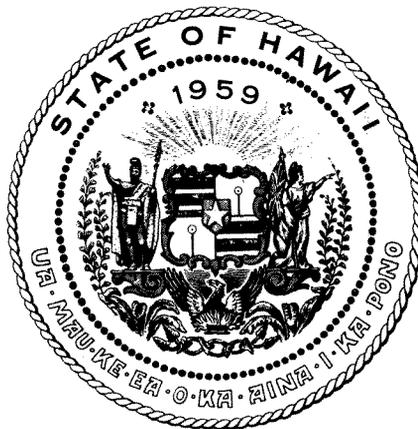


**STATE OF HAWAII CENSUS TRACT MAPS
AND
DIRECTORY OF HAWAII MAP SOURCES**

A SUPPLEMENT TO



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**DEPARTMENT OF PLANNING AND
ECONOMIC DEVELOPMENT**
P. O. Box 2359
Honolulu, Hawaii 96804

THE STATE OF HAWAII
DATA BOOK

1972

A STATISTICAL ABSTRACT

Ref
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1972
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H 356
1972
Suppl.
1982

**STATE OF HAWAII CENSUS TRACT MAPS
AND
DIRECTORY OF HAWAII MAP SOURCES**

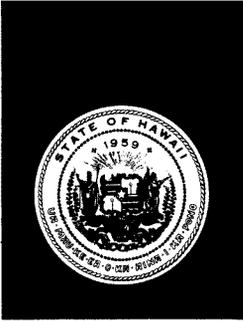
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Hawaii
DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT
HONOLULU, HAWAII
1972



**STATE OF
HAWAII**

DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

P. O. BOX 2359 • HONOLULU, HAWAII 96804

JOHN A. BURNS
Governor

SHELLEY M. MARK
Director

EDWARD J. GREANEY, JR.
Deputy Director

July 1972

This report is a *Supplement* to the *1972 State of Hawaii Data Book: A Statistical Abstract*. It contains two sections:

1. State of Hawaii Census Tract Maps
2. Directory of Hawaii Map Sources

The *Supplement* was prepared through the cooperative efforts of the Research and Economic Analysis Division, Hawaii Urban Planning Information Center, Hawaii State Census Tract Committee and the Office of Information and Public Services.

Additional copies of the *Data Book* and *Supplement* (not sold separately) may be obtained in the Islands for \$4.00 at the DPED reception desk, 7th floor, Kamamalu Building, 250 South King St., Honolulu, or elsewhere by air mail, by sending \$5.00 per copy to the Office of Information and Public Services, DPED, P.O. Box 2359, Honolulu, Hawaii 96804

A handwritten signature in cursive script that reads "Shelley M. Mark".

Shelley M. Mark

STATE OF HAWAII CENSUS TRACT MAPS

Types of Statistical Areas in Hawaii

This collection of census tract and census county division maps has been reproduced by the State of Hawaii Department of Planning and Economic Development for the convenience of the many users of small-area statistics.

Statistics from the 1970 Censuses of Population and Housing are published for seven types of areas: counties, islands, districts, census county divisions, census tracts, places, and blocks. Unpublished data, moreover, are available for enumeration districts. These maps show the boundaries of the first five categories of statistical areas listed above.

Hawaii consists of eight major islands and 124 offshore or outlying islets, grouped into four counties and one quasi county. The City and County of Honolulu consists of Oahu and all of the Northwestern Hawaiian Islands, from Nihoa to Kure Atoll, except Midway. The County of Hawaii is coterminous with the island of that name. The County of Maui includes Maui, Lanai, and Kahoolawe, plus all of Molokai except Kalaupapa Peninsula. The latter area, officially known as Kalawao County, is actually a leprosy settlement under the jurisdiction of the Hawaii State Department of Health, although it is often grouped for statistical purposes with Maui County. The remaining county, Kauai, includes Kauai, Niihau, and two smaller islands.

The counties are in turn divided into twenty-eight districts, sometimes referred to as "judicial districts" (although this terminology is no longer strictly correct). These subdivisions were initially delineated by the ancient Hawaiians, and with minor modifications have remained in official use until today. They provided basic statistical units for every census from the earliest, conducted in 1831-1832, to 1950. Although not shown in either the 1960 or 1970 census bulletins, they can be closely approximated by combining census county divisions.

The twenty-eight districts are made up of forty-four census county divisions ("CCD's"), initially defined by the Bureau of the Census in cooperation with the Hawaii State Census Tract Committee shortly before the 1960 census. On Oahu, the seven CCD's are coterminous with the seven districts; elsewhere in the State, the CCD's generally represent sub-areas of the districts. The CCD's, like districts, bear names rather than numbers. Statistics for census county divisions have been reported in two of the 1970 decennial census bulletins released to date, Final Reports PC(1)-A13 and PC(1)-B13.

The forty-four CCD's have in turn been divided into 211 census tracts, 161 of them in the City and County of Honolulu and 50 in other counties of the State. (This total excludes thirteen census tracts made up of persons enumerated aboard ships; crews of vessels berthed off Ford Island in tract 81, for example, have been assigned to tract 81.99. In 1960, such tracts bore a "CV" suffix.) Census tracts were first delineated for Hawaii prior to the 1940 decennial census. Since that time they have been altered in many ways: boundaries have been shifted, tracts have been split and split again, a few have been consolidated, and the entire system has been renumbered. In spite of these changes, sufficient comparability has been maintained since their inception to enable users to trace small-area trends in considerable detail back to 1940. The current definition in use by the Bureau of the Census is moreover much like that developed many years ago:

Census tracts are small areas into which large cities and adjacent areas have been divided for statistical purposes. Tract boundaries were established cooperatively by a local committee and the Bureau of the Census. Tracts were generally designed to be relatively uniform with respect to population characteristics, economic status, and living conditions. The average tract has about 4,000 residents. Tract boundaries are established with the intention of being maintained over a long time so that comparisons may be made from census to census.

Besides the foregoing areas, all shown in this collection of maps, census data are compiled for places, enumeration districts, and blocks. The Hawaii State Department of Planning and Economic Development, in cooperation with

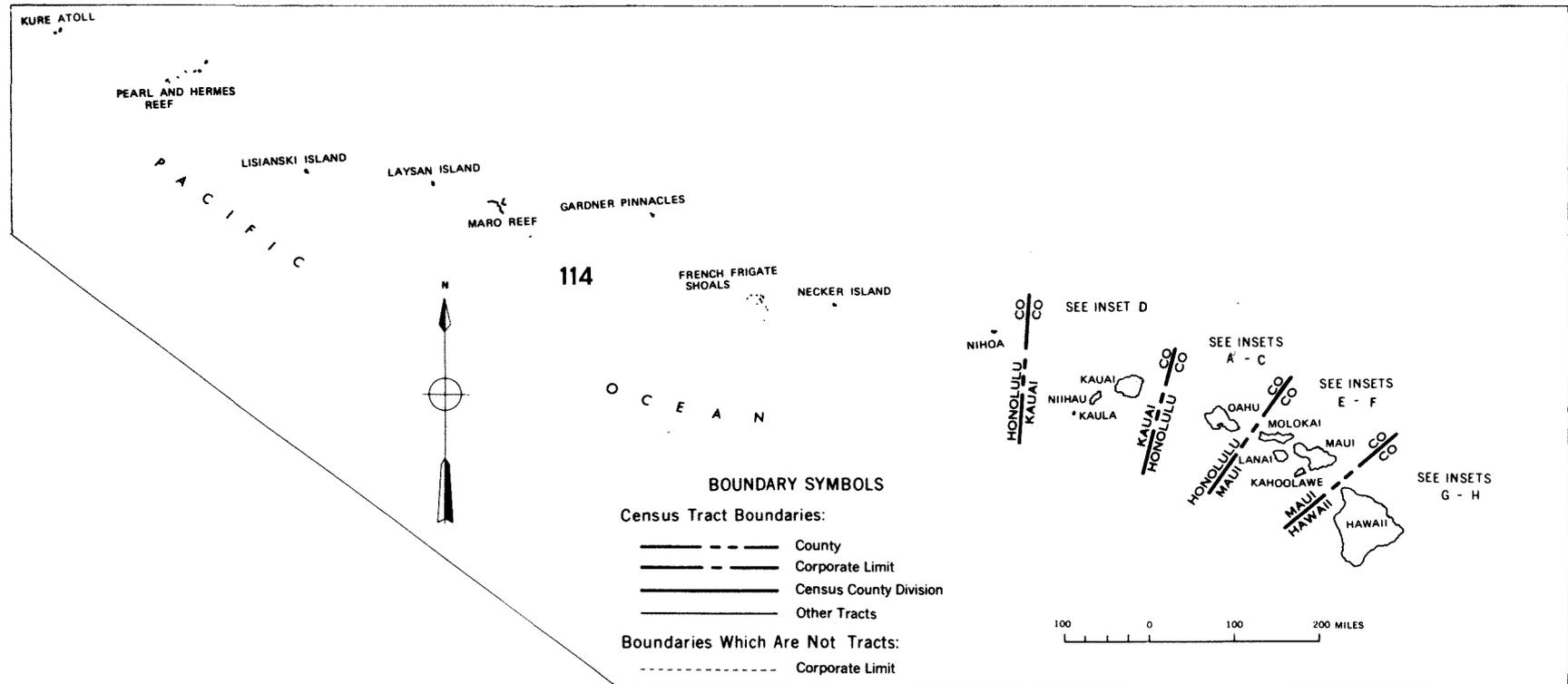
the Bureau of the Census, has defined 93 cities, towns and villages throughout the State for statistical purposes. These 93 places were delineated under provisions of legislation enacted by the State Legislature in 1963, and are described in DPED Report SB-A7, "Statistical Boundaries of Cities, Towns and Villages as Approved through December 31, 1971." Enumeration districts are subdivisions of census tracts which often provide the basis for unpublished special tabulations of census data. Block statistics for Oahu and three places on the Neighbor Islands (Hilo, Lahaina, and Wailuku) have appeared in two bulletins of the 1970 Census of Housing, *Block Statistics* for the Honolulu Urbanized Area (Final Report HC(3)-62) and for Selected Areas in Hawaii (Final Report HC(3)-63). These reports also contain detailed maps which show all eight types of statistical areas outlined above.

Further information on these matters appears in "Census Coverage in Hawaii, 1500-1970," a paper by Robert C. Schmitt presented to the Census Data Users Conference, Honolulu, on November 19, 1970. Although no longer available for distribution, copies of this paper may be seen in various libraries.

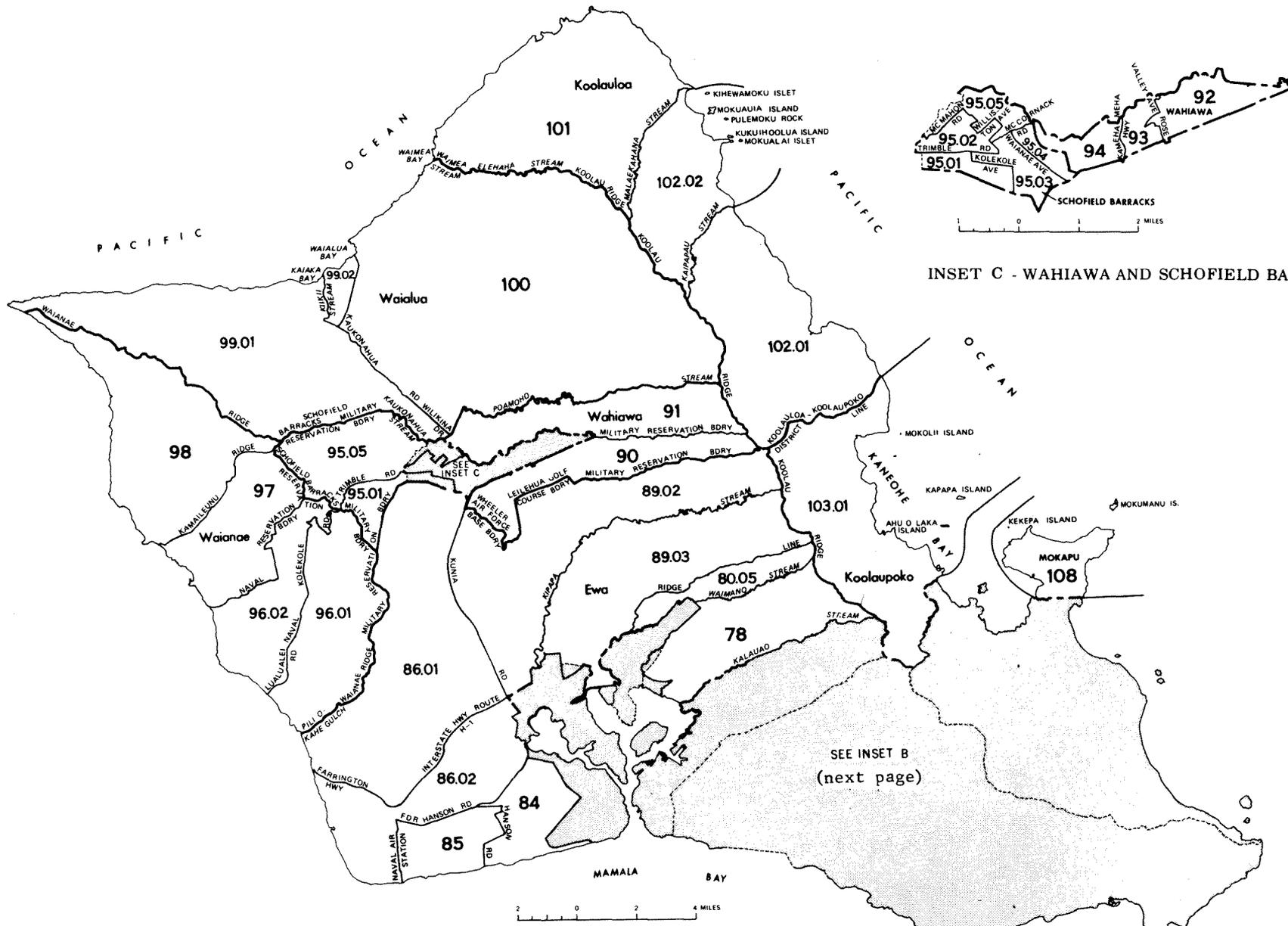
The maps reproduced in the present compilation were taken from a set published as part of the *U.S. Census of Population and Housing: 1970, Census Tracts, Honolulu, Hawaii, SMSA*, Final Report PHC(1)-88. More detailed maps are included with the block statistics reports cited earlier. Census tract statistics appear in the tract bulletin and also in the two block statistics reports.

**CROSS INDEX OF COUNTIES, DISTRICTS, CENSUS COUNTY DIVISIONS AND
CENSUS TRACTS—1970 CENSUS**

| COUNTY | DISTRICT | CENSUS COUNTY DIVISION | CENSUS TRACT |
|---------------|-----------------|-----------------------------------|---------------------|
| Honolulu | Ewa | Ewa | 73-89.03 |
| | Honolulu | Honolulu | 1.01-72, 114 |
| | Koolauloa | Koolauloa | 101-102.02 |
| | Koolaupoko | Koolaupoko | 103.01-113 |
| | Wahiawa | Wahiawa | 90-95.05 |
| | Waialua | Waialua | 99.01-100 |
| | Waianae | Waianae | 96.01-98 |
| Hawaii | Hamakua | Honokaa-Kukuihaele | 219 |
| | | Paauhau-Paauilo | 220 |
| | Ka'u | Ka'u | 212 |
| | North Hilo | North Hilo | 221 |
| | North Kohala | North Kohala | 218 |
| | North Kona | North Kona | 215-216 |
| | Puna | Keaau-Mountain View | 210 |
| | | Pahoa-Kalapana | 211 |
| | South Hilo | Hilo | 202-209 |
| | | Papaikou-Wailea | 201 |
| | South Kohala | South Kohala | 217 |
| South Kona | South Kona | 213-214 | |
| Maui | Hana | Hana | 301 |
| | | Kalawao | 319 |
| | Lahaina | Lahaina | 314-315 |
| | Lanai | Lanai | 316 |
| | Makawao | Haiku-Pauwela | 302 |
| | | Kula | 303 |
| | | Makawao-Paia | 304-305 |
| | Molokai | East Molokai | 317 |
| | | West Molokai | 318 |
| | Wailuku | Kahului | 311-312 |
| | | Kihei | 307 |
| | | Puunene | 313 |
| | | Speckelsville | 306 |
| | | Waihee-Waikapu | 308 |
| Wailuku | | 309-310 | |
| Kauai | Hanalei | Hanalei | 401 |
| | | Kapaa | 403 |
| | Koloa | Waialua-Anahola | 402 |
| | | Eleele-Kalaheo | 407 |
| | Lihue | Koloa-Poipu | 406 |
| | | Lihue | 405 |
| | Waimea | Puhi-Hanamaulu | 404 |
| | | Kaumakani-Hanapepe | 408 |
| | | Kekaha-Waimea | 409 |
| | | Niihau | 410 |



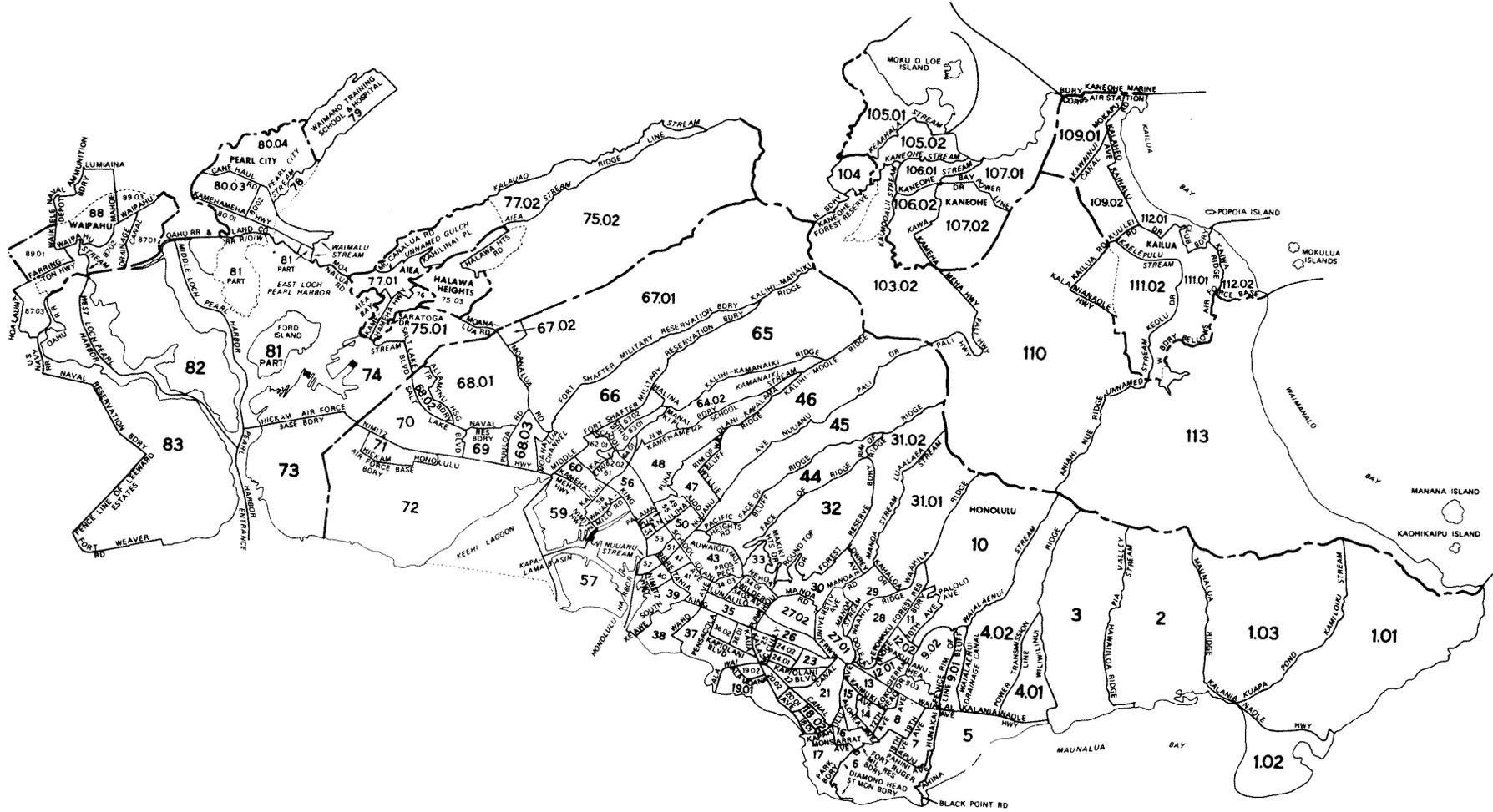
The Northwestern Hawaiian Islands, from Nihoa to Kure Atoll (exclusive of the Midway Islands, a U. S. possession), are legally part of the City and County of Honolulu and Honolulu Census County Division, and are designated tract 114.



U.S. DEPARTMENT OF COMMERCE
 BUREAU OF THE CENSUS
 1970

INSET A - HONOLULU COUNTY (PART)

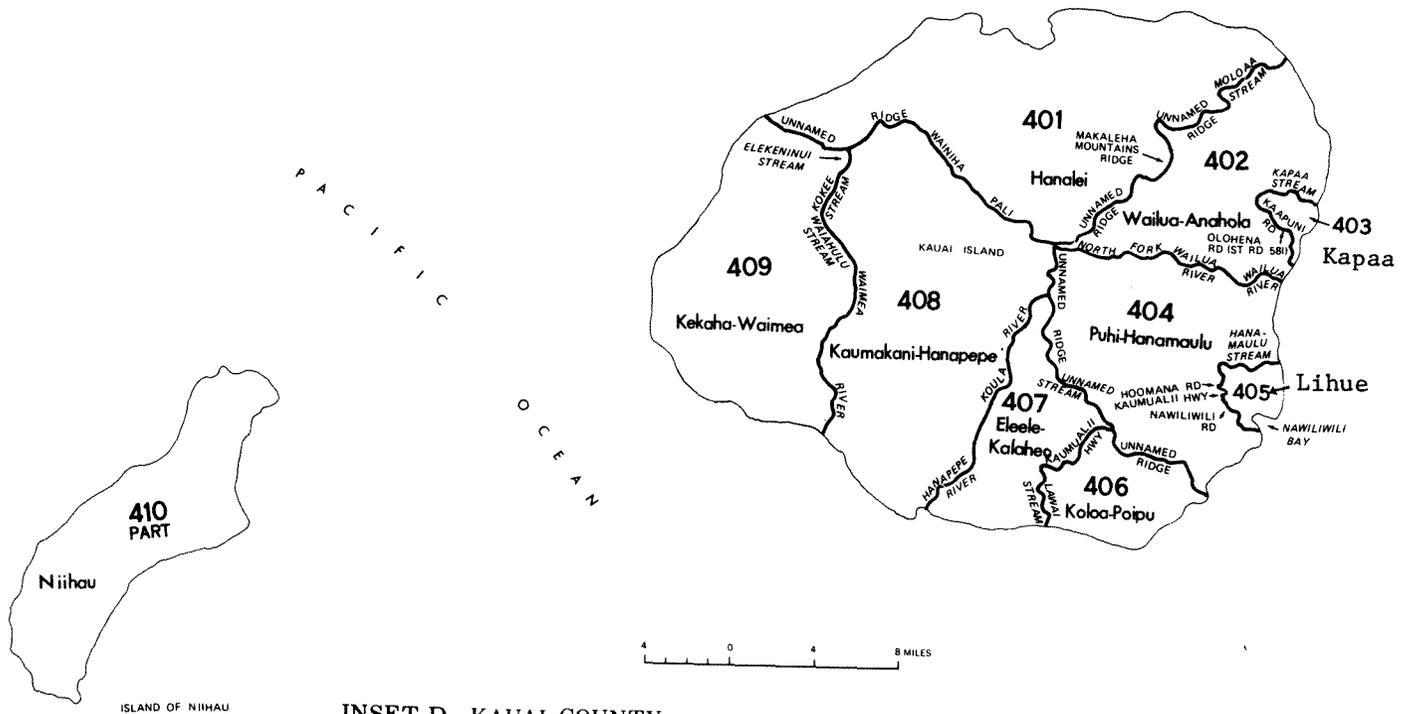
INSET C - WAHIAWA AND SCHOFIELD BARRACKS



INSET B - HONOLULU AIR COUNTY (PART)



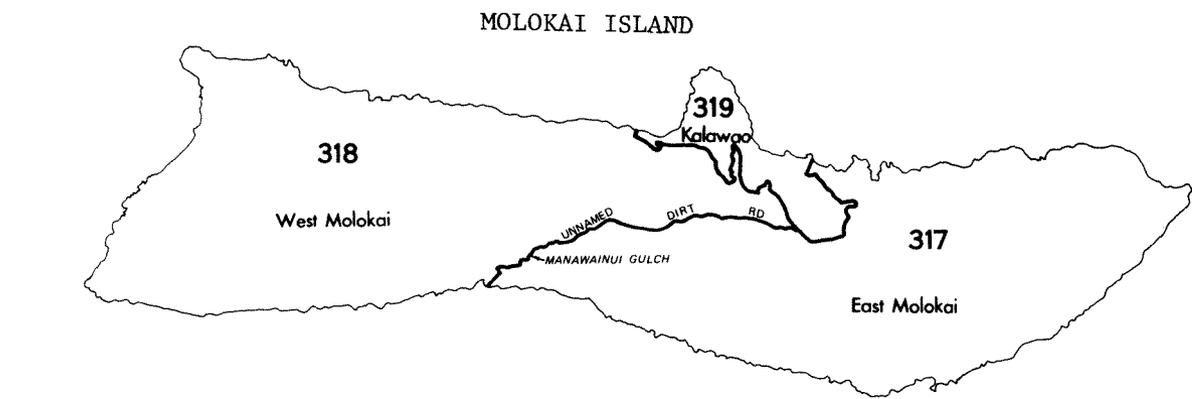
U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
1970



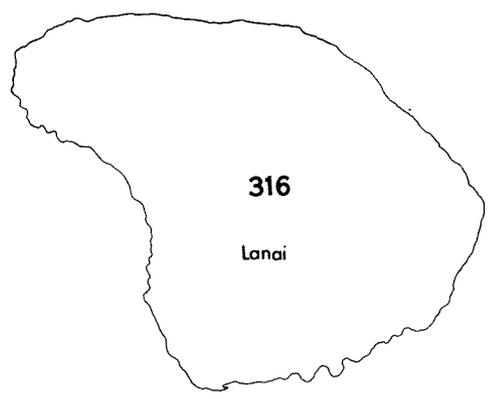
INSET D - KAUAI COUNTY

410 PART
ISLAND OF KAULA

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
1970

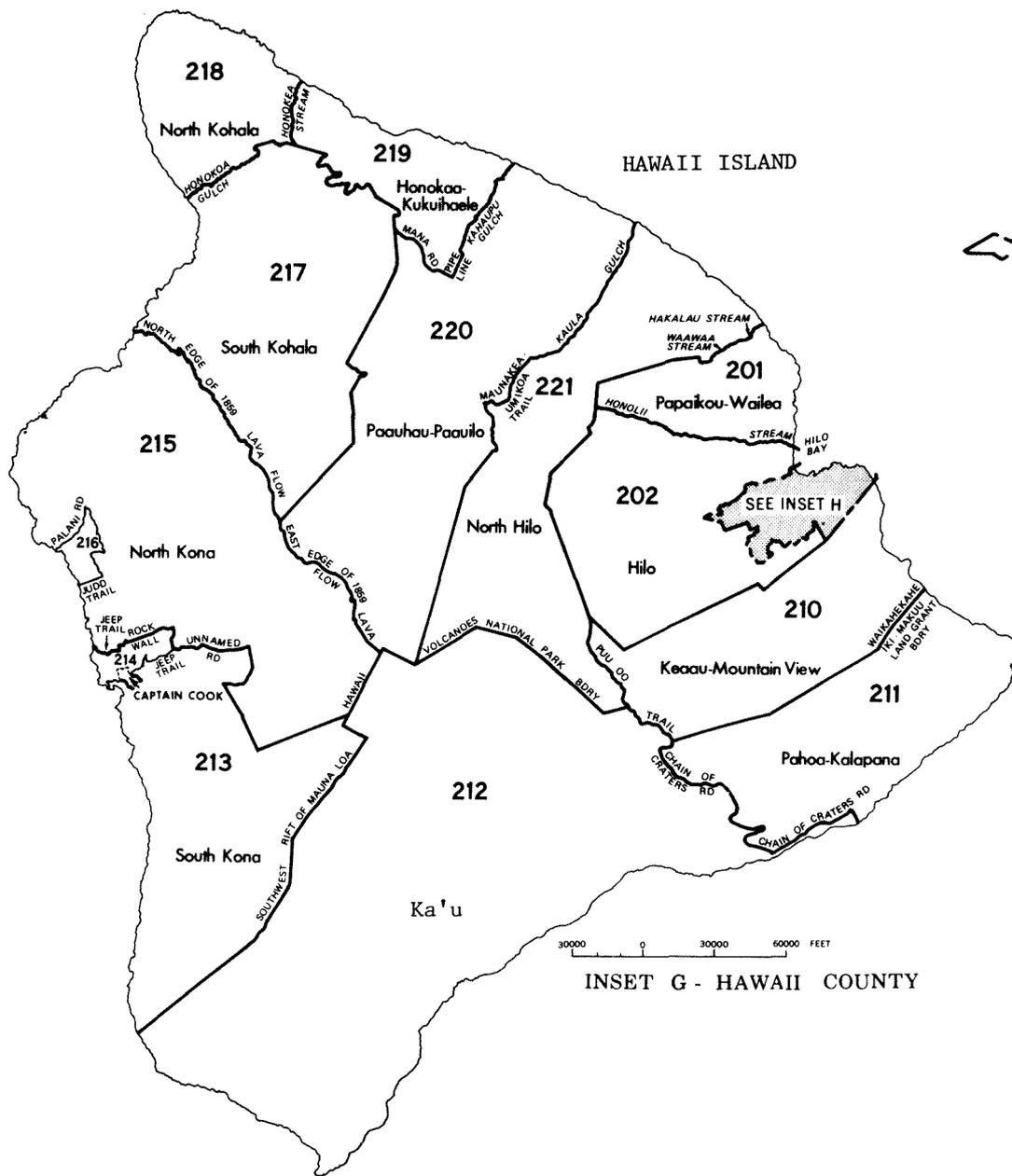


P A C I F I C O C E A N

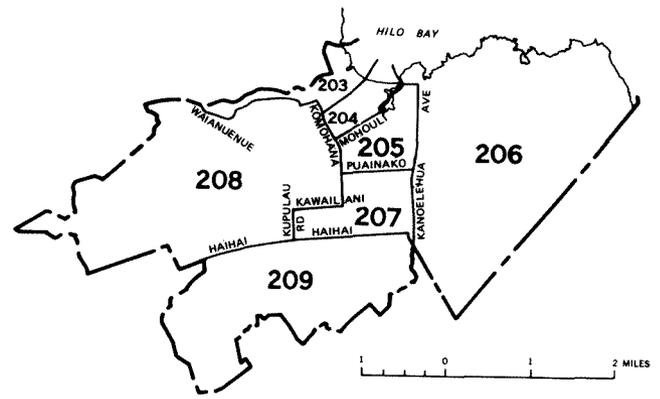


LANAI ISLAND

INSET E₂ - MAUI COUNTY (PART)



INSET G - HAWAII COUNTY



INSET H - HILO

DIRECTORY OF HAWAII MAP SOURCES

This directory is a guide to maps of the State of Hawaii available through governmental and private agencies.

Basically, only the type, source and general description are provided. Maps, however, vary—in type, purpose, size, scale, date, price, availability, etc.—and where possible, this information has been included in the directory.

This list is by no means complete as to all sources of maps of Hawaii. Information and suggestions concerning the listing of additional map sources are welcome.

TYPE

SOURCE

GENERAL DESCRIPTION

AERIAL

Agricultural Stabilization and Conservation Service
U.S. Department of Agriculture
1833 Kalakaua Avenue
Honolulu, Hawaii 96815
Telephone: 955-0468

Base Maps Section
Planning Department
City and County of Honolulu
629 Pohukaina Street
Honolulu, Hawaii 96813
Telephone: 546-7089

Towill Corp-Engineers & Surveyors
1600 Kapiolani Blvd.
Honolulu, Hawaii 96814
Telephone: 955-1131

Tryck Nyman & Hayes Inc.
Suite 204, 765 Amana
Honolulu, Hawaii 96814
Telephone: 941-9519

Aerial photo maps produced in 1963-1965. Photographs are available in various sizes from 9½" × 9½" to 38" × 38". Prices range from \$1.75 to \$9.00 per print.

Photogrammetric mapping of Waipahu to Koko Head and Waimanalo to Kahaluu. Scale: 1"=200'. Price \$2,500 per sheet (71 sheets). Sheet size: 30" × 42".

Extensive holdings at various scales of aerial photo maps. Civil engineering, surveying and photogrammetric mapping also available.

Vertical aerial photograph maps at a scale of 1"=1,000' for the Island of Oahu and about 70 percent of the Neighbor Islands. Prices vary.

AERONAUTICAL

Aeronautical Chart and Information Center
U.S. Department of the Air Force
Second and Arsenal
St. Louis, Missouri 63118

National Ocean Survey
National Oceanic & Atmospheric Admin.—NOAA
U.S. Department of Commerce
Attn: Chart Distribution
Rockville, Maryland 20852

Trans-Pacific Instrument Co.
1406 Colburn
Honolulu, Hawaii 96817
Telephone: 841-4729

Aeronautical charts and related publications of the U.S. Air Force. Some materials are available for civilian use. The aeronautical charts and publications produced by the Center are available for sale through the National Ocean Survey. Some or all of the charts may be available through a local sales dealer. (These agencies are listed to the left.)

Indexes are available from the Center and the charts are published at various scales. Price varies.

ALUMINUM ORE SITE

Land Study Bureau
University of Hawaii
Safety Loan Building, Rm. 301
2065 South King Street
Honolulu, Hawaii 96814
Telephone: 944-8295

Maps indicate the location and relative quality of principal areas bearing aluminum ore on the Islands of Kauai, Maui and Hawaii (1960). Scale: 1:62,500 (approx. 1"=1 mi.). There is a charge for the maps and master sheets may be borrowed for reproduction.

ATLAS

Department of Geography
University of Hawaii
Physical Science Building
Honolulu, Hawaii 96822
Telephone: 944-8465
(To be published by University Press of Hawaii)

Other sources:

Bookstores (listed under "Book Dealers" in the Yellow Pages).

Libraries

Atlas of Hawaii to be available in 1973. The *Atlas* will contain about 200 pages with 150 pages of maps, charts, illustrations and photographs. Also included will be a gazetteer, subject index and informational appendices. Price to be set.

Various maps of Hawaii published in world atlases available for sale in local retail bookstores or for reference use in public libraries.

BASE

Base Maps Section
Planning Department
City and County of Honolulu
629 Pohukaina Street
Honolulu, Hawaii 96813
Telephone: 546-7089

Maps showing existing roadways, public facilities, such as schools, parks, public utilities and streams in the City and County of Honolulu. Size and scale vary. Maps are open to the public. Orders should be placed with Blueprint Co., Inc., 815 Alakea Street, Honolulu, Hawaii 96813. Telephone: 536-6148.

| TYPE | SOURCE | GENERAL DESCRIPTION |
|--------------------------------|---|--|
| CENSUS | <p>Department of Planning and Economic Development State of Hawaii 250 South King Street Honolulu, Hawaii 96813 Telephone: 548-4025</p> <p>Geography Division Bureau of the Census Washington, D.C. 20233</p> | <p>Census tract outline are printed in the <i>State of Hawaii Data Book, 1972 and Supplement</i>. Price \$4.00 (Out of State charge: \$5.00 post-paid.) Other detailed 1970 census maps are available for reference.</p> |
| | <p>U.S. Department of Commerce Field Office Suite 286, Alexander Young Bldg. Honolulu, Hawaii 96813 Telephone: 546-8694</p> | <p>This Division can provide complete information on the various 1970 census maps. The following publication contains a complete list of these maps: U.S. Bureau of the Census, <i>1970 Census Users' Guide</i> (Part I); U.S. Government Printing Office, Washington D.C., p. 47. (This publication is available for reference use in the State Department of Planning and Economic Development, Library of Hawaii, and the Field Office of the U.S. Department of Commerce in Honolulu.)</p> <p>Published reports on a variety of subjects (some containing maps) of the U.S. Bureau of the Census are available for sale or reference use. Publications (some containing maps) are also available at cost from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Index available. Prices and types vary.</p> |
| FALLOUT SHELTER | <p>County Civil Defense Agencies located at:</p> <p>629 Pohukaina Street Honolulu, Hawaii 96813 Telephone: 531-4122</p> <p>34-A Rainbow Drive Hilo, Hawaii 96720</p> <p>250 S. High Street Wailuku, Maui, Hawaii 96793</p> <p>P.O. Box 627 Lihue, Kauai, Hawaii 96766</p> | <p>Location and flow of population to fallout shelters. Contained in Community Shelter Plans distributed without charge. Some maps used in work planning and emergency operations may be viewed by the public.</p> <p>Maps are maintained by County Civil Defense Agencies. (These agencies are listed to the left.)</p> |
| FLOOD HAZARD AREAS | <p>Division of Water and Land Development Department of Land and Natural Resources State of Hawaii 465 South King Street Honolulu, Hawaii 96813 Telephone: 548-7539</p> | <p>Flood maps delineating the areas subject to flooding from extraordinary flood occurrence and those floods having an estimated occurrence interval of 50 to 100 years. Size: 34" x 22". Scale: 1"=200'. Available without charge.</p> |
| FOREST | <p>Forest Service Institute of Pacific Islands Forestry U.S. Department of Agriculture 1179 Punchbowl Street Honolulu, Hawaii 96813 Telephone: 546-5669</p> | <p>Hawaii Forest Type maps containing information on the kind and extent of forest land and timber resources available in the Hawaiian Islands.</p> <p>Published in 1963-1965 (based on 1950-1954 aerial photographs) as blue-line prints at a scale of 1:62,500. Price: \$.10 per square foot or about \$.40 per map sheet. Deposit of \$2 per negative required and refunded upon return.</p> |
| HIGHWAY | <p>Highways Division Department of Transportation State of Hawaii 869 Punchbowl Street Honolulu, Hawaii 96813 Telephone: 548-7342</p> <p>Superintendent of Documents Government Printing Office Washington, D.C. 20402</p> | <p>State and Federal-aid Highway System Maps for the Islands of Oahu, Hawaii, Maui, Molokai-Lanai, and Kauai are available at a scale of 1"=2 mi. (Honolulu vicinity 1"=2,000'), sheet size 22" x 32", at a charge of \$1.00 per sheet.</p> <p>Federal-aid highway maps (1970). Size: 42" x 65". Available at a charge of \$1.50 each.</p> |
| HIKING TRAIL (see PARK) | <p>Division of Forestry Department of Land and Natural Resources State of Hawaii 1179 Punchbowl Street Honolulu, Hawaii 96813, Telephone: 548-5922</p> | <p>Maps are available for the Islands of Oahu and Molokai. Maps for the other major Islands are in process. The Oahu map (18" x 26") contains hunting areas, hiking trails and State parks. The Molokai map (22" x 13½") contains hiking trails only. Maps are distributed without charge.</p> |

| TYPE | SOURCE | GENERAL DESCRIPTION |
|--|---|--|
| HISTORICAL | Archives Division Department of Accounting and General Services State of Hawaii Iolani Palace Grounds Honolulu, Hawaii 96813 Telephone: 548-2355 | Maps of Hawaiian Islands dating back to the late 1700's. Includes maps showing trails, harbors, agriculture, transportation, topography, volcanoes and eruptions, homesteads, etc. Available to the public as reference material. |
| HUNTING AREA (see PARK) | Fish & Game Division Department of Land and Natural Resources State of Hawaii 530 South Hotel Street Honolulu, Hawaii 96813 Telephone: 548-4002 | Hunting areas for the Islands of Oahu and Kauai (18" × 26"). Hunting areas on the other major Islands (excluding Kahoolawe and Niihau) are described in written form and are provided as attachments. Distributed without charge. |
| LAND (see also ZONING) | Base Maps Section Planning Department City and County of Honolulu 629 Pohukaina Street Honolulu, Hawaii 96813 Telephone: 546-7089 | The Section maintains a variety of maps which include general plan (1"=2,000'), detailed land use, existing land use development plans which show the proposed roadways and public facilities, existing zoning and ordinance maps (formerly adopted by the City Council) for the City and County of Honolulu. Scales vary. Maps are open to the public. Orders should be placed with Blueprint Co. Price: \$.10 per square foot, ozalid. |
| | Division of Land Survey and Acquisition Department of Public Works City and County of Honolulu City Hall Honolulu, Hawaii 96813 Telephone: 546-2748 | Land Acquisition Parcel Maps for all land or easement acquisitions made by the City and County, \$1.00 per sheet. |
| | Land Study Bureau University of Hawaii Safety Loan Building, Rm. 301 2065 South King Street Honolulu, Hawaii 96814 Telephone: 944-8295 | Classification, land use, large land holdings, present and future urban land use (Oahu) 1958-1980, Oahu Lands Classified by Physical Qualities for Urban Use, etc. Scale: 1:62,500 (approx. 1"=1 mi.) Price varies. |
| | Land Survey Division Department of Accounting and General Services State of Hawaii 465 South King Street Honolulu, Hawaii 96813 Telephone: 548-7423 | Land Court Subdivision, File Plan Subdivision (showing final subdivision plans) and Registered State Survey Maps and Descriptions. Prices and sizes vary. |
| | Land Use Commission Department of Planning and Economic Development State of Hawaii 250 South King Street Honolulu, Hawaii 96813 Telephone: 548-3074 | State Land Use Law Classification Maps may be viewed in the Commission office. Prepared from U.S. Geological Survey maps. Sepia (negative) and quadrangle maps available in one large size about 2' × 3'. Price \$2.10 for each sepia and \$.50 for blueline print. Minimum order \$1. Place order with Blueprint Co., Inc., 815 Alakea Street, Honolulu, Hawaii 96813. Telephone: 536-6148. |
| NAUTICAL | National Ocean Survey National Oceanic & Atmospheric Admin.—NOAA U.S. Department of Commerce Attn: Chart Distribution Rockville, Maryland 20852 | Nautical charts and certain related publications such as Coast Pilots, Tide Tables, Tidal Current Tables and Tidal Current Charts. Catalog available from the National Ocean Survey. Charts vary in scale and average \$1.50 per copy. Some or all of the charts are available from local sales dealers on Oahu and the Neighbor Islands. Oahu sales dealers are Trans-Pacific Instrument Co. and McWayne Marine Supply Ltd. |
| PARK (see HIKING TRAIL, HUNTING AREA) | National Park Service U.S. Department of the Interior 677 Ala Moana, Suite 512 Honolulu, Hawaii 96813 Telephone: 521-3027 | Brochure type maps available on major scenic areas of Hawaii's National Parks. Available without charge. |
| | State Parks Division Department of Land and Natural Resources State of Hawaii 1179 Punchbowl Street Honolulu, Hawaii 96813 Telephone: 548-5692 | Brochure type map showing State parks, monuments, recreation areas and waysites throughout the State. Available without charge. |

| TYPE | SOURCE | GENERAL DESCRIPTION |
|-----------------------------------|---|---|
| | U.S. Geological Survey Department of the Interior Rm. 330, First Insurance Bldg. 1100 Ward Avenue Honolulu, Hawaii 96814 Telephone: 546-5692 | Topographic maps of Hawaii's National Parks may be purchased from the Distribution Section, U.S. Geological Survey, Federal Center, Denver, Colorado 80225. These maps include City of Refuge National Historical Park, Haleakala National Park and Hawaii Volcanoes National Park. Index available from Center. Prices vary. |
| POINTS OF INTEREST | Hawaii Visitors Bureau 2270 Kalakaua Avenue, 9th Floor Honolulu, Hawaii 96815 Telephone: 923-8111 | Various maps and brochures showing major scenic points throughout the State. Available without charge. |
| POLITICAL | Office of the Lieutenant Governor State Capitol Honolulu, Hawaii 96813 Telephone: 548-4544 | Eleven political district wall maps (3' x 4') available at a charge of \$1 each. The maps consist of the following: 4 County district maps showing precinct, representative and senatorial district boundaries; 6 maps showing the Oahu Senatorial districts with street, precinct boundaries, representative district boundaries and polling places; 1 map showing the 8th through 18th representative districts in the City of Honolulu. |
| POPULATION (see CENSUS) | | |
| POSTAL | Superintendent of Documents Government Printing Office Washington, D.C. 20402 | Hawaii and Islands of the Pacific Ocean. \$.35. |
| RAINFALL | Land Study Bureau University of Hawaii Safety Loan Building, Rm. 301 2065 South King Street Honolulu, Hawaii 96814 Telephone: 944-8295 | Maps showing the median annual amount of rainfall or midpoint values when amounts of rainfall are arranged in an increasing or decreasing order. Scale: 1:62,500 (approx. 1"=1 mi.) (1961) Price varies. |
| RELIEF | Hogarth Press-Hawaii 3431 Ala Akulikuli Honolulu, Hawaii 96818 Telephone: 839-2250 Trans-Pacific Instrument Co. 1406 Colburn Honolulu, Hawaii 96817 Telephone: 841-4729 941 7538 U.S. Geological Survey Department of the Interior Rm. 330, First Insurance Bldg. 1100 Ward Avenue Honolulu, Hawaii 96813 Telephone: 546-5692 | Plastic relief map of each of the major Islands and of the State. Price: \$7.00 each. Artistic Raised Relief map (in production). Approx. price: \$25.00. Four plastic relief maps showing each of the Counties. Island of Hawaii approx. 2' in size with other Islands in proportion. Price: \$12.95 each. Topographic shaded-relief maps may be obtained from the U.S. Geological Survey, Denver Distribution Section, Federal Center, Denver, Colorado 80225. Some or all of the maps may be available through a local sales dealer. (On Oahu contact Trans-Pacific Instrument Co.) Prices vary. |
| ROAD (see STREET AND ROAD) | | |
| SEWER | Division of Sewers Department of Public Works City and County of Honolulu City Hall Honolulu, Hawaii 96813 Telephone: 546-2866 | Sewer construction project drawings, ozalid prints, \$1.00 per print. |
| SOIL | Division of Water and Land Development Department of Land and Natural Resources State of Hawaii 465 South King Street Honolulu, Hawaii 96813 Telephone: 548-7539 | Maps available in Soil Survey Interpretations reports for Islands of Maui, Molokai, Lanai and Kauai. Provide information on relative suitability and limitations of soils for various uses. Available without charge. |

TYPE**SOURCE****GENERAL DESCRIPTION**

Soil Conservation Service
U.S. Department of Agriculture
440 Alexander Young Bldg.
Honolulu, Hawaii 96813
Telephone: 546-3165

Maps include Soil and Water Conservation Districts and Watersheds (1966) at a scale of $\frac{1}{2}$ "=20 mi. Soil and Water Conservation District of Kona (1971) at a scale of 1:144,800. These particular maps are available without charge.

STREET AND ROAD

Division of Engineering
Department of Public Works
City and County of Honolulu
City Hall
Honolulu, Hawaii 96813
Telephone: 546-7508

Street maps of the City of Honolulu: Scale of 1"=500', \$2.50 per sheet (5 sections). Scale of 1"=1000', \$3.00 per sheet (1 sheet). Street maps of Rural Oahu: Scale of 1"=400', \$1.00 per sheet (32 sections). Construction Drawings of Division projects, ozalid print (\$1 per print) and microfilm print (\$.50 per print).

First Hawaiian Bank
161 South King Street
Honolulu, Hawaii 96813
Telephone: 537-5011

State of Hawaii map with detailed street directory listing of the City of Honolulu. Available without charge.

South Sea Sales
916 Kaamahu Place
Honolulu, Hawaii 96817
Telephone: 841-4756

Bryan's Sectional Maps of Oahu and the Neighbor Islands (booklet, \$1.25). Honolulu Map and Tourist Guide (pocket folder, 17" x 22", \$.45 each).

Visitor Information Program
Honolulu International Airport
Department of Transportation
State of Hawaii
Honolulu, Hawaii
Telephone: 841-4706

Official Transportation Map of the State of Hawaii showing major highways and points of interest. Street maps of the Islands of Hawaii, Kauai and Maui. Available without charge.

Road maps showing all Islands may also be obtained free from the main business offices of the major oil companies and their affiliated service stations in Hawaii.

TAX KEY

Tax Maps Branch
Department of Taxation
State of Hawaii
425 Queen Street
Honolulu, Hawaii 96813
Telephone: 548-7573

Tax Key Maps for the State of Hawaii. Size: approx. 21" x 32". Available at a charge of \$1.00 per copy. Map folders containing survey maps and descriptions are also available to the general public as reference material. Reduced tax key maps (11" x 17") may be obtained from Hawaii Blueprint & Supply, 1512 Kona Street, Honolulu, Hawaii 96814. Telephone: 941-6602. Price: \$.72 for initial map and \$.46 for each additional map ordered.

TOPOGRAPHIC

U.S. Geological Survey
Department of the Interior
Rm. 330, First Insurance Bldg.
1100 Ward Avenue
Honolulu, Hawaii 96814
Telephone: 546-5692

Variety of maps on file which describe topography, geology, hydrology and related water resource features. None are for sale, but all are open for reference use.

Topographic and planimetric quadrangle maps published by the U.S. Geological Survey may be purchased from the Denver Distribution Section, Federal Center, Denver, Colorado 80225. Some or all of the maps are available from local sales dealers on Oahu and the Neighbor Islands. Oahu sales dealer is Trans-Pacific Instrument Co. Prices vary.

The following is a listing of some of the major topographic maps published by the U.S. Geological Survey. Prices vary.

Honolulu and vicinity. This map was compiled from the Honolulu, Kaneohe, Koko Head, Mokapu, Puuola and Waipahu quadrangle maps. Scale: 1:24,000, or 2000' to 1". Contour intervals, 20' and 40' with supplementary contours at 10 and 20-foot intervals. Size, 50" by 69". 1927-54.

Lanai (Island). Scale: 1:62,500, or about 1 mi. to 1". Contour interval, 50'. Size 20" by 23". 1923.

Maui (Island). Scale: 1:62,500, or about 1 mi. to 1". Contour interval, 80', with supplementary contours at 40-foot intervals. Size, 40" by 56". 1957. Also published in a shaded-relief.

Molokai (Island). Scale: 1:62,500 or about 1 mi. to 1". Contour interval, 100'. Size, 21" by 47". 1952. Also published in a shaded-relief.

Niihau (Island). Scale: 1:62,500 or about 1 mi. to 1". Contour interval, 50'. Size 19" by 22". 1926.

Oahu (Island). Scale: 1:62,500 or about 1 mi. to 1". Contour interval, 80', with supplementary contours at 20-foot intervals. Size, 37" by 48". 1954.

Topographic maps are printed in three colors. The cultural features, such as roads, railroads, cities, and towns, as well as the lettering are in black; the water features are in blue; and the features of relief, such as hills, mountains, and valleys are shown by brown contour lines.

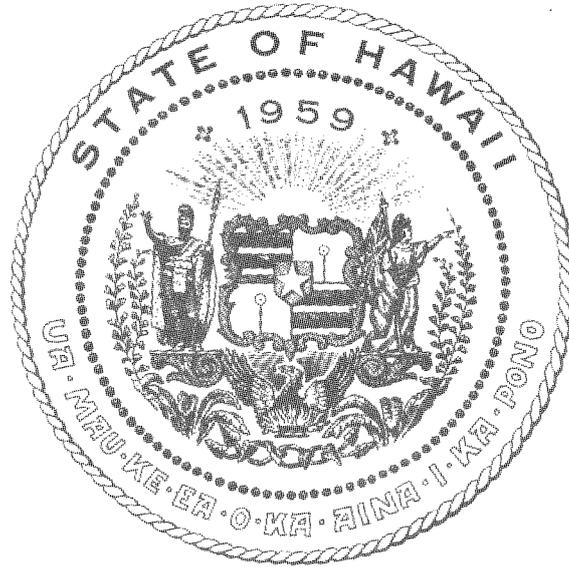
| TYPE | SOURCE | GENERAL DESCRIPTION |
|---------------------------------------|---|---|
| VEGETATION | Land Study Bureau University of Hawaii Safety Loan Building, Rm. 301 2065 South King Street Honolulu, Hawaii 96814 Telephone: 944-8295 | A vegetation and associated climatic map for the major Islands (excluding Kahoolawe and Niihau). 1961. Scale: 1:62,500 (approx. 1"=1 mi.). Price varies. |
| WALL | Hogarth Press-Hawaii 3431 Ala Akulikuli Honolulu, Hawaii 96818 Telephone: 839-2250 South Sea Sales 916 Kaamahu Place Honolulu, Hawaii 96817 Telephone: 841-4756 | Wall map of the Pacific Ocean with Hawaii at the center. Price: \$27.50. Wall map of the City of Honolulu (1963). Size: 3' x 4'. Price: \$5. |
| WEATHER | National Weather Service Forecast Office U.S. Department of Commerce Honolulu International Airport Honolulu, Hawaii 96819 Telephone: 847-1831 | Surface weather maps of the Equatorial & North Pacific Region at a scale of 1:20 million Mercator Projection. Size: 18" x 30". Available four times daily. |
| ZONING (see also LAND) | Oahu Development Conference 119 Merchant Street Honolulu, Hawaii 96813 Telephone: 537-5271 County Planning Departments: County of Maui P.O. Box 1487 Kahului, Maui 96732 County of Kauai Lihue, Kauai 96766 County of Hawaii Hilo, Hawaii 96720 Base Maps Section City and County of Honolulu 629 Pohukaina Street Honolulu, Hawaii 96813 Telephone: 546-7089 | State Zoning Map (1971) showing urban, conservation and agricultural areas on the Island of Oahu. Size: 22" x 34". Scale: approx. 1 mi.=3/4" (Island of Oahu), 1000'=3/4" (City of Honolulu). Price: \$1. Zoning maps and land use allocation maps. Contact County of your interest for information. |

LIBRARY

STATE OF HAWAII
**DEPARTMENT OF PLANNING AND
ECONOMIC DEVELOPMENT**

P. O. Box 2259
Honolulu, Hawaii 96804

LIBRARY
STATE OF HAWAII
**DEPARTMENT OF PLANNING AND
ECONOMIC DEVELOPMENT**
P. O. Box 2359
Honolulu, Hawaii 96804



THE STATE OF HAWAII
DATA BOOK

1972

A STATISTICAL ABSTRACT

EC Library
60121

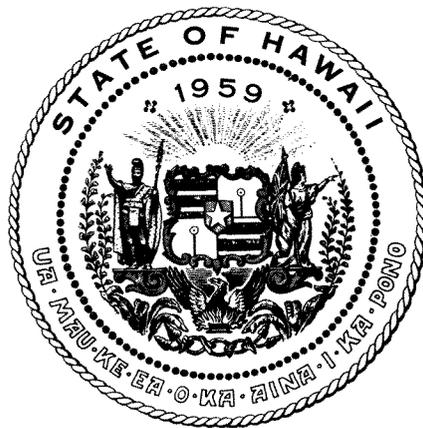
612

This report was prepared by the Research and Economic Analysis Division, with the assistance of the Office of Information and Public Services.

Additional copies may be obtained for \$4.00 each from the DPED reception desk on the 7th floor of the Kamamalu Building, 250 South King Street, Honolulu, or by postpaid air mail by sending \$5.00 per copy to the Information and Public Services Office, DPED, P.O. Box 2359, Honolulu, Hawaii 96804.

**STATE OF HAWAII CENSUS TRACT MAPS
AND
DIRECTORY OF HAWAII MAP SOURCES**

A SUPPLEMENT TO



THE STATE OF HAWAII
DATA BOOK

1972

A STATISTICAL ABSTRACT

IR84

**STATE OF HAWAII CENSUS TRACT MAPS
AND
DIRECTORY OF HAWAII MAP SOURCES**

A SUPPLEMENT TO

THE STATE OF HAWAII
DATA BOOK
A STATISTICAL ABSTRACT



DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

HONOLULU, HAWAII
1972



STATE OF
HAWAII

DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

P. O. BOX 2359 • HONOLULU, HAWAII 96804

JOHN A. BURNS
Governor

SHELLEY M. MARK
Director

EDWARD J. GREANEY, JR.
Deputy Director

July 1972

This report is a *Supplement* to the 1972 *State of Hawaii Data Book: A Statistical Abstract*. It contains two sections:

1. State of Hawaii Census Tract Maps
2. Directory of Hawaii Map Sources

The *Supplement* was prepared through the cooperative efforts of the Research and Economic Analysis Division, Hawaii Urban Planning Information Center, Hawaii State Census Tract Committee and the Office of Information and Public Services.

Additional copies of the *Data Book* and *Supplement* (not sold separately) may be obtained in the Islands for \$4.00 at the DPED reception desk, 7th floor, Kamamalu Building, 250 South King St., Honolulu, or elsewhere by air mail, by sending \$5.00 per copy to the Office of Information and Public Services, DPED, P.O. Box 2359, Honolulu, Hawaii 96804

Shelley M. Mark

STATE OF HAWAII CENSUS TRACT MAPS

Types of Statistical Areas in Hawaii

This collection of census tract and census county division maps has been reproduced by the State of Hawaii Department of Planning and Economic Development for the convenience of the many users of small-area statistics.

Statistics from the 1970 Censuses of Population and Housing are published for seven types of areas: counties, islands, districts, census county divisions, census tracts, places, and blocks. Unpublished data, moreover, are available for enumeration districts. These maps show the boundaries of the first five categories of statistical areas listed above.

Hawaii consists of eight major islands and 124 offshore or outlying islets, grouped into four counties and one quasi county. The City and County of Honolulu consists of Oahu and all of the Northwestern Hawaiian Islands, from Nihoa to Kure Atoll, except Midway. The County of Hawaii is coterminous with the island of that name. The County of Maui includes Maui, Lanai, and Kahoolawe, plus all of Molokai except Kalaupapa Peninsula. The latter area, officially known as Kalawao County, is actually a leprosy settlement under the jurisdiction of the Hawaii State Department of Health, although it is often grouped for statistical purposes with Maui County. The remaining county, Kauai, includes Kauai, Niihau, and two smaller islands.

The counties are in turn divided into twenty-eight districts, sometimes referred to as "judicial districts" (although this terminology is no longer strictly correct). These subdivisions were initially delineated by the ancient Hawaiians, and with minor modifications have remained in official use until today. They provided basic statistical units for every census from the earliest, conducted in 1831-1832, to 1950. Although not shown in either the 1960 or 1970 census bulletins, they can be closely approximated by combining census county divisions.

The twenty-eight districts are made up of forty-four census county divisions ("CCD's"), initially defined by the Bureau of the Census in cooperation with the Hawaii State Census Tract Committee shortly before the 1960 census. On Oahu, the seven CCD's are coterminous with the seven districts; elsewhere in the State, the CCD's generally represent sub-areas of the districts. The CCD's, like districts, bear names rather than numbers. Statistics for census county divisions have been reported in two of the 1970 decennial census bulletins released to date, Final Reports PC(1)-A13 and PC(1)-B13.

The forty-four CCD's have in turn been divided into 211 census tracts, 161 of them in the City and County of Honolulu and 50 in other counties of the State. (This total excludes thirteen census tracts made up of persons enumerated aboard ships; crews of vessels berthed off Ford Island in tract 81, for example, have been assigned to tract 81.99. In 1960, such tracts bore a "CV" suffix.) Census tracts were first delineated for Hawaii prior to the 1940 decennial census. Since that time they have been altered in many ways: boundaries have been shifted, tracts have been split and split again, a few have been consolidated, and the entire system has been renumbered. In spite of these changes, sufficient comparability has been maintained since their inception to enable users to trace small-area trends in considerable detail back to 1940. The current definition in use by the Bureau of the Census is moreover much like that developed many years ago:

Census tracts are small areas into which large cities and adjacent areas have been divided for statistical purposes. Tract boundaries were established cooperatively by a local committee and the Bureau of the Census. Tracts were generally designed to be relatively uniform with respect to population characteristics, economic status, and living conditions. The average tract has about 4,000 residents. Tract boundaries are established with the intention of being maintained over a long time so that comparisons may be made from census to census.

Besides the foregoing areas, all shown in this collection of maps, census data are compiled for places, enumeration districts, and blocks. The Hawaii State Department of Planning and Economic Development, in cooperation with

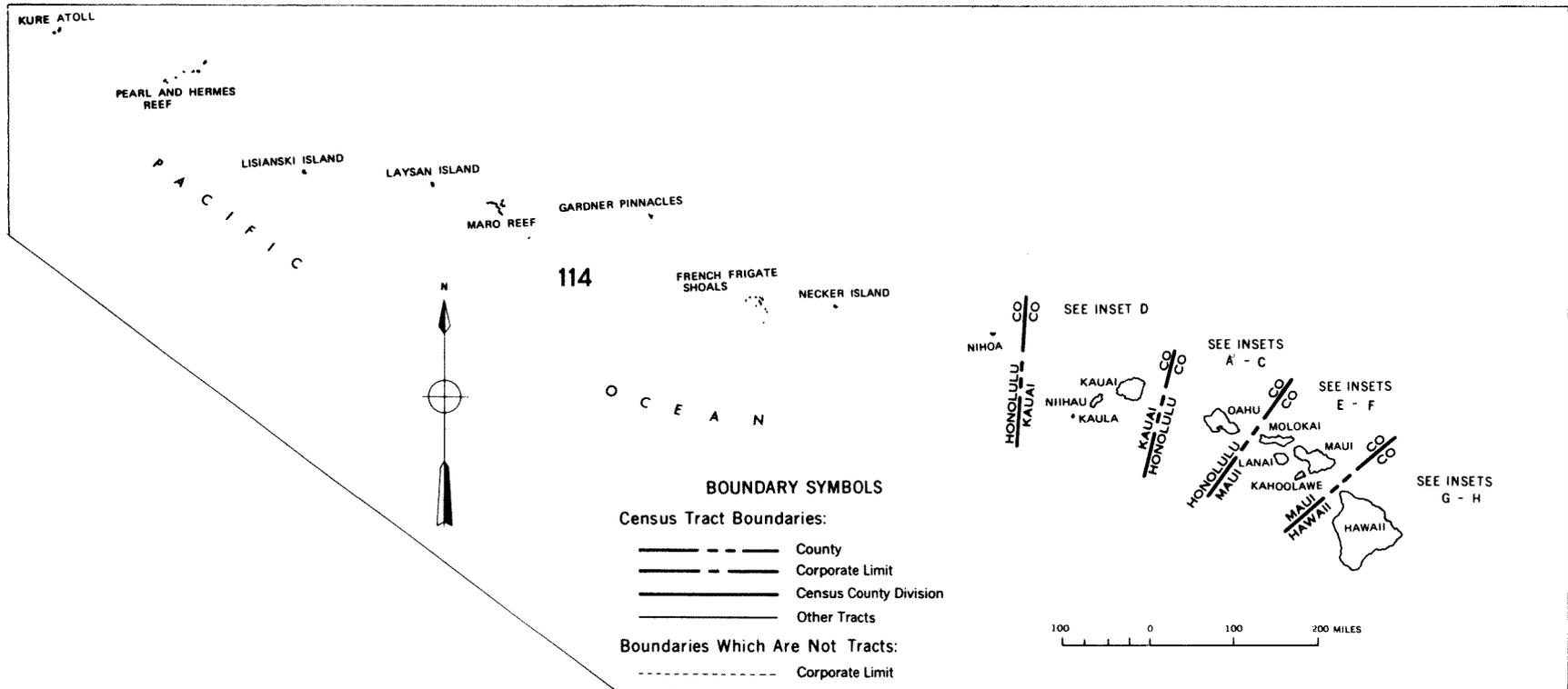
the Bureau of the Census, has defined 93 cities, towns and villages throughout the State for statistical purposes. These 93 places were delineated under provisions of legislation enacted by the State Legislature in 1963, and are described in DPED Report SB-A7, "Statistical Boundaries of Cities, Towns and Villages as Approved through December 31, 1971." Enumeration districts are subdivisions of census tracts which often provide the basis for unpublished special tabulations of census data. Block statistics for Oahu and three places on the Neighbor Islands (Hilo, Lahaina, and Wailuku) have appeared in two bulletins of the 1970 Census of Housing, *Block Statistics* for the Honolulu Urbanized Area (Final Report HC(3)-62) and for Selected Areas in Hawaii (Final Report HC(3)-63). These reports also contain detailed maps which show all eight types of statistical areas outlined above.

Further information on these matters appears in "Census Coverage in Hawaii, 1500-1970," a paper by Robert C. Schmitt presented to the Census Data Users Conference, Honolulu, on November 19, 1970. Although no longer available for distribution, copies of this paper may be seen in various libraries.

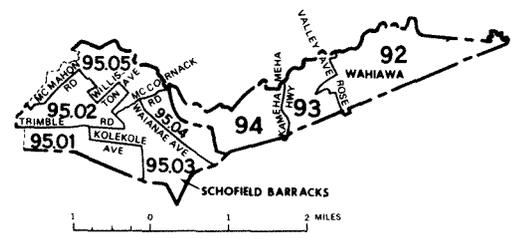
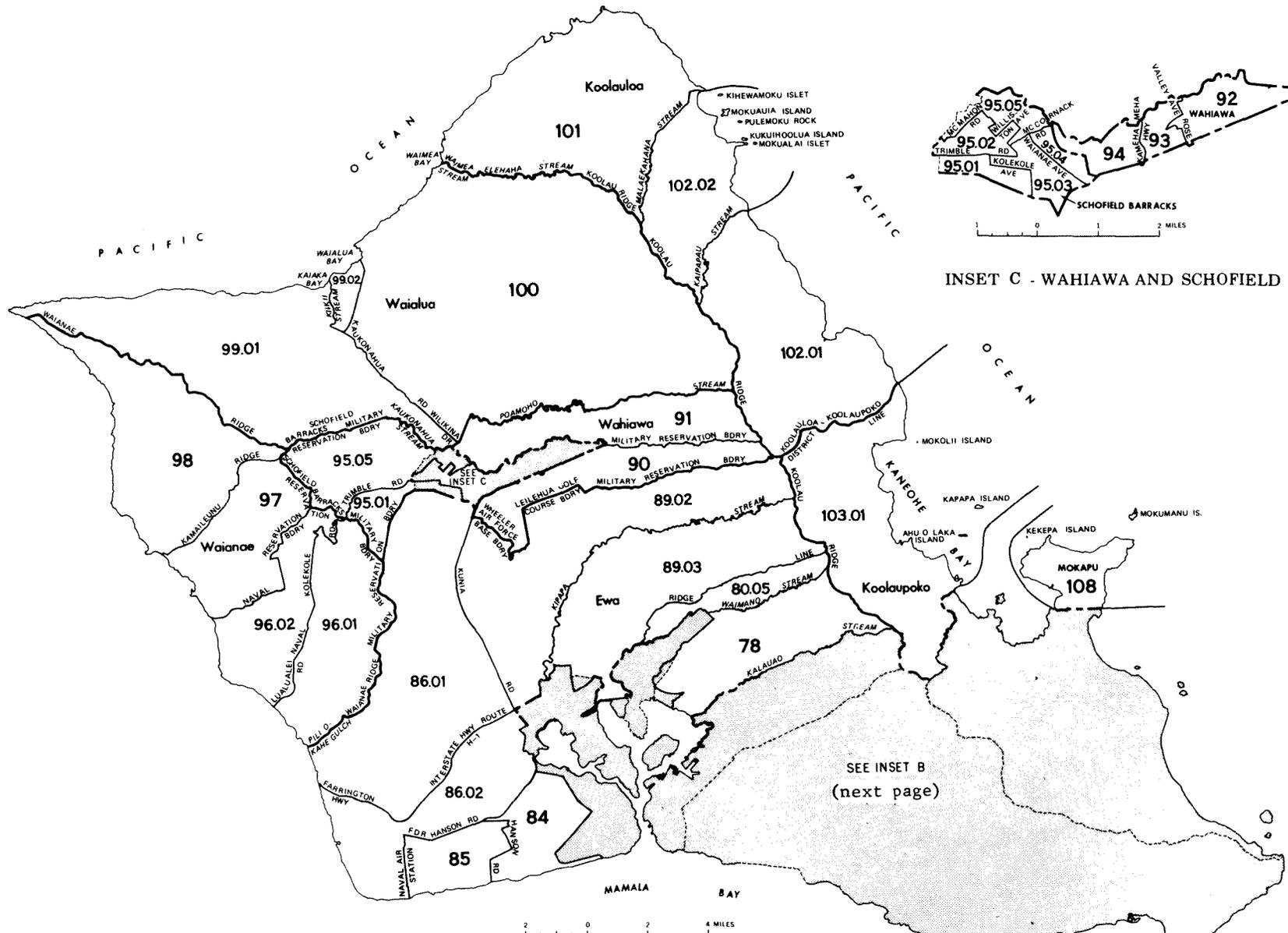
The maps reproduced in the present compilation were taken from a set published as part of the *U.S. Census of Population and Housing: 1970, Census Tracts, Honolulu, Hawaii, SMSA*, Final Report PHC(1)-88. More detailed maps are included with the block statistics reports cited earlier. Census tract statistics appear in the tract bulletin and also in the two block statistics reports.

**CROSS INDEX OF COUNTIES, DISTRICTS, CENSUS COUNTY DIVISIONS AND
CENSUS TRACTS—1970 CENSUS**

| COUNTY | DISTRICT | CENSUS COUNTY DIVISION | CENSUS TRACT |
|----------------|-----------------|-----------------------------------|---------------------|
| Honolulu | Ewa | Ewa | 73-89.03 |
| | Honolulu | Honolulu | 1.01-72, 114 |
| | Koolauloa | Koolauloa | 101-102.02 |
| | Koolaupoko | Koolaupoko | 103.01-113 |
| | Wahiawa | Wahiawa | 90-95.05 |
| | Waialua | Waialua | 99.01-100 |
| | Waianae | Waianae | 96.01-98 |
| Hawaii | Hamakua | Honokaa-Kukuihaele | 219 |
| | | Paauhau-Paauilo | 220 |
| | Ka'u | Ka'u | 212 |
| | North Hilo | North Hilo | 221 |
| | North Kohala | North Kohala | 218 |
| | North Kona | North Kona | 215-216 |
| | Puna | Keaau-Mountain View | 210 |
| | | Pahoa-Kalapana | 211 |
| | South Hilo | Hilo | 202-209 |
| | | Papaikou-Wailea | 201 |
| | South Kohala | South Kohala | 217 |
| South Kona | South Kona | 213-214 | |
| Maui | Hana | Hana | 301 |
| | | Kalawao | 319 |
| | Lahaina | Lahaina | 314-315 |
| | Lanai | Lanai | 316 |
| | Makawao | Haiku-Pauwela | 302 |
| | | Kula | 303 |
| | | Makawao-Paia | 304-305 |
| | Molokai | East Molokai | 317 |
| | | West Molokai | 318 |
| | Wailuku | Kahului | 311-312 |
| | | Kihei | 307 |
| | | Puunene | 313 |
| | | Speckelsville | 306 |
| Waihee-Waikapu | | 308 | |
| Wailuku | | 309-310 | |
| Kauai | Hanalei | Hanalei | 401 |
| | | Kapaa | 403 |
| | Kawaihau | Waialua-Anahola | 402 |
| | | Eleele-Kalaheo | 407 |
| | Koloa | Koloa-Poipu | 406 |
| | | Lihue | 405 |
| | Waimea | Puhi-Hanamaulu | 404 |
| | | Kaumakani-Hanapepe | 408 |
| | | Kekaha-Waimea | 409 |
| Niihau | | 410 | |



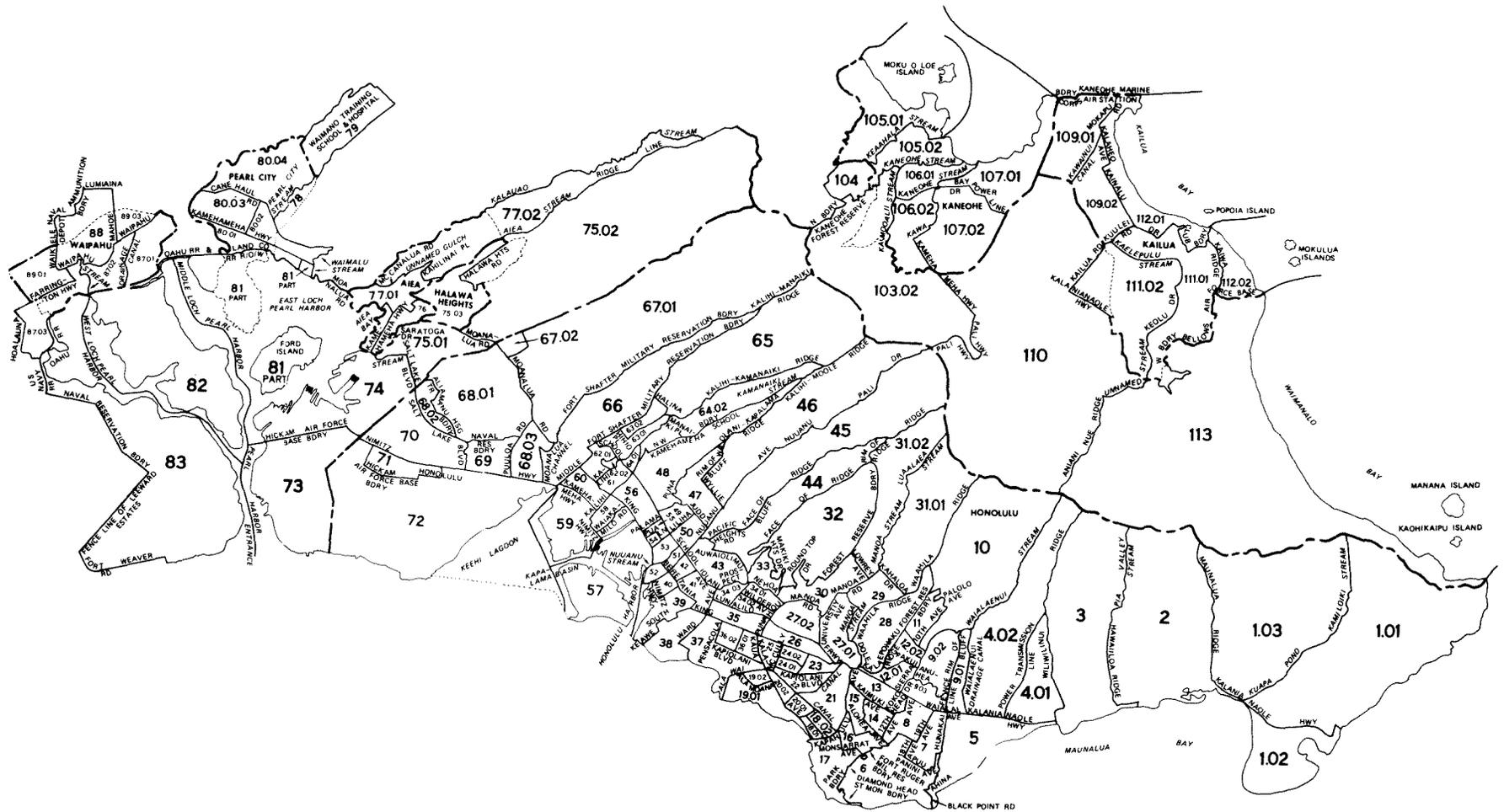
The Northwestern Hawaiian Islands, from Nihoa to Kure Atoll (exclusive of the Midway Islands, a U. S. possession), are legally part of the City and County of Honolulu and Honolulu Census County Division, and are designated tract 114.



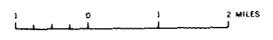
INSET C - WAHIAWA AND SCHOFIELD BARRACKS

U.S. DEPARTMENT OF COMMERCE
 BUREAU OF THE CENSUS
 1970

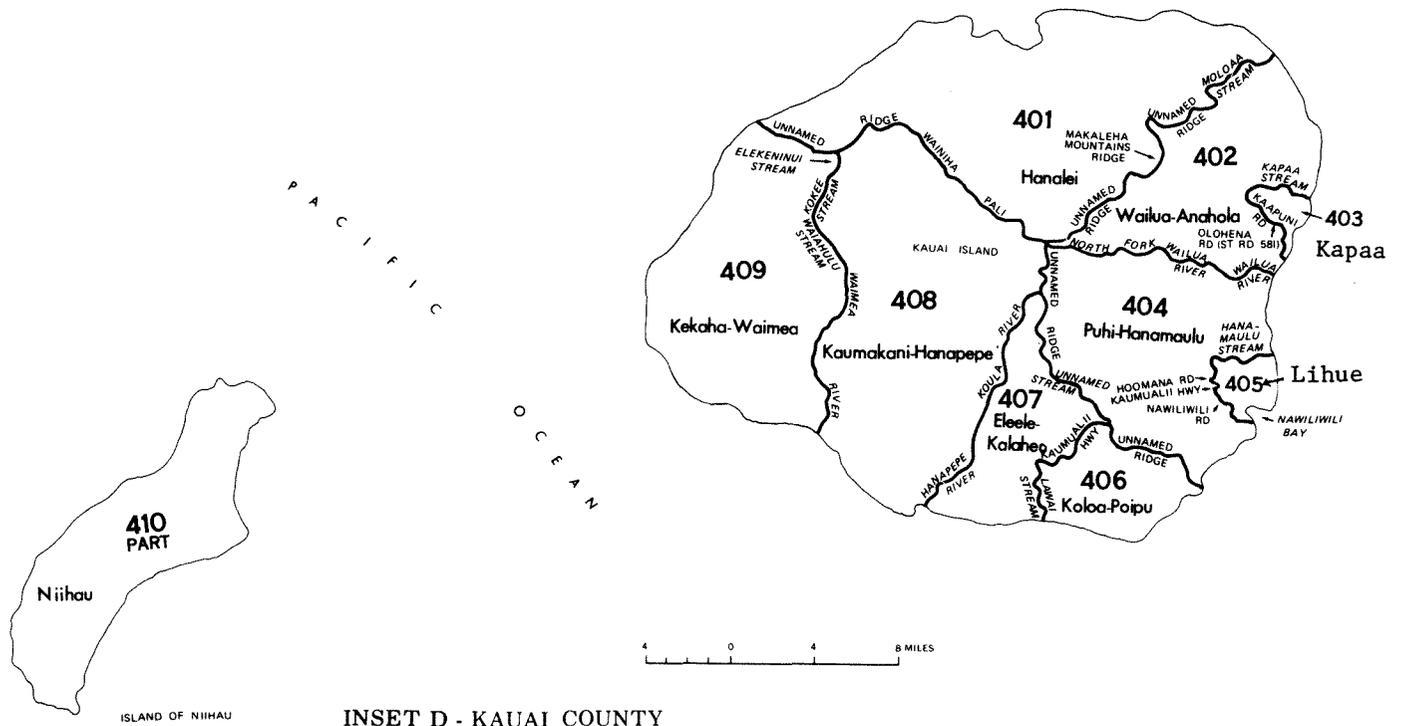
INSET A - HONOLULU COUNTY (PART)



INSET B - HONOLULU COUNTY (PART)



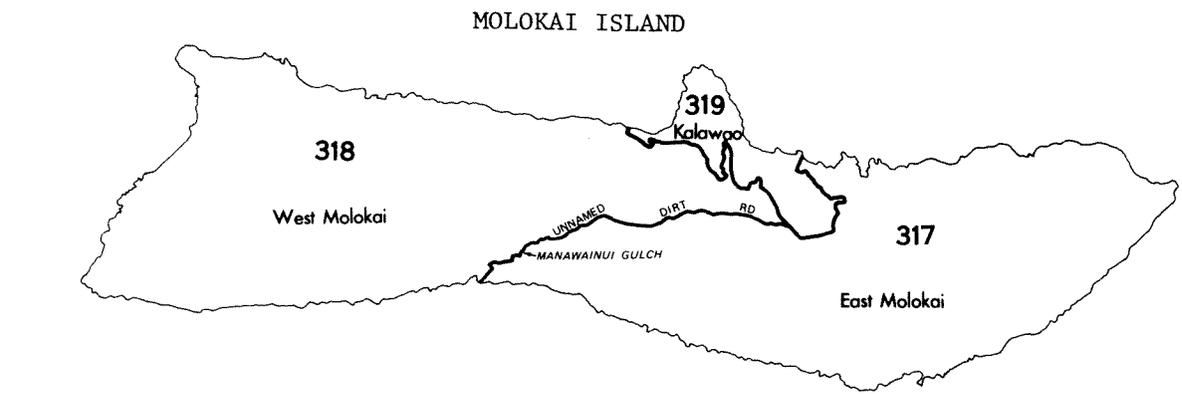
U.S. DEPARTMENT OF COMMERCE
 BUREAU OF THE CENSUS
 1970



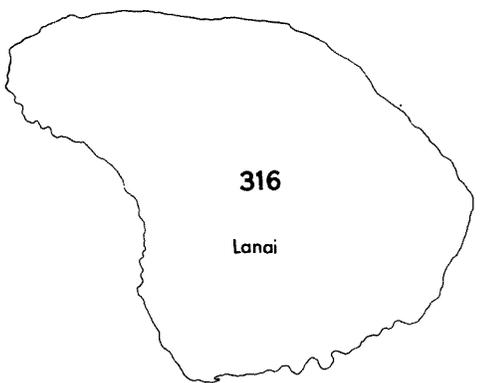
INSET D - KAUAI COUNTY

410
PART
ISLAND OF KAULA

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
1970

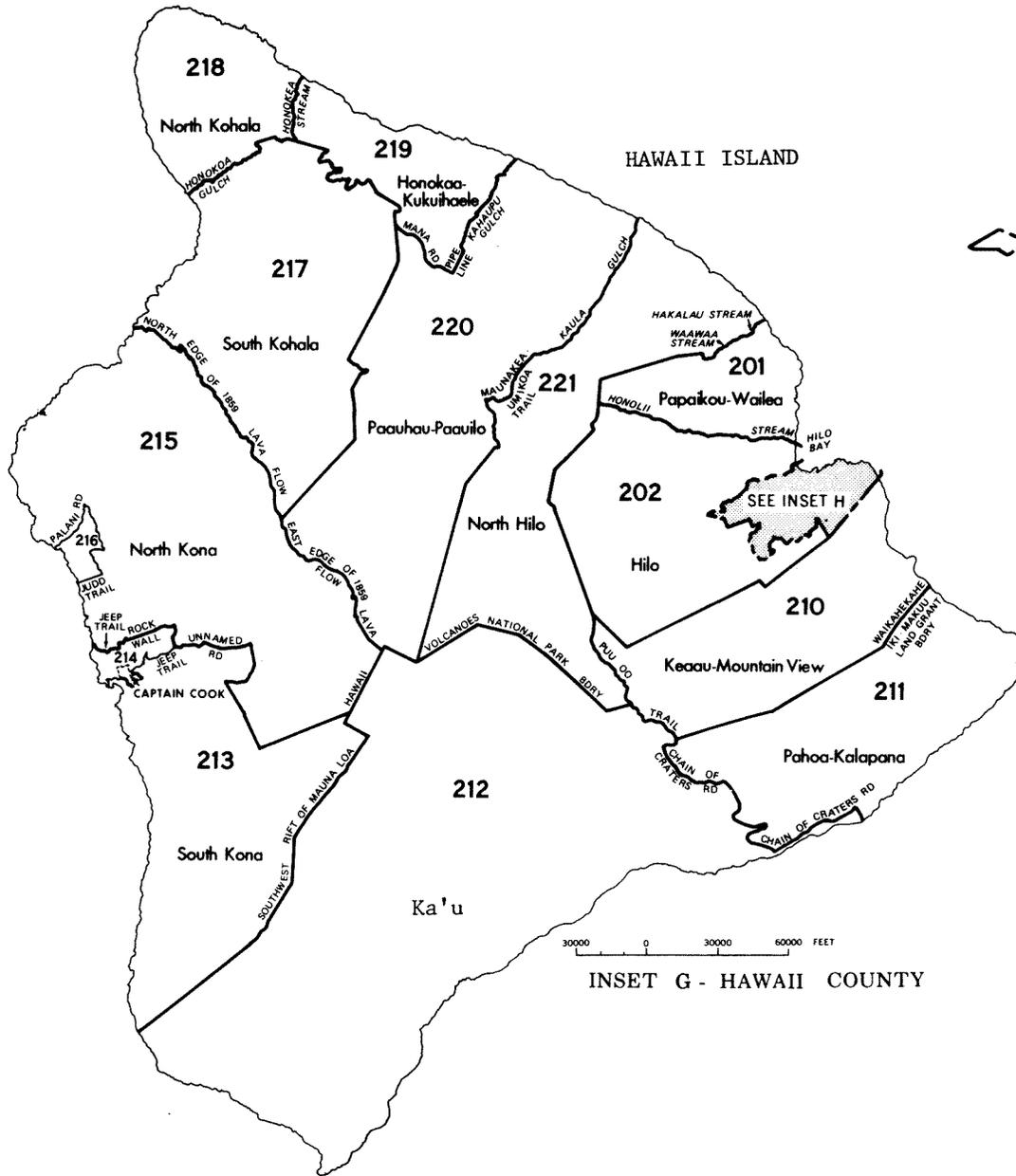


P A C I F I C O C E A N

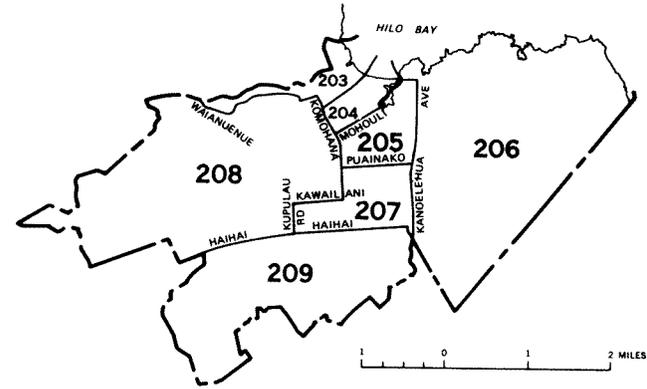


LANAI ISLAND

INSET E₂ - MAUI COUNTY (PART)



INSET G - HAWAII COUNTY



INSET H - HILO

DIRECTORY OF HAWAII MAP SOURCES

This directory is a guide to maps of the State of Hawaii available through governmental and private agencies.

