

Communications

TELEPHONE AND TELEGRAPH SYSTEMS (Series R 1-89)

R 1-89. General note.

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

1. *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. 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*. (Titles with more than a single year represent different volumes for each year.)

3. 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. *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. Federal Communications Commission reports of telephone and telegraph companies filed monthly and annually with that agency, 1934-1957. Selected data from these reports have been issued monthly and annually (in processed form) and in the Commission's annual reports to Congress. Beginning in 1939, the data have also been issued in the FCC's annual *Statistics of the Communications Industry in the United States*.

6. 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 telephone 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. The detailed 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 reporting authority of the FCC relates only to those 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 the facilities of an affiliated carrier having such facilities. Thus, the carriers filing reports with the Commission (with the exception of a small number of companies filing voluntarily) exclude a very large number of small, and a few large, telephone companies.

R 1-42. 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 the present level of 23, including Cincinnati and Suburban Bell Telephone Company, and Southern New England Telephone Company in 1948. 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 companies."

Included in the Bell organization presently are the following:

1. AT&T, which is the parent company.
2. 19 regional subsidiaries owned and controlled by AT&T, plus a subsidiary of one of these regional companies. These 20 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 today.
3. Two other major companies, Cincinnati and Suburban Bell Telephone Company and Southern New England Telephone Company, in which AT&T has substantial minority interests. These 2 companies, together with the 20 mentioned 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 the Bell company affiliates have varying degrees of stock interest in various other telephone companies. The data for series R 1-27 relating to the Bell companies exclude the operations of Bell Telephone Laboratories and of Western Electric, except as their operations affect the operating expenses and miscellaneous income of the Bell companies. Bell Telephone Laboratories operates on a non-profit basis and the profits of Western Electric on sales to the Bell companies are not eliminated in the consolidated statements.

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 3-5. Total telephones, Bell company telephones, and telephones of independent companies, 1876-1956.

Source: FCC, records, and AT&T, records (except for census data). Census data were obtained from the following census reports, and records: *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. For 1935-1956, the data were supplied to FCC by AT&T. Substantially the same data are also available in the AT&T annual reports to stockholders.

Telephones include telegraph and teletypewriter stations through 1930 and private line telephones through 1934, but not thereafter.

R 2. Telephones per 1,000 population, 1876-1956.

Source: FCC, records (except for census data). For census data, see source for series R 1 and R 3-5.

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

R 6-9. Average daily calls, 1880-1956.

Source: FCC, records.

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 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 messages to Mexico, British Columbia, and Cuba. Since a toll ticket is made for each toll call, the count of toll messages 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 10-13. Telephone toll rates between New York City and selected cities, 1902-1957.

Source: 1902, Bureau of the Census, *Special Reports: Telephones and Telegraphs*, 1902, p. 77; 1911-1957, FCC, records.

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 1940-1957 are based on records 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*, pp. 96-131.

The four major classes of toll telephone messages are station full rate, station reduced rate, person full rate, and person reduced rate. Station service is defined as "that service where the person originating the call gives only the telephone number of the station (i.e., telephone), or the branch exchange system desired, or the name and address under which the

telephone is listed and does not specify a particular person or branch exchange station to be reached at the called point."

In interstate toll service, person-to-person rates are approximately 40 percent higher than station rates. 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 the 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 14-15. Telephone plant and depreciation reserves, 1880-1956.

Source: 1885-1935, FCC, records 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, records. Census data are from the following volumes: *Compendium of the Tenth Census, 1880*, p. 1332; *Telephones and Telegraphs, 1902*, table 6, p. 7; *Telephones and Telegraphs . . . , 1912*, table 9; *Telephones, 1917*, table 33; *Telephones, 1922*, table 34; *Telephones and Telegraphs, 1932*, table 17; *Telephones and Telegraphs, 1937*, table 1 (see general note for series R 1-89 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 16. Miles of wire, 1880-1956.

Source: 1880-1884, AT&T, unpublished financial report; 1885-1935, FCC, records consisting of *Special Investigation Docket No. 1*, Exhibit No. 1360-A, pp. 76, 115; 1936-1956, AT&T, annual reports, and FCC, records. Census data are from the following 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 17-19 and R 24-25. Operating revenues, net income, and dividends, 1880-1956.

Source: 1881-1914, FCC, records 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, AT&T, annual reports, and FCC, records. Census data are from the following reports (see general note for series R 1-89 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; *Telephones and Telegraphs, 1937*, table 1.

Figures for series R 17-19 for 1900-1914 have been adjusted by the FCC by subtracting uncollectible operating revenues so that they are comparable with figures for 1915-1956.

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 22), 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 20. Operating expenses, 1880-1956.

Source: 1885-1907, FCC, records 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, AT&T, annual reports; 1936-1956, AT&T, annual reports, and FCC, records. For census data, see source for series R 17-19 and R 24-25.

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 ICC. For 1921-1935, the Federal income tax adjustment was obtained from AT&T records.

