## COMMUNICATIONS

This section presents statistics on the usage, finances, and operations of the Postal Service and of various communications media: telephone, radio, television, newspapers, periodicals, and books. Sections 12 and 15 contain employment and payroll data for communications establishments.

Hawaii is served by all major communications media. In 1989 it had 148 post offices and stations handling 434 million pieces of mail and accounting for postal receipts of $\$ 129 \mathrm{million}$. There were 530,000 telephone access lines in service, 375,000 telephone homes, about 2.5 billion local calls originated, and uncounted millions of interisland and transpacific calls in 1988. The 49 commercial, public and educational radio stations in the Islands in 1989 included 28 on the regular broadcast band and 21 FM stations. The State also had 19 television stations ( 17 commercial and 2 public), including satellites but excluding translators. Eight cable TV companies served 307,000 subscribers. An estimated 97 percent of all households in the State had television sets, and the average prime-time TV audience in May 1989 numbered 178,000 households. Island publishers printed nine daily newspapers, numerous magazines and other periodicals, and a wide diversity of books. Newspaper circulation reported by the two English-1anguage dailies on Oahu averaged 194,000 in 1988-1989. Statistics on fax machines and cellular telephones are unavailable.

The major sources for statistics on cormunications are the reports and records of the U.S. Postal Service, Federal Communications Commission, the CATV Division of the Hawaii State Department of Commerce and Consumer Affairs, Hawaiian Telephone Company, Audit Bureau of Circulations, A. C. Nielsen Co., and Hawaii Media Guide. Earlier figures appear in Historical Statistics of Hawaii, Section 18. Data on communications for other states and for the nation as a whole are carried in Statistical Abstract of the United States: 1989, Section 18.

Table 445.-- POSTAL SERVICE: 1970 TO 1989
[For fiscal years ended June 30 through 1976 and September 30 thereafter]

| Fiscal year | Number, end of fiscal year 1/ |  | Gross postal receipts $(\$ 1,000)$ | Pieces of mail 2/ (milliōns) |
| :---: | :---: | :---: | :---: | :---: |
|  | Post offices | Stations |  |  |
| 1970 | 80 | ... | 20,840 | 187 |
| 1971 | 80 | . | 21,976 | 201 |
| 1972 | 78 | ... | 23,434 | 215 |
| 1973 | 77 | . . . | 27,100 | 226 |
| 1974 | 76 | . | 29,663 | 233 |
| 1975 | 76 | . | 33,549 | 238 |
| 1976 | 76 | . . . | 37,433 | 242 |
| 1977 | 76 | ... | 43,790 | 249 |
| 1978 | 76 | ... | 49,198 | 267 |
| 1979 ......... | 76 | ... | 55,267 | 276 |
| 1980 | 76 | $\ldots$ | 58,413 | 298 |
| 1981 | 76 | $\cdots$ | 67,055 | 293 |
| 1982 | 76 |  | 77,424 | 290 |
| 1983 | 76 | 3/ 50 | 80,943 | 305 |
| 1984 | 76 | I/ 54 | 84,733 | 317 |
| 1985 | 76 | - 64 | 94,975 | 339 |
| 1986 | 76 | 67 | 102,440 | 360 |
| 1987 | 75 | 69 | 107,946 | 394 |
| 1988 | 75 | 72 | 119,740 | 400 |
| 1989 ......... | 74 | 74 | 129,177 | 434 |

1/ Includes all 1st-, 2nd-, 3rd-, and 4th-class post offices and both $\bar{c}$ lassified and contract stations (classified stations are those staffed by career postal employees; contract stations, those operated under a contractual agreement between the Postal Service and an individual contractor). Station counts not available before 1983.

2/ Originating in Hawaii. Mail originating elsewhere is excluđed.

3/ April 15.
4/ June 30.
Source: U.S. Postal Service, Honolulu Division, records.