Basically, only the type, source and general description are provided. Maps, however, vary—in type, purpose, size, scale, date, price, availability, etc.—and where possible, this information has been included in the directory.

This list is by no means complete as to all sources of maps of Hawaii. Information and suggestions concerning the listing of additional map sources are welcome.

TYPE**SOURCE****GENERAL DESCRIPTION****AERIAL**

Agricultural Stabilization and Conservation Service
U.S. Department of Agriculture
1833 Kalakaua Avenue
Honolulu, Hawaii 96815
Telephone: 955-0468

Base Maps Section
Planning Department
City and County of Honolulu
629 Pohukaina Street
Honolulu, Hawaii 96813
Telephone: 546-7089

Towill Corp-Engineers & Surveyors
1600 Kapiolani Blvd.
Honolulu, Hawaii 96814
Telephone: 955-1131

Tryck Nyman & Hayes Inc.
Suite 204, 765 Amana
Honolulu, Hawaii 96814
Telephone: 941-9519

Aerial photo maps produced in 1963-1965. Photographs are available in various sizes from 9½" × 9½" to 38" × 38". Prices range from \$1.75 to \$9.00 per print.

Photogrammetric mapping of Waipahu to Koko Head and Waimanalo to Kahaluu. Scale: 1"=200'. Price \$2,500 per sheet (71 sheets). Sheet size: 30" × 42".

Extensive holdings at various scales of aerial photo maps. Civil engineering, surveying and photogrammetric mapping also available.

Vertical aerial photograph maps at a scale of 1"=1,000' for the Island of Oahu and about 70 percent of the Neighbor Islands. Prices vary.

AERONAUTICAL

Aeronautical Chart and Information Center
U.S. Department of the Air Force
Second and Arsenal
St. Louis, Missouri 63118

National Ocean Survey
National Oceanic & Atmospheric Admin.—NOAA
U.S. Department of Commerce
Attn: Chart Distribution
Rockville, Maryland 20852

Trans-Pacific Instrument Co.
1406 Colburn
Honolulu, Hawaii 96817
Telephone: 841-4729

Aeronautical charts and related publications of the U.S. Air Force. Some materials are available for civilian use. The aeronautical charts and publications produced by the Center are available for sale through the National Ocean Survey. Some or all of the charts may be available through a local sales dealer. (These agencies are listed to the left.)

Indexes are available from the Center and the charts are published at various scales. Price varies.

ALUMINUM ORE SITE

Land Study Bureau
University of Hawaii
Safety Loan Building, Rm. 301
2065 South King Street
Honolulu, Hawaii 96814
Telephone: 944-8295

Maps indicate the location and relative quality of principal areas bearing aluminum ore on the Islands of Kauai, Maui and Hawaii (1960). Scale: 1:62,500 (approx. 1"=1 mi.). There is a charge for the maps and master sheets may be borrowed for reproduction.

ATLAS

Department of Geography
University of Hawaii
Physical Science Building
Honolulu, Hawaii 96822
Telephone: 944-8465
(To be published by University Press of Hawaii)

Other sources:
Bookstores (listed under "Book Dealers" in the Yellow Pages).
Libraries

Atlas of Hawaii to be available in 1973. The *Atlas* will contain about 200 pages with 150 pages of maps, charts, illustrations and photographs. Also included will be a gazetteer, subject index and informational appendices. Price to be set.

Various maps of Hawaii published in world atlases available for sale in local retail bookstores or for reference use in public libraries.

BASE

Base Maps Section
Planning Department
City and County of Honolulu
629 Pohukaina Street
Honolulu, Hawaii 96813
Telephone: 546-7089

Maps showing existing roadways, public facilities, such as schools, parks, public utilities and streams in the City and County of Honolulu. Size and scale vary. Maps are open to the public. Orders should be placed with Blueprint Co., Inc., 815 Alakea Street, Honolulu, Hawaii 96813. Telephone: 536-6148.

| TYPE | SOURCE | GENERAL DESCRIPTION |
|--------------------------------|--|--|
| CENSUS | <p>Department of Planning and Economic Development State of Hawaii 250 South King Street Honolulu, Hawaii 96813 Telephone: 548-4025</p> <p>Geography Division Bureau of the Census Washington, D.C. 20233</p> | <p>Census tract outline are printed in the <i>State of Hawaii Data Book, 1972</i> and <i>Supplement</i>. Price \$4.00 (Out of State charge: \$5.00 post-paid.) Other detailed 1970 census maps are available for reference.</p> |
| | <p>U.S. Department of Commerce Field Office Suite 286, Alexander Young Bldg. Honolulu, Hawaii 96813 Telephone: 546-8694</p> | <p>This Division can provide complete information on the various 1970 census maps. The following publication contains a complete list of these maps: U.S. Bureau of the Census, <i>1970 Census Users' Guide</i> (Part I); U.S. Government Printing Office, Washington D.C., p. 47. (This publication is available for reference use in the State Department of Planning and Economic Development, Library of Hawaii, and the Field Office of the U.S. Department of Commerce in Honolulu.)</p> <p>Published reports on a variety of subjects (some containing maps) of the U.S. Bureau of the Census are available for sale or reference use. Publications (some containing maps) are also available at cost from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Index available. Prices and types vary.</p> |
| FALLOUT SHELTER | <p>County Civil Defense Agencies located at: 629 Pohukaina Street Honolulu, Hawaii 96813 Telephone: 531-4122</p> <p>34-A Rainbow Drive Hilo, Hawaii 96720</p> <p>250 S. High Street Wailuku, Maui, Hawaii 96793</p> <p>P.O. Box 627 Lihue, Kauai, Hawaii 96766</p> | <p>Location and flow of population to fallout shelters. Contained in Community Shelter Plans distributed without charge. Some maps used in work planning and emergency operations may be viewed by the public.</p> <p>Maps are maintained by County Civil Defense Agencies. (These agencies are listed to the left.)</p> |
| FLOOD HAZARD AREAS | <p>Division of Water and Land Development Department of Land and Natural Resources State of Hawaii 465 South King Street Honolulu, Hawaii 96813 Telephone: 548-7539</p> | <p>Flood maps delineating the areas subject to flooding from extraordinary flood occurrence and those floods having an estimated occurrence interval of 50 to 100 years. Size: 34" x 22". Scale: 1"=200'. Available without charge.</p> |
| FOREST | <p>Forest Service Institute of Pacific Islands Forestry U.S. Department of Agriculture 1179 Punchbowl Street Honolulu, Hawaii 96813 Telephone: 546-5669</p> | <p>Hawaii Forest Type maps containing information on the kind and extent of forest land and timber resources available in the Hawaiian Islands.</p> <p>Published in 1963-1965 (based on 1950-1954 aerial photographs) as blue-line prints at a scale of 1:62,500. Price: \$.10 per square foot or about \$.40 per map sheet. Deposit of \$2 per negative required and refunded upon return.</p> |
| HIGHWAY | <p>Highways Division Department of Transportation State of Hawaii 869 Punchbowl Street Honolulu, Hawaii 96813 Telephone: 548-7342</p> <p>Superintendent of Documents Government Printing Office Washington, D.C. 20402</p> | <p>State and Federal-aid Highway System Maps for the Islands of Oahu, Hawaii, Maui, Molokai-Lanai, and Kauai are available at a scale of 1"=2 mi. (Honolulu vicinity 1"=2,000'), sheet size 22" x 32", at a charge of \$1.00 per sheet.</p> <p>Federal-aid highway maps (1970). Size: 42" x 65". Available at a charge of \$1.50 each.</p> |
| HIKING TRAIL (see PARK) | <p>Division of Forestry Department of Land and Natural Resources State of Hawaii 1179 Punchbowl Street Honolulu, Hawaii 96813, Telephone: 548-5922</p> | <p>Maps are available for the Islands of Oahu and Molokai. Maps for the other major Islands are in process. The Oahu map (18" x 26") contains hunting areas, hiking trails and State parks. The Molokai map (22" x 13½") contains hiking trails only. Maps are distributed without charge.</p> |

| TYPE | SOURCE | GENERAL DESCRIPTION |
|--|--|--|
| HISTORICAL | Archives Division Department of Accounting and General Services State of Hawaii Iolani Palace Grounds Honolulu, Hawaii 96813 Telephone: 548-2355 | Maps of Hawaiian Islands dating back to the late 1700's. Includes maps showing trails, harbors, agriculture, transportation, topography, volcanoes and eruptions, homesteads, etc. Available to the public as reference material. |
| HUNTING AREA (see PARK) | Fish & Game Division Department of Land and Natural Resources State of Hawaii 530 South Hotel Street Honolulu, Hawaii 96813 Telephone: 548-4002 | Hunting areas for the Islands of Oahu and Kauai (18" x 26"). Hunting areas on the other major Islands (excluding Kahoolawe and Nihoa) are described in written form and are provided as attachments. Distributed without charge. |
| LAND (see also ZONING) | Base Maps Section Planning Department City and County of Honolulu 629 Pohukaina Street Honolulu, Hawaii 96813 Telephone: 546-7089 | The Section maintains a variety of maps which include general plan (1"=2,000'), detailed land use, existing land use development plans which show the proposed roadways and public facilities, existing zoning and ordinance maps (formerly adopted by the City Council) for the City and County of Honolulu. Scales vary. Maps are open to the public. Orders should be placed with Blueprint Co. Price: \$.10 per square foot, ozalid. |
| | Division of Land Survey and Acquisition Department of Public Works City and County of Honolulu City Hall Honolulu, Hawaii 96813 Telephone: 546-2748 | Land Acquisition Parcel Maps for all land or easement acquisitions made by the City and County, \$1.00 per sheet. |
| | Land Study Bureau University of Hawaii Safety Loan Building, Rm. 301 2065 South King Street Honolulu, Hawaii 96814 Telephone: 944-8295 | Classification, land use, large land holdings, present and future urban land use (Oahu) 1958-1980, Oahu Lands Classified by Physical Qualities for Urban Use, etc. Scale: 1:62,500 (approx. 1"=1 mi.) Price varies. |
| | Land Survey Division Department of Accounting and General Services State of Hawaii 465 South King Street Honolulu, Hawaii 96813 Telephone: 548-7423 | Land Court Subdivision, File Plan Subdivision (showing final subdivision plans) and Registered State Survey Maps and Descriptions. Prices and sizes vary. |
| | Land Use Commission Department of Planning and Economic Development State of Hawaii 250 South King Street Honolulu, Hawaii 96813 Telephone: 548-3074 | State Land Use Law Classification Maps may be viewed in the Commission office. Prepared from U.S. Geological Survey maps. Sepia (negative) and quadrangle maps available in one large size about 2' x 3'. Price \$2.10 for each sepia and \$.50 for blue line print. Minimum order \$1. Place order with Blueprint Co., Inc., 815 Alakea Street, Honolulu, Hawaii 96813. Telephone: 536-6148. |
| NAUTICAL | National Ocean Survey National Oceanic & Atmospheric Admin.—NOAA U.S. Department of Commerce Attn: Chart Distribution Rockville, Maryland 20852 | Nautical charts and certain related publications such as Coast Pilots, Tide Tables, Tidal Current Tables and Tidal Current Charts. Catalog available from the National Ocean Survey. Charts vary in scale and average \$1.50 per copy. Some or all of the charts are available from local sales dealers on Oahu and the Neighbor Islands. Oahu sales dealers are Trans-Pacific Instrument Co. and McWayne Marine Supply Ltd. |
| PARK (see HIKING TRAIL, HUNTING AREA) | National Park Service U.S. Department of the Interior 677 Ala Moana, Suite 512 Honolulu, Hawaii 96813 Telephone: 521-3027 State Parks Division Department of Land and Natural Resources State of Hawaii 1179 Punchbowl Street Honolulu, Hawaii 96813 Telephone: 548-5692 | Brochure type maps available on major scenic areas of Hawaii's National Parks. Available without charge. Brochure type map showing State parks, monuments, recreation areas and waysites throughout the State. Available without charge. |

| TYPE | SOURCE | GENERAL DESCRIPTION |
|---|---|--|
| <p>U.S. Geological Survey Department of the Interior Rm. 330, First Insurance Bldg. 1100 Ward Avenue Honolulu, Hawaii 96814 Telephone: 546-5692</p> | | <p>Topographic maps of Hawaii's National Parks may be purchased from the Distribution Section, U.S. Geological Survey, Federal Center, Denver, Colorado 80225. These maps include City of Refuge National Historical Park, Haleakala National Park and Hawaii Volcanoes National Park. Index available from Center. Prices vary.</p> |
| POINTS OF INTEREST | <p>Hawaii Visitors Bureau 2270 Kalakaua Avenue, 9th Floor Honolulu, Hawaii 96815 Telephone: 923-8111</p> | <p>Various maps and brochures showing major scenic points throughout the State. Available without charge.</p> |
| POLITICAL | <p>Office of the Lieutenant Governor State Capitol Honolulu, Hawaii 96813 Telephone: 548-4544</p> | <p>Eleven political district wall maps (3' x 4') available at a charge of \$1 each. The maps consist of the following: 4 County district maps showing precinct, representative and senatorial district boundaries; 6 maps showing the Oahu Senatorial districts with street, precinct boundaries, representative district boundaries and polling places; 1 map showing the 8th through 18th representative districts in the City of Honolulu.</p> |
| POPULATION (see CENSUS) | | |
| POSTAL | <p>Superintendent of Documents Government Printing Office Washington, D.C. 20402</p> | <p>Hawaii and Islands of the Pacific Ocean. \$.35.</p> |
| RAINFALL | <p>Land Study Bureau University of Hawaii Safety Loan Building, Rm. 301 2065 South King Street Honolulu, Hawaii 96814 Telephone: 944-8295</p> | <p>Maps showing the median annual amount of rainfall or midpoint values when amounts of rainfall are arranged in an increasing or decreasing order. Scale: 1:62,500 (approx. 1"=1 mi.) (1961) Price varies.</p> |
| RELIEF | <p>Hogarth Press-Hawaii 3431 Ala Akulikuli Honolulu, Hawaii 96818 Telephone: 839-2250</p> <p>Trans-Pacific Instrument Co. 1406 Colburn Honolulu, Hawaii 96817 Telephone: 841-4729</p> <p>U.S. Geological Survey Department of the Interior Rm. 330, First Insurance Bldg. 1100 Ward Avenue Honolulu, Hawaii 96813 Telephone: 546-5692</p> | <p>Plastic relief map of each of the major Islands and of the State. Price: \$7.00 each. Artistic Raised Relief map (in production). Approx. price: \$25.00.</p> <p>Four plastic relief maps showing each of the Counties. Island of Hawaii approx. 2' in size with other Islands in proportion. Price: \$12.95 each.</p> <p>Topographic shaded-relief maps may be obtained from the U.S. Geological Survey, Denver Distribution Section, Federal Center, Denver, Colorado 80225. Some or all of the maps may be available through a local sales dealer. (On Oahu contact Trans-Pacific Instrument Co.) Prices vary.</p> |
| ROAD (see STREET AND ROAD) | | |
| SEWER | <p>Division of Sewers Department of Public Works City and County of Honolulu City Hall Honolulu, Hawaii 96813 Telephone: 546-2866</p> | <p>Sewer construction project drawings, ozalid prints, \$1.00 per print.</p> |
| SOIL | <p>Division of Water and Land Development Department of Land and Natural Resources State of Hawaii 465 South King Street Honolulu, Hawaii 96813 Telephone: 548-7539</p> | <p>Maps available in Soil Survey Interpretations reports for Islands of Maui, Molokai, Lanai and Kauai. Provide information on relative suitability and limitations of soils for various uses. Available without charge.</p> |

TYPE**SOURCE****GENERAL DESCRIPTION**

Soil Conservation Service
U.S. Department of Agriculture
440 Alexander Young Bldg.
Honolulu, Hawaii 96813
Telephone: 546-3165

Maps include Soil and Water Conservation Districts and Watersheds (1966) at a scale of 1/2"=20 mi. Soil and Water Conservation District of Kona (1971) at a scale of 1:144,800. These particular maps are available without charge.

STREET AND ROAD

Division of Engineering
Department of Public Works
City and County of Honolulu
City Hall
Honolulu, Hawaii 96813
Telephone: 546-7508

Street maps of the City of Honolulu: Scale of 1"=500', \$2.50 per sheet (5 sections). Scale of 1"=1000', \$3.00 per sheet (1 sheet). Street maps of Rural Oahu: Scale of 1"=400', \$1.00 per sheet (32 sections). Construction Drawings of Division projects, ozalid print (\$1 per print) and microfilm print (\$.50 per print).

First Hawaiian Bank
161 South King Street
Honolulu, Hawaii 96813
Telephone: 537-5011

State of Hawaii map with detailed street directory listing of the City of Honolulu. Available without charge.

South Sea Sales
916 Kaamahu Place
Honolulu, Hawaii 96817
Telephone: 841-4756

Bryan's Sectional Maps of Oahu and the Neighbor Islands (booklet, \$1.25). Honolulu Map and Tourist Guide (pocket folder, 17" x 22", \$.45 each).

Visitor Information Program
Honolulu International Airport
Department of Transportation
State of Hawaii
Honolulu, Hawaii
Telephone: 841-4706

Official Transportation Map of the State of Hawaii showing major highways and points of interest. Street maps of the Islands of Hawaii, Kauai and Maui. Available without charge.

Road maps showing all Islands may also be obtained free from the main business offices of the major oil companies and their affiliated service stations in Hawaii.

TAX KEY

Tax Maps Branch
Department of Taxation
State of Hawaii
425 Queen Street
Honolulu, Hawaii 96813
Telephone: 548-7573

Tax Key Maps for the State of Hawaii. Size: approx. 21" x 32". Available at a charge of \$1.00 per copy. Map folders containing survey maps and descriptions are also available to the general public as reference material. Reduced tax key maps (11" x 17") may be obtained from Hawaii Blueprint & Supply, 1512 Kona Street, Honolulu, Hawaii 96814. Telephone: 941-6602. Price: \$.72 for initial map and \$.46 for each additional map ordered.

TOPOGRAPHIC

U.S. Geological Survey
Department of the Interior
Rm. 330, First Insurance Bldg.
1100 Ward Avenue
Honolulu, Hawaii 96814
Telephone: 546-5692

Variety of maps on file which describe topography, geology, hydrology and related water resource features. None are for sale, but all are open for reference use.

Topographic and planimetric quadrangle maps published by the U.S. Geological Survey may be purchased from the Denver Distribution Section, Federal Center, Denver, Colorado 80225. Some or all of the maps are available from local sales dealers on Oahu and the Neighbor Islands. Oahu sales dealer is Trans-Pacific Instrument Co. Prices vary.

The following is a listing of some of the major topographic maps published by the U.S. Geological Survey. Prices vary.

Honolulu and vicinity. This map was compiled from the Honolulu, Kaneohe, Koko Head, Mokapu, Puuola and Waipahu quadrangle maps. Scale: 1:24,000, or 2000' to 1". Contour intervals, 20' and 40' with supplementary contours at 10 and 20-foot intervals. Size, 50" by 69". 1927- 54.

Lanai (Island). Scale: 1:62,500, or about 1 mi. to 1". Contour interval, 50'. Size 20" by 23". 1923.

Maui (Island). Scale: 1:62,500, or about 1 mi. to 1". Contour interval, 80', with supplementary contours at 40-foot intervals. Size, 40" by 56". 1957. Also published in a shaded-relief.

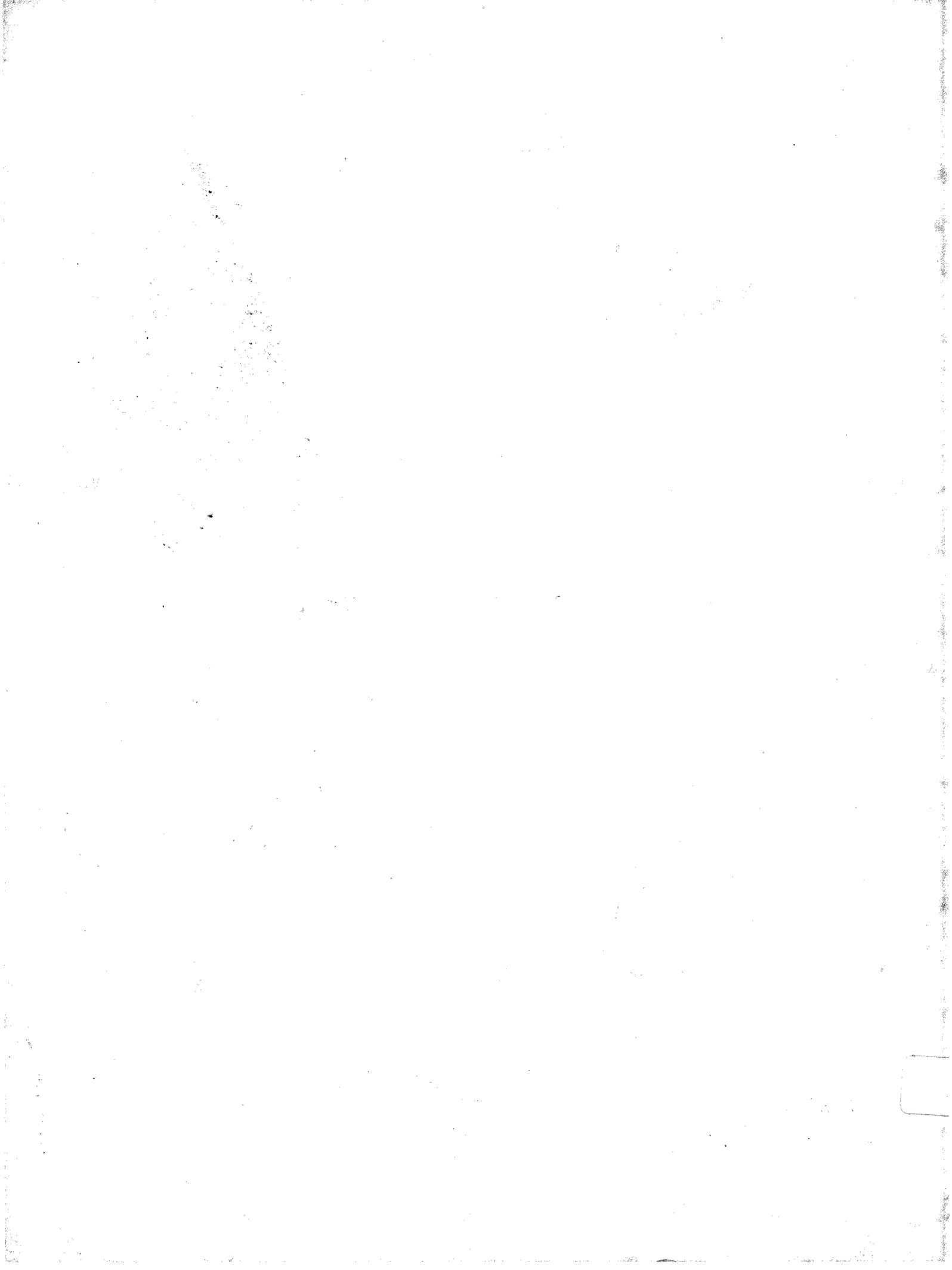
Molokai (Island). Scale: 1:62,500 or about 1 mi. to 1". Contour interval, 100'. Size, 21" by 47". 1952. Also published in a shaded-relief.

Niihau (Island). Scale: 1:62,500 or about 1 mi. to 1". Contour interval, 50'. Size 19" by 22". 1926.

Oahu (Island). Scale: 1:62,500 or about 1 mi. to 1". Contour interval, 80', with supplementary contours at 20-foot intervals. Size, 37" by 48". 1954.

Topographic maps are printed in three colors. The cultural features, such as roads, railroads, cities, and towns, as well as the lettering are in black; the water features are in blue; and the features of relief, such as hills, mountains, and valleys are shown by brown contour lines.

| TYPE | SOURCE | GENERAL DESCRIPTION |
|---------------------------------------|---|---|
| VEGETATION | Land Study Bureau University of Hawaii Safety Loan Building, Rm. 301 2065 South King Street Honolulu, Hawaii 96814 Telephone: 944-8295 | A vegetation and associated climatic map for the major Islands (excluding Kahoolawe and Niihau), 1961. Scale: 1:62,500 (approx. 1"=1 mi.). Price varies. |
| WALL | Hogarth Press-Hawaii 3431 Ala Akulikuli Honolulu, Hawaii 96818 Telephone: 839-2250 South Sea Sales 916 Kaamahu Place Honolulu, Hawaii 96817 Telephone: 841-4756 | Wall map of the Pacific Ocean with Hawaii at the center. Price: \$27.50. Wall map of the City of Honolulu (1963). Size: 3' x 4'. Price: \$5. |
| WEATHER | National Weather Service Forecast Office U.S. Department of Commerce Honolulu International Airport Honolulu, Hawaii 96819 Telephone: 847-1831 | Surface weather maps of the Equatorial & North Pacific Region at a scale of 1:20 million Mercator Projection. Size: 18" x 30". Available four times daily. |
| ZONING (see also LAND) | Oahu Development Conference 119 Merchant Street Honolulu, Hawaii 96813 Telephone: 537-5271 County Planning Departments: County of Maui P.O. Box 1487 Kahului, Maui 96732 County of Kauai Lihue, Kauai 96766 County of Hawaii Hilo, Hawaii 96720 Base Maps Section City and County of Honolulu 629 Pohukaina Street Honolulu, Hawaii 96813 Telephone: 546-7089 | State Zoning Map (1971) showing urban, conservation and agricultural areas on the Island of Oahu. Size: 22" x 34". Scale: approx. 1 mi.=3/4" (Island of Oahu), 1000'=3/4" (City of Honolulu). Price: \$1. Zoning maps and land use allocation maps. Contact County of your interest for information. |



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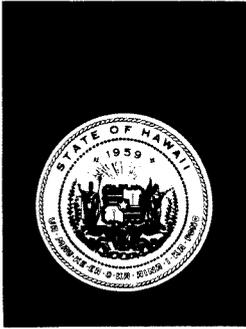
THE STATE OF HAWAII
DATA BOOK
A STATISTICAL ABSTRACT



DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

HONOLULU, HAWAII

1972



STATE OF
HAWAII

DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

P. O. BOX 2359 • HONOLULU, HAWAII 96804

July, 1972

JOHN A. BURNS
Governor

SHELLEY M. MARK
Director

EDWARD J. GREANEY, JR.
Deputy Director

The State of Hawaii Data Book: A Statistical Abstract is intended to serve as the standard official summary of statistics on the social, economic, and political organization of the State. Like its long-established counterpart, the *Statistical Abstract of the United States*, it may be used as either a convenient volume of statistical reference or a guide to other statistical publications and sources.

The present volume, containing statistics available in early 1972, is the tenth anniversary edition in this series. Earlier editions appeared in 1962, 1967, 1968, 1970 and 1971. All of these are now out of print, but copies can be seen in many high school, university, and public libraries.

The *Data Book* closely follows the organization and format of the U.S. *Abstract*, in order to facilitate comparison of Hawaii data with corresponding series for the nation and other jurisdictions.

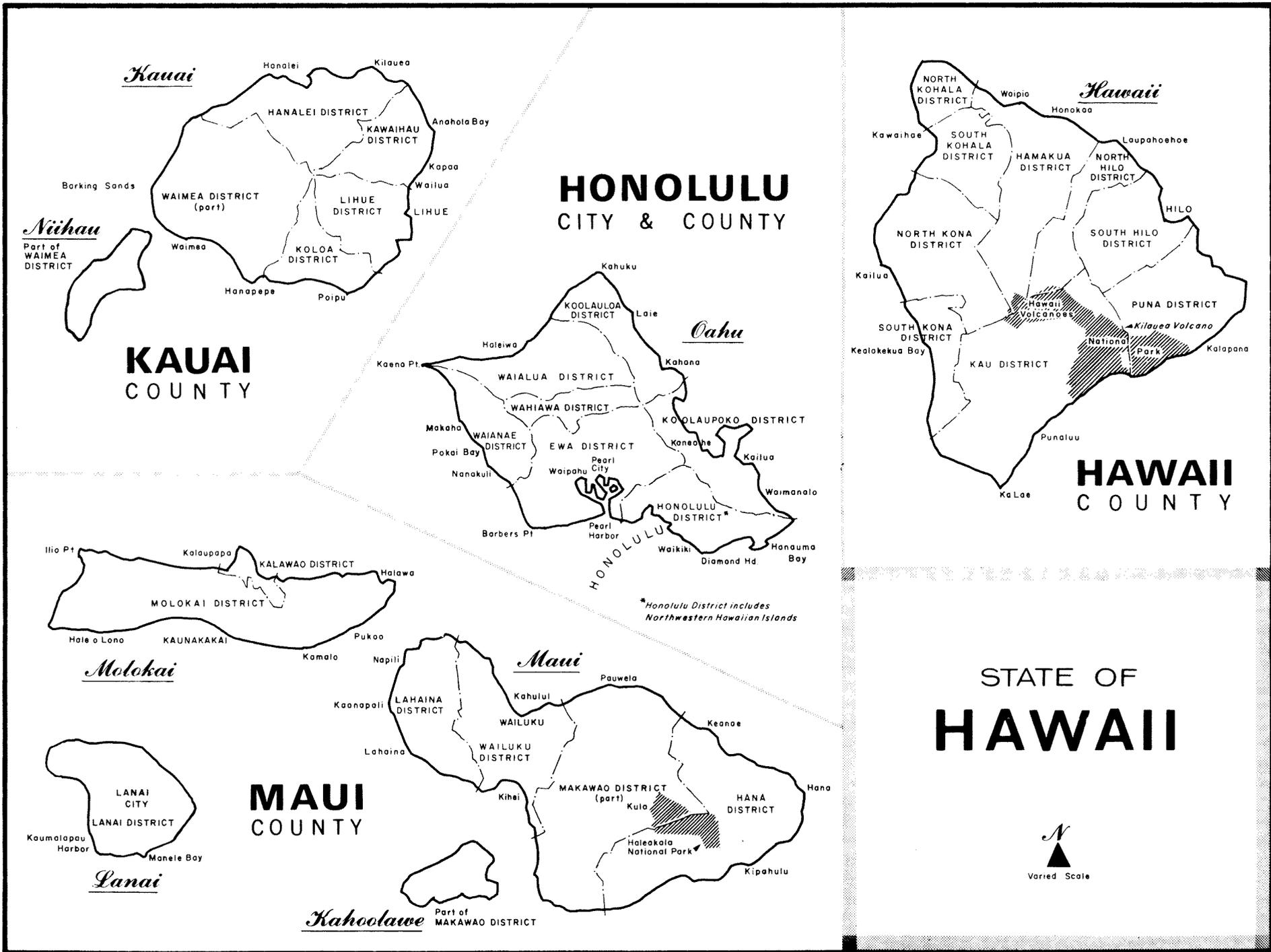
Emphasis in the *Data Book* is given to the most recent available State data. Historical statistics and information for counties, islands, urban places, and smaller areas receive more limited attention. The publications cited as sources in the introductions to the various sections or at the end of each table usually contain additional statistical detail and a more comprehensive discussion of relevant definitions and concepts than can be presented here. Persons interested in more extensive information should consult these sources or write to the agencies responsible for them.

Many Federal, State, County and private organizations cooperated in the preparation of this report. These agencies are credited in the source references to the tables to which they contributed. Their assistance is gratefully acknowledged.

Shelley M. Mark

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SECTION 1

POPULATION

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

Final results of the 1970 United States Census indicated a population of 769,913. This total included approximately 55,000 members of the armed forces and 62,000 of their dependents.

The census count excluded 38,000 visitors who were present on April 1, 1970, while including 10,000 residents who were temporarily out of the State. The total population has risen from 154,000 in 1900 and 423,000 in 1940 (although a wartime peak of 859,000 was reached in 1944). Eighty-two percent of the 1970 total lived on Oahu, giving that Island a density in excess of 1,000 persons per square mile.

The population is young—50 percent were under 25 years of age in 1970—and racially diversified, over one-fourth of the total being the product of mixed marriages. Migration has been a major factor in the growth of the population: between 1960 and 1970, approximately 193,000 persons (excluding military personnel and their dependents) moved to the State, while 140,000 moved away. The in-migrants included 156,000 persons from the Mainland and over 36,000 from foreign countries, chiefly the Philippines.

The principal sources for these data are the decennial censuses (including final tabulations of the 1970 count), the estimates developed annually by the Hawaii State Department of Health and Department of Planning and Economic Development in cooperation with the Bureau of the Census, the sample survey conducted in 1970 by the Department of Health, and ongoing series maintained by the Hawaii Visitors Bureau and U.S. Immigration and Naturalization Service. The Department of Planning and Economic Development summarizes these data in two series of reports, each issued annually: *The Population of Hawaii* and *Hawaii's In-Migrants*. Comparable national statistics appear in sections 1 and 3 of *Statistical Abstract of the United States: 1971*.

Table 1.—POPULATION OF THE STATE OF HAWAII, ISLAND OF OAHU, AND CITY OF HONOLULU: 1778 TO 1971

| Estimate or census date ¹ | State of Hawaii | Island of Oahu | City of Honolulu ² | Estimate or census date ¹ | State of Hawaii | Island of Oahu ³ | City of Honolulu ² |
|--------------------------------------|-----------------|----------------|-------------------------------|--------------------------------------|-----------------|-----------------------------|-------------------------------|
| 1778-1779 ⁴ | 250,000 | 50,000 | (NA) | 1890: Dec. 28 | 89,990 | 31,194 | 22,907 |
| 1823 | 145,000 | 34,000 | (NA) | 1896: Sept. 27 | 109,020 | 40,205 | 29,920 |
| 1831-1832 | 130,313 | 29,755 | 13,344 | 1900: June 1 | 154,001 | 58,504 | 39,306 |
| 1835-1836 | 108,579 | 27,809 | 12,994 | 1910: April 15 | 191,874 | 81,993 | 52,183 |
| 1850: January | 84,165 | 25,440 | 14,484 | 1920: January 1 | 255,881 | 123,496 | 81,820 |
| 1853: Dec. 26 | 73,138 | 19,126 | 11,455 | 1930: April 1 | 368,300 | 202,887 | 137,582 |
| 1860: Dec. 24 | 69,800 | 21,275 | 14,310 | 1940: April 1 | 422,770 | 257,696 | 179,358 |
| 1866: Dec. 7 | 62,959 | 19,799 | 13,521 | 1950: April 1 | 499,794 | 353,020 | 248,034 |
| 1872: Dec. 27 | 56,897 | 20,671 | 14,852 | 1960: April 1 | 632,772 | 500,409 | 294,194 |
| 1878: Dec. 27 | 57,985 | 20,236 | 14,114 | 1970: April 1 | 769,913 | 630,528 | 324,871 |
| 1884: Dec. 27 | 80,578 | 28,068 | 20,487 | 1971: July 1 | 788,321 | 645,662 | (NA) |

NA Not available.

¹Estimates for 1778-1779, 1823, and 1971, partial censuses (as supplemented by estimates) for 1831-1832 and 1835-1836, and official censuses for 1850 to 1970.

²The area from Maunalua to Moanalua, inclusive, plus minor outlying Islands legally part of the City of Honolulu.

³Data for 1940 and later years include minor outlying Islands legally part of the City and County of Honolulu.

⁴Other estimates for 1778-1779 range from 200,000 to 400,000 for the State and from 40,000 to 60,200 for Oahu.

Source: 1778-1779 and 1823 from Robert C. Schmitt, "New Estimates of the Pre-Censal Population of Hawaii," *The Journal of the Polynesian Society*, Vol. 80, No. 2, June 1971, pp. 237-243; 1831 to 1960 from Robert C. Schmitt, *Demographic Statistics of Hawaii: 1778-1965* (University of Hawaii Press, 1968), pp. 42, 70, and 116; 1970 from *U.S. Census of Population: 1970*, Final Report PC(1)-A13, tables 1 and 10 and correction note; 1971 from Hawaii State Department of Planning and Economic Development, Statistical Report 86 (November 12, 1971), p. 5.

Table 2.—POPULATION OF HAWAII, BY GEOGRAPHIC AREA: 1831 TO 1970

| Geographic area | 1831 | 1878 | 1910 | 1940 | 1960 | 1970 |
|-----------------------------|---------|--------|---------|---------|---------|---------|
| The State | 129,814 | 57,985 | 191,874 | 422,770 | 632,772 | 769,913 |
| Oahu ¹ | 29,745 | 20,236 | 81,993 | 257,696 | 500,409 | 630,528 |
| Honolulu ¹ | 13,344 | 14,114 | 52,183 | 179,358 | 294,194 | 324,871 |
| Rest of Oahu | 16,401 | 6,122 | 29,810 | 78,338 | 206,215 | 305,657 |
| Other islands | 100,069 | 37,749 | 109,881 | 165,074 | 132,363 | 139,385 |
| Hawaii | 45,700 | 17,034 | 55,382 | 73,276 | 61,332 | 63,468 |
| Maui | 35,062 | 12,109 | 28,623 | 46,919 | 35,717 | 38,691 |
| Kahoolawe | 80 | — | 2 | 1 | — | — |
| Lanai | 1,200 | 214 | 131 | 3,720 | 2,115 | 2,204 |
| Molokai | 6,000 | 2,581 | 1,791 | 5,340 | 5,023 | 5,261 |
| Kauai | 10,947 | 5,634 | 23,744 | 35,636 | 27,922 | 29,524 |
| Niihau | 1,080 | 177 | 208 | 182 | 254 | 237 |
| Urban ² | 13,344 | 14,114 | 58,928 | 264,262 | 483,961 | 643,222 |
| Rural ³ | 116,470 | 43,871 | 132,946 | 158,508 | 148,811 | 126,691 |
| PERCENT DISTRIBUTION | | | | | | |
| Oahu ¹ | 22.9 | 34.9 | 42.7 | 61.0 | 79.1 | 81.9 |
| Honolulu ¹ | 10.3 | 24.3 | 27.2 | 42.4 | 46.5 | 42.2 |
| Rest of Oahu | 12.6 | 10.6 | 15.5 | 18.5 | 32.6 | 39.7 |
| Other islands | 77.1 | 65.1 | 57.3 | 39.0 | 20.9 | 18.1 |
| Urban ² | 10.3 | 24.3 | 30.7 | 62.5 | 76.5 | 83.5 |
| Rural ³ | 89.7 | 75.7 | 69.3 | 37.5 | 23.5 | 16.5 |

¹Includes the Northwestern Hawaiian Islands (except Midway) and, before 1960, the Palmyra Islands.

²Limited to Honolulu before 1910.

Source: Robert C. Schmitt, *The Missionary Censuses of Hawaii* (to be published by the Bishop Museum), table 2, and *Demographic Statistics of Hawaii: 1778-1965* (University of Hawaii Press, 1968), pp. 70 and 115-116; U.S. Bureau of the Census, *U.S. Census of Population: 1970*, Final Report PC(1)-A13, table 9, as corrected.

Table 3.—ESTIMATED POPULATION, BY MILITARY STATUS: 1940 TO 1971

| Date (July 1 unless otherwise specified) | Resident population ¹ | | | | | De facto population ² |
|--|----------------------------------|--------------|---------------------|---------------------|-----------------|----------------------------------|
| | Total | Armed forces | Civilian population | | | |
| | | | Total | Military dependents | Other civilians | |
| 1940: April 1 ³ | 423,330 | 28,208 | 395,122 | — | — | 424,592 |
| July 1 | 427,884 | 30,041 | 397,843 | — | — | 429,177 |
| 1941 | 459,335 | 48,187 | 411,148 | — | — | 460,939 |
| 1942 | 582,026 | 135,907 | 446,119 | — | — | 582,026 |
| 1943 | 649,650 | 199,832 | 449,818 | — | — | 649,650 |
| 1944 | 858,945 | 406,811 | 452,134 | — | — | 858,945 |
| 1945 | 814,601 | 354,734 | 459,867 | — | — | 814,601 |
| 1946 | 545,439 | 65,731 | 479,708 | — | — | 545,476 |
| 1947 | 526,238 | 38,673 | 487,565 | — | — | 526,910 |
| 1948 | 517,013 | 32,849 | 484,164 | — | — | 518,432 |
| 1949 | 511,039 | 30,681 | 480,358 | — | — | 512,335 |
| 1950: April 1 | 499,794 | 20,575 | 479,219 | — | — | 501,686 |
| July 1 | 497,980 | 20,063 | 277,917 | — | — | 500,073 |
| 1951 | 514,256 | 44,188 | 470,068 | — | — | 516,681 |
| 1952 | 517,378 | 57,260 | 460,118 | — | — | 520,252 |
| 1953 | 509,947 | 47,215 | 462,732 | — | — | 513,711 |
| 1954 | 505,461 | 37,762 | 467,699 | — | — | 509,725 |
| 1955 | 539,292 | 56,807 | 482,485 | — | — | 544,116 |
| 1956 | 558,575 | 57,246 | 501,329 | — | — | 564,192 |
| 1957 | 584,466 | 59,581 | 524,885 | — | — | 591,079 |
| 1958 | 605,356 | 55,011 | 550,345 | — | — | 611,767 |
| 1959 | 622,087 | 56,596 | 565,491 | — | — | 630,479 |
| 1960: April 1 | 632,772 | 53,888 | 578,884 | 60,057 | 518,827 | 641,519 |
| July 1 | 641,520 | 59,183 | 582,337 | 60,261 | 522,076 | 651,185 |
| 1961 | 658,684 | 60,182 | 597,872 | 62,033 | 535,839 | 668,224 |
| 1962 | 683,513 | 78,977 | 604,536 | 63,231 | 541,305 | 693,634 |
| 1963 | 682,241 | 59,562 | 622,679 | 61,495 | 561,184 | 694,503 |
| 1964 | 699,858 | 73,174 | 626,684 | 69,090 | 557,594 | 711,158 |
| 1965 | 703,804 | 53,381 | 650,423 | 65,816 | 584,607 | 715,428 |
| 1966 | 710,325 | 54,058 | 656,267 | 62,622 | 593,645 | 724,581 |
| 1967 | 722,528 | 55,981 | 666,547 | 61,301 | 605,246 | 742,639 |
| 1968 | 734,456 | 57,013 | 677,443 | 59,133 | 618,310 | 758,839 |
| 1969 | 750,228 | 48,474 | 701,754 | 59,697 | 642,057 | 778,848 |
| 1970: April ⁴ | 769,913 | 55,142 | 714,771 | 61,858 | 652,913 | 797,308 |
| July 1 ⁴ | 773,667 | 53,803 | 719,864 | 57,781 | 662,083 | 801,416 |
| 1971 ⁴ | 789,225 | 51,666 | 737,559 | 62,181 | 675,378 | 820,637 |

¹Includes residents temporarily absent; excludes visitors present. Also excludes former Hawaii residents attending school or serving in the armed forces on the Mainland or abroad. Data on the military status of civilians not available before 1960.

²Includes visitors present; excludes residents temporarily absent. Estimates for these components are annual averages centered on the estimate date.

³Includes 560 persons on the Midway Islands and other minor outlying Islands, not part of the Territory of Hawaii but included for census purposes in 1940.

⁴Because of differences in definition and source of data on the armed forces, these estimates differ somewhat from the County estimates in table 4.

Source: Hawaii State Department of Planning and Economic Development, *Intercensal Population Estimates for Hawaii, 1930 to 1970* (Statistical Report 81, July 23, 1971) and *Provisional Estimates of the Population of Hawaii, July 1, 1971* (Statistical Report 86, November 12, 1971).

Table 4.—ESTIMATED POPULATION AND DENSITY, BY COUNTY: 1960 TO 1971

| Subject ¹ | State total ² | City and County of Honolulu | Other Counties | | | |
|---|--------------------------|-----------------------------|----------------|---------|--------|------------------|
| | | | Total | Hawaii | Kauai | Maui and Kalawao |
| Total resident population: | | | | | | |
| 1960: April 1 | 632,772 | 500,409 | 132,363 | 61,332 | 28,176 | 42,855 |
| 1970: April 1 | 769,913 | 630,528 | 139,385 | 63,468 | 29,761 | 46,156 |
| July 1 | 773,632 | 633,037 | 140,595 | 64,317 | 29,871 | 46,407 |
| 1971: July 1 | 788,321 | 645,662 | 142,659 | 66,078 | 30,057 | 46,524 |
| Civilian resident population: | | | | | | |
| 1960: April 1 | 579,891 | 447,839 | 132,052 | 61,200 | 28,036 | 42,816 |
| 1970: April 1 | 713,828 | 574,781 | 139,047 | 63,326 | 29,625 | 46,096 |
| July 1 | 719,864 | 579,621 | 140,243 | 64,166 | 29,729 | 46,348 |
| 1971: July 1 | 737,559 | 595,213 | 142,346 | 65,929 | 29,937 | 46,480 |
| Civilian resident population, excluding military dependents: | | | | | | |
| 1960: April 1 | 519,834 | 388,178 | 131,656 | 60,996 | 27,902 | 42,758 |
| 1970: April 1 | 651,970 | 513,281 | 138,689 | 63,206 | 29,420 | 46,063 |
| July 1 | 662,083 | 522,175 | 139,908 | 64,073 | 29,523 | 46,312 |
| 1971: July 1 | 675,378 | 533,475 | 141,903 | 65,812 | 29,729 | 46,362 |
| Total de facto population: | | | | | | |
| 1960: April 1 | 641,519 | 507,550 | 133,969 | 62,254 | 28,492 | 43,223 |
| 1970: April 1 | 797,308 | 648,028 | 149,280 | 67,122 | 32,861 | 49,297 |
| July 1 | 801,381 | 651,057 | 150,324 | 67,934 | 32,925 | 49,465 |
| 1971: July 1 | 819,733 | 666,406 | 153,327 | 70,086 | 32,830 | 50,411 |
| Land area (square miles) | 6,425.4 | 595.7 | 5,829.7 | 4,037.0 | 619.1 | 1,173.6 |
| De facto population per square mile, 1971 | 127.6 | 1,118.7 | 26.3 | 17.4 | 53.0 | 43.0 |

¹For definitions, see preceding table.

²Because of differences in sources, these estimates differ somewhat from the corresponding estimates in the preceding table.

Source: Hawaii State Department of Planning and Economic Development, *Provisional Estimates of the Population of Hawaii, July 1, 1971* (Statistical Report 86, November 12, 1971), tables 1 and 3 and underlying data.

**Table 5.—RESIDENT POPULATION OF COUNTIES AND DISTRICTS:
1960 AND 1970**

| County and district | April 1, 1960 | April 1, 1970 |
|------------------------|------------------|------------------|
| The State | 632,772 | 769,913 |
| Honolulu | 500,409 | 630,528 |
| Honolulu | 294,194 | 324,871 |
| Koolaupoko | 60,238 | 92,219 |
| Koolauloa | 8,043 | 10,562 |
| Waialua | 8,221 | 9,171 |
| Wahiawa | 34,595 | 37,329 |
| Waianae | 16,452 | 24,077 |
| Ewa | 78,666 | 132,299 |
| Hawaii | 61,332 | 63,468 |
| Puna | 5,030 | 5,154 |
| South Hilo | 31,553 | 33,915 |
| North Hilo | 2,493 | 1,881 |
| Hamakua | 5,221 | 4,648 |
| North Kohala | 3,386 | 3,326 |
| South Kohala | 1,538 | 2,310 |
| North Kona | 4,451 | 4,832 |
| South Kona | 4,292 | 4,004 |
| Ka'u | 3,368 | 3,398 |
| Maui and Kalawao | 42,855 | 46,156 |
| Hana | 1,073 | 969 |
| Makawao | 10,409 | 9,979 |
| Wailuku | 19,391 | 22,219 |
| Lahaina | 4,844 | 5,524 |
| Lanai | 2,115 | 2,204 |
| Molokai | 4,744 | 5,089 |
| Kalawao | 279 | 172 |
| Kauai | 28,176 | 29,761 |
| Waimea | 7,057 | 7,569 |
| Koloa | 7,012 | 6,851 |
| Lihue | 6,297 | 6,766 |
| Kawaihau | 6,498 | 7,393 |
| Hanalei | 1,312 | 1,182 |

Source: U.S. Bureau of the Census, *U.S. Census of Population: 1970*, Final Report PC(1)-A13, table 10, as corrected.

Table 6.—LAND AREA, 1970, AND POPULATION, 1960 AND 1970, OF URBAN PLACES

| Island and urban place ¹ | Land area (acres) | Resident population | | Island and urban place ¹ | Land area (acres) | Resident population | |
|-------------------------------------|-------------------|---------------------|-------------------|-------------------------------------|-------------------|---------------------|-------------------|
| | | 1970 | 1960 ² | | | 1970 | 1960 ² |
| Oahu: | | | | Oahu, cont.: | | | |
| Aiea | 1,302 | 12,560 | 11,436 | Waimalu | 115 | 2,982 | 2,446 |
| Barbers Pt. Hsg. | 149 | 3,187 | 2,665 | Waimanalo Beach | 328 | 3,045 | 1,517 |
| Ewa | 627 | 2,906 | 3,257 | Waipahu | 1,815 | 24,150 | 7,802 |
| Ewa Beach | 815 | 7,765 | 4,627 | | | | |
| Foster Village | 335 | 3,755 | 2,133 | Hawaii: | | | |
| Halawa Hts. | 808 | 5,809 | 2,485 | Hilo | 35,929 | 26,353 | 23,005 |
| Haleiwa | 1,165 | 2,626 | 2,504 | Kailua | 489 | 365 | 433 |
| Hickam Housing | 720 | 7,352 | 6,454 | Papaikou | 749 | 1,888 | 1,591 |
| Honolulu | 53,696 | 324,871 | 294,194 | Waimea | 652 | 756 | 657 |
| Iroquois Pt. | 395 | 4,572 | 677 | | | | |
| Kailua ³ | 4,470 | 33,783 | 24,402 | Kauai: | | | |
| Kaneohe | 4,316 | 29,903 | 15,291 | Kapaa | 2,591 | 3,794 | 3,439 |
| Laie | 754 | 3,009 | 1,767 | Lihue | 3,959 | 3,124 | 4,106 |
| Maili | 477 | 4,397 | 2,954 | | | | |
| Makaha | 723 | 4,644 | 2,735 | Maui: | | | |
| Makakilo City | 850 | 3,499 | 0 | Kahului | 2,888 | 8,280 | 4,223 |
| Maunawili | 2,325 | 5,303 | 2,128 | Lahaina | 870 | 3,718 | 3,423 |
| Mokapu | 2,718 | 7,860 | 6,397 | Wailuku | 1,499 | 7,979 | 6,969 |
| Nanakuli | 1,068 | 6,506 | 2,745 | | | | |
| Pacific Palisades | 658 | 7,846 | 0 | Molokai: | | | |
| Pearl City | 2,135 | 19,552 | 7,072 | Kaunakakai | 573 | 1,070 | 740 |
| Schofield Bks. | 1,849 | 13,516 | 14,873 | | | | |
| Wahiawa | 1,472 | 17,598 | 15,512 | Lanai: | | | |
| Waialua | 829 | 4,047 | 2,689 | Lanai City | 328 | 2,122 | 2,056 |
| Waianae | 541 | 3,302 | 3,186 | | | | |

¹These places are among the 93 cities, towns, and villages assigned statistical boundaries under Act 25, Session Laws of 1963. Each place over 2,500, the largest place on each island if none exceeds 2,500, and a few other places of special interest are shown.

²These figures refer to the 1960 population within the 1970 boundaries, and hence may differ somewhat from data published in official census bulletins.

³Includes Coconut Grove, Kalaheo Hillside, Keolu Hills, and Lanikai.

Source: Hawaii State Department of Planning and Economic Development, *Statistical Boundaries of Cities, Towns and Villages as Approved Through December 31, 1971* (Report SB-A7, January 1972), table 1.

Table 7.—RESIDENT POPULATION OF OAHU, BY CENSUS TRACTS: APRIL 1, 1970
 (Based on the 1960 boundaries shown on an accompanying map. For 1970, many of the 1960 census tracts were divided into two or more tracts; for example, tract 1 was split into three tracts, designated 1.01, 1.02, and 1.03.)

| Census tract | Population | Census tract | Population | Census tract | Population |
|----------------|------------|------------------------|------------|--------------------|------------|
| Oahu | 630,528 | Honolulu, con.: | | Rest of Oahu | 305,657 |
| | | 36 | 5,570 | 73 | 10,564 |
| | | 37 | 1,349 | 74 | 9,086 |
| Honolulu | 324,871 | 38 | 837 | 75 | 11,424 |
| 1 | 12,572 | 39 | 397 | 76 | 2,934 |
| 2 | 5,123 | 40 | 100 | 77 | 9,632 |
| 3 | 6,485 | 41 | 4,097 | 78 | 5,695 |
| 4 | 4,469 | 42 | 1,162 | 79 | 762 |
| 5 | 5,253 | 43 | 5,628 | 80 | 24,329 |
| 6 | 2,025 | 44 | 5,142 | 81 | 3,535 |
| 7 | 3,794 | 45 | 4,780 | 82 | — |
| 8 | 4,599 | 46 | 4,377 | 83 | 4,759 |
| 9 | 10,679 | 47 | 5,500 | 84 | 7,801 |
| 10 | 3,650 | 48 | 6,608 | 85 | 3,187 |
| 11 | 4,586 | 49 | 3,292 | 86 | 8,340 |
| 12 | 7,888 | 50 | 3,973 | 87 | 12,705 |
| 13 | 5,146 | 51 | — | 88 | 3,429 |
| 14 | 2,990 | 52 | 1,405 | 89 | 14,117 |
| 15 | 4,345 | 53 | 482 | 90 | 2,783 |
| 16 | 4,783 | 54 | 1,862 | 91 | 3,410 |
| 17 | 2,559 | 55 | 1,975 | 92 | 6,637 |
| 18 | 4,060 | 56 | 5,768 | 93 | 4,875 |
| 19 | 4,479 | 57 | 2,749 | 94 | 6,048 |
| 20 | 4,585 | 58 | 3,163 | 95 | 13,576 |
| 21 | 3,347 | 59 | 4,449 | 96 | 13,654 |
| 22 | 3,796 | 60 | 6,711 | 97 | 6,020 |
| 23 | 4,195 | 61 | 3,262 | 98 | 4,403 |
| 24 | 5,878 | 62 | 6,818 | 99 | 7,346 |
| 25 | 4,242 | 63 | 6,796 | 100 | 1,825 |
| 26 | 5,163 | 64 | 6,680 | 101 | 3,497 |
| 27 | 8,714 | 65 | 4,011 | 102 | 7,065 |
| 28 | 4,316 | 66 | 3,424 | 103 | 10,909 |
| 29 | 1,591 | 67 | 9,819 | 104 | 618 |
| 30 | 4,966 | 68 | 7,500 | 105 | 12,494 |
| 31 | 8,433 | 69 | 3,694 | 106 | 8,332 |
| 32 | 1,218 | 70 | 4,899 | 107 | 6,086 |
| 33 | 1,145 | 71 | 1,402 | 108 | 7,860 |
| 34 | 14,913 | 72 | 3,864 | 109 | 14,622 |
| 35 | 4,308 | 114 ¹ | 31 | 110 | 3,957 |
| | | | | 111 | 13,355 |
| | | | | 112 | 7,209 |
| | | | | 113 | 6,777 |

¹Northwestern Hawaiian Islands, from Nihoa to Kure Atoll (except Midway).

Source: Hawaii State Census Tract Committee, *Population and Housing Units in Hawaii by Census Tracts and Enumeration Districts, 1970* (Report CTC-19, December 22, 1970), as revised.

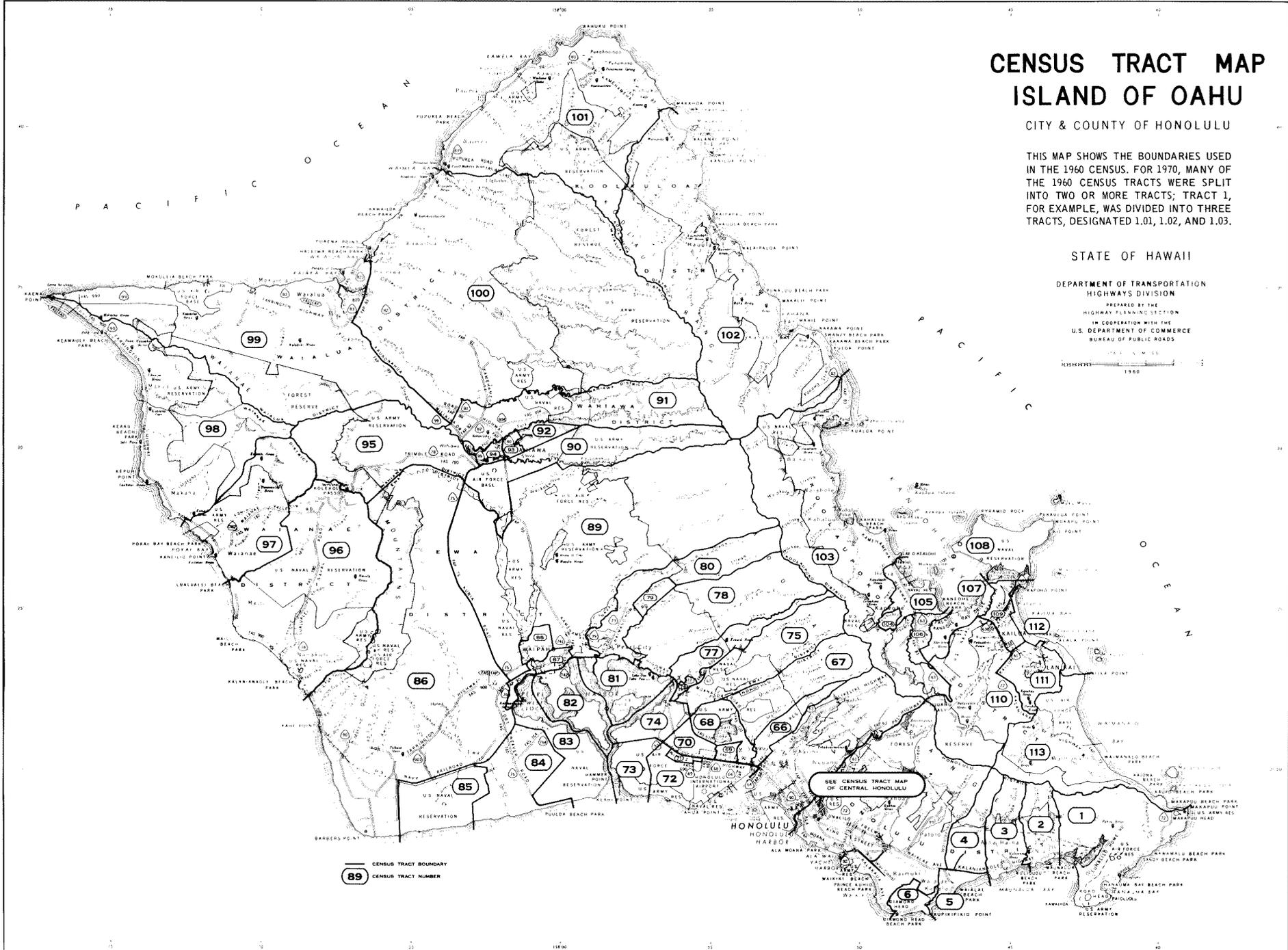
CENSUS TRACT MAP ISLAND OF OAHU

CITY & COUNTY OF HONOLULU

THIS MAP SHOWS THE BOUNDARIES USED IN THE 1960 CENSUS. FOR 1970, MANY OF THE 1960 CENSUS TRACTS WERE SPLIT INTO TWO OR MORE TRACTS; TRACT 1, FOR EXAMPLE, WAS DIVIDED INTO THREE TRACTS, DESIGNATED 1.01, 1.02, AND 1.03.

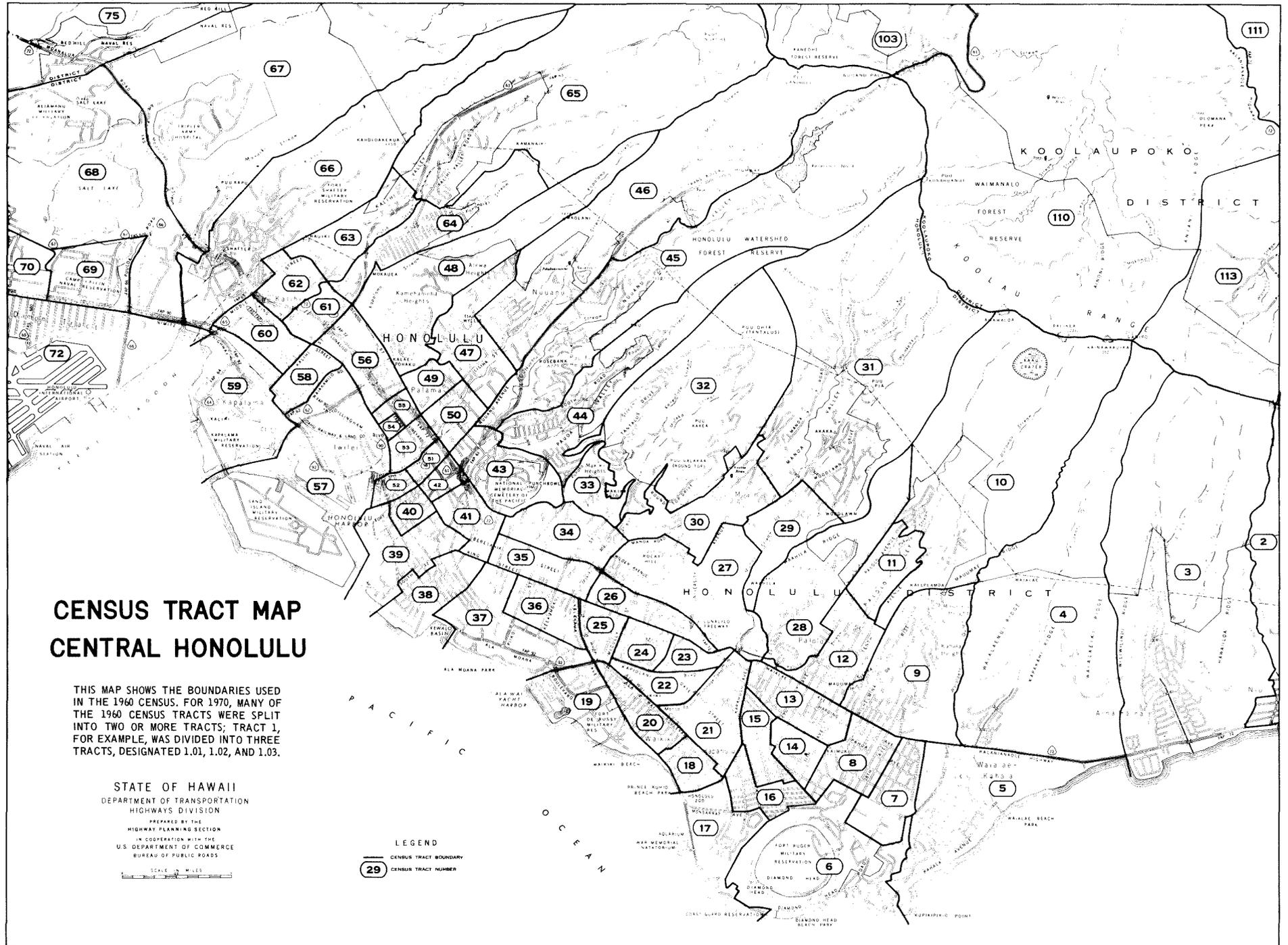
STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PREPARED BY THE
HIGHWAY PLANNING SECTION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS



— CENSUS TRACT BOUNDARY
89 CENSUS TRACT NUMBER

SEE CENSUS TRACT MAP
OF CENTRAL HONOLULU



CENSUS TRACT MAP CENTRAL HONOLULU

THIS MAP SHOWS THE BOUNDARIES USED IN THE 1960 CENSUS. FOR 1970, MANY OF THE 1960 CENSUS TRACTS WERE SPLIT INTO TWO OR MORE TRACTS; TRACT 1, FOR EXAMPLE, WAS DIVIDED INTO THREE TRACTS, DESIGNATED 1.01, 1.02, AND 1.03.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PREPARED BY THE
HIGHWAY PLANNING SECTION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

SCALE IN MILES

LEGEND

-  CENSUS TRACT BOUNDARY
-  CENSUS TRACT NUMBER

**Table 8.—POPULATION PROJECTIONS, FOR THE STATE, 1971 TO 2020, AND FOR
COUNTIES, 1971 TO 2000**
(In thousands)

| Assumptions | Total resident population, July 1 ¹ | | | | | |
|---------------------------------------|--|------|-------|-------|-------|-------|
| | 1971 | 1980 | 1990 | 2000 | 2010 | 2020 |
| Low assumptions ² | 788 | 842 | 933 | 1,025 | 1,125 | 1,230 |
| Medium assumptions ³ | 788 | 897 | 1,049 | 1,209 | 1,382 | 1,569 |
| High assumptions ⁴ | 788 | 965 | 1,201 | 1,452 | 1,729 | 2,032 |

| Year (July 1) | Total resident population (medium assumptions) ¹ | | | | | |
|---------------|---|-----------------------------|----------------|--------|-------|------|
| | State total | City and County of Honolulu | Other Counties | | | |
| | | | Total | Hawaii | Kauai | Maui |
| 1971 | 788.3 | 645.7 | 142.7 | 66.1 | 30.1 | 46.5 |
| 1975 | 830 | 680 | 150 | 68.1 | 32.0 | 49.9 |
| 1980 | 897 | 735 | 162 | 73.2 | 34.6 | 54.2 |
| 1985 | 971 | 795 | 176 | 79.3 | 37.5 | 59.2 |
| 1990 | 1,049 | 859 | 190 | 85.3 | 40.5 | 64.2 |
| 1995 | 1,128 | 924 | 204 | 91.0 | 44.0 | 69.0 |
| 2000 | 1,209 | 990 | 219 | 98.0 | 47.0 | 74.0 |

¹Includes armed forces (50,762 in 1971, 55,000 thereafter) and military dependents (62,181 in 1971, 60,000 thereafter), almost all of them on Oahu.

²Assumes gradual convergence with "Series D" national fertility projections by Bureau of the Census and zero net migration for civilians other than military dependents.

³Assumes gradual convergence with "Series D" national fertility projections and same level of net in-migration as in 1960-1970 period.

⁴Assumes gradual convergence with "Series C" national fertility projections and twice the annual level of net in-migration as in the 1960-1970 period.

Source: Hawaii State Department of Planning and Economic Development, *Illustrative Projections of the Population of Hawaii, 1970-2020* (Statistical Report 78, January 4, 1971), table 1; *Provisional Estimates of the Population of Hawaii, July 1, 1971* (Statistical Report 86, November 12, 1971), table 1; and "Population Projections by County 2020" (unpublished memorandum, July 21, 1971).

Table 9.—CHARACTERISTICS OF THE POPULATION: 1970

| Subject | The State | City & County of Honolulu | Other Counties | | |
|--------------------------|-----------|------------------------------|----------------|--------|--------|
| | | | Hawaii | Kauai | Maui |
| Total ¹ | 769,913 | 630,528 | 63,468 | 29,761 | 46,156 |
| Age: | | | | | |
| Under 5 years | 70,811 | 58,701 | 5,446 | 2,629 | 4,035 |
| 5 to 17 years | 203,818 | 165,156 | 17,656 | 8,311 | 12,695 |
| 18 to 24 years | 109,228 | 96,972 | 5,810 | 2,317 | 4,129 |
| 25 to 44 years | 202,621 | 171,021 | 14,380 | 6,835 | 10,385 |
| 45 to 64 years | 137,967 | 105,941 | 14,338 | 6,945 | 10,473 |
| 65 years and over | 44,116 | 31,385 | 5,838 | 2,724 | 4,169 |
| Sex: | | | | | |
| Male | 399,205 | 327,041 | 32,898 | 15,556 | 23,710 |
| Female | 369,356 | 302,135 | 30,570 | 14,205 | 22,446 |
| Race: ² | | | | | |
| White | 298,160 | 259,519 | 18,298 | 7,733 | 12,610 |
| Negro | 7,573 | 7,388 | 114 | 41 | 30 |
| Indian | 1,126 | 996 | 72 | 30 | 28 |
| Japanese | 217,307 | 169,078 | 23,817 | 9,780 | 14,632 |
| Chinese | 52,039 | 48,288 | 1,841 | 538 | 1,372 |
| Filipino | 93,915 | 65,553 | 10,454 | 8,135 | 9,773 |
| Hawaiian | 71,375 | 53,709 | 7,809 | 3,011 | 6,846 |
| Korean | 8,656 | 8,058 | 330 | 83 | 185 |
| Other races | 18,410 | 16,587 | 733 | 410 | 680 |
| Households | 203,088 | 164,763 | 17,260 | 8,282 | 12,783 |
| Families | 170,358 | 138,277 | 14,533 | 6,902 | 10,646 |

¹Includes 1,352 residents of the City and County of Honolulu inadvertently omitted from the tabulations on population characteristics.

²Persons of mixed race included with unmixed groups. For separate data on persons of mixed and unmixed race, see table 12.

Source: U.S. Bureau of the Census, *U.S. Census of Population: 1970*, Final Report PC(1)-B13, and underlying data.

Table 10.—AGE AND SEX: 1970

| Age | Both sexes | Male | Female |
|-------------------------|------------|---------|---------|
| All ages | 768,561 | 399,205 | 369,356 |
| Under 1 year | 15,158 | 7,821 | 7,337 |
| 1 year | 13,653 | 6,932 | 6,721 |
| 2 years | 13,285 | 6,835 | 6,450 |
| 3 years | 13,840 | 7,148 | 6,692 |
| 4 years | 14,875 | 7,520 | 7,355 |
| 5 years | 15,539 | 7,972 | 7,567 |
| 6 years | 16,122 | 8,252 | 7,870 |
| 7 years | 16,131 | 8,236 | 7,895 |
| 8 years | 16,157 | 8,377 | 7,780 |
| 9 years | 15,887 | 8,153 | 7,734 |
| 10 years | 16,797 | 8,643 | 8,154 |
| 11 years | 16,048 | 8,178 | 7,870 |
| 12 years | 15,780 | 8,075 | 7,705 |
| 13 years | 15,501 | 7,887 | 7,614 |
| 14 years | 15,686 | 8,008 | 7,678 |
| 15 years | 15,047 | 7,722 | 7,325 |
| 16 years | 14,513 | 7,415 | 7,098 |
| 17 years | 14,610 | 7,453 | 7,157 |
| 18 years | 13,722 | 7,226 | 6,496 |
| 19 years | 13,951 | 7,459 | 6,492 |
| 20 years | 16,703 | 9,737 | 6,966 |
| 21 years and over | 449,556 | 234,156 | 215,400 |
| Under 5 years | 70,811 | 36,256 | 34,555 |
| 5 to 9 years | 79,836 | 40,990 | 38,846 |
| 10 to 14 years | 79,812 | 40,791 | 39,021 |
| 15 to 19 years | 71,843 | 37,275 | 34,568 |
| 20 to 24 years | 81,555 | 46,807 | 34,748 |
| 25 to 29 years | 59,459 | 30,358 | 29,101 |
| 30 to 34 years | 47,633 | 23,846 | 23,787 |
| 35 to 39 years | 46,685 | 23,084 | 23,601 |
| 40 to 44 years | 48,844 | 23,749 | 25,095 |
| 45 to 49 years | 46,199 | 23,347 | 22,852 |
| 50 to 54 years | 38,053 | 19,620 | 18,433 |
| 55 to 59 years | 30,343 | 17,037 | 13,306 |
| 60 to 64 years | 23,372 | 13,791 | 9,581 |
| 65 to 69 years | 17,658 | 9,671 | 7,987 |
| 70 to 74 years | 11,831 | 5,781 | 6,050 |
| 75 to 79 years | 7,021 | 3,062 | 3,959 |
| 80 to 84 years | 4,593 | 2,364 | 2,229 |
| 85 years and over | 3,013 | 1,376 | 1,637 |
| Under 18 years | 274,629 | 140,627 | 134,002 |
| 62 years and over | 57,004 | 29,749 | 27,255 |
| 65 years and over | 44,116 | 22,254 | 21,862 |
| Median age | 25.0 | 24.7 | 25.5 |

Table 11.—RELATIONSHIP TO HEAD OF HOUSEHOLD AND MARITAL STATUS: 1970

| Relationship to head of household | Number | Marital status | Number |
|-----------------------------------|---------|-------------------------------------|---------|
| All persons | 768,561 | Male, 14 years old and over | 289,176 |
| In households | 730,095 | Single | 104,625 |
| Head | 203,088 | Married, except separated | 167,778 |
| 14 to 24 years | 16,432 | 14 to 19 years | 1,017 |
| 25 to 34 years | 43,078 | 20 to 24 years | 14,286 |
| 35 to 44 years | 45,445 | 25 to 34 years | 38,899 |
| 45 to 64 years | 75,820 | 35 to 44 years | 39,154 |
| 65 years and over | 22,313 | 45 to 64 years | 60,082 |
| Primary individual: Male | 18,086 | 65 years and over | 14,340 |
| Primary individual: Female | 14,644 | Separated | 2,142 |
| Family head: Male | 154,487 | Widowed | 6,433 |
| Family head: Female | 15,871 | Divorced | 8,198 |
| Wife of head | 147,818 | | |
| Child of head | 306,330 | Female, 14 years old and over | 264,612 |
| Other relative of head | 53,837 | Single | 68,009 |
| Not related to head | 19,022 | Married, except separated | 164,190 |
| | | 14 to 19 years | 3,017 |
| In group quarters | 38,466 | 20 to 24 years | 18,721 |
| Inmate of institution | 3,854 | 25 to 34 years | 43,108 |
| Other | 34,612 | 35 to 44 years | 41,614 |
| Persons per household | 3.59 | 45 to 64 years | 49,604 |
| Persons per family | 3.98 | 65 years and over | 8,126 |
| | | Separated | 2,406 |
| | | Widowed | 19,909 |
| | | Divorced | 10,098 |

Source: *U.S. Census of Population: 1970*, Final Report PC(1)-B13, table 22.

Table 12.—ETHNIC STOCK: 1853 TO 1970

| Ethnic stock | 1970 ¹ | | 1950 ² | 1920 | 1890 | 1853 |
|------------------------------|-------------------|---------|-------------------|---------|--------|--------|
| | Number | Percent | | | | |
| All races | 773,632 | 100.0 | 499,769 | 255,912 | 89,990 | 73,137 |
| Hawaiian | 7,697 | 1.0 | 12,245 | 23,723 | 34,436 | 70,036 |
| Part Hawaiian | 125,224 | 16.2 | 73,845 | 18,027 | 6,186 | 983 |
| Caucasian | 255,437 | 33.0 | 114,793 | 49,140 | 18,939 | 1,687 |
| Chinese | 29,966 | 3.9 | 29,501 | 23,507 | 16,752 | 364 |
| Filipino | 61,240 | 7.9 | 53,382 | 21,031 | (NA) | 5 |
| Japanese | 207,379 | 26.8 | 180,508 | 109,274 | 12,610 | (NA) |
| Korean | 7,201 | 0.9 | 5,111 | 4,950 | (NA) | (NA) |
| Negro | 5,925 | 0.8 | 1,928 | 348 | (NA) | (NA) |
| Puerto Rican | 4,110 | 0.5 | 6,944 | 5,602 | (NA) | (NA) |
| Samoan | 5,846 | 0.8 | (NA) | (NA) | (NA) | (NA) |
| Mixed, exc. Part Haw'n. | 60,770 | 7.9 | 20,336 | (NA) | (NA) | (NA) |
| Other and unknown | 2,837 | 0.4 | 1,176 | 310 | 1,067 | 62 |

NA Not available.

¹Based on sample of 19,344 persons surveyed by Hawaii State Department of Health. U.S. Census data on ethnic stock in 1970 (shown in table 9) were based on different definitions than those used previously and hence are not comparable.

²Partly estimated for Koreans, Negroes, Puerto Ricans, and the residual "other" category.

Source: Data for 1853-1920 from Andrew W. Lind, *Hawaii's People*, 3rd Ed. (1967), p. 28; 1950 from *U.S. Census of Population: 1950*, Bulletin P-C52, pp. viii and 38; 1970 from Hawaii State Department of Health.

Table 13.—PLACE OF BIRTH AND RESIDENCE: 1853 TO 1970

| Year | Living in Hawaii ¹ | | | | | | Living on Mainland, born in Hawaii ² |
|-------------------------|-------------------------------|----------------|-----------------------|-----------------------------|-----------------------------|--------------|---|
| | Total population | Born in Hawaii | Born on U.S. Mainland | Born in U.S. outlying areas | State of birth not reported | Foreign born | |
| 1853 | 73,138 | 71,310 | 692 | — | — | 1,136 | 533 |
| 1860 | 69,800 | (NA) | (NA) | — | — | (NA) | 435 |
| 1866 | 62,959 | (NA) | (NA) | — | — | (NA) | 524 |
| 1872 | 56,897 | 52,380 | 889 | — | — | 3,628 | 729 |
| 1878 | 57,985 | 48,455 | 1,276 | — | — | 8,254 | 1,067 |
| 1884 | 80,578 | 46,272 | 2,066 | — | — | 32,240 | 1,219 |
| 1890 | 89,990 | 48,117 | 1,928 | — | — | 39,945 | 1,304 |
| 1896 | 109,020 | 53,237 | 2,266 | — | — | 53,517 | 1,306 |
| 1900 | 154,001 | 58,931 | 4,284 | 6 | — | 90,780 | 1,307 |
| 1910 | 191,909 | 86,483 | 5,688 | 3,614 | — | 96,124 | 3,741 |
| 1920 | 255,912 | 136,349 | 10,957 | 2,637 | — | 105,969 | 10,551 |
| 1930 | 368,336 | 214,517 | 30,191 | 2,419 | — | 121,209 | 19,457 |
| 1940 | 423,330 | 278,506 | 54,224 | 2,209 | — | 88,391 | 23,723 |
| 1950 | 499,794 | 355,574 | 65,640 | 1,960 | — | 76,620 | 51,955 |
| 1960 | 632,772 | 421,168 | 128,992 | 4,962 | 8,750 | 68,900 | 115,070 |
| 1970 ³ | 769,913 | 455,892 | 178,808 | 15,876 | 42,661 | 75,595 | (NA) |

NA Not available

¹Population totals include the Midway Islands, 1910-1940, and other minor outlying islands, 1940, reported with Hawaii for census purposes. Persons born abroad or at sea of American parents combined with those born on U.S. Mainland, 1900-1950, and with those born in U.S. outlying areas, 1960 and 1970. Persons born in the Philippines (2,372 in 1910, 18,728 in 1920, 52,672 in 1930, 35,778 in 1940) included with foreign born for all years.

²Estimated by interpolation for 1853, 1866-1884, and 1896. The actual number enumerated in the decennial U.S. Census was 588 in 1850, 584 in 1870, and 1,147 in 1880.

³Data by place of birth based on a sample and not adjusted to add exactly to the indicated revised full-count total.

Source: Robert C. Schmitt, *Demographic Statistics of Hawaii: 1778-1965* (University of Hawaii Press, 1968), pp. 74, 75, 121, 122, and 183; U.S. Bureau of the Census, *U.S. Census of Population: 1970*, Final Report PC(1)-C13, table 45.

Table 14.—ALIEN ADDRESS CARDS RECEIVED FROM PERSONS RESIDING IN HAWAII, BY NATIONALITY: 1940 TO 1972

| Year | Total | Philippines | Japan and Ryukyu Is. | China and Taiwan | Korea | All others ¹ |
|------------|--------|-------------|----------------------|------------------|-------|-------------------------|
| 1940 | 91,447 | 38,340 | 38,223 | 4,981 | 2,491 | 7,412 |
| 1951 | 66,181 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 1960 | 51,316 | (NA) | 18,832 | (NA) | (NA) | (NA) |
| 1963 | 48,025 | 21,624 | 19,182 | 1,506 | 680 | 5,033 |
| 1964 | 47,616 | 21,724 | 18,459 | 1,351 | 751 | 5,331 |
| 1965 | 46,352 | 20,449 | 18,047 | 1,383 | 880 | 5,593 |
| 1966 | 45,794 | 19,678 | 17,780 | 1,368 | 893 | 6,075 |
| 1967 | 46,998 | 21,315 | 16,975 | 1,499 | 914 | 6,295 |
| 1968 | 47,882 | 22,159 | 16,388 | 1,640 | 944 | 6,751 |
| 1969 | 49,642 | 23,410 | 15,850 | 1,750 | 1,005 | 7,627 |
| 1970 | 53,003 | 26,311 | 15,351 | 2,213 | 1,138 | 7,990 |
| 1971 | 57,187 | 29,116 | 15,099 | 2,167 | 1,483 | 9,322 |
| 1972 | 60,898 | 31,210 | 15,271 | 2,421 | 2,154 | 9,842 |

NA Not available.

¹Nationalities over 500 in 1972 included United Kingdom (2,253), Canada (1,710), and Germany (777).

Source: U.S. Immigration and Naturalization Service, *Annual Report* and tabular releases.

Table 15.—CHURCHES AND CHURCH MEMBERSHIP: 1972

(Estimates based on a telephone and mail survey by the Department of Religion, University of Hawaii. Definitions differ from group to group and hence are not directly comparable.)

| Denomination | Churches | Membership ¹ |
|---|----------|-------------------------|
| All denominations | 795+ | 541,844+ |
| Buddhist | 96+ | 121,460 |
| Bodaiji | 1 | 200 |
| Chinese Buddhist Assembly | 1 | 2,000 |
| Diamond Sangha | 2 | 30 |
| Hawaii Chinese Buddhist Society | 2 | 450 |
| Higashi Hongwanji | 6 | 6,000 |
| Honpa Hongwanji | 38 | 30,000 |
| Jodo Mission | 15 | 2,900 |
| Koboji Shingon | (NA) | 200 |
| Koon Yum Temple (Kwan Yin) ² | 1 | 2,000 |
| Myohoji Mission | 1 | 280 |
| Nichiren Mission | 4 | 2,400 |
| Nichiren Shoshu | (NA) | 28,800 |
| Shingon Mission | 14 | 10,000 |
| Shinshu Kyokai Mission | 1 | 200 |
| Soto Mission | 10 | 6,000 |
| Todaiji Mission | (NA) | 30,000 |

NA Not available

¹As estimated by church central offices on Oahu. Totals and subtotals include duplications caused by multiple membership.

²Includes Confucianists and Taoists.

