## Section 16

## 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 1990 it had 144 post offices and stations handling 463 million pieces of mail and accounting for postal receipts of $\$ 136$ million. There were 556,000 telephone access lines in service, 385,000 telephone homes, about 2.6 billion local calls originated, and uncounted millions of interisland and transpacific calls in 1989. The 52 commercial, public and educational radio stations in the Islands in 1990 included 28 on the regular broadcast band and 24 FM stations. The State also had 21 television stations (19 commercial and 2 public), including satellites but excluding translators. Eight cable TV companies served 293,000 subscribers. An estimated 97 percent of all households in the State had television sets, and the average prime-time TV audience in May 1990 numbered 174,000 households. Island publishers printed nine daily newspapers, numerous magazines and other periodicals, and a wide diversity of books. Newspaper circulation reported by the two English-language dailies on Oahu averaged 191,000 in 1989-1990. Statistics on fax machines and cellular telephones are unavailable.

The major sources for statistics on conmunications are the reports and records of the U.S. Postal Service, Federal Communications Commission, the CATV Division of the Hawaii State Department of Commerce and Consumer Affairs, Hawaiian Telephone Company, Audit Bureau of Circulations, and A. C. Nielsen Co. Earlier figures appear in 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: 1990, Section 18.

Table 459.-- POSTAL SERVICE: 1970 TO 1990
[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 | $\ldots$ | 29,663 | 233 |
| 1975 | 76 | ... | 33,549 | 238 |
| 1976 ......... | 76 | . . | 37,433 | 242 |
| 1977 | 76 | $\cdots$ | 43,790 | 249 |
| 1978 | 76 | ... | 49,198 | 267 |
| 1979 | 76 | ... | 55,267 | 276 |
| 1980 | 76 | ... | 58,413 | 298 |
| 1981 | 76 | ... | 67,055 | 293 |
| 1982 | 76 |  | 77,424 | 290 |
| 1983 ......... | 76 | 3/ 50 | 80,943 | 305 |
| 1984 | 76 | 4/ 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 |
| 1990 ......... | 74 | 70 | 136,087 | 463 |

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 excluded.

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

Table 460.-- NUMBER OF POST OFFICES AND STATIONS, BY ISLANDS: OCTOBER 19, 1990

| Island | Total | Post offices |  |  | Stations |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { 1st } \\ & \text { class } \end{aligned}$ | $\begin{aligned} & \text { 2nd } \\ & \text { class } \end{aligned}$ | $\begin{gathered} \text { 3rd } \\ \text { class } \end{gathered}$ | Classi- <br> fied 1/ | $\begin{aligned} & \text { Con- } \\ & \text { tract 2/ } \end{aligned}$ |
| State total .. | 144 | 34 | 28 | 12 | 34 | 36 |
| Hawaii ............. | 36 | 9 | 13 | 4 | 2 | 8 |
| Maui .............. | 17 | 8 | 2 | - | 2 | 5 |
| Lanai ............. | 1 | - | 1 | - | - | - |
| Molokai ........... | 5 | 1 | - | 4 | - | - |
| 0ahu ............... | 65 | 12 | 4 | 1 | 28 | 20 |
| Kauai ............. | 20 | 4 | 8 | 3 | 2 | 3 |
| Niihau ............ | - | - | - | - | - | - |

$\frac{1 /}{2}$ Staffed by career postal employees.
2/ Operated under a contractual agreement between the Postal Service and an individual contractor.

Source: U.S. Postal Service, Honolulu Division, data supplied October 19, 1990.

Table 461.-- 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 462.-- TELEPHONE ACCESS LINES, BY ISLAND AND TYPE: 1981 T0 1989
[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 | A11 access 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 |
| 1989 | 555,966 | 409,904 | 146,062 | 385,247 | 133,620 | 37,099 |

Source: GTE Hawaiian Telephone Company, data provided June 12, 1990.

Table 463.-- RESIDENTIAL TELEPHONES IN SERVICE, BY ISLANDS: 1989
[Estimates based on 1987 survey data reporting 1.74 telephones per residence access line]

| Islands | Telephones |
| :---: | :---: | :---: |
| State total $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | 670,330 |
| Oahu $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | 494,611 |
| Other islands $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | 175,710 |

Source: GTE Hawaiian Telephone Company, data provided June 12, 1990.

