

Source: Hawaii State Department of Commerce and Consumer Affairs, Boxing Commission, records.

<sup>2/</sup> Data on expenditures and encumbrances reflect figures from the general and school trust funds.

Table 240.-- DOG LICENSES ISSUED, BY ISLANDS: 1985 TO 1990
[Dogs are licensed on a biennial basis]

| Year                                 | State<br>total   | Hawaii   | Maui   | Lanai                           | Molokai                              | Oahu   | Kauai                                    |
|--------------------------------------|--|--|--|---------------------------------|--------------------------------------|--|--|
| 1985<br>1986<br>1987<br>1988<br>1989 | 33,598<br>18,713<br>28,208<br>21,040<br>27,147<br>26,620 | 2,809<br>2,078<br>3,287<br>3,181<br>3,759<br>3,081 | 2,171<br>1,204<br>1,633<br>1,517<br>2,321<br>2,688 | 35<br>12<br>35<br>13<br>14<br>7 | 111<br>39<br>65<br>145<br>105<br>148 | 27,654<br>15,151<br>22,573<br>15,968<br>19,500<br>20,000 | 818<br>229<br>615<br>216<br>1,448<br>696 |

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

#### Section 8

# **ELECTIONS**

This section presents data on election districts, registered voters, votes cast, campaign expenditures, elected officials, and legislative activity.

About 453,000 persons were registered to vote in the general election of November 6, 1990, and more than 354,000 actually voted. The number voting amounted to 40 percent of the 854,000 Hawaii residents of voting age at that time. The latter figure included around 135,000 aliens, inmates of mental and penal institutions, and members of the armed forces and their dependents, groups that are either ineligible or unlikely to vote in Island elections. Among registered voters, females outnumbered males and Democrats were far more numerous than Republicans. Campaign expenditures for the 1990 primary, general, and supplemental elections (other than for federal offices) came to \$14 million.

Hawaii has 2 Congressional, 25 Senatorial, 51 Representative, and 9 Councilmanic districts. It also contains 16 soil and water conservation districts, 30 active Neighborhood Board districts, and 307 election precincts.

Elected officials in Hawaii include the President and Vice President, two U.S. Senators, two U.S. Representatives, the Governor and Lieutenant Governor, 25 State Senators, 51 State Representatives, and various county officials. Persons of Hawaiian blood also vote for the Board of Trustees of the Office of Hawaiian Affairs. The minimum voting age is 18 years.

The 1989 State Legislature, with 76 members, included 58 males, 24 persons under 40 years of age, 28 persons of Japanese ancestry, 20 persons born in places other than Hawaii, and 66 Democrats.

In its 1991 regular session, the State Legislature introduced 4,379 bills; 366 were passed and 335 became law. The Legislature also considered 1,255 resolutions, of which 455 were adopted.

The official results of primary, general, and special elections are published by the Office of the Lieutenant Governor. Additional information is often available from the various county clerks. Earlier figures for Hawaii appear in <u>Historical Statistics of Hawaii</u>, Section 24. National statistics appear in the <u>Statistical Abstract of</u> the United States: 1991, Section 8.

Table 241.-- ELECTION DISTRICTS AND POPULARLY ELECTED OFFICIALS: NOVEMBER 1990 AND 1992

|  |                        | 0ffic<br>lection to<br>istricts elect |                                 | be                                | Total elected officials, including holdover |   |
|--|------------------------|---------------------------------------|---------------------------------|-----------------------------------|---|---|
| Office   | 1990                   | 1992                                  | 1990                            | 1992                              | 1990  | 1992  |
| Federal offices: President and Vice President U.S. Senate U.S. House of Representatives  State offices: Governor and Lt. Governor State Senate State House of Representatives Board of Education Office of Hawaiian Affairs Soil and water conservation dist. 2/ | 25<br>51<br>2          | 25<br>51<br>2<br>                     | 2<br>12<br>51<br>6<br>5         | 2<br>1<br>2<br>13<br>51<br>7<br>4 | 2<br>2<br>2<br>25<br>51<br>13<br>9<br>48    | 2<br>2<br>2<br>2<br>25<br>51<br>13<br>9<br>48 |
| County offices:  Mayor Council: Hawaii Maui Honolulu Kauai Prosecuting Attorney Neighborhood Boards 3/  Precincts  | <br>9<br><br>30<br>292 | 9<br><br>9<br><br>30<br>307           | 3<br>2<br>9<br>9<br>7<br>-<br>- | 2<br>9<br>9<br>-<br>7<br>3<br>-   | 4<br>9<br>9<br>9<br>7<br>3<br>438           | 4<br>9<br>9<br>9<br>7<br>3<br>438             |

 $<sup>\</sup>frac{1}{2}$  Including vacancies to be filled.  $\overline{2}$  Three seats are elected and two are appointed for each district. Elections are an ongoing process.

<sup>3/</sup> Elections are conducted every other year in odd-numbered years. Source: Office of the Lieutenant Governor, Manual for Candidates, 1990 Elections, State of Hawaii, pp. 4-5, and records; Hawaii State Department of Land and Natural Resources, Division of Water Resource Management, records; Honolulu Neighborhood Commission, records.

Table 242.-- APPORTIONMENT OF THE STATE LEGISLATURE, BY COUNTIES: 1973 TO 1991

[For earlier apportionments, see <u>Historical Statistics of Hawaii</u>, table 24.7, p. 606]

| Legislative house, type of district, and apportionment date | State<br>total       | County<br>of<br>Hawaii | County<br>of<br>Maui | City and<br>County of<br>Honolulu | County<br>of<br>Kauai |
|---|----------------------|------------------------|----------------------|-----------------------------------|-----------------------|
| HOUSE OF REPRESENTATIVES                                    |                      |                        |                      |                                   |                       |
| Full districts: 1973  | 51<br>50<br>49<br>50 | 5<br>5<br>5<br>6       | 4<br>4<br>4<br>5     | 39<br>39<br>38<br>37              | 3<br>2<br>2<br>2<br>2 |
| Shared districts: 1/ 1973                                   | 1<br>2<br>1          | -<br>-<br>1<br>-       | -<br>-<br>1<br>1     | -<br>1<br>1                       | 1<br>1<br>1           |
| SENATE  |                      |                        |                      |                                   |                       |
| Full districts: 1973  | 25<br>24<br>23<br>24 | 3<br>2<br>2<br>2<br>3  | 2<br>2<br>2<br>2     | 19<br>19<br>18<br>18              | 1<br>1<br>1<br>1      |
| Shared districts: 1/ 1973                                   | -<br>1<br>2<br>1     | -<br>-<br>1<br>-       | 1<br>1<br>1          | -<br>1<br>1<br>-                  | -<br>-<br>1<br>1      |

<sup>1/</sup> So-called "canoe districts," which are located in more than one county.

Source: Report and Reapportionment Plan of the 1973 Legislative Reapportionment Commission (1973), p. 10; Honolulu Advertiser, July 10, 1982, pp. C-2 and 3; Honolulu Star-Bulletin, July 10, 1982, pp. B-4, 5 and 6; Office of the Lieutenant Governor, District and County Population and Ethnic Profiles 1984 State of Hawaii Election Districts (April 1984), and 1991 Reapportionment Maps.

Table 243.-- POPULARLY ELECTED OFFICIALS OF STATE AND LOCAL GOVERNMENTS: 1977 TO 1987

| <u> </u>             | Elected St        | ate and local   | Elected<br>State  | Elected local  |                |
|----------------------|-------------------|-----------------|-------------------|----------------|----------------|
| Year                 | Number            | Rank <u>1</u> / | Rate <u>2</u> /   | officials      | officials      |
| 1967<br>1977<br>1987 | 184<br>172<br>160 | 50<br>50<br>50  | 2.5<br>1.9<br>1.5 | 89<br>87<br>91 | 95<br>85<br>69 |

 $<sup>\</sup>underline{1}$ / Among the 50 States.

Source: U.S. Bureau of the Census, <u>1987 Census of Governments</u>, Vol. 1, <u>Government Organization</u>, No. 2, <u>Popularly Elected Officials</u>, GC87(1)-2, <u>January 1990</u>, table 2.

Table 244.-- POPULATION OF VOTING AGE AND PERCENT VOTING: 1980 TO 1990

| Subject  | 1980         | 1982        | 1984         | 1986        | 1988         | 1990        |
|--|--------------|-------------|--------------|-------------|--------------|-------------|
| Persons of voting age 1/ (1,000) Percent casting votes for | 697          | 728         | 757          | 784         | 815          | 854         |
| Presidential electors U.S. Representatives                 | 43.5<br>40.2 | (X)<br>40.9 | 44.4<br>36.4 | (X)<br>42.2 | 43.5<br>41.7 | (X)<br>39.9 |

X Not applicable.

Source: U.S. Bureau of the Census, "Projections of the Population of Voting Age, for States: November 1988," <u>Current Population Reports</u>, Series P-25, No. 1019, January 1988, and "Projections of the Voting-Age Population, for States: November 1990," <u>Current Population Reports</u>, Series P-25, No. 1059, April 1990; Office of the Lieutenant Governor, <u>Results of Votes</u> Cast ... November 6, 1990.

 $<sup>\</sup>overline{2}$ / Per 10,000 population. In 1987, Hawaii ranked 50th among the 50 States in this rate.

<sup>1</sup>/ Resident population 18 years and over, including armed forces stationed in Hawaii. November estimates.

Table 245.-- VOTING RESIDENCE, BY AGE AND MILITARY STATUS: APRIL 1, 1990

|                                  | Total              | Armed force      | Resi-<br>dent  |                   |                    |
|----------------------------------|--------------------|------------------|----------------|-------------------|--------------------|
| Age                              | popula-<br>tion    | Total            | Resi-<br>dents | Nonresi-<br>dents | civil-<br>ians     |
| All persons                      | 1,108,229          | 118,622          | 4,297          | 114,325           | 989,607            |
| Under 18 years 18 years and over | 280,126<br>828,103 | 34,375<br>84,247 | 1,585<br>2,712 | 32,790<br>81,535  | 245,751<br>743,856 |

<sup>1/</sup> Voting residence based on State in which taxes were paid.
Source: Total population from 1990 census. Armed forces and dependents from survey by University of Hawaii, Social Science Research Institute.

Table 246.-- POPULATION OF VOTING AGE, ELIGIBLE VOTERS, REGISTERED VOTERS, AND VOTES CAST: 1990

| Subject   | Number                     |
|---|----------------------------|
| Population 18 years and over, April 1 (1,000)  Less: Nonresident armed forces and dependents (1,000)  Aliens and other ineligible adult civilians (1,000)  Eligible to vote (1,000) | 828<br>82<br>53<br>693     |
| Registered voters, November 6 (1,000)   | 453<br>65.4<br>354<br>51.1 |

Source: Preceding table; Hawaii State Data Center estimates of ineligible adult civilians; Office of the Lieutenant Governor.

Table 247.-- PERCENT OF CIVILIAN POPULATION REGISTERED OR VOTING IN ELECTIONS, 1988 AND 1990, AND BY COUNTIES, 1990

[Based on July 1 estimates of civilian population, including military dependents, aliens, and persons under 18 years of age]

|                             | The State |      | Counties: 1990 |      |               |       |
|-----------------------------|-----------|------|----------------|------|---------------|-------|
| Election                    | 1988      | 1990 | Hawaii         | Maui | Hono-<br>lulu | Kauai |
| Registered: Primary General | 40.8      | 39.2 | 44.3           | 40.8 | 40.2          | 51.8  |
|                             | 43.1      | 40.8 | 46.3           | 43.3 | 41.7          | 52.9  |
| Voting: Primary General     | 26.8      | 24.9 | 32.5           | 27.2 | 24.1          | 40.7  |
|                             | 35.8      | 31.9 | 37.1           | 34.7 | 32.3          | 42.2  |

Source: Office of the Lieutenant Governor, Result of Votes Cast for each election; Hawaii State Data Center, unpublished estimates of civilian population by counties.

Table 248.-- REPORTED VOTING AND REGISTRATION, BY SEX: NOVEMBER 1990

[Percentages based on a sample]

|                         | Civilians                                | Reported registered          |                          | Reported voted               |                          |
|-------------------------|--|------------------------------|--------------------------|------------------------------|--------------------------|
| Sex and race            | 18 years old<br>and over                 | Percent                      | Standard<br>error        | Percent                      | Standard<br>error        |
| Total Male Female White | 790,000<br>361,000<br>429,000<br>243,000 | 57.2<br>55.8<br>58.4<br>60.7 | 1.8<br>2.7<br>2.5<br>3.2 | 51.6<br>51.1<br>51.9<br>53.7 | 1.8<br>2.7<br>2.5<br>3.3 |

Source: U.S. Bureau of the Census, 'Voting and Registration in the Election of November 1990," <u>Current Population Reports</u>, Population Characteristics, Series P-20, No. 453, October 1991.

Table 249.-- REGISTERED VOTERS AND VOTES CAST IN PRIMARY AND GENERAL ELECTIONS: 1970 TO 1990

|   | Registered voters   |  |  | Votes   | cast   |
|---|---|--|--|---|--|
| Type and date of election   | Both<br>sexes   | Male   | Female   | Number  | Percent<br>of reg.<br>voters   |
| Primary elections:  1970: Oct. 3  1972: Oct. 7  1974: Oct. 5  1976: Oct. 2  1978: Oct. 7  1980: Sept. 20  1982: Sept. 18  1984: Sept. 22  1986: Sept. 20  1988: Sept. 17 1/  1990: Sept. 22  General elections:  1970: Nov. 3  1974: Nov. 5  1976: Nov. 2 | 282,470<br>326,906<br>333,527<br>353,249<br>387,673<br>384,858<br>385,307<br>398,858<br>398,197<br>419,441<br>436,323<br>291,681<br>337,837<br>343,404<br>363,045 | (NA)<br>(NA)<br>(NA)<br>175,276<br>190,796<br>186,982<br>185,763<br>190,525<br>189,655<br>199,643<br>207,897 | (NA)<br>(NA)<br>(NA)<br>177,973<br>196,877<br>197,876<br>199,544<br>208,333<br>208,542<br>220,225<br>228,426<br>145,051<br>167,941<br>172,332<br>182,780 | 202,401<br>203,160<br>235,982<br>251;457<br>289,029<br>264,041<br>272,691<br>221,957<br>281,352<br>275,673<br>276,407<br>247,740<br>286,593<br>272,545<br>309,025 | 71.7<br>62.1<br>70.8<br>71.2<br>74.6<br>68.6<br>70.7<br>65.7<br>63.3 |
| 1978: Nov. 7<br>1980: Nov. 4<br>1982: Nov. 2<br>1984: Nov. 6<br>1986: Nov. 4<br>1988: Nov. 8<br>1990: Nov. 6  | 305,043<br>395,262<br>402,795<br>405,005<br>418,904<br>419,794<br>443,742<br>453,389  | 194,412<br>195,804<br>195,259<br>200,424<br>200,233<br>211,539<br>216,433                                    | 200,850<br>206,991<br>209,746<br>218,480<br>219,561<br>232,203<br>236,956  | 292,690<br>318,026<br>325,459<br>349,253<br>344,416<br>368,567<br>354,144   | 74.0<br>79.0<br>80.4<br>83.4<br>82.0<br>83.0<br>78.1                 |

NA Not available.

<sup>1</sup>/ Distribution by sex as of September 1, 1988, 16 days before the election.

Source: Office of the Lieutenant Governor, Result of Votes Cast for each election, and records.

Table 250.-- REGISTERED VOTERS AND VOTES CAST IN PRIMARY AND GENERAL ELECTIONS, BY COUNTIES: 1990

[Excludes persons registered for only the Office of Hawaiian Affairs election but not for the regular primary or general elections]

|                     | Regis                                 | tered vot                             | Votes                                 | cast                                       |                              |
|---------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|------------------------------|
| Election and county | Both<br>sexes                         | Male                                  | Female                                | Number                                     | Percent<br>of reg.<br>voters |
| PRIMARY ELECTION    |                                       |                                       |                                       |  |                              |
| State total         | 436,323                               | 207,897                               | 228,426                               | 276,407                                    | 63.3                         |
| Hawaii              | 53,604<br>41,292<br>314,832<br>26,595 | 25,790<br>19,892<br>149,195<br>13,020 | 27,814<br>21,400<br>165,637<br>13,575 | 39,347<br>27,524<br>188,630<br>20,901<br>5 | 73.4<br>66.7<br>59.9<br>78.6 |
| State total         | 453,389                               | 216,433                               | 236,956                               | 354,144                                    | 78.1                         |
| Hawaii              | 55,940<br>43,835<br>326,452<br>27,162 | 26,980<br>21,183<br>154,955<br>13,315 | 28,960<br>22,652<br>171,497<br>13,847 | 44,799<br>35,106<br>252,605<br>21,626<br>8 | 80.0<br>80.0<br>77.3<br>79.6 |

Source: Office of the Lieutenant Governor, Results of Votes Cast, Primary Election ... 1990, and Results of Votes Cast, General Election ... 1990.

Table 251.-- PARTY OF VOTES CAST IN PRIMARY ELECTIONS: 1980 TO 1990

| Primary<br>election                  | Total<br>votes<br>cast   | Demo-<br>cratic  | Repub-<br>lican  | Other<br>parties                          | Non-<br>partisan                                 | Invalid<br>or<br>blank                     |
|--------------------------------------|--|--|--|---|--|--|
| 1980<br>1982<br>1984<br>1986<br>1988 | 264,041<br>272,691<br>221,957<br>281,352<br>275,653<br>275,333 | 250,226<br>245,426<br>177,102<br>235,559<br>221,349<br>221,829 | 10,628<br>13,262<br>43,306<br>44,304<br>50,923<br>48,570 | 1,089<br>12,681<br>695<br>-<br>563<br>974 | 1,881<br>1,013<br>455<br>1,023<br>1,340<br>3,858 | 217<br>309<br>399<br>466<br>1,478<br>1,203 |

Source: Office of the Lieutenant Governor, Results of Votes Cast, Primary Election for years shown, and records.

Table 252.-- PARTY OF VOTES CAST IN PRIMARY ELECTION, BY COUNTIES: SEPTEMBER 22, 1990

| Party            | State<br>total                             | Hawaii<br>County                     | Maui<br>County                       | City and<br>County of<br>Honolulu        | Kauai<br>County                     |
|------------------|--|--------------------------------------|--------------------------------------|--|-------------------------------------|
| Total votes cast | 275,333                                    | 39,347                               | 27,524                               | 187,561                                  | 20,901                              |
| Democratic       | 221,829<br>974<br>48,570<br>3,858<br>1,203 | 33,945<br>130<br>4,524<br>619<br>129 | 22,201<br>108<br>4,665<br>420<br>130 | 146,262<br>702<br>38,286<br>2,665<br>747 | 19,421<br>34<br>1,095<br>154<br>197 |

Source: Office of the Lieutenant Governor, Results of Votes Cast, Primary and Special Election, September 22, 1990.

Table 253.-- VOTES CAST FOR CANDIDATES FOR MAJOR OFFICES: PRIMARY ELECTION, SEPTEMBER 22, 1990

| Office, party, and candidate  | Votes   | Office, party, and candidate  | Votes  |
|---|---|---|--|
| U.S. SENATE   |   | U.S. HOUSE, DIST. 2 (SPEC.) <u>1</u> /  |  |
| Democrat: Akaka, D. Snider, P. Republican: Saiki, P. Sutton, R. Zimmerman, B. Hustace, M. Libertarian: Schoolland, K.         | 180,235<br>18,427<br>39,847<br>2,443<br>2,096<br>2,049<br>583 | Mink, P. (D) Hannemann, M. (D) Menor, R. (D) Poepoe, A. (R) Monsef, S. (R) Black, A.D. (D) Mallan, L. (L)  GOVERNOR   | 51,841<br>50,164<br>23,629<br>8,872<br>2,264<br>1,242<br>791                               |
| U.S. HOUSE, DIST. 1  Democrat:   Abercrombie, N   | 43,480<br>30,942<br>21,128<br>11,154<br>9,150<br>885<br>273   | Democrat: Waihee, J. Hopkins, B. Garner, R. Marshall, E. Republican: Hemmings, F. Mednick, L. Hirayasu, C. Izuka, I. U'o, H. Measel, R. Libertarian: Smith, T.D. Non-partisan: Ross, P.H. | 179,383<br>9,735<br>9,112<br>4,517<br>38,827<br>1,343<br>1,049<br>844<br>593<br>448<br>534 |
| Democrat: Mink, P. Hannemann, M. Menor, R. Crozier, M. Republican: Poepoe, A. Monsef, S. Pillos, Jose Libertarian: Mallan, L. | 47,998<br>44,536<br>20,845<br>6,522<br>13,363<br>4,354<br>892 | LIEUTENANT GOVERNOR  Democrat:     Cayetano, B  | 177,705<br>35,172<br>555<br>1,754  |

Continued on next page.

Table 253.-- VOTES CAST FOR CANDIDATES FOR MAJOR OFFICES: PRIMARY ELECTION, SEPTEMBER 22, 1990 -- Con.

| Office, party, and candidate  | Votes   | Office, party, and candidate   | Votes  |
|---|---|--|--|
| HAWAII CO. MAYOR (SPECIAL) 2/  Democrat: Inouye, L. Yamashiro, S. Carpenter, D. Nobriga, A. 4 others Republican: Osorio, E. Basque, D. Hodkinson, J. Hapai, A. 5 others Libertarian: Anderson, A. Non-partisan: 6 candidates  MAUI CO. MAYOR  Democrat: Cravalho, E. Lindsey, L. Miura, M. Santos, V. | 13,625<br>13,549<br>3,874<br>957<br>841<br>1,390<br>742<br>621<br>537<br>577<br>70<br>424<br>8,215<br>5,624<br>4,030<br>3,303 | MAUI CO. MAYOR Con.  Republican:     Crockett Lingle, L.     Andrade, R. Libertarian:     Azby Non-Partisan:     Akuna, R.     Galloway, M.  KAUAI CO. MAYOR  Democrat:     Yukimura, JoAnn     Malapit, E.     Shaw, R.     Nelson, T.     Rich, J. Republican:     Barretto, J.     Wolff, M.     Sousa, J. Non-partisan:     Thomas, R. | 3,758<br>482<br>57<br>151<br>90<br>9,817<br>7,963<br>944<br>41<br>39<br>580<br>262<br>80<br>48 |

<sup>1/</sup> To fill unexpired term of former Rep. Akaka, appointed to U.S. Senate. 2/ To fill unexpired term of late Mayor Akana. Source: Office of the Lieutenant Governor, Results of Votes Cast, Primary

and Special Election, September 22, 1990.

Table 254.-- NUMBER OF PRECINCTS, REGISTERED VOTERS, AND VOTES CAST, BY ISLANDS: NOVEMBER 6, 1990

| Island  | Number<br>of<br>precincts                 | Registered<br>voters   | Votes<br>cast  |
|---|---|--|--|
| State total   | 292                                       | 453,389  | 354,136  |
| Hawaii Maui Lanai Molokai: Molokai District Kalawao District Oahu 1/ Kauai Niihau | 51<br>31<br>1<br>4<br>1<br>186<br>17<br>1 | 55,940<br>39,806<br>1,044<br>2,888<br>97<br>326,452<br>27,037<br>125 | 44,799<br>32,359<br>832<br>1,841<br>74<br>44,799<br>21,564<br>62 |

1/ Including the Northwestern Hawaiian Islands, part of the 5th Precinct of the 20th Representative District, in Waimanalo, Oahu. Source: Office of the Lieutenant Governor, printouts.

Table 255.-- AGE AND SEX OF REGISTERED VOTERS: NOVEMBER 6, 1990

| Age            | Both sexes  | Male  | Female  |
|----------------|---|---|---|
| All ages       | 453,389   | 216,433   | 236,956   |
| 18 or 19 years | 10,808<br>66,965<br>100,570<br>93,692<br>96,905<br>84,433 | 5,084<br>30,437<br>46,555<br>45,143<br>46,156<br>43,057 | 5,724<br>36,528<br>54,015<br>48,549<br>50,749<br>41,376 |

Source: Office of the Lieutenant Governor, records.

Table 256.-- VOTES CAST FOR MAJOR OFFICES: GENERAL ELECTIONS, 1980 TO 1990

| Office and                                      | Total  | Democra  | ıt   | Republi                                | can   | Other   |
|---|--|--|--|--|---|---|
| election<br>year                                | votes<br>cast  | Candidate  | Votes  | Candidate                              | Votes   | parties:<br>votes                                     |
| PRESIDENT                                       |  |  |  |  |   |   |
| 1980<br>1984<br>1988                            | 303,287<br>335,846<br>354,461                                  | Mondale  | 135,879<br>147,154<br>192,364                                  | Reagan<br>Reagan<br>Bush               | 130,112<br>185,050<br>158,625                       |   |
| U.S. SENATOR                                    |  |  |  |  |   |   |
| 1980<br>1982<br>1986<br>1988                    | 288,006<br>306,410<br>328,797<br>323,876<br>349,666            | Matsunaga<br>Inouye, D<br>Matsunaga                    | 224,485<br>245,386<br>241,887<br>247,941<br>188,901            | Brown Brown Hutchinson . Hustace Saiki | 53,068<br>52,071<br>86,910<br>66,987<br>155,978     | 10,453<br>8,953<br>-<br>8,948<br>4,787                |
| REPRESENTATIVE<br>TO CONGRESS,<br>DISTRICT 1    |  |  |  |  |   |   |
| 1980<br>1982<br>1984<br>1986 <u>1</u> /<br>1988 | 123,181<br>149,907<br>138,865<br>168,377<br>177,020<br>162,711 | Heftel Heftel Heftel Hannemann Bitterman Abercrombie . | 98,256<br>134,779<br>114,884<br>63,061<br>76,394<br>97,622     | Noble None Beard Saiki Saiki Liu       | 19,819<br>-<br>20,608<br>99,683<br>96,848<br>62,982 | 5,106<br>15,128<br>3,373<br>5,633<br>3,778<br>2,107   |
| REPRESENTATIVE<br>TO CONGRESS,<br>DISTRICT 2    |  |  |  |  |   |   |
| 1980<br>1982<br>1984<br>1986<br>1988            | 157,380<br>148,008<br>136,741<br>162,819<br>162,808<br>178,288 | Akaka  | 141,477<br>132,072<br>112,377<br>123,830<br>144,802<br>118,155 | None None Shipley Hustace None         | 20,000<br>35,371<br>-<br>54,625                     | 15,903<br>15,936<br>4,364<br>3,618<br>18,006<br>5,508 |
| GOVERNOR  |  |  | ,  |  |   |   |
| 1982<br>1986<br>1990                            | 315,853<br>334,115<br>340,132                                  | Ariyoshi<br>Waihee<br>Waihee                           | 141,043<br>173,655<br>203,491                                  | Anderson, D. Anderson, D. Hemmings     | 81,507<br>160,460<br>131,310                        | 89,303<br>-<br>5,331                                  |

Continued on next page.

Table 256. -- VOTES CAST FOR MAJOR OFFICES: GENERAL ELECTIONS, 1980 TO 1990 -- Con.

| Office and election  | Total<br>votes                | Democr       | Democrat                      |                              | can                          | Other parties: |
|----------------------|-------------------------------|--------------|-------------------------------|------------------------------|------------------------------|----------------|
| year                 | cast                          | Candidate    | Votes                         | Candidate                    | Votes                        | votes          |
| MAYOR OF<br>HONOLULU |                               |              |                               |                              |                              |                |
| 1980<br>1984<br>1988 | 219,408<br>253,853<br>263,882 | Anderson, E. | 152,240<br>117,841<br>117,479 | Schweigert .<br>Fasi<br>Fasi | 58,155<br>132,875<br>146,403 |                |

<sup>1/</sup> For special election to fill unexpired term of Rep. Heftel, Sept. 20,

1986, see Data Book 1987, table 280.
Source: Office of the Lieutenant Governor, Results of Votes Cast, General Election, State of Hawaii for 1980-1990.

Table 257.-- REGISTERED VOTERS AND VOTES CAST FOR THE BOARD OF TRUSTEES OF THE OFFICE OF HAWAIIAN AFFAIRS, BY COUNTIES: NOVEMBER 6, 1990

|             | Regi                              | istered vot                       | Votes cast                        |                                   |                              |
|-------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------|
| County      | Both<br>sexes                     | Male                              | Female                            | Number                            | Percent<br>of reg.<br>voters |
| State total | 65,773                            | 29,239                            | 36,534                            | 49,231                            | 74.8                         |
| Hawaii      | 9,922<br>7,160<br>44,579<br>4,112 | 4,457<br>3,234<br>19,589<br>1,959 | 5,465<br>3,926<br>24,990<br>2,153 | 7,566<br>5,577<br>33,020<br>3,068 | 76.2<br>77.8<br>74.0<br>74.6 |

Source: Office of the Lieutenant Governor, Results of Votes Cast, General Election ... 1990.

Table 258.-- VOTES CAST FOR MAJOR OFFICES, BY COUNTIES: GENERAL ELECTION, 1990

|  |                                      |                                |                                  | <del></del>                          |                               |
|--|--------------------------------------|--------------------------------|----------------------------------|--------------------------------------|-------------------------------|
| Office, candidate and party  | State<br>total <u>1</u> /            | County of<br>Hawaii            | County of<br>Maui                | City and<br>County of<br>Honolulu    | County of<br>Kauai            |
| U. S. SENATOR  |                                      |                                |                                  |                                      |                               |
| Akaka (D)<br>Saiki (R)<br>Schoolland (L)                                 | 188,901<br>155,978<br>4,787          | 25,508<br>17,574<br>901        | 20,736<br>13,048<br>752          | 128,781<br>118,332<br>2,868          | 13,874<br>7,020<br>265        |
| REPRESENTATIVE TO CONGRESS, DISTRICT 1                                   |                                      |                                |                                  |                                      |                               |
| Abercrombie (D)<br>Liu (R)<br>Taylor (L)                                 | 97,622<br>62,982<br>2,107            | -<br>-<br>-                    | -<br>-<br>-                      | 97,618<br>62,980<br>2,107            | -<br>-<br>-                   |
| REPRESENTATIVE TO CONGRESS, DISTRICT 2                                   |                                      |                                |                                  |                                      |                               |
| Mink (D)   | 188,155<br>54,625<br>5,508           | 28,620<br>12,786<br>1,387      | 23,227<br>9,263<br>1,108         | 51,172<br>28,069<br>2,525            | 15,135<br>4,507<br>688        |
| GOVERNOR AND<br>LT. GOVERNOR   |                                      |                                |                                  |                                      |                               |
| Waihee/Cayetano (D) Hemmings/Beamer (R) Smith/Fritts (L) Ross/Kimmel (N) | 203,491<br>131,310<br>2,885<br>2,446 | 26,832<br>15,024<br>514<br>458 | 21,339<br>11,191<br>279<br>528   | 140,232<br>100,111<br>1,990<br>1,168 | 15,088<br>4,984<br>102<br>292 |
| MAYOR OF HAWAII  |                                      |                                |                                  |                                      |                               |
| Inouye (D)   | 23,612<br>16,824<br>918<br>779       | 23,612<br>16,824<br>918<br>779 | -<br>-<br>-                      | -<br>-<br>-                          | -<br>-<br>-<br>-              |
| MAYOR OF MAUI  |                                      |                                |                                  |                                      |                               |
| Crockett (R)   | 16,534<br>14,243<br>2,606<br>454     | -<br>-<br>-<br>-               | 16,534<br>14,243<br>2,606<br>454 | -<br>-<br>-                          | -<br>-<br>-<br>-              |

Continued on next page.

Table 258.-- VOTES CAST FOR MAJOR OFFICES, BY COUNTIES: GENERAL ELECTION, 1990 -- Con.

| Office, candidate and party  | State<br>total <u>1</u> / | County of<br>Hawaii | County of<br>Maui | City and<br>County of<br>Honolulu | County of<br>Kauai |
|------------------------------|---------------------------|---------------------|-------------------|-----------------------------------|--------------------|
| MAYOR OF KAUAI               |                           |                     |                   |                                   |                    |
| Yukimura (D)<br>Barretto (R) | 12,681<br>6,969           | -                   | -<br>-            | -<br>-                            | 12,681<br>6,969    |

<sup>1</sup>/ Includes eight overseas voters, not included in county data. Source: Office of the Lieutenant Governor, Results of Votes Cast, General Election ... 1990.

Table 259.-- CAMPAIGN EXPENDITURES: 1990 ELECTIONS
[Dollars. Calendar year 1990 data. Table excludes national races]

| Election and office  | All<br>candidates  | Democrats  | Republicans   | All<br>others  |
|--|--|--|---|--|
| Total  | 13,965,721   | 10,808,274   | 2,963,631   | 193,816  |
| Election: Primary General Supplemental   | 8,594,531<br>3,763,635<br>1,607,555  | 7,181,777<br>2,188,532<br>1,437,965                                    | 1,378,294<br>1,420,964<br>164,373                             | 34,460<br>154,139<br>5,217   |
| Office: Governor Lt. Governor State Senator State Representative Mayor Council member Board of Education Office of Haw'n Affairs | 4,491,817<br>417,615<br>804,395<br>3,144,452<br>2,261,544<br>2,709,030<br>40,506<br>96,362 | 3,806,074<br>373,375<br>698,652<br>2,356,231<br>1,761,237<br>1,812,705 | 685,065<br>18,899<br>105,743<br>783,768<br>474,996<br>895,161 | 678<br>25,341<br>-<br>4,453<br>25,312<br>1,164<br>40,506<br>96,362 |

Source: Hawaii State Campaign Spending Commission, October 14, 1991.

Table 260.-- NEIGHBORHOOD BOARD ELECTIONS, FOR OAHU: 1981 TO 1991

| Number of boards                     |  | Doord                            |  | Voters 1/  |  |
|--------------------------------------|--|----------------------------------|--|--|--|
| Year                                 | In operation,<br>Dec. 31               | Holding<br>elections             | Board<br>seats<br>elected              | Ballots<br>mailed <u>1</u> /                                   | (ballots cast)   |
| 1981<br>1983<br>1985<br>1987<br>1989 | 28<br>28<br>30<br>30<br>30<br>30<br>30 | 28<br>28<br>30<br>30<br>30<br>30 | 416<br>416<br>438<br>438<br>438<br>438 | 194,735<br>231,622<br>255,045<br>260,155<br>273,954<br>260,923 | 48,745<br>61,425<br>74,583<br>83,072<br>91,285<br>85,457 |

1/ Revised from Data Book 1990, table 269.
Source: Neighborhood Commission, City and County of Honolulu, records.

Table 261.-- PARTY MEMBERSHIP OF COUNTY COUNCILS: 1989 AND 1991 [As of January]

|              | Total            | Democ            | rats             | Repub1      | icans       | Other p     | parties<br>acant |
|--------------|------------------|------------------|------------------|-------------|-------------|-------------|------------------|
| County       | Total<br>seats   | 1989             | 1991             | 1989        | 1991        | 1989        | 1991             |
| All counties | 34               | 31               | 32               | 3           | 2           | -           | _                |
| Hawaii       | 9<br>9<br>9<br>7 | 9<br>8<br>7<br>7 | 9<br>8<br>8<br>7 | 1<br>2<br>- | -<br>1<br>1 | -<br>-<br>- |                  |

Source: Legislative Reference Bureau, State of Hawaii, Directory of State, County and Federal Officials (February 15, 1989 and February 1, 1991).

Table 262.-- LENGTH OF LEGISLATIVE SESSIONS: 1986 TO 1991

|                                      | Regular  | sessions                            | Special s  | sessions                   |
|--------------------------------------|--|-------------------------------------|--|----------------------------|
| Year                                 | Date<br>convened   | Length <u>1</u> /                   | Date<br>convened                                     | Length <u>1</u> /          |
| 1986<br>1987<br>1988<br>1989<br>1990 | Jan. 15<br>Jan. 21<br>Jan. 20<br>Jan. 18<br>Jan. 17<br>Jan. 16 | 99<br>100<br>99<br>99<br>108<br>111 | July 24<br>None<br>May 20<br>None<br>None<br>June 24 | 7<br>-<br>4<br>-<br>-<br>5 |

 $<sup>\</sup>underline{1}/$  Calendar days, including Saturdays, Sundays, holidays, and mandatory five-day recess required by Art. III, sec. 10, of the Hawaii Constitution.

Source: Legislative Reference Bureau, records.

Table 263.-- PARTY MEMBERSHIP OF THE STATE LEGISLATURE: 1981 TO 1991

|                                      | House of Representatives         |                                  |                               |                  | Senate                                 |                                  |                            |       |
|--------------------------------------|----------------------------------|----------------------------------|-------------------------------|------------------|--|----------------------------------|----------------------------|-------|
| Regular<br>session                   | Total                            | Demo-<br>crats                   | Repub-<br>licans              | Other            | Total                                  | Demo-<br>crats                   | Repub-<br>licans           | Other |
| 1981<br>1983<br>1985<br>1987<br>1989 | 51<br>51<br>51<br>51<br>51<br>51 | 39<br>43<br>40<br>40<br>45<br>45 | 12<br>8<br>11<br>11<br>6<br>6 | -<br>-<br>-<br>- | 25<br>25<br>25<br>25<br>25<br>25<br>25 | 17<br>20<br>21<br>20<br>22<br>22 | 8<br>5<br>4<br>5<br>3<br>3 | -     |

Source: Session Laws of Hawaii, 1981-1989; President of the Senate; Speaker of the House of Representatives.

Table 264.-- LEGISLATIVE BILLS AND RESOLUTIONS, BY DISPOSITION: 1989 TO 1991

|  |                           |                                    | 199                       | 1                |
|--|---------------------------|------------------------------------|---------------------------|------------------|
| Action   | 1989:<br>Regular          | 1990:<br>Regular                   | Regular                   | Specia1          |
| House bills: Carried over from previous year Introduced Enacted 1/, 2/ Vetoed Became law 3/        | 1,923<br>206<br>17<br>189 | 1,717<br>1,459<br>202<br>13<br>187 | 2,232<br>192<br>17<br>175 | -<br>-<br>-<br>- |
| Senate bills: Carried over from previous year Introduced Enacted 1/, 4/ Vetoed 27 Became Taw 4/ 5/ | 2,047<br>226<br>18<br>208 | 1,821<br>1,425<br>182<br>18<br>162 | 2,147<br>174<br>14<br>160 | 1<br>1<br>1<br>- |
| House resolutions: Offered   | 423<br>235                | 405<br>233                         | 433<br>218                | 2<br>2           |
| House concurrent resolutions: Offered  | 397<br>96                 | 347<br>100                         | 361<br>89                 | -<br>-           |
| Senate resolutions: Offered  | 255<br>139                | 262<br>137                         | 223<br>98                 | 1<br>1           |
| Senate concurrent resolutions: Offered   | 280<br>77                 | 273<br>79                          | 238<br>50                 | -<br>-           |

<sup>1/</sup> Includes bills for constitution amendments: H.B. 2051, H.B. 2053, S.B.  $\overline{3}2$ , and S.B. 103 in 1990. The 1990 figure also includes H.B. 1718, which contains a constitutional amendment.

Source: Legislative Reference Bureau, records.

<sup>2</sup>/ The 1991 regular session figure includes H.B. 139, containing a vetoed item.

 $<sup>\</sup>underline{3}/$  The 1990 total includes H.B. 1718, which contains a constitutional amendment.

 $<sup>\</sup>frac{4}{5}$  The 1989 figure includes S.B. 636, which contained one vetoed item. The 1990 total includes S.B. 2794, which contained a vetoed item.

### Section 9

# **GOVERNMENT FINANCES AND EMPLOYMENT**

This section presents statistics relating to the revenues, expenditures, debt, and civilian employment of Federal, State and county governments in Hawaii.

Local government is vested in one combined city-county (Honolulu, consisting of the Island of Oahu and several outlying islets), three non-metropolitan counties (Hawaii, Kauai, and Maui), and one area (Kalawao County) administered by the State Department of Health. Separate municipal governments do not exist.

Tax collections by Federal, State and county governments in fiscal 1990 reached \$7.2 billion, twice the level reported six years earlier. The 1990 total included \$4.3 billion in U.S. taxes, \$2.4 billion in State taxes, and \$508 million in county taxes, licenses and fees. Individual income taxes accounted for 86 percent of Federal collections and 28 percent of State collections in Hawaii in 1990. State revenue receipts totaled \$3.9 billion, chiefly from the general excise and use tax (\$1.2) billion), individual income tax (\$695 million) and Federal grants-in-aid (\$573 million). The largest expenditure item in the State accounts for 1990 was education, with \$1.1 billion (out of \$4.0 billion) going to the University of Hawaii and public schools and libraries. The counties, in contrast, depended largely on the real property tax and grants-in-aid for their revenues, and reported police and fire protection as their largest single expenditure item. Assessed valuation of the State doubled between 1988 and 1991, reaching \$133 billion by the end of the period; of this total, \$35 billion was exempt from taxation. Public bonded debt outstanding at the end of 1989 stood at \$3.7 billion.

Total government employment in 1990 averaged 105,000, about 18 percent over the 1980 average. The 1990 total included 34,000 Federal workers, 57,000 persons employed by the State, and 14,000 persons on county payrolls. State civil service employees as of mid-1990 numbered 19,000.

Important sources for statistics on government in Hawaii include the U.S. Census of Governments and various annual publications of the Bureau of the Census, reports of the U.S. Treasury Department, Hawaii State Departments of Accounting and General Services, Budget and Finance, and Taxation, and the County auditors and finance directors, and an annual compilation issued by the Tax Foundation of Hawaii, Government in Hawaii: A Handbook of Financial Statistics. Data extending back to the middle of the 19th century are summarized in Historical Statistics of Hawaii, Section 25. Comparable Mainland statistics appear in the Statistical Abstract of the United States: 1991, Sections 9 and 10.

Table 265.-- FEDERAL, STATE, AND COUNTY TAX COLLECTIONS: 1970 TO 1990

### [Thousands of dollars]

|   | A11  |  | State and counties <u>2</u> /  |  |  |
|---|--|--|--|--|--|
| Year  | levels   | Federal <u>1</u> /   | Total  | State  | Counties   |
| 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 | 1,057,376 1,105,657 1,162,700 1,327,150 1,512,414 1,852,801 1,821,934 2,038,318 2,228,780 2,620,194  2,966,128 3,245,507 3,314,106 3,451,664 3,655,283 3,922,942 4,296,653 4,997,831 5,765,935 6,464,598 | 602,998<br>608,051<br>632,583<br>735,358<br>840,089<br>1,087,520<br>945,899<br>1,106,687<br>1,208,481<br>1,455,225<br>1,670,459<br>1,826,363<br>1,876,628<br>1,897,858<br>1,980,467<br>2,116,773<br>2,337,028<br>2,809,135<br>3,310,750<br>3,731,845 | 454,378<br>497,606<br>530,117<br>591,792<br>672,325<br>765,281<br>876,035<br>931,631<br>1,020,299<br>1,164,969<br>1,295,669<br>1,419,144<br>1,437,478<br>1,553,806<br>1,674,816<br>1,806,169<br>1,959,625<br>2,188,696<br>2,455,185<br>2,732,753 | 438,397<br>480,690<br>512,047<br>571,689<br>650,855<br>743,923<br>850,639<br>905,949<br>986,182<br>1,127,677<br>1,255,622<br>1,371,490<br>1,132,699<br>1,225,010<br>1,331,551<br>1,440,553<br>1,562,195<br>1,776,430<br>2,033,181<br>2,283,891 | 15,981<br>16,916<br>18,070<br>20,104<br>21,470<br>21,358<br>25,396<br>25,682<br>34,117<br>37,292<br>40,047<br>47,655<br>304,779<br>328,796<br>343,265<br>365,616<br>397,429<br>412,266<br>422,004<br>448,862 |
| 1990  | 7,213,001  | 4,264,127  | 2,948,874  | 2,441,276  | 507,598  |

 $<sup>\</sup>underline{1}/$  Fiscal years ended June 30 through 1976 and September 30 thereafter.

 $<sup>\</sup>underline{2}/$  Fiscal years ended June 30. Totals include taxes collected from visitors and other nonresidents.

Source: Tax Foundation of Hawaii, Government in Hawaii: A Handbook of Financial Statistics (annual).

Table 266.-- TAX COLLECTIONS RELATIVE TO POPULATION AND PERSONAL INCOME, BY LEVEL OF GOVERNMENT: 1970 TO 1990

Data include taxes collected in Hawaii from visitors and other nonresidents. Revised from Data Book 1990, table 276]

|   | Per capita collections <u>1</u> / (dollars)   |  |  | Collections as a percent of personal income 2/   |  |  |
|---|---|--|--|--|--|--|
| Year  | All<br>levels   | Federal <u>3</u> /   | State and counties 4/  | All<br>levels  | Federal <u>3</u> /   | State and counties 4/  |
| 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 | 1,370 1,379 1,404 1,558 1,742 2,091 2,015 2,220 2,392 2,749 3,066 3,318 3,335 3,408 3,556 3,773 4,085 4,697 5,339 5,906 | 781<br>759<br>764<br>864<br>968<br>1,227<br>1,046<br>1,205<br>1,297<br>1,527<br>1,727<br>1,867<br>1,888<br>1,874<br>1,927<br>2,036<br>2,222<br>2,630<br>3,066<br>3,409 | 589<br>621<br>640<br>695<br>775<br>864<br>969<br>1,015<br>1,095<br>1,222<br>1,339<br>1,451<br>1,446<br>1,534<br>1,629<br>1,737<br>1,863<br>2,049<br>2,273<br>2,497 | 28.0<br>27.2<br>26.0<br>26.7<br>26.5<br>30.1<br>27.3<br>28.3<br>27.7<br>29.0<br>28.9<br>29.4<br>28.2<br>26.8<br>26.8<br>26.8<br>26.8<br>26.9<br>27.5<br>29.8<br>31.4<br>31.7 | 16.0<br>15.0<br>14.1<br>14.8<br>14.7<br>17.7<br>14.2<br>15.3<br>15.0<br>16.1<br>16.3<br>16.5<br>16.0<br>14.7<br>14.5<br>14.5<br>15.0<br>16.7<br>18.0<br>18.3 | 12.0<br>12.3<br>11.9<br>11.8<br>12.4<br>13.1<br>12.9<br>12.7<br>12.9<br>12.7<br>12.9<br>12.6<br>12.8<br>12.3<br>12.1<br>12.3<br>12.1<br>12.3<br>12.1 |

4/ Collection data refer to fiscal years ended June 30. Source: Calculated from collections data in preceding table, population estimates in table 2, and income estimates in table 380.

 $<sup>\</sup>frac{1}{2}$  Based on estimated resident population, July 1.  $\frac{2}{2}$  Based on income estimates for calendar years.  $\frac{3}{2}$  Collections data refer to fiscal years ended June 30 through 1976 and September 30 thereafter.

Table 267.-- FEDERAL, STATE, AND COUNTY TAX COLLECTIONS, BY SOURCES: 1980, 1989, AND 1990

[In thousands of dollars. For fiscal year ended September 30 for federal collections and June 30 for others]

| Source                                    | 1980      | 1989      | 1990      |
|---|-----------|-----------|-----------|
| Total, all levels                         | 2,966,128 | 6,464,598 | 7,213,001 |
| Federal collections                       | 1,670,459 | 3,731,845 | 4,264,127 |
| Indiv. income and employment $1/\ldots$   | 1,412,330 | 3,220,556 | 3,648,783 |
| Corp. income and excess profits $\cdot$ . | 213,216   | 412,151   | 461,579   |
| Excise                                    | 15,324    | 51,986    | 48,601    |
| Estate                                    | 17,496    | 22,184    | 80,019    |
| Gift                                      | 1,014     | 4,837     | 3,887     |
| Unemployment insurance                    | 11,079    | 20,130    | 21,258    |
| State collections                         | 1,255,622 | 2,283,891 | 2,441,276 |
| General excise and use                    | 498,670   | 1,025,434 | 1,180,051 |
| Transient accommodations 2/               | -         | 75,983    | 82,488    |
| Fuel                                      | 51,053    | 91,131    | 107,153   |
| Liquor                                    | 12,948    | 38,609    | 40,336    |
| Tobacco                                   | 12,759    | 24,413    | 23,496    |
| Insurance                                 | 22,240    | 33,414    | 36,892    |
| Public service companies                  | 32,458    | 64,846    | 69,650    |
| Corporate income 3/                       | 42,424    | 72,339    | 74,858    |
| Indiv. income, net income 4/              | 311,404   | 767,589   | 695,098   |
| Inheritance and estate                    | 4,328     | 6,675     | 16,329    |
| Unemployment compensation                 | 67,536    | 53,120    | 78,942    |
| Other sources $5/\ldots$                  | 199,802   | 30,338    | 35,983    |
| County collections                        | 40,047    | 448,862   | 507,598   |
| Real property 5/                          | 40,047    | 372,633   | 425,551   |
| Utility franchise                         | 9,116     | 15,830    | 16,744    |
| Motor vehicle weight 6/                   | 22,727    | 42,523    | 46,971    |
| Other sources                             | 8,204     | 17,876    | 18,332    |
| Other Sources                             | 1 0,204   | 17,070    | 10,002    |
|   |           | L         | <u> </u>  |

Includes withholding, FICA, and individual income taxes.

6/ Includes State motor vehicle weight tax.

 <sup>7/</sup> Effective January 1, 1987.
 3/ Includes payments of estimated taxes less refunds. Includes withheld and estimated taxes less refunds.

<sup>5/</sup> Before July 1, 1981, real property taxes (included in State "other sources" for 1980) were collected by the State.

Source: Tax Foundation of Hawaii, Government in Hawaii, 1991, tables 13 and 29.

Table 268.-- ESTIMATED TAX BURDEN FOR A FOUR-PERSON FAMILY ON OAHU: 1970, 1988 AND 1990

[In dollars. For underlying assumptions, see source]

| Subject   | 1970  | 1988   | 1990  |
|---|---|--|---|
| Total tax burden  | 5,559   | 25,610   | 30,250  |
| Federal income State income Social Security 1/ General excise Real property Employment 2/ Specific excise 3/ Automobile | 2,130<br>693<br>1,247<br>304<br>366<br>527<br>67<br>225 | 8,096<br>3,693<br>7,758<br>1,207<br>1,006<br>3,301<br>161<br>388 | 10,425<br>4,073<br>8,866<br>1,494<br>979<br>3,764<br>204<br>445 |
| Gross family income After taxes   | 16,408<br>10,849  | 62,716<br>37,106   | 73,888<br>43,638  |

<sup>1/</sup> Includes employers' share, treated here as an indirect tax on the family.

3/ Alcohol, tobacco, telephone, and bicycle. Source: Tax Foundation of Hawaii, The Tax Burden of the Arnie Aloha Family (November 1989 and September 1991).

<sup>2/</sup> Unemployment compensation, temporary disability insurance, and workers' compensation.

Table 269.-- ESTIMATED STATE AND LOCAL TAXES PAID BY MARRIED-COUPLE FAMILIES OF FOUR AS PERCENT OF INCOME, BY INCOME GROUP, FOR THE UNITED STATES AND HAWAII: 1985 AND 1991

|  | Average income, 1991 <u>1</u> /                                      |  | Taxes as  | percent  | of inco   | ome <u>2</u> /                                     |
|--|--|--|---|--|---|--|
|  | United   |  | United  | States   | Haw   | aii  |
| Family income group  | States   | Hawaii   | 1985  | 1991   | 1985  | 1991   |
| Lowest 20 percent Second 20 percent Middle 20 percent Fourth 20 percent Next 15 percent Next 4 percent Top 1 percent | 12,700<br>26,800<br>39,100<br>54,000<br>82,200<br>184,400<br>875,200 | 14,100<br>28,200<br>42,200<br>59,100<br>88,700<br>184,700<br>707,900 | 12.6<br>10.0<br>9.1<br>8.6<br>8.4<br>8.2<br>7.1 | 13.8<br>10.9<br>10.0<br>9.5<br>9.2<br>8.7<br>7.6 | 11.3<br>11.3<br>10.8<br>10.2<br>9.7<br>9.4<br>8.0 | 8.7<br>10.2<br>10.3<br>10.1<br>10.2<br>10.3<br>9.8 |

<sup>1/</sup> Dollars. Extrapolated from 1988 IRS data.

Z/ Excludes "exported" taxes.

Table 270.-- PER CAPITA REVENUE, EXPENDITURE, AND DEBT OF STATE AND LOCAL GOVERNMENT: 1988 AND 1989

|   | Amount (dollars)                        |   | Percent<br>of U.S.                        |   | Rank                    |                         |
|---|---|---|---|---|-------------------------|-------------------------|
| Subject   | 1988                                    | 1989                                    | 1988                                      | 1989                                      | 1988                    | 1989                    |
| General revenue  Taxes  Debt outstanding  General expenditure  Capital outlay | 3,461<br>2,259<br>3,270<br>2,974<br>490 | 3,767<br>2,416<br>3,469<br>3,340<br>623 | 117.0<br>127.4<br>106.5<br>103.7<br>134.5 | 119.0<br>128.0<br>107.8<br>108.8<br>160.2 | 6<br>5<br>24<br>14<br>8 | 7<br>6<br>22<br>11<br>4 |

Source: U.S. Bureau of the Census, <u>Government Finances in 1987-1988</u>, GF88-5 (January 1990), pp. 105-109, and <u>Government Finances in 1988-1989</u>, GF89-5 (May 1991), pp. 105-109.

Source: Citizens for Tax Justice, A Far Cry From Fair (Washington, D.C., April 1991), pp. 18 and 30.

Table 271.-- STATE REVENUE RECEIPTS: 1989 AND 1990 [In thousands of dollars. Years ended June 30]

|  | 1989:  |  | 1990  |   |
|--|--|--|---|---|
| Source of revenues   | all<br>funds   | All<br>funds   | General<br>funds  | Special<br>funds  |
| Total <u>1</u> /   | 3,604,416  | 3,947,852  | 2,414,821   | 1,533,031   |
| Tax revenues   | 2,263,024<br>1,025,434<br>234,405<br>767,232<br>72,339<br>75,973<br>52,649<br>34,992 | 2,401,587<br>1,175,051<br>245,820<br>694,640<br>74,858<br>82,438<br>78,362<br>50,418 | 2,142,641<br>1,069,470<br>172,756<br>694,640<br>74,858<br>82,438<br>-<br>48,479 | 258,946<br>105,581<br>73,064<br>-<br>-<br>78,362<br>1,939                       |
| Fines, forfeits, and escheats Federal grants-in-aid Revenues from other agencies Rents, royalties, land income 4/ Earnings: general departments Earnings: public service enterp. Interest earned Miscellaneous | 15,630<br>479,582<br>12,810<br>28,365<br>250,872<br>269,157<br>156,361<br>128,345    | 18,270<br>572,845<br>15,396<br>32,037<br>267,602<br>300,547<br>197,802<br>141,766    | 16,242<br>9,533<br>3,754<br>5,521<br>86,107<br>-<br>129,589<br>21,434           | 2,028<br>563,312<br>11,642<br>26,516<br>181,495<br>300,547<br>68,213<br>120,332 |

 $<sup>\</sup>frac{1}{2}$ / Excludes transfers and repayments except as shown.  $\frac{2}{2}$ / Includes public service companies, tobacco, liquor, insurance, vehicle registration and weight, and fuel taxes.

Includes franchise, inheritance and estate, and conveyance taxes.
 Includes investment and unallocable interest income.

Tax Foundation of Hawaii, Government in Hawaii, 1991, table 12. Source:

Table 272.-- STATE OPERATING EXPENDITURES, BY FUNCTION: 1980, 1989, AND 1990

[In thousands of dollars. For years ended June 30. Data include general, special, and proprietary fund expenditures; unemployment trust fund treated as a special fund. Interfund transfers eliminated to avoid duplication]

| Functions  | 1980  | 1989   | 1990   |
|--|---|--|--|
| Total  | 1,815,855   | 3,267,997  | 3,974,505  |
| General government: Control Staff  Public safety: Police and fire Other protection  Highways  Natural resources Health and sanitation Hospitals and institutions Public welfare Education: Higher Public schools Libraries and other  Recreation Utilities and other enterprises Debt service 1/ Retirement and pension Employees' health and hosp insurance Unemployment compensation Grants-in-aid to counties | 27,953<br>62,879<br>1,957<br>46,448<br>32,457<br>20,623<br>39,586<br>86,523<br>253,411<br>189,124<br>305,618<br>17,324<br>11,034<br>45,485<br>148,847<br>64,447 | 79,496<br>208,306<br>3,036<br>116,955<br>76,911<br>38,327<br>120,440<br>147,452<br>396,944<br>380,707<br>572,334<br>33,547<br>27,025<br>174,257<br>248,062<br>85,727 | 88,143 242,863 3,813 127,877 79,841 45,750 186,317 167,947 474,659 424,142 661,522 36,849 43,951 212,062 272,820 71,300  1,013 47,846 73,472 |
| Urban redevelopment and housing Miscellaneous  | 280,509<br>14,637<br>90,338   | 263,908<br>46,921<br>155,598   | 321,005<br>87,479<br>303,834   |

<sup>1/</sup> Debt service on revenue bonds reimbursable from highway funds included under Highways; from airport and harbor funds under Utilities; from Sand Island receipts, land revolving trust, and Veterans' home loan funds under Miscellaneous.

Veterans' home loan funds under Miscellaneous.

2/ Special funds accounted for \$90.3 million in 1980, \$111.2 million in 1989, and \$196.6 million in 1990.

Source: Tax Foundation of Hawaii, Government in Hawaii, 1991, table 35.

For State on Tax Formedation. Jovernment in Human 1991, p. 45

Table 273.-- COUNTY OPERATING REVENUES, BY SOURCE, AND COUNTY OPERATING EXPENDITURES, BY OBJECT, FOR ALL COUNTIES COMBINED: 1980, 1989, AND 1990

[In thousands of dollars. For years ended June 30]

| Subject   | 1980   | 1989   | 1990   |
|---|--|--|--|
| OPERATING REVENUES 1/   |  |  |  |
| Total   | 417,827  | 752,443  | 894,868  |
| Real property taxes   | 186,209<br>39,736<br>10,761<br>37,830<br>23,508<br>108,046<br>11,738   | 372,223<br>79,233<br>21,683<br>95,112<br>58,744<br>79,201<br>46,248  | 425,551<br>97,287<br>22,981<br>127,516<br>89,220<br>75,244<br>57,070   |
| OPERATING EXPENDITURES 2/   |  |  |  |
| Total   | 408,682  | 739,585  | 836,207  |
| General government: Control Staff Public safety: Police and fire Other protection Highways Health and sanitation Public welfare Public schools Recreation Interest Bond redemption Pension and retirement Salary adjustment Economic and urban development Mass transit Miscellaneous Cash capital improvements | 7,132 38,547 82,161 13,127 21,656 29,750 4,022 503 27,334 15,269 21,089 31,485 9 28,968 24,094 19,478 44,058 | 10,648<br>81,935<br>165,610<br>33,299<br>39,309<br>71,268<br>10,588<br>573<br>52,643<br>48,012<br>23,184<br>26,448<br>38<br>23,144<br>48,909<br>45,283<br>58,695 | 10,090<br>98,096<br>188,477<br>33,410<br>42,527<br>85,445<br>12,352<br>585<br>60,097<br>60,756<br>33,345<br>22,516<br>45<br>16,745<br>53,723<br>60,731<br>57,268 |

Footnotes and source follow next table.

Table 274.-- COUNTY OPERATING REVENUES, BY SOURCE, AND COUNTY OPERATING EXPENDITURES, BY OBJECT, BY COUNTIES: 1990

[In thousands of dollars. For year ended June 30, 1990]

| Subject   | City and<br>Co. of<br>Honolulu   | County<br>of<br>Maui   | County<br>of<br>Hawaii  | County<br>of<br>Kauai  |
|---|--|--|---|--|
| OPERATING REVENUES 1/   |  |  |   |  |
| Total   | 643,814  | 101,987  | 96,501  | 52,566   |
| Real property taxes   | 302,150<br>74,426<br>14,603<br>97,565<br>35,686<br>65,938<br>53,446  | 48,255<br>8,825<br>3,702<br>17,422<br>22,003<br>384<br>1,398   | 51,652<br>9,156<br>3,218<br>5,904<br>21,109<br>3,895<br>1,567                           | 23,495<br>4,880<br>1,463<br>6,625<br>10,422<br>5,027<br>654                          |
| OPERATING EXPENDITURES 2/   |  |  |   |  |
| Total   | 614,553  | 90,520   | 88,472  | 42,662   |
| General government: Control Staff Public safety: Police and fire Other protection Highways Health and sanitation Public welfare Public schools Recreation Interest Bond redemption Pension and retirement Salary adjustment Economic and urban development Mass transit Miscellaneous Cash capital improvements | 5,388<br>69,619<br>130,963<br>22,001<br>26,066<br>70,099<br>-<br>44,600<br>48,805<br>27,372<br>13,514<br>-<br>16,745<br>53,234<br>45,808<br>40,340 | 1,472<br>10,471<br>18,468<br>3,592<br>7,075<br>7,924<br>7,721<br>192<br>5,538<br>4,628<br>1,371<br>1,908 | 1,975 10,674 29,313 6,787 6,009 4,851 3,305 250 7,219 5,083 3,022 5,969 490 2,457 1,067 | 1,255 7,332 9,733 1,030 3,377 2,570 1,326 142 2,740 2,240 1,580 1,124 45 - 7,783 384 |

<sup>1/</sup> Excludes loan, bond, revolving, improvement district, and certain trust funds, and water revenues.

Source: Tax Foundation of Hawaii, Government in Hawaii, 1991, tables 24-27 and 36-39.

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<sup>2/</sup> Excludes certain revolving, bond, loan and enterprise funds, and urban redevelopment land purchases.

Table 275.-- NUMBER OF EXEMPTIONS AND ADJUSTED GROSS INCOME REPORTED ON INDIVIDUAL FEDERAL INCOME TAX RETURNS: TAX YEARS 1970 TO 1989

|  |   |   | Adjusted gross income<br>(less deficit)   |  |   |  |
|--|---|---|---|--|---|--|
| Tax year   | Number of returns   | Number of exemptions 1/   | Total<br>(\$1,000)  | Per return (dollars)   | Per exemption <u>1</u> /(dollars)   |  |
| 1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978<br>1979<br>1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988 | 302,426<br>308,814<br>318,023<br>345,211<br>346,824<br>358,510<br>362,956<br>380,937<br>403,217<br>412,922<br>424,177<br>437,977<br>445,953<br>450,097<br>461,424<br>470,745<br>485,014<br>506,302<br>520,575 | 763,992<br>809,612<br>763,985<br>832,636<br>805,533<br>841,976<br>815,937<br>847,098<br>925,125<br>880,845<br>936,056<br>957,338<br>1,027,743<br>1,037,030<br>1,055,297<br>1,071,202<br>1,096,934<br>1,112,189<br>1,087,534 | 2,802,445 3,010,051 3,250,608 3,749,212 3,957,023 4,269,028 4,625,609 5,218,740 5,943,659 6,493,228  7,320,740 7,870,617 8,236,603 8,652,808 9,322,406 9,965,599 10,959,168 12,670,065 14,215,978 | 9,267<br>9,747<br>10,221<br>10,861<br>11,409<br>11,908<br>12,744<br>13,700<br>14,741<br>15,725<br>17,259<br>17,970<br>18,470<br>19,224<br>20,204<br>21,170<br>22,596<br>25,025<br>27,308 | 3,668<br>3,718<br>4,255<br>4,503<br>4,912<br>5,070<br>5,669<br>6,161<br>6,425<br>7,372<br>7,821<br>8,221<br>8,014<br>8,344<br>8,834<br>9,303<br>9,991<br>11,392<br>13,072 |  |

 $<sup>\</sup>underline{1}/$  Exemptions for age or blindness excluded through 1981 and included thereafter.

Source: U.S. Treasury Department, Internal Revenue Service, Statistics of Income. Individual Income Tax Returns (annual); SOI Bulletin, Summer 1985, p. 93, Winter 1985-86, p. 97, Winter 1986-87, p. 83, Fall 1990, pp. 11-57, Winter 1990-91, p. 58, and records.

Table 276.-- ADJUSTED GROSS INCOME AND INCOME TAX, BY SIZE OF ADJUSTED GROSS INCOME, FOR INDIVIDUAL FEDERAL INCOME TAX RETURNS: TAX YEARS 1987 TO 1989

|   |   | Adjusted   | То   | tal income   | tax  |
|---|---|--|--|--|--|
| Tax year 1/ and size of   | Number<br>of  | gross income<br>less deficit   | Number<br>of   | Amount   | Average  |
| adjusted gross income   | returns   | (\$1,000)  | returns  | (\$1,000)  | (dollars)  |
| 1987  |   |  |  |  |  |
| All returns   | 506,302   | 12,670,065   | 439,394  | 1,640,755  | 3,734  |
| Under \$10,000 2/<br>\$10,000 under \$15,000<br>\$15,000 under \$30,000<br>\$30,000 under \$50,000<br>\$50,000 and over<br>Median income  | 155,127<br>70,617<br>136,371<br>85,766<br>58,421<br>\$17,905                              | 575,076<br>879,316<br>2,926,801<br>3,316,271<br>4,972,601  | 94,292<br>66,680<br>134,564<br>85,519<br>58,339                              | 31,723<br>61,961<br>273,647<br>378,081<br>895,343                                  | 336<br>929<br>2,034<br>4,421<br>15,347                               |
| 1988  |   |  |  |  |  |
| All returns   | 520,575   | 14,215,978   | 447,779  | 1,925,661  | 4,300  |
| Under \$10,000 2/<br>\$10,000 under \$15,000<br>\$15,000 under \$30,000<br>\$30,000 under \$50,000<br>\$50,000 and over<br>Median income  | 150,713<br>69,067<br>142,131<br>90,175<br>68,489<br>\$19,275                              | 393,553<br>860,481<br>3,052,250<br>3,494,660<br>6,415,034  | 85,838<br>63,540<br>139,999<br>89,973<br>68,429                              | 30,839<br>60,789<br>286,398<br>397,921<br>1,149,714                                | 359<br>957<br>2,046<br>4,423<br>16,802                               |
| 1989  |   |  |  |  |  |
| All returns   | 542 <b>,</b> 943  | 15,851,813   | 467,371  | 2,177,174  | 4,658  |
| Under \$10,000 2/<br>\$10,000 under \$15,000<br>\$15,000 under \$30,000<br>\$30,000 under \$50,000<br>\$50,000 and \$75,000<br>\$75,000 under \$100,000<br>\$100,000 under \$200,000<br>Median income | 148,272<br>67,704<br>147,699<br>96,448<br>53,223<br>15,753<br>10,225<br>3,619<br>\$20,636 | 381,939<br>842,874<br>3,182,649<br>3,748,463<br>3,206,430<br>1,338,860<br>1,352,584<br>1,798,014 | 80,188<br>62,477<br>145,752<br>96,201<br>53,177<br>15,741<br>10,217<br>3,618 | 28,795<br>59,546<br>302,591<br>434,807<br>437,966<br>222,271<br>273,713<br>417,485 | 359<br>953<br>2,076<br>4,520<br>8,236<br>14,120<br>26,789<br>115,391 |

Filed in following year.

 $\frac{1}{2}$  Filed in following year.  $\frac{2}{2}$  Includes returns with adjusted gross deficit.

Source: U.S. Treasury Department, Internal Revenue Service, "Individual Income Tax Returns Data by State, 1986-1988," SOI Bulletin, Fall 1990, pp. 11-57; SOI Bulletin, Winter 1990-1991, pp. 58-60; and SOI Bulletin, Spring 1991, p. 66.

Table 277.-- CHARACTERISTICS OF INDIVIDUAL FEDERAL INCOME TAX RETURNS: TAX YEAR 1989

| Subject  | Number of returns  | Amount (\$1,000)  |
|--|--|---|
| All returns and adjusted gross income (AGI) Salaries and wages | 542,943<br>463,687<br>113,021<br>396,550<br>60,537<br>19,676<br>163,183<br>467,371<br>36,535 | 15,851,813<br>11,617,775<br>333,060<br>879,034<br>1,064,861<br>31,699<br>2,333,700<br>2,177,174<br>18,301 |

Source: U.S. Treasury Department, Internal Revenue Service, <u>SOI Bulletin</u>, Winter 1990-1991, pp. 58-60.

Table 278.-- INTERNAL REVENUE SERVICE OPERATIONS: 1988 TO 1990

| Subject   | 1988                   | 1989                       | 1990                      |
|---|------------------------|----------------------------|---------------------------|
| Internal revenue collections (\$1,000) Individual income and employment taxes | 3,310,750<br>2,890,569 | 3,731,845<br>3,240,686     | 4,264,127<br>3,670,041    |
| Total returns filed Individual income tax                                     | 909,109<br>503,855     | 934,307<br>519,674         | 964,868<br>535,785        |
| Returns examined  | 4,208<br>3,485         | 2,797<br>2,323             | 3,099<br>2,333            |
| Additional tax and penalties recommended after examination (\$1,000)          | 28,092<br>16,690       | 22,912<br>13,713<br>10,976 | 30,616<br>9,946<br>12,160 |
| Costs incurred (\$1,000)  | 10,350                 | 10,970                     | 12,100                    |

Source: Internal Revenue Service, Annual Report, 1988, 1989, and 1990.

Table 279.-- RESIDENT INDIVIDUAL STATE INCOME TAX RETURNS: TAX YEARS 1979 TO 1989

| Year income<br>was received | Number<br>of<br>resident<br>returns | Adjusted gross income 1/(\$1,000) | Net<br>taxable<br>income<br>(\$1,000) | Tax<br>liability<br>(\$1,000) |
|-----------------------------|-------------------------------------|-----------------------------------|---------------------------------------|-------------------------------|
| 1979                        | 431,906                             | 5,639,290                         | 3,871,963                             | 282,093                       |
| 1980                        | 423,858                             | 6,506,757                         | 4,275,817                             | 321,738                       |
| 1981                        | 448,320                             | 6,884,575                         | 4,479,808                             | 336,497                       |
| 1982                        | 422,535                             | 6,912,014                         | 4,469,031                             | 339,108                       |
| 1983                        | 424,194                             | 7,088,769                         | 4,695,499                             | 360,551                       |
| 1984                        | 422,245                             | 7,604,199                         | 4,980,484                             | 387,300                       |
| 1985                        | 427,572                             | 8,060,406                         | 5,284,942                             | 415,544                       |
| 1986                        | 426,532                             | 8,370,257                         | 5,493,138                             | 437,263                       |
| 1987                        | 468,363                             | 10,147,149                        | 7,170,035                             | 556,135                       |
| 1988                        | 483,913                             | 11,504,190                        | 8,387,106                             | 658,879                       |
| 1989                        | 510,512                             | 13,091,785                        | 9,540,367                             | 729,649                       |

1/ Exclusive of losses.
Source: Hawaii State Department of Taxation, Hawaii Income Patterns
Individuals (annual), and records.

Table 280.-- STATE INCOME TAX RATIOS: 1979, 1984, 1988, AND 1989

| Ratio   | 1979 | 1984 | 1988  | 1989  |
|---|------|------|-------|-------|
| Adjusted gross income per return (dollars)  Tax liability per return (dollars)  Tax liability as percent of AGI | 653  | 917  | 1,362 | 1,429 |

Source: Preceding table.

Table 281.-- STATE INCOME TAX RESIDENT RETURNS ON INCOME RECEIVED DURING 1989, BY ADJUSTED GROSS INCOME CLASS

| Adjusted gross<br>income class  | Number<br>of<br>returns  | Adjusted<br>gross<br>income <u>1</u> /<br>(dollars)  | Net<br>taxable<br>income<br>(dollars)   | Tax<br>liability<br>(dollars)  |
|---|--|--|---|--|
| All resident returns .  | 501,512  | 13,091,784,704   | 9,540,366,875   | 729,649,108  |
| Taxable resident returns  Under \$1,000  \$1,000, under \$5,000  \$5,000, under \$10,000  \$10,000, under \$20,000  \$20,000, under \$30,000  \$30,000, under \$40,000  \$40,000, under \$50,000  \$50,000, under \$75,000  \$75,000, under \$100,000  \$100,000 and over  Nontaxable resident returns  Loss  Under \$5,000  \$5,000, under \$10,000  \$10,000 and over | 411,203<br>4,094<br>40,705<br>57,036<br>100,416<br>63,098<br>45,778<br>32,367<br>43,444<br>13,328<br>10,937<br>99,309<br>2,237<br>86,793<br>6,559<br>3,720 | 133,872,667<br>424,929,123<br>1,508,387,341<br>1,555,380,993<br>1,581,525,229<br>1,444,510,973<br>2,612,208,564<br>1,144,470,471 | 985,810<br>54,156,405<br>241,691,212<br>1,090,412,337<br>1,175,022,705<br>1,192,526,118<br>1,049,747,760<br>1,903,148,906<br>842,049,121<br>1,990,626,501 | 1,385,162<br>10,816,411<br>67,938,876<br>82,989,212<br>87,885,340<br>79,712,225<br>151,838,609 |

1/ Total and subtotals exclude losses.  $\overline{\text{Source:}}$  Hawaii State Department of Taxation, records.

Table 282.-- MEDIAN ADJUSTED GROSS INCOME OF RESIDENT STATE INCOME TAX RETURNS, BY TYPE OF RETURN, 1979 TO 1989, AND BY COUNTIES, 1988 AND 1989

## [In dollars]

|                                     | Taxable and nontaxable returns |        |                  | Taxable        | returns | only             |  |
|-------------------------------------|--------------------------------|--------|------------------|----------------|---------|------------------|--|
| Year income<br>was received         | All<br>returns                 | Joint  | Other <u>1</u> / | All<br>returns | Joint   | Other <u>1</u> / |  |
| 1979                                | 8,738                          | 20,073 | 4,757            | 11,804         | 22,636  | 6,875            |  |
|                                     | 9,676                          | 21,510 | 5,294            | 13,464         | 24,980  | 7,639            |  |
|                                     | 10,220                         | 23,321 | 5,794            | 14,737         | 26,881  | 8,455            |  |
|                                     | 11,178                         | 23,737 | 6,080            | 15,466         | 27,285  | 9,636            |  |
|                                     | 11,297                         | 25,047 | 6,432            | 15,937         | 29,076  | 10,009           |  |
|                                     | 12,035                         | 25,290 | 6,858            | 16,565         | 28,935  | 10,540           |  |
|                                     | 12,488                         | 25,838 | 7,087            | 17,124         | 29,870  | 10,710           |  |
|                                     | 12,941                         | 26,576 | 7,768            | 17,747         | 31,755  | 11,557           |  |
|                                     | 13,252                         | 29,036 | 7,709            | 17,977         | 34,063  | 11,131           |  |
|                                     | 14,749                         | 31,787 | 8,910            | 18,956         | 36,706  | 12,452           |  |
|                                     | 15,614                         | 34,581 | 9,382            | 20,502         | 39,305  | 13,748           |  |
| Honolulu Maui Kauai  COUNTIES: 1989 | 15,172                         | 33,391 | 9,243            | 19,542         | 37,825  | 12,706           |  |
|                                     | 16,176                         | 32,478 | 10,407           | 19,968         | 36,699  | 12,876           |  |
|                                     | 11,006                         | 24,509 | 6,118            | 16,292         | 29,375  | 10,572           |  |
|                                     | 13,725                         | 28,085 | 6,800            | 17,757         | 32,188  | 10,597           |  |
| Honolulu Maui Hawaii Kauai          | 15,838                         | 35,890 | 9,535            | 21,131         | 40,986  | 13,819           |  |
|                                     | 17,621                         | 35,163 | 10,850           | 20,811         | 37,999  | 14,232           |  |
|                                     | 12,309                         | 28,162 | 7,528            | 17,693         | 33,490  | 12,758           |  |
|                                     | 15,430                         | 31,068 | 8,916            | 19,249         | 34,812  | 14,275           |  |

<sup>1/</sup> Including single, married filing separately, heads of
households, and qualifying widows and widowers.
 Source: Hawaii State Department of Taxation, Hawaii Income
Patterns, Individuals (annual), and records.

Table 283.-- GENERAL EXCISE AND USE TAX BASE AND COLLECTIONS: 1989 AND 1990

[In thousands of dollars. Data are on a cash basis accounting]

|   | Tax   | base  | Tax col  | lections   |
|---|---|---|--|--|
| Source of revenue   | 1989  | 1990  | 1989   | 1990   |
| All sources   | 35,778,922  | 40,460,212  | 1,096,476  | 1,250,203  |
| Sources taxed at 4 percent Retailing Services Contracting Theater, amusement, radio Interest Commissions Hotel rentals All other rentals Use (4 percent) All others (4 percent) | 24,833,681<br>11,607,779<br>3,699,003<br>3,112,846<br>184,154<br>269,093<br>618,462<br>1,505,071<br>2,603,669<br>477,078<br>756,526 | 28,116,081<br>12,827,883<br>4,276,876<br>4,003,650<br>201,003<br>309,530<br>750,308<br>1,572,994<br>2,828,739<br>501,926<br>843,172 | 993,347<br>464,311<br>147,960<br>124,514<br>7,366<br>10,764<br>24,738<br>60,203<br>104,147<br>19,083<br>30,261 | 1,124,643 513,115 171,075 160,146 8,040 12,381 30,012 62,920 113,149 20,077 33,727 |
| Sources taxed at other rates 1/.  Insurance solicitors  | 10,945,241<br>184,310<br>38,214<br>12,622<br>326,400<br>630,997<br>6,595,569<br>189,018<br>2,968,111                                | 12,344,131<br>223,938<br>26,987<br>7,476<br>317,337<br>728,387<br>7,494,330<br>349,111<br>3,196,565                                 | 54,081<br>276<br>191<br>63<br>1,632<br>3,155<br>32,978<br>945<br>14,841<br>49,048                              | 60,937<br>336<br>135<br>37<br>1,587<br>3,642<br>37,472<br>1,746<br>15,983          |

<sup>1/</sup> Insurance solicitors at 0.15 percent; others at 0.5 percent.

Source: Hawaii State Department of Taxation, General Excise and Use Tax

Base and General Excise and Use Tax Collections (calendar year summary tables).

Table 284.-- REAL PROPERTY TAX VALUATIONS: ANNUALLY, 1981 TO 1991

[Thousands of dollars. As of January 1. Government parcels assessed at \$1, 1983-1987, and at 100 percent thereafter]

|   | Assess-  | Asses   | Valua-<br>tion for   |  |  |
|---|--|---|--|--|--|
| Year  | ment<br>ratio <u>1</u> /   | Total   | Land   | Improve-<br>ment   | tax rate<br>purposes   |
| 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 | 60<br>60<br>100<br>100<br>100<br>100<br>100<br>100<br>100<br>100 | 25,371,079<br>29,631,825<br>46,659,440<br>49,085,380<br>51,231,020<br>52,814,463<br>54,655,038<br>67,628,063<br>76,926,745<br>99,942,540<br>132,952,299 | 13,775,220<br>15,982,660<br>23,603,352<br>24,900,368<br>25,507,708<br>26,442,872<br>27,396,477<br>36,730,370<br>42,778,927<br>61,554,968<br>88,359,248 | 11,595,859<br>13,649,165<br>23,056,088<br>24,185,012<br>25,723,312<br>26,371,591<br>27,258,561<br>30,897,693<br>34,147,818<br>38,387,572<br>44,593,051 | 17,933,736<br>21,397,832<br>39,508,235<br>41,672,612<br>43,581,421<br>45,222,885<br>46,629,959<br>50,219,249<br>57,526,564<br>71,080,524<br>95,943,417 |

<sup>1/</sup> Percent of fair market value.

Source: Honolulu Department of Finance, Real Property
Assessment Division, Real Property Tax Valuations & Tax Rates for
the Fiscal Year 1981-82, and Real Property Tax Valuations, Tax
Rates, & Exemptions (annual, 1982 forward).

Table 285.-- REAL PROPERTY TAX VALUATIONS: 1989 TO 1991
[In thousands of dollars]

| Subject  | 1989                                   | 1990                                   | 1991                                    |
|--|--|--|---|
| Assessor's gross valuation 1/  Land  Improvement   | 76,926,745<br>42,778,927<br>34,147,818 | 99,942,540<br>61,554,968<br>38,387,572 | 132,952,299<br>88,359,248<br>44,593,051 |
| Exemptions   | 18,752,245                             | 27,282,840                             | 34,766,801                              |
| Assessor's net taxable valuation                   | 58,174,500                             | 72,659,700                             | 98,185,498                              |
| Half of valuation on appeal  Number of appeals     | 647,936<br>2,560                       | 1,579,176<br>4,089                     | 2,242,081<br>5,619                      |
| Valuation for tax rate purposes  Land  Improvement | 57,526,564<br>31,670,173<br>25,856,391 | 71,080,524<br>44,192,655<br>26,887,869 | 95,943,417<br>63,933,593<br>32,009,824  |
| Amount to be raised by taxation $\underline{1}/$   | 418,324                                | 476,683                                | 547,033                                 |

<sup>1/</sup> For fiscal years beginning July 1.
Source: City and County of Honolulu, Department of Finance, Real
Property Assessment Division, Real Property Tax Valuations, Tax Rates, &
Exemptions (annual).

Table 286.-- REAL PROPERTY TAX VALUATIONS, BY COUNTIES: 1991
[In thousands of dollars]

| Subject  | Honolulu                                | Maui                                 | Hawaii                              | Kauai                               |
|--|---|--------------------------------------|-------------------------------------|-------------------------------------|
| Assessor's gross valuation  Land  Improvement    | 101,816,321<br>70,922,450<br>30,893,871 | 14,777,227<br>7,826,154<br>6,951,073 | 9,612,478<br>5,233,981<br>4,378,497 | 6,746,273<br>4,376,663<br>2,369,610 |
| Exemptions                                       | 29,273,824                              | 1,880,726                            | 2,249,603                           | 1,362,648                           |
| Assessor's net taxable valuation .               | 72,542,497                              | 12,896,501                           | 7,362,875                           | 5,383,625                           |
| Half of valuation on appeal  Number of appeals   | 1,790,846<br>3,942                      |                                      | 39 <b>,</b> 755<br>198              | 184,639<br>935                      |
| Valuation for tax rate purposes Land Improvement | 70,751,651<br>49,619,922<br>21,131,729  | 12,669,660<br>6,765,493<br>5,904,167 | 7,323,120<br>4,240,418<br>3,082,702 | 5,198,986<br>3,307,760<br>1,891,226 |
| Amount to be raised by taxation $\underline{1}/$ | 377,675                                 | 70,064                               | 66,895                              | 32,398                              |

<sup>1/</sup> For fiscal year beginning July 1.
Source: City and County of Honolulu, Department of Finance, Real Property
Assessment Division, Real Property Tax Valuations, Tax Rates, & Exemptions,
1991-1992 Tax Year, State of Hawaii (July 1991), pp. 2-5.

Table 287.-- REAL PROPERTY TAX EXEMPTIONS, BY TYPE: 1991

| Type of exemption   | Number   | Amount <u>1</u> / (\$1,000)  |
|---|--|--|
| All exemptions  | 197,304  | 34,878,224   |
| Federal government State government County government Homes-fee (basic and multiple) Homes-lease (basic and multiple) Churches Hospitals Low-moderate income housing Charitable organizations Public utilities Schools All others | 393 7,039 2,884 141,846 26,915 1,390 81 964 640 785 150 14,217 | 4,639,217 10,848,601 3,116,229 9,165,495 1,584,119 1,146,315 493,230 636,185 672,111 773,551 655,013 1,148,158 |

 $<sup>\ \ \,</sup>$   $\ \ \,$   $\ \ \,$   $\ \ \,$   $\ \ \,$   $\ \ \,$   $\ \ \,$   $\ \ \,$   $\ \ \,$   $\ \ \,$   $\ \ \,$   $\ \$   $\$   $\ \$   $\ \$   $\ \$   $\ \$   $\ \$   $\ \$   $\ \$   $\ \$   $\ \$   $\ \$   $\ \$   $\$   $\ \$   $\$   $\ \$   $\$   $\ \$   $\ \$   $\$   $\$   $\$   $\$   $\ \$   $\$ 

Source: City and County of Honolulu, Department of Finance, Real Property Assessment Division, Real Property Tax Valuations, Tax Rates & Exemptions, 1991-1992 Tax Year, State of Hawaii (July 1991), p. 6.

Table 288.-- REAL PROPERTY TAX VALUATIONS, BY LAND USE CLASSES: 1991
[In thousands of dollars]

|  | Gross val   | Amounts<br>to be<br>raised by<br>taxation,<br>fiscal  |  |  |
|--|---|---|--|--|
| Land use class   | Total   | Total Land Improv   |  |  |
| All classes  Improved residential Apartment Commercial Industrial Agricultural Conservation Unimproved residential | 132,952,299  56,541,774 18,199,824 19,673,366 10,423,842 6,151,800 1,659,013 13,398,532 3,660,388 | 88,359,248  39,223,608 7,879,704 14,631,255 8,394,546 4,427,915 1,428,134 7,266,980 2,828,261 | 44,593,051<br>17,318,166<br>10,320,120<br>5,042,111<br>2,029,296<br>1,723,885<br>230,879<br>6,131,552<br>832,127 | 547,033<br>148,499<br>69,473<br>107,476<br>55,505<br>36,503<br>5,328<br>105,957<br>7,891 |
| Single family Homestead  | 1,889,244<br>1,354,516  | 1,433,173<br>845,672  | 456,071<br>508,844   | 7,103<br>3,298   |

Source: City and County of Honolulu, Department of Finance, Real Property Assessment Division, Real Property Tax Valuations, Tax Rates, & Exemptions, 1991-1992 Tax Year, State of Hawaii (July 1991).

Table 289.-- REAL PROPERTY TAX RATES, BY COUNTIES: FISCAL YEAR 1991-1992

[Dollars per \$1,000 net taxable value]

| Land use class  | Honolulu   | Maui   | Hawaii   | Kauai  |
|---|--|--|--|--|
| Land: Improved residential 1/ Unimproved residential 2/ Apartment Hotel/resort Commercial Industrial Agricultural Conservation            | 3.25<br>4.09<br>3.67<br>9.64<br>8.51<br>9.45<br>9.00<br>9.00 | 3.50<br>4.75<br>4.75<br>8.00<br>6.50<br>6.50<br>4.75<br>4.75 | 8.50<br>10.00<br>10.00<br>10.00<br>10.00<br>10.00<br>10.00 | 4.93<br>4.04<br>7.99<br>7.99<br>7.99<br>7.99<br>7.89<br>7.89 |
| Improvement: Improved residential 1/ Unimproved residential 2/ Apartment Hotel and resort Commercial Industrial Agricultural Conservation | 4.09<br>4.09<br>3.67<br>9.64<br>8.51<br>9.45<br>9.00         | 3.50<br>4.75<br>4.75<br>8.00<br>6.50<br>6.50<br>4.75<br>4.75 | 8.50<br>8.50<br>8.50<br>8.50<br>8.50<br>8.50<br>8.50       | 3.94<br>3.18<br>7.59<br>7.59<br>7.59<br>7.59<br>7.49         |

<sup>1/</sup> Single family for Kauai.

<sup>7/</sup> Homestead for Kauai.
Source: City and County of Honolulu, Department of Finance, Real Property Assessment Division, Real Property Tax Valuations, Tax Rates, & Exemptions, 1991-1992 Tax Year, State of Hawaii (July 1991), p. 8.

Table 290.-- FEDERAL EXPENDITURES IN HAWAII: 1968 TO 1990

[Millions of dollars. For fiscal years ended June 30 through 1976 and September 30 thereafter]

| Fiscal year  | Amount   | Fiscal year  | Amount   | Fiscal year                                  | Amount  |
|--|--|--|--|--|---|
| 1968<br>1969<br>1970<br>1971<br>1972<br>1973<br>1974 | 848<br>988<br>964<br>1,075<br>1,173<br>1,435<br>1,644<br>2,060 | 1976<br>1977<br>1978<br>1979<br>1980<br>1981<br>1982<br>1983 | 2,162<br>2,066<br>2,507<br>2,659<br>3,151<br>3,811<br>3,505<br>4,054 | 1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 4,232<br>4,568<br>4,643<br>4,759<br>4,957<br>5,422<br>5,461 |

Source: U.S. Office of Economic Opportunity (1968-1975) and U.S. Community Services Administration (1976-1980), Federal Outlays in Hawaii (annual report, 1968-1976) and Geographic Distribution of Federal Funds in Hawaii (annual report, 1977-1980); U.S. Bureau of the Census, Federal Expenditures by State for Fiscal Year 1990 (March 1991), p. 38.

Table 291.-- FEDERAL EXPENDITURES IN HAWAII, BY TYPES: FISCAL YEARS 1985 TO 1990

[Millions of dollars]

| Type of expenditure                          | 1985  | 1986  | 1987  | 1988  | 1989  | 1990  |
|--|-------|-------|-------|-------|-------|-------|
| All categories                               | 4,568 | 4,643 | 4,759 | 4,957 | 5,422 | 5,461 |
| Grants to State and local governments        | 436   | 473   | 460   | 477   | 528   | 598   |
|  | 1,942 | 1,961 | 2,073 | 2,078 | 2,285 | 2,166 |
|  | 1,444 | 1,517 | 1,617 | 1,715 | 1,884 | 2,034 |
|  | 672   | 619   | 525   | 591   | 624   | 547   |
|  | 73    | 73    | 84    | 96    | 100   | 115   |
| Department of Defense Other federal agencies | 2,553 | 2,486 | 2,503 | 2,562 | 2,821 | 2,604 |
|  | 2,015 | 2,158 | 2,256 | 2,395 | 2,601 | 2,857 |

Source: U.S. Bureau of the Census, <u>Federal Expenditures by State for Fiscal Year 1990</u> (March 1991), pp. 37-43, <u>corresponding data in earlier reports</u>, and records.

Table 292.-- PER CAPITA FEDERAL EXPENDITURES IN HAWAII, BY TYPES: FISCAL YEAR 1990

| Category       | Amount<br>(dollars) | Percent of U.S. | Rank <u>1</u> / |
|----------------|---------------------|-----------------|-----------------|
| All categories | 4,927.28            | 124.0           | 6               |
|                | 540.02              | 101.3           | 22              |
|                | 1,954.29            | 337.5           | 2               |
|                | 1,835.45            | 93.0            | 34              |
|                | 493.85              | 66.1            | 27              |
|                | 103.67              | 72.8            | 34              |
|                | 2,349.26            | 262.5           | 3               |
|                | 2,578.03            | 83.7            | 45              |

<sup>1/</sup> Out of 50 States. Including the District of Columbia, Hawaii

ranked seventh for the all-categories total.

Source: U.S. Bureau of the Census, Federal Expenditures by State for Fiscal Year 1990 (March 1991), tables 8, 10, and 12.

Table 293.-- DIRECT FEDERAL EXPENDITURES OR OBLIGATIONS IN HAWAII, BY COUNTIES: FISCAL YEAR 1990

[Thousands of dollars]

| County   | All<br>agencies                                       | Department<br>of Defense                       | All other agencies                                    |
|--|---|--|---|
| State total <u>1</u> /   | 5,633,928   | 2,602,585                                      | 3,031,343   |
| City and County of Honolulu Hawaii County Kauai County Maui County State undistributed | 4,766,897<br>343,997<br>149,673<br>205,795<br>167,566 | 2,504,225<br>20,089<br>46,160<br>32,003<br>108 | 2,262,672<br>323,908<br>103,513<br>173,792<br>167,458 |

<sup>1/</sup> Figures differ somewhat from those in tables 299 and 300, because of treatment of Federal grants to State and local governments. In those tables, figure represented actual expenditures; in this table, Federal grants generally represent obligations and include payments to State and local governments, and grants to nongovernmental recipients (see source, pp. vii and viii).

Source: U.S. Bureau of the Census, Consolidated Federal Funds Report,

Table 294.-- PUBLIC BONDED DEBT OF STATE AND COUNTY GOVERNMENTS: 1980 TO 1990

[In millions of dollars. As of December 31]

|      | Total<br>bonded   | State   | County debt   |   |   |  |  |
|------|---|---|---|---|---|--|--|
| Year | debt <u>1</u> /   | debt  | Honolulu  | Maui  | Hawaii  | Kauai  |  |
| 1980 | 2,054.3<br>2,217.9<br>2,359.5<br>2,545.4<br>2,715.7<br>3,131.5<br>3,311.8<br>3,298.4<br>3,382.3<br>3,710.4<br>4,484.5 | 1,764.9<br>1,883.6<br>2,039.3<br>2,235.8<br>2,391.5<br>2,621.2<br>2,720.4<br>2,700.7<br>2,728.8<br>2,969.9<br>3,394.4 | 207.5<br>235.5<br>235.5<br>219.5<br>221.0<br>404.0<br>456.8<br>448.7<br>513.6<br>559.5<br>846.3 | 22.4<br>21.1<br>19.8<br>19.0<br>33.5<br>30.8<br>47.2<br>48.8<br>43.1<br>73.6<br>110.5 | 45.6<br>46.2<br>45.8<br>52.1<br>50.9<br>56.7<br>69.3<br>67.3<br>65.1<br>72.4<br>100.0 | 13.8<br>31.4<br>19.0<br>19.0<br>18.8<br>18.8<br>18.0<br>32.9<br>31.6<br>35.0<br>33.2 |  |

 $<sup>\</sup>underline{1}/$  Outstanding state and county bonds, both general obligation and revenue bonds.

Source: Tax Foundation of Hawaii, Government in Hawaii (annual).

Table 295.-- STATE GENERAL OBLIGATION BOND DEBT: 1985 TO 1990

[In dollars. As of June 30]

| Year | Debt          | Year | Debt          |
|------|---------------|------|---------------|
| 1985 | 1,697,635,620 | 1988 | 1,847,982,810 |
| 1986 | 1,734,971,350 | 1989 | 1,978,039,494 |
| 1987 | 1,823,677,080 | 1990 | 2,026,100,383 |

Source: Hawaii State Department of Accounting and General Services, records.

Table 296.-- GOVERNMENT WORKERS, BY LEVEL OF GOVERNMENT, CIVIL SERVICE STATUS, AND MEMBERSHIP IN STATE RETIREMENT SYSTEM: 1940 TO 1990

[For earlier years, see Data Book 1987, table 324]

|  |  | Governmen<br>(annual   | State<br>civil  | State<br>retirement   |  |   |  |
|--|--|--|---|---|--|---|--|
| Year   | All<br>levels  | Federal  | Terr. or<br>State   | County  | service<br>workers <u>1</u> /  | system members 2/   |  |
| 1940<br>1945<br>1950<br>1960<br>1970<br>1987<br>1988<br>1989<br>1990 | 22,136<br>78,846<br>33,140<br>49,510<br>73,640<br>89,050<br>96,050<br>99,500<br>101,600<br>105,250 | 11,139<br>66,248<br>18,891<br>27,010<br>33,380<br>30,000<br>32,800<br>33,800<br>34,000<br>33,800 | 6,245<br>7,231<br>7,955<br>14,620<br>30,600<br>45,150<br>49,900<br>51,850<br>53,550<br>57,050 | 4,752<br>5,367<br>6,294<br>7,880<br>9,660<br>13,900<br>13,400<br>13,850<br>14,100<br>14,400 | 2,616<br>3,772<br>5,280<br>6,790<br>10,166<br>17,327<br>18,956<br>19,431<br>20,016<br>19,325 | 8,352<br>12,662<br>16,120<br>24,092<br>38,912<br>48,868<br>48,262<br>51,534<br>52,655<br>53,509 |  |

<sup>1/</sup> December 31 through 1960 and June 30 thereafter. State or Territorial workers in civil service system. Data exclude county employees, also covered by civil service.

2/ June 30 through 1960 and March 31 thereafter. Includes State or Territorial employees, county employees, and inactive members (those no longer employed by the State, Territory, or counties who have remained in the System), but excludes pensioners.

Source: Robert C. Schmitt, Historical Statistics of Hawaii
(University Press of Hawaii, 1978), pp. 616-617; The State of Hawaii Data
Book 1978, p. 158; Hawaii State Department of Labor and Industrial
Relations, Labor Force Data Book (March 1978, as updated); Hawaii State
Department of Personnel Services, Annual Report for 1980-1988, and records;
Employees' Retirement System of the State of Hawaii, 58th Annual Report,
June 30, 1984, p. 17, and records.

Table 297.-- STATE CIVIL SERVICE: 1988 TO 1990

[Years ended June 30. The State civil service system does not cover elected or appointed officials, public school teachers, university faculty, and other exempt positions]

| Subject   | 1988   | 1989   | 1990   |
|---|--------|--------|--------|
| Civil service employees, June 30  Department of Education Department of Health Department of Human Services Department of Transportation University of Hawaii All others  Separations | 19,431 | 20,016 | 19,325 |
|   | 4,157  | 4,518  | 4,708  |
|   | 4,710  | 4,890  | 4,962  |
|   | 1,599  | 1,545  | 1,641  |
|   | 1,927  | 1,987  | 2,076  |
|   | 1,543  | 1,547  | 1,533  |
|   | 5,495  | 5,529  | 4,405  |
| Promotions  | 1,677  | 897    | 867    |
|   | 1,742  | 997    | 780    |
|   | 10,340 | 10,463 | 4,593  |
| Applications received   | 24,988 | 27,184 | 30,818 |
|   | 20,146 | 24,782 | 28,537 |
|   | 6,932  | 10,578 | 9,851  |
|   | 2,965  | 3,094  | 3,103  |
|   | 239    | 189    | 262    |

Source: Hawaii State Department of Personnel Services, records.

Table 298.-- STATE SALARY SCHEDULES FOR SELECTED LEVELS: 1989 TO 1991

[In dollars per month. Data refer to lowest and highest rates among six bargaining units]

|              | Lowest |       |       | Highest |       |       |
|--------------|--------|-------|-------|---------|-------|-------|
| Salary range | July   | July  | July  | July    | July  | July  |
|              | 1989   | 1990  | 1991  | 1989    | 1990  | 1991  |
| SR-4         | 1,133  | 1,184 | 1,217 | 1,490   | 1,620 | 1,665 |
| SR-11        | 1,490  | 1,557 | 1,600 | 1,961   | 2,131 | 2,190 |
| SR-21        | 2,225  | 2,279 | 2,342 | 3,058   | 3,245 | 3,334 |
| SR-31        | 3,423  | 3,650 | 3,750 | 4,839   | 5,194 | 5,337 |

Source: Hawaii State Department of Personnel Services, salary schedules and conversion tables.

Table 299.-- SALARIES OF SELECTED GOVERNMENT OFFICIALS: 1976, 1989, 1990, AND 1991

[Annual rates, in dollars, as of January 1]

| Government official   | 1976   | 1989   | 1990   | 1991   |
|---|--|--|--|--|
| Governor Lieutenant Governor Mayor, Honolulu Mayor, Hawaii Mayor, Maui Mayor, Kauai Chief Justice, Supreme Court Associate Justice, Supreme Court President, University of Hawaii | 50,000<br>45,000<br>44,903<br>43,644<br>36,070<br>34,000<br>47,500<br>45,000 | 90,699<br>86,164<br>84,725<br>63,792<br>75,000<br>58,500<br>80,000<br>78,500<br>95,000 | 94,780<br>90,041<br>84,725<br>63,792<br>80,000<br>58,500<br>80,000<br>78,500<br>95,000 | 94,780<br>90,041<br>89,000<br>76,848<br>82,500<br>58,500<br>80,000<br>78,500<br>95,000 |

Source: <u>Hawaii Revised Statutes</u>; SLH 1989, Act 329; Salary Commission of the City and County of Honolulu, <u>Final Report and Salary Schedule</u>; Hawaii, Maui, and Kauai County ordinances; <u>DBED</u> telephone surveys; newspaper articles.

## **NATIONAL DEFENSE**

This section presents statistics relating to the armed forces and their dependents, national guard strength, civilian employment in national defense, veterans, land controlled by the Department of Defense, military housing, and expenditures by the armed forces. Further information appears in sections 1, 2, 12, and 23.

There were approximately 54,000 officers and enlisted men (including 2,600 aboard ships homeported in Hawaii) and 63,000 military dependents in the Islands as of July 1, 1991. This number has been relatively stable in recent years, but at the height of World War II more than 400,000 uniformed personnel were present. The Navy and Marine Corps account for half of the current total. More than 10,000 Hawaii residents were in the armed forces worldwide in 1991. The importance of national defense in Hawaii can be further measured by total expenditures (\$3.2 billion), military prime contract awards (\$512 million), civilian employment (19,000), veterans in civil life (100,000), military personnel receiving retired pay (11,300, receiving \$15 million monthly), military-connected pupils in public schools (19,900), military housing (19,300 units), and land owned or controlled by the armed forces (over 265,000 acres). Defense expenditures are second only to tourism as a source of income to Hawaii.

The Department of Business, Economic Development & Tourism has compiled periodic reports on military personnel and dependents since 1959. Other published sources include reports of the U.S. Department of Defense, U.S. Bureau of the Census, Administrator of Veterans Affairs, and the Hawaii State Department of Labor and Industrial Relations, Department of Defense, and Department of Education. Definitions used by these sources frequently differ to some degree, and care is accordingly necessary in comparing data issued by two or more agencies. In mid-1988, for example, the number of armed forces in Hawaii was reported as 45,843 by DOD, 56,815 by the Bureau of the Census, and 64,053 by the local commanding officers reporting to DBED. Historical Statistics of Hawaii, Section 26, includes series on the armed forces dating back to 1795. Section 11 of the Statistical Abstract of the United States: 1991 presents data on national defense and veterans affairs for other states and the entire nation.

## Table 300.-- HAWAII RESIDENTS ON ACTIVE DUTY IN THE ARMED FORCES WORLDWIDE: 1970 TO 1991

[As of June 30. Based on home of record]

| Year | Number | Year | Number | Year            | Number |
|------|--------|------|--------|-----------------|--------|
| 1970 | 15,331 | 1985 | 10,827 | 1989 <u>1</u> / | 10,052 |
| 1975 | 10,640 | 1987 | 10,896 | 1990            |        |
| 1980 | 11,851 | 1988 | 10,548 | 1991            |        |

1/ U.S. military personnel stationed abroad as of December 31, 1989 included 3,782 whose home of record was Hawaii and 5,049 whose last U.S. duty station was Hawaii.

Source: U.S. Department of Defense, Manpower Data Center, records; U.S. Bureau of the Census, "Press Clippings," CB90-28, July 23, 1990.

Table 301.-- DEPARTMENT OF DEFENSE PERSONNEL AND DEPENDENTS: 1985 TO 1990

[As of September 30. Excludes Coast Guard]

| Year | Active-duty shorebased military personnel 1/ | Dependents of active-duty military personnel 2/ | Direct-hire<br>civilian<br>personnel 3/ |  |
|------|--|---|---|--|
| 1985 | 46,875                                       | 55,552  | 20,762                                  |  |
|      | 46,122                                       | 53,428  | 20,536                                  |  |
|      | 47,262                                       | 52,438  | 20,243                                  |  |
|      | 45,843                                       | 54,820  | 20,133                                  |  |
|      | 43,792                                       | 54,724  | 20,246                                  |  |
|      | 39,936                                       | 51,727  | 19,857                                  |  |

<sup>1/</sup> Excludes Navy personnel afloat or temporary shorebased.

 $<sup>\</sup>overline{2}/$  Includes dependents of Hawaii residents stationed out of the State, if those dependents remained in Hawaii.

<sup>3/</sup> Includes Army personnel performing civil functions.
Source: U.S. Department of Defense, Washington Headquarters
Services, Directorate for Information, Operations and Reports,
Department of Defense Selected Manpower Statistics (annual).