(Continued on next page)

Table 15.—CHURCHES AND CHURCH MEMBERSHIP: 1972 (continued)
 (Estimates based on a telephone and mail survey by the Department of Religion, University of Hawaii. Definitions differ from group to group and hence are not directly comparable.)

| Denomination | Churches | Membership |
|--|----------|------------|
| Christian | 605+ | 347,692+ |
| Roman Catholic | 69 | 220,000 |
| Protestant ³ | 354+ | 81,102 |
| American Baptist | 4 | 750 |
| Assembly of God | 33 | 2,370 |
| Church of Christ | 9 | 2,605 |
| Church of God | 10 | 500 |
| Church of the Living God (Ka Makua Mau Loa) | 13 | 1,000 |
| Church of the Nazarene | 11 | 719 |
| Conservative/International Baptist | 1 | 700 |
| Disciples of Christ | 4 | 1,289 |
| Episcopal | 41 | 13,384 |
| Hoomana Naauao | (NA) | 5,000 |
| Hoomana oke Akua ole | (NA) | 10,000 |
| Korean Christian | 3 | 665 |
| Lutheran | 19 | 4,355 |
| Missionary | 7 | 900 |
| Presbyterian | 3 | 1,000 |
| Salvation Army | 11 | 1,368 |
| Southern Baptist | 45 | 9,500 |
| United Church of Christ | 110 | 17,997 |
| United Methodist | 30 | 7,000 |
| Holiness Faiths | 56 | 4,925+ |
| Apostolic Faith | 5 | 200 |
| Calvary United Pentecostal | 2 | 225 |
| Church of the Latter Day Rain | (NA) | (NA) |
| Door of Faith (Pentecostal) | 38 | 3,500 |
| Hawaiian Pentecostal Full Gospel Assembly | 1 | 100 |
| Lamb of God (Pentecostal) | 2 | 300 |
| Peaceful Church of God in Christ (Pentecostal) | 6 | 400 |
| Pentecostal Holiness | 1 | 150 |
| Trinity Apostolic | 1 | 50 |
| Metaphysical Christian | 6 | 834 |
| Christian Science | 4 | 500 |
| Hawaii Church of Religious Science | 1 | 84 |
| Unity Church of Hawaii | 1 | 250 |

NA Not available

³Excludes denominations with fewer than 500 members.

(Continued on next page)

Table 15.—CHURCHES AND CHURCH MEMBERSHIP: 1972 (continued)
 (Estimates based on a telephone and mail survey by the Department of Religion, University of Hawaii. Definitions differ from group to group and hence are not directly comparable.)

| Denomination | Churches | Membership |
|--|----------|------------|
| Other Christian | 119 | 40,831 |
| Church of the Latter Day Saints | 53 | 30,000 |
| Church of the Latter Day Saints Reorganized | 4 | 1,050 |
| Greek Orthodox | 1 | 500 |
| Jehovah's Witnesses | 41 | 6,500 |
| Seventh Day Adventists | 20 | 2,781 |
| Jewish | 2 | 1,072 |
| Temple Emanu-El | 1 | 972 |
| Congregation Sof Ma'arar | 1 | 100 |
| Shinto | 6+ | 43,500+ |
| Daijingu Temple of Hawaii | 4 | 40,000 |
| Irari jinjya | (NA) | (NA) |
| Ishizuchi Shrine | (NA) | (NA) |
| Izumo Taishakyo Mission | 1 | 3,000 |
| Kotohira Jinsha Mission | 1 | 500 |
| New religious movements (primarily of Japanese derivation) | 56 | 16,340 |
| Church of the Messiahity | 4 | 1,800 |
| Konko Kyo Mission | 6 | 1,000 |
| Perfect Liberty Church | 1 | 220 |
| Rissho Kosei Kai Church | 4 | 1,200 |
| Seicho no Ie, Hawaii | 5 | 2,000 |
| Tensho Kotai Jingu Kyo (Dancing Goddess) | 15 | 7,120 |
| Tenri Kyo Hawaii Dendocho | 21 | 3,000 |
| Other religious faiths | 35+ | 11,780+ |
| Baha'i | 28 | 1,267 |
| Church of Scientology | 1 | 9,000 |
| Hare Krishna | 1 | 1,200 |
| Holy Order of Mans | 2 | 24 |
| Indigenous Hawaiian | (NA) | (NA) |
| International Meditation Society | (NA) | (NA) |
| Ramakrishna Vedanta | 1 | 20 |
| Subud | 1 | 34 |
| Unitarian | 1 | 235 |

NA Not available

Source: E.M. and M.E. McCrath, Department of Religion, University of Hawaii.

**Table 16.—INTENDED RESIDENTS ARRIVING IN HAWAII FROM THE MAINLAND OR ABROAD:
1950 TO 1971**

| Year ended June 30— | All in- tended resi- dents | Migrants from the Mainland U.S. ¹ | | | | Immigrants from abroad ² | | |
|------------------------|-------------------------------------|--|-----------------------|------------------------|--------------------|-------------------------------------|-----------|------------------------|
| | | Total | Military personnel | Military dependents | Other civilians | Total | Filipinos | Other nationalities |
| 1950 | — | — | — | — | — | 179 | — | — |
| 1951 | — | — | — | — | — | 294 | — | — |
| 1952 | 6,833 | 6,131 | — | — | — | 702 | — | — |
| 1953 | 7,589 | 6,976 | — | — | — | 613 | — | — |
| 1954 | 6,549 | 5,728 | — | — | — | 821 | — | — |
| 1955 | 7,451 | 6,500 | — | — | — | 951 | — | — |
| 1956 | 11,047 | 9,960 | — | — | — | 1,087 | — | — |
| 1957 | 14,908 | 13,524 | — | — | — | 1,384 | — | — |
| 1958 | 19,547 | 18,140 | — | — | — | 1,407 | — | — |
| 1959 | 17,492 | 15,876 | — | — | — | 1,616 | — | — |
| 1960 | 19,589 | 17,970 | — | — | — | 1,619 | — | — |
| 1961 | 15,837 | 14,075 | 1,690 | 1,723 | 10,662 | 1,762 | 530 | 1,232 |
| 1962 | 21,503 | 19,455 | 3,302 | 5,176 | 10,977 | 2,048 | 776 | 1,272 |
| 1963 | 22,222 | 20,455 | 3,280 | 5,760 | 11,415 | 1,767 | 569 | 1,198 |
| 1964 | 25,215 | 23,592 | 4,251 | 5,986 | 13,355 | 1,623 | 455 | 1,168 |
| 1965 | 29,593 | 27,872 | 6,312 | 6,949 | 14,611 | 1,721 | 447 | 1,274 |
| 1966 | 31,249 | 28,179 | 10,379 | 4,399 | 13,401 | 3,070 | 1,352 | 1,718 |
| 1967 | 44,244 | 40,419 | 12,840 | 8,154 | 19,425 | 3,825 | 2,147 | 1,678 |
| 1968 | 46,829 | 42,136 | 13,431 | 7,593 | 21,112 | 4,693 | 3,033 | 1,660 |
| 1969 | 46,809 | 41,610 | 12,738 | 7,652 | 21,220 | 5,199 | 3,181 | 2,018 |
| 1970 | 51,386 | 42,373 | 10,158 | 8,470 | 23,745 | 9,013 | 6,426 | 2,587 |
| 1971 | 47,190 | 41,135 | 9,249 | 7,278 | 24,608 | 6,055 | 3,704 | 2,351 |

¹Intended residents arriving by civilian carriers from Mainland States. Includes a few aliens. Totals not available before October 15, 1950; military status not available before April 1, 1960. Data for 1964-1970 (and breakdown by military status for 1961-63) have been revised.

²Immigrants admitted to the United States, reporting Hawaii as their State of intended future permanent residence. Not available by nationality before July 1, 1960.

Source: Hawaii Visitors Bureau, *Revised Visitor Statistics, 1964-1970* (July 1971) and records; Hawaii State Department of Planning and Economic Development, *Hawaii's In-Migrants* (annual); U.S. Immigration and Naturalization Service, *Annual Report*, and records.

Table 17.—COMPONENTS OF CHANGE IN RESIDENT POPULATION, BY MILITARY STATUS AND COUNTY: 1960 TO 1970

| Component and military status | State of Hawaii | City and County of Honolulu | Other Counties | | | |
|-------------------------------------|-----------------|-----------------------------|----------------|--------|--------|--------|
| | | | Total | Hawaii | Kauai | Maui |
| Population, 1960 | 632,772 | 500,409 | 132,363 | 61,332 | 28,176 | 42,855 |
| Armed forces ¹ | 52,881 | 52,570 | 311 | 132 | 140 | 39 |
| Civilians | 579,891 | 447,839 | 132,052 | 61,200 | 28,036 | 42,816 |
| Military dependents | 60,057 | 59,661 | 396 | 204 | 134 | 58 |
| Other civilians | 519,834 | 388,178 | 131,656 | 60,996 | 27,902 | 42,758 |
| Population, 1970 | 769,913 | 630,528 | 139,385 | 63,468 | 29,761 | 46,156 |
| Armed forces ¹ | 56,085 | 55,747 | 338 | 142 | 136 | 60 |
| Civilians | 713,828 | 574,781 | 139,047 | 63,326 | 29,625 | 46,096 |
| Military dependents | 61,858 | 61,500 | 358 | 120 | 205 | 33 |
| Other civilians | 651,970 | 513,281 | 138,689 | 63,206 | 29,420 | 46,063 |
| Net increase | 137,141 | 130,119 | 7,022 | 2,136 | 1,585 | 3,301 |
| Armed forces ¹ | 3,204 | 3,177 | 27 | 10 | -4 | 21 |
| Civilians | 133,937 | 126,942 | 6,995 | 2,126 | 1,589 | 3,280 |
| Military dependents | 1,801 | 1,839 | -38 | -84 | 71 | -25 |
| Other civilians | 132,136 | 125,103 | 7,033 | 2,210 | 1,518 | 3,305 |
| Natural increase ² | 125,519 | 110,509 | 15,010 | 6,534 | 3,441 | 5,035 |
| Armed forces | -642 | -597 | -45 | -28 | -10 | -7 |
| Civilians | 126,161 | 111,106 | 15,055 | 6,562 | 3,451 | 5,042 |
| Military dependents | 42,351 | 41,386 | 965 | 456 | 252 | 257 |
| Other civilians | 83,810 | 69,720 | 14,090 | 6,106 | 3,199 | 4,785 |
| Live births ² | 163,762 | 139,009 | 24,753 | 11,123 | 5,519 | 8,111 |
| Military dependents | 43,908 | 42,934 | 974 | 460 | 255 | 259 |
| Other civilians | 119,854 | 96,075 | 23,779 | 10,663 | 5,264 | 7,852 |
| Deaths ² | 38,243 | 28,500 | 9,743 | 4,589 | 2,078 | 3,076 |
| Armed forces | 642 | 597 | 45 | 28 | 10 | 7 |
| Civilians | 37,601 | 27,903 | 9,698 | 4,561 | 2,068 | 3,069 |
| Military dependents | 1,557 | 1,548 | 9 | 4 | 3 | 2 |
| Other civilians | 36,044 | 26,355 | 9,689 | 4,557 | 2,065 | 3,067 |
| Net migration | +11,622 | +19,610 | -7,988 | -4,398 | -1,856 | -1,734 |
| Armed forces | -274 | +186 | -460 | -330 | -71 | -59 |
| Civilians | +11,896 | +19,424 | -7,528 | -4,068 | -1,785 | -1,675 |
| Military dependents | -40,550 | -39,547 | -1,003 | -540 | -181 | -282 |
| Other civilians ³ | +52,446 | +58,971 | -6,525 | -3,528 | -1,604 | -1,393 |
| Inductions | 31,174 | 30,079 | 1,095 | 717 | 152 | 226 |
| Separations | 27,054 | 26,491 | 563 | 349 | 75 | 139 |

¹Includes Navy and Coast Guard crews homeported in each county.

²Place of occurrence basis, excluding nonresidents.

³For the State as a whole, there were 192,541 in-migrants (156,025 from the Mainland and 36,516 aliens from abroad) and 140,095 out-migrants.

Source: Population from census totals and DPED survey data in the Hawaii State Department of Planning and Economic Development, Statistical Reports 72 (p. 4), 85 (p. 4), and 86 (pp. 5, 8 and 9). Deaths to military dependents estimated by DPED on basis of 1960 mortality data. Other deaths and all births, inductions and separations from the Hawaii State Department of Health, records.

SECTION 2

VITAL STATISTICS AND HEALTH

This section presents data on births, deaths, marriages, divorces, morbidity, hospitals, and health personnel.

Vital indices generally reflect the high health standards of Hawaii. Expectation of life at birth was 70.46 years for males and 77.18 years for females in 1969-1971, about twice the 1884-1885 average of 36.5 years. The provisional crude death rate in 1971 was only 5.8, half the 1930 level and four-fifths below mortality rates at the turn of the century.

Deaths under one year of age per 1,000 live births dropped from 205 in 1910 to 16.2 in 1971. The provisional 1971 crude birth rate was 21.5. Over 99 percent of all babies were born in hospitals, and a fourth were born to military couples. One out of eleven births was illegitimate.

Marriages numbered 9,675 in 1971, with about a third accounted for by nonresidents. Divorces reached a 1971 total of 3,690.

The State had 31 hospitals (with 5,021 beds) and 161 nursing and care homes (with 2,162 beds) when most recently surveyed. Average length of stay in the largest of the hospitals was 7.5 days in 1971, compared with 13.0 in 1920 and 59 in the 1870's. State licensing boards listed 1,051 physicians and surgeons, 494 dentists, 3,702 professional nurses, and 220 pharmacists.

Major sources for data on vital statistics and health are the annual statistical reports of the Hawaii State Department of Health and various publications of the U.S. Public Health Service. Section 2 of the *Statistical Abstract of the United States: 1971* contains similar data for the nation as a whole.

Table 18.—BIRTHS, DEATHS, MARRIAGES, AND DIVORCES: 1849 TO 1971
(Place of occurrence basis. Not adjusted for underreporting, known to have been significant before 1920)

| Year ¹ | Live births | Deaths ² | Rate per 1,000 pop. ³ | | Infant death rate ⁴ | Marriages | Divorces and annulments |
|-------------------|--------------------------------|---|----------------------------------|----------------------------|--------------------------------|----------------------|-------------------------|
| | | | Birth | Death ² | | | |
| 1849 | 1,422 | 4,320 | 16.6 | 50.5 | (NA) | 1,810 | 1 |
| 1860 | 1,672 | 2,343 | 23.8 | 33.4 | (NA) | 1,075 | 86 |
| 1870 | 2,413 | 3,819 | 40.8 | 64.6 | (NA) | (NA) | 38 |
| 1880 | 2,350 | 2,550 | 35.6 | 38.6 | (NA) | (NA) | 79 |
| 1890 | (NA) | (NA) | (NA) | 30.6 | (NA) | (NA) | 48 |
| 1900 | (NA) | (NA) | (NA) | 32.8 | (NA) | (NA) | 48 |
| 1910 | 4,302 | 2,941 | 22.8 | 15.6 | 205.5 | 1,959 | 197 |
| 1920 | 10,165 | 4,564 | 40.4 | 18.1 | 108.8 | 2,127 | 570 |
| 1930 | 10,873 | 3,976 | 31.1 | 11.4 | 82.3 | 2,443 | 529 |
| 1940 | 9,524 | 3,025 | 24.1 | 7.6 | 43.7 | 5,355 | 946 |
| 1950 | 14,059 | 2,883 | 29.4 | 6.0 | 23.8 | 5,575 | 1,173 |
| 1960 | 17,193 | 3,540 | 29.5 | 6.1 | 23.2 | 5,237 | 1,270 |
| 1961 | 17,558 | 3,367 | 29.4 | 5.6 | 21.7 | 5,298 | 1,556 |
| 1962 | 17,932 | 3,512 | 29.7 | 5.8 | 20.6 | 5,484 | 1,471 |
| 1963 | 17,744 | 3,643 | 28.5 | 5.9 | 22.5 | 5,750 | 1,515 |
| 1964 | 17,284 | 3,638 | 27.6 | 5.8 | 19.8 | 5,790 | 1,690 |
| 1965 | 16,259 | 3,705 | 25.0 | 5.7 | 21.5 | 6,071 | 1,111 |
| 1966 | 14,943 | 3,770 | 22.8 | 5.7 | 18.9 | 5,792 | 897 |
| 1967 | 14,765 | 3,897 | 22.2 | 5.8 | 16.9 | 7,345 | 1,451 |
| 1968 | 14,595 | 4,192 | 21.5 | 6.2 | 19.0 | 9,021 | 1,865 |
| 1969 | 15,755 | 4,146 | 22.5 | 5.9 | 19.2 | 9,891 | 2,314 |
| 1970 | 16,467 | 4,125 | 22.9 | 5.7 | 19.1 | 10,599 | 2,589 |
| 1971 | 15,845 | 4,311 | 21.5 | 5.8 | 16.2 | 9,675 | 3,690 |
| Year ¹ | Percent of births in hospitals | Illegitimate births per 1,000 live births | Fetal deaths | | | Percent of marriages | |
| | | | Total | Gestation 20 weeks or more | Induced abortion | Resident grooms | Interracial |
| 1920 | (NA) | (NA) | (NA) | 370 | (NA) | (NA) | 18.0 |
| 1930 | 34.2 | 26.6 | (NA) | 32.6 | (NA) | (NA) | 21.3 |
| 1940 | 69.5 | 62.5 | (NA) | 190 | (NA) | (NA) | 25.0 |
| 1950 | 97.1 | 49.7 | (NA) | 175 | (NA) | (NA) | 29.7 |
| 1960 | 99.1 | 51.3 | 1,026 | 261 | 3 | 96.3 | 37.3 |
| 1965 | 99.3 | 72.1 | 1,070 | 234 | 45 | 93.9 | 38.1 |
| 1966 | 99.4 | 83.8 | 899 | 172 | 15 | 92.5 | 37.7 |
| 1967 | 99.5 | 87.5 | 1,007 | 202 | 12 | 80.4 | 33.5 |
| 1968 | 99.3 | 94.8 | 1,114 | 209 | 11 | 70.1 | 33.8 |
| 1969 | 99.5 | 94.5 | 1,231 | 215 | 19 | 67.8 | 33.7 |
| 1970 | 99.5 | 94.6 | 4,287 | 340 | 2,741 | 69.3 | 33.7 |
| 1971 | (NA) | (NA) | 5,735 | (NA) | (NA) | (NA) | (NA) |

NA Not available.

¹Divorce total for 1860 is annual average for two-year period ended March 31, 1862. Birth and death data for 1880 and divorce data for 1870-1890 are annual averages for two-year periods begun on January 1 for year specified. Birth and death data, 1910-1940, infant deaths and marriages, 1910, illegitimate births, 1930-1940, and hospital births and interracial marriages, 1940, are for years ended June 30. Hospital birth percentage for 1930 refers to year ended June 30, 1934. Interracial marriage percentage for 1920 refers to four-year period ended June 30, 1924; for 1930, to two-year period ended June 30, 1930. All other data are for calendar years.

²Death data include armed forces through 1940 but exclude them thereafter. The 1890 and 1900 rates are for Honolulu only.

³Based on total resident population through 1900 and civilian resident population thereafter.

⁴Deaths under one year of age per 1,000 live births.

Source: Robert C. Schmitt, *Demographic Statistics of Hawaii: 1778-1965* (University of Hawaii Press, 1968), pp. 165-167, 171, and 210-212; Hawaii State Department of Health, annual statistical reports for 1930-1970, and records.

**Table 19.—BIRTHS, DEATHS, AND BIRTH AND DEATH RATES, BY MILITARY STATUS:
1970 AND 1971**

| Military status | Live births ¹ | | Deaths ¹ | | Birth rate ² | | Death rate ² | |
|-----------------------|--------------------------|--------|---------------------|-------|-------------------------|------|-------------------------|------|
| | 1971 ³ | 1970 | 1971 ³ | 1970 | 1971 ³ | 1970 | 1971 ³ | 1970 |
| Total population .. | 15,845 | 16,467 | 4,357 | 4,197 | 19.3 | 20.5 | 5.3 | 5.2 |
| Armed forces | — | — | 46 | 72 | 0 | 0 | 0.9 | 1.3 |
| Civilians | 15,845 | 16,467 | 4,311 | 4,125 | 20.6 | 22.0 | 5.6 | 5.5 |
| Military | | | | | | | | |
| dependents | 3,684 | 3,906 | 155 | 144 | 59.2 | 67.6 | 2.5 | 2.5 |
| Other civilians | 12,161 | 12,561 | 4,156 | 3,981 | 17.2 | 18.2 | 5.9 | 5.8 |

¹Place of occurrence basis.

²Per 1,000 de facto population. For rates based on resident population, see the preceding table.

³Provisional.

Source: Vital events from Hawaii State Department of Health, *Statistical Report, 1970*, pp. 10 and 27, and records. Deaths of military dependents based on a crude rate of 2.5, as estimated from 1960 data. Rates based on estimates in the Hawaii State Department of Planning and Economic Development, Statistical Reports 76 (September 1, 1970), 85 (October 15, 1971), and 86 (November 12, 1971).

Table 20.—CHARACTERISTICS OF BIRTHS AND DEATHS: 1960 AND 1970
(Place of occurrence basis)

| Subject | 1970 | 1960 |
|--|--------|--------|
| LIVE BIRTHS | | |
| Number | 16,467 | 17,193 |
| Percent on Oahu | 83.2 | 84.2 |
| Males per 100 females | 106.9 | 106.4 |
| Percent attended by physician | 99.8 | 99.5 |
| Percent with prenatal visit in first 3 months | 67.2 | (NA) |
| Percent of mixed race | 41.7 | 36.8 |
| Median age of mother (years) | 25.0 | 26.1 |
| Percent first births | 38.2 | 25.1 |
| Median weight of single births (lb., oz.) | 7-2 | 7-2 |
| Percent of father with education of 12 years or more | 82.7 | (NA) |
| Percent of births plural | 1.8 | 1.7 |
| Percent premature | 8.5 | 8.8 |
| Percent with one or more congenital malformations | 1.1 | (NA) |
| Illegitimate births per 1,000 unmarried women 14-44 | 21.9 | 18.7 |
| CIVILIAN DEATHS | | |
| Number | 4,125 | 3,540 |
| Percent on Oahu | 75.4 | 72.3 |
| Males per 100 females | 165.1 | 166.0 |
| Median age (years) | 65.3 | 63.1 |
| INFANT DEATHS | | |
| Number | 315 | 399 |
| Rate per 1,000 live births | 19.1 | 23.2 |
| Under 1 day | 10.8 | 11.1 |
| 1 to 6 days | 4.1 | 6.1 |
| 7 to 27 days | 0.4 | 1.2 |
| 28 days to 11 months | 3.8 | 4.8 |

NA Not available.

Source: Hawaii State Department of Health, *Annual Report, Statistical Supplement* for 1960 and 1970.

Table 21.—AVERAGE REMAINING LIFETIME AT SPECIFIED AGES: 1884-1885 TO 1969-1971
(Average number of years of life remaining at beginning of year of age, by sex)

| Period and age | Male | Female | Period and age | Male | Female |
|------------------------------|-------|--------|----------------------|-------|--------|
| AT BIRTH | | | 1959-1961, continued | | |
| 1884-1885 ¹ | | 36.5 | 25 years | 47.75 | 51.27 |
| 1919-1920 | 47.79 | 47.27 | 30 years | 42.99 | 46.45 |
| 1929-1931 | 52.63 | 55.31 | 35 years | 38.26 | 41.64 |
| 1939-1941 | 59.46 | 62.60 | 40 years | 33.65 | 36.97 |
| 1949-1951 | 67.76 | 71.29 | 45 years | 29.18 | 32.33 |
| 1959-1961 | 69.79 | 74.01 | 50 years | 24.84 | 28.00 |
| 1969-1971 | 70.46 | 77.18 | 55 years | 20.91 | 23.94 |
| | | | 60 years | 17.28 | 20.04 |
| 1959-1961 | | | 65 years | 14.05 | 16.28 |
| 1 year | 70.64 | 74.50 | 70 years | 11.27 | 12.92 |
| 5 years | 66.85 | 70.74 | 75 years | 8.60 | 9.87 |
| 10 years | 62.00 | 65.86 | 80 years | 6.42 | 7.24 |
| 15 years | 57.14 | 60.97 | 85 years | 4.68 | 4.81 |
| 20 years | 52.41 | 56.09 | 90 years | 3.45 | 3.35 |

¹City of Honolulu only. For two-year period ended March 31, 1885.

Source: Robert C. Schmitt, *Demographic Statistics of Hawaii: 1778-1965* (University of Hawaii Press, 1968), p. 172; unpublished 1959-1961 tabulations provided by Statistical Resources Section, Division of Vital Statistics, National Center for Health Statistics, U.S. Department of Health, Education, and Welfare, May 21, 1971; unpublished 1969-1971 tabulations provided by the East-West Population Institute, October 8, 1971.

Table 22.—CIVILIAN DEATHS, BY CAUSE: 1930, 1960, AND 1970

| Cause of death ¹ | Number, 1970 | Percent distribution | | | Rate per 100,000 population | | |
|--|-----------------|----------------------|-------|-------|-----------------------------|-------|--------|
| | | 1970 | 1960 | 1930 | 1970 | 1960 | 1930 |
| All causes | 4,211 | 100.0 | 100.0 | 100.0 | 546.9 | 568.3 | 1049.3 |
| Diseases of the heart | 1,386 | 32.9 | 33.0 | 11.7 | 180.0 | 187.7 | 122.7 |
| Malignant neoplasms | 764 | 18.1 | 17.2 | 5.8 | 99.2 | 97.7 | 61.4 |
| Cerebrovascular diseases | 401 | 9.5 | 10.4 | 4.7 | 52.1 | 59.1 | 49.7 |
| All accidents | 298 | 7.1 | 7.5 | 7.0 | 38.1 | 43.5 | 73.3 |
| Diseases of early infancy | 205 | 4.9 | 7.5 | 6.6 | 26.6 | 42.7 | 69.2 |
| Influenza and pneumonia | 173 | 4.1 | 3.6 | 12.6 | 22.5 | 20.5 | 132.5 |
| Diabetes mellitus | 98 | 2.3 | 2.6 | 1.1 | 12.7 | 14.9 | 11.1 |
| Suicides | 85 | 2.0 | 1.3 | 1.7 | 11.0 | 7.4 | 17.9 |
| Congenital anomalies | 74 | 1.8 | 2.2 | 1.1 | 9.6 | 12.5 | 11.1 |
| Cirrhosis of liver | 74 | 1.8 | 1.3 | 0.7 | 9.6 | 7.1 | 7.1 |
| Bronchitis, asthma, emphysema ... | 66 | 1.6 | 1.3 | (NA) | 8.6 | 7.1 | (NA) |
| Aneurisms, other diseases of arteries | 43 | 1.0 | 0.8 | (NA) | 5.6 | 4.4 | (NA) |
| Homicide | 33 | 0.8 | 0.6 | 0.6 | 4.3 | 3.2 | 6.2 |
| Arteriosclerosis | 31 | 0.7 | 1.4 | 0.7 | 4.0 | 7.9 | 7.3 |
| Nephritis and nephrosis | 28 | 0.7 | 1.3 | 6.2 | 3.6 | 7.6 | 65.2 |
| All other causes | 452 | 10.7 | 8.0 | 39.5 | 58.7 | 45.1 | 414.6 |

NA Not available

¹The fifteen leading causes of death in 1970 listed in order of deaths for that year.

Source: Hawaii State Department of Health, *Statistical Report, 1970*, p. 33.

Table 23.—EPIDEMIC MORTALITY: 1804 TO 1971

| Year | Disease | Deaths ¹ |
|------------------------------|--|---------------------|
| 1804 | “Okuu” (cholera?) | < 15,000 |
| 1818 | “Catarrhs and fevers” | 60 |
| 1825 | Unnamed | “Great” |
| 1826 | Influenza | “Thousands” |
| 1839 | Mumps | “Great numbers” |
| 1848-1849 | Measles, whooping cough, influenza ... | 10,000 |
| 1853 | Smallpox | 5,000-6,000 |
| 1857 | Influenza, dengue | “Many” |
| 1870-1871 | Scarlet fever | “Great” |
| 1878-1880 | Whooping cough | 68 |
| 1881 | Smallpox | 282 |
| 1888 | Whooping cough | 104 |
| 1889-1890 | Measles, dysentery | 26 |
| 1895 | Cholera | 64 |
| 1899-1900 | Bubonic plague | 61 |
| 1918-1920 | Influenza | 1,700 |
| 1928-1929 | Cerebrospinal meningitis | 68 |
| 1936-1937 ² | Measles | 205 |

¹Excludes deaths primarily resulting from famine; see Robert C. Schmitt, “Famine Mortality in Hawaii,” *The Journal of Pacific History*, Vol. 5 (1970), pp. 109-115.

²Most recent of record as of early 1972.

Source: Robert C. Schmitt, “The *Okuu*—Hawaii’s Greatest Epidemic,” *Hawaii Medical Journal*, Vol. 29, No. 5, May-June 1970, pp. 359-364.

**Table 24.—ACCIDENTS AND NATURAL DISASTERS CAUSING FIVE OR MORE DEATHS:
1779 TO 1971**

| Kind of disaster | Worst disaster | | All disasters | |
|--------------------------------------|----------------|--------|---------------|--------|
| | Year | Deaths | Number | Deaths |
| All categories | 1941 | 2,500 | 119 | 5,676 |
| Natural disasters | 1790 | 400 | 11 | 755 |
| Tsunami | 1946 | 159 | 5 | 287 |
| Flood, wind, or earth movement | 1868 | 31 | 5 | 68 |
| Volcano | 1790 | 400 | 1 | 400 |
| Fire or explosion | 1944 | 163 | 6 | 219 |
| Transportation | 1830 | 250 | 95 | 2,030 |
| Marine | 1830 | 250 | 50 | 1,481 |
| Air | 1955 | 66 | 38 | 509 |
| Railroad or motor vehicle | 1944, 1969 | 7 | 7 | 40 |
| Violence | 1941 | 2,500 | 7 | 2,672 |
| Pearl Harbor attack | 1941 | 2,500 | 1 | 2,500 |
| Assault, murder, or riot | 1790 | 100+ | 6 | 172 |

Source: Robert C. Schmitt, "Catastrophic Mortality in Hawaii," *Hawaiian Journal of History*, Vol.III, 1969, pp. 66-86, as updated to December 31, 1971.

Table 25.—ABORTIONS: MARCH 13, 1970 TO MARCH 12, 1971
(Covers the first year of experience following legalization of induced abortion by Act I, Session Laws of 1970, which became effective March 11, 1970)

| Subject | Number | Subject | Number |
|---|--------|--|--------|
| Number performed | 3,643 | Average age of woman (years) | 24.6 |
| Abortions per 1,000 live births | 221 | Currently married (percent) | 36.4 |
| Performed on Oahu (percent) | 94.1 | Hawaii resident under 1 year (percent) | 19.8 |
| Gestation 13 weeks or over (percent) | 13.0 | Protestant (percent) | 40.4 |
| By dilatation and curettage and/or suction (percent) | 89.3 | Roman Catholic (percent) | 29.0 |
| With complications (percent) | 4.6 | Income under \$6,000 (percent) | 32.8 |
| Deaths | 0 | First pregnancy (percent) | 50.8 |
| In hospital 13 hours or more (percent) | 45.5 | First abortion (percent) | 91.8 |
| Usual cost (dollars) | 350 | Mean age at first coitus (years) | 18 |

Source: Pregnancy, Birth Control, and Abortion Study, University of Hawaii, *Abortion in Hawaii: The First Year. Report to the Legislature* (January 24, 1972).

**Table 26.—AVERAGE LENGTH OF STAY AND COST PER PATIENT DAY AT THE QUEEN'S HOSPITAL:
1859 TO 1971**

| Year ¹ | Average stay (days) | Cost per patient day (dollars) | Year | Average stay (days) | Cost per patient day (dollars) |
|-------------------|---------------------|--------------------------------|------------|---------------------|--------------------------------|
| 1859-1861 | 42 | 0.83 | 1965 | 7.0 | 53.39 |
| 1877-1879 | 59 | 0.61 | 1966 | 7.5 | 61.85 |
| 1903 | 33.7 | 1.78 | 1967 | 7.5 | 61.93 |
| 1920 | 13.0 | 4.20 | 1968 | 7.8 | 66.48 |
| 1940 | 8.3 | 6.20 | 1969 | 8.5 | 71.65 |
| 1950 | 7.3 | 21.16 | 1970 | 7.9 | 82.04 |
| 1960 | 6.5 | 37.90 | 1971 | 7.5 | 95.17 |

¹August 1, 1859-June 20, 1861; 24-month period ended in mid-1879; calendar years 1903-1940; fiscal years ended June 30, 1950-1971.

Source: Robert C. Schmitt, "Medical Costs in Hawaii, 1859-1967," *Hawaii Medical Journal*, January-February 1968, pp. 236-239; The Queen's Medical Center, records.

Table 27.—HOSPITALS AND NURSING AND CARE HOMES, BY ISLAND: 1970

| Category and Island | Number of estab. | Beds | | Bassinets | Percent of occupancy | Average patient occupancy | Patients admitted |
|-------------------------------|------------------|-----------------------|------------|-----------|----------------------|---------------------------|-------------------|
| | | In place ¹ | Acceptable | | | | |
| HOSPITALS² | | | | | | | |
| All Islands | 31 | 5,021 | 2,698 | 326 | 76.7 | 3,848 | 88,861 |
| Hawaii | 5 | 528 | 345 | 46 | 74.1 | 391 | 8,392 |
| Maui | 3 | 302 | 181 | 32 | 75.1 | 226 | 5,784 |
| Lanai | 1 | 14 | 14 | 4 | 17.8 | 3 | 156 |
| Molokai | 2 | 300 | 28 | 4 | 45.4 | 136 | 863 |
| Oahu | 17 | 3,626 | 1,962 | 216 | 79.6 | 2,885 | 68,902 |
| Kauai | 3 | 251 | 168 | 24 | 82.6 | 207 | 4,764 |
| NURSING AND CARE HOMES | | | | | | | |
| All Islands | 161 | 2,162 | 1,760 | — | 94.9 | 2,005 | 1,934 |
| Hawaii | 6 | 32 | 32 | — | 86.7 | 24 | 12 |
| Maui | 6 | 141 | 141 | — | 94.5 | 133 | 104 |
| Oahu | 132 | 1,933 | 1,531 | — | 95.1 | 1,801 | 1,810 |
| Kauai | 17 | 56 | 56 | — | 95.0 | 47 | 8 |

¹The total of 5,021 beds includes 1,892 general beds, 37 acute, 107 maternity-gynecological, 146 pediatric, 516 long-term, 1,650 mental, 146 tuberculosis, 423 leprosy, 64 rehabilitation, and 40 orthopedic. Data include residential cottages for leprosy and mental patients.

²Excludes Tripler General Hospital, a 900-bed armed services hospital on Oahu. Admissions at Tripler numbered 21,980 in 1970.

Source: *Annual Report, Department of Health, State of Hawaii, Statistical Supplement, 1970*, pp. 163-165.

Table 28.—AVERAGE DAILY RESIDENT POPULATION AND TOTAL ADMISSIONS, FOR OAHU INSANE ASYLUM, 1868-1870 TO 1920, AND HAWAII STATE HOSPITAL, 1930 TO 1970

| Year ¹ | Resident population, end of period | Total admissions ann. ave. | Year ¹ | Average daily resident population | Total admissions |
|-------------------|------------------------------------|----------------------------|-------------------------|-----------------------------------|------------------|
| 1868-1870 | 32 | 20 | 1930 ² | 560 | 236 |
| 1878-1880 | 31 | 22 | 1940 | 901 | 289 |
| 1888-1890 | 70 | 28 | 1950 | 1,088 | 509 |
| 1898-1899 | 136 | 54 | 1960 | 1,173 | 555 |
| 1910 | 246 | 94 | 1969 | 584 | 791 |
| 1920 | 378 | 108 | 1970 | 577 | 1,052 |

¹Twenty-four month periods ended March 31, 1870 to 1890, and December 31, 1899; twelve-month periods ended June 30, 1910 forward.

²On January 6, 1930, the 541 patients of Oahu Insane Asylum (opened on School Street, Honolulu, in September 1866) were transferred to the new Territorial Hospital in Kaneohe.

Source: *Report of the Board of Health . . . 1870*, pp. 16-17; *Biennial Report of the Minister of the Interior* for 1880 (pp. 58-59) and 1890 (pp. 13-14); *Report of the President of the Board of Health* for 1899 (p. 34), 1901 (pp. 27-28), 1910 (p. 121) 1920 (p. 40), and 1930 (pp. 393, 397); *Annual Report, Department of Institutions* for 1940 (p. 17) and 1950 (p.26); *Annual Report, Department of Health, Statistical Supplement* for 1960 (p. 83), 1969 (p. 119), and 1970 (p. 167).

Table 29.—PHYSICIANS, DENTISTS, NURSES, AND PHARMACISTS LICENSED IN HAWAII, BY ISLAND: 1971
(As of June 30)

| Professional group | Residents of Hawaii | | | | | | | Nonresidents |
|-------------------------|---------------------|--------|------|-------|---------|-------|-------|--------------|
| | State total | Hawaii | Maui | Lanai | Molokai | Oahu | Kauai | |
| Physicians (M.D.) | 1,051 | 61 | 39 | 3 | 5 | 919 | 24 | 572 |
| Dentists | 494 | 34 | 18 | 1 | 1 | 424 | 16 | 156 |
| Registered Nurses | 3,702 | 235 | 159 | 7 | 21 | 3,170 | 110 | 792 |
| Pharmacists | 220 | 12 | 14 | — | 2 | 186 | 6 | 70 |

Source: Hawaii State Department of Regulatory Agencies, records.

**Table 30.—STATISTICS FROM THE HAWAII HEALTH SURVEILLANCE PROGRAM SURVEY,
FOR OAHU: 1964-1967**

| Subject | Number ¹ |
|--|---------------------|
| Average non-institutional, non-barracks population | 565,000 |
| Hospital discharges, annual average | 66,500 |
| Median length of stay per discharged person (days) | 5.0 |
| Acute conditions, annual average | 1,040,700 |
| Per 100 population | 182.6 |
| Persons with one or more chronic conditions, average | 205,100 |
| Percent of population | 36.3 |
| Restricted activity days, annual average per person | 12.0 |
| Bed days annual average per person | 4.8 |
| Injuries, annual average per person ² | 28.1 |
| Home accidents, annual average per person ² | 8.3 |

¹Based on sample of non-institutional non-barracks population surveyed April 1964-March 1967, unless otherwise specified.

²Surveyed April 1964-September 1965.

Source: Hawaii State Department of Health, unpublished tabulations.

**Table 31.—MARRIAGES, TOTAL AND INTERRACIAL, BY USUAL OCCUPATION OF GROOM: BIENNIAL
PERIODS ENDED DECEMBER 31, 1957 AND 1968**

| Usual occupation | All marriages | | Interracial marriages | | Percent interracial | |
|---|---------------|---------|-----------------------|---------|---------------------|---------|
| | 1956-57 | 1967-68 | 1956-57 | 1967-68 | 1956-57 | 1967-68 |
| All grooms | 10,055 | 16,368 | 3,499 | 5,404 | 34.8 | 33.0 |
| No occupation | 537 | 1,312 | 170 | 519 | 31.7 | 39.6 |
| Civilian occupation | 6,429 | 9,269 | 2,120 | 3,758 | 33.0 | 40.5 |
| Professional, technical, and kindred workers | 722 | 1,740 | 159 | 501 | 22.0 | 28.8 |
| Managers, officials, proprietors, including farmers | 562 | 974 | 165 | 300 | 29.4 | 30.8 |
| Clerical and kindred workers | 567 | 649 | 144 | 275 | 25.4 | 42.4 |
| Sales workers | 325 | 543 | 93 | 188 | 28.6 | 34.6 |
| Craftsmen, foremen, and kindred workers | 1,478 | 1,834 | 440 | 752 | 29.8 | 41.0 |
| Operatives and kindred workers | 1,388 | 1,663 | 546 | 810 | 39.3 | 48.7 |
| Private household and service workers | 422 | 813 | 183 | 409 | 43.4 | 50.3 |
| Farm laborers and foremen | 283 | 165 | 123 | 72 | 43.5 | 43.6 |
| Laborers, except farm and mine | 682 | 888 | 267 | 451 | 39.1 | 50.8 |
| Armed forces | 3,081 | 5,748 | 1,205 | 1,118 | 39.1 | 19.5 |
| Not stated | 8 | 39 | 4 | 9 | — | — |

Source: Robert C. Schmitt, "Recent Trends in Hawaiian Interracial Marriage Rates by Occupation," *Journal of Marriage and the Family*, Vol. 33, No. 2, May 1971, pp. 373-374.

SECTION 3

EDUCATION

This section presents statistics on school enrollment, graduates and degrees awarded, the highest grade of school completed, and school facilities, personnel, and expenditures.

Enrollment in elementary, intermediate and high schools in 1971-1972 totalled 215,524, or almost double the 1940 figure. There were 216 public schools with 8,235 classroom teachers and 182,957 students (about 85 percent of the total).

Some 40,000 students attended colleges and universities in the State in 1971, chiefly on the Manoa Campus of the University of Hawaii. Eighty-five percent of the children 5 and 6 years old were in school in 1970 (compared with 34 percent in 1910), and 53 percent in the 18- and 19-year old group were enrolled (compared with 14 percent sixty years earlier).

Among adults, the illiteracy rate dropped from 35 percent in 1900 to 5.0 percent in 1960, and by 1970 approximately 26 percent of all residents 25 years of age or more could report having completed one or more years of college.

Section 4 of the *Statistical Abstract of the United States: 1971* presents comparable data for the nation as a whole.

Table 32.—PUBLIC AND PRIVATE SCHOOL ENROLLMENT, TEACHERS, AND GRADUATES: 1832 TO 1971

| Year | School enrollment or membership ¹ | | | Teachers ¹ | | High school graduates ² | |
|-------------------------|--|---------|---------|-----------------------|---------|------------------------------------|---------|
| | Total | Public | Private | Public | Private | Public | Private |
| 1832 | 23,123 | 23,123 | | (NA) | | (NA) | |
| 1847 | 19,644 | 19,644 | | 625 | | (NA) | |
| 1859 ³ | 9,782 | 8,628 | 1,154 | 290 | (NA) | (NA) | |
| 1870 ³ | 7,927 | 5,938 | 1,989 | (NA) | (NA) | (NA) | |
| 1880 | 7,164 | 5,373 | 1,791 | (NA) | (NA) | (NA) | |
| 1890 | 10,006 | 7,343 | 2,663 | 232 | 136 | (NA) | |
| 1900 | 15,537 | 11,501 | 4,036 | 352 | 207 | 6 | (NA) |
| 1910 | 25,770 | 20,245 | 5,525 | 501 | 276 | 26 | (NA) |
| 1920 | 48,923 | 41,350 | 7,573 | 1,312 | 402 | 164 | (NA) |
| 1930 | 88,577 | 76,634 | 11,943 | 2,657 | 594 | 1,288 | 502 |
| 1940 | 112,260 | 92,424 | 19,836 | 3,394 | 833 | 4,264 | 873 |
| 1949-50 | 114,986 | 90,786 | 24,200 | 3,122 | 878 | 5,585 | 1,072 |
| 1959-60 | 169,925 | 140,666 | 29,259 | 4,731 | 1,297 | 6,288 | 1,611 |
| 1960-61 | 175,172 | 145,134 | 30,038 | 4,850 | 1,151 | 7,267 | 1,731 |
| 1961-62 | 180,006 | 149,554 | 30,452 | 5,013 | 1,213 | 7,797 | 1,785 |
| 1962-63 | 184,231 | 153,298 | 30,933 | 5,179 | 1,227 | 7,763 | 1,748 |
| 1963-64 | 187,825 | 156,651 | 31,174 | 5,173 | 1,205 | 8,327 | 1,866 |
| 1964-65 | 193,047 | 160,681 | 32,366 | 5,368 | 1,481 | 9,239 | 1,976 |
| 1965-66 | 194,595 | 162,164 | 32,431 | 5,846 | 1,477 | 9,009 | 2,048 |
| 1966-67 | 200,242 | 166,375 | 33,867 | 6,394 | 1,492 | 9,540 | 2,175 |
| 1967-68 | 203,734 | 169,673 | 34,061 | 6,624 | 1,594 | 9,430 | 2,133 |
| 1968-69 | 207,231 | 173,718 | 33,513 | 7,098 | 1,547 | 9,800 | 2,173 |
| 1969-70 | 211,215 | 178,564 | 32,651 | 7,300 | 1,551 | 10,377 | 2,209 |
| 1970-71 | 213,165 | 180,770 | 32,395 | 7,948 | 1,698 | 10,471 | 2,178 |
| 1971-72 | 215,524 | 182,957 | 32,567 | 8,235 | 1,715 | — | — |

NA Not available.

¹Month unspecified for 1832-1859; January 1, 1870 to 1890; December 31, 1900 to 1940; December data for school years 1949-1950 forward.

²Data for 1900-1930 are for twelfth grade enrollment rather than graduates.

³Public school data refer to "common schools"; private school data, to "select" and "independent" schools.

Source: *Report of the Minister of Public Instruction* for 1846 (p. 56) and 1848 (p. 2); *Report of the President of the Board of Education* for 1860 (pp. 2 and 25), 1870 (pp. 2-3), 1880 (p. 1), and 1890 (p. 12); *Report of the Superintendent of Public Instruction* for 1900 (p. 93), 1910 (p. 74), and 1920 (p. 202); *Report of the Department of Public Instruction* for 1929-1930 (p. 155), 1939-1940 (p. 25), and June 30, 1950 (pp. 48 and 51); Department of Education, *A Compilation of Selected Statistics, Public and Non-Public Schools of Hawaii, 1970-1971*, pp. 22, 33, 60, and 77, and records.

Table 33.—PUPIL MEMBERSHIP, FACILITIES, AND EXPENDITURES OF PUBLIC AND PRIVATE SCHOOLS: 1970-1971

| Subject | All schools | Public schools | Private schools |
|---|-------------|----------------|-----------------|
| Pupil membership, all counties | 213,165 | 180,770 | 32,395 |
| City and County of Honolulu | 172,759 | 143,879 | 28,880 |
| County of Hawaii | 18,738 | 17,395 | 1,343 |
| County of Maui | 13,174 | 11,656 | 1,518 |
| County of Kauai | 8,494 | 7,840 | 654 |
| Pupil membership, all grades | 213,165 | 180,770 | 32,395 |
| Nursery | 2,337 | — | 2,337 |
| Kindergarten | 15,407 | 13,370 | 2,037 |
| 1 | 16,654 | 14,416 | 2,238 |
| 2 | 17,081 | 14,899 | 2,182 |
| 3 | 17,017 | 14,854 | 2,163 |
| 4 | 16,630 | 14,475 | 2,155 |
| 5 | 16,345 | 14,171 | 2,174 |
| 6 | 16,303 | 14,095 | 2,208 |
| 7 | 15,921 | 13,439 | 2,482 |
| 8 | 15,897 | 13,426 | 2,471 |
| 9 | 15,714 | 13,259 | 2,455 |
| 10 | 15,588 | 13,246 | 2,342 |
| 11 | 14,439 | 12,126 | 2,313 |
| 12 | 12,991 | 10,813 | 2,178 |
| Specials | 4,211 | 3,551 | 660 |
| Others | 630 | 630 | — |
| Average daily attendance, 1969-1970 | (NA) | 167,445 | (NA) |
| Average daily membership, 1969-1970 | (NA) | 179,364 | (NA) |
| Number of schools | 333 | 216 | 117 |
| Current expenditures, 1969-1970 (\$1,000) | (NA) | 134,311 | (NA) |
| Per ADA (\$) | (NA) | 802.12 | (NA) |
| Per ADM (\$) | (NA) | 748.82 | (NA) |

NA Not available.

Source: Hawaii State Department of Education, *A Compilation of Selected Statistics, Public and Non-Public Schools of Hawaii, 1970-1971*. (Statistical Report No. 9, 1971), pp. 3, 4, 22, 48, 67, 77, 78, and 80.

Table 34.—SCHOOL ENROLLMENT, BY AGE: 1890 TO 1970
(Includes Kindergarten)

| Year | Total, 5 to 24 years old | 5 and 6 years old ¹ | 7 to 13 years old | 14 and 15 years old | 16 and 17 years old | 18 and 19 years old | 20 and 21 years old | 22 to 24 years old ² |
|-------------------------|--------------------------|--------------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------------------|
| 1890 ³ | (NA) | | 9,872 | | (NA) | (NA) | | (NA) |
| 1896 ³ | (NA) | | 13,744 | | (NA) | (NA) | | (NA) |
| 1900 | 15,369 | (NA) | (NA) | (NA) | (NA) | (NA) | | (NA) |
| 1910 | 29,196 | 2,852 | 19,525 | 3,593 | 1,706 | 895 | | 625 |
| 1920 | 49,247 | 5,042 | 32,692 | 6,164 | 3,132 | 1,455 | | 762 |
| 1930 | 83,467 | 6,318 | 55,113 | 10,790 | 6,296 | 3,172 | | 1,778 |
| 1940 | 110,459 | 8,578 | 64,094 | 17,893 | 12,152 | 5,267 | | 2,475 |
| 1950 | 116,135 | 16,200 | 59,095 | 15,215 | 14,255 | 7,055 | 2,300 | 2,015 |
| 1960 | 174,777 | 26,435 | 92,877 | 22,840 | 19,278 | 7,460 | 3,394 | 2,493 |
| 1970 ⁴ | 221,726 | 27,683 | 108,757 | 30,409 | 26,362 | 14,486 | 7,672 | 6,357 |
| PERCENT | | | | | | | | |
| 1890 ³ | (NA) | | 81.6 | | (NA) | (NA) | | (NA) |
| 1896 ³ | (NA) | | 96.2 | | (NA) | (NA) | | (NA) |
| 1900 | 29.8 | (NA) | (NA) | (NA) | (NA) | (NA) | | (NA) |
| 1910 | 44.0 | 33.7 | 90.1 | 72.7 | 35.9 | 13.9 | | 3.1 |
| 1920 | 50.4 | 37.2 | 94.4 | 77.1 | 40.1 | 16.4 | | 3.1 |
| 1930 | 51.7 | 31.2 | 94.8 | 81.9 | 51.4 | 21.3 | | 4.2 |
| 1940 | 58.0 | 51.5 | 98.7 | 93.5 | 67.1 | 25.8 | | 4.8 |
| 1950 | 62.6 | 68.4 | 97.8 | 97.0 | 85.7 | 36.2 | 11.0 | 7.0 |
| 1960 | 72.0 | 85.0 | 98.6 | 97.0 | 87.8 | 34.4 | 15.7 | 8.7 |
| 1970 ⁴ | 70.8 | 84.7 | 96.7 | 95.8 | 90.8 | 53.1 | 22.4 | 13.6 |

NA Not available.

¹Enrollment total for 1910 includes a few persons under 5.

²Enrollment totals for 1900-1920 include a few persons 25 and over.

³Refers to persons 6 to 15.

⁴Includes students in nursery school, omitted for earlier years.

Source: Robert C. Schmitt, *Demographic Statistics of Hawaii: 1778-1965* (University of Hawaii Press, 1968), p. 78; *Twelfth Census of the United States . . . 1900*, Vol. II, Part II, pp. 110, 111, and 352; *Thirteenth Census . . . 1910*, *Abstract of the Census*, pp. 582-584; *Fourteenth Census . . . 1920*, Vol. III, pp. 1178 and 1183-1185; *Fifteenth Census . . . 1930*; *Outlying Territories and Possessions*, pp. 50 and 54; *Sixteenth Census . . . 1940*, *Population, Second Series, Hawaii*, p. 9; *U.S. Census of Population: 1950*, Bulletin P-B52, table 12; *U.S. Census of Population: 1960*, Final Report PC(1)-13C, table 45; *U.S. Census of Population: 1970*, Final Report PC(1)-C13, table 45.

Table 35.—DAYTIME ENROLLMENT AND DEGREES AWARDED AT THE UNIVERSITY OF HAWAII: 1908 TO 1972

| Year | Enrollment: Manoa ¹ | Degrees awarded | | | Year | Enrollment: Manoa ¹ | Degrees awarded | | |
|----------------------------|--------------------------------|-----------------|----------|----------|---------------|--------------------------------|-----------------|----------|----------|
| | | Bachelor's | Master's | Doctor's | | | Bachelor's | Master's | Doctor's |
| 1908-09 | 41 | — | — | — | 1928-29 | 1,115 | 101 | 8 | — |
| 1909-10 | 64 | — | — | — | 1929-30 | 1,321 | 96 | 20 | — |
| 1910-11 | 112 | — | — | — | 1930-31 | 1,488 | 151 | 16 | — |
| 1911-12 ² | 160 | 4 | — | — | 1931-32 | 2,034 | 193 | 17 | — |
| 1912-13 | 128 | 5 | — | — | 1932-33 | 1,947 | 193 | 17 | 1 |
| 1913-14 | 121 | 3 | 1 | — | 1933-34 | 1,601 | 268 | 22 | 1 |
| 1914-15 | 105 | 2 | 1 | — | 1934-35 | 1,809 | 257 | 32 | — |
| 1915-16 | 105 | 2 | — | — | 1935-36 | 2,003 | 254 | 34 | — |
| 1916-17 | 110 | 3 | — | — | 1936-37 | 2,256 | 271 | 33 | — |
| 1917-18 | 139 | 10 | — | — | 1937-38 | 2,478 | 301 | 19 | 1 |
| 1918-19 | 145 | 5 | — | — | 1938-39 | 2,669 | 315 | 33 | — |
| 1919-20 | 242 | 8 | 1 | — | 1939-40 | 2,703 | 228 | 9 | — |
| 1920-21 | 397 | 7 | 4 | — | 1940-41 | 2,746 | 323 | 27 | — |
| 1921-22 | 404 | 18 | 2 | — | 1941-42 | 2,311 | 348 | 33 | — |
| 1922-23 | 496 | 28 | 8 | — | 1942-43 | 1,408 | 164 | 4 | — |
| 1923-24 | 674 | 47 | 5 | — | 1943-44 | 1,594 | 156 | 8 | — |
| 1924-25 | 618 | 49 | 4 | — | 1944-45 | 1,931 | 186 | 7 | — |
| 1925-26 | 738 | 60 | 4 | — | 1945-46 | 1,760 | 162 | 9 | — |
| 1926-27 | 874 | 92 | 8 | — | 1946-47 | 2,962 | 220 | 12 | — |
| 1927-28 | 940 | 86 | 5 | — | 1947-48 | 3,837 | 236 | 11 | — |

| Year | Enrollment ¹ | | | Degrees awarded | | | |
|---------------|-------------------------|---------------------------|---------------------------------|-----------------|------------|----------|----------|
| | Manoa | Hilo College ³ | Community Colleges ⁴ | Associate | Bachelor's | Master's | Doctor's |
| 1948-49 | 4,317 | — | — | — | 452 | 17 | 1 |
| 1949-50 | 4,842 | — | — | — | 641 | 33 | — |
| 1950-51 | 4,926 | 86 | — | — | 640 | 50 | 1 |
| 1951-52 | 4,692 | 100 | — | — | 708 | 42 | — |
| 1952-53 | 4,600 | 85 | — | — | 677 | 40 | 2 |
| 1953-54 | 4,615 | 146 | — | — | 650 | 37 | 1 |
| 1954-55 | 4,671 | 145 | — | — | 643 | 42 | 2 |
| 1955-56 | 5,180 | 228 | — | — | 644 | 39 | — |
| 1956-57 | 5,408 | 243 | — | — | 722 | 32 | 2 |
| 1957-58 | 5,741 | 187 | — | — | 704 | 45 | 3 |
| 1958-59 | 6,342 | 225 | — | — | 755 | 71 | 4 |
| 1959-60 | 6,923 | 250 | — | — | 881 | 81 | 3 |
| 1960-61 | 7,511 | 260 | — | — | 832 | 109 | 7 |
| 1961-62 | 8,231 | 285 | — | — | 869 | 112 | 2 |

¹Non-duplicated annual enrollment through 1940-41; Fall semester day enrollment, 1941-42 and thereafter.

²First annual commencement was in 1912.

³Began in 1947 as a part of the UH Extension Division and put under the Dean of Faculties in 1951.

⁴Transferred to UH from the Department of Education in 1965.

(Continued on next page)

**Table 35.—DAYTIME ENROLLMENT AND DEGREES AWARDED AT THE UNIVERSITY OF HAWAII:
1908 TO 1972 (continued)**

| Year | Enrollment ¹ | | | Degrees awarded | | | |
|---------------|-------------------------|---------------------------|---------------------------------|-----------------|------------|----------|----------|
| | Manoa | Hilo College ³ | Community Colleges ⁴ | Associate | Bachelor's | Master's | Doctor's |
| 1962-63 | 9,150 | 399 | — | — | 894 | 252 | 15 |
| 1963-64 | 10,466 | 355 | — | — | 983 | 304 | 14 |
| 1964-65 | 11,641 | 398 | — | — | 1,183 | 362 | 20 |
| 1965-66 | 13,587 | 510 | 2,010 | 129 | 1,444 | 427 | 29 |
| 1966-67 | 14,772 | 571 | 2,444 | 232 | 1,515 | 555 | 28 |
| 1967-68 | 16,564 | 618 | 3,606 | 448 | 1,833 | 819 | 47 |
| 1968-69 | 17,082 | 679 | 5,494 | 448 | 1,924 | 982 | 58 |
| 1969-70 | 18,474 | 864 | 8,713 | 647 | 2,266 | 1,018 | 53 |
| 1970-71 | 21,090 | 1,184 | 10,853 | 854 | 2,681 | 1,103 | 78 |
| 1971-72 | 22,061 | 1,297 | 13,010 | — | — | — | — |

¹Non-duplicated annual enrollment through 1940-41; Fall semester day enrollment, 1941-42 and thereafter.

²First annual commencement was in 1912.

³Began in 1947 as a part of the UH Extension Division and put under the Dean of Faculties in 1951.

⁴Transferred to UH from the Department of Education in 1965.

Source: Office of the President, University of Hawaii.

Table 36.—ENROLLMENT IN COLLEGES AND UNIVERSITIES: FALL 1971

| Institution | Location | Enrollment |
|---|------------------------|------------|
| University of Hawaii, total ¹ | | 36,368 |
| Manoa | Honolulu | 22,061 |
| Hilo College | Hilo | 1,297 |
| Community Colleges ² | | 13,010 |
| Hawaii | Hilo | 968 |
| Honolulu | Honolulu | 2,167 |
| Kapiolani | Honolulu | 2,765 |
| Kauai | Lihue, Kauai | 839 |
| Leeward | Pearl City, Oahu | 5,177 |
| Maui | Kahului, Maui | 1,094 |
| Private colleges | | 3,485 |
| Chaminade College of Honolulu | Honolulu | 1,700 |
| Church College of Hawaii | Laie, Oahu | 1,300 |
| Hawaii Loa College | Kaneohe, Oahu | 170 |
| Hawaii Pacific College | Honolulu | 210 |
| U.S. International University — Maunaolu Campus ³ | Makawao, Maui | 105 |

¹Students in credit courses.

²All two-year institutions. Excludes 3,248 students in non-credit vocational programs.

³Two-year institution.

Source: University of Hawaii, Management Systems Office, *Facts About the University of Hawaii, 1971-72*; survey of private colleges by Hawaii State Department of Education, Office of Public Information.

Table 37.—YEARS OF SCHOOL COMPLETED BY PERSONS 25 YEARS OLD AND OVER: 1940 TO 1970

| Years of school completed | 1940 | 1950 | 1960 | 1970 |
|-------------------------------------|----------|----------|----------|---------|
| Total, 25 years old and over | 192,905 | 247,480 | 308,910 | 384,843 |
| None | 35,643 | 26,185 | 20,540 | 11,696 |
| Elementary, 1 to 4 years | 35,607 | 32,885 | 25,888 | 20,384 |
| Elementary, 5 and 6 years | 25,978 | 27,245 | 23,144 | 22,343 |
| Elementary, 7 years | } 36,077 | { 12,550 | 12,755 | 9,444 |
| Elementary, 8 years | | | 32,010 | 35,031 |
| High, 1 to 13 years | 19,543 | 36,155 | 49,272 | 51,365 |
| High, 4 years | 21,519 | 49,355 | 91,586 | 138,307 |
| College, 1 to 3 years | 7,683 | 12,780 | 23,016 | 46,088 |
| College, 4 years | } 10,252 | 15,005 | { 15,664 | 29,657 |
| College, 5 years or more | | | | 12,014 |
| Not reported | 603 | 3,310 | — | — |
| Elementary, 8 years or less | 133,305 | 130,875 | 117,358 | 95,336 |
| Percent ¹ | 69.3 | 53.6 | 38.0 | 24.8 |
| High, 1 to 4 years | 41,062 | 85,510 | 140,858 | 189,672 |
| Percent ¹ | 21.4 | 35.0 | 45.6 | 49.3 |
| College, 1 or more years | 17,935 | 27,785 | 50,694 | 99,835 |
| Percent ¹ | 9.3 | 11.4 | 16.4 | 25.9 |
| Median school years completed | 6.9 | 8.7 | 11.3 | 12.3 |

¹Based on number reporting.

Source: *U.S. Census of Population: 1960*, Final Report PC(1)-13C, table 47; *U.S. Census of Population: 1970*, Final Report PC(1)-C13, table 46.

Table 38.—LIBRARIES: 1970

| Library system | Number of libraries | | | | | Bound volumes (1,000) | | | | |
|--|---------------------|------|------------|-----------|----------|-----------------------|-------|------------|-----------|----------|
| | State total | Oahu | Hawaii Co. | Kauai Co. | Maui Co. | State total | Oahu | Hawaii Co. | Kauai Co. | Maui Co. |
| All categories | 124 | 111 | 6 | 3 | 4 | 2,607 | 2,250 | 125 | 88 | 144 |
| Hawaii State Library | 1 | 1 | — | — | — | 229 | 229 | — | — | — |
| Others in State system | 20 | 17 | 1 | 1 | 1 | 675 | 424 | 65 | 81 | 105 |
| State government | 9 | 9 | — | — | — | 124 | 124 | — | — | — |
| County systems | 6 | 3 | 1 | 1 | 1 | 31 | 31 | — | — | — |
| U.S. Armed Forces libraries | 21 | 20 | 1 | — | — | 324 | 320 | 4 | — | — |
| Other Federal government | 6 | 5 | 1 | — | — | 29 | 26 | 3 | — | — |
| University of Hawaii system | 8 | 7 | 1 | — | — | 766 | 716 | 50 | — | — |
| Community Colleges | 7 | 4 | 1 | 1 | 1 | 85 | 52 | 3 | 7 | 23 |
| Private colleges | 4 | 3 | — | — | 1 | 126 | 110 | — | — | 16 |
| Museums | 4 | 4 | — | — | — | 71 | 71 | — | — | — |
| Other organizations ¹ | 38 | 38 | — | — | — | 147 | 147 | — | — | — |

¹Business firms, consulates, private agencies, etc.

Source: Hawaii Library Association, "Directory of Libraries and Information Sources in Hawaii and the Pacific Islands," *HLA Journal*, Vol. XXVII, No. 2, December 1970.

Table 39.—THE HAWAII STATE AND UNIVERSITY OF HAWAII LIBRARY SYSTEMS: 1910 TO 1971

| Year | Hawaii State Library System | | | | | | University of Hawaii libraries: number of volumes, June 30 | | |
|------------|---|---------|------------------|--|-----------|------------------|---|------------------------------|--------------------------------|
| | Number of volumes, June 30 ¹ | | | Circulation, year ended June 30 ² | | | System total | Manoa Campus ³ | Rest of system ⁴ |
| | State total | Oahu | Other Islands | State total | Oahu | Other Islands | | | |
| 1910 | — | — | — | — | — | — | 6,050 | 6,050 | — |
| 1915 | 27,569 | 27,569 | — | 90,961 | 85,397 | 5,564 | 11,686 | 11,686 | — |
| 1920 | 78,002 | 45,905 | 32,097 | 219,264 | 153,506 | 65,758 | 25,709 | 25,709 | — |
| 1925 | 134,333 | 79,676 | 54,657 | 462,245 | 324,286 | 137,959 | 36,691 | 36,691 | — |
| 1930 | 183,456 | 99,938 | 83,518 | 542,799 | 315,660 | 227,139 | 50,194 | 50,194 | — |
| 1935 | 235,881 | 129,835 | 106,046 | 1,269,157 | 712,769 | 556,388 | 79,281 | 79,281 | — |
| 1940 | 293,523 | 153,331 | 140,192 | 1,751,054 | 950,828 | 800,226 | 131,586 | 131,586 | — |
| 1945 | 351,709 | 181,219 | 170,490 | 1,533,854 | 832,416 | 701,438 | 158,205 | 158,205 | — |
| 1950 | 388,617 | 204,635 | 183,982 | 1,713,568 | 955,657 | 757,911 | 210,157 | 210,157 | — |
| 1955 | 456,467 | 257,883 | 198,584 | 2,267,772 | 1,325,257 | 942,515 | 259,751 | 256,651 | 3,100 |
| 1960 | 536,714 | 314,836 | 221,878 | 2,864,321 | 1,709,727 | 1,154,594 | 307,701 | 302,188 | 5,513 |
| 1965 | 652,684 | 399,771 | 252,913 | 3,544,239 | 2,312,096 | 1,223,143 | 510,033 | 467,684 | 42,349 |
| 1970 | 1,048,858 | 710,649 | 338,209 | 3,645,950 | 2,602,146 | 1,043,804 | 1,166,552 | 1,027,513 | 139,039 |
| 1971 | 1,168,857 | 799,369 | 369,488 | 3,905,825 | 2,851,411 | 1,054,414 | 1,300,191 | 1,116,932 | 183,259 |

¹December 31 for 1930 and earlier years.

²Calendar years for 1930 and earlier.

³Includes East-West Center.

⁴Hilo College and Community Colleges.

Source: Hawaii State Department of Education, Division of Library Services, records; University of Hawaii, records.

SECTION 4

LAW ENFORCEMENT, COURTS, AND CORRECTIONS

Statistics in this section refer to crime and delinquency, the police, the judiciary system, prisons, and training schools.

Major offenses reported to the police in 1970 numbered 41,526, almost three times as many as in 1960. The rate per 100,000 population has increased from 1,145 in 1939 to 5,367 in 1970. More than seven-eighths of the 1970 total occurred on Oahu.

For the State as a whole, 18.8 percent of the major offenses and 69.1 percent of the minor offenses were cleared by arrest or otherwise. Six-tenths of the persons arrested for major crimes and one-third of those arrested for lesser offenses were less than eighteen years of age.

Almost half of the juveniles were counseled and released, and only a small number were committed to the State Youth Correctional Facility. Inmates of the State correctional institutions averaged 330 during 1971, compared with 1,000 five decades earlier. The State Supreme Court, five circuit courts, and twenty-seven district courts handled almost 500,000 cases in 1971.

Statistics on law enforcement, courts, and corrections in Hawaii appear in the annual reports of the County police departments, the State Judiciary, and the Department of Social Services and Housing. National data are summarized in the *Statistical Abstract of the United States: 1971*, Section 5.

Table 40.—MAJOR OFFENSES REPORTED TO THE POLICE: 1846-1847 TO 1970

| Offense | 1846-1847 ¹ | 1884-1886 ² | 1931 ³ | 1940 | 1950 | 1960 | 1967 ⁴ | 1970 ⁴ | |
|-------------------------------|------------------------|------------------------|-------------------|-------|-------|--------|-------------------|-------------------|--------|
| All major offenses | 213 | 579 | 1,742 | 5,266 | 6,639 | 14,569 | 27,221 | 41,200 | |
| Per 100,000 population | 224 | 356 | 615 | 1,231 | 1,333 | 2,271 | 3,767 | 5,325 | |
| Murder | — | 5 | } 33 | { 18 | 12 | 15 | 18 | 30 | |
| Manslaughter | — | 3 | | | 10 | 29 | 29 | 34 | 28 |
| Rape | 2 | 22 | 16 | 20 | 31 | 20 | 37 | 97 | |
| Robbery | (NA) | 16 | 58 | 24 | 43 | 69 | 146 | 493 | |
| Aggravated assault | (NA) | (NA) | 102 | 62 | 132 | 33 | 92 | 282 | |
| Burglary | } 211 | { 58 | 563 | 1,518 | 1,604 | 3,330 | 8,513 | 11,402 | |
| Larceny, \$100 and over | | | } 475 | 882 | { 207 | 622 | 481 | 1,778 | 4,234 |
| Larceny, under \$100 | | | | | | 3,064 | 3,814 | 8,884 | 13,617 |
| Automobile theft | — | — | 88 | 343 | 352 | 1,708 | 2,986 | 4,454 | |

NA Not available.

¹Criminal cases tried, April 1, 1846 to March 31, 1847.

²Annual average, April 1, 1884 to March 31, 1886.

³Excludes Counties of Kauai and Maui.

⁴Totals differ slightly from those in table 41.

Source: 1846-1847 from Robert C. Schmitt, "Early Crime Statistics of Hawaii," *Hawaii Historical Review, Selected Readings* (Hawaiian Historical Society, 1969), pp. 230-240; 1884-1885 from *Report of the Attorney General to the Legislative Assembly of 1886*, table E; 1931 from Seth W. Richardson, *Law Enforcement in the Territory of Hawaii* (1932), pp. 228 and 230; 1940-1967 from Hawaii State Bureau of Crime Statistics and Identification; 1970 from County police departments.

**Table 41.—ACTUAL MAJOR (PART I) OFFENSES KNOWN TO THE POLICE, BY COUNTY:
1884-86 TO 1971**

| Calendar year | The State | | City and County of Honolulu | Hawaii County | Kauai County | Maui County |
|------------------------------|-----------|-------------------|-----------------------------|---------------|--------------|-------------|
| | Number | Rate ¹ | | | | |
| 1884-1886 ² | 579 | 356 | 213 | 135 | 129 | 102 |
| 1925 | (NA) | (NA) | (NA) | 72 | (NA) | (NA) |
| 1926 | (NA) | (NA) | (NA) | 78 | (NA) | (NA) |
| 1927 | (NA) | (NA) | (NA) | 38 | (NA) | (NA) |
| 1928 | (NA) | (NA) | (NA) | 78 | (NA) | (NA) |
| 1929 | (NA) | (NA) | (NA) | 52 | (NA) | (NA) |
| 1930 | (NA) | (NA) | (NA) | 80 | (NA) | (NA) |
| 1931 ³ | (NA) | (NA) | 1,664 | 78 | (NA) | (NA) |
| 1932 | (NA) | (NA) | 2,690 | (NA) | 14 | (NA) |
| 1933 | (NA) | (NA) | 2,725 | (NA) | 51 | (NA) |
| 1934 | (NA) | (NA) | 3,100 | (NA) | 43 | (NA) |
| 1935 | (NA) | (NA) | 3,566 | (NA) | 117 | (NA) |
| 1936 | (NA) | (NA) | 3,168 | 240 | 23 | (NA) |
| 1937 | (NA) | (NA) | 3,153 | 518 | 47 | (NA) |
| 1938 | (NA) | (NA) | 3,245 | 429 | 59 | (NA) |
| 1939 | 4,760 | 1,145 | 3,948 | 434 | 46 | 332 |
| 1940 | 5,266 | 1,231 | 4,115 | 649 | 68 | 434 |
| 1941 | 5,091 | 1,108 | 4,377 | 348 | 47 | 319 |
| 1942 | 3,719 | 639 | 3,001 | 356 | 42 | 320 |
| 1943 | 4,434 | 683 | 3,637 | 340 | 69 | 388 |
| 1944 | 5,328 | 620 | 4,086 | 591 | 175 | 476 |
| 1945 | 5,261 | 646 | 4,192 | 445 | 144 | 480 |
| 1946 | 5,437 | 997 | 4,499 | 406 | 128 | 404 |
| 1947 | 5,778 | 1,098 | 4,751 | 438 | 122 | 467 |
| 1948 | 6,058 | 1,172 | 5,014 | 367 | 195 | 482 |
| 1949 | 6,645 | 1,300 | 5,443 | 375 | 320 | 507 |
| 1950 | 6,639 | 1,333 | 5,467 | 516 | 243 | 413 |
| 1951 | 6,428 | 1,250 | 5,286 | 420 | 218 | 504 |
| 1952 | 7,588 | 1,467 | 6,322 | 405 | 251 | 610 |
| 1953 | 7,253 | 1,422 | 5,962 | 507 | 260 | 524 |
| 1954 | 8,120 | 1,606 | 6,874 | 448 | 247 | 551 |

¹NA Not available.

²Annual average per 100,000 mid-period population (including armed forces). Population estimate for April 1, 1885 interpolated from Robert C. Schmitt, *Demographic Statistics of Hawaii: 1778-1965* (University of Hawaii Press, 1968), p. 223; other years from the Hawaii State Department of Planning and Economic Development, Statistical Report 81 (July 23, 1971), pp. 3-6, and Statistical Report 86 (November 12, 1971), table 2.

³April 1, 1884 to March 31, 1886.

⁴According to the source for these data, "due to the poor record system of the Honolulu police department, it is probable that all offenses known to the police were not recorded."

(Continued on next page)

**Table 41.—ACTUAL MAJOR (PART I) OFFENSES KNOWN TO THE POLICE, BY COUNTY:
1884-86 TO 1971 (continued)**

| Calendar year | The State | | City and County of Honolulu | Hawaii County | Kauai County | Maui County |
|---------------|-----------|-------------------|-----------------------------|---------------|--------------|-------------|
| | Number | Rate ¹ | | | | |
| 1955 | 8,919 | 1,654 | 7,636 | 454 | 282 | 547 |
| 1956 | 9,282 | 1,662 | 7,864 | 632 | 316 | 470 |
| 1957 | 11,685 | 1,999 | 9,998 | 714 | 371 | 602 |
| 1958 | 13,971 | 2,308 | 12,150 | 902 | 349 | 570 |
| 1959 | 14,205 | 2,283 | 12,648 | 662 | 402 | 493 |
| 1960 | 14,569 | 2,271 | 12,986 | 628 | 465 | 490 |
| 1961 | 16,608 | 2,521 | 14,981 | 689 | 471 | 467 |
| 1962 | 17,675 | 2,586 | 15,973 | 747 | 408 | 547 |
| 1963 | 17,673 | 2,590 | 16,065 | 698 | 448 | 462 |
| 1964 | 19,198 | 2,743 | 17,533 | 643 | 395 | 627 |
| 1965 | 22,891 | 3,252 | 20,723 | 829 | 524 | 815 |
| 1966 | 24,865 | 3,501 | 22,689 | 816 | 506 | 854 |
| 1967 | 27,428 | 3,796 | 24,847 | 1,126 | 649 | 806 |
| 1968 | 34,554 | 4,705 | 31,044 | 1,556 | 730 | 1,224 |
| 1969 | 36,417 | 4,854 | 32,636 | 1,714 | 779 | 1,288 |
| 1970 | 41,526 | 5,367 | 36,779 | 1,951 | 993 | 1,803 |
| 1971 | (NA) | (NA) | 37,459 | 2,167 | (NA) | 2,300 |

NA Not available.

Source: *Report of the Attorney General to the Legislative Assembly of 1886*, table E; Seth W. Richardson, *Law Enforcement in the Territory of Hawaii* (1932), pp. 228 and 230; County police departments, annual reports and records.

Table 42.—ACTUAL OFFENSES KNOWN TO POLICE AND OFFENSES CLEARED BY ARREST OR OTHERWISE, BY COUNTY: 1970

| Classification of offenses | Actual offenses known to police | | | | | Cleared by arrest or otherwise ¹ | |
|--|---------------------------------|---------------------|---------------|--------------|-------------|---|-----------------|
| | State total | City & Co. Honolulu | Hawaii County | Kauai County | Maui County | State total | Percent cleared |
| All offenses | 78,227 | 66,529 | 3,627 | 2,577 | 5,494 | 33,335 | 42.6 |
| Part I classes | 41,200 | 36,779 | 1,626 | 992 | 1,803 | 7,753 | 18.8 |
| 1A Murder & Non-negligent manslaughter ... | 30 | 25 | 2 | — | 3 | 26 | 86.7 |
| 1B Manslaughter (negligent) | 28 | 3 | 10 | 4 | 11 | 28 | 100.0 |
| 2 Rape | 97 | 85 | 4 | 6 | 2 | 59 | 60.8 |
| 3 Robbery | 493 | 473 | 9 | 4 | 7 | 187 | 37.9 |
| 4 Aggravated assault | 282 | 219 | 43 | 14 | 6 | 206 | 73.0 |
| 5 Burglary | 11,402 | 10,252 | 448 | 272 | 430 | 2,192 | 19.2 |
| 6A Larceny—over \$100 ² | 4,234 | 3,568 | 375 | 156 | 135 | 354 | 8.4 |
| 6B Larceny—under \$100 ³ | 20,180 | 17,913 | 620 | 495 | 1,152 | 3,994 | 19.8 |
| 7 Auto theft | 4,454 | 4,241 | 115 | 41 | 57 | 707 | 15.9 |
| Part II classes | 37,027 | 29,750 | 2,001 | 1,585 | 3,691 | 25,582 | 69.1 |
| 8 Other assaults | 5,905 | 4,759 | 325 | 356 | 465 | 4,769 | 80.8 |
| 9 Arson | 168 | 163 | 5 | — | — | 19 | 11.3 |
| 10 Forgery & counterfeiting | 578 | 484 | 49 | 12 | 33 | 269 | 46.5 |
| 11 Fraud | } 954 | 700 | 101 | } 34 | 80 | 605 | 63.4 |
| 12 Embezzlement | | { 34 | 5 | | | | |
| 13 Stolen property, receiving etc. | 70 | 31 | 11 | — | 28 | 65 | 92.9 |
| 14 Vandalism | 4,810 | 4,408 | 402 | — | — | 808 | 16.8 |
| 15 Weapons | 558 | 507 | 11 | 1 | 39 | 505 | 90.5 |
| 16 Prostitution | 21 | 18 | 2 | — | 1 | 20 | 95.2 |
| 17 Sex offenses | 800 | 735 | 18 | 6 | 41 | 669 | 83.6 |
| 18 Drug laws | 1,503 | 990 | 172 | 187 | 154 | 1,267 | 84.3 |
| 19 Gambling | 921 | 827 | 7 | 32 | 55 | 921 | 100.0 |
| 20 Offenses against family | 39 | 31 | 5 | — | 3 | 33 | 84.6 |
| 21 Driving, intoxicated | 530 | 438 | 43 | 24 | 25 | 530 | 100.0 |
| 22 Liquor laws | 219 | 179 | 28 | — | 12 | 216 | 98.6 |
| 23 Drunkenness (amended to non-criminal offense) | — | — | — | — | — | — | — |
| 24 Disorderly conduct | 1,468 | 982 | 137 | 198 | 151 | 1,285 | 87.5 |
| 25 Vagrancy | 1,564 | 1,220 | 103 | 46 | 195 | 587 | 37.5 |
| 26 All other offenses | 16,919 | 13,244 | 577 | 689 | 2,409 | 13,014 | 76.9 |

¹Includes previous year's cases cleared.

²Over \$50 for Hawaii County; grand larceny for Kauai County.

³Under \$50 for Hawaii County; petty larceny for Kauai County.

Source: Records of the County police departments.

Table 43.—PERSONS ARRESTED OR CHARGED, FOR OAHU: 1971

| Age of persons arrested | All offenses | Part I offenses | | Part II offenses | |
|---|--------------|-----------------|--------|------------------|------------------|
| | | Male | Female | Male | Female |
| Persons arrested, total | 20,479 | 4,640 | 1,765 | 10,980 | 3,094 |
| Juveniles under 18 years | 8,537 | 2,899 | 995 | 3,162 | 1,481 |
| 18 and 19 years | 1,865 | 538 | 156 | 1,010 | 161 |
| 20 to 24 years | 3,753 | 680 | 278 | 2,145 | 650 |
| 25 to 34 years | 2,862 | 293 | 179 | 1,959 | 431 |
| 35 to 44 years | 1,404 | 91 | 78 | 1,028 | 207 |
| 45 to 64 years | 1,721 | 113 | 70 | 1,397 | 141 |
| 65 years and over | 243 | 24 | 9 | 197 | 13 |
| Unknown age | 94 | 2 | — | 82 | 10 |
| Subject | | | | Part I offenses | Part II offenses |
| Juveniles arrested, total | | | | 3,894 | 4,643 |
| Released without charges | | | | 426 | 228 |
| Counseled and released | | | | 1,434 | 1,076 |
| Referred to social agencies | | | | 124 | 251 |
| Referred to Family Court | | | | 1,735 | 2,908 |
| Probation or protective supervision | | | | 523 | 507 |
| Counseled and released | | | | 959 | 1,803 |
| Hawaii Youth Correctional Facilities | | | | 72 | 37 |
| Social agencies | | | | 20 | 140 |
| Discharged or other disposition | | | | 338 | 522 |
| All others | | | | 9 | 58 |
| District and Circuit dispositions of persons charged, total | | | | 1,488 | 7,302 |
| Convicted | | | | 1,095 | 4,594 |
| Disposed of otherwise | | | | 393 | 2,708 |
| Fine | | | | 706 | 3,708 |
| Jail | | | | 201 | 379 |
| Probation, suspended sentence | | | | 188 | 460 |
| Other convictions | | | | — | 47 |
| Bail forfeitures | | | | 101 | 564 |
| Discharged | | | | 126 | 857 |
| Stricken, N/P | | | | 166 | 1,287 |
| Average number of inmates in City and County Jail | | | | 111 | |

Source: Honolulu Police Department, *1970 Statistical Report*, pp. 42-44, 47, 55, 66, and 75.

Table 44.—STATE JUDICIARY CASELOAD: 1970 AND 1971

(Years ended June 30)

| Court | Filings | | Terminations | | Pending, June 30 | |
|----------------------------|---------|---------|--------------|---------|------------------|--------|
| | 1971 | 1970 | 1971 | 1970 | 1971 | 1970 |
| Supreme Court | 411 | 294 | 375 | 324 | 133 | 97 |
| Circuit Courts: | | | | | | |
| Circuit Court proper | 8,899 | 7,893 | 9,211 | 8,045 | 13,366 | 13,678 |
| Family Court | 18,223 | 20,002 | 21,137 | 19,213 | 9,812 | 12,726 |
| District Courts | 460,417 | 394,508 | 454,137 | 390,695 | (NA) | (NA) |

NA Not available.

Source: *The Judiciary, Annual Report* for years ended June 30, 1970 and 1971.

Table 45.—HAWAII STATE PRISON SYSTEM INMATES: 1878 TO 1971

| Year ¹ | Average daily census ² | | Year ¹ | Average daily census | |
|-------------------|-----------------------------------|-------------------------------|-------------------------|----------------------|-------------------------------|
| | Oahu Prison ³ | Other facilities ⁴ | | Hawaii State Prison | Other facilities ⁴ |
| 1878-1880 | 115 | — | 1962 | 465 | 138 |
| 1888-1890 | 154 | — | 1963 | 451 | 110 |
| 1899 | 158 | — | 1964 | 403 | 102 |
| 1909-1910 | 229 | — | 1965 | 415 | 99 |
| 1920 | 703 | — | 1966 | 396 | 84 |
| 1930 | 380 | 103 | 1967 | 364 | 73 |
| 1940 | 506 | 52 | 1968 | 305 | 78 |
| 1951 | 407 | 218 | 1969 ⁴ | 248 | 72 |
| 1961 | 449 | 142 | 1970 ⁴ | 209 | 72 |

| Subject | Year ended June 30, 1971 | | | | |
|--------------------------------------|--------------------------|-------------------|-------------------|----------------------------|-----------------------|
| | Hawaii State Prison | Kulani Honor Camp | Olinda Honor Camp | Conditional Release Center | Adult Furlough Center |
| Committed | 66 | 5 | — | — | — |
| Returned from parole | 37 | 1 | — | — | — |
| Transferred in from camps, etc. | 37 | 28 | 14 | 17 | 7 |
| Transferred out to camps, etc. | 65 | 26 | 3 | 8 | — |
| Continue on parole | 16 | — | — | — | — |
| Paroled | 79 | 20 | 15 | 5 | 1 |
| Discharged | 5 | — | — | — | — |
| Died | — | — | — | — | — |
| Average number | 183 | 39 | 18 | 12 | 5 |
| Population, June 30 | 179 | 29 | 18 | 8 | 6 |

¹Two-year periods ended March 31, 1880 and 1890 and December 31, 1910; calendar year 1899; one-year periods ended June 30, 1920 to 1970.

²Data for 1930 and 1951 refer to number as of June 30.

³Misdemeanants as well as felons were held in Oahu Prison before World War I. The average number of criminal offenders only was 86 in 1899 and 193 in 1909-1910. Oahu Prison was renamed Hawaii State Prison in April 1962.

⁴Includes Kulani Honor Camp, Olinda Honor Camp, and the Conditional Release Center.

Source: *Biennial Report of the Minister of the Interior* for 1880 (p. 26) and 1890 (p. 147); *Report of the Attorney General* for 1899 (p. 103) and 1910 (pp. 48-49); *Report of the Governor* for 1920 (p. 70) and 1930 (p. 112); *Report of the Department of Institutions* for 1940 (p. 10) and 1951 (p. 28.); Corrections Division, Hawaii State Department of Social Services and Housing, records, 1961-1971.

Table 46.—HAWAII STATE YOUTH CORRECTIONAL FACILITY INMATES: 1920 TO 1971

| Year ended June 30 | Average ward population ¹ | Year ended June 30 | Average ward population ¹ | Subject | Year ended June 30, 1971 |
|-----------------------|--|-----------------------|--|----------------------------|--------------------------------|
| 1920 | 297 | 1965 | 148 | Committed | 121 |
| 1930 | 370 | 1966 | 135 | Returned from parole | 36 |
| 1940 | 277 | 1967 | 111 | Continue on parole | 16 |
| 1950 | 220 | 1968 | 85 | Paroled | 79 |
| 1962 | 197 | 1969 | 72 | Discharged | 67 |
| 1963 | 197 | 1970 | 67 | Died | 1 |
| 1964 | 162 | 1971 | 73 | Population, June 30 | 62 |

¹Data for 1920-1950 refer to June 30 totals rather than annual averages. Data for 1962-1966 include Molokai Forestry Camp, closed in fiscal year 1966-1967: 18 in 1962, 14 in 1963, 14 in 1964, 13 in 1965, and 12 in 1966.