Table 464.-- LOCAL TELEPHONE CALLS: 1979 TO 1989
[In thousands. Data for 1989 are estimates]

| Year | Originating | Completed | Year | Originating | Completed |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1979 \ldots$. | $1,830,954$ | $1,186,458$ | $1985 \ldots$. | $2,225,943$ | $1,669,457$ |
| $1980 \ldots$. | $1,957,427$ | $1,468,070$ | $1986 \ldots$. | $2,350,538$ | $1,671,233$ |
| $1981 \ldots .$. | $1,857,938$ | $1,393,454$ | $1987 \ldots$. | $2,404,035$ | $1,718,885$ |
| $1982 \ldots$. | $1,892,430$ | $1,419,322$ | $1988 \ldots$. | $2,514,066$ | $1,810,128$ |
| $1983 \ldots$. | $1,928,486$ | $1,446,365$ | $1989 \ldots$. | $2,615,991$ | $1,883,514$ |
| $1984 \ldots$. | $2,050,778$ | $1,538,084$ |  |  |  |

Source: GTE Hawaiian Telephone Company, records.

Table 465.-- HAWAIIAN TELEPHONE COMPANY OPERATIONS: 1987 TO 1989

| Subject | 1987 | 1988 | 1989 |
| :---: | :---: | :---: | :---: |
| Operating revenues ( $\$ 1,000$ ) | 458,361 | 494,590 | 512,144 |
| Net income ( $\$ 1,000$ ) | 55,091 | 49,520 | 48,340 |
| Investment in telephone plant ( $\$ 1,000$ ) .. | 1,369,130 | 1,365,093 | 1,432,328 |
| Total assets ( $\$ 1,000$ ) ..................... | 1,034,040 | 1,032,628 | 1,068,215 |
| Invested capital ( $\$ 1,000$ ) ................ | 699,544 | 707,305 | 734,568 |
| Access lines | 517,937 | 543,303 | 612,286 |
| Central offices | 96 | 80 | 82 |
| Miles of wire | 3,365,412 | 3,452,497 | 3,534,481 |
| Average daily local calls | 6,614,688 | 6,872,612 | 7,148,000 |
| Total salaries and wages ( $\$ 1,000$ ) ....... | 146,136 | 154,198 | 146,099 |
| Number of employees . ...................... | 4,485 | 4,189 | 4,260 |

Source: GTE Hawaiian Tel 1989 Annual Report, p. 22.

Table 466.-- CABLE TELEVISION COMPANIES, SUBSCRIBERS, AND REVENUES: 1970 TO 1989

| Subject | 1970 | 1975 | 1980 | 1985 | 1989 |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Companies, Dec. $31 \ldots \ldots \ldots \ldots \ldots \ldots$ | 6 | 10 | 10 | 9 | 8 |
| Subscribers, Dec. $31(1,000) \ldots \ldots \ldots$ | 12.1 | 54.6 | 128.7 | 220.4 | 292.6 |
| Revenue $1 /$ (mil. dol.) $\ldots \ldots \ldots \ldots \ldots$ | $\ldots$ | $\ldots$ | 16.2 | 33.0 | 52.4 |

1/ Gross revenue 1980, and basic service revenue thereafter.
Source: Hawaii State Department of Commerce and Consumer Affairs, Cable Television Division, records.

Table 467.-- CABLE TELEVISION COMPANIES, SUBSCRIBERS, AND REVENUES, BY COUNTIES: 1988 AND 1989

| County | Number of companies Dec. 31 1/ |  | Subscribers, Dec. 31 |  | Basic service revenue ( $\$ 1,000$ ) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1988 | 1989 | 1988 2/ | 1989 | 1988 | 1989 |
| State total | 8 | 8 | 285,465 | 292,638 | 43,416 | 52,448 |
| Hawaii | 3 | 3 | 24,867 | 26,248 | 3,897 | 5,486 |
| Maui | 2 | 2 | 36,603 | 36,825 | 3,971 | 5,910 |
| Honolulu | 2 | 2 | 212,672 | 217,415 | 33,063 | 38,281 |
| Kauai | 2 |  | 11,323 | 12,150 | 2,485 | 2,772 |

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

2/ Revised from Data Book 1989, table 451.
Source: Hawaii State Department of Commerce and Consumer Affairs, Cable Television Division, records.