Table 446.-- NUMBER OF POST OFFICES AND STATIONS, BY ISLANDS: OCTOBER 19, 1989

| Island | Total | Post offices 1/ |  |  | Stations |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { lst } \\ \text { class } \end{gathered}$ | $\begin{aligned} & \text { 2nd } \\ & \text { class } \end{aligned}$ | $\begin{array}{\|c} \text { 3rd } \\ \text { class } \end{array}$ | $\begin{aligned} & \text { Classi- } \\ & \text { fied 2/ } \end{aligned}$ | $\begin{aligned} & \text { Con- } \\ & \text { tract 3/ } \end{aligned}$ |
| State total | 148 | 34 | 28 | 12 | 34 | 40 |
| Hawaii | 36 | 9 | 13 | 4 | 2 | 8 |
| Maui | 18 | 8 | 2 | - | 2 | 6 |
| Lanai | 1 | - | 1 | - | - | - |
| Molokai | 5 | 1 | - | 4 | - | - |
| Oahu ... | 67 | 12 | 4 | 1 | 28 | 22 |
| Kauai | 21 | 4 | 8 | 3 | 2 | 4 |
| Niihau .......... | - | - | - | - | - | - |

1/ There are no fourth-class post offices in the State.
$\overline{2} /$ Staffed by career postal employees.
3/ Operated under a contractual agreement between the Postal Service and an individual contractor.

Source: U.S. Postal Service, Honolulu Division, data supplied October 19, 1989.

Table 447.-- RESIDENCES, POST OFFICE BOXES, AND BUSINESSES SERVED BY THE U.S. POSTAL SERVICE, BY ISLANDS: 1987
[As of September 15]

| Subject | State <br> total | Hawaii | Maui | Lanai | Molokai | Oahu | Kauai |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Residences ... | 310,529 | 23,743 | 23,282 | - | 165 | 257,465 | 5,874 |
| P. O. boxes .. | 93,974 | 26,307 | 13,966 | 876 | 1,703 | 37,098 | 14,024 |
| Businesses ... | 27,049 | 2,843 | 2,948 | - | - | 20,309 | 949 |

Source: U.S. Postal Service, San Mateo Postal Data Center, records.

Table 448.-- TELEPHONE ACCESS LINES, BY ISLAND AND TYPE: 1981 TO 1988
[As of December 31. Access lines represent the lines connecting customers to the network regardless of the ownership of the customer premises equipment. Business access includes key and coin system lines]

| Year | All <br> access <br> lines | By island |  | By type |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Oahu | Other islands | Residence | Business | Other types |
| 1981 | 431,893 | 324,968 | 106,925 | 314,355 | 95,000 | 22,538 |
| 1982 | 445,452 | 334,150 | 111,302 | 323,588 | 98,691 | 23,173 |
| 1983 | 458,339 | 342,094 | 116,245 | 332,051 | 102,923 | 23,365 |
| 1984 | 472,229 | 348,936 | 123,293 | 339,296 | 107,830 | 25,103 |
| 1985 | 479,253 | 352,674 | 126,579 | 342,296 | 111,792 | 25,165 |
| 1986 | 493,079 | 362,083 | 130,996 | 350,790 | 118,002 | 24,287 |
| 1987 | 520,057 | 380,227 | 139,830 | 363,951 | 128,197 | 27,909 |
| 1988 | 530,022 | 395,685 | 134,337 | 375,238 | 123,409 | 31,375 |

Source: Hawaiian Telephone Company, data provided May 15, 1989.