Source: *Report of the Governor* for 1920 (p. 64) and 1930 (p. 87); *Annual Report of the Department of Institutions* for 1940 (pp. 8-9) and 1950 (pp. 85 and 98); Corrections Division, Department of Social Services and Housing, records, 1962-1971.

SECTION 5

ELECTIONS

This section presents data on the number of registered voters, votes cast, and the party affiliation of elected officials.

More than 291,000 persons were registered to vote in the general election of November 1970. This amounted to 37.7 percent of the population (including those below the legal voting age or otherwise ineligible); the proportion registered was 29.4 percent in 1959 and 20.4 percent in 1940.

Votes cast in 1970 amounted to 31.8 percent of the total population, 60.8 percent of civilians of voting age, 75.0 percent of all eligible persons, and 84.9 percent of those registered. The minimum voting age is 18 years. Elective offices in Hawaii include the presidency, two U.S. Senators, two U.S. Congressmen, the Governor, 25 State Senators, 51 State Representatives, and various county officials.

Official election results are published by the Office of the Lieutenant Governor. Additional information is often available from the various County Clerks and the Legislative Reference Bureau of the University of Hawaii. An analysis of voting trends in Hawaii, *Voter Participation in Hawaii, 1970*, was published jointly by the Hawaii State Department of Planning and Economic Development and Office of the Lieutenant Governor in 1971. National statistics appear in the *Statistical Abstract of the United States: 1971*, Section 13.

Table 47.—REGISTERED VOTERS AND VOTES CAST: 1858 TO 1970

| Election date | Population ¹ | Registered voters | | Votes cast ² | | |
|---------------------------------|-------------------------|-------------------|-----------------------|-------------------------|-----------------------|-------------------------|
| | | Number | Percent of population | Number | Percent of population | Percent of registration |
| 1858: Jan. 4 ³ | 71,800 | (NA) | (NA) | 12,673 | 17.7 | (NA) |
| 1890: Feb. 5 | 87,300 | 14,113 | 16.2 | 11,672 | 13.4 | 82.7 |
| 1900: Nov. 6 | 154,001 | 11,216 | 7.3 | 9,589 | 6.2 | 85.5 |
| 1910: Nov. 8 | 191,874 | 14,442 | 7.5 | 13,541 | 7.1 | 93.8 |
| 1920: Nov. 2 | 255,881 | 26,335 | 10.3 | 22,833 | 8.9 | 86.7 |
| 1930: Nov. 4 | 368,300 | 52,127 | 14.2 | 43,544 | 11.8 | 83.5 |
| 1940: Nov. 5 | 427,884 | 87,321 | 20.4 | 74,538 | 17.4 | 85.4 |
| 1950: Nov. 7 | 497,980 | 141,319 | 28.4 | 118,704 | 23.8 | 84.0 |
| 1959: July 28 | 622,087 | 183,118 | 29.4 | 171,383 | 27.5 | 93.6 |
| 1960: Nov. 8 | 641,520 | 202,059 | 31.5 | 188,206 | 29.3 | 93.1 |
| 1962: Nov. 6 | 683,513 | 221,650 | 32.4 | 200,441 | 29.3 | 90.4 |
| 1964: Nov. 3 | 699,858 | 239,361 | 34.2 | 214,693 | 30.7 | 89.7 |
| 1966: Nov. 8 | 710,325 | 253,242 | 35.7 | 220,137 | 31.0 | 86.9 |
| 1968: Nov. 5 | 734,456 | 274,199 | 37.3 | 239,765 | 32.6 | 87.4 |
| 1970: Nov. 3 | 773,632 | 291,681 | 37.7 | 247,740 | 32.0 | 84.9 |
| COUNTIES: 1970 | | | | | | |
| Honolulu | 633,037 | 226,633 | 35.8 | 189,812 | 30.0 | 83.8 |
| Hawaii | 64,317 | 30,350 | 47.2 | 27,256 | 42.4 | 89.8 |
| Maui | 46,407 | 21,169 | 45.6 | 18,493 | 39.8 | 87.4 |
| Kauai | 29,871 | 13,529 | 45.3 | 12,179 | 40.8 | 90.0 |

NA Not available.

¹Total resident population. Includes armed forces and persons ineligible to vote because of age, sex, citizenship or other reasons. Data for 1858 and 1890 are January 1 estimates; for 1900-1930, official census counts; and for 1940 forward, July 1 estimates.

²For Representatives to the Legislative Assembly, 1858 and 1890; Delegate to Congress, 1900 and 1910; any office, 1920 forward.

³Earliest election for which all-Island totals are available. The first formal election in Hawaii was held January 6, 1851, but regular publication of election totals was not initiated until 1887.

Source: Population from Robert C. Schmitt, *Demographic Statistics of Hawaii: 1778-1965* (University of Hawaii Press, 1968), pp. 115 and 223, and the Hawaii State Department of Planning and Economic Development, Statistical Report 86, pp. 5-7. Registered voters and votes cast from Robert C. Schmitt, "Voter Participation Rates in Hawaii Before 1900," *The Hawaiian Journal of History*, Vol. 5 (1971), pp. 50-58, and the Hawaii State Department of Planning and Economic Development and the Office of the Lieutenant Governor, *Voter Participation in Hawaii, 1970* (December 28, 1971), tables 1 and 5.

Table 48.—SEX OF REGISTERED VOTERS, FOR HAWAII: 1890 TO 1970

| Year | Population 20 years and older ¹ | | | Registered voters ² | | | Percent of population registered | | |
|----------|--|---------|---------|--------------------------------|---------|---------|----------------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| 1890 ... | 56,766 | 40,132 | 16,634 | 13,593 | 13,593 | — | 23.9 | 33.9 | 0 |
| 1900 ... | 108,486 | 81,817 | 26,669 | 11,216 | 11,216 | — | 10.3 | 13.7 | 0 |
| 1910 ... | 121,602 | 86,313 | 35,289 | 14,442 | 14,442 | — | 11.9 | 16.7 | 0 |
| 1920 ... | 144,462 | 93,364 | 51,098 | 26,325 | 17,084 | 9,251 | 18.2 | 18.3 | 18.1 |
| 1930 ... | 201,505 | 135,657 | 65,848 | 52,149 | 31,845 | 20,304 | 25.9 | 23.5 | 30.8 |
| 1940 ... | 243,982 | 152,304 | 91,678 | 87,321 | (NA) | (NA) | 35.8 | (NA) | (NA) |
| 1950 ... | 299,749 | 170,583 | 129,166 | 140,800 | 76,602 | 64,198 | 47.0 | 44.9 | 49.7 |
| 1960 ... | 360,193 | 196,431 | 163,762 | 202,059 | 104,591 | 97,468 | 56.1 | 53.2 | 59.5 |
| 1970 ... | 466,259 | 243,893 | 222,366 | 291,681 | 146,630 | 145,051 | 62.6 | 60.1 | 65.2 |

NA Not available.

¹As of December 28, 1890, June 1, 1900, April 15, 1910, January 1, 1920, and April 1, 1930-1970. Includes persons of unreported age.

²As of December 28, 1890 and November 1900-1970.

Source: *Report of the General Superintendent of the Census, 1890*, table 5 and 7; *U.S. Census of Population: 1960*, Final Report PC (1)-13B, table 17; *U.S. Census of Population: 1970*, Final Report PC(1)-B13, table 20; Hawaii State Department of Planning and Economic Development and Office of the Lieutenant Governor, *Voter Participation in Hawaii, 1970* (December 28, 1971), table 1.

Table 49.—SEX AND PARTY OF REGISTERED VOTERS: NOVEMBER 3, 1970

| County | Total | Sex | | Party affiliation | | |
|-----------------|---------|---------|---------|-------------------|------------------|-------------|
| | | Male | Female | Democratic party | Republican party | Independent |
| The State | 291,681 | 146,630 | 145,051 | 133,479 | 36,787 | 121,415 |
| Honolulu | 226,633 | 113,292 | 113,341 | 94,484 | 28,732 | 103,417 |
| Hawaii | 30,350 | 15,412 | 14,938 | 14,992 | 4,952 | 10,406 |
| Maui | 21,169 | 10,928 | 10,241 | 14,621 | 2,128 | 4,420 |
| Kauai | 13,529 | 6,998 | 6,531 | 9,382 | 975 | 3,172 |

Source: Office of the Lieutenant Governor, *Result of Votes Cast, General Election, Tuesday, November 3, 1970, State of Hawaii*, p. 79.

**Table 50.—POPULATION BY ELIGIBILITY TO VOTE, REGISTERED VOTERS,
AND VOTES CAST: 1970**

| Subject | Number ¹ |
|--|---------------------|
| Population ² | 778,853 |
| Under 20 years old | 306,350 |
| 20 years old and over | 472,503 |
| Armed forces | 45,864 |
| Military dependents | 19,357 |
| Other civilians | 407,282 |
| Ineligible "other civilians" | 76,989 |
| Aliens | 57,187 |
| Residence less than one year ³ | 18,349 |
| Patients in mental institutions | 1,029 |
| Other non compos mentis | (NA) |
| Undischarged felons | 424 |
| Eligible | 330,293 |
| Percent of "other civilians," 20 and over | 81.1 |
| Registered for general election | 291,681 |
| Percent of "other civilians," 20 and over | 71.6 |
| Percent of number eligible | 88.3 |
| Registered after general election ⁴ | 255,053 |
| Percent of "other civilians," 20 and over | 62.6 |
| Percent of number eligible | 77.2 |
| Votes cast in general election | 247,740 |
| Percent of total population | 31.8 |
| Percent of "other civilians," 20 and over | 60.8 |
| Percent of number eligible | 75.0 |
| Percent of number registered | 84.9 |

NA Not available.

¹Unrounded estimates used for computational convenience; not meant to imply accuracy beyond two or three significant figures.

²Based on usual place of residence, as defined by the U.S. Bureau of the Census. Excludes persons from Hawaii attending school or serving in the armed forces on the Mainland or abroad, many of whom are eligible to participate in Hawaii elections. In Fall 1968, 7,899 students from Hawaii (including those below voting age) were attending colleges and universities in other States, and, as of July 31, 1970, 13,641 Selective Service registrants from Hawaii were on active duty with the armed forces.

³Persons qualified by citizenship and age but not by length of legal residence in Hawaii. Such persons may, however, vote in presidential elections upon application.

⁴Purged total, after persons who voted in neither the primary nor general elections of 1970 were dropped from the registration rolls.

Source: Hawaii State Department of Planning and Economic Development and Office of the Lieutenant Governor, *Voter Participation in Hawaii, 1970* (December 28, 1971), table 6.

Table 51.—PARTY MEMBERSHIP OF THE TERRITORIAL AND STATE LEGISLATURES: 1901 TO 1971

| Regular session | House of Representatives | | | | Senate | | | |
|-----------------------------|--------------------------|------|------|-----------|--------|------|------|-----------|
| | Total | Dem. | Rep. | Home Rule | Total | Dem. | Rep. | Home Rule |
| 1901 | 30 | 4 | 9 | 17 | 15 | — | 6 | 9 |
| 1911 | 30 | — | 28 | 2 | 15 | 1 | 12 | 2 |
| 1921 | 30 | 4 | 26 | — | 15 | 1 | 14 | — |
| 1931 | 30 | 3 | 27 | — | 15 | 1 | 14 | — |
| 1941 | 30 | 3 | 27 | — | 15 | 3 | 12 | — |
| 1951 | 30 | 9 | 21 | — | 15 | 6 | 9 | — |
| 1961 | 51 | 33 | 18 | — | 25 | 11 | 14 | — |
| 1963 | 51 | 40 | 11 | — | 25 | 15 | 10 | — |
| 1965 | 51 | 39 | 12 | — | 25 | 16 | 9 | — |
| 1967 | 51 | 39 | 12 | — | 25 | 15 | 10 | — |
| 1969 ¹ | 50 | 38 | 12 | — | 25 | 17 | 8 | — |
| 1971 ² | 51 | 34 | 17 | — | 24 | 16 | 8 | — |
| COUNTIES: 1971 | | | | | | | | |
| Hawaii | 6 | 4 | 2 | — | 3 | 2 | 1 | — |
| Maui | 4 | 4 | — | — | 2 | 2 | — | — |
| Honolulu ² | 38 | 24 | 14 | — | 18 | 11 | 7 | — |
| Kauai | 3 | 2 | 1 | — | 1 | 1 | — | — |

¹One disputed House seat was left unfilled for the session.

²Excludes vacancy caused by the death of a Senate Democrat prior to the session.

Source: Hawaii State Department of Planning and Economic Development and Office of the Lieutenant Governor, *Voter Participation in Hawaii, 1970* (December 28, 1971), p. 7.

Table 52.—VOTES CAST FOR MAJOR OFFICES: 1966 TO 1970

| Election and office | Democratic party | | Republican party | | Other parties | |
|--|------------------|---------|------------------|---------|-----------------------------|-------|
| | Candidate | Votes | Candidate | Votes | Candidate | Votes |
| November 8, 1966: | | | | | | |
| Governor | Burns | 108,840 | Crossley | 104,324 | None | — |
| U.S. Representative ¹ | Matsunaga | 140,110 | Carroll | 67,281 | None | — |
| | Mink | 140,880 | Kealoha | 62,473 | None | — |
| November 5, 1968: | | | | | | |
| President | Humphrey | 141,324 | Nixon | 91,425 | Wallace ² | 3,469 |
| U.S. Senator | Inouye | 189,248 | Thiessen | 34,008 | Lee ³ | 3,671 |
| U.S. Representative ¹ | Matsunaga | 161,954 | Blaisdell | 78,733 | Olsen ³ | 2,432 |
| | Mink | 149,207 | DuBois | 39,233 | Lombardi ³ | 2,026 |
| November 3, 1970: | | | | | | |
| Governor | Burns | 137,150 | King | 100,573 | None | — |
| U.S. Senator | Heftel | 116,039 | Fong | 123,334 | None | — |
| U.S. Representative, Dist. 1 | Matsunaga | 84,845 | Cockey | 31,534 | None | — |
| U.S. Representative, Dist. 2 | Mink | 90,628 | None | — | None | — |

¹Two elected at large.

²American Independent.

³Peace and Freedom.

Source: Office of the Lieutenant Governor, *Results of Votes Cast, General Election, State of Hawaii* for 1966, 1968, and 1970.

SECTION 6

GEOGRAPHY AND ENVIRONMENT

This section relates to area, climatologic, topographic, hydrologic, and other geographic and environmental measurements of Hawaii.

The State consists of eight major Islands and 124 minor Islands with a total land area of 6,425 square miles and a coastline of 750 miles. Honolulu is 214 miles from Hilo, 1,367 miles from Kure Atoll (the westernmost end of the State), and 2,397 miles from San Francisco. The highest peak in the State is Mauna Kea, 13,796 feet above sea level; the longest stream is Kauhonahua Stream, 33 miles in length; the biggest lake in Halalii, 841 acres; and the highest named waterfall is Kahiwa, a 1,750-foot cascade. Various measures of air pollution, such as suspended particulate matter and radioactivity, indicate that Honolulu is one of the cleanest cities in the nation. There is also very little water pollution: nine out of nine major Oahu beaches were rated "A" in 1970 (coliform not exceeding 50 to 100 ml.) and none was rated either "B" (51-500) or "C" (501 or more). Climatically, Hawaii is marked by remarkably balmy temperatures and wide variations in rainfall. The all-time temperature range in downtown Honolulu, for example, is from 57° to 88°F. Normal precipitation, however, ranges from 5.7 inches near Kawaihae to 486 inches atop Waialeale. The longest volcanic eruption in Island history lasted 875 days, the worst earthquake attained 7.5 on the Richter scale, and the highest tsunami wave reached 66 feet.

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 *Geographic Statistics of Hawaii*, published by the Department of Planning and Economic Development (now out of print). National data are reported in *Statistical Abstract of the United States: 1971*, Section 6.

Table 53.—GREAT CIRCLE DISTANCES IN STATUTE MILES BETWEEN HONOLULU INTERNATIONAL AIRPORT AND SPECIFIED PLACES

| Place | Miles from Honolulu | Place | Miles from Honolulu |
|--|---------------------|--|---------------------|
| Hawaiian Islands: | | Other Pacific, con.: | |
| Cape Kumukahi, Hawaii ¹ | 236 | Hong Kong | 5,541 |
| Hilo, Hawaii | 214 | Johnston Island | 820 |
| Ka Lae (South Cape), Hawaii | 221 | Kingman Reef | 1,073 |
| Kailua, Kona, Hawaii | 168 | Manila, Philippines | 5,293 |
| Kahului, Maui | 98 | Pago Pago, Amer. Samoa | 2,606 |
| Lanai Airport | 72 | Palmyra Islands | 1,101 |
| Molokai Airport | 54 | Papeete, Tahiti | 2,741 |
| Lihue, Kauai | 103 | Suva, Fiji | 3,159 |
| Puuwai, Niihau | 152 | Sydney (Port Jackson), Australia | 5,070 |
| Nihoa | 283 | Tokyo, Japan | 3,847 |
| Necker Island | 520 | Wake Island | 2,294 |
| French Frigate Shoals | 556 | | |
| Gardner Pinnacles | 688 | | |
| Maro Reef | 851 | | |
| Laysan Island | 936 | | |
| Lisianski Island | 1,065 | North America: | |
| Pearl and Hermes Atoll | 1,208 | Anchorage, Alaska | 2,781 |
| Midway Islands | 1,309 | Chicago, Illinois | 4,179 |
| Kure Atoll ¹ | 1,367 | Christobal, Canal Zone | 5,214 |
| | | Los Angeles, California | 2,557 |
| Trust Territory of the Pacific Islands: | | Miami, Florida | 4,856 |
| Majuro, Marshall Islands | 2,271 | New York, N.Y. | 4,959 |
| Kwajalein, Marshall Islands | 2,443 | Portland, Oregon | 2,595 |
| Kolonia, Ponape, E.C.I. | 3,087 | San Diego, California | 2,610 |
| Saipan, Mariana Islands | 3,704 | San Francisco, California | 2,397 |
| Koror, Palau, W.C.I. | 4,593 | Seattle, Washington | 2,679 |
| | | Vancouver, B.C. | 2,709 |
| Other Pacific locations: | | Victoria, B.C. | 2,668 |
| Apra Harbor, Guam | 3,806 | Tijuana, Mexico | 2,616 |
| Auckland, N.Z. | 4,393 | Washington, D.C. | 4,829 |

¹The great circle distance from Kure Atoll to Cape Kumukahi, Hawaii, is 1,523 statute miles. This distance represents the total length of the Hawaiian Archipelago.

Source: U.S. Geological Survey measurements cited in the Hawaii State Department of Planning and Economic Development, *Geographic Statistics of Hawaii* (Statistical Report 67, July 1, 1969), p. 5.

Table 54.—AREA AND COASTLINE OF COUNTIES, ISLANDS, AND CITIES

| County, Island or city | Area in square statute miles | | | Coastline in statute miles | |
|------------------------------|------------------------------|---------|--------------|--------------------------------|-----------------|
| | Total | Land | Inland water | General coastline ¹ | Tidal shoreline |
| The State | 6,450 | 6,425 | 25 | 750 | 1,052 |
| Counties: | | | | | |
| Hawaii | 4,038.0 | 4,037.0 | 1.0 | 266 | 313 |
| Maui | 1,161.1 | 1,160.3 | 0.8 | } 210 | 343 |
| Kalawao | 13.3 | 13.3 | — | | |
| Honolulu | 610.9 | 595.7 | 15.2 | | |
| Kauai | 627.1 | 619.1 | 8.0 | 137 | 162 |
| Islands: | | | | | |
| Hawaii | 4,038.0 | 4,037.0 | 1.0 | 266 | 313 |
| Maui | 728.8 | 728.2 | 0.6 | 120 | 149 |
| Kahoolawe | 45.0 | 45.0 | — | 29 | 36 |
| Molokini | <0.01 | <0.01 | — | — | — |
| Lanai | 139.5 | 139.5 | — | 47 | 52 |
| Molokai | 261.1 | 260.9 | 0.2 | 88 | 106 |
| Oahu | 607.7 | 592.7 | 15.0 | 112 | 209 |
| Kauai | 553.3 | 548.7 | 4.6 | 90 | 110 |
| Niihau | 73.0 | 69.6 | 3.4 | 45 | 50 |
| Lehua | 0.4 | 0.4 | — | — | — |
| Kaula | 0.4 | 0.4 | — | 2 | 2 |
| Northwestern Haw'n Isl. | 3.2 | 3.0 | 0.2 | 25 | 25 |
| Cities: | | | | | |
| Hilo | 298.9 | 298.9 | — | — | — |
| Honolulu | 88.7 | 86.6 | 2.1 | — | — |
| On Oahu | 85.5 | 83.6 | 1.9 | — | — |
| On NW Haw'n Isl. | 3.2 | 3.0 | 0.2 | 25 | 25 |

¹Figures for the four Islands of Maui County are not consistent with the published County total.

Source: Hawaii State Department of Planning and Economic Development, *Geographic Statistics of Hawaii* (Statistical Report 67, July 1, 1969).

Table 55.—ELEVATIONS OF MAJOR MOUNTAINS, BY ISLAND

| Island and mountain ¹ | Elevation (feet) | Island and mountain ¹ | Elevation (feet) |
|----------------------------------|------------------|----------------------------------|------------------|
| Hawaii: | | Oahu: | |
| Mauna Kea | 13,796 | Kaala | 4,020 |
| Mauna Loa | 13,677 | Konahuanui | 3,150 |
| Hualalai | 8,271 | Tantalus | 2,013 |
| Kohala | 5,480 | Olomana | 1,643 |
| Kilauea (Uwekahuna) | 4,090 | Diamond Head | 760 |
| | | Punchbowl | 500 |
| Kahoolawe: | | Koko Head | 642 |
| Lua Makika | 1,477 | Kauai: | |
| Maui: | | Kawaikini | 5,243 |
| Haleakala (Red Hill) | 10,023 | Waialeale | 5,148 |
| Puu Kukui | 5,788 | Niihau: | |
| Iao Needle | 2,250 | Paniau | 1,281 |
| Lanai: | | Kaula Island | 550 |
| Lanaihale | 3,370 | Nihoa ² | 910 |
| Molokai: | | | |
| Kamakou | 4,970 | | |
| Puu Nana | 1,381 | | |

¹Highest elevation on each Island and other important peaks.

²Highest elevation in the Northwestern Hawaiian Islands.

Source: U.S. Geological Survey data cited in the Hawaii Department of Planning and Economic Development, *Elevations of Major Mountains in Hawaii* (Statistical Report 52, November 7, 1967), as corrected.

Table 56.—MAJOR STREAMS, LAKES, AND WATERFALLS

| Subject | Name | Island | Magnitude |
|--|-----------------|---------|-----------|
| Streams: | | | |
| Longest water feature (mi.) | Kaukonahua Str. | Oahu | 33.0 |
| Second longest water feature (mi.) | Wailuku Riv. | Hawaii | 32.0 |
| Greatest ave. discharge (million gal./day) | Wailuku Riv. | Hawaii | 303.5 |
| Lakes: | | | |
| Greatest area (natural) (acres) ¹ | Halulu | Niihau | 182 |
| Greatest area (man-made) (acres) | Koloa Res. | Kauai | 422 |
| Longest shoreline (miles) | Wahiawa Res. | Oahu | 11 |
| Highest (feet above sea level) | Lake Waiau | Hawaii | 13,020 |
| Named waterfalls: | | | |
| Greatest sheer drop (feet) | Akaka | Hawaii | 442 |
| Highest cascade (feet) | Kahiwa | Molokai | 1,750 |

¹Excludes fishponds and intermittent lakes. The largest intermittent lake is Halalii Lake, Niihau (840.7 acres).

Source: Hawaii State Department of Planning and Economic Development, *Geographic Statistics of Hawaii* (Statistical Report 67, July 1, 1969), as corrected.

Table 57.—VOLCANIC ERUPTIONS: 1750 TO 1972

| Crater and date of outbreak | Duration (days) | Area (square miles) | Volume (cubic yards) |
|-----------------------------|-----------------|---------------------|----------------------|
| Haleakala: | | | |
| c. 1790 | (NA) | 2.2 | 35,000,000 |
| Hualalai: | | | |
| 1800-1801 | (NA) | 17.7 | 410,000,000 |
| Kilauea: | | | |
| 1750 (?) | (NA) | 1.57 | 19,500,000 |
| 1790 (?) | (NA) | 3.04 | 37,670,000 |
| 1790: Nov. (?) | (NA) | No lava flow | No lava flow |
| 1823: Feb-July | Short | 3.86 | 15,000,000 |
| 1832: Jan. 14 | Short | (NA) | (NA) |
| 1840: May 30 | 26 | 6.60 | 281,000,000 |
| 1868: April 2 | Short | 0.07 | (NA) |
| April 2 (?) | Short | 0.04 | 250,000 |
| 1877: May 4 | 1(?) | (NA) | (NA) |
| May 21 (?) | (NA) | 0.04 | (NA) |
| 1884: Jan. 22 | 1 | (NA) | (NA) |
| 1885: March | 80(?) | (NA) | (NA) |
| 1894: March 21 | 6+ | (NA) | (NA) |
| July 7 | 4(?) | (NA) | (NA) |
| 1918: Feb. 23 | 14 | 0.04 | 250,000 |
| 1919: Feb. 7 | 294 | 1.60 | 34,500,000 |
| Dec. 21 | 221 | 5.00 | 62,000,000 |
| 1921: March 18 | 7 | 0.77 | 8,800,000 |
| 1922: May 28 | 2 | 0.04 | (NA) |
| 1923: Aug. 25(?) | 1 | 0.20 | 100,000 |
| 1924: May 10 | 17 | No lava flow | No lava flow |
| July 19 | 11 | 0.02 | 320,000 |
| 1927: July 7 | 13 | 0.04 | 3,160,000 |
| 1929: Feb. 20 | 2 | 0.06 | 1,920,000 |
| July 25 | 4 | 0.08 | 3,600,000 |
| 1930: Nov. 19 | 19 | 0.09 | 8,480,000 |
| 1931: Dec. 23 | 14 | 0.12 | 9,640,000 |
| 1934: Sept. 6 | 33 | 0.16 | 9,500,000 |
| 1952: June 27 | 136 | 0.23 | 64,000,000 |
| 1954: May 31 | 3 | 0.44 | 8,500,000 |
| 1955: Feb. 28 | 88 | 6.10 | 120,000,000 |
| 1959: Nov. 14 | 36 | 0.24 | 51,000,000 |
| 1960: Jan. 13 | 36 | 4.1 | 155,000,000 |

NA Not available

(Continued on next page)

Table 57.—VOLCANIC ERUPTIONS: 1750 TO 1972 (continued)

| Crater and date of outbreak | Duration (days) | Area (square miles) | Volume (cubic yards) |
|-----------------------------|---------------------------|---------------------|----------------------|
| 1961: Feb. 24 | 1 | 0.02 | 30,000 |
| March 3 | 22 | 0.1 | 350,000 |
| July 10 | 7 | 0.4 | 17,300,000 |
| Sept. 22 | 3 | 0.3 | 3,000,000 |
| 1962: Dec. 7 | 2 | 0.02 | 430,000 |
| 1963: Aug. 21 | 2 | 0.06 | 1,100,000 |
| Oct. 5 | 1 | 1.3 | 9,000,000 |
| 1965: March 5 | 10 | 3.0 | 23,000,000 |
| Dec. 24 | < 1 | 0.23 | 1,160,000 |
| 1967: Nov. 5 | 251 | 0.25 | 110,000,000 |
| 1968: Aug. 22 | 5 | 0.01 | 50,000 |
| Oct. 7 | 15 | 0.8 | 9,000,000 |
| 1969: Feb. 22 | 6 | 2.3 | 22,000,000 |
| May 24 | 875 | 19.0 | 240,000,000 |
| 1971: Aug. 14 | < 1 | 0.8 | 12,000,000 |
| Sept. 24 | 5 | 1.5 | 10,000,000 |
| 1972: Feb. 4 | In progress, Mar. 3, 1972 | | |
| Mauna Loa: | | | |
| 1832: June 20 | 21 | (NA) | (NA) |
| 1843: Jan. 9 | 90 | 20.2 | 250,000,000 |
| 1849: May | 15 | (NA) | (NA) |
| 1851: Aug. 8 | 21 | 6.9 | 90,000,000 |
| 1852: Feb. 17 | 20 | 11.0 | 140,000,000 |
| 1855: Aug. 11 | 450 | 12.2 | 150,000,000 |
| 1859: Jan. 23 | 300 | 32.7 | 600,000,000 |
| 1865: Dec. 30 | 120 | (NA) | (NA) |
| 1818: Mar. 27 | 15 | 9.1 | 190,000,000 |
| 1870: Jan. 1 (?) | 14 | (NA) | (NA) |
| 1871: Aug. 1 (?) | 30 | (NA) | (NA) |
| 1872: Aug. 10 | 60 | (NA) | (NA) |
| 1873: Jan. 6 | 2(?) | (NA) | (NA) |
| April 20 | 547 | (NA) | (NA) |
| 1875: Jan. 10 | 30 | (NA) | (NA) |
| Aug. 11 | 7 | (NA) | (NA) |
| 1876: Feb. 13 | Short | (NA) | (NA) |
| 1877: Feb. 14 | 10 | (NA) | (NA) |
| 1880: May 1 | 6 | (NA) | (NA) |
| Nov. 1 | 280 | 24.0 | 300,000,000 |
| 1887: Jan. 16 | 10 | 11.3 | 300,000,000 |
| 1892: Nov. 30 | 3 | (NA) | (NA) |
| 1896: April 21 | 16 | (NA) | (NA) |
| 1899: July 4 | 19 | 16.2 | 200,000,000 |

NA Not available.

(Continued on next page)

Table 57.—VOLCANIC ERUPTIONS: 1750 TO 1972 (continued)

| Crater and date of outbreak | Duration (days) | Area (square miles) | Volume (cubic yards) |
|-----------------------------|-----------------|---------------------|----------------------|
| 1903: Oct. 6 | 60 | (NA) | (NA) |
| 1907: Jan. 9 | 15 | 8.1 | 100,000,000 |
| 1914: Nov. 25 | 48 | (NA) | (NA) |
| 1916: May 19 | 14 | 6.6 | 80,000,000 |
| 1919: Sept. 29 | Short | 9.2 | 350,000,000 |
| 1926: April 10 | Short | 13.4 | 150,000,000 |
| 1933: Dec. 2 | 17 | 2.0 | 100,000,000 |
| 1935: Nov. 21 | 42 | 13.8 | 160,000,000 |
| 1940: April 7 | 133 | 3.9 | 100,000,000 |
| 1942: April 26 | 13 | 10.6 | 100,000,000 |
| 1943: Nov. 21 | 3 | (NA) | (NA) |
| 1949: Jan. 6 | 145 | 5.6 | 77,000,000 |
| 1950: June 1 | 23 | 35.0 | 600,000,000 |

NA Not available.

Source: Gordon A. Macdonald and Agatin T. Abbott, *Volcanoes in the Sea* (University of Hawaii Press, 1970), pp. 50, 53, 56-57, and 74-75; Hawaiian Volcano Observatory, records.

Table 58.—EARTHQUAKES OF MAGNITUDE 5 OR GREATER: 1838 TO 1971

| Date | Location | Estimated Richter magnitude ¹ |
|--------------------------|-------------------------------|--|
| 1838: December 12 | Hawaii | 6 |
| 1841: April 7 | Hawaii | 6 |
| 1852: March 31 | Hawaii | 6 |
| 1868: March 28 | Hawaii | 6.5 |
| April 2 | Hawaii | 7.5 |
| 1871: February 18 | South of Oahu | 6.5 |
| 1875: November 23 | Hawaii | 6 |
| 1887: January 24 | Hawaii | 6 |
| 1913: October 25 | Hawaii | 6.5 |
| 1918: November 1 | Hawaii | 6.5 |
| 1919: September 14 | Hawaii | 6.5 |
| 1929: October 6 | Hawaii | 6.5 |
| 1938: January 23 | N. of Pauwela Pt., Maui | 6.75 |
| 1940: June 17 | Hawaii | 6 |
| 1941: September 25 | Hawaii | 6 |
| 1950: May 30 | Hawaii | 6.25 |
| 1951: April 23 | Hawaii | 6.5 |
| August 21 | Hawaii | 6.9 |
| 1952: May 23 | Hawaii | 6 |
| 1953: January 15 | Hawaii | 5.25 |
| 1954: March 30 | Hawaii | 6 |
| March 30 | Hawaii | 6.5 |
| 1961: September 25 | Hawaii | 5.75-6 |
| 1962: June 28 | Hawaii | 6.1 |
| 1963: October 23 | Hawaii | 5 |
| 1964: October 11 | W. of Kona Coast | 5 |

¹Except for the earthquake of April 2, 1868, magnitudes prior to 1929 are conjectural.

Source: Information supplied by Wm. Mansfield Adams and Augustine S. Furumoto, Hawaii Institute of Geophysics, University of Hawaii. Correct to December 31, 1971.

Table 59.—TSUNAMIS WITH RUN-UP OF 2 METERS (6.6 FEET) OR MORE: 1819 TO 1972

| Date ¹ | Maximum height in Hawaii (feet) | Deaths in Hawaii | Damage in Hawaii |
|-------------------------|---------------------------------|------------------|------------------|
| 1819: April 12 | 6.6 | — | Unknown |
| 1837: Nov. 7 | 19.7 | 16 | 174 houses |
| 1841: May 17 | 15.1 | — | Unknown |
| 1868: April 2 | 65.6 | 46 | Great locally |
| August 14 | 15.1 | — | Severe |
| 1869: July 25 | 29.9 | — | Some |
| 1877: May 10 | 16.1 | 5 | Extensive |
| 1878: Jan. 20 | 9.8 | — | Some houses |
| 1896: June 15 | 29.9 | — | Unknown |
| 1906: Jan. 31 | 11.8 | — | Minor |
| August 16 | 11.8 | — | Some |
| 1919: April 9 | 14.1 | — | Minor |
| April 30 | 13.8 | — | Unknown |
| 1922: November 11 | 6.9 | — | Minor |
| 1923: February 3 | 20.0 | 1 | \$1,500,000 |
| 1924: May 30 | 16.4 | — | Great locally |
| 1933: March 2 | 9.5 | — | Unknown |
| 1946: April 1 | 55.8 | 159 | \$26,000,000 |
| 1952: November 4 | 20.0 | — | \$ 1,000,000 |
| 1957: March 9 | 52.5 | — | \$ 5,000,000 |
| 1960: May 23 | 34.4 | 61 | \$23,000,000 |
| 1964: March 27 | 15.7 | — | \$ 67,590 |

¹Limited to tsunamis with a maximum run-up of 2.0 meters or more.

Source: George Pararas-Carayannis, *Catalog of Tsunamis in the Hawaiian Islands* (U.S. Coast and Geodetic Survey, May 1969); Robert C. Schmitt, "Catastrophic Mortality in Hawaii," *The Hawaiian Journal of History*, Vol. III (1969), pp. 66-86; Hawaii Institute of Geophysics, records. Correct to February 29, 1972.

Table 60.—WATER QUALITY DATA FOR OAHU BEACHES: 1950 TO 1970

| Beach | Coliform per 100 milliliters (logarithmic average) | | | | | | |
|----------------------|--|------|------|------|------|------|------|
| | 1950 | 1960 | 1966 | 1967 | 1968 | 1969 | 1970 |
| Ala Moana Park | 177.0 | 11 | 7 | 1.6 | 14 | 5 | 3 |
| Fort DeRussy | 19.2 | 7 | 15 | 18.7 | 25 | 13 | 11 |
| Kuhio Beach | 4.0 | 6 | 8 | 12.7 | 12 | 15 | 25 |
| Hanauma Bay | 3.9 | 2 | 45 | 6.3 | 6 | 13 | 16 |
| Kailua Beach | 6.4 | 6 | 8 | 37.3 | 12 | 13 | 15 |
| Punaluu Park | 6.3 | 157 | 311 | 49.5 | 20 | 7 | 8 |
| Haleiwa Park | 12.6 | 81 | 29 | 11.0 | 21 | 7 | 7 |
| Waianae Park | 1.7 | 3 | 10 | 10.4 | 52 | 9 | 13 |
| Ewa Beach | 2.4 | 9 | 22 | 5.9 | 6 | 6 | 4 |

Source: *Annual Report, Department of Health, State of Hawaii, Statistical Supplement, 1950-1970.*

Table 61.—AEROMETRIC SURVEY DATA FOR SPECIFIED LOCATIONS ON OAHU: 1971

| Subject | Department of Health Bldg. | Kalihi Kai ² | Pearl City ³ | Barbers Point ² | Waimanalo ³ | Ala Moana ² |
|--|----------------------------|-------------------------|-------------------------|----------------------------|------------------------|------------------------|
| Minimum: | | | | | | |
| Particulate matter ⁴ | 18 | 28 | 23 | 18 | 16 | 44 |
| Sulfur dioxide ⁴ | 5 | 5 | 5 | 5 | — | 5 |
| Nitrogen dioxide ⁴ | 20 | 20 | 20 | 20 | — | 20 |
| Carbon monoxide, 1 hr. values ⁵ | 0.6 | — | — | — | — | — |
| Carbon monoxide, 8 hr. values ⁵ | 0.2 | — | — | — | — | — |
| Photochemical oxidants ⁴ | 3 | — | — | — | — | — |
| Maximum: | | | | | | |
| Particulate matter ⁴ | 125 | 160 | 196 | 471 | 66 | 240 |
| Sulfur dioxide ⁴ | 42 | 12 | 23 | 16 | — | 10 |
| Nitrogen dioxide ⁴ | 159 | 109 | 118 | 68 | — | 128 |
| Carbon monoxide, 1 hr. values ⁵ | 38.0 | — | — | — | — | — |
| Carbon monoxide, 8 hr. values ⁵ | 11.2 | — | — | — | — | — |
| Photochemical oxidants ⁴ | 48 | — | — | — | — | — |
| Annual average: | | | | | | |
| Particulate matter ⁴ | 45 | 72 | 49 | 125 | 37 | 89 |
| Sulfur dioxide ⁴ | 11 | 5 | 5 | 5 | — | 5 |
| Nitrogen dioxide ⁴ | 56 | 54 | 40 | 29 | — | 69 |

¹Period of sampling: 11 months for particulates, 9 months for sulfur dioxide, 9 months for nitrogen dioxide, 9 months for carbon monoxide, and 10 months for photochemical oxidants.

²Period of sampling: 11 months for particulates, 9 months for sulfur dioxide, and 9 months for nitrogen dioxide.

³Period of sampling: 6 months.

⁴Concentration in micrograms per cubic meter.

⁵Concentration in milligrams per cubic meter.

Source: Hawaii State Department of Health, Environmental Health Division, Air Sanitation Branch, records.

Table 62.—AEROMETRIC SURVEY DATA, FOR HONOLULU: 1957 TO 1971

| Year | Suspended particulate matter (mean micrograms per cubic meter) | Benzene-soluble organic matter (mean micrograms per cubic meter) | Beta radioactivity (mean micromicrocuries per cubic meter) |
|------------|--|--|--|
| 1957 | 47 | 3.5 | 0.6 |
| 1958 | 59 | 7.5 | 3.3 |
| 1959 | 63 | 5.4 | 1.3 |
| 1960 | 47 | 4.1 | 0.0 |
| 1961 | 43 | 3.0 | 0.8 |
| 1962 | 41 | 3.1 | 4.0 |
| 1963 | 42 | 4.3 | 3.7 |
| 1964 | 44 | 2.3 | 0.9 |
| 1965 | 41 | 2.5 | 0.3 |
| 1966 | 35 | 2.8 | 0.2 |
| 1967 | 38 | 2.5 | 0.3 |
| 1968 | 45 | 2.8 | (NA) |
| 1969 | 43 | 2.3 | (NA) |
| 1970 | 37 | 1.5 | (NA) |
| 1971 | 45 | (NA) | (NA) |

NA Not available.

Source: Hawaii State, Department of Health, Environmental Health Division, Air Sanitation Branch, records.

Table 63.—AIR POLLUTANT EMISSIONS, BY SOURCE AND COUNTY: 1970
(In tons per year)

| Source or County | Sulphur oxides | Particulates | Carbon monoxide | Hydrocarbons | Nitrogen oxides |
|--|----------------|--------------|-----------------|--------------|-----------------|
| Total | 58,000 | 78,000 | 636,000 | 145,000 | 77,000 |
| Source: | | | | | |
| Motor vehicles | 1,000 | 1,420 | 413,500 | 67,900 | 40,700 |
| Aircraft | 570 | 1,390 | 4,570 | 3,810 | 1,250 |
| Vessels | 1,490 | 160 | 400 | 100 | 610 |
| Other transportation | 420 | 240 | 3,040 | 3,460 | 3,220 |
| Fuel combustion in stationary sources | 53,000 | 25,000 | 1,550 | 3,200 | 25,000 |
| Residential, commercial, institutional ... | 12,200 | 490 | 83 | 170 | 3,470 |
| Industrial | 12,000 | 910 | 11 | 160 | 3,000 |
| Agricultural | 2,550 | 22,800 | 1,450 | 2,200 | 3,900 |
| Steam-electric utilities | 26,200 | 1,150 | 6 | 700 | 14,800 |
| Solid waste disposal | 400 | 5,800 | 24,600 | 8,700 | 1,900 |
| Industrial process losses | 1,280 | 11,800 | 270 | 20,200 | 200 |
| Agricultural | (N) | 31,900 | 188,000 | 37,600 | 3,740 |
| County: | | | | | |
| City and County of Honolulu | 50,500 | 29,300 | 396,000 | 91,700 | 58,400 |
| Hawaii County | 3,000 | 22,800 | 97,400 | 21,800 | 8,100 |
| Kauai County | 1,200 | 11,900 | 55,600 | 12,200 | 3,900 |
| Maui County | 3,400 | 14,000 | 86,600 | 19,200 | 6,200 |

N Negligible

Source: Hawaii State Department of Health, Air Sanitation Branch, *Summary of Air Pollutant Emissions in the State of Hawaii, 1970* (table).

Table 64.—CLIMATIC DATA FOR SELECTED PLACES

| Island and station | Ground elevation (feet) | Average temperature (°F) | | Extreme temperature of record (°F) | | Average annual precipitation (inches) | Average annual possible sunshine (percent) |
|--|-------------------------|--------------------------|---------------|------------------------------------|---------|---------------------------------------|--|
| | | Coolest month | Warmest month | Lowest | Highest | | |
| Hawaii: | | | | | | | |
| Hilo Airport | 27 | 70.6 | 75.8 | 53 | 94 | 136.62 | 38 |
| Haw'n Volcanoes Nat. Park Hdq. | 3,971 | 57.9 | 63.5 | 37 | 85 | 100.69 | — |
| Kona (Kailua) | 30 | 72.1 | 77.3 | 54 | 93 | 25.22 | — |
| Puako ¹ | 10 | 73.9 | 80.4 | 52 | 98 | 9.47 | — |
| Waimea | 2,670 | 62.3 | 66.8 | 34 | 90 | 40.05 | — |
| Mauna Kea summit ² | 13,796 | 30.0 | 42.6 | 12 | 62 | 10.05 | — |
| Maui: | | | | | | | |
| Hana | 120 | 71.3 | 76.8 | 50 | 90 | 70.65 | — |
| Haleakala summit | 9,960 | 42.6 | 50.0 | 14 | 73 | 50.69 | — |
| Kihei ³ | 90 | 70.9 | 78.4 | 49 | 98 | 13.25 | — |
| Kahului Airport | 48 | 71.7 | 79.0 | 48 | 95 | 16.33 | 70 |
| Lahaina | 45 | 71.2 | 77.7 | 52 | 93 | 14.53 | — |
| Molokai: | | | | | | | |
| Kaunakakai | 12 | — | — | — | — | 14.08 | — |
| Molokai Airport | 450 | 70.2 | 77.6 | 48 | 90 | 29.21 | — |
| Lanai: | | | | | | | |
| Lanai City | 1,620 | 65.8 | 72.8 | 46 | 88 | 38.44 | — |
| Oahu: | | | | | | | |
| Honolulu International Airport .. | 7 | 72.4 | 79.4 | 52 | 92 | 21.89 | 69 |
| Honolulu Federal Building ⁴ | 12 | 71.9 | 78.4 | 57 | 88 | 23.96 | 65 |
| Waikiki ⁵ | 10 | 72.0 | 80.8 | 51 | 93 | 29.56 | — |
| Upper Manoa (HSPA) | 500 | 69.4 | 75.2 | — | — | 158.41 | — |
| Kaneohe MCAS | 10 | 72.9 | 79.1 | 58 | 90 | 43.88 | — |
| Kahuku | 25 | 70.6 | 77.8 | 49 | 95 | 41.10 | — |
| Wheeler AFB | 826 | 68.2 | 75.5 | 52 | 89 | 39.85 | — |
| Waianae | 20 | 72.1 | 79.7 | 45 | 96 | 20.31 | — |
| Kauai: | | | | | | | |
| Kilauea | 315 | 68.7 | 75.6 | 49 | 94 | 68.03 | — |
| Kealia | 9 | 70.2 | 78.0 | 44 | 93 | 43.28 | — |
| Lihue Airport | 103 | 70.7 | 78.4 | 50 | 90 | 43.00 | 55 |
| Poipu (Makahuena Pt.) | 52 | 72.4 | 79.4 | 50 | 93 | 36.39 | — |
| Kokee (Kanalohuluhulu) | 3,600 | 54.9 | 65.5 | 31 | 80 | 72.25 | — |
| Waialeale | 5,075 | — | — | — | — | 486. | — |
| Northwestern Hawaiian Islands: | | | | | | | |
| Midway | 10 | 65.0 | 78.6 | 52 | 89 | 43.60 | — |

¹Temperature data are for Mahukona.

²Based on incomplete and non-continuous data for 1966-1971.

³Temperature data refer to Puunene Airport.

⁴Temperature sensors are 87 feet above the ground.

⁵Located at Honolulu Zoo. Available only from 1965. The rainfall average shown is thought to be above the long-term average.

Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service Pacific Region, data supplied February 25, 1972.

Table 65.—CLIMATIC EXTREMES FOR THE PERIOD OF RECORD

| Subject | Date | Place | Magnitude |
|--|------------------------|------------------------|-----------|
| Long-term average: | | | |
| Lowest monthly average temperature (°F.) | February | Mauna Loa Obser. | 39.8 |
| Highest monthly average temperature (°F.) | August | Honolulu Airport | 82.3 |
| Lowest average annual rainfall (inches) | | N. of Kawaihae | 5.7 |
| Highest average annual rainfall (inches) | | Waialeale | 486.0 |
| Single events: | | | |
| Lowest temperature of record (°F.) | Feb. 23, 1971 | Mauna Kea summit | 12.0 |
| Highest temperature of record (°F.) | April 27, 1931 | Pahala | 100.0 |
| Lowest annual rainfall of record (inches) | 1953 | Kawaihae | 0.2 |
| Highest annual rainfall of record (inches) | 1947-1948 | Waialeale | 624.1 |
| Highest wind speed of record (m.p.h.) | Jan. 17-18, 1959 | Mauna Loa Obser. | 105+ |

Source: U.S. Department of Commerce, National Weather Service Pacific Region, data supplied February 25, 1972.

SECTION 7

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, such as farms, forests, parks, or military land, is given elsewhere.

Out of 4,050,176 acres on the six largest Islands of the State, only 155,705 are in urban use. The largest uses are grazing (1,150,534 acres), forest reserve (1,190,954), and *pali* or other barren land (503,308). Approximately half of the 55,000 acres in Honolulu were unused open space when last surveyed in 1969; the second largest category at that time was residential use, with over 8,300 acres. Approximately 8 percent of the land in the State is owned by the Federal government, 39 percent by State government, 47 percent by major private owners (those with 1,000 or more acres), and less than 7 percent by small landowners.

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 State totals ranging from 309,000 acres to 327,000 and 397,000. Recent statistics on military land use are likewise confusing, going as high as 175,000 acres and as low as 56,000.

Reports of the Hawaii State Department of Land and Natural Resources, Department of Taxation, and Department of Transportation, the Land Study Bureau of the University of Hawaii, and the Congressional Committee on Government Operations provided the data for this section. Statistics for the nation as a whole are available in Sections 7 and 23 of the *Statistical Abstract of the United States: 1971*.

Table 66.—LAND USE ACREAGES, BY ISLAND: 1968

| Land Use | Six Islands | Kauai | Oahu | Molokai | Lanai | Maui | Hawaii |
|---------------------------------|-------------|---------|---------|---------|--------|---------|-----------|
| All uses | 4,050,176 | 354,112 | 388,928 | 167,104 | 89,280 | 466,432 | 2,584,320 |
| Pineapple | 69,276 | 2,699 | 18,987 | 17,276 | 16,236 | 14,078 | — |
| Sugar cane | 262,377 | 58,927 | 40,852 | 4 | — | 47,819 | 114,775 |
| Nonplantation agriculture | 1,197,688 | 55,311 | 51,741 | 90,072 | — | 180,511 | 820,053 |
| Vegetable | 6,708 | 339 | 2,102 | 845 | — | 1,506 | 1,916 |
| Orchard | 24,294 | 455 | 1,670 | 104 | — | 536 | 21,529 |
| Grazing | 1,150,534 | 53,637 | 38,608 | 86,850 | — | 176,810 | 794,629 |
| Other ¹ | 2,567 | 547 | 1,434 | 2 | — | 331 | 253 |
| Idle agricultural land | 13,585 | 333 | 7,927 | 2,271 | — | 1,328 | 1,726 |
| Forest | 289,039 | 38,716 | 30,033 | 2,037 | 5,926 | 14,504 | 197,823 |
| Forest reserve | 1,190,954 | 157,555 | 118,766 | 48,338 | — | 156,035 | 710,260 |
| Recreation ² | 334,256 | 11,244 | 5,184 | 415 | 66,683 | 18,980 | 231,750 |
| Military | 38,048 | 1,886 | 35,055 | 316 | — | — | 791 |
| Urban | 155,705 | 4,550 | 56,850 | 1,091 | 435 | 6,204 | 86,575 |
| Civilian | 61,233 | 4,400 | 36,957 | 1,091 | 435 | 6,204 | 12,146 |
| Military | 17,658 | 150 | 17,508 | — | — | — | — |
| Undeveloped subdivision | 76,814 | — | 2,385 | — | — | — | 74,429 |
| Pali and barren land | 503,308 | 22,235 | 23,799 | 7,477 | — | 27,852 | 421,945 |
| Quarry | 1,462 | 23 | 1,077 | 30 | — | 85 | 247 |
| Water | 8,063 | 966 | 6,584 | 48 | — | 364 | 101 |

¹Includes water crop (974), forage (423), dairy (738), poultry (275), swine (103), feed lot (38), and salt bed (16).

²Includes game management areas (87,585), national parks (299,423), and other recreation areas (17,248).

Source: A.Y. Ching and T. Sahara, *Land Use and Productivity Rating, State of Hawaii, 1968*, Land Study Bureau Circular No. 15 (University of Hawaii, Land Study Bureau, July 1969), pp. 18-19.

Table 67.—LAND USE SUMMARY, FOR OAHU: 1969

| Land use | Area (in acres) | | |
|--------------------------------------|-----------------|-----------|--------------|
| | Oahu | Honolulu | Rest of Oahu |
| Total area ¹ | 381,934.85 | 54,738.26 | 327,196.59 |
| Residential ² | 22,676.00 | 8,309.47 | 14,366.53 |
| Industrial | 6,304.94 | 2,622.62 | 3,682.32 |
| Commercial | 1,645.23 | 1,024.57 | 620.66 |
| Hotel | 97.87 | 90.73 | 7.14 |
| Public buildings | 5,226.08 | 2,372.90 | 2,853.18 |
| Public open spaces | 7,795.17 | 2,660.40 | 5,134.77 |
| Highways and streets | 8,495.00 | 3,718.00 | 4,777.00 |
| Agriculture | 88,739.90 | 1,004.95 | 87,734.95 |
| Military | 47,650.43 | 5,394.53 | 42,255.90 |
| Unused open space ² | 193,304.23 | 27,540.09 | 165,764.14 |

¹Differs somewhat from measurement by the Bureau of the Census (379,328 for Oahu, 53,504 for Honolulu, and 325,824 for the rest of Oahu).

²Not directly comparable to 1964 data in *State of Hawaii Data Book 1970*, table 39, p. 36; for 1969, large parcels containing both residential and vacant areas were divided and reported separately.

Source: Hawaii State Department of Transportation, Advance Transportation Planning Office, 1969 land use files.

Table 68.—LAND AND FLOOR AREA IN COMMERCIAL AND HOTEL USE, FOR OAHU: 1964 AND 1969

| Land use | Number of establishments | Land area (acres) | Floor area (square feet) | |
|-------------------------------|--------------------------|-------------------|--------------------------|-------------------|
| | | | Total | Per establishment |
| Retailing: | | | | |
| 1964 | 3,746 | 1,016 | 10,986,345 | 2,933 |
| 1969 | 3,906 | 1,036 | 13,375,672 | 3,424 |
| Services, exc. hotels: | | | | |
| 1964 | 4,862 | 434 | 9,146,100 | 1,881 |
| 1969 | 5,696 | 602 | 13,933,747 | 2,446 |
| Hotels: | | | | |
| 1964 | 60 | 73 | 5,001,017 | 83,350 |
| 1969 | 81 | 116 | 7,571,981 | 93,481 |

Source: State of Hawaii and City and County of Honolulu, *Oahu Transportation Study*, Vol. I, *Economic, Population, and Land Use* (1967), p. IV-A-3; Hawaii State Department of Transportation, 1969 land use files from Oahu Transportation Planning Program.

Table 69.—LAND OWNERSHIP OR TENURE, BY ISLAND: JUNE 30, 1968

| Island | Ownership or tenure (in acres) | | | | |
|----------------------------------|--------------------------------|---------------------------------|-------------------------------|----------------------|---------------------------|
| | Total land area ¹ | Federal government ² | State government ³ | Major private owners | Other owners ⁴ |
| State total | 4,105,600 | 326,969 | 1,590,532 | 1,917,880 | 270,219 |
| Hawaii | 2,573,441 | 241,858 | 1,095,247 | 1,052,583 | 183,753 |
| Maui | 465,920 | 26,478 | 204,376 | 221,223 | 13,843 |
| Kahoolawe | 28,800 | — | 28,800 | — | — |
| Lanai | 90,240 | 8 | — | 88,792 | 1,440 |
| Molokai | 165,770 | 78 | 51,685 | 110,444 | 3,563 |
| Oahu | 380,790 | 56,241 | 56,672 | 221,820 | 46,057 |
| Kauai | 352,639 | 2,306 | 151,832 | 176,953 | 21,548 |
| Niihau | 46,080 | — | — | 46,065 | 15 |
| Other Islands ⁵ | 1,920 | — | 1,920 | — | — |

¹For more recent estimates from other sources, see tables 54 and 70.

²Includes fee simple and ceded land.

³Includes State land managed by the County governments and various State agencies, and Hawaiian Homes Commission lands.

⁴Land owned by private landowners with less than 1,000 acres in fee simple and County land acquired by purchase or gift in the name of the Counties.

⁵Lehua and the Northwestern Hawaiian Islands.

Source: Hawaii State Department of Land and Natural Resources, *Report to the Governor, 1970-1971*, p. 54.

Table 70.—LAND OWNERSHIP, PUBLIC AND PRIVATE, BY COUNTY: 1970

| Land ownership | The State | City & County of Honolulu | County of Hawaii | County of Kauai | County of Maui |
|-----------------------------|-----------|---------------------------|------------------|-----------------|----------------|
| NUMBER OF ACRES | | | | | |
| All land | 4,112,256 | 381,248 | 2,583,680 | 396,224 | 751,104 |
| Government land | 1,156,674 | 100,230 | 810,436 | 94,006 | 152,002 |
| United States | 309,240 | 45,927 | 211,044 | 2,273 | 49,996 |
| State of Hawaii | 775,948 | 43,545 | 562,101 | 91,224 | 79,078 |
| Hawaiian Home Lands | 59,375 | 705 | 36,773 | 180 | 21,717 |
| Counties | 12,111 | 10,053 | 518 | 329 | 1,211 |
| Private land | 2,955,582 | 281,018 | 1,773,244 | 302,218 | 599,102 |
| PERCENT DISTRIBUTION | | | | | |
| All land | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Government land | 28.1 | 26.3 | 31.4 | 23.7 | 20.2 |
| United States | 7.5 | 12.0 | 8.2 | 0.6 | 6.7 |
| State of Hawaii | 18.9 | 11.4 | 21.8 | 23.0 | 10.5 |
| Hawaiian Home Lands | 1.4 | 0.2 | 1.4 | 0.0 | 2.9 |
| Counties | 0.3 | 2.6 | 0.0 | 0.1 | 0.1 |
| Private land | 71.9 | 73.7 | 68.6 | 76.3 | 79.8 |

Table 71.—FEDERALLY OWNED PROPERTY IN HAWAII: 1960 AND 1970

| Subject | June 30, 1960 | June 30, 1970 |
|---------------------------------|---------------|---------------|
| Number of installations | 167 | 160 |
| Land (acres), total | 234,074.1 | 396,900.7 |
| Urban | 23,530.2 | 57,202.3 |
| Rural | 210,543.9 | 339,698.4 |
| Number of buildings | 11,506 | 11,479 |
| Cost (\$1,000), total | 877,162 | 1,115,240 |
| Land | 21,910 | 40,083 |
| Buildings | 407,478 | 545,140 |
| Structures and facilities | 447,774 | 530,017 |

Source: Committee on Government Operations, U.S. House of Representatives, *Federal Real and Personal Property Inventory (Civilian and Military) of the United States Government Covering Its Properties Located in the United States, in the Territories, and Overseas* (biennial report).

SECTION 8

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 and individuals. Specifically, information is given on the State balance of payments, personal income, family income, personal wealth, and family expenditures. Data on workers' earnings and payrolls appear in Section 10; on taxable income, in Section 13.

Total 1969 earnings from overseas, exclusive of capital movements, exceeded \$2,200,000,000, or about twice the 1962 total. The major sources of income to Hawaii in 1971 were defense expenditures (\$722 million), pineapple production (\$135 million), sugar production (\$209 million), and visitor expenditures (\$645 million).

Personal income in 1971 was \$3,732 million, compared with \$1,598 million only ten years earlier, and per capita personal income was \$4,797, almost twice the 1961 level. The median annual income of families in 1969 ranged from \$9,643 in Maui County to \$12,035 on Oahu.

The most recent family expenditure survey reported that the largest items in the family budget on Oahu were food and beverages (accounting for 28.3 percent of spending for current consumption) and housing (25.6 percent).

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, University of Hawaii Economic Research Center, Bank of Hawaii, and First Hawaiian Bank. Comparable data for the country as a whole are given in *Statistical Abstract of the United States: 1971*, Section 11.

Table 72.—BALANCE OF PAYMENTS (EXCLUDING CAPITAL MOVEMENTS) AND INCOME FROM MAJOR ECONOMIC ACTIVITIES: 1950 TO 1971

(In millions of dollars)

| Year | Earnings by Hawaii from overseas | Expenditures by Hawaii to overseas | Income from major economic activities | | | |
|------------|--|--|---------------------------------------|----------------------|---------------------|-------------------------|
| | | | Defense expendi- tures | Receipts from sales | | Visitor expenditures |
| | | | | Pineapple canning | Sugar processing | |
| 1950 | 513 | 564 | 147.0 | 102.4 | 123.9 | 24.2 |
| 1951 | 595 | 609 | 213.5 | 95.6 | 135.1 | 29.0 |
| 1952 | 633 | 600 | 245.1 | 96.9 | 138.0 | 32.8 |
| 1953 | 690 | 671 | 251.1 | 113.5 | 147.8 | 42.6 |
| 1954 | 679 | 643 | 237.2 | 108.8 | 141.4 | 48.9 |
| 1955 | 747 | 707 | 272.5 | 115.7 | 145.7 | 55.0 |
| 1956 | 805 | 748 | 284.5 | 122.5 | 148.9 | 65.0 |
| 1957 | 856 | 833 | 307.9 | 115.9 | 147.5 | 77.6 |
| 1958 | 859 | 821 | 327.4 | 130.1 | 106.4 | 82.7 |
| 1959 | 954 | 922 | 338.0 | 128.3 | 132.2 | 109.0 |
| 1960 | 1,029 | 1,036 | 373.1 | 119.4 | 127.2 | 131.0 |
| 1961 | 1,082 | 1,077 | 401.9 | 117.5 | 146.4 | 137.0 |
| 1962 | 1,112 | 1,120 | 375.8 | 115.0 | 159.5 | 154.0 |
| 1963 | 1,199 | 1,183 | 368.6 | 123.7 | 191.7 | 186.0 |
| 1964 | 1,310 | 1,314 | 415.9 | 126.9 | 165.2 | 205.0 |
| 1965 | 1,418 | 1,398 | 459.6 | 126.6 | 176.4 | 225.0 |
| 1966 | 1,607 | 1,544 | 517.1 | 127.7 | 190.3 | 280.0 |
| 1967 | 1,849 | 1,762 | 584.8 | 133.3 | 190.9 | 380.0 |
| 1968 | 2,003 | 1,999 | 606.1 | 127.6 | 200.0 | 440.0 |
| 1969 | 2,213 | 2,326 | 660.2 | 125.3 | 189.2 | 525.0 |
| 1970 | (NA) | (NA) | 683.4 | 135.0 | 196.7 | 570.0 |
| 1971 | (NA) | (NA) | 721.8 | 135.0 | 209.0 | 645.0 |

NA Not available.

Source: Hawaii Visitors Bureau, *Revised Visitor Statistics, 1964-1970* (July 1971) and records; Bank of Hawaii, *Hawaii '71, Annual Economic Review* (August 1971), pp. 45 and 47, and records.

Table 73.—BALANCE OF PAYMENTS (EXCLUDING CAPITAL MOVEMENTS): 1958 TO 1969
(In millions of dollars)

| Year | EARNINGS BY HAWAII FROM OVERSEAS | | | | | EXPENDITURES BY HAWAII TO OVERSEAS | | | | |
|------------|----------------------------------|-------------------|----------------------|--------------------|--------------------------------|------------------------------------|-------------------|--------------------------------|--------------------|---------------------------------|
| | Total | Commodity exports | Federal expenditures | Services performed | Return on overseas investments | Total | Commodity imports | Payments to Federal Government | Services performed | Return on investments in Hawaii |
| 1958 | 859 | 253 | 421 | 152 | 33 | 821 | 460 | 191 | 130 | 40 |
| 1959 | 954 | 276 | 447 | 194 | 37 | 922 | 521 | 219 | 141 | 46 |
| 1960 | 1,029 | 264 | 486 | 230 | 49 | 1,036 | 566 | 259 | 165 | 46 |
| 1961 | 1,082 | 282 | 530 | 219 | 51 | 1,077 | 573 | 278 | 176 | 50 |
| 1962 | 1,112 | 294 | 530 | 229 | 59 | 1,120 | 548 | 314 | 197 | 61 |
| 1963 | 1,199 | 334 | 536 | 263 | 66 | 1,183 | 572 | 314 | 225 | 72 |
| 1964 | 1,310 | 322 | 602 | 313 | 73 | 1,314 | 653 | 337 | 242 | 82 |
| 1965 | 1,418 | 331 | 647 | 354 | 86 | 1,398 | 711 | 343 | 251 | 93 |
| 1966 | 1,607 | 351 | 751 | 415 | 90 | 1,544 | 796 | 382 | 262 | 104 |
| 1967 | 1,849 | 373 | 847 | 528 | 101 | 1,762 | 947 | 414 | 287 | 114 |
| 1968 | 2,003 | 378 | 911 | 601 | 113 | 1,999 | 1,029 | 527 | 313 | 130 |
| 1969 | 2,213 | 368 | 986 | 735 | 124 | 2,326 | 1,196 | 634 | 341 | 155 |

Source: Bank of Hawaii, *Hawaii '71. Annual Economic Review* (August 1971), p. 45.

Table 74.—GROSS STATE PRODUCT: 1959 TO 1970

| Year | Millions of dollars | Year | Millions of dollars |
|------------|---------------------|------------|---------------------|
| 1959 | 1,584.9 | 1965 | 2,423.9 |
| 1960 | 1,814.4 | 1966 | 2,691.9 |
| 1961 | 1,903.8 | 1967 | 2,922.1 |
| 1962 | 1,990.1 | 1968 | 3,269.6 |
| 1963 | 2,075.4 | 1969 | 3,655.1 |
| 1964 | 2,274.0 | 1970 | 4,131.3 |

Source: Bank of Hawaii, *Hawaii '71. Annual Economic Review* (August 1971), p. 43.

Table 75.—EXPENDITURES ON GROSS DOMESTIC PRODUCT: 1958 TO 1968

(In millions of dollars)

| Year | Personal consumption expenditures | Gross private investment | Changes in inventory | Gov't purchase of goods and services | Export of goods and services | Less: Import of goods and services | Expenditures on gross domestic product |
|------------|-----------------------------------|--------------------------|----------------------|--------------------------------------|------------------------------|------------------------------------|--|
| 1958 | 909.2 | 171.7 | 9.6 | 532.6 | 425.7 | 624.0 | 1,424.8 |
| 1959 | 1,010.0 | 239.0 | 11.3 | 567.3 | 486.7 | 704.7 | 1,609.5 |
| 1960 | 1,130.7 | 297.8 | 14.1 | 644.2 | 513.8 | 775.3 | 1,825.2 |
| 1961 | 1,183.9 | 284.4 | 16.2 | 693.8 | 535.7 | 796.2 | 1,917.8 |
| 1962 | 1,183.0 | 316.4 | 13.7 | 721.6 | 578.1 | 805.1 | 2,007.7 |
| 1963 | 1,230.4 | 290.2 | 7.9 | 770.9 | 664.7 | 865.7 | 2,098.4 |
| 1964 | 1,377.0 | 344.0 | 29.6 | 826.3 | 703.0 | 978.0 | 2,301.9 |
| 1965 | 1,388.7 | 394.1 | 57.7 | 896.6 | 770.9 | 1,057.8 | 2,450.2 |
| 1966 | 1,496.6 | 499.5 | 11.6 | 1,032.9 | 852.1 | 1,167.1 | 2,725.6 |
| 1967 | 1,679.4 | 454.8 | 28.9 | 1,172.1 | 1,001.6 | 1,382.3 | 2,954.5 |
| 1968 | 1,744.8 | 658.5 | 31.9 | 1,271.6 | 1,090.0 | 1,491.7 | 3,305.1 |

Source: Yung C. Shang, William H. Albrecht, and Glenn Ifuku, *Hawaii's Income and Expenditure Accounts, 1958-1968* (Economic Research Center, University of Hawaii, July 1970), pp. 11-12.

Table 76.—DIRECT AND INDIRECT INCOME FROM MAJOR EXPORT INDUSTRIES: 1960 AND 1971

| Source of income | Expenditures or revenues (in millions of dollars) | | Percent of income remaining in State ² | Amount remaining in State ¹ (in millions of dollars) | | Total contribution to personal income ² (in millions of dollars) | | Percent of personal income ³ | |
|------------------|---|------|---|---|-------|---|-------|---|------|
| | 1960 | 1971 | | 1960 | 1971 | 1960 | 1971 | 1960 | 1971 |
| Defense | 351 | 709 | 79 | 277.3 | 560.1 | 477.0 | 963.4 | 32.3 | 25.3 |
| Visitors | 131 | 645 | 54 | 70.7 | 348.3 | 121.6 | 599.1 | 8.2 | 15.7 |
| Sugar | 127 | 210 | 67 | 85.1 | 140.7 | 146.4 | 242.0 | 9.9 | 6.4 |
| Pineapple | 119 | 135 | 53 | 63.1 | 71.6 | 108.5 | 123.2 | 7.3 | 3.2 |

¹After immediate leakages outside the State.

²Based on a regional multiplier of 1.72.

³Based on estimated totals of \$1,478 million in 1960 and \$3,810 million in 1971.

Source: Thomas K. Hitch, *The Impact of Exports on Income in Hawaii: 1971* (Research Division, First Hawaiian Bank, April 1972).

Table 77.—PERSONAL INCOME: 1939 TO 1971

| Year | Total (millions of dollars) | Per capita (dollars) | Year | Total (millions of dollars) | Per capita (dollars) | Year | Total (millions of dollars) | Per capita (dollars) |
|------------|---------------------------------------|----------------------------|------------|-----------------------------------|--------------------------------|------------|-----------------------------------|----------------------------|
| 1939 | 218 | 525 | 1951 | 793 | 1,580 | 1963 | 1,776 | 2,647 |
| 1940 | 246 | 577 | 1952 | 865 | 1,748 | 1964 | 1,912 | 2,820 |
| 1941 | 341 | 749 | 1953 | 896 | 1,795 | 1965 | 2,018 | 2,892 |
| 1942 | 612 | 1,087 | 1954 | 908 | 1,802 | 1966 | 2,225 | 3,192 |
| 1943 | 778 | 1,186 | 1955 | 972 | 1,838 | 1967 | 2,419 | 3,416 |
| 1944 | 1,028 | 1,239 | 1956 | 1,041 | 1,899 | 1968 | 2,702 | 3,757 |
| 1945 | 1,009 | 1,328 | 1957 | 1,114 | 1,944 | 1969 | 3,048 | 4,102 |
| 1946 | 719 | 1,312 | 1958 | 1,178 | 1,981 | 1970 | 3,445 | 4,521 |
| 1947 | 721 | 1,384 | 1959 | 1,315 | 2,156 | 1971 | 3,732 | 4,797 |
| 1948 | 723 | 1,407 | 1960 | 1,478 | 2,369 | | | |
| 1949 | 685 | 1,353 | 1961 | 1,598 | 2,485 | | | |
| 1950 | 692 | 1,386 | 1962 | 1,680 | 2,573 | | | |
| | Total by county (millions of dollars) | | | | Per capita by county (dollars) | | | |
| Year | Honolulu | Hawaii | Maui | Kauai | Honolulu | Hawaii | Maui | Kauai |
| 1959 | 1,084.9 | 100.6 | 82.4 | 48.7 | 2,250 | 1,700 | 1,992 | 1,792 |
| 1962 | 1,406.8 | 124.3 | 92.9 | 56.5 | 2,690 | 2,083 | 2,194 | 2,015 |
| 1965 | 1,708.5 | 159.9 | 102.1 | 62.7 | 3,034 | 2,593 | 2,303 | 2,172 |
| 1966 | 1,874.6 | 158.7 | 110.8 | 67.7 | 3,325 | 2,616 | 2,513 | 2,379 |
| 1967 | 2,044.2 | 174.9 | 118.7 | 76.2 | 3,359 | 2,894 | 2,667 | 2,663 |
| 1968 | 2,301.2 | 188.4 | 129.3 | 83.7 | 3,939 | 3,083 | 2,909 | 2,871 |
| 1969 | 2,609.3 | 206.8 | 142.8 | 90.7 | 4,324 | 3,277 | 3,077 | 3,018 |
| 1970 | 2,947.2 | 238.9 | 160.9 | 100.3 | 4,740 | 3,745 | 3,465 | 3,340 |

Source: U.S. Office of Business Economics, *Personal Income by States Since 1929* (1956), pp. 140-143, and *Survey of Current Business*, August 1971, pp. 30-31, U.S. Bureau of Economic Analysis, *Survey of Current Business*, April 1972, p. 20; First Hawaiian Bank, *Economic Indicators Source Book* (1971), p. 61, and records.

Table 78.—INCOME OF FAMILIES AND UNRELATED INDIVIDUALS: 1950 TO 1970
(Data refer to income before taxes in calendar year preceding the census)

| Subject | State total | City and County of Honolulu | Hawaii County | Kauai County | Maui County ¹ |
|--|-------------|-----------------------------|---------------|--------------|--------------------------|
| NUMBER OF FAMILIES: 1970 | | | | | |
| All families | 170,729 | 138,369 | 14,692 | 6,949 | 10,719 |
| Less than \$3,000 | 11,464 | 8,751 | 1,231 | 512 | 970 |
| \$3,000 to \$4,999 | 11,310 | 8,710 | 1,149 | 548 | 903 |
| \$5,000 to \$9,999 | 47,697 | 36,305 | 5,208 | 2,439 | 3,745 |
| \$10,000 to \$14,999 | 44,688 | 36,155 | 3,689 | 2,091 | 2,753 |
| \$15,000 to \$24,999 | 42,265 | 36,703 | 2,661 | 1,124 | 1,777 |
| \$25,000 to \$49,999 | 11,786 | 10,486 | 606 | 202 | 492 |
| \$50,000 or more | 1,519 | 1,259 | 148 | 33 | 79 |
| MEDIAN INCOME OF FAMILIES (\$) | | | | | |
| 1970 | 11,554 | 12,035 | 9,750 | 9,946 | 9,643 |
| 1960 | 6,366 | 6,792 | 4,866 | 4,976 | 5,216 |
| 1950 | 3,568 | 3,788 | 2,909 | 2,960 | 3,026 |
| MEDIAN INCOME OF UNRELATED INDIVIDUALS (\$) | | | | | |
| 1970 ² | 2,981 | 3,013 | 2,541 | 3,382 | 2,559 |
| 1960 | 1,998 | 1,968 | 1,903 | 2,387 | 2,379 |
| 1950 | 1,583 | (NA) | (NA) | (NA) | (NA) |

NA Not available

¹Data for 1950 and 1970 (but not 1960) include Kalawao County.

²Unrelated individuals numbered 83,093 in 1970: 72,869 in the City and County of Honolulu, 4,543 in Hawaii County, 2,220 in Kauai County, and 3,461 in Maui County.

Source: *U.S. Census of Population: 1950*, Bulletin P-B52, table 27; *U.S. Census of Population: 1960*, Final Report PC(1)-13C, tables 66 and 86; *U.S. Census of Population: 1970*, Final Report PC(1)-C13, tables 57 and 124.

**Table 79.—POVERTY STATUS IN 1969 OF FAMILIES AND PERSONS,
BY GEOGRAPHIC AREA: 1970**

| Subject | State total | Oahu | Other Islands |
|---|----------------|----------|------------------|
| ALL INCOME LEVELS | | | |
| Families | 170,729 | 138,369 | 32,360 |
| Percent receiving public assistance income | 3.8 | 3.7 | 4.2 |
| Mean size of family | 3.98 | 3.98 | 3.96 |
| With related children under 18 years | 113,860 | 93,533 | 20,327 |
| Mean number of related children under 18 years | 2.42 | 2.40 | 2.52 |
| Families with female head | 15,971 | 13,533 | 2,438 |
| With related children under 18 years | 11,380 | 9,689 | 1,691 |
| With related children under 6 years | 5,127 | 4,479 | 648 |
| Percent of heads in labor force | 42.5 | 41.1 | 52.2 |
| Family heads | 170,729 | 138,369 | 32,360 |
| Percent 65 years and over | 8.7 | 7.4 | 14.2 |
| Civilian male family heads under 65 years | 120,327 | 94,652 | 25,675 |
| Percent in labor force | 94.2 | 94.5 | 93.3 |
| Unrelated individuals | 55,588 | 45,891 | 9,697 |
| Percent receiving public assistance income | 4.0 | 3.7 | 5.2 |
| Percent 65 years and over | 16.4 | 13.9 | 28.0 |
| Persons | 734,874 | 597,042 | 137,832 |
| Percent receiving Social Security income | 5.8 | 4.8 | 10.0 |
| Percent 65 years and over | 5.8 | 5.1 | 8.9 |
| Percent receiving Social Security income | 73.2 | 70.4 | 80.1 |
| Households | 193,104 | 156,207 | 36,897 |
| In owner occupied housing units | 86,107 | 65,750 | 20,357 |
| Mean value of unit | \$36,806 | \$39,649 | \$27,621 |
| In renter occupied housing units | 106,997 | 90,457 | 16,540 |
| Mean gross rent | \$125 | \$135 | \$75 |
| Percent lacking some or all plumbing facilities | 5.0 | 3.0 | 13.5 |
| INCOME LESS THAN POVERTY LEVEL | | | |
| Families | 13,046 | 10,025 | 3,021 |
| Percent of all families | 7.6 | 7.2 | 9.3 |
| Mean family income | \$1,910 | \$1,816 | \$2,224 |
| Mean income deficit | \$1,692 | \$1,799 | \$1,340 |
| Percent receiving public assistance income | 17.5 | 18.3 | 14.8 |
| Mean size of family | 3.96 | 3.96 | 3.98 |
| With related children under 18 years | 9,697 | 7,836 | 1,861 |
| Mean number of children under 18 years | 2.91 | 2.84 | 3.18 |
| Families with female head | 5,180 | 4,545 | 635 |
| With related children under 18 years | 4,822 | 4,280 | 542 |
| With related children under 6 years | 2,927 | 2,669 | 258 |
| Percent of heads in labor force | 23.3 | 22.1 | 35.7 |

(Continued on next page)

**Table 79.—POVERTY STATUS IN 1969 OF FAMILIES AND PERSONS,
BY GEOGRAPHIC AREA: 1970 (continued)**

| Subject | State total | Oahu | Other islands |
|---|----------------|------------|------------------|
| Family heads | 13,046 | 10,025 | 3,021 |
| Percent 65 years and over | 17.7 | 13.0 | 33.3 |
| Civilian male heads under 65 years | 4,790 | 3,334 | 1,456 |
| Percent in labor force | 65.5 | 65.0 | 66.7 |
| Unrelated individuals | 16,833 | 13,012 | 3,821 |
| Percent of all unrelated individuals | 30.3 | 28.4 | 39.4 |
| Mean income | \$774 | \$759 | \$825 |
| Mean income deficit | \$1,086 | \$1,109 | \$1,010 |
| Percent receiving public assistance income | 7.6 | 7.0 | 9.5 |
| Percent 65 years and over | 27.1 | 22.5 | 43.0 |
| Persons | 68,543 | 52,695 | 15,848 |
| Percent of all persons | 9.3 | 8.8 | 11.5 |
| Percent receiving Social Security income | 12.6 | 9.7 | 22.6 |
| Percent 65 years and over | 12.3 | 9.8 | 20.9 |
| Percent receiving Social Security income | 76.1 | 72.3 | 82.1 |
| Related children under 18 years | 27,834 | 21,971 | 5,863 |
| Percent living with both parents | 46.2 | 42.3 | 60.9 |
| Households | 20,754 | 15,635 | 5,119 |
| Percent of all households | 10.7 | 10.0 | 13.9 |
| In owner occupied housing units | 4,970 | 2,956 | 2,014 |
| Mean value of unit | \$31,339 | \$36,205 | \$24,197 |
| In renter occupied housing units | 15,784 | 12,679 | 3,105 |
| Mean gross rent | \$106 | \$118 | \$56 |
| Percent lacking some or all plumbing facilities | 14.0 | 8.9 | 29.5 |

Source: *U.S. Census of Population: 1970*, Final Report PC(1)-C13, tables 58 and 80.

Table 80.—PERSONS WITH ASSETS OF \$60,000 AND OVER: 1962

| Subject | Number |
|--|-----------|
| Persons with assets of \$60,000 and over | 11,323 |
| Males | 7,694 |
| Females | 3,629 |
| Total assets (\$1,000) | 1,907,758 |
| Per wealthholder (dollars) | 168,485 |
| Net worth (\$1,000) | 1,677,117 |
| Males | 1,029,688 |
| Females | 647,429 |
| Number owning real estate | 10,104 |
| Amount owned (\$1,000) | 801,943 |

Source: U.S. Treasury Department, Internal Revenue Service, *Statistics of Income—1962, Personal Wealth Estimated from Estate Tax Returns*, Publication No. 482 (7-67), table 31, p. 55.

SECTION 9

PRICES

This section presents indexes of consumer prices for Honolulu and a comparison of Honolulu family budgets with those in other metropolitan areas.

In December 1971, the Honolulu all-items consumer price index stood at 121.1, with the 1967 level equal to 100. The index had increased 4.7 percent in the preceding 12 months, 9.1 percent since December 1969, and 34.9 percent since December 1961. A “moderate” or “intermediate” budget for a four-person family living on Oahu was estimated at \$13,108 as of the autumn of 1971. This family budget was 19 percent higher than the corresponding urban United States average, and was second only to Anchorage among major American metropolitan areas.

The Honolulu consumer price index has been compiled by the United States Bureau of Labor Statistics at three-month intervals since December 1963. This index measures the average change in prices of goods and services purchased by urban wage earner and clerical families and single persons living alone. Prices are expressed as a percent of the average levels reported in 1967, the base date.

Current data for Honolulu and other cities are published in the *Monthly Labor Review* and *The Consumer Price Index*, issued monthly by BLS. A similar series for Honolulu was maintained by the Hawaii State Department of Labor and Industrial Relations from March 1943 to December 1963, using March 1943 as the base date.

Comparisons of living costs between Honolulu and various Mainland communities have most recently been made for the Fall of 1971. These data were compiled and published by the U.S. Bureau of Labor Statistics. Similar comparisons go back to 1847, and include a Honolulu-Los Angeles comparison for 1945, Honolulu-Washington comparisons for 1951 and 1955-1968, and a 40-area comparison for various dates since Autumn 1966. Budget costs for a retired couple have been prepared by BLS for Honolulu and the Mainland as of 1966, 1967, and 1969.

Data on prices and living costs are summarized in *Statistical Abstract of the United States: 1971*, Section 12.

Table 81.—AVERAGE EXPENDITURES, INCOME, AND SAVINGS OF URBAN FAMILIES AND SINGLE CONSUMERS, FOR OAHU: 1961

| Item | Average per family (dollars) |
|--|---------------------------------|
| Expenditures for current consumption | 6,746 |
| Food and beverages | 1,909 |
| Tobacco | 88 |
| Housing, total | 1,729 |
| Shelter, fuel, light, refrigeration, and water | 1,093 |
| Household operations | 383 |
| Housefurnishings and equipment | 238 |
| Clothing, materials, services | 577 |
| Personal care | 207 |
| Medical care | 403 |
| Recreation | 306 |
| Reading and education | 212 |
| Automobile purchase and operation | 875 |
| Other transportation | 253 |
| Other expenditures | 187 |
| Gifts and contributions | 458 |
| Personal insurance | 545 |
| Money income before taxes | 9,217 |
| Money income after taxes | 7,950 |
| Other money receipts | 169 |
| Net change in assets and liabilities | +472 |
| Account balancing difference | -102 |

Source: U.S. Bureau of Labor Statistics, *Consumer Expenditures and Income. Honolulu, Hawaii, 1961* (BLS Report No. 237-78, November 1963), p. 2. Based on a sample of 215.