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

R 21. Federal income taxes, 1914-1956.

Source: 1914-1920, FCC, records (approximations derived from annual reports of individual Bell System companies to the ICC); 1921-1935, AT&T, records; 1936-1956, AT&T, annual reports, and FCC, records.

R 22. Income from Western Electric Company, 1882-1956.

Source: AT&T, annual reports, and FCC, records.

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.

In recent years, AT&T's annual share of the net income of Western Electric has exceeded \$50 million. In 1956, it was over \$80 million.

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.

R 23. Interest expenses, 1885-1956.

Source: AT&T, annual reports, and FCC, records. Census data are from the following 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 payments.

R 26-27. Employees and wages, 1880-1956.

Source: 1885-1899 and 1907-1935, (except for series R 27) FCC, records consisting of *Special Investigation Docket No. 1*, Exhibit No. 1360-A, pp. 76, 136, 147; 1900-1906, AT&T, records; series R 27, 1913-1935, AT&T, records; 1936-1956, AT&T, annual reports to stockholders, and FCC, records. Census data are from the following reports (see general note for series R 1-89 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 28-42. Independent telephone companies—property, revenues, expenses, interest, net income, dividends, employees and wages, 1916-1956.

Source: 1916-1934, FCC, records; 1935-1956, *Annual Statistical Volume of the United States Independent Telephone*

Association (USITA), various issues. Census data are from the following reports (see general note for series R 1-89 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; *Telephones and Telegraphs, 1937*, table 1.

The large discrepancy between the census figures and the ICC 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 as synonymous, but in general the former is employed with reference to the aggregations of lines operated by the larger companies, whereas 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 14-27.

Figures for 1935-1956 were obtained by USITA from various sources: Reports of independent telephone companies to the FCC, to State commissions, and 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 nonreporting independent companies are shown for 1947-1956 in the USITA *1957 Annual Statistical Volume . . .*, p. 1.

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 43-71. 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 companies, 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), and the provision of domestic radiotelegraph service by the international radiotelegraph carriers, RCA 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 FCC, *Reports*, vol. 10, pp. 148-198, September 27, 1943, for Commission approval of the specific terms of the merger.)

R 43-52. Western Union Telegraph Company—summary of facilities, traffic, and finances, 1866-1915.

Source: Series R 43-46 (except 1913), The Western Union Telegraph Company, annual reports; 1913, Moody's Investor Service, *Moody's Public Utilities Reports*, 1919, New York. Series R 47-52 (except R 49, 1914-1915), ICC, Bureau of Valuation, *Accounting Reports, The Western Union Telegraph Company* (December 31, 1915 and June 30, 1919); series R 49, 1914 and 1915, FCC, records. Census data are from the following 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 49, 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 53-67. Domestic telegraph industry—messages, property, revenues, expenses, net income, dividends, employees, and wages, 1916-1957.

Source: 1916-1928, ICC and FCC, records (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; 1956-1957, FCC, records (data are from the annual report of Western Union Telegraph Company to the FCC). Census data are from the following reports (see general note for series R. 1-89 for detailed identification of sources): *Census of Electrical Industries: 1917, Telegraphs . . .*, tables 1, 2, 4, 5; *Telegraphs, 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. The census reports of 1917, 1922, and 1927 similarly, 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 53, 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 1950-1956, 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 54, 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 55, 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 records 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 1939-1956, data include all telephone companies reporting on an annual basis to the FCC (roughly varying between 90 and 125).

R 56-57, 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 1946-1956 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 58, 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 59-65, finances, employees, and wages and salaries. Operating revenues are derived, in the bulk, from various transmission and nontransmission 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 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 include the entire operations of Western Union, domestic and international. No basis exists for allocating these dividends.

Number of employees were reported as of different periods: 1929-1934, at the end of June; 1935-1945, at the end of December; and 1946-1956, at the end of October. However, wages and salaries are uniformly reported for the calendar year ending December 31.

R 66-67, 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.

R 68-71. Domestic telegraph message rates and TWX rates between New York City and selected cities, 1850-1956.

Source: FCC, records.

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. 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 since July 1, 1953, have been billed a monthly service charge of \$10.

R 72-85. 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. Since most of the first cables are still in use, it is possible from this source to develop a fairly complete history of ocean-telegraph cables. Similarly, information on the beginnings of international radiotelegraphy appears in the *Report of the Federal Trade Commission on the Radio Industry* (1924).

The first overseas radiotelephone service was opened in 1927 between New York and London by AT&T. 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 1-89). 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 land-line 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 72-74, R 76-78, R 80-85. Telegraph messages, plant, nautical miles of ocean-telegraph cable, operating revenues and expenses, Federal income taxes, net income, employees, and wages, 1907-1957.

Source: 1916-1928, FCC, records; 1929-1956, *Statistics of the Communications Industry in the United States*, 1955 and 1956 issues, table 19; 1957, *Statistics of Communications, Common Carriers*, 1957. Census data are from the following reports (see general note for series R 1-89 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 ICC. 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.

