

# Communications

## Telephone and Telegraph Systems (Series R 1-92)

### R 1-92. General note.

Among the primary sources of governmental historical statistics relating to the telephone and telegraph industries are the following:

1. U.S. Bureau of the Census. *Compendium of the Seventh Census of the United States, 1850; Compendium of the Tenth Census of the United States, 1880; Statistics of Manufactures, 1890*, Census Bulletin No. 196, June 1892.
2. U.S. Bureau of the Census. Quinquennial censuses of the telephone and telegraph industry, 1902-1937: Bulletin No. 17, *Special Reports: Telephones and Telegraphs, 1902; Special Reports: Telephones, 1907*; Bulletin No. 102, *Telegraph Systems: 1907; Telephones and Telegraphs and Municipal Electric Fire-Alarm and Police-Patrol Signaling Systems, 1912; Census of Electrical Industries: 1917, Telegraphs and Municipal Electric Fire-Alarm and Police-Patrol Signaling Systems; Census of Electrical Industries: Telephones—1917, 1922, and 1927; Census of Electrical Industries: Telegraphs—1917, 1922, and 1927; Census of Electrical Industries: Telephones and Telegraphs, 1932 and 1937*. (Multiple year titles represent different volumes for each year.)
3. U.S. Interstate Commerce Commission. Reports of telephone and telegraph carriers, 1914-1933:
  - a. *Memorandum Concerning Telephone Companies and Telegraph Companies Reporting to the Interstate Commerce Commission for the Years 1916 and 1917* (processed).
  - b. *Annual Report on Telephone Companies, 1920-1927, 1928-1932, and 1933* (processed); *Annual Report on Telegraph Companies, 1926-1927, 1928-1932, and 1933* (processed).
4. U.S. Congress. *Report on Communication Companies* (Splawn Report), issued as House Report No. 1273, 73d Cong., 2d sess. (1934) in connection with the consideration of the Communications Act of 1934. This report contains detailed data from the carrier reports filed with the Interstate Commerce Commission and also the results of a questionnaire to the telephone, telegraph, and radio industries for 1922-1932.
5. U.S. Federal Communications Commission. Reports of telephone and telegraph companies filed monthly and annually with that agency, 1934-1970. Selected data from these reports have been issued either monthly or quarterly, and annually (in processed form), in the Commission's annual reports to Congress and beginning 1939, in the FCC's annual *Statistics of the Communications Industry in the United States*.
6. U.S. Federal Communications Commission, *Investigation of the Telephone Industry in the United States*, House Document No. 340, 76th Cong., 1st sess. (1939). This report includes the results of the Commission's investigation of the American Telephone and Telegraph Company (AT&T). Page 609 of the report refers to a number of staff reports, or exhibits, containing more detailed statistical and other material prepared in connection with the investigation and issued in processed form. These staff exhibits and reports are listed under the title, *Special Investigation Docket No. 1*.
7. Statistics for 1926-1934 obtained by the Federal Communications Commission from telephone and telegraph companies and designed to afford the FCC a basis for determining whether carrier rates were just and reasonable and in enforcement of other statutory responsibilities. (The text of the tele-

phone inquiry appears in "Telephone Division Order No. 9," FCC, *Reports*, vol. 1, p. 49; the text of the telegraph inquiry is in "Telegraph Division Order No. 12," FCC, *Reports*, vol. 1, p. 88. Responses are available to the public at the Commission.)

Other major sources of telephone and telegraph statistics are the annual reports to stockholders by AT&T (Bell), the Western Union Telegraph Company, and statistics of independent (i.e., non-Bell) telephone companies compiled and published by the United States Independent Telephone Association.

A major factor affecting the statistics of the telephone and telegraph carriers has been the prescription of uniform systems of accounts for these companies by the Interstate Commerce Commission and by the Federal Communications Commission after its formation in 1934. The ICC prescribed a uniform system of accounts for telephone companies having annual operating revenues exceeding \$50,000, effective January 1, 1913, and for telegraph carriers, effective January 1, 1914. The ICC issued more detailed accounting systems, effective January 1, 1933, for Class A companies, and condensed classifications for Class B companies, effective January 1, 1934. The FCC adopted a revised uniform system of accounts for Class A and Class B telephone companies, effective January 1, 1937. The outstanding change was a requirement that telephone plant be recorded in the accounts at original cost, i.e., cost at time of first dedication to public use. The FCC adopted a revised uniform system of accounts for Class C telephone companies, effective January 1, 1939 (the earlier ICC system had been established, effective January 1, 1915). The FCC differentiates among Class A, B, and C companies on the basis of operating revenues, which have had varying limits over the years.

The reporting authority of the FCC relates only to telephone and telegraph carriers engaged in interstate and foreign communication which cross State or national boundary lines over their own facilities or through connection with facilities of an affiliated carrier having such facilities. Thus, carriers filing reports with the FCC (with the exception of a small number of companies filing voluntarily) exclude a large number of small, and a few large, telephone companies.

### R 1-45. General note.

The Bell System provides the great bulk of local exchange and interexchange or toll telephone facilities and service in the United States. It includes the parent company of the Bell operating telephone companies, consolidated with "associated holding and operating companies in the United States, not including connected independent or sublicensee companies." The figures as presented are "statements of the Bell Telephone business as a whole, eliminating all duplications and showing the figures and results as 'if operated by a single company.'" The parent company has been American Telephone and Telegraph Company since January 1, 1900; prior to that date it was the American Bell Telephone Company. The number of companies included within the Bell group has varied from time to time. In 1914, approximately 35 companies were included and in 1915-1916 the number increased to 39. Subsequent consolidations reduced the number to 29 in 1920 and to 25, including Cincinnati Bell, Inc., and Southern New England Telephone Company in 1970. Since 1936, however, AT&T in its consolidated financial statements has excluded these 2 large noncontrolled companies. For comparability with previous years, however, the figures have been adjusted to include

these 2 companies using reports filed by them with the FCC. "Bell companies" and "Bell System" are at times used interchangeably herein. Unless otherwise specified, the reference is to "Bell System."

Included in the Bell organization in 1970 were the following:

1. AT&T, which is the parent company.
2. 21 regional subsidiaries owned and controlled by AT&T, plus a subsidiary of one of these regional companies. These 22 Bell System principal telephone subsidiaries furnish exchange and intrastate toll service, as well as interstate toll telephone service; they constitute, with the parent, the Bell System of 1970.
3. Two other major companies, Cincinnati Bell, Inc. and Southern New England Telephone Company, in which AT&T has substantial minority interests. These 2 companies, together with the 22 above, are referred to as the Associated Companies.
4. Bell Telephone Laboratories, Inc., a scientific research and development organization, and Western Electric Company, Inc., which is the Bell manufacturing and supply organization.

In addition, a number of Bell Company affiliates have varying degrees of stock interest in various other telephone companies. Data for series R 1-30 relating to the Bell companies exclude operations of Bell Telephone Laboratories and of Western Electric, except as their operations affect operating expenses and miscellaneous income of the Bell companies. Bell Telephone Laboratories operates on a nonprofit basis and the profits of Western Electric on sales to the Bell companies are not eliminated in the consolidated statements.

The historical growth of the Western Electric Company is described in the *FCC Report . . . on the Investigation of the Telephone Industry . . .*, pp. 56-64. More recent data appear in the "Report on Preliminary Survey and Investigation of Western Electric Company, Inc.," prepared by a committee of National Association of Railroad and Utilities Commissioners and FCC representatives (July 15, 1948, processed), and in annual supplements since 1948. In 1970, AT&T's annual share of the net income of Western Electric was over \$253 million.

Independent companies are referred to as non-Bell companies, although AT&T or Bell companies have financial interests in some of them. The independents participate with Bell in providing toll service, and have contractual arrangements with AT&T and the Bell Associated companies.

#### R 1 and R 3-8. Total telephones, Bell System telephones, and telephones of independent companies, 1876-1970.

Source: U.S. Federal Communications Commission, unpublished data; American Telephone and Telegraph Company, unpublished data; and the following U.S. Bureau of the Census reports: *Telephones and Telegraphs, 1902*, table 2, for total telephones in 1880, 1890; table 4, for total telephones in 1902; table 6, for Bell System telephones in 1902; *Telephones, 1907*, table 51, for total telephones in 1907; table 54, for Bell System telephones; *Telephones and Telegraphs . . . , 1912*, table 1, for total telephones and Bell System telephones in 1912; p. 37 for telephones connecting with the Bell System; *Telephones and Telegraphs, 1932*, table A for total telephones in 1917, 1922, 1927, and 1932; table 12, for Bell System telephones in 1922, 1927, and 1932; *Telephones and Telegraphs, 1937*, table 1, for total telephones and Bell System telephones in 1937.

The data for 1876-1934 (except census data) were taken from FCC records consisting of *Special Investigation Docket No. 1*, "Report on Control of Telephone Communications," vol. III, Exhibit 2096-D, p. 11 (June 15, 1937, processed), and "Report on American Telephone and Telegraph Company Corporate and Financial History," vol. I, Exhibit 1360-A, pp. 115 and 150. The data for 1935-1956 were supplied to FCC by AT&T; substantially the same data are also available in the AT&T annual reports to stockholders. The data for 1957-1970 were supplied by AT&T, compiled from annual reports and unpublished data.

The number of telephones comprises the total number of instruments and extensions in the system. Telephones also include tele-

graph and teletypewriter stations through 1930 and private line telephones through 1934, but not thereafter. Lines, basically for internal use, on which outside calls to public phones cannot be placed constitute private line telephones.

The households with telephones are based on census figures, utilized by AT&T in conjunction with the number of telephones in residences.

#### R 2. Telephones per 1,000 population, 1876-1970.

Source: 1876-1956, U.S. Federal Communications Commission, unpublished data (except for census data). For census data and 1957-1970, see source for series R 1 and R 3-8.

Annual figures are based on data supplied to FCC by AT&T.

#### R 9-12. Average daily conversations, 1880-1970.

Source: U.S. Federal Communications Commission, unpublished data. Figures are based on data supplied to FCC by AT&T.

Generally, exchange service is telephone service within an exchange area. A local call is defined as a call originating in and completed within the same public exchange area; a toll call is one which originates in one exchange destined to another exchange area, whether located nearby or across the continent. In instances in which there is a high community of interest between exchanges, accompanied by considerable calling on a message toll basis, "extended area service" has been established under which adjacent and nearby exchanges are included in the subscriber's local service area. The growth of this type of service each year has significantly affected the number of calls classified as local, which otherwise would have been classified and charged as toll. Moreover, elimination of toll charges through the establishment of extended area service has tended to stimulate telephone usage within the service area.

Conversations are those completed calls originating from company and service telephones, excluding private line telephones. Local calls include both completed and uncompleted calls. Bell System toll messages consist of interstate and intrastate completed calls originated or terminated at Bell System Associated Company telephones, and toll messages originated or terminated at connecting (i.e., independent) company telephones, provided their transmission utilized toll line facilities of a Bell operating company. Toll messages handled wholly over facilities of connecting or nonconnecting independent companies are shown under Independent Companies. Toll message figures include ship-to-shore messages and international messages. Since a toll ticket is made for each toll call, the count can be relatively exact. In very large exchanges, some counts of local calls are automatically accumulated in message registers but in small exchanges the counts are estimates based upon samples.

#### R 13-16. Telephone toll rates between New York City and selected cities, 1902-1970.

Source: 1902, U.S. Bureau of the Census, *Special Reports: Telephones and Telegraphs, 1902*, p. 77; 1911-1970, U.S. Federal Communications Commission, unpublished data.

Data for 1911-1917 are based on records of AT&T, newspapers, and other published reports. Data for 1919-1937 are based on information in FCC, Telephone Rate and Research Department, "The Classified Toll Rate Structure and Basic Rate Practices for Message Toll Telephone Service," pp. 40-47 (Jan. 15, 1938, processed). Data for 1940-1970 are based on unpublished data and tariffs of the FCC. Considerable historical toll rate data also appear in the report of a committee of National Association of Railroad and Utilities Commissioners (NARUC) and FCC representatives, *Message Toll Telephone Rates and Disparities*, annual October issues.

The three major classes of toll telephone messages are dial station-to-station, operator station-to-station, and person-to-person. Dial station-to-station service denotes that service where the person originating the call from other than a coin telephone station dials

the telephone number desired and the call is completed without the assistance of a telephone company operator.

In interstate toll service, operator station rates are over 10 percent higher than dial station rates, and person-to-person rates are over twice the amount of the rates for dial station service. On station calls, the starting point is computed at the time communication is established between the calling and called stations; on person-to-person calls, the chargeable period begins when the person called is reached. There was generally no rate differentiation between station and person service until January 21, 1919.

A paucity of historical data exists with respect to local exchange rates. Such data can only be laboriously constructed from the records of the Bell System companies and other telephone companies or from the tariffs filed with each State which has regulatory authority over the intrastate telephone rates. One source of data pertaining to exchange rates is the Bureau of Census report, *Telephones and Telegraphs and Municipal Electric Fire-Alarm and Police-Patrol Signaling Systems, 1912*, pp. 49-156, which presents telephone rates of selected cities in 38 States and the District of Columbia. Another source of exchange rate data is provided by the responses of telephone companies to FCC, "Telephone Division Order No. 9," which called for rates in effect in selected size exchanges between 1907 and 1933. These responses are on file at the FCC.

#### R 17-18. Telephone plant, book value and depreciation reserves, 1880-1970.

Source: 1885-1935, U.S. Federal Communications Commission, unpublished data consisting of *Special Investigation, Docket No. 1* "Report on American Telephone and Telegraph Company Corporate and Financial History," vol. I, Exhibit No. 1360-A (Jan. 16, 1937, processed), pp. 73, 102; vol. II, Exhibit No. 1360-B, Schedule 2 (appendix); "Report on Associated Bell Telephone Companies Financial and Operating Data," Exhibit No. 1364 (Jan. 23, 1937), Schedule A-15; 1936-1956, American Telephone and Telegraph Company, annual reports, and FCC, unpublished data; 1957-1970, AT&T, annual reports and unpublished data.

Census data are from the following U.S. Bureau of the Census volumes: *Compendium of the Tenth Census, 1880*, p. 1332; *Telephones and Telegraphs, 1902*, table 6, p. 7; *Telephones and Telegraphs . . . , 1912*, table 29; *Telephones, 1917*, table 33; *Telephones, 1922*, table 34; *Telephones and Telegraphs, 1932*, table 17, and 1937, table 1 (see general note for series R 1-92 for complete list of census sources).

The FCC's uniform system of accounts, which became effective January 1, 1937, requires establishment of telephone plant accounts on the basis of original cost (cost at time of first dedication to the public use). This applies to all plants ordinarily having a service life of more than one year as well as franchises, patents, rights of way, leaseholds, and other interests in land.

The depreciation policies of the Bell System have undergone various changes from a simple maintenance reserve set up for the purpose of equalizing maintenance charges over a period of years and providing for deferred maintenance expenses, to depreciation rates prescribed by the FCC. Prescription of depreciation rates for Bell companies began in 1949 and initial prescriptions were completed in 1953. For a discussion of Bell System depreciation policies, see *Report of the Federal Communications Commission on the Investigation of the Telephone Industry in the United States*, pp. 325-349.

#### R 19. Miles of wire, 1880-1970.

Source: 1880-1884, American Telephone and Telegraph Company, unpublished financial report; 1885-1935, U.S. Federal Communications Commission, unpublished data consisting of *Special Investigation Docket No. 1*, Exhibit No. 1360-A, pp. 76, 115; 1936-1956, AT&T, annual reports, and FCC, unpublished data; 1957-1970, see source for series R 17-18.

Census data are from the following U.S. Bureau of the Census volumes: *Compendium of the Tenth Census, 1880*, p. 1327; *Telephones*

*and Telegraphs, 1902*, table 2; *Telephones, 1922*, table 21; *Telephones and Telegraphs, 1937*, table 14.

Miles of wire are not an adequate index of the growth in telephone capacity for a variety of reasons: The shift from single open wire lines to complex cable systems including coaxial tubes; use of carrier systems to increase significantly the number of communication channels over a band of frequencies transmitted over an electrical circuit; and use of microwave radio systems not included in the statistics of wire lines.

#### R 20-22 and R 27-28. Operating revenues, net income, and dividends, 1880-1970.

Source: 1881-1914, U.S. Federal Communications Commission, unpublished data consisting of *Special Investigation Docket No. 1*, Exhibit No. 1360-A, pp. 39, 54, 73, 81, 89, 109 (for operating revenues and division between local and toll revenues, 1900-1914, Schedule B-2 of *Special Investigation Docket No. 1*, Exhibit No. 1364 combined with Long Lines revenues from p. 395 of Exhibit 1360-B); 1915-1956, American Telephone and Telegraph Company, annual reports, and FCC, unpublished data; 1957-1970, see source for series R 17-18.

Census data are from the following U.S. Bureau of the Census reports (see general note for series R 1-92 for detailed listing of sources): *Compendium of the Tenth Census, 1880*, p. 1329; *Statistics of Manufactures, 1890*, pp. 1, 5; *Telephones, 1907*, table 36; *Telephones and Telegraphs . . . , 1912*, table 29; *Telephones, 1917*, tables 21, 30, and 31; *Telephones, 1922*, tables 2, 31, 32; *Telephones, 1927*, table 1; *Telephones and Telegraphs, 1932*, table 1, and 1937, table 1.

Figures for series R 20-22 for 1900-1914 have been adjusted by the FCC by subtracting uncollectible operating revenues so that they are comparable with figures for 1915-1970.

Operating revenues include monthly service charges; amounts charged for connection, restoration and termination of service, and for moves, instrument changes, and similar service requirements; initial nonrecurring charges for plant or equipment, except initial charges based on the cost of specially assembled private branch exchanges; and amounts of service charges for supplemental or auxiliary equipment as extension stations and auxiliary receivers. Operating revenues include the telegraph services of the Bell System, including revenues derived from teletypewriter exchange service (TWX), and private line service; international radiotelephone service; directory advertising and sales; and rent revenues.

Net income is net operating income and other income, including dividend income and interest income, including interest charged to construction; minus miscellaneous deductions from income and fixed charges (as interest deductions). All of the Bell System operations are included; however, as noted below (see text for series R 25), prior to 1933 only the dividends from controlled companies not consolidated were included.

Dividends declared refer to the entire Bell System operations, excluding dividends paid by one system company to another.

#### R 23. Operating expenses, 1880-1970.

Source: 1885-1907, U.S. Federal Communications Commission, unpublished data consisting of *Special Investigation Docket No. 1*, Exhibit 1360-A, pp. 54, 73, 109 (figures for operating expenses derived by subtracting net earnings from revenues); 1908-1935, American Telephone and Telegraph Company, annual reports; 1936-1956, AT&T, annual reports, and FCC, unpublished data; 1957-1970, see source for series R 17-18. For census data, see source for series R 20-22 and R 27-28.

For 1885-1907, FCC's figures include all taxes (including Federal income taxes) and interest expense and miscellaneous income. For 1908-1913, figures also include Federal income taxes. For 1914-1920, figures were adjusted to exclude estimated amounts of Federal income taxes by use of annual reports of the individual Bell Telephone

companies to the Interstate Commerce Commission. For 1921-1935, the Federal income tax adjustment was obtained from AT&T unpublished data.

Figures include that portion of the expenses of Bell Telephone Laboratories absorbed by AT&T.

#### R 24. Federal income taxes, 1914-1970.

Source: 1914-1920, U.S. Federal Communications Commission, unpublished data (approximations derived from annual reports of individual Bell System companies to the ICC); 1921-1935, American Telephone and Telegraph Company, unpublished data; 1936-1956, AT&T, annual reports, and FCC, unpublished data; 1957-1970, see source for series R 17-18.

#### R 25. Other income, net, 1882-1970.

Source: 1882-1956, American Telephone and Telegraph Company, annual reports, and U.S. Federal Communications Commission, unpublished data; 1957-1970, see source for series R 17-18.

Since 1933, instead of including under this item only the dividends from controlled companies not consolidated, the AT&T has included its proportionate interest in the total earnings or deficits of such companies.

#### R 26. Interest expenses, 1885-1970.

Source: 1885-1956, American Telephone and Telegraph Company, annual reports, and U.S. Federal Communications Commission, unpublished data; 1957-1970, see source for series R 17-18. Census data are from the following U.S. Bureau of the Census reports: *Special Reports, Telephones, 1907*, table 57; *Census of Electrical Industries: 1917, Telephones*, table 30; *Census of Electrical Industries: Telephones, 1922*, table 31.

Interest expense includes interest on all classes of debt owing to the public but excludes intercompany interest payment.

#### R 29-30. Employees and wages, 1880-1970.

Source: Series R 29, 1885-1899 and 1907-1935, U.S. Federal Communications Commission, unpublished data consisting of *Special Investigation Docket No. 1*, Exhibit No. 1360-A, pp. 76, 136, 147; series R 29-30, 1900-1906, and series R 30, 1913-1935, American Telephone and Telegraph Company, unpublished data; series R 29-30, 1936-1956, AT&T, annual reports to stockholders, and FCC, unpublished data; 1957-1970, see source for series R 17-18.

Census data are from the following U.S. Bureau of the Census reports (see general note for series R 1-92 for detailed description of sources): *Compendium of the Tenth Census, 1880*, p. 1327; *Statistics of Manufactures, 1890*, p. 1; *Telephones and Telegraphs, 1902*, tables 2, 6; *Telephones and Telegraphs . . . , 1912*, tables 3, 29; *Telephones, 1917*, table 1; *Telephones, 1922*, table 1; *Telephones 1927*, table 1; *Telephones and Telegraphs, 1932*, table 1; *Telephones and Telegraphs, 1937*, table 1.

Employee figures for 1885-1935 exclude Western Electric Company.

Figures for 1939-1956 also appear in the FCC annual issues of *Statistics of the Communications Industry in the United States*. These issues also contain detailed reports of the occupational classifications and wage rates of Bell System employees.

#### R 31-45. Independent telephone companies—property, revenues, expenses, interest, net income, dividends, employees, and wages, 1916-1970.

Source: U.S. Federal Communications Commission, 1916-1934, unpublished data. United States Independent Telephone Association (USITA), 1935-1962, *Annual Statistical Volume of the United States Independent Telephone Association*, various issues (copyright); 1963-1970, *Independent Telephone Statistics*, annual issues (copyright).

Census data are from the following U.S. Bureau of the Census reports (see general note for series R 1-92 for detailed description of sources): *Telephones, 1917*, tables 1, 30, 31, 33; *Telephones, 1922*, tables 1, 22, 32; *Census of Electrical Industries: Telephones, 1927*, tables 1, 34; *Telephones and Telegraphs, 1932*, table 1, and *1937*, table 1.

The large discrepancy between the census figures and the Federal Communications Commission and USITA figures is due to the major differences in coverage. The following excerpt from Bureau of the Census, *Telephones, 1922*, refers to census coverage:

Unit of enumeration ("system" or "line").—So far as practicable, a report was secured for each system or line operated under separate ownership. The terms "system" and "line" are sometimes used synonymously but, in general, the former is employed with reference to the aggregations of lines operated by the larger companies while the latter is more commonly used to denote the small farmer or rural lines. A farmer or rural line may be merely an individual line connected with an exchange under different ownership, or may be a party line without an exchange or connected with an exchange owned jointly with other lines or under independent ownership.

Figures for 1916-1933 were based on ICC annual summaries (which did not differentiate between the Bell System and the independent telephone companies) and were derived by subtraction from the ICC figures of those amounts for each company included on a consolidated basis in the data shown for series R 17-30.

Figures for 1935-1970 were obtained by USITA from reports of independent telephone companies to the USITA. For recent years, the publications provide detailed data on companies reporting to the USITA, and limited data in respect to companies not reporting to the USITA. Certain totals for combined reporting and non-reporting independent companies are shown for 1961-1970 in the *USITA 1971 Annual Statistical Volume*.

A discussion of the relations between the Bell System and the Independents is presented in the *FCC Report . . . on the Investigation of the Telephone Industry . . .*, pp. 123-146; and a Report of Committee of National Association of Railroad and Utilities Commissioners and FCC representatives, *Message Toll Telephone Rates and Disparities*.

#### R 46-74. General note.

Since the 1850's, the Western Union Telegraph Company has been the dominant carrier in the domestic telegraph industry. Established in 1851 as the New York & Mississippi Valley Printing Telegraph Company, this company succeeded by 1866 in acquiring or merging dozens of competing telegraph companies and emerging as the sole telegraph company in the United States. (See Robert Luther Thompson, *Wiring a Continent; the History of the Telegraph Industry in the United States, 1832-1866*, Princeton University Press, 1947.) In succeeding decades, smaller telegraph companies were formed, serving a region or major cities, often with the intent of forcing Western Union to acquire them. Western Union developed close contractual ties with the railways. Telegraph pole lines were constructed along railroad rights-of-way. The lines were used jointly for general telegraph and railroad telegraph communication and signaling; and railroad stations and personnel were used for the pick-up and delivery of telegraph messages.

Western Union's most serious telegraph rival, Postal Telegraph, was acquired by the Mackay interests in the 1880's as the domestic pick-up and delivery agent for Mackay's Commercial Cable Company (later the International Telephone and Telegraph Company). Until the 1920's, Postal Telegraph competed with Western Union for the larger and more profitable routes. Beginning in the 1920's, Postal Telegraph attempted to provide a nationwide service in full competition with Western Union. Postal Telegraph expanded its own facilities and also made arrangements with the telephone com-

panies, gasoline stations, and others for the pick-up and delivery of telegrams.

The expansion of Postal Telegraph coincided roughly with the emergence of more effective competition from other sources. Predominantly, such competition came from the growth and development of toll telephone service, the expansion of domestic airmail, the introduction of the Bell System's teletypewriter exchange service (TWX), which was sold to Western Union in 1971, and the provision of domestic radiotelegraph service by the international radiotelegraph carriers, RCA Global Communications and the Mackay Companies. (In 1942, as a war measure, domestic radiotelegraph service was discontinued and was not subsequently resumed.) Postal Telegraph's share of domestic telegraph revenues was less than 25 percent. In 1943, Postal Telegraph merged with Western Union. (See U.S. Federal Communications Commission, *Reports*, vol. 10, pp. 148-198, September 27, 1943, for Commission approval of the specific terms of the merger.)

**R 46-55. Western Union Telegraph Company—summary of facilities, traffic, and finances, 1866-1915.**

Source: Series R 46-49 (except 1913), The Western Union Telegraph Company, annual reports; 1913, Moody's Investors Service, *Moody's Public Utilities Reports*, 1919, New York (copyright). Series R 50-55 (except R 52, 1914-1915), U.S. Interstate Commerce Commission, Bureau of Valuation, *Accounting Reports, The Western Union Telegraph Company* (December 31, 1915 and June 30, 1919); series R 52, 1914 and 1915, U.S. Federal Communications Commission, unpublished data. Census data are from the following U.S. Bureau of the Census reports: 1880, *Compendium of the Tenth Census, 1880*, pp. 1310-1325; *Special Reports: Telephones and Telegraphs, 1902*, tables 39, 41; *Telegraph Systems: 1907*, tables 1-8; *Telephones and Telegraphs . . . , 1912*, tables 2, 3.

The data for series R 52, 1914 and 1915, are based on ICC Bureau of Valuation report cited above, Exhibit V, sheets 2 and 3.

According to the *Compendium of the Seventh Census, 1854*, p. 189, there were 89 telegraph lines having 23,261 miles of wire in 1853. In 1854, the miles of wire were estimated at over 30,000.

The 1880 census data include many companies in addition to Western Union, and the later census data include Postal Telegraph as well as reports from some 15 to 20 small companies. Included in the Postal Telegraph data were the telephone operations of that company. The 1902 census data include the several domestic ocean-cable systems, while the 1880, 1907, and 1912 census figures exclude ocean-cable systems other than the Western Union Cable Division.

Other statistics appear in 60th Cong., 2d sess., *Investigation of Western Union and Postal Telegraph-Cable Companies*, U.S. Senate Document No. 725 (1909); State of New York, *Proceedings of Joint Committee Investigation of Telephone and Telegraph Companies* (1910); and *Submarine and Land Telegraph Systems of the World*, an excerpt from the Treasury Department, *Monthly Summary of Commerce and Finance*, January 1899.