Table 82.—CONSUMER PRICE INDEX, FOR HONOLULU: 1940 TO 1972
(All items combined. 1967 average =100)

| Year | Annual average | March | June | September | December |
|------|----------------|-------|-------|-----------|----------|
| 1940 | 40.5 | 40.1 | — | 40.8 | — |
| 1941 | 42.9 | 41.3 | — | 43.7 | — |
| 1942 | 48.5 | 47.1 | — | 49.6 | — |
| 1943 | 52.2 | 52.0 | 52.5 | 52.4 | 52.4 |
| 1944 | 53.2 | 52.1 | 53.5 | 53.5 | 53.9 |
| 1945 | 54.4 | 54.2 | 54.4 | 54.6 | 54.7 |
| 1946 | 58.3 | 54.4 | 55.3 | 60.7 | 66.8 |
| 1947 | 67.3 | 65.8 | 66.5 | 68.3 | 69.1 |
| 1948 | 70.9 | 70.0 | 69.7 | 71.9 | 73.2 |
| 1949 | 69.7 | 70.0 | 69.0 | 70.8 | 66.6 |
| 1950 | 66.9 | 66.1 | 66.2 | 67.5 | 68.3 |
| 1951 | 71.0 | 70.9 | 70.7 | 71.3 | 72.6 |
| 1952 | 73.1 | 72.3 | 72.6 | 73.8 | 74.2 |
| 1953 | 73.7 | 72.7 | 73.8 | 74.3 | 73.9 |
| 1954 | 74.4 | 74.5 | 73.9 | 74.7 | 74.8 |
| 1955 | 75.4 | 75.4 | 75.1 | 75.8 | 76.0 |
| 1956 | 76.4 | 76.4 | 76.1 | 76.5 | 77.4 |
| 1957 | 79.0 | 77.3 | 77.5 | 80.5 | 82.0 |
| 1958 | 82.8 | 82.8 | 82.0 | 83.3 | 83.3 |
| 1959 | 84.2 | 84.0 | 83.7 | 84.5 | 85.5 |
| 1960 | 86.3 | 85.8 | 86.2 | 86.6 | 87.3 |
| 1961 | 88.6 | 87.7 | 88.6 | 89.2 | 89.8 |
| 1962 | 90.6 | 90.1 | 90.0 | 91.2 | 91.3 |
| 1963 | 92.6 | 92.9 | 92.6 | 92.6 | 92.8 |
| 1964 | 92.7 | 93.2 | 92.4 | 92.9 | 93.7 |
| 1965 | 94.6 | 94.2 | 94.1 | 94.7 | 96.2 |
| 1966 | 97.3 | 96.6 | 96.8 | 97.9 | 98.8 |
| 1967 | 100.0 | 98.9 | 99.7 | 100.6 | 101.8 |
| 1968 | 103.8 | 102.8 | 103.4 | 104.6 | 105.7 |
| 1969 | 108.5 | 107.2 | 108.2 | 109.6 | 111.0 |
| 1970 | 114.2 | 113.2 | 114.4 | 114.9 | 115.7 |
| 1971 | 118.9 | 116.7 | 118.5 | 121.2 | 121.1 |
| 1972 | | 122.4 | 122.2 | | |

Source: Semi-annual data for 1940-1942 from studies by Eugene Danaher cited in Hawaii Employers Council, *Cost of Living in Honolulu, 1940-1948* (April 1948), pp. 5 and 7; quarterly data for 1943-1963 from Hawaii State Department of Labor and Industrial Relations, unpublished summary table (revised by DLIR from previously published values); annual and quarterly data for 1964-1972 from U.S. Bureau of Labor Statistics, *The Consumer Price Index* (monthly); annual averages for 1940-1963 computed by Hawaii State Department of Planning and Economic Development, using estimates for un-surveyed months (Jan., Feb., April, May, July, August, Oct., Nov.) based on linear interpolation. Data for 1940-1963 (originally on a March 1943 base) shifted to a 1967 (ann. ave.) base by DPED.

Table 83.—CONSUMER PRICE INDEX, FOR HONOLULU: 1943 TO 1971
(1967=100)

| Group | March 1943 | December 1953 | December 1963 | December 1970 | December 1971 |
|--|---------------|------------------|------------------|------------------|------------------|
| All items ¹ | 52.0 | 73.9 | 92.8 | 115.7 | 121.1 |
| Food | — | — | 92.3 | 114.1 | 120.9 |
| At home | 49.6 | 74.4 | 92.5 | 110.7 | 118.1 |
| Away from home | — | — | 91.5 | 124.0 | 129.0 |
| Housing | — | — | 89.9 | 117.6 | 122.8 |
| Shelter | — | — | 86.2 | 122.8 | 128.0 |
| Rent | — | — | 93.5 | 120.9 | 125.9 |
| Homeownership | — | — | 81.8 | 124.0 | 129.4 |
| Fuel and utilities | 71.3 | 89.9 | 99.7 | 101.0 | 108.8 |
| Gas and electricity | — | — | 100.6 | 102.4 | 104.3 |
| Household furnishings, operation | — | — | 96.3 | 110.3 | 113.5 |
| Apparel and upkeep | 71.2 | 84.3 | 94.5 | 117.7 | 119.1 |
| Men's and boys' | — | — | 98.6 | 114.3 | 112.6 |
| Women's and girls: | — | — | 90.8 | 120.6 | 124.0 |
| Footwear | — | — | 93.6 | 115.2 | 113.5 |
| Transportation | 43.1 | 74.1 | 99.3 | 113.9 | 121.7 |
| Private | — | — | 97.6 | 116.8 | 123.3 |
| Public | — | — | 108.3 | 98.0 | 112.9 |
| Health and recreation | — | — | 92.3 | 115.7 | 119.9 |
| Medical care | 43.0 | 68.3 | 87.4 | 122.0 | 126.0 |
| Personal care | 46.3 | 61.9 | 96.1 | 114.4 | 118.1 |
| Reading and recreation | 46.6 | 68.8 | 96.6 | 113.9 | 120.4 |
| Other goods and services | — | — | 89.9 | 111.8 | 113.5 |

¹Excludes food away from home and shelter before 1963.

Source: Hawaii State Department of Labor and Industrial Relations, records; U.S. Bureau of Labor Statistics, *The Consumer Price Index-Pacific Cities and U.S. Average* (monthly) and records. The indexes for 1943 and 1953, originally on a March 1943 base, have been shifted to a 1967 base by the Hawaii State Department of Planning and Economic Development.

Table 84.—COMPARATIVE FAMILY BUDGETS FOR HONOLULU: 1945 TO 1971

| Category and date | Cost of budget (dollars) | | | Percent of U.S. urban average ¹ | | |
|-------------------------------------|--------------------------|---------------------|---------------|--|---------------------|---------------|
| | Lower budget | Intermediate budget | Higher budget | Lower budget | Intermediate budget | Higher budget |
| 1945: March | — | — | — | — | 125 | — |
| 1951 | — | — | — | — | 115 | — |
| URBAN FAMILY OF FOUR PERSONS | | | | | | |
| 1966: Autumn | — | 11,190 | — | — | 122 | — |
| 1967: Spring | 7,246 | 10,902 | 16,076 | 122 | 120 | 123 |
| 1969: Spring | 8,135 | 12,118 | 18,315 | 124 | 120 | 126 |
| 1970: Spring | 8,597 | 12,776 | 19,311 | 124 | 120 | 125 |
| 1971: Autumn | 8,990 | 13,108 | 19,700 | 125 | 119 | 124 |
| RETIRED COUPLE | | | | | | |
| 1966: Autumn | — | 4,434 | — | — | 115 | — |
| 1967: Spring | 3,110 | 4,429 | 7,219 | 116 | 115 | 120 |
| 1969: Spring | 3,401 | 4,884 | 7,849 | 116 | 115 | 118 |
| 1971: Autumn | 3,875 | 5,538 | 8,621 | 117 | 116 | 116 |

¹The comparison for 1945 is with Los Angeles; for 1951, with Washington, D.C.

Source: U.S. Bureau of Labor Statistics, *Relative Differences in the Cost of Selected Goods and Services in Honolulu and Los Angeles, March 1945* (May 10, 1946); "Measuring Comparable Living Costs in Cities of Diverse Characteristics," *Monthly Labor Review*, October 1956; *City Worker's Family Budget, Autumn 1966* (Bulletin No. 1570-1), pp. 12-13; *Retired Couple's Budget, Autumn 1966* (Bulletin No. 1570-4), pp. 6-7; *Three Standards of Living for an Urban Family of Four Persons, Spring 1967* (Bulletin No. 1570-5), pp. 24, 33, 35, and 37; *Three Budgets for a Retired Couple, 1967-68* (Bulletin No. 1570-6); "Three Budgets for an Urban Family of Four Persons, Final Spring 1969 Cost Estimates" (release, December 1970); *Three Budgets for a Retired Couple . . . 1969-70* (Supplement to Bulletin No. 1570-6), pp. 24, 26-29; "Living Costs in Pacific Cities, Spring 1970" (release, December 21, 1970); "Autumn 1971 Urban Family Budgets and Geographical Comparative Indexes" (release, April 27, 1972); "Three Budgets for a Retired Couple, Autumn 1971" (release, May 16, 1972).

Table 85.—ANNUAL BUDGETS FOR THREE LEVELS OF LIVING FOR A FOUR-PERSON FAMILY ON OAHU: AUTUMN 1971

| Item | Cost of budget (dollars) | | | Percent of urban U.S. average | | |
|--|--------------------------|--------------------|--------------|-------------------------------|--------------------|--------------|
| | Lower level | Intermediate level | Higher level | Lower level | Intermediate level | Higher level |
| Total budget ¹ | 8,990 | 13,108 | 19,700 | 125 | 119 | 124 |
| Family consumption | 7,137 | 9,974 | 14,018 | 122 | 116 | 117 |
| Food | 2,442 | 3,059 | 3,939 | 124 | 121 | 123 |
| Housing | 2,150 | 3,158 | 4,898 | 142 | 120 | 123 |
| Transportation | 610 | 1,154 | 1,536 | 114 | 120 | 123 |
| Clothing and personal care | 899 | 1,231 | 1,747 | 106 | 103 | 100 |
| Medical care | 638 | 642 | 668 | 105 | 105 | 105 |
| Other family consumption | 398 | 730 | 1,230 | 108 | 107 | 109 |
| Other items ² | 395 | 607 | 1,042 | — | — | — |
| Social security and disability payment | 406 | 406 | 406 | — | — | — |
| Personal income taxes | 1,052 | 2,121 | 4,234 | 167 | 155 | 162 |

¹Honolulu ranked second at each level, behind Anchorage.

²Gifts and contributions, life insurance, and occupational expenses.

Source: U.S. Department of Labor, Office of Information, "Autumn 1971 Urban Family Budgets and Geographical Comparative Indexes" (release, April 27, 1972).

SECTION 10

LABOR FORCE, EMPLOYMENT, AND EARNINGS

This section presents statistics on the size and composition of the labor force, employment by age, sex, occupation, and industry, and wage rates, payrolls, hours, safety, and unionization of workers.

The number of employed persons almost doubled between 1940 and 1970, reaching 338,000 in the latter year. Agricultural employment fell from 55,000 to 13,000 during this period, while nonagricultural workers (excluding armed forces) rose from 99,000 to 275,000.

The unemployment rate averaged 5.1 percent in 1971, with county levels ranging from 4.9 to 6.2 percent. The labor force contains above-average proportions of younger persons and women: the 1970 Census reported that 49 percent of all females 16 years of age or more were either employed or seeking work. By occupation, one out of six civilian workers is classified as professional or technical.

Activities with especially large numbers of employees include government (70,000 in 1970, almost half of them in federal jobs), services (82,000), retail trade (50,000), and manufacturing (31,000). Wage and salary levels are high: the average annual earnings of private wage and salary workers under the Hawaii Employment Security Law reached \$6,849 in 1970 (twice the 1957 average), and in some categories exceeded \$10,000. Average weekly hours ranged from 29.0 (for hotels) to 42.2 (for communications and utilities). Labor union membership was estimated at 70,000 in 1968.

Principal sources for these data are the decennial reports of the U.S. Bureau of the Census, various studies by the U.S. Bureau of Labor Statistics, monthly and annual tabulations by the Hawaii State Department of Labor and Industrial Relations, annual surveys by the Hawaii Employers Council, and occasional sample surveys by public and private agencies. Statistics for the nation as a whole are published in Section 8 of the *Statistical Abstract of the United States: 1971*.

Table 86.—WORKING-AGE POPULATION AND EMPLOYMENT: 1872 TO 1970

| Year | Working-age population ¹ | Employment, including armed forces | | | | | |
|------------|-------------------------------------|------------------------------------|---------|---------|---------------------------------|------------------|--------------|
| | | Total | By sex | | By military status and activity | | |
| | | | Male | Female | Civilians | | Armed forces |
| | | | | | Agric, forestry, fisheries | Other activities | |
| 1872 | 41,097 | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) |
| 1878 | 41,719 | 24,795 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 1884 | 58,055 | 39,541 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 1890 | 66,472 | 41,073 | 38,930 | 2,143 | (NA) | (NA) | (NA) |
| 1896 | 78,819 | 55,294 | 51,705 | 3,589 | (NA) | (NA) | (NA) |
| 1900 | 121,044 | 90,172 | 84,047 | 6,125 | 57,125 | 32,802 | 245 |
| 1910 | 137,727 | 100,900 | 89,719 | 11,181 | 56,122 | 43,170 | 1,608 |
| 1920 | 169,164 | 111,613 | 97,439 | 14,174 | 56,087 | 51,160 | 4,366 |
| 1930 | 241,782 | 154,086 | 136,400 | 17,686 | 63,478 | 74,317 | 16,291 |
| 1940 | 301,686 | 180,796 | 145,659 | 35,137 | 54,629 | 99,167 | 27,000 |
| 1950 | 351,375 | 190,427 | 143,544 | 46,883 | 31,806 | 135,765 | 22,856 |
| 1960 | 426,495 | 256,637 | 183,459 | 73,178 | 15,982 | 193,388 | 47,267 |
| 1970 | 553,755 | 337,635 | 219,312 | 118,323 | 13,283 | 274,527 | 49,825 |

NA not available.

¹Population 15 and over before 1900, 14 and over for 1900-1970.

Source: Robert C. Schmitt, *Demographic Statistics of Hawaii: 1778-1965* (University of Hawaii Press, 1968), pp. 73, 77, and 127; U.S. Bureau of the Census, *U.S. Census of Population: 1960*, Final Report PC (1)-13C, tables 53 and 62, and *U.S. Census of Population: 1970*, Final Report PC(1)-C13, tables 53 and 55.

Table 87.—LABOR FORCE ESTIMATES: ANNUAL AVERAGES, 1940 TO 1972

| Year | Civilian labor force | Civilian employment | Workers in labor disputes | Unemployment | |
|-------------------|----------------------|---------------------|---------------------------|--------------|---------|
| | | | | Number | Percent |
| 1940 | 162,763 | 155,531 | (NA) | 7,232 | 4.4 |
| 1941 | 179,568 | 173,068 | (NA) | 6,500 | 3.6 |
| 1942 | 215,885 | 213,455 | (NA) | 2,430 | 1.1 |
| 1943 | 218,501 | 216,615 | (NA) | 1,886 | 0.9 |
| 1944 | 214,522 | 212,922 | (NA) | 1,600 | 0.7 |
| 1945 | 210,368 | 208,868 | (NA) | 1,500 | 0.7 |
| 1946 | 190,297 | 188,165 | (NA) | 2,132 | 1.1 |
| 1947 | 191,695 | 188,742 | (NA) | 2,953 | 1.5 |
| 1948 | 193,467 | 184,020 | (NA) | 9,447 | 4.9 |
| 1949 | 194,776 | 173,340 | (NA) | 21,436 | 11.0 |
| 1950 | 187,773 | 170,075 | (NA) | 17,698 | 9.4 |
| 1951 | 191,678 | 183,129 | 271 | 8,278 | 4.3 |
| 1952 | 194,067 | 185,639 | 6 | 8,422 | 4.3 |
| 1953 | 196,142 | 186,437 | 163 | 9,542 | 4.9 |
| 1954 | 197,376 | 185,514 | 103 | 11,759 | 6.0 |
| 1955 | 199,276 | 189,291 | 61 | 9,924 | 5.0 |
| 1956 | 204,082 | 195,075 | — | 9,007 | 4.4 |
| 1957 | 207,564 | 199,831 | — | 7,733 | 3.7 |
| 1958 ¹ | 211,540 | 201,370 | 3,090 | 7,080 | 3.4 |
| 1959 | 222,980 | 216,140 | — | 6,840 | 3.1 |
| 1960 | 235,140 | 228,050 | — | 7,090 | 3.0 |
| 1961 | 242,850 | 232,910 | — | 9,940 | 4.1 |
| 1962 | 246,180 | 234,420 | 160 | 11,600 | 4.7 |
| 1963 | 250,880 | 238,630 | 230 | 12,020 | 4.8 |
| 1964 | 257,630 | 247,560 | 20 | 10,050 | 3.9 |
| 1965 | 269,020 | 259,680 | 90 | 9,250 | 3.4 |
| 1966 | 281,880 | 272,730 | 30 | 9,120 | 3.2 |
| 1967 | 293,400 | 282,940 | 260 | 10,200 | 3.5 |
| 1968 | 306,780 | 297,030 | 870 | 8,880 | 2.9 |
| 1969 | 326,700 | 317,130 | 750 | 8,820 | 2.7 |
| 1970 ² | 350,030 | 337,050 | 520 | 12,460 | 3.6 |
| 1971 | 363,210 | 344,500 | 110 | 18,610 | 5.1 |
| 1972 ³ | 363,800 | 341,950 | 400 | 21,450 | 5.9 |

NA Not available.

¹Data for 1958 and later years are based on somewhat different definitions and procedures than those for 1940-1957, and hence are not fully comparable to the earlier figures. Estimates for 1958 based on the 1940-1957 definitions and procedures are as follows: Civilian labor force, 210,399; civilian employment, 199,793; labor disputes, 3,090; unemployed, 7,606; percent unemployed, 3.6.

²Differences from decennial census data for April 1, 1970, reported in other tables of this section, reflect important differences in definitions and statistical procedures as well as variations resulting from the use of annual averages rather than an April 1 time reference. The decennial census count of "employment," for example, measures the number of persons holding jobs, while the monthly and annual estimates prepared by the Hawaii State Department of Labor and Industrial Relations measure the number of jobs held by these persons.

³Preliminary estimate for March 12, 1972.

(Continued on next page)

Table 87.—LABOR FORCE ESTIMATES: ANNUAL AVERAGES, 1940 TO 1972 (continued)

| Year | Civilian labor force | Civilian employment | Workers in labor disputes | Unemployment | |
|----------------------|----------------------|---------------------|---------------------------|--------------|---------|
| | | | | Number | Percent |
| ISLANDS: 1971 | | | | | |
| Oahu | 294,700 | 279,790 | 110 | 14,800 | 5.0 |
| Hawaii | 31,790 | 30,050 | — | 1,740 | 5.5 |
| Maui | 19,850 | 18,640 | — | 1,210 | 6.1 |
| Kauai | 14,000 | 13,320 | — | 680 | 4.9 |
| Molokai, Lanai | 2,870 | 2,690 | — | 180 | 6.2 |

Source: Hawaii State Department of Labor and Industrial Relations, *Labor Force Estimates* (monthly and annual) and records.

Table 88.—LABOR FORCE CHARACTERISTICS: 1970

| Subject | State total | Sex | | Island | |
|---|-------------|---------|---------|---------|--------|
| | | Male | Female | Oahu | Other |
| EMPLOYMENT STATUS | | | | | |
| Persons 16 years old and over | 522,018 | 272,726 | 249,292 | 427,601 | 94,417 |
| Labor force | 344,269 | 222,221 | 122,048 | 286,706 | 57,563 |
| Armed Forces | 49,785 | 48,860 | 925 | 49,368 | 417 |
| Civilian labor force | 294,484 | 173,361 | 121,123 | 237,338 | 57,146 |
| Employed | 285,556 | 168,940 | 116,616 | 230,252 | 55,304 |
| Unemployed | 8,928 | 4,421 | 4,507 | 7,086 | 1,842 |
| Not in labor force | 177,749 | 50,505 | 127,244 | 140,895 | 36,854 |
| OCCUPATION | | | | | |
| Employed, 16 years old and over | 285,556 | 168,940 | 116,616 | 230,252 | 55,304 |
| Professional, technical, and kindred | 45,544 | 25,566 | 19,978 | 39,366 | 6,178 |
| Managers and administrators, exc. farm | 25,457 | 19,718 | 5,739 | 21,533 | 3,924 |
| Sales workers | 19,393 | 8,723 | 10,670 | 16,474 | 2,919 |
| Clerical and kindred workers | 52,157 | 13,207 | 38,950 | 44,880 | 7,277 |
| Craftsmen, foremen, and kindred | 43,920 | 41,907 | 2,013 | 35,349 | 8,571 |
| Operations, except transport | 21,346 | 12,384 | 8,962 | 16,905 | 4,441 |
| Transport equipment operatives | 10,079 | 9,654 | 425 | 7,412 | 2,667 |
| Laborers, except farm | 14,314 | 13,277 | 1,037 | 10,843 | 3,471 |
| Farmers and farm managers | 1,694 | 1,228 | 466 | 627 | 1,067 |
| Farm laborers and farm foremen | 7,574 | 6,136 | 1,438 | 2,352 | 5,222 |
| Service workers, exc. private household | 41,981 | 17,067 | 24,914 | 33,037 | 8,944 |
| Private household workers | 2,097 | 73 | 2,024 | 1,474 | 623 |
| INDUSTRY | | | | | |
| Agriculture, forestry, fisheries | 13,166 | 10,830 | 2,336 | 4,642 | 8,524 |
| Mining | 328 | 297 | 31 | 279 | 49 |
| Construction | 26,638 | 24,946 | 1,692 | 21,811 | 4,827 |
| Manufacturing | 31,159 | 21,973 | 9,186 | 23,613 | 7,546 |
| Food and kindred products | 13,179 | 9,734 | 1,692 | 7,338 | 5,841 |
| Other manufacturing | 17,980 | 12,239 | 5,741 | 16,275 | 1,705 |
| Trans., communications, utilities | 24,331 | 18,765 | 5,566 | 20,340 | 3,991 |
| Wholesale trade | 11,303 | 7,813 | 3,490 | 9,647 | 1,656 |
| Retail trade | 49,730 | 21,443 | 28,287 | 41,554 | 8,176 |
| Finance, insurance, real estate | 14,340 | 6,793 | 7,547 | 12,849 | 1,491 |
| Business and repair services | 8,547 | 5,837 | 2,710 | 7,397 | 1,150 |
| Personal services | 20,591 | 7,390 | 13,201 | 14,425 | 6,166 |
| Entertainment and recreation services | 3,754 | 2,104 | 1,650 | 3,165 | 589 |
| Professional and related services | 49,175 | 17,382 | 31,793 | 41,606 | 7,569 |
| Public administration | 32,494 | 23,367 | 9,127 | 28,924 | 3,570 |
| CLASS OF WORKER | | | | | |
| Private wage and salary workers | 200,912 | 118,527 | 82,385 | 158,958 | 41,954 |
| Federal government workers | 31,391 | 22,044 | 9,347 | 30,005 | 1,386 |
| State government workers | 28,699 | 11,596 | 17,103 | 23,369 | 5,330 |
| Local government workers | 10,457 | 7,746 | 2,711 | 7,452 | 3,005 |
| Self-employed workers | 12,832 | 8,798 | 4,034 | 9,577 | 3,255 |
| Unpaid family workers | 1,265 | 229 | 1,036 | 891 | 374 |

Source: U.S. Census of Population; 1970, Final Report PC(1)-C13, tables 53-56 and 75-78.

Table 89.—LABOR FORCE CHARACTERISTICS, BY COUNTY: 1970

| Counties | Nonwork- er-worker ratio | Percent in labor force | | | | | Employed persons | | | | Persons who worked in 1969— Percent worked 50 to 52 weeks |
|-----------------|--------------------------------|---------------------------------------|-----------------------------------|---|----------------------|----------------------------|---|---|---|---------------------------------------|---|
| | | Female, 16 years and over | Married women, husband present | | Male | | Civilian labor force— Percent unem- ployed | Percent in manu- fac- turing indus- tries | Percent in white- collar occupa- tions | Percent govern- ment workers | |
| | | | Total | With own children under 6 years | 18 to 24 years | 65 years and over | | | | | |
| The State | 1.22 | 49.0 | 48.1 | 37.8 | 83.9 | 22.0 | 3.0 | 10.9 | 49.9 | 24.7 | 67.0 |
| Hawaii | 1.42 | 45.5 | 48.8 | 43.2 | 72.9 | 20.9 | 2.7 | 15.0 | 38.2 | 18.6 | 65.2 |
| Honolulu | 1.18 | 49.4 | 47.8 | 36.6 | 85.0 | 23.9 | 3.0 | 10.3 | 53.1 | 26.4 | 67.7 |
| Kauai | 1.34 | 49.1 | 49.6 | 43.8 | 76.7 | 18.7 | 3.7 | 11.0 | 35.5 | 16.3 | 66.6 |
| Maui | 1.42 | 47.5 | 49.8 | 44.8 | 73.4 | 13.4 | 3.6 | 13.5 | 35.5 | 17.1 | 59.8 |

Source: *U.S. Census of Population: 1970, Final Report PC(1)-C13, table 44.*

Table 90.—EMPLOYMENT BY INDUSTRY: ANNUAL AVERAGES, 1961 AND 1971

| Industry | 1961: State total | 1971, by Island | | | | | |
|---|-------------------------|-----------------|---------|--------|--------|--------|--------------------|
| | | State total | Oahu | Hawaii | Maui | Kauai | Lanai & Molokai |
| Total employment | 232,910 | 344,500 | 279,790 | 30,050 | 18,640 | 13,320 | 2,690 |
| Contract construction | 17,170 | 23,360 | 19,950 | 1,820 | 1,130 | 440 | 30 |
| Manufacturing | 25,730 | 24,670 | 18,080 | 2,800 | 2,170 | 1,600 | 20 |
| Durable goods | 3,530 | 4,570 | 4,210 | 80 | 240 | 40 | 10 |
| Lumber & wood prod. | 1,290 | 1,410 | 1,320 | 40 | 30 | 20 | — |
| Stone, glass & clay | 1,050 | 1,590 | 1,430 | 20 | 130 | — | 10 |
| Other durables | 1,190 | 1,570 | 1,460 | 20 | 80 | 20 | — |
| Non-durable goods | 22,200 | 20,100 | 13,870 | 2,730 | 1,930 | 1,560 | 10 |
| Food processing | 16,690 | 12,990 | 7,600 | 2,210 | 1,770 | 1,420 | 10 |
| Sugar | (NA) | 4,780 | 1,020 | 1,730 | 870 | 1,160 | — |
| Pineapple | (NA) | 4,600 | 3,770 | — | 710 | 120 | — |
| Other | (NA) | 3,610 | 2,810 | 480 | 190 | 130 | 10 |
| Textile & apparel | 2,250 | 3,180 | 2,960 | 140 | 30 | 50 | — |
| Printing & publishing | 2,300 | 2,670 | 2,360 | 150 | 100 | 50 | — |
| Other non-durables | 960 | 1,260 | 960 | 230 | 30 | 30 | — |
| Transport., commun., utilities | 14,850 | 24,020 | 20,400 | 1,390 | 1,030 | 1,070 | 130 |
| Trade | 44,000 | 71,420 | 60,780 | 5,540 | 3,060 | 1,910 | 140 |
| Wholesale | 12,270 | 15,950 | 14,020 | 1,330 | 400 | 200 | — |
| Retail | 31,730 | 55,470 | 46,760 | 4,210 | 2,660 | 1,710 | 140 |
| Finance, insur., real estate | 10,160 | 19,180 | 17,470 | 910 | 470 | 270 | 50 |
| Services and miscell. | 31,470 | 60,690 | 50,700 | 4,130 | 3,220 | 2,500 | 140 |
| Hotels | 4,690 | 15,900 | 11,200 | 2,000 | 1,550 | 1,100 | 40 |
| Other services & miscell. | 26,780 | 44,800 | 39,500 | 2,120 | 1,670 | 1,400 | 100 |
| Government | 50,390 | 78,140 | 68,290 | 4,650 | 2,600 | 2,160 | 430 |
| Federal | 27,290 | 32,840 | 31,970 | 370 | 180 | 300 | 30 |
| Air Force | 2,780 | 3,430 | 3,350 | — | — | 90 | — |
| Army | 5,120 | 6,020 | 5,960 | 40 | 10 | — | — |
| Navy | 10,990 | 12,090 | 12,090 | — | — | — | — |
| Other | 8,400 | 11,300 | 10,570 | 330 | 170 | 210 | 30 |
| State | 15,030 | 34,920 | 28,390 | 3,160 | 1,780 | 1,270 | 320 |
| Local | 8,070 | 10,380 | 7,940 | 1,120 | 650 | 600 | 80 |
| Agriculture | 13,450 | 11,620 | 2,740 | 3,260 | 2,270 | 1,740 | 1,610 |
| Sugar | 8,030 | 5,720 | 920 | 1,830 | 1,400 | 1,560 | — |
| Pineapple | 3,990 | 3,220 | 1,100 | — | 500 | 60 | 1,570 |
| Other | 1,430 | 2,680 | 720 | 1,430 | 370 | 120 | 40 |
| Non-agr. self-employed, unpaid family workers, & domestics | 20,590 | 26,800 | 19,970 | 3,290 | 2,100 | 1,340 | 90 |
| Agric. self-employed & unpaid family workers | 5,100 | 4,590 | 1,400 | 2,260 | 580 | 280 | 60 |

NA Not available

Source: Hawaii State Department of Labor and Industrial Relations, *Labor Force Estimates* (monthly and annual) and records.

Table 91.—PRIVATE EMPLOYMENT AND PAYROLLS COVERED BY THE HAWAII EMPLOYMENT SECURITY LAW: 1952 TO 1970

| Year | Covered employment | Average annual wage (dollars) | Total wages (\$1,000) | Year | Covered employment | Average annual wage (dollars) | Total wages (\$1,000) |
|------------|--------------------|-------------------------------|-----------------------|------------|--------------------|-------------------------------|-----------------------|
| 1952 | 98,477 | 2,935 | 289,054 | 1961 | 153,170 | 4,190 | 641,796 |
| 1953 | 100,996 | 2,985 | 301,491 | 1962 | 154,297 | 4,332 | 668,355 |
| 1954 | 99,292 | 3,046 | 302,431 | 1963 | 157,798 | 4,478 | 706,637 |
| 1955 | 102,787 | 3,118 | 320,476 | 1964 | 163,464 | 4,737 | 774,313 |
| 1956 | 107,267 | 3,196 | 342,863 | 1965 | 171,468 | 4,939 | 846,892 |
| 1957 | 111,474 | 3,392 | 378,108 | 1966 | 181,160 | 5,149 | 932,709 |
| 1958 | 114,167 | 3,620 | 413,317 | 1967 | 186,810 | 5,364 | 1,002,002 |
| 1959 | 139,550 | 3,690 | 514,993 | 1968 | 195,419 | 5,852 | 1,143,641 |
| 1960 | 148,607 | 4,067 | 604,400 | 1969 | 213,594 | 6,375 | 1,361,576 |
| | | | | 1970 | 228,466 | 6,849 | 1,564,654 |

| County and industry | Covered employment | Average annual wage (dollars) | Total wages (\$1,000) |
|--|--------------------|-------------------------------|-----------------------|
| Counties, 1970: | | | |
| City and County of Honolulu | 186,257 | 7,046 | 1,312,404 |
| County of Hawaii | 18,070 | 6,184 | 111,745 |
| County of Kauai | 9,232 | 5,690 | 52,529 |
| County of Maui | 14,907 | 5,902 | 87,977 |
| Industries, 1970: | | | |
| Agriculture, forestry, fisheries | 11,250 | 6,214 | 69,905 |
| Mining, contract construction | 25,773 | 10,896 | 280,818 |
| Manufacturing | 25,531 | 7,120 | 181,784 |
| Transportation | 14,619 | 8,501 | 124,269 |
| Communications | 7,009 | 9,482 | 66,456 |
| Electric, gas, sanitary services | 2,415 | 10,585 | 25,562 |
| Wholesale trade | 16,107 | 8,083 | 130,196 |
| Retail trade | 53,259 | 4,586 | 244,230 |
| Finance, insurance, real estate | 17,437 | 7,670 | 133,749 |
| Services | 54,993 | 5,588 | 307,291 |
| Nonclassifiable establishments | 74 | 5,324 | 394 |

Source: Hawaii Department of Labor and Industrial Relations, *Employment and Payrolls in Hawaii* (annual, 1952-1968) and records.

Table 92.—WAGE AND SALARY RATES FOR SPECIFIED OCCUPATIONS: 1841 TO 1972

| Occupation and year | Annual salary (dollars) | Occupation and year | Monthly salary (dollars) | Occupation and year | Daily wage (dollars) |
|-------------------------------|-------------------------|-------------------------|--------------------------|-----------------------------|----------------------|
| Chief executive: ¹ | | Policeman: ² | | Sugar workers: ³ | |
| 1844 | 6,000 | 1843 | 3.50 | 1841-44 | 0.125 |
| 1860 | 16,000 | 1847 | 6.00 | 1854 | 0.11-0.25 |
| 1872 | 22,500 | 1861 | 20.00 | 1863 | 0.31-0.38 |
| 1888 ⁴ | 57,588 | 1873-77 | 20-22 | 1888-90 | 0.60-0.86 |
| 1898 | 12,000 | 1888 | 30 | 1902 | 0.64 |
| 1900 | 5,000 | 1903 | 60 | 1910 | 0.70 |
| 1910 | 7,000 | 1904 | 75 | 1915 | 0.74 |
| 1921 | 10,000 | 1932 | 135 | 1929 | 1.82 |
| 1949 | 15,000 | 1940 | 158 | 1935 | 1.70 |
| 1956 | 19,000 | 1950 | 245 | 1941 | 2.48 |
| 1959 | 25,000 | 1960 | 444 | 1946 | 5.28 |
| 1962 | 27,500 | 1966 | 504 | 1947 | 7.63 |
| 1965 | 33,500 | 1969 | 555 | 1957 | 11.20 |
| 1969 | 38,182 | 1972 | 612 | 1967 | 21.25 |
| 1970 | 42,000 | | | 1971 | 26.08 |

¹King to 1893; President, 1893-1899; Governor, 1900 to present. For selected years before 1900; thereafter for each year in which a change was authorized.

²Beginning salary for Honolulu policemen. For selected years.

³Data for 1902-1915 refer to field workers only. Data for 1935 and succeeding years are averages for non-supervisory employees in the industry. Data refer to cash wages only and do not include value of "employee benefits" (\$10.00 a day in 1971) or various workers' perquisites (housing, hospitalization, and sometimes food) provided prior to December 1946.

⁴Includes \$20,000 for privy purse and \$37,588 revenue from rental of Crown lands.

Source: Robert C. Schmitt, "Statistics on Income in Hawaii, 1825-1966," *Hawaii Historical Review, Selected Readings* (Hawaiian Historical Society, 1969), pp. 274-292; Hawaiian Sugar Planters' Association. *HSPA Sugar Manual 1971*, p. 6 and records; *Session Laws of Hawaii 1969*, Act 127; Honolulu Police Department, records, Sugar workers' daily wages for 1863-1929 computed from weekly or monthly data, assuming six working days per week or 26 per month.

Table 93.—MEDIAN EARNINGS OF PERSONS IN THE EXPERIENCED LABOR FORCE DURING THE PREVIOUS YEAR: 1940 TO 1970

| Sex | 1940 ¹ | 1950 ¹ | 1960 ² | 1970 ³ | | | | |
|--------------|-------------------|-------------------|-------------------|-------------------|----------------------|---------------|--------------|-------------|
| | | | | State total | City and Co. of Hon. | Hawaii County | Kauai County | Maui County |
| Male | 659 | 2,504 | 4,353 | 8,055 | 8,518 | 6,672 | 6,474 | 6,721 |
| Female | 520 | 1,772 | 2,407 | 4,208 | 4,307 | 3,893 | 3,765 | 3,689 |

¹Median wage or salary income received by persons 14 years old and over reporting wages or salary of \$100 or more.

²Median earnings of all persons 14 years old and over with earnings.

³Median earnings of all persons 16 years old and over with earnings.

Source: *U.S. Census of Population: 1950*, Bulletin P-C52, table 69; *U.S. Census of Population: 1960*, Final Report PC(1)-13C, table 68; *U.S. Census of Population: 1970*, Final Report PC(1)-C13, tables 57 and 122.

Table 94.—AVERAGE ANNUAL WAGES PER WORKER IN MANUFACTURING: 1899 TO 1969

| Year | All employees (\$)¹ | Production workers (\$)² | Year | All employees (\$)¹ | Production workers (\$)² |
|------------|---------------------|--------------------------|------------|---------------------|--------------------------|
| | | | | | |
| 1909 | 369 | 357 | 1963 | 4,279 | 3,585 |
| 1919 | 738 | 666 | 1967 | 5,496 | 4,574 |
| 1939 | 785 | 674 | 1968 | 5,812 | 4,777 |
| 1954 | 3,164 | 2,602 | 1969 | 6,079 | 5,073 |

¹Total payroll divided by total employment.

²Total wage payments divided by average number of production workers.

Source: Robert C. Schmitt, "Statistics on Income in Hawaii, 1825-1966," *Hawaii Historical Review, Selected Readings* (Hawaiian Historical Society, 1969), pp. 274-292; U.S. Bureau of the Census, *Annual Survey of Manufactures: 1968*, M68(AS)-6, and *Annual Survey of Manufactures: 1969*, M69(AS)-6.9, p. 5.

Table 95.—HOURS AND EARNINGS IN SELECTED INDUSTRIES: 1961 AND 1971

| Industry | Average weekly earnings (dollars) | | Average weekly hours | | Average hourly earnings (dollars) | |
|---------------------------------|-----------------------------------|--------|----------------------|------|-----------------------------------|------|
| | 1961 | 1971 | 1961 | 1971 | 1961 | 1971 |
| Contract construction | 118.34 | 223.50 | 38.8 | 37.5 | 3.05 | 5.96 |
| Manufacturing | 72.39 | 133.73 | 38.3 | 39.8 | 1.89 | 3.36 |
| Communications, utilities | 106.30 | 181.04 | 41.2 | 42.2 | 2.58 | 4.29 |
| Trades¹ | 65.64 | 100.87 | 35.1 | 33.4 | 1.87 | 3.02 |
| Finance | 84.03 | 118.08 | — | — | — | — |
| Hotels | 55.27 | 77.43 | 32.9 | 29.0 | 1.68 | 2.67 |
| Laundries | 46.25 | 76.47 | 37.6 | 35.9 | 1.23 | 2.13 |

¹Wholesale and retail, excluding eating and drinking places.

Source: Hawaii Dept. of Labor and Industrial Relations, records.

Table 96.—AVERAGE PAY RATES FOR SELECTED JOB CLASSIFICATIONS IN PRIVATE INDUSTRY: 1953 TO 1971

| Survey date | Monthly rates (dollars) | | | | Hourly rates (dollars) | | |
|-------------|-------------------------|--------------------|-----------|------------------------|------------------------|------------------|---------------|
| | Junior typist | Clerk stenographer | Secretary | Civil engineer (entry) | Laborer (heavy) | Hi-lift operator | Auto mechanic |
| 1953 | 193 | 247 | 317 | 405 | 1.15 | 1.36 | 1.72 |
| 1961 | 244 | 318 | 373 | 481 | 1.53 | 1.89 | 2.37 |
| 1968 | 327 | 423 | 487 | 668 | 2.16 | 2.88 | 3.32 |
| 1969 | 357 | 450 | 522 | 768 | 2.37 | 3.15 | 3.53 |
| 1970 | 372 | 474 | 547 | 866 | 2.50 | 3.46 | 3.79 |
| 1971 | 396 | 500 | 678 | 881 | 2.68 | 3.35 | 4.18 |

Source: Hawaii Employers Council, Research Department, *Pay Rates in Hawaii* (annual).

Table 97.—INDUSTRIAL ACCIDENTS, DEATHS, AND INSURANCE PAYMENTS: 1919 TO 1970

| Year | Accidents | | Deaths | | Insurance payments (\$1,000) |
|------------------------------|-----------|-------------------|--------|-------------------|------------------------------|
| | Number | Rate ¹ | Number | Rate ² | |
| 1919-1921 ³ | 3,039 | 20.20 | 22 | 8.5 | 40 |
| 1929-1931 ³ | 6,251 | 29.38 | 17 | 4.7 | 34 |
| 1939-1941 ³ | 10,720 | 42.03 | 22 | 4.8 | 98 |
| 1949-1951 ³ | 21,466 | 80.06 | 36 | 7.0 | 698 |
| 1959-1961 ³ | 27,592 | 79.40 | 19 | 3.0 | 4,279 |
| 1965 | 29,436 | 72.75 | 21 | 3.0 | 5,977 |
| 1966 | 30,473 | 71.52 | 30 | 4.2 | 5,665 |
| 1967 | 29,491 | 66.87 | 27 | 3.7 | 11,396 |
| 1968 | 32,056 | 68.91 | 38 | 5.2 | 10,279 |
| 1969 | 35,790 | 70.86 | 32 | 4.3 | 7,418 |
| 1970 | 37,405 | 69.12 | 40 | 5.2 | 12,528 |

¹Accidental injuries per 1,000,000 estimated employee-hours.

²Accidental deaths per 100,000 civilian population.

³Annual averages.

Source: Robert K. Hasegawa, Director of Labor and Industrial Relations, testimony before Senate Ways and Means Committee, January 25, 1972.

Table 98.—LABOR UNION MEMBERSHIP: 1968

| Kind of union | Unions | Membership |
|------------------------------------|--------|------------|
| All categories | (NA) | 70,000 |
| Affiliated with AFL-CIO | 44 | 36,000 |
| Unaffiliated with AFL-CIO | (NA) | 34,000 |
| National unions ¹ | 11 | 27,000 |
| Local unions ² | (NA) | 7,000 |

NA Not available.

¹ILWU, Teamsters, United Electrical Workers, and other unaffiliated national unions.

²Unaffiliated unions limited to a single locality or single establishment or employer.

Source: U.S. Department of Labor, Bureau of Labor Statistics, *Directory of National and International Labor Unions in the United States, 1969*, Bulletin 1665.

SECTION 11

RECREATION AND TOURISM

Statistics on travel, recreation, hotels, and parks appear in this section.

Tourism has become a major Island activity in recent decades. The number of visitors staying overnight or longer in Hawaii has grown from 32,000 in 1941 to 243,000 in 1959 and 1,819,000 in 1971. During the same time, visitor expenditures rose from \$16.4 million to \$645 million. Average length of stay excluding eastbound and layover visitors, was 11.1 days in 1971, and expenditure per visitor day averaged \$37.23. There were over 36,000 hotel units in the State as of February 1972, compared with 6,825 twelve years earlier. Seven-tenths of the units are on Oahu, chiefly in Waikiki.

Hotel occupancy rates in 1971 averaged 59 percent in Waikiki and 64 percent on the Neighbor Islands. The State has three national parks, 41 State parks, 376 County parks, 40 golf courses, and 24.4 miles of safe, sandy, accessible beach.

Recreational and cultural facilities reporting more than 250,000 annual visitors include fourteen National or State parks, the U.S.S. Arizona Memorial, Honolulu International Center, Honolulu Zoo, Sea Life Park, professional baseball, the Kodak Hula Show, Mormon Temple Grounds, and Polynesian Cultural Center. Over 162,000 Hawaii residents traveled to the Mainland in 1971 and half of them were absent more than 18 days.

Information on these subjects is issued periodically by the Hawaii Visitors Bureau, the State Parks Division of the Department of Land and Natural Resources, the U.S. National Park Service, and other organizations. An extensive summary of statistics on recreation and tourism, *Hawaii Tourism Data Book: 1969*, was published by the Department of Planning and Economic Development. National statistics are given in Section 7 of *Statistical Abstract of the United States: 1971*.

Table 99.—MODE OF TRAVEL AND VISITOR STATUS OF PASSENGERS ARRIVING IN HAWAII: 1951 to 1971

| Year | All arriving passengers | Mode of travel | | Direction of travel | | Visitor status of westbound arriving passengers ¹ | | | | |
|------|-------------------------|----------------|---------|---------------------|-------------------------|--|--------------------------|----------|---------------------|--------------------|
| | | Air | Surface | Westbound | Eastbound or northbound | Visitors destined to Hawaii | Visitors destined beyond | | Returning residents | Intended residents |
| | | | | | | | Overnight or longer | Transits | | |
| 1951 | 130,437 | 90,074 | 40,363 | 93,002 | 37,345 | 43,426 | 3,994 | 12,917 | 16,600 | 5,853 |
| 1952 | 141,192 | 104,539 | 36,653 | 106,130 | 35,062 | 49,432 | 5,280 | 15,952 | 16,708 | 6,684 |
| 1953 | 163,305 | 120,739 | 42,566 | 126,478 | 36,827 | 66,296 | 5,956 | 16,992 | 17,740 | 6,472 |
| 1954 | 186,008 | 137,991 | 48,017 | 141,503 | 44,505 | 74,452 | 7,224 | 19,584 | 19,972 | 5,852 |
| 1955 | 232,060 | 176,653 | 55,407 | 175,369 | 56,691 | 89,772 | 8,316 | 31,312 | 21,996 | 8,332 |
| 1956 | 272,619 | 215,033 | 57,586 | 203,644 | 68,975 | 102,352 | 12,524 | 36,012 | 24,100 | 11,268 |
| 1957 | 353,590 | 268,207 | 85,383 | 261,282 | 92,308 | 128,832 | 13,468 | 46,924 | 28,768 | 16,676 |
| 1958 | 363,848 | 279,768 | 84,080 | 263,193 | 100,655 | 123,576 | 19,465 | 38,425 | 35,888 | 16,412 |
| 1959 | 452,417 | 370,072 | 82,345 | 336,090 | 116,327 | 177,550 | 30,185 | 38,714 | 36,100 | 18,825 |
| 1960 | 532,547 | 449,052 | 83,495 | 399,804 | 132,743 | 213,670 | 36,475 | 43,439 | 38,630 | 15,030 |
| 1961 | 615,209 | 532,182 | 83,027 | 448,546 | 166,663 | 202,850 | 45,825 | 47,155 | 43,590 | 16,715 |
| 1962 | 690,378 | 606,972 | 83,406 | 497,035 | 193,343 | 219,005 | 60,625 | 42,690 | 53,800 | 21,070 |
| 1963 | 790,378 | 708,257 | 82,121 | 574,984 | 215,394 | 258,765 | 73,915 | 38,860 | 54,140 | 20,200 |
| 1964 | 909,436 | 832,075 | 77,361 | 681,391 | 228,045 | 359,554 | 100,736 | 110,034 | 83,313 | 27,446 |
| 1965 | 1,064,657 | 988,892 | 75,765 | 814,624 | 250,033 | 460,603 | 106,615 | 118,020 | 99,792 | 28,973 |
| 1966 | 1,279,151 | 1,200,697 | 78,454 | 974,419 | 304,732 | 558,388 | 128,498 | 137,136 | 117,605 | 32,031 |
| 1967 | 1,562,414 | 1,482,884 | 79,530 | 1,215,974 | 346,440 | 754,910 | 138,193 | 147,136 | 130,995 | 44,117 |
| 1968 | 1,683,326 | 1,608,706 | 74,620 | 1,348,112 | 335,214 | 869,116 | 146,728 | 148,802 | 140,592 | 42,236 |
| 1969 | 1,941,638 | 1,876,821 | 64,817 | 1,566,013 | 375,625 | 1,008,802 | 172,227 | 190,710 | 152,404 | 41,162 |
| 1970 | 2,219,559 | 2,174,303 | 45,256 | 1,734,560 | 484,999 | 1,170,897 | 206,849 | 201,589 | 179,461 | 41,828 |
| 1971 | 2,500,462 | 2,455,147 | 45,315 | 1,903,130 | 597,332 | 1,207,898 | 222,457 | 268,001 | 162,967 | 41,562 |

¹Data for 1951-1963 are limited to passengers reporting their visitor status. Data for 1964 and later years include estimates for unsurveyed passengers, and hence are not directly comparable to the data for 1951-1963. (Unrevised 1964 data showed 316,550 visitors destined to Hawaii, 125,130 visitors destined beyond Hawaii, 73,060 returning residents, and 24,040 intended residents.) A small number of surveyed but unclassified passengers are omitted for all years. Total westbound passenger arrivals, including unsurveyed and unclassified, are shown elsewhere in this table, under "direction of travel".

Source: Hawaii Visitors Bureau, *Annual Research Reports, 1952-1970, Revised Visitor Statistics, 1964-1970* (July 1971), as corrected, and records.

Table 100.— OVERNIGHT VISITORS, AVERAGE VISITOR CENSUS, HOTEL UNITS, HOTEL OCCUPANCY, AND VISITOR EXPENDITURES: 1922 TO 1971

| Year | Visitors staying overnight or longer | | | Visitor expenditures in Hawaii (\$ million) | Year | Visitors staying overnight or longer | | | Visitor expenditures in Hawaii (\$ million) |
|-------------------------|--------------------------------------|------------------------|-------------------------|--|--------------------------|--------------------------------------|---|-------------------------|---|
| | Total | Westbound | Eastbound or northbound | | | Total | Westbound | Eastbound or northbound | |
| 1922 | 9,676 | 8,493 | 1,183 | 4.4 | 1932 | 10,370 | 9,464 | 906 | 4.1 |
| 1923 | 12,021 | 10,699 | 1,322 | 5.5 | 1933 | 10,111 | 9,345 | 766 | 3.8 |
| 1924 | 12,468 | 11,311 | 1,157 | 5.7 | 1934 | 16,161 | 14,841 | 1,320 | 6.3 |
| 1925 | 15,193 | 13,689 | 1,504 | 7.2 | 1935 | 19,933 | 18,030 | 1,903 | 7.9 |
| 1926 | 16,762 | 15,177 | 1,585 | 8.0 | 1936 | 22,199 | 20,039 | 2,160 | 8.9 |
| 1927 | 17,451 | 15,693 | 1,758 | 8.2 | 1937 | 21,987 | 19,489 | 2,498 | 9.5 |
| 1928 | 19,980 | 18,275 | 1,705 | 9.2 | 1938 | 23,043 | 20,853 | 2,190 | 10.2 |
| 1929 | 22,190 | 20,041 | 2,149 | 10.3 | 1939 | 24,390 | 21,737 | 2,653 | 11.0 |
| 1930 | 18,651 | 16,995 | 1,656 | 8.7 | 1940 | 25,373 | 23,369 | 2,004 | 12.0 |
| 1931 | 15,780 | 14,332 | 1,448 | 6.9 | 1941 ¹ | 31,846 | 30,425 | 1,421 | 16.4 |
| Year | Visitors staying overnight or longer | | | Average visitor census (including eastbound) | Hotel units ² | | Percent of hotel units occupied (ann. ave.) | | Visitor expenditures in Hawaii (\$ million) |
| | Total ³ | Westbound ³ | Eastbound or northbound | | Oahu | Other Islands | Oahu ⁴ | Other Islands | |
| 1946 ¹ | 15,000 | (NA) | (NA) | 975 | 1,006 | 566 | (NA) | (NA) | 6.3 |
| 1947 | 25,000 | (NA) | (NA) | 1,625 | 1,392 | 566 | (NA) | (NA) | 12.1 |
| 1948 | 36,397 | (NA) | (NA) | 2,366 | 1,392 | 566 | (NA) | (NA) | 18.9 |
| 1949 | 34,386 | (NA) | (NA) | 2,235 | 1,392 | 588 | (NA) | (NA) | 17.7 |
| 1950 | 46,593 | (NA) | (NA) | 3,027 | 1,415 | 588 | (NA) | (NA) | 24.2 |
| 1951 | 51,565 | 47,634 | 3,931 | 3,350 | 1,597 | 600 | (NA) | (NA) | 29.0 |
| 1952 | 60,539 | 54,618 | 5,921 | 3,796 | 1,788 | 624 | (NA) | (NA) | 32.8 |
| 1953 | 80,346 | 72,152 | 8,194 | 4,746 | 2,212 | 713 | (NA) | (NA) | 42.6 |
| 1954 | 91,289 | 81,388 | 9,901 | 5,369 | 2,372 | 729 | 84.3 | (NA) | 48.9 |
| 1955 | 109,798 | 98,105 | 11,693 | 6,042 | 3,300 | 815 | 81.5 | (NA) | 55.0 |
| 1956 | 133,815 | 114,813 | 119,002 | 6,947 | 3,500 | 827 | 80.5 | (NA) | 65.0 |
| 1957 | 168,829 | 141,518 | 27,311 | 8,205 | 3,877 | 877 | 84.6 | (NA) | 77.6 |
| 1958 | 171,588 | 139,984 | 31,604 | 8,397 | 4,454 | 1,040 | 78.9 | (NA) | 82.7 |
| 1959 | 243,216 | 207,645 | 35,571 | 10,390 | 5,657 | 1,145 | 88.3 | (NA) | 109.0 |
| 1960 | 296,517 | 250,795 | 45,722 | 11,797 | 8,118 | 1,404 | 75.3 | (NA) | 131.0 |
| 1961 | 319,807 | 248,540 | 71,267 | 11,960 | 8,720 | 1,473 | 70.1 | (NA) | 137.0 |
| 1962 | 362,145 | 279,625 | 82,520 | 13,125 | 9,098 | 1,817 | 74.2 | (NA) | 154.0 |
| 1963 | 429,140 | 332,680 | 96,460 | 15,316 | 9,203 | 2,200 | 77.4 | 66.0 | 186.0 |
| 1964 | 563,925 | 460,290 | 103,635 | 16,017 | 10,031 | 2,872 | 74.5 | 68.0 | 205.0 |
| 1965 | 686,928 | 567,218 | 119,710 | 17,318 | 11,083 | 3,744 | 82.1 | 68.2 | 225.0 |

NA Not available

¹The visitor industry was suspended during World War II, 1942-1945.

²Month unspecified through 1958; December 31, 1959 to 1967; November 1968; October 1969, 1970, and 1971.

³Westbound visitor data for 1964 and later years are revised estimates which take account of nonresponse in the Hawaii Visitors Bureau Basic Data Survey. Westbound data for earlier years are unadjusted and thus not directly comparable to the revised figures for 1964 and succeeding years. (No change was necessary in the eastbound/northbound component.) Unrevised 1964 totals were: total visitors staying overnight or longer, 508,870; westbound visitors, 405,235.

⁴Waikiki only.

(Continued on next page)

Table 100.—OVERNIGHT VISITORS, AVERAGE VISITOR CENSUS, HOTEL UNITS, HOTEL OCCUPANCY, AND VISITOR EXPENDITURES: 1922 TO 1971 (continued)

| Year | Visitors staying overnight or longer | | | Average visitor census (including eastbound) | Hotel units ² | | Percent of hotel units occupied (ann. ave.) | | Visitor expenditures in Hawaii (\$ million) |
|------------|--------------------------------------|------------------------|-------------------------|--|--------------------------|---------------|---|---------------|---|
| | Total ³ | Westbound ³ | Eastbound or northbound | | Oahu | Other Islands | Oahu ⁴ | Other Islands | |
| 1966 | 855,456 | 686,886 | 148,570 | 21,030 | 12,598 | 4,619 | 83.7 | 67.1 | 280.0 |
| 1967 | 1,124,818 | 893,103 | 231,715 | 27,690 | 13,004 | 5,231 | 90.0 | 72.8 | 380.0 |
| 1968 | 1,314,571 | 1,015,844 | 298,727 | 32,496 | 15,138 | 6,105 | 89.2 | 75.2 | 440.0 |
| 1969 | 1,527,012 | 1,181,029 | 345,983 | 37,438 | 18,209 | 7,613 | 81.3 | 69.3 | 525.0 |
| 1970 | 1,798,591 | 1,377,756 | 420,835 | 38,132 | 21,217 | 9,106 | 74.1 | 64.8 | 570.0 |
| 1971 | 1,818,944 | 1,430,325 | 388,619 | 40,829 | 24,612 | 10,737 | 58.9 | 63.5 | 645.0 |

NA Not Available

¹The visitor industry was suspended during World War II, 1942-1945.

²Month unspecified through 1958; December 31, 1959 to 1967; November 1968; October 1969, 1970, and 1971.

³Westbound visitor data for 1964 and later years are revised estimates which take account of nonresponse in the Hawaii Visitors Bureau Basic Data Survey, Westbound data for earlier years are unadjusted and thus not directly comparable to the 1964 totals were: total visitors staying overnight or longer, 508,870; westbound visitors, 405,235.

⁴Waikiki only.

Source: Hawaii Visitors Bureau, *Annual Research Report* for 1952-1970; *Revised Visitor Statistics, 1964-1970*; *Visitor Plant Inventory* for December 1967-October 1971, and records.

Table 101.—VISITOR ARRIVALS AND VISITOR DAYS, BY MILITARY STATUS AND DIRECTION OF TRAVEL: 1965 TO 1971

| Subject and year | All groups | Rest and Recuperation | | Non-Rest and Recuperation | |
|--------------------------------------|------------|------------------------|-------------------------|---------------------------|--------------------------|
| | | Personnel ¹ | Dependents ² | Westbound | Eastbound and northbound |
| Visitor arrivals:³ | | | | | |
| 1965 | 686,928 | — | — | 567,218 | 119,710 |
| 1966 | 835,456 | 6,970 | 4,531 | 682,355 | 141,600 |
| 1967 | 1,124,818 | 70,150 | 50,174 | 842,929 | 161,565 |
| 1968 | 1,314,571 | 101,129 | 96,740 | 919,104 | 197,598 |
| 1969 | 1,527,012 | 116,327 | 129,776 | 1,051,253 | 229,656 |
| 1970 | 1,798,591 | 110,815 | 121,866 | 1,255,890 | 310,020 |
| 1971 | 1,818,944 | 46,029 | 44,162 | 1,386,163 | 342,590 |
| Visitor days:⁴ | | | | | |
| 1965 | 6,321,185 | — | — | 5,842,345 | 478,840 |
| 1966 | 7,676,176 | 34,850 | 27,186 | 7,047,740 | 566,400 |
| 1967 | 10,106,661 | 350,750 | 301,044 | 8,808,607 | 646,260 |
| 1968 | 11,860,815 | 505,645 | 580,440 | 9,984,338 | 790,392 |
| 1969 | 13,664,858 | 581,635 | 778,656 | 11,385,943 | 918,624 |
| 1970 | 13,918,408 | 554,075 | 731,196 | 11,393,057 | 1,240,080 |
| 1971 | 14,902,528 | 230,145 | 264,972 | 13,037,051 | 1,370,360 |

¹All eastbound. Flights began in August 1966.

²All westbound.

³Overnight and longer only.

⁴Includes one-day visitors.

Source: Hawaii Visitors Bureau, *Revised Visitor Statistics, 1964-1970* (July 1971), pp. 1-3, and records.

Table 102.—RESIDENCE OF OVERNIGHT AND LONGER VISITORS TO HAWAII: 1960 TO 1970

| Residence | 1960 | 1965 | 1970 ¹ |
|---------------------------------|---------|---------|-------------------|
| Total | 296,500 | 686,500 | 1,564,500 |
| United States | 237,200 | 541,000 | 1,170,000 |
| Canada | 20,800 | 48,500 | 80,000 |
| Japan ² | 14,800 | 36,400 | 131,500 |
| Australia and New Zealand | 11,900 | 30,300 | 69,100 |
| Other Pacific and Asia | 8,900 | 18,200 | 52,500 |
| All others | 2,900 | 12,100 | 61,400 |

¹Excludes Rest and Recuperation visitors.

²A provisional estimate for 1971 is approximately 180,000.

Source: Hawaii Visitors Bureau, Research Department, November 1971.

Table 103.—CHARACTERISTICS OF WESTBOUND VISITORS TO HAWAII: 1951 TO 1971

| Year | California residents (percent) | Males per 1,000 females | Median age (years) | High status occupations ¹ (percent) | Persons per party | Arriving June 1-Aug. 31 (percent) | Arriving by sea (percent) | Repeat visitors ² (percent) | Pleasure trip (percent) | Staying in hotel (percent) | Average intended stay ³ (days) | Intending to visit Neighbor Islands ⁴ (percent) |
|------|--------------------------------|-------------------------|--------------------|--|-------------------|-----------------------------------|---------------------------|--|-------------------------|----------------------------|---|--|
| 1951 | 52.3 | 739 | 44.8 | 51.3 | 1.47 | 31.0 | 43.6 | 22.3 | 72.3 | (NA) | 25.0 | 63.9 |
| 1952 | 48.9 | 697 | 46.4 | 50.2 | 1.49 | 25.3 | 30.6 | 25.7 | 73.6 | 77.8 | 25.3 | 66.2 |
| 1953 | 47.3 | 666 | 46.9 | 50.4 | 1.49 | 31.5 | 31.1 | 23.5 | 77.5 | 77.0 | 23.9 | 68.4 |
| 1954 | 43.7 | 676 | 47.4 | 49.5 | 1.50 | 30.7 | 27.1 | 24.5 | 78.2 | 78.2 | 23.6 | 67.3 |
| 1955 | 43.8 | 668 | 46.9 | 48.3 | 1.50 | 32.0 | 23.3 | 25.6 | 75.6 | 79.7 | 22.0 | 66.2 |
| 1956 | 45.1 | 706 | 46.1 | 47.6 | 1.52 | 32.6 | 19.5 | 27.5 | 77.6 | 79.2 | 22.0 | 66.0 |
| 1957 | 47.9 | 688 | 46.4 | 47.2 | 1.52 | 35.5 | 24.9 | 27.4 | 76.2 | (NA) | 20.8 | 64.7 |
| 1958 | 45.6 | 765 | 45.3 | 49.7 | 1.49 | 33.2 | (NA) | 30.4 | 74.6 | (NA) | 20.7 | (NA) |
| 1959 | 46.0 | 701 | 45.9 | 47.2 | 1.56 | 35.4 | (NA) | 26.9 | 73.9 | (NA) | 18.1 | (NA) |
| 1960 | 42.5 | 743 | 45.2 | 51.7 | 1.54 | 33.3 | (NA) | 25.8 | 67.3 | (NA) | 16.9 | (NA) |
| 1961 | 46.9 | 749 | 45.4 | 52.3 | 1.49 | 36.5 | 12.3 | 29.1 | 68.4 | (NA) | 17.2 | (NA) |
| 1962 | 42.8 | 751 | 45.5 | 54.1 | 1.53 | 36.7 | 11.3 | 29.9 | 75.4 | (NA) | 16.8 | 57.2 |
| 1963 | 45.1 | 722 | 45.2 | 56.5 | 1.59 | 33.7 | 7.9 | 30.8 | 68.1 | 83.1 | 15.4 | 65.7 |
| 1964 | 46.5 | 780 | 45.5 | 59.4 | 1.58 | 33.2 | 6.8 | 30.6 | 71.9 | 83.4 | 14.2 | 67.6 |
| 1965 | 45.7 | 807 | 45.2 | 60.9 | 1.61 | 35.0 | 5.0 | 31.7 | 75.2 | 90.1 | 13.0 | 67.1 |
| 1966 | 39.7 | 798 | 45.3 | 59.9 | 1.58 | 30.9 | 4.1 | 32.1 | 71.6 | 87.1 | 12.7 | 64.1 |
| 1967 | 36.5 | 682 | 43.2 | 52.3 | 1.55 | 32.7 | 2.9 | 29.0 | 74.9 | 84.9 | 12.3 | 56.5 |
| 1968 | 34.2 | 631 | 41.7 | 48.3 | 1.52 | 31.9 | 2.1 | 28.5 | 76.8 | 84.6 | 12.1 | 54.9 |
| 1969 | 33.4 | 641 | 40.1 | 48.3 | 1.53 | 30.5 | 1.2 | 30.6 | 72.9 | 83.2 | 12.3 | 53.2 |
| 1970 | 35.2 | 663 | 40.7 | 49.6 | 1.55 | 33.1 | 0.4 | 32.8 | 74.8 | 84.0 | 10.9 | 54.8 |
| 1971 | 33.1 | 741 | 42.7 | 54.0 | 1.61 | 30.8 | 0.3 | 36.5 | 75.9 | 85.0 | 11.1 | 60.6 |

NA Not available

¹Party heads only. Professional, technical, business, managerial and official workers as a percent of all party heads responding to this question.

²Party heads only.

³Computed from total visitor days and total visitor arrivals for westbound visitors destined for Hawaii. These data differ somewhat from those in the source because of different computation procedures.

⁴Base includes nonrespondents to this question among surveyed visitors, assumed to intend not to visit the Neighbor Islands.

Source: Hawaii Visitors Bureau, *Annual Research Report, 1952-1970, Revised Visitor Statistics, 1964-1970* (July 1971); and records.

Table 104.—SOCIAL, ECONOMIC, AND TRIP CHARACTERISTICS OF VISITOR PARTY HEADS FROM THE MAINLAND UNITED STATES: 1970 AND 1971

| Subject | 1970 | 1971 |
|---|--------|--------|
| Residence: Percent from Pacific or Mountain States | 45.5 | 46.6 |
| Age: Median, in years | 38.9 | 42.3 |
| Marital status: Percent currently married | 76.1 | 77.4 |
| Education: Percent college graduates | 42.7 | 43.2 |
| Occupation: Percent high status ¹ | 51.0 | 57.0 |
| Family income before taxes: Median, in dollars | 18,300 | 20,800 |
| Arrangements: Percent using travel agent | 58.4 | 61.6 |
| Percent with prepaid or partly prepaid package tour | 37.8 | 41.1 |
| Islands visited: Oahu only | 43.7 | 37.8 |
| Hawaii | 35.6 | 41.1 |
| Maui | 37.0 | 43.0 |
| Kauai | 36.7 | 41.6 |
| Length of stay: Median, in days | 9.7 | 10.3 |
| Comparisons: Percent rating Hawaii as "above average" or "far superior" | 88.1 | 89.6 |

¹Professional, technical, business, managerial, or official.

Source: Hawaii Visitors Bureau, Research Department, *Visitor Reaction Survey 1970* (May 1971) and *Visitor Reaction Survey 1971* (April 1972).

Table 105.—OFF-ISLAND TRAVEL BY OAHU HOUSEHOLDS: 1970 AND 1971

| Destination | 1970 | 1971 |
|---|---------|---------|
| VISITED NEIGHBOR ISLANDS IN PAST YEAR | | |
| Households | 57,420 | 58,824 |
| Percent of all Oahu households | 36.0 | 34.2 |
| Person-trips ¹ | 438,655 | 562,964 |
| Hawaii | 167,127 | 181,274 |
| Maui | 125,455 | 144,682 |
| Lanai | 10,528 | 31,526 |
| Molokai | 14,476 | 59,111 |
| Kauai | 121,069 | 145,808 |
| Other | — | 563 |
| VISITED MAINLAND IN PAST YEAR | | |
| Households | 34,931 | 41,796 |
| Percent of all Oahu households | 21.9 | 24.3 |
| Person-trips ¹ | 201,705 | 230,108 |
| Los Angeles | 40,139 | 45,331 |
| San Francisco | 33,483 | 40,729 |
| Other California | 14,926 | 11,736 |
| Las Vegas | 6,051 | 15,187 |
| Washington, Oregon, Nevada, or Arizona | 26,625 | 34,056 |
| Other Western States | 5,849 | 13,116 |
| Midwestern States | 24,205 | 33,136 |
| South | 7,463 | 10,585 |
| East Coast | 34,392 | 13,576 |
| Other or moved to Hawaii | 8,472 | 12,656 |
| VISITED FOREIGN COUNTRIES IN PAST YEAR | | |
| Households | 11,963 | 16,684 |
| Percent of all Oahu households | 7.5 | 9.7 |
| Person-trips ¹ | 44,007 | 64,908 |
| Canada | 10,034 | 12,723 |
| Mexico or Central America | 2,772 | 6,880 |
| South America | 660 | 1,363 |
| Europe | 4,709 | 7,529 |
| Africa or Mid-East | 1,276 | — |
| Orient | 19,451 | 18,758 |
| Other Asia | 616 | 2,986 |
| Australia or New Zealand | 660 | 5,517 |
| Guam or South Pacific Islands | 3,829 | 9,152 |

¹Round trips counted as two trips.

Source: Hawaii Newspaper Agency, Inc., *Continuing Home Audit, 1971*, tables B056, B058, and B064, and records. Used with permission.

Table 106.—PASSENGERS ON SCHEDULED INTERISLAND FLIGHTS ORIGINATING IN HONOLULU, BY PLACE OF RESIDENCE: 1963, 1969, AND 1971

| Place of residence | 1963 | 1969 | 1971 | Percent distribution | | |
|--------------------------------------|---------|---------|-----------|----------------------|-------|-------|
| | | | | 1963 | 1969 | 1971 |
| All passengers | 448,300 | 959,300 | 1,261,000 | 100.0 | 100.0 | 100.0 |
| Oahu residents | 163,500 | 300,100 | 429,800 | 36.5 | 31.3 | 34.1 |
| Neighbor island residents | 69,900 | 131,200 | 213,900 | 15.6 | 13.7 | 17.0 |
| Mainland and foreign residents | 214,900 | 528,000 | 617,300 | 47.9 | 55.0 | 49.0 |

Source: Estimates by Aloha Airlines and Hawaiian Airlines.

Table 107.—HOTEL UNITS, BY GEOGRAPHIC AREA: 1952 TO 1972

| Geographic area | July 1952 | January 1960 | November 1968 | February 1972 | |
|------------------------------|--------------|-----------------|------------------|---------------|----------------------|
| | | | | Existing | Planned ¹ |
| The State | 2,805 | 6,825 | 21,243 | 35,797 | 17,393 |
| Oahu | 2,142 | 5,716 | 15,138 | 24,742 | 4,222 |
| Waikiki to Kahala | 1,788 | 5,290 | 13,286 | 21,612 | 2,773 |
| Other Honolulu | 354 | 373 | 1,132 | 2,257 | 210 |
| Other Oahu | — | 53 | 720 | 873 | 1,239 |
| Hawaii | 370 | 581 | 2,353 | 4,241 | 5,524 |
| Hilo and Hamakua | 176 | 249 | 926 | 1,547 | 740 |
| North and South Kohala | 27 | 18 | 324 | 338 | — |
| North and South Kona | 129 | 270 | 1,042 | 2,306 | 4,334 |
| Ka'u and Puna | 38 | 44 | 61 | 50 | 450 |
| Maui | 144 | 247 | 2,081 | 3,979 | 4,379 |
| Hana and Makawao | 62 | 74 | 96 | 111 | — |
| Wailuku and Kahului | 82 | 159 | 596 | 398 | 206 |
| Kihei and Maalaea | — | 4 | 80 | 444 | 3,096 |
| Lahaina | — | 10 | 1,309 | 3,026 | 1,077 |
| Lanai | 11 | 11 | 10 | 11 | — |
| Molokai | 23 | 33 | 123 | 105 | 1,351 |
| Kauai | 115 | 237 | 1,538 | 2,719 | 1,917 |
| Hanalei | 6 | — | 79 | 155 | 1,000 |
| Kapaa and Wailua | 24 | 120 | 333 | 1,348 | 805 |
| Lihue | 75 | 117 | 538 | 660 | 6 |
| Koloa | 10 | — | 576 | 544 | 106 |
| Waimea | — | — | 12 | 12 | — |

¹Includes 1,979 scheduled for completion in 1972, 3,142 for 1973, 1,116 for 1974, and 11,156 without definite completion date.

Source: Harris, Kerr, Forster & Company, unpublished data from 1952 and 1960 surveys; Hawaii Visitors Bureau, *Visitor Plant Inventory* for November 1968 and February 1972.

Table 108.—HOTEL OCCUPANCY RATES, EMPLOYMENT, AND PAYROLLS: 1960 TO 1971

| Year | Percent of rooms occupied (annual average) | | | | | Covered employment (annual average) | Wages and salaries | |
|------------|--|--------------|--------|------|-------|--|--------------------|-------------------------|
| | Waikiki | | Hawaii | Maui | Kauai | | Total (\$1,000) | Per worker (dollars) |
| | Large hotels | Other hotels | | | | | | |
| 1960 | 82.4 | 68.2 | (NA) | (NA) | (NA) | 4,235 | 13,364 | 3,155 |
| 1961 | 69.7 | 70.4 | (NA) | (NA) | (NA) | 4,666 | 14,227 | 3,049 |
| 1962 | 75.8 | 72.6 | 67.5 | 64.8 | 63.3 | 4,629 | 15,158 | 3,275 |
| 1963 | 79.2 | 75.6 | 69.6 | 62.7 | 65.4 | 5,621 | 19,070 | 3,392 |
| 1964 | 72.8 | 76.2 | 70.1 | 65.9 | 72.3 | 5,834 | 21,080 | 3,613 |
| 1965 | 82.6 | 81.6 | 71.9 | 63.9 | 71.0 | 6,308 | 23,438 | 3,716 |
| 1966 | 86.0 | 81.2 | 68.7 | 63.5 | 71.1 | 7,316 | 28,173 | 3,851 |
| 1967 | 90.8 | 89.8 | 71.3 | 71.1 | 79.4 | 8,944 | 34,927 | 3,905 |
| 1968 | 91.0 | 84.1 | 78.4 | 71.6 | 75.8 | 10,783 | 46,730 | 4,334 |
| 1969 | 81.9 | 79.3 | 76.4 | 67.1 | 62.5 | 12,546 | 58,212 | 4,640 |
| 1970 | | 74.1 | 68.3 | 66.7 | 58.0 | 13,613 | 66,924 | 4,916 |
| 1971 | | 58.9 | 62.9 | 66.9 | 60.1 | (NA) | (NA) | (NA) |

NA Not available.

Source: Hawaii Visitors Bureau, *Annual Research Report*, 1963 to 1970, and records; Hawaii State Department of Labor and Industrial Relations, *Employment and Payrolls in Hawaii* (annual) and records.

Table 109.—VISITOR EXPENDITURES PER VISITOR DAY ON OAHU: 1965—1966

(In dollars)

| Item | All visitors | Independent travelers | Prepaid tour travelers | Non-hotel travelers |
|----------------------------------|--------------|-----------------------|------------------------|---------------------|
| All items | 37.23 | 41.89 | 38.61 | 12.50 |
| Lodging | 10.84 | 12.57 | 11.55 | 1.24 |
| Food | 9.28 | 10.64 | 9.23 | 2.94 |
| Liquor | 2.52 | 2.97 | 2.25 | 1.03 |
| Night clubs | 3.08 | 3.27 | 3.53 | 1.19 |
| Other entertainment | 1.00 | 0.96 | 1.52 | — |
| Clothing | 4.30 | 4.73 | 4.48 | 1.79 |
| Ground transportation | 2.00 | 2.22 | 1.81 | 1.38 |
| Gifts and souvenirs | 2.20 | 2.26 | 2.48 | 1.37 |
| Photo supplies | 0.45 | 0.46 | 0.42 | 0.46 |
| Beauty and barber services | 0.34 | 0.42 | 0.34 | 0.13 |
| All other | 1.23 | 1.38 | 1.00 | 0.99 |

Source: First National Bank of Hawaii, "Visitor Expenditures in Honolulu," *Economic Indicators*, November 1967, p. 1.

Table 110.—NATIONAL, STATE, AND COUNTY PARKS: 1970-1972

| Park | | Federal acres, Dec. 31, 1971 | | Visits (thousands) | | | |
|---|--------------------------|---------------------------------|-----------|---------------------------------|--------|----------------------------------|-----------------------------|
| | | | | 1970 | 1971 | | |
| Hawaii Volcanoes National Park | | 207,335.89 | | 822.3 | 980.7 | | |
| Haleakala National Park | | 21,190.23 | | 197.4 | 254.8 | | |
| City of Refuge National Historical Park | | 180.78 | | 213.5 | 243.4 | | |
| County | State parks | | | | | County parks | |
| | Number of areas, 1970 | Acreage, June 30, 1971 | | Visits (thousands) ¹ | | Number of areas, Jan. 1, 1972 | Acreage, Jan. 1, 1972 |
| | | Total | Developed | 1970 | 1971 | | |
| Total | 41 | 15,584 | 487.7 | 9,520 | 13,007 | 376 | 6,334 |
| Hawaii | 12 | 1,446 | 206.3 | 2,075 | 2,205 | 90 | 1,155 |
| Maui | 10 | 394 | 47.0 | 1,058 | 1,112 | 53 | 496 |
| Honolulu | 14 | 5,929 | 77.4 | 3,119 | 3,644 | 190 | 4,470 |
| Kauai | 5 | 7,815 | 157.0 | 3,268 | 6,046 | 43 | 213 |

¹Years ended June 30.

Source: U.S. Department of the Interior, National Park Service, records; Hawaii State Department of Land and Natural Resources, Division of State Parks, records; County park departments, records.

Table 111.—ATTENDANCE AT MUSEUMS, STATE MONUMENTS, AND SIMILAR ATTRACTIONS: 1971

| Island and attraction | Attendance |
|---|------------|
| Oahu: | |
| Bernice P. Bishop Museum: | |
| Exhibition Halls | 113,176 |
| Planetarium | 66,282 |
| Falls of Clyde Maritime Museum | 11,535 |
| Diamond Head State Monument ¹ | 5,000 |
| Foster Botanical Gardens | 98,994 |
| Hawaiian Wax Museum | 98,804 |
| Honolulu Academy of Arts | 109,920 |
| Honolulu Zoo | 1,107,193 |
| Iolani Palace State Monument | 521,181 |
| Mission Museum | 16,168 |
| Mormon Temple Grounds, Laie | 257,589 |
| Pacific Submarine Museum | 42,658 |
| Paradise Park ² | 247,389 |
| Polynesian Cultural Center | 498,000 |
| Post Museum, Schofield Barracks | 39,000 |
| Puu O Mahuka State Monument ¹ | 8,000 |
| Queen Emma's Summer Palace | 13,340 |
| Royal Mausoleum State Monument ¹ | 26,000 |
| Sea Life Park | 451,000 |
| Ulu Mau Village | 55,000 |
| Ulu Po Heiau State Monument ¹ | 4,000 |
| U.S.S. Arizona Memorial | 367,816 |
| Waikiki Aquarium | 231,149 |
| Washington Place State Monument | — |
| Hawaii: | |
| Hikiau Heiau State Monument ¹ | 16,000 |
| Hulihee Palace State Monument | 17,869 |
| Kamuela Museum | 12,142 |
| Lava Tree State Monument ¹ | 43,000 |
| Lyman House Memorial Museum | 11,072 |
| Maui: | |
| Baldwin Home Missionary Museum | 28,569 |
| Carthaginian Whaleship Museum ³ | 35,246 |
| Hale Hoikeike | 3,621 |
| Hale Kii-Pihana State Monument ¹ | 10,000 |
| Hale Pa'i Printing Museum | 1,476 |

¹Year ended June 30, 1971.

²Calendar 1970.

³Sank 1972.

(Continued on next page)

Table 111.—ATTENDANCE AT MUSEUMS, STATE MONUMENTS, AND SIMILAR ATTRACTIONS: 1971 (continued)

| Island and attraction | Attendance |
|-------------------------------|------------|
| Kauai: | |
| Hanalei Museum | 7,000 |
| Hui O Laka Kokee Museum | 49,534 |
| Kauai Museum | 15,830 |
| Waioli Mission | 426 |

¹Year ended June 30, 1971.

²Calendar 1970.

³Sank 1972.

Source: Hawaii State Department of Land and Natural Resources, *Report to the Governor 1970-1971*, p. 94; Waikiki Aquarium, *Attendance of Visitors at Hawaii's Parks and Museums [1971]*; information compiled by the Hawaii State Department of Planning and Economic Development from the museums and other attractions.

Table 112.—RESIDENT AND VISITOR PARTICIPATION IN MAJOR OUTDOOR RECREATION ACTIVITIES: 1967

| Activity | Percent participating | | Participant days per month | | Number participating, average summer weekend day | |
|---|-----------------------|----------|----------------------------|----------|--|----------|
| | Residents | Visitors | Residents | Visitors | Residents | Visitors |
| Pleasure driving, sightseeing | 69.5 | 69* | 3.45 | 4.1* | 47,136 | 13,200 |
| Swimming | 68.2 | 78 | 4.30 | 4.1 | 53,369 | 13,200 |
| Playing outdoor sports, games | 55.9 | 2 | 3.90 | .07 | 45,982 | 225 |
| Picnicking | 54.5 | — | 2.32 | — | 29,419 | — |
| Sunbathing | 44.1 | 71 | 4.00 | 4.0 | 40,933 | 12,900 |
| Walking for pleasure | 41.8 | 65 | 3.46 | 3.7 | 33,692 | 11,900 |
| Motorecycling, bicycling | 37.3 | — | 4.27 | — | 37,155 | — |
| Attending outdoor sports, cultural events | 35.0 | 53 | 2.10 | 1.7 | 17,041 | 5,500 |
| Surfing | 32.7 | 11 | 3.27 | .4 | 23,093 | 1,300 |
| Scuba, skin diving | 26.4 | 7 | 1.93 | .3 | 10,260 | 800 |
| Fishing | 22.9 | 9 | 3.22 | .2 | 11,622 | 600 |
| Pleasure boating | 20.7 | 20 | 2.40 | .4 | 17,095 | 1,300 |
| Golf | 14.5 | 13 | 2.17 | .5 | 7,398 | 1,600 |
| Hiking | 10.9 | — | 2.67 | — | 6,789 | — |
| Shooting | 8.6 | — | 2.33 | — | 4,159 | — |
| Camping | 5.9 | 1 | 2.60 | .06 | 3,895 | 200 |
| Horseback riding | 5.9 | — | 2.60 | — | 3,579 | — |
| Hunting | 5.5 | 1 | 1.66 | .002 | 2,116 | 6 |
| Waterskiing | 3.6 | 2 | 1.00 | .07 | 1,826 | 225 |

*Pleasure driving only.

Source: Hawaii State Department of Planning and Economic Development, *Comprehensive Outdoor Recreation Plan (1970)*, pp. 48-50, 57, 59, and 61.

Table 113.—FRESHWATER GAME FISHING LICENSES AND HUNTING LICENSES ISSUED: 1953 TO 1971

| Fiscal year | Freshwater game fishing licenses | Hunting licenses |
|---------------|----------------------------------|------------------|
| 1952-53 | 2,617 | 4,695 |
| 1953-54 | 1,734 | 4,514 |
| 1954-55 | 1,950 | 4,522 |
| 1955-56 | 2,288 | 4,742 |
| 1956-57 | 2,595 | 5,179 |
| 1957-58 | 3,320 | 5,290 |
| 1958-59 | 2,383 | 5,222 |
| 1959-60 | 1,682 | 5,290 |
| 1960-61 | 3,014 | 6,214 |
| 1961-62 | 4,209 | 6,924 |
| 1962-63 | 4,264 | 7,905 |
| 1963-64 | 5,269 | 7,766 |
| 1964-65 | 4,357 | 7,613 |
| 1965-66 | 3,743 | 6,903 |
| 1966-67 | 3,424 | 7,142 |
| 1967-68 | 3,867 | 8,510 |
| 1968-69 | 3,798 | 8,629 |
| 1969-70 | 5,070 | 9,773 |
| 1970-71 | 5,551 | 10,302 |

Source: Hawaii State Department of Land and Natural Resources, Division of Fish and Game, records.

Table 114.—SELECTED RECREATIONAL ACTIVITIES: 1967 AND 1971

| Subject | Number |
|---|---------|
| Amusement and recreation establishments with payroll, 1967: | |
| Billiard and pool establishments | 15 |
| Bowling alleys | 29 |
| Motion picture theaters, except drive-in | 51 |
| Drive-in motion picture theaters | 5 |
| Golf courses, October 1971 | |
| Public, 9-hole | 2 |
| Public, 18-hole | 6 |
| Privately owned, open to public, 9-hole | 7 |
| Privately owned, open to public, 18-hole | 10 |
| Private, 9-hole | 2 |
| Private, 18-hole | 5 |
| Military, 9-hole | 2 |
| Military, 18-hole | 6 |
| Golf course attendance, 1971: | |
| Ala Wai Golf Course | 131,213 |
| Pali Golf Course | 78,000 |
| Other City and County of Honolulu golf courses | 141,139 |
| Sandy shoreline, six major islands (length in miles) | |
| Safe, clean, accessible, suitable for swimming | 24.4 |
| Suitable for swimming during part of the year | 24.3 |
| Unsafe, poor bottom, or otherwise unsuitable | 136.2 |
| Spectator sports home attendance: | |
| Baseball: Hawaii Islanders, 1971 season | 375,957 |
| Basketball: University of Hawaii, 1971-72 season | 157,539 |
| Football: University of Hawaii, 1971 season | 145,437 |
| Honolulu International Center Sports Arena, all sports events, 1971 | 449,697 |
| Skiing: | |
| Ski Association of Hawaii paid members, March 1971 | 270 |
| Annual permits for skiing on Mauna Kea, 1971 | 685 |

Source: *U.S. Census of Business: 1967*, BC67-SA13, table 2; Hawaii Visitors Bureau, *Hawaii Golf Courses* (mimeo. list, 1971); City and County of Honolulu, Department of Auditoriums and Department of Parks and Recreation, records; Hawaii State Department of Planning and Economic Development, *Hawaii's Shoreline* (1965), p. 7; Hawaii Islanders, records; University of Hawaii, Athletics Department records; Ski Association of Hawaii, records; Hawaii State Department of Land and Natural Resources, records.

Table 115.—CHARACTERISTICS OF SURFERS, FOR OAHU: 1970

(Surfers defined as persons who had surfed at least once in the preceding year.
Based on a telephone survey of 1,271 households.)

| Subject | Number |
|--|--------|
| Percent of households with one or more surfers | 21.5 |
| Surfers per 100 households | 35.6 |
| Surfers per 100 households with surfers | 165.6 |
| Male surfers (percent) | 87.2 |
| Female surfers (percent) | 12.8 |
| Under 14 years of age (percent) | 15.2 |
| 14 to 25 years of age (percent) | 70.1 |
| 26 years of age and over (percent) | 14.7 |
| Median age (years) | 18.6 |
| Median frequency per month | 4.6 |
| Males | 5.0 |
| Females | 1.0 |

Source: Robert N. Anderson and Howard Co., *Characteristics of Surfers in Hawaii* (preliminary draft, July 13, 1971). Quoted with permission of the authors.

Table 116.—PERFORMING ARTS: 1970-1971 SEASON

| Subject | Number |
|---|-------------|
| Theater groups: | |
| Number reporting | 8 |
| Productions | 52 |
| Performances | 402 |
| Attendance | 161,000 |
| Honolulu Symphony Orchestra: ¹ | |
| Performances | 142 |
| Attendance (1969-1970 season) | 136,000 |
| Expenditures (dollars) | 711,300 |
| Honolulu Chamber Music Series: | |
| Performances | 5 |
| Attendance | 1,500-2,000 |

¹Performance and attendance data exclude demonstration concerts by small symphony ensembles in schools.