Table 449.-- LOCAL TELEPHONE CALLS: 1978 TO 1988
[In thousands. The number of local calls is affected as central offices are being converted to Electronic Common Control (ECC). ECC records call attempts after the first digit is dialed. Non-ECC offices record the call attempts when the handset is lifted. Also significant in 1981 were an estimated 17 million fewer calls due to the implementation of Directory Assistance Charging. Because of these fundamental changes in data collection, more recent figures are not comparable to earlier years.]

| Year | Originating | Completed | Year | Originating | Completed |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1978 \ldots$. | $1,719,200$ | $1,139,829$ | $1984 \ldots$. | $2,050,778$ | $1,538,084$ |
| $1979 \ldots$. | $1,830,954$ | $1,186,458$ | $1985 \ldots$. | $2,225,943$ | $1,669,457$ |
| $1980 \ldots$. | $1,957,427$ | $1,468,070$ | $1986 \ldots$. | $2,350,538$ | $1,671,233$ |
| $1981 \ldots$. | $1,857,938$ | $1,393,454$ | $1987 \ldots$. | $2,404,035$ | $1,718,885$ |
| $1982 \ldots$. | $1,892,430$ | $1,419,322$ | $1988 \ldots$. | $2,514,066$ | $1,810,128$ |
| $1983 \ldots$. | $1,928,486$ | $1,446,365$ |  |  |  |

Source: Hawaiian Telephone Company, records.

Table 450.-- HAWAIIAN TELEPHONE COMPANY OPERATIONS: 1986 TO 1988

| Subject | 1986 | 1987 | 1988 |
| :---: | :---: | :---: | :---: |
| Operating revenues ( $\$ 1,000$ ) | 440,198 | 458,361 | 494,590 |
| Net income ( $\$ 1,000$ ) | 53,001 | 55,091 | 49,520 |
| Investment in telephone plant ( $\$ 1,000$ ) .. | 1,295,424 | 1,369,130 | 1,365,093 |
| Total assets (\$1,000) | 988,121 | 1,034,040 | 1,032,628 |
| Invested capital (\$1,000) | 657,049 | 698,237 | 706,428 |
| Access lines | 491,973 | 517,937 | 543,303 |
| Central offices | 96 | 96 | 80 |
| Miles of wire | 3,273,924 | 3,365,412 | 3,452,497 |
| Average daily local calls | 6,435,932 | 6,614,688 | 6,872,612 |
| Total salaries and wages ( $\$ 1,000$ ) ....... | 135,856 | 146,136 | 154,198 |
| Number of employees ........................ | 4,330 | 4,485 | 4,189 |

Source: GTE Hawaiian Tel, 1988 Annual Report, p. 23.

Table 451.-- CABLE TELEVISION COMPANIES, SUBSCRIBERS, AND REVENUES, BY COUNTIES: 1987 AND 1988

| County | Number of companies Dec. 31 1/ |  | Subscribers, Dec. 31 |  | Basic service revenue ( $\$ 1,000$ ) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987 | 1988 | 1987 | 1988 | 1987 | 1988 |
| State total | 8 | 8 | 265,029 | 307,432 | 39,114 | 43,416 |
| Hawaii | 3 | 3 | 23,059 | 24,867 | 3,718 | 3,897 |
| Maui | 2 | 2 | 21,401 | 36,603 | 3,805 | 3,971 |
| Honolulu | 2 | 2 | 195,438 | 212,672 | 29,350 | 33,063 |
| Kauai | 2 | 2 | 11,009 | 11,323 | 2,242 | 2,485 |

1/ State totals are unduplicated figures; one company provided service to both Hawaii and Maui Counties.

Source: Hawaii State Department of Commerce and Consumer Affairs, Cable Television Division, records.