**R 56-70. Domestic telegraph industry—messages, property, revenues, expenses, net income, dividends, employees, and wages, 1916-1970.**

Source: 1916-1928, U.S. Interstate Commerce Commission and U.S. Federal Communications Commission, unpublished data (annual reports of Western Union Telegraph Company and Postal Telegraph-Cable Company to the ICC); 1929-1955, FCC, *Statistics of the Communications Industry in the United States, 1955*, pp. 110-115; 1956-1970, FCC, *Statistics of Communications Common Carriers*, annual issues, and unpublished data (data are from the annual reports of Western Union Telegraph Company to the FCC). Census data are from the following U.S. Bureau of the Census reports (see general note for series R 1-92 for detailed identification of sources): *Census of Electrical Industries: 1917, Telegraphs . . . , tables 1, 2, 4, 5; Tele-*

*graphs, 1922, tables 2, 3, 5, 6; Telegraphs, 1927, tables 2, 3, 5, 6; Telegraphs, 1932, tables 2, 3, 4; Telephones and Telegraphs, 1937, tables 2, 3, 4.*

For 1916-1928, the Western Union reported landline (domestic) and cable operations on a merged basis; therefore, supplementary material was obtained from Western Union relating to the landline operations. Necessarily, these involve estimates and allocations, the precise bases of which were not specified. For 1929-1955, figures were obtained from annual reports of the telegraph carriers to the ICC and to the FCC, supplemented by correspondence and reference to the reports of the telegraph companies.

Each census report, 1917-1937, included Western Union Cable Division with Western Union telegraph plant. Similarly, the census reports of 1917, 1922, and 1927, in reporting Western Union operating revenues, operating expenses, net income, and dividends declared, include Western Union cables. Apparently, in each census report, number of employees and wages and salaries were for Western Union landline system only.

The census data refer to approximately 15 to 20 minor domestic telegraph companies, in addition to Western Union and Postal Telegraph. In 1943, Western Union acquired Postal Telegraph, and the telegraph company data, beginning in 1944, relate to the single merged carrier.

R 56, messages handled. Prior to 1935, the annual count of revenue messages handled was based on a count of messages during the month of January and was partly estimated. For 1935-1950, most of the Western Union message data were based on an actual count for 2 days in each month at some 400 of the largest offices which together accounted for about 80 percent of total message revenues. The Postal Telegraph data continued to be based on counts and estimates for the month of January projected to annual totals. For 1950-1970, Western Union used a scientifically constructed random message sample, the results of which provide generally reliable monthly and annual message data by service classes and rate zones.

Data include telegraph traffic with Canada and Mexico. Such traffic forms only a small portion of the message data.

R 57, private-line telegraph service revenues of telegraph companies. For 1916-1935, data were furnished to FCC by Western Union and added to annual report figures for Postal Telegraph; for 1936-1943, figures are from annual reports of Western Union and Postal Telegraph.

Private line, or leased circuit, revenues are derived from the lease of wires, cables, channels, circuits, and similar wire-telegraph facilities to banks, airlines, governmental agencies, and other large organizations for the exclusive use of these customers. The charge for such service is based on contractual rent agreements providing for definite periodic terms without regard to the extent of the service obtained by the users of such facilities.

R 58, private-line telegraph service revenues of telephone companies. Data for 1916-1938 apply to the Bell System telephone companies only. Data for 1916-1926 and 1935-1938 were obtained from unpublished data of the Bell System. Data for 1927-1934 were obtained from the Bell System response to the FCC, "Telegraph Division Order No. 12," and appear in "Some Aspects of Competition Affecting the Land Wire Telegraph Industry" (1937), an unpublished FCC staff study. For 1939-1970, data include all telephone companies reporting on an annual basis to the FCC (roughly varying between 60 and 125).

R 59-60, telegraph plant. Effective January 1, 1914, the ICC prescribed a Uniform System of Accounts for telegraph and cable companies and required the carriers to keep their accounts in conformity with this system. All charges made to plant and equipment or other property accounts with respect to any property acquired on or after January 1, 1914, were to be the actual money costs of the property. The ICC did not attempt to prescribe the depreciation rates of the carriers.

In 1940, the FCC adopted a revised uniform system of accounts for wire telegraph and ocean cable carriers, to go into effect January 1, 1942. The effective date was later postponed to January 1, 1943. The new system was designed to supplant the previous system in use since 1914. The FCC prescribed depreciation rates for the telegraph carrier, effective January 1, 1948. After the merger of Western Union and Postal Telegraph, the Commission required that the merged carrier reclassify its plant as of January 1, 1943.

Telegraph plant book costs for 1946-1970 were affected by two conflicting factors: Accelerated retirement of old plant, and addition of new plant as part of the general modernization program of the Western Union Telegraph Company begun in 1946. As part of its modernization program the Western Union Telegraph Company leased substantial plant, in the form of voice channels, from the Bell System.

Census figures on book cost of plant include Western Union cables in all years.

**R 61**, miles of wire. Wire figures are not a satisfactory measure of the capacity of the domestic telegraph industry for various reasons, including the shift from less efficient open wire to more efficient cable; the introduction of multiplex terminal equipment, which has permitted a significant subdivision of each telegraph channel and the simultaneous transmission of messages on each such subdivision; the leasing from the Bell System telephone companies of voice-frequency channels and the subdivision of these channels into a substantially greater number of telegraph channels; operation by Western Union of its microwave radio system for the transmission of messages; and use of modernized routing and switching systems.

**R 62-68**, finances, employees, and wages and salaries. Operating revenues are derived, in the bulk, from various transmission and non-transmission telegraph services. However, a small proportion has been derived from incidental services, such as errand service, time service, and code registration. The operations of the former Postal Telegraph toll telephone system were included until February 1, 1952, when Western Union disposed of this service. Also included in operating revenues are revenues derived by the domestic telegraph carriers in handling the domestic haul of insular, mobile, and foreign cable and radiotelegraph communications. Such domestic haul is between the "gateway" cities and the interior of the nation.

To obtain data on total operating expenses, the domestic telegraph carriers (Western Union and Postal Telegraph) were required to subdivide their expense accounts as between domestic and international operations in respect to compensation, overhead, materials and supplies, and other charges. Such allocations are subject to some arbitrariness.

Census data for 1917, 1922, and 1927 with respect to operating revenues, expenses, and net income differ from the other data as a result of the inclusion of Western Union cable operations and the inclusion of minor companies, in addition to Western Union and Postal Telegraph.

No adjustments were made in the annual reported income statements. Thus, the net loss shown for 1945 resulted from a substantial retroactive wage award made by the War Labor Board. This was shown in the 1945 statement of the Western Union Telegraph Company as an extraordinary charge (less recoverable income taxes).

Income taxes (through 1963, when the cables were sold) are total Western Union income taxes minus those assigned by the company itself to its cable operations. The amounts assigned to Western Union cables were obtained by the FCC from Western Union on an informal basis. Income taxes for 1924 and prior years are not available separately and are included in total operating expenses.

Dividends declared (through 1963, when the international operations were sold), include the entire operations of Western Union, domestic and international. No basis exists for allocating them.

Number of employees was reported as of different periods: 1929-1934, at the end of June; 1935-1945, at the end of December; and 1946-1970, at the end of October. However, wages and salaries are uniformly reported for the calendar year ending December 31.

**R 69-70**, Bell Teletypewriter Exchange (TWX) Service. For 1931-1934, data are from responses to FCC, "Telegraph Division Order No. 12"; for 1935-1938, from the FCC *Annual Report*.

Teletypewriter exchange service (TWX) was initiated November 21, 1931. The revenues from this service, as well as the private line telegraph revenues of telephone companies, are not included in total operating revenues, which is limited to the revenues of domestic telegraph carriers. The TWX service of the telephone industry was purchased by Western Union in 1971.

**R 71-74. Domestic telegraph message rates and TWX rates between New York City and selected cities, 1850-1970.**

Source: U.S. Federal Communications Commission, unpublished data.

The 1850 rates are cited in William Holmes, *History of Telegraph Rates, 1860 to 1913* (an unpublished study obtained by the FCC from the Western Union Telegraph Company), p. 2. The same source states, p. 8, that the New York-Chicago rate from 1866 to October 1, 1869, was \$1.85, although James D. Reid, *The Telegraph in America* (1886), p. 746, states that the Chicago rate was \$2.05 between 1866 and 1869, and U.S. Senate, 60th Cong., 2d sess., *Investigation of Western Union and Postal Telegraph Cable Companies*, Document No. 725 (1909), p. 24, claims that in 1866 this rate was \$2.20. Holmes, p. 8, is the source for the 1866 and 1869 New York-Philadelphia rates. Reid, p. 746, quotes the New York-San Francisco rates for 1866 and 1869. The *Investigation of Western Union . . .*, p. 24, is also the source for the New York-Denver rate as of 1866. The 1870 rates are mentioned in 51st Cong., 1st sess., *Hearings before the House Committee on the Post-Office and Post-Roads on Postal Telegraph Facilities*, p. 131. In addition, Holmes, p. 9, states that in 1870 the maximum rate from States north of Washington, D.C., to San Francisco was reduced from \$7.45 in currency (or \$6.75 if paid in gold) to \$5.00 in currency (or \$4.00 in gold). The 1873 rates are shown in *Investigation of Western Union . . .*, p. 24. Holmes, p. 10, states that the \$2.50 San Francisco rate became effective February 1, 1873, and a reason given was that \$2.50 was the denomination of a coin in common use on the Pacific Coast. The same source, p. 12, describes the New York-Chicago rate in 1875 as having been 25 cents and in 1877 as being successively increased to 40 cents, 50 cents, and 60 cents. Holmes also states, p. 11, that the New York-Denver rate became \$2.00 in March 1876 and that the San Francisco rate was reduced to \$2.00 in August 1876. However, Reid mentions, p. 747, March 1877 as the date \$2.00 was fixed as the maximum rate between New York City and points east of the Rocky Mountains. The 1883 rates are also from *Investigation of Western Union . . .*, p. 24. Holmes, p. 17, states that the \$1.00 San Francisco rate became effective in March 1884 as part of a general reduction which established \$1.00 as the maximum rate for a 10-word full rate telegram between any two points in the Western Union system. Holmes also reports, p. 17, that in June 1884 the rate between New York and Chicago charged by Western Union was 50 cents, by Postal Telegraph, 25 cents, and by the Baltimore and Ohio Telegraph Company, 40 cents. The 1888 rates are based on State of New York, *Report of the Joint Committee of the Senate and Assembly of the State of New York Appointed to Investigate Telephone and Telegraph Companies* (transmitted to the Legislature March 21, 1910), p. 687, and the annual report of Western Union to stockholders for 1888, p. 5. The 1890 rates are from *Hearings Before the House Committee on the Post-Office and Post-Roads on Postal Telegraph Facilities*, p. 68. The rates in effect as of 1908 are from *Investigation of Western Union . . .*, p. 24, although there is evidence from other sources that some of these rates were put into effect in 1907. The 1919 rates were the result of a 20 percent increase in domestic telegraph rates as set forth in the 1919 Western Union annual report to stockholders, p. 8.

The 1931 TWX rates are from testimony on behalf of AT&T by Mr. Carroll O. Bickelhaupt in the hearings pursuant to FCC, "Telegraph Division Order No. 12."

All rates beginning with the 1946 increase are derived from official tariffs filed with the FCC.

The census report, *Special Reports: Telephones and Telegraphs, 1902*, states (p. 14) that the first telegraph rate was applicable in 1845 between Baltimore and Washington and was one cent for each group of four characters. The rates shown here are mainly those of the Western Union Telegraph Company. During some of the early years, lower rates were sometimes published by competing companies. The frequent changes in the New York-Chicago rate illustrate particularly the effects of competition. New companies appeared offering lower rates on this basic route and Western Union was forced to meet the competition until such time as it succeeded in acquiring the competing company. Moreover, it is not certain that the published rates were adhered to uniformly, particularly in the early years of telegraph development and in periods of depression. Under the stress of competition, rebates were sometimes allowed.

The rate for the full-rate telegram is the keystone of the telegraph rate structure. Rates for most other public message telegraph services (day letters, night letters, etc.) are a percentage of the rates for the full-time telegram. Between 1908 and 1946, there was no change in the level of the full-rate telegram, except for the increase effected in 1919. However, while maintaining the rate level on its full-rate telegrams, Western Union introduced various new classifications (including the fixed text social message and serials) which in effect provided discounts to the message customer.

TWX is provided only by the Bell Telephone System but this service was sold to Western Union in 1971. As contrasted with message telegraph service, which is a 1-way communication service, TWX provides 2-way, instantaneous communication service between TWX subscribers. The maximum number of words which can be transmitted in the 3-minute rate period depends on the speed of the transmitting operator (provided by the subscriber) and the maximum rated speed of the TWX equipment. In addition to the charges for specific use (measured in time units and distance) of the facilities, TWX subscribers beginning July 1, 1953, were billed a monthly service charge of \$10. This was increased to \$40 on September 1, 1966, and to \$45 on February 1, 1970, for 60-speed service.

#### R 75-88. General note.

The first successful cable linking North America with Europe was laid in 1866. Radio was not a significant factor in overseas telegraphy until 1920 when the newly formed Radio Corporation of America (RCA) entered the field as successor to Marconi Company of America. The record of hearings held in 1929 before the Committee on Interstate Commerce, United States Senate, 71st Cong., 1st sess., on S. 6, a "Bill to Provide for the Regulation of the Transmission of Intelligence by Wire or Wireless," contains (pp. 960-972) a list of submarine cables of the world, and the year in which each was laid. Few of these cables are now in use, having been replaced by circuits in telephone ocean cables laid since the mid-1950's and, since 1965, also by circuits in microwave radio relayed by satellite. Information on the beginnings of international radiotelegraphy appears in the *Report of the Federal Trade Commission on the Radio Industry (1924)*.

The first overseas radio telephone service was opened in 1927 between New York and London by American Telephone and Telegraph Company. The only overseas telephone service available during 1921-1926 was to and from Cuba by means of cable.

The census data are derived from the special quinquennial census reports of the telephone and telegraph industries (see general note for series R 1-92). With respect to international telegraph, these reports suffer from two major shortcomings. First, the Bureau of the Census was unable to obtain from the Western Union Telegraph Company a division between its landline system and its cable operations with respect to plant and financial operations. Prior to the 1932 census, Western Union provided separate data for its cable operations only in the categories of messages and cable mileage.

In the censuses of 1932 and 1937, Western Union also supplied operating revenue information for its cable system. The absence of Western Union's Cable Division from the census data on the ocean-cable companies largely accounts for the significant differences between the census data and the annual series with respect to telegraph plant book cost and depreciation reserves, operating revenues, operating expenses, and net income.

A second shortcoming of the census data is the lack of adequate coverage of the radiotelegraph industry. The financial information included in the 1922 and 1937 census compilations is seriously distorted because of the failure to exclude various activities of the Radio Corporation of America not related to its telegraph communications business. In the 1932 census, no information on radiotelegraph appeared, while in the 1937 census the published statistics relate only to messages and operating revenue. Consequently, the only census data shown with respect to radiotelegraph are the message statistics, and \$9,515,000 in operating revenues included within the 1937 cable-radiotelegraph total.

#### R 75-77, R 79-81, R 83-88. Telegraph messages, plant, nautical miles of ocean-telegraph cable, operating revenues and expenses, Federal income taxes, net income, employees, and wages, 1907-1970.

Source: U.S. Federal Communications Commission, 1916-1928, unpublished data; 1929-1956, *Statistics of the Communications Industry in the United States*, 1955 and 1956 issues, table 19; 1957-1970, *Statistics of Communications, Common Carriers*, annual issues. Census data beginning 1907 are from the following U.S. Bureau of the Census reports (see general note for series R 1-92 for detailed description of sources): *Telegraph Systems: 1907*, pp. 10, 19; *Telephones and Telegraphs . . . , 1912*, pp. 165, 167; *Telegraphs, 1927*, pp. 19, 25; *Telephones and Telegraphs, 1937*, pp. 49, 52.

Annual data prior to 1929 were derived in part from annual reports of the carriers filed with the Interstate Commerce Commission. In large part, these data were obtained through field examinations by the staff of the FCC and from data supplied by the carriers upon specific request.

Figures include Hawaii and Puerto Rico for all years. There is no international telegraph industry in Alaska; however, international telegrams originating or terminating there are included in series R 75-77.

Cable and radiotelegraph messages (series R 75-77) include communications sent from, received in, and transiting the United States and its outlying areas. In addition, radiotelegraph messages include ship-shore messages, and domestic telegraph messages handled over radiotelegraph circuits prior to the closure of such circuits on June 30, 1942.

Plant and depreciation figures (series R 79-80) are on the basis of the currently effective systems of accounts. The radiotelegraph accounts became effective January 1, 1940, and the ocean-cable uniform system accounts January 1, 1943 (replacing an earlier cable accounts system promulgated by the ICC, effective January 1, 1914).

The miles of ocean cable (series R 81) as published have been adjusted in view of the fact that some of the cables were reported and tabulated in statute miles rather than nautical miles.

Federal income taxes prior to 1929 are included in operating expenses (series R 84) in amounts which are not ascertainable. The substantial decline in net income in 1912 compared with 1907 may have been accounted for in large measure by the introduction of depreciation charges which were absent from the 1907 accounts.

Included in employees and compensation (series R 87-88) are the foreign employees of the carriers. The reporting dates for number of employees have varied: For 1929-1934, as of the end of June; for 1935-1945, as of the end of December; for 1946-1970, as of the end of October.

**R 78. Overseas telephone calls, 1921-1970.**

Source: 73d Cong., 2d sess., *Report on Communication Companies*, House Report No. 1273, pt. III, No. 2, p. 1459 (1935); and American Telephone and Telegraph Company, unpublished data.

Figures include calls to and from ships on the high seas and most international points. Additional data on radiotelephone service are contained in the *Statistics of the Communications Industry in the United States*. See also *Census of Electrical Industries: Telephones and Telegraphs, 1937*, table 9.

**R 82. Overseas countries served by direct radiotelegraph circuits, 1912-1970.**

Source: U.S. Federal Communications Commission, unpublished data (supplemented and confirmed in *Report of the Federal Trade Commission on the Radio Industry and Report on Communication Companies*, House Report No. 1273, pt. III, No. 1, pp. 990, 998; pt. III, No. 4, pp. 3934, 3948, and 4188).

**R 89-92. International cable and radiotelegraph rates and international telephone rates between New York City and selected cities, 1866-1970.**

Source: 1866-1928, scattered sources as indicated below; 1929-1970, U.S. Federal Communications Commission, unpublished data.

New York to London. The first successful transatlantic cable was laid in 1866. James D. Reid, *The Telegraph in America* (1886), p. 748, indicates that the first telegraph rate on the cable (presumably New York to London) was \$100 for 10 words. Three months later, the same source states, the rate was reduced to \$50 and subsequently to \$25. By 1868, the rate for 10 words had declined to \$15.75, and in 1885 it stood at 40 cents per word. A staff document of American Cable & Radio, Inc., prepared in connection with FCC Docket No. 8777 (1948) indicates that the Western Union Telegraph Company had a 50 cents per word rate in 1884, and that on December 24 of that year the Commercial Cable Company entered the field with a rate of 40 cents per word. The same source indicates that the cable companies other than Commercial Cable reduced their rates to 12 cents per word on May 6, 1886, and Commercial Cable in turn lowered its per word rate from 40 cents to 25 cents. On September 16, 1887, Commercial Cable further reduced its rate to the 12 cent level. Then on September 1, 1888, all the cable companies raised their rate between New York and London to 25 cents per word.

Exhibit No. 190, introduced by RCA Communications, Inc., in the same hearing (Docket No. 8777) shows the same rates, but with somewhat different effective dates; while William Holmes, *History of Telegraph Rates, 1860 to 1913*, p. 23, cites rates which differ in part from those shown here.

In 1916, it became possible to send messages from New York to London through Canada via Marconi Wireless for 17 cents per full rate word. According to the Federal Trade Commission *Report on the Radio Industry*, p. 86, RCA, on March 1, 1920, began transmitting radiotelegraph messages to Great Britain. The rate initially was 17 cents per word, with an increase to 18 cents on January 1, 1921, and to 20 cents on April 15, 1923. At this point the international cable companies reduced their rate to 20 cents to meet the radio competition. Since then, the rates for cable and radio have been identical.

The rate reductions effective May 1, 1945, provided for a uniform 20 cents per word basic rate from the United States "gateway" cities to a large part of the world (see FCC, *Eleventh Annual Report for Fiscal Year Ended June 30, 1945*, p. 45). Effective May 1,

1946, all international cable and radiotelephone rates were established on a country-to-country basis at 20 cents and 30 cents per word, respectively.

The reductions in rates, effective July 1, 1950, are the result of "unification" of the full rate and the code rate on all cable and radiotelegraph service. The rates were unified at 75 percent of the existing rate per full-rate word. This had the effect of lowering the charge for full-rate messages but increasing the charge for code messages which at that time formed a substantial portion of international telegraph traffic.

New York to Cairo. Telegraphic communication between New York and Cairo began, probably, in 1870 or shortly thereafter. A Commercial Cable Company tariff book, dated January 1903, indicates a rate of 61 cents per word as of that time. A July 1905 tariff book of the Western Union Telegraph Company shows a New York-Cairo rate of 56 cents per word; 25 cents was the rate for the New York-London haul and 31 cents for the rate beyond London. No record has been found of rates in effect between 1905 and 1925. Data since 1925 are from the FCC based on filed tariffs and correspondence with companies.

New York to Tokyo. No specific record has been found dating the beginning of telegraphic communication with Tokyo. In the hearings before the Senate Committee on Foreign Relations, 54th Cong., 1st sess., Senate Document No. 194 (1896), conflicting testimony was presented with respect to the early rates. The Commercial Cable Company tariff book of January 1903 stated that the rate at that time was \$1.76 per word. Shortly thereafter Commercial Pacific Cable Company opened its trans-Pacific cable and the rate fell to \$1.53 per word. This rate included 12 cents per word for the domestic landline haul from New York to San Francisco, and \$1.41 for the San Francisco-Tokyo leg. *Report on Communication Companies*, 73d Cong., 2d sess., House Report No. 1273, pt. III, No. 4, p. 3926, is the source of the New York-Tokyo rates between 1903 and 1929. FCC is the source of rates since 1929. For data on radiotelegraph rates lower than cable rates prior to 1925, see FTC, *Report on the Radio Industry*, p. 35, and testimony before the House Committee on the Merchant Marine and Fisheries, pursuant to H.R. 7357, 68th Cong., 1st sess., p. 170.

New York to Buenos Aires. The 1880 rate is stated in the *1956 Annual Report of the American Cable and Radio Corporation to Stockholders*, p. 16. Rates between 1882 and 1927 are derived from testimony before the Senate Committee on Interstate and Foreign Commerce, 71st Cong., 2d sess., on S. 6 (1929-1930) beginning p. 2201, and *A Half Century of Cable Service to the Three Americas* (1928) published by All America Cables, Inc. When radio service was opened in 1924 the rate was fixed at the same level as the existing cable rate. FCC is the source for rates since 1929.

New York international radiotelephone rates to selected cities. The first overseas radiotelephone service was opened on January 7, 1927, between New York and London. Service to Buenos Aires began April 3, 1930, and to Tokyo, December 8, 1934. The circuit to Cairo, opened August 8, 1932, operated via London until January 7, 1946, when a direct circuit to Cairo was placed in operation. As in telegraph, the Tokyo radiotelephone rate included a landline haul charge until 1946 for the New York-San Francisco haul. Initially \$9.00, the landline charge was reduced to \$6.75 on July 1, 1937, and to \$4.50 on August 1, 1940. All radiotelephone rates presented are for 3 minute weekday person-to-person daytime calls. In addition, there are lower night and Sunday rates on some routes, and on three of the routes station-to-station service is available at either a 25-percent or a 33 $\frac{1}{3}$ -percent discount from the person-to-person rates.

Series R 1-12. Telephones and Average Daily Conversations (Bell and Independent Companies): 1876 to 1970

[In thousands, except series R 2 and R 3. Census figures in *italics*]

Year	Telephones <sup>1</sup>						Average daily conversations					
	Total					Bell System <sup>2</sup>	Independent companies		Bell System <sup>2</sup>		Independent companies	
	Number	Per 1,000 population	Households with (percent)	Residence	Business		Connecting with Bell System	Not connecting with Bell System	Local exchange	Toll	Local exchange	Toll
	1	2	3	4	5	6	7	8	9	10	11	12
1970	120,218	583.4	90.5	87,137	33,081	99,903	20,315	-	356,400	22,500	102,000	4,300
1969	115,222	565.2	89.8	83,210	32,012	95,943	19,279	-	337,900	20,700	97,500	4,100
1968	109,256	541.5	88.5	79,029	30,227	91,122	18,134	-	311,800	18,400	92,800	3,900
1967	103,752	519.3	87.1	74,963	28,789	86,776	16,976	-	298,600	16,700	87,100	3,600
1966	98,787	499.6	86.3	71,481	27,308	82,813	15,976	-	288,000	15,400	82,800	3,300
1965	93,656	479.0	84.6	67,729	25,927	78,632	15,024	-	273,400	14,000	77,400	3,000
1964	88,793	459.5	82.8	64,124	24,669	74,659	14,134	-	256,500	12,800	73,200	2,700
1963	84,453	442.9	81.4	60,876	23,577	71,152	13,301	-	246,282	11,784	68,400	2,400
1962	80,969	430.7	80.2	58,289	22,680	68,393	12,576	-	237,942	11,164	65,158	2,242
1961	77,422	418.0	78.9	55,737	21,685	65,507	11,915	-	222,320	10,589	62,177	2,074
1960	74,342	407.8	78.3	53,537	20,805	62,989	11,353	(Z)	215,317	10,068	58,005	1,996
1959	* 70,820	* 394.8	78.0	(NA)	(NA)	60,110	10,710	(Z)	204,491	9,549	* 53,525	* 1,785
1958	66,645	379.3	76.4	47,831	18,814	56,759	9,886	(Z)	193,627	8,834	48,192	1,645
1957	63,624	368.2	75.5	45,433	18,191	54,241	9,380	3	185,304	8,490	44,174	1,602
1956	60,190	354.5	73.8	42,832	17,358	51,344	8,843	3	175,848	8,015	41,863	1,518
1955	56,243	337.2	71.5	39,854	16,389	48,028	8,212	3	166,438	7,420	37,722	1,430
1954	52,806	322.1	69.6	37,272	15,534	45,089	7,764	3	157,423	6,799	35,946	1,380
1953	50,373	312.7	68.0	35,411	14,962	43,010	7,359	4	151,667	6,552	34,645	1,365
1952	48,056	303.3	66.0	33,667	14,389	41,014	7,038	4	147,400	6,358	27,292	73
1951	45,636	292.9	64.0	31,939	13,697	38,943	6,685	8	143,285	6,230	26,384	74
1950	43,004	280.9	61.8	30,077	12,927	36,795	6,200	9	138,881	6,118	25,539	85
1949	40,709	270.4	60.2	28,327	12,382	34,175	6,524	10	130,403	6,125	23,961	102
1948	38,205	258.1	58.2	26,314	11,891	32,698	5,495	12	123,481	6,065	22,520	90
1947	34,867	239.7	54.9	23,708	11,159	29,773	5,081	13	113,075	5,908	20,353	86
1946	31,611	221.3	51.4	21,239	10,372	26,900	4,697	14	103,827	5,544	18,645	82
1945	27,867	198.1	46.2	18,409	9,458	23,547	4,306	14	89,362	4,852	17,667	99
1944	26,859	192.9	45.1	17,791	9,068	22,653	4,190	16	84,618	4,377	17,227	107
1943	26,381	191.6	45.0	17,706	8,675	22,301	4,014	66	85,000	4,046	17,138	93
1942	24,919	183.4	42.2	16,619	8,300	21,000	3,853	66	86,314	3,544	17,141	68
1941	23,521	175.3	39.3	15,453	8,068	19,742	3,709	70	84,360	3,222	16,659	69
1940	21,928	165.1	36.9	14,271	7,657	18,311	3,550	67	79,515	2,852	16,110	306
1939	20,831	158.3	35.6	13,446	7,385	17,329	3,435	67	74,020	2,705	15,292	294
1938	19,953	153.0	34.6	12,727	7,226	16,536	3,349	68	70,070	2,596	14,739	283
1937	19,453	150.0				16,932						
1937	19,453	150.4	34.3	12,341	7,112	16,097	3,288	68	68,833	2,682	14,678	287
1936	18,433	143.5	33.1	11,654	6,779	15,192	3,170	71	64,960	2,589	14,124	281
1935	17,424	136.4	31.8	11,003	6,421	14,280	3,073	71	58,809	2,276	14,631	284
1934	16,869	133.0	31.4	10,683	6,186	13,805	2,992	72	56,648	2,142	14,332	278
1933	16,628	132.0	31.3	10,475	6,153	13,501	3,051	76	55,199	2,047	14,481	273
1932	17,424	139.0				13,793						
1932	17,341	138.5	33.5	11,054	6,287	14,011	3,246	84	58,813	2,251	15,637	299
1931	19,602	157.5	39.2	12,754	6,848	15,692	3,816	94	62,205	2,700	17,245	350
1930	20,103	162.6	40.9	13,153	6,950	15,983	4,017	103	62,365	2,933	17,860	362
1929	19,970	163.1	41.6	13,135	6,835	15,838	4,022	110	61,034	3,139	18,107	370
1928	19,256	158.9	40.8	12,645	6,611	14,955	4,157	144	56,196	2,839	17,895	370
1927	18,528	155.0				14,726						
1927	18,528	153.9	39.7	12,086	6,360	14,155	4,133	158	52,581	2,615	18,100	369
1926	17,446	149.5	39.2	11,689	5,991	13,402	4,106	172	49,980	2,375	18,453	372
1925	16,875	144.6	38.7	11,270	5,605	12,622	4,037	216	46,702	2,098	18,148	352
1924	16,015	139.2	37.8	10,773	5,242	11,857	3,908	250	43,981	1,835	18,260	324
1923	15,316	135.4	37.3	10,345	4,971	10,857	4,090	369	41,109	1,683	18,516	322
1922	14,317	130.0				9,515						
1922	14,294	128.7	35.6	9,642	4,652	9,950	3,912	432	36,831	1,523	18,329	317
1921	13,817	126.4	35.8	9,342	4,475	9,328	3,994	495	33,671	1,356	18,447	281
1920	13,273	123.4	35.0	9,021	4,252	8,786	3,810	727	31,836	1,327	18,371	280
1919	12,669	119.7				7,739	4,057	873	29,236	1,167	18,158	276
1918	12,078	115.2				7,202	3,864	1,012	30,001	1,067	18,753	285
1917	11,717	112.0				7,327	3,165					
1917	11,717	112.7				7,032	3,458	1,226	30,845	1,009	19,785	302
1916	11,241	109.5				6,545	3,348	1,348	28,530	890	19,856	302
1915	10,524	103.9				5,968	3,204	1,351	25,184	819	18,535	282
1914	10,046	100.6				5,585	3,074	1,388	22,775	799	17,198	262
1913	9,543	97.2				5,255	2,878	1,409	22,255	806	17,640	272
1912	8,730	92.0				5,087	2,869					
1912	8,730	90.7				4,804	2,496	1,430	21,532	788	18,064	275
1911	8,349	88.3				4,352	2,281	1,716	19,773	645	17,466	266
1910	7,635	82.0				3,933	1,950	1,753	18,256	602	17,043	260
1909	6,996	76.5				3,522	1,621	1,853	16,777	517	16,218	247
1908	6,484	72.4				3,176	1,188	2,119	15,576	463	15,717	239
1907	6,119	70.0				3,132						
1907	6,119	69.6				3,018	826	2,280	15,266	494	13,814	210
1906	4,933	57.2				2,774	297	1,862	13,875	461	11,430	175
1905	4,127	48.8				2,285	246	1,596	11,404	368	9,756	148
1904	3,353	40.4				1,838	167	1,348	9,388	301	7,884	120
1903	2,809	34.5				1,564	121	1,124	8,316	258	6,903	105
1902	2,371	30.0				1,317						
1902	2,371	29.7				1,317	84	970	7,850	240	6,146	94
1901	1,801	23.0				1,061	48	692	6,342	187	4,468	68
1900	1,356	17.6				836	20	500	4,773	149	2,916	44
1899	1,005	13.3				667	10	328	5,174	133		

See footnotes at end of table.