Source: Hawaii State Department of Planning and Economic Development, *Statistics on Cultural Activities in Hawaii, 1970-1971* (Statistical Report 90, May 3, 1972).

Table 117.—HOUSEHOLDS OWNING PETS, FOR OAHU: 1970

| Subject | Percent of households |
|--|-----------------------|
| With one or more pets, Oahu total | 46.9 |
| Honolulu | 37.2 |
| Rest of Oahu | 59.2 |
| With one or more dogs ¹ | 24.7 |
| With one or more cats ² | 14.8 |

¹The total number of dogs owned by Oahu households was approximately 56,300, according to survey results. The City and County of Honolulu Department of Finance issued 31,559 dog licenses in 1970 and 37,693 in 1971.

²Represents approximately 48,700 cats.

Source: John M. Gooch, D.V.M., *Pet Survey* (Department of Health memorandum, January 13, 1971).

Table 118.—DRINKING AND SMOKING IN OAHU HOUSEHOLDS: 1971

| Subject | Number of households | Percent of Oahu households |
|--|----------------------|----------------------------|
| Buying alcoholic beverages | 131,752 | 76.6 |
| Beer | 125,904 | 73.2 |
| Wine | 85,828 | 49.9 |
| Liquor | 102,168 | 59.4 |
| With one or more regular smokers | 94,428 | 54.9 |
| With one or more members who permanently quit smoking in the past year | 12,212 | 7.1 |

Source: Hawaii Newspaper Agency, Inc., *Continuing Home Audit, 1971*, tables B097, B098, B099, B100, B102, and B104. Used with permission.

SECTION 12

ARMED FORCES

This section presents statistics relating to the armed forces and their dependents, civilian employment in national defense, Selective Service, veterans, military housing and land ownership, and expenditures by the armed forces.

There were approximately 51,000 officers and enlisted men (including 15,000 aboard ships homeported in Hawaii) and over 62,000 military dependents in the Islands as of July 1, 1971. 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 alone accounts for almost half of the current total.

The importance of national defense in Hawaii can be further measured by total expenditures (\$721,800,000), civilian employment (22,000), veterans in civil life (68,000), Federally-connected pupils in public schools (51,000), military housing (15,000 units), and land controlled by the armed forces (227,000 acres).

The Department of Planning and Economic Development has, since 1959, issued periodic reports on *Military Personnel and Dependents in Hawaii*. Other published sources include reports of the Bureau of the Census, the Director of Selective Service, the Administrator of Veterans Affairs, the Department of Defense, the Hawaii State Department of Labor and Industrial Relations, the Hawaii State Census Tract Committee, and the Honolulu Redevelopment Agency. Definitions used by these sources frequently differ to some degree, and care is accordingly necessary in comparing data issued by two or more agencies. Section 9 of the *Statistical Abstract of the United States: 1971* presents data on national defense and veterans affairs for other States and the entire nation.

Table 119.—ARMED FORCES AND DEPENDENTS: 1900 TO 1971

| Year | Active duty military personnel ¹ | Year | Active-duty military personnel, June 30 | | | Dependents located in Hawaii, March 31 ² |
|------------|---|------------|---|-------------------------|--------------------|---|
| | | | Shore-based | Afloat and mobile | | |
| | | | | Temporarily shore-based | Other ³ | |
| 1900 | 293 | 1951 | 27,603 | 7,588 | 7,671 | (NA) |
| 1905 | 328 | 1952 | 26,486 | 7,039 | 21,628 | (NA) |
| 1910 | 1,925 | 1953 | 24,785 | 8,595 | 12,437 | (NA) |
| 1915 | 9,820 | 1954 | 21,669 | 7,131 | 8,097 | 36,199 |
| 1920 | 6,652 | 1955 | 39,611 | 6,623 | 9,074 | (NA) |
| 1925 | 17,874 | 1956 | 39,688 | 7,278 | 10,220 | 49,955 |
| 1930 | 18,908 | 1957 | 38,523 | 9,850 | 9,171 | 53,654 |
| 1935 | 22,005 | 1958 | 35,849 | 6,594 | 10,823 | 56,976 |
| 1939 | 23,502 | 1959 | 37,536 | 7,034 | 10,446 | 50,882 |
| | | 1960 | 35,970 | 7,155 | 12,577 | 62,608 |
| | | 1961 | 37,681 | 6,384 | 13,524 | 63,172 |
| 1940 | 27,665 | 1962 | 41,615 | 5,737 | 28,084 | 63,889 |
| 1941 | (NA) | 1963 | 41,018 | 5,966 | 10,449 | 66,425 |
| 1942 | (NA) | 1964 | 45,714 | 6,462 | 18,484 | 68,138 |
| 1943 | 194,300 | 1965 | 40,184 | 4,170 | 8,862 | 72,981 |
| 1944 | 442,160 | 1966 | 28,695 | 5,014 | 15,924 | 69,048 |
| 1945 | 322,372 | 1967 | 34,370 | 5,374 | 13,118 | 57,253 |
| 1946 | 58,837 | 1968 | 33,987 | 8,573 | 10,356 | 61,940 |
| 1947 | 34,900 | 1969 | 33,739 | 5,400 | 7,375 | 65,925 |
| 1948 | 29,662 | 1970 | 33,337 | 7,102 | 10,085 | 57,382 |
| 1949 | 22,553 | 1971 | 28,352 | 3,848 | 9,677 | 57,816 |
| 1950 | 19,408 | | | | | |

NA Not available.

¹Shore-based only, 1939 to 1950; treatment of Navy personnel afloat and mobile activities for earlier years not specified. Data for 1900-1935 refer to an unspecified time of the year; 1939, to the quarterly average for the year; 1940-1950, to June 30.

²Except 1954, which refers to December 31, and 1956 and 1957, which refer to January 31.

³Navy personnel afloat, identified with the nearest port.

Source: Data for 1900-1935 from the Hawaii State Department of Planning and Economic Development, *Military Personnel and Dependents in Hawaii, July 1965* (Statistical Report 36, September 24, 1965), p. 7; 1939 from the U.S. Office of Business Economics, *Income of Hawaii* (1953), p. 20; 1940-1971 from Office of the Assistant Secretary of Defense, records.

Table 120.—MILITARY PERSONNEL, DEPENDENTS, AND FAMILIES: 1937 TO 1971
(Includes Navy and Coast Guard personnel afloat on a homeported basis and hence is not comparable to Department of Defense data in the preceding table.)

| Year, County, and service ¹ | Personnel and dependents | Military personnel | | | Dependents in Hawaii | Military families in Hawaii |
|--|--------------------------|--------------------|--------|--------------------------|----------------------|-----------------------------|
| | | Total | Ashore | Aboard ship ² | | |
| 1937 ³ | 30,272 | 24,237 | (NA) | (NA) | 6,035 | (NA) |
| 1950 ⁴ | 67,729 | 29,404 | (NA) | (NA) | 38,325 | 11,640 |
| 1959 ⁵ | 112,525 | 56,303 | (NA) | (NA) | 56,222 | (NA) |
| 1960 ⁶ | 112,938 | 52,881 | 41,927 | 10,954 | 60,057 | 19,631 |
| 1961 | 118,381 | 56,348 | 44,155 | 12,193 | 62,033 | 21,007 |
| 1962 | 122,933 | 59,702 | 48,020 | 11,682 | 63,231 | 21,973 |
| 1963 | 118,588 | 57,093 | 45,354 | 11,739 | 61,495 | 21,651 |
| 1964 | 128,930 | 59,840 | 47,959 | 11,881 | 69,090 | 21,631 |
| 1965 | 121,929 | 56,113 | 42,960 | 13,153 | 65,816 | 23,156 |
| 1966 | 112,359 | 49,737 | 31,476 | 18,261 | 62,622 | 21,154 |
| 1967 | 112,303 | 51,002 | 38,904 | 12,098 | 61,301 | 20,854 |
| 1968 | 107,746 | 48,613 | 36,712 | 11,901 | 59,133 | 21,818 |
| 1969 | 115,979 | 56,282 | 38,501 | 17,781 | 59,697 | 21,623 |
| 1970 | 111,549 | 53,768 | 39,822 | 13,946 | 57,781 | 20,568 |
| 1971 | 112,943 | 50,762 | 35,824 | 14,938 | 62,181 | 23,184 |
| ISLAND: 1971 | | | | | | |
| Oahu | 112,139 | 50,401 | 35,492 | 14,909 | 61,738 | 23,031 |
| French Frigate Shoals | 19 | 19 | 19 | — | — | — |
| Kure Atoll | 29 | 29 | 29 | — | — | — |
| Hawaii | 266 | 149 | 134 | 15 | 117 | 42 |
| Kauai | 328 | 120 | 120 | — | 208 | 78 |
| Maui | 162 | 44 | 30 | 14 | 118 | 33 |
| SERVICE: 1971 | | | | | | |
| Air Force | 27,056 | 9,043 | 9,043 | — | 18,013 | 5,828 |
| Army | 22,349 | 10,000 | 10,000 | — | 12,349 | 4,747 |
| Coast Guard | 2,510 | 1,312 | 609 | 703 | 1,198 | 395 |
| Marine Corps | 12,770 | 6,996 | 6,996 | — | 5,774 | 2,471 |
| Navy | 48,258 | 23,411 | 9,176 | 14,235 | 24,847 | 9,743 |

NA Not available

¹July 1 data unless otherwise specified.

²Navy and Coast Guard personnel aboard ships homeported in Hawaii, regardless of location on date specified.

³Army as of December 1; Navy, November 26. Excludes Coast Guard.

⁴As of April 1. Approximate totals.

⁵Air Force, Marine Corps and Navy as of March 31; Army, May 31; Coast Guard, January 1.

⁶As of April 1.

Source: Hawaii State Department of Planning and Economic Development, *Military Personnel and Dependents in Hawaii* (semi-annual or annual report).

Table 121.—FEDERAL MILITARY EXPENDITURES: 1970 AND 1971

| Subject | Millions of dollars | |
|--|---------------------|-------|
| | 1970 | 1971 |
| Total expenditures | 683.4 | 721.8 |
| By service: | | |
| Air Force | 113.2 | 120.5 |
| Army | 191.6 | 208.3 |
| Coast Guard | 22.2 | 14.7 |
| National Guard | 13.5 | 12.0 |
| Navy | 342.9 | 366.3 |
| By expenditure category: | | |
| Military payroll ¹ | 219.8 | 250.1 |
| Civilian payroll | 240.3 | 254.0 |
| Dependents and retired personnel | 41.8 | 43.3 |
| Supplies and services | 181.4 | 174.4 |

¹Includes transients (\$8.0 million in 1970).

Source: Bank of Hawaii, *Hawaii '71, Annual Economic Review* (August 1971) p. 47, and records.

Table 122.—MILITARY REAL PROPERTY CONTROLLED IN HAWAII: JUNE 30, 1960 AND 1970

| Subject | June 30, 1960: total | June 30, 1970 | | | |
|---------------------------------------|----------------------------|---------------|---------|---------|-----------|
| | | Total | Army | Navy | Air Force |
| Cost to U.S. Govt. ¹ | 855,122 | 1,047,218 | 244,877 | 646,131 | 156,210 |
| Acreage controlled | 252,647 | 226,539 | 153,122 | 66,636 | 6,781 |
| Owned ² | 34,968 | 175,225 | 106,605 | 62,563 | 6,057 |
| Public land ² | 166,880 | — | — | — | — |
| Temporary use | 30,037 | 12,721 | 11,679 | 706 | 336 |
| Leased | 20,087 | 36,954 | 34,006 | 2,750 | 198 |
| Easements | 675 | 1,639 | 832 | 617 | 190 |

¹Land and improvements. In thousands of dollars.

²“Some lands previously recorded as public land within the United States were reclassified [in 1966] in connection with certain Statehood agreements pertaining to the State of Hawaii.”

Source: U.S. House of Representatives, Committee on Government Operations, 92nd Congress, 1st Session, *Federal Real and Personal Property Inventory Report (Civilian and Military) of the United States Government Covering Its Properties Located in the United States, in the Territories, and Overseas* (biennial report).

Table 123.—SELECTIVE SERVICE REGISTRANTS, NATIONAL GUARD STRENGTH, VETERANS IN CIVIL LIFE, DEFENSE EMPLOYMENT, FEDERALLY-CONNECTED PUPILS, AND ARMED FORCES HOUSING: 1969 TO 1971

| Subject | 1969 | 1970 | 1971 |
|---|--------|--------|--------|
| Selective service registrants from Hawaii on active duty with the armed forces, December 31 | 16,380 | 13,780 | 12,749 |
| National Guard strength, June 30 | 2,446 | 3,929 | 4,510 |
| Hawaii Air National Guard | 1,493 | 1,604 | 1,569 |
| Hawaii Army National Guard | 953 | 2,325 | 2,941 |
| Veterans in civil life, June 30 ¹ | 64,000 | 68,000 | (NA) |
| War veterans | 53,000 | 57,000 | (NA) |
| Others | 11,000 | 11,000 | (NA) |
| Civilian employment, December 12 | 23,000 | 21,520 | 21,650 |
| Air Force | 3,900 | 3,500 | 3,400 |
| Army | 6,400 | 5,950 | 6,000 |
| Navy | 12,700 | 12,070 | 12,250 |
| Federally-connected pupils in public schools, Fall | 54,980 | 51,181 | (NA) |
| Housing units operated by the armed forces, July 1 ² | 14,282 | 14,425 | 14,872 |
| Owned by the armed forces | 13,631 | 13,627 | 14,085 |
| Leased from private owners | 651 | 798 | 787 |

NA Not available.

¹According to the 1970 U.S. Census of Population, 89,098 civilian males 16 years old and over (39.9 percent of all civilian males 16 and over) were veterans.

²The 1970 data refer to April 1.

Source: National Headquarters, Selective Service System, records; *Annual Reports Department of Defense, State of Hawaii* (annual) and records; *Annual Report, Administrator of Veterans Affairs* (annual); Hawaii State Department of Labor and Industrial Relations, *Labor Force Estimates* (monthly); Hawaii State Department of Education, *Report on Federally Connected Pupils, Hawaii Public Schools* (annual); Hawaii State Census Tract Committee, *The Geographic Distribution of Government Housing in Hawaii* (annual).

SECTION 13

GOVERNMENT FINANCES AND EMPLOYMENT

This section presents statistics relating to the financial structure and civilian employment of Federal, State and local government 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. The Counties establish real property tax rates but, except for licenses, permits and fees, tax collections are the responsibility of the State.

Tax collections by Federal, State and County governments in fiscal 1971 reached \$1,106 million, almost double the level reported five years earlier. The 1971 total included \$608 million in U.S. taxes, \$481 million in State taxes, and \$17 million in County licenses and fees. Individual income taxes accounted for 83 percent of Federal collections and 24 percent of State collections in Hawaii in 1971.

State revenue receipts totalled \$631 million, chiefly from the General Excise and Use tax (\$178 million) and Federal grants-in-aid (\$147 million). The largest expenditure item in the State accounts for 1971 was education, with \$260 million (out of \$685 million) going to the University of Hawaii and public schools and libraries.

The Counties, in contrast, depended largely on the real property tax (assessed and collected by the State) for their revenues, and reported police and fire protection as their largest single expenditure item. Assessed valuation of the State doubled between 1964 and 1971. Public bonded debt outstanding at the end of 1971 exceeded \$925 million. Average government employment reported for 1971 was 78,140, about 55 percent over the 1961 average but still less than the 1944 peak of 78,617. The 1971 total included 32,840 Federal workers, 34,920 persons employed by the State, and 10,850 persons on County payrolls.

Important sources for statistics on government in Hawaii include the 1967 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*. Comparable Mainland statistics appear in the *Statistical Abstract of the United States: 1971*, Sections 14 and 15.

Table 124.—FEDERAL, STATE, AND COUNTY TAX COLLECTIONS: 1852 TO 1971
(In thousands of dollars)

| Biennium ¹ | Kingdom of Hawaii | Biennium ¹ | Kingdom of Hawaii | Biennium or year ¹ | Hawaiian Government ² |
|-----------------------|-------------------|-----------------------|-------------------|-------------------------------|----------------------------------|
| 1852-1853 | 340 | 1870-1872 | 819 | 1888-1890 | 2,304 |
| 1854-1855 | 481 | 1872-1874 | 780 | 1890-1892 | 2,668 |
| 1856-1858 | 437 | 1874-1876 | 756 | 1892-1894 | 2,282 |
| 1858-1860 | 438 | 1876-1878 | 861 | | |
| 1860-1862 | 423 | 1878-1880 | 1,239 | 1894 | 986 |
| 1862-1864 | 451 | 1880-1882 | 1,545 | 1895 | 1,247 |
| 1864-1866 | 587 | 1882-1884 | 1,903 | 1896 | 1,491 |
| 1866-1868 | 732 | 1884-1886 | 1,865 | 1897 | 1,600 |
| 1868-1870 | 743 | 1886-1888 | 2,045 | 1898 | 1,855 |

| Year | Federal ³ | Territorial ⁴ | Year | Federal ³ | Territorial ⁴ | County ⁵ |
|------------|----------------------|--------------------------|------------|----------------------|--------------------------|---------------------|
| 1900 | 7 | 2,629 | 1925 | 5,750 | 12,224 | — |
| 1901 | 102 | 1,986 | 1926 | 6,797 | 13,028 | — |
| 1902 | 70 | 1,808 | 1927 | 5,331 | 14,198 | — |
| 1903 | 40 | 1,844 | 1928 | 6,244 | 15,048 | — |
| 1904 | 45 | 1,835 | 1929 | 5,607 | 15,484 | — |
| 1905 | 44 | 1,794 | | | | |
| 1906 | 43 | 2,697 | 1930 | 5,516 | 16,110 | — |
| 1907 | 48 | 2,058 | 1931 | 4,816 | 16,574 | — |
| 1908 | 57 | 2,114 | 1932 | 3,786 | 15,554 | — |
| 1909 | 79 | 2,342 | 1933 | 3,067 | 12,061 | — |
| | | | 1934 | 5,747 | 12,764 | 1,603 |
| 1910 | 209 | 2,894 | 1935 | 5,692 | 14,590 | — |
| 1911 | 219 | 2,786 | 1936 | 8,034 | 17,532 | — |
| 1912 | 266 | 3,212 | 1937 | 11,726 | 18,308 | — |
| 1913 | 241 | 3,309 | 1938 | 14,395 | 21,695 | — |
| 1914 | 247 | 2,963 | 1939 | 11,894 | 22,307 | — |
| 1915 | 435 | 3,172 | | | | |
| 1916 | 694 | 3,991 | 1940 | 9,875 | 24,429 | 1,901 |
| 1917 | 1,535 | 4,525 | 1941 | 13,991 | 26,726 | — |
| 1918 | 9,687 | 5,330 | 1942 | 32,417 | 27,833 | 2,146 |
| 1919 | 5,832 | 5,871 | 1943 | 76,482 | 36,590 | 2,103 |
| | | | 1944 | 150,781 | 40,477 | 2,041 |
| 1920 | 11,930 | 7,547 | 1945 | 173,999 | 40,451 | 2,175 |
| 1921 | 20,680 | 9,905 | 1946 | 141,554 | 43,754 | 2,312 |
| 1922 | 15,515 | 9,970 | 1947 | 106,314 | 46,671 | 2,693 |
| 1923 | 4,148 | 9,918 | 1948 | 108,178 | 62,497 | 3,233 |
| 1924 | 5,797 | 11,491 | 1949 | 91,203 | 66,295 | 3,715 |

¹Two-year periods ended December 31, 1853 and 1855, and March 31, 1858 to 1894; nine-month period ended December 31, 1894; calendar years 1895 to 1898.

²Kingdom of Hawaii to January 17, 1893, provisional government to July 5, 1894, and Republic of Hawaii to June 14, 1900.

³Sixteen-day period ended June 30, 1900, and 12-month periods ended June 30, 1901 and thereafter. Internal revenue only.

⁴Twelve-month periods ended June 30.

⁵Previous calendar year for the City and County of Honolulu, through 1961, and for the Counties of Hawaii, Kauai, and Maui, through 1966; fiscal years ended June 30 for the City and County of Honolulu beginning in 1961 and for the Counties of Hawaii, Kauai, and Maui beginning in 1967. Comparable data not available before 1942 (except 1934 and 1940).

(Continued on next page)

Table 124.—FEDERAL, STATE, AND COUNTY TAX COLLECTIONS: 1852 TO 1971 (continued)
(In thousands of dollars)

| Year | Total collections | Federal ³ | Territorial or State ⁴ | County ⁵ |
|------|-------------------|----------------------|-----------------------------------|---------------------|
| 1950 | 150,558 | 81,401 | 65,148 | 4,009 |
| 1951 | 173,912 | 98,023 | 71,540 | 4,349 |
| 1952 | 216,481 | 134,996 | 76,834 | 4,651 |
| 1953 | 218,074 | 136,319 | 76,704 | 5,051 |
| 1954 | 219,741 | 136,175 | 78,263 | 5,303 |
| 1955 | 210,799 | 126,340 | 79,097 | 5,362 |
| 1956 | 231,600 | 140,693 | 85,386 | 5,521 |
| 1957 | 253,914 | 154,274 | 93,831 | 5,809 |
| 1958 | 287,176 | 166,306 | 114,578 | 6,292 |
| 1959 | 314,277 | 175,176 | 132,693 | 6,408 |
| 1960 | 372,012 | 216,939 | 148,256 | 6,817 |
| 1961 | 414,517 | 242,358 | 164,816 | 7,343 |
| 1962 | 453,021 | 272,265 | 172,762 | 7,994 |
| 1963 | 454,641 | 271,153 | 175,260 | 8,228 |
| 1964 | 493,311 | 293,453 | 191,235 | 8,623 |
| 1965 | 512,066 | 290,164 | 212,712 | 9,190 |
| 1966 | 596,646 | 323,614 | 263,239 | 9,793 |
| 1967 | 652,681 | 342,842 | 297,410 | 12,429 |
| 1968 | 778,291 | 440,237 | 324,323 | 13,731 |
| 1969 | 922,122 | 526,624 | 379,881 | 15,617 |
| 1970 | 1,057,376 | 602,998 | 438,397 | 15,981 |
| 1971 | 1,105,657 | 608,051 | 480,690 | 16,916 |

¹Two-year periods ended December 31, 1853 and 1855, and March 31, 1858 to 1894; nine-month period ended December 31, 1894; calendar years 1895 to 1898.

²Kingdom of Hawaii to January 17, 1893, provisional government to July 5, 1894, and Republic of Hawaii to June 14, 1900.

³Sixteen-day period ended June 30, 1900, and 12-month periods ended June 30, 1901 and thereafter. Internal revenue only.

⁴Twelve-month periods ended June 30.

⁵Previous calendar year for the City and County of Honolulu, through 1961, and for the Counties of Hawaii, Kauai, and Maui, through 1966; fiscal years ended June 30 for the City and County of Honolulu beginning in 1961 and for the Counties of Hawaii, Kauai, and Maui beginning in 1967. Comparable data not available before 1942 (except 1934 and 1940).

Source: U.S. Treasury Department, Internal Revenue Service, records (for Federal collections, 1900-1941); Robert M. Kamins, *The Tax System of Hawaii* (1952), pp. 164, 166, and 173-176 (for Hawaiian Government collections, 1852-1941); Chamber of Commerce of Honolulu, Tax Study Committee, *Government in Hawaii, 1951*, p. 7 (for all levels, 1942-1948); Chamber of Commerce of Honolulu Committee on Legislation, *Facts and Faces*, 4th ed. (1955), p. 17 (for County collections, 1934); Tax Foundation of Hawaii, *A Compendium of Governmental Finances in Hawaii, 1949-1968*, pp. 30-32 (for Federal and County collections, 1949-1967, and State collections, 1949-1966); Tax Foundation of Hawaii, *Government in Hawaii* for 1970, p. 18, 1971, pp. 18 and 34, and 1972, pp. 18 and 34 (for Federal and County collections, 1968-1971, and State collections, 1967-1971); Tax Foundation of Hawaii, records (for County collections in 1940).

Table 125.—FEDERAL, STATE, AND COUNTY TAX COLLECTIONS, BY SOURCE: 1961 TO 1971
(Years ended June 30. In thousands of dollars.)

| Level of government and source | 1961 | 1966 | 1970 | 1971 |
|---|---------|---------|-----------|-----------|
| Total, all levels | 414,517 | 596,646 | 1,057,376 | 1,105,657 |
| Federal collections | 242,358 | 323,614 | 602,998 | 608,051 |
| Individual income and employment | 185,655 | 240,711 | 490,710 | 507,062 |
| Corporation income and excess profits | 42,657 | 63,323 | 84,519 | 74,022 |
| Other sources | 14,046 | 19,580 | 27,769 | 26,967 |
| State | 164,816 | 263,239 | 438,397 | 480,690 |
| General excise and use | 68,147 | 93,722 | 162,904 | 178,030 |
| Fuel | 16,430 | 18,455 | 26,181 | 27,260 |
| Public service companies | 4,645 | 8,985 | 14,105 | 13,620 |
| Corporate income | 5,834 | 9,951 | 14,578 | 12,876 |
| Individual net income | 32,052 | 47,342 | 105,016 | 116,231 |
| Real property | 21,886 | 57,399 | 75,839 | 87,893 |
| Unemployment compensation | 5,334 | 10,873 | 14,246 | 14,018 |
| Other sources | 10,488 | 16,512 | 25,528 | 30,762 |
| Counties ¹ | 7,343 | 9,793 | 15,981 | 16,916 |
| Motor vehicle weight | 4,694 | 6,034 | 10,070 | 10,451 |
| Other sources | 2,649 | 3,759 | 5,911 | 6,465 |

¹Previous calendar year for Honolulu, 1961, and Hawaii, Kauai, and Maui, 1961 and 1966.
Source: Tax Foundation of Hawaii, *Government in Hawaii, 1972*, pp. 18 and 34.

**Table 126.—ESTIMATED TAX BURDEN FOR A FOUR-PERSON FAMILY
WITH A GROSS INCOME OF \$16,408: 1970**

| Tax | Dollars |
|---|---------|
| Total tax burden, direct and indirect | 5,559 |
| Direct taxes | 4,410 |
| State | 1,073 |
| Income (on \$16,408) | 693 |
| General excise (on purchases and \$696 rent income) | 304 |
| Fuel (on 997 gal.) | 50 |
| Liquor (on \$100 of purchases) | 15 |
| Special licenses (hunting and fishing) | 11 |
| County | 458 |
| Property (on \$37,894 home) | 366 |
| Fuel (on 997 gal.) | 35 |
| Car weight (on two 3,800 lb. automobiles) | 57 |
| Federal | 2,879 |
| Income (on \$16,408) | 2,130 |
| Fuel (on 997 gal.) | 40 |
| Automobile ¹ | 44 |
| Social Security | 624 |
| Liquor (5 cases of beer and 12 qts. of liquor) | 30 |
| Telephone | 11 |
| Employment taxes, paid by employer | 1,149 |
| Unemployment compensation | 163 |
| Workmen's compensation | 256 |
| Temporary disability insurance | 106 |
| Social Security | 624 |

¹Annual average for automobiles with 10-year, 100,000-mile useful life, including oil and tires.

Source: Tax Foundation of Hawaii, *Hawaii Finance in Brief, March 1972*.

Table 127.—STATE REVENUE RECEIPTS BY SOURCE, 1970 AND 1971, AND STATE OPERATING EXPENDITURES, BY FUNCTION, 1961 TO 1971
(For years ended June 30. In thousands of dollars)

| Source of revenues | Total, general and special funds | | General fund | | Special funds | |
|---------------------------------------|---|---------|--------------|---------|---------------|---------|
| | 1970 | 1971 | 1970 | 1971 | 1970 | 1971 |
| All revenue receipts | 577,643 | 630,598 | 454,231 | 497,854 | 123,412 | 132,744 |
| Tax revenues | 354,045 | 383,668 | 322,121 | 351,550 | 31,924 | 32,118 |
| General excise | 162,867 | 178,048 | 162,867 | 178,048 | — | — |
| Individual income | 105,019 | 116,233 | 105,019 | 116,233 | — | — |
| Other taxes | 86,159 | 89,387 | 54,235 | 57,269 | 31,924 | 32,118 |
| Federal grants-in-aid | 139,412 | 147,193 | 99,144 | 109,093 | 40,268 | 38,100 |
| Earnings—gen. depts. | 29,002 | 34,788 | 16,976 | 19,514 | 12,026 | 15,274 |
| Earnings—pub. serv. int. | 15,865 | 23,860 | 583 | 742 | 15,282 | 23,118 |
| Interest earned | 10,349 | 11,921 | 4,835 | 5,988 | 5,515 | 5,933 |
| Other sources | 28,970 | 29,168 | 10,572 | 10,967 | 18,397 | 18,201 |
| | State government operating expenditures | | | | | |
| Functions | 1961 | 1966 | 1970 | 1971 | | |
| All expenditures | 188,891 | 303,588 | 570,214 | 685,058 | | |
| General government—control | 3,964 | 5,543 | 10,326 | 11,576 | | |
| General government—staff | 7,779 | 9,859 | 20,512 | 26,285 | | |
| Public safety | 24,936 | 18,651 | 24,810 | 23,581 | | |
| Highways | 11,130 | 23,712 | 11,890 | 14,946 | | |
| Natural resources | 8,620 | 11,740 | 14,589 | 19,608 | | |
| Health and sanitation | 4,020 | 5,484 | 8,568 | 10,939 | | |
| Hospitals and institutions | 11,348 | 17,178 | 27,019 | 39,941 | | |
| Public welfare | 9,979 | 20,125 | 48,796 | 65,683 | | |
| Higher education | 13,097 | 38,576 | 76,550 | 90,723 | | |
| Public schools | 51,282 | 85,382 | 134,534 | 160,896 | | |
| Libraries and other education | 1,665 | 2,287 | 6,779 | 7,982 | | |
| Recreation | 1,103 | 439 | 1,346 | 1,699 | | |
| Utilities and other enterprises | 8,617 | 7,621 | 18,642 | 26,112 | | |
| Interest | 3,480 | 6,411 | 12,290 | 15,559 | | |
| Bond redemptions | 6,072 | 9,224 | 15,868 | 18,949 | | |
| Retirement and pension | 5,938 | 11,139 | 23,581 | 24,356 | | |
| Unemployment compensation | 8,556 | 10,703 | 17,377 | 32,978 | | |
| Grants-in-aid to Counties | — | 9,363 | 13,607 | 16,345 | | |
| Cash capital improvements | — | — | 65,431 | 56,174 | | |
| Other expenditures | 7,306 | 10,151 | 17,698 | 20,729 | | |

Source: Tax Foundation of Hawaii, *Government in Hawaii, 1972*, pp. 21 and 41.

**Table 128.—OPERATING REVENUES, BY SOURCE, AND OPERATING EXPENDITURES, BY OBJECT,
FOR COUNTIES: 1971**

(For year ended June 30. In thousands of dollars.)

| Subject | City and County of Honolulu | County of Maui | County of Hawaii | County of Kauai |
|--------------------------------------|--------------------------------|-------------------|---------------------|--------------------|
| OPERATING REVENUES | | | | |
| Total | 122,424 | 11,429 | 19,087 | 8,300 |
| Real property taxes | 73,010 | 4,609 | 7,665 | 2,645 |
| Other taxes | 17,167 | 1,574 | 1,897 | 926 |
| Licenses, fees, permits, fines | 4,916 | 385 | 578 | 154 |
| Departmental earnings | 7,391 | 1,016 | 801 | 307 |
| State grants | 7,397 | 3,804 | 5,351 | 3,580 |
| Federal grants | 10,095 | — | 1,778 | 492 |
| Land sales | 567 | — | 543 | — |
| Other sources | 1,881 | 42 | 473 | 197 |
| OPERATING EXPENDITURES | | | | |
| Total | 125,709 | 11,849 | 14,778 | 8,291 |
| General government | 12,680 | 1,640 | 3,319 | 1,244 |
| Police and fire | 27,962 | 3,057 | 4,480 | 2,258 |
| Other protection | 6,192 | 263 | 367 | 199 |
| Highways | 9,262 | 1,629 | 1,779 | 1,350 |
| Health and sanitation | 11,579 | 330 | 448 | 393 |
| Recreation | 9,228 | 793 | 1,380 | 687 |
| Interest | 7,059 | 346 | 111 | 155 |
| Bond redemption | 10,945 | 801 | 429 | 258 |
| Pension and retirement | 6,373 | 1,178 | 1,265 | 541 |
| Urban redevelopment | 8,677 | — | — | — |
| Miscellaneous | 3,878 | 788 | 649 | 1,204 |
| Cash cap. improvement | 11,874 | 1,025 | 550 | — |

Source: Tax Foundation of Hawaii, *Government in Hawaii, 1972*, pp. 30, 31, 42, and 43.

Table 129.—GENERAL EXCISE AND USE TAX BASE AND COLLECTIONS: 1961, 1970, AND 1971

| Source of revenue | Tax base (\$1,000) | | | Tax collections (\$1,000) | | |
|---------------------------------|--------------------|-----------|-----------|---------------------------|---------|---------|
| | 1961 ¹ | 1970 | 1971 | 1961 ¹ | 1970 | 1971 |
| Total | 2,522,318 | 6,207,690 | 6,390,337 | 66,221 | 172,291 | 178,449 |
| Retailing | 859,563 | 1,895,089 | 2,030,170 | 30,074 | 75,792 | 81,193 |
| Services | 203,354 | 504,191 | 523,824 | 7,113 | 20,162 | 20,952 |
| Contracting | 267,340 | 782,972 | 692,938 | 9,357 | 31,309 | 27,716 |
| Theater, amuse., etc. | 21,911 | 43,588 | 48,503 | 766 | 1,743 | 1,940 |
| Interest | 19,900 | 35,704 | 43,275 | 696 | 1,428 | 1,727 |
| Commissions | 41,776 | 86,799 | 98,044 | 1,461 | 3,472 | 3,922 |
| Hotel rentals | 171,162 | 176,923 | 198,539 | 5,988 | 7,077 | 7,942 |
| Other rentals | | 354,745 | 375,067 | | 14,190 | 15,003 |
| Consumption | 49,850 | — | — | 1,734 | — | — |
| Use (4%) | — | 72,138 | 82,186 | — | 2,885 | 3,287 |
| All others | 25,124 | 60,691 | 66,822 | 863 | 2,410 | 2,673 |
| Public utilities airlines | 14,786 | — | — | 518 | — | — |
| Insurance solicitors | 5,861 | 17,908 | 20,852 | 88 | 358 | 417 |
| Sugar processing | 118,398 | 175,337 | 190,209 | 2,122 | 877 | 951 |
| Pineapple canning | 93,777 | 114,634 | 124,548 | 1,906 | 573 | 623 |
| Producing | 53,126 | 74,642 | 75,487 | 316 | 373 | 377 |
| Manufacturing | 168,514 | 285,251 | 284,929 | 920 | 1,426 | 1,425 |
| Blind vendors | 546 | 1,048 | 736 | 3 | 5 | 4 |
| Wholesaling | 359,725 | 854,660 | 918,425 | 1,896 | 4,273 | 4,592 |
| Services (intermediary) | 13,200 | 27,138 | 30,387 | 71 | 136 | 152 |
| Compensating | 34,398 | — | — | 181 | — | — |
| Use (½%) | — | 644,232 | 585,395 | — | 3,221 | 2,927 |
| Payment of est. tax | — | — | — | — | 13 | -17 |
| Disaster refunds | — | — | — | -26 | — | — |
| Penalties and interest | — | — | — | 175 | 566 | 644 |

¹General excise, consumption, and compensating tax.
 Source: Hawaii State Department of Taxation, annual tabular releases.

Table 130.—ASSESSED VALUATION OF REAL PROPERTY: 1860 TO 1972

(In thousands of dollars. Real property has been legally assessed at 70 percent of market value since 1957. The ratio was 60 percent from 1952 to 1956, 30 percent from 1943 to 1951, and unspecified for earlier years.)

| Year | Assessor's gross valuation | Valuation for tax rate purposes | Year | Assessor's gross valuation | Valuation for tax rate purposes |
|-------------------------|----------------------------|---------------------------------|-------------------------|----------------------------|---------------------------------|
| 1860 ¹ | 3,417 | (NA) | 1960 | 3,174,073 | 1,820,104 |
| 1870 | 5,396 | (NA) | 1961 | 3,327,737 | 1,958,352 |
| 1880 | 12,194 | (NA) | 1962 | 3,630,203 | 2,146,472 |
| 1890 | 18,483 | (NA) | 1963 | 3,810,422 | 2,270,903 |
| 1900 | 46,608 | (NA) | 1964 ² | 2,988,028 | 2,544,552 |
| 1910 | 75,793 | (NA) | 1965 | 4,574,005 | 2,749,162 |
| 1920 | 155,238 | 144,734 | 1966 | 5,036,156 | 3,069,066 |
| 1930 | 283,903 | 202,102 | 1967 | (NA) | 3,416,194 |
| 1940 | 350,734 | 183,048 | 1968-1969 | 6,044,461 | 3,639,215 |
| 1950 | 772,784 | 333,644 | 1969-1970 | 6,555,382 | 4,062,060 |
| 1959 | 2,211,810 | 1,152,398 | 1970-1971 | 7,663,518 | 4,627,047 |

| County | Assessor's gross valuation, 1971-1972 | | | Total exemptions, 1971-1972 | Assessor's net taxable valuation, 1971-1972 | Valuation for tax rate purposes, 1971-1972 |
|-----------------|---------------------------------------|-----------|-------------|-----------------------------|---|--|
| | Total | Land | Improvement | | | |
| The State | 8,564,188 | 4,669,721 | 3,894,467 | 3,243,258 | 5,320,930 | 5,278,571 |
| Honolulu | 7,007,744 | 3,704,010 | 3,303,734 | 2,795,155 | 4,212,589 | 4,182,624 |
| Maui | 497,949 | 288,572 | 209,377 | 139,293 | 358,656 | 352,492 |
| Hawaii | 761,026 | 483,402 | 277,624 | 234,182 | 526,844 | 525,510 |
| Kauai | 297,469 | 193,737 | 103,732 | 74,628 | 222,841 | 217,945 |

NA Not Available.

¹Earliest year available. The first real property tax law was enacted in 1859.

²Tax exempt property assessed at \$1 rather than 70 percent of market value.

Source: *Biennial Report of the Minister of Finance* for 1870 and 1872; *Report of the Auditor General* for 1886 and 1892; *Report of the Governor . . . 1901*; *Report of the Treasurer . . . 1935*; *Report of the Tax Commissioner* for 1940-1954; Hawaii State Department of Taxation, annual tabular releases for 1955-1971.

Table 131.—STATE INCOME TAX RESIDENT RETURNS FOR 1968, BY ADJUSTED GROSS INCOME CLASSES

| Adjusted gross income class | Number of returns ¹ | Adjusted gross income ² (\$1,000) | Net taxable income (\$1,000) | Tax liability (\$1,000) |
|------------------------------|--------------------------------|--|------------------------------|-------------------------|
| Total | 255,022 | 2,009,594 | 1,297,215 | 77,015 |
| Taxable returns | 217,455 | 1,974,704 | 1,297,215 | 77,015 |
| \$600 to \$4,999 | 73,040 | 190,626 | 104,858 | 4,089 |
| \$5,000 to \$9,999 | 68,437 | 506,010 | 312,982 | 15,649 |
| \$10,000 to \$14,999 | 44,579 | 544,282 | 352,368 | 19,691 |
| \$15,000 to \$19,999 | 18,763 | 320,006 | 219,286 | 13,728 |
| \$20,000 to \$24,999 | 6,331 | 139,698 | 100,069 | 6,849 |
| \$25,000 to \$49,999 | 5,085 | 165,108 | 123,761 | 9,430 |
| \$50,000 to \$99,999 | 965 | 63,067 | 48,818 | 4,265 |
| \$100,000 to \$149,999 | 156 | 18,507 | 14,172 | 1,320 |
| \$150,000 and over | 99 | 27,400 | 20,902 | 1,993 |
| Non-taxable returns | 37,567 | 34,890 | - | - |
| Loss | 611 | -3,409 | - | - |
| Under \$600 | 22,580 | 6,281 | - | - |
| \$600 to \$4,999 | 13,348 | 19,834 | - | - |
| \$5,000 and over | 1,028 | 8,775 | - | - |

¹The median for taxable returns was \$7,474 (\$3,815 for single returns and \$11,235 for joint returns); for taxable and non-taxable returns, it was \$6,180 (\$2,595 for single returns and \$10,618 for joint returns).

²Totals and subtotals exclude losses.

Source: Hawaii State Department of Taxation, *Hawaii Income Patterns 1968. Individuals* (June 1971), pp. 3 and 12.

Table 132.—PUBLIC BONDED DEBT OF STATE AND COUNTY GOVERNMENTS: 1949 TO 1971
(As of December 31. In millions of dollars.)

| Year | Total outstanding | Governmental unit and funds charged with debt service costs | Amount outstanding Dec. 31, 1971 | | |
|------------|-------------------|---|----------------------------------|-----------------|--------------------|
| | | | Total | Issued by State | Issued by Counties |
| 1949 | 39.5 | Total, State and Counties | 925.5 | 691.0 | 234.5 |
| 1950 | 63.9 | | | | |
| 1951 | 69.2 | State | 679.2 | 679.2 | — |
| 1952 | 84.0 | General Fund | 346.8 | 346.8 | — |
| 1953 | 96.8 | Highway Fund | 77.8 | 77.8 | — |
| 1954 | 102.2 | Airport Fund | 17.2 | 17.2 | — |
| 1955 | 106.7 | Harbor Fund | 12.2 | 12.2 | — |
| 1956 | 143.2 | Land Revolving Fund | 4.6 | 4.6 | — |
| 1957 | 184.8 | Veterans' Loan Fund | 9.0 | 9.0 | — |
| 1958 | 214.4 | Airport revenues ¹ | 180.0 | 180.0 | — |
| 1959 | 273.8 | Harbor revenues ¹ | 28.6 | 28.6 | — |
| | | All others ² | 3.0 | 3.0 | — |
| 1960 | 285.6 | | | | |
| 1961 | 306.8 | City and County of Honolulu | 198.9 | 8.1 | 190.8 |
| 1962 | 312.7 | General Fund | 132.3 | 8.1 | 124.2 |
| 1963 | 386.5 | Highway Fund | 21.1 | — | 21.1 |
| 1964 | 423.6 | Water Fund | 14.0 | — | 14.0 |
| 1965 | 454.1 | Water revenues ¹ | 31.4 | — | 31.4 |
| 1966 | 412.3 | | | | |
| 1967 | 472.9 | County of Maui | 25.4 | 0.4 | 25.0 |
| 1968 | 533.8 | General Fund | 21.8 | 0.4 | 21.4 |
| 1969 | 631.3 | Others ² | 3.6 | — | 3.6 |
| 1970 | 742.0 | County of Hawaii | 17.1 | 2.8 | 14.3 |
| 1971 | 925.5 | General Fund | 16.2 | 2.6 | 13.6 |
| | | Others ² | 0.9 | 0.1 | 0.7 |
| | | County of Kauai | 4.9 | 0.4 | 4.4 |
| | | General Fund | 3.8 | 0.4 | 3.4 |
| | | Others | 1.1 | 0.1 | 1.0 |

¹Revenue bonds.

²Includes revenue bonds.

Source: Tax Foundation of Hawaii, *A Compendium of Governmental Finances in Hawaii, 1949-1968*, p. 71, and *Government in Hawaii* For 1970 (p. 59), 1971 (p. 59), and 1972 (p. 59).

Table 133.—FEDERAL, STATE, AND COUNTY EMPLOYMENT: 1939 TO 1972

| Year | Full- and part-time employment (annual average) ¹ | | | | |
|-------------------|--|--------------------------------------|---------|----------------------|-----------------|
| | Total, all levels | | Federal | Territorial or State | City and County |
| | Number | Percent of total civilian employment | | | |
| 1939 | 20,495 | (NA) | 9,642 | 5,990 | 4,863 |
| 1940 | 22,136 | 14.2 | 11,139 | 6,245 | 4,752 |
| 1941 | 27,935 | 16.1 | 16,831 | 6,561 | 4,543 |
| 1942 | 53,111 | 24.9 | 41,809 | 6,669 | 4,633 |
| 1943 | 75,644 | 34.9 | 64,094 | 6,575 | 4,975 |
| 1944 | 78,617 | 36.9 | 66,809 | 6,550 | 5,258 |
| 1945 | 78,846 | 37.7 | 66,248 | 7,231 | 5,367 |
| 1946 | 58,269 | 31.0 | 44,419 | 7,951 | 5,899 |
| 1947 | 47,343 | 25.1 | 32,372 | 8,638 | 6,333 |
| 1948 | 45,618 | 24.8 | 30,213 | 9,024 | 6,381 |
| 1949 | 40,119 | 23.1 | 24,082 | 9,392 | 6,645 |
| 1950 ² | 33,140 | 19.5 | 18,891 | 7,955 | 9,683 |
| 1951 | 40,024 | 21.9 | 25,270 | 8,236 | 6,518 |
| 1952 | 40,616 | 21.9 | 25,258 | 8,692 | 6,666 |
| 1953 | 39,257 | 21.1 | 23,237 | 9,077 | 6,943 |
| 1954 | 39,082 | 21.1 | 21,966 | 10,009 | 7,107 |
| 1955 | 39,731 | 21.0 | 22,676 | 9,897 | 7,158 |
| 1956 | 42,804 | 21.9 | 25,904 | 10,592 | 7,118 |
| 1957 | 43,361 | 21.7 | 25,117 | 10,962 | 7,282 |
| 1958 ³ | 46,970 | 23.3 | 25,560 | 13,700 | 7,710 |
| 1959 | 48,320 | 22.4 | 26,200 | 14,290 | 7,830 |
| 1960 | 49,510 | 21.7 | 27,010 | 14,620 | 7,880 |
| 1961 | 50,390 | 21.6 | 27,290 | 15,030 | 8,070 |
| 1962 | 51,170 | 21.8 | 27,770 | 15,070 | 8,330 |
| 1963 | 52,890 | 22.2 | 27,910 | 16,430 | 8,550 |
| 1964 | 54,440 | 22.0 | 28,440 | 17,150 | 8,850 |
| 1965 | 57,840 | 22.3 | 29,690 | 18,880 | 9,270 |
| 1966 | 62,630 | 23.0 | 31,620 | 21,260 | 9,750 |
| 1967 | 66,340 | 23.4 | 33,900 | 22,630 | 9,810 |
| 1968 | 69,230 | 23.3 | 34,970 | 24,420 | 9,840 |
| 1969 | 71,130 | 22.4 | 34,690 | 26,090 | 10,350 |
| 1970 | 73,650 | 21.9 | 33,380 | 30,610 | 9,660 |
| 1971 | 78,140 | 22.7 | 32,840 | 34,920 | 10,380 |
| 1972 ⁴ | 78,900 | 23.1 | 32,300 | 35,750 | 10,850 |

NA Not available.

¹Based on data from three separate sources, which, because of differences in definitions and estimation procedures, are not completely comparable with one another. Data for 1939-1949 are from U.S. Office of Business Economics estimates of government employment and Hawaii Territorial Department of Labor and Industrial Relations estimates of total civilian employment. Data for 1950-1957 are unrevised estimates by the Hawaii Territorial Department of Labor and Industrial Relations; for 1958-1972; revised estimates by the Hawaii State Department of Labor and Industrial Relations.

²Estimates for 1950 comparable to 1939-1949 data are as follows: total, 36,960; percent, 21.7; Federal, 19,967; Territorial, 9,900; City and County, 7,093.

³Estimates for 1958 comparable to 1950-1957 data are as follows: total, 43,451; percent, 21.4; Federal, 24,317; Territorial, 11,678; City and County, 7,456.

⁴Preliminary estimate for March 1972.

Source: U.S. Office of Business Economics, *Income of Hawaii* (1953), table 4, p. 20; Hawaii State Department of Labor and Industrial Relations, *Labor Force Estimates* (monthly and annual, 1940-1972).

**Table 134.—EMPLOYMENT AND PAYROLLS OF STATE AND LOCAL GOVERNMENTS:
OCTOBER 1967**

| Subject | State and local governments | State | Local governments ¹ | | |
|---|-----------------------------|--------|--------------------------------|------------------------|----------------|
| | | | Total ² | City & Co. of Honolulu | Other Counties |
| Number of employees | 35,257 | 26,196 | 9,061 | 6,090 | 2,969 |
| Full-time | 31,023 | 22,237 | 8,786 | 5,924 | 2,862 |
| Part-time | 4,234 | 3,959 | 275 | 166 | 107 |
| Full-time equivalent employment | 31,932 | 23,082 | 8,850 | 5,973 | 2,877 |
| Education | 15,911 | 15,911 | — | — | — |
| Functions other than education | 16,021 | 7,171 | 8,850 | 5,973 | 2,877 |
| October payrolls (\$1,000) | 19,292 | 13,964 | 5,328 | 3,650 | 1,678 |
| Education | 9,566 | 9,566 | — | — | — |
| Other than education | 9,725 | 4,397 | 5,328 | 3,650 | 1,678 |
| Median annual rate of pay (dollars) | 6,827 | 6,913 | 6,687 | 6,719 | 6,622 |
| Teachers | 8,552 | 8,552 | — | — | — |
| Other than teachers | (NC) | 5,921 | 6,687 | 6,719 | 6,622 |

NC Not computed.

¹The 1967 Census of Governments reports data for 19 local governments in Hawaii: one municipality (the City and County of Honolulu), three Counties (Hawaii, Kauai, and Maui), and 15 special districts (three soil conservation districts on Oahu and 12 on other Islands).

²Includes data for the 15 special districts, not shown separately in this table.

Source: U.S. Bureau of the Census, *Census of Governments, 1967*. Vol. 7: *State Reports*, No. 11: *Hawaii* (1970), pp. 13, 14, 16, and 17.

SECTION 14

WELFARE SERVICES

This section presents data on government and private programs for social insurance and public welfare.

Total public welfare costs reached \$67,645,000 in fiscal 1971, compared with \$9,489,000 in 1961 and \$1,401,000 in 1941. About 59 percent of the 1971 total came from State funds and the remainder from the Federal government. The average monthly payment for public assistance was \$198. Among workers receiving unemployment compensation, weekly benefits averaged \$50. More than 66,000 Hawaii residents received Social Security benefits as of the end of 1970. Expenditures of the Aloha United Fund amounted to \$4.6 million in 1971.

Major data sources include reports of the U.S. Department of Health, Education, and Welfare, the U.S. Department of Labor, the Hawaii State Department of Social Services and Housing, and the Hawaii State Department of Labor and Industrial Relations. Section 10 of the *Statistical Abstract of the United States: 1971* presents comparable Mainland data.

Table 135.—SOCIAL WELFARE COSTS: 1940 TO 1971

| Year ended June 30 | Total costs | | By source of funds | | By expenditure category | | |
|--------------------|------------------|-----------------------------------|--------------------|-----------------|--------------------------|---|--------------------------|
| | Amount (\$1,000) | Per capita (dollars) ¹ | Federal (\$1,000) | State (\$1,000) | Administration (\$1,000) | Medical payments ² (\$1,000) | Money payments (\$1,000) |
| 1940 | 1,124 | 2.86 | 319 | 805 | 176 | — | 956 |
| 1941 | 1,401 | 3.52 | 426 | 975 | 208 | — | 1,193 |
| 1942 | 1,382 | 3.36 | 406 | 976 | 261 | — | 1,121 |
| 1943 | 1,350 | 3.03 | 359 | 991 | 331 | — | 1,019 |
| 1944 | 1,801 | 4.00 | 361 | 1,440 | 372 | 366 | 1,063 |
| 1945 | 2,058 | 4.55 | 368 | 1,690 | 392 | 540 | 1,126 |
| 1946 | 2,434 | 5.29 | 408 | 2,026 | 515 | 613 | 1,306 |
| 1947 | 3,738 | 7.79 | 693 | 3,045 | 730 | 920 | 2,088 |
| 1948 | 4,291 | 8.80 | 1,038 | 3,253 | 727 | 599 | 2,966 |
| 1949 | 5,228 | 10.80 | 1,532 | 3,696 | 791 | 452 | 3,985 |
| 1950 | 8,076 | 16.81 | 2,276 | 5,800 | 880 | 555 | 6,641 |
| 1951 | 9,425 | 19.72 | 2,911 | 6,514 | 954 | 699 | 7,772 |
| 1952 | 7,439 | 15.83 | 2,872 | 4,567 | 971 | — | 6,469 |
| 1953 | 7,189 | 15.62 | 3,164 | 4,025 | 946 | — | 6,243 |
| 1954 | 6,379 | 13.79 | 3,154 | 3,225 | 953 | — | 5,426 |
| 1955 | 7,638 | 16.33 | 3,518 | 4,120 | 974 | — | 6,664 |
| 1956 | 8,073 | 16.73 | 3,540 | 4,534 | 899 | 499 | 6,676 |
| 1957 | 7,909 | 15.78 | 3,604 | 4,306 | 981 | 420 | 6,508 |
| 1958 | 8,193 | 15.61 | 3,813 | 4,380 | 1,100 | 563 | 6,530 |
| 1959 | 8,578 | 15.59 | 3,992 | 4,586 | 1,143 | 581 | 6,854 |
| 1960 | 9,329 | 16.50 | 4,032 | 5,297 | 1,363 | 1,158 | 6,808 |
| 1961 | 9,489 | 16.29 | 4,090 | 5,398 | 1,339 | 1,277 | 6,873 |
| 1962 | 11,618 | 19.43 | 5,118 | 6,500 | 1,736 | 2,699 | 7,183 |
| 1963 | 12,697 | 21.00 | 5,897 | 6,800 | 1,667 | 3,100 | 7,931 |
| 1964 | 14,381 | 23.10 | 6,472 | 7,909 | 2,089 | 4,206 | 8,085 |
| 1965 | 14,673 | 23.41 | 6,404 | 8,269 | 2,146 | 4,356 | 8,171 |
| 1966 | 19,955 | 30.68 | 8,034 | 11,921 | 2,580 | 6,390 | 10,985 |
| 1967 | 23,704 | 36.44 | 10,869 | 12,835 | 2,642 | 7,396 | 13,666 |
| 1968 | 29,565 | 45.05 | 12,941 | 16,624 | 2,951 | 10,297 | 16,318 |
| 1969 | 35,706 | 52.71 | 15,167 | 20,539 | 3,272 | 12,948 | 19,486 |
| 1970 | 46,566 | 66.36 | 20,396 | 26,170 | 3,730 | 16,421 | 26,415 |
| 1971 | 67,645 | 93.97 | 27,769 | 39,876 | 5,483 | 23,926 | 38,236 |

¹Based on civilian population at beginning of fiscal year; for example, per capita costs for 1940 are based on estimated civilian population as of July 1, 1939. Population from the Hawaii State Department of Planning and Economic Development, Statistical Reports 81 (table 2) and 86 (table 2).

²Expenditures by the Department of Public Welfare or Department of Social Services and Housing. Beginning in 1944, the Department's program was limited to payment of hospital care, dental care and burial, and County departments were authorized to provide medical care. In 1952 responsibility for medical care was transferred to the Department of Health and the Department of Public Welfare participated in "Premium Payment Plan" for indigents only for hospital care in order to obtain Federal funds. Effective January 1960, the Medical Care Program for Indigents and Medically Indigents was established under the Department of Social Services, and the Department of Health and County departments were no longer responsible.

Source: Hawaii State Department of Social Services and Housing, records.

Table 136.—PERSONS SERVED AND AVERAGE PAYMENTS, FOR PROGRAMS ADMINISTERED BY THE HAWAII STATE DEPARTMENT OF SOCIAL SERVICES AND HOUSING: 1960 TO 1971, MONTHLY AVERAGES

| Year ended June 30 | Major programs ¹ | | Service cases | Medical payments | | Average payments (gross obligation basis) | |
|-----------------------|-----------------------------|-------------|------------------|------------------|-------------|--|------------------------|
| | Recipients | Individuals | | Cases | Individuals | Per case (\$) | Per individual (\$) |
| 1960 | 6,764 | 14,974 | 962 | — | — | — | 38.19 |
| 1961 | 6,537 | 14,661 | 967 | — | — | — | 39.48 |
| 1962 | 6,599 | 15,898 | 1,378 | — | — | 91.59 | 37.91 |
| 1963 | 6,897 | 17,300 | 1,463 | — | — | 96.75 | 37.70 |
| 1964 | 6,931 | 17,722 | 1,696 | — | — | 97.21 | 38.02 |
| 1965 | 6,807 | 17,634 | 1,474 | — | — | 100.03 | 38.62 |
| 1966 | 7,383 | 19,136 | 1,457 | — | — | 123.99 | 47.84 |
| 1967 | 8,581 | 22,350 | 1,311 | — | — | 132.71 | 50.96 |
| 1968 | 10,043 | 26,337 | 961 | — | — | 137.39 | 52.39 |
| 1969 | 11,013 | 28,845 | 926 | 2,492 | 2,700 | 147.86 | 56.45 |
| 1970 | 12,940 | 34,320 | 900 | 2,942 | 3,370 | 170.17 | 64.14 |
| 1971 | 16,467 | 44,897 | 743 | 4,073 | 4,496 | 198.20 | 72.69 |

¹Old age assistance, aid to disabled, aid to families with dependent children, AFDC unemployed parents, AFDC foster care, child welfare foster care, and general assistance.

Source: Hawaii State Department of Social Services and Housing, records.

**Table 137.—PUBLIC ASSISTANCE PAYMENTS AND RECIPIENTS: 1969 AND 1971
(Years ended June 30)**

| Program | Total payments (\$1,000) | | Number of recipients (monthly average) | | Average monthly pay- ment (dollars) | |
|--|-----------------------------|--------|---|--------|--|------|
| | 1969 | 1971 | 1969 | 1971 | 1969 | 1971 |
| All programs ¹ | 19,540 | 39,164 | 11,013 | 16,467 | 148 | 198 |
| Old age assistance | 2,075 | 2,763 | 1,952 | 2,392 | 89 | 96 |
| Aid to disabled | 2,285 | 3,051 | 1,611 | 1,882 | 118 | 135 |
| Aid to families with de- pendent children | 11,194 | 23,858 | 4,814 | 7,869 | 194 | 253 |
| Child welfare foster care | 655 | 845 | 556 | 564 | 98 | 125 |
| General assistance | 2,322 | 6,475 | 1,703 | 3,139 | 114 | 172 |

¹Includes programs not shown separately.

Source: Hawaii State Department of Social Services and Housing, records.

Table 138.—SOCIAL SECURITY RECIPIENTS AND BENEFITS: 1940 TO 1970

| Year | Number of recipients at end of year | Monthly amount payable at end of year (dollars) | Total amount paid during year ¹ (dollars) |
|------------|-------------------------------------|---|--|
| 1940 | 621 | 9,000 | 73,000 |
| 1941 | 1,393 | 21,000 | 218,000 |
| 1942 | 1,906 | 30,000 | 357,000 |
| 1943 | 2,700 | 43,000 | 438,000 |
| 1944 | 3,400 | 53,000 | 539,000 |
| 1945 | 3,731 | 61,000 | 614,000 |
| 1946 | 4,507 | 76,000 | 787,000 |
| 1947 | 4,904 | 85,000 | 1,054,000 |
| 1948 | 5,686 | 101,000 | 1,244,000 |
| 1949 | 6,726 | 124,000 | 1,514,000 |
| 1950 | 8,322 | 270,000 | 2,318,000 |
| 1951 | 10,400 | 323,000 | 4,053,000 |
| 1952 | 11,900 | 428,000 | 4,747,000 |
| 1953 | 13,800 | 525,000 | 6,192,000 |
| 1954 | 15,768 | 702,000 | 7,522,000 |
| 1955 | 17,978 | 833,000 | 10,110,000 |
| 1956 | 19,748 | 941,000 | 11,356,000 |
| 1957 | 23,382 | 1,159,000 | 14,145,000 |
| 1958 | 26,042 | 1,452,000 | 16,434,000 |
| 1959 | 28,073 | 1,591,000 | 19,467,000 |
| 1960 | 30,415 | 1,771,000 | 21,127,000 |
| 1961 | 34,533 | 2,084,000 | 24,555,000 |
| 1962 | 37,804 | 2,325,000 | 28,345,000 |
| 1963 | 40,719 | 2,557,000 | 30,814,000 |
| 1964 | 43,068 | 2,751,000 | 33,250,000 |
| 1965 | 46,861 | 3,254,000 | 38,751,000 |
| 1966 | 53,392 | 3,647,000 | 43,906,000 |
| 1967 | 57,254 | 4,584,000 | 48,368,000 |
| 1968 | 59,815 | 4,826,000 | 57,879,000 |
| 1969 | 62,824 | 5,182,000 | 63,893,000 |
| 1970 | 66,488 | 6,437,000 | 77,593,000 |
| 1971 | 70,912 | 7,666,000 | |

¹Includes also retroactive benefits and lump-sum death payments.

Source: U.S. Department of Health, Education, and Welfare, Social Security Administration, Office of Research and Statistics, Division of Statistics, records.

Table 139.—MEDICARE ENROLLMENT AND REIMBURSEMENTS: 1966 TO 1969

| Year | Hospital and/or Medical Insurance | | Hospital Insurance | | Supplementary Medical Insurance | |
|-------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------|-----------------------------------|-----------------------------|
| | Number of persons enrolled, July 1 | Amount reimbursed (dollars) | Number of persons enrolled July 1 | Amount reimbursed (dollars) | Number of persons enrolled July 1 | Amount reimbursed (dollars) |
| 1966 ¹ | 37,443 | — | 37,307 | — | 35,888 | — |
| 1967 ² | 39,170 | 11,528,000 | 39,051 | 8,738,000 | 37,068 | 2,790,000 |
| 1968 | 41,510 | 12,006,000 | 41,289 | 8,503,000 | 40,223 | 3,503,000 |
| 1969 | 43,350 | 13,638,000 | 43,020 | 9,865,000 | 42,062 | 3,773,000 |

¹Services benefits began July 1, 1966. Reimbursements during July-December 1966 included with reimbursements for 1967.

²Reimbursement data refer to 18-month period, July 1966—December 1967.

Source: U.S. Department of Health, Education, and Welfare, Social Security Administration, Office of Research and Statistics, Division of Statistics, records.

Table 140.—DISABILITY OF PERSONS 16 TO 64 YEARS OLD: 1970

| Disability status | Persons |
|---|---------|
| Persons 16 to 64, not in institutions or attending school | 417,422 |
| Disabled or handicapped | 30,718 |
| In labor force | 15,862 |
| Not in labor force | 14,856 |
| Cannot work | 10,708 |
| Disabled 6 months or more | 9,768 |

Source: *U.S. Census of Population: 1970*, Final Report PC(1)-C13, table 52.

**Table 141.—VOCATIONAL REHABILITATION, CHILD LABOR, AND
UNEMPLOYMENT COMPENSATION: 1971**

| Subject | Number |
|--|-----------|
| VOCATIONAL REHABILITATION¹ | |
| Disabled persons rehabilitated | 704 |
| Federal funds (\$1,000) | 1,933 |
| CHILD LABOR CERTIFICATES¹ | |
| Number issued | 15,840 |
| Boys | 9,184 |
| Girls | 6,656 |
| Under 13 years of age | 168 |
| 14 or 15 years of age | 3,668 |
| 16 or 17 years of age | 11,996 |
| 18 years of age and older | 8 |
| UNEMPLOYMENT COMPENSATION (1970) | |
| Number of workers covered | 302,238 |
| Wages paid (\$1,000) | 2,242,528 |
| Taxable wages (\$1,000) | 1,069,592 |
| Gross contributions (\$1,000) | 12,979 |
| Gross benefits paid (\$1,000) | 20,655 |
| Average weekly benefits (dollars) | 56.22 |

¹Year ended June 30.

Source: Hawaii State Department of Social Services and Housing, *Annual Report, 1971*; Hawaii State Department of Labor and Industrial Relations, records.

Table 142.—HAWAII STATE EMPLOYEES' RETIREMENT SYSTEM: 1926 TO 1970

| Year | Membership, March 31 ¹ | Pensioners, March 31 ¹ | Assets, June 30 (\$1,000) | Total benefits paid ² (\$1,000) | Administration expenses ² (\$1,000) |
|-------------------------|--------------------------------------|--------------------------------------|------------------------------|---|---|
| 1926 ³ | 2,028 | 84 | 125 | 42 | 17 |
| 1930 | 4,524 | 174 | 2,666 | 185 | 23 |
| 1940 | 8,352 | 274 | 10,958 | 395 | 28 |
| 1950 | 16,120 | 824 | 52,549 | 1,460 | 108 |
| 1960 | 24,092 | 1,971 | 141,162 | 4,071 | 176 |
| 1966 | 31,492 | 3,611 | 257,504 | 10,323 | 219 |
| 1967 | 33,764 | 4,176 | 282,388 | 13,287 | 245 |
| 1968 | 35,370 | 4,625 | 316,038 | 15,257 | 253 |
| 1969 | 36,445 | 5,169 | 351,771 | 22,651 | 294 |
| 1970 | 38,912 | 5,641 | 388,561 | 22,822 | 337 |

¹June 30 data for 1926-1960.

²Year ended June 30. Benefits exclude Pensioners' Bonus and Social Security.

³The System began operations January 1, 1926.

Source: Hawaii State Employees' Retirement System, *45th Annual Report, June 30, 1970* (Publication No. 42), p. 18.

Table 143.—ALOHA UNITED FUND REVENUE AND EXPENDITURES: 1967 TO 1971

| Year | Support and revenue (\$) | | Expenditures (\$) | |
|------------|--------------------------|--|-------------------|----------------------------|
| | Total | Campaign contributions ¹ | Total | Allocations to agencies |
| 1967 | 3,450,332 | 3,553,920 | 3,101,230 | 2,880,984 |
| 1968 | 4,013,848 | 3,835,104 | 3,499,445 | 3,266,414 |
| 1969 | 3,975,406 | 4,036,075 | 3,892,922 | 3,605,892 |
| 1970 | 4,377,883 | 4,507,229 | 4,277,561 | 3,963,195 |
| 1971 | 4,714,072 | 4,862,764 | 4,615,511 | 4,265,374 |

¹Before adjustment for uncollectible allowance.

Source: Aloha United Fund, *Annual Report, 1967-1971*.

SECTION 15

BANKING, INSURANCE, AND BUSINESS ENTERPRISE

Statistics in this section relate to banks and savings and loan associations, insurance, and business firms.

Deposits in Island banks reached \$1.8 billion in 1971, compared with \$673 million in 1960, \$123 million in 1940, and \$4.7 million in 1901. Assets of savings and loan associations stood at \$869 million in 1970, more than four times their 1960 level and over 11 times as great as in 1940. Life insurance in force in Hawaii at the end of 1970 amounted to \$7.4 billion, double the figure reported seven years earlier and thirty-five times the 1940 coverage.

By mid-1971, some 15,700 corporations and partnerships were registered to do business in Hawaii: 10,603 local ("domestic") corporations, 1,939 Mainland ("foreign") corporations, and 3,160 partnerships. Business units with one or more employees as of the first quarter of 1970 numbered 12,146, including 1,943 with twenty or more employees. During fiscal 1969, 1,570 new businesses with 4,958 employees were recorded; during the same year, 518 businesses with 2,038 workers were terminated.

Sources for statistics on these subjects include the Hawaii State Department of Regulatory Agencies (specifically its Bank Examination, Insurance, and Business Registration Divisions), Hawaii State Department of Labor and Industrial Relations, and the annual report on *County Business Patterns* issued by the U.S. Bureau of the Census. Comparable Mainland data appear in Sections 16 and 17 of *Statistical Abstract of the United States: 1971*.

Table 144.—BANKING AND INSURANCE: 1901 TO 1971

(In thousands of dollars)

| Year | Banks, June 30 | | Savings and loan associations, June 30 | | Insurance premiums ¹ | | Life insurance in force, Dec. 31 |
|-------------------|----------------|-----------|---|----------|---------------------------------|--------|--|
| | Assets | Deposits | Assets | Deposits | Total | Life | |
| 1901 ² | (NA) | 4,662 | (NA) | (NA) | 914 | 436 | (NA) |
| 1910 | (NA) | 13,324 | (NA) | (NA) | 1,391 | 528 | 14,857 |
| 1920 | (NA) | 52,783 | (NA) | (NA) | 5,071 | 1,872 | 45,164 |
| 1930 ³ | (NA) | 80,175 | 5,211 | (NA) | 7,939 | 4,675 | 123,978 |
| 1940 | 137,489 | 123,296 | 7,663 | 6,452 | 9,861 | 6,797 | 211,284 |
| 1950 | 400,031 | 376,456 | 43,336 | 36,826 | 35,521 | 19,247 | 707,063 |
| 1960 | 735,652 | 672,866 | 202,200 | 165,653 | 91,387 | 45,607 | 2,555,929 |
| 1961 | 843,084 | 769,200 | 228,476 | 188,179 | 97,782 | 50,003 | 2,873,220 |
| 1962 | 934,438 | 842,596 | 263,781 | 220,120 | 105,597 | 54,166 | 3,265,933 |
| 1963 | 934,223 | 838,080 | 322,674 | 273,288 | 116,263 | 59,230 | 3,593,592 |
| 1964 | 991,432 | 887,057 | 395,586 | 322,355 | 124,287 | 63,318 | 3,760,033 |
| 1965 | 1,081,588 | 940,834 | 460,454 | 365,211 | 137,331 | 69,315 | 4,212,206 |
| 1966 | 1,201,515 | 1,001,426 | 490,130 | 387,152 | 149,321 | 74,127 | 4,697,954 |
| 1967 | 1,263,917 | 1,110,733 | 514,407 | 424,005 | 162,102 | 80,217 | 5,102,132 |
| 1968 | 1,440,891 | 1,287,166 | 569,325 | 480,137 | 179,236 | 85,713 | 5,874,280 |
| 1969 | 1,669,606 | 1,499,459 | 650,398 | 528,570 | 207,184 | 91,402 | 6,632,539 |
| 1970 | 1,762,811 | 1,558,671 | 730,712 | 584,017 | 246,986 | 98,360 | 7,441,077 |
| 1971 | 2,062,194 | 1,804,545 | 869,323 | 716,674 | (NA) | (NA) | (NA) |

NA Not available.

¹Calendar years. Includes surplus lines. Life insurance data from 1962 forward include fraternal.

²Insurance data refer to 1903, earliest year available.

³Savings and loan data refer to 1932.

Source: Hawaii State Department of Regulatory Agencies, Bank Examination Division and Insurance Division, records; *Report of the Treasurer to the Legislature, 1935*, pp. 62 and 86; *Report of the Insurance Commissioner, 1971*, pp. 7-8.

Table 145.—ASSETS AND LIABILITIES OF BANKS AND SAVINGS AND LOAN ASSOCIATIONS: DECEMBER 31, 1960 TO 1970

(In thousands of dollars)

| Subject | 1960 | 1965 | 1969 | 1970 | 1971 |
|--|---------|-----------|-----------|-----------|-----------|
| BANKS | | | | | |
| Total assets | 813,618 | 1,155,117 | 1,694,440 | 1,917,915 | 2,169,032 |
| Loans and discounts | 400,109 | 667,133 | 1,023,995 | 1,163,467 | 1,267,036 |
| U.S. govt. and other securities | 248,905 | 282,558 | 395,470 | 449,642 | 545,885 |
| Cash and due from banks | 143,400 | 144,138 | 191,389 | 215,527 | 251,520 |
| Fixed assets | 12,105 | 27,476 | 40,267 | 43,846 | 48,204 |
| Other assets | 9,099 | 33,812 | 43,319 | 45,433 | 56,387 |
| Total liabilities and capital | 813,618 | 1,155,117 | 1,694,440 | 1,917,915 | 2,169,032 |
| Demand deposits | 275,452 | 373,402 | 579,592 | 608,810 | 703,398 |
| Time and other deposits | 467,844 | 632,113 | 923,143 | 1,088,352 | 1,235,147 |
| Other liabilities | 12,275 | 62,868 | 83,602 | 84,695 | 83,413 |
| Capital | 58,047 | 86,734 | 108,103 | 136,057 | 147,074 |
| SAVINGS AND LOAN ASSOCIATIONS | | | | | |
| Total assets | 210,993 | 482,067 | 694,828 | 778,909 | 978,530 |
| Mortgage loans | 185,034 | 423,603 | 595,029 | 678,688 | 854,183 |
| Other loans | 4,713 | 8,750 | 12,481 | 14,212 | 17,246 |
| U.S. govt. and other securities | 10,082 | 17,418 | 42,089 | 46,471 | 58,986 |
| Fixed assets | 2,693 | 8,361 | 23,153 | 16,282 | 18,345 |
| Cash on hand and in banks | 7,940 | 19,687 | 11,682 | 12,134 | 15,794 |
| Other assets | 531 | 4,248 | 10,394 | 11,122 | 13,976 |
| Total liabilities | 210,993 | 482,067 | 694,828 | 778,909 | 978,530 |
| Withdrawal shares | 175,040 | 364,036 | 511,269 | 576,044 | 716,886 |
| Withdrawable deposits & invest. certificates ... | 277 | 14,034 | 41,987 | 49,868 | 63,603 |
| Reserves | 15,728 | 27,898 | 35,880 | 37,346 | 38,458 |
| Surplus and undivided profits | 977 | 5,718 | 17,393 | 22,061 | 29,936 |
| Other liabilities | 18,971 | 70,381 | 88,299 | 93,590 | 129,647 |

Source: Hawaii State Department of Regulatory Agencies, Bank Examination Division, annual releases.

Table 146.—BANK CLEARINGS: 1965 TO 1971

| Year | Amount (millions of dollars) |
|------------|------------------------------|
| 1965 | 7,155.2 |
| 1966 | 7,585.8 |
| 1967 | 7,700.7 |
| 1968 | 9,281.8 |
| 1969 | 11,190.8 |
| 1970 | 13,286.8 |
| 1971 | 15,091.5 |

Source: First Hawaiian Bank, *Economic Indicators Source Book* (1971), Series 83, and records.

Table 147.—OAHU HOUSEHOLDS WITH CHARGE ACCOUNTS, CREDIT CARDS, CHECKING ACCOUNTS, AND SAVINGS ACCOUNTS: 1971

| Subject | Number of households | Percent of Oahu households |
|---|----------------------|----------------------------|
| With department store charge accounts | 105,608 | 61.4 |
| With major credit cards ¹ | 78,776 | 45.8 |
| With checking accounts | 139,664 | 81.2 |
| With savings accounts | 150,328 | 87.4 |

¹American Express, Bank of Hawaii/Americard, Carte Blanche, Diners Club, or Master Charge.

Source: Hawaii Newspaper Agency, Inc., *Continuing Home Audit, 1971*, tables A099, A100, A102, and A103. Used with permission.

Table 148.—INSURANCE: 1970

| Class of insurance | Premiums (\$1,000) | Losses, claims and benefits paid (\$1,000) | Subject ¹ | | Amount, Dec. 31 (\$1,000) |
|---------------------------------------|-----------------------|---|--|--|---------------------------------|
| | | | | | |
| All insurance | 246,986 | 114,011 | Assets | | 219,077,262 |
| Life | 98,225 | 40,241 | Liabilities excluding capital & surplus | | 195,209,323 |
| Fraternal | 135 | 26 | Policyholders' surplus, ind. capital | | 23,867,939 |
| Fire, marine, casualty, miscell. | 147,678 | 73,645 | Capital | | 1,700,457 |
| Accident and health | 23,000 | 11,977 | Investments, total ² | | 977,535 |
| Fire | 7,287 | 4,851 | Mortgage loans | | 599,702 |
| Automobile | 59,528 | 35,652 | Collateral loans | | 458 |
| Workmen's compensation | 23,667 | 10,026 | State, county bonds | | 87,925 |
| Fidelity and surety | 3,622 | 286 | Utility stocks, bonds | | 109,991 |
| Marine | 5,030 | 1,631 | Other stocks, bonds | | 167,103 |
| Other types | 25,543 | 9,223 | Real estate | | 12,356 |
| Surplus lines | 948 | 100 | | | |

| Type of life insurance | Policies written (\$1,000) | Policies transferred (net) (\$1,000) | Policies term- inated (\$1,000) | Policies in force, Dec. 31 | | Premiums received ³ (\$1,000) | Claims and benefits paid (\$1,000) |
|---------------------------|----------------------------------|---|--|----------------------------|---------------------|--|---|
| | | | | Number | Amount (\$1,000) | | |
| All life insurance | 1,390,151 | -13,244 | 586,715 | 459,845 | 7,441,077 | 98,360 | 40,267 |
| Ordinary | 771,693 | -13,087 | 400,064 | 439,473 | 4,177,785 | 76,536 | 27,149 |
| Group | 615,164 | -31 | 185,699 | 10,860 | 3,250,630 | 21,629 | 13,015 |
| Industrial | 389 | 12 | 419 | 8,038 | 3,737 | 60 | 77 |
| Fraternal | 2,905 | -138 | 533 | 1,474 | 8,924 | 135 | 26 |

¹For all insurance companies authorized to transact business in Hawaii.

²Hawaii investments only. Stocks, bonds, and real estate at market value.

³Includes \$12,275 by Hawaii companies, \$75,613 by Mainland ("foreign") companies, and \$10,472 by non-U.S. ("Alien") companies.

Source: *Report of the Insurance Commissioner of Hawaii, 1971* pp. 7, 18, 38, 54-55.

Table 149.—VALUE OF STOCKS TRADED FOR MAJOR HAWAII-BASED COMPANIES: 1925 TO 1971

| Year | Value ¹ (\$1,000) | Year | Value ¹ (\$1,000) |
|-------------------------|------------------------------|------------|------------------------------|
| 1925 | 11,527 | 1961 | 25,631 |
| 1927 ² | 13,838 | 1962 | 20,502 |
| 1930 | 7,307 | 1963 | 20,207 |
| 1932 ³ | 2,461 | 1964 | 15,163 |
| 1935 | 7,242 | 1965 | 14,944 |
| 1940 | 3,120 | 1966 | 11,307 |
| 1945 | 8,077 | 1967 | 16,716 |
| 1950 | 4,793 | 1968 | 13,480 |
| 1955 | 7,831 | 1969 | 11,679 |
| 1959 | 14,837 | 1970 | 8,590 |
| 1960 | 11,657 | 1971 | 5,521 |

¹Stocks and bonds, 1925-1964; stocks only, 1965 forward. Bond sales in 1965 amounted to \$44 thousand.

²Pre-Depression peak.

³Depression low point.

Source: Honolulu Stock Exchange data cited in the Chamber of Commerce of Honolulu, *Business Statistics* (editions published in 1935, 1938, and 1943) and *Hawaii Facts and Figures* (editions published in 1952, 1959, 1962, and 1966), and in the First Hawaiian Bank, *Economic Indicators Source Book* (1971), Series 62, and records.

Table 150.—REGISTERED CORPORATIONS AND PARTNERSHIPS: 1910 TO 1971

(Number on record as of June 30. Excludes eleemosynary corporations.)

| Year | Corporations ¹ | | Partnerships | Year | Corporations ¹ | | Partnerships |
|------------|---------------------------|---------|--------------|------------|---------------------------|---------|--------------|
| | Domestic | Foreign | | | Domestic | Foreign | |
| 1910 | 628 | 124 | (NA) | 1963 | 5,789 | 867 | 2,331 |
| 1920 | 719 | 155 | (NA) | 1964 | 6,409 | 896 | 2,186 |
| 1930 | 870 | 214 | (NA) | 1965 | 7,080 | 998 | 2,238 |
| 1940 | 929 | 68 | 584 | 1966 | 7,566 | 1,052 | 2,303 |
| 1950 | 1,491 | 167 | 2,637 | 1967 | 7,996 | 1,131 | 2,132 |
| 1960 | 4,139 | 640 | 2,153 | 1968 | 8,356 | 1,248 | 2,196 |
| 1961 | 4,794 | 722 | 2,276 | 1969 | 9,035 | 1,492 | 2,492 |
| 1962 | 5,300 | 844 | 2,355 | 1970 | 9,755 | 1,734 | 2,750 |
| | | | | 1971 | 10,603 | 1,939 | 3,160 |

| Year ended June 30 | Domestic corporations ¹ | | Foreign corporations ¹ | | Partnerships | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|--------------------------------------|--------------|---------------------------|
| | Formed | Dissolved or merged | Qualified | Withdrew, merged, or cancelled | Registered | Dissolved or cancelled |
| 1966 | 957 | 471 | 142 | 88 | 343 | 278 |
| 1967 | 813 | 383 | 178 | 99 | 376 | 547 |
| 1968 | 984 | 624 | 199 | 82 | 389 | 325 |
| 1969 | 1,177 | 498 | 297 | 53 | 524 | 512 |
| 1970 | 1,392 | 672 | 303 | 61 | 228 | 254 |
| 1971 | 1,411 | 563 | 266 | 61 | 717 | 307 |

¹Hawaii corporations are termed "domestic"; Mainland corporations, "foreign."

Source: *Report of the Treasurer to the Legislature* of 1911 (pp. 37-38), 1921 (pp. 58-59), 1931 (pp. 94 and 96), 1941 (pp. 34 and 39), and 1951 (pp. 22-24); *Report of the Department of Treasury and Regulation . . . 1960*, pp. 15-17; Department of Regulatory Agencies, *Annual Report . . . 1968*, pp. 17, 18, and 20, and records.

Table 151.—CHARACTERISTICS OF BUSINESS UNITS: 1970

| County and industry group | Number of employes, mid-March pay period | Taxable payrolls, Jan.-Mar. (\$1,000) | Total reporting units | Number of reporting units, by employment-size class | | | | | | | |
|---|--|---------------------------------------|-----------------------|---|--------|---------|----------|----------|------------|------------|-------------|
| | | | | 1 to 3 | 4 to 7 | 8 to 19 | 20 to 49 | 50 to 99 | 100 to 249 | 250 to 499 | 500 or more |
| Total | 208,882 | 330,607 | 12,146 | 5,212 | 2,487 | 2,464 | 1,243 | 403 | 240 | 64 | 33 |
| Counties: | | | | | | | | | | | |
| Hawaii | 15,871 | 22,094 | 1,217 | 537 | 287 | 228 | 101 | 36 | 21 | 6 | 1 |
| Honolulu | 174,200 | 283,390 | 9,189 | 3,828 | 1,824 | 1,911 | 1,011 | 329 | 203 | 52 | 31 |
| Kalawao | 33 | 44 | 2 | — | 1 | — | 1 | — | — | — | — |
| Kauai | 6,476 | 8,266 | 474 | 223 | 99 | 93 | 36 | 10 | 10 | 3 | — |
| Maui | 9,801 | 12,754 | 780 | 328 | 187 | 161 | 67 | 27 | 6 | 3 | 1 |
| Statewide | 2,501 | 4,059 | 484 | 296 | 89 | 71 | 27 | 1 | — | — | — |
| Major industry group: | | | | | | | | | | | |
| Agric. services, forestry, fisheries .. | 890 | 989 | 134 | 52 | 50 | 24 | 6 | 2 | — | — | — |
| Mining | 544 | 1,175 | 12 | 4 | 1 | 1 | 3 | 1 | 2 | — | — |
| Contract construction | 24,384 | 61,833 | 1,094 | 381 | 231 | 225 | 147 | 62 | 39 | 5 | 4 |
| Manufacturing: food & kindred products | 12,286 | 19,598 | 197 | 39 | 33 | 46 | 33 | 14 | 17 | 13 | 2 |
| Manufacturing, except food | 15,299 | 27,325 | 473 | 110 | 77 | 129 | 91 | 36 | 20 | 7 | 3 |
| Transportation & other public utilities | 21,149 | 43,845 | 455 | 125 | 78 | 106 | 79 | 32 | 23 | 6 | 6 |
| Wholesale trade | 14,793 | 27,910 | 1,054 | 367 | 238 | 272 | 126 | 34 | 13 | 3 | 1 |
| Retail trade | 50,218 | 51,556 | 3,013 | 982 | 674 | 808 | 372 | 111 | 54 | 6 | 6 |
| Finance, insurance, and real estate | 16,587 | 28,224 | 1,469 | 908 | 241 | 174 | 87 | 30 | 22 | 5 | 2 |
| Services: hotels and other lodging places | 11,927 | 13,513 | 187 | 58 | 23 | 27 | 37 | 17 | 14 | 4 | 7 |
| Services, except hotels | 38,276 | 51,697 | 3,598 | 1,916 | 758 | 574 | 233 | 64 | 46 | 15 | 2 |
| Unclassified establishments | 2,529 | 2,942 | 460 | 270 | 83 | 78 | 29 | — | — | — | — |

Source: U.S. Bureau of the Census, *County of Business Patterns, 1970, Hawaii*. CBP-70-13.