Table 468.-- RADIO AND TELEVISION BROADCASTING STATIONS IN OPERATION, 1930 TO 1990, AND BY COUNTIES, 1990

| Date and county | Commercial stations |  |  | Non-commercial stations |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AM | FM | TV 1/ | AM | FM | TV 1/ |
| 1930: Jan. 1 .. | 1 | - | - | - | - | - |
| 1945: Jan. 1 .. | 4 | - | - | - | - | - |
| 1960: Jan. 1 | 17 | 1 | 7 | - | 2 | - |
| 1975: Jan. 1 .. | 26 | 5 | 10 | - | 1 | 2 |
| 1990: June 30. | 28 | 21 | 19 | - | 3 | 2 |
| COUNTIES: 1990 |  |  |  |  |  |  |
| Hawaii | 5 | 4 | 6 | - | - | - |
| Maui .. | 3 | 6 | 4 | - | 1 | 1 |
| Honolulu 2/ | 18 | 9 | 9 | - | 2 | 1 |
| Kauai ...... | 2 | 2 | - | - | - | - |

1/ Includes satellites but excludes translators and cable television.
$\underline{\overline{2}}$ / 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 Communications Commission, Field Operations Bureau, Honolulu, July 30, 1990.

Table 469.-- TELEVISION HOUSEHOLDS, BY GEOGRAPHIC AREA: 1989 AND 1990

| Subject | January 1989 |  |  | January 1990 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State total | Oahu | Other islands | State total | Oahu | Other islands |
| All households | 351,800 | 267,200 | 84,600 | 361,400 | 273,300 | 88,100 |
| With television . | 341,810 | 260,600 | 81,210 | 350,920 | 266,440 | 84,480 |
| Percent ....... | 97.2 | 97.5 | 96.0 | 97.1 | 97.5 | 95.9 |

Source: Nielsen Station Index, Honolulu, Hawaii, February 1989 and February 1990, table 1.

Table 470.-- HOUSEHOLDS AND PERSONS VIEWING TELEVISION BY TIME OF DAY: 1988 TO 1990
[In thousands. Mean number of viewers, Sunday through Saturday]

| Year and month |  | Sign-on to sign-off 7 A.M. to 1 A.M. |  | Prime time <br> 6:30 P.M. to 10 P.M. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Households 1/ | Persons 2/ | Households 1/ | Persons 2/ |
| 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 |
|  | Nov. . . . . | 89 | 137 | 180 | 310 |
| 1990: | Feb. .... | 88 | 145 | 190 | 353 |
|  | May ..... | 84 | 129 | 174 | 301 |

1/ Average number with a TV set turned on.
$\overline{2} /$ Average number of persons, 2 years and older, in TV households that $\overline{\text { are }}$ viewing any station.

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

Table 471.-- COMMUNICATION AND COMMUNICATION-RELATED ESTABLISHMENTS: 1987

| SIC code | Industry | No. of estab-1ishments | SIC code | Industry | No. of estab-lishments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27 | Printing and publishing | 192 | 482 | Telegraph communication | 4 |
| 271 | Newspapers . . . . . . . . | 20 | 483 | Radio, TV broadcast ... | 37 |
| 272 | Periodicals | 18 | 489 | Commun. services, n.e.c | 34 |
| 273 | Books | 11 | 5942 | Book stores | 59 |
| 274 | Miscell. publishing . | 15 | 731 | Advertising | 70 |
| 48 | Communication ......... | 102 | 7311 | Advertising agencies | 56 |
| 481 | Telephone communication | 26 |  |  |  |

Source: U.S. Bureau of the Census, County Business Patterns 1987, Hawaii, CBP-87-13 (November 1989), table 10.