Series R 1-12. Telephones and Average Daily Conversations (Bell and Independent Companies): 1876 to 1970—Con.

[In thousands, except series R 2 and R 3. Census figures in *italics*]

Year	Telephones <sup>1</sup>				Average daily conversations			
	Total		Bell System <sup>2</sup>	Independent companies not connecting with Bell System	Bell System <sup>2</sup>		Independent companies	
	Number	Per 1,000 population			Local exchange	Toll	Local exchange	Toll
	1	2	6	8	9	10	11	12
1898.....	681	9.2	496	185	3,823	95		
1897.....	515	7.1	415	100	3,099	75		
1896.....	404	5.7	354	50	2,630	63		
1895.....	340	4.8	310	30	2,851	51	170	3
1894.....	285	4.1	270	15	2,088	38		
1893.....	266	3.9	266		1,872	34		
1892.....	261	3.9	261		1,868	41		
1891.....	239	3.7	239		1,585	34		
1890.....	234	3.7						
1890.....	228	3.6	228		1,438	10		
1889.....	212	3.4	212		1,240	8		
1888.....	195	3.2	195		1,052	7		
1887.....	181	3.0	181		1,012	7		
1886.....	167	2.9	167		856	7		
1885.....	156	2.7	156		747	7		
1884.....	148	2.6	148		698	8		
1883.....	124	2.3	124		590	5		
1882.....	98	1.8	98					
1881.....	71	1.4	71					
1880.....	54	1.1						
1880.....	48	.9	48		237	2		
1879.....	31	.6	31					
1878.....	26	.6	26					
1877.....	9	.2	9					
1876.....	3	.1	3					

\* Denotes first year for which figures include Alaska and Hawaii.  
 - Represents zero. NA Not available.  
 Z Less than 500.

<sup>1</sup> Beginning 1920, excludes private line telephones and "Bell" figures derived through totaling data for the Bell Systems, the Southern New England Telephone Company, the Cincinnati Bell Inc., and Bell service telephones.  
<sup>2</sup> Bell System has no operations in Alaska and Hawaii.

Series R 13-16. Telephone Toll Rates Between New York City and Selected Cities: 1902 to 1970

[Rate for station-to-station, daytime, 3-minute call]

Effective date	Between New York City and—				Effective date	Between New York City and—			
	Philadelphia	Chicago	Denver	San Francisco		Philadelphia	Chicago	Denver	San Francisco
	13	14	15	16		13	14	15	16
1970, Feb.....	\$0.50	\$1.05	\$1.25	\$1.35	1986, Sept.....	\$0.50	\$2.50	\$5.25	\$7.50
1968, Aug.....	.50	1.30	1.55	1.70	1980, Jan.....	.50	3.00	6.00	9.00
1967, Dec.....	.50	1.40	1.60	1.75					
1965, Dec.....	.50	1.40	1.70	2.00	1929, Feb.....	.60	3.00	6.00	9.00
1960, Feb.....	.50	1.45	1.80	2.25	1927, Dec.....	.60	3.25	6.00	9.00
1959, Sept.....	.50	1.45	1.95	2.25	1926, Oct.....	.60	3.40	7.25	11.80
1952, Mar.....	.50	1.50	2.20	2.50	1919, Jan.....	.55	4.65	10.40	16.50
1946, Feb.....	.45	1.55	2.20	2.50	1917, June.....	<sup>1</sup> 1.75	<sup>1</sup> 5.00	11.25	18.50
1945, July.....	.45	1.75	2.35	2.50	1917, Mar.....	(NA)	(NA)	11.25	19.80
1941, July.....	.45	1.75	3.25	4.00	1915, Jan.....	(NA)	(NA)	11.25	20.70
1940, May.....	.45	1.90	3.25	4.00	1911.....	(NA)	(NA)	11.25	
1937, Jan.....	.45	2.20	4.50	6.50	1902 <sup>2</sup> .....	.55	5.45		

NA Not available.  
<sup>1</sup> Rates in effect immediately prior to Jan. 21, 1919, according to an item in the New York Times for Jan. 23, 1919.

<sup>2</sup> Toll rates were \$0.006 per mile for all mileages.

Series R 17-30. Bell Telephone Companies—Property, Revenues, Expenses, Interest, Net Income, Dividends, Employees, and Wages: 1880 to 1970

[In thousands, except series R 29. Census figures in italics. Bell companies have no operations in Alaska and Hawaii]

Year	Telephone plant			Operating revenues						Federal income taxes	Other income, net <sup>4</sup>	Interest expenses	Net income	Dividends declared <sup>5</sup>	Employees					
	Book value	Depreciation reserves	Miles of wire <sup>1</sup>	Total <sup>2</sup>	Local	Toll	Operating expenses <sup>3</sup>	23	24						25	26	27	28	29	30
1970	\$56,171,376	\$12,609,552	601,912	\$17,368,544	\$8,685,479	\$8,042,160	\$12,867,499	\$1,608,526	\$438,275	\$1,028,356	\$2,303,227	\$1,508,445	793,196	\$6,640,908						
1969	50,479,993	11,553,823	553,868	16,057,755	7,979,015	7,450,709	11,401,821	2,018,380	390,178	720,435	2,307,298	1,424,155	755,065	5,911,857						
1968	46,091,402	10,511,655	512,250	14,428,866	1,366,128	6,472,036	10,025,833	1,990,741	313,821	573,848	2,152,630	1,389,124	696,749	5,136,622						
1967	42,508,397	9,445,322	480,308	13,310,606	6,910,073	5,852,380	9,245,691	1,695,744	275,199	493,757	2,150,612	1,290,838	673,816	4,791,543						
1966	39,316,832	8,551,263	453,521	12,419,140	6,517,473	5,378,439	8,577,644	1,633,247	281,048	412,992	2,076,305	1,250,184	666,982	4,517,006						
1965	36,228,981	7,793,812	422,623	11,320,328	6,114,439	4,705,856	7,857,118	1,466,287	261,214	371,193	1,886,943	1,144,416	627,278	4,169,473						
1964	33,384,997	7,158,004	394,360	10,549,386	5,778,986	4,291,054	7,233,111	1,476,741	260,748	356,707	1,743,574	1,085,182	604,577	3,890,458						
1963	30,854,403	6,583,840	368,594	9,796,302	5,527,789	3,814,370	6,647,813	1,455,070	207,412	343,700	1,557,130	934,275	585,941	3,659,869						
1962	28,656,559	6,126,180	346,697	9,192,520	5,219,431	3,543,891	6,271,219	1,360,144	214,568	314,414	1,456,158	915,846	578,403	3,512,691						
1961	26,586,552	5,749,767	327,319	8,614,337	4,921,320	3,284,038	5,903,602	1,244,867	172,368	288,158	1,350,079	871,249	581,245	3,369,059						
1960	24,721,830	5,402,334	307,876	8,108,793	4,665,116	3,058,181	5,584,190	1,172,131	184,052	262,422	1,274,101	769,701	594,860	3,282,991						
1959	22,818,918	5,084,804	282,287	7,569,869	4,362,974	2,843,466	5,233,097	1,080,302	140,874	226,773	1,170,571	730,682	597,107	3,187,533						
1958	21,225,314	4,760,297	260,464	6,936,360	4,049,465	2,543,114	4,910,866	939,637	132,005	216,108	1,001,709	649,497	606,340	3,029,099						
1957	19,654,439	4,487,207	243,730	6,466,164	3,743,800	2,406,330	4,788,708	773,481	140,702	176,186	868,486	607,655	636,100	3,042,598						
1956	17,555,690	4,228,966	220,154	5,964,876	3,457,640	2,220,438	4,437,810	714,260	127,604	147,778	792,632	546,924	653,074	2,888,990						
1955	15,773,373	4,007,118	201,235	5,424,246	3,168,480	1,999,553	4,039,159	644,404	90,084	133,910	696,857	483,619	629,773	2,631,154						
1954	14,525,846	3,766,530	185,809	4,901,162	2,914,754	1,755,241	3,746,294	524,995	79,777	132,347	577,373	439,327	591,966	2,443,560						
1953	13,419,650	3,555,901	173,375	4,523,707	2,713,501	1,603,608	3,500,599	472,994	69,359	117,668	501,805	389,057	600,363	2,327,884						
1952	12,301,975	3,352,297	162,120	4,135,537	2,460,438	1,500,603	3,240,896	403,081	54,622	118,773	427,459	339,186	591,783	2,151,286						
1951	11,250,819	3,125,706	152,112	3,727,632	2,205,117	1,369,682	2,929,122	350,134	54,244	118,857	383,763	296,541	563,416	1,927,900						
1950	10,375,100	2,904,820	144,264	3,341,308	1,995,659	1,207,509	2,652,421	248,328	41,455	114,637	367,377	262,901	534,751	1,741,907						
1949	9,688,160	2,724,745	135,400	2,965,852	1,746,771	1,092,395	2,530,899	125,878	52,224	113,469	247,870	227,929	528,015	1,704,105						
1948	8,848,572	2,597,371	126,424	2,693,027	1,551,742	1,030,474	2,324,762	105,154	63,649	91,497	235,264	214,061	559,408	1,621,347						
1947	7,552,159	2,447,046	114,850	2,282,446	1,311,401	880,227	2,013,725	77,024	40,613	63,420	168,890	198,469	536,602	1,395,042						
1946	6,474,011	2,286,952	107,343	2,146,894	1,198,802	874,497	1,789,686	104,121	9,829	42,950	219,966	193,802	508,391	1,273,137						
1945	5,865,065	2,108,385	101,813	1,978,418	1,072,731	845,008	1,454,174	259,213	730,198	47,177	187,656	187,961	396,567	910,929						
1944	5,670,879	1,934,419	100,271	1,814,113	1,017,244	746,694	1,308,926	283,062	7,037	48,998	180,163	181,281	345,703	784,178						
1943	5,543,992	1,763,868	99,400	1,690,720	981,094	666,238	1,214,015	243,605	5,989	52,525	188,061	177,855	350,912	731,276						
1942	5,450,471	1,601,916	99,709	1,507,336	923,765	544,234	1,089,074	195,906	4,023	52,147	174,232	178,000	334,957	651,904						
1941	5,196,319	1,482,590	97,206	1,333,064	872,089	424,521	986,412	110,375	17,118	49,886	203,509	179,341	321,108	586,207						
1940	4,887,900	1,397,339	91,273	1,205,435	811,400	360,792	913,023	64,419	39,297	43,349	223,941	180,298	282,224	522,095						
1939	4,727,050	1,339,563	87,411	1,136,412	766,956	338,391	870,762	41,387	23,222	43,597	203,883	180,360	266,707	497,276						
1938	4,621,914	1,286,582	85,295	1,080,591	734,687	317,290	849,079	35,015	14,655	43,256	167,896	180,847	264,275	488,888						
1937	4,389,649	1,051,379	83,391	1,051,379	703,444	321,508	833,789	31,740	27,302	43,320	197,457	183,400	275,634	463,642						
1936	4,380,881	1,236,712	88,391	1,079,004	724,658	327,229	833,789	31,740	27,302	43,320	197,457	183,400	275,634	476,164						
1935	4,196,671	1,061,650	80,458	934,371	640,993	273,483	726,510	20,843	12,894	52,373	147,539	183,145	244,599	387,264						
1934	4,177,950	968,214	80,118	884,532	607,676	258,691	685,951	19,586	3,918	57,561	125,362	183,131	248,996	371,727						
1933	4,169,370	891,883	80,281	872,406	617,253	243,906	684,424	17,109	7,942	54,351	114,580	183,240	248,563	356,287						
1932	4,269,868	820,195	80,586	956,355	670,737	263,148	683,148	19,073	17,717	55,135	139,336	185,032	266,288	414,342						
1931	4,188,749	788,586	79,239	1,066,895	723,920	326,269	824,115	21,249	36,568	64,720	193,379	180,904	294,689	483,614						
1930	4,043,422	740,006	76,248	1,094,883	728,709	348,541	852,703	21,981	47,626	66,229	201,646	156,625	324,343	534,468						
1929	3,671,100	699,035	69,519	1,063,633	691,359	354,286	807,988	22,924	43,866	59,582	217,105	132,224	364,402	526,684						
1928	3,275,687	650,621	62,193	969,237	644,209	309,334	728,544	25,591	27,621	51,635	191,088	119,349	333,794	466,362						
1927	3,085,613	56,819	56,819	894,699	604,266	271,174	670,397	23,908	21,888	50,511	166,059	112,401	309,005	429,377						
1926	3,013,985	600,664	56,823	888,987	604,266	271,174	670,397	23,908	21,888	50,511	166,059	112,401	309,005	429,377						
1925	2,783,023	576,216	50,861	817,928	557,490	248,087	611,675	22,712	21,329	49,809	155,061	100,614	300,557	408,418						
1924	2,524,906	530,071	45,474	786,648	506,026	219,913	557,295	16,829	19,920	45,941	136,503	93,243	293,095	381,857						
1923	2,266,923	485,661	39,894	653,459	454,326	190,318	511,905	13,091	20,814	41,531	107,246	82,603	278,838	365,071						
1922	1,978,948	443,130	34,524	598,153	412,009	178,427	470,556	11,748	21,626	37,751	99,264	72,429	271,979	333,786						
1921	1,783,079	395,297	30,614	546,820	374,719	163,098	438,532	10,162	17,209	37,869	86,623	60,305	243,045	297,301						
1920	1,729,220	395,297	30,617	543,747	374,719	163,098	426,302	10,162	17,209	37,869	86,623	60,305	243,045	297,301						
1919	1,543,866	350,642	27,766	495,244	343,133	146,459	397,226	7,471	13,652	36,774	67,425	47,848	224,277	274,990						
1918	1,363,826	309,556	25,377	448,233	301,283	141,883	376,171	4,246	11,693	31,724	47,785	40,000	231,316	263,729						
1917	1,215,944	276,304	24,163	387,659	263,524	118,887	324,766	6,635	6,935	27,693	48,621	39,840	209,860	199,183						
1916	1,142,498	235,395	23,349	326,524	236,524	93,887	274,766	5,898	5,898	23,111	46,383	39,735	187,458	156,451						
1915	1,140,640	206,868	23,134	303,864	214,119	86,814	237,008	5,539	5,539	21,266	51,185	37,021	198,700	144,915						
1914	1,064,893	201,090	22,610	293,666	207,472	84,560	224,766	4,342	7,976	21,820	50,714	36,863	192,364	137,861						

## Series R 17-30. Bell Telephone Companies—Property, Revenues, Expenses, Interest, Net Income, Dividends, Employees, and Wages: 1880 to 1970—Con.

[In thousands, except series R 29. Census figures in *italics*]

Year	Telephone plant, book value	Miles of wire <sup>1</sup>	Operating revenues			Operating expenses <sup>2</sup>	Other income, net <sup>4</sup>	Interest expenses	Net income	Dividends declared <sup>5</sup>	Employees	
			Total <sup>2</sup>	Local	Toll						Number <sup>6</sup>	Wages and salaries
1905	\$368,065	5,780	\$96,923	\$67,620	\$26,412	\$66,189	\$577	\$5,836	\$25,474	\$15,818	89,661	
1904	316,521	4,671	85,296	59,841	22,638	58,152	577		22,487	15,436	67,756	
1903	284,568	9,359	75,089	52,710	19,879	50,946	553		20,321	14,096	61,476	
1902		3,388						1,745		13,714	56,405	\$28,875
1902	250,013	3,282	64,176	44,845	16,906	44,838	457		16,129	10,608	55,403	
1901	211,780	2,445	54,177	37,971	14,329	35,824	373		15,464	9,884	45,990	
1900	180,700	1,962	46,086	32,414	12,098	30,632	300	2,390	13,364	7,894	37,067	
1899	145,511	1,519					198		12,095	6,647	29,818	
1898	118,124	1,159					168		10,577	6,294	22,955	
1897	104,488	951					144		9,735	6,127	19,608	
1896	95,242	806					144		8,833	5,481	16,558	
1895	87,859	675	24,059			15,488	138	656	8,053	5,067	14,699	
1894	77,781	577					117		7,708	4,662	12,553	
1893	73,136	508					105		6,630	4,967	11,862	
1892	67,636	441					84		8,114	4,631	11,602	
1891	62,190	382					83		6,741	4,398	9,713	
1890		240	16,405			11,144				3,168	8,645	
1890	58,512	332	16,153			9,068	59	279	6,866	4,101	8,740	
1889	51,372	280					60		6,202	3,802	7,550	
1888	44,436	244					75		5,747	3,658	7,445	
1887	40,799	203					42		5,506	3,444	6,683	
1886	38,325	172					32		5,160	3,246	6,162	
1885	38,619	156	10,002			5,124	32	28	4,882	3,107	5,766	
1884		137									5,769	
1883		115										
1882		88						8				
1881		52										
1880	15,702	34	3,098			2,374				303	3,338	
1880		30										

<sup>1</sup> Beginning 1957, excludes drop and block wire.<sup>2</sup> Includes miscellaneous revenues not shown elsewhere.<sup>3</sup> Excludes Federal income taxes.<sup>4</sup> Nonoperating income including Western Electric income less non-operating deductions from income.<sup>5</sup> Excludes intercompany payments.<sup>6</sup> As of Dec. 31.<sup>7</sup> Represents net loss.

## Series R 31-45. Independent Telephone Companies—Property, Revenues, Expenses, Interest, Net Income, Dividends, Employees, and Wages: 1916 to 1970

[In thousands, except series R 31 and R 44. Census figures, in *italics*, represent "systems and lines"; see text. Includes Alaska and Hawaii for all years]

Year	Companies included	Telephone plant		Miles of wire	Operating revenues			Operating expenses <sup>2</sup>	Federal income taxes	Miscellaneous income items (net)	Interest expenses	Net income	Dividends declared	Employees	
		Book value	Depreciation reserves		Total <sup>1</sup>	Local	Toll							Number	Wages and salaries
1970	684	\$11,175,403	\$2,203,425		\$2,791,304	\$1,453,662	\$1,232,084	\$1,952,904	\$224,326	\$47,146	\$304,859	\$356,094	\$243,387	142,000	\$1,001,008
1969	688	9,917,622	1,934,273		2,461,750	1,313,635	1,054,210	1,695,175	230,715	41,347	246,246	325,927	233,338	133,000	871,801
1968	654	8,714,127	1,705,577		2,152,316	1,178,891	891,800	1,477,393	214,630	32,366	196,501	293,484	202,747	123,000	781,627
1967	670	7,620,505	1,487,127		1,872,943	1,072,533	729,944	1,299,707	172,198	23,963	159,677	263,881	186,501	114,000	670,777
1966	666	6,877,526	1,333,240		1,734,341	1,000,283	668,752	1,183,853	174,322	16,877	133,991	257,241	159,156	110,000	612,105
1965	669	6,055,508	1,167,922		1,529,709	916,736	560,551	1,040,236	161,993	11,487	112,041	224,873	137,550	101,000	537,412
1964	663	5,452,292	1,039,244		1,386,143	849,035	491,720	934,421	161,036	10,154	97,494	201,013	125,829	95,000	485,065
1963	613	4,847,391	911,183		1,247,652	778,371	428,596	835,445	153,868	7,319	85,602	177,432	113,030	90,000	440,233
1962	601	4,334,645	792,986	35,017	1,119,531	710,073	372,005	754,569	137,506	7,597	75,889	157,003	103,427	86,000	404,428
1961	554	3,819,984	689,526	31,586	993,827	640,202	320,193	681,357	122,138	8,609	64,661	133,241	93,136	84,000	380,469
1960	550	3,395,865	600,405	28,594	905,744	585,004	289,400	630,187	107,092	6,974	57,249	116,998	80,880	85,000	359,341
1959	533	2,968,027	522,174	25,188	801,289	519,394	254,147	560,257	94,248	6,168	48,379	103,215	72,432	82,000	330,726
1958	504	2,609,007	460,755	22,667	708,792	459,906	217,470	502,806	76,461	5,638	42,634	86,409	68,968	81,000	310,270
1957	477	2,271,141	409,560	20,502	633,815	411,704	198,618	453,644	69,181	5,239	35,314	80,002	57,979	81,000	292,681
1956	437	1,926,743	364,616	17,478	570,929	370,587	178,728	402,318	67,472	2,035	25,749	76,636	51,584	78,000	261,218
1955	406	1,655,903	326,327	15,201	503,153	329,355	155,431	354,386	61,129	1,608	21,669	66,846	42,840	72,000	224,122
1954	392	1,444,320	293,008	13,587	449,464	285,965	137,820	327,318	48,841	1,767	19,271	55,136	37,209	70,000	214,073
1953	372	1,279,632	264,581	13,037	407,735	268,435	125,962	297,702	44,201	1,099	17,326	49,112	35,063	70,000	197,693
1952	372	1,124,094	239,895	11,337	347,307	226,436	109,943	265,597	31,140	984	15,038	36,368	24,598	68,000	163,349
1951	363	981,071	216,863	10,277	303,060	195,352	98,343	234,478	26,866	917	13,244	29,202		65,000	156,007
1950	379	878,167	203,265	9,176	270,347	170,536	91,512	211,493	21,473	1,217	11,974	28,765		63,000	147,317
1949	305	791,486	186,789		233,064	145,007	80,829	199,288						60,000	134,033
1948	291	667,782	174,735	7,128	203,578	124,219	72,898	161,499	12,843	374	8,015	21,621	4,877	54,000	112,565
1947	281	574,100	162,380	6,586	176,858	107,235	63,784	140,500	11,213		5,176	17,939	11,117	50,000	98,900
1946	265	498,567	151,959	6,609	154,757	93,857	56,754	117,195	12,522	1,188	5,067	18,781	11,108	44,000	73,211

See footnotes at end of table.

Series R 31-45. Independent Telephone Companies—Property, Revenues, Expenses, Interest, Net Income, Dividends, Employees, and Wages: 1916 to 1970—Con.

[In thousands, except series R 31 and R 44. Census figures, in *italics*, represent "systems and lines"; see text. Includes Alaska and Hawaii for all years]

Year	Companies included	Telephone plant			Operating revenues			Operating expenses <sup>2</sup>	Federal income taxes	Miscellaneous income items (net)	Interest expenses	Net income	Dividends declared	Employees	
		Book value	Depreciation reserves	Miles of wire	Total <sup>1</sup>	Local	Toll							Number	Wages and salaries
1945	227	\$449,739	\$138,333	5,637	\$135,494	\$84,155	\$48,019	\$94,889	\$19,697	\$382	\$5,235	\$14,414	\$4,466	36,000	\$54,478
1944	229	438,962	126,970	5,521	126,081	80,752	42,519	86,482	18,704	327	5,289	14,329	4,538	31,409	46,177
1943	231	432,734	114,347	5,573	117,011	77,015	37,488	78,602	17,862	837	5,143	14,106	5,880	30,309	41,386
1942	210	412,440	98,980	5,829	97,071	68,786	25,801	66,459	11,875	283	5,323	12,725	6,695	32,196	40,473
1941	210	400,886	92,055	-----	88,519	64,276	21,878	68,712	-----	173	5,346	13,705	-----	-----	-----
1940	210	383,315	85,453	-----	80,846	59,993	18,676	61,478	-----	181	5,541	11,768	-----	-----	-----
1939	201	369,809	81,047	-----	75,768	56,539	17,172	55,992	-----	338	5,809	12,444	-----	-----	-----
1938	201	357,472	76,290	-----	71,508	53,678	15,923	53,366	-----	338	5,823	10,573	-----	-----	-----
1937	200	351,350	73,127	-----	69,957	51,956	16,145	51,634	-----	338	5,771	10,823	-----	-----	-----
1937	50,584	612,264	-----	9,253	188,649	96,053	29,258	-----	-----	-----	-----	-----	-----	57,461	52,998
1936	201	346,061	70,889	-----	65,500	49,041	14,803	47,481	-----	346	6,148	10,259	-----	-----	-----
1935	202	341,949	67,001	-----	61,170	46,273	13,029	43,974	-----	396	6,347	8,830	-----	-----	-----
1934	211	374,654	71,263	4,803	63,934	-----	-----	48,466	1,283	-----	6,229	6,977	6,977	27,048	25,010
1933	261	429,087	74,832	5,027	68,533	-----	-----	51,940	1,073	-----	6,727	8,179	8,179	28,836	23,861
1932	271	428,189	67,967	5,141	77,067	-----	-----	55,725	1,147	-----	9,616	11,786	11,786	29,462	-----
1932	55,353	522,634	-----	7,092	105,176	70,351	17,900	-----	-----	-----	-----	-----	-----	52,735	43,775
1931	287	431,749	64,909	5,154	87,867	-----	-----	61,538	1,293	-----	-----	15,355	12,437	33,660	-----
1930	314	418,466	59,758	4,880	90,884	-----	-----	63,860	1,454	-----	-----	16,628	12,940	35,715	-----
1929	323	410,294	60,701	5,023	90,926	-----	-----	63,549	1,661	-----	-----	17,612	12,075	35,434	-----
1928	316	376,955	56,284	4,766	83,866	-----	-----	59,446	1,740	-----	-----	14,966	10,834	35,310	-----
1927	312	334,944	51,725	4,476	76,411	-----	-----	55,550	1,878	-----	-----	12,555	10,288	31,505	-----
1927	60,123	463,262	-----	7,017	128,874	76,955	23,451	-----	-----	-----	-----	-----	-----	66,407	56,720
1926	293	327,450	50,623	4,728	78,240	-----	-----	57,376	1,661	-----	-----	12,476	9,988	33,848	-----
1925	268	289,157	49,051	4,045	73,122	-----	-----	54,339	-----	-----	-----	11,714	8,809	-----	-----
1924	274	271,607	43,508	4,169	69,236	-----	-----	52,163	-----	-----	-----	9,936	7,361	-----	-----
1923	268	270,076	48,686	3,770	67,486	-----	-----	51,078	-----	-----	-----	9,231	6,816	-----	-----
1922	1,134	339,963	-----	4,837	85,130	-----	-----	67,945	-----	-----	-----	11,036	8,726	-----	-----
1922	57,227	422,104	64,302	6,652	119,854	72,343	16,972	66,812	-----	-----	-----	10,041	5,730	69,305	53,576
1921	1,083	339,733	-----	4,565	79,704	-----	-----	66,781	-----	-----	-----	7,809	6,284	-----	-----
1920	1,034	349,795	-----	4,735	80,561	-----	-----	67,548	-----	-----	-----	7,559	8,204	-----	-----
1917	702	245,787	-----	3,890	50,485	40,967	9,152	37,260	-----	-----	-----	8,507	7,397	37,381	-----
1917	53,089	351,639	27,515	5,693	79,582	48,579	10,436	46,411	-----	310	5,603	8,264	5,249	63,929	30,755
1916	694	258,417	-----	3,871	48,591	-----	-----	34,521	-----	-----	-----	9,268	6,843	33,952	-----

<sup>1</sup> Includes miscellaneous revenues not shown elsewhere.