Table 152.—NEW AND TERMINATED BUSINESSES: 1960 TO 1969

| Year (ended June 30), area, and kind of business | New businesses | | Terminated businesses | | Net increase | |
|---|----------------|------------|-----------------------|------------|--------------|------------|
| | Number | Employment | Number | Employment | Number | Employment |
| 1960 ¹ | 1,276 | 4,465 | 738 | 3,023 | 538 | 1,442 |
| 1961 ¹ | 1,605 | 4,901 | 719 | 2,912 | 886 | 1,989 |
| 1962 ¹ | 2,175 | 6,770 | 869 | 3,311 | 1,306 | 3,459 |
| 1963 ¹ | 1,543 | 5,603 | 1,068 | 3,708 | 475 | 1,895 |
| 1964 ¹ | 1,501 | 5,072 | 1,109 | 3,580 | 392 | 1,492 |
| 1965 ¹ | 1,351 | 4,451 | 847 | 2,903 | 504 | 1,548 |
| 1966 ¹ | 1,427 | 4,664 | 469 | 1,871 | 958 | 2,793 |
| 1967 | 1,236 | 4,105 | 595 | 2,427 | 641 | 1,678 |
| 1968 | 1,441 | 4,341 | 628 | 2,654 | 813 | 1,687 |
| 1969 | 1,570 | 4,958 | 518 | 2,038 | 1,052 | 2,920 |
| GEOGRAPHIC AREA, 1969 | | | | | | |
| Oahu | 1,290 | 4,207 | 429 | 1,772 | 861 | 2,435 |
| Maui Co. | 90 | 206 | 29 | 74 | 61 | 132 |
| Hawaii Co. | 137 | 379 | 41 | 128 | 96 | 251 |
| Kauai Co. | 53 | 166 | 19 | 64 | 34 | 102 |
| KIND OF BUSINESS, 1969 | | | | | | |
| Agric., forest., fisheries | 29 | 94 | 6 | 61 | 23 | 33 |
| Construction | 157 | 489 | 53 | 335 | 104 | 154 |
| Manufacturing | 77 | 236 | 26 | 125 | 51 | 111 |
| Transp., comm., utilities | 53 | 129 | 28 | 228 | 25 | -99 |
| Wholesale, retail trade | 380 | 1,516 | 133 | 579 | 247 | 937 |
| Finance, insur., real est. | 211 | 488 | 49 | 122 | 162 | 366 |
| Services | 636 | 1,935 | 214 | 573 | 422 | 1,362 |
| Not classifiable | 27 | 71 | 9 | 15 | 18 | 56 |

¹Excludes agriculture, forestry, and fisheries and nonclassifiable businesses, included in data for 1967-1969.

Source: Hawaii State Department of Labor and Industrial Relations, *Business Births and Deaths* (November 1967), pp. 12-13, and records.

SECTION 16

COMMUNICATIONS, POWER, AND SCIENCE

This section presents statistics relating to postal services, telephones, telegraphs, radio, television, newspapers, electrical and gas power and energy, and scientific resources.

Hawaii is served by all communications media. The most recent statistics indicate 80 post offices, 446,000 telephones, 31 radio stations, 12 television stations, and seven daily newspapers.

Electricity sales exceeded 3.7 billion kilowatt-hours in 1970, or 6,822 per housing unit. Manufactured gas sales totaled 28 million therms.

The State is also well served with scientific resources. A 1971 inventory reported 301 companies and agencies with research or scientific capabilities. Employment in these organizations was more than 22,000.

Information on communications, power and science can be obtained from reports and records of the U.S. Post Office Department, Federal Communications Commission, Hawaii State Public Utilities Commission, individual utility companies, and Audit Bureau of Circulations. Similar data for the nation as a whole can be found in the *Statistical Abstract of the United States: 1971*, Sections 18, 19, and 20.

Table 153.—POSTAL SERVICE: 1851 TO 1971

| Year | Number of post offices ¹ | Gross postal receipts (\$1,000) ² | Pieces of mail handled (1,000) ³ |
|-----------------|-------------------------------------|--|---|
| 1851-1852 | (NA) | 1 | 34 |
| 1855 | (NA) | 7 | 74 |
| 1858-1860 | 33 | 2 | (NA) |
| 1864-1866 | (NA) | 3 | (NA) |
| 1968-1870 | (NA) | 6 | 139 |
| 1874-1876 | (NA) | 10 ¹ | 101 |
| 1878-1880 | (NA) | 15 | 175 |
| 1884-1886 | 55 | 33 | (NA) |
| 1890 | (NA) | 60 | 1,579 |
| 1895 | (NA) | 61 | (NA) |
| 1901 | 90 | 103 | (NA) |
| 1905 | 89 | 123 | (NA) |
| 1910 | 93 | (NA) | (NA) |
| 1915 | 93 | (NA) | (NA) |
| 1920 | 91 | 352 | (NA) |
| 1925 | 93 | 611 | (NA) |
| 1930 | 93 | 774 | (NA) |
| 1935 | 94 | 834 | (NA) |
| 1940 | 94 | 1,480 | (NA) |
| 1945 | 91 | 22,726 | (NA) |
| 1950 | 97 | 3,955 | (NA) |
| 1955 | 101 | 5,603 | (NA) |
| 1960 | 83 | 7,732 | 127,000 |
| 1961 | 82 | 8,434 | (NA) |
| 1962 | 82 | 11,041 | (NA) |
| 1963 | 80 | 13,037 | (NA) |
| 1964 | 80 | (NA) | (NA) |
| 1965 | 80 | 13,692 | 144,000 |
| 1966 | 80 | 14,984 | 147,000 |
| 1967 | 80 | 15,881 | 149,000 |
| 1968 | 80 | 17,617 | 159,000 |
| 1969 | 80 | 20,178 | 172,000 |
| 1970 | 80 | 20,840 | 187,000 |
| 1971 | 78 | 21,976 | 201,000 |

NA Not available

¹Includes all 1st-, 2nd-, 3rd-, and 4th-class post offices; excludes branches and stations. Total for 1858-1860 refers to 1859; 1884-1886, to number in operation at beginning (and also end) of biennium ended March 31, 1886; data for 1901 and later years, as of June 30.

²Receipts for 1851-1852 refer to year ended March 31, 1852 (the earliest full year available after establishment of the postal system in December 1850); for 1855, to either calendar 1855 or the year ended March 31, 1856; for 1858-1886, to annual averages for biennial periods ended March 31; for 1890, to the year ended March 31, 1890; for 1895, to the calendar year; and for 1901 and later years, to years ended June 30.

³Data for 1851-1880 limited to letters; for 1890, to letters and prints; for 1960 and thereafter, to all pieces originated in Hawaii. Total for 1851-1852 refers to year ended March 31, 1852; 1855, either to calendar year or year ended March 31, 1856; for 1868-1890, to annual averages for biennial periods ended March 31; for 1960 and later years, to years ended June 30.

Source: *Report of the Minister of the Interior for 1856, 1880, 1886, and 1890*; *Report of the Minister of Finance for 1860, 1866, 1870, 1876, and 1895*; *Annual Report of the Postmaster General for 1913-1970*; *Statistical Abstract of the United States for 1923-1971*; U.S. Postal Service, records; Henry A. Meyer et al., *Hawaii, Its Stamps and Postal History* (1948), p. 276.

**Table 154.—TELEPHONES IN SERVICE, TELEPHONE CALLS, AND TELEGRAPH MESSAGES:
1880 TO 1971**

| Year | Telephones in service ¹ | | Completed calls ² | | | Telegraph messages ³ | |
|-------------------------|------------------------------------|---------|------------------------------|--------------|--------------|---------------------------------|------------|
| | State total | Oahu | Local (1,000) | Inter-Island | Transpacific | Total | Cable only |
| 1880 | (NA) | 47 | (NA) | — | — | — | — |
| 1885 | (NA) | 666 | (NA) | — | — | — | — |
| 1890 | (NA) | 931 | (NA) | — | — | — | — |
| 1895 | (NA) | 1,152 | (NA) | — | — | — | — |
| 1900 | (NA) | 1,393 | (NA) | — | — | — | — |
| 1905 | (NA) | 1,800 | (NA) | — | — | (NA) | (NA) |
| 1910 | (NA) | 2,657 | (NA) | — | — | (NA) | (NA) |
| 1915 | 6,527 | (NA) | (NA) | — | — | (NA) | (NA) |
| 1920 | 10,761 | (NA) | (NA) | — | — | (NA) | (NA) |
| 1925 | 18,332 | 14,471 | (NA) | — | — | (NA) | (NA) |
| 1930 | 24,319 | 19,169 | (NA) | — | — | (NA) | (NA) |
| 1935 ⁴ | 24,664 | 19,137 | (NA) | 16,748 | 1,332 | 261,456 | 52,732 |
| 1940 ⁵ | 39,179 | 31,799 | 106,464 | 43,661 | 9,687 | 336,537 | 74,777 |
| 1945 | 54,734 | 44,432 | 125,436 | 87,347 | 93,602 | 713,756 | 164,326 |
| 1950 | 99,310 | 79,968 | 202,344 | 247,071 | 92,481 | 337,984 | 50,598 |
| 1955 | 143,063 | 114,678 | 290,528 | 285,328 | 179,274 | 381,725 | — |
| 1960 | 208,411 | 171,793 | 413,908 | 512,404 | 516,527 | 499,331 | — |
| 1961 | 221,599 | 183,401 | 422,729 | 519,789 | 569,122 | 492,610 | — |
| 1962 | 233,680 | 193,570 | 434,132 | 573,789 | 702,428 | 511,890 | — |
| 1963 | 247,629 | 205,342 | 449,933 | 651,787 | 750,161 | 514,782 | — |
| 1964 | 265,793 | 220,939 | 470,097 | 794,060 | 926,424 | 559,426 | — |
| 1965 | 283,689 | 236,006 | 506,198 | 948,585 | 1,336,557 | 561,377 | — |
| 1966 | 302,506 | 251,505 | 539,632 | 1,129,492 | 1,687,105 | 589,386 | — |
| 1967 | 323,849 | 268,190 | 562,522 | 1,332,551 | 2,144,049 | 579,696 | — |
| 1968 | 352,196 | 291,317 | 585,071 | 1,624,206 | 2,594,151 | 463,985 | — |
| 1969 | 381,982 | 314,915 | 611,919 | 1,963,219 | 3,267,601 | 466,197 | — |
| 1970 | 414,165 | 339,952 | 631,543 | 2,288,320 | 3,753,449 | 434,936 | — |
| 1971 | 445,995 | 365,733 | 667,542 | 2,569,758 | 4,476,130 | (NA) | — |

NA Not available.

¹As of December 31. Includes telephones of the Hawaiian Bell Telephone and Telegraph Co. for 1880 and 1885 and the Mutual Telephone Company (renamed the Hawaiian Telephone Company in 1953) from 1885 to the present time, and is thus complete with regard to public telephone service on Oahu for the entire period of record. Other companies, not included in these statistics, operated on Hawaii and Maui until 1919 and Kauai until 1929. Neighbor Island midyear totals for all companies combined (according to the *Annual Reports of the Governor of Hawaii*) were 1,997 in 1915, 3,301 in 1920, and 4,274 in 1925.

²Statewide totals. The inter-Island and transpacific data refer to paid calls (whether paid in Hawaii or elsewhere). The transpacific data include both in and out calls. Inter-Island and transpacific radiotelephone service began late in 1931.

³Combined totals for messages between Hawaii and the Mainland United States in either direction, whether by cable or radio. Cable service was begun in 1902 and terminated in 1951.

⁴Telegraph data refer to 1936, the earliest year available.

⁵Data on local telephone calls refer to 1941, the earliest year available.

Source: Hawaiian Telephone Co., records; Federal Communications Commission, records.

Table 155.—COMMERCIAL AND EDUCATIONAL RADIO AND TELEVISION BROADCAST STATIONS ON THE AIR AND DAILY NEWSPAPER CIRCULATION: 1912 TO 1972

| Year | Commercial broadcast stations ¹ | | | Educational broadcast stations ¹ | | Daily newspaper circulation ² | | |
|------------|--|----|----|---|----|--|-------------------------------|------------------------------|
| | AM | FM | TV | FM | TV | <i>Honolulu Advertiser</i> | <i>Honolulu Star-Bulletin</i> | <i>Hawaii Tribune-Herald</i> |
| 1912 | — | — | — | — | — | 3,210 | 4,262 | (NA) |
| 1915 | — | — | — | — | — | 4,900 | 4,606 | (NA) |
| 1920 | — | — | — | — | — | 5,793 | 8,509 | (NA) |
| 1925 | 2 | — | — | — | — | 12,432 | 16,444 | (NA) |
| 1930 | 1 | — | — | — | — | 12,308 | 20,618 | (NA) |
| 1935 | 2 | — | — | — | — | 13,024 | 25,360 | (NA) |
| 1940 | 3 | — | — | — | — | 26,509 | 40,057 | 4,674 |
| 1945 | 4 | — | — | — | — | 86,353 | 109,185 | 9,166 |
| 1950 | 12 | — | — | — | — | 45,449 | 79,568 | 9,848 |
| 1955 | 13 | 1 | 3 | 1 | — | 46,712 | 90,782 | 10,222 |
| 1960 | 17 | 1 | 7 | 2 | — | 64,719 | 104,107 | 9,884 |
| 1961 | 18 | 1 | 8 | 1 | — | 68,621 | 105,273 | 10,421 |
| 1962 | 20 | 1 | 9 | 1 | — | 61,702 | 103,220 | 10,679 |
| 1963 | 20 | 1 | 10 | 1 | — | 60,551 | 103,359 | 10,826 |
| 1964 | 23 | 2 | 10 | 1 | — | 64,119 | 107,077 | 11,006 |
| 1965 | 23 | 2 | 10 | — | — | 64,763 | 107,342 | 11,136 |
| 1966 | 24 | 2 | 10 | — | — | 68,351 | 110,735 | 11,447 |
| 1967 | 25 | 2 | 10 | — | 2 | 69,686 | 114,770 | 10,944 |
| 1968 | 25 | 3 | 10 | — | 2 | 73,799 | 118,529 | 11,645 |
| 1969 | 25 | 4 | 10 | — | 2 | 74,869 | 122,680 | 12,483 |
| 1970 | 25 | 4 | 10 | 1 | 2 | 77,214 | 126,913 | 13,125 |
| 1971 | 25 | 4 | 10 | 1 | 2 | 74,441 | 126,379 | 13,642 |
| 1972 | 25 | 5 | 10 | 1 | 2 | — | — | — |

NA Not available.

¹As of January 1 (except 1950, June 7). Data before 1950 refer to licensed stations; from 1950 forward, to stations on the air. Television station totals include satellite stations (6 in 1972) but exclude relay stations. Commercial AM broadcasting in Hawaii began in 1922; FM, both commercial and educational, in 1953; commercial television, in 1952; and educational television, in 1966.

²For the three English-language dailies. Data prior to 1940 are October 1 figures supplied by the publishers to the U.S. Post Office; data for 1940 and later years are fourth quarter averages compiled by the Audit Bureau of Circulations, covering daily (but not Sunday) editions. Regular daily newspaper publication began in Hawaii in 1882.

Source: Federal Communications Commission, records; FCC data on broadcast stations on the air, cited in *Statistical Abstract of the United States, 1951-1970*; Hawaii Newspaper Agency, Inc., records; Hawaii Tribune-Herald, records; Hawaii State Department of Planning and Economic Development, *Communications Statistics for Hawaii, 1964* (Statistical Report 19, May 31, 1964).

**Table 156.—TELEPHONE AVAILABILITY AND TELEVISION SETS IN OCCUPIED HOUSING UNITS,
BY COUNTY: 1970**

| Subject | State total | City and County of Honolulu | Hawaii County | Kauai County | Maui County |
|------------------------------|-------------|-----------------------------|---------------|--------------|-------------|
| All occupied units | 203,088 | 164,763 | 17,260 | 8,282 | 12,783 |
| Telephone: | | | | | |
| Available | 185,265 | 152,198 | 14,907 | 7,064 | 11,096 |
| None | 17,823 | 12,565 | 2,353 | 1,218 | 1,687 |
| Number of television sets: | | | | | |
| One | 143,288 | 114,351 | 13,101 | 6,376 | 9,460 |
| Two or more | 46,373 | 41,254 | 2,286 | 864 | 1,969 |
| None | 13,427 | 9,158 | 1,873 | 1,042 | 1,354 |

Source: U.S. Bureau of the Census, *U.S. Census of Housing: 1970*, Final Report HC(1)-B13, tables 32, 37, 62, and 63.

Table 157.—CABLE TELEVISION SUBSCRIBERS: DECEMBER 31, 1970 AND 1971

| Year (Dec. 31) | State total | City and County of Honolulu | County of Hawaii | County of Kauai ² | County of Maui |
|----------------|-------------|-----------------------------|------------------|------------------------------|----------------|
| 1970 | 12,091 | 11,066 | — | — | 1,025 |
| 1971 | 13,718 | 12,581 | — | 37 | 1,100 |

¹Began operation in November 1971.

Source: Hawaii State Department of Regulatory Agencies, CATV Division.

**Table 158.—POSTAL, TELEPHONE AND TELEGRAPH RATES AND NEWSPAPER PRICES
JULY 1, 1929 TO 1971**

| Subject | 1929 ¹ | 1940 | 1951 | 1960 | 1970 | 1971 |
|--|-------------------|------|------|------|------|------|
| Postage rates ² | | | | | | |
| First-class letter | 0.02 | 0.03 | 0.03 | 0.04 | 0.06 | 0.08 |
| Air mail letter | — | 0.25 | 0.06 | 0.07 | 0.10 | 0.11 |
| Telephone rates: | | | | | | |
| Local calls ³ | 0.05 | 0.05 | 0.05 | 0.10 | 0.10 | 0.10 |
| Honolulu-Hilo ⁴ | 3.00 | 2.00 | 2.00 | 1.75 | 0.90 | 0.90 |
| Honolulu-San Francisco ⁴ .. | 21.00 | 9.00 | 7.50 | 6.00 | 3.90 | 3.90 |
| Cable rate ⁵ | 0.20 | 0.12 | 0.19 | 0.21 | 0.21 | 0.21 |
| Newspaper prices: | | | | | | |
| Daily ⁶ | 0.05 | 0.05 | 0.05 | 0.10 | 0.10 | 0.15 |
| Saturday ⁷ | 0.05 | 0.05 | 0.10 | 0.10 | 0.10 | 0.15 |
| Sunday ⁸ | 0.10 | 0.10 | 0.15 | 0.15 | 0.25 | 0.35 |

¹Telephone rates refer to 1931.

²Between Hawaii and U.S. Mainland. Air mail letter rate for 1940 is per half ounce; all other rates listed are per ounce.

³From pay telephones in Honolulu. The present rate was established on December 30, 1952.

⁴Station to station, 3-minute daytime call. Excludes tax.

⁵Between Oahu and San Francisco, per full rate word. Minimum number of chargeable words in a full rate cablegram or radiogram was five in 1940 and 1951, seven in 1960 and thereafter (there was no minimum in 1929, although, as a practical matter, cablegrams must have at least three and probably four or five words).

⁶*Honolulu Advertiser*, Monday through Saturday; *Honolulu Star-Bulletin*, Monday through Friday.

⁷*Honolulu Star-Bulletin*.

⁸*Honolulu Advertiser*, 1929-1960; *Honolulu Star-Bulletin*, 1960; *Honolulu Star-Bulletin and Advertiser*, 1970 and thereafter.

Source: Postmaster, U.S. Post Office, Honolulu; Public Relations Department, Hawaiian Telephone Company; Secretary, Federal Communications Commission; newspaper mastheads.

Table 159.—ELECTRIC UTILITIES: 1901 TO 1970

| Year | Customers, Dec. 31 ¹ | | KWH sold (1,000) ² | | | Average annual use (KWH) ³ | | Average rate (\$/KWH) | | Installed capacity (KW) |
|----------------|---------------------------------|--------|-------------------------------|-------------|-----------|---------------------------------------|--------|-----------------------|---------|-------------------------|
| | Residential | Other | Total | Residential | Other | Residential | Other | Residential | Other | |
| 1901 | — | — | 1,690 | — | — | — | — | — | — | — |
| 1910 | — | — | 3,926 | — | — | — | — | — | — | — |
| 1920 | 14,800 | — | 18,039 | — | — | 301 | — | — | — | — |
| 1930 | 41,600 | 8,241 | 86,699 | — | — | 568 | — | — | — | — |
| 1940 | 74,248 | — | 240,040 | — | — | 1,244 | — | — | — | — |
| 1950 | 85,069 | 21,018 | 599,309 | 203,284 | 396,025 | 2,390 | 18,842 | .029406 | .020066 | 252,955 |
| 1959 | 127,336 | 24,602 | 1,422,145 | 519,222 | 902,923 | 4,078 | 36,701 | .030240 | .021664 | 469,343 |
| 1960 | 132,440 | 25,138 | 1,602,197 | 580,849 | 1,021,348 | 4,386 | 40,630 | .029723 | .021559 | 469,343 |
| 1961 | 136,788 | 25,664 | 1,766,031 | 624,730 | 1,141,301 | 4,567 | 44,471 | .029057 | .021015 | 527,708 |
| 1962 | 140,661 | 26,440 | 1,966,105 | 678,628 | 1,287,477 | 4,825 | 48,694 | .028886 | .020722 | 543,737 |
| 1963 | 144,638 | 27,194 | 2,077,570 | 730,317 | 1,347,254 | 5,049 | 49,542 | .028389 | .020609 | 628,312 |
| 1964 | 149,547 | 28,137 | 2,284,275 | 786,118 | 1,498,157 | 5,257 | 53,245 | .027949 | .020133 | 716,312 |
| 1965 | 154,822 | 28,901 | 2,445,024 | 853,086 | 1,591,939 | 5,510 | 55,082 | .027569 | .020072 | 731,395 |
| 1966 | 160,784 | 29,492 | 2,639,866 | 912,616 | 1,727,250 | 5,676 | 58,567 | .027290 | .019949 | 830,644 |
| 1967 | 166,256 | 30,161 | 2,832,468 | 989,785 | 1,842,684 | 5,953 | 61,109 | .027039 | .020037 | 829,157 |
| 1968 | 171,346 | 30,821 | 3,109,256 | 1,083,233 | 2,026,023 | 6,322 | 65,735 | .026803 | .020022 | 894,532 |
| 1969 | 178,569 | 31,761 | 3,426,052 | 1,174,502 | 2,251,550 | 6,577 | 70,890 | .026548 | .019647 | 896,271 |
| 1970 | 186,282 | 32,721 | 2,758,094 | 1,270,732 | 2,487,362 | 6,822 | 76,017 | .026810 | .020113 | 1,007,021 |
| COUNTIES: | | | | | | | | | | |
| 1970 | | | | | | | | | | |
| Honolulu | 144,854 | 23,677 | 3,275,673 | 1,064,700 | 2,210,973 | 7,350 | 93,381 | .024381 | .017750 | — |
| Hawaii | 17,897 | 4,327 | 214,364 | 92,071 | 122,293 | 5,144 | 28,263 | .040359 | .038321 | — |
| Kauai | 8,673 | 1,596 | 102,686 | 38,455 | 64,231 | 4,434 | 40,245 | .043355 | .035921 | — |
| Maui | 14,858 | 3,121 | 165,371 | 75,506 | 89,865 | 5,082 | 28,794 | .036111 | .042180 | — |

¹Data limited to Oahu before 1930. The 1930 Oahu totals were 30,972 residential and 6,682 nonresidential customers.

²Amount generated (rather than amount sold) for 1901 and 1910. Data before 1930 limited to Oahu. The 1930 Oahu total was 78,633M KWH, or 90.7 percent of the all-Island total.

³Data before 1950 limited to Oahu. The 1950 residential average on Oahu was 2,688 KWH.

Source: Hawaii State Public Utilities Commission, *Annual Report . . . 1931* (p. 23); *Historical Data, Gas and Electric Utilities, State of Hawaii, 1959 to 1968* (unpaged), and records; Territorial Planning Board, *First Progress Report* (p. 292); *Annual Report of the Governor of Hawaii . . . 1941* (p. 75); Hawaiian Electric Co., Ltd., records.

Table 160.—GAS UTILITIES: 1910 TO 1970
(Data limited to Honolulu Gas Co., Ltd. Excludes bottled gas)

| Year | Customers | | Gas sold (therms) ¹ | | | Ave. ann. use (therms) | | Average rate (dollars per therms) | | Installed capacity (1,000 therms) |
|---------------|-------------|--------|--------------------------------|-------------|--------|------------------------|--------|-----------------------------------|-------|-----------------------------------|
| | Residential | Other | Total | Residential | Other | Residential | Other | Residential | Other | |
| 1910 | | 1,928 | — | — | — | — | — | — | — | — |
| 1920 | | 6,762 | — | — | — | — | — | — | — | — |
| 1930 | | 14,144 | — | — | — | — | — | — | — | — |
| 1940 | | 24,265 | 4,405 | — | — | — | — | — | — | — |
| 1950 | 32,392 | 2,935 | 11,453 | 8,755 | 2,698 | 270 | 919 | .2348 | .1744 | — |
| 1959 | 35,826 | 2,657 | 14,869 | 10,018 | 4,851 | 280 | 1,826 | .3538 | .2246 | 2,400 |
| 1960 | 35,536 | 2,555 | 15,881 | 10,299 | 5,582 | 290 | 2,185 | .3619 | .2280 | 2,400 |
| 1961 | 35,857 | 2,227 | 16,790 | 10,502 | 6,289 | 293 | 2,824 | .3685 | .2263 | 2,400 |
| 1962 | 35,463 | 2,050 | 18,197 | 10,839 | 7,358 | 306 | 3,589 | .3679 | .2262 | 2,400 |
| 1963 | 35,034 | 1,874 | 18,914 | 10,775 | 8,139 | 308 | 4,343 | .3666 | .2238 | 2,400 |
| 1964 | 34,994 | 1,515 | 19,697 | 10,919 | 8,778 | 312 | 5,794 | .3639 | .2202 | 2,400 |
| 1965 | 34,775 | 1,428 | 20,397 | 11,016 | 9,381 | 317 | 6,570 | .3634 | .2186 | 2,400 |
| 1966 | 34,956 | 1,355 | 21,019 | 11,171 | 9,848 | 320 | 7,268 | .3626 | .2185 | 2,400 |
| 1967 | 35,000 | 1,382 | 22,547 | 11,348 | 11,198 | 324 | 8,103 | .3618 | .2179 | 2,400 |
| 1968 | 34,955 | 1,300 | 23,570 | 11,331 | 12,240 | 324 | 9,415 | .3618 | .2169 | 2,400 |
| 1969 | 34,829 | 1,305 | 25,649 | 11,848 | 13,801 | 340 | 10,576 | .3588 | .2156 | 2,400 |
| 1970 | 32,163 | 3,979 | 27,831 | 10,891 | 16,940 | 339 | 4,257 | .3619 | .2227 | 2,400 |
| COUNTIES: | | | | | | | | | | |
| 1970 | | | | | | | | | | |
| Honolulu | 29,880 | 3,971 | 26,696 | 10,026 | 16,670 | 336 | 4,198 | .3586 | .2225 | — |
| Hawaii | 2,016 | 8 | 1,074 | 270 | 804 | 399 | 33,683 | .3933 | .2392 | — |
| Kauai | — | — | — | — | — | — | — | — | — | — |
| Maui | 267 | — | 61 | 61 | — | 228 | — | .4789 | — | — |

¹Data for years before 1940 were expressed in cubic feet rather than therms. Cubic feet of gas sold amounted to 47,484,100 in 1910, 194,062,800 in 1920, 431,934,600 in 1930, and 855,420,400 in 1940.

Source: Hawaii State Public Utilities Commission, *Historical Data, Gas and Electric Utilities, State of Hawaii, 1959 to 1968* (unpaged), and records; Territorial Planning Board, *First Progress Report* (p. 307); Chamber of Commerce of Honolulu, *General Information About Honolulu ... 1936-1940*, p. 27.

**Table 161.—TYPICAL RESIDENTIAL UTILITY RATES, FOR OAHU:
JANUARY 1, 1972**

| Utility and usage | Monthly rate (dollars) |
|---|---------------------------|
| Water: | |
| ¾-inch meter, 5,000 gallons | 4.25 |
| ¾-inch meter, 10,000 gallons | 6.10 |
| ¾-inch meter, 20,000 gallons | 9.80 |
| 1½-inch meter, 50,000 gallons | 26.00 |
| Electricity: | |
| 100 kilowatt-hours | 4.94 |
| 250 kilowatt-hours | 8.87 |
| 500 kilowatt-hours | 14.08 |
| 500 kilowatt-hours, with electric waterheater | 13.48 |
| Gas: | |
| 10 therms | 4.84 |
| 25 therms | 9.14 |
| 50 therms | 16.14 |
| 100 therms | 30.14 |
| Telephone: | |
| Individual line | 9.20 |
| Two-party line | 7.75 |

Source: Honolulu Board of Water Supply, *Water Service Rate Schedule, Effective December 23, 1970*; Hawaiian Electric Company, Inc., Customer Service Department; Honolulu Gas Co., Ltd., Schedule No. 20, Effective August 1, 1970; Hawaiian Telephone Co., P.U.C. Tariff No. 2, Effective December 27, 1971.

Table 162.—SCIENTIFIC RESOURCES: 1971

| TYPE OF ORGANIZATION | Number of companies or agencies | | Total employment | | Professional and technical employment | |
|---|---------------------------------|------|----------------------|-------------|---------------------------------------|-------------|
| | 1971 | 1970 | 1971 | 1970 | 1971 | 1970 |
| I.—Employing organizations | 301 | 265 | 22,230 | 20,490 | 5,681 | 5,094 |
| Organizations with scientific capabilities .. | 59 | 39 | 7,511 | 7,158 | 1,446 | 1,339 |
| Computer sciences | 45 | 27 | 1,883 | 1,351 | 1,034 | 637 |
| R & D and allied organizations | 45 | 46 | 3,612 | 3,513 | 637 | 629 |
| Testing laboratories | 24 | 23 | 854 | 704 | 474 | 415 |
| Government research agencies | 99 | 101 | 7,677 | 7,183 | 1,868 | 1,882 |
| Federal | 23 | 20 | 1,670 | 1,703 | 277 | 260 |
| Military | 12 | 12 | 1,037 | 806 | 164 | 150 |
| State, except U.H. | 33 | 34 | 2,323 | 1,950 | 684 | 662 |
| University of Hawaii | 18 | 22 | 998 | 1,133 | 429 | 622 |
| County | 13 | 13 | 1,649 | 1,591 | 224 | 188 |
| Private research agencies | 29 | 29 | 693 | 581 | 222 | 192 |
| | Number of associations | | Regular membership | | Associate membership | |
| Type of Organization | 1971 | 1970 | 1971 | 1970 | 1971 | 1970 |
| II.—Professional associations | 45 | 43 | 10,365 | 10,226 | 604 | 545 |
| | Libraries | | Scientific books | | | |
| Type of library | 1971 | 1970 | 1971 | | 1970 | |
| III.—Scientific libraries | 24 | 27 | 677,917 | | 656,918 | |
| | Institutions or units | | Full-time enrollment | | Part-time enrollment | |
| Institution | 1971 | 1970 | Spring 1971 | Spring 1970 | Spring 1971 | Spring 1970 |
| IV.—Educational institutions | 35 | 35 | 32,553 | 28,101 | 39,629 | 29,345 |
| East-West Center | 6 | 6 | 695 | 550 | 1,765 | — |
| University of Hawaii ¹ | 14 | 14 | 19,387 | 16,930 | 33,441 | 28,018 |
| Community Colleges | 6 | 5 | 8,609 | 6,348 | 3,962 | 989 |
| Private Colleges | 5 | 5 | 2,342 | 2,112 | 311 | 288 |
| Business and technical schools | 4 | 5 | 1,520 | 2,161 | 150 | 50 |

¹Because of different enrollment definitions, these data are not comparable to those for the University of Hawaii in Section 3.

Source: Hawaii State Department of Planning and Economic Development, *Hawaii's Scientific Resources, 1971 Directory*, 5th Edition, p. 5.

Table 163.—LARGE OPTICAL TELESCOPES: APRIL 1972

| Location | Operated by | Diameter (inches) |
|-----------------|-------------------------|-------------------|
| Mauna Kea | Univ. of Hawaii | 88 |
| do | do | 24 |
| do | do | 24 |
| Haleakala | Univ. of Michigan | 60 |
| Ewa Beach | Private | 16 |
| Honolulu | Bishop Museum | 12 |

Source: Bernice P. Bishop Museum; University of Hawaii, Institute for Astronomy.

SECTION 17

TRANSPORTATION

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

Most local travel in Hawaii is by private automobile. Motor vehicle registration increased from 72,000 in 1940 to 231,000 in 1960 and 425,000 in 1971. Vehicle miles rose during the same period from 716 million to 3.7 billion. By the end of 1971, 524,000 licensed drivers had access to 3,661 miles of streets and highways throughout the State. There was a corresponding decline in the use of local bus service: revenue passengers of the Honolulu Rapid Transit Company dropped from 93 million in 1944 to 23.7 million in 1970.

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

Similar growth is evident in transpacific travel. Although surface passengers dropped from 95,000 in 1940 to 27,000 in 1970, air passengers increased during the same 30-year span from 639 to 5.2 million. Between 1936 and 1972, sharp declines occurred in both scheduled flight time between California and Hawaii (from 20 to 5 hours) and minimum roundtrip fare (from \$712 to \$203). Overseas cargo received in the State in 1970 amounted to 27,000 tons by air and 7.5 million tons by ship.

The chief source for transportation statistics is the Hawaii State Department of Transportation and its Highways, Harbors, and Airports Divisions. Other sources include the U.S. Bureau of Public Roads, Civil Aeronautics Board, Federal Aviation Administration, Army Corps of Engineers, Hawaii State Public Utilities Commission, and individual transportation companies. Similar statistics for other areas are reported in *Statistical Abstract of the United States: 1971*, Sections 21 and 22.

**Table 164.—MOTOR VEHICLE REGISTRATION, FUEL CONSUMPTION, AND VEHICLE MILES:
1900 TO 1971**

| Year | Motor vehicle registration ¹ | | | Fuel consumption per vehicle (gallons) | Vehicle miles | |
|------------|---|----------------|-----------------------------------|--|------------------|-------------|
| | Total | Passenger cars | Other motor vehicles ² | | Total (millions) | Per vehicle |
| 1900 | 4 | — | — | — | — | — |
| 1905 | 80 | — | — | — | — | — |
| 1910 | 861 | — | — | — | — | — |
| 1915 | 3,781 | — | — | — | — | — |
| 1922 | 15,336 | — | — | — | — | — |
| 1925 | 28,001 | — | — | — | — | — |
| 1930 | 45,118 | — | — | — | — | — |
| 1935 | 50,422 | 40,772 | 9,650 | 654 | 461.5 | 9,153 |
| 1940 | 71,596 | 58,541 | 13,055 | 714 | 715.6 | 9,996 |
| 1945 | 70,618 | 55,672 | 14,946 | 638 | 630.4 | 8,932 |
| 1950 | 137,917 | 110,622 | 27,295 | 642 | 1,240.3 | 8,988 |
| 1955 | 180,755 | 153,451 | 27,304 | 621 | 1,571.1 | 8,694 |
| 1960 | 230,791 | 199,829 | 30,962 | 616 | 1,989.6 | 8,624 |
| 1961 | 244,898 | 212,650 | 32,248 | 602 | 2,063.7 | 8,428 |
| 1962 | 257,215 | 225,086 | 32,129 | 595 | 2,142.9 | 8,330 |
| 1963 | 270,176 | 237,422 | 32,754 | 580 | 2,192.3 | 8,120 |
| 1964 | 288,452 | 254,249 | 34,203 | 574 | 2,316.7 | 8,036 |
| 1965 | 309,331 | 273,559 | 35,772 | 566 | 2,449.8 | 7,924 |
| 1966 | 323,843 | 286,836 | 37,007 | 566 | 2,565.6 | 7,922 |
| 1967 | 335,326 | 297,766 | 37,560 | 580 | 2,721.1 | 8,114 |
| 1968 | 353,888 | 315,024 | 38,864 | 592 | 2,934.4 | 8,292 |
| 1969 | 373,541 | 332,213 | 41,328 | 605 | 3,162.8 | 8,467 |
| 1970 | 404,463 | 358,255 | 46,208 | 602 | 3,408.9 | 8,428 |
| 1971 | 425,210 | 375,205 | 50,005 | 615 | 3,660.7 | 8,609 |

¹Taxable and non-taxable. Excludes military vehicles, motorcycles, motor scooters, trailers, and semi-trailers.

²Amublances and hearses, buses, trucks, and tractor-trucks.

Source: Hawaii State Department of Transportation, Highways Division, *Annual Traffic Summary, Island of Oahu, 1959*, tables II, III, VI and VII, and records; Robert C. Schmitt, "Automobile Ownership in Hawaii Before 1931: Dates and Data," *Hawaii Historical Review*, Vol. II, No. 10, January 1968, pp. 426-432.

Table 165.—VEHICLE REGISTRATION AND USE, DRIVERS LICENSES IN FORCE, AND STREET AND HIGHWAY MILEAGE, BY COUNTIES: 1971

| Subject | State total | City and County of Honolulu | County of Hawaii | County of Kauai | County of Maui |
|--|-------------|-----------------------------|------------------|-----------------|----------------|
| Motor vehicles registered | 425,210 | 332,212 | 42,150 | 19,409 | 31,439 |
| Passenger cars | 375,205 | 299,320 | 33,979 | 15,924 | 25,982 |
| Ambulances and hearses | 104 | 66 | 11 | 7 | 20 |
| Buses | 1,129 | 772 | 137 | 106 | 114 |
| Trucks | 46,984 | 30,984 | 7,651 | 3,201 | 5,148 |
| Tractor-trucks | 1,736 | 1,019 | 372 | 170 | 175 |
| Other vehicles | 52 | 51 | — | 1 | — |
| Other vehicles registered: | | | | | |
| Trailers, semi-trailers | 12,263 | 7,664 | 2,145 | 1,202 | 1,252 |
| Motoreycles, motor scooters | 10,033 | 8,446 | 649 | 378 | 560 |
| Bicycles ¹ | 52,485 | 44,159 | 2,735 | 2,141 | 3,450 |
| Fuel consumption per motor vehicle (gallons) | 615 | 613 | 658 | 583 | 599 |
| Vehicle miles (in millions) | 3,660.7 | 2,849.9 | 388.5 | 158.5 | 263.8 |
| Miles per motor vehicle | 8,609 | 8,579 | 9,216 | 8,169 | 8,389 |
| Drivers licenses in force; Dec. 31 | 523,935 | 436,494 | 37,428 | 18,729 | 31,284 |
| Mileage in public streets and highways, Dec. 31 ² | 3,584.71 | 1,212.23 | 1,380.32 | 320.51 | 671.65 |
| De facto population per motor vehicle ³ | 1.93 | 2.01 | 1.66 | 1.69 | 1.60 |
| Motor vehicles per mile of public street or highway | 119 | 274 | 31 | 61 | 47 |

¹The Maui County total includes 3,041 on Maui, 228 on Molokai, and 181 on Lanai.

²The Maui County total includes 519.92 on Maui, 89.14 on Molokai, and 62.59 on Lanai.

³Based on the provisional estimates for July 1, 1971 published in the Hawaii State Department of Planning and Economic Development, Statistical Report 86 (November 12, 1971), p. 5.

Source: Hawaii State Department of Transportation, Highways Division, records; each County Department of Finance, records.

Table 166.—AUTOMOBILES AVAILABLE AND MEANS OF TRANSPORTATION TO WORK: 1960 AND 1970

| Number of automobiles available | Households | | Means of transportation to work | Workers | |
|---------------------------------|------------|---------|-------------------------------------|---------|-----------|
| | 1970 | 1960 | | 1970 | 1960 |
| All households | 203,089 | 153,012 | All workers ¹ | 327,310 | 248,406 |
| None | 22,170 | 25,871 | Private automobile, driver | 213,521 | } 156,992 |
| One | 93,854 | 88,320 | Private automobile, passenger | 44,493 | |
| Two | 69,343 | 32,577 | Bus | 19,470 | 20,039 |
| Three or more | 17,722 | 6,244 | Walked only | 33,003 | 22,214 |
| | | | Other means | 11,296 | 10,173 |
| Percent, two or more | 42.9 | 25.4 | Worked at home | 5,527 | 32,843 |

¹Includes not reported (6,145 in 1960).

Source: *U.S. Census of Housing: 1960*, Final Report HC(1)-13, table 6; *U.S. Census of Population: 1960*, Final Report PC(1)-13C, table 64; *U.S. Census of Housing: 1970*, Final Report HC(1)-B13, table 36; *U.S. Census of Population: 1970*, Final Report PC(1)-C13, table 50.

Table 167.—NEW PASSENGER CAR REGISTRATIONS, FOR OAHU: 1960 TO 1971

| Calendar year | Total registrations by origin | | | | Leading make | |
|---------------|-------------------------------|----------------|---------------|---------|---------------------------|-------------------|
| | Total | Domestic makes | Foreign makes | | Name | Number registered |
| | | | Number | Percent | | |
| 1960 | 15,857 | 12,773 | 3,084 | 19.4 | Chevrolet | 3,702 |
| 1967 | 24,331 | 17,412 | 6,919 | 28.4 | Chevrolet | 4,706 |
| 1968 | 29,044 | 19,560 | 9,484 | 32.7 | Chevrolet | 4,409 |
| 1969 | 33,361 | 22,001 | 11,360 | 34.1 | Ford | 4,738 |
| 1970 | 33,542 | 20,275 | 13,267 | 39.6 | Toyota | 4,836 |
| 1971 | 32,109 | 16,308 | 15,801 | 49.2 | Toyota ¹ | 6,040 |

¹Other makes with 1,000 or more new passenger car registrations in 1971 were: Datsun, 5,023; Chevrolet, 3,452; Volkswagen, 3,303; Ford, 3,229; Dodge, 2,596; Plymouth, 2,217; and Pontiac, 1,197.

Source: Motor Vehicle Registrations—Hawaii, a Division of Cardinal Services, Ltd., tabular releases.

Table 168.— MAJOR TRAFFIC ACCIDENTS, PERSONS INJURED, AND TRAFFIC DEATHS: 1920 TO 1971

| Year | Major traffic accidents ¹ | Persons injured in traffic accidents | Traffic deaths ² |
|------------|--------------------------------------|--------------------------------------|-----------------------------|
| 1920 | (NA) | (NA) | 41 |
| 1930 | (NA) | (NA) | 86 |
| 1940 | (NA) | (NA) | 63 |
| 1950 | 6,599 | 2,112 | 61 |
| 1960 | 7,254 | 4,754 | 96 |
| 1965 | 9,495 | 7,493 | 99 |
| 1966 | 10,225 | 8,051 | 116 |
| 1967 | 11,529 | 8,707 | 138 |
| 1968 | 13,989 | 10,082 | 147 |
| 1969 | 16,174 | 10,603 | 133 |
| 1970 | 18,172 | 11,744 | 152 |
| 1971 | 18,048 | 10,934 | 154 |

NA Not available.

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

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

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

Table 169.—UNDOCUMENTED STATE-REGISTERED VESSELS: DECEMBER 31, 1970 AND 1971

| Characteristic | 1970 | 1971 | |
|--------------------------------|-------|--------|---------|
| | | Number | Percent |
| Certificates outstanding | 8,042 | 8,803 | 100.0 |
| Length:¹ | | | |
| Under 16 feet | 4,051 | 4,352 | 49.9 |
| 16 to less than 26 feet | 3,333 | 3,626 | 41.6 |
| 26 to less than 40 feet | 561 | 654 | 7.5 |
| 40 feet and over | 97 | 94 | 1.1 |
| Hull materials: | | | |
| Wood | 3,514 | 3,580 | 40.7 |
| Steel | 23 | 14 | 0.2 |
| Aluminum | 162 | 176 | 2.0 |
| Plastic | 4,280 | 4,880 | 55.4 |
| Other | 63 | 153 | 1.7 |
| Type of vessel: | | | |
| Cabin motorboat | 842 | 915 | 10.4 |
| Open motorboat | 3,301 | 3,477 | 39.6 |
| Runabout | 2,433 | 2,530 | 28.7 |
| Sail/inboard | 199 | 241 | 2.7 |
| Sail/outboard | 325 | 414 | 4.7 |
| Sail only | 907 | 970 | 11.0 |
| Other | 35 | 256 | 2.9 |
| Uses: | | | |
| Pleasure | 7,439 | 8,108 | 92.0 |
| Commercial fishing | 319 | 364 | 4.2 |
| Other | 284 | 331 | 3.8 |
| Island: | | | |
| Oahu | 6,049 | 6,711 | 76.2 |
| Rest of State | 1,993 | 2,092 | 23.8 |
| Place kept: | | | |
| Moored on water | 2,040 | 2,195 | 24.8 |
| Stored on land | 6,002 | 6,608 | 75.2 |

¹Excludes 77 assigned to dealers or manufacturers in 1971.

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

Table 170.—REVENUE PASSENGERS, BY MEANS OF TRANSPORTATION: 1860 TO 1971

| Year | Bus or street car (Honolulu only) ¹ | Steam railway ² | | Ship | | Airline | |
|-------------------|--|----------------------------|----------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | | All railroads | Oahu Rwy. & Land Co. | Inter-Island ³ | Transpacific ⁴ | Inter-Island ⁵ | Transpacific ⁶ |
| 1860 | — | — | — | (NA) | 1,348 | — | — |
| 1870 | — | — | — | (NA) | 2,495 | — | — |
| 1880 | — | (NA) | — | (NA) | 7,521 | — | — |
| 1890 | (NA) | (NA) | 36,352 | (NA) | 11,010 | — | — |
| 1900 ⁷ | (NA) | (NA) | 278,872 | (NA) | 41,788 | — | — |
| 1910 ⁸ | 8,979,874 | 694,793 | 617,719 | 62,236 | 29,178 | — | — |
| 1920 ⁹ | 16,926,617 | 2,760,585 | 2,033,756 | 95,237 | 30,170 | — | — |
| 1930 | 14,505,045 | 591,069 | 322,685 | 143,806 | 70,000 | 10,356 | — |
| 1940 | 23,390,745 | 354,159 | 331,587 | 158,328 | 94,582 | 28,624 | 639 |
| 1950 ⁹ | 41,787,045 | — | — | — | 35,643 | 438,938 | 118,738 |
| 1960 | 29,083,700 | — | — | — | 80,903 | 955,610 | 785,589 |
| 1961 | 26,116,687 | — | — | — | 68,102 | 939,336 | 926,072 |
| 1962 | 24,530,398 | — | — | — | 66,925 | 979,756 | 1,084,076 |
| 1963 | 22,922,296 | — | — | — | 62,760 | 1,144,265 | 1,295,740 |
| 1964 | 22,945,470 | — | — | — | 56,177 | 1,340,996 | 1,516,259 |
| 1965 | 23,190,704 | — | — | — | 53,990 | 1,538,392 | 1,794,255 |
| 1966 | 23,694,206 | — | — | — | 54,511 | 1,754,970 | 2,125,479 |
| 1967 ⁹ | 18,301,341 | — | — | — | 52,876 | 2,117,557 | 2,735,151 |
| 1968 | 23,514,205 | — | — | — | 49,099 | 2,347,949 | 3,171,259 |
| 1969 | 24,079,233 | — | — | — | 45,428 | 2,724,622 | 3,806,147 |
| 1970 | 23,693,547 | 114,000 | — | — | 26,966 | 2,992,777 | 5,243,276 |
| 1971 ⁹ | 17,861,774 | (NA) | — | — | (NA) | 3,380,031 | 5,329,926 |

NA Not available.

¹Calendar year data for the Honolulu Rapid Transit Co., Ltd., 1910-1970, and for the Mass Transit Lines, Inc., from March 1, 1971 forward. Street railway service, using mule cars, was initiated in Honolulu in 1888. From 1903 to 1970, HRT (which commenced operations in 1901) provided the only large scale public transit service in Honolulu.

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

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

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

⁵Calendar years. Service began in 1929. Includes non-revenue passengers for 1970 and 1971.

⁶Calendar years. Includes Hilo (319,771 in 1971) as well as Honolulu. Data for 1970 and 1971 include non-revenue passengers. This series shows combined totals for arrivals, departures, and through passengers. In 1971 there were 2,296,119 arrivals, 2,304,570 departures, and 729,237 through passengers. Scheduled service started in Honolulu in 1936 and in Hilo in 1967.

⁷The transpacific ship total refers to calendar 1899.

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

⁹Passenger volumes affected by major strikes.

Source: Hawaii State Department of Planning and Economic Development, *Passenger Statistics of Hawaii* (Statistical Report 75, August 25, 1970), as corrected; Hawaii State Department of Transportation, records; City and County of Honolulu, Mass Transit Services.

Table 171.—AIR FARES AND FLIGHT TIMES FOR SPECIFIED INTER-ISLAND AND TRANSPACIFIC FLIGHTS: 1930 TO 1972

| Year (as of Jan. 1) | Honolulu-Hilo by Hawaiian Airlines | | | | Honolulu-San Francisco by Pan American World Airways | | | |
|---------------------|------------------------------------|-------------------------|------------------------------|-------------------|--|-------------------------|------------------------------|-------------------|
| | Aircraft | 1-way fare ¹ | Round trip fare ¹ | Time ² | Aircraft | 1-way fare ¹ | Round trip fare ¹ | Time ² |
| 1930 | S-38 | 30.00 | 60.00 | 1:40 | — | — | — | — |
| 1935 | S-38 | 30.00 | 45.00 | 1:40 | — | — | — | — |
| 1940 | S-43 | 23.00 | 41.40 | 1:25 | B-314 | 278.00 | 556.00 | 17:30 |
| 1945 | DC-3 | 20.70 | 37.26 | 1:20 | B-314 | 319.70 | 575.00 | 17:30 |
| 1950 | DC-3 | 15.53 | 31.05 | 1:20 | B-377 | 184.00 | 331.20 | 9:25 |
| 1955 | CV-340 | 16.50 | 33.00 | 1:02 | B-377 | 137.50 | 275.00 | 9:25 |
| 1960 | CV-340 | 19.36 | 38.72 | 1:02 | B-707 | 133.08 | 266.16 | 4:55 |
| 1965 | Viscount | 20.10 | 40.19 | 0:53 | B-707 | 100.03 | 200.06 | 4:55 |
| 1970 | DC-9 | 25.20 | 50.40 | 0:42 | B-707 | 85.03 | 170.05 | 4:55 |
| 1971 | DC-9 | 26.00 | 52.00 | 0:42 | B-747 | 88.28 | 176.56 | 4:55 |
| 1972 | DC-9 | 26.00 | 52.00 | 0:42 | B-747 | 101.32 | 202.64 | 5:02 |

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

²Average scheduled flight time eastbound and westbound in hours and minutes.

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

Table 172.—AIR CARGO AND AIR MAIL: 1947 TO 1971
(In thousands of pounds)

| Year ¹ | Overseas air cargo ² | | | Overseas air mail ² | | | Inter-Island ³ | |
|-------------------------|---------------------------------|----------|---------|--------------------------------|----------|---------|---------------------------|----------|
| | Outgoing | Incoming | Through | Outgoing | Incoming | Through | Air cargo | Air mail |
| 1947 | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) | 23,883 | 433 |
| 1948 ⁴ | | 3,329 | | | 2,110 | | 23,469 | 513 |
| 1949 ⁵ | 997 | 1,577 | 1,775 | 1,253 | 1,249 | 881 | 20,770 | 663 |
| 1950 ⁵ | 1,144 | 1,935 | 1,389 | 1,214 | 1,230 | 1,121 | 19,532 | 863 |
| 1951 | 835 | 879 | 2,596 | 887 | 981 | 1,393 | 24,421 | 709 |
| 1952 | 778 | 839 | 2,121 | 1,084 | 1,009 | 942 | 24,924 | 682 |
| 1953 | 821 | 934 | 1,834 | 1,196 | 1,080 | 1,105 | 24,526 | 719 |
| 1954 | 808 | 908 | 1,968 | 1,243 | 1,190 | 1,685 | 23,262 | 736 |
| 1955 | 857 | 1,417 | 3,178 | 1,603 | 1,590 | 4,143 | 24,143 | 748 |
| 1956 | 1,122 | 1,532 | 4,666 | 1,697 | 1,881 | 3,879 | 22,867 | 788 |
| 1957 | 1,453 | 2,143 | 10,081 | 1,811 | 2,152 | 3,394 | 21,597 | 850 |
| 1958 | 1,544 | 2,480 | 5,453 | 2,017 | 2,382 | 3,258 | 23,365 | 857 |
| 1959 | 1,787 | 4,055 | 7,710 | 2,191 | 2,871 | 4,563 | 22,385 | 936 |
| 1960 | 9,898 | 12,092 | (NA) | 7,955 | 8,702 | (NA) | 25,333 | 1,036 |
| 1961 | 10,902 | 14,028 | 6,170 | 12,992 | 15,767 | 1,060 | 26,207 | 1,279 |
| 1962 | 16,497 | 20,705 | 8,099 | 15,202 | 16,954 | 962 | 29,427 | 1,429 |
| 1963 | 14,840 | 17,082 | 4,996 | 15,388 | 17,193 | 723 | 32,634 | 1,698 |
| 1964 | 19,611 | 22,826 | 9,218 | 14,824 | 16,812 | 46 | 40,298 | 2,062 |
| 1965 ⁶ | 31,732 | 40,985 | 11,948 | 26,208 | 27,700 | 230 | 39,565 | 4,897 |
| 1966 | 43,490 | 57,907 | 13,877 | 64,356 | 67,036 | 128 | 38,767 | 11,736 |
| 1967 | 65,156 | 80,198 | 11,515 | 117,969 | 121,386 | 78 | 41,978 | 12,039 |
| 1968 | 66,960 | 83,986 | 21,075 | 117,929 | 121,096 | 2,534 | 38,215 | 12,236 |
| 1969 | 42,391 | 77,760 | 23,666 | 80,405 | 81,051 | 1,335 | 44,150 | 12,534 |
| 1970 | 37,553 | 54,285 | (NA) | 21,362 | 18,109 | (NA) | 52,139 | 14,141 |
| 1971 ⁷ | 67,131 | 116,591 | (NA) | 17,915 | 24,883 | (NA) | 51,389 | 14,332 |

NA Not available

¹Calendar 1947; fiscal years ended June 30, 1948 to 1960; calendar years, 1961 and later.

²For traffic at Honolulu International Airport (all years) and General Lyman Field, Hilo (beginning in 1967). Comparability of these data varies significantly from year to year, as a result of fluctuations in completeness of reporting, inclusion of through traffic in outgoing and incoming totals, and other reasons. Major disruptions in classification procedures or coverage appear to have occurred in 1960 and, for air mail data, after 1968.

³All airports. Cargo totals include air freight and air express.

⁴Overseas cargo and mail data are combined totals for outgoing, incoming, and through traffic.

⁵Data reflect shipping strike of May 1, 1949-October 24, 1949.

⁶Data reflect the airlifting of all inter-Island third- and fourth-class mail beginning in October 1965.

⁷Data reflect the shipping strike of July 1, 1971-October 6, 1971.

Source: Hawaii Aeronautics Commission, *Annual Report* for 1948-1960; Hawaii State Department of Transportation, Airports Division, tabular releases and records.

Table 173.—SHIP ARRIVALS, GROSS TONNAGE, AND CARGO TONS, 1824 TO 1971

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

| Year ended June 30 | Overseas vessel arrivals ¹ | | Inter-Island vessel arrivals ¹ | | Overseas cargo (1,000 tons) ³ | | Inter-Island cargo (1,000 tons) ³ | |
|-------------------------|---------------------------------------|-----------------------|---|-----------------------|--|-------|--|-------|
| | Number | Gross tonnage (1,000) | Number | Gross tonnage (1,000) | In | Out | In | Out |
| 1901 | 559 | 853 | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) |
| 1910 | 373 | 1,239 | (NA) | (NA) | (NA) | (NA) | 414 | 414 |
| 1920 | 839 | 4,530 | (NA) | (NA) | (NA) | (NA) | 393 | 393 |
| 1930 | 903 | 7,607 | 1,365 | 1,638 | (NA) | (NA) | 355 | 355 |
| 1940 | 872 | 7,236 | 2,622 | 1,917 | (NA) | (NA) | 235 | 235 |
| 1950 | 861 | 7,281 | 2,210 | 1,059 | 2,520 | 2,046 | 617 | 589 |
| 1960 | 1,411 | 12,305 | 2,272 | 1,061 | 3,773 | 2,095 | 974 | 976 |
| 1961 | 1,518 | 12,699 | 2,460 | 1,143 | 4,830 | 2,496 | 1,170 | 1,173 |
| 1962 | 1,818 | 13,094 | 2,522 | 1,150 | 4,988 | 2,678 | 1,224 | 1,232 |
| 1963 | 1,799 | 12,487 | 2,550 | 1,119 | 4,566 | 2,603 | 1,240 | 1,219 |
| 1964 | 2,064 | 13,103 | 2,446 | 1,275 | 5,185 | 2,732 | 1,334 | 1,372 |
| 1965 | 1,948 | 12,992 | 2,551 | 1,125 | 5,840 | 2,922 | 1,427 | 1,354 |
| 1966 | 1,941 | 14,654 | 2,877 | 1,220 | 6,165 | 3,031 | 1,600 | 1,511 |
| 1967 | 1,684 | 13,821 | 2,652 | 1,422 | 6,830 | 3,051 | 2,424 | 1,990 |
| 1968 | 1,774 | 15,277 | 2,474 | 1,414 | 7,818 | 3,105 | 1,651 | 1,505 |
| 1969 ⁴ | 1,903 | 15,954 | 2,961 | (NA) | 7,816 | 2,225 | 1,970 | 1,971 |
| 1970 ⁴ | 1,933 | (NA) | 3,321 | (NA) | 7,465 | 2,146 | 1,861 | 2,394 |
| 1971 | 1,879 | (NA) | 3,356 | (NA) | (NA) | (NA) | (NA) | (NA) |

NA Not available.

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

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

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

⁴Cargo data are for calendar years.

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

Table 174.—FREIGHT AND PASSENGER TRAFFIC FOR SPECIFIED HARBORS: 1908 TO 1970

| Year | Passengers ¹ | | | Freight (1,000 short tons) ² | | | |
|------|-------------------------|------------------------------|----------------|---|-------------|-----------------|----------------|
| | Hilo Harbor | Honolulu Harbor ³ | Kahului Harbor | Barbers Point Harbor | Hilo Harbor | Honolulu Harbor | Kahului Harbor |
| 1908 | — | — | — | — | 184.0 | 920.2 | — |
| 1909 | — | — | — | — | 223.0 | 1,028.7 | — |
| 1910 | — | — | — | — | 252.8 | 1,211.0 | — |
| 1911 | — | — | — | — | 308.4 | 1,164.7 | — |
| 1912 | — | — | — | — | 323.2 | 1,653.0 | — |
| 1913 | — | — | — | — | 434.1 | 1,462.0 | — |
| 1914 | — | — | 11,961 | — | 365.3 | 1,339.0 | 213.7 |
| 1915 | 21,598 | 100,537 | 9,844 | — | 428.4 | 1,680.3 | 255.0 |
| 1916 | 27,625 | 103,420 | 9,007 | — | 314.7 | 1,753.7 | 247.2 |
| 1917 | 38,559 | 123,762 | 10,843 | — | 368.0 | 1,697.0 | 243.4 |
| 1918 | 31,854 | 112,520 | 12,183 | — | 348.1 | 1,625.7 | 232.8 |
| 1919 | 37,760 | 134,329 | 12,734 | — | 389.0 | 1,889.9 | 242.9 |
| 1920 | 41,524 | 149,862 | 17,860 | — | 316.2 | 2,039.0 | 228.3 |
| 1921 | 43,821 | 167,559 | 20,201 | — | 287.4 | 1,709.3 | 177.6 |
| 1922 | 45,594 | 158,540 | 22,039 | — | 256.7 | 1,792.0 | 229.3 |
| 1923 | 49,010 | 169,461 | 16,874 | — | 289.8 | 1,869.4 | 240.8 |
| 1924 | 47,636 | 177,736 | 22,736 | — | 319.4 | 1,895.1 | 304.4 |
| 1925 | 46,302 | 195,926 | 24,626 | — | 344.4 | 1,981.1 | 337.5 |
| 1926 | 45,262 | 187,458 | 23,091 | — | 377.6 | 2,227.9 | 348.8 |
| 1927 | 49,854 | 202,932 | 24,648 | — | 388.1 | 2,082.7 | 373.9 |
| 1928 | 54,156 | 215,893 | 25,776 | — | 439.3 | 2,100.6 | 370.4 |
| 1929 | 55,895 | 223,976 | 28,514 | — | 445.5 | 1,976.1 | 399.9 |
| 1930 | 43,989 | 207,436 | 31,183 | — | 406.7 | 1,926.5 | 442.2 |
| 1931 | 41,314 | 191,554 | 30,183 | — | 354.6 | 2,009.4 | 385.0 |
| 1932 | 32,193 | 158,951 | 26,548 | — | 406.0 | 1,672.7 | 360.7 |
| 1933 | 28,798 | 142,187 | 21,951 | — | 392.9 | 1,785.4 | 375.4 |
| 1934 | 34,841 | 162,572 | 25,018 | — | 428.0 | 1,986.6 | 381.0 |
| 1935 | 35,042 | 166,196 | 27,146 | — | 416.8 | 2,113.0 | 396.3 |
| 1936 | 38,891 | 187,564 | 31,166 | — | 442.7 | 2,254.2 | 456.5 |
| 1937 | 42,761 | 218,459 | 34,299 | — | 509.2 | 2,365.5 | 477.3 |
| 1938 | 35,073 | 193,519 | 30,902 | — | 551.8 | 2,443.9 | 413.3 |
| 1939 | 47,780 | 227,547 | 35,562 | — | 534.2 | 2,662.0 | 448.0 |
| 1940 | 46,604 | 278,260 | 37,122 | — | 528.3 | 3,353.8 | 495.7 |
| 1941 | 48,105 | 276,017 | 39,433 | — | 561.4 | 4,328.3 | 522.4 |

¹Total arrivals and departures, inter-Island and transpacific. Not available before 1914 (for Kahului) or 1915 (for Hilo and Honolulu).

²Excludes cargo in transit, shown separately in the source for Honolulu, 1926 to 1941.

³Most of the increase in passenger traffic in recent years appears to be a result of excursion travel between Honolulu Harbor or Kewalo Basin and Pearl Harbor. The 1970 total of 690,906 included 345,108 arrivals (21,189 from foreign countries, 4,825 from other States, and 319,094 Island excursion passengers) and 345,798 departures (19,745 to foreign countries, 7,046 to other States, and 319,007 Island excursionists).

(Continued on next page)

Table 174.—FREIGHT AND PASSENGER TRAFFIC FOR SPECIFIED HARBORS: 1908 TO 1970 (continued)

| Year | Passengers ¹ | | | Freight (1,000 short tons) ² | | | |
|------|-------------------------|------------------------------|----------------|---|-------------|-----------------|----------------|
| | Hilo Harbor | Honolulu Harbor ³ | Kahului Harbor | Barbers Point Harbor | Hilo Harbor | Honolulu Harbor | Kahului Harbor |
| 1942 | 8,573 | 51,700 | 7,166 | — | 461.5 | 2,116.2 | 468.4 |
| 1943 | 4,468 | 27,253 | 482 | — | 650.8 | 2,194.3 | 502.6 |
| 1944 | 5,337 | 44,970 | 2,592 | — | 1,290.5 | 6,506.5 | 709.2 |
| 1945 | 11,145 | 48,132 | 3,966 | — | 714.8 | 4,808.1 | 535.6 |
| 1946 | 17,732 | 215,530 | 10,161 | — | 480.3 | 3,229.5 | 442.3 |
| 1947 | 4,623 | 83,295 | 6,386 | — | 596.7 | 2,745.1 | 468.6 |
| 1948 | 5,416 | 51,678 | 2,827 | — | 454.5 | 2,371.4 | 286.6 |
| 1949 | 1,274 | 46,649 | 170 | — | 476.8 | 2,382.2 | 399.6 |
| 1950 | 525 | 50,660 | 26 | — | 739.9 | 2,812.0 | 630.6 |
| 1951 | 979 | 37,722 | 28 | — | 647.6 | 2,770.5 | 590.4 |
| 1952 | 1,766 | 37,844 | 39 | — | 684.1 | 3,104.8 | 543.0 |
| 1953 | 3,563 | 54,821 | 70 | — | 763.7 | 3,318.0 | 640.7 |
| 1954 | 1,417 | 59,092 | 31 | — | 751.2 | 3,031.1 | 619.0 |
| 1955 | 281 | 72,874 | 81 | — | 850.7 | 3,650.5 | 685.6 |
| 1956 | 656 | 73,398 | 41 | — | 909.2 | 3,784.2 | 701.9 |
| 1957 | 576 | 134,494 | 25 | — | 855.9 | 4,014.2 | 625.8 |
| 1958 | 785 | 145,954 | 374 | — | 674.9 | 4,125.7 | 536.6 |
| 1959 | 725 | 123,921 | 304 | — | 905.9 | 4,296.9 | 676.4 |
| 1960 | 4,047 | 112,298 | 614 | — | 807.8 | 5,041.3 | 638.0 |
| 1961 | 1,356 | 116,847 | 309 | 686.5 | 733.4 | 4,263.3 | 694.3 |
| 1962 | 1,157 | 108,750 | 17 | 469.3 | 835.2 | 4,295.2 | 714.6 |
| 1963 | 74 | 90,937 | 449 | 1,782.5 | 728.2 | 4,421.5 | 624.5 |
| 1964 | 1,492 | 213,004 | 13 | 2,248.4 | 874.5 | 4,755.7 | 787.3 |
| 1965 | 70 | 139,031 | 78 | 2,416.1 | 775.0 | 5,480.0 | 741.2 |
| 1966 | 4,000 | 160,565 | 1,086 | 2,469.7 | 835.0 | 6,180.8 | 895.4 |
| 1967 | 5,194 | 363,488 | 16 | 2,363.8 | 882.5 | 6,640.2 | 875.5 |
| 1968 | 9,880 | 535,287 | 1,930 | 2,472.5 | 991.1 | 6,828.9 | 957.2 |
| 1969 | 9,288 | 604,482 | 125 | 2,918.8 | 990.5 | 7,057.9 | 868.5 |
| 1970 | 4,457 | 690,906 | — | 2,561.6 | 1,141.2 | 8,078.1 | 1,083.4 |

¹Total arrivals and departures, inter-Island and transpacific. Not available before 1914 (for Kahului) or 1915 (for Hilo and Honolulu).

²Excludes cargo in transit, shown separately in the source for Honolulu, 1926 to 1941.

³Most of the increase in passenger traffic in recent years appears to be a result of excursion travel between Honolulu Harbor or Kewalo Basin and Pearl Harbor. The 1970 total of 690,906 included 345,108 arrivals (21,189 from foreign countries, 4,825 from other States, and 319,094 Island excursion passengers) and 345,798 departures (19,745 to foreign countries, 7,046 to other States, and 319,007 Island excursionists).

Source: *Report of the Chief of Engineers, U.S. Army* for 1920 (Part 3, pp. 4046, 4050, and 4051), 1921 (Part 2, pp. 1372, 1378, and 1381), 1927 (Part 2, pp. 913, 917, and 920), 1936 (Part 2, pp. 1109, 1114, and 1116), and 1945 (Part 2, pp. 1253, 1256, and 1258); U.S. Army, Corps of Engineers, *Waterborne Commerce of the United States* for 1953 (Part 4, pp. 96, 99, and 101), 1958 (Part 4, pp. 198, 203, and 206), 1964 (Part 4, pp. 51, 54, and 57), and 1970 (Part 4, pp. 41, 43, and 46).

Table 175.—FREIGHT TRAFFIC FOR SPECIFIED HARBORS: 1970

(Short tons)

| Harbor and commodity ¹ | Total | Foreign | | Domestic | | | |
|---------------------------------------|-----------|-----------|---------|-----------|-----------|-------------------|-------|
| | | Imports | Exports | Coastwise | | Internal receipts | Local |
| | | | | Receipts | Shipments | | |
| Hilo | 1,141,163 | 9,852 | 3,528 | 716,000 | 411,586 | 197 | — |
| Kawaihae | 329,425 | — | — | 115,938 | 213,475 | 12 | — |
| Kahului | 1,083,355 | 19,490 | 4,610 | 508,486 | 550,717 | 52 | — |
| Sugar | 263,471 | — | 3 | 944 | 262,524 | — | — |
| Kaunakakai | 320,819 | — | — | 97,213 | 223,602 | 4 | — |
| Barbers Point | 2,561,558 | 1,110,932 | — | 1,422,876 | 27,750 | — | — |
| Crude petroleum | 1,785,612 | 1,104,322 | — | 677,334 | 13,956 | — | — |
| Residential fuel oil | 703,933 | — | — | 703,933 | — | — | — |
| Honolulu | 8,078,111 | 1,497,526 | 132,059 | 3,974,275 | 2,465,174 | 18 | 9,059 |
| Fresh fruits and tree nuts | 457,161 | 1,532 | 441 | 435,444 | 19,744 | — | — |
| Prep. fruit and vegetable juice | 605,042 | 1,166 | 44,284 | 180,058 | 379,534 | — | — |
| Sugar | 295,323 | — | — | 49,996 | 245,327 | — | — |
| Molasses | 384,080 | — | — | 189,079 | 185,942 | — | 9,059 |
| Gasoline | 399,133 | 133 | 11,112 | 290,877 | 97,011 | — | — |
| Kerosene | 1,269,315 | 1,033,426 | 8,554 | 122,124 | 105,211 | — | — |
| Distillate fuel oil | 331,466 | — | 13,351 | 270,922 | 47,193 | — | — |
| Residual fuel oil | 480,031 | 30,773 | 15,544 | 132,480 | 132,480 | — | — |
| Pearl Harbor | 623,039 | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) |
| Jet fuel | 285,212 | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) |
| Other Honolulu area ports | 364,148 | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) |
| Sand, gravel, crushed rock | 363,240 | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) |
| Nawiliwili | 500,094 | 9,594 | — | 221,623 | 268,827 | 50 | — |
| Port Allen | 146,362 | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) |

NA Not available

¹Commodities under 250,000 tons not shown separately.

Source: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 1970, Part 4* (1971), p. 41-52.

SECTION 18

AGRICULTURE

This section presents statistics on agricultural land, farms, and specific crops, livestock, dairy products, and poultry.

There were 4,300 farms in Hawaii as of 1970, with a total area of 2,340,000 acres. Both figures have declined appreciably during the past decade. The value of crop sales in 1970 was \$171 million, about 47 percent more than in 1960. Livestock sales amounted to \$42 million, or 25 percent more than the 1960 level. Combined crop and livestock sales ranged from \$28 million in Kauai County to \$66 million on the Big Island.

Major crops in 1970 were sugar (\$111 million in sales), pineapple (\$39 million), and vegetables and melons (\$7 million). Important products of livestock farms as of 1969 included cattle (\$13.7 million in sales), milk (\$12.9 million), and eggs (\$8.4 million). Coffee and rice production have declined sharply since the early years of the century, but macadamia nuts have increased rapidly.

Important sources for data on agriculture include the *United States Census of Agriculture* for 1969 and earlier years, the annual report on *Statistics of Hawaiian Agriculture* issued by the Hawaii Crop and Livestock Reporting Service, and publications of the Hawaii Agricultural Experiment Station, Hawaiian Sugar Planters' Association, and Pineapple Growers Association of Hawaii. National statistics appear in Section 23 of the *Statistical Abstract of the United States: 1971*.

Table 176.—AGRICULTURAL SUMMARY: 1900 TO 1969

| Year | Number of farms, by size (in acres) | | | | | Farm acreage (thousands) | | | |
|------|--|--------------------------|-------------------------|------------------------------------|-------------------------------------|--------------------------|--|---------------------------------|---|
| | All farms | 1 to 9 | 104.49 | 50 to 259 | 260 and over | Total acreage | In farms of 260 or more acres | Harvested cropland | Irrigated |
| 1900 | 2,273 | 1,209 | 656 | 230 | 178 | 2,610 | 2,568 | (NA) | 724.6 |
| 1910 | 4,320 | 3,787 | | 533 | | 2,591 | (NA) | (NA) | (NA) |
| 1920 | 5,284 | 2,734 | 1,959 | 374 | 217 | 2,702 | (NA) | (NA) | (NA) |
| 1930 | 5,955 | 3,407 | 2,051 | 322 | 175 | 2,815 | 2,727 | (NA) | (NA) |
| 1940 | 4,995 | 2,870 | 1,691 | 263 | 171 | 2,486 | 2,411 | 184.6 | 132.7 |
| 1950 | 5,750 | 3,558 | 1,669 | 339 | 184 | 2,432 | 2,350 | 159.5 | 117.4 |
| 1959 | 6,242 | 3,569 | 1,988 | 432 | 253 | 2,461 | 2,364 | 176.4 | 141.2 |
| 1964 | 4,864 | 2,603 | 1,594 | 416 | 251 | 2,354 | 2,266 | 167.5 | 143.9 |
| 1969 | 3,896 | 2,024 | 1,281 | 389 | 202 | 2,058 | 1,982 | 178.7 | 145.6 |
| Year | Average age of farm operators (years) | Tenant farmers | | Regular hired workers ¹ | Average value of land and buildings | | Market value of agricultural products sold | | |
| | | Percent of all operators | Percent of farm acreage | | Per farm (\$1,000) | Per acre (dollars) | Total (\$1,000) | Average per farm (\$1,000) | Percent of farms over \$2,500 |
| 1900 | (NA) | 58.2 | 1.5 | (NA) | 26.4 | 23 | (NA) | (NA) | (NA) |
| 1910 | (NA) | 71.9 | (NA) | (NA) | 19.2 | 32 | (NA) | (NA) | (NA) |
| 1920 | (NA) | 70.8 | (NA) | (NA) | 24.4 | 48 | (NA) | (NA) | (NA) |
| 1930 | (NA) | 72.5 | 21.7 | (NA) | 18.8 | 40 | (NA) | (NA) | (NA) |
| 1940 | 49.9 | 70.6 | 4.6 | (NA) | 22.6 | 45 | (NA) | (NA) | (NA) |
| 1950 | 47.8 | 57.5 | 1.7 | 21,597 | 34.0 | 80 | 164,554 | 28.6 | (NA) |
| 1959 | 49.5 | 38.7 | 1.6 | 14,403 | (NA) | (NA) | 152,334 | 24.4 | (NA) |
| 1964 | 51.0 | 41.1 | 2.6 | 12,375 | 98.9 | 205 | 187,505 | 38.5 | 46.4 |
| 1969 | 53.1 | 38.1 | 18.2 | 13,200 | 156.8 | 297 | 287,939 | 73.9 | 55.6 |
| Year | Livestock and poultry on farms (thousands) | | | | Quantity of crops harvested | | | | |
| | Cattle and calves | Hogs and and pigs | Sheep and lambs | Chickens 4 mo. old and over | Sugar-cane (1,000 tons) | Pineapples (1,000 tons) | Rice (1,000 lb.) | Coffee (1,000 lb.) ² | Macadamia nuts (1,000 lb.) ³ |
| 1900 | 103 | 8 | 102 | 32 | 2,239 | (NA) | 33,442 | (NA) | (NA) |
| 1910 | 145 | 20 | 77 | 64 | 4,240 | (NA) | 41,828 | 9,834 | (NA) |
| 1920 | 137 | 24 | 43 | 65 | 4,863 | 150 | 29,572 | 19,884 | (NA) |
| 1930 | 138 | 31 | 32 | 271 | 7,471 | 355 | 7,582 | 19,950 | 5 |
| 1940 | 139 | 32 | 26 | 273 | 8,535 | 614 | 1,902 | 8,547 | 181 |
| 1950 | 156 | 65 | 14 | 472 | 7,889 | 655 | 658 | 4,648 | 704 |
| 1959 | 205 | 78 | 12 | 806 | 9,391 | 1,010 | 287 | 10,005 | 2,015 |
| 1964 | 218 | 68 | 12 | 1,045 | 10,741 | 924 | — | 9,679 | 7,015 |
| 1969 | 233 | 52 | 11 | 1,072 | (NA) | (NA) | (NA) | (NA) | (NA) |

NA Not available

¹Working 150 days or more. Data for 1964 and 1969 exclude farms with sales less than \$2,500 (which accounted for 152 hired workers in 1964).

²Parchment.

³Husked, unshelled.

Source: U.S. Bureau of the Census, *U.S. Census of Agriculture: 1959*, Vol. I, Part 50; *U.S. Census of Agriculture: 1964*, Vol. I, Part 50; *U.S. Census of Agriculture: 1969, Hawaii, County Data*.

Table 177.—AGRICULTURAL SUMMARY, BY COUNTIES: 1969

| County | Number of farms, by size (in acres) | | | | | Farm acreage (thousands) | | | | |
|-------------------|--|--------------------------|-------------------------|-----------------------------|--|---|-------------------------------|--|----------------------------|-------------------------------|
| | All farms | 1 to 9 | 10 to 49 | 50 to 259 | 260 and over | Total acreage | In forms of 260 or more acres | Harvested cropland | Irrigated | |
| State total | 3,896 | 2,024 | 1,281 | 389 | 202 | 2,058 | 1,982 | 178.7 | 145.6 | |
| Hawaii | 2,241 | 1,066 | 832 | 227 | 116 | 1,203 | 1,158 | 64.2 | 9.1 | |
| Honolulu | 768 | 555 | 153 | 32 | 28 | 147 | 138 | 31.2 | 41.1 | |
| Kauai | 375 | 185 | 125 | 47 | 18 | 273 | 265 | 28.3 | 42.5 | |
| Maui | 512 | 218 | 171 | 83 | 40 | 435 | 420 | 55.0 | 52.8 | |
| County | Average age of farm operators (yrs.) | Tenant farmers | | | Regular hired workers ¹ | Average value of land and buildings | | Market value of agricultural products sold | | |
| | | Percent of all operators | Percent of farm acreage | | | Per farm (\$1,000) | Per acre (dollars) | Total (\$1,000) | Average per farm (\$1,000) | Percent of farms over \$2,500 |
| State total | 53.1 | 38.1 | 18.2 | 13,200 | 156.8 | 297 | 287,939 | 73.9 | 55.6 | |
| Hawaii | 53.6 | 38.9 | 16.7 | 3,752 | 90.0 | 168 | 85,833 | 38.3 | 52.9 | |
| Honolulu | 52.1 | 43.6 | 29.9 | 2,944 | 281.7 | 1,474 | 87,025 | 113.3 | 70.1 | |
| Kauai | 52.3 | 37.6 | 30.5 | 2,606 | 224.7 | 308 | 41,596 | 110.9 | 49.3 | |
| Maui | 52.5 | 26.5 | 10.3 | 3,898 | 212.1 | 250 | 73,485 | 143.5 | 50.0 | |
| County | Livestock and poultry on farms (thousands) | | | | Quantity of crops harvested ² | | | | | |
| | Cattle and calves | Hogs and pigs | Horses and ponies | Chickens 3 mo. old and over | Coffee (1,000 lb.) ³ | Macadamia nuts (1,000 lb.) ⁴ | Papayas (1,000 lb.) | Pineapples (1,000 tons) | Sugarcane (1,000 tons) | |
| State total | 233 | 52.3 | 4.1 | 1,072 | 9,679 | 7,015 | 21,924 | 924 | 10,741 | |
| Hawaii | 133 | 6.3 | 2.4 | 149 | 9,679 | 6,778 | 15,853 | — | 4,690 | |
| Honolulu | 35 | 35.6 | 0.4 | 773 | — | 160 | 4,422 | 332 | 1,754 | |
| Kauai | 16 | 3.5 | 0.7 | 45 | — | 56 | 1,113 | 44 | 2,113 | |
| Maui | 48 | 6.9 | 0.6 | 104 | — | 21 | 533 | 548 | 2,184 | |

¹Working 150 days or more. Limited to farms with sales of \$2,500 and over.

²Refers to 1964; data for 1969 not yet available.

³Parchment.

⁴Husked, unshelled.

Source: U.S. Bureau of the Census, *U.S. Census of Agriculture: 1969, Hawaii, County Data*.

**Table 178.—NUMBER OF FARMS, FARM ACREAGE, AND VALUE OF CROP AND LIVESTOCK SALES
1960 TO 1970**

| Area and year | Number of farms | Area in farms ¹ (1,000 acres) | Value of sales (\$1,000) | | |
|-----------------------|-----------------|---|--------------------------|---------|-----------|
| | | | Crops and livestock | Crops | Livestock |
| The State: | | | | | |
| 1960 | 6,600 | 2,600 | 149,859 | 116,338 | 33,521 |
| 1961 | 6,200 | 2,550 | 160,330 | 125,980 | 34,350 |
| 1962 | 5,700 | 2,500 | 170,355 | 136,101 | 34,254 |
| 1963 | 5,200 | 2,450 | 192,759 | 158,450 | 34,309 |
| 1964 | 5,100 | 2,450 | 176,354 | 140,752 | 35,602 |
| 1965 | 5,000 | 2,400 | 186,542 | 150,849 | 35,693 |
| 1966 | 4,900 | 2,400 | 197,263 | 160,008 | 37,255 |
| 1967 | 4,800 | 2,360 | 200,457 | 162,606 | 37,851 |
| 1968 | 4,700 | 2,350 | 205,424 | 167,118 | 38,306 |
| 1969 | 4,600 | 2,350 | 200,299 | 160,398 | 39,901 |
| 1970 | 4,300 | 2,340 | 212,753 | 170,914 | 41,839 |
| Hawaii County: | | | | | |
| 1960 | 3,600 | 1,521 | 39,219 | 31,224 | 7,995 |
| 1970 | 2,500 | 1,367 | 65,519 | 52,177 | 13,342 |
| Kauai County: | | | | | |
| 1960 | 600 | 315 | 21,169 | 18,734 | 2,435 |
| 1970 | 350 | 284 | 27,664 | 25,278 | 2,386 |
| Maui County: | | | | | |
| 1960 | 1,050 | 595 | 41,016 | 37,350 | 3,666 |
| 1970 | 600 | 536 | 57,907 | 54,424 | 3,483 |
| Oahu: | | | | | |
| 1960 | 1,350 | 169 | 48,455 | 29,030 | 19,425 |
| 1970 | 850 | 156 | 61,663 | 39,035 | 22,628 |

¹Includes land not in crop and pasture, such as farm houselots, roads, woodlots, etc.

Source: Hawaii Crop and Livestock Reporting Service, *Statistics of Hawaiian Agriculture* (U.S. Department of Agriculture, in cooperation with Hawaii State Department of Agriculture, annual).

Table 179.—ACREAGE IN CROP AND PASTURE, NUMBER OF FARMS, VOLUME OF CROP MARKETINGS, AND VALUE OF CROP SALES, BY CROP: 1960 TO 1970

| Subject | The State | | Counties, 1970 | | | |
|---|-----------|---------|----------------|--------|--------|----------|
| | 1960 | 1970 | Hawaii | Kauai | Maui | Honolulu |
| Acres (1,000 acres): | | | | | | |
| Sugarcane | 224.6 | 237.9 | 107.4 | 49.6 | 45.6 | 35.3 |
| Pineapple | 75.0 | 64.0 | — | 2.5 | 43.5 | 18.5 |
| Vegetables and melons | 3.4 | 3.2 | 1.1 | 0.1 | 0.8 | 1.2 |
| Fruits (excl. pineapple) | 2.6 | 3.2 | 2.2 | 0.2 | 0.3 | 0.5 |
| Coffee | 5.5 | 4.3 | 4.3 | — | — | — |
| Macadamia nuts | 3.8 | 8.7 | 8.7 | — | 0.1 | — |
| Pasture | 1,250 | 1,286 | 796 | 127 | 324 | 39 |
| Number of crop farms: | | | | | | |
| Sugar | 988 | 717 | 703 | 7 | 3 | 4 |
| Pineapple | 135 | 59 | — | 27 | 30 | 2 |
| Vegetables and melons | 773 | 488 | 107 | 58 | 89 | 234 |
| Fruits (excl. pineapple) | 651 | 409 | 190 | 49 | 44 | 126 |
| Coffee | 1,128 | 760 | 760 | — | — | — |
| Macadamia nuts | 215 | 250 | 241 | 6 | 2 | 1 |
| Taro | 233 | 118 | 30 | 40 | 40 | 8 |
| Volume of crop marketings:¹ | | | | | | |
| Sugar (unprocessed cane) | 8,613 | 10,457 | 4,481 | 2,115 | 2,207 | 1,654 |
| Pineapple (fresh equivalent) | 884 | 916 | — | — | — | — |
| Vegetables and melons | 48,475 | 54,150 | 19,420 | 2,280 | 15,945 | 16,450 |
| Fruits (excl. pineapple) | 24,190 | 36,049 | 25,690 | 1,570 | 1,085 | 4,520 |
| Coffee (parchment) | 13,272 | 4,900 | 4,900 | — | — | — |
| Macadamia nuts (in shell) | 2,569 | 11,500 | 11,420 | 50 | — | 30 |
| Taro | 9,675 | 8,555 | 2,295 | 4,565 | 1,495 | 200 |
| Value of crop sales (\$1,000): | | | | | | |
| Sugar (unprocessed cane) | 67,200 | 110,600 | 41,000 | 22,700 | 26,600 | 20,300 |
| Pineapple (fresh equivalent) | 36,100 | 38,700 | — | 1,500 | 24,000 | 13,200 |
| Vegetables and melons | 4,611 | 6,791 | 2,288 | 389 | 1,398 | 2,716 |
| Fruits (excl. pineapple) | 1,400 | 3,442 | 2,491 | 176 | 307 | 468 |
| Coffee (parchment) | 3,202 | 1,715 | 1,715 | — | — | — |
| Macadamia nuts (in shell) | 472 | 2,496 | 2,478 | (W) | (W) | (W) |
| Others ² | 3,353 | 7,170 | 2,205 | 495 | 2,119 | 2,351 |

W Withheld to avoid disclosure of individual operations.