Table 452.-- RADIO AND TELEVISION BROADCASTING STATIONS IN OPERATION, 1929 TO 1989, AND BY COUNTIES, 1989

| Date and county | Commercial stations |  |  | Non-commercial stations |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AM | FM | TV 1/ | AM | FM | TV 1/ |
| 1929: Jan. 1 | 2 | - | - | - | - | - |
| 1944: Jan. 1 | 4 | - | - | - | - | - |
| 1959: Jan. 1 | 15 | 1 | 7 | - | 2 | - |
| 1974: Jan. 1 | 25 | 7 | 10 | - | 1 | 2 |
| 1989: June 30 | 28 | 19 | 17 | - | 2 | 2 |
| COUNTIES: 1989 |  |  |  |  |  |  |
| Hawaii | 5 | 4 | 5 | - | - | - |
| Maui | 3 | 6 | 3 | - | - | 1 |
| HonoIulu 2/ | 18 | 8 |  | - | 2 | 1 |
| Kauai ..... | 2 | 1 | - | - | - | - |

1/ Includes satellites but excludes translators and cable television.
$\overline{2} /$ Includes one commercial AM station with studio on Oahu but transmitter on Molokai.

Source: Robert C. Schmitt, Historical Statistics of Hawaii (University Press of Hawaii, 1977), p. 482; Federal Conmunications Commission, Field Operations Bureau, Honolulu, July 17, 1989.

Table 453.-- TELEVISION HOUSEHOLDS, BY GEOGRAPHIC AREA: 1988 AND 1989

| Subject | January 1989 |  |  | January 1988 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State total | Oahu | Other islands | State total | Oahu | Other islands |
| All households | 351,800 | 267,200 | 84,600 | 343,300 | 261,900 | 81,400 |
| With television . | 341,810 | 260,600 | 81,210 | 333,380 | 255,460 | 77,920 |
| Percent ....... | 97.2 | 97.5 | 96.0 | 97.1 | 97.5 | 95.7 |

Source: Nielsen Station Index, Honolulu, Hawaiị, February 1988 and February 1989, table 1.

Table 454.-- HOUSEHOLDS AND PERSONS VIEWING TELEVISION BY TIME OF DAY: 1987 TO 1989
[In thousands. Mean number of viewers, Sunday through Saturday]

| Year and month |  | Sign-on to sign-off <br> 7 A.M. to 1 A.M. |  | Prime time$\text { 6:30 P.M. to } 10 \mathrm{P} . \mathrm{M} .$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Households 1/ | Persons 2/ | Households 1/ | Persons 2/ |
| 1987: | Feb. .... | 93 | 158 | 200 | 386 |
|  | May . .... | 90 | 152 | 182 | 351 |
|  | Nov. .... | 87 | 141 | 184 | 335 |
| 1988: | Feb. .... | 90 | 150 | 198 | 374 |
|  | May . .... | 88 | 145 | 184 | 345 |
|  | Nov. .... | 89 | 143 | 179 | 319 |
| 1989: | Feb. .... | 91 | 143 | 195 | 343 |
|  | May . ..... | 84 | 134 | 178 | 324 |

1/ Average number with a TV set turned on.
ㄱ/ Average number of persons, 2 years and older, in TV households that are viewing any station.

Source: Nielsen Station Index, Honolulu, Hawaii, Daypart Summary, issued three times annually.

Table 455.-- COMMNICATION AND COMMNICATION-RELATED ESTABLISHMENTS: 1986

| $\begin{gathered} \text { SIC } \\ \text { code } \end{gathered}$ | Industry | No. of estab-lishments | $\begin{gathered} \text { SIC } \\ \text { code } \end{gathered}$ | Industry | No. of estab-lishments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27 | Printing and publishing | 168 | 482 | Telegraph communic. ... | 4 |
| 271 | Newspapers .......... | 21 | 483 | Radio, TV broadcast. . . | 41 |
| 272 | Periodicals .......... | 16 | 489 | Commun. services, n.e.c | 29 |
| 273 | Books ............... | 9 | 731 | Advertising ........... | 59 |
| 274 | Miscell. publishing . | 8 | 7311 | Advertising agencies | 45 |
| 481 | Telephone communic. ... | 19 |  |  |  |

Source: U.S. Bureau of the Census, County Business Patterns 1986, Hawaii, CBP-86-13 (August 1988), pp. 4-9.