<sup>2</sup> Excludes Federal income taxes.

Series R 46-55. Western Union Telegraph Company—Summary of Facilities, Traffic, and Finances: 1866 to 1915

[In thousands, except series R 46. Census figures in *italics*. Covers landline (domestic) and cable (international) operations]

As of, or for, year ending—	Telegraph offices	Miles of wire	Messages handled	Total book capitalization	Revenues	Expenses <sup>1</sup>	Miscellaneous income items (net)	Interest expenses	Net income	Dividends declared
	46	47	48	49	50	51	52	53	54	55
1915, Dec. 31	25,142	1,584	-----	\$167,338	\$51,100	\$40,797	\$1,213	\$1,348	\$10,168	\$4,986
1914, Dec. 31	25,784	1,582	-----	162,678	45,880	40,138	972	1,343	5,371	3,989
1913, Dec. 31	25,060	1,561	-----	158,855	45,784	42,327	1,116	1,338	3,235	2,992
1913, June 30	26,300	1,543	-----	158,692	43,978	40,432	927	1,338	3,135	2,991
1912, Dec. 31	30,864	1,814	109,378	226,337	62,322	55,610	1,941	2,769	6,384	6,180
1912, June 30	25,392	1,517	-----	159,394	39,438	34,846	1,107	1,697	4,002	2,991
1911, June 30	24,926	1,487	-----	166,762	33,598	27,825	1,424	1,826	5,371	2,990
1910, June 30	24,825	1,429	75,135	164,382	30,741	24,544	1,133	1,951	5,379	2,987
1909, June 30	24,321	1,383	68,053	159,246	27,600	21,364	1,333	1,956	5,614	2,739
1908, June 30	23,853	1,359	62,371	156,371	25,890	23,553	1,063	1,731	1,670	1,715
1907, Dec. 31	33,110	1,578	108,794	220,294	49,685	39,227	1,899	2,653	9,704	7,477
1907, June 30	24,760	1,321	74,805	153,585	29,939	24,674	1,058	1,420	4,903	4,867
1906, June 30	24,323	1,256	71,487	146,349	27,828	21,838	1,093	1,335	5,749	4,867
1905, June 30	23,814	1,185	67,477	145,993	26,347	20,227	1,066	1,227	5,959	4,867
1904, June 30	23,458	1,155	67,904	141,271	26,571	19,783	1,116	1,175	6,729	4,867
1903, June 30	23,120	1,089	69,791	138,409	26,525	19,262	2,353	1,166	8,450	4,867
1902, Dec. 31	27,377	1,318	91,655	162,947	39,486	28,999	1,444	1,950	9,382	6,257
1902, June 30	23,567	1,030	69,375	133,150	25,602	18,941	670	1,008	6,323	4,867
1901, June 30	23,238	973	65,657	129,715	23,865	17,979	1,773	956	6,703	4,867
1900, June 30	22,900	933	63,168	128,856	22,811	16,934	405	991	5,292	4,867
1899, June 30	22,285	905	61,398	123,818	22,048	16,463	422	1,027	4,980	4,866
1898, June 30	22,210	874	62,174	123,718	21,683	16,231	671	992	5,130	4,866
1897, June 30	21,769	841	58,152	123,484	20,630	15,515	629	896	4,849	4,791
1896, June 30	21,725	827	58,760	121,436	20,820	15,406	474	909	4,980	4,766

See footnotes at end of table.

## Series R 46-55. Western Union Telegraph Company—Summary of Facilities, Traffic, and Finances: 1866 to 1915—Con.

[In thousands, except series R 46. Census figures in *italics*]

As of, or for, year ending—	Telegraph offices	Miles of wire	Messages handled	Total book capital- ization	Revenues	Expenses <sup>1</sup>	Miscel- laneous income items (net)	Interest expenses	Net income	Dividends declared
	46	47	48	49	50	51	52	53	54	55
1895, June 30	21,360	803	58,307	\$121,278	\$20,421	\$14,756	\$477	\$898	\$5,244	\$4,766
1894, June 30	21,156	791	58,632	120,285	20,059	14,763	513	904	4,906	4,739
1893, June 30	21,078	769	66,592	120,364	22,983	16,057	575	899	6,602	4,632
1892, June 30	20,700	739	62,387	118,423	21,769	14,926	599	932	6,511	4,308
1891, June 30	20,098	716	59,148	116,255	21,135	15,012	499	903	5,719	4,308
1890, June 30	19,382	679	55,879	115,273	20,055	13,701	637	898	6,093	4,955
1889, June 30	18,470	648	54,108	108,430	19,075	13,323	725	820	5,651	4,308
1888, June 30	17,241	616	51,464	101,968	17,584	13,493	585	494	4,132	4,041
1887, June 30	15,658	525	47,395	96,481	15,683	12,021	504	608	3,557	812
1886, June 30	15,142	490	43,290	93,794	14,871	11,384	511	530	3,418	3,400
1885, June 30	14,184	462	42,097	92,616	15,298	11,029	509	505	4,274	5,198
1884, June 30	13,761	451	42,076	92,459	16,693	12,012	565	503	4,744	5,697
1883, June 30	12,917	433	41,181	90,961	16,596	10,490	459	433	6,132	4,899
1882, June 30	12,068	374	38,842	88,971	14,819	9,035	579	430	5,933	4,798
1881, June 30	10,737	327	32,500	87,123	11,552	7,630	2,228	437	5,713	3,733
1880, June 30	9,077	234	29,216	64,080	10,581	5,863	437	435	4,720	3,280
1880, June 1	12,510	391	31,703	96,031	16,697	10,213	---	561	5,970	4,137
1879, June 30	8,534	212	25,070	62,699	9,118	5,239	395	438	3,336	2,295
1878, June 30	8,014	206	23,919	58,237	8,637	5,656	179	462	2,698	2,085
1877, June 30	7,500	194	21,159	56,318	9,089	6,096	194	443	2,694	1,521
1876, June 30	7,072	184	18,730	55,844	9,143	6,061	314	535	2,862	2,532
1875, June 30	6,565	179	17,154	54,673	<sup>2</sup> 4,330	<sup>2</sup> 2,832	<sup>2</sup> 33	<sup>2</sup> 228	<sup>2</sup> 1,304	1,351
1874, Dec. 31 <sup>3</sup>	6,188	176	16,329	54,773	8,872	5,935	148	333	2,752	151
1873, Dec. 31 <sup>3</sup>	5,740	154	14,457	53,331	8,612	6,506	155	266	1,995	269
1872, Dec. 31 <sup>3</sup>	5,237	137	12,444	---	8,471	5,558	97	370	2,640	259
1871, Dec. 31 <sup>3</sup>	4,606	121	10,646	---	7,384	4,916	74	318	2,224	222
1870, Dec. 31 <sup>3</sup>	3,972	112	9,158	---	6,731	4,539	116	327	1,982	1,035
1869, Dec. 31 <sup>3</sup>	3,607	105	7,935	48,402	6,672	4,346	225	325	2,226	1,810
1868, Dec. 31 <sup>3</sup>	3,219	98	6,405	47,677	6,636	3,873	139	346	2,557	832
1867, Dec. 31 <sup>3</sup>	2,565	85	5,879	47,426	5,964	3,693	182	371	2,082	1,608
1866, Dec. 31 <sup>3</sup>	2,250	76	---	24,205	4,619	2,686	185	162	1,956	1,051

<sup>1</sup> Including facility rentals and taxes.<sup>2</sup> Income data are for 6 months ending June 30.<sup>3</sup> Telegraph offices, miles of wire, messages handled, and total book capitalization are as of June 30.

## Series R 56-70. Domestic Telegraph Industry—Messages, Property, Revenues, Expenses, Net Income, Dividends, Employees, and Wages: 1916 to 1970

[In thousands, except series R 67 and R 69. Census figures in *italics*]

Year	Messages handled	Private-line telegraph service revenues		Telegraph plant		Miles of wire	Operat- ing revenues	Operat- ing ex- penses <sup>2</sup>	Federal income taxes <sup>3</sup>	Net income	Divi- dends declared	Employees		Bell Teletypewriter Exchange (T.W.X.) Service	
		Tele- graph com- panies	Tele- phone com- panies <sup>1</sup>	Book value	Depre- ciation reserves							Number	Wages and salaries	Number of teletype- writers	Reven- ues
		56	57	58	59							60	61	62	63
1970	69,679	\$125,188	\$130,050	\$1,029,149	\$331,360	621	\$402,456	\$368,446	---	\$26,074	\$19,681	24,293	\$209,294	40,766	\$75,214
1969	77,059	122,294	138,091	968,401	307,518	633	391,338	358,445	---	22,724	18,076	25,164	203,836	42,605	71,051
1968	85,645	111,815	128,328	916,712	284,677	753	358,202	328,622	---	21,569	16,776	26,502	196,621	46,411	71,118
1967	89,078	104,950	121,461	871,425	279,647	829	334,983	310,791	---	22,062	15,917	26,524	190,085	47,200	72,367
1966	92,682	94,074	118,425	778,810	262,843	891	319,329	294,435	---	20,712	13,935	27,198	180,172	48,663	77,207
1965	94,302	93,319	118,508	688,757	242,974	964	305,615	281,835	---	17,833	11,085	26,179	164,793	56,675	72,902
1964	97,448	91,922	112,190	634,636	221,783	984	299,410	278,324	(\$1,200)	16,974	10,501	26,607	161,129	59,843	72,470
1963	104,220	84,687	115,953	596,587	198,930	1,010	286,822	266,660	1,000	24,931	10,490	28,015	160,650	57,598	70,321
1962	112,487	61,981	118,746	541,419	183,099	1,043	264,119	257,139	(3,730)	10,405	10,484	30,021	168,278	56,693	69,338
1961	117,263	58,968	123,661	434,933	177,850	1,044	265,727	253,374	3,295	11,833	9,704	31,425	165,356	57,920	67,859

See footnotes at end of table.

TELEPHONE AND TELEGRAPH SYSTEMS

R 56-70

Series R 56-70. Domestic Telegraph Industry—Messages, Property, Revenues, Expenses, Net Income, Dividends, Employees, and Wages: 1916 to 1970—Con.

[In thousands, except series R 67 and R 69. Census figures in *italics*]

Year	Messages handled	Private-line telegraph service revenues		Telegraph plant		Miles of wire	Operating revenues	Operating expenses <sup>2</sup>	Federal income taxes	Net income	Dividends declared	Employees		Bell Teletypewriter Exchange (TWX) Service	
		Telegraph companies	Telephone companies <sup>1</sup>	Book value	Depreciation reserves							Number	Wages and salaries	Number of teletypewriters	Revenues
1960	124,819	\$54,841	\$118,384	\$398,023	\$168,605	1,063	\$262,365	\$246,768	\$4,350	\$10,205	\$3,970	32,655	\$164,524	54,744	\$62,539
1959	130,993	49,763	108,943	380,216	157,382	1,058	260,849	235,762	11,000	14,755	7,941	33,151	159,842	51,631	58,111
1958	131,867	39,186	85,850	364,438	149,693	1,076	240,729	225,146	4,975	11,062	7,506	33,620	154,032	47,491	51,284
1957	143,947	34,414	77,735	350,860	147,334	1,078	245,549	228,219	5,993	12,911	7,165	36,467	159,157	44,923	47,944
1956	151,600	29,859	66,074	332,727	141,490	1,088	238,362	219,231	6,665	12,060	6,226	37,754	153,625	41,628	44,372
1955	153,910	24,458	55,309	310,968	135,826	1,100	228,816	206,024	9,613	10,331	5,695	37,785	143,289	38,946	41,758
1954	152,582	20,163	48,732	300,126	130,183	1,129	209,635	194,657	6,208	4,480	3,730	37,009	137,521	36,672	38,349
1953	162,188	17,453	44,619	289,448	128,776	1,151	208,578	193,863	5,743	13,242	3,690	38,957	139,489	35,272	33,174
1952	151,712	15,031	40,328	286,372	126,580	1,194	184,396	183,395	1,199	14,724	3,689	39,853	126,974	33,938	26,503
1951	180,151	12,669	36,265	284,293	123,825	1,225	192,089	182,023	4,007	4,711	3,381	40,319	127,818	30,815	23,344
1950	178,904	9,139	31,747	294,451	128,227	1,298	177,994	167,280	2,050	7,953	2,459	40,482	116,937	28,393	20,445
1949	175,323	7,528	28,017	306,316	133,979	1,438	171,893	173,505	-----	3,468	-----	41,660	125,871	25,526	17,940
1948	191,013	5,696	25,225	310,295	136,267	1,632	183,429	185,362	-----	1,265	1,228	48,967	140,901	23,423	16,302
1947	213,780	4,320	21,829	314,275	142,664	1,743	199,654	185,314	2,176	-----	-----	53,572	138,976	20,208	13,743
1946	212,072	3,681	20,732	361,618	161,826	2,044	175,536	183,366	-----	10,030	-----	57,644	137,293	14,838	12,946
1945	236,169	3,572	23,627	357,784	157,243	2,247	182,048	174,848	-----	7,834	2,433	63,446	126,662	13,031	16,798
1944	225,462	3,655	20,727	358,822	152,795	2,272	173,207	160,169	2,267	5,117	2,167	61,481	112,553	15,979	20,613
1943	231,692	3,688	17,590	366,347	153,730	2,303	166,953	159,020	3,236	5,746	2,090	61,037	111,822	16,013	23,456
1942	223,148	3,889	19,318	384,332	120,863	2,294	145,789	134,031	4,448	3,836	2,090	64,874	92,450	16,607	16,233
1941	210,928	3,079	14,830	380,501	114,174	2,281	130,519	121,841	1,450	4,016	2,090	65,363	84,267	16,130	10,169
1940	191,645	2,170	14,621	375,021	97,746	2,269	114,587	110,856	-----	372	1,045	59,670	74,736	14,855	8,436
1939	189,055	2,185	15,744	388,837	87,569	2,277	109,899	106,995	-----	3,152	-----	57,513	71,287	14,267	7,782
1938	185,639	2,066	16,834	387,897	83,827	2,279	106,813	105,996	-----	5,248	-----	57,190	70,124	-----	6,803
1937	200,711	1,981	19,098	387,749	80,678	2,275	117,228	111,614	-----	523	-----	64,084	77,745	12,499	6,775
1937	206,937	-----	-----	418,231	-----	2,302	117,032	-----	-----	-----	1,604	61,254	77,928	-----	-----
1936	193,566	1,897	18,538	384,946	42,398	2,270	115,772	103,991	116	5,129	784	67,862	71,155	10,646	5,722
1935	176,250	1,782	17,007	383,216	42,574	2,245	106,262	96,076	-----	3,213	2,090	62,257	65,030	7,894	3,864
1934	155,215	1,749	19,131	383,165	42,940	2,247	102,557	96,069	-----	380	-----	62,839	65,810	5,776	2,300
1933	143,553	1,856	20,023	383,886	43,947	2,245	96,613	90,669	-----	330	-----	58,368	60,401	3,578	995
1932	143,075	1,830	21,284	388,960	44,191	2,239	97,902	96,339	-----	5,099	1,045	60,997	65,760	2,524	514
1932	147,941	-----	-----	415,694	-----	2,250	97,789	-----	-----	-----	-----	60,933	66,988	-----	-----
1931	183,373	1,787	25,245	382,737	46,222	2,250	126,697	120,166	-----	537	7,888	72,916	90,084	1,479	7
1930	211,971	1,881	27,034	379,869	53,095	2,269	148,223	139,141	486	3,942	8,188	84,962	108,557	-----	-----
1929	234,050	1,947	25,197	357,343	53,710	2,251	163,358	146,867	1,307	12,796	8,188	87,435	113,928	-----	-----
1928	211,559	1,754	21,057	307,113	50,791	2,202	153,329	135,081	1,798	13,889	8,085	77,644	94,415	-----	-----
1927	203,365	1,853	18,016	292,817	46,991	2,095	147,845	128,940	2,126	14,105	7,981	76,183	91,493	-----	-----
1927	215,595	-----	-----	338,143	-----	2,138	159,632	142,213	-----	16,090	8,191	74,903	89,384	-----	-----
1926	203,035	1,899	16,548	281,503	43,432	1,977	149,721	131,473	2,070	13,841	7,981	79,755	101,003	-----	-----
1925	185,187	1,601	15,153	266,571	40,675	1,944	141,630	122,613	2,062	15,153	7,232	78,262	90,911	-----	-----
1924	162,700	1,510	13,207	252,678	38,146	1,834	125,490	111,853	-----	12,152	6,983	68,561	80,692	-----	-----
1923	158,468	1,502	13,106	238,923	35,326	1,836	124,172	109,197	-----	13,094	6,983	69,045	79,341	-----	-----
1922	149,219	1,689	12,145	230,644	32,100	1,807	116,659	100,352	-----	14,311	6,983	62,576	70,497	-----	-----
1922	181,519	-----	-----	254,030	-----	1,845	128,639	111,724	-----	15,675	7,113	62,299	63,737	-----	-----
1921	139,544	1,873	11,270	224,876	23,293	1,787	111,707	101,817	-----	7,932	6,983	64,395	71,942	-----	-----
1920	155,884	1,489	10,541	214,986	19,289	1,711	124,379	113,253	-----	9,199	6,983	74,448	86,037	-----	-----
1919	139,435	1,318	7,969	203,010	16,987	1,686	105,409	93,165	-----	9,595	6,983	65,181	66,351	-----	-----
1918	134,031	1,121	5,811	190,712	12,965	1,620	90,369	80,511	-----	8,103	6,983	69,528	58,376	-----	-----
1917	129,273	1,300	5,202	184,351	10,792	1,863	81,623	67,084	-----	12,336	6,983	60,122	46,953	-----	-----
1917	151,725	-----	-----	183,438	-----	1,839	91,313	79,409	-----	12,125	7,166	60,376	40,512	-----	-----
1916	-----	1,365	4,162	-----	-----	1,877	66,471	54,335	-----	11,764	5,985	-----	-----	-----	-----

- Represents zero.  
<sup>1</sup> Includes minor amounts for Hawaiian Telephone Co.  
<sup>2</sup> Excludes Federal income taxes.  
<sup>3</sup> Figures in parentheses represent reversal of income taxes charged in previous years.  
 The Western Union Telegraph Company has numerous items deductible from taxable income, but not recorded in the accounts as income deductions; this accounts for the fact that it reported net income in the late sixties with no concurrent liability for income taxes.

<sup>4</sup> This figure is affected by the \$18,126,223 loss on the sale of the Western Union cables system recorded as a cables loss and the \$8,250,000 tax reduction therefore recorded as a domestic telegraph gain.  
<sup>5</sup> Figures represent net loss.  
<sup>6</sup> Excludes wire owned and operated wholly by Class I railroads and landwire of ocean-cable companies.

Series R 71-74. Domestic Telegraph Message Rates and Teletypewriter Exchange Service (TWX) Rates Between New York City and Selected Cities: 1850 to 1970

Year	Between New York City and—				Year	Between New York City and—			
	Philadelphia	Chicago	Denver	San Francisco		Philadelphia	Chicago	Denver	San Francisco
	71	72	73	74		71	72	73	74
<b>TELEGRAPH RATES <sup>1</sup></b>					<b>TELEGRAPH RATES <sup>1</sup>—Con.</b>				
In effect Jan. 1, 1970-----	\$2.25	\$2.25	\$2.25	\$2.25	In effect in—Con.	(NA)	\$0.50	\$2.00	\$2.00
Made effective:					1876-----	(NA)	.25	(NA)	(NA)
1968, Nov. 1-----	2.25	2.25	2.25	2.25	1875-----	\$0.30	1.00	2.50	2.50
1966, Jan. 1-----	1.27	1.70	2.23	2.23	1878-----	.25	1.00	(NA)	5.00
1963, July 10-----	1.20	1.60	2.10	2.10	1870-----	.45	2.05	(NA)	7.45
1960, Oct. 17-----	1.10	1.45	1.90	1.90	1869-----	.25	1.85	7.00	7.45
1958, Aug. 1-----	1.05	1.40	1.85	1.85	1866-----	.25	1.55		
1956, Aug. 26-----	.95	1.30	1.75	1.75	1850-----	.25			
1954, July 15-----	.85	1.25	1.70	1.70	<b>TELETYPEWRITER EXCHANGE SERVICE RATES <sup>2</sup></b>				
1952, July 6-----	.65	1.10	1.55	1.70	In effect Jan. 1, 1970-----	.25	.45	.55	.60
1951, Sept. 1-----	.60	1.00	1.45	1.60	Made effective:				
1950, Feb. 1-----	.40	.75	1.25	1.45	1968, Sept. 1-----	.25	.45	.55	.60
1946, Dec. 29-----	.36	.72	1.08	1.44	1960, Feb. 7-----	.45	1.15	1.65	1.75
1946, June 12-----	.33	.66	.99	1.32	1953, July 1-----	.45	1.20	1.65	1.75
1919, Apr. 1-----	.30	.60	.90	1.20	1946, Feb. 1-----	.35	1.05	1.55	1.75
In effect in—					1931, Nov. 21 <sup>3</sup> -----	.85	1.10	1.80	2.40
1908-----	.25	.50	.75	1.00					
1890-----	.20	.40	.75	1.00					
1886-----	.25	.50	.75	1.00					
1884-----	(NA)	.50	(NA)	1.00					
1883-----	.15	.50	1.25	1.50					
1877-----	(NA)	.60	(NA)	(NA)					

NA Not available.  
<sup>1</sup> Beginning Sept. 1, 1951, minimum charge for 15 text words or less; prior to that, for 10 text words or less.

<sup>2</sup> Prior to September 1966, telephone company rates for 3 minutes or less, 2-way; thereafter, for each minute or fraction thereof. Since 1959, the telegraph company has offered similar service called "Telex" with a different rate structure.  
<sup>3</sup> Beginning of service.

Series R 75-88. International Telegraph Industry—Messages, Property, Ocean-Cable Mileage, Countries Served by Radiotelegraph, Revenues, Expenses, Net Income, Employees, and Wages: 1907 to 1970

[In thousands, except series R 82 and R 87. Census figures in italics. Includes Hawaii and Puerto Rico]

Year	Telegraph messages <sup>1</sup>			Overseas telephone calls <sup>2</sup>	Telegraph plant		Nautical miles of ocean-telegraph cable	Overseas countries served by direct radio-telegraph circuits <sup>3</sup>	Operating revenues	Operating expenses <sup>4</sup>	Federal income taxes	Net income	Employees <sup>5</sup>	
	Total	Cable	Radio		Book value	Depreciation reserves							Number	Wages and salaries
	75	76	77		78	79							80	81
1970-----	32,241	6,548	25,693	25,813	\$351,674	\$93,355	—	60	\$193,808	\$155,708	\$11,887	\$42,346	7,599	\$71,709
1969-----	32,235	6,832	25,403	20,660	320,629	81,351	8	62	179,993	142,413	12,421	37,253	7,938	65,463
1968-----	30,705	6,560	24,145	15,166	282,412	79,225	8	64	153,547	123,997	8,527	21,212	7,727	59,873
1967-----	29,953	6,577	23,376	12,332	250,722	70,561	8	66	132,427	107,565	6,784	19,324	7,541	55,437
1966-----	29,925	6,663	23,262	9,932	213,359	62,623	8	68	121,516	96,133	6,550	14,779	7,437	52,217
1965-----	28,830	6,467	22,363	8,108	189,242	56,584	8	69	106,696	87,374	5,448	13,110	7,581	50,531
1964-----	30,102	9,365	20,737	6,382	191,412	71,452	38	70	107,560	91,109	5,439	9,158	9,041	53,131
1963-----	29,390	11,260	18,130	5,290	153,465	66,939	42	71	97,822	85,102	3,611	8,638	9,963	51,905
1962-----	28,568	11,318	17,250	4,914	163,360	72,394	55	72	92,372	82,104	4,083	8,118	10,522	50,651
1961-----	28,345	11,323	17,022	4,365	172,050	85,210	71	74	90,049	78,379	4,926	8,467	10,734	48,876
1960-----	28,278	11,186	17,092	3,713	163,798	82,610	71	77	86,976	76,885	4,511	7,991	11,011	47,636
1959-----	28,133	10,807	17,326	3,039	157,557	83,679	75	83	84,377	71,726	5,815	8,328	11,239	44,531
1958-----	26,876	10,420	16,456	2,688	154,439	82,018	76	86	77,281	67,044	4,868	6,605	11,182	42,855
1957-----	27,838	10,647	17,191	2,421	149,439	80,069	76	84	76,845	66,258	5,386	5,921	11,502	41,994
1956-----	27,348	11,012	16,336	2,024	139,818	77,629	76	85	73,472	60,862	5,733	6,186	11,306	41,288
1955-----	25,642	10,671	14,971	1,742	135,178	76,432	76	85	68,050	58,366	6,328	5,020	11,844	40,548
1954-----	24,357	10,619	13,738	1,529	133,667	75,987	78	85	63,811	54,654	4,854	3,333	11,814	39,241
1953-----	23,725	10,085	13,640	1,440	131,168	75,348	78	85	59,727	53,217	4,308	3,390	11,686	37,507
1952-----	23,880	9,756	14,124	1,364	127,101	72,923	78	85	57,606	51,557	2,474	4,393	11,540	36,056
1951-----	24,043	10,059	13,984	1,263	127,310	73,929	78	85	56,949	49,087	3,504	4,526	11,081	33,120
1950-----	22,578	9,969	12,609	1,000	136,168	82,757	88	83	50,333	45,226	1,304	4,538	10,759	30,240
1949-----	20,891	10,390	10,501	853	134,332	82,897	88	83	46,595	45,959	525	619	11,150	31,269
1948-----	22,136	11,022	11,114	798	135,626	82,087	90	81	46,348	47,435	519	778	11,755	31,717
1947-----	23,960	11,835	12,125	664	132,534	79,426	91	76	45,579	49,358	263	7,215	12,404	33,678
1946-----	22,272	11,069	11,203	632	129,147	76,769	91	75	45,199	44,999	230	836	11,557	30,497
1945-----	21,047	10,531	10,516	360	137,623	86,197	91	72	49,879	37,905	7,190	7,907	9,579	25,153
1944-----	17,266	10,386	6,880	173	136,329	84,550	91	69	46,981	34,340	6,983	7,454	7,893	20,002
1943-----	15,991	10,159	5,832	154	138,436	83,909	95	65	40,254	29,450	6,424	6,508	7,591	16,573
1942-----	13,020	8,012	5,008	135	139,360	83,807	95	68	35,812	23,423	4,600	4,525	7,232	14,553
1941-----	16,511	7,434	9,077	117	141,292	82,723	95	61	36,022	28,425	3,201	3,814	8,206	13,728
1940-----	16,619	7,667	8,952	73	142,015	81,240	95	60	32,087	27,035	1,359	3,598	8,083	12,809
1939-----	18,725	9,300	9,425	76	146,236	81,860	95	55	30,612	26,518	524	2,074	8,176	12,663
1938-----	18,306	9,612	8,694	75	147,747	81,263	95	53	26,895	25,577	219	727	8,229	12,333
1937-----	16,331	11,129	5,202	—	82,533	—	104	—	22,275	—	—	—	5,408	7,408
1937-----	19,768	10,376	9,392	75	148,082	79,517	95	52	29,648	25,511	530	2,936	8,428	12,302
1936-----	17,641	9,819	7,822	48	147,723	78,082	95	52	27,173	24,042	306	2,004	8,182	11,538
1935-----	15,669	9,050	6,619	23	147,708	76,613	95	50	25,360	23,693	186	693	8,134	11,033
1934-----	14,464	9,287	5,177	27	147,662	75,473	97	49	25,449	23,177	259	1,395	7,851	10,754
1933-----	15,365	10,456	4,909	30	146,602	74,523	97	48	24,649	21,532	227	3,467	7,337	9,615
1932-----	10,437	—	—	—	90,751	—	96	—	16,927	—	—	—	7,790	6,961
1932-----	14,940	—	—	—	145,813	73,066	98	46	23,442	21,707	169	2,368	7,553	10,009
1931-----	17,414	12,551	4,863	33	148,847	62,050	98	43	28,584	23,919	201	5,610	8,114	11,178

See footnotes at end of table.