Table 302.-- MILITARY PERSONNEL, DEPENDENTS, AND FAMILIES: 1970 TO 1991

[Includes Navy, Marine Corps, and Coast Guard personnel afloat on a homeported basis. Data differ somewhat from similar series compiled by the Bureau of the Census and Department of Defense, reported elsewhere in this volume]

|   |   | Personnel   | Militar  | y person   | nel <u>l</u> /   |  |  |
|---|---|---|--|--|--|--|--|
|   | Date  | and<br>dependents   | Total  | Ashore   | Aboard<br>ship   | Dependents<br>in Hawaii  | Military<br>families   |
| 1970:<br>1971:<br>1972:<br>1973:<br>1974:<br>1975:<br>1976:<br>1977:<br>1978:                   | April 1 July 1                      | 117,943<br>111,549<br>112,943<br>118,760<br>128,082<br>126,882<br>121,911<br>126,694<br>123,471<br>119,200            | 56,085<br>53,768<br>50,762<br>52,538<br>57,783<br>58,558<br>58,205<br>59,737<br>58,466<br>58,106           | 41,362<br>39,822<br>35,824<br>37,124<br>43,064<br>45,369<br>45,589<br>46,453<br>45,811<br>46,001           | 14,723<br>13,946<br>14,938<br>15,414<br>14,719<br>13,189<br>12,616<br>13,284<br>12,655<br>12,105   | 61,858<br>57,781<br>62,181<br>66,222<br>70,299<br>68,324<br>63,706<br>66,957<br>65,005<br>61,094           | 20,558<br>20,568<br>23,184<br>23,688<br>25,264<br>29,082<br>26,122<br>26,395<br>25,927<br>25,400           |
| 1979:<br>1980:<br>1981:<br>1982:<br>1983:<br>1984:<br>1985:<br>1986:<br>1987:<br>1988:<br>1989: | April 1 July 1 | 122,386<br>125,042<br>125,865<br>127,816<br>125,273<br>127,887<br>122,286<br>124,794<br>125,127<br>133,958<br>116,644 | 57,868<br>61,019<br>61,521<br>61,107<br>59,021<br>60,804<br>58,005<br>58,584<br>60,277<br>64,053<br>56,370 | 44,915<br>48,813<br>46,255<br>54,184<br>53,755<br>56,321<br>53,848<br>53,616<br>56,322<br>60,621<br>53,263 | 12,953<br>12,206<br>15,266<br>6,923<br>5,266<br>4,483<br>4,157<br>4,968<br>3,955<br>3,432<br>3,107 | 64,518<br>64,023<br>64,344<br>66,709<br>66,252<br>67,083<br>64,281<br>66,210<br>64,850<br>69,905<br>60,274 | 27,835<br>26,129<br>25,893<br>26,009<br>26,791<br>31,415<br>29,997<br>29,481<br>32,038<br>34,535<br>31,652 |
| 1990:<br>1991:  | April 1<br>July 1   | 113,833<br>117,141  | 53,898<br>53,813   | 50,681<br>51,197   | 3,217<br>2,616   | 59,935<br>63,328   | 30,934<br>28,655   |

 $<sup>\</sup>underline{1}/$  Beginning in 1982, ship crews living ashore are included with the ashore total.

Source: Hawaii State Department of Business, Economic Development & Tourism, annual survey of local commanding officers.

Table 303.-- MILITARY PERSONNEL, DEPENDENTS, AND FAMILIES, BY SERVICE AND ISLAND: JULY 1, 1991

[See headnote to preceding table]

|  |   | N   | Military               |                      |                          |   |  |
|--|---|---|------------------------|----------------------|--------------------------|---|--|
|  | Person-                                       |   | Livi                   | ng ashore            |                          |   |  |
| Island and service                                       | nel and<br>depend-<br>ents                    | Ashore<br>and<br>afloat                     | hsg.                   | In<br>barracks       | Living<br>aboard<br>ship | Depend-<br>ents in<br>Hawaii                | Military<br>families                     |
| State total  | 117,141                                       | 53,813                                      | 34,715                 | 16,482               | 2,616                    | 63,328                                      | 28,655                                   |
| By island: Oahu Hawaii Maui Kauai Kure Atoll             | 116,603<br>199<br>40<br>274<br>25             | 76<br>13                                    | 73<br>13               | 3 -                  | 2,616                    | 63,042<br>123<br>27<br>133<br>3             | 28,508<br>60<br>9<br>77<br>1             |
| By service: Air Force Army Coast Guard Marine Corps Navy | 13,901<br>42,524<br>2,182<br>15,784<br>42,750 | 5,961<br>18,910<br>1,030<br>7,022<br>20,890 | 11,484<br>822<br>3,674 | 7,426<br>79<br>3,348 | 129<br>-<br>2,487        | 7,940<br>23,614<br>1,152<br>8,762<br>21,860 | 3,280<br>9,333<br>510<br>3,362<br>12,170 |

Source: Hawaii State Department of Business, Economic Development  $\xi$  Tourism, annual survey of local commanding officers.

Table 304.-- NATIONAL GUARD STRENGTH: 1986 TO 1991

[Actual strength as of late June]

| Service                                   | 1986           | 1987           | 1988           | 1989           | 1990           | 1991           |
|---|----------------|----------------|----------------|----------------|----------------|----------------|
| Total                                     | 5 <b>,</b> 882 | 5,814          | 5,838          | 5,769          | 5,711          | 5,632          |
| Air National Guard<br>Army National Guard | 2,197<br>3,685 | 2,190<br>3,624 | 2,187<br>3,651 | 2,159<br>3,610 | 2,124<br>3,587 | 2,078<br>3,554 |

Source: Hawaii State Department of Defense, records.

Table 305.-- DEPARTMENT OF DEFENSE PERSONNEL, MILITARY AND CIVILIAN, BY SERVICE: SEPTEMBER 30, 1990

| Category  | All<br>services  | Army            | Navy             | Air<br>Force   | Other<br>DoD |
|---|------------------|-----------------|------------------|----------------|--------------|
| Total   | 59,793           | 24,138          | 27,686           | 7 <b>,</b> 855 | 114          |
| Military personnel $\frac{1}{2}$ / Civilian personnel $\frac{1}{2}$ / | 39,936<br>19,857 | 18,590<br>5,548 | 15,735<br>11,951 | 5,611<br>2,244 | -<br>114     |

Footnotes and source follow next table.

Table 306.-- DEPARTMENT OF DEFENSE PERSONNEL, MILITARY AND CIVILIAN, BY LOCATION: SEPTEMBER 30, 1990

|   | Total  | Military       | Civilian             |
|---|--------|----------------|----------------------|
| Installation or geographic area   | DoD    | personnel 1/   | personnel <u>2</u> / |
| State total   | 59,793 | 39,936         | 19,857               |
| Aiea Barbers Point NAS Camp H. M. Smith Ford Island Fort Shafter Hickam AFB Honolulu                        | 762    | 479            | 283                  |
|   | 1,851  | 1,480          | 371                  |
|   | 952    | 952            | -                    |
|   | 365    | 330            | 35                   |
|   | 2,035  | 2              | 2,033                |
|   | 7,705  | 5,763          | 1,942                |
|   | 1,983  | 1,627          | 356                  |
| Kaneohe   | 5,261  | 4 <b>,</b> 574 | 687                  |
|   | 213    | 30             | 183                  |
| Kauai Kunia Lualualei Pearl Harbor Schofield Barracks Tripler Army Medical Center Wahiawa Wheeler AFB Other | 287    | 150            | 137                  |
|   | 1,554  | 1,505          | 49                   |
|   | 481    | 213            | 268                  |
|   | 17,477 | 7,426          | 10,051               |
|   | 14,714 | 13,616         | 1,098                |
|   | 1,361  | -              | 1,361                |
|   | 912    | 730            | 182                  |
|   | 1,342  | 880            | 462                  |
|   | 538    | 179            | 359                  |

<sup>1</sup>/ Active duty. Navy figure includes Marine Corps and excludes personnel afloat on temporary shore-based.

<sup>2/</sup> Direct hire. Army data include civil function personnel.

Source: U.S. Office of the Secretary of Defense, Washington
Headquarters Services, Directorate for Information Operations and Reports,
Department of Defense Distribution of Personnel by State and by Selected
Locations, September 30, 1990, pp. 6 and 28.

Table 307.-- CIVILIAN EMPLOYMENT IN THE AIR FORCE, ARMY, AND NAVY: ANNUAL AVERAGES, 1985 TO 1990

| Service                   | 1985   | 1986   | 1987   | 1988   | 1989   | 1990   |
|---------------------------|--------|--------|--------|--------|--------|--------|
| Total Air Force Army Navy | 20,750 | 20,400 | 20,150 | 20,200 | 20,100 | 19,350 |
|                           | 2,650  | 2,650  | 2,550  | 2,450  | 2,350  | 2,300  |
|                           | 5,400  | 5,600  | 5,600  | 5,500  | 5,550  | 5,550  |
|                           | 12,700 | 12,150 | 11,950 | 12,250 | 12,200 | 11,500 |

Source: Hawaii State Department of Labor and Industrial Relations, Labor Force Data Book (March 1978), as updated annually through April 1991.

Table 308.-- MILITARY PRIME CONTRACT AWARDS, BY PROGRAM: 1988 TO 1990 [In thousands of dollars. Fiscal years ended September 30. Net value of Department of Defense prime contracts over \$25,000]

| Procurement program   | 1988   | 1989   | 1990   |
|---|--|--|--|
| Total   | 540,991  | 578,733  | 511,893  |
| Ships Electronics and communication equipment Petroleum Construction Services | 14,459<br>34,798<br>72,585<br>250,616<br>139,167<br>29,366 | 25,529<br>32,645<br>38,240<br>262,044<br>191,413<br>28,862 | 16,086<br>37,214<br>59,274<br>157,555<br>198,244<br>43,520 |

Source: U.S. Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, Prime Contract Awards by Region and State, Fiscal Years 1990, 1989, and 1988, p. 29.

## Table 309.-- ALTERNATE ESTIMATES OF FEDERAL DEFENSE EXPENDITURES: 1970 TO 1990

[In millions of dollars. These widely differing estimates from different sources reflect variations in coverage, definitions, and reporting periods. DBED plans to issue new and revised estimates in 1992]

| Year   | Based on GSP accounts 1/   | Based on local services <u>2</u> /   | Census Bureau<br>data <u>3</u> /   | Bank of Hawaii<br>estimates <u>4</u> /   |
|--|--|--|--|--|
| 1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978 | 916.8<br>958.6<br>1,068.2<br>1,223.1<br>1,311.8<br>1,442.1<br>1,499.2<br>1,576.1<br>1,644.5<br>1,707.7 | 639.4<br>708.8<br>744.2<br>840.9<br>897.9<br>982.8<br>1,034.2<br>1,086.6<br>1,155.5<br>1,221.8 | 524<br>623<br>670<br>807<br>944<br>1,107<br>1,221<br>995<br>1,240<br>1,372 | 675.2<br>722.2<br>763.4<br>872.2<br>935.0<br>1,027.5<br>1,080.3<br>1,131.8<br>1,214.8<br>1,309.7 |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985                         | 1,865.4<br>2,041.2<br>2,385.3<br>2,566.5<br>2,653.0<br>2,810.1<br>2,866.3                              | 1,317.4<br>1,449.3<br>1,693.4<br>1,848.2<br>1,867.2<br>1,965.4<br>1,784.9                      | 1,648 2,223 1,932 2,198 2,324 2,553 2,486                                  | 1,399.2<br>1,520.9<br>1,820.0<br>2,028.7<br>2,062.9<br>2,159.5<br>2,033.0                        |
| 1987<br>1988<br>1989<br>1990   | 2,923.6<br>2,924.2<br>3,050.8<br>3,203.3   | 1,857.0<br>1,892.4<br>2,038.2  | 2,503<br>2,562<br>2,821<br>2,604   | 2,220.1<br>2,159.0<br>2,313.5  |

<sup>1/</sup> DBED estimates based partly on U.S. Bureau of Economic Analysis data; see table 379 and its source.

2/ DBED data based on partial reporting by armed services in Hawaii; see Data Book 1990, table 318. Series discontinued after 1989.

Sources cited in footnotes.

<sup>3/</sup> U.S. Department of Defense expenditures reported by U.S. Office of Economic Opportunity (1970-75), Community Services Administration (1976-80), and Bureau of the Census (1981-90); see Data Book for 1982 (table 224), 1987 (table 320), and 1991 (table 291). Data refer to fiscal years.

<sup>4/</sup> Bank of Hawaii estimates reported in their <u>Hawaii 1990</u>, <u>Annual Economic Report</u>, p. 38. Series discontinued after 1989 and replaced with <u>Census Bureau data</u>.

Table 310. -- ACREAGE OWNED OR CONTROLLED BY THE U.S. DEPARTMENT OF DEFENSE, BY BRANCH OF SERVICE AND BY ISLANDS: APRIL 1987

| Branch of service and island   | Total<br>acreage   | Owned<br>in fee                           | Ceded<br>1and <u>1</u> /   | Other<br>1and <u>2</u> /                                |
|--|--|---|----------------------------|---|
| All branches   | 265,402  | 26,406                                    | 146,187                    | 92,809  |
| Branch of service: Air Force Army Navy and Marine Corps  | 6,081<br>165,807<br>93,514   | 2,496<br>4,058<br>19,851                  | 2,827<br>101,688<br>41,672 | 757<br>60,061<br>31,991                                 |
| Island: Hawaii Maui Kahoolawe Lanai Molokai Oahu Kauai Niihau Kaula Northwestern Hawaiian Islands, exc. Midway | 108,928<br>8<br>28,777<br>-<br>6,319<br>93,888<br>27,371<br>3<br>108 | 4<br>5<br>-<br>-<br>26,397<br>-<br>-<br>- | 84,819<br>                 | 24,105<br>3<br>-<br>6,307<br>36,945<br>25,446<br>3<br>- |

Source: Hawaii State Department of Business and Economic Development, Land Ownership in Hawaii 1987 (Statistical Report 208, September 1988), pp. 7-10.

<sup>1/</sup> Includes 4,962 acres of submerged Navy land in Pearl Harbor.  $\overline{2}/$  Held under lease, license, or permit. Includes 31,283 acres of Navy Tand used for intermittent training with no permanent occupancy and subject to restrictions.

Table 311. -- HOUSING UNITS OWNED BY THE ARMED FORCES, BY COUNTIES: APRIL 1, 1990 AND 1991

| Year | State<br>total | Hono-<br>lulu | Hawaii | Kauai | Maui |
|------|----------------|---------------|--------|-------|------|
| 1990 | 19,199         | 19,116        | 15     | 62    | 6    |
| 1991 | 19,348         | 19,272        | 8      | 62    | 6    |

Source: Hawaii State Department of Business, Economic Development & Tourism, Housing Unit Estimates for Hawaii (annual).

Table 312.-- VETERANS IN CIVIL LIFE: 1980 AND 1990

| Period of service  | March 31,<br>1980                                     | March 31,<br>1990  |
|--|---|--|
| Total veterans <u>1</u> /  | 94,000  | 100,000  |
| Wartime veterans 1/ Vietnam era Korean conflict World War II World War I  Peacetime veterans Post-Vietnam era only 2/ Between Korea and Vietnam only Other peacetime veterans 3/ | 78,000 33,000 20,000 30,000 1,000 15,000 3,000 13,000 | 78,000<br>36,000<br>20,000<br>31,000<br>(Z)<br>22,000<br>10,000<br>10,000<br>1,000 |

Under 500.

Source: Veterans Administration, Veteran Population (annual report).

<sup>1/</sup> Veterans who served in more than one conflict are counted only once in the totals and subtotals.

<sup>2/</sup> Service only after May 7, 1975.

3/ Includes those who served only between World War I and World War II, and those who served only between World War II and the Korean conflict.

Table 313.-- MILITARY PERSONNEL RECEIVING RETIRED PAY FROM THE DEPARTMENT OF DEFENSE: SEPTEMBER 30, 1990

|                                  | Number of                      | personnel                      | Monthly                          | Payment<br>per person            |  |
|----------------------------------|--------------------------------|--------------------------------|----------------------------------|----------------------------------|--|
| Service                          | Retired <u>1</u> /             | Paid by<br>DOD                 | payment 2/<br>(\$1,000)          | paid 2/<br>(dollars)             |  |
| Dept. of Defense                 | 12,461                         | 11,334                         | 15,030                           | 1,326                            |  |
| Army Navy Marine Corps Air Force | 5,077<br>3,472<br>830<br>3,082 | 4,512<br>3,196<br>743<br>2,883 | 5,479<br>4,364<br>1,128<br>4,068 | 1,214<br>1,365<br>1,518<br>1,411 |  |

<sup>1/</sup> Includes retired personnel not receiving retired pay from the Department of Defense.

2/ Before deductions for withholding taxes and allotments, but after deductions for survivor benefits, dual compensation, etc.

Source: U.S. Department of Defense, Office of the Actuary, FY 1990

DOD Statistical Report on the Military Retirement System (1991), p. 20.

#### Section 11

# SOCIAL INSURANCE AND HUMAN SERVICES

This section presents data related to governmental expenditures on social welfare; programs for old-age, survivors, disability and health insurance; public employee retirement; unemployment insurance; aid to the needy; and child and other welfare services. Also included here are selected statistics on United Way campaigns, foundations, and the quality of life. Related data are cited in Sections 9 and 13.

Total social welfare costs reached \$434 million in fiscal 1990. compared with \$255 million a decade earlier. About 54 percent of the 1990 total came from State funds and the remainder from the Federal government. The monthly average number of persons served by major welfare programs in 1990 was 52,000, or 4.6 percent of the resident population of the State. Fifty-five percent of all public assistance payments and 42 percent of all recipient cases were accounted for by aid to families with dependent children. The average monthly payment per case for public assistance was \$505, or 50 percent more than in 1980. Participation in the food stamp program included 32,000 households and 79,000 persons. Among workers receiving unemployment compensation in 1990, weekly benefits averaged \$189. About 149,000 Hawaii residents were receiving Social Security benefits in December 1990, and about 127,000 were enrolled for Medicare. There were also 20,000 State and county government pensioners in 1990, with annual benefits of \$245 million. Child adoptions in 1990 numbered 678. Thirty-five foundations reported assets of \$345 million when most recently surveyed. The United Way reported revenues of \$14.9 million and agency allocations of \$13.7 million in 1989. A recent comparative study of the 'quality of life' in 300 American metropolitan areas ranked Honolulu 27th.

Major data sources include reports and records of the U.S. Department of Health and Human Services, the Hawaii State Department of Human Services, the Hawaii State Department of Labor and Industrial Relations, the Hawaii State Employees' Retirement System, and the United Way. Historical Statistics of Hawaii, Section 8, contains data for earlier years. Section 12 of the Statistical Abstract of the United States: 1991 presents comparable Mainland data.

Table 314.-- PERSONS SERVED AND AVERAGE PAYMENTS, FOR PROGRAMS ADMINISTERED BY THE HAWAII STATE DEPARTMENT OF HUMAN SERVICES: 1980 TO 1990, MONTHLY **AVERAGES** 

# [Years ended June 30]

|          | Financial<br>assistance<br>programs <u>1</u> /                               |                  | finand<br>assist<br>paymen | Average<br>financial<br>assistance<br>payments 2/<br>(dollars) |                  | Medical<br>payments <u>3</u> / |                  |
|----------|--|------------------|----------------------------|--|------------------|--------------------------------|------------------|
| Year     | Cases  | Indi-<br>viduals | Per<br>case                | Per<br>indi-<br>vidual   | Service<br>cases | Cases                          | Indi-<br>viduals |
| 1980     | 27,219 27,604 26,130 24,157 23,378 22,212 21,119 19,531 18,394 18,851 19,891 | 71,693           | 337.59                     | 128.17   | 16,312           | 12,932                         | 13,598           |
| 1981     |  | 72,480           | 342.67                     | 130.68   | 15,281           | 11,763                         | 12,104           |
| 1982     |  | 68,835           | 355.42                     | 135.05   | 8,124            | 11,629                         | 12,228           |
| 1983     |  | 64,305           | 371.00                     | 139.56   | 6,443            | 12,858                         | 13,186           |
| 1984     |  | 62,430           | 369.92                     | 138.72   | 6,586            | 12,642                         | 12,939           |
| 1985     |  | 59,561           | 368.17                     | 137.50   | 6,832            | 12,286                         | 12,519           |
| 1986     |  | 56,140           | 368.25                     | 138.67   | 7,186            | 12,481                         | 12,710           |
| 1987     |  | 50,954           | 367.00                     | 140.86   | 7,402            | 13,650                         | 13,858           |
| 1988     |  | 48,108           | 414.00                     | 158.00   | 7,217            | 12,197                         | 13,731           |
| 1989     |  | 49,389           | 473.00                     | 181.00   | 6,108            | (NA)                           | 16,829           |
| 1990     |  | 51,695           | 505.00                     | 195.00   | 5,846            | (NA)                           | 18,773           |
| Hawaii   | 4,260  | 11,300           | 512.00                     | 193.00   | 939              | (NA)                           | 2,655            |
| Maui     | 1,214  | 3,313            | 512.00                     | 188.00   | 645              | (NA)                           | 1,320            |
| Honolulu | 13,720   | 35,293           | 503.00                     | 196.00   | 3,855            | (NA)                           | 13,745           |
| Kauai    | 697  | 1,790            | 494.00                     | 193.00   | 407              | (NA)                           | 1,053            |

NA Not available.

<sup>1/</sup> Old age assistance, aid to disabled, aid to families with dependent children, AFDC unemployed parents, AFDC foster care, child welfare foster care, and general assistance, excluding SSI recipients.

<sup>2/</sup> Gross obligation basis.

3/ Ineligible for money assistance, receiving medical payment only.

Source: Hawaii State Department of Human Services, records.

Table 315.-- PERCENT OF RESIDENT POPULATION SERVED BY FINANCIAL ASSISTANCE PROGRAMS ADMINISTERED BY THE HAWAII STATE DEPARTMENT OF HUMAN SERVICES, BY COUNTIES: 1989 AND 1990

[Based on fiscal year program data and July population estimates]

| Year | State | Hawaii | Maui | Honolulu | Kauai |
|------|-------|--------|------|----------|-------|
| 1989 |       | 9.4    | 3.5  | 4.0      | 3.3   |
| 1990 |       | 9.3    | 3.3  | 4.2      | 3.5   |

Source: Hawaii State Department of Human Services, records; present volume, table 5.

Table 316.-- SELECTED SOCIAL WELFARE EXPENDITURES: 1980 TO 1990

[Thousands of dollars. Years ended June 30. Covers expenditures by the Hawaii State Department of Human Services in selected categories]

|  |   | By source<br>of funds   |   | By expenditure category  |   |  |   |  |
|--|---|---|---|--|---|--|---|--|
| Year   | Total<br>cost   | Federal   | State   | Admin-<br>istra-<br>tion   | Medical<br>pay-<br>ments <u>1</u> /   | Money<br>payments  | Social<br>service<br>costs  |  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 255,280<br>286,709<br>289,391<br>303,782<br>335,986<br>294,406<br>328,804<br>314,025<br>341,573<br>375,992<br>433,862 | 109,734<br>131,652<br>121,911<br>133,498<br>148,902<br>127,052<br>147,865<br>141,185<br>150,412<br>169,142<br>198,515 | 145,547<br>155,057<br>167,480<br>170,284<br>187,084<br>167,354<br>180,939<br>172,840<br>191,161<br>206,850<br>235,347 | 18,999<br>19,595<br>22,271<br>26,616<br>35,482<br>33,604<br>41,637<br>37,899<br>35,445<br>39,315<br>49,350 | 112,024<br>135,541<br>143,068<br>157,996<br>185,730<br>145,559<br>175,887<br>172,966<br>196,270<br>207,059<br>235,901 | 112,793<br>118,346<br>114,811<br>111,185<br>107,508<br>103,611<br>98,738<br>91,909<br>98,294<br>114,620<br>134,350 | 11,464<br>13,227<br>9,241<br>7,985<br>7,266<br>11,632<br>12,541<br>11,251<br>11,564<br>14,998<br>14,261 |  |

<sup>1/</sup> These amounts are for benefits provided to both the Medicaid only recipients and financial assistance recipients under the major programs. Effective 1990, medical payments' administrative costs are included in total administration costs.

Source: Hawaii State Department of Human Services, records.

Table 317.-- FINANCIAL ASSISTANCE PAYMENTS AND CASES: 1989 AND 1990 [Years ended June 30]

|  | Total payments (\$1,000)                             |  | Case<br>(monthly a                              | -   | Average monthly payment (dollars)      |  |  |
|--|--|--|---|---|--|--|--|
| Program  | 1989   | 1990   | 1989  | 1990  | 1989                                   | 1990                                   |  |
| All programs   | 151,407  | 176,135  | 32,107  | 33,652  | 392                                    | 436                                    |  |
| Old age assistance 1/. Aid to the blind 1/ Aid to disabled 17 Aid to families with dependent children 2/ Child welfare foster care | 14,580<br>600<br>27,035<br>86,060<br>2,598<br>20,534 | 17,073<br>702<br>32,753<br>96,453<br>5,738<br>23,416 | 5,279<br>176<br>7,287<br>13,676<br>881<br>4,808 | 5,471<br>186<br>7,650<br>14,273<br>1,001<br>5,071 | 230<br>283<br>308<br>524<br>243<br>355 | 260<br>314<br>357<br>563<br>478<br>384 |  |

<sup>1/</sup> Assisted through the Federal Social Security Administration, with State supplements (Supplementary Security Payments) included.

2/ Includes AFDC unemployed parent and AFDC foster care.

Source: Hawaii State Department of Human Services, obligations FY printout and foster care printout; Social Security Bulletin, tables M22, M24, M25.

Table 318.-- FOOD STAMP PROGRAM: 1989 AND 1990 [Years ended June 30]

| Subject  | 1989                       | 1990                       |
|--|----------------------------|----------------------------|
| Households, total participating 1/                 | 31,809<br>16,095<br>15,714 | 32,285<br>17,588<br>14,697 |
| Persons, total participating 1/                    | 80,285<br>48,190<br>32,095 | 79,495<br>51,318<br>28,177 |
| Value of food stamps given to recipients (\$1,000) | 74,533                     | 78,998                     |

<sup>1/</sup> Monthly averages.

Source: Hawaii State Department of Human Services, records.

Table 319.-- RETIREMENT, SURVIVORS AND DISABILITY INSURANCE (OASDI) BENEFICIARIES IN CURRENT-PAYMENT STATUS, BY AGE, RACE, AND SEX: 1989 AND 1990

[December data. Based on 10-percent sample]

| Age, race, and sex  | December<br>1989                               | December<br>1990                              |
|---|--|---|
| Total   | 144,710  | 148,160                                       |
| Age: 17 years or under 18 to 64 years 65 to 69 years 70 to 74 years 75 years or older | 10,020<br>28,450<br>37,440<br>28,390<br>40,410 | 9,860<br>27,650<br>38,410<br>29,600<br>42,640 |
| Race: White Black Other   | 39,710<br>1,130<br>103,870                     | 39,760<br>1,080<br>107,320                    |
| Beneficiaries other than children: Men Women  | 61,220<br>71,310                               | 62,670<br>73,440                              |

Source: U.S. Department of Health and Human Services, Social Security Administration, Social Security Bulletin, Annual Statistical Supplement for 1990 and 1991.

Table 320.-- RETIREMENT, SURVIVORS AND DISABILITY INSURANCE (OASDI) BENEFITS IN CURRENT-PAYMENT STATUS, BY TYPE OF BENEFIT AND COUNTY: DECEMBER 1990

| Type of benefit and county  | Number<br>of OASDI<br>benefi-<br>ciaries   | Amount of monthly benefits (\$1,000)   |
|---|--|--|
| Total   | 148,522  | 79,859   |
| TYPE OF BENEFIT   |  |  |
| Retirement program: Retired workers Wives and husbands Children  Survivor program: Widows and widowers Children  Disability program: Disabled workers Wives and husbands Children  Age 65 and over: Men Women | 102,360<br>11,248<br>3,787<br>14,414<br>6,230<br>7,635<br>588<br>2,260<br>52,225<br>58,946 | 60,721<br>3,195<br>892<br>7,604<br>2,512<br>4,491<br>84<br>360<br>34,410<br>29,340 |
| COUNTY  |  |  |
| Hawaii Honolulu Kalawao Kauai Maui Unknown  | 20,410<br>105,105<br>155<br>8,445<br>14,145<br>255   | 10,950<br>56,451<br>80<br>4,490<br>7,734<br>130                                    |

Source: U.S. Department of Health and Human Services, Social Security Administration, Office of Research and Statistics, records.

Table 321.-- SOCIAL SECURITY BENEFICIARIES AND PAYMENTS: 1985 TO 1990

| Year                                 | Number of<br>beneficiaries,<br>December                        | Monthly amounts, December (\$1,000)                      | Annual<br>payments<br>(million<br>dollars) |
|--------------------------------------|--|--|--|
| 1985<br>1986<br>1987<br>1988<br>1989 | 129,475<br>133,520<br>138,472<br>141,730<br>145,178<br>148,522 | 54,612<br>57,629<br>62,847<br>67,493<br>73,297<br>79,859 | 626<br>667<br>715<br>770<br>830<br>893     |

Source: U.S. Department of Health and Human Services, Social Security Administration, Office of Research and Statistics, records.

Table 322.-- MEDICARE BENEFICIARIES ENROLLED AND BENEFIT PAYMENTS: 1989 AND 1990

|  | All persons<br>enrolled,<br>July 1       |  | Persons 65 and over enrolled, July 1     |  | Estimated benefit payments (mil. dol.) |                   |
|--|--|--|--|--|--|-------------------|
| Coverage   | 1989                                     | 1990                                     | 1989                                     | 1990                                     | 1989 <u>1</u> /                        | 1990 <u>2</u> /   |
| Hospital and/or medical insurance Hospital insurance Supplementary medical insurance Hospital and medical insurance (both) | 122,456<br>119,353<br>115,960<br>112,857 | 126,934<br>123,697<br>119,698<br>116,461 | 113,684<br>110,581<br>108,043<br>104,940 | 118,054<br>114,817<br>111,760<br>108,523 | 258<br>151<br>107                      | 262<br>152<br>110 |

Table 323.-- HAWAII STATE EMPLOYEES' RETIREMENT SYSTEM: 1985 TO 1990

| Year                               | Member-<br>ship, 1/<br>March 31 | Pen-<br>sioners,<br>March 31 | Assets, 2/<br>June 30<br>(\$1,000) | Total<br>benefits<br>paid 3/<br>(\$1,000) | Average monthly pension 3/ (dollars) | Adminis-<br>tration<br>expenses 3/<br>(dollars) |
|------------------------------------|---------------------------------|------------------------------|------------------------------------|---|--------------------------------------|---|
| 1985 <u>4/</u> 1986 1987 1988 1989 | 51,767                          | 16,438                       | 2,326,594                          | 385,756                                   | 521                                  | 2,292,754                                       |
|                                    | 47,662                          | 17,326                       | 2,713,753                          | 175,698                                   | 552                                  | 1,519,706                                       |
|                                    | 48,262                          | 18,635                       | 3,142,146                          | 206,346                                   | 596                                  | 1,985,071                                       |
|                                    | 51,534                          | 19,108                       | 3,419,753                          | 189,131                                   | 710                                  | 1,954,151                                       |
|                                    | 52,655                          | 19,840                       | 3,681,938                          | 217,878                                   | 748                                  | 1,871,595                                       |
|                                    | 53,509                          | 20,495                       | 3,906,923                          | 244,568                                   | 787                                  | 2,067,028                                       |

<sup>1/</sup> State and county employees. Includes former employees who have not withdrawn their contributions but excludes all pensioners. Decline after 1985 primarily reflects corrections in ERS records.

Table 324.-- CHILD ADOPTIONS: 1985 TO 1989

| Type of adoption          | 1985       | 1986       | 1987       | 1988       | 1989       | 1990       |
|---------------------------|------------|------------|------------|------------|------------|------------|
| Total                     | 550        | 544        | 581        | 611        | 830        | 678        |
| By relatives              | 382<br>168 | 339<br>205 | 414<br>167 | 409<br>202 | 577<br>253 | 479<br>190 |
| Placed by social agencies | 121        | 160        | 134        | 167        | 207        | 174        |

Source: Hawaii State Department of Human Services, tabulations from SRS-NCSS-280 Adoption Cards.

 $<sup>\</sup>frac{2}{3}$ / Book value.  $\frac{3}{2}$ / Year ended June 30. Data on total benefits paid exclude the employers' share of social security contributions.

<sup>4/</sup> Benefits paid total includes refunds to members electing noncontributory retirement plan. Administration expenses total reflects Social Security sick leave recovery claims.

Source: Employees' Retirement System of the State of Hawaii, records.

Table 325.-- UNEMPLOYMENT INSURANCE: 1980 TO 1990

|  |  | Insured unemployment  |  | Average<br>weekly  |  | Average  | Average  |
|--|--|---|--|--|--|--|--|
| Calendar<br>year   | Covered employ-ment  | Weekly<br>average   | Percent<br>coverage  | total<br>wages<br>(dollars)  | Gross<br>benefits<br>(\$1,000)   | weekly<br>benefits<br>(dollars)  | benefit<br>duration<br>(weeks)   |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 413,095<br>417,018<br>409,511<br>413,289<br>422,950<br>434,637<br>447,667<br>470,179<br>485,707<br>508,673<br>(NA) | 11,291<br>12,224<br>13,657<br>13,452<br>11,567<br>10,091<br>8,901<br>7,329<br>6,708<br>5,239<br>5,722 | 54<br>51<br>44<br>45<br>43<br>37<br>37<br>37<br>42<br>40<br>38 | 259.63<br>276.79<br>295.25<br>310.31<br>321.58<br>332.90<br>347.06<br>364.79<br>392.73<br>415.75<br>(NA) | 49,222<br>66,194<br>77,788<br>70,392<br>70,914<br>62,123<br>56,391<br>49,900<br>50,659<br>40,833<br>50,269 | 102.91<br>113.59<br>124.34<br>123.22<br>135.72<br>134.03<br>140.16<br>149.50<br>162.51<br>170.03<br>189.40 | 13.7<br>14.2<br>14.8<br>15.8<br>14.8<br>14.6<br>14.3<br>13.4<br>13.5<br>12.0 |

NA Not available.

Source: Hawaii State Department of Labor and Industrial Relations, 1990 State of Hawaii Unemployment Insurance Fact Book, 1970 to the Present, Hawaii (June 1990), pp. 6, 8, 11, 22, and 23, and records.

Table 326.-- CHILD DAY CARE SERVICES WITH PAYROLL, BY FEDERAL INCOME TAX STATUS AND BROAD GEOGRAPHIC AREA: 1987

[Child day care services without payroll subject to Federal income tax, not included in this table, numbered 614 establishments with receipts of \$2,812,000]

|                                   | Number of establishments |        |         | ots or<br>(\$1,000) | Paid employees,<br>March 12 |        |
|-----------------------------------|--------------------------|--------|---------|---------------------|-----------------------------|--------|
| Geographic area                   | Subject                  | Tax    | Subject | Tax                 | Subject                     | Tax    |
|                                   | to tax                   | exempt | to tax  | exempt              | to tax                      | exempt |
| State total Oahu Neighbor Islands | 32                       | 89     | 3,049   | 15,748              | 225                         | 999    |
|                                   | 22                       | 69     | 2,379   | 14,470              | 183                         | 902    |
|                                   | 10                       | 20     | 670     | 1,278               | 42                          | 97     |

Source: U.S. Bureau of the Census, 1987 Census of Service Industries, Hawaii, SC87-A-12 (July 1989), tables 1a, 1b, 8a, and 8b, and 1987 Census of Service Industries, Nonemployer Statistics Series, West, SC87-N-4 (March 1990), table 2.

Table 327.-- FOUNDATIONS: 1984 TO 1991
[For definition and coverage, see Data Book 1984, table 306, headnote]

| Subject   | 1984 | 1990                     | 1991                        |
|---|------|--------------------------|-----------------------------|
| Non-restricted foundations (open to grant-seekers):  Number |      | 95<br>230.2<br>12.0<br>6 | 35<br>345.3<br>17.4<br>(NA) |

NA Not available.

Source: The Foundation Center, Foundations Directory (annual) and National Foundations (annual), special tabulations.

Table 328.-- UNITED WAY REVENUES AND OUTLAYS, 1979 TO 1989, AND BY ISLANDS, 1989

[\$1,000]

| Year and island  | Total    | Contrib- | Total   | Agency     |
|--|----------|----------|---------|------------|
|  | revenues | utions   | outlays | allocation |
|  |          |          |         |            |
| 1979 1/ 1980 1/ 1981 1/ 1981 1/ 1982 1/ 1983 1984 1985 1986 2/ 1987 1988 3/ 1989 | 8,993    | 8,852    | 8,921   | 8,199      |
|  | 9,708    | 9,371    | 9,399   | 8,555      |
|  | 10,338   | 10,271   | 10,394  | 9,308      |
|  | 10,781   | 10,593   | 10,548  | 9,743      |
|  | 11,168   | 10,975   | 11,280  | 10,116     |
|  | 11,651   | 11,271   | 11,294  | 10,059     |
|  | 11,869   | 11,517   | 11,603  | 10,307     |
|  | 12,807   | 12,258   | 12,454  | 10,920     |
|  | 13,313   | 12,473   | 13,319  | 11,319     |
|  | 14,302   | 13,474   | 13,782  | 11,263     |
|  | 14,933   | 14,135   | 15,044  | 13,722     |
| ISLAND: 1989   |          |          |         |            |
| Aloha United Way (Oahu)  | 12,637   | 11,978   | 12,627  | 9,798      |
|  | 945      | 904      | 938     | 736        |
|  | 448      | 413      | 382     | 327        |
|  | 851      | 788      | 1,045   | 820        |
|  | 52       | 52       | 52      | 52         |

<sup>1/</sup> Data exclude Friendly Isle United Way.
2/ Data for Maui United Way cover 18-month period ending June 30, 1987.

<sup>3/</sup> Agency allocation figure is revised from Data Book 1990, table 338. The correct Oahu allocation in 1988 was \$9,457,000.

<sup>4/</sup> Year ended June 30, 1989.

Source: Aloha United Way, Annual Reports; Hawaii Island United Way, Inc., and Maui United Way, Financial Statements and records; United Way of Kauai and Friendly Isle United Fund, records.

### Table 329.-- QUALITY OF LIFE GENERAL INDEX RANKINGS, FOR THE STATE AND HONOLULU METROPOLITAN STATISTICAL AREA: 1986 TO 1991

[For earlier studies, see Data Book 1984, table 309, and Data Book 1986, table 348]

| Area, authority, and year of publication  | Number of areas ranked                        | Honolulu<br>rank                        |
|---|---|---|
| State: Morgan Quitno, 1991 1/   | 50  | 7                                       |
| Honolulu MSA:  Thompson, 1986 2/  Eisenberg and Englander, 1987 3/  Eisenberg and Englander, 1988 4/  Eisenberg and Smith, 1989 5/  Boyer and Savageau, 1989 67  Eisenberg and Smith, 1990 7/  Smith and Englander, 1991 8/ | 119<br>300<br>300<br>300<br>333<br>300<br>300 | 114<br>58<br>43<br>14<br>32<br>27<br>27 |

1/ Morgan Quitno (publisher), State Rankings (1991), cited in

Honolulu Advertiser, October 8, 1991, p. D5.

2/ Thomas Patrick Thompson, ed., The National Metropolitan Area Study (Florence, Alabama: The University of North Alabama, Dec. 1986), p. 336. Composite weighted rank among 119 metropolitan statistical areas with populations between 250,000 and 1,000,000.

3/ Richard Eisenberg and Debra Wishik Englander, "The Best

Places to Live in America," Money, August 1987, pp. 34-44.

4/ Richard Eisenberg and Debra Wishik Englander, "The Best Places to Live in America," Money, August 1988, pp. 76-84.
5/ Richard Eisenberg and Marguerite T. Smith, "The Best

Places to Live in America," Money, September 1989, pp. 124-141.

6/ Richard Boyer and David Savageau, Places Rated Almanac, rev. ed. (Prentice Hall, 1989), p. 397.

7/ Richard Eisenberg and Marguerite T. Smith, "The Best

Places to Live Now," Money, September 1990, pp. 78-95. 8/ Marguerite T. Smith and Debra Wishik Englander, "The Best Places to Live Now," Money, September 1991, pp.130-146.

Table 330.-- QUALITY OF LIFE SPECIAL INDEX RANKINGS, BY GEOGRAPHIC AREAS: 1986 TO 1991

| Type of index, area ranked, authority,       | Areas                | Local      |            |
|--|----------------------|------------|------------|
| and year of publication                      | Туре                 | Number     | rank       |
| STRESS INDEXES                               |                      |            |            |
| State:<br>Linsky and Straus, 1986 <u>1</u> / | States               | 50         | 17         |
| Honolulu: Levine, 1988 <u>2</u> /            | MSAs<br>Cities       | 286<br>192 | 175<br>105 |
| RETIREMENT LOCATION INDEXES                  |                      |            |            |
| Honolulu: Savageau, 1990 4/                  | Counties             | 151        | 14         |
| Kauai: Boyer and Savageau, 1987 5/           | Counties             | 131        | 83         |
| Maui: Boyer and Savageau, 1987 <u>5</u> /    | Counties<br>Counties | 131<br>151 | 100<br>93  |

<sup>1/</sup> Arnold S. Linsky and Murray A. Straus, Social Stress in the United States (Auburn House Publishing Co., 1986), pp. 38-39 and 51. Based on "State Stress Index," calculated from 1976 data.

<sup>2/</sup> Robert Levine, "City Stress Index: 25 Best, 25 Worst," Psychology Today, November 1988, pp. 52-58.

<sup>3/</sup> Zero Population Growth, Inc., <u>Urban Stress Test</u> (1988). 4/ David Savageau, <u>Retirement Places Rated</u>, 3rd ed. (Prentice Hall Press, 1990), pp. 214-215.

<sup>5/</sup> Richard Boyer and David Savageau, Retirement Places Rated, 2nd ed. (Rand McNally & Co., 1987), pp. 200-203.

### Section 12

# LABOR FORCE, EMPLOYMENT, AND EARNINGS

This section presents statistics on the size and composition of the labor force, employment by occupation, industry, class of worker, and place of work, payrolls, wage rates, hours, industrial safety, unionization, and strikes. Related series appear in Sections 3, 9, 10, and 19 through 23.

The civilian labor force averaged 539,000 in 1990; of this total, 524,000 persons were employed and 15,000 were unemployed and seeking work. The civilian jobcount rose from 448,000 in 1980 to 580,000 a decade later. (The jobcount differs from employment because the latter counts multiple jobholders--'moonlighters''--only once. Eight percent of all persons currently employed in the summer of 1988 held two or more jobs.) Areas with large concentrations of workers in 1980 included downtown Honolulu (46,000), Waikiki (30,000), and Pearl Harbor-Hickam (15,000). The unemployment rate averaged 2.8 percent in 1990, with individual island levels ranging from 2.4 to 10.3 percent. By occupation, one out of four civilian workers is classified as professional or managerial. Activities with especially large numbers of employees include services (155,000 in 1990), retail trade (113,000), and government (105,000). The average annual earnings of wage and salary workers under the Hawaii Employment Security Law reached \$23,156 in 1990, or 2.7 percent more than the 1980 average after adjustment for inflation. Average weekly hours in 1990 were 39.4 for all civilian workers and 46.8 for those on full-time schedules, and ranged from 30.9 (for retail trade) to 44.8 (for communication and utilities). Labor union membership was estimated at 161,000 in 1990. Work stoppages in 1990 involved more than 7,400 workers.

Principal sources for the data on labor force, employment, place of work, hours, earnings, unions and strikes are the decennial reports of the U.S. Bureau of the Census, the same agency's Current Population Survey, reports by the U.S. Bureau of Labor Statistics, monthly and annual tabulations by the Hawaii State Department of Labor and Industrial Relations, and annual surveys of pay rates by the Hawaii Employers Council. Historical Statistics of Hawaii, Section 4, includes figures for earlier years. Statistics for the nation as a whole are published in Section 13 of the Statistical Abstract of the United States: 1991.

Table 331.-- LABOR FORCE STATUS, BY SEX: 1950 TO 1980

| Sex and labor force status   | 1950 <u>1</u> /   | 1960   | 1970   | 1980  |
|--|---|--|--|---|
| BOTH SEXES   |   |  |  |   |
| Persons 16 years and over  | 351,375   | 402,937  | 522,018  | 723,479   |
| Labor force Armed forces Civilian labor force Employed Unemployed Percent of civ. labor force Not in labor force | 207,952<br>22,856<br>185,096<br>167,571<br>17,525<br>9.5<br>143,423 | 263,450<br>47,255<br>216,195<br>207,456<br>8,739<br>4.0<br>139,487 | 344,269<br>49,785<br>294,484<br>285,556<br>8,928<br>3.0<br>177,749 | 494,223<br>58,443<br>435,780<br>415,181<br>20,599<br>4.7<br>229,256 |
| MALE   | 110,120   | 133,107  | 177,743  | 223,230   |
| Persons 16 years and over  | 197,864   | 219,822  | 272,726  | 370,683   |
| Labor force Armed forces Civilian labor force Employed Unemployed Percent of civ. labor force Not in labor force | 157,088<br>22,572<br>134,516<br>120,972<br>13,544<br>10.1<br>40,776 | 186,507<br>46,626<br>139,881<br>135,481<br>4,400<br>3.1<br>33,315  | 222,221<br>48,860<br>173,361<br>168,940<br>4,421<br>2.6<br>50,505  | 290,420<br>54,032<br>236,388<br>225,331<br>11,057<br>4.7<br>80,263  |
| FEMALE   |   | :  | _  |   |
| Persons 16 years and over  | 153,511   | 183,115  | 249,292  | 352 <b>,</b> 796  |
| Labor force  | 50,864<br>284<br>50,580<br>46,599<br>3,981<br>7.9<br>102,647        | 76,943<br>629<br>76,314<br>71,975<br>4,339<br>5.7<br>106,172       | 122,048<br>925<br>121,123<br>116,616<br>4,507<br>3.7<br>127,244    | 203,803<br>4,411<br>199,392<br>189,850<br>9,542<br>4.8<br>148,993   |

<sup>1/</sup> Data refer to persons 14 years and over.

Source: U.S. Bureau of the Census, U.S. Census of Population: 1960,
General Social and Economic Chracteristics, Hawaii, PC(1)-13C (1962),
tables 53 and 54, and Detailed Characteristics, Hawaii, PC(1)-13D (1962),
table 115; 1970 Census of Population, General Social and Economic
Characteristics, Hawaii, PC(1)-C13 (December 1971), table 53; 1980 Census
of Population, General Social and Economic Characteristics, Hawaii,
PC80-1-C13 (June 1983), table 61.

Table 332.--LABOR FORCE STATUS OF THE CIVILIAN NONINSTITUTIONAL POPULATION 16 YEARS AND OVER: ANNUAL AVERAGES, 1989 AND 1990

# [Numbers in thousands]

|   | Persons 16 years<br>and over                          |   |  | 16 to 19  |  |
|---|---|---|--|---|--|
| Labor force status  | Both<br>sexes   | Men   | Women  | years<br>(both<br>sexes)                          |  |
| 1989  |   |   |  |   |  |
| Civilian noninstitutional population Civilian labor force Percent of population Employment Percent of population Unemployment Rate 1/ Not in civilian labor force | 790<br>525<br>66.4<br>511<br>64.7<br>13<br>2.6<br>265 | 366<br>271<br>74.1<br>264<br>72.1<br>7<br>2.6<br>95 | 424<br>254<br>59.9<br>248<br>58.3<br>6<br>2.5<br>170 | 54<br>26<br>47.8<br>23<br>43.1<br>3<br>9.8<br>28  |  |
| 1990  |   | ·   |  |   |  |
| Civilian noninstitutional population . Civilian labor force   | 803<br>539<br>67.1<br>524<br>65.2<br>15<br>2.8<br>264 | 376<br>280<br>74.5<br>271<br>72.0<br>9<br>3.3<br>96 | 427<br>259<br>60.6<br>253<br>59.2<br>6<br>2.3<br>168 | 47<br>22<br>47.0<br>19<br>40.6<br>3<br>13.7<br>25 |  |

<sup>1/</sup> Percent of civilian labor force. The error ranges for these rates, at the 90-percent confidence level, are: both sexes, 2.3-3.3; men. 2.6-4.1: women. 1.7-2.9: 16-19. 9.0-18.3.

men, 2.6-4.1; women, 1.7-2.9; 16-19, 9.0-18.3.

2/ Percent of civilian labor force. The error ranges for these rates, at the 90-percent confidence interval, are: both sexes, 2.7-3.7; men, 2.6-4.1; women, 2.3-3.7; 16-19, 7.2-14.3.

Source: U.S. Bureau of Labor Statistics, Geographic Profile of Employment and Unemployment, 1989 (Bulletin 2361, May 1990), p. 38, and Geographic Profile of Employment and Unemployment, 1990 (Bulletin 2381, June 1991), p. 38.

Table 333.-- LABOR FORCE PARTICIPATION RATES, BY SEX: ANNUAL AVERAGES, 1980 TO 1990

[Percent of civilian noninstitutional population 16 years and over in civilian labor force]

| Year | Both<br>sexes  | Male   | Female   | Both sexes,<br>16 to 19<br>years   |
|------|--|--|--|--|
| 1980 | 63.8<br>66.7<br>66.8<br>66.8<br>65.5<br>65.5<br>66.1<br>67.4<br>66.8<br>66.4<br>67.1 | 72.0<br>74.9<br>75.5<br>75.1<br>73.5<br>72.6<br>73.8<br>75.3<br>74.3<br>74.1 | 56.7<br>59.5<br>58.9<br>59.1<br>58.1<br>59.0<br>60.4<br>60.0<br>59.9<br>60.6 | 50.1<br>49.2<br>43.9<br>41.8<br>45.3<br>48.5<br>47.9<br>49.7<br>48.1<br>47.8<br>47.0 |

Source: U. S. Bureau of Labor Statistics, Geographic Profile of Employment and Unemployment (annual).

# Table 334.-- CIVILIAN LABOR FORCE, TOTAL AND FEMALE, BY RACE AND HISPANIC ORIGIN: 1990

#### [Thousands]

| Race <u>1</u> /  | Both<br>sexes  | Female               | Race <u>1</u> / | Both<br>sexes                    | Female                          |
|--|--|----------------------|-----------------|----------------------------------|---------------------------------|
| All races  White Asian/Pacific 2/ Japanese Filipino Hawaiian Chinese | 539.0<br>167.3<br>357.9<br>168.6<br>74.2<br>60.4<br>34.6 | 80.1<br>33.1<br>27.0 | Korean          | 10.4<br>9.6<br>4.1<br>1.4<br>8.3 | 5.6<br>4.0<br>1.8<br>0.6<br>3.4 |

<sup>1/</sup> Based on census definitions. Persons of mixed race are classified by self-Identification or race of mother.

3/ American Indian, Eskimo, or Aleut.
4/ Hispanics may be of any race.

Source: Hawaii State Department of Labor and Industrial Relations, Labor Force Information for Affirmative Action Programs (April 1991), table 2.

<sup>2/</sup> Asians and Pacific Islanders include Japanese, Chinese, Filipino, Korean, Asian Indian, Vietnamese, Hawaiian, Guamanian, and Samoan residents.

Table 335.-- EMPLOYMENT STATUS OF THE CIVILIAN LABOR FORCE: ANNUAL AVERAGES, 1970 TO 1990

|  | Civilian<br>labor  | Civilian   | Unemp  | Unemployed   |  |  |
|--|--|--|--|--|--|--|
| Year   | force  | employment   | Number   | Percent  |  |  |
| 1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978         | 321,550<br>336,800<br>351,000<br>364,600<br>375,000<br>382,950<br>410,000<br>418,000<br>420,000<br>422,000 | 305,650<br>313,450<br>324,050<br>338,350<br>345,350<br>351,100<br>370,000<br>388,000<br>388,000<br>395,000 | 15,900<br>23,350<br>26,950<br>26,250<br>29,650<br>31,850<br>40,000<br>31,000<br>32,000<br>26,000 | 4.9<br>6.9<br>7.7<br>7.2<br>7.9<br>8.3<br>9.8<br>7.3<br>7.7<br>6.3 |  |  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 440,000<br>451,000<br>461,000<br>472,000<br>472,000<br>479,000<br>492,000<br>514,000<br>518,000<br>525,000 | 418,000<br>427,000<br>430,000<br>442,000<br>445,000<br>452,000<br>468,000<br>494,000<br>502,000<br>511,000 | 21,000<br>24,000<br>31,000<br>30,000<br>27,000<br>27,000<br>24,000<br>20,000<br>16,000<br>13,000 | 4.9<br>5.4<br>6.7<br>6.5<br>5.6<br>4.8<br>3.8<br>3.2<br>2.6        |  |  |

Source: Hawaii State Department of Labor and Industrial Relations, Labor Force Data Book (March 1978), as updated and revised annually through April 1991.

Table 336.-- EMPLOYMENT STATUS OF THE CIVILIAN LABOR FORCE, FOR COUNTIES AND ISLANDS: ANNUAL AVERAGES, 1980 TO 1990

[Island data may not add exactly to State totals in preceding table]

|  |   |  |  | Maui County  |   |  |   |
|--|---|--|--|--|---|--|---|
| Year   | Oahu  | Hawaii<br>County   | Kauai<br>County  | County<br>total  | Lanai   | Maui   | Molokai   |
| CIVILIAN<br>LABOR FORCE  |   |  |  |  |   |  |   |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988 1/<br>1989 1/<br>1990<br>CIVILIAN<br>EMPLOYMENT                               | 338,350<br>345,700<br>350,100<br>357,100<br>357,100<br>359,600<br>368,700<br>383,400<br>384,100<br>383,900<br>391,400 | 43,550<br>45,450<br>47,200<br>48,350<br>48,650<br>50,400<br>51,300<br>54,050<br>54,900<br>57,200<br>61,550 | 19,550<br>20,100<br>20,800<br>21,650<br>21,300<br>22,050<br>23,400<br>24,900<br>26,300<br>27,350<br>28,400 | 37,550<br>39,800<br>42,850<br>44,850<br>44,950<br>46,950<br>48,600<br>51,600<br>52,750<br>55,550<br>57,700 | 1,300<br>1,250<br>1,300<br>1,150<br>1,150<br>1,050<br>1,050<br>1,050<br>1,350<br>1,250  | 33,900<br>36,000<br>38,950<br>40,950<br>41,250<br>43,550<br>45,050<br>48,050<br>49,200<br>51,800<br>53,900 | 2,350<br>2,500<br>2,600<br>2,750<br>2,550<br>2,300<br>2,500<br>2,600<br>2,450<br>2,400<br>2,500 |
| 1980          1981          1982          1983          1984          1985          1986          1987       1/         1989       1/         1990 | 322,800<br>328,500<br>328,600<br>336,550<br>338,050<br>341,150<br>352,500<br>369,850<br>373,500<br>375,300<br>381,400 | 40,850<br>42,150<br>42,700<br>44,050<br>44,900<br>46,150<br>47,500<br>50,950<br>52,200<br>55,000<br>59,200 | 18,700<br>18,900<br>19,150<br>20,000<br>19,800<br>20,550<br>22,000<br>23,850<br>25,350<br>26,550<br>27,350 | 35,650<br>37,450<br>39,550<br>41,450<br>42,250<br>44,150<br>46,050<br>49,350<br>51,000<br>54,100<br>56,050 | 1,200<br>1,150<br>1,100<br>1,050<br>1,000<br>850<br>900<br>850<br>950<br>1,250<br>1,200 | 32,450<br>34,150<br>36,250<br>38,150<br>39,000<br>41,300<br>42,950<br>46,250<br>47,750<br>50,700<br>52,600 | 2,050<br>2,150<br>2,200<br>2,200<br>2,200<br>2,000<br>2,150<br>2,250<br>2,250<br>2,150<br>2,250 |

Continued on next page.

Table 336.-- EMPLOYMENT STATUS OF THE CIVILIAN LABOR FORCE, FOR COUNTIES AND ISLANDS: ANNUAL AVERAGES, 1980 TO 1990 -- Con.

|   |   |   |   |   | Maui  | County  |  |
|---|---|---|---|---|---|---|--|
| Year  | 0ahu  | Hawaii<br>County  | Kauai<br>County   | County<br>total   | Lanai   | Maui  | Molokai  |
| UNEMPLOYED  |   |   |   |   |   |   |  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989<br>PERCENT | 15,550<br>17,150<br>21,500<br>20,600<br>19,100<br>18,450<br>16,200<br>13,550<br>10,600<br>8,550<br>10,000 | 2,700<br>3,350<br>4,500<br>4,350<br>3,700<br>4,250<br>3,850<br>3,100<br>2,700<br>2,200<br>2,350 | 850<br>1,150<br>1,700<br>1,650<br>1,500<br>1,500<br>1,400<br>1,100<br>950<br>800<br>1,000 | 1,900<br>2,350<br>3,300<br>3,400<br>2,700<br>2,800<br>2,550<br>2,250<br>1,750<br>1,450<br>1,600 | 100<br>150<br>250<br>100<br>150<br>200<br>100<br>150<br>100<br>100              | 1,500<br>1,900<br>2,700<br>2,800<br>2,200<br>2,250<br>2,100<br>1,800<br>1,450<br>1,100<br>1,300 | 350<br>300<br>400<br>550<br>350<br>300<br>350<br>300<br>200<br>250<br>250          |
| 1980 1981 1982 1983 1984 1985 1986 1987 1988 1/ 1989 1/ 1990                            | 4.6<br>5.0<br>6.1<br>5.8<br>5.3<br>5.1<br>4.4<br>3.5<br>2.8<br>2.2<br>2.6                                 | 6.2<br>7.3<br>9.6<br>9.0<br>7.7<br>8.5<br>7.5<br>5.8<br>4.9<br>3.8                              | 4.2<br>5.8<br>8.1<br>7.7<br>7.0<br>6.8<br>5.9<br>4.3<br>3.7<br>2.9<br>3.6                 | 5.1<br>5.9<br>7.7<br>7.6<br>6.0<br>5.9<br>5.3<br>4.4<br>3.3<br>2.6<br>2.8                       | 7.7<br>10.6<br>17.1<br>9.0<br>11.1<br>20.1<br>11.5<br>14.8<br>7.5<br>8.7<br>4.2 | 4.4<br>5.2<br>6.9<br>6.8<br>5.4<br>5.2<br>4.7<br>3.7<br>2.9<br>2.1<br>2.4                       | 13.9<br>12.9<br>15.2<br>19.4<br>13.8<br>13.0<br>13.4<br>12.1<br>8.8<br>9.5<br>10.3 |

<sup>1/</sup> Revised from Data Book 1990, table 346.
Source: Hawaii State Department of Labor and Industrial
Relations, Labor Force Data Book (March 1978), as revised and updated
annually through April 1991.

Table 337.-- CHARACTERISTICS OF THE INSURED UNEMPLOYED: ANNUAL AVERAGES, 1990

[Percent distributions. Includes all eligible claimants who filed new claims for unemployment insurance benefits during the year. Includes both intrastate and interstate agent claimants]

| Characteristic          | Percent | Characteristic                          | Percent |
|-------------------------|---------|---|---------|
| Total                   | 100.0   | Industrycon.: Fin., ins., real estate . | 4.1     |
| Age:                    |         | Services                                | 24.2    |
| Under 22 years          | 3.1     | Hotel                                   | 9.3     |
| 22 to 24 years          | 5.5     | Others                                  | 7.1     |
| 25 to 34 years          | 31.8    |   |         |
| 35 to 44 years          | 31.0    | Occupation:                             |         |
| 45 to 54 years          | 16.2    | Prof., tech., mgr                       | 18.1    |
| 55 to 64 years          | 10.0    | Clerical, sales                         | 14.9    |
| 65 years and over       | 2.4     | Services                                | 9.3     |
|                         |         | Farm, fish., forest                     | 4.7     |
| Sex:                    | 65.5    | Processing                              | 0.8     |
| Male                    | 65.5    | Machine trades                          | 1.7     |
| Female                  | 34.5    | Bench work                              | 1.3     |
| To look                 |         | Structural work                         | 14.6    |
| Industry:               | 0.4     | Miscellaneous                           | 6.4     |
| Government              | 7.5     | Not available                           | 28.1    |
| Agriculture             | 29.7    | Duration:                               |         |
| Manufacturing           | 5.0     | 1 to 4 weeks                            | 45.1    |
| Trans., commun., util   | 8.5     | 5 to 14 weeks                           | 36.8    |
| Wholesale, retail trade | 13.5    | 15 weeks and over                       | 18.1    |
|                         |         |   |         |

Source: Hawaii State Department of Labor and Industrial Relations, Characteristics of the Insured Unemployed in Hawaii--1990.

Table 338.-- JOBCOUNT, BY COUNTIES: ANNUAL AVERAGES, 1970 TO 1990

[Persons holding more than one job are counted in each position. As a result, these data differ from corresponding estimates of employment, reported elsewhere in this section. Active-duty armed forces are excluded, unless also employed in civilian jobs. Persons not working because of labor disputes are included. Because of a change in the method of estimating nonagricultural self-employed and unpaid family workers, jobcount estimates for 1987 and later years are not exactly comparable to those for earlier years]

| Year  | State<br>total   | City and<br>County of<br>Honolulu  | Hawaii<br>County   | Kauai<br>County  | Maui<br>County   |
|---|--|--|--|--|--|
| 1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978<br>1979<br>1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1988<br>1989 1/ | 331,580<br>339,070<br>349,950<br>365,050<br>374,650<br>380,900<br>387,000<br>398,600<br>417,500<br>434,450<br>448,150<br>449,900<br>446,050<br>453,750<br>461,000<br>473,150<br>486,650<br>504,900<br>524,400<br>552,000 | 270,310<br>276,260<br>285,900<br>298,900<br>306,350<br>308,550<br>312,100<br>319,900<br>334,400<br>348,150<br>357,900<br>357,350<br>352,150<br>357,100<br>362,200<br>369,800<br>379,600<br>391,750<br>404,500<br>421,650 | 28,410<br>29,000<br>29,450<br>30,150<br>31,000<br>32,350<br>33,000<br>34,100<br>35,400<br>36,300<br>38,200<br>39,050<br>39,050<br>39,050<br>39,850<br>41,000<br>42,400<br>43,300<br>45,600<br>47,500<br>52,000 | 12,540<br>12,960<br>13,050<br>13,600<br>13,600<br>14,550<br>15,250<br>15,900<br>16,650<br>17,200<br>18,400<br>18,300<br>18,300<br>18,300<br>18,900<br>18,950<br>19,900<br>21,200<br>22,450<br>24,250<br>26,600 | 20,320<br>20,840<br>21,550<br>22,250<br>23,650<br>25,400<br>26,600<br>28,450<br>30,950<br>32,650<br>33,850<br>35,150<br>36,600<br>37,850<br>38,950<br>41,100<br>42,500<br>45,100<br>48,100<br>51,850 |

<sup>1/</sup> Revised from Data Book 1990, table 348.

Source: Hawaii State Department of Labor and Industrial Relations,
Labor Force Data Book (March 1978), as revised annually through April 1991;
Labor Force Statistics, Bull. No. 70-F and 72-F.

Table 339.-- JOBCOUNT, BY INDUSTRY: ANNUAL AVERAGES, 1980 AND 1987 TO 1990

| Industry  | 1980    | 1987           | 1988    | 1989 <u>1</u> / | 1990    |
|---|---------|----------------|---------|-----------------|---------|
| Nonagriculture, wage and salary                 | 404,100 | 459,950        | 478,050 | 505,450         | 527,500 |
| Contract construction                           | 23,950  | 21,200         | 23,400  | 29,200          | 31,850  |
| Manufacturing                                   | 23,350  | 21,900         | 22,000  | 21,500          | 20,950  |
| Durable goods                                   | 4,700   | 3,950          | 4,250   | 4,350           | 4,350   |
| Nondurable goods                                | 18,650  | 17,950         | 17,750  | 17,150          | 16,600  |
| Food processing                                 | 11,150  | 9,950          | 9,950   | 9,500           | 9,250   |
| Pineapple                                       | 2,900   | 2,050          | 2,050   | 1,800           | 1,600   |
| Sugar   | 3,900   | 3,050          | 2,850   | 2,550           | 2,500   |
| Other   | 4,350   | 4,800          | 5,050   | 5,150           | 5,150   |
| Textile, apparel                                | 3,050   | 3,150          | 2,800   | 2,500           | 2,200   |
| Printing, publishing                            |         | 3,130<br>3,400 | 3,550   |                 | 3,600   |
| Other nondurables                               | 3,100   | 1,450          | 1,450   | 3,650           |         |
|   | 1,350   |                |         | 1,550           | 1,500   |
| Transp., commun., utilities                     | 31,200  | 36,800         | 38,000  | 39,950          | 42,050  |
| Transportation                                  | 21,500  | 26,900         | 27,750  | 29,900          | 31,650  |
| Communication                                   | 7,150   | 7,250          | 7,550   | 7,300           | 7,350   |
| Utilities                                       | 2,550   | 2,650          | 2,650   | 2,800           | 3,050   |
| Trade   | 105,250 | 123,750        | 127,450 | 132,550         | 135,850 |
| Wholesale                                       | 18,600  | 20,400         | 20,750  | 21,850          | 22,400  |
| Retail  | 86,700  | 103,400        | 106,750 | 110,700         | 113,450 |
| Finance, insur., real estate.                   | 32,850  | 33,700         | 34,450  | 35,250          | 36,900  |
| Services and miscellaneous                      | 98,450  | 126,500        | 133,250 | 145,400         | 154,650 |
| Hotels  | 24,900  | 31,250         | 34,350  | 37,000          | 38,800  |
| Other services, misc                            | 73,550  | 95,250         | 98,900  | 108,400         | 115,850 |
| Government                                      | 89,050  | 96,050         | 99,500  | 101,600         | 105,250 |
| Federal   | 30,000  | 32,800         | 33,800  | 34,000          | 33,800  |
| Air Force                                       | 2,650   | 2,550          | 2,450   | 2,350           | 2,300   |
| Army  | 4,100   | 5,600          | 5,500   | 5,550           | 5,550   |
| Navy  | 11,950  | 11,950         | 12,250  | 12,200          | 11,500  |
| Other   | 11,250  | 12,650         | 13,600  | 13,850          | 14,450  |
| State   | 45,150  | 49,900         | 51,850  | 53,550          | 57,050  |
| Local   | 13,900  | 13,400         | 13,850  | 14,100          | 14,400  |
| Agniculture wage and colony                     | 10,650  | 10,550         | 10,000  | 9,650           | 9,600   |
| Agriculture, wage and salary                    |         |                |         |                 |         |
| Sugar   | 4,950   | 3,800          | 3,700   |                 | 3,100   |
| Pineapple                                       | 2,500   | 1,900          | 1,750   | 1,850           | 1,850   |
| Other   | 3,200   | 4,800          | 4,550   | 4,500           | 4,650   |
| Nonagric., self-employed $\underline{2}/\ldots$ | 28,300  | 30,700         | 32,750  | 33,400          | 38,550  |
| Agric., self-employed 3/                        | 4,600   | 3,700          | 3,600   | 3,500           | 3,550   |
| Labor disputes                                  | 500     | 50             | 100     | (Z)             | 650     |

Footnotes and source follow next table.

Table 340.-- JOBCOUNT BY INDUSTRY, BY COUNTIES: ANNUAL AVERAGE, 1990

|  |         | City and  |        |              |                 |
|--|---------|-----------|--------|--------------|-----------------|
|  | State   | County of | Hawaii | Kauai        | Maui            |
| Industry                                     | total   | Honolulu  | 1      |              | i               |
| Industry                                     | totai   | попотити  | County | County       | County          |
|  |         |           |        |              |                 |
| Nonagriculture, wage and salary              | 527,500 | 409,200   | 45,650 | 24,300       | 48,300          |
| Contract construction                        | 31,850  | 24,000    | 3,250  | 1,450        | 3,150           |
| Manufacturing                                | 20,950  | 15,800    | 2,250  | 900          | 1,950           |
| Durable goods                                | 4,350   | 3,850     | 200    | (Z)          | 250             |
| Nondurable goods                             | 16,600  | 11,950    | 2,050  | 900          | 1,700           |
| Food processing                              | 9,250   | 5,400     | 1,750  | 700          | 1,400           |
| Textile, apparel                             | 2,200   | 2,150     | (NS)   | (NS)         | (NS)            |
| Printing, publishing                         | 3,600   | 3,000     | (NS)   | (NS)         | (NS)            |
| Other nondurables                            | 1,500   | 1,400     | (NS)   | (NS)         | (NS)            |
| Transp., commun., utilities.                 | 42,050  | 34,200    | 2,500  | 2,400        | 3,000           |
| Transportation                               | 31,650  | 26,200    | (NS)   | (NS)         | (NS)            |
| Communication                                | 7,350   | 5,800     | (NS)   | (NS)         | (NS)            |
| Utilities                                    | 3,050   | 2,200     | (NS)   | (NS)         | (NS)            |
| Trade  |         |           | 12,600 |              |                 |
|  | 135,850 | 102,550   |        | 7,050<br>500 | 13,650<br>1,350 |
| Wholesale                                    | 22,400  | 18,500    | 2,000  | 1            |                 |
| Retail                                       | 113,450 | 84,000    | 10,600 | 6,550        | 12,300          |
| Finance, insur., real estate                 | 36,900  | 29,600    | 2,350  | 1,550        | 3,350           |
| Services and miscellaneous                   | 154,650 | 115,450   | 14,250 | 7,600        | 17,350          |
| Hotels                                       | 38,800  | 19,400    | 6,250  | 4,000        | 9,200           |
| Other services, misc                         | 115,850 | 96,050    | 8,000  | 3,600        | 8,150           |
| Government                                   | 105,250 | 87,600    | 8,450  | 3,350        | 5,850           |
| Federal                                      | 33,800  | 32,150    | 850    | 350          | 450             |
| Air Force                                    | 2,300   | 2,200     | (NS)   | (NS)         | (NS)            |
| Army   | 5,550   | 5,450     | (NS)   | (NS)         | (NS)            |
| Navy   | 11,500  | 11,400    | (NS)   | (NS)         | (NS)            |
| Other  | 14,450  | 13,100    | (NS)   | (NS)         | (NS)            |
| State  | 57,050  | 45,450    | 5,650  | 2,100        | 3,850           |
| Local  | 14,400  | 10,000    | 1,950  | 900          | 1,500           |
|  |         |           |        |              |                 |
| Agriculture, wage and salary                 | 9,600   | 2,300     | 3,500  | 1,150        | 2,600           |
| Sugar  | 3,100   | 450       | 850    | 950          | 850             |
| Pineapple                                    | 1,850   |           | -      | -            | 1,100           |
| Other  | 4,650   | 1,150     | 2,700  | 200          | 600             |
| Nonagric., self-employed 2/                  | 38,550  | 26,650    | 5,850  | 2,300        | 3,700           |
| <del>-</del>                                 |         |           |        |              |                 |
| Agric., self-employed $\underline{3}/\ldots$ | 3,550   | 700       | 2,200  | 250          | 400             |
| Labor disputes                               | 650     | 550       | (Z)    | (Z)          | (Z)             |
|  |         |           |        | L            | L               |

Footnotes and source on next page.

### Table 340. -- JOBCOUNT BY INDUSTRY, BY COUNTIES: ANNUAL AVERAGE, 1990 -- Con.

Fewer than 50.

Not shown separately.

Revised from Data Book 1990, tables 349 and 350.

 $\frac{1}{2}$ / Revised from Data Book 1990, tables 349 and 350. Includes unpaid family workers and domestics. Data for 1987-1990 are not comparable to earlier years.

3/ Includes unpaid family workers.

Source: Hawaii State Department of Labor and Industrial Relations, Labor Force Data Book (March 1978), as updated annually through April 1991.

Table 341.-- NUMBER OF JOBS HELD BY CURRENTLY EMPLOYED CIVILIANS, BY COUNTIES: JULY-AUGUST 1988

[Based on a telephone survey of 3,927 persons 18 years old or over. Excludes armed forces

| Number of jobs held   | State<br>total   | Hono-<br>lulu  | Hawaii   | Kauai   | Maui   |
|---|--|--|--|---|--|
| Currently employed One job only Full-time Part-time More than one job Full-time and other Several part-time No response | 501,776<br>459,800<br>382,936<br>76,864<br>39,808<br>7.9<br>31,784<br>8,024<br>2,168 | 385,870<br>355,088<br>294,579<br>60,509<br>28,897<br>7.5<br>23,303<br>5,594<br>1,885 | 50,457<br>45,441<br>37,007<br>8,434<br>4,809<br>9.5<br>3,485<br>1,324<br>207 | 21,338<br>19,626<br>16,798<br>2,828<br>1,636<br>7.7<br>1,523<br>113<br>76 | 44,111<br>39,645<br>34,552<br>5,093<br>4,466<br>10.1<br>3,473<br>993 |

Source: Hawaii State Department of Business and Economic Development, Tourism Branch, 1988 Statewide Tourism Impact Core Survey: Detailed Findings, Vol. 1 (August 1989), table I-Cl.

Table 342.-- MULTIPLE JOBHOLDERS, FOR THE UNITED STATES AND HAWAII: MAY 1989

| Subject                  | United<br>States               | Hawaii                     |
|--------------------------|--------------------------------|----------------------------|
| Total employment (1,000) | 117,084<br>7,225<br>6.2<br>0.2 | 531<br>28<br>1/ 5.2<br>2.6 |

<sup>1/</sup> Hawaii ranked 40th among the 50 States.

Source: U.S. Bureau of Labor Statistics, special tabulation from Current Population Survey.

Table 343.-- CIVILIAN EMPLOYMENT, FULL-AND PART-TIME: 1989 AND 1990 [Thousands]

|                    | Fu11-                          |                               | Part time                  |                            |                        |
|--------------------|--------------------------------|-------------------------------|----------------------------|----------------------------|------------------------|
| Year, sex, and age | and<br>part-<br>time           | Full<br>time                  | Total                      | Volun-<br>tary             | Economic<br>reasons    |
| 1989, total        | 511<br>524<br>271<br>253<br>19 | 430<br>445<br>245<br>200<br>8 | 81<br>79<br>26<br>53<br>11 | 70<br>71<br>22<br>49<br>11 | 11<br>8<br>4<br>4<br>1 |

Source: U.S. Bureau of Labor Statistics, <u>Geographic Profile of Employment and Unemployment (annual)</u>.

Z/ At 90-percent confidence level (1.6 sigma).

Table 344.-- EMPLOYMENT BY INDUSTRY: 1980 AND 1970

| Industry  | 1980  | 1970   |
|---|---|--|
| Employed persons 16 years and over Agriculture, forestry, and fisheries Mining Construction Manufacturing Nondurable goods Durable goods Transportation, communications, and other public utilities Wholesale and retail trade Finance, insurance, and real estate Business and repair services Personal services Entertainment and recreation services Professional and related services Public administration | 415,181<br>14,560<br>233<br>29,888<br>32,914<br>21,234<br>11,680<br>36,478<br>98,542<br>31,648<br>17,832<br>31,288<br>6,862<br>73,363<br>41,573 | 285,556<br>13,161<br>322<br>26,637<br>31,188<br>21,173<br>10,015<br>26,403<br>61,044<br>14,356<br>8,978<br>20,301<br>3,756<br>48,310<br>31,100 |

Source: U.S. Bureau of the Census, 1980 Census of Population, General Social and Economic Characteristics, Hawaii, PC80-1-C13 (June 1983), table 61.

Table 345.-- EMPLOYMENT BY CLASS OF WORKER: 1940 TO 1980

[Persons 14 years and over through 1960; 16 years and over, 1970 and 1980]

| Class of worker  | 1940                                 | 1950                                 | 1960                                 | 1970                                 | 1980                                 |
|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| All employed civilians   | 153,796                              | 167,571                              | 209,370                              | 285,556                              | 415,181                              |
| Private wage and salary workers Government workers Self-employed workers Unpaid family workers | 113,551<br>18,553<br>15,967<br>5,725 | 111,036<br>34,400<br>19,192<br>2,943 | 144,602<br>46,078<br>17,009<br>1,681 | 200,912<br>70,547<br>12,832<br>1,265 | 300,315<br>90,401<br>22,965<br>1,500 |

Source: U.S. Bureau of the Census, U.S. Census of Population: 1960, General Social and Economic Characteristics, Hawaii, Final Report PC(1)-13C (February 1962), table 56; 1970 Census of Population, General Social and Economic Characteristics, Hawaii, PC(1)-Cl3 (December 1971), table 56; 1980 Census of Population, General Social and Economic Characteristics, Hawaii, PC80-1-Cl3 (June 1983), table 67.

Table 346.-- OCCUPATION, BY SEX: 1980 AND 1970

| Both             | sexes  | Female  | s only   |
|------------------|--|---|--|
| 1980             | 1970   | 1980  | 1970   |
| 415,181          | 285,556  | 189,850   | 116,616<br>22,565  |
| ·                |  |   | 6,129  |
| 48,935           | 33,194   | 25,312  | 16,436   |
| 132,651          | 83,698   | 89,078  | 53,113   |
| 11,982<br>47,475 | 7,442<br>28,227  | 4,501<br>27,465   | 2,027<br>15,571  |
| 73,194           | 48,029   | 57,112  | 35,515   |
| 74,149<br>1,547  | 44,024<br>2,131  | 41,691<br>1,376   | 26,766<br>2,024  |
|                  |  |   | 143  |
|                  |  | _   | 24,599   |
|                  | _  | ·   | 2,118  |
| 48,198<br>48,423 | 43,484<br>43,536   | 3,941<br>10,143   | 2,731<br>9,323   |
| 14,000           | 13,589   | 5,730   | 5,743  |
| 16,430           | 13,767   | 1,132   | 472  |
| 17,993           | 16,180   | 3,281   | 3,108  |
|                  | 1980<br>415,181<br>97,606<br>48,671<br>48,935<br>132,651<br>11,982<br>47,475<br>73,194<br>74,149<br>1,547<br>7,578<br>65,024<br>14,154<br>48,198<br>48,423<br>14,000<br>16,430 | 415,181 285,556<br>97,606 58,242<br>48,671 25,048<br>48,935 33,194<br>132,651 83,698<br>11,982 7,442<br>47,475 28,227<br>73,194 48,029<br>74,149 44,024<br>1,547 2,131<br>7,578 4,304<br>65,024 37,589<br>14,154 12,572<br>48,198 43,484<br>48,423 43,536<br>14,000 13,589<br>16,430 13,767 | 1980         1970         1980           415,181         285,556         189,850           97,606         58,242         42,212           48,671         25,048         16,900           48,935         33,194         25,312           132,651         83,698         89,078           11,982         7,442         4,501           47,475         28,227         27,465           73,194         48,029         57,112           74,149         44,024         41,691           1,547         2,131         7,376           7,578         4,304         855           65,024         37,589         39,460           14,154         12,572         2,785           48,198         43,484         3,941           48,000         13,589         5,730           16,430         13,767         1,132 |

Source: U.S. Bureau of the Census, 1980 Census of Population, General Social and Economic Characteristics, Hawaii, PC80-1-C-13 (June 1983), table 61.

Table 347.-- OCCUPATION OF EMPLOYED CIVILIANS, BY SEX: ANNUAL AVERAGES, 1990

| Occupation   | Both<br>sexes  | Men  | Women  |
|--|--|--|--|
| All occupations (number in thousands)  Percent   | 524<br>100.0   | 271<br>100.0   | 253<br>100.0   |
| Managerial and professional specialty:  Executive, administrative, and managerial  Professional specialty  Technical, sales, and administrative support:  Technicians and related support  Sales  Administrative support, including clerical  Service occupations  Precision production, craft, and repair  Operators, fabricators, and laborers:  Machine operators, assemblers, and inspectors  Transportation and material moving  Handlers, equipment cleaners, helpers, and  laborers  Farming, forestry, and fishing | 13.4<br>14.7<br>2.2<br>13.4<br>16.2<br>16.1<br>9.8<br>2.5<br>3.5 | 15.5<br>13.7<br>2.2<br>10.6<br>5.1<br>13.1<br>18.2<br>2.9<br>6.4<br>5.4<br>7.0 | 11.2<br>15.8<br>2.1<br>16.4<br>28.2<br>19.3<br>.9<br>2.1<br>.3 |

Source: U.S. Bureau of Labor Statistics, Geographic Profile of Employment and Unemployment, 1990 (Bulletin 2381, June 1991), pp. 58-59.

Table 348.-- PLACE OF RESIDENCE AND PLACE OF WORK OF EMPLOYED PERSONS 16 YEARS AND OVER FOR THE CITY AND COUNTY OF HONOLULU, BY AREAS: 1980

[Residence and labor force status as of April 1; place of work as of preceding week. Includes armed forces. For census tract data, see <a href="Data">Data</a> Book 1987, pp. 359-361]

|   |   | Workers by p   | lace of   |
|---|---|--|---|
| Area  | Census tract<br>equivalent  | Residence  | Work <u>1</u> /   |
| County total  | 1.02-114  | 369,523  | 356,692   |
| Honolulu CDP  Waikiki  Ala Moana  Kakaako  Central Business District  Iwilei-Kalihi Kai  Airport  Other areas | 1.02-72, 114<br>18.01-20.02<br>37<br>38, 39<br>40, 42, 51, 52<br>57-60<br>68.03-72  | 183,677<br>9,094<br>1,326<br>407<br>3,193<br>6,442<br>5,061<br>158,154 | 246,969<br>30,011<br>18,578<br>26,696<br>33,478<br>21,571<br>33,714<br>82,921 |
| Rest of Oahu  Ewa  Wahiawa  Waianae  Waialua  Koolauloa  Koolaupoko  Unknown                                  | 73-113<br>73-89.03<br>90-95.05<br>96.01-98<br>99.01-100<br>101-102.02<br>103.02-113 | 185,846<br>93,223<br>20,475<br>9,611<br>4,405<br>5,711<br>52,409       | 109,723<br>42,044<br>20,940<br>4,327<br>2,031<br>2,214<br>19,337<br>18,830    |

<sup>1</sup>/ Excludes residents who worked away from the City and County of Honolulu and nonresidents who worked within the area.

Source: U.S. Bureau of the Census, 1980 Census of Population and Housing, Census Tracts, Honolulu SMSA, PHC80-2-183 (1983), table P-9, and Urban Transportation Planning Package, printouts (March 1985).

Table 349.-- PROFESSIONAL FIRMS AND EMPLOYMENT, FOR OAHU AND DOWNTOWN HONOLULU: 1991

|  | Oahu   |   | Downtown<br>Honolulu <u>1</u> /                      |  | Percent<br>downtown  |  |
|--|--|---|--|--|--|--|
| Kind of business   | No. of<br>firms  | Employ-<br>ment   | No. of firms   | Employ-<br>ment  | No. of firms   | Employ-<br>ment  |
| Total  | 7,741  | 39,125  | 3,559  | 19,581   | 46.0   | 50.0   |
| Accountants, CPAs Attorneys, law firms Dentists Engineers Insurance agencies, co.'s Physicians Real estate companies All others 2/ | 457<br>2,010<br>677<br>173<br>599<br>1,422<br>1,224<br>1,179 | 2,149<br>6,048<br>2,132<br>2,255<br>7,414<br>2,789<br>11,957<br>4,381 | 239<br>1,861<br>90<br>54<br>288<br>246<br>407<br>374 | 1,443<br>5,796<br>298<br>689<br>4,280<br>383<br>4,848<br>1,844 | 52.3<br>92.6<br>13.3<br>31.2<br>48.1<br>17.3<br>33.3<br>31.7 | 67.1<br>95.8<br>14.0<br>30.6<br>57.7<br>13.7<br>40.5<br>42.1 |

1/ Area bounded by River Street, Vineyard Boulevard, Ward Avenue, and Pacific Ocean.

2/ For details, see source.

Source: John Witwer, publisher, Hawaii Business Directory; cited in Downtown Planet, August 19, 1991.

Table 350.-- EMPLOYMENT AND PAYROLLS COVERED BY THE HAWAII EMPLOYMENT SECURITY LAW AND UNEMPLOYMENT COMPENSATION FOR FEDERAL EMPLOYEES: 1980 TO 1990

|   | 1 6  |   | Wages and salaries  |  |  |
|---|--|---|---|--|--|
| Year  | Number of employers, December 1/   | Average<br>employment   | Total<br>(\$1,000)  | Per worker (dollars)   |  |
| INCLUDING GOVERNMENT  |  |   |   |  |  |
| 1980  | 19,988 20,190 20,259 20,937 21,288 21,945 24,510 24,686 24,787 26,149 27,277 | 412,281<br>414,830<br>408,791<br>413,767<br>421,821<br>434,400<br>446,756<br>468,027<br>484,483<br>510,232<br>532,927 | 5,585,489<br>6,002,943<br>6,281,953<br>6,668,001<br>7,050,512<br>7,530,505<br>8,072,318<br>8,920,628<br>9,909,719<br>11,038,771<br>12,340,356 | 13,548<br>14,471<br>15,367<br>16,115<br>16,714<br>17,335<br>18,069<br>19,060<br>20,454<br>21,635<br>23,156 |  |
| EXCLUDING GOVERNMENT  | •  |   |   |  |  |
| 1985<br>1986<br>1987<br>1988<br>1989 (rev.)<br>1990<br>PRIVATE NON-AGRICUL- | 21,939<br>24,498<br>24,680<br>24,781<br>26,143<br>27,271                     | 343,400<br>355,192<br>373,955<br>389,024<br>413,046<br>432,910  | 5,518,268<br>5,997,767<br>6,738,448<br>7,564,054<br>8,532,379<br>9,625,759  | 16,070<br>16,886<br>18,019<br>19,444<br>20,657<br>22,235   |  |
| TURAL  1985   | 21,510<br>23,992<br>24,145<br>24,211<br>25,554<br>26,647                     | 332,092<br>343,555<br>362,271<br>376,884<br>401,002<br>420,717  | 5,344,772<br>5,817,270<br>6,543,781<br>7,341,568<br>8,304,991<br>9,386,430  | 16,094<br>16,933<br>18,063<br>19,480<br>20,711<br>22,311   |  |

<sup>1</sup>/ Beginning in 1986, includes employers reporting 1 or more employees at any time during the year, even if they reported no employees for December.

Source: Hawaii State Department of Labor and Industrial Relations, Employment and Payrolls in Hawaii (annual) and records.

Table 351.-- EMPLOYMENT AND PAYROLLS COVERED BY THE HAWAII EMPLOYMENT SECURITY LAW AND UNEMPLOYMENT COMPENSATION FOR FEDERAL EMPLOYEES, BY COUNTIES: 1990

| County or island  | Number<br>of em-<br>ployers,<br>Dec. | Average<br>employ-<br>ment            | Total<br>wages<br>(\$1,000)                  | Average<br>annual<br>wage<br>(dollars) |
|---|--------------------------------------|---------------------------------------|--|--|
| INCLUDING GOVERNMENT  |                                      |                                       |  |  |
| State total   | 27,277                               | 532 <b>,</b> 927                      | 12,340,356                                   | 23,156                                 |
| City and Co. of Honolulu . Hawaii County Kauai County Maui County  EXCLUDING GOVERNMENT | 19,432<br>3,313<br>1,493<br>3,045    | 408,303<br>48,699<br>24,885<br>51,041 | 9,807,337<br>967,864<br>488,604<br>1,076,550 | 24,020<br>19,874<br>19,634<br>21,092   |
| State total   | 27,271                               | 432,910                               | 9,625,759                                    | 22,235                                 |
| City and Co. of Honolulu . Hawaii County Kauai County Maui County                       | 19,429<br>3,310<br>1,490<br>3,042    | 325,809<br>40,306<br>21,527<br>45,268 | 7,562,150<br>744,567<br>398,445<br>920,596   | 23,210<br>18,473<br>18,509<br>20,337   |

Source: Hawaii State Department of Labor and Industrial Relations, 1990 Employment and Payrolls in Hawaii (September 1991).

Table 352.-- EMPLOYMENT AND PAYROLLS COVERED BY THE HAWAII EMPLOYMENT SECURITY LAW AND UNEMPLOYMENT COMPENSATION FOR FEDERAL EMPLOYEES, BY INDUSTRY: 1990

|                                  | Number<br>of em- | Average          | Total                | Average<br>annual |
|----------------------------------|------------------|------------------|----------------------|-------------------|
| Industry                         | ployers,<br>Dec. | employ-<br>ment  | wages<br>(\$1,000)   | wage<br>(dollars) |
| All industries                   | 27,277           | 532,927          | 12,340,356           | 23,156            |
| Government                       | 6                | 100,017          | 2,714,597            | 27,141            |
| FederalState                     | 1<br>1           | 34,153<br>51,484 | 993,434<br>1,314,575 | 29,088<br>25,534  |
| County                           | 4                | 14,380           | 406,588              | 28,275            |
| Private                          | 27,271           | 432,910          | 9,625,759            | 22,235            |
| Agriculture, forestry, fisheries | 624              | 12,193           | 239,329              | 19,628            |
| Sugar                            | 15<br>5          | 3,163            | 70,570               | 22,311            |
| PineappleOther                   | 604              | 1,969<br>7,061   | 41,261<br>127,498    | 20,955<br>18,057  |
| Mining and contract construction | 2,668            | 32,712           | 1,181,887            | 36,130            |
| Manufacturing                    | 1,013            | 21,255           | 515,831              | 24,269            |
| Sugar mills                      | 12               | 2,525            | 59,148               | 23,425            |
| Pineapple canning                | 2                | 1,637            | 35,816               | 21,879            |
| Other food processing            | 208              | 5,217            | 105,039              | 20,134            |
| Other manufacturing              | 791              | 11,876           | 315,827              | 26,594            |
| Transportation                   | 1,225            | 31,951           | 815,371              | 25,519            |
| Communications                   | 111              | 7,410            | 250,786              | 33,844            |
| Utilities                        | 51               | 3,001            | 129,929              | 43,295            |
| Wholesale trade                  | 2,395            | 22,693           | 598,475              | 26,373            |
| Retail trade                     | 5,732            | 113,537          | 1,633,134            | 14,384            |
| Eating and drinking places       | 1,971            | 46,806           | 519,153              | 11,092            |
| Other retail trade               | 3,761            | 66,731           | 1,113,982            | 16,694            |
| Finance, insurance, real estate  | 3,555            | 37,107           | 1,012,784            | 27,294            |
| Services                         | 9,603            | 150,719          | 3,241,019            | 21,504            |
| Hotels, rooming houses, etc      | 228              | 38,800           | 720,569              | 18,571            |
| Health services                  | 2,012            | 29,431           | 869,024              | 29,527            |
| Other services                   | 7,363            | 82,488           | 1,651,426            | 20,020            |
| Nonclassifiable establishments   | 294              | 331              | 7,213                | 21,792            |

Source: Hawaii State Department of Labor and Industrial Relations, 1990 Employment and Payrolls in Hawaii (September 1991), pp. 5-6.

Table 353.-- AVERAGE ANNUAL WAGE FOR EMPLOYEES COVERED BY THE HAWAII EMPLOYMENT SECURITY LAW AND UNEMPLOYMENT COMPENSATION FOR FEDERAL EMPLOYEES, IN CURRENT AND CONSTANT DOLLARS, BY CLASS OF WORKER: 1980 AND 1990

|                                 | 1980:   | 1       | 990                | Percent change,<br>1980-1990 |                    |  |
|---------------------------------|---------|---------|--------------------|------------------------------|--------------------|--|
| Class of worker                 | current | Current | 1980               | Current                      | 1980               |  |
|                                 | dollars | dollars | dollars <u>1</u> / | dollars                      | dollars <u>1</u> / |  |
| All classes                     | 13,548  | 23,156  | 13,916             | 70.9                         | 2.7                |  |
| Federal State 2/ County Private | 21,140  | 29,088  | 17,481             | 37.6                         | -17.3              |  |
|                                 | 14,198  | 25,534  | 15,345             | 79.8                         | 8.1                |  |
|                                 | 14,848  | 28,275  | 16,992             | 90.4                         | 14.4               |  |
|                                 | 12,697  | 22,235  | 13,362             | 75.1                         | 5.2                |  |

<sup>1/</sup> Deflated by the all-items consumer price index (CPI-U) for Honolulu.
The all-items index increased 66.4 percent during this period.

Source: Hawaii State Department of Labor and Industrial Relations, Employment and Payrolls in Hawaii (annual).

Table 354.-- NONGOVERNMENTAL REPORTING UNITS AND EMPLOYMENT, BY SIZE OF FIRM: DECEMBER 1990

|                            |              | Employment-size class |                 |                 |                 |               |                         |
|----------------------------|--------------|-----------------------|-----------------|-----------------|-----------------|---------------|-------------------------|
| Subject                    | All<br>units | 1 to<br>4             | 5 to<br>9       | 10 to<br>19     | 20 to<br>49     | 50 to<br>99   | 100 or<br>more          |
| Reporting units Employment |              | 15,039<br>25,795      | 5,147<br>34,107 | 3,331<br>45,218 | 2,251<br>68,157 | 810<br>55,650 | 693<br>215 <b>,</b> 944 |

Source: Hawaii State Department of Labor and Industrial Relations, 1990 Employment and Payrolls in Hawaii (September 1991), p. 19.

<sup>2/</sup> Average for 1980 is understated because of erroneous inclusion of uncovered student workers, omitted in 1990 data.

Table 355.-- ANNUAL WAGES PER EMPLOYEE, TOTAL AND PRIVATE: 1980 TO 1990

|  |  | wages per<br>e (dollars)   | Hawaii as percent of U.S.  |  |  |  |
|--|--|--|--|--|--|--|
| Year   | Total  | Private<br>only  | Tota1  | Private<br>only  | Total  | Private<br>only  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 13,491<br>14,411<br>15,353<br>16,108<br>16,701<br>17,329<br>18,101<br>19,091<br>20,444<br>21,624<br>23,167 | 12,695<br>13,567<br>14,202<br>14,898<br>15,456<br>16,064<br>16,907<br>18,024<br>19,437<br>20,646<br>22,244 | 94.2<br>92.2<br>92.0<br>92.1<br>91.0<br>90.3<br>90.7<br>91.5<br>93.5<br>95.8<br>98.2 | 88.6<br>86.9<br>85.5<br>85.8<br>85.0<br>84.7<br>85.6<br>87.4<br>89.8<br>92.7<br>95.6 | 27<br>32<br>31<br>30<br>31<br>31<br>31<br>25<br>22<br>18<br>13 | 37<br>41<br>42<br>40<br>41<br>40<br>38<br>35<br>27<br>24<br>18 |

<sup>1/</sup> Among 50 States and D.C.

Source: U.S. Bureau of Labor Statistics, Employment and Wages, Annual Averages (annual report), and Release USDL 91-390 (Aug. 8, 1991).

Table 356.--MINIMUM WAGE CHRONOLOGY: 1942 TO 1993
[Dollars per hour. As of July 1, unless otherwise specified]

| Effective date                                  | Oahu   | Other<br>islands                                     | Effective<br>date                                       | State  | Effective<br>date                                     | State  |
|---|--|--|---|--|---|--|
| 1942 1/<br>1943<br>1945<br>1953<br>1955<br>1957 | 0.25<br>0.30<br>0.40<br>0.65<br>0.75<br>0.90<br>1.00 | 0.20<br>0.25<br>0.40<br>0.55<br>0.65<br>0.85<br>1.00 | 1962<br>1964 <u>2</u> /<br>1969<br>1970<br>1974<br>1975 | 1.15<br>1.25<br>1.40<br>1.60<br>2.00<br>2.40<br>2.65 | 1979<br>1980<br>1981<br>1988 2/<br>1992 3/<br>1993 2/ | 2.90<br>3.10<br>3.35<br>3.85<br>4.75<br>5.25 |

<sup>1/</sup> At inception of minimum wage law, April 1, 1942.

 $<sup>\</sup>frac{2}{2}$ / January 1.  $\frac{3}{4}$ / April 1.

Source: Hawaii State Department of Labor and Industrial Relations, records; Act 264, S.L.H. 1991.

Table 357.-- HOURS AND EARNINGS IN SPECIFIED INDUSTRIES: ANNUAL AVERAGES, 1985 TO 1990

| Subject   | 1985   | 1986   | 1987   | 1988   | 1989   | 1990   |
|---|--------|--------|--------|--------|--------|--------|
| Average weekly earnings (dollars)   |        |        |        |        |        |        |
| Contract construction  Manufacturing Food and kindred products  Communication and utilities  Trade 1/ Wholesale trade Retail trade 1/ Banking & credit agencies  Hotels                           | 627.32 | 642.80 | 679.30 | 706.10 | 756.56 | 778.95 |
|   | 323.51 | 344.65 | 366.42 | 393.60 | 414.80 | 442.90 |
|   | 303.32 | 321.40 | 341.01 | 362.03 | 368.34 | 385.28 |
|   | 542.15 | 582.15 | 608.75 | 650.62 | 683.65 | 694.85 |
|   | 228.72 | 231.62 | 235.95 | 245.70 | 259.20 | 282.94 |
|   | 311.04 | 326.10 | 328.90 | 342.88 | 358.27 | 381.21 |
|   | 200.95 | 200.26 | 206.30 | 216.04 | 228.30 | 251.84 |
|   | 267.80 | 291.78 | 297.11 | 305.33 | 321.48 | 343.49 |
|   | 243.42 | 259.38 | 265.22 | 281.22 | 300.81 | 318.40 |
| Average weekly hours  Contract construction  Manufacturing  Food and kindred products  Communication and utilities  Trade 1/  Wholesale trade  Retail trade 1/  Banking & credit agencies  Hotels | 36.6   | 36.9   | 38.4   | 37.8   | 38.6   | 38.6   |
|   | 37.4   | 38.9   | 39.4   | 40.0   | 40.0   | 40.3   |
|   | 36.9   | 39.1   | 40.5   | 41.0   | 40.3   | 40.9   |
|   | 41.8   | 42.4   | 42.6   | 44.2   | 44.8   | 44.8   |
|   | 33.1   | 32.9   | 32.5   | 32.5   | 32.4   | 32.9   |
|   | 38.4   | 38.5   | 38.2   | 38.7   | 38.9   | 39.3   |
|   | 31.3   | 31.0   | 30.7   | 30.6   | 30.4   | 30.9   |
|   | 38.7   | 38.8   | 37.8   | 38.6   | 38.5   | 38.9   |
|   | 33.3   | 34.4   | 33.7   | 33.8   | 34.3   | 34.2   |
| Average hourly earnings (dollars)  Contract construction  Manufacturing   | 17.14  | 17.42  | 17.69  | 18.68  | 19.60  | 20.18  |
|   | 8.65   | 8.86   | 9.30   | 9.84   | 10.37  | 10.99  |
| Food and kindred products  Communication and utilities  Trade 1/  | 8.22   | 8.22   | 8.42   | 8.83   | 9.14   | 9.42   |
|   | 12.97  | 13.73  | 14.29  | 14.72  | 15.26  | 15.51  |
|   | 6.91   | 7.04   | 7.26   | 7.56   | 8.00   | 8.60   |
|   | 8.10   | 8.47   | 8.61   | 8.86   | 9.21   | 9.70   |
|   | 6.42   | 6.46   | 6.72   | 7.06   | 7.51   | 8.15   |
|   | 6.92   | 7.52   | 7.86   | 7.91   | 8.35   | 8.83   |
|   | 7.31   | 7.54   | 7.87   | 8.32   | 8.77   | 9.31   |

<sup>1/</sup> Excludes eating and drinking establishments.
Source: Hawaii State Department of Labor and Industrial Relations, Labor
Force Data Book (March 1978), as updated annually through April 1991.

Table 358.-- AVERAGE PAY RATES FOR SELECTED JOB CLASSIFICATIONS IN PRIVATE INDUSTRY: 1986 TO 1991

[In dollars]

|                               |   | <del> </del>  |  |  |  |   |
|-------------------------------|---|---|--|--|--|---|
| Job classification <u>1</u> / | 1986  | 1987  | 1988   | 1989   | 1990   | 1991  |
| MONTHLY RATES                 |   |   |  |  |  |   |
| Junior typist                 | 1,084<br>1,485<br>1,461<br>1,194<br>1,794<br>1,891<br>1,135<br>2,159    | 1,103<br>1,583<br>1,516<br>1,218<br>1,865<br>2,049<br>1,171<br>2,287    | 1,224<br>1,581<br>1,597<br>1,254<br>2,034<br>2,057<br>1,232<br>2,534     | 1,279<br>1,769<br>1,680<br>1,333<br>1,914<br>2,216<br>1,306<br>2,746     | 1,238<br>1,737<br>1,762<br>1,414<br>2,108<br>2,065<br>1,376<br>2,999     | 1,406<br>1,849<br>1,871<br>1,435<br>2,244<br>2,440<br>1,533<br>3,456      |
| HOURLY RATES                  |   |   |  |  |  |   |
| Housekeeper                   | 6.412<br>8.950<br>3.846<br>7.187<br>10.405<br>12.191<br>10.753<br>8.734 | 6.714<br>8.747<br>3.866<br>7.399<br>10.768<br>12.486<br>11.154<br>9.783 | 7.183<br>9.074<br>4.212<br>7.521<br>11.156<br>13.148<br>11.531<br>10.159 | 7.503<br>9.082<br>4.259<br>7.672<br>11.701<br>13.447<br>11.872<br>10.664 | 7.856<br>9.603<br>4.409<br>7.785<br>12.007<br>14.300<br>12.486<br>10.397 | 8.499<br>10.909<br>4.614<br>8.229<br>13.817<br>15.456<br>13.110<br>10.639 |

<sup>1</sup>/ The 16 job titles listed in this table are meant to be only illustrative of the 105 reported in the full report; see the source for full information.

Source: Hawaii Employers Council, Pay Rates in Hawaii (annual).

Table 359.-- AVERAGE PAY RATES FOR SELECTED JOB CLASSIFICATIONS IN PRIVATE INDUSTRY, BY COUNTIES OR ISLANDS: 1991

[In dollars]

| Job classification and year 1/  | State<br>average  | Kauai   | Oahu  | Maui<br>County  | Hawaii<br>County  |
|---|---|---|---|---|---|
| MONTHLY RATES   |   |   |   |   |   |
| Junior typist Clerk-stenographer Secretary Data entry operator Bookkeeper, full-charge Engineering drafting technician Hospital attendant Staff nurse     | 1,406<br>1,849<br>1,871<br>1,435<br>2,244<br>2,440<br>1,533<br>3,456      | 1,795<br><br>1,565<br>3,394                     | 1,403<br>1,819<br>1,872<br>1,438<br>2,218<br>2,498<br>1,532<br>3,462      | 1,958<br><br>1,521<br>3,280   | 1,654<br>1,290<br><br>2,320   |
| HOURLY RATES  |   |   |   |   |   |
| Housekeeper Cook, general Waiter/waitress Laborer (light) Carpenter (maintenance) Electrician (maintenance) Automotive mechanic Truck driver (1.5-5 tons) | 8.499<br>10.909<br>4.614<br>8.229<br>13.817<br>15.456<br>13.110<br>10.639 | 8.543<br>11.174<br>4.757<br>8.063<br>12.712<br> | 8.459<br>10.314<br>4.431<br>8.235<br>13.323<br>16.242<br>13.947<br>10.856 | 8.543<br>12.117<br>4.973<br>8.229<br>14.304<br>13.885<br>12.884<br>10.016 | 8.439<br>12.471<br>4.910<br>8.452<br>15.999<br>16.523<br>12.561<br>10.522 |

<sup>1/</sup> See preceding table, footnote 1.
Source: Hawaii Employers Council, Pay Rates in Hawaii (Special Publication No. 208, October 1991).

Table 360.-- MONTHLY AND HOURLY WAGE RATES FOR SPECIFIED JOB TITLES: 1990

[In dollars. Data are shown for only a few of the more than 6,000 job titles listed in the source, primarily to suggest the type of information and occupational detail available there]

|   | Data  | Pay   | Wage   | range   |
|---|---|---|--|---|
| Job title   | source  | period  | Low  | High  |
| Accountant Cannery warehouse worker Clerk, data entry Engineer, civil Host/hostess Laborer, general Nurse, licensed practical Police officer Professor Stenographer | Private Private Private Local govt. Private Private State govt. Local govt. State govt. Private | Monthly Hourly Hourly Monthly Hourly Hourly Monthly Monthly Monthly | 2,135<br>5.50<br>8.36<br>2,026<br>6.25<br>6.40<br>1,520<br>2,260<br>3,588<br>2,008 | 3,018<br>7.05<br>12.29<br>6,034<br>7.16<br>8.78<br>2,197<br>3,255<br>6,720<br>2,158 |

Source: Hawaii State Department of Labor and Industrial Relations, Selected Wage Information for Hawaii 1990 (November 1990).

Table 361.-- CASH COMPENSATION PAID TO EXECUTIVES OF MAJOR CORPORATIONS, 1989, AND LABOR UNION LEADERS, 1990

[\$1,000]

| Category             | Total | Less<br>than<br>100 | 100<br>to<br>249 | 250<br>to<br>499 | 500<br>to<br>999 | 1,000<br>or<br>more | Highest |
|----------------------|-------|---------------------|------------------|------------------|------------------|---------------------|---------|
| Corporate executives | 30    | -                   | 6                | 16               | 6                | 2                   | 1,473   |
| Union leaders        | 19    | 15                  | 4                | -                | -                | -                   | 201     |

Source: Sunday Star-Bulletin & Advertiser, June 3, 1990, pp. B4 and B8, and August 4, 1991, pp. B4 and B10.