¹Sugar and pineapple in 1,000 tons, other crops in 1,000 pounds.

²Chiefly flowers, foliage and nursery products (\$4,420,000 in 1970).

Source: Hawaii Crop and Livestock Reporting Service, *Statistics of Hawaiian Agriculture* (U.S. Department of Agriculture, in cooperation with the Hawaii State Department of Agriculture, annual).

**Table 180.—NUMBER OF LIVESTOCK FARMS, VOLUME OF LIVESTOCK MARKETINGS,
AND VALUE OF LIVESTOCK SALES, BY PRODUCT: 1960 TO 1970**

| Subject | The State | | Counties, 1970 | | | |
|--|-----------|--------|----------------|-------|-------|--------|
| | 1960 | 1970 | Hawaii | Kauai | Maui | Oahu |
| Number of livestock farms: | | | | | | |
| Cattle | 1,820 | 1,410 | 580 | 210 | 370 | 250 |
| Hogs | 1,760 | 700 | 190 | 60 | 170 | 280 |
| Milk | 260 | 120 | 40 | 10 | 40 | 35 |
| Eggs | 900 | 240 | 90 | 20 | 70 | 60 |
| Broilers | 39 | 31 | 3 | 3 | 2 | 23 |
| Honey | 48 | 24 | | 7 | 5 | 12 |
| Volume of livestock marketings: | | | | | | |
| Beef (1,000 lb. dressed weight) | 25,001 | 32,210 | 20,189 | 2,900 | 6,598 | 2,523 |
| Pork (1,000 lb. dressed weight) | 8,831 | 8,691 | 1,117 | 310 | 1,260 | 6,004 |
| Milk (million pounds) | 120 | 135 | (W) | (W) | (W) | 114.5 |
| Eggs (million eggs) | 138 | 197 | 32.8 | 8.6 | 12.1 | 143.4 |
| Broilers and chickens | | | | | | |
| (1,000 lb. live weight) | 6,592 | 7,798 | (W) | (W) | (W) | 6,790 |
| Honey, beeswax (1,000 lb.) | 285 | 219 | | 153.7 | 32.7 | 32.4 |
| Value of livestock sales (\$1,000): | | | | | | |
| Cattle | 9,837 | 13,729 | 8,679 | 1,204 | 2,821 | 1,025 |
| Hogs | 3,684 | 4,508 | 569 | 176 | 655 | 3,108 |
| Milk | 10,635 | 12,933 | (W) | (W) | (W) | 10,706 |
| Eggs | 6,911 | 8,372 | 1,485 | | 1,006 | 5,881 |
| Broilers and chickens | 2,347 | 2,206 | (W) | (W) | (W) | 1,882 |
| Others | 107 | 91 | | 58 | 7 | 26 |

W Withheld to avoid disclosure of individual operations.

Source: Hawaii Crop and Livestock Reporting Service, *Statistics of Hawaiian Agriculture*, (U.S. Department of Agriculture, in cooperation with Hawaii State Department of Agriculture, annual).

Table 181.—FLOWERS AND NURSERY PRODUCTS: 1970

| County | Number of farms | Growing area (acres) | Wholesale value (\$1,000) | Commodity | Wholesale value (\$1,000) |
|-----------------|-----------------|----------------------|---------------------------|-----------------------------|---------------------------|
| The State | 459 | 807 | 4,022.5 | Cut and lei flowers | 2,584.2 |
| Hawaii | 231 | 380 | 1,582.5 | Anthurium | 847.0 |
| Kauai | 17 | 18 | 66.2 | Carnation | 328.0 |
| Maui | 57 | 57 | 453.1 | Orchid | 736.7 |
| Honolulu | 154 | 352 | 1,970.7 | Others | 672.5 |
| | | | | Cut cultivated greens | 194.0 |
| | | | | Potted plants | 657.3 |
| | | | | Nursery products | 587.0 |

Source: Hawaii Crop and Livestock Reporting Service, *Statistics of Hawaiian Agriculture 1970* (U.S. Department of Agriculture, in cooperation with Hawaii State Department of Agriculture, July 1971).

Table 182.—LAND USE PRODUCTIVITY RATINGS FOR MAJOR ISLANDS: 1968

| Island and land use | Agricultural productivity rating (acres) | | | | | |
|-------------------------------|--|------------------|----------------------------|-----------------|-------------|------------------|
| | Total ¹ | A (very good) | B (good) | C (moderate) | D (poor) | E (very poor) |
| Six Islands | 4,050,176 | 68,037 | 128,833 | 312,558 | 783,817 | 2,668,515 |
| Island: | | | | | | |
| Kauai | 354,112 | 10,038 | 30,276 | 28,458 | 30,525 | 249,276 |
| Oahu | 388,928 | 24,584 | 32,286 | 21,986 | 19,728 | 228,218 |
| Molokai | 167,104 | 702 | — | 4,519 | 40,405 | 120,309 |
| Lanai | 89,280 | — | — | 4,849 | 20,219 | 63,777 |
| Maui | 466,432 | 32,713 | 20,067 | 38,467 | 99,806 | 268,726 |
| Hawaii | 2,584,320 | — | 46,204 | 214,279 | 573,134 | 1,738,209 |
| Land use: | | | | | | |
| Pineapple | 69,276 | — | 16,204 | 22,131 | 29,038 | 1,903 |
| Sugar cane | 262,377 | 65,776 | 71,354 | 82,760 | 40,230 | 2,257 |
| Diversified agriculture | 33,569 | 2,261 | 6,497 | 14,218 | 6,205 | 4,388 |
| Grassland grazing | 492,905 | — | 22,905 | 116,641 | 175,186 | 178,173 |
| Wooded grazing | 657,629 | — | 4,313 | 37,776 | 175,767 | 439,773 |
| Idle agricultural land | 13,585 | — | 994 | 3,139 | 4,545 | 4,907 |
| Forest | 289,039 | — | 1,729 | 7,864 | 58,877 | 220,569 |
| Forest reserve | 1,190,954 | — | 1,603 | 14,596 | 237,389 | 937,366 |
| Recreation | 17,248 | — | 798 | 657 | 4,630 | 11,163 |
| Game management | 87,585 | — | — | 2,302 | 17,565 | 67,718 |
| National park | 229,423 | — | — | 5,191 | 26,554 | 197,678 |
| Military | 38,048 | — | 1,637 | 3,280 | 3,624 | 29,507 |
| Undeveloped subdivision | 76,814 | — | 799 | 2,003 | 4,198 | 69,814 |
| Pali and barren land | 503,308 | — | — | — | 9 | 503,299 |
| Quarry | 1,462 | } | Not rated for productivity | | | |
| Water | 8,063 | | | | | |
| Urban: military | 17,658 | | | | | |
| Urban: civilian | 61,233 | | | | | |

¹Includes quarry, water, and urban, which were not rated for productivity.

Source: Arthur Y. Ching and Tamotsu Sahara, *Land Use and Productivity Rating, State of Hawaii, 1968*, L.S.B. Circular No. 15 (University of Hawaii, Land Study Bureau, July 1969), pp. 20-21.

SECTION 19

FORESTS, FISHERIES, AND MINING

This section presents data on forests and forest products, commercial fishing, and mining and mineral products.

The most recent available statistics show 1.1 million acres of commercial forest in the State, most of it on the Big Island. Over 46,800 acres had been planted in eucalyptus and other species of trees by 1971. The volume of sawtimber reported in 1968 was 789 million board feet. Primary forest products harvested in 1969 had a value of \$331,000.

The commercial fish catch in 1971 exceeded 15 million pounds and had a value of \$4.6 million. *Aku* (Skipjack) accounted for almost half of the total value.

The value of mineral production reached \$28 million in 1971, most of it in cement and stone.

Important sources of data on these subjects are the United States Census of Agriculture, United States Census of Mineral Industries, and reports of the Hawaii State Department of Land and Natural Resources Fish and Game Division and Forestry Division. Comparable Mainland statistics are reported in the *Statistical Abstract of the United States: 1971*, Sections 24, 25, and 26.

**Table 183.—AREA OF FOREST LAND, 1961, AND PLANTED FOREST, 1971
AND VOLUME OF SAWTIMBER, 1968, BY ISLAND**

| Island | Forest land area, 1961 (1,000 acres) | | Area of planted forest, to 1971 (acres) ³ | Volume of sawtimber, 1968 (1,000 board feet) ⁴ |
|-------------------|--------------------------------------|-------------------------|--|---|
| | Total ¹ | Commercial ² | | |
| State total | 1,981.6 | 1,088.9 | 46,849 | 788,931 |
| Niihau | 28.0 | — | — | — |
| Kauai | 223.0 | 136.7 | 4,849 | 37,316 |
| Oahu | 210.6 | 97.1 | 7,145 | 49,652 |
| Molokai | 82.9 | 23.6 | 2,781 | 4,204 |
| Lanai | 28.2 | 2.1 | 512 | 2,920 |
| Kahoolawe | 11.7 | — | — | — |
| Maui | 263.6 | 120.4 | 10,351 | 105,560 |
| Hawaii | 1,133.6 | 709.0 | 21,211 | 589,279 |

¹Includes commercial (1,088.9), unproductive (807.3), and productive-reserved (85.4).

²Includes Federal military (8.6), State (487.3), County (0.4), farmer-owned (365.9), and miscellaneous private (266.7).

³Chiefly Robusta Eucalyptus, other Eucalyptus, other hardwoods, and conifers.

⁴Includes Ohia (377,555), Koa (120,908), Eucalyptus (252,648), other hardwoods (19,778), and conifers (18,042).

Source: Hawaii State Department of Land and Natural Resources, Forestry Division, *Facts About Hawaii's Forests* (1969), and records.

Table 184.—PRIMARY FOREST PRODUCTS HARVESTED: 1958 TO 1969

| Subject | Total | Sawlogs | Craftwood | Veneer logs | Fuelwood | Posts | Treefern |
|---------------------------------|-------|---------|-----------|-------------|----------|-------|----------|
| Production¹: | | | | | | | |
| 1958 | — | 405 | 510 | — | 1,300 | 65.0 | 100 |
| 1960 | — | 850 | 100 | 30 | 1,500 | 37.0 | 115 |
| 1963 | — | | 913 | — | 847 | 22.0 | 118 |
| 1967 ² | — | 3,925 | 196 | — | 720 | 7.1 | 143 |
| 1969 | — | 1,650 | 422 | 1,056 | 1,720 | 10.1 | 55 |
| Average unit value (\$): | | | | | | | |
| 1958 | — | 100 | 240 | — | 14.50 | 0.83 | 0.35 |
| 1960 | — | 70 | 200 | 300 | 30.00 | 0.60 | 0.38 |
| 1963 | — | | 160 | — | 22.43 | 1.05 | 0.33 |
| 1967 | — | 40 | 300 | — | 38.89 | 1.69 | 0.52 |
| 1969 | — | 52 | 230 | 47 | 31.40 | 1.58 | 0.49 |
| Total value (\$1,000): | | | | | | | |
| 1958 | 269 | 40 | 121 | — | 19 | 54 | 35 |
| 1960 | 197 | 57 | 20 | 9 | 45 | 22 | 44 |
| 1963 | 230 | | 149 | — | 19 | 23 | 39 |
| 1967 | 334 | 161 | 58 | — | 28 | 12 | 75 |
| 1969 | 331 | 86 | 98 | 50 | 54 | 16 | 27 |

¹Sawlogs, craftwood, and veneer logs in 1,000 board feet, fuelwood in cords, posts in 1,000 pieces, and treefern in 1,000 cubic feet.
 Source: U.S. Department of Agriculture, Pacific Southwest Forest and Range Experiment Station, *Forest Products Harvested in Hawaii—1969*, Research Note PSW-239 (1971), p.2.

Table 185.—COMMERCIAL FISHING: 1928 TO 1971

| Year ended June 30 | Fishermen | Fishing boats | Commercial fish landings | |
|--------------------|-----------|---------------|--------------------------|-----------------|
| | | | Pounds | Value (dollars) |
| 1928 | 1,530 | 949 | 11,727,803 | 1,410,089 |
| 1929 | 1,488 | 790 | 8,633,169 | 1,215,796 |
| 1930 | 1,557 | 923 | 9,252,926 | 1,076,452 |
| 1931 | 1,534 | 814 | 10,262,442 | 849,593 |
| 1932 | 1,860 | 974 | 8,874,831 | 955,492 |
| 1933 | 1,991 | 976 | 11,392,570 | 792,357 |
| 1934 | 2,105 | 909 | 13,605,200 | 861,883 |
| 1935 | 2,078 | 881 | 10,898,617 | 901,630 |
| 1936 | 2,966 | 1,021 | 10,952,576 | 899,557 |
| 1937 ¹ | 2,670 | 999 | 19,175,509 | 1,501,273 |
| 1938 ¹ | 2,898 | 995 | 15,504,453 | 1,291,485 |
| 1939 ¹ | 3,123 | 995 | 14,261,445 | 1,209,778 |
| 1940 ¹ | 2,573 | 857 | 19,403,249 | 1,468,688 |
| 1941 ¹ | 2,648 | 778 | 8,224,805 | 1,037,101 |
| 1942 ¹ | 1,353 | 233 | 572,918 | 182,750 |
| 1943 ¹ | 1,941 | 341 | 2,124,949 | 568,980 |
| 1944 | 2,539 | 503 | 2,806,551 | 724,383 |
| 1945 | 2,431 | 561 | 3,591,965 | 994,836 |
| 1946 | 3,396 | 757 | 9,990,572 | 2,621,820 |
| 1947 | 3,532 | 803 | 11,151,445 | 3,556,445 |
| 1948 | 2,998 | 1,035 | 14,243,229 | 4,171,409 |
| 1949 | 3,111 | 845 | 15,368,223 | 4,172,425 |
| 1950 | 3,110 | 800 | 14,904,681 | 3,547,608 |
| 1951 | 2,478 | 759 | 19,219,884 | 3,963,614 |
| 1952 | 2,124 | 584 | 15,827,771 | 3,561,395 |
| 1953 | 2,035 | 612 | 17,399,338 | 3,766,012 |
| 1954 | 1,924 | 619 | 18,878,208 | 3,655,579 |
| 1955 | 1,858 | 572 | 19,245,366 | 3,575,254 |
| 1956 | 1,662 | 625 | 15,171,714 | 3,070,359 |
| 1957 | 1,444 | 529 | 14,927,110 | 3,041,598 |
| 1958 | 1,245 | 533 | 10,568,761 | 2,512,121 |
| 1959 | 1,112 | 508 | 13,178,933 | 2,841,168 |
| 1960 | 1,022 | 437 | 14,266,795 | 2,994,033 |
| 1961 | 941 | 443 | 13,730,912 | 2,898,380 |
| 1962 | 940 | 423 | 13,931,171 | 2,873,274 |
| 1963 | 808 | 366 | 10,879,389 | 2,566,045 |
| 1964 | 805 | 373 | 12,099,123 | 2,738,323 |
| 1965 | 717 | 387 | 17,192,431 | 3,355,553 |
| 1966 | 715 | 365 | 15,987,978 | 3,319,917 |
| 1967 | 801 | 397 | 12,354,658 | 3,147,566 |
| 1968 | 760 | 387 | 12,829,326 | 3,253,622 |
| 1969 | 1,028 | 509 | 11,096,116 | 3,378,553 |
| 1970 | 1,264 | 670 | 9,786,726 | 3,584,936 |
| 1971 | 1,373 | 738 | 15,176,525 | 4,633,877 |

¹Year ended December 31.

Source: Hawaii State Department of Land and Natural Resources, Division of Fish and Game, records.

Table 186.—COMMERCIAL FISH LANDINGS, BY SPECIES AND ISLAND: 1971
(Year ended June 30)

| Island and species | Pounds | Value (dollars) | Value per pound (cents) |
|---------------------------|------------|-----------------|-------------------------|
| Total landings | 15,176,525 | 4,633,877 | 30.5 |
| ISLAND | | | |
| Hawaii | 1,143,966 | 437,589 | 38.3 |
| Maui | 1,161,475 | 229,905 | 19.8 |
| Lanai | 6,179 | 2,897 | 46.9 |
| Molokai | 9,628 | 4,366 | 45.3 |
| Oahu | 12,495,869 | 3,826,445 | 30.6 |
| Kauai | 359,408 | 132,675 | 36.9 |
| SPECIES ¹ | | | |
| Sea catch, total | 15,159,262 | 4,624,112 | 30.5 |
| Aku (Skipjack) | 11,449,345 | 2,309,990 | 20.2 |
| Ahi (Yellowfin) | 773,314 | 504,557 | 65.2 |
| Akule | 608,472 | 236,555 | 38.9 |
| Ahi (Bigeye) | 377,839 | 438,105 | 116.0 |
| Pacific Blue Marlin | 240,888 | 79,952 | 33.2 |
| Stripe Marlin | 238,271 | 153,883 | 64.6 |
| Hahalalu | 237,213 | 103,541 | 43.6 |
| Opelu | 200,924 | 117,115 | 58.3 |
| Kahala | 77,807 | 32,854 | 42.2 |
| Mahimahi | 76,596 | 54,780 | 71.5 |
| Ulua | 64,922 | 35,232 | 54.3 |
| Opakapaka | 63,132 | 50,174 | 79.5 |
| Crab (Kona) | 43,576 | 56,902 | 130.6 |
| Ulaula Koae (Onaga) | 39,744 | 61,143 | 153.8 |
| Other species | 667,219 | 389,329 | 58.4 |
| Pond catch, total | 17,263 | 9,765 | 56.6 |

¹Shown separately for all species over 50,000 pounds or \$50,000.

Source: Hawaii State Department of Land and Natural Resources, Division of Fish and Game, *Commercial Fish Landings, for Fiscal Year—July, 1970 through June, 1971.*

Table 187.—MINERAL OPERATIONS: 1909 TO 1971

| Kind of operation and year | Establishments | Employees | Payroll (\$1,000) | Value added in mining (\$1,000) | Value of shipments and receipts (\$1,000) | Capital expenditures (\$1,000) |
|-------------------------------|---------------------------------------|-----------|-------------------|---------------------------------|---|--------------------------------|
| | | | | | | |
| 1958 | 20 | 421 | 1,724 | 4,550 | 5,847 | 704 |
| 1963 | 44 | 315 | 1,658 | 4,909 | 6,525 | 520 |
| 1967 | 12 | 200 | 1,600 | 5,000 | 5,500 | 1,800 |
| Including operations in mfrs: | | | | | | |
| 1909 | 6 | 43 | 14 | 16 | 21 | (NA) |
| 1919 | 5 | 151 | 95 | 202 | 251 | (NA) |
| 1954 | 13 | 171 | 598 | 1,266 | 1,778 | 193 |
| 1958 | 24 | 445 | 1,820 | 4,887 | 6,207 | 704 |
| 1963 | 49 | 339 | 1,758 | 5,677 | 7,462 | 520 |
| 1967 | 18 | (W) | (W) | (W) | (W) | (W) |
| | Value of mineral production (\$1,000) | | | | Quantity produced | |
| Year | Total | Cement | Stone | Other | Cement (1,000 376-lb. barrels) | Stone (1,000 short tons) |
| 1968 | 23,225 | 9,254 | 11,273 | 2,649 | 1,841 | 5,211 |
| 1969 | 29,539 | 10,544 | 16,059 | 2,936 | 2,075 | 6,534 |
| 1970 | 28,965 | 10,334 | 15,538 | 3,093 | 2,162 | 6,332 |
| 1971 (prel.) | 28,166 | 10,143 | 14,910 | 3,113 | 2,016 | 5,952 |

W Withheld to avoid disclosing figures for individual companies.

NA Not available.

Source: U.S. Bureau of the Census, *Census of Mineral Industries, 1963*, MIC 63(2)-10, table 1, and *Census of Mineral Industries, 1967*, MIC67(2)-10, table 1; U.S. Bureau of Mines, "The Mineral Industry of Hawaii in 1970," *Mineral Industry Surveys*, December 1970, and "The Mineral Industry of Hawaii in 1971," *Mineral Industry Surveys*, December 27, 1971.

SECTION 20

CONSTRUCTION AND HOUSING

This section presents statistics on construction activity and costs, the size and composition of the housing inventory, occupancy of housing, and residential financing.

Building permits for \$226 million in new residential construction and \$100 million in hotels, commercial buildings, and industrial structures were issued in 1971. The estimated value of construction put in place, as indicated by the contracting tax base, was \$693 million. The value of land transfers reached an all-time peak of \$1,044 million, and mortgage loans outstanding approached \$1.8 billion.

The number of occupied housing units in the State increased from 30,000 in 1900 to 87,000 in 1940 and 203,000 in 1970. Owner occupied units numbered 32,000 in 1950 and 94,000 in 1971; the latter total included 72,000 on land owned in fee and almost 22,000 on leased land. Military and public housing accounted for 21,400 units as of 1971.

Housing was in short supply throughout most of the past decade: on Oahu, the 1970 vacancy rate was only 3.1 percent, although 29 percent of all units turned over at least once during the previous year. Median monthly rent for the State rose from \$64 in 1960 to \$120 in 1970, and the Oahu rent-income ratio increased from 16.9 percent in 1958 to 23.8 in 1969. The average property value of homes insured by the Federal Housing Administration in Hawaii was \$21,600 in 1960 and \$33,400 in 1969—both figures well over national averages.

The principal sources for these data are the United States Census of Housing, an annual report on *FHA Homes, Data for States and Selected Areas*, the Honolulu Redevelopment Agency's *Redevelopment and Housing Research*, reports of County building departments, and the Bank of Hawaii's *Construction in Hawaii*. Mainland statistics appear in Section 27 of *Statistical Abstract of the United States: 1971*.

Table 188.—ESTIMATED VALUE OF BUILDING PERMITS, FOR THE CITY AND COUNTY OF HONOLULU: 1912 TO 1971

| Calendar year | Estimated value (\$1,000) | Calendar year | Estimated value (\$1,000) | |
|---------------|---------------------------|---------------|---------------------------|--------------------------|
| | | | All permits | New housing ¹ |
| 1912 | 2,400 | 1940 | 10,845 | 6,510 |
| 1913 | 1,675 | 1941 | 11,874 | 6,911 |
| 1914 | 1,275 | 1942 | 2,684 | 235 |
| 1915 | 1,450 | 1943 | 3,374 | 827 |
| 1916 | 2,350 | 1944 | 9,491 | 4,283 |
| 1917 | 2,090 | 1945 | 11,818 | 6,068 |
| 1918 | 1,500 | 1946 | 23,021 | 9,592 |
| 1919 | 4,400 | 1947 | 35,026 | 19,767 |
| 1920 | 3,403 | 1948 | 46,047 | 24,595 |
| 1921 | 5,081 | 1949 | 30,003 | 12,305 |
| 1922 | 6,222 | 1950 | 46,692 | 25,664 |
| 1923 | 5,866 | 1951 | 42,633 | 29,119 |
| 1924 | 5,643 | 1952 | 42,164 | 31,089 |
| 1925 | 8,611 | 1953 | 45,768 | 28,453 |
| 1926 | 5,733 | 1954 | 49,373 | 27,227 |
| 1927 | 6,398 | 1955 | 62,245 | 35,780 |
| 1928 | 6,750 | 1956 | 65,623 | 33,450 |
| 1929 | 7,254 | 1957 | 78,303 | 42,434 |
| 1930 | 5,921 | 1958 | 99,144 | 48,444 |
| 1931 | 3,622 | 1959 | 129,020 | 80,585 |
| 1932 | 2,423 | 1960 | 164,098 | 78,463 |
| 1933 | 1,408 | 1961 | 135,900 | 59,815 |
| 1934 | 1,717 | 1962 | 179,229 | 94,424 |
| 1935 | 3,064 | 1963 | 137,888 | 71,169 |
| 1936 | 4,940 | 1964 | 145,873 | 77,156 |
| 1937 | 7,266 | 1965 | 219,294 | 122,603 |
| 1938 | 9,584 | 1966 | 255,176 | 138,183 |
| 1939 | 10,142 | 1967 | 210,408 | 92,325 |
| | | 1968 | 345,600 | 164,941 |
| | | 1969 | 412,594 | 195,963 |
| | | 1970 | 386,687 | 170,983 |
| | | 1971 | 298,630 | 159,059 |

¹New one-family, two-family, or multi-family dwellings. Excludes hotels.

Source: City and County of Honolulu, Department of Buildings, *Report of Building Activities* for 1931 and 1935, *Summary of Building Permits* (annual report, 1951-1971), and records; Chamber of Commerce of Honolulu, *Business Statistics... 1922-1936* and *General Information About Honolulu, Hawaii, U.S.A.* for 1928-1938 (p. 31) and 1938-1942 (p. 39).

Table 189.—VALUE OF BUILDING PERMITS, BY COUNTY: 1965 TO 1971
(In thousands of dollars)

| Category and year | State total | City and County of Honolulu | Hawaii County | Kauai County | Maui County |
|---|-------------|-----------------------------|---------------|--------------|-------------|
| New residential buildings: | | | | | |
| 1965 | 138,625 | 122,603 | 6,334 | 2,840 | 6,848 |
| 1966 | 154,298 | 138,183 | 6,915 | 2,981 | 6,219 |
| 1967 | 108,865 | 92,325 | 6,217 | 2,355 | 7,968 |
| 1968 | 193,430 | 164,941 | 11,683 | 5,077 | 11,729 |
| 1969 | 237,834 | 195,963 | 16,876 | 5,273 | 19,722 |
| 1970 | 217,532 | 170,983 | 21,139 | 8,007 | 17,403 |
| 1971 | 226,270 | 159,059 | 33,300 | 9,220 | 24,691 |
| Industrial and commercial buildings:¹ | | | | | |
| 1965 | 69,168 | 53,891 | 7,309 | 4,215 | 3,753 |
| 1966 | 89,740 | 75,181 | 6,501 | 1,377 | 6,681 |
| 1967 | 82,774 | 70,980 | 2,857 | 5,391 | 3,546 |
| 1968 | 146,048 | 124,771 | 8,638 | 6,615 | 6,024 |
| 1969 | 203,970 | 160,457 | 26,857 | 8,347 | 8,309 |
| 1970 | 175,351 | 133,056 | 23,626 | 1,672 | 16,997 |
| 1971 | 100,190 | 72,318 | 16,981 | 1,727 | 9,164 |

¹Both new construction and additions, alterations, and repairs. Includes hotels.

Source: First Hawaiian Bank, *Economic Indicators Source Book* (August 1971), Series 43, 46, 47, 50, 51, 54, 55, and 58, and records.

**Table 190.—PRIVATE RESIDENTIAL CONSTRUCTION AND DEMOLITION AUTHORIZED BY PERMIT,
BY COUNTY: 1965 TO 1971**

| Category and year authorized | State total | City and County of Honolulu | Other Counties | | | |
|--|-------------|-----------------------------|----------------|--------|-------|------|
| | | | Total | Hawaii | Kauai | Maui |
| New 1-family dwellings: | | | | | | |
| 1965 | 5,480 | 4,512 | 968 | 431 | 202 | 335 |
| 1966 | 3,953 | 2,943 | 1,010 | 453 | 212 | 345 |
| 1967 | 3,930 | 3,005 | 925 | 393 | 160 | 372 |
| 1968 | 4,814 | 3,683 | 1,131 | 493 | 214 | 424 |
| 1969 | 4,886 | 3,569 | 1,317 | 652 | 264 | 401 |
| 1970 | 5,399 | 3,809 | 1,590 | 796 | 320 | 474 |
| 1971 | 5,802 | 3,771 | 2,031 | 1,014 | 348 | 669 |
| Units in new 2-family structures: | | | | | | |
| 1965 | 178 | 132 | 46 | 4 | 14 | 28 |
| 1966 | 80 | 52 | 28 | 12 | 12 | 4 |
| 1967 | 54 | 46 | 8 | 4 | — | 4 |
| 1968 | 338 | 330 | 8 | 6 | — | 2 |
| 1969 | 316 | 286 | 30 | 16 | — | 14 |
| 1970 | 228 | 212 | 16 | 6 | 6 | 4 |
| 1971 | 100 | 70 | 30 | 28 | — | 2 |
| New apartments: | | | | | | |
| 1965 | 5,795 | 5,551 | 244 | 90 | 6 | 148 |
| 1966 | 6,495 | 6,320 | 175 | 61 | 12 | 102 |
| 1967 | 3,341 | 3,159 | 182 | 18 | 4 | 160 |
| 1968 | 6,982 | 6,043 | 939 | 354 | 100 | 485 |
| 1969 | 8,546 | 7,285 | 1,261 | 390 | 18 | 853 |
| 1970 | 5,122 | 3,957 | 1,165 | 389 | 67 | 709 |
| 1971 | 5,623 | 4,017 | 1,606 | 830 | 29 | 747 |
| Units demolished: | | | | | | |
| 1965 | 1,016 | 794 | 222 | 64 | 136 | 22 |
| 1966 | 982 | 788 | 194 | 57 | 96 | 41 |
| 1967 | 1,123 | 722 | 401 | 82 | 276 | 43 |
| 1968 | 1,189 | 927 | 262 | 119 | 92 | 51 |
| 1969 | 1,000 | 694 | 306 | 120 | 128 | 58 |
| 1970 | (NA) | 642 | (NA) | (NA) | 112 | (NA) |
| 1971 | 857 | 596 | 261 | 80 | 87 | 94 |

NA Not available.

Source: Compiled from County building departments by Hawaii State Department of Planning and Economic Development.

Table 191.—CONSTRUCTION COST INDEX, CONTRACTING TAX BASE, REAL ESTATE MORTGAGE LOANS OUTSTANDING, AND VALUE OF LAND TRANSFERS: 1940 TO 1972

| Year | Honolulu Construction Cost Index (1967=100) ¹ | | Contracting general excise tax base (\$1,000) ² | Real estate mortgage loans outstanding, Jan. 1 (\$1,000) | Value of land transfers (\$1,000) ³ | |
|------------|--|--------------------|--|--|--|---------|
| | 1-family residence | High-rise building | | | State | Oahu |
| 1940 | — | — | 18,343 | 26,485 | — | — |
| 1950 | — | — | 67,710 | 106,076 | — | — |
| 1960 | — | — | 268,530 | 443,365 | — | — |
| 1965 | 91.0 | 91.6 | 338,557 | 905,955 | — | — |
| 1966 | 95.5 | 96.3 | 392,408 | 1,022,725 | — | — |
| 1967 | 100.0 | 100.0 | 346,778 | 1,138,569 | 442,371 | 374,706 |
| 1968 | 105.6 | 104.0 | 451,697 | 1,228,091 | 440,689 | 356,318 |
| 1969 | 112.9 | 107.9 | 624,957 | 1,386,863 | 809,415 | 596,427 |
| 1970 | 114.4 | 113.7 | 782,972 | 1,579,560 | 880,196 | 668,003 |
| 1971 | 120.0 | 118.5 | 692,938 | 1,790,220 | 1,043,539 | 812,545 |
| 1972 | 124.8 | 123.2 | (NA) | (NA) | (NA) | (NA) |

NA Not available.

¹Annual averages, 1965-1971; March 1972. Not available before 1965.

²Years ended June 30, 1940 and 1950; calendar years 1960 to 1971.

³Includes leases, agreement of sales assignments, subleases, etc. Comparable data not available before 1967.

Source: Honolulu Construction Cost Index from First Hawaiian Bank, *Economic Indicators Source Book—Revisions* (1971), p. 4, and *Economic Indicators* (monthly). General excise tax base for contracting from Honolulu Redevelopment Agency, *Redevelopment and Housing Research*, Supplemental Research Notes, October 1965, p. 5, and Hawaii State Department of Taxation, annual releases. Real estate mortgage loans outstanding from Honolulu Redevelopment Agency, *op. cit.*, January 1972, p. 12. Value of land transfers from Hawaii State Department of Land and Natural Resources, Bureau of Conveyances, records.

Table 192.—CHARACTERISTICS OF CONSTRUCTION INDUSTRIES: 1967

| Payroll and activity classification | Number of establishments | Number of proprietors and working partners | All employees (average) | Total receipts (\$1,000) |
|---|--------------------------|--|-------------------------|--------------------------|
| Construction industries, total | 1,927 | 1,392 | 17,171 | 558,526 |
| With payroll | 1,220 | 718 | 17,171 | 543,304 |
| Without payroll | 707 | 674 | — | 15,222 |
| General building contractors | 543 | 351 | 6,802 | 286,422 |
| Heavy construction contractors | 92 | 30 | 2,606 | 65,697 |
| Special trade contractors | 1,123 | 922 | 7,036 | 156,727 |
| Subdividers and developers and operative builders | 169 | 89 | 727 | 49,680 |

Source: U.S. Bureau of the Census, *Census of Construction Industries, 1967. Area Statistics. Hawaii*, CC67-A-13, table 1.

Table 193.—OCCUPIED HOUSING UNITS AND POPULATION PER UNIT: 1890 TO 1970

| Year | Occupied housing units ¹ | | | | Population | | Population per occupied unit ² |
|------------|-------------------------------------|----------------|---------|-----------------|------------------|-------------------|---|
| | Total | Owner occupied | | Renter occupied | In housing units | In group quarters | |
| | | Number | Percent | | | | |
| 1890 | 12,023 | (NA) | (NA) | (NA) | 60,703 | 29,287 | 5.05 |
| 1896 | 14,026 | 5,966 | 42.5 | 8,060 | 71,809 | 37,211 | 5.12 |
| 1900 | 29,763 | 6,321 | 23.1 | 21,086 | 110,306 | 43,695 | 3.71 |
| 1910 | 52,219 | 6,776 | 13.1 | 44,900 | 191,909 | | (NA) |
| 1920 | 65,670 | 8,695 | 13.4 | 56,386 | 255,912 | | (NA) |
| 1930 | 77,070 | 14,624 | 19.1 | 61,807 | 368,336 | | (NA) |
| 1940 | 86,855 | 22,030 | 25.4 | 64,825 | 423,330 | | (NA) |
| 1950 | 112,290 | 37,025 | 33.0 | 75,265 | 463,230 | 36,564 | 4.14 |
| 1960 | 153,064 | 62,937 | 41.1 | 90,127 | 592,807 | 39,965 | 3.87 |
| 1970 | 203,088 | 95,271 | 46.9 | 107,817 | 730,095 | 38,466 | 3.59 |

NA Not available.

¹Termed "private residences" in 1890 and 1896, "families" in 1900-1930, "occupied dwelling units" in 1940 and 1950, and "occupied housing units" in 1960 and 1970. Data for 1890 and 1896 exclude plantation quarters. Data for 1910-1930 include group quarters as separate units. Units with tenure unreported numbered 2,356 in 1900, 543 in 1910, 589 in 1920, and 639 in 1930.

²Based on population in housing units. Total population per occupied unit was 7.48 in 1890, 7.77 in 1896, 4.17 in 1900, 3.68 in 1910, 3.90 in 1920, 4.78 in 1930, 4.87 in 1940, 4.47 in 1950, 4.13 in 1960, and 3.78 in 1970.

Source: Robert C. Schmitt, *Demographic Statistics of Hawaii: 1778-1965* (University of Hawaii Press, 1968), pp. 78, 124, 129; *U.S. Census of Housing: 1970*, Final Report HC(1)-A13, table 2.

Table 194.—HOUSING CHARACTERISTICS: 1940 TO 1970

| Year and County | All housing units | Population per occupied unit | Percent vacant ¹ | | Median number of rooms ¹ | Percent in one-unit structures ¹ |
|------------------------------|-------------------|------------------------------|-----------------------------|--------------|-------------------------------------|---|
| | | | For rent or sale | Other vacant | | |
| 1940 | 90,830 | (NA) | 4.4 | | 4.2 | 78.9 |
| 1950 | 120,606 | 4.1 | 2.4 | 4.2 | 4.3 | 71.9 |
| 1960 | 165,506 | 3.9 | 2.7 | 4.8 | 4.5 | 74.2 |
| 1970 | 216,568 | 3.6 | 2.9 | 3.0 | 4.6 | 65.0 |
| COUNTIES: 1970 | | | | | | |
| City & Co. of Honolulu | 174,653 | 3.6 | 3.1 | 2.3 | 4.5 | 59.0 |
| Hawaii County | 18,972 | 3.6 | 2.5 | 6.3 | 4.8 | 88.4 |
| Kauai County | 9,021 | 3.5 | 2.3 | 5.5 | 4.8 | 91.0 |
| Maui County | 13,922 | 3.5 | 1.7 | 6.1 | 4.8 | 91.6 |

NA Not available.

¹Data for 1970 limited to year-round housing units (215,897 for the State).

²In dollars. Value of land and building combined. Except for 1940, excludes units in multi-unit structures. Data for 1950 exclude units on leased land.

³In dollars. Contract monthly rent, excluding rent free units.

(Continued on next page)

Table 194.—HOUSING CHARACTERISTICS: 1940 TO 1970 (continued)

| Year and County | Percent lacking some or all plumbing ¹ | Occupied housing units | | | Owner occupied: median value ² | Renter occupied: median rent ³ |
|--|---|------------------------|------------------------|---------------------------------------|---|---|
| | | Number | Percent owner occupied | Percent 1.01 or more persons per room | | |
| 1940 | (NA) | 86,855 | 25.4 | 38.4 | 2,540 | 17 |
| 1950 | 38.8 | 112,290 | 33.0 | 30.8 | 12,283 | 32 |
| 1960 | (NA) | 153,064 | 41.1 | 25.7 | 20,900 | 64 |
| 1970 | 5.6 | 203,088 | 46.9 | 19.9 | 35,100 | 120 |
| COUNTIES: 1970 | | | | | | |
| City & Co. of Honolulu | 3.3 | 164,763 | 45.0 | 19.9 | 38,100 | 130 |
| Hawaii County | 16.3 | 17,260 | 56.9 | 20.4 | 25,000 | 56 |
| Kauai County | 15.2 | 8,282 | 45.7 | 20.1 | 26,300 | 40- |
| Maui County | 13.1 | 12,783 | 58.5 | 19.1 | 23,500 | 46 |
| | | | 1970: percent | | | |
| Subject | | | 1960: percent | State total | City & Co. of Honolulu | Other Counties |
| Year-round housing units: ⁴ | | | | | | |
| With more than one bedroom | | | 21.5 | 39.6 | 40.9 | 34.4 |
| In structures built previous 10 years | | | 36.0 | 39.8 | 42.8 | 27.3 |
| With air conditioning ⁵ | | | 1.5 | 11.3 | 13.2 | 2.9 |
| With three or more bedrooms | | | 46.3 | 52.8 | 50.9 | 60.7 |
| Occupied housing units: | | | | | | |
| Moved into unit previous 15 months | | | 30.8 | 29.7 | 32.4 | 17.8 |
| With two or more automobiles available | | | 25.4 | 42.9 | 41.3 | 49.5 |
| With clothes washing machine | | | 80.1 | 74.7 | 73.7 | 79.0 |
| With clothes dryer | | | 7.6 | 28.4 | 31.5 | 15.4 |
| With dish washer | | | (NA) | 17.1 | 19.3 | 7.5 |
| With home food freezer | | | 18.8 | 21.0 | 18.4 | 31.9 |
| With television | | | 77.9 | 93.4 | 94.4 | 88.9 |
| Owned second home | | | (NA) | 4.2 | 4.0 | 5.0 |

NA Not available.

¹Data for 1970 limited to year-round housing units (215,897 for the State).

²In dollars. Value of land and building combined. Except for 1940, excludes units in multi-unit structures. Data for 1950 exclude units on leased land.

³In dollars. Contract monthly rent, excluding rent free units.

⁴Data for 1960 include a few vacant seasonal or migratory housing units.

⁵Data for 1960 limited to occupied housing units.

Source: *U.S. Census of Housing: 1940, General Characteristics, Hawaii; U.S. Census of Housing: 1950, Bulletin H-A52; U.S. Census of Housing: 1960, Final Report HC(1)-13; U.S. Census of Housing: 1970, Final Reports HC(1)-A13 and HC(1)-B13.*

Table 195.—CONTROL OF HOUSING: 1940 TO 1971

| Control | April 1, 1940 | April 1, 1950 | April 1, 1960 | April 1, 1970 | April 1, 1971 | | | | |
|--|------------------|------------------|------------------|------------------|----------------|-----------------------|------------------|-----------------|-----------------------------|
| | | | | | State total | City & Co. of Hon. | Hawaii County | Kauai County | Maui County ¹ |
| All housing units | 90,830 | 120,606 | 165,506 | 216,568 | 227,969 | 183,216 | 20,168 | 9,340 | 15,245 |
| Private ² | (NA) | 108,899 | 148,850 | 197,030 | 206,569 | 163,133 | 19,596 | 9,059 | 14,781 |
| Owner occupied, fee ³ | 19,693 | 30,373 | 49,798 | 68,422 | 72,086 | 50,942 | 9,891 | 3,669 | 7,584 |
| Owner occupied, lease ³ | (NA) | 1,502 | 6,247 | 20,802 | 21,732 | 21,279 | 259 | 82 | 112 |
| Renter occ. or vacant ² | (NA) | 77,024 | 92,805 | 107,806 | 112,751 | 90,912 | 9,446 | 5,308 | 7,085 |
| Federal | (NA) | 7,231 | 12,115 | 13,641 | 15,089 | 14,991 | 23 | 60 | 15 |
| Air Force | 1,164 | 1,501 | 2,085 | 2,523 | 3,085 | 3,085 | — | — | — |
| Army | (NA) | 1,289 | 2,922 | 3,563 | 3,577 | 3,562 | 15 | — | — |
| Navy | (NA) | 4,441 | 7,089 | 7,354 | 8,226 | 8,170 | — | 56 | — |
| Other | (NA) | — | 19 | 201 | 201 | 174 | 8 | 4 | 15 |
| State | 200 | 4,476 | 4,541 | 5,897 | 6,311 | 5,092 | 549 | 221 | 449 |
| Public ⁴ | 171 | 4,438 | 4,385 | 4,979 | 5,372 | 4,661 | 350 | 128 | 233 |
| Other ⁵ | 29 | 38 | 156 | 918 | 939 | 431 | 199 | 93 | 216 |

NA Not available.

¹Includes Kalawao County (Kalaupapa Settlement, with 117 State operated units in 1971).

²Data for 1940, 1950 and 1960 include approximately 500 teachers cottages operated by the Counties. Data for 1970 and 1971 include privately owned units (numbering 1,650 in 1971) leased by Federal and State agencies.

³As of January 1, 1940 to 1960, and July 1, 1970 and 1971. Based on the number of taxpayers claiming home exemptions in their State tax returns. Totals based on this source are somewhat lower than corresponding U.S. Census figures, in part because of eligibility restrictions. The 1970 U.S. Census reported 95,271 owner occupied housing units, including 4,727 cooperative or condominium owner occupied units.

⁴Housing units operated by the Hawaii Housing Authority, including some owned by the Navy (in 1950 and 1960) but excluding teachers cottages and units leased from private owners.

⁵Data for 1970 and 1971 include teachers cottages operated by the Hawaii Housing Authority. These units were operated by the Counties in earlier years and were reported with private housing data for those dates.

Source: Total inventory from the U.S. Bureau of the Census, *U.S. Census of Housing* for 1940-1970, and the Honolulu Redevelopment Agency, *Redevelopment and Housing Research*, No. 31 (July 1971), p. 6. Owner occupied units from the Hawaii State Department of Taxation, tabular releases and records. Federal and State housing from the Honolulu Redevelopment Agency, *Redevelopment and Housing Research*, No. 2 (October 1955), p. 52; No. 15 (May 1959), p. 51; No. 18 (October 1960), p. 7; No. 30 (July 1970), p. 6; and No. 31 (July 1971), p. 5.

Table 196.—HOUSING COSTS IN HONOLULU: 1971

| Subject | Amount |
|---|--------|
| Percent of selling price, total | 100.0 |
| Home construction | 52.0 |
| Site preparation | 15.2 |
| Developer profits | 16.3 |
| Other elements | 16.5 |
| Average home construction cost (\$) | 18,211 |
| Percent of Mainland average | 130.0 |
| Subdivision site preparation costs: | |
| Percent of Mainland average | 129.2 |

Source: City and County of Honolulu Planning Departments, *Planning for Oahu. Elements of a Residential Policy: Housing Programs and Planning Areas* (December 1971), pp. 7, 9, and 12.

Table 197.—AVERAGE VALUES FOR HOMES INSURED UNDER F.H.A. SECTION 203: 1960 TO 1969

| Subject | Property value (dollars) | Market price of site | | Improved floor area (square feet) | Lot size (square feet) | Dollars per square foot | | |
|------------------------|--------------------------|----------------------|---------------------|-----------------------------------|------------------------|-------------------------|------------|-------------|
| | | Amount (dollars) | % of property value | | | Sale price | Site price | Const. cost |
| New homes: | | | | | | | | |
| 1960 | 21,622 | 6,502 | 30.1 | 1,063 | (NA) | 17.50 | (NA) | (NA) |
| 1968 | 32,038 | 13,235 | 41.3 | 1,104 | 6,788 | 26.27 | 2.05 | 17.48 |
| 1969 | 33,391 | 13,853 | 41.5 | 1,120 | 7,292 | 28.01 | 2.07 | 19.01 |
| Percent increase | 54.4 | 113.1 | 37.9 | 5.4 | (NA) | 60.1 | (NA) | (NA) |
| Existing homes: | | | | | | | | |
| 1960 | 20,093 | 6,396 | 31.8 | 1,022 | (NA) | 18.34 | (NA) | — |
| 1968 | 31,647 | 12,768 | 40.3 | 1,126 | 8,350 | 24.76 | 1.73 | — |
| 1969 | 32,262 | 12,587 | 39.0 | 1,089 | 7,797 | 27.03 | 1.77 | — |
| Percent increase | 60.6 | 96.8 | 22.6 | 6.6 | (NA) | 47.4 | (NA) | — |

NA Not available.

Source: U.S. Department of Housing and Urban Development, *FHA Homes. Data for States and Selected Areas. On Characteristics of FHA Operations under Section 203* (annual).

SECTION 21

MANUFACTURERS

This section presents statistics on the manufacturing segment of the economy.

The number of manufacturing establishments in Hawaii increased from 222 in 1899 to 474 in 1939 and 697 in 1967, and the value added by manufacture rose from \$11 million to \$58 million to \$326 million during the same period. Over 77 percent of all manufacturing activity in the State was on Oahu in 1967. Food processing—mostly sugar and pineapple—accounted for 57 percent of the value added by manufacture in that year.

Growth has been most rapid, however, in manufacturing outside of the sugar and pineapple industries. Between 1961 and 1971, the general excise and use tax base increased 61 percent for sugar processing, 33 percent for pineapple canning, and 69 percent for all other manufacturing.

Sources for data on this subject include the United States Census of Manufacturers, most recently taken as of 1967, the Annual Survey of Manufactures, and publications of the Hawaii State Department of Labor and Industrial Relations and Department of Taxation, Hawaiian Sugar Planters' Association, and Pineapple Growers Association of Hawaii. Statistics for the nation as a whole appear in Section 28 of the *Statistical Abstract of the United States: 1971*.

Table 198.—MANUFACTURING: 1899 TO 1969

| Year ¹ | Establishments | | All employees | | Production workers | | | Value added by manufacture (million dollars) | Cost of materials (million dollars) | Value of industry shipments (million dollars) | Capital expenditures, new (million dollars) |
|-------------------|----------------|-------------------------|---------------|---------------------------|--------------------|----------------------|-------------------------|--|-------------------------------------|---|---|
| | Total | With 20 ployees or more | Number | Payroll (million dollars) | Number | Man-hours (millions) | Wages (million dollars) | | | | |
| 1899 | 222 | (NA) | 4,418 | 2.0 | 3,655 | (NA) | 1.5 | 11.1 | (NA) | (NA) | (NA) |
| 1909 | 500 | (NA) | 7,572 | 2.8 | 5,904 | (NA) | 2.1 | 21.6 | (NA) | (NA) | (NA) |
| 1919 | 496 | (NA) | 11,744 | 8.7 | 9,969 | (NA) | 6.6 | 51.9 | (NA) | (NA) | (NA) |
| 1939 | 474 | (NA) | 19,518 | 15.3 | 17,002 | (NA) | 11.5 | 58.4 | (NA) | (NA) | (NA) |
| 1954 | 520 | 137 | 24,381 | 77.1 | 19,524 | 36.1 | 50.8 | 140.3 | (NA) | (NA) | 11.7 |
| 1958 | 618 | 179 | 23,896 | 82.2 | 17,823 | 31.9 | 51.8 | 164.9 | (NA) | (NA) | 17.2 |
| 1959 | (NA) | (NA) | 25,962 | 93.1 | 19,397 | 35.9 | 61.8 | 197.1 | (NA) | (NA) | (NA) |
| 1960 | (NA) | (NA) | 23,456 | 89.4 | 17,358 | 32.7 | 56.6 | 183.2 | (NA) | (NA) | 60.6 |
| 1961 | (NA) | (NA) | 23,238 | 93.4 | 16,840 | 31.2 | 57.4 | 204.5 | (NA) | (NA) | 31.5 |
| 1962 | (NA) | (NA) | 22,645 | 94.0 | 16,159 | 29.9 | 57.5 | 199.0 | (NA) | (NA) | 14.2 |
| 1963 | 672 | 203 | 25,144 | 109.0 | 18,722 | 33.2 | 67.5 | 261.1 | (NA) | (NA) | 15.4 |
| 1964 | (NA) | (NA) | 25,000 | 113.7 | 18,300 | 33.1 | 69.4 | 268.8 | 372.0 | 638.4 | 17.7 |
| 1965 | (NA) | (NA) | 25,400 | 118.1 | 18,700 | 34.0 | 73.5 | 292.1 | 365.9 | 655.5 | 17.2 |
| 1966 | (NA) | (NA) | 24,800 | 123.8 | 18,700 | 34.3 | 78.2 | 310.8 | 371.5 | 680.9 | 24.1 |
| 1967 | 697 | 215 | 25,400 | 139.6 | 19,000 | 35.9 | 86.9 | 326.2 | 399.6 | 723.4 | 26.0 |
| 1968 | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) |
| 1969 | (NA) | (NA) | 23,900 | 145.3 | 17,900 | 33.2 | 90.8 | 351.0 | 408.3 | 758.1 | 19.8 |

NA Not available.

¹Data for 1899-1958, 1963, and 1967 are from the Census of Manufactures for those years. Data for other years are from the Annual Survey of Manufactures and are subject to considerable sampling variation. Because of changes in definitions over time, data are not entirely comparable from year to year; see sources for discussion.

Source: U.S. Bureau of the Census, *Census of Manufactures, 1963*, MC63(3)-12, table 2; *Census of Manufactures, 1967*, MC67(3)-12, table 2; and *Annual Survey of Manufactures, 1969*, M69(AS)-6.9, table 1, p. 5.

Table 199.—MANUFACTURING, BY INDUSTRY AND ISLAND: 1969

| Island and industry group | All employees | | Production workers | | | Value added by manufacture (million dollars) | Cost of materials (million dollars) | Value of industry shipments (million dollars) | Capital expenditures, new (million dollars) | End-of year-inventories (million dollars) |
|---|----------------|---------------------------|--------------------|----------------------|-------------------------|--|-------------------------------------|---|---|---|
| | Number (1,000) | Payroll (million dollars) | Number (1,000) | Man-hours (millions) | Wages (million dollars) | | | | | |
| State total | 23.9 | 145.3 | 17.9 | 33.2 | 90.8 | 351.0 | 408.3 | 758.1 | 19.8 | 90.5 |
| Island: | | | | | | | | | | |
| Oahu | 18.5 | 114.4 | 13.7 | 25.3 | 69.3 | 254.5 | 317.0 | 570.2 | 14.2 | 70.6 |
| Other Islands | 5.4 | 30.9 | 4.2 | 7.9 | 21.5 | 96.5 | 91.3 | 187.9 | 5.6 | 19.9 |
| Industry: | | | | | | | | | | |
| Food and kindred products | 13.1 | 74.7 | 10.0 | 18.2 | 47.9 | 202.2 | 236.3 | 437.2 | 13.7 | 40.9 |
| Canned fruits, vegetables | 6.0 | 27.6 | 5.5 | 9.3 | 21.3 | 43.6 | 74.6 | 118.2 | 2.3 | 25.2 |
| Raw cane sugar | 3.7 | 24.5 | 2.6 | 5.0 | 16.1 | 95.7 | 80.1 | 175.7 | 5.3 | 5.3 |
| Apparel, other textile products | 3.1 | 12.4 | 2.7 | 5.3 | 9.4 | 21.1 | 14.6 | 35.7 | (W) | 4.3 |
| Lumber and wood products ¹ | 1.0 | 5.5 | 0.8 | 1.6 | 4.3 | 9.5 | 8.9 | 17.9 | 0.3 | 2.6 |
| Printing and publishing ¹ | 1.3 | 11.2 | 0.7 | 1.0 | 7.1 | 33.8 | 15.3 | 49.2 | 0.5 | 3.6 |
| Stone, clay, glass products | 0.9 | 8.3 | 0.6 | 1.4 | 5.1 | 23.0 | 22.1 | 48.2 | 1.6 | 2.5 |
| Fabricated metal products | 0.7 | 5.1 | 0.6 | 1.2 | 4.1 | 12.3 | 21.1 | 32.0 | 0.2 | 11.4 |
| Machinery, except electrical ¹ | 0.3 | 1.9 | 0.3 | 0.5 | 1.6 | 3.2 | 1.5 | 5.4 | 0.3 | 0.8 |
| Misc. mfg. industries | 0.5 | 1.7 | 0.4 | 0.8 | 1.0 | 2.5 | 1.2 | 3.7 | 0.0 | 0.7 |
| Administrative, auxiliary | 0.7 | 7.9 | (X) | (X) | (X) | (X) | (X) | (X) | (X) | (X) |

W Withheld to avoid disclosure.

X Not applicable.

¹Subject to considerable sampling variation.

Source: U.S. Bureau of the Census, *Annual Survey of Manufactures, 1969*, M69(AS)-6.9, table 3, p. 10, and table 4, p. 15.

Table 200.—GENERAL EXCISE AND USE TAX BASE FOR SUGAR PROCESSING, PINEAPPLE CANNING, AND MANUFACTURING: 1958 TO 1971

| Year | Sugar processing (\$1,000) | Pineapple canning (\$1,000) | Manufacturing (\$1,000) |
|------------|----------------------------|-----------------------------|-------------------------|
| 1958 | 67,358 | 107,300 | 103,867 |
| 1959 | 113,865 | 98,957 | 129,123 |
| 1960 | 99,079 | 96,939 | 145,739 |
| 1961 | 118,398 | 93,777 | 168,514 |
| 1962 | 135,328 | 99,143 | 158,157 |
| 1963 | 146,761 | 99,353 | 170,501 |
| 1964 | 148,103 | 109,808 | 178,830 |
| 1965 | 152,701 | 123,761 | 188,741 |
| 1966 | 178,909 | 105,747 | 205,463 |
| 1967 | 171,155 | 131,695 | 218,272 |
| 1968 | 184,663 | 114,554 | 234,071 |
| 1969 | 196,744 | 116,466 | 279,482 |
| 1970 | 175,337 | 114,634 | 285,251 |
| 1971 | 190,209 | 124,548 | 284,929 |

Source: Hawaii State Department of Taxation, annual releases.

Table 201.—PINEAPPLE PRODUCTION: 1903 TO 1971

| Year ¹ | Single-strength canned pineapple (actual cases) | | | Concentrated pineapple juice (equivalent 6/10 cases) |
|-------------------|---|------------|------------|--|
| | Total fruit and juice | Fruit | Juice | |
| 1903 | 1,893 | 1,893 | — | — |
| 1905 | 45,041 | 45,041 | — | — |
| 1910 | 464,968 | 464,968 | — | — |
| 1915 | 2,669,916 | 2,669,916 | — | — |
| 1920 | 5,986,982 | 5,986,982 | — | — |
| 1925 | 8,728,580 | 8,728,580 | — | — |
| 1930 | 12,672,296 | 12,672,296 | — | — |
| 1935-36 | 15,515,176 | 11,428,246 | 4,086,930 | — |
| 1940-41 | 21,755,716 | 10,947,414 | 10,808,302 | — |
| 1945-46 | 17,722,102 | 9,050,898 | 8,671,204 | — |
| 1950-51 | 27,451,562 | 15,097,960 | 12,353,602 | — |
| 1955-56 | 30,836,161 | 18,612,561 | 12,223,600 | — |
| 1960-61 | 30,035,864 | 18,461,912 | 11,573,952 | 723,619 |
| 1961-62 | 29,880,482 | 18,121,674 | 11,758,808 | 449,715 |
| 1962-63 | 30,395,233 | 18,457,107 | 11,938,126 | 728,075 |
| 1963-64 | 28,794,589 | 17,644,797 | 11,149,792 | 1,184,964 |
| 1964-65 | 26,728,812 | 16,301,014 | 10,427,798 | 1,041,084 |
| 1965-66 | 29,714,443 | 17,833,405 | 11,881,038 | 1,129,046 |
| 1966-67 | 30,327,598 | 19,004,793 | 11,322,805 | 1,211,166 |
| 1967-68 | 28,035,755 | 17,241,338 | 10,794,417 | 679,735 |
| 1968-69 | 28,659,533 | 17,729,546 | 10,929,987 | 1,011,512 |
| 1969-70 | 28,784,396 | 16,970,762 | 11,813,634 | 731,294 |
| 1970-71 | 28,250,938 | 17,675,249 | 10,575,689 | 986,362 |

¹Calendar years, 1903-1930; pack years ended May 31, 1936 and thereafter.

Source: Pineapple Growers Association of Hawaii, *Pineapple Fact Book Hawaii 1969* (May 1969), p. 18, and records.

Table 202.—SUGAR PRODUCTION: 1837 TO 1971

| Year | Sugar produced (short tons) | Year | Sugar produced (short tons) | Year | Sugar produced (short tons) |
|------------|-----------------------------|------------|-----------------------------|-------------------------|-----------------------------|
| 1837 | 2 | 1860 | 572 | 1885 | 85,695 |
| 1840 | 180 | 1865 | 7,659 | 1890 | 129,899 |
| 1845 | 151 | 1870 | 9,392 | 1895 | 149,627 |
| 1850 | 375 | 1875 | 12,540 | 1900 | 289,544 |
| 1855 | 145 | 1880 | 31,792 | 1905 ¹ | 426,248 |

| Year | Total cane land (acres) | Sugar produced (96° raw value, short tons) | Average yield per acre (short tons) | Ave. N.Y. raw sugar price cwt. (dollars) | Ave. daily cash wage, non-superv. employees ² (dollars) | Man-hours per ton of sugar, raw value |
|-------------------------|-------------------------|--|-------------------------------------|--|--|---------------------------------------|
| 1910 ¹ | 209,469 | 529,940 | 37.4 | — | — | — |
| 1915 ¹ | 239,800 | 650,970 | 45.8 | — | — | — |
| 1920 ¹ | 247,838 | 560,379 | 39.2 | — | — | — |
| 1925 ¹ | 240,597 | 781,000 | 52.2 | — | — | — |
| 1930 ¹ | 242,761 | 939,287 | 58.7 | — | — | — |
| 1935 | 246,491 | 986,849 | 67.8 | 3.23 | 1.70 | — |
| 1940 | 235,110 | 976,677 | 62.7 | 2.78 | 2.18 | — |
| 1945 ³ | 211,331 | 821,216 | 71.4 | 3.75 | 5.10 | 33.24 |
| 1950 | 220,383 | 960,961 | 74.7 | 5.93 | 8.30 | 25.86 |
| 1955 | 218,819 | 1,140,112 | 92.94 | 5.95 | 10.62 | 17.42 |
| 1960 | 224,617 | 935,744 | 83.15 | 6.31 | 13.18 | 16.72 |
| 1961 | 227,027 | 1,092,481 | 88.58 | 6.30 | 14.11 | 13.90 |
| 1962 | 228,926 | 1,120,011 | 90.36 | 6.45 | 14.96 | 13.76 |
| 1963 | 231,321 | 1,100,768 | 93.39 | 8.20 | 16.68 | 13.56 |
| 1964 | 233,145 | 1,178,770 | 94.76 | 6.90 | 17.60 | 11.76 |
| 1965 | 235,576 | 1,217,667 | 97.97 | 6.75 | 18.40 | 10.82 |
| 1966 | 237,499 | 1,234,121 | 98.82 | 6.99 | 19.76 | 10.50 |
| 1967 | 239,813 | 1,191,042 | 98.74 | 7.28 | 21.35 | 10.64 |
| 1968 | 242,476 | 1,232,182 | 99.36 | 7.52 | 21.62 | 9.98 |
| 1969 | 242,216 | 1,182,414 | 95.73 | 7.75 | 23.26 | 9.44 |
| 1970 | 238,997 | 1,162,071 | 91.88 | 8.08 | 24.24 | 9.50 |
| 1971 | 232,278 | 1,229,976 | 92.26 | 8.52 | 26.08 | — |

¹Production year ended September 30.

²Cash wage only. Excludes value of housing, medical care, and other perquisites provided without charge to employees until elimination of the perquisite system in December 1946. Also excludes value of "employee benefits", estimated at \$10.00 in 1971.

³Value for man-hours per ton refers to 1946.

Source: U.S. Bureau of Labor Statistics, *Labor Conditions in the Territory of Hawaii, 1929-1930* (1932), pp. 12-13; Hawaiian Sugar Planters' Association, *HSPA Sugar Manual 1971* (1971), pp. 6-9, and records.

SECTION 22

DISTRIBUTION AND SERVICES

This section presents statistics relating to retail trade, wholesale trade, and selected services.

These activities have undergone rapid growth in recent decades. Retail sales increased from \$121 million in 1939 to \$522 million in 1958 and \$1.1 billion in 1967. Wholesale sales rose from \$97 million to \$1.0 billion in the same 28-year period. Hotels, amusements, and other services reported receipts of \$295 million in 1967, compared with \$101 million in 1958 and only \$15 million in 1939.

General excise and use tax base data for more recent years indicate continued increases; between 1967 and 1971, the retailing tax base rose 60 percent, the wholesaling base by 61 percent, and the base for services by 71 percent.

The major source for these data is the United States Census of Business, most recently conducted in 1967. Statistics on the retailing, wholesaling, and services tax base are available from the Hawaii State Department of Taxation. Data on hotel room counts and occupancy are given in the section on recreation and tourism. The *Statistical Abstract of the United States: 1971*, Section 29, presents similar data for the nation as a whole.

**Table 203.—RETAIL TRADE, WHOLESALE TRADE, AND SELECTED SERVICES,
FOR HAWAII: 1939 TO 1967**

(Coverage varies somewhat from year to year)

| Year | Retail trade | | Wholesale trade | | Selected services ¹ | |
|------------|----------------|--------------------|-----------------|--------------------|--------------------------------|-----------------------|
| | Establishments | Sales (\$1,000) | Establishments | Sales (\$1,000) | Establishments | Receipts (\$1,000) |
| 1939 | 4,256 | 120,681 | 704 | 97,045 | 2,186 | 15,340 |
| 1948 | 4,881 | 382,680 | 702 | 480,734 | 2,337 | 44,617 |
| 1954 | 4,807 | 426,115 | 594 | 581,940 | 2,595 | 64,726 |
| 1958 | 4,760 | 521,877 | 793 | 618,155 | 3,070 | 101,142 |
| 1963 | 4,578 | 751,411 | 974 | 735,205 | 3,431 | 163,094 |
| 1967 | 5,212 | 1,083,458 | 1,030 | 1,013,813 | 4,057 | 294,828 |

¹Includes hotels; personal services; miscellaneous business services; automobile repair, services, and garages; miscellaneous repair services; and motion pictures and other amusement and recreation services.

Source: U.S. Bureau of the Census, *U.S. Census of Business: 1948*, Bulletin No. 1-RWS-51; *U.S. Census of Business: 1958*, Bulletins BC58-RA52, BC58-SA52, and BC58-WA52; *U.S. Census of Business: 1967*, Bulletins BC67-RA13, BC67-SA13, and BC67-WA13.

Table 204.—RETAIL TRADE, BY GEOGRAPHIC AREA AND KIND OF BUSINESS: 1967

| Subject | Number of establishments | Sales (\$1,000) | Proprietors | Payroll, entire year (\$1,000) | Paid employees, March 12 |
|--|--------------------------|-----------------|-------------|--------------------------------|--------------------------|
| Total ¹ | 5,212 | 1,083,458 | 4,408 | 147,608 | 41,347 |
| GEOGRAPHIC AREA | | | | | |
| City and County of Honolulu ² | 3,837 | 899,741 | 3,245 | 126,411 | 35,135 |
| City of Honolulu ² | 2,965 | 734,546 | 2,459 | 107,532 | 29,566 |
| Kailua | 153 | 33,780 | 119 | 4,150 | 1,141 |
| Remainder of County | 719 | 131,415 | 667 | 14,729 | 4,428 |
| County of Hawaii | 642 | 83,635 | 547 | 9,523 | 2,911 |
| Hilo | 362 | 58,975 | 279 | 7,251 | 2,201 |
| Remainder of County | 280 | 24,660 | 268 | 2,272 | 710 |
| County of Kauai | 320 | 42,487 | 265 | 5,098 | 1,388 |
| County of Maui | 413 | 57,595 | 349 | 6,576 | 1,913 |
| Lanai | 11 | 1,803 | 10 | (W) | (W) |
| Maui | 375 | 52,921 | 313 | 6,131 | 1,779 |
| Molokai | 27 | 2,871 | 26 | (W) | (W) |
| KIND OF BUSINESS | | | | | |
| Building materials, hardware, farm equipment dealers | 68 | 26,016 | 50 | 4,087 | 691 |
| General merchandise stores | 279 | 187,258 | 225 | 26,155 | 7,540 |
| Food stores | 852 | 254,536 | 793 | 20,388 | 5,756 |
| Automotive dealers | 159 | 153,597 | 93 | 16,300 | 2,688 |
| Gasoline service stations | 457 | 72,987 | 437 | 8,437 | 3,225 |
| Apparel and accessory stores | 403 | 67,321 | 230 | 10,433 | 2,930 |
| Furniture, home furnishings, equipment stores | 274 | 40,650 | 197 | 5,581 | 1,170 |
| Eating and drinking places | 1,255 | 143,860 | 1,104 | 39,613 | 13,396 |
| Drug stores, proprietary stores | 101 | 40,717 | 53 | 4,511 | 1,133 |
| Miscellaneous retail stores | 1,065 | 78,943 | 925 | 9,699 | 2,258 |
| Nonstore retailers | 299 | 17,573 | 301 | 2,404 | 560 |

W Withheld to avoid disclosure.

¹Excludes commissaries, exchanges, and eating and drinking places operated for military personnel by the U.S. Department of Defense. Total sales for these groups amounted to \$109,467,000 in 1967.

²Revised since publication of the census bulletin.

Source: U.S. Bureau of the Census, *Census of Business, 1967. Retail Trade: Hawaii*, BC67-RA13, and special tabulation for the County of Maui.

Table 205.—RETAIL TRADE FOR MAJOR RETAIL CENTERS ON OAHU: 1948 TO 1967

| Retail center | Sales (\$1,000) | | | Percent distribution | | |
|--------------------------------------|-----------------|---------|---------|----------------------|-------|-------|
| | 1948 | 1958 | 1967 | 1948 | 1958 | 1967 |
| Oahu | 285,710 | 415,471 | 884,069 | 100.0 | 100.0 | 100.0 |
| Honolulu ¹ | 249,850 | 346,094 | 720,371 | 87.4 | 83.3 | 81.5 |
| Central business district | 71,648 | 64,059 | 55,138 | 25.1 | 15.4 | 6.2 |
| Waikiki | 14,824 | 31,881 | 84,005 | 5.2 | 7.7 | 9.5 |
| Ala Moana Center | — | — | 122,051 | — | — | 13.8 |
| Waiialae-Kahala | — | 4,152 | 15,984 | — | 1.0 | 1.8 |
| Kapalama | (NA) | (NA) | 23,896 | (NA) | (NA) | 2.7 |
| Remainder of Oahu ¹ | 35,860 | 69,377 | 163,698 | 12.6 | 16.7 | 18.5 |
| Kailua Shopping Center ... | (NA) | 8,835 | 22,769 | (NA) | 2.1 | 2.6 |
| Wahiawa Shopping Center | (NA) | (NA) | 18,883 | (NA) | (NA) | 2.1 |

NA Not available.

¹Includes areas not shown separately.

Source: Honolulu Redevelopment Agency, *Redevelopment and Housing Research*, No. 7, January 1957, pp. 25-26; U.S. Bureau of the Census, *U.S. Census of Business, 1958*, BC58-CBD36, and *U.S. Census of Business, 1967*, BC67-MRC-12.

Table 206.—MERCHANDISE LINE SALES OF RETAIL ESTABLISHMENTS: 1967

| Merchandise line | The State | | Oahu | |
|---|----------------|-----------------|----------------|-----------------|
| | Establishments | Sales (\$1,000) | Establishments | Sales (\$1,000) |
| All lines | 3,537 | 1,041,540 | 2,644 | 869,784 |
| Groceries, other foods | 807 | 217,420 | 540 | 166,248 |
| Meals, snacks | 1,047 | 107,012 | 815 | 96,349 |
| Alcoholic drinks | 454 | 35,627 | 350 | 32,782 |
| Packaged alcoholic beverages | 392 | 22,913 | 244 | 18,700 |
| Cigars, cigarettes, tobacco | 613 | 14,601 | 406 | 11,862 |
| Cosmetics, drugs, cleaners | 501 | 42,223 | 317 | 37,655 |
| Men's, boys' clothing, exc. footwear | 382 | 39,779 | 227 | 34,507 |
| Women's, girls' clothing, exc. footwear | 493 | 75,472 | 317 | 67,150 |
| All footwear | 286 | 17,719 | 187 | 15,746 |
| Curtains, draperies, dry goods | 252 | 23,298 | 133 | 19,878 |
| Major appl., radio, TV, musical inst. | 264 | 35,400 | 172 | 30,177 |
| Furniture, sleep equip., floor cov. | 164 | 19,978 | 105 | 17,323 |
| Kitchenware, home furnishings | 306 | 15,728 | 196 | 14,090 |
| Jewelry, optical goods | 323 | 17,195 | 221 | 15,241 |
| Sporting, recreation equipment | 176 | 9,577 | 112 | 8,587 |
| Hardware, gardening equipment | 251 | 11,890 | 132 | 9,365 |
| Lumber, building materials | 129 | 15,515 | 72 | 8,175 |
| Automobiles, trucks | 100 | 128,359 | 72 | 106,807 |
| Auto fuels, lubricants | 477 | 57,175 | 337 | 47,018 |
| Auto tires, batteries, access. | 479 | 28,426 | 354 | 21,789 |
| Farm equipment machinery | 16 | 1,766 | 6 | 1,462 |
| Hay, grain, feed, farm supplies | 103 | 7,278 | 36 | 4,952 |
| All other merchandise | 764 | 57,334 | 519 | 49,484 |
| Nonmerchandise receipts | 1,074 | 39,479 | 828 | 34,188 |
| Miscellaneous merchandise | — | 376 | — | 248 |

Source: U.S. Bureau of the Census, *Census of Business, 1967. Retail Trade. Merchandise Line Sales. Hawaii*, BC67-MLS-13, pp. 3 and 12.

**Table 207.—WHOLESALE TRADE, BY GEOGRAPHIC AREA, TYPE OF OPERATION,
AND KIND OF BUSINESS: 1967**

| Subject | Establish- ments | Sales (\$1,000) | Payroll, entire year (\$1,000) | Paid employees, March 12 | Proprie- tors |
|--|---------------------|--------------------|--------------------------------------|--------------------------------|------------------|
| Total | 1,030 | 1,013,813 | 76,054 | 12,442 | 311 |
| GEOGRAPHIC AREA | | | | | |
| City and Co. of Honolulu | 849 | 912,333 | 67,698 | 10,742 | 267 |
| City of Honolulu | 802 | 891,432 | 66,673 | 10,545 | 243 |
| Remainder of County | 47 | 20,901 | 1,025 | 197 | 24 |
| County of Hawaii | 99 | 61,709 | 4,960 | 1,035 | 17 |
| County of Kauai | 29 | 14,821 | 1,504 | 284 | 11 |
| County of Maui | 53 | 24,950 | 1,892 | 381 | 16 |
| Maui | 49 | 23,461 | 1,757 | 357 | 16 |
| Molokai | 4 | 1,489 | 135 | 24 | — |
| TYPE OF OPERATION | | | | | |
| Merchant wholesalers | 754 | 537,555 | — | — | — |
| Manufacturers' sales branches | 118 | 201,273 | — | — | — |
| Mdse. agents, brokers | 82 | 144,500 | — | — | — |
| Other operating types | 76 | 130,485 | — | — | — |
| KIND OF BUSINESS | | | | | |
| Motor vehicles, automotive equipment | 70 | 62,804 | 5,381 | 914 | 19 |
| Groceries, related products | 232 | 244,888 | 11,876 | 2,283 | 88 |
| Electrical goods | 62 | 84,760 | 6,494 | 1,031 | 12 |
| Machinery, equip., supplies | 159 | 86,835 | 13,439 | 2,004 | 41 |
| Petroleum bulk terminals | 43 | 118,063 | 2,374 | 335 | 3 |
| Lumber and construction materials | 34 | 57,366 | 4,841 | 839 | 9 |
| Other products | 430 | 359,097 | 31,649 | 5,036 | 139 |

Source: U.S. Bureau of the Census, *Census of Business, 1967. Wholesale Trade: Hawaii*, BC67-WA13, and special tabulation for Maui County.

Table 208.—SELECTED SERVICES, BY GEOGRAPHIC AREA AND KIND OF BUSINESS: 1967

| Subject | Establishments | Receipts (\$1,000) | Proprietors | Payroll, entire year (\$1,000) | Paid employees, March 12 |
|--|----------------|-----------------------|-------------|--------------------------------------|--------------------------------|
| Total | 4,057 | 294,828 | 2,784 | 88,024 | 22,004 |
| GEOGRAPHIC AREA | | | | | |
| City and Co. of Honolulu | 3,208 | 236,858 | 2,141 | 71,587 | 17,362 |
| City of Honolulu | 2,454 | 218,623 | 1,530 | 67,124 | 16,125 |
| Remainder of County | 754 | 18,235 | 611 | 4,463 | 1,237 |
| County of Hawaii | 387 | 26,503 | 302 | 7,723 | 2,134 |
| County of Kauai | 184 | 13,850 | 130 | 3,822 | 1,039 |
| County of Maui | 278 | 17,617 | 211 | 4,892 | 1,469 |
| Lanai | 7 | (W) | (W) | (W) | (W) |
| Maui | 245 | 16,655 | 179 | 4,675 | 1,382 |
| Molokai | 26 | (W) | (W) | (W) | (W) |
| KIND OF BUSINESS | | | | | |
| Hotels, motels, camps | 212 | 113,216 | 105 | 32,744 | 8,509 |
| Personal services | 1,541 | 40,512 | 1,119 | 14,975 | 4,032 |
| Miscellaneous business services | 895 | 60,520 | 593 | 21,331 | 4,515 |
| Automobile repair, services, garages | 487 | 39,283 | 375 | 7,823 | 1,791 |
| Miscellaneous repair services | 384 | 9,731 | 298 | 2,380 | 440 |
| Motion pictures | 68 | 9,531 | 24 | 1,662 | 701 |
| Amusement and recreation, except motion pictures | 470 | 22,035 | 270 | 7,109 | 2,016 |

W Withheld to avoid disclosure

Source: U.S. Bureau of Census, *Census of Business, 1967. Selected Services: Hawaii*, BC67-SA13, and special tabulation for Maui County.

Table 209.—FOREIGN, INTERSTATE, AND LOCAL TRADE AND AREA IN SHOPPING CENTERS: 1959 TO 1970
(Trade in millions of dollars; area of shopping centers in thousands of square feet)

| Year | Direct foreign trade | | Interstate trade | | Local trade | | Oahu shopping center area ¹ |
|------------|----------------------|---------|------------------|---------|-------------|-----------|--|
| | Imports | Exports | Imports | Exports | Retail | Wholesale | |
| 1959 | 34.1 | 18.0 | 486.7 | 258.1 | 844.6 | 350.4 | 1,430 |
| 1960 | 47.0 | 20.3 | 519.1 | 243.5 | 948.2 | 383.6 | 1,430 |
| 1961 | 58.0 | 22.4 | 515.5 | 258.9 | 949.0 | 394.1 | 1,430 |
| 1962 | 68.3 | 28.1 | 480.1 | 265.5 | 1,027.6 | 418.0 | 1,506 |
| 1963 | 74.0 | 26.7 | 497.9 | 307.8 | 1,026.8 | 430.0 | 1,749 |
| 1964 | 85.8 | 38.2 | 567.1 | 283.4 | 1,101.8 | 468.9 | 1,824 |
| 1965 | 95.9 | 34.7 | 615.1 | 296.7 | 1,200.7 | 517.2 | 1,939 |
| 1966 | 107.2 | 40.6 | 688.8 | 310.6 | 1,297.2 | 790.0 | 2,730 |
| 1967 | 125.1 | 47.4 | 822.4 | 325.3 | 1,394.3 | 861.1 | 2,928 |
| 1968 | 142.5 | 48.6 | 886.7 | 329.1 | 1,559.2 | 1,014.2 | 3,155 |
| 1969 | 171.0 | 46.4 | 1,029.1 | 321.7 | 1,763.1 | 1,235.1 | 3,627 |
| 1970 | 174.7 | 51.2 | (NA) | (NA) | 2,024.7 | 1,498.9 | 3,771 |

NA Not available.

¹Gross leaseable area of Oahu shopping centers.

Source: Data from U.S. Department of Commerce, Hawaii State Department of Taxation, Retail Board of the Chamber of Commerce of Hawaii, and major shippers and carriers, summarized in the Bank of Hawaii, *Hawaii '71 Annual Economic Review* (August 1971), p. 45.

Table 210.—GENERAL EXCISE AND USE TAX BASE FOR RETAILING, WHOLESALING, AND SERVICES: 1958 TO 1971

| Year | Retailing (\$1,000) | Wholesaling (\$1,000) | Services (\$1,000) |
|------------|---------------------|-----------------------|--------------------|
| 1958 | 664,973 | 282,734 | 135,730 |
| 1959 | 756,003 | 320,194 | 165,402 |
| 1960 | 846,729 | 354,598 | 188,752 |
| 1961 | 859,563 | 359,725 | 203,354 |
| 1962 | 920,956 | 386,135 | 228,420 |
| 1963 | 928,895 | 396,462 | 231,777 |
| 1964 | 998,510 | 435,707 | 240,909 |
| 1965 | 1,097,826 | 482,563 | 260,693 |
| 1966 | 1,184,736 | 547,031 | 276,833 |
| 1967 | 1,271,932 | 570,678 | 305,691 |
| 1968 | 1,423,835 | 651,512 | 358,852 |
| 1969 | 1,670,288 | 747,204 | 451,814 |
| 1970 | 1,895,089 | 854,660 | 504,191 |
| 1971 | 2,030,170 | 918,425 | 523,824 |

Source: Hawaii State Department of Taxation, annual releases.

BIBLIOGRAPHY

This volume is the seventh in a series published by the Hawaii State Department of Planning and Economic Development and its predecessor agencies. The first were *Statistical Abstract of Hawaii, 1962* and *Historical Statistics of Hawaii, 1778 to 1962*, both prepared by Robert C. Schmitt and issued by the Department of Planning and Research in 1962. Retitled *The State of Hawaii Data Book*, updated versions were published by DPED in 1967, 1968, 1970, and 1971. The 1967 and 1968 editions were the work of the DPED Information and Public Services Office, chiefly Nancy C. Fowler. The 1970 and later editions were prepared by Robert C. Schmitt and Lynn Y.S. Zane of the Statistics Branch. All volumes issued prior to 1971 are now out of print, but copies can be seen in the DPED Library, Hawaii State Library, University of Hawaii Library, and in other collections throughout the State.

Additional information regarding specific statistical sources can be found in the introductory statements to each section of the *Data Book*, in footnotes and source references to the various tables, and in other DPED publications. Three of these DPED reports cover statistical sources in considerable detail: *Statistics in Hawaii: 34 Papers Prepared for the Hawaii Statistical Reporting System Workshop, February 18-20, 1970, at Waikiki* (1970), *Proceedings of the Conference on Socio-Environmental Indicators, March 15-17, 1971, Honolulu, Hawaii* (1971), and *Planners Manual and Inventory of Planning Information* (1971). The first two are the reports of statistical symposia organized by Dr. Young P. Joun. The third is a 124-page reference work prepared for the Hawaii Urban Planning Information Center by Nancy Fowler under the direction of Dr. Joun, containing detailed geographic and subject-matter indexes and source listings. These reports were given only limited distribution, but copies can be consulted in most Hawaii libraries.

Privately published works of general statistical reference include *Hawaii Facts and Figures* and *All About Hawaii, Combined with Thrum's Hawaiian Almanac and Standard Guide*. Both have been issued at annual or irregular intervals for many years.

Hawaii Facts and Figures is a publication of the Chamber of Commerce of Hawaii. The 1942-1945 edition, issued in May 1946, was the first to appear under its present name, but similar volumes with different titles had been available since the mid 1930's (for example, *Business Statistics* in 1935, 1937 and 1938 and *General Information About Honolulu, Hawaii, U.S.A.* in 1940, 1941 and 1943). Updated editions of *Hawaii Facts and Figures* appeared in 1947, 1948, and throughout the 1950's and 1960's. The most recent version is undated but carries statistics through 1971; copies are available from the Chamber for \$1.00.

The current edition of *All About Hawaii* is the 90th, published in 1968 by the Honolulu Star-Bulletin Printing Company at \$1.95. This series began with the *Hawaiian Almanac and Annual for 1875*, compiled and published by Thos. G. Thrum. After its founder's death in 1932, the *Hawaiian Annual* was published, through 1940, by the Printshop Co., Ltd. The *Honolulu Star-Bulletin* absorbed *Thrum's* later that year and combined it with *All About Hawaii* (a largely non-statistical publication initiated in 1928 and revised several times during the 1930's) for 1940-1941 and succeeding years.

Two other privately published reports containing useful statistics are the annual economic reviews of the two largest banks in the State. The current volumes are *Hawaii '71*, published by the Bank of Hawaii in August 1971, and *Hawaii in 1971*, issued by the First Hawaiian Bank in September 1971.

The major official source for general statistical information during the Territorial period was the *Report of the Governor of Hawaii to the Secretary of the Interior*, issued annually (sometimes with variant titles) from 1900 to 1959. No comparable work was published by either the Kingdom or Republic of Hawaii, although Thrum's *Hawaiian Almanac and Annual* was sometimes accorded quasi-official status. The earliest general statistical compilation for Hawaii was the work of Robert C. Wyllie, Minister of Public Affairs, who however published it

in a private periodical, *The Friend*. Wyllie's extensive report, initially issued in installments, was titled "NOTES on the Shipping, Trade, Agriculture, Climate, Diseases, Religious Institutions, Civil and Social Condition, Mercantile and Financial Policy of the Sandwich or Hawaiian Islands, Viewed in Relation to Other Groups of Islands, and to the Natural and Acquired Advantages of the Sandwich or Hawaiian Islands. Published in Monthly Numbers of the Friend, from May to December [1844], and Dedicated to His Majesty by Robert Crichton Wyllie, Esq., of Hazelbank, Ayrshire, Scotland. Honolulu, Oahu, S.I. Printed at the Am. Mission Press. 1845."

Further information on the historical development of statistics in Hawaii is given in two articles by Robert C. Schmitt, "Hawaii's Statistical Reporting and Data Processing System," *State Government*, Vol. 38, No. 2, Spring 1965, pp. 100-103, and "From Umi to UNIVAC: Data Processing in Hawaii, 1500-1965," *Seventy-Fourth Annual Report of the Hawaiian Historical Society for the Year 1965* (1966), pp. 17-28.

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