Series R 75-88. International Telegraph Industry—Messages, Property, Ocean-Cable Mileage, Countries Served by Radiotelegraph, Revenues, Expenses, Employees, and Wages: 1907 to 1970—Con.

[In thousands, except series R 82 and R 87. Census figures in *italics*. Includes Hawaii and Puerto Rico]

Year	Telegraph messages <sup>1</sup>			Overseas telephone calls <sup>2</sup>	Telegraph plant		Nautical miles of ocean-telegraph cable	Overseas countries served by direct radiotelegraph circuits <sup>3</sup>	Operating revenues	Operating expenses <sup>4</sup>	Federal income taxes	Net income	Employees <sup>5</sup>	
	Total	Cable	Radio		Book value	Depreciation reserves							Number	Wages and salaries
	75	76	77		79	80							87	88
1930	20,409	15,258	5,151	33	\$147,236	\$64,994	98	42	\$35,360	\$27,010	\$366	\$9,775	8,999	\$13,604
1929	21,565	16,478	5,092	30	185,797	72,671	97	34	39,656	27,559	798	13,705	8,579	13,129
1928	17,562	14,812	2,750	23	126,770	69,124	93	30	34,264	21,643	-----	11,368	2,299	3,322
1927	17,765	13,987	3,778	-----	88,556	-----	90	-----	20,137	11,519	-----	7,755	6,535	9,536
1927	16,093	13,793	2,300	12	122,635	67,668	91	26	32,083	21,340	-----	9,814	2,332	3,395
1926	15,493	13,298	2,195	9	116,179	60,904	88	20	32,672	22,293	-----	11,159	2,309	3,469
1925	7,580	5,520	2,060	10	110,106	59,370	83	16	34,811	22,726	-----	11,526	2,352	3,659
1924	7,088	5,198	1,890	12	107,357	54,834	83	14	33,636	21,360	-----	10,962	2,340	3,463
1923	6,165	4,465	1,700	11	101,011	52,011	79	12	32,173	21,725	-----	9,768	2,349	3,459
1922	11,968	9,603	2,365	-----	72,632	-----	77	-----	21,319	12,150	-----	8,193	6,333	7,425
1922	5,437	3,992	1,445	10	92,073	49,142	73	10	34,191	22,539	-----	11,058	2,603	3,902
1921	4,947	3,987	960	5	90,139	46,467	76	9	35,976	22,570	-----	10,399	3,111	4,283
1920	4,387	4,037	350	-----	83,799	42,059	75	8	40,507	24,287	-----	11,463	3,062	4,882
1919	-----	581	-----	-----	74,090	37,145	69	4	22,584	12,267	-----	5,357	2,688	3,938
1918	-----	418	-----	-----	64,058	31,481	69	4	17,299	10,425	-----	2,965	-----	-----
1917	6,573	6,451	122	-----	59,871	-----	71	-----	16,719	9,281	-----	5,707	4,347	3,252
1917	-----	485	-----	-----	63,116	26,763	69	4	15,274	7,838	-----	3,434	-----	-----
1916	-----	378	-----	-----	63,256	21,349	68	4	10,878	4,706	-----	3,318	-----	-----
1912	6,121	5,841	280	-----	58,136	7,600	63	1	8,469	4,008	-----	2,953	1,856	1,167
1912	6,024	5,869	155	-----	57,438	-----	66	-----	7,672	2,205	-----	4,029	1,207	915

- Represents zero.  
<sup>1</sup> Numbers of cable and radio telegraph messages depend on whether they were reported by what were formerly known as cable or radio carriers. Since 1956, radio carriers have been using circuits in cables in addition to radio for transmission of messages; since 1965, cable carriers have been using radio circuits via satellite relay in addition to cables.  
<sup>2</sup> Overseas telephone calls inserted for information purposes only; not handled by International Telegraph Industry. Beginning 1956, includes Alaska, Guam, and Virgin Islands. Excludes calls over landwire to Canada and Mexico.  
<sup>3</sup> Number of overseas countries served by direct radiotelegraph circuits decreased during the sixties as they were displaced by submarine cable and satellite circuits; even some of the remaining circuits are for fallback use only.  
<sup>4</sup> Excludes Federal income taxes.  
<sup>5</sup> Prior to 1929, employment and compensation figures represent incomplete reporting to FCC by all carriers.  
<sup>6</sup> Figure represents net loss resulting from the sale, charged against income, of a cable system.  
<sup>7</sup> Figures represent net loss.  
<sup>8</sup> As of September 16.

Series R 89-92. International Cable and Radiotelegraph Rates and International Telephone Rates Between New York City and Selected Cities: 1866 to 1970

[Prior to 1924, rate changes are for messages by cable only (except as noted for radiotelegraph messages). Since 1924, rate changes are for both cable and radiotelegraph messages]

Effective date	New York City to—				Effective date	New York City to—			
	London	Cairo	Tokyo	Buenos Aires		London	Cairo	Tokyo	Buenos Aires
	89	90	91	92		89	90	91	92
INTERNATIONAL CABLE AND RADIOTELEGRAPH RATES <sup>1</sup>					INTERNATIONAL CABLE AND RADIOTELEGRAPH RATES <sup>1</sup> — Con.				
1970, Jan. 1	\$0.23	\$0.34	\$0.34	\$0.31	1892, May 1	\$0.25	-----	\$2.21	\$1.50
1969, Jan. 1	.23	.34	.34	.31	1892, Jan. 26	.25	-----	2.21	1.70
1966, Apr. 12	.23	.34	.34	.31	1890	.25	-----	-----	1.82
1958, Aug. 1	.21	.34	.34	.31	1888	.25	-----	-----	3.98
1950, July 1	.19	.30	.30	.27	1886	.12	-----	-----	3.98
1949, Feb. 2	.25	.40	.40	.35	1884	.40	-----	-----	3.98
1948, Apr. 28	.25	.30	.30	.28	1882	.50	-----	-----	3.98
1947, Aug. 5	.25	.30	.30	.22	1882	.50	-----	-----	4.60
1946, May 1	.20	.30	.20	.20	1880	.50	-----	-----	7.50
1945, May 1	.20	.42	.24	.20	1868	1.58	-----	-----	-----
1943, Aug. 16	.20	.42	.72	.26	1866	10.00	-----	-----	-----
1940	.20	.42	.72	.42	INTERNATIONAL TELEPHONE RATES <sup>3</sup>				
1937	.20	.42	.72	.42	1970, Mar. 1	9.60	\$12.00	12.00	12.00
1931	.20	.39	.80	.42	1969	12.00	12.00	12.00	12.00
1923	.20	.39	.80	.42	1946	12.00	12.00	12.00	12.00
1927	.20	.45	.80	.42	1945	12.00	30.00	19.50	12.00
1925	.20	.42	.85	.42	1944	21.00	30.00	19.50	12.00
1924	.20	(NA)	.109	.50	1940	21.00	30.00	19.50	15.00
1924	.20	(NA)	.85	.50	1939	21.00	30.00	30.75	15.00
1923	.20	(NA)	.109	.50	1937	21.00	30.00	30.75	21.00
1921	.18	(NA)	.85	.50	1936	21.00	30.00	33.00	21.00
1919	.25	(NA)	1.09	.50	1934	30.00	36.00	39.00	30.00
1917	.25	(NA)	1.33	.50	1932	30.00	36.00	-----	30.00
1916	.17	(NA)	.92	.65	1930	30.00	-----	-----	30.00
1912	.25	(NA)	1.33	.65	1930	30.00	-----	-----	36.00
1910	.25	(NA)	1.33	.85	1928	45.00	-----	-----	-----
1905	.25	(NA)	.56	1.00	1927	75.00	-----	-----	-----
1903	.25	(NA)	1.53	1.00					
1903, Jan	.25	.61	1.76	1.00					
1901	.25	-----	1.76	1.00					

NA Not available.  
<sup>1</sup> Per plain language telegraph-word, including address and signature.  
<sup>2</sup> Change in radiotelegraph messages.  
<sup>3</sup> For 3-minute person-to-person telephone conversations.

# Radio and Television (Series R 93-162)

### R 93-162. General note.

Federal regulation of radio communication has been continuous since 1912 when the Department of Commerce was given authority to license radio equipment and radio operators, and broadcast stations, which began operation in 1921. On February 23, 1927, Congress established the Federal Radio Commission with broad authority for the regulation of radio. In 1934, the powers of the Federal Radio Commission were transferred to the Federal Communications Commission.

Principal governmental sources of statistics in respect to broadcast and nonbroadcast radio services include the following:

1. U.S. Bureau of the Census, *Census of Business, 1935: Radio Broadcasting*; Fifteenth Census Reports, *Population*, vol. VI, *Families*, 1930; Sixteenth Census Reports, *Housing*, vol. II, part 1, 1940; *U.S. Census of Housing: 1950, 1960, and 1970*, vol. I, part 1.

2. U.S. Department of Commerce, *Annual Report of the Secretary of Commerce, 1913-1926*.

3. Federal Radio Commission, *Annual Report of the Federal Radio Commission, 1927-1933; Commercial Radio Advertising, 1931*.

4. U.S. Federal Communications Commission, *Annual Report of the Federal Communications Commission, 1938-1970; Report on Chain Broadcasting, 1941; The Public Service Responsibilities of Broadcast Stations, 1946; "An Economic Study of Standard Broadcasting,"* October 1947 (processed); House Report No. 1297, 85th Cong., 2d sess., *Network Broadcasting, 1958*.

5. House Report No. 1273, 73d Cong., 2d sess., *Report on Communication Companies, 1934*.

Since 1937, the FCC has obtained annual financial reports from networks and broadcast stations. Statistical tabulations of the data so reported have been made available by the FCC in its annual reports; in its annual *Statistics of the Communications Industry in the United States*; and in annual processed reports. Unlike the telephone and telegraph industries, radio broadcasting is not classified as a common carrier and is not subject to rate or earnings regulation. The FCC, therefore, does not prescribe a uniform system of accounts for the radio industry. However, the Commission's Annual Report Form No. 324, and the accompanying instructions, ensures general uniformity in the reported data. The individual financial reports of networks and stations filed with the FCC are not available for public inspection. However, some individual network and station data have been published from time to time, as for example, in a Committee Print, 84th Cong., 2d sess. (Senator John W. Bricker), *The Network Monopoly: Report Prepared for Use of the Committee on Interstate and Foreign Commerce, 1956; Monopoly Problems in Regulated Industries; Hearings before the Antitrust Subcommittee of the Committee on the Judiciary, 84th Cong., 2d sess., 4 vols., part 2, 1956*.

### R 93-97. General note.

Statistics of broadcast stations are commonly presented in terms of "authorized" and of "licensed" stations. A broadcast station is authorized when it receives a construction permit from the U.S. Federal Communications Commission (or predecessor licensing agencies). Normally, a station is expected to complete construction and begin regular operation within 8 months thereafter. However, not all authorized stations complete this process and be-

come operating stations. This has occurred mainly in the broadcast services of frequency modulation (FM) and television (TV).

Similarly, statistics of "licensed" stations can be misleading. A station permittee who has completed construction in accordance with the specifications of the construction permit or a modification thereof, usually receives a regular license, prior to start of regular on-the-air program service. However, for a variety of reasons, the FCC has permitted stations to undertake regular broadcast service under a Special Temporary Authorization. Many stations have operated under such authority for a number of years. Here, again, this statement applies particularly to FM and TV stations.

Figures for these series are for the most part presented in terms of operating stations. Stations are recorded in FCC records as operating when they have received permission to conduct program tests. In some instances, considerable time may elapse before such stations are in regular, daily operation. Adjustments for this factor have been made by the FCC on the basis of trade sources, and such adjustments are incorporated here. In sum, the data on operating stations are not precise, but are believed to be reasonably accurate.

### R 93. Standard broadcast (AM) stations operating, 1921-1970.

Source: 1921, U.S. Federal Communications Commission, unpublished data; 1922-1926, *Annual Report of the Secretary of Commerce*, various issues; 1927-1932, *Seventh Annual Report of the Federal Radio Commission for Fiscal Year 1933*, p. 18; 1933-1970, FCC, *Annual Report*, various issues.

Prior to 1948, data pertain to licensed stations which, in the AM service, generally approximated operating stations.

Figures are not available annually on the number of noncommercial AM stations because there is no separate noncommercial service. Usually, such stations are supported by educational or public bodies. In the early growth of radio prior to 1927, educational institutions were prominent in radio (see S. E. Frost, *Education's Own Stations; the History of Broadcast Licenses Issued to Educational Institutions*, University of Chicago Press, 1937). From 1945-1970, the number of noncommercial AM stations declined from about 35 to 25. In addition, a small number of educational institutions operate commercial stations.

The decline in the number of AM stations between 1927 and 1929 followed the transfer of the licensing function from the Secretary of Commerce to the Federal Radio Commission. The latter body tightened the licensing requirements, resulting in the withdrawal or deletion of a number of operating stations.

### R 94-95. Frequency modulation (FM) stations operating, 1940-1970.

Source: U.S. Federal Communications Commission, *Annual Report*, various issues.

FM was authorized as a regular service in 1940, effective January 1, 1941, and the first commercial station was licensed in 1941. Non-commercial FM is a separate service with a specific spectrum allocation. The stations are licensed to nonprofit educational organizations.

### R 96-97. Television (TV) stations operating, 1941-1970.

Source: See source for series R 94-95.

Television was authorized on a regular commercial basis, effective July 1, 1941, and 2 stations in New York began operating as of that

date. Figures include very high frequency (VHF) stations, first authorized in 1941, and ultra high frequency stations (UHF), first authorized in 1952. Some stations (almost entirely UHF stations) began operation and subsequently ceased operation, but retained their FCC authorization. Such stations are not included in the years of nonoperation.

**R 98-101. Cable television, 1952-1970.**

Source: John Blair & Company, New York, N.Y., *Statistical Trends in Broadcasting*, annual issues (copyright).

Cable television (CATV) is a system whereby program signals are sent through a cable attached to a television set, as opposed to commercial television and on-the-air transmission of signals.

**R 102-103. Sets produced, 1922-1970.**

Source: Electronic Industries Association, 1922-1934, *Electronics Industry Fact Book*, 1957, pp. 4, 5; 1935-1970, *Electronic Market Data Book*, 1971. (Copyright.)

Figures are based on reports of members of the Electronic Industries Association (formerly Radio-Electronic-Television Manufacturers Association) adjusted for estimated production of nonmembers. The figures also include sets produced for export. Radio set figures include home sets for all years; auto sets, 1930-1970; portable sets, 1939-1970; and clock sets, 1951-1970. As of 1970, automobile sets constituted over 40.3 percent of total radio-set production. As of 1970, year end, Electronic Industries Association estimated that there were 336 million radio sets in working order in the United States, including 85 million in automobiles.

**R 104. Households with radio sets, 1922-1970.**

Source: Annual figures, National Broadcasting Company (NBC), unpublished estimates. U.S. Bureau of the Census data, as follows: 1930, Fifteenth Census Reports, *Population*, vol. VI, *Families*, table 39; 1940, Sixteenth Census Reports, *Housing*, vol. II, part 1, table 10; 1950, 1960, and 1970, *U.S. Census of Housing: 1950*, vol. I, part 1, table 13; *1960*, vol. I, part 1, table 7; *1970*, vol. I, part 1, table 34.

NBC accredits data on radio ownership prior to 1950 to the National Association of Broadcasters (NAB), which is the national trade association of broadcasters, and to Broadcast Measurement Bureau, a private survey group, which conducted a detailed nationwide survey of radio listening. A survey conducted by the Columbia Broadcasting System (CBS), the results of which were published as "Lost and Found," purported to show 2,450,000 households with radios not enumerated in the 1930 Census of Population. Accordingly, the NAB adjusted the 1930 census figure to 14,499,000. Similarly, 964,026 occupied dwelling units did not report concerning radio ownership in the 1940 Census of Population. The NAB estimated that 786,043 of these should be added to the 1940 census figure of 28,048,219 occupied units with radio.

The figures include radio sets which may not be in working order. Sets temporarily out of order or being repaired at the time of enumeration were included in the census data. The figures exclude radio sets in places of business, institutions, and hotels.

**R 105. Households with television sets, 1946-1970.**

Source: National Broadcasting Company, unpublished estimates. U.S. Bureau of the Census data as follows: 1950, 1960, and 1970, *U.S. Census of Housing: 1950*, vol. I, part 1, table 13; *1960*, vol. I, part 1, table 7; *1970*, vol. I, part 1, table 34.

An indication of the accuracy of the estimates is provided by several surveys of TV ownership in the Nation's households conducted by the Bureau of the Census for the Advertising Research Founda-

tion. These studies have yielded the following estimates:

	June 1955	March 1956	August 1956	January 1969
Total sets in TV homes...	33,269,000	37,277,000	39,568,000	79,660,000
TV homes.....	32,106,000	35,495,000	37,410,000	58,250,000
Second sets in TV homes.....	1,163,000	1,782,000	2,158,000	21,410,000
TV homes as percent of total homes.....	67.2	72.8	76.1	95.0

All figures exclude sets in places of business, institutions, and hotels, but include households with television sets which may not be in current working order.

**R 106-109 and R 123-126. Radio and television advertising expenditures, 1935-1970.**

Source: 1935-1956 and 1958-1968, *Printers' Ink Advertisers' Guide to Marketing*, various issues; 1957, *Printers' Ink*, Feb. 6, 1959, p. 9; 1969 and 1970, *Marketing Communications*, July 1971.

Historical-time series on advertising expenditures were first developed by L. D. H. Weld of the McCann-Erickson Advertising Agency, New York, in 1938. After Dr. Weld's death in 1946, McCann-Erickson continued to prepare the estimates under the supervision of Dr. Hans Zeisel and, since 1950, Robert J. Coen.

Total advertising expenditures in radio and television are total time sales of networks and stations including commissions of advertising agencies and station representatives, as reported by the Federal Communications Commission, multiplied by estimated "adjustment" factors. For a description of the method used in developing the annual adjustment factors, see the source. Total advertising expenditures are larger than total broadcast revenues as reported by the FCC in two respects: The inclusion of commissions paid to advertising agencies and station representatives; and the inclusion of sums paid by advertisers for talent, program, and production to organizations which do not operate networks or broadcast stations (included in the "adjustment" figures).

The networks included in radio are the four national networks—American Broadcasting Company (ABC), Columbia Broadcasting System (CBS), National Broadcasting Company (NBC), and the Mutual Broadcasting System (MBS). The three large regional networks included for most years are the Don Lee Network, the Yankee Network, and the Texas State Network. The networks included in television are ABC, CBS, NBC (each of which operates a network in both radio and television) and, until September 1955, the DuMont Network. At that time DuMont withdrew from the network field.

For a detailed discussion of the network system, see the FCC and other reports listed in the general note for series R 93-162; and 84th Cong., 2d sess., Robert F. Jones, *Investigation of Television Networks and the UHF-VHF Problems; Progress Report Prepared for the Committee on Interstate and Foreign Commerce*, 1955.

**R 107 and R 124, network expenditures.** Figures are total expenditures of network advertisers in radio or television for time (i.e., access to the individual stations broadcasting the program); for the program, including talent and production; and for the production of the commercial announcements. Such sums include commissions to advertising agencies but exclude discounts and allowances received by the advertiser. The figures are before disbursements by the networks to their affiliated and owned stations, and exclude the non-network time sales of the stations owned by the networks.

**R 108 and R 125, national spot expenditures.** This type of advertising is commonly confused with commercial, or "spot," announcements. The term "spot" in this context refers to the purchase of time by national advertisers on individual stations "spotted" or selected in various communities. Predominantly, the advertiser expenditures are for commercial announcements adjacent to network or other programs carried by the individual stations. In addition, national spot advertisers sponsor programs or purchase "participations" in station-supplied programs. Thus, national spot advertiser expenditures include total time sales (after discounts but

including commissions to advertising agencies and station representatives) multiplied by an estimated "adjustment" factor for program and production.

**R 109 and R 126**, local advertising expenditures. These include total time sales (after trade discounts but including commissions to advertising agencies) multiplied by an estimated "adjustment" factor for program and production. Local advertiser expenditures are made both in connection with the broadcast of commercial announcements and the supply of a program service. The main distinction between national spot and local advertising is as follows: National spot advertisers are connected with firms or companies which produce or distribute goods or services on a national or regional basis, and which usually place their advertising message on a number of selected stations. Local advertisers are usually local retailers and other organizations whose goods or services are primarily for local distribution. As such, a local advertiser will place his advertising message only on the stations in his community or marketing area. However, in practice, the "national" and "local" categories are not completely differentiated.

**R 110-122 and R 127-139**. Networks and stations reporting, broadcast revenues, expenses, income, gross investment, and employees, 1935-1970.

Source: U.S. Bureau of the Census, 1935, *Census of Business, 1935, Radio Broadcasting*, pp. 15, 25; U.S. Federal Communications Commission, 1937-1947, *Annual Report*, various issues; 1948-1970, *AM-FM Broadcast Financial Data and TV Broadcast Financial Data*, various issues.

The basic sources of figures shown in the *Annual Report* are *Statistics of the Communications Industry in the United States*, annual issues, and processed releases of the FCC.

FCC began the regular annual collection of financial and operating data from networks and stations in 1937. The respondents each year usually include over 90 percent of commercial stations in operation, accounting for well over 95 percent of total industry revenues, expenses, and income. Statistics based on these reports, particularly prior to 1952, have included considerable detail. These statistics have been made available to the public in the *Annual Report* of the FCC, 1938-1970; *Statistics of the Communications Industry in the United States*, annual issues; and in processed releases.

**R 110-111 and R 127-128**, reporting networks and stations. Prior to 1949 the radio data are limited to commercial standard broadcasting (AM) stations and networks operating in the United States, Puerto Rico, and outlying areas. Since 1949, the radio data also include reports of joint AM-FM stations, and reports of FM-only stations. The television data include stations operating in the United States, Puerto Rico, and outlying areas.

**R 112-114 and R 129-131**, broadcasting revenues. Figures include the amounts received by networks and stations from the sale of time (net of all trade and cash discounts and commissions to advertising agencies and station representatives) and from other broadcast activities as follows: Gross amount received for services of talent under contract to and in the pay of networks or stations; net commissions, fees, and profits for services in obtaining, or for placing with others, talent not under contract to and in the pay of respondent; amounts received for furnishing manuscripts, transcriptions, productions, or other program materials or services; and amounts received for incidental broadcast activities such as charges for studio facilities and special charges in connection with remote broadcasts, fees or other charges for conducting studio tours, and fees or profits received for the right to operate concessions.

**R 115-117 and R 132-134**, broadcasting expenses. The broad expense categories reported include technical, program, selling, and general and administrative expenses. Among the expenses required to be included are the following: Salaries and wages; talent expenses;

film and transcription expense; commissions to staff salesmen; insurance; depreciation and amortization of broadcast investments; rents paid for use of broadcast property; taxes (other than Federal taxes on income); and losses on notes, accounts, and other amounts receivable.

**R 118-120 and R 135-137**, broadcasting income. Figures represent net operating revenues (before Federal income tax), excluding income derived by the networks and stations from sources and operations other than broadcasting.

**R 121 and R 138**, gross investment. Figures represent investment in tangible broadcast property, before depreciation. The FCC report form requires that the costs be reported on an original-cost basis, and not on the basis of cost readjustments resulting from the sales or transfers of stations. Tangible broadcast property includes land and buildings, if owned, and transmitter and studio property; it excludes financial assets and good will. In the case of stations which have been sold, it represents that portion of the price assigned by the licensee to the property. Tangible broadcast property is, therefore, not a measure of total investment in broadcasting.

**R 122 and R 139**, employees. Figures include all employees, staff and nonstaff, full and part time, not excluding general officers and other managerial officials, but excluding "uncompensated" employees. Figures for 1935 are employees reported as of the 15th of each month, summed and divided by 12; 1938, week beginning Dec. 11; 1939-1943, middle week in October; 1944-1946, as of Dec. 31; 1946-1948, middle week in October; 1955-1970, as of Dec. 31.

**R 140-148**. Safety and special radio stations authorized, by class, 1913-1970.

Source: 1913-1926, U.S. Department of Commerce, *Annual Report of the Secretary of Commerce*, various issues; 1927-1934, Federal Radio Commission, *Annual Report*, various issues; 1935-1970, U.S. Federal Communications Commission, *Annual Report*, various issues.

Prior to 1948, the only data available to measure the use of radio in various nonbroadcast safety and special radio services were the number of authorized stations. The term "station," however, has not had a uniform significance among these services or within the same service over time. Primarily, the term reflects licensing procedures. A station is a single authorization issued by the FCC (or its predecessor licensing agencies) authorizing the use of one or more transmitters on assigned frequencies. A station may include one of the following: One or more transmitters at a fixed (land or fixed stations) location; one or more mobile transmitters; a system including a transmitter at a fixed location and one or more mobile transmitters or one of these in a combination with more than one frequency. Within most of the services, station authorizations have been changed from one to another form in an effort to simplify licensing procedures. As a result, year-to-year changes in the number of stations must be interpreted with caution, particularly if a decrease is shown.

Most of the nonbroadcast radio services are grouped together as the safety and special radio services, which constitute the greatest number of radio stations licensed by the FCC. Utilization of these services by individuals, industry, commerce, and State and local governments cover broad fields of operations in connection with protection of life and property, industrial and agricultural production, transportation, disaster, and civil defense.

**R 149-162**. Authorized land stations and mobile transmitters in the safety and special radio services, 1948-1970.

Source: See source for series R 140-148.