Table 472.-- BOOKS AND SCHOLARLY JOURNALS PUBLISHED BY THE UNIVERSITY OF HAWAII PRESS: 1988 TO 1990

|  | Published <br> titles 1/ |  | New books and <br> journals <br> published 3/ |  |  | Book <br> sales |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Cumulative <br> total 2/ | In <br> print | Books | Scholarly <br> journals | Volumes <br> sold 3/ |  |
| $1988 \ldots .$. | 868 | 672 | 42 | 6 | 324,185 | $1,962,537$ |
| $1989 \ldots$. | 918 | 701 | 50 | 9 | 402,606 | $2,222,341$ |
| $1990 \ldots$ | 971 | 703 | 53 | 13 | 422,266 | $2,591,790$ |

1/ As of June 30. Excludes journals.
2/ Includes books and other media, but not journals.
3/ Year ended June 30.
Source: The University of Hawaii Press, Annual Report (annual) and records.

Table 473.-- AVERAGE PAID CIRCULATION OF DAILY AND SUNDAY ENGLISH-LANGUAGE NEWSPAPERS: 1986-87 T0 1989-90
[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 | 1986-87 | ; 1987-88 | 1988-89 | 1989-90 |
| :---: | :---: | :---: | :---: | :---: |
| Daily: |  |  |  |  |
| Honolulu Advertiser 1/ | 88,551 | 93,088 | 98,025 | 98,400 |
| Honolulu Star-Bulletin 2/ | 99,724 | 97,950 | 96,074 | 92,811 |
| Hawaii Tribune-Herald (Hilo) 3/ | 20,290 | 20,328 | 20,360 | 20,354 |
| West Hawaii Today (Kailua-Kona) 4/ . | 8,298 | 8,820 | 9,757 | 10,781 |
| Maui News (Wailuku) 3/ ............... | 15,199 | 15,805 | 16,722 | 17,861 |
| Garden Island (LihueJ 5/ ............. | 9,500 | 9,525 | 8,737 | 8,664 |
| Sunday morning: |  |  |  |  |
| Sunday Star-Bulletin and Advertiser . | 199,684 | 203,358 | 203,752 | 200,798 |
| Hawaii Tribune-Herald (Hilo) ......... | 22,944 | 23,209 | 23,146 | 23,291 |
| West Hawaii Today (Kailua-Kona) ..... | 8,273 | 8,961 | 10,025 | 11,576 |
| Maui News (Wailuku) | 15,117 | 16,326 | 17,660 | 19,405 |
| Garden Island (Lihue) | 9,300 | 9,528 | 8,899 | 9,157 |

1/ Mornings, Monday through Saturday.
$\overline{2} /$ Afternoons, Monday through Saturday.
3/ Afternoons, Monday through Friday.
$\overline{4} /$ 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 474.-- POSTAGE RATES AND NEWSPAPER PRICES, FOR HONOLULU: 1980 TO 1990
[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 |  |  |  |
| 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 |
| 1990 | 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 by Postal Service Customer Information. Newspaper rates from Hawaii Newspaper Agency.

Table 475.-- HAWAIIAN TELEPHONE COMPANY RATES FOR SPECIFIED TYPES OF SERVICE, FOR HONOLULU: 1980 TO 1990
[In dollars. As of July 1. Including state and federal excise tax where applicable]

| Year | Local call, pay phone | Honolulu to Hilo |  | Honolulu to California |  | Monthly <br> charge, indiv. res. line 3/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Direct } \\ \text { dialing } 1 / \end{gathered}$ | Through operator 2/ | $\begin{gathered} \text { Direct } \\ \text { dialing } 1 / \end{gathered}$ | Through operator 2/ |  |
| 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 T/ | 0.25 | 1.04 | 2.00 | 0.92 | 2.47 | 14.10 |
| 1989 ¢/ | 0.25 | 1.00 | 2.00 | 0.76 | 3.26 | 14.10 |
| 1990 [/] | 0.25 | 0.98 | 2.00 | 0.78 | 3.50 | 14.10 |

1/ Daytime calls, first three minutes.
ㅍ/ Station-to-station operator-handled daytime weekday calls, first three minutes.

3/ Telephone rental included through February 5, 1983, and excluded thereāfter. In 1990, the monthly rental charge for a standard dial desk-top telephone was $\$ 2.70$, and the federal subscriber line charge was $\$ 3.20$.

4/ ATET Communications, Inc., rates quoted for Honolulu to California calls.

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