Table 456.-- AVERAGE PAID CIRCULATION OF DAILY AND SUNDAY ENGLISH-LANGUAGE NEWSPAPERS: 1985-86 TO 1988-89
[Averages for 12 -month periods ended in March. Foreign-language daily newspapers, not included in this table, are the Hawaii Hochi, Japanese and English; The Korea Times and Han Kook Ilbo, Korean; and United Chinese Press, Chinese]

| Newspaper | 1985-86 | 1986-87 | 1987-88 | 1988-89 |
| :---: | :---: | :---: | :---: | :---: |
| Daily: |  |  |  |  |
| Honolulu Advertiser 1/ | 84,782 | 88,551 | 93,088 | 98,025 |
| Honolulu Star-Bulletīn 2/ | 102,734 | 99,724 | 97,950 | 96,074 |
| Hawaii Tribune-Herald (Hilo) 3/ ..... | 19,946 | 20,290 | 20,328 | 20,360 |
| West Hawaii Today (Kailua-Kona) 4/ . . | 7,680 | 8,298 | 8,820 | 9,757 |
| Maui News (Wailuku) 3/ | 15,506 | 15,199 | 15,805 | 16,722 |
| Garden Island (LihueT 5/ ............. | 9,479 | 9,500 | 9,525 | 8,737 |
| Sunday morning: |  |  |  |  |
| Sunday Star-Bulletin and Advertiser | 195,344 | 199,684 | 203,358 | 203,752 |
| Hawaii Tribune-Herald (Hilo) | 22,663 | 22,944 | 23,209 | 23,146 |
| West Hawaii Today (Kailua-Kona) | 7,431 | 8,273 | 8,961 | 10,025 |
| Maui News (Wailuku) .................. | 14,684 | 15,117 | 16,326 | 17,660 |
| Garden Island (Lihue) ................. | 8,884 | 9,300 | 9,528 | 8,899 |

1/ Mornings, Monday through Saturday.
$\overline{2} /$ Afternoons, Monday through Saturday.
3/ Afternoons, Monday through Friday.
4/ Mornings, Monday through Friday.
5/ Afternoons, 4 times weekly (Monday, Wednesday, Thursday, and Friday). Source: Audit Bureau of Circulations data provided to DBED by newspaper publishers.

Table 457.-- PERIODICALS PUBLISHED IN HAWAII: 1985

| Frequency | Newspapers |  | Magazines and other periodicals 1/ |
| :---: | :---: | :---: | :---: |
|  | English | Foreign language |  |
| Daily, 5 to 7 times weekly 2/ | 6 | 3 | - |
| 2 to 4 times weekly ........... | - | - | 1 |
| Weekly ........................ | 9 | 1 | 15 |
| Semi-monthly or biweekly ..... | 3 | 3 | 18 |
| Monthly | 2 | - | 53 |
| 1 to 10 times annually ....... | - | - | 40 |

1/ Includes regularly published magazines, company and in-house publications, labor publications, educational publications, military and federal publications, and special interest publications. Does not include publications that are updated as required, or other irregular publications. 2/ For more recent data, see table 456.
Source: Aloha United Way, Hawaii Media Guide, April 1985.

Table 458.-- BOOKS AND SCHOLARLY JOURNALS PUBLISHED BY THE UNIVERSITY OF HAWAII PRESS: 1987 TO 1989

| Year | Published titles 1/ |  | New books and journals published 2/ |  | Volumes sold 2/ | ```Book sales revenues 2/ (dollars)``` |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cumulative total | $\underset{\text { in }}{\text { print }}$ | Books | Scholarly journals |  |  |
| 1987 | 826 | 643 | 43 | 8 | 279,017 | 1,497,901 |
| 1988 | 868 | 672 | 42 | 6 | 324,185 | 1,962,537 |
| 1989 | 918 | 701 | 50 | 9 | 402,606 | 2,222,341 |

1/ As of June 30. Excludes journals.
2/ Year ended June 30.
Source: The University of Hawaii Press, Annual Report (annual) and records.