Table 362.-- WEEKLY HOURS OF WORK, FOR CIVILIANS AT WORK: ANNUAL AVERAGES, 1980 TO 1990

| Year  | All civil-<br>ians at<br>work                | Full-time<br>sched-<br>ules <u>1</u> /       | Year                         | All civil-<br>ians at<br>work        | Full-time<br>sched-<br>ules <u>1</u> / |
|---|--|--|------------------------------|--------------------------------------|--|
| 1980 <u>2</u> /<br>1981<br>1982<br>1983<br>1984 | 37.0<br>36.7<br>37.4<br>37.9<br>37.8<br>38.2 | 43.0<br>43.0<br>43.1<br>43.2<br>43.5<br>44.4 | 1986<br>1987<br>1988<br>1989 | 38.3<br>37.6<br>39.0<br>39.4<br>39.4 | 44.3<br>44.1<br>44.6<br>46.0<br>46.8   |

<sup>1/</sup> Refers to persons who worked 35 hours or more during the survey week.

Table 363.-- WEEKLY HOURS OF WORK, FOR CIVILIAN WORKERS: ANNUAL AVERAGES; 1990

| Hours of work     | Civilian<br>workers<br>(1,000) | Age, sex, or race          | Average<br>hours |
|-------------------|--------------------------------|----------------------------|------------------|
| Total at work     | 496                            | Total at work              | 39.4<br>46.8     |
| 1 to 14 hours     | 19                             | _                          |                  |
| 15 to 29 hours    | 51                             | Men                        | 41.6             |
| 30 to 34 hours    | 42                             | Women                      | 36.9             |
| 35 to 39 hours    | 23                             |                            |                  |
| 40 hours          | 246                            | Both sexes, 15 to 19 years | 26.5             |
| 41 to 48 hours    | 33                             |                            |                  |
| 49 hours and over | 82                             | White                      | 40.1             |
|                   |                                |                            |                  |

<sup>1/</sup> Refers to persons who worked 35 hours or more during the survey week. Source: U.S. Bureau of Labor Statistics, Geographic Profile of Employment and Unemployment, 1990 (Bulletin 2381, June 1991), pp. 71-74.

<sup>2/</sup> Data for 1980 limited to nonagricultural wage and salary workers. Source: U.S. Bureau of Labor Statistics, Geographic Profile of Employment and Unemployment (annual).

Table 364.-- INTERSTATE MOVEMENT OF JOB-SEEKERS: 1985 TO 1990

| Type of job-seeker  | 1985           | 1986                  | 1987                 | 1988                 | 1989                 | 1990                 |
|---|----------------|-----------------------|----------------------|----------------------|----------------------|----------------------|
| Island workers on Mainland $\frac{1}{2}$ Mainland workers in Hawaii $\frac{2}{2}$ Ratio $\frac{3}{2}$ | 3 <b>,</b> 993 | 3,664<br>3,932<br>107 | 3,805<br>3,161<br>83 | 3,942<br>2,974<br>75 | 3,961<br>2,679<br>68 | 5,275<br>2,910<br>55 |

<sup>1/</sup> Interstate liable initial claims, excluding UCFE and UCX. Covers Hawaii workers seeking work and filing for benefits on Mainland. Includes Federal civilian employees and ex-servicemen.

Table 365.-- RECORDABLE OCCUPATIONAL INJURIES AND ILLNESSES OF NONGOVERNMENTAL WORKERS: 1989

[Data exclude agricultural employers with fewer than 11 employees]

| Subject          | Total   | Injuries | Illnesses |
|------------------|---------|----------|-----------|
| Recordable cases | 37,415  | 36,625   | 790       |
|                  | 11.4    | 11.2     | 0.2       |
|                  | 20,369  | 19,938   | 431       |
|                  | 356,480 | 350,108  | 6,372     |
|                  | 18      | 18       | 15        |
|                  | 17,026  | 16,669   | 357       |

Source: Hawaii State Department of Labor and Industrial Relations, 1989 Occupational Injuries and Illnesses Survey, State of Hawaii, p. 4.

<sup>2/</sup> Interstate agent initial claims (UI), excluding UCFE and UCX. Covers Mainland workers filing claims for unemployment insurance and registered for work with the Hawaii State Employment Service.

<sup>3/</sup> Interstate agent initial claims per 100 interstate liable initial claims. Ratios under 100 suggest a net out-migration of workers.

Source: Hawaii State Department of Labor and Industrial Relations, 1990 State of Hawaii Unemployment Insurance Fact Book, 1970 to the Present, Hawaii (June 1990), p. 15, and records.

Table 366.-- WORK INJURIES, DEATHS, TIME LOST, AND COMPENSATION COSTS: 1984 TO 1989

| Year                                 | Reported<br>cases  | Reported<br>deaths               | Time lost<br>(compensated<br>days)   | Compensation costs (\$1,000)                                   |
|--------------------------------------|--|----------------------------------|--|--|
| 1984<br>1985<br>1986<br>1987<br>1988 | 38,755<br>37,940<br>39,390<br>43,108<br>50,101<br>52,030 | 35<br>49<br>47<br>45<br>46<br>53 | 1,307,011<br>1,262,513<br>1,067,462<br>1,266,460<br>1,445,052<br>1,323,074 | 122,454<br>136,837<br>127,367<br>159,196<br>178,930<br>173,049 |

Source: Hawaii State Department of Labor and Industrial Relations, Work Injury Statistics (1984-1988), and Worker's Compensation Data Book 1989.

Table 367.-- LABOR UNIONS AND EMPLOYEE ASSOCIATIONS: 1990

| Subject                                | Total            | AFL-CIO<br>affiliated | Independen t    |
|--|------------------|-----------------------|-----------------|
| Unions and associations  Membership 1/ | 71               | 59                    | 12              |
|  | 161 <b>,</b> 052 | 142 <b>,</b> 518      | 18 <b>,</b> 534 |

 $<sup>\</sup>underline{1}$ / Data exclude 5 unions and associations not reporting membership.

Source: Hawaii State Department of Labor and Industrial Relations, Directory of Labor Organizations & Affiliates, 1990.

Table 368.-- COLLECTIVE BARGAINING AGREEMENTS: 1986 TO 1991
[Covers collective bargaining agreements subject to wage negotiations]

|                                      | Number Workers covered                   |  | Duration over 2 years (percent)     |  |  |  |
|--------------------------------------|--|--|-------------------------------------|--|--|--|
| Year                                 | of agree-<br>ments                       | Total  | Per agree-<br>ment                  | Agreements                                   | Workers                                      |  |
| 1986<br>1987<br>1988<br>1989<br>1990 | 138<br>1,375<br>433<br>104<br>194<br>107 | 13,550<br>80,400<br>16,290<br>50,950<br>24,300<br>23,700 | 98<br>58<br>38<br>490<br>125<br>221 | 60.2<br>96.4<br>88.7<br>76.9<br>89.2<br>80.4 | 44.1<br>42.9<br>52.5<br>14.9<br>95.6<br>80.4 |  |

Source: Helene S. Tanimoto, <u>Duration of Collective Bargaining</u>
Agreements in Hawaii, 1991 (University of Hawaii at Manoa, Industrial Relations Center, Occasional Publication No. 167, December 1990).

Table 369.-- STATE AND COUNTY EMPLOYEES IN COLLECTIVE BARGAINING UNITS BY EMPLOYING JURISDICTION: 1988 TO 1990

[Unless otherwise specified, as of December 31]

| Employing jurisdiction | 1988  | 1989  | 1990  |
|------------------------|---|---|---|
| Total                  | 45,172  | 46,426  | 49,237  |
| State of Hawaii        | 19,690<br>7,822<br>1,434<br>1,106<br>640<br>10,592<br>3,888 | 20,680<br>7,908<br>1,482<br>1,205<br>649<br>10,440<br>4,062 | 21,926<br>8,091<br>1,545<br>1,287<br>657<br>11,384<br>4,347 |

Source: Hawaii Labor Relations Board, <u>HLRB Information Bulletin</u>, No. 28, February 28, 1991, and earlier issues.

[Data exclude stoppages lasting less than one full shift (8 hours) and stoppages affecting fewer than 6 workers. Data are limited to stoppages begun or in progress during the week containing the 12th of each month]

| Year                                 | Year Number of stoppages <u>1</u> / |  | Man-days<br>lost <u>2</u> /                              |  |
|--------------------------------------|-------------------------------------|--|--|--|
| 1985<br>1986<br>1987<br>1988<br>1989 | 9<br>6<br>4<br>6<br>2<br>13         | 1,990<br>1,266<br>99<br>410<br>48<br>7,415 | 32,257<br>49,533<br>14,392<br>25,057<br>3,046<br>119,509 |  |

 $<sup>\</sup>underline{1}$ / Stoppages carrying over from previous year are counted in both years.

2/ Partly estimated.

Source: Hawaii State Department of Labor and Industrial Relations, Research and Statistics Office, records.

Table 371.-- WORK STOPPAGES INVOLVING 1,000 OR MORE WORKERS: 1982 TO 1990

| Year | Number of stoppages begun Workers during in year involved 1/ year |                         | during                    | Percent of estimated nonagricultural working time |  |
|------|---|-------------------------|---------------------------|---|--|
| 1982 | -<br>1<br>1<br>1  | 2,800<br>1,000<br>1,000 | 5,600<br>70,000<br>11,000 | 0<br>0.01<br>0.01<br>0.01<br>0                    |  |

<sup>1</sup>/ Workers counted more than once if involved in more than one stoppage during year.

Source: U.S. Department of Labor, Bureau of Labor Statistics, records.

## Section 13

## **INCOME, EXPENDITURES, AND WEALTH**

This section presents statistics on two different aspects of income and expenditures, one relating to the state income and product system and the other to the distribution of income to families, households and individuals. Specifically, information is given on gross state product, income by industry, personal, family and household income, poverty, personal wealth, and family expenditures. Data on wage rates, salaries, and earnings appear in Sections 3, 9, 12, and 22; on industrial payrolls, in Sections 12, 15, and 20 through 23; on the family income of visitors, in Section 7; on retirement payments and public assistance, in Sections 10 and 11; on taxable income, in Section 9.

Gross state product in 1990 was about \$27 billion. The major sources of outside income to Hawaii in 1990 were defense expenditures (\$3.2 billion), pineapple production (\$216 million), sugar production (\$329 million), and visitor expenditures (\$9.4 billion). Personal income in 1990 was \$22.7 billion, compared with \$10.3 billion only ten years earlier, and per capita personal income was \$20,400, almost twice the 1980 level. The per capita figure for Hawaii was 8.9 percent above the national average, reflecting in part the Islands' higher cost of living. The median annual income of households, based on data for 1990, was \$39,000, third highest of the 50 States. The official poverty threshold for a 4-person family in Hawaii was set in February 1991 at \$15,410. 1990, one-ninth of all Island residents were below the U.S. poverty level. The most recent family expenditure survey, taken in 1988 and 1989, reported that the largest items in the family budget on Oahu were housing (accounting for 30.7 percent of total spending), food (15.6 percent), and transportation (17.6 percent). Top wealthholders in 1986 included 11,000 persons with assets of \$500,000 or more.

The chief sources of data shown in this section are the U.S. Bureau of Economic Analysis, U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, U.S. Department of Health and Human Services, U.S. Department of Housing and Urban Development, Internal Revenue Service, Hawaii Agricultural Statistics Service, Hawaii State Department of Business, Economic Development & Tourism, and Hawaii Visitors Bureau. Sections 6 and 7 of Historical Statistics of Hawaii present data for earlier years. Comparable data for the country as a whole are given in Statistical Abstract of the United States: 1991, Section 14.

Table 372. -- DIRECT INCOME FROM MAJOR EXPORT INDUSTRIES: 1970 TO 1990

## [In millions of dollars]

|   | Value of prod                        | luction                       |                              |   |
|---|--------------------------------------|-------------------------------|------------------------------|---|
| Year  | Raw sugar<br>and molasses <u>1</u> / | Fresh and processed pineapple | Defense<br>expendi-<br>tures | Visitor<br>expendi-<br>tures <u>2</u> / |
| 1970 1971 1972 1973 1974 1975 1976 1977 1978      | 187.8                                | 138.6                         | 916.8                        | 595                                     |
|   | 202.9                                | 141.4                         | 958.6                        | 705                                     |
|   | 184.7                                | 145.4                         | 1,068.2                      | 840                                     |
|   | 222.2                                | 142.4                         | 1,223.1                      | 1,020                                   |
|   | 676.6                                | 127.1                         | 1,311.8                      | 1,225                                   |
|   | 366.1                                | 136.7                         | 1,442.1                      | 1,360                                   |
|   | 257.0                                | 144.5                         | 1,499.2                      | 1,640                                   |
|   | 226.8                                | 161.6                         | 1,576.1                      | 1,845                                   |
|   | 285.2                                | 162.8                         | 1,644.5                      | 2,146                                   |
|   | 345.7                                | 206.4                         | 1,707.7                      | 2,537                                   |
| 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 | 594.1                                | 226.5                         | 1,865.4                      | 2,875                                   |
|   | 327.9                                | 217.6                         | 2,041.2                      | 3,200                                   |
|   | 351.5                                | 206.0                         | 2,385.3                      | 3,700                                   |
|   | 410.2                                | 219.0                         | 2,566.5                      | 3,974                                   |
|   | 393.0                                | 249.6                         | 2,653.0                      | 4,582                                   |
|   | 340.8                                | 222.5                         | 2,810.1                      | 4,986                                   |
|   | 361.9                                | 238.4                         | 2,866.3                      | 5,802                                   |
|   | 335.9                                | 251.4                         | 2,923.6                      | 6,530                                   |
|   | 324.0                                | 247.0                         | 2,924.2                      | 7,849                                   |
|   | 322.0                                | 241.9                         | 3,050.8                      | 8,785                                   |

Source: Hawaii Agricultural Statistics Service, Statistics of Hawaiian Agriculture (annual) and records; data from DBED GSP accounts, cited in present report, table 309; Hawaii Visitors Bureau, estimates cited in present report, tables 198 and 199.

 $<sup>\</sup>frac{1}{2}$  Excludes government sugar support payments.  $\frac{1}{2}$  Direct visitor expenditures in Hawaii, exclusive of transpacific transportation and expenditures of carriers and crews.

Table 373.-- GROSS STATE PRODUCT AND PER CAPITA GROSS STATE PRODUCT: 1958 TO 1990

|  | Gross<br>prod  |  | Per capit<br>state p   | ~  |
|--|--|--|--|--|
| Year   | Millions of<br>current<br>dollars  | Millions of<br>1982<br>dollars   | Current<br>dollars   | 1982<br>dollars  |
| 1958<br>1959<br>1960<br>1961<br>1962<br>1963<br>1964         | 1,415.0<br>1,572.5<br>1,805.1<br>1,886.5<br>1,965.8<br>2,101.8<br>2,301.3<br>2,530.4                     | 4,152.3<br>4,632.4<br>5,248.1<br>5,250.0<br>5,471.0<br>5,606.2<br>6,167.5<br>6,714.3                     | 2,337<br>2,528<br>2,814<br>2,864<br>2,876<br>3,081<br>3,288<br>3,595                   | 6,859<br>7,447<br>8,181<br>7,970<br>8,004<br>8,217<br>8,813<br>9,540                   |
| 1966<br>1967<br>1968<br>1969<br>1970<br>1971<br>1972         | 2,771.4<br>2,990.0<br>3,344.5<br>3,952.3<br>4,414.0<br>4,773.8<br>5,305.4<br>6,009.3                     | 7,083.5<br>7,329.4<br>7,932.5<br>8,905.6<br>9,324.6<br>9,806.5<br>10,464.5<br>10,982.4                   | 3,902<br>4,138<br>4,554<br>5,268<br>5,720<br>5,955<br>6,405<br>7,057                   | 9,972<br>10,144<br>10,800<br>11,871<br>12,084<br>12,233<br>12,633<br>12,896            |
| 1974<br>1975<br>1976<br>1977<br>1978<br>1979<br>1980         | 6,901.7<br>7,411.3<br>7,933.4<br>8,597.4<br>9,627.6<br>10,906.4<br>12,225.7<br>13,078.3                  | 10,948.5<br>11,596.6<br>11,746.4<br>12,103.3<br>12,482.9<br>12,972.1<br>13,690.5<br>14,022.5             | 7,951<br>8,363<br>8,774<br>9,363<br>10,335<br>11,441<br>12,619<br>13,343               | 12,614<br>13,086<br>12,991<br>13,181<br>13,400<br>13,608<br>14,131<br>14,306           |
| 1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 13,691.0<br>14,811.8<br>15,826.5<br>16,874.9<br>18,115.5<br>19,717.4<br>21,803.2<br>24,300.1<br>26,945.3 | 13,691.0<br>14,210.0<br>14,637.0<br>15,107.3<br>15,807.6<br>16,458.6<br>17,512.6<br>18,578.1<br>19,525.6 | 13,725<br>14,541<br>15,276<br>16,229<br>17,222<br>18,450<br>20,188<br>22,200<br>24,314 | 13,725<br>13,950<br>14,128<br>14,529<br>15,560<br>15,410<br>16,216<br>16,973<br>17,619 |

Source follows table 379.

Table 374.-- EXPENDITURES ON GROSS STATE PRODUCT: 1988 TO 1990

[In millions of dollars]

| Item  | 1988     | 1989     | 1990     |
|---|----------|----------|----------|
| Gross state product                           | 21,803.2 | 24,300.1 | 26,945.3 |
| Personal consumption expenditures 1/          | 13,085.4 | 14,438.8 | 15,893.7 |
| Goods   | 9,320.9  | 10,242.8 | 11,286.6 |
| Durables                                      | 2,811.8  | 3,147.9  | 3,533.0  |
| Non-durables                                  | 6,509.1  | 7,094.9  | 7,818.6  |
| Services                                      | 3,764.5  | 4,196.0  | 4,607.1  |
| Gross private domestic investment             | 2,849.8  | 3,501.6  | 4,173.1  |
| Fixed investment                              | 2,775.1  | 3,419.4  | 4,082.6  |
| Non-residential                               | 2,101.5  | 2,478.4  | 2,919.2  |
| Structures                                    | 1,095.9  | 1,315.2  | 1,680.4  |
| Producers' durable equipment                  | 1,005.6  | 1,163.2  | 1,238.8  |
| Residential                                   | 673.6    | 941.0    | 1,163.4  |
| Change in inventories                         | 74.8     | 82.2     | 90.5     |
| Government purchases of goods and services    | 6,462.5  | 6,954.2  | 7,603.9  |
| State and local                               | 3,363.2  | 3,720.6  | 4,210.0  |
| Compensation of employees                     | 1,683.7  | 1,776.2  | 1,970.1  |
| Purchases from business                       | 1,679.4  | 1,944.4  | 2,239.9  |
| Federal                                       | 3,099.3  | 3,233.6  | 3,393.8  |
| Defense                                       | 2,924.2  | 3,050.8  | 3,203.3  |
| Non-defense                                   | 175.1    | 182.8    | 190.5    |
| Net exports                                   | -1,292.0 | -1,014.1 | -1,052.9 |
| Exports                                       | 12,291.6 | 13,814.3 | 15,324.3 |
| Commodities (Merchandise)                     | 1,467.6  | 1,509.2  | 1,617.4  |
| Services and income from investments          | 2,884.0  | 3,232.6  | 3,513.9  |
| Visitor and crew expenditures                 | 7,940.0  | 9,072.6  | 10,193.0 |
| Less: Imports                                 | 13,583.6 | 14,828.4 | 16,377.2 |
| Commodities (Merchandise)                     | 9,298.4  | 10,062.3 | 10,945.5 |
| Services and income from investments          | 3,475.6  | 3,874.1  | 4,354.1  |
| Out-of-state expenditures by Hawaii residents | 809.5    | 892.0    | 1,077.6  |
| Discrepancy and omissions                     | 697.4    | 419.6    | 262.5    |

 $<sup>\</sup>frac{1}{8}$  Purchases by Hawaii residents. Source follows table 379.

Table 375.-- GROSS STATE (DOMESTIC) PRODUCT, BY INDUSTRY: 1977 TO 1989 [Dollar amounts in millions]

| Year   | Total   | Percent of U.S.                         | Rank                                   | 1/           | Yea  | r         | Т                        | otal   | Percent of U.S.                  | Rank <u>1</u> /                  |
|--|---|---|--|--------------|--|-----------|--------------------------|--|----------------------------------|----------------------------------|
| 1977<br>1978<br>1979<br>1980<br>1981<br>1982 | 8,946<br>10,066<br>11,257<br>12,621<br>13,507<br>14,412<br>15,477 | 0.46<br>.45<br>.46<br>.47<br>.45<br>.46 | 38<br>38<br>38<br>39<br>39<br>39<br>39 |              | 1984 .<br>1985 .<br>1986 .<br>1987 .<br>1988 .<br>1989 . | ••        | 17<br>19<br>20<br>23     | ,500<br>,642<br>,088<br>,738<br>,183<br>,755 | 0.45<br>.44<br>.46<br>.46<br>.48 | 39<br>40<br>40<br>40<br>40<br>38 |
|  |   |   |  |              |  |           |                          |  | 19                               | 89                               |
|  | Indus   | stry                                    |  |              | 1977   | 19        | 81                       | 1985   | Amount                           | Percent                          |
| Tota   | l, all ind  | dustries                                | • • • •                                |              | 8,946  | 13,       | 507                      | 17,642                                       | 2 25,755                         | 100.0                            |
|  |   | • • • • • • • • • • •                   | • • • •                                |              | 205  |           | 297                      | 340  | 396                              | 1.5                              |
|  | es  | orestry,<br>                            |  |              | 32   |           | 54                       | 6  | i i                              | 0.4<br>0.0                       |
| Construct                                    | ion   | • • • • • • • • • •                     | • • • •                                |              | 597  | 976 1,022 |                          | 2,237  | 8.7                              |                                  |
|  |   | ilities                                 |  |              | 559<br>940   |           | 695<br>312               | 847<br>1,760                                 |                                  | 4.3<br>9.8                       |
| Wholesale trade                              |   |   |  | 453<br>1,001 | 626 80   |           | 80 <sup>4</sup><br>2,047 | 1,054  | 4.1<br>11.6                      |                                  |
| Retail trade                                 |   |   | 1,381                                  | 2,4          | 443  | 2,844     | 4,333                    | 16.8   |                                  |                                  |
| Services Federal government:                 |   | ••••                                    |  | 1,426        | 2,   | 294       | 3,520                    | 5,598  | 21.7                             |                                  |
| Civilian                                     |   |   | 578                                    |              | 834  | 1,143     |                          | 5.1  |                                  |                                  |
|  |   | vernment                                |  |              | 964<br>810   |           | 334<br>113               | 1,826<br>1,41                                |                                  | 7.9<br>8.0                       |

1/ Among the 50 States.

Source: U.S. Bureau of Economic Analysis, "Gross State Product: New Estimates for 1987-89 and Revised Estimates for 1977-86," Release BEA 91-51 (November 26, 1991), and BEA diskette tabulated by DBED.

Table 376.-- CHARGES AGAINST GROSS STATE PRODUCT: 1988 TO 1990
[In millions of dollars]

| Item   | 1988  | 1989   | 1990  |
|--|---|--|---|
| Charges against gross state product  | 21,803.2  | 24,300.1   | 26,945.3  |
| Compensation of employees Wages and salaries Supplements to wages and salaries Employers' contributions for social ins. State programs Federal programs Other labor income Proprietors' income Rental income Corporate profits before tax Profit tax State Federal Profits after tax Dividends Undistributed profits | 13,979.7<br>11,756.4<br>2,223.3<br>1,239.5<br>106.6<br>1,132.9<br>983.8<br>1,457.0<br>129.0<br>1,073.0<br>377.9<br>69.2<br>308.7<br>695.1<br>428.9<br>266.2 | 15,450.0<br>12,998.2<br>2,451.8<br>1,338.5<br>47.0<br>1,291.5<br>1,113.3<br>1,555.5<br>107.2<br>1,261.7<br>443.1<br>72.7<br>370.4<br>818.6<br>501.5<br>317.1 | 17,114.8 14,333.6 2,846.2 1,526.7 52.4 1,474.3 1,254.5 1,705.5 130.0 1,464.8 563.0 88.2 474.9 901.7 537.1 364.7 |
| Net interest   | 1,640.9<br>18,279.6   | 2,071.7<br>20,446.1  | 2,170.5<br>22,585.6   |
| Business transfer payments   | 135.1<br>99.2<br>35.9<br>1,838.4  | 150.7<br>111.1<br>39.6<br>1,979.4  | 182.2<br>131.0<br>51.2<br>2,217.0   |
| government enterprises   | -31.7<br>113.0<br>-111.0  | -42.3<br>118.4<br>-122.1   | -48.0<br>128.1<br>-127.2  |
| Charges against net state product  Capital consumption allowances  | 20,508.8  | 22,859.1   | 25,288.0<br>1,592.3   |

Source follows table 379.

Table 377.-- PRIVATE CONSTRUCTION EXPENDITURES: 1988 TO 1990
[Millions of current dollars]

| 1988   | 1989  | 1990  |
|--|---|---|
| 1,769.2  | 2,256.2   | 2,843.9   |
| 1,095.6<br>749.2<br>311.9<br>437.4<br>251.5<br>186.2<br>346.3<br>230.9<br>115.4<br>673.6<br>544.0<br>483.5<br>60.5 | 1,315.2<br>893.4<br>393.9<br>499.5<br>290.6<br>208.9<br>421.8<br>281.2<br>140.6<br>941.0<br>740.0<br>574.6<br>165.4   | 1,680.5<br>1,210.7<br>508.6<br>702.2<br>471.6<br>230.6<br>469.7<br>313.2<br>156.6<br>1,163.5<br>947.5<br>665.4<br>282.1<br>215.9  |
|  | 1,769.2<br>1,095.6<br>749.2<br>311.9<br>437.4<br>251.5<br>186.2<br>346.3<br>230.9<br>115.4<br>673.6<br>544.0<br>483.5 | 1,769.2 2,256.2  1,095.6 1,315.2 749.2 893.4 311.9 393.9 437.4 499.5 251.5 290.6 186.2 208.9 346.3 421.8 230.9 281.2 115.4 140.6 673.6 941.0 544.0 740.0 483.5 574.6 60.5 165.4 |

Source follows table 379.

Table 378.-- EXPORTS AND IMPORTS OF GOODS AND SERVICES: 1988 TO 1990

[In millions of dollars. Includes both domestic and foreign imports and exports]

| Classification   | 1988     | 1989     | 1990     |
|--|----------|----------|----------|
| Exports of goods and services 1/  Merchandise exports  Primary | 12,291.6 | 13,814.3 | 15,324.3 |
|  | 1,467.6  | 1,509.2  | 1,617.4  |
|  | 521.8    | 536.0    | 553.6    |
| Sugar and molasses   | 285.1    | 285.1    | 285.1    |
|  | 236.7    | 250.9    | 268.5    |
|  | 182.8    | 189.9    | 199.2    |
| Garments   | 47.2     | 48.0     | 50.0     |
|  | 33.0     | 36.3     | 40.3     |
|  | 10.9     | 11.8     | 12.6     |
| Macadamia nuts, coffee, and other  Miscellaneous               | 91.7     | 93.8     | 96.3     |
|  | 763.0    | 783.3    | 864.6    |
|  | 26.2     | 27.7     | 30.0     |
|  | 122.1    | 108.2    | 163.1    |
| Fuels and petroleum products                                   | 614.7    | 647.4    | 671.5    |
|  | 2,884.0  | 3,232.6  | 3,513.9  |
|  | 7,940.0  | 9,072.6  | 10,193.0 |
| Imports of goods and services                                  | 13,583.6 | 14,828.4 | 16,377.2 |
|  | 9,298.4  | 10,062.3 | 10,945.5 |
| Domestic   | 7,459.9  | 8,076.1  | 8,784.9  |
|  | 7,029.8  | 7,006.5  | 8,281.1  |
|  | 430.2    | 469.6    | 503.9    |
| Foreign, total   | 1,838.5  | 2,393.7  | 2,613.5  |
|  | 3,475.6  | 3,874.1  | 4,354.1  |
|  | 809.5    | 892.0    | 1,077.6  |

<sup>1/</sup> Not available separately for foreign and domestic exports. Source follows table 379.

Table 379.-- SUMMARY OF GOVERNMENT ACCOUNTS: 1988 TO 1990
[In millions of dollars]

| Item  | 1988    | 1989    | 1990    |
|---|---------|---------|---------|
| Total revenues, State and local State and local tax and non-tax Personal tax and non-tax Corporate profits tax Indirect business tax and non-tax Contributions to social insurance programs Employer Personal Federal grants-in-aid                             | 3,958.0 | 4,242.1 | 4,548.6 |
|   | 3,379.8 | 3,648.1 | 3,948.6 |
|   | 1,298.5 | 1,472.4 | 1,500.0 |
|   | 69.2    | 72.7    | 88.2    |
|   | 1,838.4 | 1,979.4 | 2,217.0 |
|   | 173.7   | 123.6   | 143.5   |
|   | 106.6   | 47.0    | 52.4    |
|   | 67.1    | 76.6    | 91.1    |
|   | 578.2   | 594.0   | 600.0   |
| Total expenditures, State and local  Purchases of goods and services  Compensation of employees  Purchases from business  Transfer payments to persons  Net interest paid  Subsidies less current surplus of gov. ent  Surplus or deficit (-), State & local    | 3,537.8 | 3,896.8 | 4,393.7 |
|   | 3,363.2 | 3,720.6 | 4,210.0 |
|   | 1,683.7 | 1,776.2 | 1,970.1 |
|   | 1,679.4 | 1,944.4 | 2,239.9 |
|   | 304.8   | 324.3   | 341.7   |
|   | -98.5   | -105.8  | -110.0  |
|   | -31.7   | -42.3   | 48.0    |
| Total revenues, Federal  Federal tax and non-tax revenues  Personal tax and non-tax  Corporate profits tax  Indirect business tax and non-tax  Contributions for social insurance programs  Employer  Personal  Transfers from Federal gov. in Washington, D.C. | 5,604.6 | 5,905.2 | 6,266.7 |
|   | 3,198.2 | 3,628.8 | 4,161.5 |
|   | 837.7   | 929.8   | 1,061.8 |
|   | 308.7   | 370.4   | 474.9   |
|   | 113.0   | 118.4   | 128.1   |
|   | 1,938.8 | 2,210.2 | 2,496.7 |
|   | 1,132.9 | 1,291.5 | 1,474.3 |
|   | 805.9   | 918.7   | 1,022.4 |
|   | 2,406.4 | 2,276.4 | 2,105.3 |
| Total expenditures, Federal  Purchases of goods and services  Defense  Non-defense  Transfer payments to persons  Grants-in-aid to State and local government  Net interest paid (to persons)  Subsidies less current surplus of gov. ent.                      | 5,604.6 | 5,905.2 | 6,266.7 |
|   | 3,099.3 | 3,233.6 | 3,393.8 |
|   | 2,924.2 | 3,050.8 | 3,203.3 |
|   | 175.1   | 182.8   | 190.5   |
|   | 2,023.4 | 2,184.5 | 2,384.4 |
|   | 578.2   | 5,940.0 | 600.0   |
|   | 14.7    | 15.2    | 15.7    |
|   | 111.0   | -122.1  | -127.2  |

Source: Hawaii State Department of Business and Economic Development, Hawaii Gross State Product Accounts: 1958 to 1985; Summary Estimates: 1986, 1987, and 1988 (1989), as updated and revised.

Table 380.-- TOTAL AND PER CAPITA PERSONAL INCOME AND DISPOSABLE PERSONAL INCOME: 1960 TO 1990

|  | (mi]  | onal income<br>llions of<br>dollars)   | Per capita<br>personal income<br>(dollars)   |  | perso<br>as p   | c capita onal income percent of average                                   |
|--|---|--|--|--|---|---|
| Year   | Total   | Disposable   | Total  | Disposable   | Total   | Disposable  |
| 1960<br>1961<br>1962<br>1963<br>1964<br>1965<br>1966<br>1967                 | 1,466<br>1,584<br>1,695<br>1,806<br>1,962<br>2,153<br>2,359<br>2,565<br>2,874 | 1,243<br>1,337<br>1,454<br>1,553<br>1,712<br>1,888<br>2,039<br>2,216<br>2,453                  | 2,350<br>2,464<br>2,595<br>2,692<br>2,894<br>3,085<br>3,385<br>3,624<br>3,998                    | 1,992 2,080 2,226 2,315 2,525 2,705 2,926 3,129 3,412  | 104<br>107<br>107<br>107<br>109<br>109<br>111<br>112                      | 101<br>103<br>105<br>106<br>108<br>108<br>110<br>111                      |
| 1969  1970  1971  1972  1973  1974  1975  1976  1977  1978  1979             | 3,277 3,772 4,060 4,473 4,967 5,702 6,159 6,670 7,210 8,043 9,031             | 2,747 3,191 3,478 3,780 4,204 4,861 5,374 5,783 6,213 6,898 7,711                              | 4,411<br>4,944<br>5,129<br>5,468<br>5,901<br>6,645<br>7,038<br>7,474<br>7,873<br>8,660<br>9,506  | 3,698  4,182 4,394 4,620 4,993 5,665 6,141 6,480 6,784 7,427 8,116                             | 116<br>122<br>119<br>117<br>114<br>118<br>116<br>112<br>108<br>106<br>105 | 114<br>120<br>118<br>116<br>112<br>117<br>116<br>113<br>108<br>107<br>106 |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 10,279 11,051 11,732 12,875 13,628 14,589 15,607 16,798 18,376 20,417         | 8,776<br>9,418<br>10,213<br>11,100<br>11,886<br>12,606<br>13,527<br>14,348<br>15,588<br>16,979 | 10,617<br>11,298<br>11,805<br>12,713<br>13,257<br>14,030<br>14,837<br>15,727<br>17,015<br>18,652 | 9,065<br>9,628<br>10,277<br>10,960<br>11,562<br>12,123<br>12,860<br>13,433<br>14,434<br>15,512 | 107<br>103<br>103<br>105<br>101<br>101<br>101<br>102<br>103<br>105        | 108<br>104<br>106<br>106<br>102<br>102<br>103<br>102<br>102<br>103        |

Source: U.S. Department of Commerce, Bureau of Economic Analysis, printouts.

Table 381.-- PERSONAL INCOME BY MAJOR SOURCES: 1985 TO 1990
[In millions of dollars. Revised from Data Book 1990, table 392]

| Item                             | 1985   | 1986   | 1987   | 1988   | 1989   | 1990   |
|----------------------------------|--------|--------|--------|--------|--------|--------|
| Labor and proprietors income     |        |        |        |        |        |        |
| By type:                         |        |        |        |        |        | 1      |
| Wage and salary disbursements .  | 9,184  | 9,778  | 10,691 | 11,772 | 13,020 | 14,395 |
| Other labor income               | 759    |        |        | 985    | 1,106  | 1,217  |
| Proprietors income               | 1,062  | 1,203  | 1,273  | 1,360  | 1,480  | 1,596  |
| Farm                             | 108    | 154    | 97     | 107    | 93     | 97     |
| Nonfarm                          | 954    | 1,049  | 1,176  | 1,253  | 1,387  | 1,499  |
| By industry:                     | :      |        |        |        |        |        |
| Farm                             | 258    | 305    | 255    | 267    | 256    | 267    |
| Nonfarm                          | 10,746 | 11,528 | 12,618 | 13,850 | 15,350 | 16,941 |
| Private                          | 7,314  |        |        | 9,940  | 11,198 | 12,553 |
| Government and government        |        |        |        | -      |        | •      |
| enterprises                      | 3,432  |        |        | 3,910  |        |        |
| Federal, civilian                | 967    | ı      | 1      | 1,042  | 1,086  |        |
| Federal military                 | 1,274  | 1,295  | 1,326  | 1,370  | 1,408  | 1,430  |
| State and local                  | 1,192  | 1,278  | 1,349  | 1,499  | 1,657  | 1,851  |
| Derivation of personal income    |        | :      |        |        |        |        |
| Labor and proprietors income     | 11,005 | 11,833 | 12,873 | 14,117 | 15,606 | 17,208 |
| Less: Personal contributions for |        |        |        |        |        |        |
| social insurance                 | 678    |        |        | 879    | 1,000  | 1,108  |
| Net labor and proprietors income | 10,327 | 11,105 | 12,107 | 13,238 | 14,606 | 16,100 |
| Plus: Dividends, interest, and   |        |        |        |        |        |        |
| rent                             | 2,189  |        |        |        |        |        |
| Plus: Transfer payments          | 2,073  |        |        | 2,469  | 2,672  | 3,154  |
| Personal income                  | 14,589 | 15,607 | 16,798 | 18,376 | 20,417 | 22,663 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis, diskettes dated September 6, 1991.

Table 382.-- PERSONAL INCOME, TOTAL AND PER CAPITA, BY COUNTIES: 1979 TO 1989

|                         |   |  | Other counties  |   |  |   |
|-------------------------|---|--|---|---|--|---|
| Year                    | State<br>total  | City and<br>County of<br>Honolulu  | Total   | Hawaii  | Kauai  | Maui<br>and<br>Kalawao  |
| TOTAL (MIL. DOL.)       |   |  |   |   |  |   |
| 1979                    | 9,030.9<br>10,279.2<br>11,051.4<br>11,731.7<br>12,875.3<br>13,627.9<br>14,588.7<br>15,607.4<br>16,798.0<br>18,412.0<br>20,477.0 | 7,395.5<br>8,293.1<br>9,039.9<br>9,570.6<br>10,396.3<br>11,063.9<br>11,815.8<br>12,537.0<br>13,486.0<br>14,713.0<br>16,251.0 | 1,635.4<br>1,986.2<br>2,011.4<br>2,161.1<br>2,479.0<br>2,564.0<br>2,772.8<br>3,070.4<br>3,312.0<br>3,699.0<br>4,227.0 | 724.4<br>901.3<br>895.8<br>948.9<br>1,080.7<br>1,117.3<br>1,188.4<br>1,316.1<br>1,417.0<br>1,575.0<br>1,800.0 | 313.0<br>374.4<br>378.3<br>406.6<br>462.7<br>471.7<br>515.8<br>566.5<br>612.0<br>693.0<br>790.0        | 598.0<br>710.5<br>737.3<br>805.7<br>935.5<br>975.1<br>1,068.6<br>1,187.9<br>1,283.0<br>1,431.0<br>1,638.0 |
| PER CAPITA<br>(DOLLARS) |   |  |   |   |  |   |
| 1979                    | 9,506<br>10,617<br>11,275<br>11,760<br>12,640<br>13,154<br>13,874<br>14,674<br>15,525<br>16,765<br>18,379                       | 9,816<br>10,854<br>11,765<br>12,292<br>13,107<br>13,805<br>14,568<br>15,306<br>16,268<br>17,548<br>19,171                    | 8,318<br>9,729<br>9,496<br>9,869<br>10,995<br>10,930<br>11,535<br>12,557<br>13,092<br>14,240<br>15,858                | 8,133<br>9,682<br>9,232<br>9,472<br>10,526<br>10,438<br>10,851<br>11,830<br>12,345<br>13,410<br>14,969        | 8,234<br>9,499<br>9,308<br>9,703<br>10,764<br>10,691<br>11,365<br>12,254<br>12,776<br>14,051<br>15,585 | 8,600<br>9,916<br>9,944<br>10,477<br>11,724<br>11,688<br>12,502<br>13,647<br>14,210<br>15,390<br>17,121   |

Source: U.S. Department of Commerce, Bureau of Economic Analysis, diskettes dated May 1991.

Table 383.-- PER CAPITA PERSONAL INCOME IN CURRENT AND CONSTANT DOLLARS FOR THE UNITED STATES AND HAWAII: 1980 AND 1990

| Subject  | United<br>States | Hawaii           |
|--|------------------|------------------|
| Per capita personal income (current dollars): 1980   | 9,919<br>18,691  | 10,617<br>20,356 |
| Per capita personal income (1982-1984 dollars): 1980 | 12,038<br>14,301 | 12,792<br>14,740 |
| Percent of U.S. average: 1980                        | 100.0<br>100.0   | 107.0<br>108.9   |
| Percent increase, 1980-1990: Current dollars         | 88.4<br>18.8     | 91.7<br>15.2     |
| Rank (50 States and D.C.): 1980                      | (X)<br>(X)       | 13<br>11         |
| Consumer price index (1982-1984=100): 1/ 1980        | 82.4<br>130.7    | 83.0<br>138.1    |

X Not appliable. 
1/ Hawaii index is for Honolulu MSA.  $\overline{\text{S}}$ ource: U.S. Department of Commerce, Bureau of Economic Analysis.

Table 384.-- PER CAPITA PERSONAL INCOME, MEDIAN FAMILY INCOME, AND AVERAGE WAGE AND SALARY EARNINGS, IN CURRENT AND CONSTANT DOLLARS: 1939 TO 1990

[Constant dollar amounts based on Honolulu consumer price index for all urban consumers (CPI-U)]

|  | Per ca<br>personal  | apita<br>income <u>l</u> /  | Median family cash income 2/                    |   | Average wage or salary <u>3</u> /                                      |   | Honolulu<br>CPI-U   |
|--|---|---|---|---|--|---|---|
| Year   | Current<br>dollars  | 1982-84<br>dollars  | Current<br>dollars                              | 1982-84<br>dollars                                | Current<br>dollars   | 1982-84<br>dollars  | (1982-84<br>=100) <u>4/</u>                                     |
| 1939<br>1949<br>1959<br>1969<br>1979<br>1988<br>1989 | 525<br>1,354<br>2,116<br>4,411<br>9,506<br>17,015<br>18,652<br>20,356 | 3,596<br>5,373<br>6,938<br>11,195<br>12,794<br>13,981<br>14,493<br>14,740 | (NA) 3,568 6,366 11,664 22,750 39,609 (NA) (NA) | (NA) 14,159 20,872 29,604 30,619 32,546 (NA) (NA) | 970<br>2,605<br>3,745<br>6,431<br>11,709<br>19,480<br>20,711<br>22,311 | 6,644<br>10,337<br>12,279<br>16,322<br>15,759<br>16,007<br>16,092<br>16,156 | 14.6<br>25.2<br>30.5<br>39.4<br>74.3<br>121.7<br>128.7<br>138.1 |

NA Not available.

3/ Data limited to private nonagricultural wage and salary workers. 1939-1969 reported in Historical Statistics of Hawaii, p. 127; 1979 in Data Book 1985, table 343; 1988-1990 in present volume, table 350.

<sup>1/ 1939</sup> and 1949 from U.S. Office of Business Economics estimates cited in Robert C. Schmitt, <u>Historical Statistics of Hawaii</u> (1977), p. 167; 1959-1990 from U.S. Bureau of Economic Analysis, printouts filed in the Hawaii State Data Center.

<sup>2/</sup> U.S. Bureau of the Census, decennial census data for 1949-1979 and Current Population Survey tabulations for 1988, cited in present volume, table 385.

<sup>4/</sup> Honolulu consumer price index for all urban consumers, reported in present volume, table 399. The 1939 index was estimated from the 1940 Honolulu index and the 1939-1940 percent change in the Mainland index. Sources cited in footnotes.

Table 385.-- MEDIAN INCOME OF HOUSEHOLDS, FAMILIES, UNRELATED INDIVIDUALS, AND PERSONS: 1949 TO 1990

[In dollars. Based on censuses or surveys made in March or April of following year. Data for 1980-1990 are taken from small samples and are subject to considerable sampling variation]

|              |  |  | Unrelated individuals  |  | s with  |
|--------------|--|--|--|--|---|
| Year         | Households   | Families   | with income 1/   | Male   | Female  |
| 1949         | (NA)<br>(NA)<br>10,675<br>15,991<br>20,473<br>21,666<br>22,434<br>23,582<br>26,805<br>28,877<br>28,961<br>29,003<br>34,398<br>33,024 | 3,568<br>6,366<br>11,664<br>17,770<br>22,750<br>24,813<br>27,499<br>27,840<br>29,742<br>32,831<br>32,611<br>34,665<br>39,038<br>39,609 | 1,583<br>1,998<br>2,981<br>6,180<br>7,097<br>8,663<br>10,073<br>11,406<br>12,735<br>12,873<br>15,357<br>14,906<br>14,876 | 2,340<br>3,753<br>6,528<br>9,489<br>11,505<br>13,533<br>13,635<br>13,582<br>14,903<br>16,147<br>15,865<br>18,889<br>19,872<br>18,375 | 1,247<br>1,796<br>3,222<br>4,082<br>6,581<br>6,917<br>7,069<br>8,133<br>7,941<br>8,548<br>9,987<br>9,998<br>10,765<br>8,983 |
| 1989<br>1990 | 35,035<br>38,921   | (NA)<br>(NA)   | (NA)<br>(NA)   | (NA)<br>(NA)   | (NA)<br>(NA)  |

NA Not available.

2/ Revision in income imputation procedures.

Source: U.S. Bureau of the Census, Census of Population: 1960, PC(1)-13C (1962), tables 66 and 67 (for 1949 data); 1970 Census of Population, PC(1)-C13 (December 1971), table 47 (for 1959 data); 1980 Census of Population, PC80-1-C-13 (June 1983), table 61 (for 1969 and 1979 data); Current Population Reports, Consumer Income, Series P-60, No. 108 (November 1977), p. 145; Current Population Reports, Consumer Income, Series P-60, No. 113 (July 1978), pp. 175-177; Current Population Survey (March), annual, 1981 to 1989, machine-readable file, tabulated by Hawaii State Data Center; Current Population Reports, Consumer Income, Series P-60, No. 174 (August 1991), pp. 196 and 210.

<sup>1/</sup> 14 years old and over through 1975, and 15 years old and over thereafter. Data for 1975 and 1980-1988 exclude persons in military group quarters.

Table 386.-- INCOME OF HOUSEHOLDS AND FAMILIES: ANNUAL AVERAGES, 1983 TO 1985 AND 1986 TO 1988

[Data refer to income before taxes, as reported in March survey in following year. Based on a pooled sample of 1,630 households for 1983-1985 and 1,540 households for 1986-1988]

|                         | Households   |  | Families  |   |
|-------------------------|--|--|---|---|
| Income                  | 1983-1985  | 1986-1988  | 1983-1985   | 1986-1988   |
| Total                   | 329,037  | 361,986  | 251,104   | 273,083   |
| Under \$5,000           | 18,491<br>14,111<br>16,725<br>33,889<br>33,753<br>29,325<br>56,217<br>63,739<br>45,519<br>17,268 | 16,493<br>15,955<br>11,214<br>28,305<br>34,126<br>33,131<br>55,585<br>69,688<br>67,091<br>30,398 | 7,814<br>6,956<br>9,835<br>23,437<br>22,420<br>23,607<br>47,015<br>55,717<br>39,168<br>15,135 | 5,738<br>8,383<br>5,226<br>16,717<br>22,763<br>21,540<br>44,566<br>58,328<br>62,133<br>27,689 |
| Median income (dollars) | 28,094   | 32,278   | 31,713  | 37,866  |

Source: U.S. Bureau of the Census for U.S. Bureau of Labor Statistics, Current Population Survey (March), annual, 1984 to 1989; machine-readable data file, special tabulation by Hawaii State Data Center.

Table 387.-- MEDIAN FAMILY INCOME AND RANK: 1979 AND 1990 [Data refer to calendar year 1979 and fiscal year 1990]

| The state of the s | The State           |                 | ne State        |                   | Naichhan                         |  |
|--|---------------------|-----------------|-----------------|-------------------|----------------------------------|--|
| Year   | Amount<br>(dollars) | Percent of U.S. | Rank <u>1</u> / | Oahu<br>(dollars) | Neighbor<br>Islands<br>(dollars) |  |
| 1979<br>1990   | 22,751<br>39,800    | 114.2<br>114.8  | 5<br>8          | 23,553<br>41,200  | 20,607<br>34,500                 |  |

1/ Among 50 States.

Source: U.S. Department of Housing and Urban Development, "Estimated Median Family Incomes for Fiscal Year 1990," memorandum dated February 1, 1990.

Table 388.-- ESTIMATED DECILE DISTRIBUTIONS OF FAMILY INCOMES, BY COUNTIES: 1979 AND 1991

[Data refer to calendar year 1979 and fiscal year 1991. HUD has not provided 1991 statewide estimates comparable to these county figures]

|                                     | 1st decile                       |                                      | 5th decil                            | e (median)                           | 9th decile                           |                                      |
|-------------------------------------|----------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| County                              | 1979                             | 1991                                 | 1979                                 | 1991                                 | 1979                                 | 1991                                 |
| Honolulu<br>Hawaii<br>Kauai<br>Maui | 7,569<br>5,975<br>7,089<br>7,216 | 14,043<br>10,337<br>12,289<br>12,496 | 23,553<br>19,131<br>20,881<br>22,578 | 43,700<br>33,100<br>36,200<br>39,100 | 49,866<br>42,778<br>42,150<br>48,653 | 92,520<br>74,013<br>73,072<br>84,256 |

Source: U.S. Department of Housing and Urban Development, Office of Economic Affairs, Economic and Market Analysis Division, estimates dated January 28, 1991.

Table 389.-- INCOME AND POVERTY STATUS IN PREVIOUS YEAR: 1980 AND 1990

| Subject   | 1980  | 1990   |
|---|---|--|
| INCOME IN PREVIOUS YEAR   |   |  |
| Households Median income (current dollars)  | 294,934<br>\$20,473   | 356,267<br>(NA)  |
| Families Median income (current dollars)  | 227,974<br>\$22,750   | 263,456<br>(NA)  |
| Unrelated individuals 15 years and over Median income (current dollars)   | 136,692<br>\$7,097  | (NA)<br>(NA)   |
| Male, 15 years and over Without income With income  | 378,942<br>29,106<br>349,836<br>\$11,505  | 441,420<br>(NA)<br>(NA)<br>(NA)                              |
| Female, 15 years and over Without income  | 360,707<br>78,115<br>282,592<br>\$6,581   | 428,783<br>(NA)<br>(NA)<br>(NA)                              |
| INCOME BELOW POVERTY LEVEL 1/   |   |  |
| Persons 65 years and over In families Householder Female householder, no husband present Related child under 18 years Related child under 6 years Other relatives Unrelated individuals 65 years and over | 91,618<br>7,654<br>66,843<br>17,700<br>7,985<br>35,103<br>14,725<br>14,040<br>24,775<br>4,927 | (NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA) |

NA Not available.

number of persons in Hawaii below the poverty level.

Source: U.S. Bureau of the Census, 1980 Census of Population, General Social and Economic Characteristics, Hawaii, PC80-1-13C (July 1983), table 61, and 1990 Summary Tape File 1A.

<sup>1/</sup> Data are based on U.S. poverty thresholds. Thresholds in Hawaii are about 15 percent higher; these statistics accordingly understate the number of persons in Hawaii below the poverty level.

Table 390.-- POVERTY STATUS IN 1979 OF FAMILIES AND PERSONS: 1980

[Based on nationwide poverty thresholds. Hawaii thresholds are approximately 15 percent higher than those in effect on the Mainland; these data accordingly understate the numbers of persons and families below the poverty level in Hawaii. Data refer to the poverty status in 1979 of families and persons surveyed in April 1980]

| Subject  | Number  |
|--|---|
| ALL INCOME LEVELS IN 1979  |   |
| Families   | 227,974<br>107,787<br>927,032                       |
| INCOME IN 1979 BELOW POVERTY LEVEL   |   |
| Families   | 17,700<br>7.8<br>24,775<br>23.0<br>91,618<br>9.9    |
| INCOME IN 1979 BELOW 125 PERCENT OF POVERTY LEVEL  |   |
| Families   | 26,815<br>11.8<br>30,725<br>28.5<br>133,214<br>14.4 |
| INCOME IN 1979 BELOW SPECIFIED POVERTY LEVEL   |   |
| Percent of persons:  Below 75 percent of poverty level  Below 150 percent of poverty level  Below 200 percent of poverty level | 6.1<br>19.0<br>29.0                                 |

Source: U.S. Bureau of the Census, 1980 Census of Population, General Social and Economic Characteristics, Hawaii, PC80-1-C13 (June 1983), table 72.

Table 391.-- POVERTY STATUS OF PERSONS: 1969, 1975, AND 1979 TO 1990

[Based on Mainland poverty thresholds. Hawaii thresholds are approxitely 15 percent higher than those in effect on the Mainland; these data accordingly understate the number and percent of persons below the poverty level in Hawaii. Data are based on censuses or surveys made in March or April of the following year, and exclude inmates of institutions, persons in military group quarters and in college dormitories, and unrelated individuals under 15 years (14 years before 1979). Data for 1980-1990 are taken from small samples and are subject to considerable sampling variation]

| Year   | Number  | Percent  | Year | Number  | Percent  |
|--|---|--|------|---|--|
| 1969<br>1975<br>1979<br>1980<br>1981<br>1982 | 68,543<br>67,000<br>91,618<br>81,000<br>108,000<br>132,000<br>135,000 | 9.3<br>7.9<br>9.9<br>8.5<br>11.3<br>13.2<br>13.4 | 1984 | 92,000<br>109,000<br>109,000<br>95,000<br>117,000<br>122,000<br>121,000 | 9.3<br>10.7<br>10.7<br>8.8<br>11.1<br>11.3<br>11.0 |

<sup>1/</sup> Standard errors in 1990 were 19,000 for the number of poor and 1.7 for the poverty rate. For the entire United States in 1990, there were 33,585,000 persons below the poverty level and the poverty rate was 13.5 percent.

Source: U.S. Bureau of the Census, 1970 Census of Population, PC(1)-C13 (December 1971), table 58; Current Population Reports, Consumer Income, Series P-60, No. 113 (July 1978), p. 179; 1980 Census of Population, PC80-1-C13 (June 1983), table 72; Current Population Reports, Consumer Income, Series P-60, No. 175 (August 1991), pp. 219-221.

Table 392.-- POVERTY INCOME GUIDELINES: 1980, 1990 AND 1991

These family income levels are poverty thresholds established by the U.S. Department of Health and Human Services to determine eligibility for certain Federal programs for the poor.]

| Size of family unit | Effective                 | Effective                | Effective                |
|---------------------|---------------------------|--------------------------|--------------------------|
|                     | April 21, 1980 <u>1</u> / | Feb. 16, 1990 <u>2</u> / | Feb. 20, 1991 <u>2</u> / |
| 1                   | 4,370                     | 7,230                    | 7,610                    |
|                     | 5,770                     | 9,690                    | 10,210                   |
|                     | 7,170                     | 12,150                   | 12,810                   |
|                     | 8,570                     | 14,610                   | 3/15,410                 |
|                     | 9,970                     | 17,070                   | 18,010                   |
|                     | 11,370                    | 19,530                   | 20,610                   |
|                     | 12,770                    | 21,990                   | 23,210                   |
|                     | 14,170                    | 24,450                   | 4/25,810                 |

Nonfarm families only; guidelines for farm families were lower.

4/ For larger families, add \$2,600 for each additional member.

Source: Community Services Administration, "General Characteristics of Community Action Programs; Income Poverty Guidelines (Revised)," Federal Register, Vol. 45, No. 78 (April 21, 1980), pp. 26712-26713; U.S. Department of Health and Human Services, "Annual Update of the Poverty Income Guidelines," Federal Register, Vol. 55, No. 33 (February 16, 1990), pp. 5664-5666, and "Annual Update of the HHS Poverty Income Guidelines," Federal Register, Vol. 56, No. 34 (February 20, 1991), pp. 6859-6861.

All families.
 Corresponding levels for four-person families elsewhere in the United States were \$13,400 on the Mainland and \$16,750 in Alaska.

Table 393.-- ANNUAL INCOME AND EXPENDITURES OF URBAN CONSUMER UNITS, FOR OAHU: 1982-83 TO 1988-89

[Data based on 928 sample interviews in 1982-83, 1,043 in 1984-85, 1,214 in 1986-87, and 1,071 in 1988-89. For detailed breakdowns, see sources]

|   | Annual averages (dollars) |                 |                     |                     |
|---|---------------------------|-----------------|---------------------|---------------------|
| Item  | 1982-83                   | 1984-85         | 1986-87             | 1988-89             |
| Total expenditures  | 22,247 2,838              | 24,818<br>2,994 | 28,239<br>2,600     | 33,425<br>2,814     |
| Food away from home   | 1,265                     | 1,350           | 2,195               | 2,414               |
|   | 460                       | 413             | 351                 | 388                 |
| Housing Shelter   | 6,122                     | 6,934           | 8,610               | 10,266              |
|   | 3,948                     | 4,735           | 5,800               | 6,869               |
| Utilities, fuels, and public services Household operations                  | 1,142<br>280              | 1,144<br>311    | 1,099<br>324<br>390 | 1,259<br>375<br>432 |
| Housekeeping supplies  Housefurnishings and equipment  Apparel and services | 751                       | 745             | 996                 | 1,331               |
|   | 1,080                     | 1,158           | 1,688               | 1,740               |
| Transportation  | 4,051                     | 4,681           | 4,244               | 5,893               |
|   | 770                       | 987             | 1,026               | 1,469               |
| Entertainment  Personal care products and services                          | 1,101                     | 1,170           | 1,466               | 1,534               |
|   | 232                       | 243             | 413                 | 480                 |
| Reading  Education  Tobacco products and smoking supplies                   | 159                       | 176             | 169                 | 186                 |
|   | 380                       | 454             | 665                 | 710                 |
|   | 177                       | 214             | 208                 | 251                 |
| Miscellaneous   | 482                       | 480             | 603                 | 792                 |
|   | 923                       | 1,191           | 785                 | 937                 |
| Personal insurance and pensions   | 2,204                     | 2,391           | 3,217               | 3,550               |
| Money income before taxes  Personal taxes                                   | 27,937                    | 30,751          | 32,575              | 39,733              |
|   | 3,595                     | 2,965           | 2,907               | 5,587               |
| Net change in total assets  Net change in total liabilities                 | (NA)                      | (NA)            | 1,196               | 16,394              |
|   | (NA)                      | (NA)            | 5,077               | 19,686              |
| Other money receipts  | 227                       | 579             | 1,313               | 201                 |
|   | 635                       | 490             | 509                 | 616                 |
|   | 690                       | 700             | 918                 | 1,339               |
|   | <u> </u>                  | L               | L                   | L                   |

NA Not available.

Source: U.S. Bureau of Labor Statistics, <u>Consumer Expenditure Survey:</u> <u>Interview, 1984</u>, <u>Bulletin 2267</u> (August 1986), pp. 83-86; 1984-85, 1986-87, and <u>1988-89</u> printouts.

Table 394.-- TOP WEALTHHOLDERS: 1962 TO 1986

[Top wealthholders are defined as persons with a gross estate in excess of specified amounts, rising from \$60,000 in 1962 to \$500,000 in 1986. All figures are estimates based on estate tax return samples]

|                                      | Number                       | Millions of dollars     |                             |                         |                               |
|--------------------------------------|------------------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|
| Group and year                       | of top<br>wealth-<br>holders | Total<br>assets         | Debts<br>and mort-<br>gages | Net<br>worth            | AV6.                          |
| Gross estate over \$60,000: 1962     | 11,323<br>36,470<br>53,700   | 1,908<br>6,327<br>7,866 | 231<br>1,090<br>1,369       | 1,677<br>5,236<br>6,497 | 148,105<br>143,570<br>120,987 |
| Gross estate over \$120,000: 1976    | 39,000                       | 7,436                   | 1,546                       | 5,890                   | 151,026                       |
| Gross estate over \$325,000:<br>1982 | 20,300                       | 14,767                  | 3,523                       | 11,244                  | 553,812                       |
| Gross estate over \$500,000:<br>1982 | 8,700<br>11,000              | 10,864<br>11,330        | 2,919<br>1,475              | 7,946<br>9,855          | 913,333                       |

Source: U.S. Internal Revenue Service, Statistics of Income - 1962, Personal Wealth (1967), pp. 55-56; Statistics of Income - 1969, Personal Wealth (1973), pp. 57-58; Statistics of Income - 1972, Personal Wealth Estimated from Estate Tax Returns (1976), table 33; and Statistics of Income Bulletin, Summer 1983, pp. 1-26, Spring 1988, pp. 31-46, and Spring 1990, pp. 63-78.

Table 395.-- TOTAL AND SELECTED ASSETS, DEBTS AND MORTGAGES, AND NET WORTH OF TOP WEALTHHOLDERS: 1986

[Top wealthholders are defined for this table as persons with net worth under \$10,000,000 and gross assets of \$500,000 or more]

| Subject   | Number of<br>persons               | Amount<br>(millions<br>of dollars) |
|---|------------------------------------|------------------------------------|
| Total assets 1/  Debts and mortgages  Net worth | 11,000<br>10,100<br>11,000         | 11,330<br>1,475<br>9,855           |
| Total assets by type: Real estate               | 10,800<br>8,900<br>10,700<br>5,800 | 5,447<br>2,439<br>1,041<br>806     |

<sup>1/</sup> For the U.S., top wealthholders numbered 3,304,300. Hawaii ranked 42nd among the 50 States. In top wealthholders per 10,000 residents 18 years and over, ratios were 141 for Hawaii and 186 for the entire nation.

and over, ratios were 141 for Hawaii and 186 for the entire nation.

Source: U.S. Internal Revenue Service, "Estimates of Personal Wealth, 1986," SOI Bulletin, Spring 1990, pp. 63-78, table 7.

Table 396.-- WORTH OF RICHEST RESIDENTS: 1991

| Name                               | Age<br>(years) | Net worth<br>(million<br>dollars)        |
|------------------------------------|----------------|--|
| Barbara Cox Anthony  Doris Duke 1/ | • • •          | 2,000<br>750<br>675<br>500<br>400<br>300 |

Table 397.-- GINI RATIOS: 1929 TO 1988

[Gini ratios are measures of income equality, ranging from zero to one. Lower ratios indicate relative equality of incomes; higher ratios, relative inequality]

| Year | Gini ratio                              |
|------|---|
| 1929 | .513<br>.428<br>.441<br><u>1</u> / .519 |

<sup>1/</sup> The 1988 nationwide ratio was .526, compared with .428 in 1970. Hawaii ranked 32nd among the 50 States in income equality in 1988. Source: First Hawaiian Bank, "Income Distribution in Paradise," Economic Indicators, January-February 1991.

## **PRICES**

This section presents indexes of consumer prices for Honolulu, the implicit price deflator for gross state product, actual prices for selected foods, and comparisons of Honolulu and Hilo living costs with those in other urban areas. Other statistics on prices are reported in Sections 7, 16, 17, 18, 21, and 23.

During the first six months of 1991, the Honolulu all-items consumer price index for all urban consumers (CPI-U) averaged 146.8, with the 1982-1984 level equal to 100. The index had increased 8.3 percent over the first half of 1990, 34.8 percent since 1986, and 60.1 percent since 1981. Prices have risen most rapidly since the 1982-84 base period for shelter (67.6 percent) and medical care (68.0 percent) and have dropped most rapidly for electricity (13.5 percent). The implicit price deflator for expenditures on gross state product (a measure of price changes used in the state product accounts) rose 54.8 percent between 1980 and 1990.

An "intermediate" budget for a four-person family living on Oahu was unofficially estimated at \$52,139 as of 1990. This family budget was 34.1 percent higher than the corresponding urban United States average. Differences were particularly marked for renter shelter costs (53.7 percent higher) and personal income taxes (75.7 percent higher).

The Honolulu consumer price index has been compiled by the U.S. Bureau of Labor Statistics since December 1963. This index measures the average change in prices of goods and services purchased by urban households. Prices are expressed as a percent of the average levels reported in 1982-1984, the base period. Current data for Honolulu and other cities are published in CPI Detailed Report, issued monthly by BLS.

Important technical changes have been made in the consumer price index in recent years. In 1983, the basis for measuring homeowners' costs was substantially modified. In 1987, component weights based on a 1982-1984 survey replaced the older weights derived from 1972-1973 data. At the same time, the publication of the Honolulu indexes was moved from a bimonthly to a semi-annual basis. Beginning in 1988, the base period was shifted from 1967 to 1982-1984. Both the CPI-U and CPI-W have been linked by DBED to older indexes going back to 1940.

Official comparisons of Honolulu and Mainland living costs are no longer being made on a regular basis. The annual four-person family budgets estimated by the Bureau of Labor Statistics for Honolulu and the Mainland were discontinued after 1981, and are now maintained unofficially by the Bank of Hawaii. A comparison of prices in Hawaii and

Washington, D.C., compiled for the U.S. Office of Personnel Management to provide a basis for cost of living adjustments for Federal employees, was most recently published for 1990. The American Chamber of Commerce Researchers Association (ACCRA) added Hilo to its list of participating cities for comparative living cost surveys the same year. All of these studies are subject to technical limitations and must be interpreted with considerable caution.

No composite wholesale or producer price index is available for Hawaii. Average wholesale prices of agricultural products are reported in Statistics of Hawaiian Agriculture, issued by the Hawaii Agricultural Statistics Service, and in various other publications of the State Department of Agriculture. Wholesale price statistics of other commodities are seldom available.

Data on prices and living costs for the nation as a whole and other areas are summarized in <u>Statistical Abstract of the United States: 1991</u>, Section 15. Long-term trends for Hawaii are traced in <u>Historical</u> Statistics of Hawaii, Section 5.

Table 398.-- IMPLICIT PRICE DEFLATOR FOR EXPENDITURES ON GROSS STATE PRODUCT: SELECTED YEARS, 1958 TO 1990

[1982 = 100]

| Year   | Deflator   | Year   | Deflator  | Year                                 | Deflator   |
|--|--|--|---|--------------------------------------|--|
| 1958<br>1960<br>1965<br>1970<br>1975<br>1976 | 34.1<br>34.4<br>37.7<br>47.3<br>63.9<br>67.5<br>71.0 | 1978<br>1979<br>1980<br>1981<br>1982<br>1983 | 77.1<br>84.0<br>89.3<br>93.3<br>100.0<br>104.2<br>108.1 | 1985<br>1986<br>1987<br>1988<br>1989 | 111.7<br>114.6<br>119.8<br>124.5<br>130.8<br>138.0 |

Source: Hawaii State Department of Business and Economic Development, Hawaii Gross State Product Accounts: 1958-1988 (June 1989), tables 1-A and 1-5, and Quarterly Statistical & Economic Report, 1st Quarter 1991, p. 6.

Table 399.-- CONSUMER PRICE INDEX (ALL ITEMS COMBINED), BY TYPE OF CONSUMER, FOR HONOLULU: ANNUAL AVERAGES, 1940 TO 1990

| [1982-1984 av | verage = | 100. | Excludes | rent | before | 1963] |  |
|---------------|----------|------|----------|------|--------|-------|--|
|---------------|----------|------|----------|------|--------|-------|--|

|      |  |  | 11   |  |  |
|------|--|--|------|--|--|
| Year | CPI-U  | CPI-W  | Year | CPI-U  | CPI-W  |
| 1940 | 14.7<br>15.5<br>17.6<br>18.9<br>19.2<br>19.7<br>21.0<br>24.4<br>25.7<br>25.2<br>24.3<br>25.7<br>26.5<br>26.7<br>26.9<br>27.3<br>27.7<br>28.6<br>30.0<br>30.5 | 14.5<br>15.3<br>17.4<br>18.7<br>19.0<br>19.5<br>20.8<br>24.1<br>25.4<br>24.9<br>24.0<br>25.4<br>26.2<br>26.4<br>26.6<br>27.0<br>27.4<br>28.3<br>29.6<br>30.1<br>30.9<br>31.7<br>32.4<br>33.1<br>33.3<br>33.9 | 1967 | 36.3<br>37.7<br>39.4<br>41.5<br>43.2<br>44.6<br>46.6<br>51.5<br>56.3<br>59.1<br>62.1<br>66.9<br>74.3<br>83.0<br>91.7<br>97.2<br>99.3<br>103.5<br>106.8<br>109.4<br>114.9<br>121.7<br>128.7 | 35.8<br>37.2<br>38.8<br>40.9<br>42.6<br>44.0<br>45.9<br>50.8<br>55.5<br>58.3<br>61.2<br>65.9<br>73.2<br>81.9<br>90.5<br>96.0<br>99.8<br>104.3<br>107.9<br>110.3<br>115.9<br>122.8<br>129.7 |

Source: 1964-1990 from U.S. Bureau of Labor Statistics, CPI Detailed Report (monthly) and BLS tapes tabulated by Hawaii State Data Center. 1940-1963 from surveys by Eugene Danaher and Hawaii State Department of Labor and Industrial Relations, cited in Hawaii State Department of Planning and Economic Development, The Honolulu Consumer Price Index, 1940-1986 (Statistical Report 187, May 30, 1986), as shifted to 1982-1984 base by Hawaii State Data Center.

Table 400.-- CONSUMER PRICE INDEX (ALL ITEMS COMBINED), BY TYPE OF CONSUMER, FOR HONOLULU: SEMI-ANNUALLY, 1984 TO 1991

[1982-1984 average = 100]

|  | All urban consumers (CPI-U)                                 |  |   | Urban wage earners and clerical workers (CPI-W)             |  |   |  |
|--|---|--|---|---|--|---|--|
| Year   | Annual<br>average   | First<br>half  | Second<br>half  | Annual<br>average   | First<br>half  | Second<br>half  |  |
| 1984<br>1985<br>1986<br>1987<br>1988<br>1989<br>1990 | 103.5<br>106.8<br>109.4<br>114.9<br>121.7<br>128.7<br>138.1 | 102.5<br>106.3<br>108.9<br>113.3<br>120.1<br>126.4<br>135.5<br>146.8 | 104.4<br>107.4<br>109.9<br>116.5<br>123.4<br>131.1<br>140.8 | 104.3<br>107.9<br>110.3<br>115.9<br>122.8<br>129.7<br>138.9 | 103.0<br>107.4<br>109.9<br>114.3<br>121.1<br>127.4<br>136.3<br>147.7 | 105.5<br>108.4<br>110.7<br>117.6<br>124.5<br>132.0<br>141.6 |  |

Source: U.S. Bureau of Labor Statistics, <u>CPI Detailed Report</u> (monthly), BLS tapes tabulated by Hawaii State Data Center, and BLS press releases.

Table 401.-- PERCENT CHANGE IN SELECTED PRICE INDEXES: 1980 TO 1990

| Index <u>1</u> /   | 1980 | 1980 | 1985 | 1986 | 1987 | 1988 | 1989 |
|--|------|------|------|------|------|------|------|
|  | to   |
|  | 1990 | 1985 | 1990 | 1987 | 1988 | 1989 | 1990 |
| Hawaii GSP deflator Honolulu CPI-U Honolulu CPI-W U.S. CPI-U | 54.5 | 25.1 | 23.5 | 4.5  | 3.9  | 5.1  | 5.5  |
|  | 66.4 | 28.7 | 29.3 | 5.0  | 5.9  | 5.8  | 7.3  |
|  | 69.6 | 31.7 | 28.7 | 5.1  | 6.0  | 5.6  | 7.1  |
|  | 58.6 | 30.6 | 21.5 | 3.7  | 4.1  | 4.8  | 5.4  |

<sup>1/</sup> GSP deflator, the implicit price deflator for expenditures on Hawaii gross state product; CPI-U, consumer price index for all urban consumers; CPI-W, consumer price index for urban wage earners and clerical workers.

Source: U.S. Bureau of Labor Statistics, <u>CPI Detailed Report</u> (monthly); present report, tables 398 and 399.

Table 402.-- CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS (CPI-U), BY EXPENDITURE CATEGORY AND COMMODITY AND SERVICE GROUP, FOR HONOLULU: ANNUAL AVERAGES, 1986 TO 1990

[Unless otherwise specified, 1982-1984 average=100]

| Group                               | 1986  | 1987  | 1988  | 1989  | 1990  |
|-------------------------------------|-------|-------|-------|-------|-------|
|                                     |       |       |       |       |       |
| All items                           | 109.4 | 114.9 | 121.7 | 128.7 | 138.1 |
| Food and beverages                  | 110.0 | 114.1 | 120.3 | 128.1 | 137.8 |
| Food                                | 109.9 | 114.3 | 120.2 | 128.2 | 138.3 |
| Food at home                        | 109.0 | 113.4 | 120.0 | 131.5 | 145.0 |
| Cereals and bakery products         | 112.8 | 117.2 | 127.0 | 139.3 | 151.7 |
| Meats, poultry, fish, and eggs      | 104.3 | 108.5 | 119.1 | 133.1 | 147.2 |
| Meats, poultry, and fish            | 104.3 | 107.9 | 119.1 | 133.9 | 148.0 |
| Dairy products                      | 105.0 | 105.9 | 106.5 | 115.5 | 121.9 |
| Fruits and vegetables               | 112.3 | 116.5 | 122.3 | 142.2 | 167.4 |
| Other foods at home                 | 113.2 | 119.4 | 122.2 | 123.0 | 128.8 |
| Food away from home                 | 111.4 | 115.6 | 121.0 | 122.2 | 128.0 |
| Alcoholic beverages                 | 111.1 | 111.4 | 121.0 | 126.5 | 131.0 |
| Housing                             | 108.4 | 115.0 | 123.0 | 131.1 | 141.5 |
| Shelter                             | 113.9 | 122.1 | 132.1 | 141.1 | 154.5 |
| Renters' costs 1/                   | 121.1 | 127.3 | 133.9 | 143.4 | 158.1 |
| Rent, residential                   | 116.9 | 122.3 | 129.4 | 139.3 | 152.2 |
| Other renters' costs                | 122.5 | 129.7 | 131.7 | 136.3 | 158.6 |
| Homeowners' costs 1/                | 115.7 | 124.9 | 136.5 | 147.7 | 160.7 |
| Owners' equivalent rent 1/          | 115.8 | 125.0 | 136.8 | 148.1 | 161.4 |
| Fuel and other utilities            | 87.6  | 88.8  | 87.3  | 90.9  | 98.0  |
| Fuels                               | 75.2  | 77.8  | 72.6  | 75.7  | 84.1  |
| Gas (piped) and electricity         | 74.9  | 77.4  | 72.1  | 75.1  | 83.6  |
| Electricity                         | 73.3  | 76.0  | 70.4  | 73.7  | 82.3  |
| Utility (piped) gas                 | 88.2  | 87.6  | 86.5  | 85.9  | 91.4  |
| Household furnishings and operation | 104.7 | 108.8 | 117.3 | 125.8 | 126.8 |
| Apparel and upkeep                  | 99.8  | 102.5 | 106.8 | 104.3 | 107.0 |
| Apparel commodities                 | 98.5  | 101.2 | 105.4 | 102.4 | 104.3 |
| Men's and boys' apparel             | 106.8 | 114.7 | 121.2 | 123.8 | 118.6 |
| Women's and girls apparel           | 102.0 | 100.3 | 105.3 | 97.1  | 99.4  |
| Footwear                            | 100.8 | 100.4 | 101.2 | 93.0  | 98.2  |
| Transportation                      | 105.2 | 109.7 | 116.1 | 123.9 | 131.1 |
| Private transportation              | 105.4 | 109.7 | 116.4 | 124.3 | 130.8 |
| Motor fuel                          | 88.5  | 90.9  | 95.4  | 101.1 | 108.6 |
| Gasoline                            | 88.5  | 91.0  | 95.3  | 100.7 | 109.1 |
| Public transportation               | 103.8 | 109.1 | 112.9 | 119.4 | 132.7 |
| Medical care                        | 122.3 | 127.9 | 132.5 | 139.3 | 154.2 |
| Entertainment                       | 113.2 | 118.6 | 122.9 | 124.3 | 128.4 |
| Other goods and services            | 119.6 | 129.7 | 137.1 | 146.1 | 160.4 |
| Personal care                       | 107.3 | 112.6 | 115.8 | 122.1 | 136.6 |
|                                     |       |       |       |       |       |

Continued on next page.

Table 402.-- CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS (CPI-U), BY EXPENDITURE CATEGORY AND COMMODITY AND SERVICE GROUP, FOR HONOLULU: ANNUAL AVERAGES, 1986 TO 1990 -- Con.

| Group  | 1986  | 1987  | 1988  | 1989  | 1990  |
|--|-------|-------|-------|-------|-------|
| All items  Commodities  Food and beverages  Commodities less food and beverages  Nondurables less food and beverages  Durables  Services  Medical care services  | 109.4 | 114.9 | 121.7 | 128.7 | 138.1 |
|  | 106.2 | 109.6 | 115.5 | 121.6 | 128.1 |
|  | 110.0 | 114.1 | 120.3 | 128.1 | 137.8 |
|  | 103.1 | 106.0 | 111.8 | 116.4 | 120.2 |
|  | 102.5 | 105.5 | 110.1 | 113.8 | 120.8 |
|  | 104.5 | 107.2 | 114.9 | 121.0 | 119.7 |
|  | 112.3 | 119.8 | 127.4 | 135.2 | 147.2 |
|  | 122.1 | 128.1 | 132.4 | 139.2 | 155.3 |
| Special indexes: All items less shelter All items less medical care All items less energy Energy Commodities less food Nondurables less food Nondurables Services less rent of shelter 1/ Services less medical care | 107.7 | 112.2 | 117.7 | 124.0 | 131.7 |
|  | 108.6 | 114.1 | 121.0 | 128.0 | 137.1 |
|  | 112.0 | 118.1 | 125.5 | 132.7 | 142.3 |
|  | 82.3  | 84.8  | 84.7  | 89.2  | 97.1  |
|  | 103.5 | 106.2 | 112.1 | 116.8 | 120.7 |
|  | 103.0 | 105.8 | 110.7 | 114.6 | 121.3 |
|  | 106.6 | 110.2 | 115.7 | 121.7 | 130.3 |
|  | 112.6 | 119.0 | 123.8 | 130.2 | 140.5 |
|  | 111.2 | 118.8 | 126.6 | 134.5 | 146.1 |

<sup>1/</sup> December 1982=100.

Source: U.S. Bureau of Labor Statistics, <u>CPI Detailed Report</u> (monthly), printouts, and tapes tabulated by Hawaii State Data Center.

Table 403.-- CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS (CPI-W), BY EXPENDITURE CATEGORY AND COMMODITY AND SERVICE GROUP, FOR HONOLULU: ANNUAL AVERAGES, 1986 TO 1990

[Unless otherwise specified, 1982-1984 average=100]

| Group                               | 1986  | 1987  | 1988  | 1989  | 1990  |
|-------------------------------------|-------|-------|-------|-------|-------|
|                                     |       |       |       |       |       |
| All items                           | 110.3 | 115.9 | 122.8 | 129.7 | 138.9 |
| Food and beverages                  | 110.8 | 115.3 | 121.7 | 129.2 | 138.6 |
| Food                                | 110.8 | 115.6 | 121.7 | 129.3 | 139.1 |
| Food at home                        | 110.1 | 114.9 |       | 133.1 | 146.2 |
| Cereals and bakery products         | 111.7 | 115.7 | 125.4 | 137.7 | 149.9 |
| Meats, poultry, fish, and eggs      | 107.6 | 112.9 | 124.3 | 138.4 | 153.2 |
| Meats, poultry, and fish            | 107.8 | 112.4 | 124.6 | 139.5 | 154.5 |
| Dairy products                      | 104.9 | 105.5 | 106.5 | 114.6 | 120.5 |
| Fruits and vegetables               | 112.3 | 117.9 | 123.0 | 140.8 | 162.9 |
| Other foods at home                 | 113.3 | 119.0 | 122.0 | 123.2 | 129.0 |
| Food away from home                 | 111.8 | 116.1 | 121.4 | 122.6 | 128.5 |
| Alcoholic beverages                 | 111.3 | 111.1 | 121.4 | 126.6 | 131.5 |
| Housing                             | 111.0 | 117.4 | 125.5 | 133.7 | 144.3 |
| Shelter                             | 117.7 | 126.0 |       | 145.6 | 159.4 |
| Renters' costs 1/                   | 108.2 | 113.2 | 119.3 | 127.9 | 140.6 |
| Rent, residential                   | 116.9 | 122.3 | 129.4 | 139.3 | 152.2 |
| Other renters' costs                | 122.8 | 128.8 | 130.7 | 135.2 | 157.2 |
| Homeowners' costs 1/                | 108.4 | 116.9 | 127.9 | 138.3 | 150.6 |
| Owners' equivalent rent 1/          | 108.4 | 117.0 | 128.1 | 138.7 | 151.1 |
| Fuel and other utilities            | 87.6  | 88.7  | 87.4  | 91.1  | 98.1  |
| Fuels                               | 75.3  | 77.7  | 72.7  | 75.6  | 84.0  |
| Gas (piped) and electricity         | 75.1  | 77.5  | 72.4  | 75.2  | 83.6  |
| Electricity                         | 73.3  | 76.0  | 70.4  | 73.7  | 82.3  |
| Utility (piped) gas                 | 88.3  | 87.6  | 86.5  | 85.9  | 91.4  |
| Household furnishings and operation | 105.6 | 109.7 | 118.7 | 126.5 | 127.5 |
| Apparel and upkeep                  | 100.1 | 103.7 | 108.2 | 105.2 | 108.1 |
| Apparel commodities                 | 98.7  | 102.3 | 106.9 | 103.5 | 105.5 |
| Men's and boys' apparel             | 107.6 | 116.6 | 123.5 | 126.1 | 121.1 |
| Women's and girls apparel           | 103.1 | 101.8 | 107.1 | 98.0  | 100.9 |
| Footwear                            | 100.8 | 100.4 | 101.4 | 93.5  | 98.5  |
| Transportation                      | 104.7 | 109.2 | 115.7 | 123.7 | 130.2 |
| Private transportation              | 104.8 | 108.8 | 115.5 | 123.8 | 129.8 |
| Motor fuel                          | 88.5  | 90.9  | 95.4  | 101.1 | 108.6 |
| Gasoline                            | 88.5  | 91.0  | 95.3  | 100.7 | 109.1 |
| Public transportation               | 103.6 | 110.2 | 113.6 | 119.3 | 131.0 |
| Medical care                        | 121.1 | 126.7 | 131.4 | 138.3 | 153.3 |
| Entertainment                       | 113.1 | 119.3 | 123.6 | 123.5 | 127.9 |
| Other goods and services            | 119.1 | 128.7 | 136.4 | 146.3 | 161.9 |
| Personal care                       | 107.5 | 112.7 | 115.7 | 121.9 | 136.3 |
|                                     |       |       |       |       |       |

Continued on next page.

Table 403.-- CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS (CPI-W), BY EXPENDITURE CATEGORY AND COMMODITY AND SERVICE GROUP, FOR HONOLULU: ANNUAL AVERAGES, 1986 TO 1990 -- Con.

| Group  | 1986   | 1987  | 1988   | 1989   | 1990   |
|--|--|---|--|--|--|
| All items  Commodities  Food and beverages  Commodities less food and beverages  Nondurables less food and beverages  Durables  Services  Medical care services  | 110.3<br>107.0<br>110.8<br>104.5<br>102.2<br>107.4<br>114.3<br>120.7         | 110.7<br>115.3<br>107.4<br>105.4<br>110.0         | 122.8<br>116.8<br>121.7<br>113.3<br>110.1<br>117.8<br>129.5<br>131.3         | 129.7<br>122.8<br>129.2<br>118.1<br>113.8<br>124.3<br>137.5<br>138.2         | 138.9<br>129.2<br>138.6<br>122.2<br>121.2<br>123.2<br>149.6<br>154.6         |
| Special indexes: All items less shelter All items less medical care All items less energy Energy Commodities less food Nondurables less food Nondurables Services less rent of shelter 1/ Services less medical care | 107.8<br>109.6<br>113.3<br>83.0<br>104.7<br>102.8<br>107.1<br>104.1<br>113.5 | 115.2<br>119.3<br>85.4<br>107.5<br>105.7<br>111.0 | 118.2<br>122.2<br>126.9<br>85.7<br>113.6<br>110.8<br>116.7<br>115.0<br>129.1 | 124.2<br>129.1<br>134.0<br>90.3<br>118.4<br>114.7<br>122.5<br>121.0<br>137.1 | 131.9<br>138.1<br>143.5<br>98.1<br>122.6<br>121.8<br>131.0<br>130.5<br>148.9 |

<sup>1/</sup> December 1984=100.

Source: U.S. Bureau of Labor Statistics, <u>CPI Detailed Report</u> (monthly), printouts, and tapes tabulated by Hawaii State Data Center.

# Table 404.-- RELATIVE IMPORTANCE OF COMPONENTS IN THE CONSUMER PRICE INDEX FOR HONOLULU: DECEMBER 1990

## [Percent of all items]

| Group                                     | CPI-U <u>1</u> / | CPI-W <u>2</u> / |
|---|------------------|------------------|
| EXPENDITURE CATEGORY                      |                  |                  |
|   |                  |                  |
| All items                                 | 100.000          | 100.000          |
| Food and beverages                        | 20.378           | 21.555           |
| Food                                      | 19.015           | 19.931           |
| Food at home                              | 12.643           | 12.833           |
| Cereals and bakery products               | 1.728            | 1.981            |
| Meats, poultry, fish, and eggs            | 4.432            | 4.773            |
| Meats, poultry, and fish                  | 4.189            | 4.466            |
| Dairy products                            | .955<br>2.882    | .904<br>2.683    |
| Fruits and vegetables Other foods at home | 2.646            | 2.493            |
| Food away from home                       | 6.372            | 7.098            |
| Alcoholic beverages                       | 1.362            | 1.624            |
| Aconotic beverages                        | 1.502            | 1.024            |
| Housing                                   | 42.219           | 39.390           |
| Shelter                                   | 31.612           | 29.134           |
| Renters' costs                            | 9.246            | 9.314            |
| Rent, residential                         | 7.852            | 8.358            |
| Other renters' costs                      | 1.393            | .956             |
| Homeowners' costs                         | 22.183           | 19.654           |
| Owners' equivalent rent                   | 21.985           | 19.514           |
| Fuel and other utilities                  | 4.542            | 4.847            |
| Fuels                                     | 2.375            | 2.507            |
| Fuel oil, coal, and bottled gas           | .022             | .028             |
| Fuel oil                                  | .001             | .005             |
| Other fuels                               | .021<br>2.353    | .023<br>2.479    |
| Gas (piped) and electricity Electricity   | 2.353            | 2.479            |
| Utility (piped) gas                       | .202             | .292             |
| Household furnishings and operations      | 6.065            | 5.409            |
| nouschold furnishings and operations      | 0.005            | 3.403            |
| Apparel and upkeep                        | 4.837            | 5.102            |
| Apparel commodities                       | 4.499            | 4.749            |
| Men's and boys'                           | 1.188            | 1.318            |
| Women's and girls'                        | 1.956            | 2.046            |
| Footwear                                  | .607             | .670             |
|   |                  |                  |

Table 404.-- RELATIVE IMPORTANCE OF COMPONENTS IN THE CONSUMER PRICE INDEX FOR HONOLULU: DECEMBER 1990 -- Con.

| Group   | CPI-U <u>1</u> /  | CPI-W <u>2</u> /  |
|---|---|---|
| EXPENDITURE CATEGORY Con.   |   |   |
| Transportation  | 16.914<br>14.860<br>3.201<br>2.054  | 18.902<br>17.364<br>3.901<br>1.537  |
| Medical care  | 5.143   | 4.884   |
| Entertainment   | 4.301   | 4.146   |
| Other goods and services  Personal care   | 6.209<br>1.273  | 6.021<br>1.387  |
| COMMODITY AND SERVICE GROUP   |   |   |
| All items   | 100.000   | 100.000   |
| Commodities   | 42.487<br>20.378<br>22.109<br>13.918<br>8.191   | 46.106<br>21.555<br>24.552<br>15.298<br>9.254   |
| Services  Medical care services   | 57.513<br>4.237   | 53.894<br>3.953   |
| Special indexes: All items less shelter All items less medical care All items less energy Energy Commodities less food Nondurables less food Nondurables Services less rent of shelter Services less medical care | 68.388<br>94.857<br>94.424<br>5.576<br>23.472<br>15.281<br>34.296<br>26.295<br>53.276 | 70.866<br>95.116<br>93.592<br>6.408<br>26.175<br>16.922<br>36.853<br>25.078<br>49.941 |

Source: U.S. Bureau of Labor Statistics, printout.

 $<sup>\</sup>frac{1}{2}$  Consumer price index for all urban consumers.  $\frac{2}{2}$  Consumer price index for urban wage earners and clerical workers.

Table 405.-- COST OF LIVING INDEX FOR HILO: 1990 AND 1991
[Hilo living costs as a percent of average costs in 308
participating urban areas]

|   | Weight (p | percent) | Index    |          |  |
|---|-----------|----------|----------|----------|--|
| Component   | 2nd qtr.  | 2nd qtr. | 2nd qtr. | 2nd qtr. |  |
|   | 1990      | 1991     | 1990     | 1991     |  |
| Composite index Grocery items Housing Utilities Transportation Health care Miscellaneous goods and services | 100       | 100      | 132.5    | 138.3    |  |
|   | 17        | 13       | 140.7    | 144.5    |  |
|   | 22        | 28       | 162.3    | 180.1    |  |
|   | 11        | 9        | 102.0    | 116.5    |  |
|   | 13        | 10       | 127.2    | 131.7    |  |
|   | 7         | 5        | 110.7    | 129.6    |  |
|   | 30        | 35       | 124.6    | 117.1    |  |

Source: American Chamber of Commerce Researchers Association (ACCRA), Cost of Living Index (quarterly), provided by Institute for Business and Economic Studies, University of Hawaii at Hilo.

Table 406.-- ANNUAL INTERMEDIATE BUDGET FOR A FOUR-PERSON FAMILY ON OAHU: 1971 TO 1990

| Year   | Dollars  | Percent<br>of urban<br>U.S.  | Year   | Dollars  | Percent<br>of urban<br>U.S.  |
|--|--|--|--|--|--|
| 1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978<br>1979 | 13,108<br>13,617<br>14,937<br>17,019<br>18,107<br>19,036<br>20,883<br>23,099<br>25,799<br>28,488 | 119.5<br>119.0<br>118.3<br>118.8<br>117.0<br>117.2<br>122.1<br>124.0<br>125.7<br>123.1 | 1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 31,893<br>33,403<br>33,890<br>35,484<br>36,926<br>38,437<br>41,790<br>44,414<br>47,950<br>52,139 | 125.5<br>124.5<br>124.3<br>124.4<br>122.7<br>123.2<br>126.7<br>129.2<br>130.7<br>134.1 |

Source: U.S. Bureau of Labor Statistics, annual releases for 1971-1981; 1982-1990 estimates by Paul Brewbaker, Economics Department, Bank of Hawaii.

Table 407.-- ANNUAL INTERMEDIATE BUDGETS, BY ITEM, FOR A FOUR-PERSON FAMILY IN THE UNITED STATES AND ON OAHU: 1981 AND 1990

[Hypothetical budgets for a family of specified characteristics, based on 1972-1973 expenditure patterns as updated by the consumer price index and current tax rates. The 1981 values are official estimates published by the U.S. Bureau of Labor Statistics; the 1990 values are unofficial estimates prepared by the Bank of Hawaii, using comparable assumptions and methodology. Users of these estimates should bear in mind the limitations imposed by the underlying assumptions and methods]

|   | Urban United<br>States<br>(dollars)   |   | Oahu<br>(dollars)   |  | Oahu as percent of urban U.S.   |   |
|---|---|---|---|--|---|---|
| Item  | 1981  | 1990  | 1981  | 1990   | 1981  | 1990  |
| Total budget Consumption Food Food at home Food away from home. Housing Homeowner shelter costs Renter shelter costs Housefurnishings and operations Transportation Clothing Personal care Medical care Other family consumption 1/ Other items 2/ Social Security payments Personal income taxes | 25,409<br>18,242<br>5,843<br>4,866<br>977<br>5,547<br>4,886<br>2,732<br>1,199<br>2,372<br>1,333<br>508<br>1,443<br>1,196<br>1,021<br>1,703<br>4,443 | 38,884<br>27,122<br>8,221<br>6,784<br>1,434<br>8,219<br>7,548<br>4,312<br>1,480<br>3,068<br>1,737<br>741<br>2,834<br>2,302<br>1,468<br>3,186<br>7,109 | 31,893<br>21,530<br>7,626<br>6,649<br>977<br>6,493<br>5,467<br>3,991<br>1,395<br>2,421<br>1,432<br>590<br>1,590<br>1,378<br>1,137<br>2,049<br>7,177 | 52,139 33,767 11,594 10,181 1,413 10,605 9,416 6,628  1,885 3,317 1,621 921 2,997 2,712 1,714 4,165 12,493 | 125.5<br>118.0<br>130.5<br>136.6<br>100.0<br>117.1<br>111.9<br>146.1<br>116.3<br>102.1<br>107.4<br>116.1<br>110.2<br>115.2<br>113.6<br>120.3<br>161.5 | 98.5<br>129.0<br>124.7<br>153.7<br>127.4<br>108.1 |

<sup>1/</sup> Reading, recreation, tobacco products, alcoholic beverages, education, and miscellaneous expenditures.

Source: U.S. Bureau of Labor Statistics, Autumn 1981 Urban Family Budgets and Comparative Indexes for Selected Urban Areas (release USDL: 82-139, April 16, 1981); 1990 estimates by Paul H. Brewbaker, Economics Department, Bank of Hawaii, in 'Hawaii's Cost of Living in 1990: Urban Four-Person Family Budgets at an Intermediate Standard of Living' (1991).

<sup>2</sup>/ Includes gifts and contributions, life insurance, and occupational expenses.

Table 408.-- COST OF LIVING INDEXES AND PAY DIFFERENTIALS FOR FEDERAL EMPLOYEES IN HAWAII RELATIVE TO WASHINGTON, D.C., BY COUNTIES: 1990

| Allowance category <u>1</u> /   | City and<br>Co. of<br>Honolulu       | Kauai<br>County      | Maui<br>County | Hawai i<br>County    |
|---|--------------------------------------|----------------------|----------------|----------------------|
| INDEXES <u>2</u> /  |                                      |                      |                |                      |
| "Part 1" methodology: Local pricing Exchange and commissary "Part 2" methodology: Local pricing Exchange and commissary  ALLOWANCE RATES 3/ | 120.39<br>115.00<br>119.45<br>114.34 | 116.08<br><br>114.90 | 119.58         | 104.86<br><br>104.36 |
| Local retail  | 22.5<br>12.5                         | 17.5<br>17.5         | 20.0           | 15.0                 |

<sup>1/</sup> Based on access to military commissary and exchange facilities. "Local retail" refers to Federal employees who purchase goods and services from private retail establishments; "commissary, PX," to Federal employees who have unlimited access to and who use military commissary and exchange facilities.

Source: U.S. Office of Personnel Management, "Nonforeign Area Cost-of-Living Allowances," Federal Personnel Manual System, FPM Letter 591-51 (1990), and "Cost-of-Living Allowances and Post Differentials (Nonforeign Areas); Advance Notice of Proposed Rulemaking; Proposed Rule," Federal Register, Vol. 56, No. 38, Part II, February 26, 1991, pp. 7902-7986, at pp. 7902-7903.

<sup>2/</sup> Washington, D.C., living costs=100. Based on a survey of comparative costs for Federal employees in June-September 1990. Indexes were calculated by two different methods.

<sup>3/</sup> Authorized allowance rate, expressed as a percentage differential, effective February 15, 1990.

Table 409.-- COST OF FOOD AT HOME IN HONOLULU RELATIVE TO U.S. CITY AVERAGE: 1973 TO 1989

| Index name and year | Honolulu index <u>1</u> / | Honolulu rank <u>2</u> / |
|---------------------|---------------------------|--------------------------|
| Sherwood, 1973      | 116.1<br>141.3<br>139.0   | 2<br>1<br>1              |

 $\frac{1}{2}$  25-city average = 100.  $\frac{2}{2}$  Among 25 major cities. Source: U.S. Bureau of Labor Statistics, "New research on interarea consumer price differences," Monthly Labor Review, July 1991, pp. 31-34.

Table 410.-- EXPENDITURES ON A CHILD FROM BIRTH TO AGE 18: 1990 [In dollars. Data pertain to husband-wife families living in urban areas in the Western States]

|  |                                     | Expenditures                 | on a child              |  |
|--|-------------------------------------|------------------------------|-------------------------|--|
| Family income level  | Income range                        | 18-year<br>total             | Annual<br>average       |  |
| Lower income level Middle income level Higher income level | <29,900<br>29,900-48,300<br>>48,300 | 91,590<br>124,530<br>171,180 | 5,088<br>6,918<br>9,510 |  |

Source: U.S. Department of Agriculture, Family Economics Review, Vol. 4, No. 1, March 1991; pp. 32-34.

#### Section 15

## BANKING, INSURANCE, AND BUSINESS ENTERPRISE

Statistics in this section relate to banks and other financial institutions, stocks and bonds, insurance, fires, and business firms.

There were 10 banks with 199 locations, six savings and loan associations with 146 locations, four trust companies with seven branches, and 46 industrial loan or small loan licensees with 186 branch offices in Hawaii as of December 31, 1990. Deposits in all financial institutions reached \$21.4 billion at the end of 1989, compared with \$8.2 billion a decade earlier. Assets of savings and loan associations stood at \$7.3 billion in 1989, more than double their 1985 level. There were 130 credit unions with combined assets of \$2.5 billion at the end of 1990.

Approximately 256,000 Hawaii residents held shares in U.S. public corporations or investment companies in 1985.

Life insurance in force in Hawaii at the end of 1989 amounted to \$35 billion, more than twice the figure reported ten years earlier. For all 807 insurance companies doing business in the Islands, Hawaii premiums amounted to \$1.6 billion in 1989 and losses, claims, and benefits paid came to \$843 million. Fire losses in fiscal 1990 amounted to \$25 million. Persons covered by the three major prepaid health insurance plans as of December 31, 1990 numbered 810,000, with annual membership dues of \$848 million.

By mid-1991, about 47,000 corporations and partnerships were registered to do business in Hawaii: 32,900 local ("domestic") corporations, 5,900 out-of-State ("foreign") corporations, and 8,200 partnerships. Business establishments with one or more employees in 1988 numbered 27,900; over half had fewer than five employees. During fiscal 1991, 3,600 new local corporations were formed. Business receipts of corporations in 1987 exceeded \$26 billion; business receipts of partnerships and proprietorships in the same year amounted to respectively \$3.5 billion and \$1.8 billion. Hawaii's largest corporation, PRI, reported annual sales of \$3.9 billion. Business failures in 1990 numbered 147.

Sources for statistics on these subjects include the Hawaii State Department of Commerce and Consumer Affairs and Department of Taxation, county fire departments, major island banks, the New York Stock Exchange, Dun and Bradstreet, Inc., local health insurance plans, the Hawaii Credit Union League, and the annual report on County Business Patterns issued by the U.S. Bureau of the Census. Historical Statistics of Hawaii, Sections 22 and 23, provides information for earlier periods. Comparable Mainland data appear in Sections 16 and 17 of Statistical Abstract of the United States: 1991.

Table 411.-- NUMBER OF FINANCIAL INSTITUTIONS, BY TYPES: 1980 TO 1990 [Excludes out-of-State branches of Hawaii-based institutions. As of December 31]

|   | Banks  |   | Savings and<br>loans<br>associations           |  | Trust<br>companies                        |   | Industrial<br>loan<br>licensees                          |   |
|---|--|---|--|--|---|---|--|---|
| Type of charter,<br>island, and<br>year | Firms  | Loca-<br>tions  | Asso-<br>cia-<br>tions                         | Loca-<br>tions   | Firms                                     | Loca-<br>tions                            | Firms  | Loca-<br>tions  |
| 1980                                    | 9<br>9<br>10<br>10<br>10<br>10<br>10<br>10<br>10 | 169<br>171<br>166<br>162<br>178<br>179<br>181<br>185<br>182<br>188<br>190 | 8<br>9<br>8<br>8<br>8<br>8<br>7<br>7<br>7<br>6 | 156<br>163<br>153<br>166<br>163<br>163<br>148<br>158<br>152<br>146 | 4<br>4<br>4<br>4<br>4<br>3<br>3<br>4<br>3 | 7<br>7<br>7<br>7<br>7<br>6<br>6<br>7<br>6 | 71<br>76<br>78<br>72<br>77<br>66<br>64<br>54<br>52<br>46 | 238<br>236<br>230<br>209<br>223<br>201<br>204<br>199<br>185<br>192<br>186 |
| Federal                                 | 3<br>7   | 14<br>176   | 4<br>2   | 121<br>25  | 4   | 7   | -<br>46  | -<br>186  |
| Hawaii                                  | 6<br>7<br>1<br>1<br>9<br>4                       | 21<br>20<br>1<br>1<br>132<br>15   | 6<br>6<br>1<br>2<br>6<br>5                     | 17<br>14<br>1<br>2<br>103<br>9                                     | 2<br>1<br>-<br>4<br>-                     | 2<br>1<br>-<br>-<br>4<br>-                | 10<br>10<br>-<br>1<br>46<br>8<br>-                       | 19<br>16<br>-<br>1<br>141<br>9<br>-                                       |

Source: Hawaii State Department of Commerce and Consumer Affairs, Division of Financial Institutions, records.

Table 412.-- CHARACTERISTICS OF FINANCIAL INSTITUTIONS: 1965 TO 1990 [In millions of dollars. As of December 31]

|                      | 1  |  |  |  | T  |  |
|----------------------|--|--|--|--|--|--|
|                      |  | Deposits   |  |  | Loai   | ns   |
| *                    | All<br>financial<br>insti-   | Bank de<br>deposit   |  | Debits to<br>bank<br>demand  | All<br>financial<br>insti-   |  |
| Year                 | tutions  | Private <u>2</u> /   | Other  | deposits 1/  | tutions  | Banks <u>1</u> /   |
| 1965                 | 1,542.0 1,605.6 1,814.4 2,093.6 2,298.2 2,625.8 3,098.8 3,616.2 4,071.7  4,379.3 4,896.7 5,580.7 6,196.1 7,107.4 8,227.1 9,043.6 9,834.0 10,792.2  11,615.8 12,626.5 12,911.7 13,172.7 14,795.6 18,641.2 | 373.4<br>383.8<br>434.3<br>514.2<br>579.6<br>608.8<br>703.4<br>809.9<br>865.4<br>870.4<br>919.8<br>1,007.0<br>1,064.1<br>1,214.8<br>1,328.9<br>1,274.9<br>1,139.7<br>1,216.6<br>1,155.0<br>1,825.3<br>1,469.3<br>2,001.3<br>1,981.7<br>2,166.7 | 632.1<br>658.6<br>747.7<br>864.3<br>923.1<br>1,088.4<br>1,235.2<br>1,384.5<br>1,584.5<br>1,682.4<br>1,760.9<br>1,989.4<br>2,168.7<br>2,494.4<br>3,034.1<br>3,517.3<br>4,293.6<br>4,803.8<br>5,429.4<br>5,358.6<br>6,763.3<br>7,471.9<br>8,414.7<br>9,358.0 | 9,562.1<br>12,166.7<br>13,198.4<br>16,316.7<br>21,527.3<br>23,305.5<br>24,375.9<br>27,006.9<br>31,803.8<br>38,495.2<br>42,198.2<br>44,908.5<br>50,492.9<br>58,264.4<br>72,492.7<br>84,336.9<br>90,280.9<br>89,384.3<br>89,147.3<br>91,805.8<br>95,870.4<br>109,927.9<br>121,926.3<br>130,612.3 | 1,334.0 1,405.8 1,508.0 1,687.0 1,995.6 2,271.9 2,612.4 3,120.0 3,674.8  4,042.7 4,318.9 4,797.2 5,468.2 6,617.7 7,790.1 8,721.0 9,383.3 9,802.4  9,601.8 10,426.8 9,953.5 9,731.6 10,859.2 14,059.2 | 668.1<br>708.2<br>779.4<br>866.9<br>1,025.4<br>1,165.4<br>1,271.3<br>1,502.7<br>1,731.8<br>1,859.9<br>1,834.2<br>1,987.1<br>2,176.4<br>2,603.7<br>3,051.9<br>3,493.5<br>3,931.8<br>4,115.5<br>4,143.1<br>4,698.1<br>5,098.0<br>5,861.3<br>6,330.4<br>7,766.6 |
| 1988<br>1989<br>1990 | 21,360.9<br>23,588.5   | 2,250.7<br>2,393.5   | 11,427.4<br>12,725.4   | 172,698.3<br>217,639.4   | 16,655.7<br>18,880.3   | 9,704.2<br>11,206.3  |

<sup>1/</sup> Interbank and public demand deposits included in "other." Out-of-State branches of Hawaii banks are included.

<sup>2/</sup> Data for 1989 not strictly comparable to earlier years.