The distinctive characteristics of a land station are that it is located at a fixed site, has a fixed antenna and a panel control, and is used for communication in the mobile services (aviation, land



Series R 93-105. Radio and Television Stations, Sets Produced, and Households With Sets: 1921 to 1970

[Figures as of June 30, except for census figures in italics which are as of Apr. 1]

Year	Operating broadcast stations <sup>1</sup>					Cable television				Sets produced <sup>2</sup>		Households with--	
	Standard broadcast (AM)	Frequency modulation (FM)		Television (TV)		Systems	Subscribers (households)			Radio (1,000)	Television (1,000)	Radio sets (1,000)	Television sets (1,000)
		Commercial	Noncommercial	Commercial	Noncommercial		Total (1,000)	Percent of U.S.	Average per system				
	93	94	95	96	97	98	99	100	101	102	103	104	105
1970	4,288	2,126	416	691	190	2,490	4,500	7.6	1,807	16,406	4,852	62,000	59,550
1970												<i>48,108</i>	<i>60,594</i>
1969	4,254	2,018	375	680	177	2,260	3,600	6.1	1,593	20,549	5,309	60,600	58,250
1968	4,203	1,850	348	655	156	2,000	2,800	4.4	1,400	22,566	5,813	58,500	56,670
1967	4,135	1,708	318	626	127	1,770	2,100	3.8	1,186	21,698	5,104	57,500	55,130
1966	4,075	1,515	291	613	108	1,570	1,575	2.9	1,003	23,595	7,285	57,000	53,850
1965	4,025	1,343	262	589	92	1,325	1,275	2.4	962	24,119	8,382	55,200	52,700
1964	3,976	1,181	243	582	79	1,200	1,085	2.1	904	19,176	8,107	54,000	51,600
1963	3,860	1,120	221	581	70	1,000	950	1.9	950	18,282	7,130	52,800	50,800
1962	3,745	1,012	201	571	59	800	850	1.7	1,063	19,162	6,471	51,305	48,855
1961	3,602	889	186	553	54	700	725	1.5	1,036	17,374	6,173	50,695	47,200
1960	3,483	741	165	579	47	640	650	1.4	1,016	17,127	5,708	50,193	45,750
1960												<i>48,504</i>	<i>46,312</i>
1959	3,377	622	154	566	43	560	550	1.3	982	15,622	6,349	*49,450	*48,950
1958	3,253	548	147	556	32	525	450	1.1	857	11,747	4,920	48,500	41,924
1957	3,079	530	135	519	26	500	350	.9	700	14,505	6,399	47,600	38,900
1956	2,896	530	126	496	20	450	300	.9	667	13,513	7,387	46,800	34,900
1955	2,732	540	124	458	11	400	150	.5	375	14,133	7,757	45,900	30,700
1954	2,583	553	117	402	6	300	65		217	10,023	7,347	45,100	26,000
1953	2,458	580	106	198	1	150	30	(Z)	200	12,852	7,216	44,800	20,400
1952	2,355	629	92	108	-	70	14	(Z)	200	10,431	6,096	42,800	15,300
1951	2,281	649	83	107						11,923	5,385	41,900	10,320
1950	2,144	691	62	104						13,468	7,464	40,700	3,875
1950												<i>40,411</i>	<i>5,080</i>
1949	2,006	737	34	69						11,400	3,000	39,300	940
1948	2,034	1,020	46	108						16,500	975	37,623	172
1947	1,795	918	38	66						20,000	179	35,900	14
1946	1,215	511	24	30						15,955	6	33,998	8
1945	955	53	12	9						(4)		33,100	
1944	924	52	8	9						(4)		32,500	
1943	912	43	7	8						(4)		30,800	
1942 <sup>4</sup>	925	42	8	8						4,307		30,600	
1941	897	49	7	2						13,642		29,300	
1940	847	-	3							11,831		28,500	
1940												<i>28,048</i>	

Year	Operating standard broadcast stations (AM)	Radio sets produced (1,000)	Households with radio sets (1,000)	Year	Operating standard broadcast stations (AM)	Radio sets produced (1,000)	Households with radio sets (1,000)	Year	Operating standard broadcast stations (AM)	Radio sets produced (1,000)	Households with radio sets (1,000)
	93	102	104		93	102	104		93	102	104
1939	778	10,763	27,500	1932	604	2,446	18,450	1926	528	1,750	4,500
1938	743	7,142	26,667	1931	612	3,594	16,700	1925	371	2,000	2,750
1937	704	8,083	24,500					1924	530	1,500	1,250
1936	656	8,249	22,869	1930	618	3,789	13,750	1923	556	500	400
				1929			<i>12,049</i>	1922	30	100	60
1935	623	6,030	21,456	1928	606	4,428	10,250	1921	<sup>5</sup> 1		
1934	593	4,479	20,400	1923	677	3,250	8,000				
1933	598	4,157	19,250	1927	681	2,350	6,750				

\* Denotes first year for which figures include Alaska and Hawaii.  
 - Represents zero.  
 Z Less than 0.05 percent.  
<sup>1</sup> Includes Alaska, Hawaii, Puerto Rico, Guam, and Virgin Islands for all years. Prior to 1948, the FCC did not keep records on the number of stations on the air. Therefore, data for 1933-1948 are for authorized stations and may include a number that were not actually on the air.  
<sup>2</sup> No production in Alaska and Hawaii.  
<sup>3</sup> In 1970 Census of Housing, only battery-operated radios were enumerated.  
<sup>4</sup> Authorization of new radio stations and production of radio receivers for commercial use halted from April 1942 until Oct. 1945.  
<sup>5</sup> First station to receive regular license as of Sept. 15; other stations in operation experimentally.

Series R 106-122. Radio Advertising Expenditures, Finances, and Employment: 1935 to 1970

Year	Advertising expenditures (mil. dol.)				Networks reporting <sup>1</sup>	Number of stations reporting	Broadcast revenues, net (mil. dol.)		
	Total	Network	National spot	Local			Total	Network <sup>1</sup>	Other stations
	106	107	108	109			110	111	112
1970	1,308	56	371	881	7	4,898	1,187	88	1,049
1969	1,264	59	368	837	7	4,815	1,086	86	1,000
1968	1,190	63	360	767	7	4,594	1,023	81	942
1967	1,031	64	310	657	4	4,481	907	77	830
1966	1,010	64	308	638	4	4,400	872	79	793
1965	917	60	275	582	4	4,279	793	74	719
1964	846	59	256	531	4	4,202	719	71	648
1963	789	56	243	490	4	4,126	670	69	601
1962	736	46	233	457	4	3,977	627	64	563
1961	683	43	221	420	4	3,859	584	62	522
1960	692	43	222	428	4	3,688	598	63	535
1959	656	44	206	406	4	3,528	556	60	495
1958	619	58	190	372	7	3,290	521	69	451
1957	618	64	187	368	7	3,164	515	74	442
1956	567	61	161	346	7	2,967	479	70	409
1955	545	84	134	326	7	2,742	452	78	374
1954	559	114	135	309	7	2,598	449	89	360
1953	611	141	146	324	7	2,479	475	97	377
1952	624	162	142	321	7	2,380	469	101	368
1951	606	180	138	289	7	2,266	449	104	345
1950	605	196	136	273	7	2,229	443	111	333
1949	571	203	123	245	7	2,125	414	108	306
1948	562	211	121	230	7	1,927	407	109	298
1947	506	201	106	199	7	1,516	364	104	260
1946	454	200	98	157	8	1,033	323	102	221
1945	424	198	92	134	10	906	299	101	198
1944	394	192	87	114	9	879	275	95	180
1943	314	157	71	86	9	846	215	76	139
1942	260	129	59	73	10	856	179	63	116
1941	247	125	52	70	8	817	169	62	107
1940	216	113	42	60	8	765	147	53	94
1939	184	99	35	50	3	705	124	49	75
1938	167	89	34	44	3	660	111	45	66
1937	165	89	28	48	3	629	114	41	73
1936	122	76	23	24	(NA)	(NA)	(NA)	(NA)	(NA)
1935	113	63	15	35	8	561	86	30	56

Year	Broadcast expenses (mil. dol.)			Broadcast income <sup>2</sup> (mil. dol.)			Gross investment (mil. dol.)	Employees (1,000)
	Total	Network <sup>1</sup>	Other stations	Total	Network <sup>1</sup>	Other stations		
	115	116	117	118	119	120		
1970	1,044	90	955	93	-1	94	823	71.0
1969	985	88	897	101	-2	103	780	70.0
1968	910	86	824	113	-5	118	723	70.6
1967	826	79	747	81	-2	83	671	67.2
1966	775	76	699	97	4	93	623	64.8
1965	715	71	644	78	3	75	567	62.2
1964	645	67	579	73	4	69	521	60.2
1963	612	63	549	58	6	52	493	58.0
1962	580	62	518	47	2	45	466	56.1
1961	552	61	490	32	(Z)	32	426	54.3
1960	552	66	486	46	-3	49	423	53.0
1959	512	65	447	44	-5	49	373	50.4
1958	483	73	410	38	-4	42	333	48.8
1957	461	74	387	54	(NA)	54	328	48.9
1956	430	70	360	50	(Z)	49	298	47.6
1955	406	72	334	46	6	40	287	45.3
1954	406	80	326	43	8	34	279	(NA)
1953	419	87	332	56	10	45	276	(NA)
1952	408	89	318	61	11	50	267	(NA)
1951	390	94	296	59	10	49	255	(NA)
1950	372	92	281	71	19	52	244	(NA)
1949	363	87	267	56	17	39	231	52.0
1948	343	91	252	64	18	46	202	48.3
1947	292	92	200	72	20	52	150	(NA)
1946	246	73	173	76	19	57	108	40.0
1945	216	78	138	84	23	60	88	37.8
1944	185	68	116	90	26	64	83	34.3
1943	149	53	96	66	23	43	81	31.8
1942	134	47	87	45	17	28	81	29.6
1941	124	44	80	45	17	27	78	27.6
1940	114	39	75	33	13	20	71	25.7
1939	100	37	62	24	11	13	64	23.9
1938	93	36	57	19	8	11	61	22.5
1937	92	33	59	19	6	13	55	28.3
1936								(NA)
1935								14.6

NA Not available.  
Z Less than \$500,000.

<sup>1</sup> Includes network owned and operated stations.  
<sup>2</sup> Before Federal income tax.

Series R 123-139. Television Advertising Expenditures, Finances, and Employment: 1945 to 1970

Year	Advertising expenditures (mil. dol.)				Networks reporting <sup>1</sup>	Number of stations reporting	Broadcast revenues, net (mil. dol.)		
	Total	Network	National spot	Local			Total	Network <sup>1</sup>	Other stations
	123	124	125	126			127	128	129
1970	3,596	1,658	1,234	704	3	686	2,808	1,457	1,351
1969	3,585	1,678	1,253	654	3	673	2,796	1,467	1,329
1968	3,231	1,523	1,181	577	3	658	2,521	1,308	1,213
1967	2,909	1,455	988	466	3	637	2,275	1,217	1,059
1966	2,828	1,398	988	442	3	608	2,203	1,166	1,037
1965	2,515	1,237	892	386	3	588	1,965	1,024	941
1964	2,289	1,132	806	351	3	575	1,793	929	865
1963	2,082	1,025	698	309	3	565	1,597	820	777
1962	1,897	976	629	292	3	554	1,486	754	732
1961	1,691	887	548	256	3	540	1,318	675	643
1960	1,627	820	527	281	3	530	1,269	641	628
1959	1,529	776	486	267	3	519	1,164	576	588
1958	1,387	742	397	248	3	514	1,030	517	513
1957	1,286	690	352	244	3	501	943	468	475
1956	1,225	648	329	253	3	474	897	442	455
1955	1,035	550	260	225	4	437	745	374	371
1954	809	422	207	180	4	410	593	307	286
1953	606	320	146	141	4	334	433	232	201
1952	454	256	94	104	4	122	324	180	144
1951	382	181	70	82	4	108	236	128	107
1950	171	85	31	55	4	107	106	56	50
1949	58	29	9	19	4	98	34	19	15
1948						47	9	5	4
1947						15	2		
1946						10	1		
1945						6	(Z)		

  

Year	Broadcast expenses (mil. dol.)			Broadcast income <sup>2</sup> (mil. dol.)			Gross investment (mil. dol.)	Employees (1,000)
	Total	Network <sup>1</sup>	Other stations	Total	Network <sup>1</sup>	Other stations		
	132	133	134	135	136	137		
1970	2,354	1,290	1,065	454	167	286	1,497	58.4
1969	2,243	1,241	1,001	554	226	328	1,445	57.8
1968	2,026	1,129	897	495	179	316	<sup>3</sup> 1,307	55.2
1967	1,861	1,057	804	415	160	255	1,185	51.7
1966	1,710	980	731	493	187	306	1,014	50.3
1965	1,517	862	655	448	162	286	860	47.8
1964	1,378	772	606	416	157	259	781	45.7
1963	1,254	684	570	343	136	207	(NA)	43.6
1962	1,175	643	532	312	111	200	673	41.8
1961	1,081	588	493	237	87	150	631	40.1
1960	1,025	546	479	244	95	149	593	40.6
1959	942	488	453	222	88	134	563	40.3
1958	858	440	418	172	77	95	523	39.4
1957	783	397	386	160	71	89	478	37.8
1956	707	357	350	190	85	104	430	36.7
1955	595	306	289	150	68	82	365	32.3
1954	503	270	232	90	37	54	315	29.4
1953	361	214	147	71	18	53	233	18.2
1952	269	170	98	56	10	46	124	14.1
1951	194	117	77	42	11	31	93	
1950	115	66	50	<sup>3</sup> 9	<sup>3</sup> 10	1	70	
1949	60	31	28	<sup>3</sup> 25	<sup>3</sup> 12	<sup>3</sup> 13	56	
1948	24	11	12	<sup>3</sup> 15	6			

NA Not available.  
 Z Less than \$500,000.  
<sup>1</sup> Includes network owned and operated stations.

<sup>2</sup> Before Federal income tax.  
<sup>3</sup> Loss.

Series R 140-148. Safety and Special Radio Stations Authorized, by Class: 1913 to 1970

[As of June 30. Includes Alaska, Hawaii, Puerto Rico, and outlying areas. See text for definition of stations]

Year	Amateur and disaster services	Aviation services	Citizens services	Industrial services	Land transportation services	Marine services	Public safety services	Experimental services <sup>1</sup>	Radio operators (1,000)
	140	141	142	143	144	145	146	147	148
1970	283,461	150,955	886,951	222,500	22,262	206,251	72,215	1,049	3,688
1969	285,175	149,997	860,624	204,266	21,291	186,295	67,730	1,019	3,545
1968	282,525	140,799	867,552	185,046	20,016	164,000	63,160	966	3,405
1967	279,093	122,568	848,297	169,417	18,613	143,612	58,831	838	3,240
1966	285,600	105,133	865,414	152,315	16,914	137,469	54,839	928	3,088
1965	280,343	109,897	744,713	141,360	15,685	114,075	50,888	812	2,971
1964	280,818	107,557	682,307	124,347	14,815	161,593	47,389	698	2,870
1963	270,838	106,202	446,590	107,796	14,089	143,227	43,168	730	3,186
1962	251,659	106,923	305,138	98,073	13,273	127,633	38,676	757	2,789
1961	234,681	92,779	206,106	77,773	12,075	110,433	36,658	757	2,499
1960	228,206	91,180	126,034	64,804	11,452	97,411	32,906	723	2,154
1959	205,538	77,682	49,269	49,679	10,625	84,947	29,363	891	1,897
1958	187,862	62,684	38,611	39,973	10,190	72,514	26,512	834	1,682
1957	165,908	49,699	27,931	35,711	9,592	63,844	23,270	788	1,469
1956	154,337	48,745	18,602	30,597	8,990	56,915	20,718	716	1,259
1955	142,387	43,855	12,334	24,854	7,668	50,714	18,415	625	1,123
1954	124,324	40,154	7,054	21,598	6,891	46,299	15,697	586	963
1953	111,579	39,315	3,829	17,378	5,922	40,357	13,631	444	839
1952	113,163	32,608	1,401	18,680	5,027	35,500	11,143	369	790
1951	90,587	34,061	560	9,551	4,253	29,544	9,129	404	701
1950	87,967	23,794	335	6,099	3,495	24,921	7,607	466	624
1949	81,675	27,227	-----	4,266	3,588	20,004	5,700	501	<sup>2</sup> 564
1948	78,434	20,858	-----	2,855	3,122	15,024	4,903	652	<sup>2</sup> 506
1947	75,000	15,943	-----	1,787	1,692	11,955	4,620	532	442
1946	70,000	6,205	-----	702	156	8,676	4,760	1,374	-----
1945	60,000	3,793	-----	576	-----	-----	4,446	487	-----
1944	60,000	3,445	-----	468	-----	6,817	4,144	572	-----
1943	60,000	3,553	-----	386	-----	6,609	3,772	453	-----
1942	60,000	4,713	-----	356	-----	-----	3,455	497	-----
1941	60,000	3,000	-----	306	-----	5,822	2,967	450	-----
1940	56,295	2,099	-----	340	-----	4,945	2,334	295	-----
1939	53,558	1,824	-----	307	-----	4,036	1,536	372	-----
1938	49,911	1,460	-----	232	-----	3,516	662	2,842	-----
1937	47,444	1,212	-----	221	-----	2,422	535	1,971	-----
1936	46,850	812	-----	195	-----	2,219	403	1,576	-----
1935	45,561	678	-----	146	-----	2,157	298	975	-----

Year	Amateur and disaster services	Aviation services	Industrial services	Marine services	Public safety services	Experimental services <sup>1</sup>	Year	Amateur and disaster services	Marine services	Public safety services
	140	141	143	145	146	147		140	145	146
1934	46,390	671	129	2,195	220	681	1923	16,570	-----	3
1933	41,555	646	121	2,192	152	255	1922	-----	-----	-----
1932	30,374	579	134	2,225	123	168	1921	-----	-----	-----
1931	22,739	463	130	2,392	91	160	-----	-----	-----	-----
1930	18,994	281	-----	2,173	20	-----	1920	5,719	-----	1
1929	16,829	131	-----	-----	12	-----	1919	-----	-----	-----
1928	16,928	-----	-----	-----	-----	-----	1918	-----	-----	-----
1927	16,926	-----	-----	-----	-----	-----	1917	-----	-----	-----
1926	14,902	-----	-----	1,954	-----	-----	1916	-----	-----	1
1925	15,000	-----	-----	1,901	4	-----	1915	-----	-----	-----
1924	15,540	-----	-----	2,741	3	-----	1914	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	1913	1,312	701	-----

<sup>1</sup> The Experimental Radio Service is the means by which the Federal Communications Commission encourages and promotes basic radio research and development of new radio techniques and systems.

<sup>2</sup> Estimated.

Series R 149-162. Authorized Land Stations and Mobile Transmitters in the Safety and Special Radio Services: 1948 to 1970

[Includes Alaska, Hawaii, Puerto Rico, and outlying areas. See text for series R 140-148 for definition of stations]

Year	Aviation		Citizens <sup>1</sup>		Land transportation <sup>1</sup>		Marine		Public safety	
	Land or fixed stations	Portable or mobile units	Land or fixed stations	Portable or mobile units	Land or fixed stations	Portable or mobile units	Land or fixed stations	Portable or mobile units	Land or fixed stations	Portable or mobile units
	149	150	151	152	153	154	155	156	157	158
1970, June 30.....	21,352	220,813	4,663	3,987,075	25,302	548,020	8,610	242,026	68,972	709,497
1969, June 30.....	20,958	210,035	4,402	2,838,243	24,766	526,801	7,147	219,036	64,743	667,350
1968, June 30.....	20,105	205,771	5,115	2,753,996	23,440	498,941	6,530	192,708	60,441	624,015
1967, June 30.....	19,527	177,196	4,984	2,776,167	21,961	467,874	5,565	168,889	56,246	583,309
1966, June 30.....	17,330	151,704	4,440	2,714,065	20,215	425,999	4,951	144,678	52,474	544,814
1965, June 30.....	17,449	159,109	-----	2,545,606	19,056	397,331	4,760	134,028	48,730	496,002
1964, June 30.....	17,696	154,967	-----	2,383,032	18,203	378,008	4,402	191,268	45,372	464,423
1963, June 30.....	16,036	153,786	-----	2,183,302	18,340	369,943	4,553	160,934	60,017	430,880
1962, June 30.....	15,294	154,401	-----	1,429,088	17,270	351,989	4,122	143,245	51,975	388,464
1961, June 30.....	14,400	132,350	-----	963,688	15,755	325,150	4,015	123,757	45,582	369,390
1960, June 30.....	13,502	130,752	-----	650,000	11,913	246,935	3,873	103,007	39,047	332,940
1959, June 30.....	11,524	111,547	-----	431,000	17,100	425,371	3,642	90,007	37,077	292,131
1958, Jan. 1.....	11,884	69,451	-----	-----	10,145	331,608	3,619	75,000	31,134	273,216
1957, Jan. 1.....	8,996	53,616	-----	-----	9,371	297,322	3,094	62,000	23,565	220,022
1956, Jan. 1.....	7,978	40,735	-----	-----	8,069	243,457	2,106	56,265	18,526	207,195
1955, Jan. 1.....	5,373	36,595	-----	-----	6,616	154,358	1,385	49,742	13,731	187,670
1954, Jan. 1.....	4,657	37,467	-----	-----	6,041	132,944	1,250	42,573	11,742	152,811
1953, Mar. 1.....	6,145	37,951	-----	-----	5,277	110,514	1,174	37,629	10,306	131,549
1952, Jan. 1.....	2,716	39,307	-----	-----	4,302	92,000	1,102	34,187	7,732	104,559
1951, Jan. 1.....	3,181	32,575	-----	-----	3,721	74,966	1,273	28,085	6,579	80,433
1949, June 15.....	1,937	23,037	-----	-----	2,759	51,774	443	19,170	4,301	59,122
1949, Jan. 1.....	-----	24,695	-----	-----	-----	<sup>2</sup> 49,650	-----	17,414	-----	53,783
1948, Jan. 1.....	-----	20,517	-----	-----	-----	<sup>3</sup> 31,852	-----	13,180	-----	38,929

Year	Industrial		Amateur and disaster		Year	Industrial		Amateur and disaster	
	Land or fixed stations	Portable or mobile units	Land or fixed stations	Portable or mobile units		Land or fixed stations	Portable or mobile units	Land or fixed stations	Portable or mobile units
	159	160	161	162		159	160	161	162
1970, June 30.....	177,598	1,840,649	-----	283,461	1958, Jan. 1.....	35,170	331,421	-----	184,566
1969, June 30.....	164,456	1,693,936	-----	290,298	1957, Jan. 1.....	28,073	297,147	-----	160,931
1968, June 30.....	150,219	1,538,525	-----	287,164	1956, Jan. 1.....	22,987	252,265	148,509	8,408
1967, June 30.....	139,033	1,412,377	-----	283,412	1955, Jan. 1.....	16,009	164,262	129,029	3,123
1966, June 30.....	126,558	1,273,673	-----	292,194	1954, Jan. 1.....	13,515	132,425	116,236	1,173
1965, June 30.....	119,328	1,196,170	-----	286,325	1953, Mar. 1.....	12,074	115,024	116,902	252
1964, June 30.....	106,921	1,054,584	-----	289,338	1952, Jan. 1.....	8,676	81,418	113,159	335
1963, June 30.....	97,008	926,631	-----	279,978	1951, Jan. 1.....	6,458	64,172	90,601	61
1962, June 30.....	88,328	804,234	-----	233,038	1949, June 15.....	2,765	33,608	81,675	-----
1961, June 30.....	76,065	680,830	-----	218,101	1949, Jan. 1.....	-----	<sup>4</sup> 27,842	-----	-----
1960, June 30.....	66,795	573,395	-----	221,362	1948, Jan. 1.....	-----	10,924	-----	-----
1959, June 30.....	54,779	480,174	-----	205,595	-----	-----	-----	-----	-----

<sup>1</sup> Data for "Citizens" are included with "Land transportation" before 1960.  
<sup>2</sup> Includes Class 2 experimental stations as follows: 46,085 taxicab units and 668 trucks and buses.

<sup>3</sup> Includes 30,000 Class 2 experimental taxicab units.  
<sup>4</sup> Includes 68 Class 2 experimental industrial units.

# Postal Service, Newspapers, and Books (Series R 163-257)

### R 163. Post offices, 1789-1970.

Source: U.S. Post Office Department, *Annual Report of the Postmaster General*, 1970.

The source also presents a classification of the number of post offices into first, second, third, and fourth class for 1946-1970.

### R 164-165. Revenues and expenditures, 1789-1970.

Source: See source for series R 163.

For 1789-1953, revenues and expenses are stated on a cash basis and therefore include payments and receipts in one year applicable to the expenses and revenues of prior years. For 1954-1962, revenues and expenses are stated on an accrual basis, with expenses reported in the year which gave rise to the earnings, whether collected or accrued. For 1963-1970, revenues and expenses are stated on an accrued cost basis.

Comparability of figures from year-to-year are affected by various factors. For example, the Post Office discontinued payment of subsidies to airlines in 1954; the Department also began receiving reimbursement for penalty and franked mail in 1954, costs which the Post Office had previously absorbed.

Expenses include expenditures for plant and equipment of a capital nature and for inventories and supplies, but no provision for depreciation is made. Expenses also include certain public service costs paid by the Post Office Department, but which the Department considered to be unrelated to the determination of the proper operating costs of the Postal Service. These include unreimbursed services for other Government agencies; specific rate subsidies for mailings of second- and third-class mail by certain nonprofit organizations, free-in-county second-class mail, classroom publications, and mail for the blind; excess rates paid to foreign air carriers; and custodial services for other Government departments and agencies. These costs were estimated to have been approximately \$740 million for 1970.

Expenses of the Post Office Department do not include costs applicable to postal operations which are paid by other Government departments and agencies for retirement pay accrual, workmen's compensation and unemployment compensation for postal employees, and certain custodial and maintenance expenses. These expenses amounted to \$424 million in 1970.

### R 166-167. Ordinary postage stamps and stamped envelopes and wrappers issued, 1848-1970.

Source: See source for series R 163.

### R 168. Postal cards issued, 1873-1970.

Source: See source for series R 163.

The Government postal card was authorized in 1872. The post card, or private mailing card, was introduced in 1898. The rate for this service has been practically identical with that of the postal cards. Business reply cards and letters as a postal service was initiated in 1928.

### R 169. Pieces of matter of all kinds handled, 1886-1970.

Source: See source for series R 163.

With the establishment of the cost ascertainment system in 1926, data on the volume of mail have been obtained from sample counts

conducted quarterly for one week at representative post offices, ranging in number from 255 to over 500. These sample data were then projected to include all originating mail at all post offices in the United States. The methods of estimating the number of pieces of matter handled prior to 1926 could not be ascertained. See also general note for series R 172-186.

### R 170. Surplus or deficit, 1926-1970.

Source: See source for series R 163.

The Post Office Department operated with a deficit in fiscal year 1970 as it had in all but a few years of its history. The last period in which there was a surplus was during the three World War II years, 1943 through 1945.

The accounts of the Department are maintained in such a way as to reflect the deficit in three ways—the cash deficit, the operating deficit, and the postal fund deficit. The "cash deficit" represents the excess of disbursements over receipts. The "operating deficit," which is utilized in the series, represents the excess of expense over income. The "postal fund deficit" represents the excess of obligations incurred over postal revenues.

### R 171. Sales of postage stamps and other stamped paper, 1937-1970.

Source: See source for series R 163.

### R 172-186. General note.

The bulk of postal revenues and postal expenses cannot be allocated directly to the various classes of mail handled or to special services performed.

Postal revenues (except for about 10 percent which can be directly allocated or computed) are derived from postage acquired in the form of stamps and stamped paper and from payments under permits, which may be used by the purchaser generally on any class of mail. The result is a large common pool of revenues from numerous sources. Similarly, the several classes of mail and the special services are to a considerable extent handled by the same employees using the same buildings, equipment, operating facilities, house services, and supplies.

Pursuant to a Congressional Act of February 28, 1925 (39 U.S.C. 826), a regular, continuing cost ascertainment system was established in 1926 to collect and develop data on the revenue received (including volume and weight of mail) and cost incurred by the Post Office Department. This system was succeeded by the revenue-cost analysis system which incorporated incremental costs concepts into the system for the first time. The latter system represents the culmination of many changes and improvements for the Revenue and Cost Analysis Report (formerly the Cost Ascertainment Report).

The statistics of expenses as published annually are subject to later readjustments as a result of increases in the charges of railroad, air, or other transportation services, or increases in the salaries of Post Office Department employees, if such increases are made retroactive to an earlier fiscal year.

### R 172-174. First-class mail, 1926-1970.

Source: U.S. Post Office Department, 1926-1946, *Budget Digest*, 1949, chapter IV, tables 5-11; 1947-1968, *Cost Ascertainment Report*, 1956, 1958, and 1968 issues; 1969-1970, *Revenue and Cost Analysis*, 1970.