Table 459.-- POSTAGE RATES AND NEWSPAPER PRICES, FOR HONOLULU: 1979 TO 1989
[In cents. As of July 1]

| Year | Domestic first-class postage rates |  |  | Newspaper price 1/ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Letters |  | Postal and post cards | Daily | Sunday |
|  | First ounce | Each added ounce |  |  |  |
| 1979 | 15 | 13 | 10 | 25 | 60 |
| 1980 | 15 | 13 | 10 | 25 | 60 |
| 1981 | 18 | 17 | 12 | 25 | 75 |
| 1982 | 20 | 17 | 13 | 25 | 100 |
| 1983 | 20 | 17 | 13 | 25 | 100 |
| 1984 | 20 | 17 | 13 | 25 | 100 |
| 1985 | 22 | 17 | 14 | 35 | 100 |
| 1986 | 22 | 17 | 14 | 35 | 100 |
| 1987 | 22 | 17 | 14 | 35 | 100 |
| 1988 | 25 | 20 | 15 | 35 | 125 |
| 1989 | 25 | 20 | 15 | 35 | 125 |

1/ Street sales, for the Honolulu Advertiser, Honolūlu Star-Bulletin, and Sunday Star-Bulletin and Advertiser.

Source: Postal rates from Statistical Abstract of the United States: 1989, p. 543, as updated. Newspaper rates from nameplates.

Table 460.-- HAWAIIAN TELEPHONE COMPANY RATES FOR SPECIFIED TYPES OF SERVICE, FOR HONOLULU: 1979 TO 1989
[In dollars. As of July 1. Including state and federal excise tax where applicable]

| Year | Local <br> call, <br> pay <br> phone | Honolulu to Hilo |  | Honolulu to California |  | Monthly <br> charge, <br> indiv. <br> res. <br> line 3/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Direct } \\ \text { dialing } 1 / \end{gathered}$ | Through operator 2/ | $\begin{gathered} \text { Direct } \\ \text { dialing } \underline{1 /} \end{gathered}$ | Through operator 2/ |  |
| 1979 | 0.15 | 0.90 | 0.90 | 1.61 | 2.55 | 11.74 |
| 1980 | 0.15 | 1.06 | 1.89 | 1.64 | 2.60 | 11.63 |
| 1981 | 0.15 | 1.06 | 1.89 | 1.64 | 2.60 | 11.63 |
| 1982 | 0.15 | 1.05 | 1.87 | 1.74 | 2.63 | 11.51 |
| 1983 | 0.15 | 1.07 | 1.91 | 1.77 | 3.37 | 11.31 |
| 1984 | 0.15 | 1.07 | 1.91 | 1.66 | 3.25 | 11.74 |
| 1985 . | 0.15 | 1.14 | 2.06 | 1.54 | 3.13 | 12.77 |
| 1986 4/ | 0.25 | 1.45 | 2.06 | 1.32 | 2.91 | 14.10 |
| 1987 T/ | 0.25 | 1.11 | 2.00 | 0.98 | 2.53 | 14.10 |
| 1988 // | 0.25 | 1.04 | 2.00 | 0.92 | 2.47 | 14.10 |
| 1989 I/ | 0.25 | 1.00 | 2.00 | 0.76 | 3.26 | 14.10 |

1/ Daytime calls, first three minutes.
$\underline{\overline{2} /}$ Station-to-station operator-handled daytime weekday calls, first three minutes.

3/ Telephone rental included through February 5, 1983, and excluded thereafter. In 1989, the monthly rental charge for a standard dial desk-top telephone was $\$ 2.70$, and the federal subscriber line charge was $\$ 3.20$.

4/ AT\&T Cormunications, Inc., rates quoted for Honolulu to California calls.

Source: Hawaiian Telephone Company, records, and ATET Communications, Inc., records.