Source: Bank of Hawaii, Hawaii 1991, Annual Economic Report (1991), p. 35.

Table 413.-- CHARACTERISTICS OF STATE-CHARTERED FINANCIAL INSTITUTIONS, BY TYPES: 1988 TO 1990

[As of December 31]

| Subject                           | 1988  | 1989  | 1990  |
|-----------------------------------|---|---|---|
| BANKS                             |   |   |   |
| Number of banks                   | 7<br>185<br>12,560.5<br>11,292.7<br>133,916<br>52,498 | 7<br>195<br>15,401.7<br>13,671.3<br>172,698<br>58,466 | 7<br>194<br>17,535.8<br>15,114.2<br>217,636<br>63,426 |
| Number of associations            | 2<br>21<br>943.5<br>636.5                             | 2<br>22<br>994.5<br>710.6                             | 2<br>23<br>1,009.5<br>667.1                           |
| TRUST COMPANIES                   |   |   |   |
| Number of companies               | 3<br>3<br>39.8  | 3<br>6<br>48.2  | 4<br>3<br>70.4  |
| FINANCIAL SERVICES LOAN COMPANIES |   |   |   |
| Number of companies               | 51<br>153<br>2,556.6                                  | 52<br>142<br>2,046.8                                  | 48<br>146<br>2,577.4                                  |

Source: Hawaii State Department of Commerce and Consumer Affairs, Division of Financial Institutions, Comparative Statement of Condition (semi-annual), monthly releases, and records.

Table 414.-- SAIF-INSURED INSTITUTIONS AND DEPOSITS: 1965 TO 1989 [SAIF (formerly FSLIC) refers to Savings Association Insurance Fund]

| Subject  | Dec. | Nov. | Sept. | Sept. | June  | June  |
|--|------|------|-------|-------|-------|-------|
|  | 1965 | 1970 | 1975  | 1980  | 1985  | 1989  |
| No. of facilities No. of branch offices Total deposits (mil. dol.) | 44   | 62   | 99    | 147   | 157   | 150   |
|  | 33   | 52   | 90    | 141   | 149   | 143   |
|  | (NA) | 463  | 1,376 | 2,933 | 3,891 | 4,849 |

NA Not available. Source follows next table.

Table 415.-- SELECTED FINANCIAL DATA FOR SAIF-INSURED INSTITUTIONS: 1984, 1988, AND 1989

[See headnote to preceeding table]

| Subject   | 1984  | 1988  | 1989  |
|---|-------|-------|-------|
| No. of institutions  Total assets (million dollars)  Total deposits (million dollars) | 6     | 6     | 6     |
|   | 3,480 | 6,560 | 7,251 |
|   | 2,738 | 4,515 | 4,956 |

Source: U.S. Office of Thrift Supervision, 1989 Savings & Home Financing Source Book, pp. B-25 and B-72.

Table 416.-- CREDIT UNIONS: 1985 TO 1990
[As of December 31]

| Year                                 | Number<br>of<br>credit<br>unions       | Assets<br>(dollars)  | Shares<br>(dollars)  | Number<br>of<br>credit<br>union<br>members                     |
|--------------------------------------|--|--|--|--|
| 1985<br>1986<br>1987<br>1988<br>1989 | 137<br>136<br>136<br>136<br>132<br>130 | 1,535,426,151<br>1,906,350,845<br>2,145,826,560<br>2,305,569,314<br>2,284,832,750<br>2,505,708,932 | 1,390,984,301<br>1,742,031,717<br>1,938,767,096<br>2,059,966,207<br>2,020,219,693<br>2,238,607,674 | 425,973<br>443,015<br>461,944<br>479,610<br>473,700<br>498,486 |

Source: Hawaii Credit Union League, records.

Table 417.-- CREDIT CARD OWNERSHIP, FOR OAHU: 1988, 1989 AND 1990

[Limited to major credit cards, such as Master Card, VISA, American Express, or Discover. Data based on telephone surveys of respectively 400, 402 and 402 Oahu residents, October 24-November 10, 1988, November 3-13, 1989, and November 8-13, 1990]

| Number owned | 1988                                  | 1989                                  | 1990  |
|--------------|---------------------------------------|---------------------------------------|---|
| Percent      | 100<br>29<br>26<br>26<br>13<br>5<br>2 | 100<br>27<br>28<br>24<br>15<br>3<br>1 | 100<br>20<br>31<br>31<br>9<br>6<br>4<br>1.7 |

Source: Surveys by Omnitrak Group, Inc., reported in Honolulu Star-Bulletin, February 20, 1990, p. D-1, and March 8-13, 1991.

Table 418.-- HAWAII RESIDENTS HOLDING SHARES IN U.S. PUBLIC CORPORATIONS OR INVESTMENT COMPANIES: 1959 TO 1985

| Year | Share-<br>holders                              | Year | Share-<br>holders                        |
|------|--|------|--|
| 1959 | 13,000<br>18,000<br>39,000<br>74,000<br>58,000 | 1980 | 175,000<br>174,000<br>234,000<br>256,000 |

Source: New York Stock Exchange, Inc., Shareownership 1985, p. 24, and similar reports for earlier years.

Table 419.-- RESIDENTS INVESTING IN SPECIFIED CATEGORIES: 1990 AND 1991

[Responses to question, 'Besides the money you keep as savings, how else do you invest your money? Do you invest in ...?'' The 1991 survey was based on a telephone survey of 501 Hawaii residents, conducted March 20-28]

|   |  | Percent of respondents           |  |
|---|--|----------------------------------|--|
| Type of investment  | 1990                                   | 1991                             |  |
| Money market mutual funds Stocks and bonds Real estate Own business Trust fund Antiques, gems, other collectibles Gold, silver, precious metals | 46<br>42<br>31<br>20<br>17<br>16<br>10 | 44<br>37<br>37<br>19<br>21<br>17 |  |

Source: Survey by Omnitrak Research & Marketing Group, Inc., cited in <u>Honolulu Star Bulletin</u>, April 30, 1991, p. D-1.

Table 420.-- FINANCE, INSURANCE, AND REAL ESTATE ESTABLISHMENTS WITH PAYROLL AND EMPLOYMENT: 1989

| SIC  | Major group  | Estab-<br>lishments   | Employ-<br>ment   |
|--|--|---|---|
| 60<br>602<br>603<br>61<br>62<br>63<br>64<br>65 | Total Depository institutions Commercial banks Savings institutions Nondepository institutions Security and commodity brokers Insurance carriers Insurance agents, brokers and service Real estate Holding and other investment offices Administrative and auxiliary | 3,513<br>418<br>201<br>168<br>280<br>56<br>257<br>318<br>2,043<br>129<br>12 | 34,240<br>8,728<br>5,899<br>2,290<br>2,266<br>582<br>3,932<br>3,031<br>13,049<br>1,561<br>1,091 |

Source: U.S. Bureau of the Census, <u>County Business Patterns 1989</u>, Hawaii, CBP-89-13 (October 1991), p. 10.

Table 421.-- GENERAL EXCISE TAX BASE FOR INTEREST AND INSURANCE SOLICITORS: 1980 TO 1990

[In thousands of dollars. Data are on a cash basis accounting]

| Year <u>1</u> /                      | Interest   | Insurance<br>solicitors  | Year <u>1</u> /                               | Interest  | Insurance solicitors                                |
|--------------------------------------|--|--|---|---|---|
| 1980<br>1981<br>1982<br>1983<br>1984 | 174,790<br>205,989<br>205,443<br>184,895<br>207,430<br>206,256 | 303,264<br>255,321<br>199,512<br>214,972<br>236,086<br>167,438 | 1986<br>1987<br>1988 2/<br>1989 2/<br>1990 2/ | 200,656<br>258,015<br>230,817<br>269,093<br>309,530 | 140,120<br>198,442<br>160,936<br>184,310<br>223,938 |

<sup>1/</sup> Calendar year in which reported, including 'prior years' reports. Income received in December is reported the following January, hence these annual totals generally refer to an "income year" ended November 30.

Source: Hawaii State Department of Taxation, "General Excise and Use Tax Base" (annual tabular release).

<sup>2/</sup> Data exclude tax base for unallocated collections, distributed before 1988.

Table 422.-- INSURANCE BUSINESS TRANSACTED IN HAWAII: 1984 TO 1989 [Includes data for all insurance companies, life or other, authorized in Hawaii]

| Year                                 | Number of<br>companies<br>authorized,<br>Dec. 31 | Premiums<br>paid<br>(\$1,000)  | Losses,<br>claims and<br>benefits paid<br>(\$1,000)            | Cumulative net investments in Hawaii Dec. 31 1/ (\$1,000)                  |
|--------------------------------------|--|--|--|--|
| 1984<br>1985<br>1986<br>1987<br>1988 | 730<br>752<br>752<br>782<br>805<br>807           | 967,105<br>1,132,282<br>1,307,192<br>1,456,508<br>1,484,743<br>1,572,949 | 530,200<br>592,550<br>611,105<br>694,331<br>787,603<br>842,917 | 2,704,084<br>2,680,318<br>3,060,664<br>2,864,352<br>3,082,836<br>3,261,900 |

<sup>1/</sup> Does not include balances in Hawaii banks.

Table 423.-- LIFE INSURANCE BUSINESS TRANSACTED IN HAWAII: 1984 TO 1989 [Including fraternal benefit societies]

| Year                                 | Number of<br>companies<br>authorized<br>in Hawaii,<br>Dec. 31 | Face value of policies written 1/(\$1,000)                                 | Insurance in force, Dec. 31 2/ (\$1,000)   | Premiums<br>(\$1,000)  | Losses, claims, and benefits paid (\$1,000)                    |
|--------------------------------------|---|--|--|--|--|
| 1984<br>1985<br>1986<br>1987<br>1988 | 401<br>417<br>424<br>446<br>465<br>465                        | 6,294,746<br>6,965,896<br>8,118,761<br>8,202,902<br>7,856,086<br>5,890,849 | 28,060,450<br>30,478,068<br>33,463,090<br>37,429,250<br>41,060,540<br>35,461,017 | 257,611<br>302,554<br>309,649<br>354,952<br>348,614<br>325,467 | 168,487<br>199,101<br>175,205<br>217,871<br>207,391<br>221,071 |

Includes insurance revived, increased, or transferred. 1/ Includes insurance 1/2/ Excludes annuities.

Source: Hawaii State Department of Commerce and Consumer Affairs, Report of the Insurance Commissioner of Hawaii (annual).

Source: Hawaii State Department of Commerce and Consumer Affairs, Report of the Insurance Commissioner of Hawaii (annual), and records.

Table 424.-- INSURANCE PREMIUMS AND LOSSES PAID, BY CLASS OF INSURANCE: 1989

## [Dollars]

| Class of insurance  | Premiums   | Losses, claims, and benefits paid  |
|---|--|--|
| All classes   | 1,572,949,255  | 842,916,666  |
| Life 1/ Fraternal Fire, marine, casualty, and miscell: Accident and health Fire Allied lines 2/ Homeowners multiple peril Commercial multiple peril Private passenger auto no-fault Other private passenger auto liability Commercial auto no-fault Other commercial auto liability Private passenger auto physical damage Commercial auto physical damage Workers' compensation Other liability Medical malpractice Financial Guaranty Glass Burglary and theft Boiler and machinery Fidelity and surety Ocean marine Inland marine Earthquake | 322,044,739 3,422,064  127,009,368 15,287,675 10,756,093 54,645,701 86,985,360 71,874,367  191,360,144 6,729,556 57,643,164  118,545,486 14,982,004 240,268,071 105,114,600 17,776,972 1,708,259 108,775 359,366 2,045,583 23,299,129 3,512,181 17,447,892 333,983 | 219,508,259<br>1,562,393<br>68,189,384<br>6,283,545<br>1,960,001<br>22,162,138<br>27,052,954<br>58,737,063<br>129,154,460<br>4,342,710<br>35,232,795<br>62,370,446<br>7,795,217<br>130,235,256<br>26,294,338<br>6,911,490<br>47<br>38,487<br>55,768<br>170,103<br>1,062,892<br>5,999,477<br>3,068,092<br>5,600 |
| All other 3/ Surplus lines  | 35,959,979<br>43,728,744   | 20,401,345<br>4,322,406  |

Source: Hawaii State Department of Commerce and Consumer Affairs, Report of the Insurance Commissioner of Hawaii, 1990, p. 6.

 $<sup>\</sup>frac{1}{2}$  Excludes annuities and premiums for insurance on nonresidents. Includes extended coverage; tornado, windstorm and hail; sprinkler and water damage; explosion, riot and civil commotion; growing crops; flood; rain; and damage from aircraft and vehicle.

<sup>3/</sup> Aircraft (all risks); title, credit, mortgage guaranty; livestock; farmowners multiple peril; contact lens.

Table 425.-- INSURANCE BUSINESS TRANSACTED IN HAWAII, BY LOCATION OF HOME OFFICE: 1989

[Money amounts in millions of dollars. For insurance companies authorized to do business in Hawaii]

| Subject   | All<br>companies | Domestic<br>com-<br>panies <u>1</u> / | Foreign<br>com-<br>panies <u>2</u> / | Alien companies 3/ (U.S. business only) |
|---|------------------|---------------------------------------|--------------------------------------|---|
| Number of companies, Dec. 31                                      | 807              | 20                                    | 770                                  | 17                                      |
| Financial condition, Dec. 31: Assets Liabilities exc. capital and | 1,580,703.6      | 1,336.1                               | 1,543,822.7                          | 35,544.8                                |
| surplusPolicyholder's surplus inc.                                | 1,409,980.9      | 1,038.3                               | 1,375,785.6                          | 33,157.0                                |
| capital   | 170,722.6        | 297.7                                 | 168,037.2                            | 2,387.8                                 |
| Capital   | 4,178.8          | 24.4                                  | 4,125.1                              |   |
| Net gain or loss  | -3,016.4         | -2.5                                  | -2,611.7                             | -402.2                                  |
| Hawaii business:  | ,                |                                       |                                      |   |
| Direct premiums written   | 1,759.7          | 543.8                                 | 1,172.3                              | 43.6                                    |
| Claims and benefits paid  | 962.6            | 281.6                                 | 658.0                                | 23.1                                    |
| Investments in Hawaii, Dec. 31 4/<br>Mortgage loans (principal    | 3,261.9          | 243.8                                 | 3,005.3                              | 12.8                                    |
| indebtedness)   | 997.9            | 127.8                                 | 867.1                                | 3.0                                     |
| Collateral loans (amount lent)                                    | 2.0              | 1.9                                   | .1                                   | -                                       |
| State and county bonds $5/\ldots$                                 | 905.0            | 23.1                                  | 880.9                                | 1.1                                     |
| Utilities stocks and bonds <u>5/</u> Industrial and misc. stocks  | 309.6            | 24.4                                  | 277.5                                | 7.8                                     |
| and bonds $5/\ldots$  | 909.9            | 58.5                                  | 850.7                                | .8                                      |
| Real estate $\overline{\underline{5}}/\dots$                      | 137.4            | 8.2                                   | 129.0                                | .2                                      |
| Balances in Hawaii banks  | 33.1             | 29.8                                  | 3.2                                  | .02                                     |

<sup>1/</sup> A domestic insurer is one formed under the laws of Hawaii.  $\overline{2}/$  A foreign insurer is one formed under the laws of any State of the United States (including the District of Columbia and Commonwealth of Puerto Rico) other than Hawaii.

<sup>3/</sup> An alien insurer is one formed under the laws of a nation other than the United States.

<sup>4/</sup> Does not include balances in Hawaii banks.

<sup>5/</sup> Market value less encumbrances for real estate.

Source: Hawaii State Department of Commerce and Consumer Affairs, Report of the Insurance Commissioner of Hawaii, 1990, pp. 10, 12, 14, 15, 38 and 39.

Table 426.-- HEALTH PLANS: 1987 TO 1990

| Subject   | 1987                          | 1988                          | 1989                          | 1990                          |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| BestCare: 1/ Members covered, Dec. 31 2/ Premium revenue 3/ (\$1,000)   | 3,197<br>1,573                | 5,970<br>2,948                | 5,730<br>3,214                | •••                           |
| Hawaii Medical Service Association: $\underline{4}$ / Persons covered, Dec. 31 $\underline{2}$ / Membership dues $\underline{3}$ / (\$1,00 $\overline{0}$ ) | 555,394<br>433,826            | 557,594<br>485,955            | 577,725<br>566,655            | 605,127<br>660,623            |
| Island Care: 1/ Persons covered, Dec. 31 2/ Membership dues 3/ (\$1,000)  | 16,771<br>12,970              | 18,469<br>13,638              | 17,619<br>11,605              | 22,337<br>22,709              |
| Kaiser Foundation Health Plan: Persons covered2/ Annual average  Dec. 31  Membership dues 3/ (\$1,000)  | 141,396<br>147,067<br>102,719 | 155,539<br>162,060<br>108,191 | 170,772<br>176,298<br>130,744 | 179,450<br>182,580<br>165,145 |
| Commercial carrier premiums for accident and health insurance (\$1,000)   | 105,341                       | 120,661                       | 127,009                       | (NA)                          |

NA Not available.

<sup>1/</sup> BestCare combined with Island Care in 1990.

2/ Subscribers and dependents, whether on a group or individual basis.

3/ Includes both employers' and employees' contributions.

4/ Includes both Straub Plan and Pacific Health.

Source: Data provided by BestCare, Hawaii Medical Service Association, Island Care, and Kaiser Foundation Health Plan, Inc.; Report of the Insurance Commissioner (annual).

Table 427.-- MEDICAL INSURANCE COVERAGE OF OAHU RESIDENTS: 1991

[Based on a telephone survey of 508 Oahu residents,
October 3-12, 1991]

| Subject   | Percent             |
|---|---------------------|
| Percent of all residents Covered by medical insurance   | 98<br>69<br>29<br>2 |
| Percent of insured residents with coverage Through plans provided by their employers Through spouses' employers | 73<br>15            |

Source: Survey by Omnitrak/Hawaii Inc. cited in Honolulu Star-Bulletin, December 10, 1991, p. C-1.

Table 428.-- FIRES AND FIRE LOSSES, FOR OAHU: 1981 TO 1991
[Years ended June 30]

| Year                                 | Fires  | Losses (\$1,000)  | Year                         | Fires                                     | Losses (\$1,000)                             |
|--------------------------------------|--|---|------------------------------|---|--|
| 1981<br>1982<br>1983<br>1984<br>1985 | 7,564<br>6,518<br>6,982<br>6,666<br>6,377<br>4,367 | 15,071<br>11,394<br>10,751<br>11,363<br>10,700<br>9,172 | 1987<br>1988<br>1989<br>1990 | 4,835<br>2,966<br>3,327<br>3,487<br>3,248 | 9,582<br>6,632<br>13,272<br>18,972<br>13,408 |

Source: 1984-1985 Annual Report of the Fire Department, City and County of Honolulu, p. 26, and records.

Table 429.-- FIRES, FIRE DEATHS, AND FIRE LOSSES, BY COUNTIES: 1987 TO 1991

[Years ended June 30]

| Subject and year            | State<br>total                                 | Hono-<br>lulu                                | Hawaii                                    | Kauai                             | Maui                                      |
|-----------------------------|--|--|---|-----------------------------------|---|
| Number of fires: 1987       | 6,036<br>4,817<br>5,137<br>5,722<br>5,949      | 4,835<br>2,966<br>3,327<br>3,487<br>3,248    | 558<br>599<br>625<br>854<br>934           | 205<br>216<br>245<br>228<br>253   | 438<br>1,036<br>940<br>1,153<br>1,514     |
| Fire deaths: 1987           | 6<br>7<br>12<br>4<br>4                         | -<br>5<br>11<br>3<br>4                       | 1<br>-<br>1<br>1<br>-                     | 1<br>2<br>-<br>-                  | 4<br>-<br>-<br>-                          |
| Fire losses (\$1,000): 1987 | 14,010<br>13,351<br>19,546<br>26,764<br>24,517 | 9,582<br>6,632<br>13,272<br>18,972<br>13,408 | 2,599<br>4,454<br>3,384<br>2,370<br>2,355 | 290<br>802<br>707<br>793<br>1,286 | 1,539<br>1,463<br>2,183<br>4,629<br>7,468 |

Source: Compiled by Hawaii State Department of Business, Economic Development & Tourism from Honolulu Fire Department, Hawaii County Fire Department, Kauai Fire Department, and Maui County Department of Fire Control.

Table 430.-- CHARACTERISTICS OF BUSINESS ESTABLISHMENTS: 1979 TO 1989 [Data refer to establishments with taxable payrolls. Coverage excludes government and self-employed workers]

|      | Number  | Payroll (\$1,000)   |   |  | Number of establishments, by employment-size class 2   |  |   |  |
|------|---|---|---|--|--|--|---|--|
| Year | of em-<br>ployees <u>1</u> /  | First<br>quarter Annual   |   | Tota1  | 1 to<br>4  | 5 to 9   |   |  |
| 1979 | 302,763<br>314,106<br>312,195<br>309,546<br>308,627<br>318,635<br>331,196<br>345,167<br>363,491<br>382,943<br>410,745 | 930,3<br>984,0<br>1,026,3<br>1,094,4<br>1,192,4<br>1,268,1<br>1,382,3<br>1,506,9<br>1,710,7     | 809,676 3,451,980<br>930,312 3,849,636<br>984,003 4,092,561<br>026,323 4,264,863<br>094,458 4,505,090<br>192,429 4,824,535<br>268,106 5,271,750<br>382,381 5,790,531<br>506,971 6,304,798<br>710,738 7,242,782<br>924,365 8,253,134 |  | 20,621<br>21,125<br>21,264<br>21,655<br>24,519<br>25,093<br>25,742<br>26,212<br>27,281<br>27,938<br>28,443 | 10,568<br>10,928<br>10,969<br>11,095<br>13,320<br>13,588<br>14,058<br>14,070<br>14,508<br>14,570<br>14,736 | 4,285<br>4,346<br>4,337<br>4,592<br>5,039<br>5,225<br>5,261<br>5,474<br>5,705<br>5,971<br>6,006 |  |
|      | Number of e   | establish   | men   | ts b   | y employ   | ment-siz   | e class   | 2/Con.   |
| Year | 10 to<br>19   | 20 to<br>49   | 50<br>99  | to<br>9  | 100 to<br>249  | 250 to<br>499  | 500 to<br>999   | 1,000 or<br>more   |
| 1979 | 2,866<br>2,868<br>2,973<br>2,921<br>3,093<br>3,167<br>3,181<br>3,306<br>3,515<br>3,684<br>3,805                       | 1,864<br>1,906<br>1,905<br>2,005<br>2,001<br>1,990<br>2,084<br>2,128<br>2,246<br>2,379<br>2,443 | 60<br>64<br>60<br>70<br>73<br>78<br>80  | 53<br>66<br>63<br>48<br>67<br>09<br>34<br>84<br>04<br>14 | 281<br>311<br>309<br>296<br>305<br>313<br>314<br>331<br>388<br>386<br>427                                  | 54<br>55<br>63<br>56<br>51<br>52<br>58<br>68<br>62<br>77<br>86   | 31<br>26<br>28<br>24<br>26<br>34<br>37<br>33<br>34<br>36  | 19<br>19<br>17<br>18<br>17<br>15<br>15<br>18<br>19<br>21<br>26 |

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

<sup>1/</sup> For week including March 12.
2/ Data for 1983 and later years refer to establishments active anytime during the year; data for 1982 and earlier years refer to establishments in business at the end of the year.

Table 431.-- CHARACTERISTICS OF BUSINESS ESTABLISHMENTS, BY COUNTIES: 1988 AND 1989

[Excludes government employees and self-employed persons]

|                 | Number<br>of                           | Number                                      | Payroll  | (\$1,000)   |
|-----------------|--|---|--|---|
| Year and county | establish-<br>ments <u>1</u> /         | employ-<br>ees <u>2</u> /                   | First<br>quarter                                 | Annua 1   |
| 1988            |  |   |  |   |
| State total     | 27,938                                 | 382,943                                     | 1,710,738  | 7,242,782   |
| Hawaii          | 3,187<br>20,395<br>1,389<br>2,958<br>9 | 32,679<br>297,324<br>17,089<br>35,781<br>70 | 115,444<br>1,393,351<br>65,725<br>135,831<br>387 | 490,291<br>5,904,887<br>273,585<br>572,507<br>1,512 |
| 1989            |  |   |  |   |
| State total     | 28,443                                 | 410,745                                     | 1,924,365  | 8,253,134   |
| Hawaii          | 3,194<br>20,699<br>1,445<br>3,096<br>9 | 34,871<br>317,941<br>18,473<br>39,375<br>85 | 134,968<br>1,553,267<br>74,284<br>161,248<br>598 | 583,402<br>6,675,441<br>307,303<br>684,777<br>2,211 |

<sup>1/</sup> Data refer to establishments active anytime during the year.

2/ For week including March 12.

Source: U.S. Bureau of the Census, County Business Patterns,

1989, Hawaii, CBP-89-13 (October 1991), p. 19.

Table 432.-- CHARACTERISTICS OF BUSINESS ESTABLISHMENTS, BY MAJOR INDUSTRY GROUP: 1989

[Excludes government and self-employed workers. Based on 1987 Standard Industrial Classification Manual and thus not comparable to 1987 and earlier data reported in previous editions, which were based on the 1972 SIC Manual]

| Major industry group  | Number of establishments 1/   | Number of employees <u>2</u> /  | Annual payroll (\$1,000)  |
|---|---|---|---|
| Total   | 28,443  | 410,745   | 8,253,134   |
| Agricultural services, forestry, fishering Mining Construction Manufacturing 3/ Food and kindred products Apparel and other textile products Printing and publishing Transportation and public utilities Wholesale trade Retail trade 3/ Food stores Eating and drinking places Finance, insurance, real estate Services 3/ Hotels and other lodging places Health services Unclassified establishments | 253 7 2,080 971 212 158 187 1,194 1,965 7,280 898 2,204 3,513 8,950 265 2,092 2,230 | 1,891<br>109<br>26,036<br>22,886<br>10,130<br>2,954<br>3,508<br>39,169<br>22,257<br>110,284<br>13,931<br>45,732<br>34,240<br>147,800<br>36,794<br>32,899<br>6,073 | 36,122<br>4,372<br>878,678<br>492,781<br>202,148<br>36,395<br>89,940<br>1,026,169<br>539,954<br>1,398,270<br>179,639<br>433,768<br>845,735<br>2,933,456<br>626,047<br>908,434<br>97,597 |

<sup>1/</sup> Data refer to establishments active anytime during the year.

2/ For week including March 12.

3/ Includes subgroups not shown separately.

Source: U.S. Bureau of the Census, County Business Patterns, 1989, Hawaii, CBP-89-13 (October 1991), pp. 1-2.

Table 433.-- CHARACTERISTICS OF BUSINESS ESTABLISHMENTS, BY EMPLOYMENT-SIZE CLASS: 1989

[Excludes government employees and self-employed persons]

| Employment-size class | Number of<br>establishments                  | Number of employees  | Annual<br>payroll<br>(\$1,000)  |
|-----------------------|--|--|---|
| Total                 | 28,443                                       | 410,745  | 8,253,134   |
| 1 to 4                | 14,736 6,006 3,805 2,443 874 427 86 40 1/ 26 | 26,152<br>39,671<br>51,578<br>73,472<br>58,959<br>62,959<br>28,849<br>25,766<br>43,339 | 647,270<br>718,137<br>936,433<br>1,314,681<br>1,096,509<br>1,308,793<br>578,937<br>492,406<br>1,159,968 |

1/ 1,000-1,499 employees, 16 establishments; 1,500-2,499, 7
establishments; 2,500-4,999, 3 establishments.
 Source: U.S. Bureau of the Census, County Business Patterns,
1989, Hawaii, CBP-89-13 (October 1991), pp. 3, 14, and 18.

Table 434.-- CHARACTERISTICS OF BUSINESS AND PROFESSIONAL FIRMS, BY COUNTIES: 1990-1991

| Characteristic  | State<br>total   | Honolulu   | Maui  | Kauai  | Hawaii  |
|---|--|--|---|--|---|
| Business type, total 1/ Corporation Partnership Proprietorship  Employees, total 1/ 1 to 4 5 to 9 10 to 19 20 to 49 50 to 99 100 to 199 200 to 499 500 to 999   | 25,685<br>15,555<br>1,254<br>8,876<br>25,246<br>13,794<br>4,594<br>2,890<br>2,254<br>902<br>451<br>224<br>68                 | 18,426<br>11,565<br>846<br>6,015<br>17,912<br>9,466<br>3,238<br>2,132<br>1,722<br>694<br>366<br>177<br>53                  | 2,714<br>1,585<br>154<br>975<br>2,819<br>1,650<br>528<br>287<br>208<br>83<br>35<br>17 | 1,463<br>752<br>89<br>622<br>1,472<br>862<br>256<br>166<br>101<br>52<br>22<br>11 | 3,081<br>1,653<br>165<br>1,263<br>3,042<br>1,815<br>572<br>305<br>223<br>73<br>28<br>19                 |
| 1,000 and over  Sales volume, total 1/ Under \$500,000 \$500,000 to \$999,999 \$1.0 to \$4.9 million \$5.0 to \$9.9 million \$10.0 to \$24.9 million \$25.0 million and over  Year established, total 1/ 1820 to 1849 1850 to 1899 1900 to 1949 1950 to 1959 1960 to 1969 1970 to 1979 1980 and later | 18,704<br>13,168<br>2,295<br>1,988<br>448<br>405<br>400<br>25,400<br>27<br>152<br>1,826<br>1,762<br>3,433<br>8,007<br>10,193 | 13,864<br>9,542<br>1,754<br>1,549<br>353<br>324<br>342<br>18,729<br>15<br>107<br>1,323<br>1,420<br>2,707<br>5,709<br>7,448 | 1,665 1,140 201 198 57 44 25 2,391 5 14 157 116 280 977 842                           | 1,008 751 119 101 11 20 6 1,402 2 9 100 74 136 396 685                           | 2,166<br>1,734<br>221<br>140<br>27<br>17<br>27<br>2,877<br>5<br>22<br>246<br>152<br>310<br>925<br>1,217 |

<sup>1/</sup> For the entire State, 34,400 firms were surveyed. Distributions exclude non-responding firms and those for which item (typically sales volume) was not applicable.

Source: Hawaii Business Directory, Inc., Hawaii Business Directory 1990-91 (April 1991), pp. 5-10.

Table 435.-- REGISTERED CORPORATIONS AND PARTNERSHIPS: 1987 TO 1991

### [Excludes eleemosynary corporations]

| Subject   | 1988   | 1989   | 1990   | 1991   |
|---|--------|--------|--------|--------|
| Domestic (Hawaii) corporations: Formed 1/ Dissolved or merged 2/ On record, June 30 37                    | 3,459  | 3,791  | 3,822  | 3,559  |
|   | 239    | 583    | 6,589  | 2,560  |
|   | 31,379 | 34,587 | 31,844 | 32,943 |
| Foreign (non-Hawaii) corporations: Qualified 1/ Withdrawn, merged, or cancelled 2/. On record, June 30 3/ | 692    | 812    | 858    | 770    |
|   | 185    | 228    | 1,183  | 287    |
|   | 5,327  | 5,911  | 5,665  | 5,903  |
| Partnerships:  Registered 1/  Dissolved or cancelled 2/  On record, June 30 3/                            | 1,367  | 1,409  | 1,575  | 1,430  |
|   | 645    | 688    | 3,098  | 1,423  |
|   | 9,693  | 10,414 | 8,311  | 8,229  |

 $<sup>\</sup>frac{1}{2}$  Annual totals for fiscal years ended June 30. Annual totals for fiscal years ended June 30. Annual fluctuations may partly reflect the sporadic purging of defunct firms from the registration files.

<sup>3/</sup> Number on record may be inconsistent with data on components of change, reflecting inaccuracy in manual tabulation.

Source: Hawaii State Department of Commerce and Consumer Affairs, Business Registration Division, October 24, 1991.

Table 436.-- MAJOR CORPORATE FAMILIES HEADQUARTERED IN HAWAII: 1991

[Includes major ultimate parent companies headquartered in Hawaii and meeting the following criteria: Conduct business from two or more locations; net worth of \$500,000 or more; controlling interest in one or more subsidiary companies]

|   | Affili                  | Sales            |  |
|---|-------------------------|------------------|--|
| Ultimate parent company   | In<br>Hawaii            | On<br>Mainland   | (million dollars)                          |
| Parent companies with Mainland affiliates: Alexander & Baldwin, Inc | 7<br>2<br>2<br>4<br>185 | 4<br>2<br>5<br>1 | 84 6<br>84<br>69<br>25<br><u>2</u> / 3,783 |

NA Not available.

Table 437.-- AUXILIARIES AND CORPORATE HEADQUARTERS: 1987

[Auxiliaries are separate locations of multiunit companies providing administrative or other support services to the operating establishments of the same company]

| Subject         | Number<br>of auxil-<br>iaries | Em-<br>ployees | Annual payroll (\$1,000) |
|-----------------|-------------------------------|----------------|--------------------------|
| All auxiliaries | 1/ 215                        | 6,558          | 154,433                  |
|                 | 156                           | 5,259          | 131,471                  |
|                 | 79                            | 3,110          | 87,750                   |

<sup>1/</sup> By principal function: administration, 147; research, development, and testing, 2; warehousing, 30; other activities, 36.

<sup>1/</sup> Excludes divisions but includes all subsidiary companies.

<sup>2/</sup> Excludes sales of 15 companies not reporting sales.

Source: Dun & Bradstreet, Inc., Dun's Marketing Services, America's Corporate Families 1991, Vol. 1 (1991).

Source: U.S. Bureau of the Census, 1987 Enterprise Statistics, Auxiliary Establishments, ES87-2 (December 1990), tables 2 and 3.

Table 438.-- CHARACTERISTICS OF CORPORATIONS, PARTNERSHIPS, AND PROPRIETORSHIPS: 1983, 1985, AND 1987

[Money amounts in millions of dollars]

| Subject   | 1983   | 1985   | 1987  |
|---|--|--|---|
| CORPORATIONS 1/   |  |  |   |
| Number of corporations Taxable Nontaxable Business receipts Taxable corporations Nontaxable corporations Taxable income, excluding net losses 2/                                    | 18,420<br>8,040<br>10,380<br>21,072<br>12,368<br>8,704<br>682.8            | 19,513<br>8,708<br>10,805<br>22,714.3<br>12,554.7<br>10,159.6<br>845.7               | 19,493<br>9,404<br>10,089<br>26,583<br>17,753<br>8,830<br>1,114.3                   |
| PARTNERSHIPS  |  |  |   |
| Number of partnerships With net profit With net loss Number of partners Business receipts Businesses with net profit Businesses with net loss Net profit reported Net loss reported | 7,378 3,453 3,925 83,313 1,737.9 1,065.8 672.2 358.1 366.3                 | 7,398<br>3,389<br>4,009<br>3/80,208<br>1,918.1<br>1,294.0<br>624.1<br>431.1<br>439.1 | 6,752<br>3,697<br>3,055<br>146,170<br>3,510.2<br>2,800.5<br>709.7<br>906.0<br>548.5 |
| PROPRIETORSHIPS   |  |  |   |
| Number of proprietorships With net profit With net loss Business receipts Businesses with net profit Businesses with net loss Net profit reported Net loss reported                 | 54,182<br>36,330<br>17,852<br>1,236.2<br>1,050.6<br>185.7<br>254.0<br>63.9 | 59,475<br>41,510<br>17,965<br>1,579.1<br>1,439.4<br>139.7<br>321.3<br>53.3           | 61,733<br>46,870<br>14,863<br>1,767.7<br>1,584.4<br>183.3<br>444.2<br>66.4          |

Includes domestic, foreign, and small business corporations.

<sup>2/</sup> Includes taxable income reported by small business corporations, taxable to individual stockholders only.

<sup>3/</sup> For Oahu only.
Source: Hawaii State Department of Taxation, Hawaii Income
Patterns, Corporation, Proprietorship, Partnership (biennial), and records.

Table 439.-- LARGEST PUBLIC AND PRIVATE CORPORATIONS: [Data may include sales and employment on the Mainland or abroad]

| Rank<br>in<br>sales                                   | Company  | Year<br>founded <u>1</u> /  | Sales<br>(million<br>dollars   | Employees   |
|---|--|---|--|---|
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11 | Pacific Resources Inc. Castle & Cooke Hawaiian Electric Industries, Inc. Bancorp Hawaii, Inc. Alexander & Baldwin, Inc. Hawaii Medical Service Assn. (HMSA) DFS Hawaii Chevron USA Inc. (Hawaii Division) First Hawaiian Inc. GTE Hawaiian Tel Amfac/JMB Hawaii 2/ | 1904/1970<br>1851<br>1891/1983<br>1897/1971<br>1870/1900<br>1938<br>1962<br>1904<br>1858/1974<br>1883<br>1849 | 3,900<br>3,003<br>1,010<br>954<br>758<br>661<br>600<br>556<br>541<br>539<br>(NA) | 1,215 51,000 3,300 4,162 3,123 1,100 1,300 285 2,300 4,185 (NA) |

NA Not available.

Source: Tom Yoneyama, 'The Hawaii Business Top 250," Hawaii Business, August 1991, pp. 74 and 76.

<sup>1/</sup> If two years are given, the first is the founding date of the original company, the second is when it became a holding company, was sold, or legally changed its name.

2/ Ranked 6th in 1989.

Table 440.-- NET INCOME OR LOSS AND TOTAL REVENUES OF SELECTED COMPANIES: 1989 AND 1990

[Based on 1990 ranks for reporting companies]

|                                     | Net incom                   | e or loss                    | Revenues                  |       |  |
|-------------------------------------|-----------------------------|------------------------------|---------------------------|-------|--|
|                                     | (\$1,                       | 000)                         | (\$1,000,000)             |       |  |
| Company                             | 1989                        | 1990                         | 1989                      | 1990  |  |
| Largest net incomes: Castle & Cooke | 94,924<br>202,708<br>79,860 | 120,455<br>115,189<br>95,688 | 2,717.8<br>846.3<br>761.5 |       |  |
| Largest net losses: HAL Inc         | 46 <b>,</b> 930             | 121,287                      | 348.9                     | 340.7 |  |
|                                     | 70                          | 4,773                        | 64.7                      | 63.4  |  |

NA Not available.

Source: "The Hawaii Business Top 250," <u>Hawaii Business</u>, August 1991, p. 52.

Table 441.-- SMALL BUSINESS SHARE OF PRIME CONTRACT DOLLARS, BY MAJOR PRODUCER SERVICE CATEGORY: FISCAL YEAR 1988

[Data refer to contracts in which the principal place of performance is Hawaii]

| Major product or service category   | Amount to small business (\$1,000) | Percent<br>to small<br>business     |
|---|------------------------------------|-------------------------------------|
| All products and services Research and development Construction Other services Supplies and equipment | 27,360<br>232,326<br>202,708       | 48.2<br>16.5<br>85.6<br>32.5<br>3.6 |

Source: The State of Small Business: A Report of the President Transmitted to the Congress 1990, pp. 219-221.

Table 442. -- MINORITY-OWNED FIRMS: 1987

[Firms are classified as minority owned if the sole owner or at least half of the partners or shareholders (limited to the 10 partners or shareholders received) were members of specified minority groups]

|  | <b>A1</b> 1        | l firms                      | Firms with paid employees |                              |                   |  |
|--|--------------------|------------------------------|---------------------------|------------------------------|-------------------|--|
| Minority <u>1</u> /                        | Firms              | Sales and receipts (\$1,000) | Firms                     | Sales and receipts (\$1,000) | Employ-<br>ees    |  |
| All firms Minority-owned: Black            | 60 <b>,</b> 928    | 6,522,000<br>12,310          | 10,589<br>52              | 5,342,000<br>7,429           | 65 <b>,</b> 058   |  |
| HispanicOther minorities                   | 1,226<br>31,406    | 58,098<br>1,662,269          | 177<br>4,443              | 41,838<br>1,114,878          | 542<br>15,094     |  |
| Aleut Eskimo                               | 6 11               | 6 32                         | -                         |                              | -                 |  |
| American Indian                            | 89<br>115<br>4,962 | 6,201<br>9,008<br>337,265    | 16<br>28<br>763           | 5,512<br>7,650<br>240,883    | 48<br>66<br>3,530 |  |
| Chinese                                    | 15,751<br>2,061    | 869,341<br>148,515           | 2,324<br>379              | 595,908<br>87,130            | 7,702<br>1,172    |  |
| Vietnamese<br>Filipino                     | 529<br>3,891       | 14,859<br>95,789             | 42<br>381                 | 5,892<br>50,294              | 78<br>801         |  |
| Hawaiian <u>2</u> /Other Asian and Pacific | 2,550              | 109,094                      | 359                       | 67,489                       | 1,011             |  |
| Islander                                   | 1,441              | 72,159                       | 151                       | 54,120                       | 686               |  |

<sup>1</sup>/ Persons of mixed race were instructed to report the race with which they most closely identified. Whites (Caucasians), although only 33.4 percent of the 1980 population of Hawaii, were treated as a non-minority group for census purposes.

2/ For the United States as a whole, Hawaiians owned 4,279 firms with

sales and receipts of \$221,176,000.

Source: U.S. Bureau of the Census, 1987 Economic Censuses, Survey of Minority-Owned Business Enterprises, MB87-1, Black (July 1990), table 2; MB87-2, Hispanic (April 1991), table 5; MB87-3, Asian American, American Indians, and Other Minorities (June 1991), tables 5 and 14.

Table 443.-- WOMEN-OWNED BUSINESSES: 1987

| Subject  | Total<br>firms | Women-<br>owned<br>firms <u>1</u> / | Percent women-owned 1/ |
|--|----------------|-------------------------------------|------------------------|
| All firms:  Number  Sales and receipts 2/  Firms with paid employees:  Number  Sales and receipts 2/  Employees  Annual payroll 2/ | 60,928         | 21,696                              | 35.6                   |
|  | \$6,522        | \$856,930                           | 13.1                   |
|  | 10,589         | 2,404                               | 22.7                   |
|  | \$5,342        | \$546,087                           | 10.2                   |
|  | 65,058         | 9,548                               | 14.7                   |
|  | \$913          | \$105,425                           | 11.5                   |

<sup>1/</sup> A firm is classified as women-owned if the sole proprietor or at least half of the partners or shareholders were women.

Table 444.-- BUSINESS CLIMATE INDEXES: 1989 TO 1991

|  | Rank <u>1</u> /     |                     |                     | Grade            |                  |                  |
|--|---------------------|---------------------|---------------------|------------------|------------------|------------------|
| Index  | 1989                | 1990                | 1991                | 1989             | 1990             | 1991             |
| Economic performance Business vitality Development capacity State policy | 2<br>38<br>13<br>24 | 2<br>38<br>13<br>34 | 3<br>44<br>14<br>29 | A<br>D<br>B<br>C | A<br>D<br>B<br>C | A<br>D<br>B<br>C |

<sup>1/</sup> Among the 50 States.

<sup>2</sup>/ Dollar amounts in millions for total firms and thousands for women-owned firms.

Source: U.S. Bureau of the Census, 1987 Economic Censuses, WB87-1, Women-Owned Businesses (August 1990), tables 2 and 11.

Source: The Corporation for Enterprise Development, The 1989
Development Report Card for the States (March 1989), The 1990 Development
Report Card for the States (April 1990), and The 1991 Development Report
Card for the States (April 1991).

Table 445.-- BUSINESS FAILURES: 1989 AND 1990

|                                 |                        |                        | Rank (50 States and | and D.C.) |                 |                   |
|---------------------------------|------------------------|------------------------|---------------------|-----------|-----------------|-------------------|
| Subject                         | 1989                   | 1990 <u>1</u> /        | Percent<br>change   | 1989      | 1990 <u>1</u> / | Percent<br>change |
| Firms<br>Liabilities <u>2</u> / | 170<br>41 <b>,</b> 269 | 147<br>22 <b>,</b> 599 | -13.5<br>-45.2      | 39<br>41  | 46<br>47        | 44<br>48          |

<sup>1/</sup> Preliminary.

Source: The Dun & Bradstreet Corp., Press Release, March 13, 1991.

Table 446.-- BUSINESS STARTS, 1986 AND 1987, AND FAILURES, 1988 AND 1989, BY INDUSTRY SECTOR

|                    | Sta   | ırts   | Fa  | Failures  |  |
|--------------------|---|--|---|---|--|
| Industry sector    | 1986  | 1987   | 1988  | 1989 <u>1</u> /                                     |  |
| Firms, all sectors | 1,071<br>31<br>-<br>104<br>83<br>52<br>133<br>326<br>56<br>285<br>1 | 997<br>20<br>-<br>83<br>80<br>47<br>108<br>370<br>62<br>221<br>6 | 178<br>2<br>-<br>10<br>2<br>4<br>11<br>19<br>3<br>127 | 170<br>-<br>-<br>3<br>1<br>3<br>2<br>11<br>4<br>146 |  |

<sup>1/</sup> Preliminary.

Source: The Dun & Bradstreet Corporation, Business Starts Record 1986/1987 (1988), pp. 3 and 16, and Business Failure Record 1988 Final 1989 Preliminary (1991?), pp. 4, 5, and 16.

 $<sup>\</sup>overline{2}$ / Dollar amounts in thousands.

## **COMMUNICATIONS**

This section presents statistics on the usage, finances, and operations of the Postal Service and of various communications media: telephone, radio, television, newspapers, periodicals, and books. Sections 12 and 15 contain employment and payroll data for communications establishments.

Hawaii is served by all major communications media. In 1991 it had 144 post offices and stations handling 473 million pieces of mail and accounting for postal receipts of \$151 million. There were 586,000 telephone access lines in service, 398,000 telephone homes, and uncounted millions of local, interisland, and transpacific calls in 1990. The 55 commercial, public and educational radio stations in the Islands in 1991 included 27 on the regular broadcast band and 28 FM stations. The State also had 21 television stations (19 commercial and 2 public), including satellites but excluding translators. Eight cable TV companies served 310,000 subscribers. An estimated 97 percent of all households in the State had television sets, and the average prime-time TV audience in May 1991 numbered 180,000 households. Island publishers printed nine daily newspapers, numerous magazines and other periodicals, and a wide diversity of books. Newspaper circulation reported by the two English-language dailies on Oahu averaged 191,000 in 1990-1991. Statistics on fax machines and cellular telephones are unavailable.

The major sources for statistics on communications are the reports and records of the U.S. Postal Service, Federal Communications

Commission, the CATV Division of the Hawaii State Department of Commerce and Consumer Affairs, Hawaiian Telephone Company, Audit Bureau of Circulations, and A. C. Nielsen Co. Earlier figures appear in <u>Historical Statistics of Hawaii</u>, Section 18. Data on communications for other states and for the nation as a whole are carried in <u>Statistical Abstract of the United States</u>: 1991, Section 18.

Table 447.-- POSTAL SERVICE: 1987 TO 1991 [Years ended September 30]

| Subject                         | 1987    | 1988    | 1989    | 1990    | 1991    |
|---------------------------------|---------|---------|---------|---------|---------|
| Post offices, Sept. 30          | 75      | 75      | 74      | 74      | 74      |
| Stations, Sept. 30 1/           | 69      | 72      | 74      | 70      | 70      |
| Gross postal receipts (\$1,000) | 107,946 | 119,740 | 129,177 | 136,087 | 151,429 |
| Pieces of mail 2/ (millions).   | 394     | 400     | 434     | 463     | 473     |

<sup>1/</sup> Includes both classified and contract stations (see following
2/ Originating in Hawaii. Excludes mail originating elsewhere.
Source: U.S. Postal Service, records. Includes both classified and contract stations (see following table).

Table 448.-- NUMBER OF POST OFFICES AND STATIONS, BY ISLANDS: SEPTEMBER 30, 1991

|             |                                | Post offices                |                             |                            |              |                            | Stations                    |  |
|-------------|--------------------------------|-----------------------------|-----------------------------|----------------------------|--------------|----------------------------|-----------------------------|--|
| Island      | Total                          | lst<br>class                | 2nd<br>class                | 3rd<br>class               | 4th<br>class | Classi-<br>fied <u>1</u> / | Con-<br>tract 2/            |  |
| State total | 144                            | 34                          | 29                          | 10                         | 1            | 34                         | 36                          |  |
| Hawaii      | 36<br>17<br>1<br>5<br>65<br>20 | 9<br>8<br>-<br>1<br>12<br>4 | 14<br>2<br>1<br>-<br>4<br>8 | 2<br>-<br>-<br>4<br>1<br>3 | 1            | 2<br>2<br>-<br>28<br>2     | 8<br>5<br>-<br>20<br>3<br>- |  |

<sup>1/</sup> Staffed by career postal employees. 2/ Operated under a contractual agreement between the Postal Service and an individual contractor.

Source: U.S. Postal Service, Honolulu Division, data supplied October 29, 1991.

Table 449.-- TELEPHONE ACCESS LINES, BY ISLAND AND TYPE: 1981 TO 1990

[As of December 31. Access lines represent the lines connecting customers to the network regardless of the ownership of the customer premises equipment. Business access includes key and coin system lines]

| A11  |  | By is  | sland  | By type  |  |  |
|--|--|--|--|--|--|--|
| Year   | access<br>lines  | 0ahu   | Other<br>islands   | Residence  | Business   | Other<br>types   |
| 1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 431,893<br>445,452<br>458,339<br>472,229<br>479,253<br>493,079<br>520,057<br>530,022<br>555,966<br>586,065 | 324,968<br>334,150<br>342,094<br>348,936<br>352,674<br>362,083<br>380,227<br>395,685<br>409,904<br>427,017 | 106,925<br>111,302<br>116,245<br>123,293<br>126,579<br>130,996<br>139,830<br>134,337<br>146,062<br>159,048 | 314,355<br>323,588<br>332,051<br>339,296<br>342,296<br>350,790<br>363,951<br>375,238<br>385,247<br>397,762 | 95,000<br>98,691<br>102,923<br>107,830<br>111,792<br>118,002<br>128,197<br>123,409<br>133,620<br>143,631 | 22,538<br>23,173<br>23,365<br>25,103<br>25,165<br>24,287<br>27,909<br>31,375<br>37,099<br>44,672 |

Source: GTE Hawaiian Telephone Company, data provided April 29, 1991.

Table 450.-- RESIDENTIAL TELEPHONES IN SERVICE, BY ISLANDS: 1989 AND 1990

[Estimates based on 1987 survey data reporting 1.74 telephones per residence access line]

| Islands                        | 1989                          | 1990                          |
|--------------------------------|-------------------------------|-------------------------------|
| State total Oahu Other islands | 670,330<br>494,611<br>175,719 | 692,106<br>504,215<br>187,890 |

Source: GTE Hawaiian Telephone Company, data provided April 29, 1991.

Table 451.-- LOCAL TELEPHONE CALLS: 1979 TO 1989
[In thousands. Data not available after 1989]

| Year                                 | Originating  | Completed  | Year                                 | Originating   | Completed   |
|--------------------------------------|--|--|--------------------------------------|---|---|
| 1979<br>1980<br>1981<br>1982<br>1983 | 1,830,954<br>1,957,427<br>1,857,938<br>1,892,430<br>1,928,486<br>2,050,778 | 1,186,458<br>1,468,070<br>1,393,454<br>1,419,322<br>1,446,365<br>1,538,084 | 1985<br>1986<br>1987<br>1988<br>1989 | 2,225,943<br>2,350,538<br>2,404,035<br>2,514,066<br>2,615,991 | 1,669,457<br>1,671,233<br>1,718,885<br>1,810,128<br>1,883,514 |

Source: GTE Hawaiian Telephone Company, records.

Table 452.-- HAWAIIAN TELEPHONE COMPANY OPERATIONS: 1988 TO 1990

| Subject  | 1988      | 1989      | 1990      |
|--|-----------|-----------|-----------|
| Operating revenues (\$1,000)  Net income (\$1,000)  Net investment in property, plant, and equipment (\$1,000)  Total assets (\$1,000)  Access lines 1/  Total salaries and wages (\$1,000)  Number of employees | 494,590   | 512,144   | 539,283   |
|  | 49,520    | 48,340    | 51,963    |
|  | 889,192   | 899,751   | 944,095   |
|  | 1,032,628 | 1,070,670 | 1,121,529 |
|  | 543,303   | 612,286   | 645,627   |
|  | 154,198   | 146,099   | 154,222   |
|  | 4,189     | 4,260     | 4,185     |

<sup>1/</sup> Data for 1989 and 1990 include intrastate private line loops, not reported for earlier years.

Source: GTE Hawaiian Tel 1990 Annual Report, p. 24.

Table 453.-- CABLE TELEVISION COMPANIES, SUBSCRIBERS, AND REVENUES: 1970 TO 1990

| Subject            | 1970 | 1975              | 1980                | 1985               | 1990               |
|--------------------|------|-------------------|---------------------|--------------------|--------------------|
| Companies, Dec. 31 | 12.1 | 10<br>54.6<br>··· | 10<br>128.7<br>16.2 | 9<br>220.4<br>33.0 | 8<br>310.3<br>54.7 |

 $<sup>\</sup>frac{1}{S}$  Gross revenue 1980, and basic service revenue thereafter. Source: Hawaii State Department of Commerce and Consumer Affairs, Cable Television Division, records.

Table 454.-- CABLE TELEVISION COMPANIES, SUBSCRIBERS, AND REVENUES, BY COUNTIES: 1989 AND 1990

|                                     | com                   | ber of panies . 31 <u>1</u> / | Subsc:<br>Dec                         | ribers,                               | Basic s<br>revenue                | service<br>(\$1,000)              |
|-------------------------------------|-----------------------|-------------------------------|---------------------------------------|---------------------------------------|-----------------------------------|-----------------------------------|
| County                              | 1989                  | 1990                          | 1989                                  | 1990                                  | 1989                              | 1990                              |
| State total                         | 8                     | 8                             | 292,638                               | 310,258                               | 52,449                            | 54,660                            |
| Hawaii<br>Maui<br>Honolulu<br>Kauai | 3<br>2<br>2<br>2<br>2 | 3<br>2<br>2<br>2<br>3         | 26,248<br>36,825<br>217,415<br>12,150 | 30,700<br>38,885<br>224,768<br>15,905 | 5,486<br>5,910<br>38,281<br>2,772 | 6,052<br>6,438<br>38,305<br>3,865 |

<sup>1</sup>/ State totals are unduplicated figures; one company provided service to three counties.

Source: Hawaii State Department of Commerce and Consumer Affairs, Cable Television Division, records.

Table 455. -- RADIO AND TELEVISION BROADCASTING STATIONS IN OPERATION, 1931 TO 1991, AND BY COUNTIES, 1991

|   | Comm                     | ercial st         | tations            | Non-commercial stations |                  |                  |
|---|--------------------------|-------------------|--------------------|-------------------------|------------------|------------------|
| Date and county   | AM                       | FM                | TV <u>1</u> /      | АМ                      | FM               | TV <u>1</u> /    |
| 1931: Jan. 1<br>1946: Jan. 1<br>1961: Jan. 1<br>1976: Jan. 1<br>1991: June 30 | 2<br>4<br>18<br>26<br>27 | -<br>1<br>6<br>24 | -<br>8<br>10<br>19 |                         | -<br>1<br>1<br>4 | -<br>-<br>2<br>2 |
| COUNTIES: 1991  Hawaii  | 5<br>3<br>17<br>2        | 6<br>6<br>10<br>2 | 6<br>4<br>9<br>-   |                         | -<br>1<br>3<br>- | -<br>1<br>1<br>- |

<sup>1/</sup> Includes satellites but excludes translators and cable television.  $\overline{2}/$  Includes one commercial AM station with studio on Oahu but

Source: Robert C. Schmitt, <u>Historical Statistics of Hawaii</u> (University Press of Hawaii, 1977), p. 482; Federal Communications Commission, Field Operations Bureau, Honolulu, July 25, 1991.

transmitter on Molokai.

Table 456.-- TELEVISION HOUSEHOLDS, BY GEOGRAPHIC AREA: 1990 AND 1991

|  |                            | January 19                 | 90                       | January 1991               |                            |                          |
|--|----------------------------|----------------------------|--------------------------|----------------------------|----------------------------|--------------------------|
| Subject                                  | State<br>total             | Oahu                       | Other<br>islands         | State<br>total             | 0ahu                       | Other<br>islands         |
| All households With television . Percent | 361,400<br>350,920<br>97.1 | 273,300<br>266,440<br>97.5 | 88,100<br>84,480<br>95.9 | 370,300<br>359,670<br>97.1 | 279,200<br>272,220<br>97.5 | 91,100<br>87,450<br>96.0 |

Source: Nielsen Station Index, Honolulu, Hawaii, February 1990 and February 1991, table 1.

Table 457.-- HOUSEHOLDS AND PERSONS VIEWING TELEVISION BY TIME OF DAY: 1989 TO 1991

[In thousands. Mean number of viewers, Sunday through Saturday]

|       |                             | Sign-on to sign-off Prime time 7 A.M. to 1 A.M. 6:30 P.M. to 10 P. |  |  |  |
|-------|-----------------------------|--|--|--|--|
| Year  | and month                   | Households <u>1</u> /  | Persons <u>2</u> /                                   | Households <u>1</u> /                                | Persons <u>2</u> /                                   |
| 1990: | Feb May Nov Feb Nov Feb May | 91<br>84<br>89<br>88<br>84<br>86<br>83<br>85                       | 143<br>134<br>137<br>145<br>129<br>135<br>126<br>133 | 195<br>178<br>180<br>190<br>174<br>177<br>184<br>180 | 343<br>324<br>310<br>353<br>301<br>306<br>317<br>316 |

 $\underline{1}$ / Average number with a TV set turned on.

 $\overline{2}$ / Average number of persons, 2 years and older, in TV households that are viewing any station.

Source: Nielsen Station Index, Honolulu, Hawaii, Daypart Summary, issued three times annually.

Table 458.-- COMMUNICATION AND RELATED ESTABLISHMENTS: 1989

| SIC   | Industry  | No. of<br>estab-<br>lish-<br>ments | SIC<br>code                                      | Industry   | No. of<br>estab-<br>lish-<br>ments |
|---|---|------------------------------------|--|--|------------------------------------|
| 27<br>271<br>272<br>273<br>274<br>48<br>481 | Printing and publishing Newspapers Periodicals Books Miscell publishing Communication Telephone | 17<br>23<br>8<br>10<br>115         | 482<br>483<br>484<br>489<br>5942<br>5731<br>7311 | Telegraph & other Radio, TV broadcast Cable, other pay TV Commun. services, n.e.c Book stores Advertising Advertising agencies | 14                                 |

Source: U.S. Bureau of the Census, County Business Patterns 1989, Hawaii, CBP-89-13 (October 1991), table 1b.

Table 459.-- BOOKS AND SCHOLARLY JOURNALS PUBLISHED BY THE UNIVERSITY OF HAWAII PRESS: 1988 TO 1991

|                      | Published titles <u>1</u> / |                          |                      |                       |  | Book<br>sales                                    |
|----------------------|-----------------------------|--------------------------|----------------------|-----------------------|--|--|
| Year                 | Cumulative total <u>2</u> / | In<br>print              | Books                | Scholarly<br>journals | Volumes sold 3/                          | revenues 3/<br>(dollars)                         |
| 1988<br>1989<br>1990 | 868<br>918<br>971<br>1,024  | 672<br>701<br>703<br>705 | 42<br>50<br>53<br>53 | 6<br>9<br>13<br>12    | 324,185<br>402,606<br>422,266<br>365,790 | 1,962,537<br>2,222,341<br>2,591,790<br>2,721,480 |

<sup>1/</sup> As of June 30. Excludes journals.

2/ Includes books and other media, but not journals.

3/ Year ended June 30.

Source: The University of Hawaii Press, Annual Report (annual) and records.

Table 460.-- AVERAGE PAID CIRCULATION OF DAILY AND SUNDAY ENGLISH-LANGUAGE NEWSPAPERS: 1987-88 TO 1990-91

[Averages for 12-month periods ended in March. Foreign-language daily newspapers, not included in this table, are the <u>Hawaii Hochi</u>, Japanese and English; <u>The Korea Times and Han Kook Ilbo</u>, Korean; and <u>United Chinese</u> Press, Chinese

| Newspaper  | 1987-88 | 1988-89 | 1989-90 | 1990-91 |
|--|---------|---------|---------|---------|
| Daily:  Honolulu Advertiser 1/  Honolulu Star-Bulletin 2/  Hawaii Tribune-Herald (Hilo) 3/  West Hawaii Today (Kailua-Kona) 4/  Maui News (Wailuku) 3/  Garden Island (Lihue) 5/ | 93,088  | 98,025  | 98,400  | 101,220 |
|  | 97,950  | 96,074  | 92,811  | 89,704  |
|  | 20,328  | 20,360  | 20,354  | 20,486  |
|  | 8,820   | 9,757   | 10,781  | 11,733  |
|  | 15,805  | 16,722  | 17,861  | 18,170  |
|  | 9,525   | 8,737   | 8,664   | 8,246   |
| Sunday morning: Sunday Star-Bulletin and Advertiser. Hawaii Tribune-Herald (Hilo) West Hawaii Today (Kailua-Kona) Maui News (Wailuku) Garden Island (Lihue)                      | 203,358 | 203,752 | 200,798 | 200,199 |
|  | 23,209  | 23,146  | 23,291  | 23,879  |
|  | 8,961   | 10,025  | 11,576  | 12,684  |
|  | 16,326  | 17,660  | 19,405  | 19,939  |
|  | 9,528   | 8,899   | 9,157   | 8,552   |

Mornings, Monday through Saturday.

<sup>2/</sup> Afternoons, Monday through Saturday.

Afternoons, Monday through Friday.

4/ Mornings, Monday through Friday.

5/ Afternoons, 4 times weekly (Monday, Wednesday, Thursday, and Friday). Source: Audit Bureau of Circulations data provided to DBED by newspaper publishers.

Table 461.-- POSTAGE RATES AND NEWSPAPER PRICES, FOR HONOLULU: 1981 TO 1991

[In cents. As of July 1]

|  | Domestic first-class Newsp<br>postage rates price              |  | paper<br>e <u>1</u> /                                    |  |   |
|--|--|--|--|--|---|
|  | Lett   | ers  | D  |  |   |
| Year   | First<br>ounce   | Each<br>added<br>ounce   | Postal<br>and<br>post<br>cards                           | Daily  | Sunda y   |
| 1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989<br>1990 | 18<br>20<br>20<br>20<br>22<br>22<br>22<br>25<br>25<br>25<br>29 | 17<br>17<br>17<br>17<br>17<br>17<br>17<br>20<br>20<br>20<br>20<br>23 | 12<br>13<br>13<br>13<br>14<br>14<br>14<br>15<br>15<br>15 | 25<br>25<br>25<br>25<br>35<br>35<br>35<br>35<br>35<br>35 | 75<br>100<br>100<br>100<br>100<br>100<br>125<br>125<br>125<br>125 |

 $\frac{1}{A}$  Street sales, for the <u>Honolulu Advertiser</u>, Honolulu Star-Bulletin, and <u>Sunday Star-Bulletin and Advertiser</u>.

Source: Postal rates from Statistical Abstract of the United States: 1990, p. 549, as updated by Postal Service Customer Information. Newspaper rates from Hawaii Newspaper Agency.

Table 462.-- HAWAIIAN TELEPHONE COMPANY RATES FOR SPECIFIED TYPES OF SERVICE, FOR HONOLULU: 1981 TO 1991

[In dollars. As of July 1. Including state and federal excise tax where applicable]

|  | Local call,  | Honolulu   | to Hilo  | Honolulu to  | Monthly charge, indiv.   |  |
|--|--|--|--|--|--|--|
| Year   | pay<br>phone   | Direct<br>dialing <u>1</u> /   | Through operator <u>2</u> /  | Direct<br>dialing <u>l</u> /   | Through operator <u>2</u> /  | res. line 3/   |
| 1981<br>1982<br>1983<br>1984<br>1985<br>1986 4/<br>1987 4/<br>1988 4/<br>1989 4/<br>1990 4/<br>1991 4/ | 0.15<br>0.15<br>0.15<br>0.15<br>0.25<br>0.25<br>0.25<br>0.25<br>0.25<br>0.25 | 1.06<br>1.05<br>1.07<br>1.07<br>1.14<br>1.45<br>1.11<br>1.04<br>1.00<br>0.98<br>1.35 | 1.89<br>1.87<br>1.91<br>1.91<br>2.06<br>2.06<br>2.00<br>2.00<br>2.00<br>2.00<br>2.00 | 1.64<br>1.74<br>1.77<br>1.66<br>1.54<br>1.32<br>0.98<br>0.92<br>0.76<br>0.78 | 2.60<br>2.63<br>3.37<br>3.25<br>3.13<br>2.91<br>2.53<br>2.47<br>3.26<br>3.50<br>2.50 | 11.63<br>11.51<br>11.31<br>11.74<br>12.77<br>14.10<br>14.10<br>14.10<br>14.10<br>13.50 |

 $<sup>\</sup>frac{1}{2}$  Daytime calls, first three minutes. Station-to-station operator-handled daytime weekday calls, first three minutes.

<sup>3/</sup> Telephone rental included through February 5, 1983, and excluded thereafter. In 1991, the monthly rental charge for a standard dial desk-top telephone was \$3.00, and the federal subscriber line charge was \$3.50.

<sup>4/</sup> AT&T Communications, Inc., rates quoted for Honolulu to California

Source: Hawaiian Telephone Company, records, and AT&T Communications, Inc., records.

## **ENERGY AND SCIENCE**

This section presents statistics on fuel resources, energy production and consumption, the electric and gas utility industries, research and development, and scientific, engineering, and technological resources. Related series are cited in Sections 12 (on utility employment), 14 (prices), and 18 (gasoline consumption).

Total energy consumption in 1989 amounted to 299 trillion British thermal units, compared with 255 trillion Btu a decade earlier. Fully 98.3 percent in 1989 was provided by petroleum. Transportation, including aviation fuels, accounted for 51 percent of the total. Total expenditures for fuels and electricity in 1988 were \$1.66 billion.

Electricity sales amounted to 8.3 billion kilowatt-hours in 1990, a total that has increased 31 percent since 1980. Manufactured gas sales reached 34 million therms in 1989, four percent below the figure ten years earlier. Residential rates in 1990 averaged 10.3 cents per kilowatt-hour and \$1.63 per therm. Average residential use (7,247 kWh and 192 therms in 1990) has declined since the early 1970s.

The liquid fuel tax base for 1990 was approximately 1.3 billion gallons, compared with 940 million in 1980. The 1990 total included 375 million gallons of gasoline, 751 million of aviation fuel, and 176 million of diesel oil. The average price for automotive gasoline was \$1.48 per gallon during 1990.

The State is well served with scientific resources. Especially noteworthy is the cluster of large astronomical telescopes at the summits of Mauna Kea and Haleakala--twelve major facilities, including the world's most powerful. Federal research and development obligations in Hawaii totaled \$97 million in 1989. Seventy-eight patents were granted to Hawaii residents in 1990.

Information on energy and science can be obtained from reports and records of the U.S. Department of Energy, U.S. Patent and Trademark Office, U.S. Bureau of Labor Statistics, National Science Foundation, Hawaii State Department of Taxation, Hawaii State Department of Commerce and Consumer Affairs and its Division of Consumer Advocacy, the DBED Energy Division, UH Institute for Astronomy, and individual utility companies. Historical Statistics of Hawaii, Section 19, presents data for earlier years. Data for the nation as a whole can be found in the Statistical Abstract of the United States: 1991, Sections 19 and 20.

Table 463.-- CONSUMPTION OF ENERGY, BY SOURCE (PHYSICAL UNITS): 1960 TO 1989

| Year   | Petroleum <u>1</u> /<br>(1,000<br>barrels)  | Hydro-<br>electric<br>power 2/<br>(million kWh)   | Geothermal<br>energy<br>(million kWh)              | Coal<br>(1,000<br>short<br>tons)  | Other 3/<br>(million kWh)   |
|--|---|---|--|---|---|
| 1960 1961 1962 1963 1964 1965 1966 1967 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 | 16,864 20,094 19,040 19,946 21,298 22,507 25,140 28,321 31,483 33,054  34,129 36,754 37,755 38,785 36,698 37,056 37,990 40,249 40,851 44,486  43,505 38,721 35,637 36,297 36,932 39,351 38,905 39,470 | 27 24 20 23 115 105 112 108 94 100  108 89 91 95 92 89 93 86 84 90  86 80 90 84 82 86 78 82 | (million kwn)  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>2<br>0<br>30<br>29<br>24<br>15<br>18<br>22<br>30<br>25<br>29<br>26<br>0<br>0 |
| 1988<br>1989   | 44,500<br>50,232  | 81<br>89  | 16<br>14   | 50<br>32  | 0<br>11   |

 $<sup>\</sup>frac{1}{2}$  For data by type of petroleum, see source. Revised data. Includes industrial and electric utility production.

Source: U.S. Department of Energy, Energy Information Administration, State Energy Data Report, Consumption Estimates, 1960-1989 (May 1991), p. 95.

<sup>3/</sup> Wood, waste, wind, photovoltaic, and solar thermal energy sources consumed at electric utilities to produce electricity. Excludes natural gas and nuclear electric power.

Table 464.-- CONSUMPTION OF ENERGY, BY SOURCE (TRILLION BTU): 1960 TO 1989

| Year   | Total<br>energy<br>con-<br>sumed   | Petro-<br>1eum <u>1</u> /  | Hydro-<br>electric<br>power <u>2</u> /                      | Geo-<br>thermal<br>energy                     | Coal  | Natural<br>gas   | Other types 3/   |
|--|--|--|---|---|---|--|--|
| 1960<br>1961<br>1962<br>1963<br>1964<br>1965<br>1966<br>1967<br>1968<br>1969 | 95.0<br>113.9<br>108.5<br>114.2<br>123.5<br>130.6<br>145.6<br>164.0<br>182.6<br>190.7  | 94.7<br>113.6<br>108.3<br>114.0<br>122.3<br>129.5<br>144.4<br>162.9<br>181.3<br>189.4  | 0.3<br>0.3<br>0.2<br>0.2<br>1.2<br>1.1<br>1.0<br>1.0<br>1.0 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0        | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0               | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>(Z)<br>0.0<br>0.3<br>0.3 |
| 1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978                         | 217.7<br>223.7<br>211.6<br>213.9<br>219.3<br>232.6<br>236.0<br>255.2                   | 216.6<br>222.5<br>210.3<br>212.7<br>218.0<br>231.8<br>235.2<br>254.3                   | 0.9<br>1.0<br>1.0<br>0.9<br>1.0<br>0.9<br>0.9               | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0        | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0                      | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0                      | 0.2<br>0.2<br>0.3<br>0.3<br>0.3<br>0.0<br>0.0                      |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988         | 253.2<br>226.4<br>208.5<br>210.3<br>218.7<br>233.3<br>230.9<br>234.7<br>264.3<br>299.1 | 249.3<br>222.6<br>203.3<br>205.4<br>213.8<br>227.9<br>226.7<br>229.2<br>259.0<br>294.0 | 0.9<br>0.8<br>0.9<br>0.9<br>0.8<br>0.8<br>0.8<br>0.9        | 0.0<br>0.0<br>0.0<br>0.4<br>0.4<br>0.3<br>0.3 | 0.0<br>0.0<br>1.1<br>1.0<br>0.9<br>1.1<br>0.4<br>1.6<br>1.3 | 3.0<br>2.8<br>2.8<br>2.7<br>2.4<br>2.7<br>2.7<br>2.8<br>2.8<br>2.9 | 0.0<br>0.2<br>0.3<br>0.3<br>0.3<br>0.0<br>0.0<br>0.0               |

Z Less than 0.05.

Source: U.S. Department of Energy, Energy Information Administration, State Energy Data Report, Consumption Estimates, 1960-1989 (May 1991), p. 95.

<sup>1/</sup> For data by type of petroleum, see source. Revised data. 2/ Includes industrial and electric utility production.

<sup>3/</sup> Wood, waste, wind, photovoltaic, and solar thermal energy sources consumed at electric utilities to produce electricity.

Table 465.-- CONSUMPTION OF ENERGY BY END-USE SECTOR: 1960 TO 1989

[Trillion Btu]

|      |   | Consum   | ption <u>1</u> /   |  |  |
|------|---|--|--|--|--|
| Year | Residen-<br>tial  | Commer-<br>cial  | Indus-<br>trial  | Trans-<br>porta-<br>tion   | Input at<br>electric<br>util-<br>ities   |
| 1960 | 7.3<br>7.5<br>8.0<br>8.9<br>9.6<br>10.1<br>10.8<br>12.1<br>13.1<br>14.9<br>16.4<br>17.8<br>19.6<br>20.0<br>20.3<br>19.6<br>21.3<br>21.8<br>21.8<br>22.9 | 5.2<br>5.4<br>5.5<br>6.0<br>6.6<br>6.8<br>7.4<br>8.0<br>8.8<br>9.8<br>11.6<br>11.4<br>12.7<br>13.5<br>13.3<br>13.8<br>15.3<br>16.8<br>17.4<br>18.1 | 20.7<br>26.9<br>28.9<br>29.8<br>32.4<br>34.7<br>35.8<br>38.8<br>38.7<br>40.8<br>43.6<br>43.5<br>48.9<br>49.4<br>49.4<br>49.9<br>51.0<br>52.7<br>52.2<br>57.8 | 61.8 74.0 66.1 69.5 74.8 79.0 91.5 105.1 122.0 125.1 125.3 138.8 136.5 140.9 128.7 130.5 131.7 141.3 144.6 156.4 | 17.6<br>19.4<br>21.4<br>24.2<br>26.7<br>27.6<br>29.7<br>31.3<br>35.0<br>38.7<br>43.2<br>47.7<br>54.1<br>55.6<br>57.5<br>58.8<br>62.5<br>65.2<br>66.8<br>67.7 |
| 1980 | 23.2<br>23.0<br>21.5<br>22.1<br>21.0<br>20.8<br>21.4<br>22.9<br>24.0<br>25.3  | 20.8<br>18.8<br>17.6<br>17.8<br>19.4<br>20.2<br>22.7<br>29.0<br>36.1<br>52.8   | 62.4<br>60.6<br>67.1<br>52.6<br>46.6<br>47.4<br>57.4<br>57.1<br>62.6<br>68.6   | 146.7<br>124.1<br>102.2<br>117.9<br>131.7<br>144.9<br>129.4<br>125.7<br>141.7                                    | 69.7<br>69.9<br>66.9<br>68.6<br>70.6<br>70.0<br>72.9<br>76.6<br>81.9<br>85.8   |

<sup>1/</sup> Excludes small quantities of energy sources for which consistent historical data are not available, such as solar energy obtained by the use of thermal and photovoltaic collectors; wind energy; and geothermal, biomass, and waste energy other than that consumed at the electric utilities.

Source: U.S. Department of Energy, Energy Information Administration, State Energy Data Report, Consumption Estimates, 1960-1989 (May 1991), pp. 96-100.

Table 466.-- ENERGY CONSUMPTION AND ELECTRICITY SALES, TOTAL AND PER CAPITA: 1960 TO 1990

|      | Primary energ  | gy consumption   |  | ity sales<br>ilities  |  |
|------|--|--|--|---|--|
| Year | Total<br>(trillion Btu)  | Per capita <u>1</u> /<br>(million Btu)   | Total<br>(1,000 kWh)   | Per capita <u>1</u> /(kWh)  |  |
| 1960 | 120.49816<br>141.31562<br>137.19339<br>143.86984<br>153.96038<br>160.60139<br>175.59905<br>196.12467<br>214.96128<br>221.93865<br>225.22990<br>241.09159<br>245.12817<br>250.54211<br>237.26587<br>238.35719<br>240.51954<br>254.54840<br>259.11475<br>278.45009 | 185.040<br>211.487<br>197.799<br>207.156<br>216.480<br>224.492<br>242.339<br>264.105<br>283.291<br>284.975<br>282.031<br>289.391<br>281.821<br>277.979<br>256.865<br>252.631<br>247.882<br>256.524<br>255.462<br>267.047 | 1,602,197 1,766,031 1,966,105 2,077,571 2,284,275 2,445,025 2,639,866 2,832,469 3,109,256 3,426,052  3,758,094 4,167,127 4,562,568 4,867,850 5,113,906 5,334,755 5,615,210 5,831,610 6,004,891 6,197,426 | 2,460<br>2,643<br>2,835<br>2,991<br>3,212<br>3,418<br>3,643<br>3,814<br>4,098<br>4,399<br>4,706<br>5,002<br>5,246<br>5,401<br>5,536<br>5,654<br>5,787<br>5,877<br>5,877<br>5,920<br>5,944 |  |
| 1980 | 273.88094<br>273.32263<br>272.11290<br>279.03031<br>276.36995<br>266.21778<br>271.05620<br>282.71678<br>306.72360<br>314.96310<br>321.23000  | 259.504<br>257.221<br>250.842<br>251.379<br>244.208<br>233.524<br>231.751<br>237.717<br>254.310<br>252.213   | 6,345,531<br>6,424,016<br>6,332,707<br>6,425,578<br>6,606,255<br>6,635,158<br>7,025,739<br>7,298,178<br>7,719,029<br>7,970,360<br>8,310,537  | 6,012<br>6,046<br>5,838<br>5,789<br>5,837<br>5,820<br>6,007<br>6,137<br>6,400<br>6,382  |  |

1/ Based on estimated de facto population.
Source: Hawaii State Department of Business, Economic Development & Tourism, Energy Division, records; Hawaii State Department of Commerce and Consumer Affairs, records.

Table 467.-- ENERGY CONSUMPTION, BY SOURCE: 1970 TO 1990 [Trillion Btu]

| Year            | Total <u>1</u> / | Petroleum | Biomass | Solar<br>water<br>heating | Hydro-<br>elect-<br>ricity | Coal   | Wind   | Geo-<br>thermal |
|-----------------|------------------|-----------|---------|---------------------------|----------------------------|--------|--------|-----------------|
|                 |                  |           |         |                           |                            |        |        |                 |
| 1970            | 225.2299         | 197.2279  | 26.9020 | _                         | 1.1000                     | _      | _ '    | _               |
| 1971            | 241.0916         | 212.8486  | 27.3430 | _                         | 0.9000                     | _      | _      | _               |
| 1972            | 245.1282         | 218.3842  | 25.8440 | _                         | 0.9000                     | _      | _      | _               |
| 1973            | 250.5421         | 223.7861  | 25.7560 | _                         | 1.0000                     | _      | _      | _               |
| 1974            | 237.2659         | 212.2739  | 23.9920 | _                         | 1.0000                     | _      | _      | _               |
| 1975            | 238.3572         | 213.4572  | 24.0000 | -                         | 0.9000                     |        | _      | _               |
| 1976            | 240.5195         | 215.5195  | 24.0000 | _                         | 1.0000                     | _      | _      | _               |
| 1977            | 254.5484         | 229.5889  | 24.0000 | 0.0595                    | 0.9000                     | _      | -      | -               |
| 1978            | 259.1148         | 233.5357  | 24.4000 | 0.2791                    | 0.9000                     | _      | -      | -               |
| 1979            | 278.4501         | 253.0344  | 24.0000 | 0.5157                    | 0.9000                     | -      | -      | -               |
|                 |                  |           |         |                           |                            |        |        |                 |
| 1980            | 273.8809         | 248.0109  | 24.2000 | 0.7700                    | 0.9000                     |        | -      | -               |
| 1981            | 273.3226         | 245.5086  | 24.0900 | 1.1185                    | 0.7356                     | 1.8700 | -      | 0 1572          |
| 1982            | 272.1129         | 244.3151  | 23.9200 | 1.3567                    | 1.0939                     | 1.2700 | -      | 0.1572          |
| 1983            | 279.0303         | 250.6283  | 24.8500 | 1.5269                    | 0.8865                     | 0.9500 | -      | 0.1886          |
| 1984            | 276.3700         | 248.4026  | 24.3650 | 1.7683                    | 0.7796                     | 0.8470 |        | 0.2075          |
| 1985            | 266.2178         | 238.6470  | 23.1430 | 2.1327                    | 0.9808                     | 0.9560 | 0.1697 | 0.1886          |
| 1986            | 271.0562         | 242.5857  | 23.9670 | 2.1644                    | 1.0562                     | 0.4970 | 0.6036 | 0.1823          |
| 1987            | 284.2043         | 256.4061  | 22.1840 | 2.1914                    | 0.9670                     | 1.4875 | 0.8236 | 0.1446          |
| 1988            | 306.9212         | 279.1052  | 22.7080 | 2.1931                    | 0.9826                     | 1.3509 | 0.4185 | 0.1629          |
| 1989 2/         | 314.9631         | 289.2301  | 20.8020 | 2.3310                    | 1.0183                     | 0.8715 | 0.4189 | 0.1435          |
| 1990 <u>3</u> / | 321.2300         | 295.4000  | 18.1200 | 2.3400                    | 1.0700                     | 0.8900 | 0.2900 | _               |

<sup>1/</sup> Beginning 1989, includes solid waste (0.1478 in 1989, 3.1200 in 1990).

Z/ Preliminary.
 3/ Estimated.
 Source: U.S. Energy Information Administration; Hawaii State Department of Business, Economic Development & Tourism, Energy Division, records.

Table 468.-- ELECTRICITY GENERATION BY SOURCE: 1985 TO 1990
[Millions of kWh generated]

| Year                                 | Total  | Petroleum  | Biomass                                | Hydro-<br>electric                  | Geo-<br>thermal            | Wind                             | 0ther<br><u>1</u> /         |
|--------------------------------------|--|--|--|-------------------------------------|----------------------------|----------------------------------|-----------------------------|
| 1985<br>1986<br>1987<br>1988<br>1989 | 7,821<br>8,251<br>8,368<br>8,952<br>9,280<br>9,565 | 7,001<br>7,412<br>7,577<br>8,115<br>8,511<br>8,589 | 670<br>646<br>605<br>681<br>614<br>538 | 98<br>100<br>93<br>98<br>100<br>105 | 19<br>18<br>14<br>16<br>14 | 17<br>58<br>79<br>42<br>41<br>28 | 16<br>17<br>-<br>(Z)<br>306 |

Z Less than 500,000 kWh.

Source: Hawaii State Department of Commerce and Consumer Affairs, records; Hawaii State Department of Business, Economic Development & Tourism, Energy Division, records; Hawaiian Sugar Planters' Association, records.

Table 469.-- ELECTRICITY PRODUCTION, BY SOURCE, BY ISLANDS: 1990
[Million kWh]

| Island      | Total  | Petrol-<br>eum                                     | Biomass <u>1</u> /                      | Hydro-<br>electric             | Wind                     | Other <u>2</u> /          |
|-------------|--|--|---|--------------------------------|--------------------------|---------------------------|
| State total | 9,565.4  | 8,588.8  | 843.1                                   | 104.9                          | 28.1                     | 0.5                       |
| Hawaii      | 875.4<br>958.0<br>17.3<br>31.3<br>7,209.7<br>473.7 | 665.9<br>785.0<br>17.3<br>25.3<br>6,800.1<br>295.3 | 167.8<br>146.2<br>6.0<br>398.0<br>125.1 | 25.2<br>26.3<br>-<br>-<br>53.4 | 16.4<br>0.1<br>-<br>11.5 | 0.1<br>0.4<br>-<br>-<br>- |

<sup>1/</sup> Includes generation from Honolulu municipal solid waste plant.

<sup>1/</sup> Coal, photovoltaic, and solid waste.

Z/ Coal, geothermal (ceased operation in 1989), and photovoltaic. Source: Hawaii State Department of Business, Economic Development & Tourism, Energy Division, records; Department of Commerce and Consumer Affairs, Division of Consumer Advocacy, records.

Table 470.-- EXPENDITURES FOR FUELS AND ELECTRICITY, BY SOURCE: 1970 TO 1988

#### [Millions of dollars]

|   |   | Fue   | l expenditu   | res   | Less:   | Dlug   |
|---|---|---|---|---|---|--|
| Year  | Total<br>energy<br>expend.  | Total   | Electric utility  | Other   | electric<br>utility<br>fuel<br>expend.  | Plus:<br>electric<br>purch. by<br>end-user   |
| 1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978              | 282.7<br>320.8<br>332.4<br>391.1<br>534.5<br>669.9<br>735.6<br>844.5<br>932.2<br>1,261.3        | 215.9<br>246.8<br>250.4<br>300.9<br>433.2<br>546.1<br>600<br>696.5<br>767.8<br>1,083.7          | 17.3<br>24.8<br>27.3<br>36.3<br>49.8<br>91.9<br>100.4<br>123.5<br>149.3       | 198.6<br>222<br>223.1<br>264.6<br>383.4<br>454.2<br>499.6<br>573<br>618.5<br>906.7        | 17.3<br>24.8<br>27.3<br>36.3<br>49.8<br>91.9<br>100.4<br>123.5<br>149.3       | 84.1<br>98.8<br>109.3<br>126.5<br>151.1<br>215.7<br>236<br>271.5<br>313.7<br>354.6 |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988 <u>1</u> / . | 1,721.3<br>2,195.2<br>2,153.8<br>2,019.9<br>2,048.4<br>1,921.6<br>1,564.0<br>1,575.1<br>1,664.1 | 1,529.8<br>1,947.7<br>1,869.6<br>1,730.1<br>1,724.8<br>1,586.6<br>1,147.3<br>1,176.2<br>1,314.6 | 267.8<br>451.5<br>439.4<br>369.3<br>379.3<br>337.6<br>224.6<br>203.7<br>238.0 | 1,262<br>1,496.2<br>1,430.2<br>1,360.8<br>1,345.5<br>1,249.0<br>922.7<br>972.5<br>1,076.6 | 267.8<br>451.5<br>439.4<br>369.3<br>379.3<br>337.6<br>224.6<br>203.7<br>238.0 | 459.3<br>699<br>723.6<br>659.1<br>702.9<br>672.6<br>641.3<br>602.6<br>587.5        |

1/ Provisional.
 Source: Hawaii State Department of Business and Economic
Development, Division of Energy, records.

Table 471.-- EXPENDITURES FOR FUELS AND ELECTRICITY, BY SECTORS: 1970 TO 1988

### [Millions of dollars]

|  | Total   | Reside  | ntial  |   | cial and<br>strial  | Trans-<br>port:  | Electric<br>utilities:  |
|--|---|---|--|---|---|--|---|
| Year   | fuel  | Fuel  | Elect.   | Fuel  | Elect.  | fuel   | fuel  |
| 1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978 | 215.9<br>246.8<br>250.4<br>300.9<br>443.2<br>546.1<br>600.0<br>696.5<br>767.8<br>1,083.7        | 8.7<br>6.1<br>10.5<br>10.4<br>7.4<br>12.7<br>13.9<br>13.3 | 34.1<br>38.8<br>42.6<br>48.7<br>57.1<br>76.9<br>84.0<br>92.9<br>105.8<br>118.9 | 18.9<br>17.9<br>20.5<br>24.4<br>44.7<br>45.8<br>45.9<br>55.0<br>52.6<br>102.4 | 50.0<br>60.0<br>66.7<br>77.8<br>94.0<br>138.8<br>152.0<br>178.6<br>207.9<br>235.7 | 174.2<br>195.4<br>196.5<br>229.7<br>328.3<br>401.0<br>441.0<br>504.1<br>552.6<br>778.1 | 17.3<br>24.8<br>27.3<br>36.3<br>49.8<br>91.9<br>100.4<br>123.5<br>149.3       |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987         | 1,529.8<br>1,947.7<br>1,869.6<br>1,730.1<br>1,724.8<br>1,586.6<br>1,147.3<br>1,176.2<br>1,314.6 | 26.2<br>22.9<br>20.6<br>20.6                              | 146.4<br>214.6<br>222.4<br>205.9<br>217.4<br>213.5<br>195.8<br>(NA)<br>(NA)    | 135.4<br>232.4<br>283.6<br>288.1<br>192.1<br>100.8<br>65.8<br>(NA)<br>(NA)    | 312.9<br>484.4<br>501.2<br>453.2<br>485.5<br>459.1<br>445.6<br>(NA)<br>(NA)       | 1,107.1<br>1,243.2<br>1,120.4<br>1,049.8<br>1,132.8<br>1,127.6<br>843.1<br>(NA)        | 267.8<br>451.5<br>439.4<br>369.3<br>379.3<br>337.6<br>224.6<br>203.7<br>238.0 |

NA Not available.

Source: Hawaii State Department of Business, Economic Development and Tourism, Division of Energy, unpublished estimates.

Table 472.-- ELECTRIC UTILITIES: 1980 TO 1990

|   | Custom  | ers, Dec.   | 31 <u>1</u> /  | i  | talled acity,  |                                  | Powe   | r sold (1,0   | 00 kWh)   |
|---|---|---|--|--|--|----------------------------------|--|---|---|
| Year  | Total   | Residen-<br>tial  | Other  | De   | c. 31<br>W) <u>2/</u>  |                                  | Total  | Residen-<br>tial  | Other   |
| 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 | 301,544<br>305,927<br>313,009<br>319,449<br>324,384<br>330,407<br>337,563<br>347,085<br>354,887<br>362,281<br>370,952 | 260,358<br>265,042<br>270,712<br>276,194<br>280,518<br>285,117<br>291,222<br>299,758<br>306,375<br>312,347<br>320,215 | 41,186<br>40,885<br>42,297<br>43,255<br>43,866<br>45,290<br>46,341<br>47,327<br>48,512<br>49,934<br>50,737 | 1,6<br>1,6<br>1,5<br>1,5<br>1,5<br>1,5<br>1,5<br>1,5 | 14,180<br>52,380<br>44,980<br>78,780<br>67,230<br>53,580<br>35,700<br>70,410<br>17,500<br>55,690 | 6<br>6<br>6<br>6<br>7<br>7<br>7  | ,345,531<br>,424,016<br>,332,707<br>,425,578<br>,606,255<br>,635,158<br>,025,739<br>,297,905<br>,719,029<br>,969,694<br>,311,537 | 1,852,984 1,855,837 1,801,297 1,814,336 1,837,954 1,879,027 1,959,447 2,069,859 2,148,275 2,238,874 2,320,550 | 4,492,547<br>4,568,179<br>4,531,410<br>4,611,242<br>4,768,301<br>4,756,131<br>5,066,292<br>5,228,046<br>5,570,754<br>5,730,820<br>5,990,987 |
|   |   | annual use<br>h) <u>3</u> /   |  |  | rate<br>per kWh  | ı)                               |  | Revenues<br>(\$1,000)   |   |
| Year  | Residen-<br>tial  | Other   | Resid<br>tia   |  | 0ther  | •                                | Total  | Residen-<br>tial  | Other   |
| 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 | 7,117 7,002 6,654 6,569 6,552 6,590 6,728 6,905 7,011 7,168 7,247   | 109,079 111,732 107,133 106,606 108,702 105,015 109,326 110,466 114,832 114,772 118,079                               | .115<br>.123<br>.113<br>.118<br>.113<br>.092<br>.094<br>.088<br>.092                                       | 63<br>48<br>48<br>31<br>61<br>94<br>31<br>29         | .0696<br>.1060<br>.1106<br>.0982<br>.1018<br>.0965<br>.0750<br>.0779<br>.0714<br>.0758           | 15<br>18<br>13<br>15<br>15<br>15 | 459,251<br>699,031<br>723,622<br>659,089<br>702,899<br>672,600<br>562,345<br>602,553<br>587,528<br>642,101<br>749,857            | 214,584<br>222,423<br>205,889<br>217,447<br>213,478<br>182,110<br>195,198<br>189,689<br>207,436               | 501,199<br>453,200<br>485,452<br>459,122<br>380,234<br>407,355<br>397,839<br>434,665  |

Table 473.-- ELECTRIC UTILITIES, BY ISLANDS: 1989 [Revised]

|  |   |   | <del></del>   |   |   |  |  |  |
|--|---|---|---|---|---|--|--|--|
|  | Cus   | stomers, De   | ec. 31  | Installed capacity,   | Power   | sold (1,000  | kWh)   |  |
| County or island                                 | Total   | Resi-<br>dential  | Other   | Dec. 31 (kW)  | Total   | Resi-<br>dential   | Other  |  |
| State total                                      | 362,281   | 312,347   | 49,934  | 1,517,500   | 7,969,694   | 2,238,874  | 5,730,820  |  |
| Oahu   | 247,120<br>48,312<br>22,442<br>44,407<br>1,043<br>40,712<br>2,652 | 216,063<br>40,012<br>18,779<br>37,493<br>907<br>34,418<br>2,168     | 31,057<br>8,300<br>3,663<br>6,914<br>136<br>6,294<br>484                  | 1,189,000<br>128,000<br>59,800<br>140,700<br>4,700<br>131,000<br>5,000    | 6,254,220<br>663,512<br>321,259<br>730,703<br>12,028<br>692,351<br>26,323 | 1,620,439<br>259,304<br>110,036<br>249,095<br>4,095<br>233,952<br>11,048 | 4,633,781<br>404,208<br>211,223<br>481,608<br>7,933<br>458,400<br>15,275 |  |
|  |   | nnual use<br>n) <u>1</u> /  |   | age rate<br>rs per kWh)   | Revenues (\$1,000)  |  |  |  |
| County or island                                 | Resi-<br>dential  | Other   | Resi-<br>dential  | Other   | Total   | Resi-<br>dential   | Other  |  |
| State total                                      | 7,168   | 114,772   | 0.09265   | 0.07585   | 642,101   | 207,436  | 434,665  |  |
| Oahu Hawaii Kauai Maui County Lanai Maui Molokai | 7,500<br>6,481<br>5,860<br>6,644<br>4,515<br>6,797<br>5,096       | 149,202<br>48,700<br>57,664<br>69,657<br>58,333<br>72,831<br>31,560 | 0.08308<br>0.11847<br>0.12661<br>0.11225<br>0.15345<br>0.10735<br>0.19716 | 0.06785<br>0.10764<br>0.12489<br>0.10401<br>0.13840<br>0.10020<br>0.19923 | 449,046<br>74,229<br>40,312<br>78,514<br>1,743<br>71,521<br>5,250         | 134,729<br>30,720<br>13,932<br>28,055<br>634<br>25,304<br>2,117          | 314,317<br>43,509<br>26,380<br>50,459<br>1,109<br>46,217<br>3,133        |  |

1/ Based on number of customers at end of year.
Source: Hawaii State Department of Commerce and Consumer Affairs, Division of Consumer Advocacy, records.

Table 474.-- ELECTRIC UTILITIES, BY ISLANDS: 1990

|                  | Custom  | ers, Dec.   | 31 <u>1</u> /   | Installed capacity,   | Power   | sold (1,000  | kWh)  |
|------------------|---|---|---|---|---|--|---|
| County or island | Total   | Resi-<br>dential  | Other   | Dec. 31 (kW) 2/   | Total   | Resi-<br>dential   | Other   |
| State total      | 370,952   | 320,215   | 50,737  | 1,655,690   | 8,311,537   | 2,320,550  | 5,990,987   |
| Oahu             | 249,810<br>50,957<br>23,417<br>46,768<br>1,062<br>43,010<br>2,696 | 218,799<br>42,165<br>19,624<br>39,627<br>918<br>36,505<br>2,204     | 31,011<br>8,792<br>3,793<br>7,141<br>144<br>6,505<br>492                  | 1,290,000<br>138,750<br>77,080<br>149,860<br>10,760<br>130,100<br>9,000   | 6,471,587<br>715,751<br>342,857<br>781,342<br>15,496<br>738,220<br>27,627 | 1,657,105<br>277,468<br>116,361<br>269,616<br>4,646<br>253,508<br>11,461 | 4,814,482<br>438,283<br>226,496<br>511,726<br>10,850<br>484,711<br>16,165 |
|                  |   | nnual use<br>1) <u>3</u> /  |   | rage rate<br>ars per kWh) Revenues (\$1,000)                              |   |  | 00)   |
| County or island | Resi-<br>dential  | Other   | Resi-<br>dential  | Other   | Total   | Resi-<br>dential   | Other   |
| State total      | 7,247   | 118,079   | 0.10261   | 0.08542   | 749,857   | 238,103  | 511,754   |
| Oahu             | 7,574<br>6,581<br>5,930<br>6,804<br>5,061<br>6,944<br>5,200       | 155,251<br>49,850<br>59,714<br>71,660<br>75,345<br>74,514<br>32,856 | 0.09228<br>0.12963<br>0.14096<br>0.12169<br>0.15422<br>0.11825<br>0.18472 | 0.07686<br>0.11861<br>0.13989<br>0.11343<br>0.14166<br>0.11033<br>0.18721 | 522,962<br>87,954<br>48,087<br>90,854<br>2,254<br>83,457<br>5,143         | 152,924<br>35,967<br>16,402<br>32,810<br>717<br>29,977<br>2,117          | 370,038<br>51,987<br>31,685<br>58,044<br>1,537<br>53,480<br>3,026         |

<sup>1/</sup> Oahu based on November data.

 Does not include purchased power.
 Based on number of customers at end of year.
 Source: Hawaii State Department of Commerce and Consumer Affairs, Division of Consumer Advocacy, records.

Table 475.-- GAS UTILITIES: 1980 TO 1990 [Excludes bottled gas]

|  | Cus  | tomers, D   | ec. 3  | 31   |  | Gas sold (1,000 therms)  |   |   |   |  |  |
|--|--|---|--|--|--|--|---|---|---|--|--|
| Year   | Total  | Resident  | ial  | Oth  | er   | Total  |   | Re  | sidential   | Other  |  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 33,019<br>32,421<br>32,905<br>32,880<br>32,643<br>32,988<br>33,369<br>33,895<br>34,103<br>34,304<br>34,477 | 28,34<br>28,97<br>28,93<br>28,85<br>29,25<br>29,67<br>30,19<br>30,45<br>30,66                   | 28,825<br>28,343<br>28,979<br>28,933<br>28,859<br>29,253<br>29,678<br>30,198<br>30,450<br>30,661<br>30,840 |  | 94<br>78<br>26<br>47<br>84<br>35<br>91<br>97<br>53<br>43 | 34,<br>32,<br>31,<br>30,<br>31,<br>32,<br>32,<br>33,<br>34,                          | 396<br>224<br>307<br>928<br>203<br>122<br>408<br>733<br>865 | 7,030<br>6,422<br>6,329<br>6,338<br>5,853<br>5,911<br>5,762<br>5,880<br>5,780<br>5,896<br>5,924 |   | 27,675<br>25,975<br>25,895<br>24,970<br>25,075<br>25,292<br>25,360<br>26,528<br>26,952<br>27,969<br>28,882 |  |
|  | Average<br>us<br>(therm  | е   | e (e   |  | Average ra<br>(dollars p<br>therm)                       |  | Ì   |   | Revenues<br>(\$1,000)   |  |  |
| Year   | Residen-<br>tial   | Other   |  | iden-  | Ot   | her  | Tot   | al  | Residen-<br>tial  | Other  |  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 244<br>227<br>218<br>219<br>203<br>202<br>194<br>195<br>189<br>192   | 6,599<br>6,369<br>6,596<br>6,326<br>6,627<br>6,772<br>6,871<br>7,176<br>7,378<br>7,677<br>7,941 | 1.7<br>1.7<br>1.7<br>1.7<br>1.5<br>1.5<br>1.5  | 6583<br>(2585<br>(3311<br>(9719)<br>(8958)<br>(6934)<br>(7151)<br>(7204)<br>(4961)<br>(4200)<br>(2847) | 1.5<br>1.4<br>1.3<br>1.3<br>1.1<br>1.1                   | 5951<br>0091<br>3891<br>4022<br>7488<br>3821<br>2027<br>0494<br>7840<br>6487<br>4834 | 48,<br>47,<br>44,<br>37,<br>38,<br>38,                      | 069<br>229<br>352<br>949<br>305<br>465<br>556<br>023<br>876                                     | 10,305<br>11,083<br>10,969<br>11,390<br>10,474<br>10,459<br>9,055<br>9,244<br>8,957<br>9,092<br>9,646 | 34,857<br>38,986<br>37,260<br>35,962<br>34,475<br>33,846<br>28,410<br>29,312<br>29,066<br>29,783<br>33,167 |  |

Table 476.-- GAS UTILITIES, BY ISLANDS: 1990 [Excludes bottled gas]

|                                      | Cu                            | ıstomer                  | , Dec                    | . 31                         |                            | Ga                             | s sol                        | ld (                   | (1,000 t                      | herms)                           |
|--------------------------------------|-------------------------------|--------------------------|--------------------------|------------------------------|----------------------------|--------------------------------|------------------------------|------------------------|-------------------------------|----------------------------------|
| Island                               | Total                         | Resi-<br>Total dentia    |                          | Oth                          | er                         | Tot                            | al                           |                        | Resi-<br>ential               | Other                            |
| State total                          | 34,477                        | 30                       | ,840                     | 3,6                          | 37                         | 34,                            | 806                          | į                      | 5,924                         | 28,882                           |
| Oahu                                 | 31,974<br>1,842<br>279<br>382 |                          | 714<br>531<br>279<br>316 |                              | 660<br>611<br>-<br>66<br>- | 2,                             | 645<br>297<br>58<br>806<br>- |                        | 5,469<br>331<br>58<br>66<br>- | 26,176<br>1,966<br>-<br>740<br>- |
|                                      |                               | Average annual (dol      |                          |                              | ge r<br>rs p<br>rm)        |                                | Re                           | ever                   | nues (\$1                     | <b>,</b> 000)                    |
| Island                               | Resi-<br>dential              | Other                    |                          | si-<br>tial                  | 0t                         | her                            | Tota                         | 11                     | Resi-<br>dential              | Other                            |
| State total                          | 192                           | 7,94                     | 1.6                      | 2847                         | 1.1                        | 4834                           | 42,8                         | 313                    | 9,646                         | 33,167                           |
| Oahu Hawaii Kauai Maui Molokai Lanai | 190<br>216<br>207<br>210<br>- | 8,030<br>6,321<br>11,212 | 1.3                      | 5421<br>1864<br>6066<br>8517 | 1.0                        | 6464<br>0341<br>-<br>5695<br>- |                              | 32<br>109<br>78<br>793 | 9,046<br>436<br>78<br>85<br>- | 30,486<br>1,972<br>-<br>708<br>- |

<sup>1/</sup> Based on number of customers at end of year.  $\overline{\text{S}}\text{ource:}$  Hawaii State Department of Commerce and Consumer Affairs, Division of Consumer Advocacy, records.

Table 477.-- SERVICE PROVIDED BY HAWAIIAN ELECTRIC CO., INC., ON OAHU: 1985 TO 1990

|                                      | f  | of cus-<br>Dec. 31   | Net  | Dower  | Average<br>annual<br>residen-                      | Average<br>residen-<br>tial                                    | Gener-<br>ating<br>capabil-  |
|--------------------------------------|--|--|--|--|--|--|--|
| Year                                 | Total  | Residen-<br>tial<br>only                                       | input 1/<br>(1,000<br>kWh)   | Power<br>sold<br>(1,000<br>kWh)  | tial<br>use 2/<br>(kWh)                            | rate<br>(dollars<br>per kWh)                                   | ity<br>(kW)<br>Dec. 31   |
| 1985<br>1986<br>1987<br>1988<br>1989 | 231,912<br>235,742<br>241,426<br>244,965<br>247,120<br>248,692 | 202,222<br>205,636<br>211,277<br>214,429<br>216,063<br>217,681 | 5,637,678<br>5,933,569<br>6,135,382<br>6,439,768<br>6,617,943<br>6,835,025 | 5,336,262<br>5,625,398<br>5,804,298<br>6,095,707<br>6,254,220<br>6,470,587 | 6,997<br>7,113<br>7,322<br>7,386<br>7,534<br>7,620 | 0.10417<br>0.08328<br>0.08591<br>0.07973<br>0.08308<br>0.09228 | 1,283,000<br>1,277,000<br>1,277,000<br>1,258,000<br>1,271,000<br>1,262,000 |

Source: Hawaiian Electric Co., Inc., records.

Table 478.-- GAS UTILITY SERVICE BY GASCO, INC., FOR OAHU: 1985 TO 1990

| Calendar                             | Customers, Dec. 31                                       |  |  | sold <u>l</u> /<br>0 therms)                       | Average annual residential usage 1/ |
|--------------------------------------|--|--|--|--|-------------------------------------|
| year                                 | Total  | Residential  | Total  | Residential  | (therms)                            |
| 1985<br>1986<br>1987<br>1988<br>1989 | 30,442<br>30,831<br>31,398<br>31,613<br>31,812<br>31,974 | 27,085<br>27,516<br>28,069<br>28,331<br>28,539<br>28,714 | 28,255<br>28,137<br>29,345<br>29,689<br>30,776<br>31,645 | 5,436<br>5,318<br>5,435<br>5,342<br>5,446<br>5,469 | 201<br>193<br>194<br>189<br>191     |

<sup>1/</sup> Includes liquefied petroleum gas.
Source: Gasco, Inc., records.