Figures cover letters, matter wholly or partially in writing or typewriting, and packages (including local delivery letters), single or double postal and post cards, bills and statements of account, and matter closed against postal inspection. Each piece may not weigh more than 70 pounds or measure more than 100 inches in length and girth combined. Postage may be paid by adhesive stamps, stamped cards or envelopes, meter stamps, or permit imprint. For 1926-1929, domestic airmail could not be segregated and is included with first-class mail. Mail fees are included for 1950-1970. Box rent revenues, previously reported as unassignable are allocated to classes of mail, 1951-1955, and classified with special services for 1956-1970. For 1951-1970, the expense of free mail from members of the Armed Forces is included in first-class mail expenditures.

See also text for series R 188-189.

#### R 175-177. Second-class mail, 1926-1970.

Source: See source for series R 172-174.

Newspapers and periodical publications, both domestic and foreign, which meet all of the requirements set forth in part 132, Postal Service Manual, may be mailed at the second-class rates of postage. Revenues include postage payments (stamps or money order permit) and, since 1932, payment of fees for use of the second-class privilege; transient second-class matter (mailings of second-class publications by other than the publisher or news agents); publishers' second-class matter forwarded or returned, 1950-1970; mailing fees, 1951-1970; and box rent revenue allocation, 1951-1970.

Expenses include cost of publishers' second-class matter forwarded or returned, 1950-1970, and, for 1953-1970, also includes the expense of sending notices to publishers regarding undelivered mail.

#### R 178-180. Third-class mail, 1926-1970.

Source: See source for series R 172-174.

Third-class mail embraces all matter less than 16 ounces in weight and not qualifying as first or second class. A significant proportion of the matter mailed under third class is advertising material. Also included are keys, identification cards and tags, or similar identification devices that are without cover and bear, contain, or have securely attached the name and complete post office address of a person, organization, or concern with instructions to return to such address and a statement guaranteeing the payment of the postage due on delivery. In 1928, a special "bulk rate" was made applicable to separately addressed identical pieces of third-class matter mailed at one time. The present law requires such matter be mailed in quantities of at least 50 pounds or at least 200 pieces. Also, there is a single piece third-class rate. Revenues include postage revenues and fees for permits; domestic mail fees, 1951-1970; and box rent revenue allocation, 1951-1970.

Prior to 1953, the revenues and expenses applicable to controlled circulation publications (publications consisting primarily of advertising and distributed free or mainly free) were included with third-class and fourth-class services. For 1953-1970, controlled circulation publications are shown separately.

#### R 181-183. Fourth-class mail, 1926-1970.

Source: See source for series R 172-174.

This class includes mailable matter 16 ounces or more in weight, not qualifying as first or second class. The major development in this class of mail was the establishment of the parcel post system effective January 1, 1913. Books, special fourth-class and library rate items, catalogs, and matter for the blind, included in fourth class, carry special rates. Mailers of fourth-class articles may use any method of paying postage. Revenues include domestic mail fees for 1951-1970; box rent revenue allocations, 1951-1970; and special handling fees.

#### R 184-186. Domestic airmail, 1929-1970.

Source: See source for series R 172-174.

Since September 1948, domestic airmail includes a parcel post service and since January 1949 airmail postal and post card service. Paid airmail to and from the Armed Forces overseas and the outlying areas of the United States, formerly in international airmail, is included with domestic airmail, 1947-1970. For 1951-1970, airmail expenses include the cost of free mail from members of the Armed Forces.

Airmail expenditures include subsequent payments, as of June 30, 1950, to airlines for retroactive rate increases where effective. The decline in airmail expenses between 1953 and 1954 resulted from the transfer of subsidy payments to airlines from the Post Office Department to the Civil Aeronautics Board effective October 1, 1953. The *Cost Ascertainment Report* for 1953 and prior years shows division of service costs and subsidy payments.

For 1954-1970, the Post Office Department experimented with the transporting of all mail by air between a number of major cities. Such mail, carrying first-class postage, is counted within first-class service.

#### R 187. Post Office employees, 1926-1970.

Source: U.S. Post Office Department, *Annual Report of the Postmaster General*, 1970.

Included are regular or full-time employees and substitute, hourly rate, and part-time employees. Part-time employees are a substantial part of the Post Office labor force.

Prior to October 1933, the operating force for public buildings housing post offices and other Government agencies was on the rolls of the Treasury Department. On that date, the personnel were transferred to the Post Office Department. This increased the regular labor force of the Post Office Department by 8,000 employees.

#### R 188-190. Postal rates for first-class mail, letters and postal cards, 1792-1970.

Source: 1792-1956, U.S. Post Office Department, *United States Domestic Postage Rates, 1789-1956*, table I; 1958-1970, Public Law 85-426 (Postal Policy Act of 1958), Public Law 87-793 (Postal Service and Employee Salary Act of 1962), and Public Law 90-206 (Postal Service and Employee Salary Act of 1967).

The postage rates in effect in 1789 were those fixed by the Continental Congress in the Ordinance of 1782. These rates were continued until 1792. It was not until 1863 that mail was divided into "classes." In the early days of the postal service the recipient rather than the sender ordinarily paid the postage. In 1847 postage stamps were introduced, and in 1885 compulsory prepayment for all domestic letter mail was established.

The rates shown are for regular service. During the earlier years of the westward expansion, special local rates were often improvised. Thus, the first letter rate on the "pony express," which operated between Missouri and California from 1860 to 1861, was \$5 for a half ounce, reduced in May 1861 to \$2 for a half ounce, and in July 1861 to \$1 for a half ounce because of a Government subsidy.

A considerable part of the domestic mail service between 1792 and 1863 was carried by ship, and was subject to shipletter rates. These rates are detailed in the source, table II, p. 24. In 1863, a ship and steamboat rate, double the regular rate, was made applicable to domestic mail conveyed by ships not regularly employed in carrying mail. This classification is omitted after 1879 because of its diminishing importance but the double rate is still in effect although little or no matter is mailed under these rates.

In 1863, first-class mail was defined to include letters and matter wholly or partly in writing, except book manuscripts and corrected proof sheets. In 1872, first-class mail was described as including



Series R 163-171. Postal Service—Post Offices, Revenues and Expenditures, Postage Stamps, Stamped Envelopes and Postal Cards Issued, and Pieces of Mail Handled: 1789 to 1970

[In thousands, except number of post offices. For years ending June 30. Includes Alaska, Hawaii, Puerto Rico, and all outlying areas except the Canal Zone]

Year	Post offices <sup>1</sup>	Revenues <sup>2</sup>	Expenditures <sup>2</sup>	Ordinary postage stamps issued <sup>3</sup>	Stamped envelopes and wrappers issued <sup>4</sup>	Postal cards issued <sup>5</sup>	Pieces of matter of all kinds handled	Surplus or deficit	Sales of postage stamps and other stamped paper
	163	164	165	166	167	168	169	170	171
1970	32,002	\$7,701,695	\$7,867,269	26,182,562	1,368,098	830,650	84,881,833	\$-165,574	\$1,936,147
1969	32,064	7,025,898	7,168,489	27,383,827	1,374,121	846,695	82,004,501	-142,531	1,936,578
1968	32,250	6,423,515	6,543,920	34,667,494	1,853,427	1,431,311	79,516,731	-120,405	1,799,492
1967	32,626	5,101,982	6,249,027	26,320,986	1,512,996	1,011,675	78,366,572	-1,147,044	1,636,057
1966	33,121	4,784,186	5,726,523	23,503,959	1,627,789	1,289,000	75,607,302	-942,336	1,579,338
1965	33,624	4,483,390	5,275,840	22,691,106	1,670,726	1,092,380	71,873,166	-792,450	1,528,289
1964	34,040	4,276,123	4,927,825	24,692,326	1,928,982	1,563,165	69,676,477	-651,702	1,504,180
1963	34,498	3,879,128	4,698,528	31,669,175	2,344,717	2,487,038	67,852,738	-819,400	1,381,749
1962	34,797	3,557,041	4,331,617	25,405,929	1,789,415	1,463,665	66,493,190	-837,277	1,262,315
1961	34,955	3,423,059	4,249,414	23,001,808	2,021,032	1,653,595	64,932,859	-875,355	1,252,681
1960	35,238	3,276,588	3,873,953	23,773,570	2,005,442	1,773,090	63,674,604	-634,534	1,244,909
1959	35,750	3,035,232	3,640,368	27,980,885	2,228,813	2,969,065	61,247,220	-605,117	1,245,231
1958	36,308	2,550,221	3,440,810	22,879,828	2,040,211	2,375,065	60,229,911	-2,870,577	1,016,930
1957	37,012	2,496,614	3,044,438	24,257,860	1,966,336	2,046,516	59,077,633	-547,824	1,015,237
1956	37,515	2,419,354	2,883,305	23,722,489	2,571,416	2,911,276	56,441,216	-673,951	1,010,523
1955	38,316	2,349,477	2,712,150	23,105,454	2,189,521	2,515,392	55,233,564	-862,673	999,985
1954	39,405	2,268,517	2,667,664	22,219,068	2,265,309	2,360,554	52,213,170	-399,147	998,965
1953	40,609	2,091,714	2,742,126	22,960,962	2,338,622	2,330,921	60,843,156	-650,412	985,172
1952	40,919	1,947,316	2,666,860	22,067,033	2,274,660	2,984,124	49,905,875	-719,544	948,430
1951	41,193	1,776,816	2,341,399	21,521,807	2,004,569	4,183,743	46,908,410	-564,583	883,357
1950	41,464	1,677,487	2,222,949	20,647,165	2,052,156	3,872,301	45,063,737	-545,462	862,313
1949	41,607	1,571,851	2,149,322	21,047,376	2,219,744	3,468,719	43,555,108	-551,130	856,266
1948	41,695	1,410,971	1,687,305	20,482,059	2,117,573	3,656,591	40,280,374	-308,972	820,904
1947	41,760	1,299,141	1,504,799	19,542,257	1,996,450	2,951,300	37,427,706	-263,368	801,437
1946	41,751	1,224,572	1,353,654	19,180,427	1,815,816	2,477,854	36,313,158	-148,083	843,417
1945	41,792	1,314,240	1,145,002	20,239,986	2,064,773	2,282,280	37,912,067	+162,642	953,770
1944	42,161	1,112,877	1,068,987	19,106,171	1,902,313	1,912,990	34,930,685	+37,789	787,836
1943	42,654	966,227	952,529	19,123,977	1,797,400	2,316,990	32,818,262	+1,335	668,054
1942	43,358	859,817	873,950	19,492,121	1,676,573	2,370,062	30,117,633	-11,825	571,651
1941	43,739	812,828	836,359	16,381,321	1,645,255	2,400,188	29,235,791	-26,964	548,584
1940	44,024	766,949	807,629	16,381,427	1,649,549	2,256,520	27,749,467	-42,225	521,753
1939	44,327	745,955	784,550	15,073,796	1,605,076	2,170,572	26,444,846	-40,827	514,869
1938	44,656	728,634	772,308	14,912,093	1,643,815	2,186,521	26,041,979	-44,697	515,118
1937	44,877	726,201	772,743	15,108,639	1,663,818	2,226,153	25,801,279	-44,704	521,675
1936	45,230	665,343	753,616	13,836,400	1,647,891	1,917,793	23,571,315	-90,975	-----
1935	45,686	630,795	696,503	13,610,497	1,617,677	1,754,030	22,331,752	-69,802	-----
1934	46,506	586,733	630,733	12,525,717	1,580,820	1,590,257	20,625,827	-46,667	-----
1933	47,641	699,387	699,387	11,917,442	1,644,993	1,389,524	19,868,456	-110,007	-----
1932	48,159	588,172	793,684	14,650,970	2,384,793	1,334,753	24,306,744	-206,886	-----
1931	48,733	656,463	802,485	15,559,164	2,847,439	1,531,246	26,544,352	-146,545	-----
1930	49,063	705,484	803,667	16,268,856	3,164,127	1,643,212	27,887,823	-98,449	-----
1929	49,482	696,943	782,344	16,917,275	3,223,537	1,783,897	27,951,548	-86,310	-----
1928	49,944	693,634	725,700	16,676,493	3,201,459	1,872,040	26,837,005	-33,363	-----
1927	50,266	683,122	714,577	15,999,701	3,145,946	1,834,456	26,686,556	-28,915	-----
1926	50,601	659,820	679,704	16,333,410	3,001,858	1,668,241	25,483,529	-37,906	-----
1925	50,957	599,591	639,282	17,386,556	2,997,177	1,497,367	-----	-----	-----
1924	51,266	572,949	587,377	15,954,475	2,964,464	1,293,185	-----	-----	-----
1923	51,613	532,828	556,851	15,478,095	2,721,475	1,258,196	23,054,832	-----	-----
1922	51,950	484,854	545,644	14,261,949	2,364,373	1,111,124	-----	-----	-----
1921	52,168	463,491	620,994	13,869,935	2,738,984	1,081,207	-----	-----	-----
1920	52,641	437,150	454,323	13,212,790	2,350,073	986,156	-----	-----	-----
1919	53,084	436,239	362,498	15,020,470	1,844,885	456,924	-----	-----	-----
1918	54,347	388,976	324,834	13,065,785	1,819,307	707,111	-----	-----	-----
1917	55,414	329,726	319,839	12,451,522	2,161,108	1,112,338	-----	-----	-----
1916	55,935	312,058	306,204	11,671,842	1,853,791	1,047,895	-----	-----	-----
1915	56,380	237,243	298,546	11,226,386	1,793,764	975,542	-----	-----	-----
1914	56,810	237,935	283,544	11,112,254	1,864,714	962,072	-----	-----	-----
1913	58,020	266,620	262,068	10,812,508	1,724,730	946,862	18,567,445	-----	-----
1912	58,729	246,744	248,525	9,929,174	1,684,624	909,411	17,588,659	-----	-----
1911	59,287	237,880	237,649	10,046,069	1,690,775	975,139	16,900,552	-----	-----
1910	59,580	224,129	229,977	9,067,165	1,506,862	726,441	14,850,102	-----	-----
1909	60,144	203,562	221,004	8,731,875	1,509,626	926,479	14,004,577	-----	-----
1908	60,704	191,479	208,352	7,651,400	1,266,003	809,427	13,364,069	-----	-----
1907	62,658	183,585	190,238	7,061,037	1,418,840	805,569	12,255,666	-----	-----
1906	65,600	167,933	178,450	6,284,450	1,230,288	798,918	11,361,091	-----	-----
1905	68,131	152,827	167,399	5,751,018	1,074,918	728,285	10,187,506	-----	-----
1904	71,131	143,582	152,362	5,380,887	1,020,255	702,907	9,502,460	-----	-----
1903	74,169	134,224	138,784	5,270,549	948,654	770,658	8,887,467	-----	-----
1902	75,924	121,848	124,786	4,621,286	853,128	547,204	8,085,447	-----	-----
1901	76,945	111,631	115,555	4,239,274	772,839	659,615	7,424,390	-----	-----

See footnotes at end of table.

Series R 163-171. Postal Service—Post Offices, Revenues and Expenditures, Postage Stamps, Stamped Envelopes and Postal Cards Issued, and Pieces of Mail Handled: 1789 to 1970—Con.

[In thousands, except number of post offices]

Year	Post offices <sup>1</sup>	Revenues <sup>2</sup>	Expenditures <sup>2</sup>	Ordinary postage stamps issued <sup>3</sup>	Stamped envelopes and wrappers issued <sup>4</sup>	Postal cards issued <sup>5</sup>	Pieces of matter of all kinds handled	Year	Post offices <sup>1</sup>	Revenues <sup>2</sup>	Expenditures <sup>2</sup>	Ordinary postage stamps issued <sup>3</sup>	Stamped envelopes and wrappers issued <sup>4</sup>
	163	164	165	166	167	168	169		163	164	165	166	167
1900	76,688	\$102,354	\$107,740	3,998,545	707,555	587,815	7,129,990	1872	31,863	\$21,915	\$26,658	541,445	113,926
1899	75,000	95,021	101,632	3,692,776	628,456	573,684	6,576,310	1871	30,045	20,037	24,390	498,126	104,675
1898	73,570	89,013	98,054	3,418,458	606,447	556,381	6,214,447	1870	28,492	18,880	23,999	468,118	86,290
1897	71,022	82,665	94,077	3,063,634	585,032	523,608	5,781,002	1869	27,106	17,314	23,698	421,047	81,675
1896	70,360	82,499	90,933	3,025,481	616,040	524,820	5,693,719	1868	26,481	16,292	22,731	383,471	73,365
1895	70,064	76,983	87,180	2,795,425	598,849	492,306	5,184,281	1867	25,163	15,237	19,235	371,600	63,087
1894	69,805	75,080	84,994	2,602,278	571,475	468,500	4,919,090	1866	23,389	14,387	15,352	347,734	39,095
1893	68,408	75,897	81,582	2,750,293	636,279	530,506	5,021,841	1865	23,882	14,556	13,695	387,419	72,206
1892	67,119	70,930	76,981	2,543,270	593,685	511,434	4,776,575	1864	23,878	12,438	12,645	334,055	28,219
1891	64,329	65,932	73,060	2,397,503	556,226	424,217	4,369,900	1863	23,047	11,164	11,814	338,340	25,549
1890	62,401	60,832	66,260	2,219,737	513,833	429,515	4,005,408	1862	23,875	8,300	11,125	251,307	27,234
1889	58,999	56,176	62,317	1,961,981	451,864	386,809	3,860,200	1861	23,586	8,349	13,607	211,789	826,027
1888	57,376	52,695	56,458	1,867,173	433,636	381,798	3,576,100	1860	23,498	8,518	14,875	216,371	29,280
1887	55,157	48,838	53,006	1,746,986	381,611	356,939	3,495,100	1859	23,539	7,968	15,754	192,202	30,280
1886	53,614	48,948	51,005	1,620,784	354,008	355,648	3,747,000	1858	22,977	7,487	12,722	176,761	30,971
1885	51,252	42,561	50,046	1,465,123	322,751	339,417	-----	1857	22,586	7,354	11,508	154,729	33,033
1884	48,434	43,326	47,225	1,459,768	322,232	362,877	-----	1856	25,565	6,921	10,405	126,045	33,764
1883	46,820	45,509	43,283	1,202,744	259,266	379,517	-----	1855	24,410	6,642	9,968	72,977	23,452
1882	46,231	41,876	40,482	1,114,560	256,565	351,498	-----	1854	23,548	6,256	8,577	56,330	21,384
1881	44,512	36,785	39,593	954,128	227,067	308,537	-----	1853	22,320	5,241	7,983	56,344	5,000
1880	42,989	33,815	36,543	875,682	207,137	272,550	-----	1852	20,901	5,185	7,108	54,186	-----
1879	40,588	30,042	33,450	774,359	177,562	221,797	-----	1851	19,796	6,411	6,278	1,247	-----
1878	38,253	29,278	34,165	742,462	183,500	200,630	-----	1850	18,417	5,500	5,213	1,541	-----
1877	37,345	27,532	33,486	689,581	170,651	170,651	-----	1849	16,749	4,705	4,479	956	-----
1876	36,383	28,644	33,263	698,799	165,520	150,815	-----	1848	16,159	4,555	4,327	860	-----
1875	35,547	26,791	33,611	682,342	149,766	107,616	-----	-----	-----	-----	-----	-----	-----
1874	34,294	26,477	32,126	632,733	136,419	91,079	-----	-----	-----	-----	-----	-----	-----
1873	33,244	22,997	29,085	601,932	131,173	31,094	-----	-----	-----	-----	-----	-----	-----

Year	Post offices <sup>1</sup>	Revenues <sup>2</sup>	Expenditures <sup>2</sup>	Year	Post offices <sup>1</sup>	Revenues <sup>2</sup>	Expenditures <sup>2</sup>	Year	Post offices <sup>1</sup>	Revenues <sup>2</sup>	Expenditures <sup>2</sup>
	163	164	165		163	164	165		163	164	165
1847	15,146	\$3,880	\$3,980	1827	7,300	\$1,525	\$1,470	1807	1,848	\$479	\$454
1846	14,601	3,487	4,076	1826	6,150	1,448	1,367	1806	1,710	446	417
1845	14,183	4,290	4,321	1825	5,677	1,307	1,229	1805	1,558	421	377
1844	14,103	4,237	4,299	1824	5,182	1,198	1,188	1804	1,405	389	338
1843	13,814	4,296	4,375	1823	4,043	1,130	1,157	1803	1,258	352	322
1842	13,733	4,547	4,628	1822	4,709	1,117	1,163	1802	1,114	327	282
1841	13,778	4,408	4,500	1821	4,650	1,059	1,165	1801	1,025	320	255
1840	13,468	4,544	4,718	1820	4,500	1,112	1,161	1800	903	281	214
1839	12,730	4,485	4,637	1819	4,000	1,205	1,118	1799	677	265	188
1838	12,519	4,239	4,431	1818	3,613	1,130	1,036	1798	639	233	179
1837	11,767	4,102	3,288	1817	3,459	1,003	917	1797	554	214	150
1836	11,091	3,408	2,842	1816	3,260	962	804	1796	468	195	132
1835	10,770	2,994	2,757	1815	3,000	1,043	748	1795	453	161	118
1834	10,693	2,824	2,911	1814	2,670	730	727	1794	450	129	90
1833	10,127	2,617	2,930	1813	2,708	703	631	1793	209	105	72
1832	9,205	2,259	2,266	1812	2,610	649	540	1792	195	67	55
1831	8,686	1,998	1,936	1811	2,403	587	499	1791	89	46	37
1830	8,450	1,851	1,933	1810	2,300	552	496	1790	75	38	32
1829	8,004	1,707	1,782	1809	2,012	507	498	1789	75	8	8
1828	7,530	1,660	1,690	1808	1,944	461	463	-----	-----	-----	-----

<sup>1</sup> Excludes branches and stations.

<sup>2</sup> Accounting basis changed from cash to accrual basis in 1954; from accrual basis to accrued cost basis in 1963.

<sup>3</sup> First issued under act of Mar. 3, 1847, and placed on sale at New York, July 1, 1847.

<sup>4</sup> Stamped envelopes first issued June 1853, under act of Aug. 31, 1852.

<sup>5</sup> First issued May 1, 1873, under act of June 8, 1872.

<sup>6</sup> For 1918 and 1919, includes \$44,500,000 and \$71,392,000, respectively, war-tax revenue accruing from increased postage.

<sup>7</sup> Special-request envelopes first issued in this year.

<sup>8</sup> Newspaper wrappers first issued under act of Feb. 27, 1861; they were not made after Oct. 9, 1934.

<sup>9</sup> For 3 months only.

Series R 172-187. Postal Service—Revenues, Expenses, and Volume of Mail, by Classes of Mail, and Employees: 1926 to 1970

[In millions, except employees in thousands. Includes Alaska, Hawaii, Puerto Rico, and all outlying areas except the Canal Zone]

Year	First-class mail <sup>1</sup>			Second-class mail			Third-class mail			Fourth-class mail			Airmail, domestic <sup>1,3</sup>			Post Office employees
	Revenues <sup>2</sup>	Ex-penses	Pieces	Revenues <sup>2</sup>	Ex-penses	Pieces	Revenues <sup>2</sup>	Ex-penses	Pieces	Revenues <sup>2</sup>	Ex-penses	Pieces	Revenues <sup>2</sup>	Ex-penses	Pieces	
	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	
1970	\$8,290	\$1,985	48,640	\$155	\$292	9,351	\$827	\$531	19,974	\$778	\$554	977	\$484	\$188	1,718	741
1969	3,135	1,692	46,411	147	350	9,206	782	460	19,622	831	542	1,031	485	165	1,886	739
1968	2,722	2,660	43,183	134	569	8,907	743	1,144	20,665	767	939	1,039	425	304	2,065	731
1967	2,442	2,407	41,998	129	551	8,711	704	1,116	20,985	742	933	1,070	329	271	2,111	717
1966	2,334	2,176	40,422	126	524	8,634	682	1,041	20,305	712	896	1,066	277	221	1,828	675
1965	2,193	1,965	38,068	119	499	8,600	650	999	19,454	702	846	1,045	243	198	1,629	596
1964	2,109	1,814	36,943	108	481	8,559	612	899	18,599	659	815	1,066	216	181	1,505	585
1963	1,824	1,691	35,833	98	454	8,227	563	874	18,407	645	806	1,076	200	172	1,545	587
1962	1,615	1,605	35,333	94	455	8,090	510	787	17,837	634	787	1,024	185	163	1,545	588
1961	1,558	1,547	34,289	89	442	7,966	498	787	17,569	626	774	978	171	151	1,453	582
1960	1,510	1,395	33,235	81	412	7,535	441	711	17,910	607	736	1,016	157	137	1,356	563
1959	1,439	1,303	32,274	69	373	7,099	391	678	16,978	576	709	1,038	153	131	1,368	550
1958	1,092	1,229	32,218	66	351	7,148	288	611	15,849	584	699	1,170	137	127	1,435	538
1957	1,066	1,040	31,561	66	327	6,888	281	528	15,702	586	641	1,184	140	119	1,483	521
1956	1,014	978	30,078	66	318	6,915	266	472	14,676	593	608	1,173	137	114	1,487	509
1955	968	906	23,713	66	299	6,740	270	442	15,050	595	593	1,136	130	109	1,467	512
1954	908	845	27,085	62	293	6,483	252	399	13,866	587	609	1,195	127	119	1,470	507
1953	909	822	27,257	58	298	6,762	218	374	12,004	491	623	1,245	121	157	1,430	507
1952	843	787	26,502	51	288	6,956	171	361	11,630	485	619	1,257	121	148	1,391	524
1951	785	678	25,578	49	245	6,520	158	286	10,534	431	537	1,235	95	116	1,094	498
1950	741	665	24,500	45	242	6,265	154	292	10,343	404	506	1,179	74	109	853	501
1949	706	629	23,206	44	234	6,987	136	267	9,389	356	485	1,209	65	104	856	518
1948	668	518	21,948	41	210	6,344	112	201	8,158	272	368	1,143	54	83	796	503
1947	627	500	20,665	39	201	6,124	96	171	6,803	235	298	1,067	54	68	772	471
1946	598	454	20,059	33	181	5,832	83	135	6,055	209	250	994	68	50	716	487
1945	615	374	21,009	29	145	5,522	76	99	5,446	233	232	1,028	81	50	876	436
1944	540	370	20,510	29	138	4,635	63	88	4,409	202	217	961	79	49	1,092	390
1943	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	374
1942	459	298	16,972	27	113	4,571	74	98	5,435	151	169	779	33	37	463	360
1941	432	278	15,989	26	109	4,607	83	105	6,075	142	161	738	24	31	323	361
1940	418	267	15,224	25	110	4,577	75	101	5,556	134	156	712	19	28	259	353
1939	400	263	14,657	24	111	4,810	70	94	5,181	133	151	693	16	25	221	349
1938	389	259	14,226	24	114	4,377	71	95	5,272	129	146	670	15	22	210	345
1937	384	254	13,882	24	113	4,529	72	92	5,356	132	146	685	12	19	168	332
1936	355	247	12,731	22	118	4,353	63	86	4,674	122	140	618	10	17	134	324
1935	344	229	12,498	20	107	4,138	55	76	4,030	112	133	573	7	13	89	309
1934	325	206	11,557	21	99	3,956	50	67	3,612	102	121	531	6	15	57	314
1933	332	227	10,878	20	108	3,869	51	79	3,753	100	132	530	6	23	60	322
1932	310	277	14,598	23	125	4,552	51	80	3,641	114	146	617	6	24	89	333
1931	336	278	15,824	27	124	4,857	58	82	4,100	133	158	766	6	18	88	339
1930	359	279	16,901	31	120	4,968	61	83	4,325	152	167	837	5	15	69	340
1929	361	276	17,170	30	124	4,834	62	81	4,341	143	163	770	4	11	56	340
1928	356	268	16,706	35	120	4,673	66	72	3,833	144	151	752				337
1927	345	262	16,284	35	119	4,753	69	73	4,062	141	146	743				332
1926	321	247	15,266	34	118	4,658	69	71	3,962	145	148	770				329

NA Not available.

<sup>1</sup> For 1926-1929, domestic airmail included with first-class mail.

<sup>2</sup> For 1951-1955, box rent revenue, previously classified as unassignable, allocated to classes of mail; thereafter, classified as "Special services."

<sup>3</sup> Beginning 1947, includes airmail to and from Armed Forces overseas, previously included with foreign mail. Beginning 1954, excludes reimbursement for airmail transportation.

<sup>4</sup> In fiscal year 1969 the department changed from a fully distributed cost system to an attributable cost system.