 $<sup>\</sup>frac{1}{2}$  Net generation plus purchased power.  $\frac{2}{2}$  Based on average number of customers during the year.

Table 479.-- LIQUID FUEL TAX BASE: 1980 TO 1990 [In thousands of gallons]

|  | All t   | ypes  |   | Diesel   | oil  |
|--|---|---|---|--|--|
| Year reported 1/   | Total   | Excluding aviation  | Gasoline  | Non-hwy.   | Hwy. use   |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 939,766<br>918,437<br>893,288<br>919,865<br>925,871<br>970,555<br>1,059,180<br>1,206,716<br>1,216,828<br>1,268,597<br>1,307,887 | 437,222<br>428,886<br>418,811<br>418,217<br>440,061<br>432,500<br>456,013<br>512,974<br>515,273<br>535,714<br>557,097 | 312,896<br>305,886<br>308,600<br>310,085<br>322,410<br>327,021<br>336,559<br>348,474<br>357,986<br>369,172<br>375,382 | 101,719<br>101,212<br>88,312<br>86,790<br>95,956<br>83,147<br>95,022<br>137,806<br>131,292<br>136,465<br>151,095 | 17,765<br>15,771<br>17,303<br>16,440<br>17,892<br>17,636<br>19,354<br>21,207<br>21,057<br>23,729<br>24,763 |
|  |   | efied<br>eum gas  |   | Smal1  | boats  |
| Year<br>reported <u>1</u> /  | Off-hwy.  | Hwy. use  | Aviation<br>fuel  | Gasoline   | Diesel<br>oil  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 2,448 2,378 2,628 3,013 2,600 2,804 2,969 3,135 3,012 4,301 4,757   | 1,140<br>1,136<br>960<br>1,052<br>873<br>1,028<br>1,031<br>1,142<br>1,071<br>968<br>834                               | 502,544<br>489,551<br>474,477<br>501,648<br>485,810<br>538,055<br>603,167<br>693,742<br>701,555<br>732,883<br>750,790 | 338<br>424<br>207<br>213<br>114<br>187<br>163<br>123<br>63<br>57<br>78   | 917<br>2,079<br>802<br>624<br>215<br>676<br>916<br>1,089<br>792<br>1,022<br>188                            |

<sup>1/</sup> Liquid fuel sold in a given month is usually reported the following month. Annual totals accordingly refer to fuel sold during a 12-month period ended November 30.

Source: Hawaii State Department of Taxation, "Liquid Fuel Tax Base, Collections and Distribution" (annual report).

Table 480.-- LIQUID FUEL TAX BASE, BY COUNTIES: 1990
[In thousands of gallons]

| Type of fuel | State<br>total   | City and<br>Co. of<br>Honolulu                                      | County<br>of<br>Maui                                 | County<br>of<br>Hawaii                                     | County<br>of<br>Kauai                              |
|--------------|--|---|--|--|--|
| Total        | 1,307,887  | 1,065,323   | 102,152  | 90,573   | 49,839   |
| Gasoline     | 375,382<br>151,095<br>24,763<br>4,757<br>834<br>78<br>188<br>750,790 | 250,800<br>56,631<br>16,549<br>2,047<br>671<br>78<br>125<br>738,424 | 45,696<br>46,446<br>2,623<br>416<br>63<br>-<br>6,909 | 55,303<br>24,570<br>4,766<br>535<br>46<br>-<br>64<br>5,289 | 23,584<br>23,488<br>824<br>1,759<br>55<br>-<br>168 |

Source: Hawaii State Department of Taxation, "Liquid Fuel Tax Base, Collections & Distribution, Calendar Year Ending December 31, 1990" (annual release).

Table 481.-- IMPORTS AND EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS: 1990
[1,000 barrels]

|   |                                    | Imports                            |                |                                      | Exports                            |                          |
|---|------------------------------------|------------------------------------|----------------|--------------------------------------|------------------------------------|--------------------------|
| Product   | Total                              | Domestic                           | Foreign        | Total                                | Domestic                           | Foreign                  |
| Crude oil   | 43,719                             | 17,631                             | 26,089         | 36                                   | -                                  | 36                       |
| Distillates  Jet fuel 1/  Residual fuel oil  Naphtha  Other | 849<br>2,824<br>4,023<br>10<br>153 | 849<br>1,022<br>2,893<br>10<br>153 | 1,802<br>1,129 | 4,709<br>85<br>1,659<br>1,905<br>101 | 3,972<br>85<br>633<br>1,333<br>101 | 737<br>-<br>1,026<br>572 |

Table 482.-- GASOLINE SERVICE STATIONS (SIC 554) WITH PAYROLL, BY COUNTIES: 1987 AND 1989

|              |                | City and           |                  |                 | Mai           | ui Coun  | ty                 |
|--------------|----------------|--------------------|------------------|-----------------|---------------|----------|--------------------|
| Year         | State<br>total | Co. of<br>Honolulu | Hawaii<br>County | Kauai<br>County | Lanai         | Maui     | Molo-<br>kai       |
| 1987<br>1989 | 355<br>331     | 241<br>225         | 52<br>50         | 26<br>22        | ( <u>1</u> /) | 34<br>34 | 1<br>( <u>1</u> /) |

1/ Included with Maui.

Source: U.S. Bureau of the Census, 1987 Census of Retail Trade, Hawaii RC87-A-12 (May 1989), table 5, and County Business Patterns 1989, Hawaii, CBP-89-13 (October 1991), tables 1b and 2.

Table 483.-- CHARACTERISTICS OF GASOLINE SERVICE STATIONS WITH PAYROLL: 1987

| Subject   | State<br>total  | Oahu   |
|---|---|--|
| Number of establishments in business— Any time during the year Offering self-service At end of year Sales (\$1,000) Gallon sales of gasoline (1,000) Through self-service Gallon sales of other automotive fuels Gasoline pumps, December 31 Self-service Other automotive fuel pumps, December 31 Total storage capacity of all fuels, December 31 (1,000 gallons) | 355<br>173<br>341<br>427,232<br>261,738<br>128,298<br>3,853<br>2,909<br>1,284<br>114<br>7,625 | 241<br>129<br>232<br>296,341<br>186,633<br>95,633<br>2,501<br>2,020<br>914<br>73 |

Source: U.S. Bureau of the Census, 1987 Census of Retail Trade, Miscellaneous Subjects, RC87-S-4 (October 1990), tables 2-5.

# Table 484.-- GASOLINE AVERAGE PRICES PER GALLON, FOR OAHU: ANNUAL AVERAGES, 1984 TO 1990

[In dollars. Average prices include all applicable federal, state, and county taxes. For earlier years, 1903-1983, see <u>Data Book 1984</u>, tables 497 and 498]

| Period | All              | Leaded  | Unleaded | Unleaded |
|--------|------------------|---------|----------|----------|
|        | types <u>l</u> / | regular | regular  | premium  |
| 1984   | 1.450            | 1.367   | 1.443    | (NA)     |
|        | 1.392            | 1.274   | 1.396    | (NA)     |
|        | 1.206            | 1.077   | 1.221    | 1.346    |
|        | 1.233            | 1.099   | 1.254    | 1.372    |
|        | 1.293            | 1.204   | 1.273    | 1.413    |
|        | 1.365            | (NA)    | 1.404    | 1.460    |
|        | 2/ 1.479         | (NA)    | 1.538    | 1.551    |

NA Not available.

1/ Includes types not shown separately.

Source: Based on data in the U.S. Bureau of Labor Statistics, CPI Detailed Report (monthly). The 1984-1986 Honolulu prices and 1990  $\overline{\text{U.S.}}$  average are actual values; the 1987-1990 Honolulu prices are estimates based on actual prices for the last half of 1986 and CPI(U) changes for gasoline for subsequent years.

Table 485.-- BOILERS AND PRESSURE VESSELS: 1989 AND 1990

| Date          | Total | Power<br>boilers | Heating<br>boilers | Pressure<br>vessels |
|---------------|-------|------------------|--------------------|---------------------|
| 1989: Dec. 31 | 8,519 | 574              | 2,441              | 5,504               |
| 1990: Dec. 31 | 8,581 | 581              | 2,479              | 5,521               |

Source: Hawaii State Department of Labor and Industrial Relations, Division of Occupational Safety and Health, Boiler and Elevator Inspection Bureau, records.

<sup>7/</sup> The U.S. city average for 1990 was \$1.217.

Table 486.-- ENERGY GENERATED, PURCHASED, SOLD, AND USED BY SUGAR PLANTATIONS, BY ISLANDS: 1989

| Subject   | State<br>total                   | Hawaii                         | Kauai                 | Maui                            | 0ah u                         |
|---|----------------------------------|--------------------------------|-----------------------|---------------------------------|-------------------------------|
| Electricity (millions of kilowatt-hours)              |                                  |                                |                       |                                 |                               |
| Generated 1/  | 844<br>38.18<br>440.47<br>441.89 | 248<br>1.51<br>177.12<br>72.16 |                       | 247<br>24.56<br>99.72<br>172.19 | 136<br>8.05<br>49.94<br>94.00 |
| Gross heat values of boiler fuels (billions of Btu's) |                                  |                                |                       |                                 |                               |
| All fuels   | 25,830<br>20,513<br>5,028<br>289 | 8,546<br>6,632<br>1,914        | 5,706<br>5,148<br>559 | 7,366<br>5,448<br>1,629<br>289  | 4,212<br>3,285<br>927         |

<sup>1/</sup> Includes electricity generated by steam and by hydroelectric or dieseT engine generators.

Source: Hawaiian Sugar Planters' Association, Energy Inventory of Hawaiian Sugar Plantations - 1989 (Energy Report 29, September, 1990), pp. 7-10.

Table 487.-- HIGH TECHNOLOGY INDUSTRY EMPLOYMENT AS A PERCENT OF ALL EMPLOYMENT, FOR THE UNITED STATES AND HAWAII: 1989

| Subject                 | Value             |
|-------------------------|-------------------|
| United States (percent) | 11.3<br>2.6<br>51 |

Source: U.S. Bureau of Labor Statistics, 'High technology employment: another view,' Monthly Labor Review, July 1991, pp. 26-30.

<sup>2/</sup> Includes transmission losses and electricity used to operate power plant auxiliaries.

Table 488.-- FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT AND R&D PLANT IN HAWAII: 1984 TO 1989

[Millions of dollars. For fiscal years ended September 30]

| Type of obligation        | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|---------------------------|------|------|------|------|------|------|
| Obligations for R&D       | 52.9 | 58.2 | 54.7 | 63.9 | 82.2 | 97.4 |
| Obligations for R&D plant | 0.6  | 0.9  | 0.6  | 0.6  | 6.9  | 0.4  |

Source: National Science Foundation, Federal Funds for Research and Development: Fiscal Years 1989, 1990, and 1991, Volume XXXIX, NSF 90-327 Final (1991), pp. 285-286.

Table 489.-- RESEARCH AND NON-RESEARCH EXTRAMURAL FUNDING, FOR THE UNIVERSITY OF HAWAII: 1986-87 TO 1990-91

[Research and non-research awards received through the Office of Research Administration, University of Hawaii]

|   | Total Research                  |   | arch                            | Non-research   |                                 |  |
|---|---------------------------------|---|---------------------------------|--|---------------------------------|--|
| Fiscal year   | Awards                          | Amount<br>(dollars)   | Awards                          | Amount<br>(dollars)  | Awards                          | Amount (dollars)   |
| 1986-87<br>1987-88<br>1988-89<br>1989-90<br>1990-91 | 643<br>678<br>777<br>851<br>910 | 52,360,382<br>61,476,926<br>71,898,382<br>83,689,450<br>106,095,750 | 378<br>417<br>466<br>488<br>510 | 35,787,240<br>39,410,637<br>46,990,238<br>49,362,792<br>58,058,097 | 265<br>261<br>311<br>363<br>400 | 16,573,142<br>22,066,289<br>24,908,144<br>34,326,658<br>48,037,653 |

Source: Office of Research Administration, University of Hawaii, 1990-1991 Extramural Awards (1991), p. i.

## Table 490.-- RESEARCH AND DEVELOPMENT EXPENDITURES AT DOCTORATE-GRANTING INSTITUTIONS: 1985 TO 1989

[Thousands of dollars. For fiscal years ended September 30]

| Type of expenditure                       | 1985   | 1986   | . 1987 | 1988   | 1989      |
|---|--------|--------|--------|--------|-----------|
| Total R&D expenditures Federally financed | 54,025 | 57,383 | 57,345 | 64,278 | 1/ 70,733 |
|   | 34,886 | 35,322 | 34,472 | 38,560 | 40,574    |

<sup>1/</sup> U.S. total was \$14.7 billion. Hawaii ranked 37th of the 50th States. Source: National Science Foundation, Academic Science/Engineering: R & D Funds, Fiscal Year 1989, NSF 90-321 final (1991), tables B-22 and B-23.

Table 491.-- TELESCOPES AT THE SUMMITS OF MAUNA KEA AND HALEAKALA: 1991

| Location and facility  | Mirror<br>size<br>(meters) | Year<br>com-<br>pleted  | Primary use                              | Local<br>staff <u>1</u> / |
|--|----------------------------|-------------------------|--|---------------------------|
| Mauna Kea:   |                            |                         |  |                           |
| UH 24-inch Telescope #1 UH 24-inch Telescope #2 UH 88-inch Telescope                     | 0.61<br>0.61<br>2.24       | 1968<br>1969<br>1970    | Optical<br>Optical<br>Optical/infrared   | } 12                      |
| NASA Infrared Telescope Facility Canada-France-Hawaii                                    | 3.0                        | 1979                    | Infrared                                 | 15                        |
| Telescope  | 3.6                        | 1979                    | Optical/infrared                         | 51                        |
| Telescope  | 3.8                        | 1979                    | Infrared                                 | 29                        |
| Observatory  | 10.4<br>15.0<br>10.0       | 1986<br>1986<br>1991    | mm/submm<br>mm/submm<br>Optical/infrared | 11<br>37<br>40            |
| Haleakala (on UH land): Mees Solar Observatory Lunar Ranging Facility Gamma Ray Facility | •••                        | 1956<br>1976/84<br>1985 | •••                                      | 9<br>8<br>1               |

<sup>1/</sup> Based in same county as observatory.

Source: University of Hawaii at Manoa, Institute for Astronomy, Fact Sheet--1991-92 (July 1991).

#### Table 492.-- PATENTS ISSUED TO HAWAII RESIDENTS: 1983 TO 1990

[Fiscal years ended September 30. Data include design, plant, and reissue patents]

| Fiscal year                  | Patents              | Fiscal year          | Patents              |
|------------------------------|----------------------|----------------------|----------------------|
| 1983<br>1984<br>1985<br>1986 | 30<br>43<br>33<br>37 | 1987<br>1988<br>1989 | 52<br>62<br>74<br>78 |

Source: U.S. Department of Commerce, Patent and Trademark Office, Commissioner of Patents and Trademarks Annual Report, Fiscal Year '90, pp. 64-65, and earlier editions.

Table 493.-- COMPUTER USE BY OAHU RESIDENTS EMPLOYED OUTSIDE THEIR HOMES: 1988 AND 1989

[Percent. As of March]

| Subject   | 1988                        | 1989                        |
|---|-----------------------------|-----------------------------|
| Use of personal computer at place of work                     | 100<br>22<br>14<br>15<br>50 | 100<br>27<br>13<br>16<br>44 |
| Facsimile machine (FAX) at place of work  Yes  No  Don't know | 100<br>41<br>46<br>13       | 100<br>52<br>44<br>5        |
| Own a personal computer for use at home  Yes No               | 100<br>25<br>75             | 100<br>33<br>67             |

Source: Omnitrak/Hawaii Inc. Polls (400 telephone interviews each) reported in Honolulu Star-Bulletin, May 23, 1989 (p. C-1), May 30, 1989 (p. D-1), and June 6, 1989 (p. D-1).

#### **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 618,000 in 1980 to 886,000 in 1990. Vehicle miles rose during the same period from 5.6 billion to 8.1 billion. Hawaii residents purchased 87,000 new passenger cars and 15,000 trucks in 1990. By the end of that year, 678,000 licensed drivers had access to 4,101 miles of streets and highways throughout the State. Bus passengers carried by the Honolulu Mass Transit Lines increased from 72 million in 1980 to 76 million in 1990.

Almost all scheduled interisland travel is by air. In 1990, airlines and air taxis reported 9.9 million interisland passengers, some 47 percent more than in 1980, and carried 73,000 tons of cargo. The State has seven commercial airports, 15 general aviation, military or semi-private airports, 13 civilian heliports, 3,800 active pilots, and about 500 active civil aircraft in general aviation.

Rapid growth is similarly evident in transpacific air travel. In 1990, 7,311,000 overseas passengers arrived by air, a 10-year growth of 71 percent. Overseas air cargo received that year weighed 169,000 tons.

Undocumented State-registered vessels as of December 31, 1990 numbered 14,081, compared with 8,000 in 1970. Median length was 18.1 feet, and five-sixths were stored on land. There were 1,700 documented vessels in the State in 1990, triple the 1970 total. Overseas vessels brought 17,500 passengers into the State in 1991. Receipts of cargo in 1988 included 11.0 million tons in overseas cargo and 5.3 million tons in interisland cargo.

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: 1991, Sections 21 and 22.

Table 494.-- HIGHWAY DISTANCES: 1991

| Route  | Statute<br>miles  | Route   | Statute<br>miles   |
|--|---|---|--|
| HAWAII   |   | MOLOKAI   |  |
| Hilo-Lyman Field   | 26.1<br>39.3<br>52.4<br>30.7<br>125.2<br>84.3<br>91.2<br>57.9<br>55.3<br>83.7 | Kaunakakai-Sheraton Hotel Kaunakakai-Maunaloa Kaunakakai-Airport Kaunakakai-Halawa Airport-Sheraton Hotel  OAHU 1/  Honolulu-Ala Moana Center Honolulu-UH, via King Street Honolulu-Waikiki   | 19.5<br>16.5<br>7.0<br>27.6<br>11.5                          |
| Hilo-Kawaihae, via Hamakua Waimea-Hawi Waimea-Kawaihae Kawaihae-Hawi Kawaihae-Kailua Kailua-Keahole Airport Kailua-Keauhou | 69.5<br>21.4<br>11.5<br>18.0<br>48.4<br>6.8<br>6.9                            | Honolulu-Waimanalo, via Koko Head Honolulu-Waimanalo, via Nuuanu Honolulu-Kailua, via Nuuanu Honolulu-Kaneohe, via Kalihi Honolulu-Kahuku, via Kahaluu Honolulu-Kahuku, via Wahiawa Honolulu-Kaena Pt., via Wahiawa . Honolulu-Wahiawa Honolulu-Wahiawa | 13.3<br>11.6<br>10.8<br>36.2<br>46.2<br>42.4<br>44.3<br>20.5 |
| Wailuku-Kahului  | 2.3<br>4.2<br>53.7<br>59.8<br>38.2<br>17.6<br>38.0<br>20.9<br>7.9             | Honolulu-Pearl Harbor Shipyard Honolulu-Honolulu Airport Waikiki-UH, via Kapahulu Waikiki-Honolulu Airport Waimanalo-Kahuku Circle island, via Makapuu Circle island, via Nuuanu Pali KAUAI   | 6.5<br>4.8<br>3.2<br>8.0<br>33.0<br>99.1<br>81.1             |
| Lahaina-Wailea   | 32.4<br>8.9<br>3.7<br>2.7<br>8.0  | Lihue-Haena Lihue-Wailua Lihue-Lihue Airport Lihue-Poipu Lihue-Mana Lihue-Kalalau Lookout Poipu-Kalalau Lookout Poipu-Princeville   | 38.0<br>5.9<br>2.0<br>11.9<br>32.9<br>44.6<br>36.8<br>40.7   |

<sup>1/</sup> Honolulu distances measured from King and Bishop Streets; Waikiki, from Kalakaua and Lewers.

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

Table 495.-- LENGTH OF STREETS AND HIGHWAYS, PAVED AND UNPAVED: 1970 TO 1990

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

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

Source follows next table.

Table 496.-- LENGTH OF STREETS AND HIGHWAYS, PAVED AND UNPAVED, BY ISLANDS: DECEMBER 31, 1990

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

|             |   | Pay                                  |   |  |
|-------------|---|--------------------------------------|---|--|
| Island      | Total<br>mileage  | Free-<br>ways <u>1</u> /             | Other   | Unpaved  |
| State total | 4,100.88  | 96.55                                | 3,790.32  | 214.01   |
| Hawaii 2/   | 1,450.21<br>592.10<br>45.83<br>129.29<br>1,487.15<br>396.30 | 7.04<br>3.21<br>-<br>-<br>86.30<br>- | 1,367.79<br>532.19<br>31.83<br>117.29<br>1,367.41<br>373.81 | 75.38<br>56.70<br>14.00<br>12.00<br>33.44<br>22.49 |

 $<sup>\</sup>frac{1}{2}$  Classified as interstate and freeways and expressways.  $\frac{1}{2}$  Data exclude Chain of Craters Road, closed due to

Z/ Data exclude Chain of Craters Road, closed due to volcanic eruption.

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

Table 497.-- HIGHWAY BRIDGES, BY ISLANDS: DECEMBER 31, 1990

|                                      | Number                            | Longest bridg  | ge                                       | Highest bridge |                                  |  |
|--------------------------------------|-----------------------------------|--|--|----------------|----------------------------------|--|
| Island                               | of<br>bridges 1/                  | Location   | Length<br>(feet)                         | Location       | Height<br>(feet)                 |  |
| State .                              | 700                               | Airport Viaduct .  | 14,890                                   | Nanue          | 208                              |  |
| Hawaii Maui Lanai Molokai Oahu Kauai | 129<br>93<br>-<br>19<br>406<br>53 | Hakalau  Honokahua  None  Manawainui  Airport Viaduct .  Hanamaulu | 775<br>600<br><br>360<br>14,890<br>1,150 | Nanue          | 208<br>79<br><br>50<br>156<br>90 |  |

<sup>1/</sup> Limited to bridges under State jurisdiction and 20 feet or longer. Source: Hawaii State Department of Transportation, Highways Division, records.

Table 498.-- HIGHWAY TUNNEL LENGTHS: DECEMBER 31, 1990

| Island and name of tunnel  | Length<br>(feet) |
|--|------------------|
| Oahu: Pali No. 1: Inbound (to Honolulu) Outbound (from Honolulu) | 1,000<br>1,080   |
| Pali No. 2: Inbound  | 500<br>497       |
| Wilson: Inbound  | 2,775<br>2,813   |
| Middle Street Structure No. 8, Waiawa Interchange                | 393<br>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 499.-- VEHICLE REGISTRATION, BY TYPE OF VEHICLE: 1980 TO 1990

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

|   |  |   | Motor ve   | hicles  |  |
|---|--|---|--|---|--|
| Year  | All<br>vehicles<br>regis-<br>tered   | All<br>motor<br>vehicles  | Pas-<br>senger<br>vehicles <u>1</u> /  | Ambu-<br>lances,<br>hearses,<br>patrol<br>wagons  | Buses  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989                                    | 633,846<br>667,019<br>689,468<br>(NA)<br>735,458<br>767,892<br>790,855<br>818,430<br>838,327<br>876,848<br>907,950 | 617,571<br>649,350<br>671,513<br>702,854<br>717,171<br>749,034<br>771,575<br>798,317<br>817,609<br>855,057<br>885,755 | 514,669<br>541,932<br>566,060<br>(NA)<br>599,845<br>625,823<br>642,636<br>661,674<br>670,877<br>695,397<br>715,464 | 85<br>88<br>80<br>(NA)<br>68<br>66<br>60<br>54<br>52<br>54  | 3,366<br>3,577<br>3,863<br>(NA)<br>4,034<br>4,189<br>4,158<br>4,198<br>4,215<br>4,203<br>4,303           |
| According to the second section of the second section of the second section of the second section of the second |  | Motor vehic   | les contin   | ued   |  |
| Year  | Trucks <u>1</u> /  | Truck<br>tractors,<br>tow<br>trucks   | Truck<br>crane,<br>misc.   | Motor-<br>cycles,<br>motor<br>scooters <u>2</u> /   | Trailers<br>and<br>semi-<br>trailers   |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989                                    | 87,542<br>90,954<br>88,410<br>(NA)<br>101,233<br>106,673<br>112,053<br>119,338<br>129,452<br>141,845<br>151,857    | 1,725<br>1,641<br>1,395<br>(NA)<br>1,428<br>1,334<br>1,290<br>1,220<br>1,176<br>1,107<br>1,049                        | 488<br>458<br>388<br>(NA)<br>364<br>342<br>323<br>318<br>293<br>292<br>306   | 9,696<br>10,700<br>11,317<br>(NA)<br>10,199<br>10,607<br>11,055<br>11,515<br>11,544<br>12,159<br>12,720 | 16,275<br>17,669<br>17,955<br>(NA)<br>18,287<br>18,858<br>19,280<br>20,113<br>20,718<br>21,791<br>22,195 |

Footnotes and source on next page.

## Table 499.-- VEHICLE REGISTRATION, BY TYPE OF VEHICLE: 1980 TO 1990 -- Con.

NA Not available.

1/ Beginning in 1979, vans, pickups, 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.

 $\frac{2}{2}$  Excluding mopeds (1.5 HP or less), which are legally

classified as bicycles.

Source: City and County of Honolulu, Department of Data Systems, records.

Table 500.-- MOTOR VEHICLES REGISTERED, BY COUNTIES: 1980 TO 1990

[Taxable and non-taxable. Includes passenger cars, buses, trucks, and motor-cycles but excludes trailers and semi-trailers. Also includes vehicles registered but subsequently scrapped or shipped out of the State]

| Year   | State<br>total  | City and<br>County of<br>Honolulu   | County<br>of<br>Hawaii   | County<br>of<br>Kauai  | County<br>of<br>Maui   |
|--|---|---|--|--|--|
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 617,571<br>649,350<br>671,513<br>702,854<br>717,171<br>749,034<br>771,575<br>798,317<br>817,609<br>855,057<br>885,755 | 454,316<br>476,995<br>495,629<br>515,002<br>525,599<br>544,976<br>556,935<br>571,738<br>579,998<br>599,379<br>611,919 | 70,047<br>75,812<br>77,024<br>80,090<br>80,840<br>85,806<br>89,918<br>93,095<br>96,360<br>103,724<br>109,910 | 30,604<br>32,932<br>33,931<br>35,365<br>35,236<br>37,659<br>40,585<br>43,925<br>47,235<br>51,455<br>55,537 | 62,604<br>63,611<br>64,929<br>72,397<br>75,496<br>80,593<br>84,137<br>89,559<br>94,016<br>100,499<br>108,389 |

Source: City and County of Honolulu, Department of Data Systems, records.

Table 501.-- VEHICLE REGISTRATION, BY TYPE OF VEHICLE, FOR COUNTIES: 1990 AND 1983

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

| Type of vehicle   | State<br>total   | City and<br>County of<br>Honolulu   | County<br>of<br>Hawaii  | County<br>of<br>Kauai   | County<br>of<br>Maui  |
|---|--|---|---|---|---|
| 1990  |  |   |   |   |   |
| All vehicles  | 907,950  | 624,582   | 114,551   | 57 <b>,</b> 795   | 111,022   |
| Motor vehicles Passenger vehicles Automobiles Trucks Buses Ambulances, hearses Freight Trucks Truck tractors, tow trucks Truck cranes, misc. Motorcycles 1/ Trailers, semi-trailers | 885,755<br>811,503<br>715,464<br>91,680<br>4,303<br>56<br>61,532<br>60,177<br>1,049<br>306<br>12,720<br>22,195 | 611,919<br>563,090<br>497,116<br>62,470<br>3,467<br>37<br>39,066<br>38,485<br>472<br>109<br>9,763<br>12,663 | 109,910<br>97,854<br>87,299<br>10,287<br>257<br>11<br>10,519<br>10,224<br>244<br>51<br>1,537<br>4,641 | 55,537<br>51,520<br>44,171<br>7,249<br>99<br>1<br>3,489<br>3,343<br>112<br>34<br>528<br>2,258 | 108,389<br>99,039<br>86,878<br>11,674<br>480<br>7<br>8,458<br>8,125<br>221<br>112<br>892<br>2,633 |
| 1983  |  |   |   |   |   |
| Motor vehicles  | 702,854<br>30,442<br>672,412   | 515,002<br>18,580<br>496,422  | 80,090<br>2,891<br>77,199   | 35,365<br>1,478<br>33,887   | 72,397<br>7,493<br>64,904   |

1/ Including motorscooters but excluding mopeds (1.5 HP or less), legal  $\overline{1}$ y classified as bicycles.

Source: 1990 from City and County of Honolulu, Department of Data Systems, records; 1983 from Applied Analysis, Inc., Estimating Annual Vehicle-miles Traveled (VMT) in the State of Hawaii (August 1987), and records.

Table 502.-- TRUCK CHARACTERISTICS: 1977, 1982, AND 1987
[Percent]

| Vehicular and operational characteristics  | 1977 | 1982 | 1987 <u>1</u> / |
|--|------|------|-----------------|
| Major use: Personal transportation Body type: Pickup, panel, or mini-van Vehicle size: Light Annual miles: Less than 10,000 Year model: Over 4 years old Vehicle acquisition: Purchased new Fleet size: 1 truck Truck type: Single-unit, 2 axles Range of operation: Local Fuel type: Diesel and LPG | 50.0 | 54.3 | 60.5            |
|  | 85.1 | 89.1 | 91.2            |
|  | 89.0 | 92.9 | 94.6            |
|  | 54.1 | 59.7 | 57.0            |
|  | 68.1 | 75.8 | 62.1            |
|  | 54.6 | 47.3 | 49.6            |
|  | 64.0 | 72.3 | 64.4            |
|  | 95.7 | 96.6 | 96.4            |
|  | 87.3 | 78.2 | 80.2            |
|  | 4.6  | 3.7  | 5.4             |

<sup>1</sup>/ There were 160,800 trucks in Hawaii in 1987, which traveled 1,550.5 million truck miles, or 9,600 per truck.

Source: U.S. Bureau of the Census, 1987 Census of Transportation, Truck Inventory and Use Survey, Hawaii, TC87-T-12 (March 1990), tables 1 and 2.

Table 503.-- VEHICLE DENSITIES: 1970 TO 1990

| Measure   | 1970       | 1975                     | 1980                     | 1985                     | 1990                     |
|---|------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Motor vehicles per  1,000 persons 1/  Mile of street or highway  Persons per 1/  Motor vehicle  Mile of street or highway | 115<br>2.0 | 532<br>134<br>1.9<br>252 | 585<br>158<br>1.7<br>270 | 657<br>184<br>1.5<br>280 | 705<br>216<br>1.4<br>306 |

1/ Based on de facto population.

Source: Hawaii State Department of Transportation, Highways Division, records; Hawaii State Data Center population estimates.

Table 504.-- NEW PASSENGER CARS AND MOTOR TRUCKS REGISTERED: 1985 TO 1990

| Year | Total  | Passenger<br>cars | Motor<br>trucks |
|------|--------|-------------------|-----------------|
| 1985 | 67,875 | 51,330            | 16,545          |
|      | 68,060 | 49,680            | 18,380          |
|      | 73,138 | 51,446            | 21,692          |
|      | 78,454 | 56,278            | 22,176          |
|      | 84,485 | 59,893            | 24,592          |
|      | 97,754 | 71,950            | 25,804          |

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 505.-- NEW PASSENGER CAR AND TRUCK REGISTRATIONS, BY COUNTIES: 1985 TO 1990

| Year | State<br>total | Hono-<br>lulu | Maui   | Hawaii | Kauai  |
|------|----------------|---------------|--------|--------|--------|
| 1985 | 68,676         | 50,058        | 8,095  | 7,660  | 2,863  |
|      | 68,379         | 48,497        | 8,535  | 7,896  | 3,451  |
|      | 71,987         | 49,028        | 10,865 | 7,436  | 4,658  |
|      | 74,962         | 49,401        | 11,413 | 8,410  | 5,738  |
|      | 85,425         | 52,855        | 13,733 | 11,362 | 7,475  |
|      | 102,721        | 57,424        | 19,737 | 14,527 | 11,033 |
|      | 87,481         | 47,609        | 17,664 | 12,403 | 9,805  |
|      | 15,240         | 9,815         | 2,073  | 2,124  | 1,228  |

Source: Hawaii Automobile Dealers Association, <u>HADA</u> Yearbook (annual), as revised.

Table 506.-- NEW PASSENGER CAR AND TRUCK REGISTRATIONS, RETAIL AND FLEET, BY NAMEPLATE: 1990

|                | Retail and fleet           |   | Retail<br>registrations     |  | Fleet<br>registrations      |   |
|----------------|----------------------------|---|-----------------------------|--|-----------------------------|---|
| Nameplate      | Rank                       | Number <u>1</u> /   | Rank                        | Number   | Rank                        | Number  |
| All nameplates | •••                        | 102,721   | • • •                       | 54,381   | •••                         | 48,340  |
| Chevrolet      | 1<br>2<br>3<br>4<br>5<br>6 | 22,929<br>14,888<br>12,548<br>7,716<br>6,902<br>4,887<br>32,361 | 4<br>14<br>1<br>3<br>2<br>5 | 5,570<br>853<br>8,125<br>5,695<br>6,781<br>4,628<br>22,729 | 1<br>2<br>3<br>6<br>14<br>9 | 16,943<br>14,035<br>4,423<br>2,459<br>123<br>727<br>9,630 |

<sup>1/</sup> Independently calculated from county data, and may differ
significantly from sum of retail registrations and fleet registrations.
 Source: Hawaii Automobile Dealers Association, 1991 HADA Yearbook,
pp. 6, 8, and 9.

Table 507.-- NEW PASSENGER CAR AND TRUCK REGISTRATIONS, BY PLACE OF MANUFACTURE: 1989 AND 1990

|              |                   |                      | Imported <u>1</u> / |              |
|--------------|-------------------|----------------------|---------------------|--------------|
| Year         | Total             | Domestics <u>1</u> / | Number              | Percent      |
| 1989<br>1990 | 85,425<br>102,721 | 50,923<br>70,718     | 34,502<br>32,003    | 40.4<br>31.2 |

<sup>1/</sup> 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.

Source: Hawaii Automobile Dealers Association, 1991 HADA Yearbook, p. 10.

Table 508.-- HAWAII DRIVERS LICENSES IN FORCE, BY COUNTIES: 1985 TO 1990

[As of December 31]

| Year                                 | State<br>total   | City and<br>County of<br>Honolulu                              | County<br>of<br>Hawaii                                   | County<br>of<br>Kauai                                    | County<br>of<br>Maui                                     |
|--------------------------------------|--|--|--|--|--|
| 1985<br>1986<br>1987<br>1988<br>1989 | 593,952<br>612,101<br>628,027<br>634,880<br>657,156<br>677,626 | 441,278<br>453,220<br>463,522<br>465,331<br>478,078<br>488,119 | 68,177<br>70,493<br>72,142<br>74,545<br>78,448<br>82,730 | 29,188<br>30,374<br>31,831<br>33,007<br>34,963<br>37,026 | 55,309<br>58,014<br>60,532<br>61,997<br>65,667<br>69,751 |

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

Table 509.-- HAWAII DRIVERS LICENSES IN FORCE, BY AGE AND SEX: DECEMBER 31, 1990

| Age                | Both sexes  | Male  | Female  |
|--------------------|---|---|---|
| Total              | 677,626   | 366,208   | 311,418   |
| 15 to 19 years     | 37,911<br>63,333<br>167,308<br>163,745<br>99,298<br>74,548<br>53,213<br>16,880<br>1,390 | 21,256<br>34,152<br>87,486<br>85,690<br>53,248<br>39,991<br>31,682<br>11,650<br>1,053 | 16,655<br>29,181<br>79,822<br>78,055<br>46,050<br>34,557<br>21,531<br>5,230 |
| Median age (years) | 39.3  | 39.7  | 38.8  |

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

Table 510.-- MOTOR VEHICLE FUEL CONSUMPTION AND VEHICLE MILES: 1980 TO 1990

|                 | Highway<br>consumpt         |                                      | Vehicle miles<br>of travel |                           |  |
|-----------------|-----------------------------|--------------------------------------|----------------------------|---------------------------|--|
| Year and county | Total<br>(1,000<br>gallons) | Gallons<br>per<br>vehicle <u>2</u> / | Total<br>(millions)        | Per<br>vehicle <u>2</u> / |  |
| 1980            | 330,734                     | 536                                  | 5,570.0                    | 9,019                     |  |
|                 | 319,588                     | 492                                  | 5,855.7                    | 9,018                     |  |
|                 | 323,827                     | 482                                  | 6,048.3                    | 9,007                     |  |
|                 | 327,769                     | (NA)                                 | (NA)                       | (NA)                      |  |
|                 | 339,491                     | 473                                  | 6,486.3                    | 9,044                     |  |
|                 | 345,672                     | 461                                  | 6,761.5                    | 9,027                     |  |
|                 | 357,716                     | 464                                  | 6,970.7                    | 9,034                     |  |
|                 | 367,984                     | 461                                  | 7,217.2                    | 9,041                     |  |
|                 | 378,988                     | 464                                  | 7,400.8                    | 9,052                     |  |
|                 | 395,945                     | 463                                  | 7,748.1                    | 9,062                     |  |
|                 | 395,185                     | 444                                  | 8,065.4                    | 9,071                     |  |
| Honolulu        | 264,613                     | 434                                  | 5,395.7                    | 8,847                     |  |
|                 | 58,834                      | 525                                  | 1,094.8                    | 9,765                     |  |
|                 | 24,107                      | 421                                  | 591.7                      | 10,322                    |  |
|                 | 47,631                      | 434                                  | 983.2                      | 8,957                     |  |

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

NA Not available. 1/ Includes gasoline, gasohol, diesel oil, and butane gas. Gasohol was no longer used in motor vehicles after June 1982.

<sup>2/</sup> 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.

Table 511.-- TOTAL 24-HOUR TRAFFIC VOLUMES AT SELECTED OAHU SURVEY SITES: 1988 TO 1990

| Site  | 1988             | 1989              | 1990              |
|---|------------------|-------------------|-------------------|
| Pali Highway at tunnels<br>Likelike Highway at tunnels<br>H-1 Freeway at Manoa-Palolo | 50,453<br>48,358 | 51,503<br>57,025  | 50,590<br>54,296  |
| Drainage Canal 1/ H-1 Freeway at Kapalama Drainage                                    | 127,367          | 128,273           | 123,621           |
| Canal Bridge  | 191,286          | 193,254<br>79,870 | 193,983<br>73,188 |
| Kalanianaole Highway east of Ainakoa Ave  | 77,928           | 79,275            | 80,135            |

Table 512.-- HIGHWAY SPEEDS, BY TYPE OF HIGHWAY: 1985 TO 1990 [Average speeds, in miles per hour. Years ended September 30]

|      |  |  | Rural  |  |  |
|------|--|--|--|--|--|
| Year | State-<br>wide                                 | Urban<br>inter-<br>state                     | Inter-<br>state                              | Other<br>arter-<br>ials                      | Major<br>collec-<br>tors                     |
| 1985 | 54.8<br>55.1<br>55.0<br>56.2<br>55.7<br>1/56.7 | 56.9<br>58.4<br>58.4<br>59.5<br>58.2<br>58.9 | 58.0<br>(NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA) | 52.3<br>51.4<br>51.3<br>52.0<br>52.4<br>53.5 | 53.0<br>52.6<br>52.1<br>52.3<br>53.1<br>54.9 |

NA Not available.

NA Not available.

1/ Includes Kapiolani on- and off-ramps.

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

<sup>1/</sup> The corresponding U.S. average was 56.6. Hawaii ranked 31st among the 50 States.

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

Table 513.-- MAJOR TRAFFIC ACCIDENTS, TRAFFIC INJURIES, AND TRAFFIC DEATHS, 1979 TO 1989, AND BY COUNTIES, 1989

|                            | Major traffic  | accidents <u>1</u> /  | Persons injured  | or killed   |
|----------------------------|--|---|--|---|
| Year                       | Total  | Fatal   | Injured only   | Killed  |
| 1979                       | 19,158 18,301 16,582 16,407 16,372 17,657 19,577 20,852 23,618 26,039 26,893 | 183<br>165<br>136<br>143<br>131<br>127<br>118<br>108<br>126<br>129<br>127 | 13,963<br>13,026<br>11,999<br>11,865<br>11,852<br>12,390<br>12,613<br>10,941<br>11,987<br>12,801<br>12,834 | 205<br>185<br>150<br>161<br>139<br>136<br>126<br>117<br>138<br>149<br>147 |
| Honolulu Hawaii Kauai Maui | 20,388<br>3,290<br>1,201<br>2,014  | 70<br>33<br>6<br>18   | 8,475<br>2,263<br>663<br>1,433   | 78<br>40<br>8<br>21   |

<sup>1/</sup> 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 514.-- REGISTERED TAXICABS AND BICYCLES, BY ISLANDS: 1990

| I AS OT DECEMBEL ST | [As | of | December | 31 |
|---------------------|-----|----|----------|----|
|---------------------|-----|----|----------|----|

| Island | Taxicabs <u>1</u> /           | Bicycles and mopeds 2/                       |
|--------|-------------------------------|--|
| Hawaii | 110<br>157<br>2<br>5<br>1,620 | 5,357<br>861<br>47<br>80<br>109,834<br>1,272 |

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

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

Table 515.-- U-DRIVE WEEKDAY AVERAGE DAILY RATES, BY SIZE OF PASSENGER CAR, FOR OAHU: 1989 TO 1991

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

| Date             | Sub-<br>compact | Compact | Mid-size | Full-<br>size |
|------------------|-----------------|---------|----------|---------------|
| October 18, 1989 | 37.93           | 38.92   | 43.68    | 48.94         |
|                  | 39.97           | 46.46   | 49.71    | 57.21         |
|                  | 30.62           | 34.19   | 37.44    | 43.19         |

Source: Information provided by listed companies.

<sup>2/</sup> Number licensed during 1989 and 1990 for Hawaii and Oahu, and during 1990 only for Maui, Lanai, Molokai, and Kauai. Bicycles with wheels having a diameter of 20 inches or more and all mopeds, both of which were formerly licensed on an annual basis, have, since November 1, 1988, been registered biennially; see SLH 1988, Act 264, sec. 1.

Table 516.-- AUTOMOTIVE RENTAL AND LEASING WITHOUT DRIVERS (SIC 751) ESTABLISHMENTS WITH PAYROLL, BY COUNTIES: 1987

|  | State total 1/ |             | Counties (SIC 751) |            |            |            |
|--|----------------|-------------|--------------------|------------|------------|------------|
| Subject                                    | SIC<br>751     | SIC<br>7514 | Hono-<br>lulu      | Hawaii     | Kauai      | Maui       |
| No. of establishments Receipts (mil. dol.) | 101<br>243.3   | 77<br>231.1 | 48<br>134.5        | 19<br>23.5 | 11<br>23.9 | 23<br>61.4 |

<sup>1/</sup> Most of the receipts for SIC 751 were reported in SIC 7514, passenger car rental. Other subgroups under SIC 751 were SIC 7513, truck rental and leasing, without drivers; SIC 7515, passenger car leasing; and SIC 7519, utility trailer and recreational vehicle rental. Source: U.S. Bureau of the Census, 1987 Census of Service Industries, Hawaii, SC87-A-12 (July 1989), tables 1a, 4a, 7, and 8a.

Table 517. -- MOTOR CARRIER CHARACTERISTICS, BY COUNTIES: JULY 1991

|             | Passenger carriers <u>1</u> / |                            |                                   | Property carriers <u>2</u> / |                                |  |
|-------------|-------------------------------|----------------------------|-----------------------------------|------------------------------|--------------------------------|--|
| County      | Number<br>of<br>carriers      | Number<br>of<br>vehicles   | Seating capacity                  | Number<br>of<br>carriers     | Number<br>of<br>vehicles       |  |
| State total | 355                           | 2,465                      | 51,864                            | 2,510                        | 12,360                         |  |
| Hawaii      | 21<br>32<br>289<br>13         | 199<br>408<br>1,660<br>198 | 5,165<br>9,264<br>32,779<br>4,656 | 470<br>346<br>1,525<br>169   | 2,332<br>1,405<br>7,859<br>764 |  |

<sup>1</sup>/ Includes mostly tour bus operators; excludes public transit (such as MTL,  $\overline{I}$ nc.), school buses, taxicabs, and rental car companies.

<sup>2/</sup> Includes truckers, moving companies, etc.

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

Table 518.-- PUBLIC TRANSIT, FOR OAHU: 1980 TO 1990 [Service provided by City and County of Honolulu bus system]

| Year | Number<br>of<br>buses,<br>Dec. 31                                  | Bus<br>mileage <u>1</u> /  | Total<br>passengers <u>2</u> /   | Revenues<br>(dollars)  |
|------|--|--|--|--|
| 1980 | 400<br>400<br>400<br>395<br>440<br>440<br>459<br>460<br>470<br>475 | 16,579,392<br>16,748,338<br>16,767,816<br>16,654,568<br>16,774,564<br>16,938,692<br>17,065,875<br>16,733,510<br>17,124,317<br>17,525,608<br>18,080,500 | 71,601,744 73,546,802 74,109,528 75,051,618 76,260,187 74,816,485 74,410,104 74,066,369 74,467,760 74,964,453 75,648,930 | 17,388,760<br>17,991,735<br>18,269,144<br>18,157,876<br>18,819,782<br>18,952,566<br>18,802,330<br>18,659,459<br>18,824,046<br>18,843,083<br>18,914,500 |

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

 $<sup>\</sup>frac{1}{2}$  Estimated number of revenue vehicle miles. Estimated number of revenue passengers, including senior citizens and handicapped.

Table 519.-- PUBLIC TRANSIT PASSENGERS, BY FARE CATEGORY, AND AVERAGE BUS SPEED, FOR OAHU: 1988 TO 1990

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

| Fare category  | 1988  | 1989  | 1990   |
|--|---|---|--|
| All passengers   | 74,467,760  | 74,964,453  | 75,648,930   |
| Adults, full fare Students School subsidy Stadium express Senior citizens and handicapped Chartered service Free transfers | 43,182,518<br>11,533,291<br>311,027<br>10,309<br>14,197,265<br>4,967<br>5,228,383 | 43,699,952<br>11,558,225<br>242,201<br>11,249<br>14,319,192<br>-<br>5,133,592 | 44,508,635<br>11,301,854<br>212,211<br>7,894<br>14,454,242<br>-<br>5,164,094 |
| Average bus speed (m.p.h.)   | 15.0  | 15.0  | 15.0   |

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

Table 520.-- BUS FARE CHRONOLOGY, FOR OAHU: 1971 TO 1991 [In dollars]

|                | Cash  | fares <u>1</u> /                            | Month1         | y passes     |
|----------------|---|---|----------------|--------------|
| Effective date | Adult                                       | School                                      | Adult          | School       |
| March 1, 1971  | .25<br>.25<br>.25, .50<br>.25<br>.50<br>.60 | .15<br>.10<br>.10, .25<br>.10<br>.25<br>.25 | 15.00<br>15.00 | 7.50<br>7.50 |

<sup>1/</sup> 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.

Zone fares initiated.Current fares as of July 15, 1991.

Source: City and County of Honolulu, Department of Transportation Services, records.

#### Table 521.-- STEAM RAILROAD MILEAGE AND PASSENGERS: 1980 TO 1990

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

| Calendar<br>year                     | Miles<br>of<br>track  | Passengers   | Calendar<br>year             | Miles<br>of<br>track  | Passengers  |
|--------------------------------------|-----------------------|--|------------------------------|-----------------------|---|
| 1980<br>1981<br>1982<br>1983<br>1984 | 6<br>6<br>6<br>6<br>6 | 111,699<br>128,178<br>155,059<br>171,892<br>197,876<br>199,759 | 1986<br>1987<br>1988<br>1989 | 6<br>6<br>6<br>6<br>6 | 215,735<br>244,555<br>285,139<br>296,391<br>308,910 |

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

Table 522.-- AIRPORTS AND HELIPORTS, BY CONTROL, BY ISLANDS: DECEMBER 31, 1990

|  |                            | Airpor                        | Heliports <u>2</u> /            |                            |                            |                            |
|--|----------------------------|-------------------------------|---------------------------------|----------------------------|----------------------------|----------------------------|
|  | State                      |                               |                                 |                            |                            |                            |
| Island   | Com-<br>mercial            | General<br>aviation           | Military                        | Semi-<br>private           | State:<br>commercial       | Semi-<br>private           |
| State total  | 7                          | 7                             | 6                               | 2                          | _                          | 13                         |
| Hawaii Maui Kahoolawe Lanai Molokai Oahu Kauai Niihau Kure Atoll | 2<br>1<br>1<br>1<br>1<br>1 | 2<br>1<br><br>1<br>2<br>1<br> | 1<br>-<br>-<br>-<br>3<br>1<br>- | 1<br>-<br>-<br>-<br>1<br>- | -<br>-<br>-<br>-<br>-<br>- | 8<br>-<br>-<br>1<br>2<br>2 |

<sup>1/</sup> Excludes private airports (not available).

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

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

Table 523.-- AIRCRAFT OPERATIONS FOR SPECIFIED AIRPORTS: 1980 TO 1990

[An aircraft operation is an aircraft arrival or departure]

| Year   | Honolulu<br>Inter-<br>national<br>Airport   | Hilo<br>Inter-<br>national<br>Airport <u>l</u> /                             | Keahole<br>Airport   | Kahului<br>Airport  | Lihue<br>Airport  | Molokai<br>Airport   |
|--|---|--|--|---|---|--|
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 375,408<br>339,359<br>308,728<br>333,038<br>343,818<br>357,511<br>368,049<br>385,275<br>377,919<br>403,635<br>407,048 | 49,969 53,274 47,964 54,470 62,543 61,225 61,514 80,123 85,267 93,202 98,755 | 66,944<br>57,488<br>51,889<br>66,581<br>83,320<br>93,879<br>81,467<br>67,497<br>56,584<br>55,674<br>60,086 | 111,573<br>102,760<br>112,428<br>124,288<br>142,311<br>157,231<br>174,560<br>165,920<br>173,053<br>177,803<br>182,686 | 62,829<br>59,404<br>65,305<br>71,739<br>100,992<br>131,755<br>143,905<br>134,495<br>122,268<br>116,742<br>113,860 | 67,761<br>61,876<br>69,142<br>54,882<br>53,513<br>56,048<br>52,268<br>50,829<br>50,456<br>47,208<br>43,509 |

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

Source: follows next table. HAWAH STATE DEPTARTMENT OF TRANSPORTATION, AIRPORTS DIVISION, RECORDS

Table 524.-- RANK OF HONOLULU INTERNATIONAL AIRPORT IN OPERATIONS AND ENPLANED PASSENGERS: 1988 AND 1989

|   | Rank <u>1</u> / |                | Number                          |                                 |
|---|-----------------|----------------|---------------------------------|---------------------------------|
| Subject   | 1988            | 1989           | 1988                            | 1989                            |
| Total aircraft operations Air carrier operations Total enplaned passengers 2/ | 23<br>23<br>15  | 16<br>19<br>14 | 376,893<br>184,856<br>8,396,313 | 403,738<br>194,354<br>8,943,521 |

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

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

Source: FAA Statistical Handbook of Aviation for 1988 (pp. 24 and 82) and 1989 (pp. 2-18 and 4-33).

Table 525.-- AIRCRAFT OPERATIONS, BY TYPE OF AIRCRAFT, AT MAJOR STATE OWNED AIRPORTS: 1990

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

| Airport   | All<br>movements  | Air<br>carrier                                  | Air taxi   | General<br>aviation                                     | Military   |
|---|---|---|--|---|--|
| Honolulu International Hilo International Kahului Lihue Keahole Molokai | 407,048<br>98,755<br>182,686<br>113,860<br>60,086<br>43,509 | 194,357<br>19,709<br>56,532<br>34,656<br>27,608 | 57,506<br>42,249<br>75,923<br>63,754<br>10,838<br>33,145 | 122,349<br>23,550<br>44,209<br>8,230<br>17,504<br>9,121 | 32,836<br>13,247<br>6,022<br>7,220<br>4,136<br>1,231 |

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

Table 526.-- TRANSPACIFIC AND INTERISLAND AIR CARRIERS SERVING HAWAII: 1988 TO 1991

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

| Service      | 1988                                | 1989                                      | 1990                                      | 1991                                 |
|--------------|-------------------------------------|---|---|--------------------------------------|
| All carriers | 34<br>25<br>10<br>15<br>2<br>7<br>5 | 44<br>27<br>12<br>15<br>5<br>12<br>8<br>4 | 43<br>26<br>11<br>15<br>4<br>13<br>9<br>4 | 43<br>25<br>10<br>15<br>5<br>13<br>9 |

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

Table 527.-- CIVIL FLYING: 1986 TO 1989

| Item                                   | 1986         | 1987         | 1988         | 1989         |
|--|--------------|--------------|--------------|--------------|
|  |              |              |              |              |
| Aircraft facilities, Dec. 31           | 51           | 54           | 54           | 53           |
| Airports                               | 34           | 35           | 35           | 34           |
| Heliports                              | 17           | 19           | 19           | 19           |
| Public aircraft facilities, Dec. 31    | 18           | 18           | 18           | 17           |
| Paved and lighted facilities, Dec. 31. | 12           | 12           | 12           | 12           |
| Large aircraft in operation, Dec       | 54           | 57           | 51           | 51           |
| Aloha Airlines                         | 11           | 10           | 12           | 13           |
| Hawaiian Airlines                      | 24           | 29           | 31           | 31           |
| Mid Pacific Airlines                   | 19           | 18           | 8            | 7            |
|  |              |              | -            |              |
| General aviation: 1/                   |              |              |              |              |
| Active civil aircraft, Dec             | 366          | 486          | 600          | 519          |
| Standard error                         | 118          | 140          | 153          | 119          |
| Hours flown (1,000)                    | 182          | 163          | 426          | 290          |
| Standard error (1,000)                 | 81           | 75           | 133          | 96           |
| A-+ 71.                                |              |              |              |              |
| Active personnel, Dec. 31:             | 7 727        | 7 777        | 7 500        | 7 014        |
| Pilots, except instructors             | 3,327<br>246 | 3,373<br>271 | 3,598<br>293 | 3,814<br>284 |
| Flight instructors                     | 1            | 2,778        |              |              |
| Nonpilot airmen $\underline{2}/\ldots$ | 2,609        | 4,//0        | 3,008        | 3,185        |

<sup>1/</sup> Aircraft based in Hawaii. Data based on samples with specified standard errors.

<sup>2/</sup> Mechanics, parachute riggers, ground instructors, dispatchers, flight navigators, and flight engineers.
Source: U.S. Department of Transportation, Federal Aviation Administration, FAA Statistical Handbook of Aviation (annual).

#### Table 528.-- OVERSEAS AND INTERISLAND AIR PASSENGER MOVEMENTS: 1980 TO 1990

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

|  | Overse  | Inter-<br>island<br>passenger   |   |   |
|--|---|---|---|---|
| Year   | Arrivals Departures Through   |   | arrivals  |   |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 4,270,633<br>4,290,752<br>4,669,747<br>4,760,459<br>5,263,213<br>5,317,862<br>6,041,078<br>6,265,211<br>6,653,346<br>7,022,986<br>7,310,635 | 4,174,739<br>4,292,159<br>4,641,716<br>4,714,689<br>5,261,373<br>5,293,528<br>6,083,508<br>6,317,747<br>6,713,621<br>7,234,653<br>7,562,156 | 1,118,987<br>1,032,264<br>882,832<br>777,490<br>727,947<br>858,501<br>841,241<br>1,109,850<br>1,421,707<br>1,167,954<br>1,065,408 | 6,737,894<br>6,724,113<br>7,327,447<br>7,037,687<br>7,632,239<br>7,878,598<br>8,340,048<br>8,802,594<br>8,964,928<br>9,634,077<br>9,907,154 |

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

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

Table 529.-- PASSENGERS, CARGO, AND MAIL, OVERSEAS AND INTERISLAND, BY AIRPORT: 1990

|  | Passeng  | ers <u>1</u> /   | Cargo  | (tons)   | Mai1  | (tons)                                  |
|--|--|--|--|--|---|---|
| Airport  | Enplaned   | Deplaned   | Enplaned   | Deplaned   | Enplaned  | Deplaned                                |
| OVERSEAS   |  | ARRIVALS   |  | AKRIVALS   |   | ARRIVALS                                |
| Total  | 7,562,156  | 7,310,635  | 147,663  | 168,862  | 16,011  | 19,099                                  |
| Honolulu Hilo Kahului Keahole Lihue INTERISLAND  | 6,837,726<br>-<br>550,169<br>109,947<br>64,314   | 6,549,459<br>-<br>567,073<br>119,265<br>74,838   | 138,797<br>177<br>5,418<br>3,012<br>259  | 157,376<br>83<br>7,748<br>2,436<br>1,219   | 16,011  | 19,099<br>-<br>-<br>-<br>-              |
|  | 2 22 2 2 2   |  | <b>50</b> 500  | 70 700   |   | 17 404                                  |
| Total  | 9,907,154  | 9,907,154  | 72,709   | 72,709   | 11,424  | 11,424                                  |
| Honolulu Hilo Upolu Waimea-Kohala Keahole Kahului Hana Molokai Kalaupapa Lanai Lihue Other airports 2/ | 4,445,160<br>721,104<br>5<br>7,312<br>987,598<br>1,920,221<br>11,216<br>164,472<br>6,315<br>56,240<br>1,358,837<br>228,674 | 4,470,017<br>739,506<br>8<br>7,187<br>961,886<br>1,899,508<br>11,005<br>166,777<br>5,929<br>56,599<br>1,350,334<br>238,398 | 49,309<br>14,247<br>100<br>3,159<br>3,883<br>-<br>328<br>-<br>31<br>1,487<br>165 | 20,979<br>10,887<br>7<br>39<br>8,683<br>18,770<br>34<br>455<br>4<br>579<br>11,774<br>498 | 6,786<br>1,231<br>-<br>922<br>1,616<br>-<br>65<br>-<br>6<br>798 | 1,379<br>2,501<br>-<br>26<br>-<br>1,309 |

<sup>1</sup>/ Revenue and non-revenue, excluding Military Airlift Command (MAC). Also excludes overseas passengers in transit (1,065,408, all passing through Honolulu International Airport).

<sup>2/</sup> Privately owned.

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

Table 530.-- AIR CARGO AND AIRMAIL: 1980 TO 1990
[In thousands of pounds]

|  | Overseas air cargo  |   | Overseas airmail   |  | Interisland   |  |
|--|---|---|--|--|---|--|
| Calendar<br>year   | Out-<br>going   | In-<br>coming   | Out-<br>going  | In-<br>coming  | Air cargo: incoming   | Airmail: incoming  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 130,586<br>151,513<br>155,278<br>174,582<br>196,215<br>180,470<br>200,255<br>234,098<br>284,783<br>313,402<br>295,326 | 114,673<br>101,301<br>105,388<br>136,354<br>153,654<br>150,295<br>184,894<br>212,717<br>247,174<br>301,674<br>337,724 | 21,105<br>22,388<br>21,280<br>23,620<br>23,356<br>21,657<br>22,842<br>23,560<br>27,764<br>28,258<br>32,022 | 19,581<br>19,887<br>25,006<br>28,288<br>29,497<br>22,119<br>23,725<br>29,004<br>31,028<br>33,542<br>38,198 | 138,008<br>132,559<br>114,038<br>109,828<br>111,472<br>101,700<br>114,657<br>122,481<br>130,203<br>146,960<br>145,418 | 13,576<br>14,131<br>15,014<br>16,024<br>16,282<br>16,072<br>16,913<br>17,561<br>18,847<br>20,706<br>22,848 |

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

Table 531.-- HELICOPTER TOURS: 1977 TO 1991

| Subject   | 1977 | 1982 | 1987 | 1988 | 1989 | 1990 | 1991 |
|-----------|------|------|------|------|------|------|------|
| Companies | 9    | 14   | 36   | 36   | 36   | 37   | 33   |
|           | 15   | 26   | 71   | 74   | 74   | 78   | 90   |

Source: Hawaii Helicopter Operators Association, records.

Table 532.-- FLIGHTS SCHEDULED TO DEPART HONOLULU INTERNATIONAL AIRPORT, BY DESTINATION: APRIL 1991

[Data for the 569 transpacific flights scheduled to depart from Honolulu during a one-week period]

|  | Flights during week  |   |  |  |  |  |
|--|--|---|--|--|--|--|
| Destination  | Total  | Final<br>destination                                  | Intermediate<br>point  |  |  |  |
| Tokyo Osaka Taipei Manila Sydney Auckland Melbourne Guam Vancouver Seattle Portland San Francisco Los Angeles Denver Dallas/Fort Worth Chicago Atlanta New York All others | 80<br>20<br>10<br>15<br>40<br>22<br>14<br>12<br>22<br>23<br>7<br>74<br>152<br>9<br>19<br>21<br>12<br>7 | 75 20 5 15 26 8 14 12 22 16 7 64 126 7 12 21 12 7 100 | 5<br>-<br>5<br>-<br>14<br>14<br>14<br>-<br>-<br>7<br>-<br>10<br>26<br>2<br>7<br>-<br>-<br>41 |  |  |  |

Source: Greeters of Hawaii, <u>Jiffisked<sup>[tm]</sup> April 1991</u>. Courtesy of Greeters of Hawaii, P. O. Box 29638, Honolulu, HI 96820.

Table 533.-- REGULAR ONE-WAY FARES AND SCHEDULED FLIGHT TIMES FOR FLIGHTS BY UNITED AIRLINES BETWEEN SAN FRANCISCO AND HONOLULU: 1981 TO 1991

[Updated to September 13, 1991. For historical data, see Robert C. Schmitt, What People Paid to Travel (Hawaiian Historical Society, 1991), pp. 40-41]

|  |  | r one-way far<br>g taxes (doll                           |  | Flight                                       |  |
|--|--|--|--|--|--|
| Effective date o   | į.   | Coach,<br>weekend  | Coach<br>weekday   | time 1/ (hours, min.)                        |  |
| 1981: Jan. 20 .<br>Mar. 31 .<br>June 17 .<br>Oct. 1      | 415.12<br>425.13   | 265.08<br>286.09<br>296.09<br>280.08                     | 265.08<br>286.09<br>296.09<br>280.08                     | 5:02<br>5:02<br>5:02<br>5:00                 |  |
| 1982: Mar. 1<br>Apr. 1<br>June 1<br>Sept. 1              | 412.12<br>412.12<br>412.12                               | 219.07<br>310.09<br>328.10<br>331.13                     | 219.07<br>310.09<br>328.10<br>331.13                     | 5:00<br>5:00<br>5:00<br>5:00                 |  |
| 1983: June 15.   | i i  | 353.14   | 353.14   | 5:00   |  |
| 1984: Sept<br>Oct<br>Dec                                 | 415.00<br>454.00   | 353.14<br>353.00<br>364.00                               | 353.14<br>353.00<br>364.00                               | 5:00<br>5:02<br>5:02                         |  |
| 1986: Nov. 14. 1987: Apr. 11. June 5. June 30. Aug. 7    | 588.00<br>598.00<br>605.00                               | 459.00<br>469.00<br>479.00<br>486.00<br>494.00           | 459.00<br>469.00<br>479.00<br>486.00<br>494.00           | 5:03<br>5:00<br>5:00<br>5:00<br>5:00         |  |
| 1989: Feb. 4<br>June 3                                   |  | 514.00<br>524.00   | 514.00<br>524.00   | 5:06<br>5:05                                 |  |
| 1990: Jan. 4 Feb. 14 . March 2 . Sept. 1 . Oct. 2 Nov. 3 | 762.00<br>771.00<br>777.00<br>818.00<br>852.00<br>901.00 | 545.00<br>554.00<br>560.00<br>589.00<br>613.00<br>648.00 | 545.00<br>554.00<br>560.00<br>589.00<br>613.00<br>648.00 | 5:05<br>5:05<br>5:05<br>5:05<br>5:05<br>5:05 |  |
| 1991: July 1   | 895.00   | 642.00   | 642.00   | 5:05   |  |

<sup>1/</sup> Average scheduled flight time eastbound and westbound, by B-747 or DC-10 aircraft. Flight time varies seasonally. Source: United Airlines, records.

Table 534.-- AIR FARES BETWEEN HONOLULU AND LOS ANGELES, SAN FRANCISCO, AND SEATTLE, FOR MAJOR AIRLINES: JULY 1, 1991

[Dollars. Includes taxes]

| Carrier and fare category  | Los Angeles | San Francisco | Seattle |
|--|-------------|---------------|---------|
| United Airlines, one-way: First class Coach (unrestricted)                                   | 946         | 895           | 987     |
|  | 633         | 642           | 708     |
| United Airlines, round-trip: First class Coach (unrestricted)                                | 1,892       | 1,790         | 1,974   |
|  | 1,266       | 1,284         | 1,416   |
| Major carriers, lowest round-trip: United Airlines 1/ Lowest carrier Highest carrier Average | 438         | 438           | 528     |
|  | 359         | 359           | 359     |
|  | 608         | 688           | 708     |
|  | 468         | 495           | 532     |

 $<sup>\</sup>underline{1}/$  Coach fare, restricted. Requires 14-day advance notice, departure only on Tuesday, Wednesday, or Thursday, and 30-day maximum stay. No one-way fare available.

Source: United Airlines, records.

Table 535.-- ONE-WAY FARES AND SCHEDULED FLIGHT TIMES FOR INTERISLAND FLIGHTS BY HAWAIIAN AIRLINES: 1990 TO 1991

#### [Updated to August 28, 1991]

|                                  |         | One-way  | fares 1/ (                             | dollars)   |  |
|----------------------------------|---------|--|--|--|--|
| Effective date of change in fare |         | Regui  |  | Kamaaina   |  |
| 1990: January 1                  |         | 49.9<br>54.9<br>56.9<br>56.9<br>58.9<br>63.0<br>62.9 | 95<br>95<br>95<br>95<br>95<br>95<br>95 | 44.95<br>49.95<br>39.50<br>42.00<br>45.00<br>54.95<br>49.95<br>54.95 |  |
|                                  | June 14 | 65.9<br>65.9   |  | 54.95<br>57.95   |  |
| Many Many (Many) and a second    |         |  | ght time be                            |  |  |
| Aircraft                         |         | Lihue  | Kahului                                | Hilo   |  |
| DC-9                             |         | 30<br>41   | 32<br>43                               | 46<br>71   |  |

<sup>1/</sup> Fares are identical between Honolulu and each of the Neighbor Islands. "Kamaaina" fares are available only to Hawaii residents. For a complete chronology of interisland air fares, 1929 to 1990, see Robert C. Schmitt, What People Paid to Travel (Hawaiian Historical Society, January 1991), table 11, pp. 38-39.

2/ Average scheduled nonstop flight times (eastbound and westbound averaged), in minutes.

Source: Hawaiian Airlines, tariff records and Schedule and Planning Division.

Table 536.-- STATE COMMERCIAL HARBORS: 1991

|   | Harbor<br>entrance |                   |                         |                             | Piers            | Storage area<br>(1,000 square<br>feet) |                |
|---|--------------------|-------------------|-------------------------|-----------------------------|------------------|--|----------------|
| Island and harbor                             | depth<br>(feet)    | Depth<br>(feet)   | Length (feet)           | Width<br>(feet)             | (linear<br>feet) | Shedded                                | Open           |
| Hawaii: Hilo Kawaihae                         | 35<br>40           | 35<br>35          | 2,300<br>1,500          | 1,400<br>1,450              | 2,787<br>1,012   | 122<br>23                              | 496<br>166     |
| Maui:<br>Kahului                              | 35                 | 35                | 2,400                   | 2,050                       | 3,019            | 124                                    | 703            |
| Molokai:<br>Kaunakakai                        | 23                 | 23                | 1,500                   | 600                         | 691              | 10                                     | 123            |
| Oahu: Honolulu: Main Kapalama Barbers Point . | } 45<br>42         | <b>{</b> 40 40 38 | 3,300<br>3,400<br>2,100 | 1,520 }<br>1,000 }<br>1,800 | 28,007<br>1,600  | 1,733<br>-                             | 7,812<br>1,280 |
| Kauai: Nawiliwili Port Allen                  | 40<br>35           | 35<br>35          | 1,950<br>1,500          | 1,540<br>1,200              | 1,291<br>1,200   | 66<br>35                               | 291<br>32      |

Source: Hawaii State Department of Transportation, Harbors Division, unpublished data, November 5, 1991.

Table 537.-- SMALL CRAFT MOORING FACILITIES CAPACITY, BY ISLANDS: 1990-1991

|             |                                    | State-opera                   | Non-State <u>2</u> /               |                                |                      |                              |
|-------------|------------------------------------|-------------------------------|------------------------------------|--------------------------------|----------------------|------------------------------|
|             | Catwalks and piers                 |                               | Other moorage                      |                                |                      | Other                        |
| Island      | Total                              | Vacant                        | Total                              | Vacant                         | Slips                | moorage 3/                   |
| State total | 1,457                              | 134                           | 756                                | 105                            | 1,355                | 749                          |
| Hawaii      | 14<br>48<br>28<br>3<br>1,282<br>82 | 3<br>7<br>5<br>1<br>104<br>14 | 370<br>145<br>-<br>29<br>176<br>36 | 34<br>9<br>-<br>11<br>35<br>16 | -<br>-<br>-<br>1,355 | 100<br>-<br>-<br>-<br>-<br>- |

<sup>1/</sup> As of December 31, 1990. At that time, 2,013 vessels were moored  $(1,32\overline{3})$  at catwalks and piers, 690 at other moorage), and valid applications on file numbered 2,851.

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<sup>2/</sup> As of March 4, 1991. Totals for 15 organizations controlling moorage.

3/ Includes moorings (82), ramps (8), and dry storage (659).

Source: Hawaii State Department of Transporation, Harbors Division, Boating Branch, Small Craft Mooring Facilities Utilization Report (quarterly), and records.

Table 538.-- LIGHTHOUSES AND RELATED FACILITIES, BY ISLANDS: [Includes all lights, day beacons, buoys, and similar aids to navigation in the Hawaiian Archipelago]

|  | Number of aids to navigation                                     |   |   |   | Greatest<br>nominal                                      | Highest<br>above  |   |
|--|--|---|---|---|--|---|---|
|  | By control   |   |   | Light-                                    | range<br>(naut.  | Sea<br>1eve1  | Ground  |
| Island   | Total  | Federal   | Private   | houses                                    | miles)   | (feet)  | (feet)  |
| Total .  | 430  | 300   | 130   | 22  | <u>1</u> / 25  | <u>2</u> / 931  | <u>3</u> / 138  |
| Hawaii Maui Molokini Kahoolawe Lanai Molokai Oahu Kauai Niihau Lehua Midway At sea | 63<br>44<br>1<br>1<br>14<br>18<br>219<br>39<br>-<br>1<br>25<br>5 | 50<br>27<br>1<br>1<br>8<br>10<br>150<br>22<br>-<br>1<br>25<br>5 | 13<br>17<br>-<br>-<br>6<br>8<br>69<br>17<br>-<br>-<br>- | 7<br>4<br>-<br>-<br>1<br>4<br>6<br>-<br>1 | 24<br>24<br>7<br>7<br>8<br>25<br>25<br>25<br>-<br>7<br>4 | 156<br>170<br>182<br>120<br>91<br>213<br>913<br>174<br>-<br>704<br>43 | 115<br>48<br>30<br>20<br>13<br>138<br>71<br>80<br>-<br>10<br>(NA) |

NA Not available.

<sup>1/</sup> Molokai Light, Kaena Point Light, and Kilauea Light.

2/ Kaena Point Light.

3/ Molokai Light.

Source: 14th Coast Guard District, April 16, 1991.

Table 539.-- UNDOCUMENTED STATE-REGISTERED VESSELS: DECEMBER 31, 1990

| Subject   | Number  | Subject   | Number  |
|---|---|---|---|
| Certificates outstanding .  Length:     Under 16 feet | 14,081  5,581 6,978 1,319 203 18.1  1,235 10,928 541 1,147 230  935 8,427 2,090 557 576 889 256 351  2,367 11,714 | Type of vessel:     Cabin motorboat     Open motorboat     Runabout     Sail/inboard     Sail/outboard     Sail only     Motor vessel over 65 feet     Other  Uses:     Pleasure     Commercial fishing     Charter fishing     Commercial passenger     Other commercial     Livery     Dealer or manufacturer     Youth group     Government     Other  Island kept:     Hawaii     Kauai     Lanai     Maui     Molokai     Oahu | 2,336<br>5,367<br>2,863<br>557<br>576<br>1,098<br>7<br>1,277<br>12,161<br>1,038<br>27<br>243<br>63<br>219<br>43<br>44<br>190<br>53<br>1,980<br>1,181<br>56<br>1,238<br>473<br>9,153 |

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

Table 540.-- DOCUMENTED AND NUMBERED VESSELS REGISTERED IN HAWAII: 1986 TO 1991

| Category             | 1986   | 1987   | 1988   | 1989   | 1990   | 1991  |
|----------------------|--------|--------|--------|--------|--------|-------|
| Documented $1/\dots$ | 1,348  | 1,389  | 1,380  | 1,600  | 1,700  | 1,800 |
| Numbered $2/\dots$   | 14,052 | 14,008 | 14,250 | 13,501 | 14,081 |       |

<sup>1</sup>/ Vessels documented under the laws of the United States with the U.S.  $\overline{\text{C}}$ oast Guard in Hawaii. All vessels over five net tons, used for commercial purposes, must be documented. In addition, yachts over five net tons may be documented. As of June 30.

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

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

Table 541.-- BOATING ACCIDENTS: 1985 TO 1990

|                                      | Number of accidents              |                            | 1                          | er of<br>csons                  | Number                           | Amount   |  |
|--------------------------------------|----------------------------------|----------------------------|----------------------------|---------------------------------|----------------------------------|--|--|
| Year                                 | Total                            | Fatal                      | Killed                     | Injured<br>non-<br>fatally      | of<br>vessels<br>involved        | of<br>damage<br>(\$1,000)                          |  |
| 1985<br>1986<br>1987<br>1988<br>1989 | 41<br>54<br>62<br>31<br>40<br>21 | 2<br>3<br>1<br>4<br>1<br>2 | 5<br>3<br>2<br>5<br>1<br>3 | 10<br>14<br>18<br>11<br>28<br>6 | 50<br>69<br>76<br>41<br>48<br>25 | 417.3<br>293.0<br>720.2<br>209.6<br>216.8<br>271.7 |  |

Source: U.S. Department of Transportation, Coast Guard, <u>Boating Statistics</u> (annual); Hawaii State Department of Transportation, <u>Harbors Division</u>, Boating Branch, <u>Reportable Boating Accident Statistics for Period 1988 to 1990.</u>

Table 542.-- HARBOR DEPTHS AND VESSEL ARRIVALS, BY DRAFT: 1989

[Excludes domestic fishing craft]

|        | Controlling d             | epth (feet)                          | Inbound vessels, by draft   |  |  |  |  |
|--------|---------------------------|--------------------------------------|---|--|--|--|--|
| Harbor | Entrance<br>channel Basin |                                      | Total   | 18 feet<br>and less  | 19 feet<br>and more                              |  |  |
| Hilo   | 42<br><br>45<br>42<br>41  | 34<br>36<br>34<br><br>40<br>37<br>34 | 1,445<br>800<br>1,766<br>738<br>8<br>1/7,104<br>558<br>1,079<br>100 | 1,278<br>792<br>1,630<br>738<br>8<br>6,415<br>475<br>966<br>(NA) | 167<br>8<br>136<br>-<br>689<br>83<br>113<br>(NA) |  |  |

NA Not available.

Source: U.S. Department of the Army, Corps of Engineers, Waterborne Commerce of the United States, Calendar Year 1989, Part 4 (1991), pp. 30-36 and 111-112.

<sup>1/</sup> By type of vessel: self propelled, 4,195 (1,133 passenger and dry cargo, 70 tanker, 2,992 towboat or tugboat); non-self propelled, 2,909 (2,335 dry cargo, 574 tanker).

Table 543.-- SHIP ARRIVALS AT THE PORT OF HONOLULU: 1981 TO 1991

[Years ended June 30]

|  | 0vers   | eas vessels  | Interi  | sland vessels   |
|--|---|--|---|---|
| Year   | Number  | Gross tonnage  | Number  | Gross tonnage   |
| 1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989<br>1990 | 1,968<br>1,943<br>1,775<br>1,686<br>1,749<br>1,825<br>2,080<br>2,014<br>2,024<br>2,159<br>2,066 | 10,959,161<br>9,604,985<br>10,406,544<br>10,397,905<br>9,398,179<br>9,450,373<br>9,974,948<br>10,548,893<br>11,219,662<br>11,752,880<br>13,862,771 | 2,597<br>2,496<br>2,662<br>2,660<br>2,412<br>2,697<br>2,848<br>3,172<br>3,101<br>3,212<br>3,190 | 2,670,405<br>2,598,632<br>2,623,321<br>3,649,085<br>4,480,660<br>4,913,219<br>5,200,667<br>(NA)<br>(NA)<br>(NA) |

NA Not available.

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

Table 544.-- OVERSEAS AND INTERISLAND PASSENGER ARRIVALS AND DEPARTURES, FOR HONOLULU HARBOR: 1986 TO 1991

[Fiscal years ended June 30]

| Type of passenger   | 1986   | 1987   | 1988   | 1989   | 1990   | 1991   |
|---------------------|--------|--------|--------|--------|--------|--------|
| Overseas: In Out    | 6,537  | 8,681  | 5,815  | 15,993 | 9,770  | 17,503 |
|                     | 6,190  | 8,103  | 5,350  | 16,716 | 9,084  | 17,812 |
| Interisland: In Out | 84,943 | 71,049 | 77,731 | 78,710 | 67,199 | 67,409 |
|                     | 82,895 | 69,337 | 71,804 | 78,711 | 67,199 | 67,409 |

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

Table 545.-- OVERSEAS AND INTERISLAND SHIPPING: 1986 TO 1989

[In short tons]

| Calendar                     | Ove        | erseas cargo            |  | Interisland cargo                                   |                        |  |  |
|------------------------------|------------|-------------------------|--|---|------------------------|--|--|
| year                         | Total      | In                      | Out  | Total   | In                     | Out  |  |
| 1986<br>1987<br>1988<br>1989 | 13,140,832 | 9,767,966<br>11,019,824 | 2,070,225<br>2,611,849<br>2,121,008<br>1,728,866 | 8,464,107<br>10,358,749<br>10,844,603<br>11,483,387 | 5,071,134<br>5,267,754 | 4,222,203<br>5,287,615<br>5,576,849<br>5,829,437 |  |

Source: U.S. Department of the Army, Corps of Engineers, <u>Waterborne</u> Commerce of the United States (annual) and printouts, as tabulated by the Hawaii State Department of Transportation, Harbors Division.

Table 546.-- FREIGHT AND PASSENGER TRAFFIC FOR SPECIFIED HARBORS: 1985 TO 1989

| Harbor                  | 1985   | 1986   | 1987   | 1988                                 | 1989  |
|-------------------------|--|--|--|--------------------------------------|---|
| FREIGHT 1/ (SHORT TONS) |  |  |  |                                      |   |
| Hilo                    | 1,318,518<br>526,639<br>1,516,509<br>7,986,133<br>6,751,709<br>933,477 | 1,198,692<br>592,018<br>1,626,650<br>8,603,760<br>5,629,312<br>745,396 | 1,365,768<br>871,202<br>2,035,247<br>9,736,688<br>7,135,064<br>916,422 | 2,156,631<br>10,654,845<br>7,511,140 | 1,569,142<br>732,392<br>2,278,516<br>10,360,134<br>7,374,418<br>1,038,452 |
| PASSENGERS 2/           |  |  |  |                                      |   |
| Hilo                    | 1,102,398  | 708 <b>,</b> 268   | 154,082  | 825,377<br>-                         | 9,082<br>9,083<br>626,671<br>9,082  |

 $<sup>\</sup>frac{1}{2}$  Excludes cargo carried by Army and Navy vessels and cargo in transit.  $\frac{2}{7}$  Total arrivals and departures for transpacific, interisland, and local trave  $\frac{1}{7}$ .

Source: U.S. Department of the Army, Corps of Engineers, Waterborne Commerce of the United States, Calendar Year 1989, Part 4 (1991), pp. 30-37.

Table 547.-- FREIGHT TRAFFIC, BY COMMODITIES, FOR SPECIFIED HARBORS: 1989
[In short tons. Commodities under 150,000 tons not shown separately]

|                           |                  | Foreign   |         | Inter     | state     | Interi    | sland     |
|---------------------------|------------------|-----------|---------|-----------|-----------|-----------|-----------|
| Harbor and commodity      | Total <u>1</u> / | Imports   | Exports | Receipts  | Shipments | Receipts  | Shipments |
| Hilo                      | 1,569,142        | 31,291    | -       | 49,451    | 64,864    | 1,109,320 | 314,216   |
| Residual fuel oil         | 214,993          | -         | -       | 214,993   | -         | 214,993   | -         |
| Fabricated metal products | 305,600          | -         | -       | 305,600   | 40        | 174,172   | 131,388   |
| Kawaihae                  | 732,392          | 10,788    | 1,419   | 12,861    | 82,699    | 432,726   | 191,899   |
| Fabricated metal products | 156,712          | -         | - 1     | (NA)      | (NA)      | (NA)      | (NA)      |
| Kahului                   | 2,278,516        | 12,888    | 10,514  | 51,190    | 137,387   | 1,598,297 | 468,240   |
| Sugar                     | 155,021          | -         | -       | -         | 137,387   | 21        | 17,613    |
| Fabricated metal products | 433,848          | 382       | 3       | 790       | -         | 283,612   | 149,061   |
| Motor vehicles, parts,    |                  |           |         |           |           |           |           |
| and equipment             | 198,881          | 1,990     | -       | 102       | -         | 124,793   | 71,996    |
| Barbers Point             | 7,374,418        | 3,709,321 | 148,505 | 2,723,379 | 167,694   | 42,140    | 493,600   |
| Crude petroleum           | 5,862,212        | 3,491,896 | -       | 2,370,316 | -         | -         | -         |
| Residual fuel oil         | 934,406          | 216,959   | 100,606 | 262,435   | 12,498    | 24,338    | 228,191   |
| Petro. & coal prod. NEC . | 204,839          | -         | -       | · -       | -         | 1,816     | 203,023   |
| Honolulu                  | 10,360,134       | 815,645   | 192,764 | 2,968,090 | 795,743   | 1,593,070 | 3,827,048 |
| Fresh fruits              | 257,374          | 2,868     | 190     | 24,713    | 77,049    | 149,132   | 3,422     |
| Meat, fresh, chill, froz. | 167,562          | 7,199     | 2,370   | 129,063   | 2,928     | 2,064     | 23,938    |
| Vegetables & prep. NEC    | 202,757          | 5,234     | 575     | 112,194   | 6,047     | 45,988    | 32,719    |
| Prepared fruit & vege-    | -                |           |         | ·         | ,         |           |           |
| table juice NEC           | 389,612          | 3,299     | 3,476   | 8,109     | 251,810   | 122,682   | 236       |
| Molasses                  | 200,351          | -         | 26,070  | -         | 134,605   | 37,903    | 1,773     |
| Alcoholic beverages       | 234,427          | 7,127     | 936     | 181,576   | 561       | 4         | 44,223    |
| Misc. food products       | 329,712          | 4,860     | 7,344   | 40,052    | 3,146     | 108,759   | 165,551   |
| Lumber                    | 243,943          | 563       | 2,251   | 165,799   | 1,594     | 3,506     | 70,230    |
| Pulp & paper prod. NEC    | 155,626          | 928       | 400     | 104,185   | 73        | 1,618     | 48,422    |

Continued on next page.

Table 547.-- FREIGHT TRAFFIC, BY COMMODITIES, FOR SPECIFIED HARBORS: 1989 -- Con.

|   |   | Foreign                    |                           | Foreign Interstate                         |                             | Interisland                                   |  |
|---|---|----------------------------|---------------------------|--|-----------------------------|---|--|
| Harbor and commodity  | Total <u>1</u> /                                    | Imports                    | Exports                   | Receipts                                   | Shipments                   | Receipts                                      | Shipments  |
| Honolulu - Con. Gasoline  Jet fuel  Distillate fuel oil  Residual fuel oil  Petro. & coal prod. NEC . | 228,628<br>261,808<br>335,526<br>698,293<br>210,402 | 16,610<br>-<br>-<br>-<br>2 | 142<br>-<br>168<br>38,552 | 40,788<br>186,438<br>82,207<br>-<br>18,344 | 30,697<br>-<br>2,855<br>-   | 4,451<br>4,793<br>25,326<br>169,400<br>16,471 | 135,940<br>70,577<br>220,248<br>335,999<br>175,035 |
| Building cement<br>Fabricated metal product<br>Motor vehicles, parts,                                 | 434,705<br>1,291,524                                | 257,690<br>2,693           | 278<br>351                | 9,442<br>72,587                            | 642                         | 471,440                                       | 167,284<br>743,811                                 |
| equipment Nawiliwili Fabricated metal products Kalaupapa  | 832,710<br>1,038,452<br>287,967<br>1,687            | 38,729<br>7,275<br>499     | 848<br>-<br>-<br>-        | 135,286<br>17,744<br>-                     | 45,043<br>127,277<br>-<br>- | 184,951<br>655,619<br>163,312<br>1,238        | 427,853<br>230,537<br>124,156<br>449               |
| Kaunakakai  | 144,494<br>131,592                                  | -                          | -                         | 1,199                                      | -                           | 97,511<br>124,029                             | 45,784<br>111                                      |

NA Not available.

NEC Not elsewhere classified.

<sup>1/</sup> Includes internal and local movements, not separately shown in this table: 89,779 tons at Barbers Point and 167,774 tons at Honolulu.

Source: U.S. Department of the Army, Corps of Engineers, <u>Waterborne Commerce of the United States</u>, Calendar Year 1989, Part 4 (June 1991), pp. 30-37, and unpublished printouts.

Table 548.-- SUMMARY STATISTICS FOR TRANSPORTATION SERVICES ESTABLISHMENTS: 1987 AND 1989

[Includes only establishments with payroll]

| 1987<br>SIC<br>code | Kind of business  | No. of establishments | Revenue (\$1,000) | Annual<br>payroll<br>(\$1,000) | Paid employees, |
|---------------------|---|-----------------------|-------------------|--------------------------------|-----------------|
| 42                  | Motor freight transp., warehousing Water transportation Transportation services  1989 | 215                   | 192,336           | 66,389                         | 3,734           |
| 44                  |   | 58                    | 147,349           | 44,168                         | 1,547           |
| 47                  |   | 550                   | 241,602           | 83,405                         | 5,755           |
| 42                  | Motor freight transp., warehousing Water transportation Transportation services       | 205                   | (NA)              | 90,746                         | 4,070           |
| 44                  |   | 59                    | (NA)              | 71,918                         | 2,883           |
| 47                  |   | 550                   | (NA)              | 114,254                        | 6,627           |

NA Not available.

Source: U. S. Bureau of the Census, 1987 Census of Transportation, TC87-S-1 (July 1991), table 1, and County Business Patterns 1989, Hawaii, CBP-89-13 (October 1991), table 1a.

## Section 19

## **AGRICULTURE**

This section presents statistics on agricultural land, farms, crops, livestock, dairy products, poultry, and aquaculture. Related information appears in Sections 6 (on land use), 12 and 15 (agricultural employment and earnings), and 22 (food processing).

There were 4,600 farms in Hawaii in 1990, with a total area of 1.7 million acres. The value of crop sales in 1990 was \$500 million, or 9.5 percent lower than the total for 1980. Livestock sales amounted to \$88 million, or 8.9 percent more than the 1980 level. Combined crop and livestock sales in 1990 ranged from \$65 million in Kauai County to \$198 million on the Big Island. Major crops were sugar (\$214 million in sales, down 44.5 percent over the decade), pineapple (\$99 million, or 29.6 percent over the 1980 total), flowers and nursery products (\$70 million, or 154.1 percent more than in 1980), and macadamia nuts (\$41 million, up 69.6 percent). Diversified crops, defined as all crops other than sugar and pineapple, rose from \$91 million in 1980 to \$187 million in 1990, or 105.5 percent. About 710 farms sold \$70 million of flowers and nursery products in 1990, chiefly anthuriums, potted foliage, and orchids. Important products of livestock farms as of 1990 included cattle and calves (\$29 million in sales), milk (\$31 million), and eggs (\$16 million). In 1990, Hawaii produced 32 percent of the fresh market vegetables consumed locally, 57 percent of the fresh market fruits, 26 percent of the beef and veal, 16 percent of the pork, 15 percent of the chickens, and 92 percent of the eggs.

Aquaculture has been growing in importance in recent years, with an aggregate value rising from \$11,000 in 1970 to \$9.2 million in 1990. Shellfish production amounted to 599,000 pounds in 1990, with a value of \$3.0 million.

Statistics on Hawaiian agriculture exclude marijuana and other illicit plants. Authorities confiscated or destroyed marijuana with a potential street value of \$7.7 billion in 1990, but the proportion escaping detection is unknown.

Important sources for data on agriculture include the <u>United States Census of Agriculture</u>, most recently conducted in 1987, the <u>annual report on Statistics of Hawaiian Agriculture</u> issued by the Hawaii Agricultural Statistics Service, and data compiled by the Hawaiian Sugar Planters' Association and the Aquaculture Development Program of the Department of Land and Natural Resources. Agricultural data for earlier years are summarized in <u>Historical Statistics of Hawaii</u>, Section 13. National statistics appear in Section 23 of the <u>Statistical Abstract of the United States</u>: 1991.

Table 549.-- FARMS, LAND IN FARMS, AND SELECTED ITEMS: 1987 AND 1982

|   | A11 f     | arms      | i         | th sales of<br>or more |
|---|-----------|-----------|-----------|------------------------|
| Item  | 1987      | 1982      | 1987      | 1982                   |
| Farms number  Land in farms acres  Average size of farm acres   | 4,870     | 4,595     | 2,049     | 1,775                  |
|   | 1,721,521 | 1,957,501 | 1,634,955 | 1,858,568              |
|   | 353       | 426       | 798       | 1,047                  |
| Value of land and buildings: Average per farm dollars Average per acre dollars  | 603,435   | 778,471   | 1,096,618 | 1,693,553              |
|   | 1,707     | 1,826     | 1,374     | 1,617                  |
| Estimated market value of all machinery and equipment:  Average per farm dollars  | 41,208    | 41,735    | 85,275    | 94,031                 |
| Farms by size:  1 to 9 acres  | 2,855     | 2,743     | 976       | 820                    |
|   | 1,401     | 1,261     | 734       | 629                    |
|   | 341       | 320       | 151       | 145                    |
|   | 128       | 126       | 62        | 64                     |
|   | 31        | 33        | 21        | 21                     |
|   | 114       | 112       | 105       | 96                     |
| Total cropland  | 4,170     | 3,836     | 1,814     | 1,536                  |
|   | 327,396   | 346,113   | 299,180   | 324,830                |
|   | 3,837     | 3,538     | 1,758     | 1,485                  |
|   | 152,719   | 155,960   | 145,422   | 149,843                |
|   | 1,827     | 1,544     | 975       | 777                    |
|   | 148,884   | 145,982   | 146,907   | 143,986                |
| Market value of agricultural products sold \$1,000  Average per farm dollars  Crops, including nursery and greenhouse crops \$1,000  Livestock, poultry, and their products \$1,000 | 609,740   | 558,608   | 600,637   | 549,601                |
|   | 125,203   | 121,569   | 293,137   | 309,635                |
|   | 498,317   | 456,069   | 491,320   | 449,457                |
|   | 111,424   | 102,539   | 109,317   | 100,144                |

Continued on next page.

Table 549.-- FARMS, LAND IN FARMS, AND SELECTED ITEMS: 1987 AND 1982 -- Con.

|   | All fa  | arms  | 1                                  | h sales of<br>or more    |
|---|---|---|------------------------------------|--------------------------|
| Item  | 1987  | 1982  | 1987                               | 1982                     |
| Farms by value of sales: Less than \$2,500  | 1,402<br>674<br>745<br>911<br>476<br>287<br>375 | 1,454<br>706<br>653<br>788<br>397<br>237<br>353 | -<br>-<br>911<br>476<br>287<br>375 | 788<br>397<br>237<br>353 |
| Operators by principal occupation: Farming Other  | 2,816   | 2,565   | 1,557                              | 1,352                    |
|   | 2,054   | 2,030   | 492                                | 423                      |
| Operators by days worked off farm:  Any   | 2,728   | 2,534   | 909                                | 722                      |
|   | 1,476   | 1,371   | 470                                | 375                      |
|   | 53.0  | 52.7  | 51.1                               | 51.5                     |
|   | 495,759   | (NA)  | 482,975                            | (NA)                     |
|   | 101,840   | (NA)  | 235,828                            | (NA)                     |
| Selected farm production expenses: Livestock and poultry purchased\$1,000 Feed for livestock and poultry\$1,000 Interest expense\$1,000 Petroleum products\$1,000 | 15,230  | 17,581  | 14,646                             | 17,032                   |
|   | 42,629  | 41,548  | 42,095                             | 40,889                   |
|   | 22,930  | 17,771  | 21,407                             | 16,665                   |
|   | 17,197  | 19,864  | 16,065                             | 18,759                   |
| Livestock and poultry: Cattle and calves inventory  | 1,003   | 1,040   | 259                                | 268                      |
|   | 211,045   | 241,969   | 193,062                            | 219,651                  |
|   | 724   | 784   | 198                                | 208                      |
|   | 83,427  | 90,523  | 76,126                             | 81,629                   |
|   | 73  | 88  | 27                                 | 38                       |
|   | 11,836  | 12,767  | 11,736                             | 12,662                   |
|   | 807   | 817   | 225                                | 241                      |
|   | 101,315   | 91,675  | 96,239                             | 86,603                   |

Continued on next page.

Table 549.-- FARMS, LAND IN FARMS, AND SELECTED ITEMS: 1987 AND 1982 -- Con.

|                               |     | A11 :      | farms      |   | th sales of<br>0 or more |
|-------------------------------|-----|------------|------------|---|--------------------------|
| Item                          |     | 1987       | 1982       | 1987                                    | 1982                     |
| Livestock and poultry, con.:  |     |            |            |   |                          |
| Hogs and pigs inventory farms | • • | 372        | 371        | 136                                     | 132                      |
| number                        |     | 47,564     | 49,029     | 42,784                                  | 42,683                   |
| Hogs and pigs sold farms      |     | 307        |            |   |                          |
| number                        |     | 69,019     | 66,875     | 64,618                                  | 61,919                   |
| Sheep and lambs               |     |            |            |   |                          |
| inventory farms               | • • | 42         |            |   |                          |
| number                        | • • | (D)        | (D)        | (D)                                     | (D)                      |
| Chicken 3 months old or       |     |            |            |   |                          |
| older inventory farms         |     | 181        |            |   |                          |
| number                        | • • | (D)        | 929,210    | (D)                                     | 921,810                  |
| Broilers and other meat-      |     |            | 0.7        |   | 1                        |
| type chickens sold farms      | • • | 12         | 23         |   |                          |
| number                        | • • | 2,069,316  | 3,1/3,500  | 2,069,219                               | 3,172,382                |
| Selected crops harvested:     |     |            |            |   |                          |
| Sugarcane for sugar farms     |     | 79         | 188        | 62                                      | 157                      |
| acres                         |     | 79,234     |            |   |                          |
| tons                          |     |            |            |   |                          |
| Pineapples harvested farms    |     |            |            |   | 14                       |
| acres                         |     | 00000      |            |   |                          |
| tons                          |     | 683,182    |            |   | 1 1 1                    |
| Vegetables harvested          | ••  | 000,202    | 020,000    | ,,,,,,                                  |                          |
| for sale farms                |     | 710        | 746        | 428                                     | 366                      |
| acres                         |     | 5,587      | 5          | 1                                       |                          |
| <b>W0100</b>                  | • • | , ,,,,,    | .,,        | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | ,                        |
| Land in orchards farms        | • • | 2,128      | 1,825      | 796                                     | 612                      |
| acres                         |     |            |            |   | 18,656                   |
| Macadamia nuts farms          |     |            | 1          |   |                          |
| acres                         |     |            |            | 20,284                                  | 13,960                   |
| pounds                        |     | 44,464,884 | 35,594,548 | 42,380,242                              | 34,258,992               |
| Nursery and greenhouse        |     |            |            |   |                          |
| crops farms                   |     | 1,139      | 1,050      | 573                                     | 467                      |
| sales, \$1,000                |     | 56,527     | 35,973     | (D)                                     | 34,062                   |
|                               |     | -          | -          |   |                          |

<sup>(</sup>D) Withheld to avoid disclosing data for individual farms.

Source: U.S. Bureau of the Census, 1987 Census of Agriculture, Advance

State Report, Hawaii, AC87-A-15-000(A) (May 1989), and Geographic Area Series,

Hawaii, State and County Data, AC87-A-11 (August 1989).

Table 550.-- FARMS AND LAND IN FARMS, FOR COUNTIES: 1987

| Item  | Hawaii                                | Honolulu                          | Kauai                       | Maui                              |
|---|---------------------------------------|-----------------------------------|-----------------------------|-----------------------------------|
| Farms number  Land in farms acres  Average size of farm acres   | 2,810                                 | 938                               | 400                         | 722                               |
|   | 1,007,287                             | 130,771                           | 224,153                     | 359,310                           |
|   | 358                                   | 139                               | 560                         | 498                               |
| Value of land and buildings:  Average per farm dollars  Average per acre dollars  | 573,527                               | 440,397                           | 709,213                     | 873,008                           |
|   | 1,600                                 | 3,159                             | 1,266                       | 1,754                             |
| Estimated market value of all machinery and equipment:  Average per farm dollars  | 27,187                                | 39,523                            | 70,317                      | 81,608                            |
| Farms by size:  1 to 9 acres  | 1,602<br>883<br>180<br>71<br>14<br>60 | 707<br>156<br>31<br>21<br>7<br>16 | 181<br>139<br>51<br>11<br>5 | 365<br>223<br>79<br>25<br>5<br>25 |
| Total cropland farms acres  Harvested cropland farms acres  Irrigated land farms acres  | 2,561                                 | 742                               | 294                         | 573                               |
|   | 137,924                               | 49,887                            | 50,146                      | 89,439                            |
|   | 2,390                                 | 716                               | 235                         | 496                               |
|   | 63,098                                | 24,779                            | 21,890                      | 42,952                            |
|   | 644                                   | 583                               | 190                         | 410                               |
|   | 12,899                                | 36,301                            | 32,486                      | 67,198                            |
| Market value of agricultural products sold \$1,000  Average per farm dollars Crops, including nursery and greenhouse crops \$1,000 Livestock, poultry, and their products \$1,000 | 219,756                               | 168,824                           | 67,847                      | 153,313                           |
|   | 78,205                                | 179,983                           | 169,619                     | 212,345                           |
|   | 195,140                               | 100,356                           | 62,099                      | 140,722                           |
|   | 24,616                                | 68,468                            | 5,748                       | 12,591                            |

Source: U.S. Bureau of the Census, 1987 Census of Agriculture, Geographic Area Series, Hawaii, State and County Data, AC87-A-11 (August 1989), pp. 130-132.

Table 551.-- EMPLOYMENT IN AGRICULTURE: 1900 TO 1990

[Data for 1940 and later years include forestry and fisheries]

| Year                         | Number   | Percent of total     | Year                         | Number   | Percent of total                 |
|------------------------------|--|----------------------|------------------------------|--|----------------------------------|
| 1900<br>1910<br>1920<br>1930 | 55,931<br>54,742<br>54,803<br>61,811<br>54,629 | 54.1<br>49.0<br>40.1 | 1950<br>1960<br>1970<br>1980 | 31,806<br>15,981<br>13,161<br>14,560<br>13,150 | 19.0<br>7.6<br>4.6<br>3.5<br>2.5 |

Source: Robert C. Schmitt, <u>Historical Statistics of Hawaii</u> (1977), pp. 122-124; present volume, tables 335, 339, and 344.

Table 552.-- GENERAL EXCISE TAX BASE FOR PRODUCING: 1980 TO 1990

[In thousands of dollars. Data are on a cash basis accounting.
"Producing" refers to the raising and production of agricultural products in their natural state, the production of natural resource products, fishing, and aquaculture; see HRS, 1985 Replacement, Section 237-5]

| Year <u>1</u> /              | Amount             | Year <u>1</u> /              | Amount | Year <u>1</u> /      | Amount                        |
|------------------------------|--------------------|------------------------------|--------|----------------------|-------------------------------|
| 1980<br>1981<br>1982<br>1983 | 176,582<br>173,891 | 1984<br>1985<br>1986<br>1987 |        | 1988<br>1989<br>1990 | 298,261<br>326,400<br>317,337 |

<sup>1/</sup> Calendar year in which reported, including 'prior years' reports. Income received in December is reported the following January, hence these annual totals generally refer to an 'income year' ended November 30.

Source: Hawaii State Department of Taxation, "General Excise and Use Tax Base" (annual tabular release).

Table 553.-- NUMBER OF FARMS, FARM ACREAGE, AND FARM EMPLOYMENT: 1970 TO 1990

|  |   |  | Farm empl  | oyment 3/  |  |
|--|---|--|--|--|--|
| Year   | Number<br>of<br>farms <u>1</u> /  | Farm<br>acreage <u>2/</u><br>(1,000)   | Self-em-<br>ployed farm<br>operators   | Unpaid<br>family<br>members  | Hired<br>workers   |
| 1970   | 4,500<br>4,400<br>4,300<br>4,300<br>3,800<br>3,900<br>4,000<br>4,100<br>4,300<br>4,300<br>4,300 | 2,300<br>2,300<br>2,300<br>2,300<br>2,200<br>2,150<br>2,100<br>2,050<br>1,980<br>1,980 | 3,200<br>3,050<br>3,050<br>3,050<br>3,040<br>3,060<br>2,890<br>2,840<br>2,890<br>3,020 | 1,450<br>1,500<br>1,550<br>1,550<br>1,660<br>1,720<br>1,560<br>1,550<br>1,810<br>1,520 | 12,450<br>11,810<br>11,220<br>10,770<br>10,180<br>11,040<br>11,240<br>11,300<br>11,600<br>10,800 |
| 1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 4,400<br>4,500<br>4,500<br>4,600<br>4,600<br>4,650<br>4,650<br>4,650<br>4,650                   | 1,965<br>1,960<br>1,900<br>1,850<br>1,800<br>1,750<br>1,720<br>1,720<br>1,720          | 3,100<br>2,600<br>2,500<br>2,200<br>2,200<br>2,050<br>2,600<br>2,600<br>2,400          | 1,300<br>1,500<br>1,300<br>1,200<br>1,200<br>1,100<br>1,100<br>1,100                   | 10,500<br>13,000<br>13,000<br>11,800<br>10,600<br>9,700<br>10,700<br>10,300<br>9,800             |

<sup>1/</sup> Based on farm definition of \$600 or more of agricultural sales prior to 1974 and \$1,000 or more thereafter.

2/ Includes land not in crop and pasture, such as farm house lots,

roads, woodlots, etc.

<sup>3/</sup> Annual averages through 1980, and varying dates thereafter.

Source: Hawaii Agricultural Statistics Service, Statistics of Hawaiian

Agriculture (annual) and records.

Table 554.-- VALUE OF CROP AND LIVESTOCK SALES: 1970 TO 1990 [\$1,000]

|  |  |  | Crops  |  |   |  |
|--|--|--|--|--|---|--|
| Year   | All<br>crops<br>and<br>livestock   | All<br>crops   | Sugar<br>(unpro-<br>cessed<br>cane)  | Pine-<br>apples<br>(fresh<br>equiv.)   | Other<br>crops  | Live-<br>stock   |
| 1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1979<br>1980<br>1981<br>1982<br>1983 1/<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 1/ | 213,950<br>221,829<br>232,760<br>266,161<br>575,432<br>377,575<br>327,820<br>325,182<br>380,655<br>441,253<br>634,101<br>489,502<br>507,268<br>568,414<br>550,517<br>528,649<br>564,717<br>557,298<br>573,962<br>585,048 | 172,302<br>178,776<br>186,518<br>210,892<br>517,523<br>319,304<br>265,498<br>260,164<br>308,098<br>362,789<br>552,877<br>401,348<br>428,860<br>481,926<br>463,502<br>445,826<br>481,312<br>469,565<br>485,293<br>493,261 | 110,600<br>115,800<br>117,300<br>141,900<br>442,300<br>237,000<br>164,700<br>144,200<br>182,700<br>217,600<br>385,100<br>207,500<br>230,800<br>266,900<br>256,200<br>222,400<br>233,800<br>218,000<br>209,900<br>210,300 | 39,500<br>40,300<br>43,900<br>39,600<br>40,259<br>41,616<br>52,983<br>62,249<br>63,090<br>69,409<br>76,596<br>89,745<br>94,364<br>100,376<br>89,928<br>90,530<br>99,720<br>99,286<br>107,402<br>98,310 | 22,202<br>22,676<br>25,318<br>29,392<br>34,964<br>40,688<br>47,815<br>53,715<br>62,308<br>75,780<br>91,181<br>104,103<br>103,696<br>114,650<br>117,374<br>132,896<br>147,792<br>152,279<br>167,991<br>184,651 | 41,648<br>43,053<br>46,242<br>55,269<br>57,909<br>58,271<br>62,322<br>65,018<br>72,557<br>78,464<br>81,224<br>88,154<br>78,408<br>86,488<br>87,015<br>82,823<br>83,405<br>87,733<br>88,669<br>91,787 |
| 1990   | 588,844  | 500,400  | 213,800  | 99,255   | 187,345   | 88,444   |

<sup>1/</sup> Revised from <u>Data Book 1990</u>, table 571.
Source: Hawaii Agricultural Statistics Service, <u>Statistics of Hawaiian Agriculture</u> (annual) and records.

Table 555.-- NUMBER OF FARMS, FARM ACREAGE, AND FARM EMPLOYMENT, BY COUNTIES OR ISLANDS: 1980, 1989, AND 1990

|                               |                                  |                                       | Farm employment 3/                   |                             |                  |
|-------------------------------|----------------------------------|---------------------------------------|--------------------------------------|-----------------------------|------------------|
| County or island              | Number<br>of<br>farms <u>1</u> / | Farm<br>acreage <u>2</u> /<br>(1,000) | Self-em-<br>ployed farm<br>operators | Unpaid<br>family<br>members | Hired<br>workers |
| State total: 1980 1989 1990   | 4,300                            | 1,970                                 | 3,400                                | 1,100                       | 10,550           |
|                               | 4,650                            | 1,720                                 | 2,400                                | 1,100                       | 9,800            |
|                               | 4,600                            | 1,710                                 | 2,500                                | 1,000                       | 9,600            |
| Hawaii County: 1980 1989 1990 | 2,500                            | 1,150                                 | 2,090                                | 740                         | 3,240            |
|                               | 2,700                            | 1,010                                 | 1,575                                | 725                         | 3,610            |
|                               | 2,650                            | 1,005                                 | 1,560                                | 610                         | 3,475            |
| Maui County: 1980 1989 1990   | 500                              | 420                                   | 400                                  | 110                         | 3,140            |
|                               | 600                              | 360                                   | 225                                  | 110                         | 2,560            |
|                               | 600                              | 355                                   | 260                                  | 125                         | 2,525            |
| Oahu: 1980 1989 1990          | 1,000                            | 125                                   | 710                                  | 190                         | 2,640            |
|                               | 950                              | 125                                   | 450                                  | 200                         | 2,425            |
|                               | 950                              | 125                                   | 460                                  | 225                         | 2,425            |
| Kauai County: 1980 1989 1990  | 300                              | 275                                   | 200                                  | 60                          | 1,540            |
|                               | 400                              | 225                                   | 175                                  | 60                          | 1,175            |
|                               | 400                              | 225                                   | 200                                  | 60                          | 1,140            |

 $<sup>\</sup>frac{1}{2}$  Based on farm definition of \$1,000 or more of agricultural sales.  $\frac{2}{1}$  Includes land not in crops and pasture, such as farm house lots, roads, woodlots, etc.

<sup>3/</sup> Data not comparable among years shown due to changes in survey periods; sum of county estimates may not add due to rounding.

Source: Hawaii Agricultural Statistics Service, Statistics of Hawaiian Agriculture (annual).

Table 556.-- VALUE OF CROP AND LIVESTOCK SALES, BY COUNTIES OR ISLANDS: 1980, 1989, AND 1990

[\$1,000]

|   | 1                                |                               |                                     |                                      |                              |                            |  |
|---|----------------------------------|-------------------------------|-------------------------------------|--------------------------------------|------------------------------|----------------------------|--|
|   |                                  |                               | Crops                               |                                      |                              |                            |  |
| County and year                                 | All<br>crops<br>and<br>livestock | All<br>crops                  | Sugar<br>(unpro-<br>cessed<br>cane) | Pine-<br>apples<br>(fresh<br>equiv.) | Other<br>crops               | Live-<br>stock             |  |
| State total:<br>1980<br>1989 <u>1</u> /<br>1990 | 634,101<br>585,048<br>588,844    | 552,877<br>493,261<br>500,400 | 385,100<br>210,300<br>213,800       | 76,596<br>98,310<br>99,255           | 91,181<br>184,651<br>187,345 | 81,224<br>91,787<br>88,444 |  |
| Hawaii County: 1980 1989 1/ 1990                | 215,640<br>207,445<br>197,997    | 193,169<br>174,741<br>168,580 | 137,500<br>56,900<br>55,000         | -                                    | 55,669<br>117,841<br>113,580 | 22,471<br>32,704<br>29,417 |  |
| Maui County: 1980 1989 1/ 1990                  | 159,302<br>133,042<br>144,488    | 149,218<br>124,781<br>135,654 | 100,800<br>66,400<br>69,600         | 36,404<br>32,863<br>36,975           | 12,014<br>25,518<br>29,079   | 10,084<br>8,261<br>8,834   |  |
| Oahu: 1980 1989 <u>1</u> / 1990                 | 165,131<br>179,670<br>181,083    | 122,194<br>133,608<br>135,899 | 63,200<br>35,500<br>36,800          | 40,192<br>65,447<br>62,280           | 18,802<br>32,661<br>36,819   | 42,937<br>46,062<br>45,184 |  |
| Kauai County: 1980 1989 1/ 1990                 | 94,028<br>64,891<br>65,276       | 88,296<br>60,131<br>60,267    | 83,600<br>51,500<br>52,400          | (Z)<br>(Z)<br>(Z)                    | 4,696<br>8,631<br>7,867      | 5,732<br>4,760<br>5,009    |  |

Z Less than \$50,000.

1/ Revised from Data Book 1990, table 573.

Source: Hawaii Agricultural Statistics Service, Statistics of Hawaiian Agriculture (annual) and records.

Table 557.-- ACREAGE IN CROP, NUMBER OF CROP FARMS, VOLUME OF CROP MARKETINGS, AND VALUE OF CROP SALES: 1980, 1989, AND 1990

| Subject                                   | 1980    | 1989 <u>1</u> / | 1990    |
|---|---------|-----------------|---------|
| Acreage in crop (1,000 acres):            |         |                 |         |
| Sugarcane                                 | 217.7   | 170.8           | 162.0   |
| Pineapples (land used for pineapple)      | 43.0    | 32.7            | 30.9    |
| Vegetables and melons (harvested acreage) | 3.9     | 5.0             | 5.3     |
| Fruits, excluding pineapples              | 5.2     | 7.4             | 7.0     |
| Coffee                                    | 1.9     | 3.0             | 5.3     |
| Macadamia nuts                            | 13.3    | 22.3            | 22.6    |
| Miscellaneous crops                       | 6.4     | 4.8             | 4.6     |
| Number of crop farms:                     |         |                 |         |
| Sugar                                     | 380     | 70              | 55      |
| Pineapples                                | 18      | 10              | 10      |
| Vegetables and melons                     | 585     | 525             | 485     |
| Fruits (excluding pineapples)             | 692     | 709             | 735     |
| Coffee                                    | 650     | 635             | 620     |
| Macadamia nuts                            | 475     | 675             | 690     |
| Taro                                      | 122     | 150             | 140     |
| Flowers and nursery products              | 640     | 710             | 710     |
| Volume of crop marketings:                |         |                 |         |
| Sugar, unprocessed cane (1,000 tons)      | 9,214   | 7,082           | 6,538   |
| Pineapples, fresh equivalent (1,000 tons) | 657     | 580             | 575     |
| Vegetables and melons (1,000 lb.)         | 70,710  | 83,250          | 84,920  |
| Fruits, excluding pineapples (1,000 lb.)  | 67,800  | 109,980         | 105,310 |
| Coffee, parchment (1,000 lb.)             | 1,440   | 3,200           | 2,700   |
| Macadamia nuts, in shell (1,000 lb.)      | 33,390  | 50,500          | 50,000  |
| Taro (1,000 lb.)                          | 6,400   | 6,500           | 5,800   |
| Value of crop sales (\$1,000):            | :       |                 |         |
| Sugar (unprocessed cane)                  | 385,100 | 210,300         | 213,800 |
| Pineapples (fresh equivalent)             | 76,596  | 98,310          | 99,255  |
| Vegetables and melons                     | 18,552  | 32,719          | 35,805  |
| Fruits (excluding pineapples)             | 12,982  | 23,074          | 23,779  |
| Coffee (parchment)                        | 2,304   | 12,480          | 7,020   |
| Macadamia nuts (in shell)                 | 24,174  | 44,945          | 41,000  |
| Taro                                      | 1,280   | 1,996           | 2,262   |
| Field crops (not estimated separately)    | 4,101   | 6,981           | 6,882   |
| Flowers and nursery products              | 27,688  | 62,206          | 70,347  |

<sup>1/</sup> Revised from <u>Data Book 1990</u>, table 574.
Source: Hawaii Agricultural Statistics Service, <u>Statistics of Hawaiian</u>
Agriculture (annual).

Table 558.-- ACREAGE IN CROP, NUMBER OF CROP FARMS, VOLUME OF CROP MARKETINGS, AND VALUE OF CROP SALES, BY GEOGRAPHIC AREAS: 1990

| Subject   | Hawaii<br>County   | Maui<br>County  | 0ahu  | Kauai<br>County  |
|---|--|---|---|--|
| Acreage in crop (1,000 acres): Sugarcane Pineapples (land used for pineapple) Vegetables and melons (harvested acreage) Fruits, excluding pineapples Coffee Macadamia nuts Miscellaneous crops  | 57.9<br>-<br>1.5<br>5.4<br>5.3<br>(D)<br>1.6                           | 42.4<br>18.2<br>2.9<br>0.1<br>(D)<br>1.6                          | 23.6<br>12.7<br>0.8<br>0.8<br>(D)<br>0.7                            | 38.1<br>(1/)<br>0.1<br>0.7<br>(D)<br>0.7                         |
| Number of crop farms: Sugar Pineapples Vegetables and melons Fruits (excluding pineapples) Coffee Macadamia nuts Taro Flowers and nursery products  | 45<br>-<br>255<br>515<br>620<br>670<br>86<br>325                       | 2<br>5<br>85<br>45<br>-<br>9<br>10<br>110                         | 3<br>2<br>120<br>120<br>-<br>3<br>4<br>230                          | 5<br>3<br>25<br>55<br>-<br>8<br>40<br>45                         |
| Volume of crop marketings: Sugar, unprocessed cane (1,000 tons) Pineapples, fresh equivalent (1,000 tons). Vegetables and melons (1,000 lb.) Fruits, excluding pineapples (1,000 lb.) Coffee, parchment (1,000 lb.) Macadamia nuts, in shell (1,000 lb.) Taro (1,000 lb.) | 1,945<br>-<br>28,690<br>84,960<br>2,700<br>(D)<br>1,300                | 1,903<br>345<br>45,240<br>685<br>(D)<br>(D)                       | 1,115<br>230<br>10,500<br>5,775<br>(D)<br>(D)                       | 1,575<br>(2/)<br>490<br>13,890<br>(D)<br>3,620                   |
| Value of crop sales (\$1,000):  Sugar (unprocessed cane)  Pineapples (fresh equivalent)  Vegetables and melons  Fruits (excluding pineapples)  Coffee (parchment)  Macadamia nuts (in shell)  Taro  Field crops (not estimated separately)  Flowers and nursery products  | 55,000<br>-<br>13,867<br>18,894<br>7,020<br>(D)<br>528<br>89<br>33,767 | 69,600<br>36,975<br>14,044<br>289<br>(D)<br>(D)<br>3,783<br>9,092 | 36,800<br>62,280<br>7,616<br>2,038<br>(D)<br>(D)<br>1,058<br>25,892 | 52,400<br>(3/)<br>278<br>2,558<br>(D)<br>1,379<br>1,952<br>1,596 |

Withheld to avoid disclosure of individual operations.

<sup>1/</sup> Less than 500 acres.

½/ Less than 500 tons.

½/ Less than \$50,000.

Source: Hawaii Agricultural Statistics Service, Statistics of Hawaiian Agriculture 1990.

Table 559.-- VEGETABLES, MELONS, FRUITS, NUTS, COFFEE, AND TARO: 1990

[Data shown for crops with sales in excess of \$1,000,000]

| Crop  | Acreage<br>har-<br>vested <u>1</u> /                                     | Yield per<br>acre<br>(1,000 lb.)   | Production (1,000 lb.)  | Farm price (cents per 1b.)  | Value<br>of<br>sales<br>(\$1,000)   |
|---|--|--|---|---|---|
| Vegetables and melons: Chinese cabbage Head cabbage Cucumbers Ginger root Lettuce (head, semi-head) Dry onions Green onions Green peppers Tomatoes Watermelons Watercress | 390<br>690<br>210<br>190<br>300<br>120<br>200<br>150<br>230<br>700<br>35 | 17.7<br>21.3<br>16.9<br>50.0<br>11.0<br>9.7<br>8.3<br>10.4<br>20.0<br>21.1 | 6,900<br>14,700<br>3,550<br>9,500<br>3,300<br>1,160<br>1,660<br>1,560<br>4,600<br>14,800<br>1,300 | 22.8<br>19.5<br>41.0<br>71.5<br>42.0<br>102.5<br>100.3<br>70.0<br>65.0<br>13.2<br>106.0 | 1,573<br>2,867<br>1,456<br>6,792<br>1,386<br>1,189<br>1,665<br>1,092<br>2,990<br>1,954<br>1,378 |
| Fruits:     Bananas   | 930<br>1,040<br>2,400<br>18,400<br>2,400<br>420                          | 12.2<br>28.5<br>2.7<br>1.1   | 11,300<br>22,130<br>68,500<br>54,300<br>2,700<br>5,800  | 38.0<br>15.0<br>21.6<br>75.5<br>260<br>39.0   | 4,294<br>3,320<br>14,805<br>41,000<br>7,020<br>2,262  |

 $<sup>\</sup>underline{1}/$  Acreage bearing for macadamia nuts; acreage in crop for watercress and taro.

Source: Hawaii Agricultural Statistics Service, <u>Statistics of Hawaiian</u> Agriculture 1990.

Table 560.-- SUGARCANE ACREAGE, BY TYPE OF IRRIGATION: 1972 TO 1990

|      | Total        | Irrigate | ed cane land       |                       |
|------|--------------|----------|--------------------|-----------------------|
| Year | cane<br>land | Drip     | Furrow or overhead | Unirrigated cane land |
| 1972 | 229,611      | 327      | 119,704            | 109,580               |
|      | 226,580      | 2,544    | 116,136            | 107,900               |
|      | 224,227      | 5,662    | 112,919            | 105,646               |
|      | 221,426      | 12,719   | 103,998            | 104,709               |
|      | 221,551      | 21,250   | 98,797             | 101,504               |
|      | 220,729      | 30,042   | 91,368             | 99,319                |
|      | 220,697      | 39,167   | 80,207             | 101,323               |
|      | 218,773      | 49,202   | 70,936             | 98,635                |
|      | 217,718      | 60,241   | 58,966             | 98,511                |
|      | 216,099      | 69,665   | 48,493             | 97,941                |
| 1982 | 204,749      | 73,551   | 41,896             | 89,302                |
|      | 194,258      | 80,019   | 33,459             | 80,780                |
|      | 188,396      | 86,925   | 26,325             | 75,146                |
|      | 187,858      | 89,129   | 24,323             | 74,406                |
|      | 184,179      | 90,877   | 19,526             | 73,776                |
|      | 180,967      | 88,812   | 18,602             | 73,553                |
|      | 177,693      | 88,387   | 17,791             | 71,515                |
|      | 170,816      | 86,030   | 16,687             | 68,099                |
|      | 161,991      | 83,252   | 15,129             | 63,610                |

Source: Hawaiian Sugar Planters' Association, records; Alexander & Baldwin, Inc., 'Water to the Roots,' Ampersand, Spring 1987, pp. 3-6.

Table 561.-- FRESH FRUIT AND VEGETABLE ARRIVALS IN HONOLULU, BY SOURCE: 1988 TO 1990

[1,000 pounds, net]

|  |  | <del> </del>  |   |
|--|--|---|---|
| Source   | 1988   | 1989  | 1990  |
| Total arrivals   | 305,494  | 303,526   | 290,606   |
| From Hawaii Oahu 1/ Other islands 2/ Hawaii 2/ Maui 2/ Molokai 2/ Kauai 2/ From U.S. Mainland 2/ From foreign countries 2/ | 101,541<br>36,736<br>64,805<br>31,257<br>16,007<br>16,548<br>993<br>195,516<br>8,437 | 91,881<br>33,314<br>58,567<br>30,203<br>15,388<br>12,667<br>309<br>205,915<br>5,730 | 88,631<br>29,215<br>59,416<br>27,123<br>15,137<br>16,938<br>218<br>194,610<br>7,365 |

1/ Wholesalers' truck receipts.
2/ Ship and plane arrivals.
Source: Hawaii State Department of Agriculture, Market News Service, Honolulu Arrivals, Fresh Fruits and Vegetables, 1990 (June 1991), table 1.

Table 562.-- GOVERNMENT PAYMENTS FOR AGRICULTURE: 1982 TO 1990 [\$1,000]

| Year | Amount | Year | Amount | Year | Amount |
|------|--------|------|--------|------|--------|
| 1982 | 586    | 1985 | 1,184  | 1988 | 465    |
| 1983 | 6,775  | 1986 | 2,810  | 1989 | 396    |
| 1984 | 2,675  | 1987 | 344    | 1990 | 657    |

Source: Hawaii Agricultural Statistics Service, Statistics of Hawaiian Agriculture (annual).

Table 563.-- LIVESTOCK INVENTORY, 1980 TO 1990, AND BY GEOGRAPHIC AREAS, 1990 [In thousands]

| Year and geographic area   | All<br>cattle<br>and<br>calves <u>1</u> /                                 | Milk<br>cows <u>1</u> /  | Hogs<br>and<br>pigs <u>2</u> /                                 | Chickens<br>(excluding<br>broilers) <u>2</u> /  | Bee<br>colon-<br>ies                 |
|--|---|--|--|---|--------------------------------------|
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989   | 220<br>228<br>230<br>226<br>221<br>209<br>199<br>203<br>212<br>205<br>214 | 13<br>13<br>12<br>12<br>12<br>11<br>12<br>12<br>12<br>11<br>11 | 57<br>55<br>49<br>48<br>47<br>55<br>50<br>47<br>43<br>39<br>36 | 1,314<br>1,242<br>1,148<br>1,140<br>1,195<br>1,210<br>1,185<br>1,212<br>1,217<br>1,216<br>1,183 | 7<br>7<br>8<br>9<br>9<br>9<br>9<br>9 |
| GEOGRAPHIC AREAS: 1990  Hawaii County Maui Molokai and Lanai Oahu Kauai County | 138.9<br>29.6<br>7.3<br>26.3<br>11.9                                      | 1.7<br>0.9<br>-<br>7.7<br>0.5                                  | 2.6<br>7.7<br>0.7<br>21.7<br>3.3                               | (D)<br>(D)<br>(D)<br>971<br>(D)   | (NA)<br>(NA)<br>(NA)<br>(NA)<br>(NA) |

NA Not available.

D Withheld to avoid disclosing data for individual operations.

1/ As of January 1 of the following year.

2/ As of December 1.

Source: Hawaii Agricultural Statistics Service, Statistics of Hawaiian Agriculture (annual).

Table 564.-- NUMBER OF LIVESTOCK OPERATIONS, VOLUME OF LIVESTOCK MARKETINGS, AND VALUE OF LIVESTOCK SALES: 1980, 1989, AND 1990

| Subject   | 1980   | 1989 <u>1</u> / | 1990   |
|---|--------|-----------------|--------|
| Number of livestock operations, Dec. 31: Cattle 2/ Hogs Milk Eggs Broilers Honey  | 850    | 900             | 900    |
|   | 650    | 550             | 500    |
|   | 80     | 80              | 80     |
|   | 60     | 55              | 55     |
|   | 10     | 8               | 8      |
|   | 27     | 11              | 12     |
| Volume of livestock marketings:  Beef (dressed weight; 1,000 lb.) 3/  Pork (dressed weight; 1,000 lb.)  Milk (million lb.)  Eggs (million)  Broilers and chickens (1,000 lb.) 4/  Honey (1,000 lb.) | 28,809 | 34,450          | 29,071 |
|   | 8,012  | 7,716           | 6,850  |
|   | 149.4  | 151.5           | 148.6  |
|   | 220.5  | 226.6           | 227.5  |
|   | 7,890  | 7,967           | 7,266  |
|   | 861    | 1,215           | 1,570  |
| Value of livestock sales (\$1,000): Cattle 5/ Hogs 5/ Milk Eggs Broilers and chickens Other 6/  | 28,074 | 31,483          | 28,735 |
|   | 7,451  | 7,911           | 7,252  |
|   | 27,071 | 31,588          | 30,760 |
|   | 13,910 | 14,956          | 16,115 |
|   | 4,181  | 4,792           | 4,334  |
|   | 531    | 1,057           | 1,248  |

Revised from Data Book 1990, table 581.

Includes beef, dairy, and dairy replacement farms.
Includes slaughter cattle, but excludes calves shipped out-of-State.

<sup>4/</sup> Ready-to-cook weight.

<sup>5/</sup> Excludes interfarm sales; includes out-of-State sales of slaughter cattle and feeder calves.

<sup>6/</sup> Includes sheep, wool, turkeys, horses, honey, and beeswax.

Source: Hawaii Agricultural Statistics Service, Statistics of Hawaiian Agriculture (annual).

Table 565.-- NUMBER OF LIVESTOCK OPERATIONS, VOLUME OF LIVESTOCK MARKETINGS, AND VALUE OF LIVESTOCK SALES, BY GEOGRAPHIC AREAS: 1990

| Subject   | Hawaii<br>County                          | Maui<br>County                                    | Oahu  | Kauai<br>County                            |
|---|---|---|---|--|
| Number of livestock operations, Dec. 31: Cattle 1/ Hogs Milk Eggs Broilers Honey  | 440<br>80<br>41<br>25<br>-<br>7           | 220<br>80<br>7<br>7<br>-<br>3                     | 80<br>250<br>20<br>19<br>7                      | 160<br>90<br>12<br>4<br>1<br>2             |
| Volume of livestock marketings:  Beef 2/ (dressed weight; 1,000 lb.)  Pork (dressed weight; 1,000 lb.)  Milk (million lb.)  Eggs (million)  Broilers and chickens 3/ (1,000 lb.)  Honey (1,000 lb.) | 23,388<br>530<br>(D)<br>(D)<br>(D)<br>(D) | 3,132<br>1,570<br>(D)<br>(D)<br>(D)<br>(D)        | 1,308<br>3,868<br>112.1<br>181.0<br>(D)<br>(D)  | 1,243<br>882<br>(D)<br>(D)<br>(D)<br>(D)   |
| Value of livestock sales (\$1,000): Cattle 4/ Hogs 4/ Milk Eggs Broilers and chickens Other 5/  | 23,101<br>569<br>(D)<br>(D)<br>(D)<br>784 | 3,324<br>1,727<br>(D)<br>(D)<br>(D)<br>(D)<br>167 | 1,250<br>3,945<br>23,384<br>12,627<br>(D)<br>50 | 1,060<br>1,011<br>(D)<br>(D)<br>(D)<br>247 |

Withheld to avoid disclosure of individual operations.

Includes beef, dairy, and dairy replacement farms.

Includes slaughter cattle, but excludes calves shipped out-of-State.

Includes slaughter cattle, but excludes calves snipped out-of-State sales of slaughter

| The property of the cattle and feeder calves.

<sup>5/</sup> Includes sheep, wool, turkeys, horses, honey, and beeswax.

Source: Hawaii Agricultural Statistics Service, Statistics of Hawaiian Agriculture 1990.

Table 566.-- CATTLE OPERATIONS, BY SIZE GROUP, BY ISLANDS: 1989

| Head of cattle                              | State<br>total | Ha-<br>waii       | Maui             | Molokai,<br>Lanai | Oahu           | Kauai,<br>Niihau |
|---|----------------|-------------------|------------------|-------------------|----------------|------------------|
| All operations 1 to 19 head 20 head or more |                | 440<br>290<br>150 | 180<br>120<br>60 | 30<br>20<br>10    | 80<br>40<br>40 | 170<br>110<br>60 |

Source: Hawaii Agricultural Statistics Service, <u>Statistics of</u> Hawaiian Agriculture 1989, p. 75.

Table 567.-- LARGE RANCHES: 1991

| Ranch  | Island   | Head of cattle   | Acres of pasture <u>1</u> /  |
|--|--|--|--|
| Parker Ranch Molokai Ranch, Ltd. Ponoholo Ranch Haleakala Ranch Co. Ulupalakua Ranch Kahua Ranch Palani Ranch Kahuku Ranch Makaweli Ranch Puuwaawaa Ranch McCandless Ranch Hana Ranch Niihau Ranch | Hawaii Molokai Hawaii Maui Hawaii Hawaii Hawaii Hawaii Hawaii Kauai Hawaii Hawaii Maui Maui Niihau | 50,000<br>6,000<br>5,300<br>5,200<br>5,000<br>4,330<br>4,300<br>4,200<br>3,000<br>3,000<br>3,000<br>2,500<br>2,200 | 210,000<br>40,000<br>10,000<br>26,000<br>20,000<br>14,000<br>23,000<br>14,000<br>45,000<br>40,000<br>20,000<br>3,000<br>46,000 |

<sup>1/</sup> Approximate total. Some figures include ungrazed acreage. Source: Jan TenBruggencate, "After Parker Ranch, which is the largest?" Honolulu Advertiser, March 27, 1991, p. Al5.

Table 568.-- FLORICULTURE AND NURSERY PRODUCTS, 1988 TO 1990, AND BY ISLANDS, 1990

|   |                       |                  | Growing area                          |  |                                     |                          |                                      |
|---|-----------------------|------------------|---------------------------------------|--|-------------------------------------|--------------------------|--------------------------------------|
| Island and year                                 | Number<br>of<br>farms | Total<br>(acres) | Green-<br>house<br>(1,000<br>sq. ft.) | Artificial shade structure (1,000 sq. ft.) | Natural<br>shade<br>area<br>(acres) | Open<br>field<br>(acres) | Whole-<br>sale<br>value<br>(\$1,000) |
| State total: 1988 1989 1990                     | 675                   | 1,833            | 4,690                                 | 23,800                                     | 70                                  | 1,109                    | 59,551                               |
|   | 710                   | 2,206            | 3,615                                 | 25,395                                     | 50                                  | 1,490                    | 62,206                               |
|   | 710                   | 2,298            | 5,695                                 | 23,385                                     | 35                                  | 1,595                    | 70,347                               |
| Islands, 1990: Hawaii Kauai Maui/Molokai . Oahu | 325                   | 1,109            | 4,800                                 | 15,425                                     | 35                                  | 610                      | 33,767                               |
|   | 45                    | 92               | 20                                    | 285  | -                                   | 85                       | 1,596                                |
|   | 110                   | 529              | 265                                   | 1,195                                      | -                                   | 495                      | 9,092                                |
|   | 230                   | 568              | 610                                   | 6,480                                      | -                                   | 405                      | 25,892                               |

Source: Hawaii Agricultural Statistics Service, Hawaii Flowers & Nursery Products, Annual Summary (August 8, 1991), pp. 10 and 13.

Table 569.-- OUT-OF-STATE SALES OF FLORICULTURE AND NURSERY PRODUCTS: 1986 TO 1990

[\$1,000. Based on F.O.B. island value. Includes both wholesale and retail sales]

| Туре  | 1986   | 1987   | 1988   | 1989   | 1990   |
|---|--------|--------|--------|--------|--------|
| Total sales Anthuriums, cut Foliage, potted Other flowers, nursery products . | 28,136 | 31,904 | 33,042 | 37,475 | 37,734 |
|   | 8,653  | 9,170  | 8,816  | 9,280  | 11,185 |
|   | 9,782  | 8,935  | 8,609  | 8,130  | 8,525  |
|   | 9,701  | 13,799 | 15,617 | 20,065 | 18,024 |

Source: Hawaii Agricultural Statistics Service, <u>Hawaii Flowers</u> and <u>Nursery Products</u>, <u>Annual Summary</u> (August 8, 1991), p. 15.

Table 570.-- FLORICULTURE AND NURSERY PRODUCTS, BY COMMODITY: 1990 [Shown for commodities with value of sales over \$750,000]

|  | Number<br>of                  | Number so  | Number sold                       |                                     |  |
|--|-------------------------------|--|-----------------------------------|-------------------------------------|--|
| Commodity  | farms                         | Unit   | Number                            | sales<br>(\$1,000)                  |  |
| Selected cut flowers: Anthuriums Birds of Paradise Ginger, pink Ginger, red Heliconias                     | 141<br>59<br>82<br>112<br>117 | 1,000 dozens<br>1,000 dozens<br>1,000 dozens<br>1,000 dozens<br>1,000 dozens | 1,300<br>135<br>104<br>162<br>220 | 7,527<br>877<br>789<br>844<br>1,339 |  |
| Proteas<br>Roses, Tea  | 39<br>13                      | 1,000 stems<br>1,000 dozens  | 1,343<br>716                      | 976<br>2,533                        |  |
| Orchids: Sprays: Dendrobium Potted: Dendrobiums  Lei flowers: Carnations Dendrobiums                       | 82<br>75<br>21<br>52          | 1,000 dozens 1,000 pots  Million blooms Million blooms                       | 408<br>540<br>20.8<br>26.0        | 2,694<br>2,885<br>1,069<br>755      |  |
| Tuberose   | 7                             | Million blooms   | 30.4                              | 981                                 |  |
| Foliage: Potted, primarily for Indoor or patio use Landscape use Unfinished stock (for further growing on) | 77<br>66<br>26                | •••  | (NA)<br>(NA)<br>(NA)              | 14,591<br>3,397<br>1,151            |  |
| Potted flowering plants: Chrysanthemums Poinsettias  | 8<br>33                       | 1,000 pots<br>1,000 pots   | 230<br>290                        | 869<br>1,144                        |  |
| Ornamentals and trees  | 70<br>48                      | •••  | (NA)<br>(NA)                      | 7,067<br>3,673                      |  |

NA Not available.

Source: Hawaii Agricultural Statistics Service, Hawaii Flowers & Nursery Products, Annual Summary (August 8, 1991), pp. 3-9.

Table 571.-- MARKET SUPPLY OF SPECIFIED FOODS: 1980, 1989, AND 1990

|                                 | Total                      | market su                  | Per<br>capita           | Percent              |                      |
|---------------------------------|----------------------------|----------------------------|-------------------------|----------------------|----------------------|
| Commodity and year              | Total                      | Inship-<br>ment            | Hawaii                  | market<br>supply 2/  | from<br>Hawaii       |
| Fresh market fruits:  1980      | 80,586                     | 61,926                     | 18,660                  | 76.4                 | 23.2                 |
|                                 | 186,116                    | 92,896                     | 93,220                  | 149.4                | 50.1                 |
|                                 | 208,948                    | 89,753                     | 119,195                 | 166.4                | 57.0                 |
| Fresh market vegetables: 1980   | 172,724                    | 105,414                    | 67,310                  | 163.8                | 39.0                 |
|                                 | 227,153                    | 159,003                    | 68,150                  | 182.4                | 30.0                 |
|                                 | 218,538                    | 149,638                    | 68,900                  | 174.0                | 31.5                 |
| Beef and veal: 4/ 1980          | 94,359                     | 65,550                     | 28,809                  | 89.5                 | 30.5                 |
|                                 | 113,653                    | 79,203                     | 34,450                  | 91.3                 | 30.3                 |
|                                 | 111,537                    | 82,466                     | 29,071                  | 88.8                 | 26.1                 |
| Pork: 4/<br>1980                | 34,830<br>42,491<br>41,762 | 26,818<br>34,775<br>34,912 | 8,012<br>7,716<br>6,850 | 33.0<br>34.1<br>33.3 | 23.0<br>18.2<br>16.4 |
| Chickens: 1980                  | 33,345                     | 25,455                     | 7,890                   | 31.6                 | 23.7                 |
|                                 | 46,743                     | 38,776                     | 7,967                   | 37.5                 | 17.0                 |
|                                 | 48,929                     | 41,663                     | 7,266                   | 39.0                 | 14.9                 |
| Eggs: 1980 1989 <u>3</u> / 1990 | 20,746                     | 2,371                      | 18,375                  | 19.7                 | 88.6                 |
|                                 | 20,609                     | 1,726                      | 18,883                  | 16.5                 | 91.6                 |
|                                 | 20,595                     | 1,637                      | 18,958                  | 16.4                 | 92.1                 |

 $<sup>\</sup>frac{1}{2}$  Eggs in 1,000 dozens; other foods in 1,000 pounds.  $\frac{2}{2}$  Eggs in dozens; other foods in pounds. Based on de facto population estimates in table 3.

<sup>3/</sup> Revised from Data Book 1990, table 586.

4/ Carcass weight equivalent.

Source: Hawaii Agricultural Statistics Service, Statistics of Hawaiian Agriculture (annual).

Table 572.-- LAND EVALUATION RATING, FOR SIX MAJOR ISLANDS: 1985

[Thousand acres. The Land Evaluation and Site Assessment Commission land evaluation rating is a composite index, scaled from 0 to 100, based on measurements of soil productivity and the suitableness of land for agricultural purposes. Data exclude Kahoolawe, Niihau, Lehua, Kaula, and the Northwestern Hawaiian Islands]

| Land evaluation rating   | Six-<br>island<br>total                                      | Hawaii   | Maui   | Lanai   | Molokai   | 0ahu   | Kauai   |
|--|--|--|--|---|---|--|---|
| Total area   | 4,042  | 2 <b>,</b> 579                                       | 466  | 90  | 166   | 386  | 355   |
| 90 to 100 80 to 89 70 to 79 60 to 69 40 to 49 30 to 39 20 to 29 Under 10 Mean rating | 66<br>137<br>189<br>212<br>221<br>309<br>605<br>492<br>1,813 | 17<br>95<br>125<br>113<br>227<br>543<br>282<br>1,176 | 17<br>39<br>20<br>36<br>64<br>40<br>29<br>55<br>165<br>- | 3<br>11<br>2<br>(Z)<br>3<br>6<br>1<br>48<br>15<br>- | 7<br>16<br>6<br>9<br>10<br>10<br>3<br>50<br>55<br>- | 39<br>33<br>27<br>22<br>12<br>18<br>11<br>30<br>194<br>- | 20<br>40<br>20<br>18<br>7<br>17<br>26<br>206<br>- |

Z Less than 500 acres.

Source: Land Evaluation and Site Assessment Commission, <u>A Report</u> on the State of Hawaii Land Evaluation and Site Assessment System (February 1986), Exhibit A.

Table 573.-- AGRICULTURAL CHEMICALS USED, INCLUDING FERTILIZER AND LIME: 1978 TO 1987

| Chemicals used   | 1978            | 1982                      | 1987                    |
|--|-----------------|---------------------------|-------------------------|
| Any chemicals, fertilizer, or lime used farms Commercial fertilizer farms acres on which used                | 3,172           | 3,532<br>3,158<br>228,982 | 3,524                   |
| Lime \$1,000  Lime farms  acres on which used tons   | 26,530<br>525   | 33,477<br>525<br>9,547    | 30,717<br>825<br>21,544 |
| Agricultural chemicals 1/ farms \$1,000 Sprays, dusts, granules, fumigants, etc.,                            | 3,277           | 3,084                     | 3,881                   |
| to control  Insects on hay and other crops farms acres on which used   | ,               |                           |                         |
| Nematodes in crops farms acres on which used Diseases in crops and orchards farms                            | 441             | 654<br>9 <b>,</b> 638     | 663<br>15 <b>,</b> 792  |
| weeds, grass, or brush in crops and pasture farms acres on which used  | 12,310<br>2,325 | 18,085                    | (D)<br>2,887            |
| Chemicals used for defoliation or for growth control of crops or thinning of fruit farms acres on which used | 160             | 165                       | 212                     |

D Withheld to avoid disclosing data for individual farms.

1/ Data after 1978 exclude the cost of lime.

Source: U.S. Bureau of the Census, 1987 Census of Agriculture, Geographic Area Series, Hawaii, State and County Data, AC87-A-11 (August 1989), table 15, p. 19.

Table 574.-- AQUACULTURE INDUSTRY OPERATIONS: 1970 TO 1990

|      |  | f operations,<br>ec. 31                                  |  | Produc-<br>tion  |  |
|------|--|--|--|--|--|
| Year | Total  | Prawn<br>producers                                       | Acreage,<br>Dec. 31  | (1,000<br>1b.)   | Value<br>(\$1,000)   |
| 1970 | 2<br>2<br>3<br>4<br>10<br>14<br>25<br>25<br>23           | 1<br>1<br>2<br>3<br>3<br>6<br>13<br>16<br>19             | 193<br>193<br>193<br>203<br>213<br>234<br>235<br>246<br>320<br>493 | 20<br>17<br>18<br>34<br>41<br>82<br>94<br>123<br>178<br>246                | 11<br>17<br>23<br>34<br>136<br>178<br>210<br>281<br>525<br>1,531 |
| 1980 | 37<br>41<br>44<br>42<br>47<br>48<br>44<br>45<br>44<br>46 | 24<br>21<br>22<br>21<br>17<br>20<br>20<br>14<br>12<br>10 | 575<br>547<br>643<br>496<br>474<br>465<br>444<br>437<br>477<br>479 | 320<br>338<br>551<br>345<br>441<br>583<br>1,015<br>1,689<br>1,170<br>1,264 | 1,655 1,868 2,625 1,605 2,300 2,780 3,549 6,263 5,560 6,835      |

Source: Hawaii State Department of Land and Natural Resources, Aquaculture Development Program, records, October 9, 1991.

Table 575.-- AQUACULTURE OPERATIONS, ACREAGE, PRODUCTION, AND VALUE, BY COUNTIES: 1990

| Subject   | State<br>total                                    | Hawaii  | Maui                            | Honolulu                                      | Kauai                           |
|---|---|---|---------------------------------|---|---------------------------------|
| Number of operations  Prawn producers                       | 53<br>10  | 21  | 5<br>-                          | 22<br>10                                      | 5 -                             |
| Acreage (Dec. 31)   | 489   | 84  | 13                              | 377   | 15                              |
| Production (1,000 lb.)  Shellfish  Finfish  Algae  Other 1/ | 1,452.0<br>598.6<br>277.0<br>576.4<br>(NA)        | 580.4<br>20.0<br>130.3<br>430.1<br>(NA)       | 14.3<br>14.0<br>.3<br>(NA)      | 855.8<br>563.6<br>145.9<br>146.3<br>(NA)      | 1.0<br>1.0<br>(NA)<br>-<br>(NA) |
| Value (\$1,000)   | 9,241.1<br>3,002.3<br>991.5<br>4,171.9<br>1,075.4 | 5,013.6<br>120.0<br>508.9<br>3,799.2<br>585.5 | 76.9<br>76.0<br>.9<br>-<br>(NA) | 4,148.1<br>2,803.8<br>481.7<br>372.7<br>489.9 | 2.5<br>2.5<br>(NA)<br>-<br>(NA) |

NA Not available.

1/ Nonfood products: ornamental fish, seedstock, other.
Source: Hawaii State Department of Land and Natural Resources,
Aquaculture Development Program, October 9, 1991.

## Section 20

## FORESTS, FISHERIES, AND MINING

This section presents data on forests and forest reserves, commercial fishing and fish populations, and mining and mineral products.

The most recent available statistics show 1.7 million acres of forest and 700,000 acres of timberland in the State, most of it on the Big Island. Over 45,000 acres had been planted in eucalyptus and other species of trees by mid-1990. Recent surveys of vegetation on three islands show ohia lehua to be the most common type of tree on Oahu and Kauai (with acreages of 38,000 and 109,000, respectively) and kiawe the leading type (at 33,000 acres) on Molokai. Forest and brushland fires burned 5.3 square miles in fiscal 1990.

The commercial fish catch in fiscal year 1990 amounted to 15.4 million pounds, with a value of \$36 million to primary producers. Ahi (yellowfin) and aku (skipjack) accounted for 44 percent of the total value. Other important species are swordfish, spiny lobster, opakapaka, mahimahi, akule, and ono. Commercial fishermen numbered 3,551. Among Marine Life Conservation Districts, those with the most fish per acre were Honolua-Mokuleia Bays (4,497), Hanauma Bay (3,788), and Kealakekua Bay (3,414).

The value of mineral production reached \$103 million in 1990, almost all of it in cement (\$42 million) and crushed stone (\$55 million). The 1990 total was an all-time high.

Important sources of data on these subjects are the United States Census of Mineral Industries and reports and records of the U.S. Bureau of Mines and Hawaii State Department of Land and Natural Resources, Aquatic Resources Division and Forestry and Wildlife Division.

Historical Statistics of Hawaii, Section 14, summarizes the data for earlier periods. Comparable Mainland statistics are reported in the Statistical Abstract of the United States: 1991, Sections 24 and 25.

Table 576.-- FOREST AND NATURAL AREA ACREAGE: JUNE 30, 1990

|   | Conservation district forest land                    |  | Planted                               | forest  | Natural<br>areas <u>3</u> / |   |
|---|--|--|---------------------------------------|---|-----------------------------|---|
| Island  | Forest<br>reserve<br>land <u>1</u> /                 | Private<br>forest<br>land <u>2</u> /                     | Planted<br>in preced-<br>ing year     | Total<br>standing                                       | Number<br>of<br>areas       | Acres   |
| State total   | 639,592  | 327,845  | 355                                   | 45,853  | 21                          | 122,703   |
| Hawaii Maui Kahoolawe Lanai Molokai Oahu Kauai Niihau | 438,416<br>73,227<br>-<br>16,030<br>28,626<br>83,293 | 106,745<br>53,180<br>-<br>6,150<br>-<br>87,920<br>73,850 | 125<br>148<br>-<br>-<br>2<br>45<br>35 | 16,976<br>11,837<br>-<br>512<br>3,219<br>7,084<br>6,225 | 9 4 - 2 3 3 -               | 86,135<br>17,123<br>-<br>2,950<br>1,770<br>14,725 |

<sup>1</sup>/ State owned and privately owned lands under surrender agreement in forest reserve system.

Source: Hawaii State Department of Land and Natural Resources, Division of Forestry and Wildlife, records.

Table 577.-- WOODLAND ON FARMS, 1978 TO 1987, AND BY COUNTIES, 1987
[Acres]

|                             |                              |                             | 1987                       |                            |                         |                         |                       |
|-----------------------------|------------------------------|-----------------------------|----------------------------|----------------------------|-------------------------|-------------------------|-----------------------|
| Use                         | 1978                         | 1982                        | State<br>total             | Hawaii                     | Maui                    | Hono-<br>lulu           | Kauai                 |
| Total Pastured Not pastured | 145,802<br>40,242<br>105,560 | 117,270<br>36,550<br>80,720 | 99,135<br>27,517<br>71,618 | 75,331<br>22,973<br>52,358 | 14,024<br>992<br>13,032 | 7,085<br>2,797<br>4,288 | 2,695<br>755<br>1,940 |

Source: U.S. Bureau of the Census, 1987 Census of Agriculture, Hawaii AC87-A-11 (August 1989), pp. 15 and 36.

<sup>2/</sup> Private forest land within conservation district. The majority of these lands were previously in the forest reserve system.

<sup>3/</sup> Includes Waimanu Research Reserve (3,600 acres) and Alakai Wilderness Preserve (9,939 acres).

Table 578.-- LAND AREA, BY VEGETATION TYPE AND FOREST RESERVE STATUS, FOR MOLOKAI, OAHU, AND KAUAI: 1986

[In acres. Excludes land in forest plantations. Surveys of Hawaii, Maui, Kahoolawe, and Lanai are planned for 1992]

|  | Molokai  |  | Oah  | u   | Kauai   |  |
|--|--|--|--|---|---|--|
| Vegetation type  | Total  | Forest<br>reserve                                | Total  | Forest<br>reserve                                     | Total   | Forest<br>reserve  |
| Total, all types   | 163,214  | 44,288   | 370,002  | 34,931  | 347,088   | 88,127   |
| Tree type: Ohia lehua Koa Kukui Kiawe Eucalyptus Guava Other trees | 32,833<br>4,773<br>33,215<br>1,527<br>5,918<br>2,673 | 30,161<br>-<br>4,009<br>-<br>954<br>4,200<br>573 | 37,563<br>28,548<br>2,775<br>17,354<br>1,131<br>10,287<br>36,700 | 9,524<br>6,601<br>617<br>241<br>411<br>1,421<br>6,776 | 109,040<br>13,438<br>7,634<br>10,358<br>3,157<br>12,143<br>32,763 | 50,702<br>6,223<br>2,029<br>116<br>1,288<br>3,099<br>6,043 |
| Shrub type   | 16,417<br>191<br>38,751<br>18,325<br>3,819<br>4,772  | 1,527<br>-<br>764<br>-<br>2,100                  | 33,974<br>11,338<br>45,102<br>55,770<br>822<br>88,638            | 2,965<br>2,718<br>3,261<br>-<br>396                   | 36,061<br>4,120<br>34,168<br>64,741<br>6,709<br>12,756            | 7,189<br>2,043<br>5,198<br>387<br>3,810                    |

Source: Hawaii State Department of Land and Natural Resources, Division of Forestry and Wildlife, multi-resource inventory reports.

Table 579.-- FOREST LAND, TIMBERLAND AREA, VOLUME OF SAWTIMBER, AND GROWING STOCK: JANUARY 1, 1987

| Subject  | 1,000<br>acres         | Subject  | Amount                  |
|--|------------------------|--|-------------------------|
| Total forest land  Timberland  Federal  State or county  Private | 700<br>-<br>338<br>362 | Sawtimber, net volume: Total (mil. bd. ft.) Softwood (mil. bd. ft.)  Growing stock, net volume: Total (mil. cu. ft.) Softwood (mil. cu. ft.) | 1,196<br>18<br>280<br>4 |

Source: U.S. Forest Service, cited in <u>Statistical Abstract of the United</u> States: 1990, p. 672.

Table 580.-- FOREST AND BRUSHLAND FIRES, 1988 TO 1990, AND BY COUNTIES, 1990

[Years ended June 30]

|                              |                       |                      | 1990, by counties |              |           |               |        |
|------------------------------|-----------------------|----------------------|-------------------|--------------|-----------|---------------|--------|
| Subject                      | 1988                  | 1989                 | State<br>total    | Hawaii       | Maui      | Hono-<br>lulu | Kaua i |
| Number of fires Acres burned | 79<br>34 <b>,</b> 794 | 82<br>6 <b>,</b> 585 | 210<br>3,384      | 128<br>1,827 | 43<br>223 | 33<br>1,325   | 6<br>9 |

Source: Hawaii State Department of Land and Natural Resources, Division of Forestry and Wildlife, records.

Table 581.-- COMMERCIAL FISHING: 1970 TO 1990

[Years ended June 30]

|  | Number  | Com   | mercial fish ca  | tch <u>1</u> /   |
|--|---|---|--|--|
| Year   | of<br>commercial<br>fishermen   | Pounds<br>1 anded   | Pounds<br>sold   | Value to pri-<br>mary producers<br>(dollars)   |
| 1970<br>1971<br>1972<br>1973<br>1974<br>1975<br>1976<br>1977<br>1978<br>1979<br>1980<br>1981<br>1982<br>1983<br>1984 | 1,264 1,373 1,544 1,677 2,085 1,991 2,283 2,368 2,574 2,447 2,525 2,577 2,525 2,480 2,940 | 9,786,726<br>15,176,525<br>15,577,669<br>14,029,491<br>13,997,774<br>10,801,441<br>11,893,141<br>15,298,515<br>13,672,061<br>12,310,524<br>10,418,964<br>10,890,468<br>9,178,789<br>7,841,959 | 9,588,319 14,945,539 15,246,519 13,719,284 13,660,574 10,404,019 11,332,659 14,763,816 13,139,142 11,890,241  9,946,065 10,465,731 8,824,348 7,529,178 | 3,585,166<br>4,633,875<br>5,536,521<br>5,676,783<br>6,234,924<br>6,242,614<br>7,508,395<br>9,433,781<br>11,115,964<br>12,673,328<br>10,497,456<br>11,828,575<br>10,754,276<br>10,506,860 |
| 1984<br>1985<br>1986<br>1987<br>1988<br>1989   | 2,940<br>2,638<br>2,880<br>3,008<br>3,155<br>3,491<br>3,551                               | 9,819,800<br>9,436,591<br>9,503,193<br>12,128,527<br>11,052,502<br>13,493,866<br>15,370,302   | 9,344,200<br>9,077,357<br>9,081,881<br>11,628,387<br>10,592,287<br>13,010,973  | 13,556,184<br>15,901,656<br>18,557,533<br>20,477,699<br>20,541,580<br>28,003,055<br>35,984,313   |

<sup>1/</sup> Represents the total catches of all licensed commercial fishers. Includes both sea and pond catches, but excludes coral harvests. Particularly for 1979-1988, data may be incomplete due to unreported aku (skipjack tuna) and longline boat catches.

Source: Hawaii State Department of Land and Natural Resources, Division of Aquatic Resources, Commercial Fish Landings for Fiscal Year (annual), as revised, and records.

Table 582.-- COMMERCIAL FISH CATCH, BY SPECIES: 1990 [Year ended June 30, 1990]

|                              |            |            | ,          |
|------------------------------|------------|------------|------------|
|                              | Pounds     | Pounds     | Value      |
| Species 1/                   | caught     | sold       | (dollars)  |
| opouro Z/                    |            |            | (0011010)  |
| Total catch                  | 15 370 302 | 14 076 175 | 75 09/ 717 |
| iotal catch                  | 15,370,302 | 14,836,135 | 35,984,313 |
| Sea catch, all species 2/    | 15,350,576 | 14,816,617 | 35,939,707 |
| Tunas                        | 7,666,660  | 7,498,663  | 16,016,478 |
| Aku (Skipjack)               | 2,771,063  | 2,707,992  | 3,962,056  |
| Ahipalaha                    | 212,093    | 211,419    | 307,561    |
| Bigeye (ahi)                 | 1,549,390  | 1,546,048  | 5,094,899  |
| Yellowfin (ahi)              | 3,103,943  | 3,010,869  | 6,624,431  |
| Billfishes                   | 3,442,745  | 3,329,065  | 6,700,151  |
| Blue marlin                  | 1,132,636  | 1,045,637  | 925,774    |
| Striped marlin               | 643,310    | 633,141    | 846,966    |
| Swordfish                    | 1,523,285  | 1,522,002  | 4,766,443  |
| Miscellaneous pelagie fishes | 1,095,131  | 1,041,091  | 2,429,593  |
| Mahimahi                     | 510,696    | 477,768    | 1,207,137  |
| Ono                          | 360,365    | 341,212    | 1,013,209  |
| Deep bottom fishes           | 789,564    | 746,764    | 2,875,925  |
| Opakapaka                    | 272,403    | 266,110    | 1,114,597  |
| Uku                          | 151,277    | 148,258    | 524,182    |
| Ulaula                       | 145,666    | 140,663    | 720,787    |
| Akule/opelu                  | 1,127,051  | 1,033,791  | 1,793,105  |
| Akule                        | 694,859    | 613,376    | 1,094,728  |
| Opelu                        | 372,773    | 362,596    | 599,241    |
| Jacks                        | 197,201    | 185,783    | 358,782    |
| Inshore fishes               | 196,529    | 180,504    | 428,378    |
| Sharks                       | 84,115     | 74,535     | 62,826     |
| Lobsters (ula)               | 341,383    | 325,123    | 3,602,803  |
| Crabs                        | 26,693     | 25,169     | 125,809    |
| Shrimps                      | 341,433    | 341,303    | 1,453,270  |
| Other animals                | 27,557     | 22,941     | 59,012     |
| Seaweeds                     | 9,421      | 7,365      | 28,035     |
| Miscellaneous                | 5,093      | 4,520      | 5,540      |
| Pond landings, all species   | 19,726     | 19,518     | 44,606     |

<sup>1/</sup> Shown separately for all species over 250,000 lb. or \$250,000. 

2/ Including species not shown separately. 

Source: Hawaii State Department of Land and Natural Resources, Division of Aquatic Resources, Commercial Fish Landings, State of Hawaii--Fiscal Year 1989-1990.

Table 583.-- COMMERCIAL SEA LANDINGS, BY ISLANDS: 1990
[Year ended June 30, 1990]

| Island  | Pounds     | Pounds     | Value      |
|---|------------|------------|------------|
|   | landed     | sold       | (dollars)  |
| State total                                     | 15,350,576 | 14,816,617 | 35,939,707 |
| Hawaii Maui Lanai Molokai Oahu Kauai and Niihau | 2,783,460  | 2,680,145  | 4,935,260  |
|   | 684,227    | 553,379    | 1,228,580  |
|   | 21,852     | 18,397     | 43,807     |
|   | 71,306     | 52,690     | 156,550    |
|   | 10,841,040 | 10,681,796 | 27,799,187 |
|   | 948,691    | 830,210    | 1,776,317  |

Source: Hawaii State Department of Land and Natural Resources, Division of Aquatic Resources, Commercial Fish Landings, State of Hawaii--Fiscal Year 1989-1990.

Table 584.-- COMMERCIAL SEA LANDINGS, BY FISHING METHOD: 1990

[Year ended June 30, 1990]

| Fishing method  | Pounds     | Pounds     | Value      |
|---|------------|------------|------------|
|   | 1anded     | sold       | (dollars)  |
| All methods   | 15,350,576 | 14,816,617 | 35,939,707 |
| Aku pole and line  Longline Handline  Trolling  Net  Trap All other methods | 2,477,726  | 2,477,726  | 3,564,296  |
|   | 5,790,578  | 5,773,081  | 14,814,658 |
|   | 2,662,734  | 2,570,405  | 6,492,913  |
|   | 2,665,838  | 2,349,348  | 4,222,722  |
|   | 929,949    | 848,787    | 1,482,361  |
|   | 720,701    | 708,141    | 5,147,193  |
|   | 103,050    | 89,129     | 215,564    |

Source: Hawaii State Department of Land and Natural Resources, Division of Aquatic Resources, Commercial Fish Landings, State of Hawaii--Fiscal Year 1989-1990.

Table 585.-- FISH POPULATIONS AROUND SELECTED SHORELINE AREAS: YEAR ENDED JUNE 30, 1990

| Location  | Species  | Fish per<br>acre   | Pounds per<br>acre  |
|---|--|--|---|
| Marine Life Conservation Districts: Hanauma Bay, Oahu (in shore) Pupukea, Oahu Waikiki, Oahu Molokini Shoal, Maui Honolua-Mokuleia Bays, Maui Manele-Hulopoe Bays, Lanai Wailea Bay, Hawaii Lapakahi, Hawaii Kealakekua Bay, Hawaii  Artificial reefs: Maunalua Bay, Oahu (tire modules) Waianae, Oahu (tire modules) Keawakapu, Maui | 60<br>91<br>(NA)<br>86<br>74<br>(NA)<br>73<br>91<br>92<br>67<br>(NA)<br>(NA) | 3,788<br>2,582<br>(NA)<br>2,250<br>4,497<br>2,338<br>1,524<br>2,074<br>3,414<br>(NA)<br>(NA) | 3,186<br>346<br>427<br>623<br>1,377<br>430<br>372<br>360<br>542 |
| Fisheries Management Areas: Waikiki-Diamond Head, Oahu Puako Reef, Hawaii  Other areas: Na Pali Coast, Kauai Waimea Bay, Oahu Honokahau, Kona Wawahiwaa, Kona Kaiwi, Kona Red Hill, Kona  | (NA)<br>42<br>77<br>57<br>30<br>58<br>50<br>64                               | (NA)<br>1,331<br>2,692<br>2,245<br>1,063<br>2,229<br>4,136<br>3,225                          | 252<br>218<br>296<br>166<br>190<br>204<br>635<br>631            |

NA Not available. Source follows next table.

## Table 586.--MOST ABUNDANT AND HEAVIEST FISH SPECIES AT SPECIFIED LOCATIONS: YEAR ENDED JUNE 30, 1990

[Three leading species at each location, based on both individuals per acre and pounds per acre]

|  | Individuals<br>per acre              |   | Pounds per<br>acre                           |   |
|--|--------------------------------------|---|--|---|
| Location and species   | Rank                                 | Number  | Rank   | Number  |
| Waikiki MLCD, Oahu:  Manini (acanthurus triostegus)  | 1<br>2<br>3<br>4<br>1<br>2<br>3<br>5 | 407<br>294<br>245<br>143<br>864<br>590<br>392<br>235<br>158 | 3<br>2<br>5<br>1<br>3<br>7<br>(NA)<br>1<br>2 | 65<br>78<br>19<br>151<br>382<br>113<br>(NA)<br>1,200<br>1,013 |
| Kealakekua Bay MLCD, Hawaii: Yellow tang (zebrasome flavescens) Kole (ctenochaetus strigosus) Maikoiko (acanthurus leucopareius) Eleele (melichthys niger) | 1<br>2<br>3<br>7                     | 1,131<br>378<br>260<br>164                                  | 1<br>7<br>3<br>2                             | 142<br>15<br>45<br>103  |

NA Not available.

Source: Hawaii State Department of Land and Natural Resources, Division of Aquatic Resources, Statewide Marine Research and Surveys, Survey of Fish and Habitat, July 1, 1989 to June 30, 1990.

MLCD Marine Life Conservation District.

Table 587.-- MINERAL INDUSTRIES: 1958 TO 1987

[Excluding mines at manufactures]

| Subject  | 1958            | 1963            | 1967            | 1972            | 1977            | 1982            | 1987            |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Number of establishments $\underline{1}/$ With 20 employees or more          | 20<br>8         | 44<br>4         | 12<br>3         | 15<br>5         | 7 2             | 12<br>4         | 9<br>4          |
| All employees: Number (1,000) Payroll (million dollars)                      | .4<br>1.7       | .3<br>1.7       | .2<br>1.6       | .3              | .1<br>1.9       | .2<br>3.8       | .2<br>7.4       |
| Production, development, and exploration workers: Number (1,000)             | .4<br>.7<br>1.4 | .2<br>.6<br>1.5 | .2<br>.4<br>1.3 | .2<br>.4<br>1.8 | .1<br>.2<br>1.5 | .1<br>.2<br>2.6 | .2<br>.4<br>5.7 |
| Value added by mining (million dollars)                                      | 4.6             | 4.9             | 5.0             | 9.0             | 8.1             | 9.7             | 23.5            |
| Cost of supplies used, purchased machinery installed, etc. (million dollars) | 2.0             | 2.1             | 2.3             | 4.1             | 2.9             | 5.9             | 10.4            |
| Value of shipments and receipts (million dollars)                            | 5.8             | 6.5             | 5.5             | 11.0            | 9.7             | 12.8            | 31.1            |
| Capital expenditures (million dollars)                                       | .7              | •5              | 1.8             | 2.0             | 1.3             | 2.7             | 2.8             |

<sup>1/</sup> After 1963, data for single-unit establishments without paid employees were excluded from the census of mineral industries. In 1987, seven of the nine establishments reported, including three of the four with 20 employees or more, were in SIC 142, crushed and broken stone, including riprap.

Source: U.S. Bureau of the Census, 1982 Census of Mineral Industries, Geographic Area Series, Pacific States, MIC82-A-9 (April 1985), tables 1 and 2a, and 1987 Census of Mineral Industries, Geographic Area Series, Pacific States, MIC87-A-9 (October 1990), Hawaii table 1.

Table 588.-- NONFUEL MINERAL PRODUCTION: 1988 TO 1990

[Production as measured by mine shipments, sales, or marketable production, including consumption by producers]

| Minerals  | 1988  | 1989 <u>1</u> /                                  | 1990 <u>2</u> /                               |
|---|---|--|---|
| QUANTITY (1,000 SHORT TONS)   |   |  |   |
| Cement:  Masonry  Portland  Gem stones  Sand and gravel (construction)  Stone (crushed)                               | 10<br>354<br>(NA)<br>652<br>*5,700                | 10<br>493<br>(NA)<br>600<br>6,205                | 10<br>500<br>(NA)<br>1,000<br>7,000           |
| VALUE (\$1,000)   |   |  |   |
| Total 3/  | 74,932  | 92,051   | 103,144                                       |
| Cement:  Masonry  Portland  Gem stones  Sand and gravel (construction)  Stone (crushed)  Other industrial minerals 3/ | 1,531<br>28,880<br>(W)<br>3,173<br>*41,000<br>348 | 1,566<br>40,495<br>44<br>*3,200<br>46,746<br>(W) | 600<br>41,500<br>44<br>5,600<br>55,400<br>(W) |

<sup>\*</sup> Estimated.

NA Not available.

W Withheld to avoid disclosing company proprietary data.

<sup>1/</sup> Revised from Data Book 1990, table 603.

<sup>7/</sup> Preliminary.

<sup>3/</sup> Except for 1988, totals exclude values indicated by symbol W. Source: U.S. Bureau of Mines, "The Mineral Industry of Hawaii in 1990," Mineral Industry Surveys (1991).

## **CONSTRUCTION AND HOUSING**

This section presents statistics on construction activity and costs, the size and composition of the housing inventory, occupancy of housing units and office buildings, home sales, and residential financing. Related series are included in Sections 6 (land use) and 14 (prices).

There were 28,000 building permits issued in 1990, with an estimated value of \$2.4 billion. The total included \$1.0 billion for new private residential construction, \$169 million for hotels, and \$501 million for private nonresidential structures. The value of government construction contracts awarded was \$801 million. Construction put in place, as indicated by the contracting tax base, totaled \$4.0 billion in 1990. The value of land transfers in fiscal 1991 was \$11.3 billion, 9.1 percent of the assessed value of all privately-owned real property in the State. The June 1991 construction cost index for Honolulu (1982=100) was 151 for single-family residences and 148 for high-rise buildings.

The number of housing units in the State increased from 334,000 in 1980 to 390,000 in 1990 and 398,000 in 1991. Owner occupied units numbered 152,000 in 1980 and 192,000 in 1990; the latter total included 29,000 on leased land. Condominium units, first authorized in 1961, numbered 98,000 by 1987, and cooperative units, first built in 1956, totaled 2,800. Government-owned housing, mostly military and public, accounted for 27,000 units as of 1990. Housing has been in short supply; at the time of the 1990 census, the homeowner vacancy rate was 0.8 percent, and the rental vacancy rate was 5.4 percent. The median selling price of single-family homes on Oahu during 1990, based on Multiple Listing Service data, was \$352,000; for condominium units it was \$187,000. The median gross monthly rent for Oahu rose from \$271 in 1980 to \$599 in 1990, and the median value of owner occupied single-family units increased from \$118,100 to \$245,300.

The principal sources for these data are the 1990 U.S. Census of Housing, postal vacancy surveys sponsored by the Federal Home Loan Bank of Seattle, various series compiled by State and County agencies (primarily the Hawaii Housing Authority, Hawaii State Department of Business, Economic Development & Tourism, Department of Commerce and Consumer Affairs, Department of Taxation, and Bureau of Conveyances, and the four county building departments), the construction cost indexes prepared by the First Hawaiian Bank, and the Honolulu Board of Realtors reports on Multiple Listing Service activity. Many of these series are summarized in the Bank of Hawaii's Construction in Hawaii, issued annually. Persons interested in figures for earlier periods should consult Historical Statistics of Hawaii, Section 15. Mainland statistics appear in Section 26 of Statistical Abstract of the United States: 1991.

Table 589.-- NUMBER AND VALUE OF BUILDING PERMITS, BY COUNTIES: 1980 TO 1990

| Year                      | State<br>total  | City and<br>County of<br>Honolulu   | Hawaii<br>County  | Kauai<br>County   | Maui<br>County  |
|---------------------------|---|---|---|---|---|
| NUMBER ISSUED             |   |   |   |   |   |
| 1980                      | 22,771<br>21,395<br>16,974<br>19,733<br>20,582<br>23,332<br>21,461<br>23,929<br>24,032<br>23,320<br>27,689                        | 15,729<br>15,141<br>11,743<br>13,018<br>14,404<br>16,011<br>14,237<br>16,197<br>14,956<br>15,284<br>17,123                | 3,732<br>3,427<br>2,581<br>2,649<br>2,834<br>2,933<br>2,717<br>3,175<br>3,597<br>3,560<br>4,720                     | 1,210<br>1,276<br>1,214<br>2,165<br>1,437<br>1,544<br>1,486<br>1,595<br>1,904<br>2,129<br>2,312                   | 2,040<br>1,551<br>1,436<br>1,901<br>1,907<br>2,844<br>3,021<br>2,962<br>3,575<br>2,347<br>3,534                     |
| ESTIMATED VALUE (\$1,000) |   |   |   |   |   |
| 1980                      | 1,278,911<br>898,428<br>714,938<br>767,305<br>710,661<br>990,879<br>1,161,489<br>1,268,927<br>1,788,983<br>1,996,299<br>2,358,147 | 745,565<br>550,254<br>493,139<br>410,763<br>473,943<br>619,689<br>674,057<br>836,328<br>926,901<br>1,205,519<br>1,169,286 | 146,395<br>136,617<br>75,715<br>95,979<br>102,805<br>132,735<br>231,997<br>146,035<br>181,929<br>362,220<br>493,788 | 133,261<br>67,844<br>55,380<br>142,859<br>74,076<br>59,522<br>101,315<br>109,574<br>220,245<br>190,907<br>261,157 | 253,690<br>143,713<br>90,704<br>117,704<br>59,837<br>178,933<br>154,120<br>176,990<br>459,909<br>237,653<br>433,916 |

Source: City and County of Honolulu Department of Buildings, Summary of Building Permits (annual); Hawaii, Kauai, and Maui County departments of public works, records; F.W. Dodge Division, McGraw-Hill Information Systems Co., records.

Table 590.-- VALUE OF BUILDING PERMITS, BY TYPE, BY COUNTIES: 1990
[Thousands of dollars. Limited to private construction, including additions, alteration, and repairs]

| Category   | State<br>total                             | City and<br>County of<br>Honolulu       | Hawaii<br>County                      | Kauai<br>County                      | Maui<br>County                         |
|--|--|---|---------------------------------------|--------------------------------------|--|
| Total  | 2,122,065                                  | 996,792                                 | 449,962                               | 241,394                              | 433,916                                |
| Residential  Hotel  Non-residential  Additions and alterations | 1,000,818<br>169,168<br>500,604<br>451,475 | 390,444<br>65,630<br>223,038<br>317,679 | 260,189<br>67,027<br>92,017<br>30,729 | 160,985<br>2,800<br>27,685<br>49,925 | 189,200<br>33,711<br>157,864<br>53,142 |

Source: Calculated by Hawaii State Department of Business, Economic Development & Tourism from county 'Monthly Cooperative Report of Local Construction' submitted to F.W. Dodge Division, McGraw-Hill Information Systems Company.

Table 591.-- GENERAL EXCISE TAX BASE FOR CONTRACTING: 1980 TO 1990 [In thousands of dollars. Data are on a cash basis accounting]

| Year <u>1</u> /              | Amount   | Year <u>1</u> /              | Amount   | Year <u>1</u> /      | Amount                              |
|------------------------------|--|------------------------------|--|----------------------|-------------------------------------|
| 1980<br>1981<br>1982<br>1983 | 1,569,658<br>1,613,764<br>1,294,871<br>1,353,405 | 1984<br>1985<br>1986<br>1987 | 1,242,929<br>1,367,733<br>1,808,024<br>2,003,056 | 1988<br>1989<br>1990 | 2,487,571<br>3,112,846<br>4,003,650 |

<sup>1/</sup> Calendar year in which reported, including "prior years" reports. Income received in December is reported the following January, hence these annual totals generally refer to income received in the 12-month period ended November 30.

Source: Hawaii State Department of Taxation, "General Excise and Use Tax Base" (annual tabular release).

Table 592.- GOVERNMENT CONSTRUCTION CONTRACTS AWARDED, BY AWARDING AGENCY AND LOCATION OF CONSTRUCTION: 1986 TO 1990

[In thousands of dollars. By date of publication]

| Awarding agency and location  | 1986    | 1987    | 1988    | 1989    | 1990    |
|---|---------|---------|---------|---------|---------|
| Total   | 425,145 | 372,165 | 650,225 | 758,332 | 800,975 |
| Awarding agency: Federal agencies State agencies City and County of Honolulu Other counties           | 101,943 | 107,874 | 170,506 | 192,358 | 101,007 |
|   | 205,443 | 174,207 | 351,705 | 417,152 | 549,883 |
|   | 90,413  | 79,090  | 120,285 | 146,609 | 110,179 |
|   | 27,346  | 10,994  | 7,729   | 2,213   | 39,906  |
| Location of construction: City and County of Honolulu County of Hawaii County of Kauai County of Maui | 313,444 | 293,358 | 493,865 | 649,922 | 539,871 |
|   | 61,041  | 32,261  | 41,057  | 26,862  | 54,804  |
|   | 33,765  | 21,080  | 20,696  | 30,891  | 49,915  |
|   | 16,895  | 25,466  | 94,607  | 50,657  | 153,651 |

Source: Compiled by Hawaii State Department of Business and Economic Development from Trade Publishing Company, BID Service Weekly.

Table 593.-- SUMMARY STATISTICS FOR CONSTRUCTION INDUSTRIES AND SUBDIVIDERS AND DEVELOPERS: 1972 TO 1987

[Excludes establishments without payroll]

| Subject  | 1972  | 1977   | 1982   | 1987   |
|--|-------|--|--|--|
| Number of establishments in business during year | 282.6 | 1,732<br>530<br>20,792<br>15,784<br>5,032<br>323.4<br>1,435.2<br>636.2 | 1,861<br>396<br>18,665<br>13,953<br>4,711<br>409.7<br>1,853.3<br>855.2 | 1,891<br>456<br>21,706<br>16,582<br>4,861<br>606.9<br>2,963.1<br>1,288.7 |

Source: U.S. Bureau of the Census, 1987 Census of Construction Industries, Pacific States, CC87-A-9 (July 1990), Hawaii table 4.

Table 594.-- SUMMARY STATISTICS FOR CONSTRUCTION INDUSTRIES AND SUBDIVIDERS AND DEVELOPERS, BY INDUSTRY: 1982 AND 1987

[Includes establishments both with and without payroll]

| 1987<br>SIC<br>code | Industry  | Number         | Proprietors and working partners | All em-<br>ployees<br>(average) | Value of<br>business<br>done<br>(\$1,000) |
|---------------------|---|----------------|----------------------------------|---------------------------------|---|
| į                   | 1987  |                |                                  |                                 |   |
| 15-17<br>15         | Construction industries and subdividers and developers Construction industries Building constructionGeneral | 5,796<br>5,605 | 4,310<br>4,147                   | 21,706<br>21,385                | 3,233,759<br>3,104,309                    |
| 16                  | contractors and operative builders Heavy construction other than building construction                      | 1,346          | 828                              | (D)                             | (D)                                       |
| 17<br>6552          | contractors  Special trade contractors Land subdividers and developers,                                     | 136<br>4,123   | 44<br>3,275                      | 2,745<br>(D)                    | 402,471<br>(D)                            |
| 0332                | n.e.c. $\underline{1}/$   | 183            | 161                              | 309                             | 129,444                                   |
|                     | 1982  |                |                                  |                                 |   |
|                     | Construction industries and subdividers and   |                |                                  |                                 |   |
|                     | developers  | 4,259          | 2,799                            | 18,665                          | 2,032,087                                 |
| 15-17<br>15         | Construction industries Building constructionGeneral contractors and operative                              | 4,092          | 2,645                            | 18,340                          | 1,894,673                                 |
| 16                  | builders  Heavy construction other than   | 1,020          | 564                              | 6,290                           | 944,585                                   |
|                     | building construction contractors   | 133            | 67                               | 1,768                           | 179,221                                   |
| 17                  | Special trade contractors   | 2,939          | 2,014                            | 10,282                          | 770,867                                   |
| 6552                | Land subdividers and developers, n.e.c. 1/  | 162            | 154                              | 323                             | 137,412                                   |

D Withheld to avoid disclosing data for individual companies.

Pacific States, CC87-A-9 (July 1990), Hawaii table 1.

<sup>1/</sup> For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

Source: U.S. Bureau of the Census, 1987 Census of Construction Industries,

## Table 595.-- GENERAL STATISTICS FOR CONSTRUCTION INDUSTRIES AND SUBDIVIDERS AND DEVELOPERS, BY GEOGRAPHIC AREA: 1987

[Excludes establishments without payroll]

| Subject  | State<br>total  | Oahu  | Other<br>islands  |
|--|---|---|---|
| Number of establishments in business during year | 1,891<br>21,706<br>606.9<br>2,849.8<br>1,958.3<br>1,288.7<br>759.0<br>891.5<br>44.6 | 1,284<br>17,851<br>525.2<br>2,441.6<br>1,647.9<br>1,082.9<br>635.3<br>793.7<br>36.1 | 607<br>3,855<br>81.7<br>408.2<br>310.4<br>205.9<br>123.7<br>97.8<br>8.4 |
|  |   |   |   |

Source: U.S. Bureau of the Census, 1987 Census of Construction Industries, Pacific States, CC87-A-9 (July 1990), Hawaii tables 3 and 12.

Table 596.-- ESTIMATED VALUE PER HOUSING UNIT, BY TYPE OF STRUCTURE, FOR BUILDING PERMITS ISSUED BY THE CITY AND COUNTY OF HONOLULU: 1985 TO 1990

[In dollars. Excludes building permits for additions, alterations and repair]

| Type of structure                  | 1985                       | 1986                       | 1987 *                     | 1988                        | 1989                         | 1990                         |
|------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------------|------------------------------|------------------------------|
| One-family Two-family Multi-family | 67,783<br>58,337<br>46,089 | 80,119<br>59,184<br>47,789 | 80,719<br>64,490<br>42,507 | 101,649<br>69,465<br>81,169 | 109,519<br>84,415<br>100,462 | 144,090<br>133,905<br>68,363 |

Source: City and County of Honolulu Department of Building, "Summary of Building Permits" (annual tabular release).

Table 597.-- PRIVATE RESIDENTIAL CONSTRUCTION AND DEMOLITION AUTHORIZED BY PERMITS, BY COUNTIES: 1986 TO 1990

|  |   | City and                                |                                     | Other co                      | ınties              |                                 |
|--|---|---|-------------------------------------|-------------------------------|---------------------|---------------------------------|
| Category and year authorized                     | State<br>total                            | County<br>of Hono-<br>lulu              | Total                               | Hawaii                        | Kauai               | Maui                            |
| New 1-family dwellings: 1986 1987 1988 1989 1990 | 4,985                                     | 2,024                                   | 2,961                               | 1,127                         | 417                 | 1,417                           |
|  | 5,813                                     | 2,684                                   | 3,129                               | 1,391                         | 543                 | 1,195                           |
|  | 6,067                                     | 2,001                                   | 4,066                               | 1,715                         | 692                 | 1,659                           |
|  | 6,846                                     | 2,026                                   | 4,820                               | 2,782                         | 856                 | 1,182                           |
|  | 5,529                                     | 1,593                                   | 3,936                               | 2,023                         | 845                 | 1,068                           |
| New duplex units: 1986                           | 166                                       | 112                                     | 54                                  | 18                            | 2                   | 34                              |
|  | 182                                       | 124                                     | 58                                  | 50                            | 6                   | 2                               |
|  | 205                                       | 172                                     | 33                                  | 28                            | 5                   | -                               |
|  | 219                                       | 124                                     | 95                                  | 63                            | 12                  | 20                              |
|  | 260                                       | 136                                     | 124                                 | 50                            | 14                  | 60                              |
| New apartments: 1986                             | 2,570<br>1,671<br>2,802<br>2,618<br>2,862 | 2,076<br>785<br>1,377<br>1,852<br>1,210 | 494<br>886<br>1,425<br>766<br>1,652 | 22<br>314<br>446<br>59<br>580 | -<br>21<br>5<br>324 | 472<br>572<br>958<br>702<br>748 |
| Units demolished: 1/ 1986                        | 690                                       | 534                                     | 156                                 | 43                            | 60                  | 53                              |
|  | 825                                       | 741                                     | 84                                  | 40                            | 2                   | 42                              |
|  | 753                                       | 629                                     | 124                                 | 57                            | 9                   | 58                              |
|  | 864                                       | 690                                     | 174                                 | 96                            | 4                   | 74                              |
|  | 1,073                                     | 944                                     | 129                                 | 54                            | 22                  | 53                              |

 $<sup>\</sup>underline{1}/$  Excludes units destroyed by fire, volcanic activity, high winds, and other disasters.

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

Table 598.-- HONOLULU CONSTRUCTION COST INDEXES: 1982 TO 1991 [1982=100. Data are annual averages unless otherwise specified]

|      | Single-f   | amily resid  | ence   | High-rise building   |  |  |  |
|------|--|--|--|--|--|--|--|
| Year | All<br>components  | Materials<br>prices  | Labor <u>1</u> /   | All components   | Materials<br>prices  | Labor <u>1</u> /   |  |
| 1982 | 100.0<br>109.5<br>114.3<br>117.4<br>121.5<br>125.7<br>132.8<br>138.5<br>145.7<br>150.8 | 100.0<br>111.3<br>113.1<br>115.2<br>119.1<br>123.7<br>133.2<br>137.2<br>145.1<br>149.7 | 100.0<br>107.3<br>115.8<br>120.1<br>124.4<br>128.2<br>132.2<br>140.3<br>146.4<br>151.7 | 100.0<br>106.9<br>110.9<br>113.5<br>116.8<br>120.7<br>126.1<br>133.2<br>142.1<br>148.4 | 100.0<br>107.4<br>108.0<br>108.7<br>110.8<br>114.9<br>121.6<br>126.7<br>138.5<br>149.2 | 100.0<br>106.7<br>114.2<br>118.2<br>122.4<br>125.8<br>129.9<br>138.8<br>145.2<br>147.4 |  |

<sup>1/</sup> Wages and benefits.

Source: First Hawaiian Bank, Research Department, records.

Table 599.-- HOUSING UNITS CONVERTED FROM RENTAL UNITS TO CONDOMINIUM UNITS: 1963 TO 1990

| Subject                | 1963-<br>1984   | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|------------------------|-----------------|------|------|------|------|------|------|
| Projects Housing units | 290             | 18   | 36   | 35   | 34   | 47   | 80   |
|                        | 11 <b>,</b> 977 | 117  | 151  | 398  | 99   | 150  | 545  |

Source: 1963-1980 compiled by Real Estate Research Center, College of Business Administration, University of Hawaii, from the records of the Hawaii Real Estate Commission; 1981 and later years from Hawaii State Department of Commerce and Consumer Affairs, Professional and Vocational Licensing Division, Real Estate Commission, records.

Table 600.-- CONDOMINIUM PROJECTS REGISTERED WITH THE STATE OF HAWAII: 1986 TO 1990

| Subject  | 1986  | 1987  | 1988  | 1989  | 1990  |
|----------|-------|-------|-------|-------|-------|
| Projects | 87    | 94    | 104   | 153   | 201   |
|          | 1,346 | 2,289 | 2,060 | 2,575 | 4,301 |
|          | 405   | 153   | 133   | 139   | 147   |

<sup>1/</sup> Includes units in agricultural condominium projects which can be used for residential or business/commercial purposes (110 in 1987, 50 in 1988, 120 in 1989, 72 in 1990).

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

Table 601.-- TIME SHARE PROPERTIES AND UNITS, BY GEOGRAPHIC AREAS: OCTOBER 18, 1990

[Time sharing refers to the use, occupancy, or possession of accommodations among various persons for less than 60 days in any year, for any occupant]

| Geographic area | Properties                     | Units   |
|-----------------|--------------------------------|---|
| State total     | 63                             | 2,497   |
| Oahu            | 17<br>15<br>2<br>6<br>16<br>24 | 94 0<br>8 6 7<br>7 3<br>1 2 2<br>7 5 9<br>6 7 6 |

Source: State Department of Commerce and Consumer Affairs, Professional and Vocational Licensing Division, Time Sharing Office, records.

Table 602.-- CONDOMINIUM AND COOPERATIVE HOUSING UNITS, BY COUNTIES: 1987

| Type of housing unit                   | State<br>total  | Honolulu        | Maui         | Hawaii | Kauai      |
|--|-----------------|-----------------|--------------|--------|------------|
| Condominium units 1/ Cooperative units | 98,111<br>2,832 | 74,325<br>2,738 | 14,100<br>94 | 5,629  | 4,057<br>- |

<sup>1/</sup> Includes some nonresidential condominium units. Source follows next table.

Table 603.-- CONDOMINIUM HOUSING UNITS, TOTAL AND OWNER OCCUPIED, BY LAND OWNERSHIP, BY COUNTIES: 1987

[Includes some nonresidential condominium units]

| Ownership of land and condominium unit                                   | State<br>total | Honolulu | Maui   | Hawaii | Kauai |
|--|----------------|----------|--------|--------|-------|
| All condo units  On fee simple land  On leased land  Other categories 1/ | 98,111         | 74,325   | 14,100 | 5,629  | 4,057 |
|  | 34,856         | 22,988   | 6,462  | 3,314  | 2,092 |
|  | 59,395         | 49,825   | 6,120  | 1,803  | 1,647 |
|  | 3,860          | 1,512    | 1,518  | 512    | 318   |
| Owner occupied condo units On fee simple land On leased land             | 26,424         | 25,203   | 753    | 369    | 99    |
|  | 9,690          | 8,912    | 475    | 251    | 52    |
|  | 16,734         | 16,291   | 278    | 118    | 47    |

<sup>1/</sup> Such as fee and leasehold condominium units sold on agreement of sale. Source: Legislative Reference Bureau, Ownership Patterns of Land Beneath Hawaii's Condominium and Cooperative Housing Projects (Report No. 6, 1987), pp. 8, 10-12, and 27.

Table 604.-- TENURE AND CONTROL OF HOUSING UNITS: ANNUALLY, 1980 TO 1991 [Data include condominium units occupied or intended for occupancy by nonresidents

|   | A11  | Owner occupied units 2/  |  | Renter occu  | er occupied and vacant units   |  |  |
|---|--|--|--|--|--|--|--|
| Year  | housing units 1/   | Land<br>owned  | Land<br>1eased   | Private <u>3</u> /   | Federal <u>1</u> /   | State and County 1/  |  |
| 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 | 334,235<br>341,764<br>346,726<br>349,996<br>354,484<br>358,581<br>363,416<br>369,425<br>375,434<br>382,052<br>389,810<br>398,325 | 100,478<br>104,677<br>106,147<br>108,761<br>111,767<br>114,548<br>117,090<br>121,019<br>126,563<br>132,691<br>138,520<br>141,846 | 36,986<br>37,413<br>37,372<br>35,586<br>35,545<br>35,681<br>35,811<br>35,959<br>33,579<br>30,996<br>29,047<br>26,915 | 170,963<br>173,644<br>177,325<br>179,831<br>181,034<br>182,050<br>184,343<br>186,109<br>188,851<br>191,657 | 19,437<br>19,427<br>19,392<br>19,304<br>19,294<br>19,280<br>19,264<br>19,265<br>19,394<br>19,421 | 6,371<br>6,603<br>6,490<br>6,514<br>6,844<br>7,022<br>6,908<br>7,073<br>7,047<br>7,287<br>7,397<br>7,940 |  |

 $<sup>\</sup>frac{1}{2}$  As of April 1.  $\frac{1}{2}$  As indicated by the number of taxpayers claiming home exemptions as of January 1. The number of owner occupied housing units reported by the U.S. Census of Housing is somewhat higher than the corresponding number based on taxpayer home exemptions, chiefly because of differences in definitions.

<sup>3/</sup> Calculated as a residual after accounting for the known components, some of which pertain to dates other than April 1, and thus not attributable to any specific date.

<sup>4/</sup> As of April 1.

Source follows table 607.

Table 605.-- HOUSING UNITS STANDING, BY COUNTIES: ANNUALLY, 1980 TO 1991

[As of April 1. Data include condominium units occupied or intended for occupancy by nonresidents]

|  | State  | City and<br>County of  |   | Other counties   |  |  |  |
|--|--|--|---|--|--|--|--|
| Year   | total  | Honolulu   | Total   | Hawaii   | Kauai  | Maui   |  |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 334,235<br>341,764<br>346,726<br>349,996<br>354,484<br>358,581<br>363,416<br>369,425<br>375,434<br>382,052<br>389,810<br>398,325 | 252,038<br>254,815<br>256,689<br>259,149<br>262,337<br>265,412<br>268,551<br>272,134<br>275,520<br>278,191<br>281,683<br>284,835 | 82,197<br>86,949<br>90,037<br>90,847<br>92,147<br>93,169<br>94,865<br>97,291<br>99,914<br>103,861<br>108,127<br>113,490 | 34,215<br>36,041<br>37,453<br>38,264<br>39,164<br>40,054<br>41,006<br>42,022<br>43,397<br>45,520<br>48,253<br>50,579 | 14,828<br>16,021<br>16,476<br>16,044<br>16,318<br>16,428<br>16,556<br>16,690<br>16,871<br>17,173<br>17,613<br>18,649 | 33,154<br>34,887<br>36,108<br>36,539<br>36,665<br>36,687<br>37,303<br>38,579<br>39,646<br>41,168<br>42,261<br>44,262 |  |

Source: Source follows table 607.

Table 606.-- TENURE AND CONTROL OF HOUSING, BY COUNTIES: 1980, 1990, AND 1991 [Condominium units occupied by nonresidents are included in these estimates]

|  | Al1                                   | Owner occupied units 2/               |                               | Renter occupied and vacant units       |                          |                                |  |
|--|---------------------------------------|---------------------------------------|-------------------------------|--|--------------------------|--------------------------------|--|
| Year and county  | housing units 1/                      | Land<br>owned                         | Land<br>1eased                | Pri-<br>vate <u>3</u> /                | Feder-<br>al <u>l</u> /  | State and County 1/            |  |
| 1980   |                                       |                                       |                               |  |                          |                                |  |
| State total  | 334,235                               | 100,478                               | 36,986                        | 170,963                                | 19,437                   | 6,371                          |  |
| City & Co. of Hon. County of Hawaii County of Kauai County of Maui 4/. | 252,038<br>34,215<br>14,828<br>33,154 | 69,147<br>15,111<br>5,551<br>10,669   | 35,278<br>964<br>126<br>618   | 123,454<br>17,191<br>8,833<br>21,485   | 19,290<br>57<br>64<br>26 | 4,869<br>892<br>254<br>356     |  |
| 1990   |                                       |                                       |                               |  |                          |                                |  |
| State total  | 389,810                               | 138,520                               | 29,047                        | 195,601                                | 19,245                   | 7,397                          |  |
| City & Co. of Hon. County of Hawaii County of Kauai County of Maui 4/  | 281,683<br>48,253<br>17,613<br>42,261 | 96,304<br>20,475<br>7,705<br>14,036   | 26,498<br>1,277<br>357<br>915 | 134,257<br>25,310<br>9,161<br>26,873   | 19,123<br>48<br>65<br>9  | 5,501<br>1,143<br>325<br>428   |  |
| 1991   |                                       |                                       |                               |  |                          |                                |  |
| State total  | 398,325                               | 141,846                               | 26,915                        | 202,266                                | 19,358                   | 7,940                          |  |
| City & Co. of Hon. County of Hawaii County of Kauai County of Maui 4/  | 284,835<br>50,579<br>18,649<br>44,262 | 98,271<br>21,101<br>• 8,045<br>14,429 | 24,284<br>1,287<br>375<br>969 | 137,162<br>27,027<br>+ 9,840<br>28,237 | 19,279<br>8<br>+ 65<br>6 | 5,839<br>1,156<br>+ 324<br>621 |  |

<sup>. 8,420</sup> + 10,229

Source follows table 607.

 $<sup>\</sup>frac{1}{2}$  As of April 1. \* 8,420 + 10,224  $\frac{1}{2}$  As of January 1. Based on the number of taxpayers claiming home exemptions, rather than on the census tabulations on tenure.

<sup>3/</sup> Calculated as a residual and not attributable to any specific month.

Includes Kalawao County (121 units in 1980, 114 units in 1990 and

Table 607.-- RESIDENT AND NONRESIDENT HOUSING UNITS, BY COUNTIES: ANNUALLY, 1980 TO 1991

|                   | State  | City and<br>County of  | Other counties   |  |  |   |  |
|-------------------|--|--|--|--|--|---|--|
| Category and year | total  | Honolulu   | Total  | Hawaii   | Kauai  | Maui  |  |
| RESIDENT 1/       |  |  |  |  |  |   |  |
| 1980              | 322,598<br>327,570<br>332,326<br>336,583<br>336,882<br>336,777<br>340,417<br>347,529<br>354,314<br>362,912           | 247,152<br>249,176<br>251,002<br>254,402<br>255,450<br>256,396<br>258,713<br>262,898<br>267,885<br>272,272 | 75,446<br>78,394<br>81,324<br>82,181<br>81,432<br>80,381<br>81,704<br>84,631<br>86,429<br>90,640                 | 33,594<br>34,782<br>35,969<br>36,495<br>37,262<br>37,775<br>38,954<br>39,920<br>41,043<br>43,502       | 13,395<br>14,165<br>14,797<br>15,038<br>14,720<br>14,352<br>13,982<br>14,059<br>14,016<br>14,139         | 28,457<br>29,447<br>30,558<br>30,648<br>29,450<br>28,254<br>28,768<br>30,652<br>31,370<br>32,999          |  |
| 1991              | 378,257  | 280,116  | 98,141   | 48,178   | 16,114   | 33,849  |  |
| 1980              | 11,637<br>14,194<br>14,400<br>13,413<br>17,602<br>21,804<br>22,999<br>21,896<br>21,120<br>19,140<br>19,479<br>20,068 | 4,886<br>5,639<br>5,687<br>4,747<br>6,887<br>9,016<br>9,838<br>9,236<br>7,635<br>5,919<br>5,116<br>4,719   | 6,751<br>8,555<br>8,713<br>8,666<br>10,715<br>12,788<br>13,161<br>12,660<br>13,485<br>13,221<br>14,363<br>15,349 | 621<br>1,259<br>1,484<br>1,769<br>1,902<br>2,279<br>2,052<br>2,102<br>2,354<br>2,018<br>2,115<br>2,401 | 1,433<br>1,856<br>1,679<br>1,006<br>1,598<br>2,076<br>2,574<br>2,631<br>2,855<br>3,034<br>2,866<br>2,535 | 4,697<br>5,440<br>5,550<br>5,891<br>7,215<br>8,433<br>8,535<br>7,927<br>8,276<br>8,169<br>9,382<br>10,413 |  |

<sup>1/</sup> Estimated as of April 1. Includes all housing units other than

condominium units in rental pools and intended for transient occupancy.

2/ Condominium units in rental pools and intended for transient occupancy, based on February survey data from the Hawaii Visitors Bureau. Source: Hawaii State Department of Business, Economic Development & Tourism, Housing Unit Estimates for Hawaii, 1980-1991 (Statistical Report 223, forthcoming).

Table 608.-- SELECTED HOUSING CHARACTERISTICS: 1980 AND 1990

[Data include most condominium units used or intended for use by transients]

| Subject  | 1980  | 1990   | Percent<br>change   |
|--|---|--|---|
| Total housing units  | 334,235   | 389,810  | 16.6  |
| Occupancy and tenure: Occupied housing units Owner occupied Percent owner occupied Renter occupied Vacant housing units For seasonal, recreational, or occasional use Homeowner vacancy rate (percent) Rental vacancy rate (percent) | 294,052   | 356,267  | 21.2  |
|  | 151,954   | 191,911  | 26.3  |
|  | 51.7  | 53.9   | (X)   |
|  | 142,098   | 164,356  | 15.7  |
|  | 40,183  | 33,543   | -16.5   |
|  | 6,431   | 12,806   | 99.1  |
|  | 1.4   | 0.8  | (X)   |
|  | 10.3  | 5.4  | (X)   |
| Persons per owner-occupied unit  Persons per renter-occupied unit  Units with 1.01 or more persons per room  Percent of all occupied units   | 3.41  | 3.19   | -6.5  |
|  | 2.87  | 2.78   | -3.1  |
|  | 44,905  | 56,708   | 26.3  |
|  | 15.3  | 15.9   | (X)   |
| Units in structure: 1/ 1-unit, detached  | 158,174   | 202,990  | 28.3  |
|  | 13,562  | 34,041   | 151.0   |
|  | 33,386  | 24,182   | -27.6   |
|  | 22,874  | 22,258   | -2.7  |
|  | 103,791   | 100,238  | -3.4  |
|  | 418   | 6,101  | 1,359.6   |
| Number of rooms: 1/ Median   | 4.4   | (NA)   | (NA)  |
|  | (NA)  | 4.4  | (NA)  |
| Value of house and lot: 3/     Specified owner-occupied units Less than \$50,000 \$50,000 to \$99,999 \$100,000 to \$149,999 \$150,000 to \$199,999 \$200,000 to \$299,999 \$300,000 or more Median (dollars)                        | 109,334<br>9,186<br>31,651<br>35,660<br>18,699<br>14,138<br>118,100 | 144,431<br>3,339<br>13,111<br>16,706<br>21,119<br>(39,679<br>50,477<br>245,300 | 32.1<br>-63.7<br>-58.6<br>-53.2<br>12.9<br>} 537.7<br>107.7 |

Continued on next page.

Table 608.-- SELECTED HOUSING CHARACTERISTICS: 1980 AND 1990 -- Con.

| Subject   | 1980  | 1990   | Percent<br>change                        |
|---|---|--|--|
| Contract rent: Specified renter-occupied units paying cash rent Less than \$250 \$250 to \$499 \$500 to \$749 \$750 to \$999 \$1,000 or more Median (dollars) | 122,095<br>52,504<br>57,961<br>}<br>11,630<br>271 | 139,266<br>15,119<br>36,779<br>43,763<br>25,164<br>18,441<br>599 | 14.1<br>-71.2<br>-36.5<br>651.2<br>121.0 |

X Not applicable.

1/ Data for 1980 exclude vacant seasonal and migratory units.

 $\overline{2}$ / Because of rewording of census question, data for 1980 and 1990 apparently are not comparable.

3/ Data limited to single-family homes on less than 10 acres without a

business or medical office on the property.

Source: U.S. Bureau of the Census, 1980 Census of Housing, General Housing Characteristics, Hawaii, HC80-1-Al3 (July 1982) and Detailed Housing Characteristics, Hawaii, HC80-1-Bl3 (May 1983); 1990 Census of Population and Housing, Summary Population and Housing Characteristics, Hawaii, 1990 CPH-1-13 (August 1991).

NA Not available.

Table 609.-- SELECTED HOUSING CHARACTERISTICS, BY COUNTIES: 1990

[Data include most condominium units used or intended for use by transients]

| Subject  | State total 1/  | Hono-<br>lulu  | Hawaii  | Kauai   | Maui  |
|--|---|--|---|---|---|
| ALL HOUSING UNITS  |   |  |   |   |   |
| All housing units  | 389,810   | 281,683  | 48,253  | 17,613  | 42,160  |
| Units in structure:  1 unit, detached                          | 202,990<br>34,041<br>24,182<br>22,258<br>100,238<br>6,101 | 126,553<br>28,914<br>19,384<br>18,285<br>84,378<br>4,169 | 36,622<br>1,399<br>2,150<br>1,642<br>5,561<br>879 | 13,934<br>1,158<br>1,053<br>446<br>647<br>375 | 25,781<br>2,569<br>1,595<br>1,885<br>9,652<br>678 |
| Mean number of rooms   | 4.4   | 4.4  | 4.6   | 4.6   | 4.2   |
| OCCUPIED HOUSING UNITS   |   |  |   |   |   |
| Total  | 356,267   | 265,304  | 41,461  | 16,295  | 33,145  |
| With 1.01 or more persons per room                             | 56,708  | 43,526   | 5,155   | 2,613   | 5,411   |
| VACANT HOUSING UNITS   |   |  |   |   |   |
| Total For seasonal, recreational,                              | 33,543  | 16,379   | 6,792   | 1,318   | 9,015   |
| or occasional use  Homeowner vacancy rate  Rental vacancy rate | 12,806<br>0.8<br>5.4                                      | 4,462<br>0.6<br>4.3                                      | 2,045<br>1.5<br>10.3                              | 333<br>0.7<br>4.3                             | 5,944<br>1.5<br>9.9                               |
| OWNER-OCCUPIED HOUSING UNITS                                   |   |  |   |   |   |
| Total  | 191,911<br>153,596<br>53.9<br>3.19<br>5.2                 | 137,910<br>103,716<br>52.0<br>3.23<br>5.3                | 25,336<br>24,063<br>61.1<br>2.93<br>5.2           | 9,582<br>9,042<br>58.8<br>3.28<br>5.2         | 19,083<br>16,775<br>57.6<br>3.23<br>5.0           |

Continued on next page.

Table 609.-- SELECTED HOUSING CHARACTERISTICS, BY COUNTIES: 1990 -- Con.

|   |  | m  |  | <del>,                                    </del>                           |   |
|---|--|--|--|--|---|
| Subject   | State<br>total <u>1</u> /  | Hono-<br>lulu  | Hawaii   | Kauai  | Maui  |
| VALUE OF SPECIFIED OWNER-OCCUPIED HOUSING UNITS 2/  |  |  |  |  |   |
| Total Less than \$100,000 \$100,000 to \$199,999 \$200,000 to \$299,999 \$300,000 or more Lower quartile (dollars) Median (dollars) Upper quartile (dollars)  | 144,431<br>16,450<br>37,825<br>39,679<br>50,477<br>156,800<br>245,300<br>358,800 | 98,541<br>4,056<br>19,781<br>30,702<br>44,002<br>202,700<br>283,600<br>391,500 | 21,910<br>9,414<br>8,159<br>2,500<br>1,837<br>77,000<br>113,000<br>176,400 | 8,414<br>1,164<br>4,028<br>1,854<br>1,368<br>122,000<br>171,500<br>254,800 | 15,566<br>1,816<br>5,857<br>4,623<br>3,270<br>141,500<br>202,100<br>284,300 |
| RENTER-OCCUPIED HOUSING UNITS   |  |  |  |  |   |
| Total   | 164,356<br>71,634<br>2.78<br>3.7   | 127,394<br>47,233<br>2.80<br>3.6   | 16,125<br>9,877<br>2.76<br>3.8   | 6,713<br>5,039<br>2.85<br>3.9  | 14,062<br>9,423<br>2.66<br>3.6  |
| CONTRACT RENT OF SPECIFIED RENTER-OCCUPIED UNITS 3/   |  |  |  |  |   |
| Total  Less than \$250  \$250 to \$499  \$500 to \$749  \$750 to \$999  \$1,000 or more  Lower quartile (dollars)  Median (dollars)  Upper quartile (dollars) | 139,266<br>15,119<br>36,779<br>43,763<br>25,164<br>18,441<br>401<br>599<br>837   | 107,256<br>9,653<br>27,231<br>35,258<br>20,019<br>15,095<br>423<br>615<br>854  | 13,941<br>2,841<br>5,797<br>3,154<br>1,414<br>735<br>288<br>428<br>626     | 5,822<br>1,253<br>1,392<br>1,473<br>1,092<br>612<br>301<br>532<br>807      | 12,243<br>1,368<br>2,359<br>3,878<br>2,639<br>1,999<br>434<br>658<br>899    |

 $<sup>\</sup>frac{1}{2}$  Includes Kalawao County (101 housing units), not shown separately.  $\frac{2}{2}$  House and lot. Data limited to one-family houses on less than 10 acres without a business or medical office on the property.

<sup>3/</sup> Excludes one-family houses on 10 acres or more.

Source: U.S. Bureau of the Census, 1990 Census of Population and Housing, Summary Population and Housing Characteristics, Hawaii, 1990 CPH-1-13 (August 1991), tables 8, 10, and 12.

Table 610.-- HAWAII HOUSING AUTHORITY OPERATIONS: 1988 TO 1990

[Some functions of the Hawaii Housing Authority were transferred to the Housing Finance and Development Corporation by SLH 1987, Act 337, effective July 1, 1987. The data presented in this table accordingly exclude HFDC units and assets.]

| Subject   | 1988            | 1989            | 1990            |
|---|-----------------|-----------------|-----------------|
| Total units owned by HHA, June 30 1/ Occupied                   | 5,723<br>5,675  | 5,723<br>5,641  | 5,723<br>5,199  |
| Population in units, June 30  Per occupied unit                 | 17,083<br>3.01  | 16,817<br>2.98  | 17,878<br>3.43  |
| Total assets, June 30 (million dollars)                         | 151             | 147             | 157             |
| Operating revenues of HHA, fiscal year: 2/<br>Gross (\$1,000)   | 13,254<br>5,567 | 14,223<br>6,571 | 15,607<br>5,706 |
| Operating revenues per unit per month, fiscal year (dollars) 2/ | 200.03          | 227.98          | 250.15          |
| Rent charged per unit per month, fiscal year (dollars) 2/       | 186.58          | 190.32          | 207.20          |

<sup>1/</sup> Federal low-rent, 5,213; State-subsidized, 510, for all years. 2/ Federal projects only; revenue amounts include Federal subsidies. Source: Hawaii Housing Authority, records.

Table 611.-- HOUSING VACANCY SURVEYS OF OAHU: 1977 TO 1989

[Sponsored by the Federal Home Loan Bank of Seattle and conducted by U.S. mail carriers. Data for 1977-1981 have been adjusted to include newly completed but vacant units, omitted from base in earlier reports. No survey was published for 1984, 1985, 1987, and 1988]

|   |   |   | Vacant  | units   | Units   |   |
|---|---|---|---|---|---|---|
|   | Total   | Used a  | nd new  |   |   | under<br>con-   |
| Year and month  | units   | Number  | Percent   | Used  | New   | struction   |
| 1977: April 1/ 1978: March 1979: May 1980: March 1981: March 1982: March 1983: March 1986: May 1989: AprMay  TYPE OF UNIT: 1989 | 215,923<br>226,103<br>233,631<br>238,028<br>240,354<br>244,077<br>241,355<br>250,500<br>257,050 | 5,472<br>5,178<br>4,081<br>5,104<br>5,235<br>4,130<br>3,253<br>5,750<br>3,730 | 2.5<br>2.3<br>1.7<br>2.1<br>2.2<br>1.7<br>1.3<br>2.3<br>1.5 | 3,399<br>3,312<br>2,584<br>3,039<br>3,306<br>2,665<br>2,558<br>4,593<br>3,414 | 2,073<br>1,866<br>1,497<br>2,065<br>1,929<br>1,465<br>695<br>1,157<br>316 | 4,820<br>4,754<br>3,980<br>2,400<br>1,087<br>2,002<br>877 |
| Single-family units: Detached Attached Multi-family units Mobile homes  | 125,051<br>22,716<br>108,934<br>349   | 1,034<br>356<br>2,340   | 0.8<br>1.6<br>2.1<br>0                                      | 906<br>308<br>2,200   | 128<br>48<br>140  | 538   |

<sup>1/</sup> Dated March 1977 in the original report but April 1977 thereafter. For survey data for 1955-1976, see <u>Historical Statistics of Hawaii</u>, p. 397.

Source: Federal Home Loan Bank of Seattle, Honolulu Housing Vacancy Survey (annual), as adjusted to 1982-1989 definitions.