Series R 188-190. Postal Rates for First-Class Mail, Letters and Postal Cards: 1792 to 1970

[First-class mail as a mail category not officially established until 1863. Ship and steamboat letters, 1792-1863, carried special rates]

Year of rate change	Letters, nonlocal	Postal cards (cents)	Year of rate change and distance	Single letters <sup>5</sup> (cents)	Year of rate change and distance	Single letters <sup>5</sup> (cents)
	188	189		190		190
1968-1970	6¢ per oz.	5	1855:		1815, over 500 miles	50% increase
1963	5¢ per oz.	4	Not over 3,000 miles	3		
1958, Aug. 1	4¢ per oz.	3	Over 3,000 miles, all prepaid	10	1799:	
1952	3¢ per oz.	2	1851:		Not over 40 miles	8
1940	3¢ per oz. <sup>(1)</sup>	(1)	Not over 3,000 miles, prepaid	3	41-90 miles	10
1932	3¢ per oz.	1	Not over 3,000 miles, not prepaid	5	91-150 miles	12½
1919	2¢ per oz.	1	Over 3,000 miles, prepaid	6	151-300 miles	17
1917	3¢ per oz.	2	Over 3,000 miles, not prepaid	10	301-500 miles	20
1885	2¢ per oz.	1	1847	(6)	Over 500 miles	25
1883	2¢ per ½ oz.	1	1845:		1792:	
1872	3¢ per ½ oz.	2 1	Not over 300 miles	5	Not over 30 miles	6
1863 <sup>3</sup>	3¢ per ½ oz.		Over 300 miles	10	31-60 miles	8
1861 <sup>4</sup>	do.		1816:		61-100 miles	10
			Not over 30 miles	6	101-150 miles	12½
			31-80 miles	10	151-200 miles	15
			81-150 miles	12½	201-250 miles	17
			151-400 miles	7 18½	251-350 miles	20
			Over 400 miles	25	351-450 miles	22
			Over 500 miles	increase repealed	Over 450 miles	25

<sup>1</sup> The 1940 rate change provided that the 3¢ letter rate was not to apply to first-class matter for local delivery or for delivery within a county with a population of over 1 million if county was entirely within a corporate city.  
<sup>2</sup> Government postal cards first authorized in 1872.  
<sup>3</sup> A uniform rate regardless of distance, a free city delivery service, and a letter unit of ½ ounce instead of the former "single letter" were inaugurated.  
<sup>4</sup> Rate between any point in the U.S. east of the Rocky Mountains and any State or Territory on the Pacific. For other rates, see those for 1855.

<sup>5</sup> A communication of 1 sheet. Proportionately higher rates charged for letters of 2, 3, and 4 or more sheets (packet).  
<sup>6</sup> Various acts between 1847 and 1850 established special rates for the western and southwestern U.S.  
<sup>7</sup> In 1825, rates for single letters, 151 to 400 miles, increased to 18¾ cents.  
<sup>8</sup> Between 1794 and 1863, extra fees were charged for city delivery service. The proceeds went to the letter carrier.

Series R 191. Postal Rates for Domestic Airmail: 1918 to 1970

[Includes Alaska, Hawaii, Puerto Rico, and all outlying areas except the Canal Zone]

Effective date	Rate	Effective date	Rate	Effective date	Rate
	191		191		191
1968, Jan. 7 to 1970	10¢ per oz., 8¢ each for airmail postal and post cards	1932, July 6 1928, Aug. 1 1927, Feb. 1	8¢ first oz.; 13¢ each additional oz. 5¢ first oz.; 10¢ each additional oz. 10¢ per ½ oz., regardless of distance (both contract and Government-operated air routes)	1926, Feb. 15	Government routes: Daytime zone rate, 8¢ per oz. New York to Chicago (overnight), 10¢ per oz.
1963, Jan. 7	8¢ per oz., 6¢ each for airmail postal and post cards	1926, Feb. 15	Contract air routes: Under 1,000 miles, 10¢ per oz. 1,000-1,500 miles, 15¢ per oz. Over 1,500 miles, 20¢ per oz.	1925, July 1	10¢ per oz. for Government-operated overnight service New York to Chicago; 8¢ per oz. daytime zone rate
1958, Aug. 1	7¢ per oz., 5¢ each for airmail postal and post cards			1924, July 1	8¢ per oz., per zone <sup>3</sup>
1949, Jan. 1	6¢ per oz., 4¢ each for airmail postal and post cards <sup>1</sup>			1919, July 18	2¢ per oz. <sup>4</sup>
1948, Sept. 1	(2)			1918, Dec. 15	6¢ per oz.
1946, Oct. 1	5¢ per oz.			1918, July 15	16¢ per oz. and 6¢ each additional oz., of which 10¢ was for special delivery
1944, Mar. 26	8¢ per oz.			1918, May 15	24¢ per oz., of which 10¢ was for special delivery
1934, July 1	6¢ per oz.				

<sup>1</sup> Airmail postal and post card service started Jan. 1, 1949.  
<sup>2</sup> Prior to 1948, weight and size limits for airmail were the same as for first-class mail; beginning Sept. 1, 1948, matter carried by air weighing 8 oz. or less was classified as "airmail," and over 8 oz. as "air-parcel post."

<sup>3</sup> Zones were (1) New York-Chicago, (2) Chicago-Cheyenne, (3) Cheyenne-San Francisco.  
<sup>4</sup> Not strictly an "airmail rate." Between July 18, 1919, and July 1, 1924, there was no airmail rate and no offer of airmail service. Some mail, however, was carried by planes at the regular first-class rate of 2¢ per oz.

Series R 192-217. New Books and New Editions Published, by Subject: 1880 to 1970

Year	Books published <sup>1</sup>			New books									
	Total	New books	New editions	Agriculture	Art	Biography	Business	Education	Fiction	General works	History	Home economics	Juvenile
	192	193	194	195	196	197	198	199	200	201	202	203	204
1970	36,071	24,288	11,783	200	852	735	658	842	1,998	568	1,010	235	2,472
1969	29,579	21,787	7,792	216	856	718	566	721	1,816	508	1,191	267	1,321
1968	30,387	23,321	7,066	191	930	786	644	917	1,822	521	1,048	245	2,318
1967	28,762	21,877	6,885	213	844	783	509	781	1,981	426	1,015	203	2,390
1966	30,050	21,819	8,231	212	779	819	478	886	1,699	410	959	219	2,375
1965	28,595	20,234	8,361	214	763	455	437	789	1,615	384	909	241	2,473
1964	28,451	20,542	7,909	209	776	697	411	934	1,703	361	834	188	2,533
1963	25,784	19,057	6,727	219	664	680	396	777	1,859	346	847	205	2,605
1962	21,904	16,448	5,456	215	590	667	303	559	1,787	279	812	156	2,323
1961	18,060	14,238	3,822	194	539	622	286	461	1,645	231	796	143	1,513
1960	15,012	12,069	2,943	121	422	746	240	308	1,642	233	695	155	1,623
1959	14,876	12,017	2,859	101	354	671	327	368	1,675	326	750	141	1,540
1958	13,462	11,012	2,450	122	409	608	283	276	1,592	213	750	142	1,424
1957	13,142	10,561	2,581	120	304	699	266	254	1,433	360	773	115	1,420
1956	12,538	10,007	2,531	106	283	676	222	229	1,500	305	521	159	1,384
1955	12,589	10,226	2,363	125	305	735	228	231	1,459	315	572	205	1,372
1954	11,901	9,690	2,211	111	285	687	196	223	1,512	339	529	192	1,193
1953	12,050	9,724	2,326	126	285	710	225	201	1,495	360	495	197	1,264
1952	11,840	9,399	2,441	114	267	650	180	238	1,354	336	454	237	1,094
1951	11,255	8,765	2,490	105	272	586	180	229	1,329	329	435	186	982
1950	11,022	8,634	2,388	111	317	538	190	209	1,211	262	456	150	907

Year	New books—Continued												
	Language	Law	Literature	Medicine	Music	Philosophy, psychology	Poetry, drama	Religion	Science	Sociology, economics	Sports, recreation	Technology	Travel
	205	206	207	208	209	210	211	212	213	214	215	216	217
1970	339	355	1,349	1,144	217	843	973	1,815	1,955	3,867	583	930	848
1969	355	363	1,348	928	227	678	944	1,278	1,999	3,216	585	884	802
1968	387	432	1,301	1,022	210	669	731	1,511	2,011	3,107	501	1,072	885
1967	382	392	1,172	935	165	633	739	1,502	1,835	2,767	391	1,051	769
1966	459	316	1,185	1,007	207	629	728	1,477	2,079	2,632	441	1,091	732
1965	385	291	1,166	871	138	582	725	1,428	1,850	2,372	474	942	635
1964	414	256	1,038	876	156	523	681	1,441	1,923	2,445	452	939	747
1963	334	269	871	752	139	505	578	1,459	1,648	1,932	427	960	595
1962	226	219	771	688	137	436	505	1,174	1,309	1,603	367	780	532
1961	248	203	617	595	114	433	517	1,098	1,193	1,289	381	665	455
1960		303	560	388	82	496	404	983	833	651	233	474	372
1959		245	630	445	93	505	395	894	814	566	204	585	298
1958		245	495	393	89	467	373	941	731	494	201	443	271
1957		252	477	359	78	480	378	853	697	416	195	316	291
1956		221	370	334	88	425	337	810	531	448	160	404	294
1955		240	529	407	85	362	423	747	623	443	175	355	290
1954		226	493	345	69	386	339	774	522	463	201	325	230
1953		196	485	328	58	425	412	725	522	467	194	294	240
1952		236	518	350	71	427	424	715	513	473	168	311	264
1951		223	445	336	80	393	400	636	521	480	151	287	230
1950		228	510	312	88	380	453	626	499	447	153	366	221

Year	Books published <sup>1</sup>			Year	Books published <sup>1</sup>			Year	Books published <sup>1</sup>		
	Total	New books	New editions		Total	New books	New editions		Total	New books	New editions
	192	193	194		192	193	194		192	193	194
1949	10,892	8,460	2,432	1926	9,925	6,832	1,527	1903	7,865	5,793	2,072
1948	9,897	7,807	2,090	1925	9,574	6,680	1,493	1902	7,833	5,485	2,348
1947	9,182	7,243	1,939	1924	9,012	6,380	1,153	1901	8,141	5,496	2,645
1946	7,735	6,170	1,565	1923	8,863	6,257	921	1900	6,356	4,490	1,866
1945	6,548	5,386	1,162	1922	8,638	5,938	865	1899	5,321	4,749	572
1944	6,970	5,807	1,163	1921	8,329	5,438	1,008	1898	4,886	4,332	554
1943	8,325	6,764	1,561	1920	8,422	5,101	1,086	1897	4,928	4,171	757
1942	9,525	7,786	1,739	1919	8,594	7,625	969	1896	5,703	5,189	514
1941	11,112	9,337	1,775	1918	9,237	8,085	1,152	1895	5,469	5,101	368
1940	11,323	9,515	1,813	1917	10,060	8,849	1,211	1894	4,484	3,937	647
1939	10,640	9,015	1,625	1916	10,445	9,160	1,285	1893	5,194	4,291	853
1938	11,067	9,464	1,603	1915	9,734	8,349	1,385	1892	4,862	4,074	788
1937	10,912	9,273	1,639	1914	12,010	10,175	1,835	1891	4,665	(NA)	(NA)
1936	10,436	8,584	1,852	1913	12,250	10,607	1,628	1890	4,559	4,113	446
1935	8,766	6,914	1,852	1912	10,903	10,135	768	1889	4,014		
1934	8,198	6,783	1,410	1911	11,128	10,440	783	1888	4,631		
1933	8,092	6,813	1,279	1910	13,470	11,671	1,799	1887	4,437		
1932	9,035	7,556	1,479	1909	10,901	10,193	708	1886	4,676		
1931	10,307	8,506	1,801	1908	9,254	8,745	509	1885	4,030		
1930	10,027	8,134	1,893	1907	9,620	8,925	695	1884	4,088		
1929	10,187	8,342	1,845	1906	7,139	6,724	415	1883	3,481		
1928	10,354	7,614	1,562	1905	8,112	7,514	598	1882	3,472		
1927	10,153	7,450	1,449	1904	8,291	6,971	1,320	1881	2,991		
								1880	2,076		

NA Not available.  
<sup>1</sup> 1880-1919, includes pamphlets; 1920-1923, pamphlets included in total only; thereafter, pamphlets excluded entirely.  
<sup>2</sup> Beginning 1967, counting methods were revised; prior years not strictly comparable with subsequent years. See text.  
<sup>3</sup> Beginning 1959, data not strictly comparable with previous years because of change in definition of "book." See text.  
<sup>4</sup> Prior to 1961, includes military.  
<sup>5</sup> Agrees with source; however, figures for components do not add to total shown.

Series R 218-223. Newsprint Consumption and Newspaper Pages: 1940 to 1970

[Consumption figures in 1,000 short tons]

Year	Newsprint consumption <sup>1</sup>				Newspaper pages per issue <sup>2</sup>		Year	Newsprint consumption <sup>1</sup>				Newspaper pages per issue <sup>2</sup>	
	Total	Newspapers <sup>2</sup>			Daily	Sunday		Total	Newspapers <sup>2</sup>			Daily	Sunday
		Total	Adver- tising	Other content					Total	Adver- tising	Other content		
		218	219	220					221	222	223		
1970	9,754	9,071	5,579	3,492	47	145	1954	6,103	5,732	3,376	2,356	36	122
1969	9,820	9,183	5,662	3,471	56	191	1953	6,109	5,713	3,394	2,319	37	121
1968	9,162	8,521	5,274	3,247	55	186	1952	5,915	5,569	3,286	2,283	36	117
1967	9,159	8,518	5,213	3,305	53	178	1951	5,872	5,557	3,295	2,262	36	113
1966	9,099	8,462	5,221	3,241	53	180	1950	5,863	5,521	3,279	2,242	36	112
1965	8,442	7,851	4,750	3,101	50	167	1949	5,532	5,142	2,977	2,165	34	107
1964	8,092	7,482	4,616	2,866	47	154	1948	5,136	4,781	2,811	1,970	32	102
1963	7,577	7,047	4,313	2,734	46	148	1947	4,658	4,420	2,550	1,870	29	94
1962	7,412	6,893	4,205	2,688	45	145	1946	4,192	3,995	2,177	1,818	27	84
1961	7,358	6,843	4,126	2,717	43	139	1945	3,451	3,237	1,667	1,570	22	70
1960	7,312	6,800	4,148	2,652	43	142	1944	3,218	3,048	1,530	1,518	23	68
1959*	7,073	6,578	4,026	2,552	42	141	1943	3,559	3,409	1,568	1,841	26	78
1958	6,515	6,059	3,635	2,424	39	135	1942	3,721	3,537	1,442	2,145	26	82
1957	6,768	6,300	3,843	2,457	40	138	1941	3,922	3,694	1,481	2,213	27	88
1956	6,807	6,320	3,925	2,395	41	135	1940	3,739	3,507	1,403	2,104	27	86
1955	6,484	6,173	3,827	2,346	40	132							

\* Denotes first year for which figures include Alaska and Hawaii.

<sup>1</sup> Apparent consumption; equals production plus imports minus exports adjusted for year-end changes in newspaper publishers, inventories, and domestic mill stocks.

<sup>2</sup> Based on information of Media Records, Inc. Through 1968, newspaper pages per issue based on average in 39 cities; thereafter, on average in 110 cities.

Series R 224-231. Newspapers—Number and Circulation of Daily and Sunday Newspapers: 1920 to 1970

[Circulation in thousands. Figures as of October 1 of each year]

Year	Daily newspapers						Sunday newspapers		Year	Daily newspapers						Sunday newspapers		
	Total		Morning		Evening		Num- ber	Circu- lation		Total		Morning		Evening		Num- ber	Circu- lation	
	Num- ber	Circu- lation	Num- ber	Circu- lation	Num- ber	Circu- lation				Num- ber	Circu- lation	Num- ber	Circu- lation	Num- ber	Circu- lation			
	224	225	226	227	228	229				230	231	224	225	226	227			228
1970	1,748	62,108	334	25,934	1,429	36,174	586	49,217	1944	1,744	45,955	338	18,059	1,406	27,896	481	37,946	
1969	1,758	62,060	333	25,812	1,443	36,248	585	49,675	1943	1,754	44,393	333	17,078	1,421	27,315	467	37,292	
1968	1,752	62,535	328	25,338	1,443	36,697	578	49,693	1942	1,787	43,375	345	17,111	1,442	26,264	474	35,294	
1967	1,749	61,561	327	25,282	1,438	36,279	573	49,224	1941	1,857	42,080	377	16,519	1,480	25,561	510	33,436	
1966	1,754	61,397	324	24,806	1,444	36,592	578	49,282	1940	1,878	41,132	380	16,114	1,498	25,018	525	32,371	
1965	1,751	60,358	320	24,107	1,444	36,251	562	48,600	1939	1,888	39,671	383	15,505	1,505	24,519	524	31,519	
1964	1,763	60,412	323	24,365	1,452	36,048	561	48,383	1938	1,936	39,572	398	15,338	1,538	23,041	523	30,481	
1963	1,754	58,905	311	23,459	1,453	35,446	550	46,830	1937	1,983	41,419	406	15,777	1,577	22,860	539	30,957	
1962	1,760	59,849	318	24,563	1,451	35,286	558	48,888	1936	1,989	40,292	405	15,584	1,584	22,962	520	29,962	
1961	1,761	59,261	312	24,094	1,458	35,167	558	48,216	1935	1,950	38,156	390	15,560	1,560	21,847	518	28,147	
1960	1,763	58,882	312	24,029	1,459	34,853	563	47,699	1934	1,929	36,709	385	15,544	1,544	21,545	505	26,545	
1959	1,755	58,300	306	23,547	1,455	34,753	564	47,848	1933	1,911	35,175	378	15,533	1,533	20,041	506	24,041	
1958	1,751	57,418	307	23,161	1,456	34,258	556	46,955	1932	1,913	36,408	380	15,533	1,533	19,713	546	19,713	
1957	1,755	57,805	309	23,171	1,453	34,635	544	47,044	1931	1,923	38,761	384	15,539	1,539	19,041	545	19,041	
1956	1,761	57,102	314	22,492	1,454	34,610	546	47,162	1930	1,942	39,589	388	15,554	1,554	17,084	522	17,084	
1955	1,760	56,147	316	22,183	1,454	33,964	541	46,448	1929	1,944	39,426	381	15,563	1,563	16,880	528	16,880	
1954	1,765	55,072	317	21,705	1,448	33,367	544	46,176	1928	1,989	37,973	397	15,542	1,542	15,772	522	15,772	
1953	1,785	54,472	327	21,412	1,458	33,060	544	45,949	1927	1,949	37,967	411	15,588	1,588	15,469	526	15,469	
1952	1,786	53,951	327	21,160	1,459	32,791	545	46,210	1926	2,001	36,002	425	15,576	1,576	14,435	545	14,435	
1951	1,773	54,018	319	21,223	1,454	32,795	543	46,279	1925	2,008	33,739	427	15,581	1,581	13,355	548	13,355	
1950	1,772	53,829	322	21,266	1,450	32,563	549	46,582	1924	2,014	32,999	429	15,585	1,585	12,220	539	12,220	
1949	1,780	52,846	329	21,005	1,451	31,841	546	46,399	1923	2,036	31,454	426	15,610	1,610	11,463	547	11,463	
1948	1,781	52,285	328	21,082	1,453	31,203	530	46,308	1922	2,033	29,780	426	15,607	1,607	10,713	546	10,713	
1947	1,769	51,673	328	20,762	1,441	30,911	511	45,151	1921	2,028	28,424	427	15,601	1,601	9,041	545	9,041	
1946	1,763	50,928	334	20,546	1,429	30,382	497	43,665	1920	2,042	27,791	437	15,605	1,605	8,041	522	8,041	
1945	1,749	48,384	330	19,240	1,419	29,144	485	39,680										

<sup>1</sup> Total is adjusted to account for "all-day" papers listed in both morning and evening figures. Circulations are divided between morning and evening totals.

Series R 232-243. Newspapers and Periodicals: 1935 to 1970

[Data refer to year of compilation of the Directory, i.e., generally to year preceding year shown]

Year	Newspapers					Periodicals						
	Total	Semi-weekly	Weekly	Daily	Other	Total	Weekly	Semi-monthly	Monthly	Bi-monthly	Quarterly	Other
	232	233	234	235	236	237	238	239	240	241	242	243
1970	11,383	423	8,908	1,838	219	9,573	1,856	589	4,314	957	1,108	749
1969	11,336	413	8,855	1,833	235	9,484	1,787	587	4,353	899	1,084	724
1968	11,293	387	8,858	1,833	215	9,400	1,796	606	4,331	899	1,078	690
1967	11,307	366	8,915	1,826	206	9,238	1,808	573	4,296	859	1,051	651
1966	12,365	382	9,785	1,972	226	10,002	1,884	335	4,796	912	1,119	956
1965	11,383	357	8,989	1,843	194	8,990	1,716	550	4,195	876	1,030	623
1964	12,332	390	9,761	1,963	218	9,798	1,724	334	4,847	910	1,065	918
1963	12,295	391	9,739	1,974	191	9,643	1,792	313	4,744	858	1,025	911
1962	12,293	376	9,774	1,970	173	9,483	1,740	305	4,705	826	1,030	877
1961	12,285	361	9,783	1,968	173	9,275	1,656	301	4,634	801	998	885
1960*	11,315	324	8,979	1,854	158	8,422	1,580	527	4,118	743	895	564
1959	12,294	359	9,812	1,977	146	9,004	1,592	302	4,577	712	950	871
1958	12,207	332	9,768	1,969	138	8,927	1,705	292	4,490	676	914	850
1957	12,299	354	9,854	1,946	145	8,722	1,681	288	4,457	639	842	815
1956	12,256	338	9,813	1,963	142	8,718	1,748	283	4,450	614	831	792
1955	11,415	324	9,126	1,860	105	7,648	1,602	503	3,782	608	674	479
1954	12,398	323	9,960	1,999	111	8,092	1,584	260	4,218	604	695	731
1953	12,645	346	10,173	2,009	117	7,792	1,494	242	4,115	598	673	670
1952	12,833	341	10,381	1,998	118	7,711	1,485	246	4,118	558	665	639
1951	13,009	362	10,514	2,018	115	7,635	1,491	239	4,132	517	633	623
1950	12,115	337	9,794	1,894	90	6,960	1,443	416	3,694	436	604	367
1949	12,814	326	10,386	2,014	88	7,570	1,537	244	4,073	458	635	623
1948	12,900	301	10,511	2,001	87	7,346	1,498	262	3,970	412	576	628
1947	12,877	284	10,523	2,003	67	7,083	1,394	272	3,805	401	609	602
1946	12,804	286	10,424	2,020	74	6,693	1,331	253	3,595	345	595	574
1945	12,791	283	10,430	2,004	74	6,569	1,359	246	3,503	309	578	574
1944	12,889	308	10,504	2,006	71	6,672	1,456	226	3,500	285	588	617
1943	13,456	356	10,967	2,043	90	7,040	1,489	215	3,826	274	586	650
1942	14,100	408	11,474	2,131	87	7,374	1,609	248	3,983	288	601	645
1941	14,284	397	11,617	2,153	117	7,141	1,449	222	3,966	277	595	632
1940	13,314	368	10,860	2,086	101	6,432	1,399	427	3,466	241	538	361
1939	14,213	380	11,516	2,216	66	6,846	1,408	213	3,821	250	563	591
1938	14,112	388	11,421	2,242	66	6,412	1,220	202	3,663	219	530	578
1937	14,336	401	11,592	2,272	71	6,320	1,251	253	3,512	203	530	571
1936	13,923	368	11,288	2,189	83	6,576	1,546	216	3,622	197	497	592
1935	14,091	369	11,438	2,197	87	6,546	1,484	203	3,608	196	493	562

\* Denotes first year for which figures include Alaska and Hawaii.

<sup>1</sup> Includes fortnightly.

Series R 244-257. Newspapers and Periodicals—Number and Circulation: 1850 to 1967

[Circulation in thousands. Data for 1947 and 1954 are for establishments having 1 or more regularly paid employees for whom a social security account was maintained at the Bureau of Old-Age and Survivors Insurance. Data for 1921-1939 are for establishments reporting annual receipts of \$5,000 or more. For prior years the corresponding limit was \$500. Circulation figures are the totals of average circulation per issue]

Year	Newspapers										Periodicals			
	Total		Daily		Sunday		Weekly		Other		Total		Weekly	
	Number	Circulation	Number	Circulation	Number	Circulation	Number	Circulation	Number	Circulation	Number	Circulation	Number	Circulation
	244	245	246	247	248	249	250	251	252	253	254	255	256	257
1967	(NA)	(NA)	(NA)	66,527	(NA)	52,129	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1963	7,703	136,600	1,766	63,831	560	51,669	5,377	<sup>1</sup> 17,500	(NA)	<sup>1</sup> 3,600	(NA)	427,915	(NA)	(NA)
1958	8,645	136,803	1,778	58,713	552	48,262	6,315	26,177	(NA)	3,651	4,455	408,364	478	105,147
1954	9,022	136,353	1,820	56,410	510	46,350	6,249	30,336	443	3,257	3,427	449,285	487	82,066
1947	10,282	119,568	1,854	53,287	416	42,736	7,705	21,408	307	2,137	4,610	384,628	892	69,393
1939	9,173	96,477	2,040	42,966	542	33,007	6,212	18,295	379	2,209	4,985	239,693	1,109	55,825
1937	8,826	95,296	2,065	43,345	528	32,713	5,839	17,287	394	1,951	4,202	224,275	954	56,115
1935	8,266	87,096	2,037	40,871	523	29,196	5,337	15,185	369	1,844	4,019	178,621	966	42,648
1933	6,884	76,293	1,903	37,630	489	25,454	4,218	12,408	274	1,166	3,459	174,759	873	39,365
1931	9,299	86,457	2,044	41,294	555	27,453	6,313	16,173	387	1,537	4,887	183,527	1,066	30,782
1929	10,176	91,778	2,086	42,015	578	29,012	7,075	18,884	437	1,867	5,157	202,022	1,158	34,495
1927	9,693	87,617	2,091	41,368	511	27,696	6,661	16,379	430	1,674	4,659	191,000	1,099	39,107
1925	9,569	80,705	2,116	37,407	597	25,630	6,435	15,990	421	1,678	4,496	179,281	1,133	34,826
1923	9,248	<sup>2</sup> 76,408	2,271	35,471	602	24,512	5,903	16,425	472	---	3,829	---	984	31,436
1921	9,419	<sup>2</sup> 75,411	2,334	33,742	538	20,858	6,059	20,316	488	---	3,747	---	995	23,090
1919	15,697	<sup>2</sup> 73,139	2,441	33,029	604	19,369	12,145	20,741	507	---	4,796	---	1,230	31,162
1914	<sup>3</sup> 16,944	<sup>2</sup> 67,108	2,580	28,777	571	16,480	13,793	21,851	---	---	---	---	1,379	28,486
1909	<sup>3</sup> 17,023	<sup>2</sup> 58,505	2,600	24,212	520	13,347	13,903	20,946	---	---	---	---	1,194	19,877
1904	<sup>3</sup> 16,459	<sup>2</sup> 50,464	2,452	19,633	494	12,022	13,513	18,809	---	---	---	---	1,493	17,418
1900	---	---	<sup>4</sup> 2,226	<sup>4</sup> 15,102	---	---	---	---	---	---	---	---	---	---
1890	---	---	<sup>4</sup> 1,610	<sup>4</sup> 8,387	---	---	---	---	---	---	---	---	---	---
1880	---	---	<sup>4</sup> 971	<sup>4</sup> 3,566	---	---	---	---	---	---	---	---	---	---
1870	---	---	<sup>4</sup> 574	<sup>4</sup> 2,602	---	---	---	---	---	---	---	---	---	---
1860	---	---	<sup>4</sup> 387	<sup>4</sup> 1,478	---	---	---	---	---	---	---	---	---	---
1850	---	---	<sup>4</sup> 254	<sup>4</sup> 758	---	---	---	---	---	---	---	---	---	---

NA Not available.

<sup>1</sup> Data are estimates based on the yearly subscription rate of reporting newspapers, as many small newspapers did not report circulation.

<sup>2</sup> Does not include circulation of "Other" newspapers (series R 253), not available prior to 1925. <sup>3</sup> Does not include a number of "Other" newspapers (series R 252), not available prior to 1919.

<sup>4</sup> Includes a small number of periodicals.