Table 612.-- VACANCY RATES FOR HOUSING ON OAHU AND THE NEIGHBOR ISLANDS: ANNUAL AVERAGES, 1970 TO 1990

[Based on housing units sampled for the Hawaii Health Surveillance Program survey. Units occupied by households temporarily absent were classified as occupied. The base excludes units occupied by transients

|   |   | Units sam  | pled   | Percent vacant   |  |  |
|---|---|--|--|--|--|--|
| Year  | State<br>total  | Oahu   | Other<br>islands   | State<br>average   | 0ahu   | Other<br>islands   |
| 1970 1/ 1971 1972 1973 1974 1975 1976 2/ 1977 1978 1979 1980 1981 1982 1983 1984 3/ 1985 1986 1987 1988 1988 1989 | 6,107<br>5,370<br>7,177<br>6,735<br>6,301<br>6,632<br>2,440<br>6,899<br>6,690<br>5,936<br>6,174<br>6,509<br>6,139<br>7,238<br>7,485<br>7,143<br>7,441<br>7,330<br>7,679 | 3,217<br>2,493<br>5,423<br>5,456<br>4,982<br>5,360<br>1,817<br>4,526<br>4,102<br>3,519<br>3,613<br>3,195<br>3,468<br>3,147<br>3,827<br>3,872<br>3,653<br>3,738<br>3,625<br>3,734 | 2,890<br>2,877<br>1,754<br>1,279<br>1,319<br>1,272<br>623<br>2,373<br>2,588<br>2,417<br>2,886<br>2,979<br>3,041<br>2,992<br>3,411<br>3,613<br>3,490<br>3,703<br>3,705<br>3,945 | 3.2<br>3.6<br>3.9<br>3.1<br>4.1<br>5.6<br>5.1<br>5.9<br>4.0<br>3.2<br>4.2<br>4.8<br>3.9<br>3.8<br>4.5<br>5.0<br>4.5<br>4.8<br>3.2<br>3.0 | 3.5<br>3.2<br>3.5<br>2.6<br>3.9<br>5.2<br>5.0<br>6.1<br>3.8<br>2.8<br>3.9<br>4.4<br>3.1<br>4.7<br>4.5<br>4.3<br>3.0<br>2.6 | 3.0<br>5.1<br>5.4<br>5.0<br>4.7<br>6.9<br>5.6<br>5.1<br>4.5<br>4.4<br>5.0<br>5.8<br>6.5<br>5.7<br>4.5<br>6.1<br>3.7<br>4.0 |

Source: Hawaii State Department of Health, Hawaii Health Surveillance Program, records.

Neighbor Island data based on last 9 months of 1970.
 Survey suspended during the first 6 months of 1976.
 Sample excluded housing units on military bases, included in other years.

Table 613. -- PERSONS AND HOUSEHOLD HEADS, TOTAL AND CIVILIAN, CHANGING RESIDENCE IN PAST YEAR: 1978 TO 1988

[Excludes persons in institutions or barracks, in Kalawao, or on Niihau]

|   |   | Movers   | Percent moving <u>1</u> /  |  |  |
|---|---|--|--|--|--|
| Year surveyed   | Total   | Civilians <u>2</u> /   | Total  | Civilians <u>2</u> /   |  |
| Persons 1 year old and over:  1978 1979 1980 1981 1982 1983 1984 3/ 1985 1986 1987 1988  Household heads:  1979 1980 1981 1982 1983 1984 3/ 1985 1986 1987 1988 | 148,048<br>139,025<br>122,691<br>137,717<br>147,684<br>135,496<br>140,509<br>133,466<br>130,796<br>173,495<br>172,243<br>48,875<br>45,908<br>40,654<br>48,264<br>51,817<br>45,692<br>45,798<br>42,923<br>42,552<br>53,748<br>51,708 | 110,451<br>103,705<br>89,981<br>105,767<br>115,685<br>96,824<br>101,730<br>101,840<br>99,990<br>139,728<br>136,325<br>36,968<br>34,069<br>29,370<br>36,780<br>39,870<br>32,155<br>34,637<br>31,778<br>31,949<br>42,753<br>38,901 | 15.5<br>16.2<br>13.5<br>15.0<br>15.8<br>14.1<br>14.4<br>13.6<br>13.1<br>17.0<br>16.4<br>18.9<br>17.2<br>14.3<br>16.5<br>17.2<br>14.7<br>15.3<br>14.4<br>13.7<br>17.0<br>16.6 | 14.7<br>13.3<br>11.1<br>12.8<br>13.8<br>11.4<br>11.6<br>11.5<br>11.1<br>15.1<br>14.5 |  |

Source: Hawaii State Department of Health, Hawaii Health Surveillance Program, records.

<sup>1/</sup> Based on number reporting place of residence one year earlier. 
Z/ Based on military status when surveyed. Excludes members of the armed forces and their dependents.

<sup>3/</sup> Persons in households living on military bases were omitted from the 1984 survey, although included in other years. For purposes of this table, such persons were assumed to have the same response distribution as members of military households living in the civilian community.

Table 614.-- MOBILITY OF HOUSEHOLD HEADS, BY MILITARY STATUS: 1988

[Based on place of residence one year prior to survey date. Expanded from a sample. Excludes persons in institutions or military barracks, in Kalawao, or on Niihau]

| Military status and residence of house-                       | All<br>household                   | Non-                              | М                                 | Mobility not re-             |                          |
|---|------------------------------------|-----------------------------------|-----------------------------------|------------------------------|--------------------------|
| hold head 1/  | heads                              | movers                            | Number                            | Percent <u>2</u> /           | ported                   |
| State total   | 310,874                            | 255,957                           | 51,708                            | 16.6                         | 3,209                    |
| Military or dependent  Military  Military dependent  Civilian | 34,656<br>34,459<br>197<br>276,218 | 21,323<br>21,256<br>67<br>234,634 | 12,807<br>12,677<br>130<br>38,901 | 37.0<br>36.8<br>66.0<br>14.1 | 526<br>526<br>-<br>2,683 |

 $<sup>\</sup>frac{1}{2}$  Military status of household head when surveyed.  $\frac{1}{2}$  Based on number reporting.

Table 615. -- ESTIMATED NUMBER OF PERSONS HOMELESS ON A GIVEN DAY, BY COUNTIES: FEBRUARY TO APRIL 1990

| Category   | State<br>total | Hono-<br>lulu | Ha-<br>waii | Kauai | Maui  |
|--|----------------|---------------|-------------|-------|-------|
| High estimate 1/  Low estimate 27  In shelters  Receiving other services  Unserved | 8,369          | 6,362         | 803         | 165   | 1,039 |
|  | 7,023          | 5,833         | 336         | 165   | 689   |
|  | 1,063          | 808           | 102         | 21    | 132   |
|  | 2,329          | 1,739         | 158         | 14    | 418   |
|  | 3,631          | 3,286         | 76          | 130   | 139   |

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

<sup>1/</sup> Based on number in 'open shelters."

2/ Currently in any type of shelter.

Source: SMS Research & Marketing Services, Inc., Hawaii's Homeless (prepared for the Hawaii Housing Authority, July 2, 1990), p. 18.

Table 616.-- REAL ESTATE LICENSES, ACTIVE AND INACTIVE, BY TYPE OF LICENSE AND LOCATION: JUNE 1991

| Type of license   | Active                            | Inactive                    | Location   | Active                                     | Inactive  |
|---|-----------------------------------|-----------------------------|--|--|---|
| Total  Broker: Individual Corporation or partnership Salesman | 14,626<br>4,325<br>1,260<br>9,041 | 7,580<br>669<br>55<br>6,856 | Oahu Hawaii Maui Kauai Molokai Lanai U.S. mainland Foreign | 10,714<br>1,605<br>1,668<br>589<br>48<br>2 | 5,214<br>691<br>581<br>301<br>9<br>2<br>738<br>44 |

Source: Hawaii State Department of Commerce and Consumer Affairs, Professional and Vocational Licensing Division, September 30, 1991.

Table 617.-- BUILDING VACANCY RATES FOR COMPETITIVE OFFICE SPACE FOR HONOLULU, BY LOCATION: 1988 TO 1991

[Rates are percent of space reported vacant in survey]

| Location | May  | Oct. | May  | Oct. | May  | Oct. | May  |
|----------|------|------|------|------|------|------|------|
|          | 1988 | 1988 | 1989 | 1989 | 1990 | 1990 | 1991 |
| Downtown | 5.0  | 5.6  | 6.1  | 4.2  | 3.1  | (NA) | 1.8  |
|          | 4.1  | 1.6  | 1.3  | 9.0  | 4.5  | (NA) | 4.9  |
|          | 3.5  | 1.1  | (NA) | 2.0  | 6.1  | (NA) | 10.3 |
|          | 10.0 | 10.7 | 9.3  | 3.0  | 8.3  | (NA) | 7.0  |

NA Not available.

Source: Semi-annual survey by Hastings, Martin, Conboy, Braig & Associates, Ltd., cited in Building Owners & Managers Association, Hawaii, Newsletter, (monthly).

Table 618.-- OFFICE RENTS AND VACANCY RATES, FOR SELECTED AREAS ON OAHU: MARCH 1991

| Measure   | Airport<br>area | Central<br>business<br>district | Kapio-<br>lani<br>corridor | Waikiki | East<br>Oahu |
|---|-----------------|---------------------------------|----------------------------|---------|--------------|
| Median weighted lease rent per square foot (dollars): Gross | 2.11            | 2.65                            | 2.34                       | 2.77    | 2.56         |
|   | 1.71            | 1.89                            | 1.77                       | 1.51    | 1.88         |
|   | 3.0             | 2.1                             | 3.9                        | 6.6     | 15.8         |

<sup>1/</sup> Percent, based on square footage. The five-area combined rate was
3.4.
Source: Coopers & Lybrand, Honolulu Office Market Report, First Quarter
1991.

Table 619.-- MEDIAN PURCHASE PRICE OF EXISTING ONE-FAMILY HOMES, FOR OAHU: 1982 TO 1988

[Based on surveys of conventional first mortgages]

| Subject                             | 1982  | 1983  | 1984  | 1985  | 1986       | 1987       | 1988                |
|-------------------------------------|-------|-------|-------|-------|------------|------------|---------------------|
| Amount (\$1,000)<br>Rank <u>1</u> / | 129.1 | 135.0 | 138.7 | 150.6 | 161.6<br>2 | 177.6<br>4 | 174 <b>.</b> 7<br>6 |

<sup>1/</sup> Among 32 metropolitan areas.
Source: U.S. Office of Thrift Supervision, 1988 Savings and Home
Financing Source Book, table D5, pp. D-5 to D-15.

Table 620. -- MULTIPLE LISTING SERVICE LISTINGS AND SALES, FOR OAHU: 1970 TO 1990

[Data include 1-family and condominium properties for all years and cooperative, commercial/industrial, business opportunities, income, and vacant properties through 1977 and from 1982 forward]

| Year   | Number<br>listed   | Number<br>sold  | Percent<br>sold                                      | Average<br>sales price<br>(dollars)                                       |
|--|--|---|--|---|
| 1970   | 3,415<br>4,165<br>6,022<br>7,845<br>10,933<br>11,271<br>10,627     | 1,693<br>2,157<br>4,555<br>5,348<br>4,821<br>4,174<br>4,311 | 49.6<br>51.8<br>75.6<br>68.2<br>44.1<br>37.0<br>40.6 | 44,755<br>58,651<br>60,810<br>70,769<br>70,918<br>71,485<br>75,483        |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$  | 10,597<br>9,926<br>13,506<br>14,090<br>13,799<br>13,484<br>13,556  | 5,523<br>5,714<br>8,009<br>5,553<br>3,735<br>2,948<br>4,868 | 52.1<br>57.6<br>59.3<br>39.4<br>27.1<br>21.9<br>35.9 | 81,213<br>82,076<br>103,698<br>124,897<br>144,227<br>143,046<br>142,914   |
| 1984 <u>3/</u><br>1985<br>1986<br>1987<br>1988<br>1989 | 13,258<br>13,558<br>16,047<br>12,887<br>14,548<br>13,873<br>17,097 | 4,732<br>5,261<br>6,467<br>8,855<br>9,886<br>9,757<br>9,243 | 35.7<br>38.8<br>40.3<br>68.7<br>68.0<br>70.3<br>54.1 | 141,888<br>137,650<br>151,985<br>188,200<br>201,000<br>238,257<br>319,500 |

<sup>1/</sup> Year ended February 28 or 29.

Source: Honolulu Board of Realtors, records.

March through December.January 1 through December 3.

Table 621.-- MULTIPLE LISTING SERVICE LISTINGS AND SALES, BY TYPE OF PROPERTY, FOR OAHU: 1988 TO 1990

|   | Number                                      | Number                                  | Percent                                      | Sales<br>(doll  | price<br>ars)   |
|---|---|---|--|---|---|
| Year and type of property   | listed                                      | sold                                    | sold   | Mean  | Median  |
| 1988  |   |   |  |   |   |
| Total   | 14,548                                      | 9,886                                   | 68.0   | 201,000   | 146,800   |
| Single family residential Condominium/cooperative Vacant land Multi-family Commercial/industrial Business opportunities | 4,518<br>8,993<br>483<br>156<br>140<br>258  | 3,026<br>6,546<br>169<br>53<br>54<br>38 | 67.0<br>72.8<br>35.0<br>34.0<br>38.6<br>14.7 | 312,300<br>140,300<br>284,000<br>662,800<br>611,300<br>74,300   | 210,000<br>114,000<br>195,000<br>450,000<br>200,000<br>59,000 |
| 1989  |   |   |  |   |   |
| Total   | 13,873                                      | 9,757                                   | 70.3   | 238,257   | • • •   |
| Residential (1-family) Condominium/cooperative Vacant land Multi-family Commercial Business opportunities               | 4,503<br>8,177<br>485<br>185<br>153<br>370  | 2,922<br>6,486<br>201<br>64<br>47<br>37 | 64.9<br>79.3<br>41.4<br>34.6<br>30.7<br>10.0 | 372,361<br>164,496<br>383,373<br>716,658<br>775,976<br>156,405  | 270,000<br>135,500<br>250,000<br>500,000<br>410,000<br>60,000 |
| 1990  |   |   |  |   |   |
| Total   | 17,097                                      | 9,243                                   | 54.1   | 319,500   | • • •   |
| Residential (1-family) Condominium/cooperative Vacant land Multi-family Commercial Business opportunities               | 5,216<br>10,588<br>521<br>230<br>213<br>329 | 2,744<br>6,149<br>170<br>81<br>46<br>53 | 52.6<br>58.1<br>32.6<br>35.2<br>21.6<br>16.1 | 498,511<br>225,901<br>392,931<br>845,384<br>1,221,804<br>88,304 | 352,000<br>187,000<br>289,000<br>640,000<br>430,000<br>60,000 |

Source: Honolulu Board of Realtors, Multiple Listing Service, records.

Table 622.-- MULTIPLE LISTING SERVICE UNITS SOLD, SINGLE-FAMILY RESIDENTIAL AND CONDOMINIUM, BY SELLING PRICE RANGE, FOR OAHU: 1989 AND 1990

|                     |   | e-family<br>lential   | Condomi  | inium  |
|---------------------|---|---|--|--|
| Selling price range | 1989 <u>1</u> /   | 1990  | 1989   | 1990   |
| All properties      | 2,922   | 2,744   | 6,486  | 6,149  |
| Less than \$50,000  | 4<br>6<br>21<br>50<br>98<br>182<br>271<br>251<br>333<br>265<br>254<br>546<br>225<br>150<br>63<br>51<br>31<br>25<br>96 | -<br>2<br>7<br>28<br>34<br>69<br>76<br>121<br>237<br>288<br>829<br>386<br>190<br>114<br>85<br>55<br>43<br>180 | 92<br>645<br>931<br>970<br>1,117<br>844<br>614<br>322<br>240<br>158<br>131<br>216<br>83<br>29<br>29<br>11<br>9<br>11 | 10<br>111<br>318<br>465<br>810<br>845<br>898<br>654<br>543<br>377<br>234<br>456<br>137<br>84<br>57<br>38<br>16<br>30<br>66 |
| Median value        | \$270,000<br>\$372,361  | \$352,000<br>\$498,511  | \$135,500<br>\$164,496   | \$187,000<br>\$225,901   |

<sup>1/</sup> Median revised from Data Book 1990, table 639.
Source: Honolulu Board of Realtors, Multiple Listing Service records.

Table 623.-- AVERAGE MONTHLY RENTS FOR A THREE-ROOM, ONE-BATH, 800-SQ. FT. APARTMENT IN HONOLULU AND OTHER CITIES: 1991

[Estimates for 10 highest U.S. cities and national median]

| City     | Dollars                  | City    | Dollars           |
|----------|--------------------------|---------|-------------------|
| Honolulu | 840<br>825<br>825<br>710 | Chicago | 630<br>600<br>595 |

Source: Runzheimer International, cited in Sunday Star-Bulletin  $\S$  Advertiser, September 8, 1991, p. G-1.

Table 624.-- CHARACTERISTICS OF PRIVATE SINGLE-FAMILY AND MULTI-FAMILY DEVELOPMENTS, FOR OAHU: 1985 TO 1990

|                                      | S  | ingle-fam  | ily devel                                    | Multi-family developments $\underline{1}$                      |  |  |   |
|--------------------------------------|--|--|--|--|--|--|---|
|                                      | Average area (square feet) Units                   |  | Average<br>price                             | Average<br>living<br>area                                      | Units                                  | Average<br>price                       |   |
| Year                                 | House  | Lot  | sold   | (dollars)  | (sq. ft.)                              | sold                                   | (dollars)   |
| 1985<br>1986<br>1987<br>1988<br>1989 | 1,263<br>1,191<br>1,393<br>1,264<br>1,270<br>1,342 | 5,360<br>4,887<br>4,721<br>4,429<br>4,838<br>5,174 | 1,139<br>1,392<br>965<br>1,399<br>950<br>617 | 148,711<br>154,411<br>164,214<br>168,543<br>202,151<br>286,549 | 773<br>858<br>798<br>683<br>837<br>711 | 316<br>727<br>556<br>293<br>510<br>579 | 93,737<br>108,656<br>105,680<br>113,696<br>119,630<br>140,391 |

1/ Four stories or less.

Source: Bank of Hawaii, Construction in Hawaii, 1991 (1991), p. 25.

Table 625.-- MORTGAGES, FORECLOSURES, AND AGREEMENTS OF SALE: 1985 TO 1990

|                                      | Mortgages recorded                                       |  |  |   |   |  |
|--------------------------------------|--|--|--|---|---|--|
| Year                                 | Number   | Total<br>value<br>(\$1,000)  | Average<br>value<br>(dollars)                                  | Fore-<br>clo-<br>sures 1/<br>(\$1,000)              | Mortgage<br>assign-<br>ments<br>(\$1,000)         | Agree-<br>ments<br>of sale<br>(\$1,000)                        |
| 1985<br>1986<br>1987<br>1988<br>1989 | 30,777<br>48,602<br>49,657<br>41,841<br>47,826<br>50,450 | 3,809,595<br>7,109,021<br>6,508,957<br>7,159,347<br>10,464,959<br>14,671,725 | 123,780<br>146,270<br>131,079<br>171,104<br>218,834<br>290,817 | 81,525<br>139,757<br>51,382<br>(NA)<br>(NA)<br>(NA) | 3,566<br>6,260<br>4,038<br>*5,420<br>(NA)<br>(NA) | 257,588<br>187,307<br>256,328<br>239,933<br>234,280<br>268,457 |

<sup>\* 11</sup> months.

Source: Data from Title Guaranty of Hawaii and Hawaii State Bureau of Conveyances, cited in the Bank of Hawaii, Construction in Hawaii, 1991 (1991), p. 35.

Table 626.-- MORTGAGE LOANS OUTSTANDING: 1965 TO 1990

[In millions of dollars. As of December 31. Mortgage holdings of insurance companies doing business in Hawaii are included; mortgage holdings of credit unions are excluded]

| Year   | Amount  | Year   | Amount  | Year   | Amount   |
|--|---|--|---|--|--|
| 1965<br>1966<br>1967<br>1968<br>1969<br>1970<br>1971<br>1972 | 1,022.7<br>1,138.6<br>1,228.1<br>1,386.9<br>1,579.5<br>1,790.2<br>2,093.1<br>2,424.2<br>2,797.4 | 1974<br>1975<br>1976<br>1977<br>1978<br>1979<br>1980<br>1981 | 3,210.2<br>3,564.9<br>3,959.5<br>4,496.0<br>5,320.8<br>6,323.2<br>7,131.4<br>7,498.0<br>7,730.1 | 1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 7,553.9<br>7,708.0<br>6,505.3<br>4,614.6<br>5,750.3<br>5,917.3<br>6,665.8<br>7,783.6 |

Source: Bank of Hawaii, <u>Hawaii 1991</u>, <u>Annual Economic Report</u> (1991), p. 35.

NA Not available.

<sup>1/</sup> Commercial and residential projects.

Table 627.-- NUMBER OF DEEDS FILED AND RECORDED AND APPROXIMATE VALUE OF LAND CONVEYED: 1988 TO 1991

[Years ended June 30. Data include leases, agreement of sales assignments, subleases, etc., as well as deeds]

| Subject                            | 1988                | 1989   | 1990                 | 1991                 |
|------------------------------------|---------------------|--------|----------------------|----------------------|
| Number of deeds filed and recorded | 53,204<br>7,958,152 | 61,674 | 75,534<br>16,154,886 | 71,933<br>11,304,180 |

Source: Hawaii State Department of Land and Natural Resources, Bureau of Conveyances, records.

Table 628.-- APPROXIMATE VALUE OF LAND TRANSFERS, BY COUNTIES: 1988 TO 1990

[In dollars. For calendar years. Totals include leases, agreement of sales assignments, subleases, etc., as well as deeds]

| County      | 1988   | 1989   | 1990   |
|-------------|--|--|--|
| State total | 9,468,113,350  | 13,303,281,000   | 14,262,953,800   |
| Honolulu    | 6,705,645,400<br>1,177,183,891<br>1,139,148,059<br>446,136,000 | 8,514,925,700<br>2,446,997,200<br>1,671,483,100<br>669,875,000 | 8,764,531,600<br>2,046,874,000<br>2,893,085,800<br>558,462,400 |

Source: Hawaii State Department of Land and Natural Resources, Bureau of Conveyances, records.

Table 629.-- CHARACTERISTICS OF SINGLE FAMILY HOMES INSURED FHA SECTION 203(B): 1988 AND 1990

| Subject   | 1988   | 1990  |
|---|--|---|
| Number insured  | 2,122<br>630<br>1,492<br>249,255   | 897<br>382<br>515<br>113,389  |
| Averages: Age of structure (years) Improved living area (square feet) Lot size (square feet) Number of rooms Market price of site Site to value ratio (percent) Site price per square foot (dollars) Construction cost per square foot (dollars) Appraised value (dollars) Sales price per square foot (dollars) Annual family income (dollars) | 12.8<br>1,305<br>6,511<br>6.0<br>59,774<br>42.8<br>*5.96<br>*62.17<br>138,697<br>*126.07<br>48,765 | 13.5<br>1,224<br>7,481<br>5.6<br>67,468<br>50.3<br>5.45<br>62.98<br>163,032<br>136.01<br>47,317 |

<sup>\*</sup>Sample under 25.

Source: U.S. Department of Housing and Urban Development, Housing Information and Statistics Division, FHA Homes - 1988, pp. 33-64, and FHA Homes - 1990, pp. 31-60.

Table 630.-- FORECLOSURES: 1984 TO 1989

[For earlier years, 1976-1983, see source]

| Subject  | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|--|------|------|------|------|------|------|
| Number of foreclosures Amount (m.1. dol.) Percent of total mortgages | 440  | 261  | 156  | 154  | 55   | 39   |
|  | 96   | 33   | 22   | 25   | 13   | 35   |
|  | 3.8  | 1.3  | 0.9  | 0.9  | 0.4  | 1.0  |

Source: U.S. Office of Thrift Supervision, 1989 Savings & Home Financing Source Book, table B9, p. B-83.

Table 631.-- SEATING CAPACITIES OF SELECTED STADIUMS, THEATERS, AND CHURCHES: 1987-1988

| Theaters and auditoriums:  Neal Blaisdell Center Arena 2/ Neal Blaisdell Center Exhibition Hall 3/ Francis Wong Stadium (Hoolulu Park Complex  Multi-purpose Pavilion) 2/ Lahaina Civic Center Convention Hall 2/ Andrews Amphitheater 4,000 Hilo Civic Auditorium 2/ Waikiki Shell 4/ Pearlridge West Theater complex (12 theaters) 2,160 Neal Blaisdell Center Concert Hall 2,158 Kahala Theaters (5 theaters) 1,460 Waikiki 3 Theater 1,262 Hilton Hawaiian Village Dome 1,120 Kauai War Memorial Concert Theater 1,100 Waikiki 1 and 2 Theaters (each) 982 Kapiolani Theater 600 Ruger Theater 600 Ruger Theater 507 Richard T. Mamiya Theatre 500  Churches: Kawaiahao Church (Sanctuary) 800 St. Theresa Co-Cathedral 800 St. Andrew's Cathedral 750 Cathedral of Our Lady of Peace 700 St. Augustine 700   | Facility type and name   | Seating capacity |
|---|--|------------------|
| Aloha Stadium   | Stadiums and snorts arenas:  |                  |
| Aiea High School Stadium       9,600         Neal Blaisdell Center Arena 1/       8,731         Leilehua High School Stadium       6,500         Brigham Young University-Hawaii Cannon Activity Center       6,000         University of Hawaii Baseball Stadium       4,312         Theaters and auditoriums:       8,780         Neal Blaisdell Center Arena 2/       8,780         Neal Blaisdell Center Exhibition Hall 3/       5,000         Francis Wong Stadium (Hoolulu Park Complex       4,500         Multi-purpose Pavilion) 2/       4,500         Lahaina Civic Center Convention Hall 2/       4,500         Andrews Amphitheater       4,000         Hilo Civic Auditorium 2/       3,550         Waikiki Shell 4/       3,257         Pearlridge West Theater complex (12 theaters)       2,160         Neal Blaisdell Center Concert Hall       2,158         Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,262         Kapiolani Theater       600         Cinerama Theater       640         Kamiahao Church       600         Ruger Theater       507         Richard T. Mamiya Theatre       500         Churches   |  | 50,000           |
| Neal Blaisdell Center Arena 1/  | Aiea High School Stadium   |                  |
| Leilehua High School Stadium  | Neal Blaisdell Center Arena 1/   |                  |
| Waipahu High School Stadium       6,500         Brigham Young University-Hawaii Cannon Activity Center       6,000         University of Hawaii Baseball Stadium       4,312         Theaters and auditoriums:       8,780         Neal Blaisdell Center Arena 2/       8,780         Neal Blaisdell Center Exhibition Hall 3/       5,000         Francis Wong Stadium (Hoolulu Park Complex       4,500         Multi-purpose Pavilion) 2/       4,500         Lahaina Civic Center Convention Hall 2/       4,050         Andrews Amphitheater       4,000         Hilo Civic Auditorium 2/       3,550         Waikiki Shell 4/       3,257         Pearlridge West Theater complex (12 theaters)       2,160         Neal Blaisdell Center Concert Hall       2,158         Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,262         Kaui War Memorial Concert Theater       982         Kapiolani Theater       660         Cinerama Theater       646         Kennedy Theater       500         Churches:       Kawaiahao Church       500         Central Union Church (Sanctuary)       800         St. Andrew's Cathedral       750 </td <td>Leilehua High School Stadium</td> <td></td> | Leilehua High School Stadium   |                  |
| Brigham Young University-Hawaii Cannon Activity Center University of Hawaii Baseball Stadium 4,312  Theaters and auditoriums:  Neal Blaisdell Center Arena 2/ 8,780 Neal Blaisdell Center Exhibition Hall 3/ 5,000 Francis Wong Stadium (Hoolulu Park Complex Multi-purpose Pavilion) 2/ 4,500 Lahaina Civic Center Convention Hall 2/ 4,050 Andrews Amphitheater 4,000 Hilo Civic Auditorium 2/ 3,550 Waikiki Shell 4/ 3,257 Pearlridge West Theater complex (12 theaters) 2,160 Neal Blaisdell Center Concert Hall 2,158 Kahala Theaters (5 theaters) 1,262 Hilton Hawaiian Village Dome 1,262 Hilton Hawaiian Village Dome 1,100 Waikiki 1 and 2 Theaters (each) 982 Kapiolani Theater 646 Kennedy Theater 650 Richard T. Mamiya Theatre 500  Churches: Kawaiahao Church (Sanctuary) 500 St. Theresa Co-Cathedral 551 St. Andrew's Cathedral 750 Cathedral of Our Lady of Peace 700 St. Augustine 700  | Waipahu High School Stadium  |                  |
| University of Hawaii Baseball Stadium 4,312  Theaters and auditoriums:     Neal Blaisdell Center Arena 2/ 8,780     Neal Blaisdell Center Exhibition Hall 3/ 5,000     Francis Wong Stadium (Hoolulu Park Complex Multi-purpose Pavilion) 2/ 4,500     Lahaina Civic Center Convention Hall 2/ 4,050     Andrews Amphitheater 4,000     Hilo Civic Auditorium 2/ 3,550     Waikiki Shell 4/ 7,216     Pearlridge West Theater complex (12 theaters) 2,160     Neal Blaisdell Center Concert Hall 2,158     Kahala Theaters (5 theaters) 1,460     Waikiki 3 Theater 1,262     Hilton Hawaiian Village Dome 1,120     Kauai War Memorial Concert Theater 1,100     Waikiki 1 and 2 Theaters (each) 982     Kapiolani Theater 646     Kennedy Theater 600     Ruger Theater 7500  Churches: Kawaiahao Church (Sanctuary) 500     St. Theresa Co-Cathedral 750     St. Andrew's Cathedral 750     St. Andrew's Cathedral 750     Cathedral of Our Lady of Peace 700     St. Augustine 700  | Brigham Young University-Hawaii Cannon Activity Center                                 |                  |
| Neal Blaisdell Center Exhibition Hall 3/       5,000         Francis Wong Stadium (Hoolulu Park Complex       4,500         Multi-purpose Pavilion) 2/       4,500         Lahaina Civic Center Convention Hall 2/       4,050         Andrews Amphitheater       4,000         Hilo Civic Auditorium 2/       3,550         Waikiki Shell 4/       3,257         Pearlridge West Theater complex (12 theaters)       2,160         Neal Blaisdell Center Concert Hall       2,158         Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       646         Kennedy Theater       600         Ruger Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700   | University of Hawaii Baseball Stadium  | 4,312            |
| Neal Blaisdell Center Exhibition Hall 3/       5,000         Francis Wong Stadium (Hoolulu Park Complex       4,500         Multi-purpose Pavilion) 2/       4,500         Lahaina Civic Center Convention Hall 2/       4,000         Andrews Amphitheater       4,000         Hilo Civic Auditorium 2/       3,550         Waikiki Shell 4/       3,257         Pearlridge West Theater complex (12 theaters)       2,160         Neal Blaisdell Center Concert Hall       2,158         Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       760         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       1,300         Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700  | Theaters and auditoriums:  |                  |
| Neal Blaisdell Center Exhibition Hall 3/       5,000         Francis Wong Stadium (Hoolulu Park Complex       4,500         Multi-purpose Pavilion) 2/       4,500         Lahaina Civic Center Convention Hall 2/       4,000         Andrews Amphitheater       4,000         Hilo Civic Auditorium 2/       3,550         Waikiki Shell 4/       3,257         Pearlridge West Theater complex (12 theaters)       2,160         Neal Blaisdell Center Concert Hall       2,158         Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       760         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       1,300         Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700  | Neal Blaisdell Center Arena 2/   | 8,780            |
| Multi-purpose Pavilion) 2/       4,500         Lahaina Civic Center Convention Hall 2/       4,050         Andrews Amphitheater       4,000         Hilo Civic Auditorium 2/       3,550         Waikiki Shell 4/       3,257         Pearlridge West Theater complex (12 theaters)       2,160         Neal Blaisdell Center Concert Hall       2,158         Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       646         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Andrew's Cathedral       750         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700   | Neal Blaisdell Center Exhibition Hall 3/<br>Francis Wong Stadium (Hoolulu Park Complex | 5,000            |
| Lahaina Civic Center Convention Hall 2/       4,050         Andrews Amphitheater       4,000         Hilo Civic Auditorium 2/       3,550         Waikiki Shell 4/       3,257         Pearlridge West Theater complex (12 theaters)       2,160         Neal Blaisdell Center Concert Hall       2,158         Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       646         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700  | Multi-purpose Pavilion) 2/   | 4,500            |
| Hilo Civic Auditorium 2/       3,550         Waikiki Shell 4/       3,257         Pearlridge West Theater complex (12 theaters)       2,160         Neal Blaisdell Center Concert Hall       2,158         Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       646         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700   | Lahaina Civic Center Convention Hall 2/  | 4,050            |
| Waikiki Shell 4/       3,257         Pearlridge West Theater complex (12 theaters)       2,160         Neal Blaisdell Center Concert Hall       2,158         Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       646         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Andrew's Cathedral       800         St. Andrew's Cathedral       750         Cathedral of Our Lady of Peace       700         St. Augustine       700  |  |                  |
| Pearlridge West Theater complex (12 theaters)       2,160         Neal Blaisdell Center Concert Hall       2,158         Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       646         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Andrew's Cathedral       800         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700  | Hilo Civic Auditorium $2/\ldots$   |                  |
| Neal Blaisdell Center Concert Hall       2,158         Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       646         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Andrew's Cathedral       800         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700  | Waikiki Shell 4/   |                  |
| Kahala Theaters (5 theaters)       1,460         Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       646         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700  | Pearlridge West Theater complex (12 theaters)  |                  |
| Waikiki 3 Theater       1,262         Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       646         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700   |  |                  |
| Hilton Hawaiian Village Dome       1,120         Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       646         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700   |  |                  |
| Kauai War Memorial Concert Theater       1,100         Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       760         Cinerama Theater       646         Kennedy Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700  |  |                  |
| Waikiki 1 and 2 Theaters (each)       982         Kapiolani Theater       760         Cinerama Theater       646         Kennedy Theater       507         Ruger Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700   |  |                  |
| Kapiolani Theater       760         Cinerama Theater       646         Kennedy Theater       600         Ruger Theater       507         Richard T. Mamiya Theatre       500         Churches:       Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         Cathedral of Our Lady of Peace       700         St. Augustine       700   |  |                  |
| Cinerama Theater 646 Kennedy Theater 507 Ruger Theater 507 Richard T. Mamiya Theatre 500  Churches: Kawaiahao Church 500 Central Union Church (Sanctuary) 800 St. Theresa Co-Cathedral 800 St. Andrew's Cathedral 750 St. Anthony 750 Cathedral of Our Lady of Peace 700 St. Augustine 700  |  |                  |
| Kennedy Theater Ruger Theater Richard T. Mamiya Theatre  Churches: Kawaiahao Church Central Union Church (Sanctuary) St. Theresa Co-Cathedral St. Andrew's Cathedral St. Anthony Cathedral of Our Lady of Peace St. Augustine  600 507 507 507 507 507 507 507 700  | Kaplolani ineater  |                  |
| Ruger Theater   |  |                  |
| Richard T. Mamiya Theatre 500  Churches: Kawaiahao Church   | Pugar Thaster  |                  |
| Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700  |  | 500              |
| Kawaiahao Church       1,300         Central Union Church (Sanctuary)       800         St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700  | Churches.  |                  |
| Central Union Church (Sanctuary)       800         St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700   |  | 1.300            |
| St. Theresa Co-Cathedral       800         St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700  |  |                  |
| St. Andrew's Cathedral       750         St. Anthony       750         Cathedral of Our Lady of Peace       700         St. Augustine       700   |  |                  |
| St. Anthony   |  |                  |
| Cathedral of Our Lady of Peace  |  |                  |
| St. Augustine 700   | Cathedral of Our Lady of Peace   | 700              |
|   |  | 700              |
| Star of the Sea   | Star of the Sea  | 700              |

Continued on next page.

# Table 631.-- SEATING CAPACITIES OF SELECTED STADIUMS, THEATERS, AND CHURCHES: 1987-1988 -- Con.

- 1/ Capacity in boxing configuration.
- 2/ Capacity in concert configuration.
- 3/ Capacity in reception configuration.

4/ Includes 1,299 temporary seating.

Source: Compiled by the Hawaii State Department of Business and Economic Development from the Honolulu Fire Department, Fire Prevention Bureau; Honolulu Building Department; officials of the facilities listed.

Table 632.-- ELEVATORS, ESCALATORS, AND SIMILAR FACILITIES: DECEMBER 31, 1990

|                              |                |       | Hawaii |      |      |              |          |       |
|------------------------------|----------------|-------|--------|------|------|--------------|----------|-------|
| Facility                     | State<br>total | Oahu  | Hilo   | Kona | Maui | Molo-<br>kai | Lanai    | Kauai |
| Total                        | 4,669          | 3,804 | 123    | 157  | 399  | 2            | 12       | 172   |
| Elevators                    | 4,039          | 3,258 | 98     | 148  | 363  | -            | 10       | 162   |
| Hydro                        | 979            | 656   | 40     | 52   | 127  | _            | 9        | 95    |
| Roped                        | 1,363          | 996   | 48     | 96   | 170  | -            | 1        | 52    |
| 9 to 18 stories              | 1,046          | 955   | 10     | -    | 66   | -            | -        | 15    |
| 19 to 28 stories             | 375            | 375   | -      | -    | -    | -            | -        | -     |
| 29 to 38 stories             | 192            | 192   | -      | -    | -    | -            | -        | -     |
| 39 stories or more           | 84             | 84    | -      | -    | -    | -            | -        | -     |
| Escalators and moving walks  | 302            | 290   | 6      | -    | 4    | -            | -        | 2     |
| Inclined lifts               | 9              | 2     | 3      | 1    | 1    | -            | -        | 2     |
| Private industrial elevators | 11             | 1     | -      | 3    | 7    | -            | -        | -     |
| Manlifts                     | 11             | 10    | -      | 1    | -    | -            | -        | -     |
| Chair lifts                  | 19             | 16    | _      | 2    | -    | -            | -        | 1     |
| Dumbwaiters                  | 274            | 225   | 16     | 1    | 23   | 2            | 2        | 5     |
| Other facilities             | 4              | 2     | -      | 1    | 1    | -            | <b>-</b> | -     |

Source: Hawaii State Department of Labor and Industrial Relations, Division of Occupational Safety and Health, Boiler and Elevator Inspection Bureau, records.

Table 633.-- TALLEST STRUCTURES, BY ISLANDS: MARCH 1991

|   |                      | Year<br>com-                     | Heig    | ht                                      |
|---|----------------------|----------------------------------|---------|---|
| Island and structure  | Location             | pleted                           | Stories | Fee t                                   |
| BUILDINGS 1/  |                      |                                  |         |   |
| Hawaii: Bayshore Towers Maui: 2/ Kalana O Maui  | Hilo                 | 1970                             | 15      | 135                                     |
| (County Bldg.) Royal Lahaina Hotel Molokai: 2/  | Wailuku<br>Kaanapali | 1972<br>1970                     | 9<br>12 | 140<br>132                              |
| Molokai Light Station   | Kalaupapa            | 1909                             | •••     | 138                                     |
| Oahu: Waterfront Towers   | 425 South Street     | 1990                             | 46      | 400                                     |
| Kauai: Westin Kauai Hotel   | Lihue                | 1959                             | 10      | 107                                     |
| OTHER STRUCTURES  |                      |                                  |         |   |
| Hawaii: Coast Guard Loran Station Maui: 2/ KMWI Radio Tower Lanai: 2/ Storage tanks Molokai: 2/ KAIM Radio Tower Oahu: VLF Antenna Kauai: Communication Engineers Tower Kure Atoll: | Upolu Point          | 1958<br>1947<br><br>1981<br>1972 | •••     | 625<br>455<br>50<br>410<br>1,503<br>400 |
|   | Kure Atoll           | 1962                             | • • •   | 62                                      |

 $<sup>\</sup>underline{1}/$  Shown separately for the tallest in feet and also (if different) for the tallest in number of stories.

<sup>2/</sup> As of March 1990.

Source: Compiled by DBED from Hawaii County Dept. of Research and Development, Maui County Dept. of Public Works, City and County of Honolulu Building Dept., Kauai County Dept. of Public Works, and 14th Coast Guard District.

### **MANUFACTURES**

This section presents statistics on the manufacturing segment of the economy, including sugar processing and pineapple canning. Additional information on manufacturing workers appears in Sections 12 and 15.

The number of manufacturing establishments in Hawaii increased from 697 in 1967 to 1,020 in 1987. The value added by manufacture rose from \$326 million in 1967 to \$786 million in 1977, \$1.41 billion in 1987, and \$1.61 billion in 1989. More than three-fourths of all manufacturing activity in the State in 1987 was on Oahu. Food processing--mostly sugar and pineapple--accounted for 41 percent of the value added by manufacture in 1987. In 1990, the general excise and use tax base for diversified manufacturing (that is, manufacturing exclusive of sugar processing, pineapple canning, and petroleum refining) was \$728 million. There were two pineapple canneries and 12 sugar mills in Hawaii in 1990. Canned and fresh pineapple sales in 1990 totaled \$216 million, down somewhat from earlier years. Sugar production in 1990 amounted to 820,000 short tons. the lowest total in 32 years. The value of sugar production (including commercial molasses) in 1990 was \$329 million, compared with the record of \$677 million set in 1974. Important manufactures other than food processing include apparel, printing and publishing, and stone, clay, and glass products. Industrial and technology parks and areas in 1990 numbered 40, with 7,591 acres.

Sources for data on this subject include the quinquennial United States Census of Manufactures, most recently conducted for 1987, the Annual Survey of Manufactures, publications of the Hawaii State Department of Agriculture and Department of Taxation, and the Hawaiian Sugar Planters' Association's annual report, HSPA Sugar Manual. Historical Statistics of Hawaii, Section 16, contains the figures for earlier years. Statistics for the nation as a whole appear in Section 27 of the Statistical Abstract of the United States: 1991.

Table 634.-- STATISTICAL SUMMARY OF MANUFACTURES: 1963 TO 1989

| Subject   | 1963                 | 1967                 | 1972                  | 1977                  | 1982                  |
|---|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| All establishments: 1/ Total With 20 employees or more                        | 672<br>203           | 697<br>215           | 773<br>238            | 949<br>231            | 966<br>237            |
| All employees: Number (1,000) Payroll (million dollars)                       | 25.1<br>109.0        | 25.4<br>139.6        | 24.8<br>191.1         | 25.0<br>276.8         | 23.6<br>360.3         |
| Production workers: Number (1,000) Hours (millions) Wages (million dollars) . | 18.7<br>33.2<br>67.5 | 19.0<br>35.9<br>86.9 | 17.7<br>33.1<br>113.7 | 17.4<br>31.3<br>160.5 | 16.0<br>29.9<br>217.5 |
| Value added by manu-<br>facture <u>2/</u><br>(million dollars)                | 261.1                | 326.2                | 410.0                 | 785.5                 | 1,119.6               |
| Cost of materials 3/ (million dollars)  | (NA)                 | 399.6                | 548.3                 | 1,176.1               | 2,357.5               |
| Value of shipments 3/ (million dollars)                                       | (NA)                 | 723.4                | 955.6                 | 1,974.0               | 3,443.0               |
| New capital expenditures (million dollars)                                    | 15.4                 | 26.0                 | 46.7                  | 44.4                  | 89.4                  |

Continued on next page.

Table 634.-- STATISTICAL SUMMARY OF MANUFACTURES: 1963 TO 1989--Con.

| Subject   | 1985                  | 1986                  | 1987                  | 1988                  | 1989                  |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| All establishments: 1/ Total  | (NA)<br>(NA)          | (NA)<br>(NA)          | 1,022<br>225          | (NA)<br>(NA)          | (NA)<br>(NA)          |
| All employees: Number (1,000) Payroll (million dollars)                       | 23.0<br>400.7         | 23.1<br>424.0         | 22.2<br>440.2         | 21.7<br>452.4         | 20.5<br>432.6         |
| Production workers: Number (1,000) Hours (millions) Wages (million dollars) . | 15.8<br>28.0<br>228.5 | 15.7<br>29.0<br>239.3 | 15.2<br>28.8<br>254.2 | 14.3<br>27.4<br>255.0 | 13.0<br>25.2<br>244.2 |
| Value added by manufacture <u>2</u> / (million dollars)                       | 1,195.3               | 1,173.9               | 1,405.3               | 1,376.8               | 1,609.8               |
| Cost of materials 3/ (million dollars)  | 2,280.2               | 1,898.9               | 2,048.8               | 1,980.1               | 2,220.7               |
| Value of shipments 3/ (million dollars)                                       | 3,477.3               | 3,086.4               | 3,447.9               | 3,337.3               | 3,813.4               |
| New capital expenditures (million dollars)                                    | 76.1                  | 47.3                  | 102.0                 | 76.1                  | 98.4                  |

NA Not available.

Source: U.S. Bureau of the Census, 1982 Census of Manufactures, Geographic Area Series, Hawaii, MC82-A-12 (April 1985), table 2a; 1986 Annual Survey of Manufactures, Geographic Area Statistics, M86(AS)-3 (July 1988), table 1; 1987 Census of Manufactures, Geographic Area Series, Hawaii, MC87-A-12 (October 1990), table 2a; 1989 Annual Survey of Manufactures, Geographic Area Statistics, M89(AS)-3 (September 1991), table 1.

 $<sup>\</sup>frac{1}{2}$  Establishments with payroll at any time during year.  $\frac{1}{2}$  Data for 1982 and later years not directly comparable to data for earlier years; see source for discussion.

<sup>3/</sup> Aggregate of cost of materials and value of shipments includes extensive duplication since products of some industries are used as materials by others.

Table 635.-- STATISTICAL SUMMARY OF MANUFACTURES, BY COUNTIES: 1987

| Subject   | State<br>total        | City and<br>County of<br>Honolulu | Hawaii<br>County   | Kauai<br>County   | Maui<br>County     |
|---|-----------------------|-----------------------------------|--------------------|-------------------|--------------------|
| All establishments 1/ (number) With 20 employees or more                    | 1,022<br>225          | 800<br>182                        | 100<br>21          | 34<br>6           | 88<br>16           |
| All employees: Number (1,000) Payroll (million dollars)                     | 22.2<br>440.2         | 16.5<br>330.7                     | 2.2<br>40.7        | 0.7<br>13.8       | 2.8<br>54.9        |
| Production workers: Number (1,000) Hours (millions) Wages (million dollars) | 15.2<br>28.8<br>254.2 | 19.9                              | 1.6<br>3.2<br>27.5 | 0.5<br>1.1<br>9.5 | 2.2<br>4.6<br>39.0 |
| Value added by manufacture (million dollars)                                | 1,405.3               | 1,077.1                           | 117.4              | 51.8              | 159.0              |
| Cost of materials 2/ (million dollars)                                      | 2,048.8               | 1,716.6                           | 129.6              | 47.7              | 154.9              |
| Value of shipments 2/ (million dollars)                                     | 3,447.9               | 2,783.8                           | 250.5              | 99.5              | 314.2              |
| New capital expenditures (million dollars)                                  | 102.0                 | 66.1                              | 11.6               | 5.9               | 18.5               |

Source: U.S. Bureau of the Census, 1987 Census of Manufactures, Geographic Area Series, Hawaii, MC87-A-12 (October 1990), table 4.

 $<sup>\</sup>frac{1}{2}$  Includes establishments with payroll at any time during the year.  $\frac{2}{2}$  Aggregate of cost of materials and value of shipments include extensive duplication since products of some industries are used as materials by others.

Table 636.-- MANUFACTURES, BY SELECTED INDUSTRY GROUP: 1987

[Includes operating manufacturing establishments and auxiliaries. Includes industry groups with 500 employees or more]

| Subject   | Food and<br>kindred<br>products<br>(SIC 20) | Apparel,<br>other<br>textile<br>(SIC 23) | Printing<br>and pub-<br>lishing<br>(SIC 27) | Stone,<br>clay, glass<br>products<br>(SIC 32) | Fabricated<br>metal<br>products<br>(SIC 34) |
|---|---|--|---|---|---|
| All establishments:   |   |  |   |   |   |
| Total   | 229   | 181                                      | 188   | 54  | 37  |
| With 20 employees or more   | 72  | 47                                       | 34  | 12  | 8   |
| All employees: Number (1,000) Payroll (mil. dol.)                       | 9.8<br>187.9                                | 3.4<br>38.7                              | 2.5+<br>(D)                                 | 0.9<br>23.6                                   | 0.5<br>11.7                                 |
| Production workers: Number (1,000) Hours (millions) Wages (mil. dol.) . | 7.1<br>13.8<br>117.6                        | 2.7<br>4.6<br>25.2                       | (D)<br>(D)<br>(D)                           | 0.7<br>1.4<br>17.5                            | 0.4<br>0.7<br>8.1                           |
| Value added by manufacture (mil. dol.)                                  | 575.8                                       | 88.0                                     | (D)   | 74.2  | 36.2  |
| Cost of materials (mil. dol.)   | 784.0                                       | 72.1                                     | (D)   | 83.0  | 49.2  |
| Value of shipments (mil. dol.)  | 1,360.9                                     | 159.1                                    | (D)   | 155.6   | 84.7  |
| New capital expenditures (mil. dol.)                                    | 49.3  | 2.0                                      | (D)   | 4.3   | 1.1   |

D Withheld to avoid disclosing data for individual companies. Source: U.S. Bureau of the Census, 1987 Census of Manufactures, Geographic Area Series, Hawaii, MC87-A-12 (October 1990), table 5.

Table 637.-- MANUFACTURES, BY SELECTED INDUSTRY GROUP: 1988

|                |   |                 | er of<br>ishments               | Number of employees               |                          |
|----------------|---|-----------------|---------------------------------|-----------------------------------|--------------------------|
| SIC<br>code    | Industry  | Total           | With 20<br>employees<br>or more | for week<br>including<br>March 12 | Annual payroll (\$1,000) |
|                | Manufacturing   | 963             | 230                             | 22,467                            | 475,191                  |
| 20<br>2061     | Food and kindred products Raw cane sugar  | 223<br>13       | 76<br>12                        | 9,757<br>2,945                    | 206,450<br>65,819        |
| 22<br>23       | Textile mill products   | 5               | -                               | (B)                               | (D)                      |
| 24<br>25       | products  Lumber and wood products  Furniture and fixtures                      | 159<br>37<br>29 | 45<br>5<br>8                    | 3,351<br>405<br>385               | 39,561<br>8,527<br>6,916 |
| 26<br>27<br>28 | Paper and allied products Printing and publishing Chemicals and allied products | 7<br>186<br>21  | 4<br>36<br>3                    | 216<br>3,447<br>205               | 5,872<br>82,790<br>4,546 |
| 29<br>30       | Petroleum and coal products Rubber and miscellaneous plastics products          | 5<br>22         | 4<br>6                          | 493<br>276                        | 19,126<br>3,457          |
| 31             | Leather and leather products  | 7               | 2                               | 113                               | 1,295                    |
| 32             | Stone, clay, and glass products   | 52              | 11                              | 871                               | 26,805                   |
| 33<br>34       | Primary metal industries Fabricated metal products                              | 4<br>34         | 1<br>6                          | (C)<br>415                        | (D)<br>9,605             |
| 35<br>36       | Industrial machinery, equipmentElectronic, other electronic                     | 32              | 4                               | 274                               | 6,879                    |
| 37             | equipment  Transportation equipment   | 14<br>15        | 1<br>5                          | 167<br>489                        | 3,557<br>15,428          |
| 38             | Instruments and related   | 16              | 1                               | 131                               | 1,533                    |
| 39             | products  | 77              | 6                               | 793                               | 12,218                   |
|                | Administrative and auxiliary  | 18              | 6                               | 532                               | 16,590                   |

B 20 to 99.

C 100 to 249.

D Withheld to avoid disclosing data for individual companies.

Source: U.S. Bureau of the Census, County Business Patterns 1988,

Hawaii, CBP-88-13 (September 1990), table 1B.

## Table 638.-- PLANT CAPACITY UTILIZATION RATES: FOURTH OUARTER ESTIMATES. 1983 TO 1988

[The sample of manufacturing plants located in Hawaii was not selected specifically to represent the state but is a by-product of the national survey. Consequently, the state data are subject to high sampling variability that may disguise real movement in the series. No survey was conducted in 1989]

| Type of rate                   | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
|--------------------------------|------|------|------|------|------|------|
| Preferred rate $\frac{1}{2}$ / | 83   | 84   | 87   | 87   | 89   | 92   |
|                                | 73   | 81   | 83   | 78   | 85   | 88   |

<sup>1/</sup> The preferred level of operations is defined as a level, normally between actual operations and practical capacity, which the manufacturer would prefer not to exceed due to costs or other considerations. In this table, the preferred utilization rate represents the ratio of actual to preferred level of operations.

Source: U.S. Bureau of the Census, Industry Division, records.

Table 639.-- MANUFACTURING SALES RECEIPTS: 1987 TO 1990
[Millions of dollars]

| Category   | 1987    | 1988    | 1989    | 1990    |
|--|---------|---------|---------|---------|
| Total manufacturing Sugar processing Pineapple canning Petroleum Diversified manufacturing | 2,089.6 | 2,166.6 | 2,347.1 | 2,620.8 |
|  | 354.5   | 337.5   | 342.1   | 353.3   |
|  | 202.9   | 191.7   | 182.7   | 160.1   |
|  | 943.9   | 1,030.7 | 1,164.5 | 1,353.1 |
|  | 588.3   | 606.7   | 657.9   | 754.4   |

Source: Bank of Hawaii, Hawaii 1991, p. 35.

<sup>2/</sup> Practical capacity is broadly defined as the greatest output the plant could achieve within the framework of a realistic work pattern. The practical capacity utilization rate is the ratio of actual operations to the practical capacity level.

## Table 640.-- GENERAL EXCISE TAX BASE FOR MANUFACTURING: 1980 TO 1990

[In thousands of dollars. Data exclude sugar processing, pineapple canning, and petroleum refining, and are on a cash basis accounting. Manufactured goods shipped out of State have been exempt from the general excise tax by Act 239, SLH 1987, effective January 1, 1988]

| Year re-                     | Tax                                      | Year re-                     | Tax                                      | Year re-             | Tax                           |
|------------------------------|--|------------------------------|--|----------------------|-------------------------------|
| ported <u>1</u> /            | base                                     | ported <u>1</u> /            | base                                     | ported <u>1</u> /    | base                          |
| 1980<br>1981<br>1982<br>1983 | 626,004<br>630,732<br>530,598<br>511,823 | 1984<br>1985<br>1986<br>1987 | 519,601<br>527,673<br>568,532<br>595,140 | 1988<br>1989<br>1990 | 629,303<br>630,997<br>728,387 |

<sup>1/</sup> Calendar year in which reported, including "prior years" reports. Income received in December is reported the following January and hence these annual totals generally refer to an "income year" ended November 30.

Source: Hawaii State Department of Taxation, "General Excise and Use Tax Base" (annual tabular release).

Table 641.-- MANUFACTURING CLIMATE: 1989

| Factor   | States<br>ranked                 | Hawaii<br>rank             |
|--|----------------------------------|----------------------------|
| Overall rank (among low manufacturing intensity States only) | 21<br>50<br>50<br>50<br>50<br>50 | 19<br>21<br>14<br>48<br>45 |

Source: 11th Annual Grant Thornton Manufacturing Climates Study (August 1990), pp. 13 and 55.

Table 642.-- PINEAPPLE COMPANIES AND CANNERIES AND SUGAR COMPANIES AND MILLS: 1940 TO 1990

|                                      |  | eapple<br>nning season)                                  | Sugar<br>(December 31)   |  |  |
|--------------------------------------|--|--|--|--|--|
| Year                                 | Companies  | Canneries  | Companies <u>1</u> /   | Mills  |  |
| 1940                                 | 8<br>7<br>9<br>10<br>8<br>6<br>4<br>3<br>3<br>3<br>3 | 8<br>7<br>8<br>8<br>9<br>6<br>4<br>3<br>3<br>2<br>2<br>2 | 38<br>36<br>28<br>28<br>27<br>25<br>23<br>16<br>15<br>14<br>13 | 34<br>32<br>26<br>26<br>27<br>27<br>27<br>26<br>17<br>14<br>12<br>11 |  |
| ISLANDS: 1990 Hawaii Maui Oahu Kauai | -<br>2<br>2  | -<br>1<br>1  | 3<br>2<br>2<br>5   | 3<br>3<br>2<br>4   |  |

1/ Excludes cooperatives.

Source: Pineapple Growers Association of Hawaii, records;
Hawaiian Sugar Planters' Association, Hawaiian Sugar Manual
(annual); Hawaii State Department of Agriculture, records.

Table 643.-- SUGAR AND MOLASSES PRODUCTION: 1970 TO 1990

|  | Cane lan  | d (acres)   | Cane used for sugar  |  | Sugar produced (short tons)   |   |  |
|--|---|---|--|--|---|---|--|
| Year   | Total<br>area   | Harvested area 1/   | (short<br>tons)  | 96 <sup>0</sup> raw<br>value   | Equivalent<br>refined   | produced<br>(short<br>tons)   |  |
| 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 | 242,216<br>238,997<br>232,278<br>229,611<br>226,580<br>224,227<br>221,426<br>221,551<br>220,729<br>220,697<br>218,773<br>217,718<br>216,099<br>204,749<br>194,258 | 113,232<br>113,816<br>115,810<br>108,456<br>108,189<br>95,826<br>105,125<br>99,926<br>96,770<br>99,355<br>100,610<br>97,358<br>97,573<br>89,261<br>92,808 | 10,839,272<br>10,457,377<br>10,685,019<br>9,929,068<br>9,645,452<br>9,082,684<br>9,485,299<br>9,172,649<br>8,994,388<br>9,263,190<br>9,632,135<br>9,214,136<br>8,831,477<br>8,807,998<br>8,926,358 | 1,182,414 1,162,071 1,229,976 1,118,883 1,128,529 1,040,742 1,107,199 1,050,457  1,033,739 1,028,933 1,059,737 1,023,232 1,047,541 982,913 1,044,204 | 1,105,060<br>1,086,000<br>1,149,510<br>1,045,708<br>1,054,723<br>972,677<br>1,034,788<br>981,757<br>966,132<br>961,641<br>990,430<br>956,313<br>979,032<br>918,630<br>975,913 | 340,330<br>322,480<br>330,227<br>307,543<br>301,500<br>293,380<br>301,335<br>275,352<br>284,349<br>310,238<br>325,843<br>315,088<br>311,719<br>287,190<br>303,254 |  |
| 1984<br>1985<br>1986<br>1987<br>1988<br>1989                               | 188,396<br>187,858<br>184,181<br>180,966<br>177,693<br>170,813<br>161,991   | 89,541<br>83,029<br>83,583<br>79,498<br>78,715<br>74,660<br>71,999  | 8,453,721<br>7,916,459<br>8,379,463<br>8,012,899<br>7,602,414<br>7,078,479<br>6,540,925  | 1,061,814<br>1,012,249<br>1,042,452<br>979,209<br>928,195<br>863,614<br>819,631  | 992,371<br>946,048<br>974,276<br>915,169<br>867,491<br>817,752<br>776,027   | 314,202<br>271,645<br>290,422<br>283,250<br>274,375<br>229,377<br>320,859   |  |

<sup>1/</sup> The average growth of a crop is 22 to 26 months. Only a portion of the total acreage in cane is harvested each year.
Source: Hawaiian Sugar Planters' Association, HSPA Sugar Manual (annual), and records.

Table 644.-- AVERAGE RAW SUGAR PRICE AND SUGAR INDUSTRY EMPLOYMENT AND EARNINGS: 1970 TO 1990

|   | Average<br>raw<br>sugar<br>price 1/   | Hourly-rated employees  |  | Industry-<br>wide                              | Average daily earn-<br>ings <u>2</u> / (dollars)   |  |  |
|---|---|---|--|--|--|--|--|
| Year  | (cents per 1b.)   | Average<br>number <u>3</u> /  | Total<br>man-days  | strikes<br>(weeks)                             | Cash<br>wages  | Employee<br>benefits   |  |
| 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 | 8.08<br>8.52<br>9.10<br>10.30<br>29.43<br>22.49<br>13.31<br>11.11<br>13.74<br>15.20<br>30.18<br>19.74<br>19.94<br>22.04<br>21.74<br>20.39 | 8,908<br>8,610<br>8,127<br>7,900<br>7,700<br>7,800<br>7,500<br>7,200<br>7,065<br>7,076<br>7,282<br>6,816<br>6,543<br>6,319<br>5,751 | 2,139,183<br>2,077,011<br>1,934,563<br>1,897,369<br>1,744,346<br>1,937,973<br>1,854,272<br>1,660,298<br>1,771,530<br>1,762,838<br>1,793,237<br>1,806,020<br>1,519,732<br>1,565,928<br>1,467,127<br>1,323,525 | -<br>-<br>6<br>-<br>-<br>3<br>-<br>-<br>-<br>- | 24.24<br>26.08<br>29.09<br>30.86<br>34.41<br>37.34<br>43.12<br>43.92<br>47.06<br>50.49<br>56.72<br>61.51<br>65.11<br>66.80 | 10.00<br>10.27<br>11.23<br>12.48<br>15.81<br>15.66<br>17.28<br>19.97<br>21.28<br>22.21<br>24.68<br>27.71<br>30.83<br>32.00 |  |
| 1986<br>1987<br>1988<br>1989  | 20.90<br>21.83<br>22.12<br>22.76<br>23.26   | 5,413<br>5,222<br>5,110<br>4,721<br>4,453   | 1,290,067<br>1,261,209<br>1,204,708<br>1,129,526<br>1,065,794  | -<br>-<br>-<br>-                               | 69.28<br>71.36<br>72.46<br>74.64<br>76.42  | 34.24<br>41.83<br>34.56<br>41.92<br>43.07  |  |

<sup>1/</sup> Average New York raw sugar price computed over all the days of the year (Hawaiian basis). The New York spot price was suspended from November 2, 1977 to August 20, 1979; figures for that period are based on Clearing Association settlement prices. New York spot price 'hearby futures" used beginning June 1985.

2/ For non-supervisory employees.

3/ Adults only.

Source: Hawaiian Sugar Planters' Association, HSPA Sugar Manual (annual), as revised and updated.

Table 645.-- VALUE OF SALES AND GOVERNMENT PAYMENTS FOR PINEAPPLE AND SUGAR PRODUCTION: 1970 TO 1990

[In millions of dollars. Calendar year data unless otherwise specified]

|   | Pineap  | ple   |   | Sugar  |                                       |  |                     |
|---|---|---|---|--|---------------------------------------|--|---------------------|
|   | Canned  | Fresh   | Value of production   |  |                                       |  | Government<br>sugar |
| Year  | fruit and juices <u>1</u> /   | market<br>sales <u>2</u> /  | Raw sugar 960   | Commercial<br>molasses   | support<br>payments                   |  |                     |
| 1970 1971 1972 1973 1974 1975 1976 1977 1978 1980 1981 1982 1983 1984 1985 1986 1987 1988 | 135.0<br>137.7<br>140.5<br>135.0<br>118.2<br>126.6<br>130.0<br>140.0<br>133.4<br>176.3<br>192.2<br>172.0<br>156.1<br>171.6<br>202.0<br>171.7<br>184.9<br>202.9<br>191.7 | 3.6<br>3.7<br>4.9<br>7.4<br>8.9<br>10.1<br>14.5<br>21.6<br>29.5<br>30.1<br>34.3<br>45.6<br>49.9<br>47.4<br>47.6<br>50.8<br>53.5<br>48.5<br>55.3 | 180.7<br>196.3<br>176.6<br>203.8<br>659.2<br>354.6<br>245.5<br>219.1<br>269.5<br>322.2<br>566.4<br>314.2<br>343.9<br>396.5<br>382.9<br>331.9<br>348.4<br>325.0<br>312.9 | 7.1<br>6.7<br>8.1<br>18.4<br>17.4<br>11.5<br>11.5<br>7.7<br>15.7<br>23.5<br>27.7<br>13.7<br>7.6<br>13.7<br>10.1<br>8.9<br>13.5<br>10.9<br>11.1 | 10.3<br>10.7<br>9.7<br>9.5<br>8.6<br> |  |                     |
| 1989<br>1990  | 182.7<br>160.1  | 59.2<br>55.8  | 313.6<br>319.0  | 8.4<br>9.9   | -                                     |  |                     |

<sup>1/</sup> Processor value of canned fruit and juice production and by-products shipped out-of-State and sold within State. Prior to 1979, data are for pack years beginning June 1.
2/ Value FAS shipping point for outshipments, delivered

Source: Hawaii Agricultural Statistics Service, Statistics of Hawaiian Agriculture (annual) and records.

wholesalers local sales.

Table 646.-- INDUSTRIAL AND TECHNOLOGY PARKS AND AREAS, BY ISLANDS: 1990

[Includes existing industrial areas, industrial parks and subdivisions, and technology parks and centers]

| Subject                         | State<br>total | Hawaii | Maui | 0ahu           | Kauai |
|---------------------------------|----------------|--------|------|----------------|-------|
| Number of parks and areas Acres | 40             | 10     | 5    | 22             | 3     |
|                                 | 7,591          | 2,066  | 626  | 4 <b>,</b> 847 | 52    |

Source: Hawaii State Department of Business, Economic Development & Tourism, State of Hawaii Directory of Industrial and Technology Parks 1991 (1990).

#### Section 23

### **DOMESTIC TRADE AND SERVICES**

This section presents statistics relating to retail and wholesale trade; hotels; and selected personal, business, automotive, repair, and amusement services, including the motion picture industry. Related data are included in Sections 7, 12, 14 and 15.

These activities have undergone rapid growth in recent decades, largely because of surging tourism and higher price levels. Retail sales increased from \$5.2 billion in 1982 to \$8.3 billion in 1987 and \$9.7 billion in 1989. Wholesale sales rose from \$4.1 billion in 1982 to \$5.4 billion in 1987. Hotels, amusements, and other services have reported similar increases during this period. General excise and use tax base data indicate continued increases; between 1987 and 1990, the retailing tax base rose 36 percent, the wholesaling base by 44 percent, and the base for services by 48 percent. Major retail concentrations include Waikiki, Ala Moana Center, Pearlridge Center, and downtown Honolulu. In addition to civilian retail outlets, there are many commissaries, exchanges, clubs, package stores, gasoline stations and food services maintained by the armed forces; these facilities had sales of \$558 million in 1988.

Growth has been especially rapid for hotels and related facilities. The number of units in the State rose from 54,000 in 1980 to 72,000 in 1990. There were 537 hotels, motels, transient condominiums, and apartment-hotels in Hawaii on the latter date, including 362 on the Neighbor Islands. Almost 27 percent of all transient units were in condominium structures. Occupancy rates averaged 87 percent in Waikiki and 67 percent on the Neighbor Islands during 1990. The average daily room rate was \$102 in 1990. Total hotel rentals in 1990 amounted to \$1.6 billion.

Fully 379 feature motion pictures and television specials and series were filmed in Hawaii in 1990, accounting for local expenditures of \$48 million.

The major sources of these data are the United State Censuses of Retail Trade, Wholesale Trade, and Service Industries, most recently published for 1987. Statistics on the retailing, wholesaling, and services tax bases are available from the Hawaii State Department of Taxation. Data on hotel room counts, occupancy and other characteristics are published by the Hawaii Visitors Bureau and the firm of Pannell Kerr Forster. The Film Industry Branch of the Department of Business, Economic Development & Tourism compiles data on motion picture and television production. A summary of figures on trade and services in earlier years appears in Historical Statistics of Hawaii, Section 20. The Statistical Abstract of the United States: 1991, Section 28, presents similar data for other states and the nation as a whole.

Table 647.-- GENERAL EXCISE TAX BASE FOR TRADE AND SERVICE ACTIVITIES: 1980 TO 1990

[In thousands of dollars. Data are on a cash basis accounting]

| Year reported 1/   | Retailing  | Services <u>2</u> /   | Amuse-<br>ment,<br>etc. <u>3</u> /  | Inter-<br>mediary<br>services  | Wholesaling   |
|--|--|---|---|--|---|
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 6,109,628<br>6,700,750<br>6,874,963<br>7,438,193<br>8,111,893<br>8,499,254<br>9,239,373<br>9,449,673<br>10,385,974<br>11,607,779<br>12,827,883 | 1,743,003<br>1,809,913<br>1,905,068<br>2,134,524<br>2,368,415<br>2,481,669<br>2,784,169<br>2,896,159<br>3,287,715<br>3,699,003<br>4,276,876 | 121,562<br>129,501<br>130,280<br>144,095<br>153,723<br>154,830<br>159,881<br>157,824<br>165,729<br>184,154<br>201,003 | 53,244<br>57,191<br>69,775<br>102,227<br>128,875<br>116,300<br>127,992<br>148,557<br>182,138<br>189,018<br>349,111 | 2,986,877<br>3,528,763<br>3,207,768<br>3,694,220<br>4,025,324<br>4,095,220<br>4,443,166<br>5,188,215<br>5,683,815<br>6,595,569<br>7,494,330 |

<sup>1/</sup> Calendar year in which reported, including 'prior years' reports. Income received in December is reported the following January, hence these

annual totals generally refer to an "income year" ended November 30.

2/ Includes both business and professional services but excludes hotels, theater, amusement, broadcasting, and intermediary services.

<sup>3/</sup> Theater, amusement, broadcasting, etc.
Source: Hawaii State Department of Taxation, 'General Excise and Use Tax Base" (annual tabular release).

Table 648.-- RETAIL ESTABLISHMENTS, BY PAYROLL STATUS: 1977 TO 1987

[Coverage differed somewhat from census to census]

|                                   | Number of establishments |                         |                          | Sales (million dollars) |                      |                       |
|-----------------------------------|--------------------------|-------------------------|--------------------------|-------------------------|----------------------|-----------------------|
| Payroll status                    | 1977                     | 1982                    | 1987                     | 1977                    | 1982                 | 1987                  |
| All retail establish With payroll | 7,388<br>5,273<br>2,115  | 8,917<br>6,139<br>2,778 | 11,143<br>7,195<br>3,948 | 3,294<br>3,223<br>71    | 5,193<br>5,102<br>92 | 8,267<br>8,084<br>183 |

Source: U.S. Bureau of the Census, 1977 Census of Retail Trade, Hawaii, RC77-A-12 (June 1979), table 1; 1982 Census of Retail Trade, Hawaii, RC82-A-12 (September 1984), table 1; 1987 Census of Retail Trade, Hawaii, RC87-A-12 (May 1989), table 1, and Nonemployer Statistics Series, West, RC87-N-4 (February 1990), table 2.

Table 649.-- CHARACTERISTICS OF RETAIL ESTABLISHMENTS WITH PAYROLL, FOR THE STATE, 1982 AND 1987, AND OAHU AND THE NEIGHBOR ISLANDS, 1987

[Excludes establishments without payroll. Also excludes establishments operated by the armed forces]

|   |   | 1987  |  |   |  |
|---|---|---|--|---|--|
| Subject                                   | 1982  | State<br>total  | 0ahu   | Neighbor<br>islands   |  |
| Number of establishments  Sales (\$1,000) | 6,564 5,100,237 696,064 (NA) 81,950 (NA) (NA) | 7,195<br>8,084,416<br>1,016,127<br>242,236<br>101,969<br>1,215<br>408 | 4,918<br>6,079,556<br>752,824<br>178,477<br>74,485<br>792<br>250 | 2,277<br>2,004,860<br>263,303<br>63,759<br>27,484<br>423<br>158 |  |

NA Not available.

Source: U.S. Bureau of the Census, 1987 Census of Retail Trade, Hawaii, RC87-A-12 (May 1989), tables 1, 2, 8, and 9.

Table 650.-- RETAIL ESTABLISHMENTS WITH PAYROLL, FOR COUNTIES AND URBAN PLACES: 1987

[Excludes establishments without payroll. Also excludes establishments operated by the armed forces]

| Geographic area   | Number<br>of estab-<br>lishments                                  | Sales<br>(\$1,000)   | Annual<br>payroll<br>(\$1,000)   | Paid employees<br>for pay period<br>including<br>March 12                           |
|---|---|--|--|---|
| State total   | 7,195   | 8,084,416  | 1,016,127  | 101,969   |
| Hawaii County Hilo Kailua Balance of county  Honolulu County Ahuimanu Aiea Ewa Ewa Ewa Beach Hauula Heeia Hickam Housing Honolulu Iroquois Point Kahaluu Kailua Kaneohe | 7,195  842 378 219 245  4,918 5 246 2 16 10 3 - 3,644 - 1 173 188 | 8,084,416  721,798 403,435 186,592 131,771  6,079,556 (D) 420,642 (D) 9,687 10,815 3,288 - 4,451,451 (D) 175,779 292,847 | 1,016,127  87,929 49,429 23,352 15,148  752,824 (D) 47,567 (D) 1,199 1,202 786 - 559,406 (D) 22,961 31,582 | 9,456 5,077 2,553 1,826  74,485 (D) 4,593 (D) 158 123 78 - 54,846 - (D) 2,383 3,036 |
| Laie Maile Makaha Makakilo City Maunawili Mililani Town Mokapu  | 7<br>5<br>8<br>3<br>8<br>35                                       | 7,307<br>2,651<br>6,780<br>(D)<br>3,199<br>68,832<br>(D)   | 972<br>475<br>639<br>(D)<br>282<br>7,728<br>(D)  | 156<br>57<br>98<br>(D)<br>30<br>588<br>(D)  |
| Nanakuli  | 101<br>3<br>102<br>12<br>39<br>25                                 | 9,914<br>137,280<br>432<br>71,320<br>5,564<br>49,897<br>15,660   | 788<br>17,042<br>85<br>10,233<br>653<br>5,855<br>2,417   | 90<br>1,806<br>9<br>1,177<br>72<br>611<br>268                                       |
| Waipahu   | 154<br>-<br>118   | 208,664<br>-<br>99,948   | 22,902<br>-<br>15,677  | 2,014<br>2,117  |

Continued on next page.

Table 650.-- RETAIL ESTABLISHMENTS WITH PAYROLL, FOR COUNTIES AND URBAN PLACES: 1987 -- Con.

| Geographic area  | Number<br>of estab-<br>lishments | Sales<br>(\$1,000) | Annual<br>payroll<br>(\$1,000) | Paid employees<br>for period<br>including<br>March 12 |
|--|----------------------------------|--------------------|--------------------------------|---|
| Kauai County  Hanamaulu  Kalaheo  Kapaa  Kekaha  Lihue  Balance of county                                      | 464                              | 362,491            | 47,12                          | 5,173   |
|  | 7                                | 2,932              | 64\                            | 108   |
|  | 8                                | 3,815              | 591                            | 68  |
|  | 108                              | 72,905             | 8,965                          | 993   |
|  | 4                                | (D)                | (D)                            | (D)   |
|  | 158                              | 155,160            | 18,116                         | 1,773   |
|  | 179                              | (D)                | (D)                            | (D)   |
| Maui County Island of Lanai Island of Molokai Kahului Kihei Lahaina Makawao Pukalani Wailuku Balance of county | 971                              | 920,571            | 128,253                        | 12,855  |
|  | 10                               | 5,260              | 727                            | 69  |
|  | 29                               | 21,436             | 2,359                          | 247   |
|  | 191                              | 294,026            | 36,963                         | 3,471   |
|  | 105                              | 92,034             | 12,382                         | 1,588   |
|  | 361                              | 277,365            | 44,865                         | 4,579   |
|  | 9                                | 6,046              | 540                            | 68  |
|  | 14                               | 19,169             | 2,100                          | 229   |
|  | 132                              | 115,312            | 14,036                         | 1,207   |
|  | 120                              | 89,923             | 14,281                         | 1,397   |

<sup>(</sup>D) Withheld to avoid disclosing data for individual companies.

Source: U.S. Bureau of the Census, 1987 Census of Retail Trade, Hawaii, RC87-A-12 (May 1989), table 5.

Table 651. -- RETAIL ESTABLISHMENTS WITHOUT PAYROLL, FOR COUNTIES, ISLANDS, AND SELECTED URBAN PLACES: 1987

[For retail establishments with payroll, see preceding table]

| Geographic<br>area <u>1</u> /                           | No. of estab. | Sales<br>(\$1,000)                                    | Geographic<br>area <u>1</u> /                   | No. of estab.                | Sales<br>(\$1,000)                       |
|---|---------------|---|---|------------------------------|--|
| State total Hawaii County Hilo Kailua                   | 112           | 24,965<br>5,315<br>7,473                              | Kauai County  Maui County  Lanai  Maui  Molokai | 202<br>369<br>5<br>345<br>19 | 10,367<br>19,566<br>329<br>18,524<br>713 |
| Honolulu County Aiea Honolulu Kailua Kaneohe Pearl City | 1,894         | 128,122<br>5,449<br>92,621<br>5,078<br>4,749<br>4,109 |   |                              |  |

<sup>1/</sup> Shown for urban places with 100 establishments or more. For other

urban places, see source.

Source: U.S. Bureau of the Census, 1987 Census of Retail Trade,
Nonemployer Statistics Series, West, RC87-N-4 (February 1990), table 4.

Table 652.-- RETAIL ESTABLISHMENTS WITH PAYROLL, BY KIND OF BUSINESS: 1982 AND 1987

[Excludes establishments without payroll. Also excludes establishments operated by the armed forces]

|            |                        | Numb                   |       |           | Sales     |              |
|------------|------------------------|------------------------|-------|-----------|-----------|--------------|
| SIC        |                        | of estab-<br>lishments |       | 1982      | 1987      | Per-<br>cent |
| code       | Kind of business       | 1982                   | 1987  | (\$1,000) | (\$1,000) | change       |
| ·          | Retail trade           | 6,569                  | 7,204 | 5,101,671 | 8,087,398 | 58.5         |
| 52         | Building materials and |                        |       |           |           |              |
| -          | garden supplies        | 136                    | 149   | 149,622   | 230,051   | 53.8         |
| 53         | General merchandise    | 160                    | 151   | 748,493   | 1,253,965 | 67.5         |
| 54         | Food stores            | 836                    | 921   | 1,081,175 |           | 45.4         |
| 55 ex. 554 | Automotive dealers     | 239                    | 281   | 540,566   | 1,221,516 | 126.0        |
| 554        | Gasoline service       |                        |       | ·         |           |              |
|            | stations               | 389                    | 355   | 400,141   | 427,232   | 6.8          |
| 56         | Apparel and accessory  |                        |       |           |           |              |
| _          | stores                 | 828                    | 963   | 379,746   | 578,467   | 52.3         |
| 57         | Furniture and home-    |                        |       | 4.60.000  |           |              |
|            | furnishings stores     | 365                    | 402   | 160,828   | 280,781   | 74.6         |
| 58         | Eating and drinking    | 7 004                  | 0.000 | 050 550   | 1 750 640 | 54.0         |
|            | places                 | 1,894                  | 2,209 | 872,558   | 1,350,648 | 54.8         |
| 591        | Drug and proprietary   | 120                    | 110   | 777 500   | 441 504   | 70.0         |
| 50 501     | stores                 | 129                    | 112   | 337,590   | 441,584   | 30.8         |
| 59 ex. 591 | Miscellaneous retail   | 1 507                  | 1 661 | E22 100   | 731,325   | 40.0         |
|            | stores                 | 1,593                  | 1,661 | 522,198   | /31,343   | 40.0         |

Source: U.S. Bureau of the Census, <u>1987 Census of Retail Trade</u>, Hawaii, RC87-A-12 (May 1989), table 3.

Table 653.-- RETAIL SALES, BY TYPE OF STORE: 1987 AND 1989
[In millions of dollars]

| Kind of store   | 1987   | 1989   |
|---|--|--|
| All stores <u>1</u> /   | 8,267  | <u>2</u> / 9,737   |
| Food stores Supermarkets General merchandise stores Department stores Automotive dealers Eating and drinking places Gasoline service stations Building materials, hardware dealers Apparel and accessories stores Furniture, home furnishings, appliance stores | 1,601<br>1,472<br>1,257<br>997<br>1,258<br>1,369<br>438<br>238<br>586<br>294 | 1,852<br>1,701<br>1,362<br>1,080<br>1,458<br>1,691<br>523<br>295<br>714<br>362 |

<sup>1/</sup> Includes other types of stores, not shown separately.

Source: Market Statistics estimates cited in <u>Statistical Abstract</u> of the United States: 1991, pp. 774-775.

Table 654.-- SHOPPING CENTER CHARACTERISTICS: 1988 AND 1989

| Characteristic | 1988                 | 1989                 |
|----------------|----------------------|----------------------|
| Number         | 129<br>13.3<br>2,267 | 141<br>14.0<br>2,423 |

Source: National Research Bureau data cited in Statistical Abstract of the United States for 1990 (p. 775) and 1991 (p. 777).

 $<sup>\</sup>overline{2}$ / Sales per household were \$26,971, second highest of the 50 States. The U.S. ratio was \$18,534.

Table 655.-- CHARACTERISTICS OF MAJOR SHOPPING CENTERS: 1989

[Includes all centers on Oahu with more than 200,000 square feet of gross leaseable area and all centers on other islands with more than 150,000 square feet of building area]

| Island and<br>name of center  | Location  | Year<br>opened   | Site<br>area<br>(acres)   | Gross<br>lease-<br>able<br>area<br>(1,000<br>square<br>feet)                         | Parking<br>spaces   | Number<br>of<br>stores   |
|---|---|--|---|--|---|--|
| Oahu: Ala Moana Center Kahala Mall Kapolei S.C Moanalua S.C Pearl City S.C Pearlridge Center Royal Hawaiian S.C. Wahiawa S.C Waikiki Shopping Plaza Waipahu Town Center Windward City S.C. Windward Mall S.C. | Honolulu Honolulu Makakilo Honolulu Pearl City Aiea Honolulu Wahiawa Honolulu Waipahu Kaneohe Kaneohe | 1959<br>1970<br>1991<br>1954<br>1967<br>1972<br>1980<br>1977<br>1977<br>1988<br>1956<br>1982 | 50<br>22<br>30<br>15<br>14<br>54<br>6<br>1<br>1<br>11<br>15<br>32 | 1,500<br>370<br>510<br>240<br>260<br>1,400<br>280<br>300<br>300<br>244<br>231<br>530 | 7,600<br>1,650<br>1,009<br>500+<br>824<br>4,915<br>600<br>300<br>650+<br>785<br>2,300 | 180<br>80<br>(NA)<br>50+<br>37<br>150<br>125<br>50<br>50<br>30<br>41<br>95 |
| Hawaii:<br>Kaiko'o Mall S.C<br>Prince Kuhio Plaza .   | Hilo<br>Hilo  | 1970<br>1979   | 14<br>(NA)  | 220<br>494   | 950<br>400  | 33<br>(NA)   |
| Maui: Kaahumanu Center Lahaina Cannery S.C. Maui Mall   | Kahului<br>Lahaina<br>Kahului   | 1973<br>1987<br>1971   | 25<br>15<br>25  | 300<br>169<br>182  | 1,400<br>735<br>1,400   | 60<br>51<br>38   |
| Kauai:<br>Kukui Grove Center  | Lihue   | 1982   | 35  | 311  | 1,590   | 57   |

NA Not available.

Source: Hawaii Chapter, International Council of Shopping Centers, Hawaii Shopping Center Directory 1989.

Table 656.-- SHOPPING CENTER VACANCY RATES AND AVERAGE RENTS, BY TYPE OF CENTER: DECEMBER 1990

|  | Type of retail center |               |                |                            |                |  |  |
|--|-----------------------|---------------|----------------|----------------------------|----------------|--|--|
| Subject                                | Super<br>regional     | Region-<br>al | Commu-<br>nity | Strip<br>neighbor-<br>hood | Special-<br>ty |  |  |
| Average vacancy rate                   | 0.3                   | 3.6           | 3.5            | 3.7                        | 3.8            |  |  |
| Average rent per square foot (dollars) | 4.67                  | 2.87          | 2.25           | 2.21                       | 4.27           |  |  |

Source: Grubb & Ellis/Locations, Inc., <u>Hawaii Real Estate 1991</u> (1991), p. 19.

Table 657.-- RETAIL SALES AT ALA MOANA CENTER: 1986 TO 1989

| Subject   | 1986 | 1987 | 1988 | 1989 |
|---|------|------|------|------|
| Ala Moana sales (million dollars) Percent of State retail total | 460  | 541  | 588  | 663  |
|   | 5.7  | 6.6  | 6.3  | 6.4  |

Source: Hawaii Investor, August 1990, p. 50.

Table 658.-- MERCHANDISE LINE SALES OF RETAIL ESTABLISHMENTS WITH PAYROLL, FOR THE STATE AND OAHU: 1987

|  | Number of establishments   |   | Sales  | (\$1,000)  |
|--|--|---|--|--|
| Merchandise line   | State<br>total   | 0ahu  | State<br>total   | Oahu   |
| Total retail trade $\underline{1}/$  | 7,195  | 4,918   | 8,084,416  | 6,079,556  |
| Groceries and other foods Meals and snacks Alcoholic drinks Packaged alcoholic beverages Cigars, cigarettes, and tobacco Drugs, health aids, and beauty aids Soaps, detergents, & household cleaners Paper and related products Men's and boys' wear exc. footwear Women's and girls' wear exc. footwear Footwear exc. infants and toddlers Sewing, knitting, and needlework goods Curtains, draperies, and dry goods Major household appliances Small electric appliances TVs and video recorders and tapes Audio equipment, musical instruments, and supplies Furniture and sleep equipment Floor coverings Computer hardware/software equipment and supplies Kitchenware and home furnishings Jewelry Photographic equipment and supplies Toys, hobby goods, and games Optical goods Sporting goods Hardware, tools, plumbing and | 1,379 2,422 1,114 810 1,022 860 466 469 989 1,257 527 138 199 182 238 164 264 243 146 75 505 941 322 434 140 343 | 910<br>1,726<br>780<br>503<br>615<br>526<br>275<br>269<br>560<br>775<br>308<br>87<br>113<br>91<br>145<br>105<br>182<br>172<br>74<br>51<br>282<br>606<br>182<br>276<br>94<br>211 | 1,202,647 1,190,265 193,732 285,075 118,405 444,311 50,477 51,217 289,292 537,393 109,908 19,333 49,146 70,593 33,975 37,825  86,908 133,271 29,617  18,050 67,273 333,687 37,476 68,218 17,976 97,703 | 810,779 923,059 138,029 213,456 83,794 351,591 33,623 30,892 223,761 432,690 89,258 14,506 36,454 49,049 23,879 27,546  73,167 103,102 21,941  14,762 50,591 276,603 28,859 53,323 14,218 74,288 |
| electrical supplies  | 345<br>386<br>147  | 193<br>222<br>84  | 81,945<br>63,773<br>104,432  | 55,732<br>46,218<br>70,282   |
| supplies   | 146  | 55  | 30,463   | 18,853   |

Continued on next page.

Table 658.-- MERCHANDISE LINE SALES OF RETAIL ESTABLISHMENTS WITH PAYROLL, FOR THE STATE AND OAHU: 1987 -- Con.

|  | Number of establishments  |  | Sales (\$1,000)  |  |
|--|---|--|--|--|
| Merchandise line   | State<br>total  | 0ahu   | State<br>total   | 0ah u  |
| Cars, trucks, and powered vehicles  Automotive fuels  Automotive lubricants  Auto tires, batteries, and accessories  Household fuels  Pets, pet foods, and supplies  All other merchandise  Unclassified merchandise  Nonmerchandise receipts  Miscellaneous merchandise | 115<br>430<br>538<br>517<br>25<br>280<br>1,161<br>936<br>1,239<br>(X) | 77<br>282<br>325<br>334<br>(NA)<br>173<br>735<br>580<br>808<br>(X) | 968,730<br>373,181<br>8,914<br>147,467<br>9,463<br>21,378<br>426,299<br>56,964<br>213,000<br>4,634 | 776,288 260,591 5,110 104,489 (NA) 15,863 330,250 40,212 157,053 5,395 |

X Not applicable.

Source: U.S. Bureau of the Census, 1987 Economic Censuses CD-ROM Vol. 1, Release 1C, "1987 Census of Retail Trade: Merchandise Line sales--U.S., States, MSAs."

Table 659 .-- DUTY-FREE STORE REVENUES: 1981 TO 1990

[In dollars. These sales revenues are not included in the general excise and use tax base data cited elsewhere in this volume]

| Year | Revenues  | Year                         | Revenues  |
|------|---|------------------------------|---|
| 1981 | 145,264,415<br>145,382,976<br>150,424,959<br>170,661,949<br>180,126,919 | 1986<br>1987<br>1988<br>1989 | 270,891,959<br>369,788,429<br>445,072,755<br>451,185,041<br>413,932,037 |

Source: DFS Hawaii, records.

NA Not available.

<sup>1/</sup> Because some establishments carry more than one merchandise line, the number of establishments for each line will not add to the indicated totals.

Table 660.-- RETAIL SALES AND HOTEL RECEIPTS OF FACILITIES OPERATED FOR THE ARMED FORCES, BY TYPE AND FACILITY: 1986 TO 1988

#### [In dollars]

| Type of facility                      | 1986   | 1987   | 1988   |
|---------------------------------------|--|--|--|
| Retail sales <u>1</u> /               | 454,092,570  | 465,168,573  | 558,243,976  |
| Commissaries                          | 139,076,522<br>240,951,904<br>46,520,878<br>16,268,682<br>5,025,084<br>6,249,500 | 145,795,399<br>247,501,620<br>46,166,032<br>13,207,235<br>6,110,441<br>6,387,846 | 159,079,031<br>326,197,701<br>45,454,512<br>8,495,505<br>10,022,536<br>8,994,691 |
| Hotel receipts $\underline{2}/\ldots$ | 15,839,089   | 16,901,584   | 17,887,611   |
| Room Food Beverage                    | 7,481,014<br>6,367,191<br>1,990,884  | 8,027,520<br>6,923,720<br>1,950,344  | 8,324,284<br>7,599,969<br>1,963,358  |

<sup>1/</sup> Calendar year data. Excludes Hale Koa Hotel.

Table 661.-- RETAIL SALES AND HOTEL RECEIPTS OF CIVILIAN AND MILITARY ESTABLISHMENTS WITH PAYROLL: 1977 TO 1987

#### [In millions of dollars]

|                                 | Retail sales                       |                                    |                                    | Hotel receipts               |                               |                                   |
|---------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------|-------------------------------|-----------------------------------|
| Control of establishment        | 1977                               | 1982                               | 1987                               | 1977                         | 1982                          | 1987                              |
| Total Civilian Military Percent | 3,455.9<br>3,225.3<br>230.6<br>6.7 | 5,506.7<br>5,101.7<br>405.0<br>7.4 | 8,552.6<br>8,087.4<br>465.2<br>5.4 | 556.1<br>548.7<br>7.4<br>1.3 | 987.1<br>973.3<br>13.8<br>1.4 | 1,578.9<br>1,562.0<br>16.9<br>1.1 |

Source: U.S. Bureau of the Census, Census of Retail Trade and Census of Service Industries, 1982 and 1987; Data Book 1988, table 685.

<sup>7/</sup> Hale Koa Hotel receipts for fiscal years ended September 30. Source: Hawaii State Data Center, annual facilities survey.

Table 662.-- CHARACTERISTICS OF EATING PLACES WITH PAYROLL: 1987

| Subject   | Restaurants<br>and<br>lunchrooms                           | Cafeterias                  | Refreshment<br>places  |
|---|--|-----------------------------|--|
| Number of establishments in business Any time during year At end of year  Sales (\$1,000) Seating capacity, end of year Average cost of meal: Less than \$2.00 \$2.00 to \$4.99 \$5.00 to \$6.99 \$7.00 to \$9.99 \$10.00 to \$14.99 \$15.00 to \$29.99 \$30.00 or more | 915<br>664,981<br>88,936<br>28<br>232<br>272<br>130<br>182 | 24<br>23<br>15,381<br>2,404 | 720<br>690<br>424,531<br>37,171<br>37<br>515<br>131<br>37<br>- |

Source: U. S. Bureau of the Census, 1987 Census of Retail Trade, Miscellaneous Subjects, RC87-S-4 (October 1990), tables 8 and 10.

Table 663.-- FLOOR SPACE OF DEPARTMENT STORES AND GROCERY STORES WITH PAYROLL: 1987

| Subject   | Depart-<br>ment<br>stores <u>1</u> /         | Grocery<br>stores                                |
|---|--|--|
| Number of establishments in business Any time during year | 26<br>26<br>646,151<br>3,267<br>2,575<br>251 | 604<br>576<br>1,450,165<br>3,894<br>2,862<br>507 |

<sup>1/</sup> Including leased departments.
Source: U.S. Bureau of the Census, 1987 Census of Retail Trade,
Miscellaneous Subjects, RC87-S-4 (October 1990), table 25.

Table 664.-- TOBACCO TAX BASE, TOTAL AND PER CAPITA: 1980 TO 1990

[Wholesale value. Excludes sales on military bases. By calendar year in which reported; data accordingly refer in general to tobacco sales for 12-month periods ended November 30]

| Year                                 | Tax<br>base<br>(\$1,000) | Per capita<br>tax base <u>l</u> /<br>(dollars)     | Year                         | Tax<br>base<br>(\$1,000)                       | Per capita<br>tax base <u>l</u> /<br>(dollars) |
|--------------------------------------|--------------------------|--|------------------------------|--|--|
| 1980<br>1981<br>1982<br>1983<br>1984 | 49,580<br>48,262         | 31.53<br>33.08<br>34.42<br>44.67<br>42.65<br>41.39 | 1986<br>1987<br>1988<br>1989 | 51,796<br>46,622<br>58,819<br>59,836<br>62,376 | 44.29<br>39.20<br>48.77<br>47.91<br>49.67      |

<sup>1/</sup> Based on de facto population estimates in table 3. Source: Hawaii State Department of Taxation, "Liquor Tax Base, Collections and Permits; Tobacco Tax Base, Collections and Licenses" (annual release).

Table 665.-- ALCOHOLIC BEVERAGE SALES, BY TYPE: 1989 AND 1990

[Wine gallons of 128 fluid ounces]

| •                | Total sales   |   | Per capita                                      | Per capita sales $1/$                           |  |  |
|------------------|---|---|---|---|--|--|
| Type of beverage | 1989  | 1990  | 1989  | 1990  |  |  |
| All types        | 35,629,085<br>1,718,116<br>320,586<br>2,258,481<br>415,989<br>1,520,693<br>29,395,220 | 36,374,344<br>1,716,023<br>287,281<br>2,112,167<br>353,887<br>1,587,296<br>30,317,690 | 28.5<br>1.4<br>0.3<br>1.8<br>0.3<br>1.2<br>23.5 | 29.0<br>1.4<br>0.2<br>1.7<br>0.3<br>1.3<br>24.1 |  |  |

 $<sup>\</sup>underline{1}$ / Based on estimated de facto population.

Source: Hawaii State Department of Taxation, Tax Research and Planning, records.

Table 666.-- WHOLESALE TRADE, FOR COUNTIES AND SPECIFIED PLACES: 1987

|  | All who                          | lesalers           | Merchant w                       | holesalers         |
|--|----------------------------------|--------------------|----------------------------------|--------------------|
| Geographic area  | Number of<br>establish-<br>ments | Sales<br>(\$1,000) | Number of<br>establish-<br>ments | Sales<br>(\$1,000) |
| State total  | 1,998                            | 5,362,490          | 1,718                            | 3,762,672          |
| Hawaii County Hilo Kailua  Honolulu County Aiea Ewa Beach Honolulu Kailua Kaneohe Pearl City | 191                              | 347,224            | 171                              | 269,888            |
|  | 116                              | 275,949            | 102                              | 204,498            |
|  | 36                               | 33,323             | 32                               | (D)                |
|  | 1,577                            | 4,501,802          | 1,340                            | 3,127,947          |
|  | 67                               | 172,664            | 61                               | 144,516            |
|  | 13                               | 27,206             | 12                               | (D)                |
|  | 1,293                            | 3,816,710          | 1,095                            | 2,621,357          |
|  | 31                               | 21,399             | 27                               | 16,189             |
|  | 24                               | 14,315             | 21                               | 12,606             |
|  | 40                               | 117,864            | 33                               | 46,125             |
| Waipahu  Kauai County  Lihue   | 49                               | 135,071            | 41                               | 103,325            |
|  | 73                               | 124,882            | 64                               | 96,221             |
|  | 43                               | 85,106             | 38                               | (D)                |
| Maui County Island of Lanai Island of Molokai Kahului  | 157                              | 388,582            | 143                              | 268,616            |
|  | 1                                | (D)                | 1                                | (D)                |
|  | 5                                | 3,047              | 4                                | (D)                |
|  | 73                               | 260,544            | 67                               | 164,568            |
|  | 42                               | 77,007             | 39                               | (D)                |

<sup>(</sup>D) Withheld to avoid disclosing data for individual companies. Source: U.S. Bureau of the Census, 1987 Census of Wholesale Trade, Hawaii, WC87-A-12 (April 1989), table 5.

Table 667.-- WHOLESALE TRADE, BY TYPE OF OPERATION AND KIND OF BUSINESS: 1987

| Type of operation and kind of business  | Number of<br>establish-<br>ments  | Sales<br>(\$1,000)   |
|---|---|--|
| Wholesale trade   | 1,998   | 5,362,490  |
| Type of operation:     Merchant wholesalers     Manufacturers' sales branches and offices     Agents, brokers, and commission merchants  Kind of business:     Motor vehicles and motor vehicle parts and supplies     Furniture and home furnishings     Professional and commercial equipment and supplies     Lumber and other construction materials     Metals and minerals, except petroleum     Electrical goods     Hardware, and plumbing and heating equipment and supplies     Machinery, equipment, and supplies     Miscellaneous durable goods     Paper and paper products     Drugs, drug proprietaries, and druggists' sundries     Apparel, piece goods, and notions     Groceries and related products     Farm-product raw materials     Chemicals and allied products     Petroleum and petroleum products     Beer, wines, and distilled alcoholic beverages     Miscellaneous nondurable goods | 1,718<br>130<br>150<br>121<br>69<br>193<br>82<br>18<br>116<br>93<br>144<br>202<br>69<br>40<br>108<br>388<br>10<br>39<br>50<br>41<br>215 | 3,762,672<br>1,060,066<br>539,752<br>409,040<br>105,823<br>427,975<br>217,920<br>41,947<br>367,006<br>164,382<br>241,390<br>226,496<br>203,601<br>133,740<br>146,805<br>1,453,873<br>7,477<br>105,375<br>468,694<br>270,773<br>370,173 |

Source: U.S. Bureau of the Census, 1987 Census of Wholesale Trade, Hawaii, WC87-A-12 (April 1989), table 1.

Table 668.-- CHARACTERISTICS OF WHOLESALE ESTABLISHMENTS, FOR THE STATE, 1982 AND 1987, AND OAHU AND THE NEIGHBOR ISLANDS, 1987

|   |  | 1987   |   |   |
|---|--|--|---|---|
| Subject                                   | 1982   | State<br>total   | 0ahu  | Neighbor<br>Islands                                       |
| Number of establishments  Sales (\$1,000) | 1,810<br>4,084,369<br>287,626<br>69,858<br>17,210<br>620,882<br>457,525<br>440,723 | 1,998 5,362,490 415,114 100,963 20,157 883,223 472,167 579,212 | 1,577<br>4,501,802<br>357,469<br>(NA)<br>16,907<br>(NA)<br>(NA) | 421<br>860,688<br>57,645<br>(NA)<br>3,250<br>(NA)<br>(NA) |

NA Not available.

Source: U.S. Bureau of the Census, 1982 Census of Wholesale Trade, Hawaii, WC82-A-12 (September 1984), table 1; 1987 Census of Wholesale Trade, Hawaii, WC87-A-12 (April 1989), tables 1, 3, 8, and 9.

Table 669.-- SERVICE ESTABLISHMENTS, BY PAYROLL STATUS: 1977 TO 1987

[Excludes firms exempt from Federal income tax for all years, hospitals prior to 1987, and most other health services before 1982]

|   |      | Number o              |                           |                      | eceipts<br>lion dol   | lars)                 |
|---|------|-----------------------|---------------------------|----------------------|-----------------------|-----------------------|
| Payroll status                          | 1977 | 1982                  | 1987                      | 1977                 | 1982                  | 1987                  |
| All service establishments With payroll |      | (NA)<br>6,124<br>(NA) | 30,114<br>7,458<br>22,656 | 1,276<br>1,216<br>60 | (NA)<br>2,660<br>(NA) | 4,902<br>4,456<br>446 |

NA Not available.

Source: U.S. Bureau of the Census, 1977 Census of Service Industries, Hawaii, SC77-A-12 (December 1979), table 1; 1982 Census of Service Industries, Hawaii, SC82-A-12 (September 1984), table 1; 1987 Census of Service Industries, Hawaii, SC87-A-12 (July 1989), table 1, and Nonemployer Statistics Series, West, SC87-N-4 (March 1990), table 2.

Table 670.-- CHARACTERISTICS OF SERVICE ESTABLISHMENTS WITH PAYROLL, FOR THE STATE, 1982 AND 1987, AND OAHU AND THE NEIGHBOR ISLANDS, 1987

|   |   | 1987  |  |  |  |
|---|---|---|--|--|--|
| Subject   | 1982  | State<br>total  | 0ahu   | Neighbor<br>islands  |  |
| FIRMS SUBJECT TO FEDERAL INCOME TAX   |   |   |  |  |  |
| Number of establishments  Excluding hospitals  Receipts (\$1,000)  Excluding hospitals  Annual payroll (\$1,000)  Excluding hospitals  First quarter payroll (\$1,000)  Paid employees 1/  Excluding hospitals  Unincorp. businesses or operations: Individual proprietorships  Partnerships  FIRMS EXEMPT FROM FEDERAL | (NA)<br>6,469<br>(NA)<br>2,659,651<br>(NA)<br>904,328<br>(NA)<br>(NA)<br>71,051<br>(NA)<br>(NA) | 7,458 7,456 4,455,953 (D) 1,499,500 (D) 356,723 91,673 (D) 2,146 452                    | 5,702<br>3,234,314<br>(D)<br>1,124,039<br>(D)  | 1,754<br>1,754<br>1,221,639<br>1,221,639<br>375,461<br>375,461<br>88,425<br>25,140<br>25,140 |  |
| Number of establishments  Excluding hospitals  Revenue (\$1,000)  Expenses, except hospitals (\$1,000)  Annual payroll (\$1,000)  Excluding hospitals  First quarter payroll (\$1,000)  Paid employees 1/  Excluding hospitals  | (NA)<br>881<br>(NA)<br>315,006<br>(NA)<br>122,302<br>(NA)<br>(NA)<br>12,442                     | 998<br>973<br>1,222,359<br>464,222<br>521,108<br>176,335<br>128,303<br>28,541<br>13,811 | 685<br>672<br>1,044,911<br>(NA)<br>444,007<br>145,635<br>109,597<br>23,594<br>11,186 | 313<br>301<br>177,448<br>(NA)<br>77,101<br>30,700<br>18,706<br>4,947<br>2,625                |  |

 $<sup>\</sup>ensuremath{\mathsf{D}}$  Withheld to avoid disclosing data for individual companies. NA  $\ensuremath{\mathsf{Not}}$  available.

<sup>1/</sup> For pay period including March 12.
Source: U.S. Bureau of the Census, 1987 Census of Service Industries,
Hawaii, SC87-A-12 (July 1989), tables 1a, 1b, 3a, 3b, 8a, 8b, 9a, and 9b.

Table 671.-- SERVICE ESTABLISHMENTS WITH PAYROLL AND SUBJECT TO FEDERAL INCOME TAX, FOR COUNTIES AND SELECTED URBAN PLACES: 1987

|   | Number<br>establish  |   | Receip<br>(\$1,00   |  |
|---|--|---|---|--|
| Geographic area   | All services   | Hotels <u>1</u> /                             | All services  | Hotels <u>1</u> /  |
| State total   | 7,458  | 237   | 4,455,953   | 1,562,043  |
| Hawaii County<br>Hilo<br>Kailua   | 736<br>388<br>170  | 35<br>9<br>13                                 | 382,211<br>131,071<br>85,259  | 191,918<br>12,539<br>46,113                                |
| Honolulu County Aiea Ewa Beach Honolulu Kailua Kaneohe Mililani Town Pearl City Wahiawa Waianae | 5,704<br>188<br>18<br>4,529<br>242<br>143<br>39<br>144<br>96<br>24 | 130<br>3<br>-<br>118<br>-<br>1<br>-<br>1<br>1 | 3,234,314<br>70,268<br>3,838<br>2,848,869<br>57,539<br>36,243<br>12,131<br>45,720<br>23,833<br>10,155 | 868,888<br>2,575<br>-<br>828,367<br>(D)<br>-<br>(D)<br>(D) |
| Waimanalo   | 13<br>116<br>293<br>56   | 27<br>9                                       | 10,649<br>26,747<br>186,636<br>28,560   | 98,474<br>20,513   |
| Lihue   | 129 725 3 20 171 66 116 18 237                                     | 8<br>45<br>-<br>2<br>3<br>7<br>17<br>-<br>1   | 69,391<br>652,792<br>(D)<br>17,641<br>110,323<br>16,496<br>140,715<br>2,674<br>67,673                 | 10,311<br>402,763<br>(D)<br>(D)<br>8,064<br>102,114        |

Source: U.S. Bureau of the Census, 1987 Census of Service Industries, Hawaii, SC87-A-12 (July 1989), table 5.

D Withheld to avoid disclosing data for individual companies.

1/ Including motels and other lodging places (SIC 70), but excluding condominium apartments in transient use.

Table 672.-- SERVICE ESTABLISHMENTS WITHOUT PAYROLL, FOR COUNTIES, ISLANDS, AND SELECTED URBAN PLACES: 1987

[Excludes establishments exempt from Federal income tax. For service establishments with payroll, see preceding table]

| Geographic<br>area <u>1</u> /         | No. of estab. | Receipts (\$1,000) | Geographic<br>area <u>1</u> / | No. of estab. | Receipts (\$1,000) |
|---------------------------------------|---------------|--------------------|-------------------------------|---------------|--------------------|
| State total                           | 22,656        | 445,628            | Kauai County                  | 1,022         | 17,390             |
| Hawaii County                         | 2,945         | 45,198             | Maui County                   | 2,636         | 51,438             |
| Hilo                                  | 870           | 13,354             | Lanai                         | 10            | 57                 |
| Kailua                                | 728           | 12,807             | Maui                          |               | 50,067             |
|                                       |               | •                  | Molokai                       | 98            | 1,314              |
| Honolulu County                       | 16,053        | 331,602            |                               |               |                    |
| Aiea                                  | 632           | 13,834             |                               |               |                    |
| Honolulu                              | 9,975         | 234,300            |                               |               |                    |
| Kailua                                |               | 19,060             |                               |               |                    |
| Kaneohe                               | 754           | 11,036             |                               |               |                    |
| Pearl City                            | 611           | 10,206             |                               |               |                    |
| Waipahu                               | 578           | 8,281              |                               |               |                    |
| · · · · · · · · · · · · · · · · · · · | <b>3</b> , 0  | -,                 |                               |               |                    |

<sup>1/</sup> Shown for urban places with 500 establishments or more. For other urban places, see source.

Source: U.S. Bureau of the Census, 1987 Census of Service Industries Nonemployer Statistics Series, West, SC87-N-4 (March 1990), table 4.

Table 673.-- SERVICE ESTABLISHMENTS WITH PAYROLL AND SUBJECT TO FEDERAL INCOME TAX, BY KIND OF BUSINESS OR OPERATION: 1982 AND 1987

| 1972        |                        | of e  | nber<br>estab-<br>ments | Receipts  |           |         |  |
|-------------|------------------------|-------|-------------------------|-----------|-----------|---------|--|
| SIC         | Kind of business or    | 1131  | uliciics                | 1987      | 1982      | Percent |  |
| code        | operation              | 1987  | 1982                    | (\$1,000) | (\$1,000) |         |  |
|             | Total                  | 7,456 | 6,469                   | (D)       | 2,659,651 | (D)     |  |
| 70          | Hotels, motels, other  |       |                         |           |           |         |  |
| <i>,</i> 0  | lodging                | 237   | 213                     | 1,562,043 | 973,328   | 60.5    |  |
| 72          | Personal services      | 727   | 704                     | (D)       |           | (D)     |  |
| 73          | Business services      | 1,435 | 1,097                   | 548,807   |           | 1       |  |
| 75          | Automotive repair,     | ,     | <b></b> ,               | 0.0,007   | 010,000   | ''      |  |
| . •         | services, & parking    | 653   | 615                     | 416,441   | 249,342   | 67.0    |  |
| 76          | Miscellaneous repair   |       |                         | ,         |           | ****    |  |
|             | services               | 255   | 250                     | 72,490    | 47,779    | 51.7    |  |
| 78, 79      | Amusement & recreation |       |                         | ,         | ,         |         |  |
|             | services, including    |       |                         |           |           |         |  |
|             | motion pictures        | 429   | 346                     | (D)       | 128,452   | (D)     |  |
| 80, ex. 806 | Health services,       |       |                         |           |           |         |  |
|             | except hospitals       | 1,979 | 1,711                   | (D)       | 420,211   | (D)     |  |
| 81          | Legal services         | 721   | 672                     | 315,500   | 173,129   | 82.2    |  |
| 823, 4, 9   | Selected educational   |       |                         |           |           |         |  |
|             | services               | 62    | 63                      | 11,829    |           |         |  |
| 83          | Social services        | 90    | 69                      | 19,319    | 6,401     | 201.8   |  |
| 891         | Engineering, architec- |       |                         |           |           |         |  |
|             | tural, surveying       |       |                         |           |           |         |  |
|             | services               | 409   | 350                     | 281,543   | 158,104   | 78.1    |  |
| 893         | Accounting, auditing,  |       |                         |           | == 046    |         |  |
|             | bookkeeping services   | 386   | 325                     | 111,178   |           |         |  |
| 892, 9      | Other services         | 73    | (NC)                    | 11,001    | (NC)      | (X)     |  |

D Withheld to avoid disclosing data for individual companies. NC Not comparable.
X Not applicable.

Source: U.S. Bureau of the Census, 1987 Census of Service Industries, Hawaii, SC87-A-12 (July 1989), table 3.

Table 674.-- SERVICE ESTABLISHMENTS WITHOUT PAYROLL, BY KIND OF BUSINESS: 1987

[Excludes establishments exempt from Federal income tax. For service establishments with payroll, see preceding table]

| SIC code  | Kind of business  | No. of estab.   | Receipts<br>(\$1,000)  |
|---|---|---|--|
| 70, ex. 704 7011 702.3 72 73 75 76                  | Total   | 22,656<br>346<br>98<br>248<br>4,166<br>6,106<br>861<br>782        | 7,015<br>2,555<br>4,460<br>55,433<br>106,400<br>26,636<br>18,588                   |
| 78, 79, 84 78 80 81 823, 4, 9 83 835 87, ex. 873 89 | Amusement and recreation services  Motion pictures  Health services  Legal services  Selected educational services  Child day care services  Engineering, accounting, research, management Services, n.e.c. | 2,321<br>156<br>1,580<br>548<br>959<br>815<br>614<br>3,427<br>745 | 47,495<br>6,070<br>48,782<br>19,421<br>8,512<br>5,563<br>2,812<br>76,668<br>25,115 |

Source: U.S. Bureau of the Census, 1987 Census of Service Industries, Nonemployer Statistics Series, West, SC87-N-4 (March 1990), table 2.

Table 675.-- HOTELS, MOTELS, AND OTHER LODGING PLACES: 1987

[Includes only establishments with payroll. Apparently excludes condominium units in rental pools for transient use]

| Subject                         | Number of<br>establish-<br>ments | Guest-<br>rooms,<br>Dec. 31              | Receipts<br>(\$1,000)                              | Annual<br>payroll<br>(\$1,000)            | Paid<br>employees,<br>pay period<br>including<br>March 12 |
|---------------------------------|----------------------------------|--|--|---|---|
| SUBJECT TO FEDERAL INCOME TAX   |                                  |  |  |   |   |
| Hotels, motels, other lodging   | 237                              | 47,209                                   | 1,562,043  | 436,081                                   | 31,600  |
| Hotels                          | 196<br>175<br>21<br>33<br>8      | 45,342<br>45,084<br>258<br>1,867<br>(NA) | 1,539,940<br>1,536,711<br>3,229<br>20,893<br>1,210 | 430,648<br>429,804<br>844<br>5,085<br>348 | 31,099<br>30,995<br>104<br>462<br>39                      |
| EXEMPT FROM FEDERAL INCOME TAX  |                                  | v  |  |   |   |
| Camps and membership lodging 2/ | 3                                | (NA)                                     | (D)  | (D)                                       | (D)   |

DA Witheld to avoid disclosing data for individual companies.

NA Not available.

<sup>1/</sup> Rooming and boarding houses, 6 establishments; camps and recreational vehicle parks, 2.

 $<sup>\</sup>overline{2}$ / Sporting and recreational camps, 2; organization hotels and lodging houses on membership basis, 1.

Source: U.S. Bureau of the Census, 1987 Census of Service Industries, Hotels, Motels, and Other Lodging Places, SC87-S-3 (April 1991), tables 1, 6, and 11.

Table 676.-- VISITOR ACCOMMODATIONS, BY TYPE, 1981 TO 1991, AND BY ISLANDS, 1991

[As of February, unless otherwise specified]

|                 |   | Properti  | es  |  | Units  |  |
|-----------------|---|---|---|--|--|--|
| Year and island | Total   | Hotels <u>1</u> /   | Condo-<br>miniums <u>2</u> /  | Total  | Hotels <u>1</u> /  | Condo-<br>miniums <u>2</u> /   |
| 1981            | 412<br>417<br>426<br>443<br>481<br>523<br>510<br>481<br>453<br>537<br>604 | 214<br>208<br>218<br>209<br>207<br>201<br>196<br>203<br>197<br>265<br>319 | 198<br>209<br>208<br>234<br>274<br>322<br>314<br>278<br>256<br>272<br>285 | 56,769<br>57,968<br>58,765<br>62,448<br>65,919<br>66,308<br>65,318<br>69,012<br>68,034<br>72,237<br>74,112 | 42,575<br>43,568<br>45,352<br>44,846<br>44,115<br>43,309<br>43,422<br>47,892<br>48,894<br>52,758<br>54,044 | 14,194<br>14,400<br>13,413<br>17,602<br>21,804<br>22,999<br>21,896<br>21,120<br>19,140<br>19,479<br>20,068 |
| Oahu            | 191<br>135<br>56<br>413<br>111<br>187<br>4<br>8<br>103                    | 137<br>93<br>44<br>182<br>62<br>57<br>4<br>2<br>57                        | 54<br>42<br>12<br>231<br>49<br>130<br>-<br>6<br>46                        | 38,022<br>33,380<br>4,642<br>36,090<br>9,384<br>18,241<br>364<br>527<br>7,574                              | 33,303<br>29,465<br>3,838<br>20,741<br>6,983<br>8,264<br>91<br>5,039                                       | 4,719<br>3,915<br>804<br>15,349<br>2,401<br>9,977<br>-<br>436<br>2,535                                     |

<sup>1/</sup> Hotels, apartment hotels, bed-and-breakfast, cottages, hostels, and lodges. Properties with both condo and hotel units are included with condominiums in 1990 and 1991; treatment before 1990 not specified.

Source: Hawaii Visitors Bureau, Visitor Plant Inventory, 1981 to 1991.

<sup>2/</sup> Condominium accomme 3/ February-October. 4/ February-November. Condominium accommodations in rental pools for transient use.

<sup>5/</sup> Includes Diamond Head and Kahala but not areas ewa and mauka (west and north) of the Ala Wai Canal.

Table 677. -- HOTEL ROOMS, OCCUPANCY RATES, AND DAILY ROOM AND GUEST RATES: 1980 TO 1990

[Includes condominium units in rental pools for transient occupancy]

|  | Hotel units, February  |  | Percent  | Daily r<br>(doll   | rates <u>1</u> /<br>lars)  | Guests  |  |
|--|--|--|--|--|--|---|--|
| Year   | State<br>total   | Oahu   | Other<br>islands   | occu-<br>pied <u>1</u> /   | Per<br>room  | Per<br>guest  | per<br>room 1/   |
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 54,246<br>56,769<br>57,968<br>58,765<br>62,448<br>65,919<br>66,308<br>65,318<br>69,012<br>68,034<br>72,237 | 34,334<br>33,967<br>33,492<br>34,354<br>36,848<br>38,600<br>39,010<br>38,185<br>37,841<br>36,467<br>37,270 | 19,912<br>22,802<br>24,476<br>24,411<br>25,600<br>27,319<br>27,298<br>27,133<br>31,171<br>31,567<br>34,967 | 69.3<br>68.2<br>70.4<br>69.7<br>76.0<br>76.1<br>81.7<br>81.1<br>78.5<br>79.0<br>78.8 | 47.28<br>49.73<br>51.78<br>54.78<br>59.25<br>68.84<br>73.20<br>80.09<br>87.94<br>95.83<br>102.10 | 24.40<br>25.70<br>26.44<br>27.71<br>29.59<br>34.39<br>36.80<br>40.23<br>44.22<br>47.93<br>50.75 | 1.94<br>1.94<br>1.96<br>1.98<br>2.00<br>2.00<br>1.99<br>1.99<br>1.99<br>2.00<br>2.01 |

1/ Annual averages.
Source: Hawaii Visitors Bureau, Visitor Plant Inventory (annual);
Pannell Kerr Forster, Trends in the Hotel Industry, Hawaii (December issues).

Table 678.-- HOTEL ROOM OCCUPANCY AND ROOM RATES, AND FOOD AND BEVERAGE SALES, BY GEOGRAPHIC AREAS: 1990

[Includes condominium units in rental pools for transient occupancy]

|                         |                                  | Average<br>daily                     | Average<br>daily                 |                                  | e daily<br>er guest           | Average<br>food                  |
|-------------------------|----------------------------------|--------------------------------------|----------------------------------|----------------------------------|-------------------------------|----------------------------------|
| Geographic area         | Percent<br>occu-<br>pied         | room<br>rate<br>(dollars)            | guest<br>rate<br>(dollars)       | Food<br>(dollars)                | Beverage<br>(dollars)         | sales per<br>cover<br>(dollars)  |
| State total             | 78.80                            | 102.10                               | 50.75                            | 21.24                            | 6.30                          | 14.09                            |
| Oahu                    | 86.26<br>86.88<br>72.66          | 93.45<br>94.01<br>78.72              | 47.83<br>48.04<br>42.09          | 18.55<br>18.04<br>28.45          | 4.96<br>4.90<br>6.02          | 13.64<br>13.92<br>10.95          |
| Hawaii Hilo Kona Kohala | 61.67<br>59.06<br>66.76<br>58.33 | 125.31<br>56.60<br>78.15<br>192.19   | 60.58<br>30.55<br>36.57<br>92.63 | 27.56<br>13.39<br>13.30<br>41.35 | 8.34<br>3.48<br>4.55<br>12.26 | 17.01<br>10.89<br>11.92<br>19.86 |
| Maui                    | 70.10<br>76.32<br>70.47<br>59.60 | 130.49<br>146.63<br>121.31<br>106.54 | 62.11<br>72.55<br>52.76<br>51.81 | 26.30<br>23.40<br>24.72<br>38.85 | 9.59<br>9.37<br>9.55<br>10.51 | 13.89<br>14.07<br>15.74<br>12.96 |
| Kauai                   | 67.62<br>44.71<br>68.51<br>73.56 | 92.06<br>79.47<br>77.65<br>128.85    | 39.73<br>31.16<br>37.07<br>46.16 | 20.63<br>19.54<br>19.40<br>23.93 | 6.33<br>6.58<br>6.39<br>6.12  | 12.80<br>13.72<br>12.92<br>12.39 |
| Molokai                 | 47.82                            | 66.28                                | 32.20                            | 27.57                            | 9.90                          | 10.23                            |
| All Neighbor Islands    | 66.68                            | 120.82                               | 56.73                            | 15.64                            | 5.21                          | 14.74                            |

Source: Pannell Kerr Forster, <u>Trends in the Hotel Industry</u>, <u>Hawaii</u>, December 1990, and records.

Table 679. -- VISITOR ACCOMMODATIONS, BY TYPE AND GEOGRAPHIC AREA: FEBRUARY-NOVEMBER 1991

|  | Properties                               |                                       |  | Units   |  |   |  |
|--|--|---------------------------------------|--|---|--|---|--|
| Type of accommodation  | State<br>total                           | Oahu                                  | Other<br>islands                       | State<br>total  | Oahu   | Other<br>islands                                      |  |
| All types  | 604                                      | 191                                   | 413                                    | 74,112  | 38,022   | 36,090  |  |
| Apartment-hotel  Bed and breakfast  Condominium  Condo and hotel  Cottage  Hotel  Other 1/ | 22<br>58<br>228<br>57<br>38<br>169<br>32 | 16<br>5<br>37<br>17<br>13<br>90<br>13 | 6<br>53<br>191<br>40<br>25<br>79<br>19 | 1,075<br>319<br>14,162<br>5,906<br>292<br>51,765<br>593 | 922<br>16<br>2,819<br>1,900<br>64<br>31,968<br>333 | 153<br>303<br>11,343<br>4,006<br>228<br>19,797<br>260 |  |

1/ Hostel, lodge, etc. Source: Hawaii Visitors Bureau, 1991 Visitor Plant Inventory.

Table 680.-- HOTEL OCCUPANCY AND ROOM RATES, FOR THE UNITED STATES HAWAII, AND HONOLULU: 1989 AND 1990

|                                    | States           |        |                           | C                  | Cities        |                             |  |
|------------------------------------|------------------|--------|---------------------------|--------------------|---------------|-----------------------------|--|
| Geographic area                    | United<br>States | Hawaii | Hawaii<br>rank <u>1</u> / | All U.S.<br>cities | Hono-<br>lulu | Honolulu<br>rank <u>2</u> / |  |
| Occupancy (percent): 1989          | 65.5             | 75.5   | 1                         | 66.6               | 82.5          | 1                           |  |
|                                    | 65.0             | 74.0   | 1                         | 66.3               | 81.5          | 1                           |  |
| Average daily rate (dollars): 1989 | 70.19            | 94.73  | 3                         | 74.14              | 85.00         | 9                           |  |
|                                    | 72.83            | 100.88 | 3                         | 77.36              | 94.08         | 7                           |  |

 $\frac{1}{2}$  Among 35 reported States or combinations of States.  $\frac{1}{2}$  Among 57 reported U.S. cities.  $\frac{1}{2}$  Source: Pannell Kerr Forster,  $\frac{1}{2}$  Trends in the Hotel Industry, United States, Worldwide, March 1991.

Table 681.-- GENERAL EXCISE TAX BASE FOR RENTALS: 1980 TO 1990

[In thousands of dollars. Data are on a cash basis accounting]

| Year<br>reported <u>1</u> / | Total   | Hotel<br>rentals  | All other rentals <u>2</u> /  |
|-----------------------------|---|---|---|
| 1980                        | 1,820,715<br>2,040,505<br>2,265,287<br>2,470,820<br>2,743,855<br>3,037,254<br>3,278,450<br>3,443,271<br>3,715,546<br>4,108,740<br>4,401,733 | 708,620<br>770,705<br>844,926<br>876,227<br>984,518<br>1,122,268<br>1,212,782<br>1,369,401<br>1,408,891<br>1,505,071<br>1,572,994 | 1,112,095 1,269,800 1,420,361 1,594,593 1,759,337 1,914,986 2,065,668 2,073,870 2,306,655 2,603,669 2,828,739 |

<sup>1/</sup> Calendar year in which reported, including "prior years" reports. Income received in December is reported the following January, hence these annual totals generally refer to an "income year" ended November 30.

<sup>2/</sup> Includes residential, office, automobile, and equipment rentals, and land leases.

Source: Hawaii State Department of Taxation, "General Excise and Use Tax Base" (annual tabular release).

Table 682.-- ARRANGEMENT OF PASSENGER TRANSPORTATION: 1987
[Includes only establishments with payrol1]

| Kind of business   | Estab-<br>lish-<br>ments | Revenue (\$1,000) | Annual payroll (\$1,000) | Paid employees, |
|--|--------------------------|-------------------|--------------------------|-----------------|
| All establishments  Travel agencies  Tour operators  Arrangement of passenger transportation, n.e.c. | 486                      | 197,360           | 68,128                   | 4,796           |
|  | 327                      | 79,850            | 25,688                   | 1,975           |
|  | 110                      | 99,542            | 35,273                   | 2,400           |
|  | 49                       | 17,968            | 7,167                    | 421             |

n.e.c. Not elsewhere classified.

Source: U.S. Bureau of the Census, 1987 Census of Transportation, TC87-S-1 Miscellaneous Subjects (July 1991), tables 15 and 16.

Table 683.-- PASSENGER TRANSPORTATION ARRANGEMENT: 1989

|                             | Number of establishments  |                         | Number of employees, Annual |                                |                                      |
|-----------------------------|---|-------------------------|-----------------------------|--------------------------------|--------------------------------------|
| SIC                         | Industry  | State<br>total          | Oahu                        | week incl. March 12            | payroll                              |
| 472<br>4724<br>4725<br>4729 | Passenger transp. arrangement Travel agencies Tour operators Pass. transport. arrangement, n.e.c. | 471<br>315<br>100<br>43 | 379<br>254<br>84<br>31      | 5,598<br>1,997<br>2,956<br>588 | 93,357<br>33,804<br>47,549<br>11,393 |

n.e.c. Not elsewhere classified.

Source: U.S. Bureau of the Census, <u>County Business Patterns 1989</u>, Hawaii, CBP-89-13 (October 1991), pp. 7 and 25.

Table 684.-- MOTION PICTURE SERVICES: 1977 TO 1989 [Data limited to establishments with payroll. For 1963-1972 data, see Data Book 1990, table 699]

| Subject and year   | Number<br>of<br>estab-<br>lishments | Receipts (\$1,000) | Annual payroll (\$1,000) | Paid employees, week inc. |
|--|-------------------------------------|--------------------|--------------------------|---------------------------|
| Motion picture production, distribution, and services (SIC 781, 2): 1977 1982 1987 1989 1/ | 11                                  | 926                | 174                      | 31                        |
|  | 16                                  | 4,203              | 1,147                    | 74                        |
|  | 25                                  | 10,177             | 2,394                    | 136                       |
|  | 20                                  | (NA)               | 2,889                    | 121                       |
| Motion picture theaters (SIC 768): 1977 2/ 1982  | 50                                  | 17,444             | (D)                      | (D)                       |
|  | 36                                  | 21,329             | 3,195                    | 519                       |
|  | 35                                  | (D)                | (D)                      | (D)                       |
|  | 37                                  | (NA)               | 6,574                    | 657                       |
| Video tape rental (SIC 784): 1987  | 78                                  | 12,319             | 2,456                    | 376                       |
|  | 67                                  | (NA)               | 3,161                    | 422                       |

Withheld to avoid disclosing data for individual companies.

NA Not available.

<sup>1/</sup> Excludes motion picture distribution (SIC 782). 
2/ Data include 3 establishments without payroll.

Source: U.S. Bureau of the Census, 1977 Census of Service Industries, Hawaii, SC77-A-12 (December 1979); 1982 Census of Service Industries, Hawaii, SC82-A-12 (September 1984); 1982 Census of Service Industries, Motion Picture Industry, SC82-I-4 (December 1985); 1987 Census of Service Industries, Hawaii, SC87-A-12 (July 1989); County Business Patterns 1989, Hawaii, CBP-89-13 (October 1991).

Table 685.-- MOTION PICTURE AND TELEVISION PRODUCTION: 1986 TO 1990

| Subject   | 1986 | 1987  | 1988 | 1989  | 1990 |
|---|------|-------|------|-------|------|
| Number of features and programs                             |      |       |      |       |      |
| filmed 1/   | 81   | 109   | 182  | 173   | 379  |
| Feature films for theater viewing                           | 3    | 4     | 2    | 5     | 2    |
| Feature films for TV viewing Television episodics, specials | 2    | 2     | 1    | 7     | 2    |
| and series $\underline{1}/\ldots$                           | 76   | 103   | 179  | 161   | 375  |
| Expenditures in Hawaii (million                             |      |       |      |       |      |
| dollars)  | 35.3 | 50.5  | 24.8 | 61.6  | 48.3 |
| Commercials   | 4.6  | 12.1  | 9.4  | 20.0  | 16.5 |
| TV series   | 23.2 | 22.9  | 7.0  | 27.0  | 16.4 |
| Features (theater & TV)                                     | 4.4  | 3.9   | 6.2  | 12.0  | 5.5  |
| TV specials/episodics                                       | 1.6  | 10.8  | 1.5  | .8    | 4.8  |
| Others (still photography, sports,                          |      |       |      |       |      |
| music, cable)   | 1.5  | .8    | .1   | .5    | 3.5  |
| Documentaries/industrials                                   | 1.5  |       | .6   | 1.3   | 1.6  |
| Tax revenues generated (million                             |      |       |      |       |      |
| dollars)  | 3.1  | 4.5   | 2.24 | 9.2   | 7.2  |
| •   |      |       |      |       |      |
| Spending effect on economy                                  |      |       |      |       |      |
| (millions dollars)  | 78   | 114.8 | 56.5 | 120.0 | 96.6 |
|   |      |       |      | [     |      |

<sup>1/</sup> Each program in a series counted separately.
Source: Hawaii State Department of Business, Economic Development, & Tourism, Film Industry Branch, records.

# FOREIGN AND INTERSTATE COMMERCE

This section includes data on the flow of goods, services, and capital between Hawaii and the rest of the world, with particular emphasis on trade and investment involving foreign countries.

Imports to Hawaii from foreign nations rose from \$1.8 billion in 1980 to \$2.3 billion in 1990. Exports to foreign countries amounted to only \$174 million in 1980, but by 1990 reached \$512 million. These figures, it should be noted, refer to merchandise imports and exports through the Honolulu Customs District. They do not necessarily represent exports of commodities originating in Hawaii, nor imports for direct consumption within the State. Exports actually originating in Hawaii, first compiled for 1987, totaled only \$179 million in 1990.

Trade with the Mainland United States has similarly risen in the past decade. Merchandise received from the Mainland increased from \$3.1 billion in 1978 to \$7.5 billion in 1988. Estimates of the value of merchandise shipped to the Mainland are no longer available.

Among the foreign nations, Hawaii's leading trading partner in 1989, both for imports and exports, was Japan. Imports for consumption from Japan amounted to \$452 million, or 23 percent of the total, while exports to Japan reached \$222 million or 41 percent of all foreign exports. Almost one-fourth of all imports for consumption were petroleum and other mineral fuels and products.

Honolulu Foreign Trade Zone No. 9 handled merchandise valued at \$48 million in fiscal 1990. Merchandise handled by Subzone No. 9A, the PRI refinery, was valued at \$1.1 billion, almost all of it in petroleum and petroleum products. The other four subzones accounted for a combined total of \$712 million.

Foreign-owned businesses in Hawaii had property, plant, and equipment with a gross book value of \$6.9 billion in 1989 and employed 42,700 persons. Foreign investments in Hawaii between 1959 and 1990 totaled \$11 billion, five-sixths of it Japanese. During 1989 and 1990 alone, Japanese investors spent \$7.3 billion on Hawaiian real estate.

Sources for statistics on interstate and foreign commerce and foreign investment include the U.S. Bureau of the Census and Bureau of Economic Analysis, Foreign Trade Zone No. 9 and its subzones, the DBED Trade and Industry Development Branch, and Kenneth Leventhal & Co. Further information is found in waterborne cargo data compiled by the Army Corps of Engineers and cited in Section 18.

Comparable data for the nation as a whole appear in Section 29 of Statistical Abstract of the United States: 1991. Long-term Island trends are summarized in Historical Statistics of Hawaii, Section 21.

Table 686.-- INTERSTATE AND FOREIGN TRADE: 1970 TO 1990

[Merchandise imports and exports, foreign and domestic, in millions of dollars. For 1958-1969, see <a href="Data Book">Data Book</a> 1987, table 713]

| Merchandise imports |                    |                    |                    |                |                |                   |
|---------------------|--------------------|--------------------|--------------------|----------------|----------------|-------------------|
|                     |                    | 1,01               | Domestic           |                |                | <br>  Merchandise |
|                     |                    |                    | Domestic           |                |                | exports,          |
| Year                | Total              | Total              | Waterborne         | Air <u>1</u> / | Foreign        | total 1/          |
| 1970                | 1,431.5            | 1,256.8            | 1,172.5            | 84.3           | 174.7          | 349.4             |
| 1971                | 1,258.1            |                    | 888.7              | 145.9          | 223.6          | 380.8             |
| 1972                | 1,462.5            | 1,218.8            | 1,082.2            | 136.6          | 243.7          | 365.0             |
| 1973                | 1,892.9            | 1,578.0            | 1,460.1            | 117.9          | 314.9          | 493.9             |
| 1974                | 2,510.0            | 1,962.9            | 1,825.0            | 137.8          | 547.2          | 1,017.9           |
| 1975                | 2,843.0            | 2,044.8            | 1,872.8            | 172.0          | 798.2          | 844.7             |
| 1976                | 3,310.8            | 2,488.8            | 2,269.2            | 219.5          | 822.0<br>907.1 | 903.6             |
| 1977<br>1978        | 3,792.1<br>4,146.1 | 2,885.1<br>3,140.9 | 2,648.3<br>2,890.0 | 236.8<br>251.0 | 1,005.2        | 938.4<br>1,044.7  |
| 1979                | 5,001.2            | 3,897.0            | 3,636.9            | 260.1          | 1,104.3        | 1,182.3           |
| 13/3                | 3,001.2            | 3,037.0            | 3,030.3            | 200.1          | 1,104.0        | 1,102.3           |
| 1980                | 6,239.4            | 4,779.7            | 4,577.9            | 201.9          | 1,459.7        | 1,569.2           |
| 1981                | 6,241.3            | 4,716.1            | 4,500.2            | 215.9          | 1,525.2        | 1,289.2           |
| 1982                | 5,933.8            | 4,700.3            | 4,478.8            | 221.5          | 1,233.5        | 1,333.4           |
| 1983                | 6,461.8            | 5,096.3            | 4,856.6            | 239.7          | 1,365.5        | 1,440.7           |
| 1984                | 6,568.0            | 5,309.4            | 5,047.9            | 261.5          | 1,258.6        | 1,419.8           |
| 1985                | 6,552.3            | 4,796.0            | 4,506.9            | 289.1          | 1,756.3        | 1,314.3           |
| 1986                | 6,557.1            | 5,131.6            | 4,724.0            | 407.7          | 1,425.4        | 1,429.4           |
| 1987                | 7,468.9            | 5,910.3            | 4,465.4            | 445.0          | 1,558.6        | 1,452.9           |
| 1988                | 9,298.4            | 7,459.9            | 7,029.8            | 430.2          | 1,838.5        | 1,467.6           |
| 1989                | 10,062.3           | 8,076.1            | 7,606.5            | 469.6          | 2,393.7        | 1,509.2           |
| 1990                | 10,945.5           | 8,784.9            | 8,281.1            | 503.9          | 2,613.5        | 1,617.4           |

1/ Not available separately for foreign and domestic exports. Source: Hawaii State Department of Business and Economic Development, Hawaii Gross State Product Accounts: 1958 to 1985; Summary Estimates: 1986, 1987, and 1988 (June 1989), and records.

Table 687.-- FOREIGN TRADE THROUGH THE HONOLULU CUSTOMS DISTRICT: 1980 TO 1990

[Value, in millions of dollars, of U.S. imports and exports entered or exported through the Honolulu Customs District. The data may include imports intended for consumption on the Mainland and exports originated on the Mainland]

| Year   | General<br>imports <u>1</u> /   | Imports for consumption 1/  | Exports of foreign and domestic merchandise <u>2</u> /  |
|--|---|---|---|
| 1980<br>1981<br>1982<br>1983<br>1984<br>1985<br>1986<br>1987<br>1988<br>1989 | 1,842.0<br>1,982.2<br>1,732.7<br>1,828.0<br>1,614.2<br>1,756.3<br>1,556.9<br>1,770.1<br>1,839.6<br>1,970.1<br>2,260.6 | 1,721.4<br>1,525.4<br>1,509.4<br>1,433.5<br>1,397.9<br>1,553.1<br>1,425.4<br>1,558.6<br>1,559.1<br>1,735.9<br>2,100.3 | 174.3<br>237.7<br>219.0<br>203.3<br>316.9<br>388.8<br>231.1<br>392.8<br>572.6<br>537.4<br>512.2 |

<sup>1/</sup> Customs value basis. Excludes vessels under their own
power or afloat and shipments valued under \$251.
2/ Totals are on f.a.s. (free alongside ship) basis.

<sup>2/</sup> Totals are on f.a.s. (free alongside ship) basis.

Source: U.S. Bureau of the Census, Highlights of U.S. Export and Import Trade, FT990, cumulative totals in December issues, 1980-1988; U.S. Merchandise Trade: Selected Highlights, FT920, December 1989 and 1990.

Table 688. -- FOREIGN TRADE THROUGH THE HAWAII CUSTOMS DISTRICT, BY CLASSIFICATION: 1989 AND 1990

### [In millions of dollars]

| Classification  | 1989                   | 1990                   |
|---|------------------------|------------------------|
| General imports by district of entry: Customs value 1/                              | 1,970.09<br>2,071.61   | 2,260.64<br>2,381.89   |
| General imports by district of unlading: Customs value 1/ C.i.f. value 27           | 2,330.00<br>2,463.01   | 2,819.43<br>2,981.68   |
| Imports for consumption by district of entry (customs value $\underline{1}/$ )      | 1,735.90               | 2,100.27               |
| Exports of domestic and foreign merchandise by district of export (f.a.s. value 3/) | 537.38                 | 512.25                 |
| Exports of merchandise by district of origination  Manufactured commodities         | 160.0<br>103.3<br>56.7 | 178.7<br>128.1<br>50.6 |

<sup>1/</sup> Prices paid by the buyer to the seller in accordance with the 1979 Trade Agreement Act amendments to the 1930 Tariff Act.

Source: U.S. Bureau of the Census, U.S. Merchandise Trade: Selected Highlights, FT920, for December 1989 and 1990, tables 1, 4, 5 and 6, and U.S. Merchandise Trade, FT900 Supplement, for December 1989 and 1990, exhibit 2.

<sup>2/</sup> Cost, insurance and freight.
3/ Free alongside ship value at the U.S. port of export, based on the transaction price, including inland freight, insurance, and other charges; excludes cost of loading merchandise aboard the exporting carrier and also excludes freight, insurance, etc., beyond the U.S. port of exportation.

Table 689. -- FOREIGN TRADE THROUGH THE HAWAII CUSTOMS DISTRICT, BY METHOD OF TRANSPORTATION: 1989 AND 1990

[Data may include imports intended for consumption on the Mainland and exports originated on the Mainland]

|                             | Value (          | million do | Shipping weight (mil. kgs.) |          |       |
|-----------------------------|------------------|------------|-----------------------------|----------|-------|
| Category and year           | Total <u>1</u> / | Vessel     | Air                         | Vesse1   | Air   |
| General imports: <u>2</u> / | 2,330.00         | 1,081.48   | 1,230.56                    | 4,166.82 | 19.83 |
| 1989                        | 2,819.43         | 1,113.18   | 1,600.55                    | 4,332.53 | 24.11 |
| Exports: 3/                 | 537.38           | 99.89      | 213.93                      | 328.20   | 24.55 |
| 1989                        | 512.25           | 122.09     | 200.19                      | 373.93   | 16.48 |

<sup>1/</sup> Includes categories not tabulated by method of transportation, not shown separately.

<sup>2/</sup> By district of unlading. Value is on customs value basis.

3/ Exports of domestic and foreign merchandise, by district of export. Value is on f.a.s. (free alongside ship) basis.

Source: U.S. Bureau of the Census, U.S. merchandise Trade: Selected Highlights, FT920, December 1989 and 1990, tables 1 and 6.

Table 690.-- IMPORTS AND EXPORTS THROUGH THE HONOLULU CUSTOMS DISTRICT, BY REGION OF ORIGIN OR DESTINATION: 1988 AND 1989

[In dollars. Includes all foreign trade through the Honolulu Customs District, and thus may include imports intended for consumption in other States or exports originated in other States. Excludes imports intended for consumption in Hawaii but entering through other customs districts, and exports originated in Hawaii but shipped through other customs districts]

|             | Import<br>consum  |   | Exports of domestic merchandise  |  |  |
|-------------|---|---|--|--|--|
| Region      | 1988 1989   |   | 1988   | 1989   |  |
| All regions | 1,839,632,442<br>426,432<br>1,426,600,773<br>128,063,148<br>252,321,619<br>32,220,470 | 1,970,093,475<br>467,123<br>1,531,382,363<br>146,327,996<br>244,005,556<br>36,454,769<br>11,455,668 | 581,122,182<br>166,451<br>340,739,122<br>218,213,347<br>10,386,456<br>11,616,806 | 537,376,151<br>-<br>387,708,683<br>137,296,531<br>4,409,730<br>7,923,579<br>37,628 |  |

Source: Hawaii State Department of Business, Economic Development & Tourism, Trade and Industry Development Branch, <u>Hawaii's Foreign Trade</u>, A Statistical Digest (annual). Compiled from U.S. <u>Bureau of the Census tapes</u>.

Table 691.-- IMPORTS AND EXPORTS THROUGH THE HONOLULU CUSTOMS DISTRICT, TOTAL AND BY LEADING COUNTRIES OF ORIGIN OR DESTINATION: 1989

### [See headnote to preceding table]

| Country   | Total   | Imports for consumption   | Exports of domestic merchandise  |
|---|---|---|--|
| All countries   | 2,507,469,626   | 1,970,093,475   | 537,376,151  |
| Japan Singapore Taiwan, Republic of China Korea, Republic of Indonesia Australia Malaysia Philippines France China, People's Republic of Italy Hong Kong New Zealand Canada United Kingdom Thailand Switzerland Marshall Islands Netherlands Germany, Federal Republic of Ecuador Brunei Spain Ereneh Polymosis | 674,893,654 231,583,141 208,468,043 204,725,390 200,011,304 197,116,487 125,723,016 118,017,648 96,448,196 63,401,627 53,555,075 44,238,980 42,005,635 38,400,101 26,608,449 26,536,392 24,349,737 21,546,088 13,316,219 10,851,019 9,683,106 8,956,871 8,671,968 6,550,475 | 452,417,883<br>223,714,064<br>193,352,157<br>91,461,575<br>198,493,087<br>114,314,754<br>122,133,201<br>113,034,962<br>95,896,264<br>62,477,639<br>53,471,156<br>29,506,430<br>28,990,026<br>30,509,067<br>25,949,445<br>23,726,683<br>24,315,418<br>263,983<br>11,906,830<br>9,432,597<br>9,650,476<br>8,932,276<br>8,671,968<br>514,583 | 222,475,771 7,869,077 15,115,886 113,263,815 1,518,217 82,801,733 3,589,815 4,982,686 551,932 923,988 83,919 14,732,550 13,015,609 7,891,034 659,004 2,809,709 34,319 21,282,105 1,409,389 1,418,422 32,630 24,595 |
| French Polynesia Papua New Guinea   | 6,060,834   | 16,584  | 6,044,250  |

Source: Hawaii State Department of Business, Economic Development, & Tourism, Trade and Industry Development Branch, Hawaii's Foreign Trade 1989, A Statistical Digest (April 1991), table 2. Compiled from U.S. Bureau of the Census tapes.

Table 692.-- IMPORTS AND EXPORTS THROUGH THE HONOLULU CUSTOMS DISTRICT, BY COMMODITY CLASSIFICATION: 1989

[See headnote to table 690]

| Commodity <u>1</u> /  | Imports for consumption  | Exports of domestic mdse.  |
|---|--|--|
| All commodities   | 1,970,093,475  | 537,376,151  |
| Animals and animal products  Vegetable products  Animal or vegetable fats  Prepared foodstuffs, beverages, tobacco  Mineral fuels, other mineral products  Products of chemical industry  Plastics, rubber  Rawhides, leather, travel goods  Wood, wood articles  Pulp of wood, paper, paperboard  Textiles, textile articles  Footwear, headgear, umbrellas  Articles of stone, etc.; glass, glassware | 48,677,508<br>18,365,981<br>574,890<br>76,379,347<br>487,372,880<br>36,609,121<br>14,520,211<br>86,009,535<br>11,265,710<br>22,755,666<br>54,908,606<br>10,861,558<br>21,943,718 | 11,480,391 22,507,239 473,002 38,394,280 18,829,457 8,499,656 1,965,085 4,039,678 2,093,745 23,974,723 4,481,267 240,700 1,524,275 |
| Precious stones and metals  | 51,667,312<br>34,955,832   | 3,730,630<br>16,533,383  |
| TV equipment Vehicles, aircraft, vessels Vehicles Aircraft, spacecraft Vessels  | 600,876,084<br>283,958,467<br>268,351,017<br>14,781,657<br>825,793   | 72,536,955<br>247,245,049<br>7,359,657<br>239,502,658<br>382,734   |
| Optical, scientific, musical instruments; clocks, watches   | 19,685,548<br>68,497<br>44,616,935<br>2,502,745<br>41,517,324  | 23,451,977<br>185,415<br>13,772,828<br>16,417,088<br>4,999,328   |

<sup>1/</sup> Classification system not comparable to that in use for earlier years.

Source: Hawaii State Department of Business, Economic Development &
Tourism, Trade and Industry Development Branch, Hawaii's Foreign Trade 1988, A
Statistical Digest (April 1991), tables 7, 8, 20, and 21.

Table 693.-- FOREIGN-TRADE ZONE AND SUBZONE OPERATIONS: 1988 TO 1990
[Years ended September 30, unless otherwise specified]

| Subject   | 1988               | 1989               | 1990                  |
|---|--------------------|--------------------|-----------------------|
| 7ama Na 0.  |                    |                    |                       |
| Zone No. 9: Firms using zone  | 386                | 393                | 395                   |
| User employment at zone 1/  | 216                | 223                | 217                   |
| Value of merchandise (\$1,000):   | 55.041             | 60.545             | 45 500                |
| In/out Exports  | 57,241<br>12,026   | 62,747<br>9,086    | 47,708<br>6,001       |
| Revenue (\$1,000)   | 1,247              | 1,508              | 2/ 1,699              |
| Expenditures (\$1,000)  | 1,119              | 1,183              | $\frac{2}{2}$ / 1,304 |
| Subzone No. 9-A:  |                    |                    |                       |
| User employment at subzone  | 233                | 243                | 241                   |
| Quantity (1,000 short tons):  | 0 501 0            | 0.740.0            | 0.270.7               |
| Merchandise, in/out Exports   | 8,581.0<br>1,782.7 | 9,349.8<br>1,865.0 | 9,230.7<br>1,859.1    |
| Value (million dollars):  | 1, 520             | _,000              | 1,000                 |
| Merchandise, in/out   | 865.9              | 978.1              | 1,138.6               |
| Exports   | 186.0              | 199.8              | 228.8                 |
| Subzone No. 9-B:  |                    |                    |                       |
| User employment at subzone  | 17                 | 19                 | 19                    |
| Value (\$1,000):  Merchandise, in/out   | 4,724              | 6,434              | 6,277                 |
| Exports   | 2,372              | 3,210              | 3,144                 |
| Colores No. O. Co   |                    |                    |                       |
| Subzone No. 9-C: User employment at subzone   | 2,071              | 1,520              | 1,151                 |
| Value (million dollars):  | , ,,,,             | 1,020              | 1,101                 |
| Merchandise, in/out   | 273.7              | 282.1              | 251.8                 |
| Exports   | 16.5               | 12.7               | 8.5                   |
| Subzone No. 9-D:  |                    |                    |                       |
| User employment at subzone  | 1,250              | 1,250              | 1,250                 |
| Value (\$1,000):  | 02 444             | 02 726             | 04 500                |
| Merchandise, in/out<br>Exports  | 92,444             | 82,326<br>2,434    | 94,598<br>4,695       |
| Exported intrinsical interest in the second | 0,113              | <b>2,</b>          | ,,000                 |

Continued on next page.

Table 693.-- FOREIGN-TRADE ZONE AND SUBZONE OPERATIONS: 1988 TO 1990--Con.

| Subject  | 1988 | 1989 | 1990                         |
|--|------|------|------------------------------|
| Subzone No. 9-E: 3/ User employment at subzone Quantity (1,000 short tons): Merchandise, in/out Exports Value (million dollars): Merchandise, in/out Exports | •••  | •••  | 237 3,454.9 135.0 359.2 13.1 |

<sup>1/</sup> For firms occupying facilities on a continuing basis only.

Table 694.-- EMPLOYMENT AND SHIPMENTS RELATED TO MANUFACTURED EXPORTS: 1986 AND 1987

| Subject  | 1986   | 1987   |
|--|--|--|
| Employment related to manufactured exports  Percent of civilian employment  Manufacturing industries  Direct export related  Supporting exports  Nonmanufacturing industries  Trade  Other | 5,300<br>1.1<br>700<br>200<br>500<br>4,600<br>3,600<br>1,000 | 6,900<br>1.4<br>1,000<br>400<br>600<br>5,900<br>4,700<br>1,200 |
| Value of export related manufacturers' shipments 1/  Percent of total manufacturers' shipments  Direct exports 1/  Supporting exports 1/   | 317.9<br>10.3<br>214.3<br>103.6                              | 319.1<br>9.2<br>175.3<br>141.8                                 |

<sup>1/</sup> Million dollars.

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

<sup>3/</sup> Activated as a subzone April 1, 1990. Data refer to six-month period ended September 30.

Source: Hawaii State Department of Business and Economic Development, Foreign-Trade Zone No. 9, annual reports and records.

Source: U.S. Bureau of the Census, "Exports from Manufacturing Establishments: 1987," Manufacturing, Analytical Report Series, AR87-1 (Feb. 1991), pp. 16-19.

Table 695.-- EMPLOYMENT AND PROPERTY, PLANT AND EQUIPMENT OF HAWAII AFFILIATES OF FOREIGN-OWNED COMPANIES: 1977 TO 1989

[Data for Hawaii nonbank affiliates of U.S. business enterprises owned 10 percent or more, directly or indirectly, by a foreign person]

| Subject  | 1977        | 1987   | 1988   | 1989 <u>1</u> /                                      |
|--|-------------|--|--|--|
| Employment by nonbank affiliates  Percent of all nonbank businesses  | 11.4<br>4.0 | 27.3<br>7.2  | 34.8<br>8.8  | 42.7<br>10.1   |
| Employment by country of ultimate beneficial owner Canada Europe Latin America, other W. Hemisphere Africa and Middle East Asia and Pacific Australia Japan U.S. | 11.4        | 27.3<br>.7<br>1.0<br>2.8<br>0<br>22.8<br>1.4<br>20.6 | 34.8<br>.8<br>3.2<br>3.5<br>0<br>27.2<br>1.5<br>24.3<br>.2 | 42.7<br>.9<br>3.8<br>3.7<br>0<br>34.0<br>1.9<br>29.6 |
| Gross property, plant, and equipment (million dollars)   | •••         | 3,474<br>2,848<br>626                                | 4,990<br>3,316<br>1,674                                    | 6,888<br>4,449<br>2,439                              |

<sup>1/</sup> Preliminary.

Z/ The book value of commercial property owned by all U.S. affiliates is a measure of U.S. affiliates' ownership of U.S. real estate. Source: U.S. Department of Commerce, Bureau of Economic Analysis,

Source: U.S. Department of Commerce, Bureau of Economic Analysis, 'U.S. Affiliates of Foreign Companies: Operations in 1989," Survey of Current Business, July 1991, pp. 72-93, and earlier reports.

Table 696.-- FOREIGN OWNERSHIP OF HOTELS, BY ISLANDS: 1991

| Ownership                                  | State<br>total             | Hawaii                  | Maui                    | Molokai,<br>Lanai | 0ahu                       | Kauai                   |
|--|----------------------------|-------------------------|-------------------------|-------------------|----------------------------|-------------------------|
| Total hotel rooms U.S. owned Foreign owned | 50,979<br>17,389<br>33,590 | 6,670<br>2,024<br>4,646 | 8,737<br>1,645<br>7,092 | 578<br>401<br>177 | 30,263<br>11,824<br>18,439 | 4,731<br>1,495<br>3,236 |
| Percent foreign owned Japanese Other       | 65.89<br>61.18<br>4.71     | 69.65<br>69.65          | 81.17<br>74.38<br>6.79  | 30.62<br>30.62    | 60.93<br>58.11<br>2.82     | 68.40<br>48.24<br>20.16 |

Source: Pannell Kerr Forster survey cited in <u>Honolulu Star-Bulletin</u>, November 15, 1991, p. C-1.

Table 697.-- AGRICULTURAL LANDHOLDINGS OF FOREIGN OWNERS: DECEMBER 31, 1989 AND 1990

| Subject  | 1989                             | 1990                             |
|--|----------------------------------|----------------------------------|
| Parcels owned by foreigners  | 15                               | 66<br>11<br>55                   |
| Acres owned by foreigners  | 106,559<br>5.3<br>548<br>106,011 | 173,767<br>8.7<br>478<br>173,289 |
| Value of foreign-owned agricultural land (\$1,000): At time of acquisition | 329,458<br>325,257               | 491,972<br>498,885               |

<sup>1</sup>/ The 1990 percent for Hawaii ranked second among the 50 States, exceeded only by Maine (16.6 percent), and well above the national percentage (1.1).

Source: U.S. Department of Agriculture, Economic Research Service, Foreign Ownership of U.S. Agricultural Land Through December 31, 1989 (Staff Report No. AGES 9026, May 1990), pp. 6, 9, and 13, and Foreign Ownership of U.S. Agricultural Land Through December 31, 1990 (Staff Report No. AGES 9120, April 1991), pp. 6, 9, and 13.

Table 698.-- FOREIGN INVESTMENTS IN HAWAII, TOTAL AND JAPANESE: PRE-1970 TO 1990

[In thousands of dollars. Data are estimates based on incomplete reporting, and do not include undisclosed amounts]

| Year   | Total foreign investments  | Investments<br>by Japanese  |
|--|--|---|
| Total completed Before 1970 1970-1974 1975-1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990  Future investments | 10,961,111<br>35,000<br>438,589<br>522,160<br>124,485<br>108,775<br>299,880<br>141,176<br>221,100<br>140,224<br>1,150,354<br>1,306,025<br>1,864,363<br>2,638,450<br>1,970,530<br>2,608,707 | 9,323,404<br>31,900<br>328,689<br>264,740<br>80,100<br>70,800<br>489,880<br>134,900<br>130,500<br>121,154<br>1,107,854<br>1,107,025<br>1,747,682<br>1,482,850<br>1,924,330<br>2,358,707 |
|  |  |   |

Source: Hawaii State Department of Business, Economic Development & Tourism, Trade and Industry Development Branch, A Listing of Foreign Investments in Hawaii, December 31, 1990 (May 1991), p. 127.

Table 699.-- FOREIGN INVESTMENTS IN HAWAII, BY COUNTRY OF INVESTOR: PRE-1970 TO 1990

[In thousands of dollars. Data are estimates based on incomplete reporting, and do not include undisclosed amounts]

|  | · · · · · · · · · · · · · · · · · · ·  |   |   |  |
|--|--|---|---|--|
| Country of investor  | Pre-1970<br>through<br>1990  | 1988  | 1989  | 1990   |
| All countries  | 10,961,111   | 1,864,363   | 2,638,450   | 1,970,530  |
| Australia Bermuda British West Indies Canada Cayman Islands France Germany Hong Kong Indonesia Italy Japan Korea, Republic of Liechtenstein Netherlands Netherlands Netherlands Antilles New Zealand Singapore Spain Switzerland Taiwan United Arab Emirates | 650,631<br>500<br>575<br>179,570<br>8,500<br>19,900<br>(NA)<br>303,345<br>148,600<br>(NA)<br>9,323,404<br>11,550<br>(NA)<br>19,600<br>17,735<br>58,900<br>(NA)<br>(NA)<br>(NA)<br>(NA) | 68,581<br>(NA)<br>(NA)<br>(NA)<br>-<br>60,000<br>-<br>1,725,382 | 400,000<br>(NA)<br>22,200<br>4,000<br>(NA)<br>66,600<br>(NA)<br>2,137,150<br>-<br>(NA)<br>(NA)<br>(NA)<br>8,500 | 1,970,330  14,250  (NA) (NA) (NA) 11,450  - 1,924,330  (NA) - 20,500  (NA) |
| United Kingdom<br>Vanuatu  | 193,801<br>2,500   | (NA)<br>-   | (NA)<br>-   | (NA)<br>-  |

NA Not available.

Source: Hawaii State Department of Business, Economic Development & Tourism, Trade & Industry Development Branch, A Listing of Foreign Investments in Hawaii, December 31, 1990 (May 1991), p. 127.

Table 700.-- FOREIGN INVESTMENTS IN HAWAII, BY TYPE OF INVESTMENT: PRE-1970 TO 1990

[In thousands of dollars. Data are estimates based on incomplete reporting, and do not include undisclosed amounts]

|                    | Pre-1970 through<br>1990  |   | A  | ll countrie   | s   |
|--------------------|---|---|--|---|---|
| Type of investment | All<br>countries  | Japanese<br>investments   | 1988   | 1989  | 1990  |
| All types          | 10,961,111  | 9,323,404   | 1,864,363  | 2,638,450   | 1,970,530   |
| Agriculture        | 84,100<br>31,801<br>770,950<br>93,550<br>6,229,901<br>497,155<br>2,349,955<br>396,430<br>50,745<br>151,379<br>87,201<br>217,944 | 22,400<br>20,001<br>536,350<br>93,550<br>5,954,220<br>71,405<br>1,913,200<br>396,430<br>47,020<br>141,154<br>7,500<br>120,174 | 21,400<br>382<br>132,550<br>5,250<br>977,131<br>(NA)<br>459,450<br>211,900<br>4,200<br>5,100 | 2,000<br>2,900<br>33,750<br>-<br>1,438,300<br>400,000<br>586,500<br>85,500<br>79,000<br>(NA)<br>5,000 | 27,500<br>3,000<br>79,900<br>-<br>1,395,600<br>41,550<br>331,500<br>55,980<br>1,000<br>(NA)<br>(NA)<br>34,500 |

NA Not available.

Source: Hawaii State Department of Business, Economic Development & Tourism, Trade & Industry Development Branch, A Listing of Foreign Investments in Hawaii, December 31, 1990, pp. 128-129, as corrected.

Table 701.-- JAPANESE INVESTMENT IN HAWAII REAL ESTATE AND BUSINESSES: 1986 TO 1990

| Year and category | Million dollars                                       |
|-------------------|---|
| 1986, total       | 1,200<br>1,400<br>1,870<br>2,786                      |
| 1990, total       | 3,784.1<br>1,523.7<br>884.6<br>43.9<br>919.3<br>412.6 |

Source: Greg Wiles, "Japan investors pull back after record haul in 1990," <u>Sunday Star-Bulletin & Advertiser</u>, November 24, 1991, pp. Al, A8, A9.

Table 702.-- JAPANESE INVESTMENT IN REAL ESTATE, FOR THE UNITED STATES, HAWAII AND HONOLULU METROPOLITAN STATISTICAL AREA: 1990 AND EARLIER YEARS

| United  | Hawaii             |                    | Honolulu MSA |                    |      |
|---|--------------------|--------------------|--------------|--------------------|------|
| Period  | States (mil. dol.) | Amount (mil. dol.) | Rank         | Amount (mil. dol.) | Rank |
| 1988  | 16,544             | 1,825              | 4            | 1,325              | 4    |
|   | 14,775             | 4,437              | 2            | 1,064              | 4    |
|   | 13,059             | 2,860              | 2            | 1,325              | 2    |
| Through 1987 Through 1988 Through 1989 Through 1990 | 26,340             | 7,240              | 1            | 4,420              | 3    |
|   | 42,884             | 9,065              | 2            | 5,745              | (NA) |
|   | 57,658             | 13,502             | 2            | 6,809              | (NA) |
|   | 70,717             | 16,362             | 2            | 8,134              | (NA) |

NA Not available.

Source: Kenneth Leventhal & Company, 1990 Japanese Investment in United States Real Estate (1991), pp. 15, 16, and 23.

Table 703.-- CHARACTERISTICS OF JAPANESE REAL ESTATE INVESTMENTS, FOR THE STATE AND HONOLULU MSA: 1990

|  | ·   | <del></del>   |
|--|---|---|
| Subject  | State<br>total  | Honolulu<br>MSA   |
| Amount (million dollars)  Average transaction (million dollars)  Leading property types (percent):  Hotel/resort  Land  Office  Residential  Leading acquisition methods (percent):  Existing property, full ownership  New construction, full ownership  Leading investor types (percent):  Construction/development  Individual/investment company  Miscellaneous public/private company | 2,860<br>44.0<br>37<br>18<br>(1/)<br>22<br>39<br>35<br>38<br>33<br>15 | 1,325<br>42.7<br>34<br>(1/)<br>16<br>15<br>42<br>41<br>46<br>35<br>11 |

1/ Not among top three types.

Source: Kenneth Leventhal & Company, 1990 Japanese Investment in United States Real Estate (1991), pp. 18, 20, 25, and 27.

#### Section 25

# COMPARATIVE NATIONAL STATISTICS

This section presents statistics for the United States as a whole, the corresponding figures for Hawaii, and the rank of Hawaii among the 50 states. The 12 tables in this section contain 313 series, thought to include the most significant or frequently requested types of data for which national comparisons are available. Virtually all of the major subject-matter areas covered in the first 24 sections of the Data Book are represented. The comparisons include totals, averages, medians, percentages, and rates.

Ranked against other jurisdictions, Hawaii was first in 29 comparisons, second in 13, last in 13, and second last in 16. Hawaii ranked 41st in population, first in life expectancy at birth, third in public school pupil-teacher ratio, 10th in crime rate, 47th in land area, 14th in percent of land owned by the Federal government, 16th in domestic travel expenditures, 48th in votes cast as a percent of voting-age population, sixth in State and local government tax collections per capita, 22nd in defense spending, 26th in public aid recipients relative to population, 18th in female labor force participation rate, 10th in per capita disposable personal income, sixth in family living costs (based on data for 100 metropolitan areas), 37th in per capita bank deposits, 30th in newspaper circulation per capita, 43rd in energy consumption per capita, 50th in highway mileage, first in volume of crop marketings for pineapple, macadamia nuts, and coffee, 18th in value of commercial fish catch, 49th in homeownership rate, 44th in value added by manufacture, second in retail sales per household, ninth in hotel receipts, and second in percent of workers employed by foreign-owned businesses.

High ranks do not necessarily mean favorable scores, nor low ranks unfavorable scores. Hawaii was first (highest) in expectation of life at birth and 49th (second lowest) in crude death rate, for example, but both were highly desirable positions.

When Hawaii shared the same rank with other jurisdictions, the next lower rank (or ranks) was omitted. Although most comparisons were for the 50 areas, some ranked Honolulu against other large metropolitan areas, and a few were based on other groupings. Variations in comparison groups are marked in the footnotes.

Some of the values shown for Hawaii in this section differ from the corresponding figures given elsewhere in the <u>Data Book</u>, because of differences in sources or subsequent revisions in data.

This section was taken from other tables in this edition or their underlying sources, Statistical Abstract of the United States: 1991, pp. xii-xxi, and State and Metropolitan Area Data Book, 1986, table 1. Historical data on state rankings are not readily available for most series.

Table 704.-- POPULATION, VITAL STATISTICS, AND HEALTH

|   | Ibi+od           | Hawaii |      |
|---|------------------|--------|------|
| Subject   | United<br>States | Number | Rank |
| Resident population, 1990 (1,000)                       | 248,710          | 1,108  | 41   |
| Percent change in resident population, 1980-1990        | 9.8              | 14.9   | 13   |
| Resident population per square mile, 1990               | 70.3             | 172.5  | 13   |
| Percent of population in metro areas, 1990              | 77.5             | 75.5   | 19   |
| Males per 100 females, 1990                             | 95.1             | 103.6  | 3    |
| Resident population, percent 65 years and over, 1990    | 12.6             | 11.3   | 37   |
| Median age of population, 1990 (years)                  | 32.9             | 32.6   | 32   |
| White   | 80.3             | 33.4   | 50   |
| Black   | 12.1             | 2.5    | 37   |
| Asian and Pacific Islander                              | 2.9              | 61.8   | 1    |
| Pct. married of persons 15 years old and over, 1980: 1/ |                  |        |      |
| Male  | 60.1             | 55.2   | 50   |
| Female  | 54.8             | 56.8   | 22   |
| Households, 1990 (1,000)                                | 91,947           | 356    | 43   |
| Persons per household, 1990                             | 2.63             | 3.01   | 2    |
| Christian church adherents, percent of population, 1980 | 49.3             | 33.1   | 48   |
| Births per 1,000 population, 1989                       | 16.2             | 17.6   | 7    |
| Percent of births to teenage mothers, 1988              | 12.5             | 9.4    | 38   |
| Percent of births to unmarried women, 1988              | 25.7             | 22.2   | 31   |
| Deaths per 1,000 population, 1989                       | 8.7              | 6.0    | 49   |
| Legal abortions per 1,000 women 15-44, 1988             | 27.0             | 43.0   | 3    |
| Infant mortality per 1,000 births, 1988                 | 10.0             | 7.2    | 49   |
| Diseases of the heart                                   | 311.3            | 167.3  | 49   |
| Malignant neoplasms                                     | 197.3            | 139.3  | 47   |
| Cerebrovascular diseases                                | 61.2             | 39.2   | 49   |
| Accidents and adverse effects                           | 39.5             | 28.7   | 49   |
| Average life expectancy, 1979-1981 (years)              | 73.88            | 77.02  | 1    |
| Marriages per 1,000 population, 1989                    | 9.7              | 16.2   | 2    |
| Divorces per 1,000 population, 1989                     | 4.7              | 5.1    | 16   |
| Average daily hospital room charge, 1990 (dollars)      | 315              | 349    | 11   |
| Hospital beds per 100,000 population, 1988              | 384              | 253    | 49   |
| Hospital occupancy rate, 1988                           | 65.7             | 83.2   | 2    |
| Active physicians per 100,000 civilian population, 1988 | 210              | 225    | 10   |
| Active dentists per 100,000 civilian population, 1989   | 58               | 80     | 1    |

 $<sup>\</sup>underline{1}/$  Ranks based on data for 51 areas, including D.C.

Table 705.-- EDUCATION AND LAW ENFORCEMENT

|  |                  | Hawaii         |      |
|--|------------------|----------------|------|
| Subject  | United<br>States | Number         | Rank |
| Elementary and secondary schools: 1/   |                  |                |      |
| Public, 1988-1989  | 83,165           | 231            | 49   |
| Private, 1980-1981   | 20,764           | 114            | 34   |
| Elementary and secondary school enrollment (1,000): 1/   | 40 100           | 3.65           | 4.0  |
| Public, Fall 1988  | 40,192           | 167            | 42   |
| Private, Fall 1980 Elementary and secondary school teachers (1,000): 1/                          | 4,962            | 37             | 31   |
| Public, Fall 1988  | 2,316            | 8.0            | 45   |
| Private, Fall 1980   | 277.4            | 2.1            | 31   |
| Percent change in public school enrollment, 1980-1990  | -0.5             | 6.1            | 10   |
| Pupil-teacher ratio in public schools, Fall 1988   | 17.4             | 21.1           | 3    |
| Expenditures of State and local governments for education, 1987-88:                              |                  |                |      |
| Per capita (dollars)   | 987              | 804            | 48   |
| Percent of all general expenditures  | 34.6             | 27.1           | 49   |
| Expend. per pupil in daily attendance, 1988-89 (dol.)  | 4,813            | 4,464          | 25   |
| Public school current expenditures, 1989-90 (mil. dol.)  | 180,644          | 704            | 42   |
| Scholastic Aptitude Test scores, 1988-1989:  | ·                |                |      |
| Verbal   | 427              | 406            | 47   |
| Math   | 476              | 482            | 32   |
| Public high school graduates, 1989-90 (1,000)  | 2,398.7          | 10.0           | 41   |
| Public teachers' average annual salary, 1989-90 (dol.).  | 31,200           | 32,047         | 14   |
| Higher education enrollment, Fall 1988 (1,000)<br>Earned degrees conferred, 1987-1988:           | 13,043           | 52             | 40   |
| Bachelor's   | 993,362          | 3 <b>,</b> 724 | 43   |
| Master's   | 298,733          | 969            | 41   |
| Doctorate  | 34,839           | 116            | 38   |
| Graduates as percent of population 25 and older, 1989:   | 76.0             | 02.7           | ,,   |
| High school graduates  | 76.9<br>21.1     | 82.3           | 11   |
| College graduates  | 21.1             | 23.9           | 11   |
| institutions of higher education, 1987-1988 (dollars)  | 35,901           | 35,489         | 17   |
| Crime rate per 100,000 population, 1989  | 5,741            | 6 <b>,</b> 270 | 10   |
| Violent crime rate   | 663              | 270            | 38   |
| Property crime rate  | 5,078            | 6,000          | 6    |
| Federal and State prisoners, sentenced to more than  | 274              | 144            | 39   |
| 1 year, per 100,000 population, 1989<br>Expenditures per capita for criminal justice activities, | 2/4              | 144            | 39   |
| 1988 (dollars)   | 230              | 248            | 10   |
| Population per lawyer, 1985  | 360              | 373            | 38   |
|  |                  |                |      |

 $<sup>\</sup>underline{1}$ / Ranks based on data for 51 areas, including D.C.

Table 706.-- GEOGRAPHY, ENVIRONMENT, LAND USE, AND LAND OWNERSHIP

|   | United         | Hawaii     |          |
|---|----------------|------------|----------|
| Subject   | States         | Number     | Rank     |
|   |                |            |          |
| General coastline (statute miles)   | 12,383         | 750        | 4        |
| Land area, 1980 (1,000 square miles)  | 3,536          | 6.4        | 47       |
| Highest point (feet)  | 20,320         | 13,796     | 6        |
| Approximate mean elevation (feet)   | 2,500          | 3,030      | 10<br>31 |
| Water withdrawn per capita, 1985 (gal. per day), fresh. Hazardous waste sites, 1990 | 1,400<br>1,197 | 1,100<br>7 | 42       |
| Air pollution standard index, 1989 1/   | 100            | 44         | 42       |
| Toxic chemicals released, 1988 (1b. per person) 1/                                  | 20             | 3          | 2        |
| Unsafe drinking water, 1988 (percent of population) 1/.                             | 9              | 3          | 7        |
| Environmental health score, 1991 ("Green Index") 1/                                 | 6,869          | 5,522      | 12       |
| Conditions  | 4,530          | 3,283      | 1        |
| Policies  | 2,296          | 2,239      | 24       |
| Normal daily mean temperature, 1951-1980  | ·              | ·          |          |
| (degrees F.): 2/  |                |            |          |
| January   | 32.5           | 72.6       | 1        |
| July  | 75.2           | 80.1       | 15       |
| Annual average  | 54.5           | 77.0       | 1        |
| Temperature of record, period of record through 1985                                |                |            |          |
| (degrees F.): 2/  | 105            | 94         | 60       |
| Highest temperature   | 105<br>-13     | 53         | 68<br>1  |
| Lowest temperature  | 34.72          | 23.47      | 55       |
| Average number of days with precipitation of .01 inch or                            | 34.72          | 23.47      | 33       |
| more, period of record through 1985 2/  | 113            | 100        | 52       |
| Average percentage of possible sunshine, period of                                  | 220            | 200        | 0_       |
| record through 1985 2/  | 59             | 67         | 9        |
| Average wind speed, period of record through 1985                                   |                |            |          |
| (miles per hour) <u>2</u> /   | 9.4            | 11.6       | 7        |
| Urban and built-up nonfederal land, 1987 (1,000 acres).                             | 77,305         | 157        | 50       |
| Urban land acreage per capita, 1980   | 0.28           | 0.21       | 46       |
| Land owned by federal government, percent of total land                             | 0.20           | 0.21       | 70       |
| area, 1989  | 29.2           | 16.5       | 14       |
|   |                |            |          |

<sup>1/</sup> U.S. score represents median State. The States are ranked from 1 (best) to 50 (worst).

<sup>2/</sup> Data for Honolulu and 68 other U.S. cities.

Table 707.-- RECREATION, TRAVEL, AND ELECTIONS

|   | Their ad         | Hawai  | i        |
|---|------------------|--------|----------|
| Subject   | United<br>States | Number | Rank     |
| Resident expenditures per household for entertainment,                  |                  |        |          |
| annual average, 1988-1989 1/  | 1,502            | 1,534  | 13       |
| Visitor expenditures, 1984 (million dollars)                            | 411,350          | 4,620  | 27       |
| Domestic travel expenditures, 1989 (million dollars)                    | 272,021          | 5,492  | 16       |
| Economic impact of domestic visitors:                                   | -                | -      |          |
| Payroll, 1987 (million dollars) 2/                                      | 60,749           | 818    | 24       |
| Percent of total payroll, 1987 27                                       | 4.9              | 13.1   | 3        |
| Employment, 1989 (1,000)  | 4,919            | 89.7   | 19       |
| Tax revenues, 1987 (million dollars) 2/                                 | 33,645           | 392    | 27       |
| State tourism office budgets, FY 1990-1991 (mil. dol.).                 | 356.0            | 22.3   | 2        |
| National Park System acreage, 1988 (1,000 acres)                        | 79,927           | 270    | 16       |
| State parks and recreation areas, FY 1989:                              |                  | 0.5    |          |
| Acres (1,000)   | 11,061           | 25     | 46       |
| Visitors (million)  | 726.8            | 17.3   | 12       |
| Paid license holders, FY 1987 (1,000):                                  | 70 750           | 8.4    | 50       |
| Fishing   | 30,350           | 12.1   | 50<br>50 |
| Hunting   | 15,819           | 12.1   | 30       |
| Per capita State appropriations for State arts agencies, 1990 (dollars) | 1.13             | 7.83   | 1        |
| agencies, 1990 (dollars)  | 1.13             | 7.03   | -        |
| Number of local governments, 1987                                       | 83,235           | 19     | 50       |
| Popularly elected State and local officials, 1987                       | 497,155          | 160    | 50       |
| Per 10,000 population   | 20.6             | 1.5    | 50       |
| Voting-age population, 1990 (1,000)                                     | 186,382          | 854    | 41       |
| Popular vote cast for President, 1988 (1,000)                           | 91,595           | 354    | 43       |
| Votes cast, percent of voting-age population                            | 50.2             | 43.0   | 48       |
| Percent voting for Republican party                                     | 53.4             | 45.7   | 48       |
| Vote cast for U.S. Representatives, 1988 (1,000)                        | 81,786           | 340    | 43       |
| Percent voting for Democratic party                                     | 53.4             | 65.1   | 8        |
| Percent of civilians 18 and over:                                       |                  |        |          |
| Registered, November 1990   | 62.2             | 57.2   | 43       |
| Voted, November 1990  | 45.0             | 51.6   | 14       |

 $<sup>\</sup>frac{1}{2}$  Rank based on data for 26 MSAs. U.S. value is for median MSA. Rank based on data for 51 areas, including D.C.

Table 708.-- GOVERNMENT FINANCES AND EMPLOYMENT AND NATIONAL DEFENSE [Fiscal year data unless otherwise specified]

|  | Imital            | Hawai          | ii      |
|--|-------------------|----------------|---------|
| Subject  | United<br>States  | Number         | Rank    |
| Federal government:  |                   |                |         |
| Per capita expenditures, 1990 (dollars) Per capita grants to State and local government, | 3,974             | 4,927          | 6       |
| 1989 (dollars)   | 533               | 540            | 22      |
| Civilian employment, 1988  | 2,941             | 27             | 30      |
| State and local government:  | 7 166             | 7 7 7 7        |         |
| Per capita general revenue, 1989 (dollars)   | 3,166             | 3,767          | 7       |
| Per capita taxes, 1989 (dollars)<br>Per capita debt outstanding, 1989 (dollars)          | 1,888             | 2,416<br>3,469 | 6<br>22 |
| Per capita general expenditure, 1989 (dollars)   | 3,216<br>3,071    | 3,340          | 11      |
| Per capita capital outlay, 1989 (dollars)  | 389               | 623            | 4       |
| Employees per 10,000 population, 1990:   | 303               | 023            | 7       |
| State  | 154               | 445            | 1       |
| Local  | 371               | 120            | 50      |
| Average employee earnings, October 1988 (dollars):                                       |                   |                |         |
| State employees  | 2,260             | 2,033          | 28      |
| Local employees  | 2,157             | 2,260          | 15      |
| State government general fund balance, 1989  | ·                 |                |         |
| (mil. dol.)  | 533.9             | 483            | 1       |
| State income tax collections, percent of all   |                   |                |         |
| collections, 1988  | 30.3              | 30.7           | 27      |
| Per capita adjusted gross income, 1987 (dollars)   | 11,390            | 11,710         | 14      |
| Per capita Federal income tax, 1988 (dollars)  | 1,755             | 1,757          | 15      |
| Residential effective property tax rate per \$100,                                       | 1/ 1.53           | 0.64           | 48      |
| 1989 (51 large cities)   | 2/75,000          | 80,000         | 20      |
| Governor's Salary, March 1969 (dollars)  | <u>2</u> / /3,000 | 80,000         | 20      |
| Federal funds for defense, 1989 (billion dollars)  | 212.2             | 2.82           | 22      |
| Department of Defense employment, 1989:  | 21214             | 2.02           | 22      |
| Civilian employees (1,000)   | 964.6             | 20.2           | 16      |
| Military personnel (1,000)   | 1,342.1           | 43.8           | 7       |
| Department of Defense payroll, 1989 (mil. dol.)  | 66,180            | 2,002          | 10      |
| Department of Defense contract awards,   | •                 |                |         |
| 1989 (mil. dol.)   | 119,917           | 579            | 32      |
| Veterans, March 31, 1989 (1,000)   | 27,103            | 100            | 43      |
| Per 1,000 civilian population 18 and over  | 152.2             | 135.3          | 44      |
|  |                   |                |         |

 $<sup>\</sup>frac{1}{2}$  Median city of 51 surveyed.  $\frac{1}{2}$  Median State.

Table 709.-- SOCIAL INSURANCE, HUMAN SERVICES, LABOR FORCE, EMPLOYMENT, AND EARNINGS

|  | 11-:4-1          | Hawai  | i    |
|--|------------------|--------|------|
| Subject  | United<br>States | Number | Rank |
| Payments for Aid to Families with Dependent Children,    |                  |        |      |
| 1989 (million dollars)                                   | 17,466           | 92     | 32   |
| Public aid recipients, percent of population, 1989       | 6.1              | 5.0    | 26   |
| Food stamp recipients, percent of population, 1989       | 7.6              | 6.9    | 21   |
| Social Security recipients, percent of population, 1989  | 15.4             | 13.0   | 43   |
| Medicare payments, 1988 (million dollars)                | 86,318           | 248    | 43   |
| Average weekly unemployment benefits, 1989 (dollars)     | 152              | 177    | 8    |
| Quality of life score, 300 MSAs including Honolulu, 1991 | (NA)             | (NA)   | 27   |
| Civilian labor force, 1990 (1,000)                       | 124,787          | 539    | 41   |
| Civilian employment, 1990 (1,000)                        | 117,914          | 524    | 41   |
| Civilian employment, pct. of civilian noninstitutional   |                  |        |      |
| population 16 years and over, 1990                       | 62.7             | 65.2   | 21   |
| Unemployed persons, 1990 (1,000)                         | 6,874            | 15     | 46   |
| Unemployment rate, pct. of civ. labor force, 1990        | 5.5              | 2.8    | 49   |
| Male unemployment rate, 1990                             | 5.6              | 3.3    | 49   |
| Female unemployment rate, 1990                           | 5.4              | 2.3    | 49   |
| Percent of persons 16 and over in labor force, 1990:     |                  |        |      |
| Male   | 76.1             | 74.5   | 37   |
| Female   | 57.5             | 60.6   | 18   |
| Percent of civilian employment, 1990:                    |                  |        |      |
| Manufacturing  | (NA)             | 5.0    | 47   |
| Services   | (NA)             | 23.5   | 5    |
| Government   | (NA)             | 19.6   | 7    |
| Percent in managerial and professional specialty         |                  |        |      |
| occupations, 1990  | (NA)             | 28.1   | 11   |
| Average annual wage or salary, 1990 (dollars)            | 23,602           | 23,167 | 13   |
| Multiple jobholders, May 1989 (percent)                  | 6.2              | 5.2    | 40   |
| Average hours of work, 1990                              | (NA)             | 39.4   | 27   |
| Union membership in mfg., percent of employment, 1988    | 24.9             | 41.4   | 3    |

NA Not available.

Table 710.-- INCOME, EXPENDITURES, WEALTH, AND PRICES

|  | United        | Hawai         | li       |
|--|---------------|---------------|----------|
| Subject  | States        | Number        | Rank     |
| Gross state product, 1986 (billion dollars) 1/                               | 4,192         | 19.3          | 41       |
| Percent change, 1980-1986 1/   | 57.0          | 47.8          | 32       |
| Manufacturing, percent of total, 1986 1/                                     | 19.7          | 5.2           | 47       |
| Personal income, 1990 (billion dollars)                                      | 4,647         | 22.4          | 39       |
| Disposable   | 3,949         |               | 39       |
| Per capita personal income, 1990 (dollars)                                   | 18,685        |               | 10       |
| Disposable   | 15,878        | 17,229        | 10       |
| Median income (dollars):   | 20 247        | 70 007        | _        |
| Households, 1990   | 29,943        | 38,921        | 3        |
| Families, fiscal 1990  | 35,700        | 39,800        | 8        |
| Unrelated individuals, 1979  | 6,695<br>13.5 | 7,097<br>11.0 | 11<br>32 |
| Percent of persons below poverty level, 1990 Household finances, 1988-89: 2/ | 13.5          | 11.0          | 32       |
| Average annual income before taxes (dollars)                                 | (NA)          | 39,733        | 4        |
| Average annual expenditures (dollars)  | (NA)          | 33,425        | 6        |
| Persons with assets over \$500,000, 1986:                                    | (IVA)         | 33,443        |          |
| Number (1,000)   | 3,286.0       | 11.0          | 42       |
| Per 10,000 population 21 and older   | 197.7         |               | 30       |
| Assets (billion dollars)   | 3,721.1       | 11.3          | 40       |
|  | ·             |               |          |
| Consumer price index for all urban consumers, 1990 annual average: 3/        |               |               |          |
| 1967=100   | 391.4         | 380.3         | 22       |
| 1982-1984=100  | 130.7         | 138.1         | 4        |
| Percent increase, 1989-1990  | 5.4           | 7.3           | 2        |
| Four-person higher-income family budget, 1986 4/                             |               |               |          |
| (percent of U.S. average)  | 100.0         | 114.5         | 6        |
| Retail food prices, 1988-1989 $5$ / (percent of 25-city                      | 7.00.0        |               | -        |
| average)   | 100.0         | 139.0         | 1        |
|  |               |               |          |

NA Not available.

1/ Ranks based on data for 51 areas, including D.C.

3/ Hawaii figure is for Honolulu MSA; ranks based on data for 26 MSAs (1967=100), 27 MSAs (1982-84=100), and 29 MSAs (percent increase).

<sup>2/</sup> Hawaii figure is for Honolulu MSA; ranks based on data for 26 MSAs surveyed.

<sup>4/</sup> Hawaii figure is for Honolulu MSA; rank based on data for 100 MSAs. 5/ Hawaii figure is for Honolulu MSA; rank based on data for 25 MSAs.

Table 711.-- BANKING, INSURANCE, BUSINESS ENTERPRISE, AND COMMUNICATIONS

|   | United  | Hawai  | i        |
|---|---------|--------|----------|
| Subject   | States  | Number | Rank     |
| Commercial bank deposits, Dec. 31, 1989 (bil. dol.)             | 2,223.6 | 12.8   | 37       |
| Savings institutions (SAIF-insured): Deposits, 1989 (bil. dol.) | 937.4   | 4.85   | 34       |
| Percent of mortgage loans foreclosed, 1989                      | 2.50    | 0.96   | 33       |
| Return on assets, 1989 (percent)                                | -1.47   | 0.44   | 6        |
| Shareowners of public corporations, 1985 (1,000)                | 47,040  | 256    | 36       |
| Percent of population   | 20.1    | 24.8   | 6        |
| Life insurance in force per household, 1989 (\$1,000)           | 93.6    | 126.4  | 2        |
| Average auto insurance premium, 1987 (dollars)                  | 487     | 530    | 12       |
| Percent of population in Health Maintenance Orgs., 1990         | 13.2    | 21.9   | 6        |
| Private business establishments, 1987 (1,000)                   | 5,937.1 | 27.3   | 41       |
| With 1 to 4 employees (1,000)                                   | 3,290.3 | 14.5   | 42       |
| With 1,000 employees or more (number)                           | 4,819   | 19     | 40       |
| New business incorporations, 1989 (1,000)                       | 677.4   | 3.8    | 36       |
| Business failures, 1989   | 50,389  | 170    | 49       |
| Major corporate headquarters, 1988                              | (NA)    | 3      | 38       |
| Per million population  | (NA)    | 2.7    | 26       |
| Business climate, 1991 (Corp. for Enterprise                    |         |        |          |
| Development):   | (274.)  |        | _        |
| Economic performance  | (NA)    | A      | 3        |
| Business vitality   | (NA)    | D      | 44       |
| Development capacity  | (NA)    | В      | 14       |
| State policy  | (NA)    | С      | 29       |
| Talanhana aggas lines 1000 (millions)                           | 134     | 0.564  | 41       |
| Telephone access lines, 1989 (millions)                         | 10,936  | 55     | 48       |
| AM  | 4,941   | 28     | 46<br>46 |
| FM  | 5,995   | 27     | 48       |
| Commercial television stations, 1985                            | 887     | 13     | 46<br>28 |
| Percent of TV households with cable, 1990                       | 55.3    | 71.3   | 4        |
| Daily newspapers, 1989  | 1,626   | 71.5   | 48       |
| Circulation per capita, 1989                                    | 0.26    | 0.22   | 30       |
| orrearest per capton, root initialities in the second           | 0.20    | 0.22   | 50       |

NA Not available.

Table 712.-- ENERGY, SCIENCE, AND TRANSPORTATION

|   | United          | Hawai       | i        |
|---|-----------------|-------------|----------|
| Subject   | States          | Number      | Rank     |
| Energy consumption per capita, 1988 (million Btu)<br>Percent of energy consumption (in Btu) from petroleum, | 327             | 243         | 43       |
| 1988  | 42.6            | 98.1        | 1        |
| Energy expenditures per capita, 1988 (dollars)  | 1,652           | 1,443       | 46       |
| Electric energy sales, 1989 (billion kWh)   | 2,634           | 8.0         | 45       |
| (dollars)   | 86.08           | 77.62       | 16       |
| Gas utility sales, 1989 (trillion Btu)  | 10,551          | 3           | 50       |
| 1986 2/ (dollars)   | 58.70           | 129.81      | 1        |
| regular) per gallon, April 1990 (dollars)   | 1.03            | 1.25        | 1        |
| (million dollars)   | 59,484          | 97.4        | 39       |
| 1988 (million dollars)  | 13,243          | 64.3        | 36       |
| Patents issued to U.S. residents, 1990  | 51,526          | 78          | 45       |
| Highway and street mileage, 1988 (1,000)  | 3,871           | 4.1         | 50       |
| Licensed drivers per 1,000 driving-age population, 1989   | 867             | 770         | 48       |
| Motor vehicle registrations per 1,000 population, 1988.   | 572             | 559         | 29       |
| Vehicle-miles of travel per mile of road, 1988  | 523             | 1,805       | 1        |
| Average highway speed, 1989 (m.p.h.)  | 56.7            | 55.7        | 39       |
| 1989  | 18.9            | 13.2        | 44       |
| Aircraft facilities, December 31, 1989  | 17,446          | 53          | 48       |
| Air operations (takeoffs and landings), 1989 (1,000)<br>Honolulu International Airport, 1989: 3/            | 61,345          | 907         | 24       |
| Aircraft operations (1,000)   | (NA)            | 404         | 16       |
| Enplaned passengers (1,000)   | (NA)            | 8,944       | 14       |
| General aviation, active aircraft, 1989 (1,000)   | 219.7           | 0.5         | 49       |
| Active pilots, Dec. 31, 1989 (1,000)  | 675.8<br>10,996 | 3.8<br>14.1 | 43<br>50 |
| Numbered vessers (State-registered), 1990 (1,000)   | 10,990          | 14.1        |          |

NA Not available.

<sup>1/</sup> Hawaii figure is for Honolulu. Rank based on data for 26 MSAs.

2/ Hawaii figure is for Honolulu. Rank based on data for 28 MSAs.

3/ Rank based on data for all FAA-operated airports.

Table 713.-- AGRICULTURE, FORESTS, FISHERIES, AND MINING

|   | United    | Hawai  | i    |
|---|-----------|--------|------|
| Subject   | States    | Number | Rank |
| Farm population, percent of total population, 1980      | 2.48      | 0.47   | 45   |
| Farms, 1990 (1,000)                                     | 2,143     | 5      | 44   |
| Land in farms, 1990 (million acres)                     | 988       | 2      | 40   |
| Acreage per farm, 1990 (acres)                          | 461       | 372    | 18   |
| Farm assets, 1989 (billion dollars)                     | 972.2     | 3.7    | 40   |
| Gross farm income, 1989 (billion dollars)               | 189.2     | 0.6    | 41   |
| Farm value of crops, 1988 (million dollars)             | 72,828    | 393    | 36   |
| Farm debt-to-asset ratio, 1989 (percent)                | 15.0      | 8.6    | 44   |
| Acreage in harvested crop, 1987 (1,000 acres):          |           |        |      |
| Sugarcane, for sugar                                    | 778.3     | 79.5   | 3    |
| Pineapple   | 36.1      | 36.1   | 1    |
| Macadamia nuts  | 15.6      | 15.6   | 1    |
| Taro  | 0.4       | 0.4    | 1    |
| Coffee, parchment                                       | 2.0       | 2.0    | 1    |
| Value of farm marketings, 1989 (million dollars)        | 159,173   | 587    | 41   |
| Crops   | 75,449    | 495    | 35   |
| Livestock and products                                  | 83,724    | 92     | 47   |
| Volume of crop marketings, 1987:                        | -         |        |      |
| Sugarcane, for sugar (1,000 tons)                       | 28,026    | 8,014  | 2    |
| Pineapple, harvested (tons)                             | 692       | 692    | 1    |
| Macadamia nuts (1,000 pounds)                           | 42,700    | 42,700 | 1    |
| Taro (1,000 pounds)                                     | 6,300     | 6,300  | 1    |
| Coffee, parchment (1,000 pounds)                        | 1,800     | 1,800  | 1    |
|   | , , , , , | _,     |      |
| Forest land, 1987 (1,000 acres)                         | 731,377   | 1,748  | 43   |
| Commercial timberland, 1987 (1,000 acres)               | 483,319   | 700    | 45   |
| Commercial fish catch, 1987 (million pounds)            | 6,896     | 16     | 18   |
| Value of fish catch, 1987 (million dollars)             | 3,115     | 29     | 18   |
| Mineral (nonfuel) production value, 1988 (million dol.) | 30,015    | 75     | 46   |
| Value added in mining, 1987 (million dollars)           | 111,121   | 23.5   | 47   |
|   | ,         |        |      |

Table 714.-- CONSTRUCTION, HOUSING, AND MANUFACTURES

|  | United  | Hawai  | i    |
|--|---------|--------|------|
| Subject  | States  | Number | Rank |
| Construction industry, 1987:                           |         |        |      |
| Number of establishments (1,000)                       | 1,951.5 | 5.8    | 47   |
| Employees (1,000)                                      | 5,054.4 | 21.7   | 40   |
| Value of business done (billion dollars)               | 605.0   | 3.2    | 36   |
| Payroll per employee (\$1,000)                         | 22.0    | 28.0   | 2    |
| Value of construction work per worker (\$1,000)        | 125.3   | 171.9  | 1    |
| Private housing units authorized, 1989:                |         |        |      |
| Number (1,000)   | 1,338.4 | 9.6    | 29   |
| Valuation (billion dollars)                            | 100.7   | 0.89   | 27   |
| Valuation of all construction auth., 1989 (bil. dol.)  | 193.8   | 1.78   | 27   |
| Existing homes sold, 1989:                             |         |        | }    |
| Number   | 3,440   | 12.1   | 46   |
| Median sales price 1/ (\$1,000)                        | 93.1    | 267.6  | 1    |
| Housing units, 1990 (1,000)                            | 102,264 | 389.8  | 43   |
| In 1-unit structures (percent)                         | 64.3    | 60.8   | 42   |
| In structures with 10 or more units (percent)          | 12.9    | 25.7   | 2    |
| Homeowner vacancy rate (percent)                       | 2.1     | 0.8    | 50   |
| Rental vacancy rate (percent)                          | 8.5     |        | 47   |
| Occupied housing units, 1990 (1,000)                   | 91,947  | 356.3  | 43   |
| With 1.01 or more persons per room (percent)           | 4.9     | 15.9   | 1    |
| Owner occupied (percent)                               | 64.2    | 53.9   | 49   |
| Median value of owner occupied 1-family houses,        | 70.1    | 245 7  | ,    |
| 1990 (\$1,000)   | 79.1    | 245.3  | 1    |
| Median rent of renter occupied units, 1990 (dollars) . | 374     | 599    | 1    |
| Manufacturing establishments, 1987 (1,000)             | 368.9   | 1.02   | 44   |
| Manufacturing employees, 1989 (1,000)                  | 19,041  | 20.5   | 47   |
| Production workers                                     | 12,342  | 13.0   | 47   |
| Value added by manufacture, 1989 (billion dollars)     | 1,308   | 1.61   | 44   |
| Value of mfg. shipments, 1989 (billion dollars)        | 2,793   | 3.81   | 46   |
| Average hourly earnings of production workers,         | 2,733   | 0.01   | '`   |
| 1989 (dollars)   | 10.49   | 10.37  | 28   |
|  |         |        |      |

 $<sup>\</sup>underline{1}$ / Data for 95 large MSAs, including Honolulu.

Table 715.-- DOMESTIC TRADE, SERVICES, AND FOREIGN AND INTERSTATE COMMERCE

| Sales per household (dollars)       18,534       26,8         Retail establishments, 1987 1/ (1,000)       1,503.6         Retail sales, 1987 1/ (bil. dol.):       301.8       1         Food stores       301.8       1         General merchandise stores       181.1       1         Automotive dealers       333.4       1         Eating and drinking places       148.8       1         Apparel and accessories stores       77.4       0         Shopping centers, 1989       34,683       1         Gross leasable area (mil. sq. ft.)       4,214       1         Retail sales (bil. dol.)       682.8       2         Wholesale sales, 1987 (bil. dol.)       2,523.7       3         Service establishments, 1987 1/ (1,000)       6,254.5       3  | .74<br>971<br>7.2<br>.57<br>.25<br>.22<br>.35<br>.58<br>141<br>4.0<br>.42 | Rank  38 2 40 40 35 42 31 31 41 44 43 43 43                   |
|---|---|---|
| Sales per household (dollars)       18,534       26,5         Retail establishments, 1987 1/ (1,000)       1,503.6         Retail sales, 1987 1/ (bil. dol.):       301.8       1         Food stores       301.8       1         General merchandise stores       181.1       1         Automotive dealers       333.4       1         Eating and drinking places       148.8       1         Apparel and accessories stores       77.4       0         Shopping centers, 1989       34,683       34,683         Gross leasable area (mil. sq. ft.)       4,214       14         Retail sales (bil. dol.)       682.8       2         Wholesale sales, 1987 (bil. dol.)       2,523.7       5         Service establishments, 1987 1/ (1,000)       6,254.5       36         Service receipts, 1987 1/ (billion dollars)       868.3       4 | 971<br>7.2<br>.57<br>.25<br>.22<br>.35<br>.58<br>141<br>4.0<br>.42<br>5.4 | 2<br>40<br>40<br>35<br>42<br>31<br>31<br>41<br>44<br>43<br>43 |
| Retail establishments, 1987 1/ (1,000)       1,503.6         Retail sales, 1987 1/ (bil. dol.):       301.8         Food stores       301.8         General merchandise stores       181.1         Automotive dealers       333.4         Eating and drinking places       148.8         Apparel and accessories stores       77.4         Shopping centers, 1989       34,683         Gross leasable area (mil. sq. ft.)       4,214         Retail sales (bil. dol.)       682.8         Wholesale sales, 1987 (bil. dol.)       2,523.7         Service establishments, 1987 1/ (1,000)       6,254.5         Service receipts, 1987 1/ (billion dollars)       868.3  | 7.2<br>.57<br>.25<br>.22<br>.35<br>.58<br>141<br>4.0<br>.42               | 40<br>40<br>35<br>42<br>31<br>31<br>41<br>44<br>43<br>43      |
| Retail sales, 1987 1/ (bil. dol.):       301.8         Food stores       301.8         General merchandise stores       181.1         Automotive dealers       333.4         Eating and drinking places       148.8         Apparel and accessories stores       77.4         Shopping centers, 1989       34,683         Gross leasable area (mil. sq. ft.)       4,214         Retail sales (bil. dol.)       682.8         Wholesale sales, 1987 (bil. dol.)       2,523.7         Service establishments, 1987 1/ (1,000)       6,254.5         Service receipts, 1987 1/ (billion dollars)       868.3   | .57<br>.25<br>.22<br>.35<br>.58<br>141<br>4.0<br>.42                      | 40<br>35<br>42<br>31<br>31<br>41<br>44<br>43<br>43            |
| Food stores   | .25<br>.22<br>.35<br>.58<br>141<br>4.0<br>.42                             | 35<br>42<br>31<br>31<br>41<br>44<br>43<br>43                  |
| General merchandise stores       181.1       1         Automotive dealers       333.4       1         Eating and drinking places       148.8       1         Apparel and accessories stores       77.4       0         Shopping centers, 1989       34,683       34,683         Gross leasable area (mil. sq. ft.)       4,214       14         Retail sales (bil. dol.)       682.8       2         Wholesale sales, 1987 (bil. dol.)       2,523.7       5         Service establishments, 1987 1/ (1,000)       6,254.5       36         Service receipts, 1987 1/ (billion dollars)       868.3       4   | .25<br>.22<br>.35<br>.58<br>141<br>4.0<br>.42                             | 35<br>42<br>31<br>31<br>41<br>44<br>43<br>43                  |
| Automotive dealers  | .22<br>.35<br>.58<br>141<br>4.0<br>.42<br>5.4                             | 42<br>31<br>31<br>41<br>44<br>43<br>43                        |
| Eating and drinking places       148.8       1         Apparel and accessories stores       77.4       0         Shopping centers, 1989       34,683       1         Gross leasable area (mil. sq. ft.)       4,214       14         Retail sales (bil. dol.)       682.8       2         Wholesale sales, 1987 (bil. dol.)       2,523.7       3         Service establishments, 1987 1/ (1,000)       6,254.5       3         Service receipts, 1987 1/ (billion dollars)       868.3       4   | .35<br>.58<br>141<br>4.0<br>.42<br>5.4                                    | 31<br>31<br>41<br>44<br>43<br>43                              |
| Apparel and accessories stores       77.4         Shopping centers, 1989       34,683         Gross leasable area (mil. sq. ft.)       4,214         Retail sales (bil. dol.)       682.8         Wholesale sales, 1987 (bil. dol.)       2,523.7         Service establishments, 1987 1/ (1,000)       6,254.5         Service receipts, 1987 1/ (billion dollars)       868.3   | .58<br>141<br>4.0<br>.42<br>5.4   | 31<br>41<br>44<br>43<br>43                                    |
| Shopping centers, 1989       34,683         Gross leasable area (mil. sq. ft.)       4,214         Retail sales (bil. dol.)       682.8         Wholesale sales, 1987 (bil. dol.)       2,523.7         Service establishments, 1987 1/ (1,000)       6,254.5         Service receipts, 1987 1/ (billion dollars)       868.3   | 141<br>4.0<br>.42<br>5.4  | 41<br>44<br>43<br>43  |
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| Retail sales (bil. dol.)       682.8       2         Wholesale sales, 1987 (bil. dol.)       2,523.7       3         Service establishments, 1987 1/ (billion dollars)       6,254.5       36         Service receipts, 1987 1/ (billion dollars)       868.3       4   | .42<br>5.4  | 43<br>43  |
| Wholesale sales, 1987 (bil. dol.)   | 5.4   | 43  |
| Service establishments, 1987 1/ (1,000)   |   |   |
| Service receipts, 1987 1/ (billion dollars) 868.3   | 1 1   | 4.1   |
| Hotel and motel receipts, 1987 1/ (mil. dol.) 50.372 1.5  | 1.9   | 33  |
| HOUGH AND MOUGH ICCCIDUS. 190/ 1/ (MILLE DOI: / a.e.e.e.e. / DO:D/A   Le.   |   | 33<br>9   |
|   | 7.2   | 22  |
| Hotel occupancy rate (percent), 1990 2/   | 4.0   | 1   |
| Hotel occupancy rate (percent), 1990 2/   |   | 3   |
| Motion picture industry 1987: 1/  | , 66  | 3   |
| Production, distribution, and service ests  | 25  | 35  |
|   | 0.2   | 33  |
| Theaters  | 35  | 45  |
| 7,770   | 33  | 73  |
|   | 179   | 50  |
| Foreign direct investment (nonbank affiliates), 1989:   | 1   |   |
|   | .89   | 20  |
|   | 2.7   | 27  |
| 1   | 0.1   | 2   |
|   | 9.6   | 5   |
| Export-related manufactures shipment value, 1987  |   | <u>.</u> .  |
|   | 0.3   | 47  |
|   | 9.2   | 49  |
| Foreign-owned agricultural land as percent of all   |   | _   |
| private agricultural land, 1989 1.0   | 5.3   | 2   |

For establishments with payroll and subject to Federal income tax. Rank based on data for 35 reported States or combinations of States.

## **BIBLIOGRAPHY**

This volume is the 25th of its type published by the Hawaii State Department of Business, Economic Development & Tourism (DBED) and its predecessor agencies. The first was Statistical Abstract of Hawaii, 1962, issued by the Department of Planning and Research in 1962. After a four-year hiatus, updated versions titled The State of Hawaii Data Book were published by the Department of Planning and Economic Development in 1967, 1968, and annually beginning in 1970. The 1987 edition was the first one issued by DBED. All of the volumes issued before 1991 are now out of print, but copies can be consulted in the DBED Library, Hawaii State Library, University of Hawaii and community college libraries, and other collections throughout the State.

Additional information regarding specific statistical sources can be found in the introductory statements to each section of the <u>Data Book</u>, in footnotes and source references to the various tables, and in the underlying reports.

Although most of the series in the <u>Data Book</u> are shown only for recent years, many earlier figures appear in <u>Historical Statistics of Hawaii</u>, by Robert C. Schmitt. This book, published by the <u>University Press</u> of Hawaii in 1977, contains 711 pages of narrative and tables on the development of statistics in Hawaii since the 18th century.

Privately published works of general statistical reference include Hawaii Facts and Figures 1989, sold by the Chamber of Commerce of Hawaii, and All About Business in Hawaii 1991, published by Crossroads Press, Inc.

Statistical abstracts have also been published recently for the Big Island, Molokai, and Kauai. In December 1990, the Hawaii County Department of Research & Development issued 1990 County of Hawaii Data Book. Also in 1990, the Cooperative Extension Service, College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa produced The Moloka'i Data Book: A Statistical Abstract. Vol. 7, No. 1 of Kauai Business & Real Estate, a bi-monthly publication of H & S Publishing, was titled 1991 Kauai Data Book.

Persons interested in data for other States or the nation as a whole should consult the Statistical Abstract of the United States and its companion volumes, the State and Metropolitan Area Data Book and County and City Data Book. The Abstract is an annual publication of the U.S. Bureau of the Census, initiated in 1878. The current edition is the 111th, dated 1991; copies are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402. The State and Metropolitan Area Data Book, 1991 and County and City Data Book, 1988 are sold by the same agency.

Table A.-- PRINTING HISTORY OF THE STATE OF HAWAII DATA BOOK: 1962 TO 1991

|                   | Number | Number | Price ( | dollars)            | Printing  | Number of |
|-------------------|--------|--------|---------|---------------------|-----------|-----------|
|                   | of     | of     |         | Outside             | costs     | copies    |
| Edition           | pages  | tables | Hawaii  | State               | (dollars) | printed   |
| Larcion           | pages  | cabios | IMMALL  |                     | (4011415) | - princed |
| 1962 1/           | 128    | 243    | 1.00    | 1.00                | (NA)      | (NIA)     |
| 1065              | 66     | 95     | (NA)    | (NA)                | (NA)      | (NA)      |
|                   |        |        | , ,     | , ,                 | 1,969.45  | 3,000     |
| 1968              | 69     | 99     | 1.00    | 1.00                | 2,969.20  | 3,000     |
| 1970              | 136    | 135    | 1.00    | 1.00                | 2,470.92  | 2,030     |
| 1971              | 159    | 152    | 2.00    | 2.00                | 4,149.60  | 2,000     |
| $1972 \ 2/ \dots$ | 227    | 210    | 4.00    | 5.00                | 6,245.00  | 3,000     |
| 1973              | 290    | 262    | 4.00    | 5.00                | 6,309.00  | 1,500     |
| 1974              | 306    | 292    | 4.00    | 5.00                | 9,330.00  | 2,000     |
| 1975              | 302    | 309    | 4.00    | 5.00                | 10,222.95 | 2,000     |
|                   |        |        |         |                     |           |           |
| 1976              | 312    | 335    | 4.00    | 5.00                | 9,901.13  | 2,000     |
| 1977              | 339    | 374    | 4.00    | 5.00                | 11,990.00 | 2,000     |
| 1978              | 379    | 425    | 4.00    | 5.00                | 8,900.00  | 2,000     |
| 1979              | 447    | 407    | 4.00    | 5.00                | 10,744.00 | 2,500     |
| 1980              | 545    | 496    | 5.00    | 10.00               | 12,335.00 | 2,500     |
| 1981              | 603    | 563    | 5.00    | 10.00               | 14,910.00 | 3,000     |
| 1982              | 596    | 566    | 5.00    | 10.00               | 15,633.00 | 3,000     |
| 1983              | 663    | 622    | 5.00    | 10.00               | 15,875.00 | 2,500     |
|                   |        |        |         |                     | ·         | •         |
| 1984              | 762    | 724    | 5.00    | 15.00               | 32,003.00 | 3,000     |
| 1985              | 662    | 680    | 5.00    | 15.00               | 19,995.00 | 3,000     |
| 1986              | 705    | 721    | 5.00    | 15.00               | 19,980.00 | 3,000     |
| 1987              | 722    | 746    | 5.00    | 15.00               | 21,981.00 | 3,000     |
| 1988              | 694    | 737    | 5.00    | 15.00               | 21,700.00 | 3,000     |
| 1989              | 651    | 704    | 8.00    | 18.00 3/            | 21,620.00 | 3,000     |
| 1990              | 667    | 732    | 8.00    | $18.00 \frac{3}{3}$ | 22,500.00 | 3,000     |
| 1991              | 657    | 717    | 8.00    | $18.00 \frac{3}{3}$ | 25,312.00 | 3,000     |
| 1001              | 00,    | , 1,   | 0.00    | 20.00 2/            | 20,012.00 | 3,000     |

NA Not available.

<sup>1/</sup> The 1962 edition was titled Statistical Abstract of Hawaii, 1962. In addition, a 41-page, 57-table supplement, Historical Statistics of Hawaii, 1778-1962, was published and distributed without extra charge to persons receiving the regular edition.

<sup>2/</sup> A 19-page supplement, State of Hawaii Census Tract Maps and Directory of Hawaii Map Sources, was included with each copy of the regular edition, and was not sold separately.

<sup>3/</sup> U.S. Mainland price; \$35.00 for foreign countries. Source: DBED records.

## ON-LINE AVAILABILITY OF DATA BOOK TABLES TO PUBLIC

Early in 1988, the Hawaii State Department of Business and Economic Development initiated a pilot program to make <u>Data Book</u> tables and selected other statistical series available to anyone with a personal computer and a modem.

The program incorporates the full text of <u>The State of Hawaii Data Book</u> (including available updates to the current edition) and the data and analyses in the department's most recent <u>Quarterly Statistical & Economic Report</u>. Other publications and data series may be added if there is sufficient demand.

The DBED electronic bulletin board is available free 24 hours a day, seven days a week.

Until now, getting updated <u>Data Book</u> tables was a time-consuming process. Now the almost daily updates are available on-demand and in a format that is more convenient for people who use many of the popular electronic spreadsheets.

The system is easy to use. It is menu-driven and contains numerous "prompts" which guide the user to the data sets. It also has electronic mail features that permit users to leave messages on the system. User comments and suggestions are welcome.

The bulletin board is maintained on an IBM System 2 microcomputer which is located in the Department's Information Resources Management Division. The system uses the PC Board version 14.5a/U software. The bulletin board can be accessed at either 300, 1200, 2400 or 9600 baud. Anyone wishing to access the system can call (808) 586-2496. Neighbor Island residents can call toll free 1-800-421-3233. A users guide is available from the Department's Library (586-2424) or can be retrieved from the system.

For further information about available data or system specifications, users should call the Information Resources Management Division at (808) 586-2486.

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