Cable and radiotelegraph messages (series R 72-74) include communications sent from, received in, and transiting the United States and its territories and possessions. 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 financial statistics (series R 76-77) are on 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 78) 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 81) 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 84-85) 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 1946-1956, as of the end of October.

R 75. Overseas telephone calls, 1921-1956.

Source: 73d Cong., 2d sess., *Report on Communication Companies*, House Report No. 1273, pt. III, No. 2, p. 1459 (1935); and AT&T, records.

Figures include calls to and from ships on the high seas. Telephone service with Cuba is by means of submarine cable, with Canada and Mexico by means of wire lines, and with Alaska by means of wire lines and radio. 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 79. Overseas countries served by direct radiotelegraph circuits, 1912-1956.

Source: FCC, records (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 86-89. International cable and radiotelegraph rates between New York City and selected cities, 1866-1956.

Source: 1866-1928, scattered sources as indicated below; 1929-1956, FCC, records.

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 *FTC Report on the Radio Industry*, p. 36, 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 form 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 daytime calls. In addition, there are lower night and Sunday rates on some routes.

Series R 1-9. Telephones and Average Daily Calls (Bell and Independent Companies): 1876 to 1956

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

Year	Telephones					Average daily calls			
	Total		Bell	Independent companies		Bell		Independent companies	
	Number	Per 1,000 population		Connecting with Bell	Not connecting with Bell	Local exchange	Toll	Local exchange	Toll
	1	2	3	4	5	6	7	8	9
1956	60,190	354.5	50,996	9,191	3	175,726	8,019	31,574	1,281
1955	56,243	337.2	47,684	8,556	3	166,383	7,409	30,917	91
1954	52,806	322.1	44,704	8,099	3	157,391	6,793	29,139	77
1953	50,373	312.7	42,672	7,697	4	151,618	6,539	28,067	76
1952	48,056	303.3	40,676	7,376	4	147,383	6,352	27,292	73
1951	45,636	292.9	38,612	7,016	8	143,216	6,226	26,384	74
1950	43,004	280.9	36,478	6,517	9	138,861	6,115	25,539	85
1949	40,709	270.4	34,462	6,237	10	129,824	6,113	23,961	102
1948	38,205	258.1	32,386	5,807	12	123,025	6,065	22,520	90
1947	34,867	239.7	29,456	5,398	13	112,947	5,914	20,353	86
1946	31,611	221.3	26,577	5,020	14	103,720	5,553	18,645	82
1945	27,867	198.1	23,202	4,651	14	88,703	4,831	17,667	99
1944	26,859	192.9	22,309	4,534	16	84,493	4,373	17,227	107
1943	26,381	191.6	21,970	4,345	66	84,922	4,047	17,138	93
1942	24,919	183.4	20,694	4,159	66	86,239	3,552	17,141	68
1941	23,521	175.3	19,476	3,975	70	84,241	3,231	16,659	69
1940	21,928	165.1	18,066	3,795	67	79,040	2,844	16,110	306
1939	20,831	158.5	17,086	3,678	67	73,518	2,696	15,292	294
1938	19,953	153.0	16,287	3,598	68	69,591	2,587	14,739	283
1937	19,453	150.	15,332						
1937	19,453	150.4	15,848	3,537	68	68,362	2,673	14,678	287
1936	18,433	143.5	14,940	3,422	71	64,516	2,579	14,124	281
1935	17,424	136.4	13,845	3,509	71	58,809	2,276	14,631	284
1934	16,969	133.8	13,458	3,437	74	56,648	2,142	14,332	278
1933	16,711	132.6	13,163	3,472	76	55,199	2,047	14,481	273
1932	17,424	139.	13,793						
1932	17,424	139.1	13,793	3,548	84	58,813	2,251	15,637	299
1931	19,707	158.3	15,407	4,206	94	62,205	2,700	17,245	350
1930	20,202	163.4	15,682	4,416	103	62,365	2,933	17,860	362
1929	20,068	163.8	15,414	4,543	110	61,034	3,139	18,107	370
1928	19,341	159.6	14,525	4,672	144	56,196	2,839	17,895	370
1927	18,523	155.	13,726						
1927	18,523	154.6	13,726	4,639	158	52,581	2,615	18,100	369
1926	17,746	150.0	12,816	4,758	172	49,980	2,375	18,453	372
1925	16,936	145.2	12,035	4,685	216	46,702	2,098	18,148	352
1924	16,073	139.7	11,242	4,581	250	43,981	1,835	18,260	324
1923	15,369	135.9	10,406	4,594	369	41,109	1,683	18,516	322
1922	14,347	130.	9,515						
1922	14,347	129.2	9,515	4,401	432	36,831	1,523	18,329	317
1921	13,875	126.9	8,914	4,466	495	33,671	1,356	18,447	281
1920	13,329	123.9	8,334	4,268	727	31,836	1,327	18,371	280
1919	12,669	119.7	7,739	4,057	873	29,286	1,167	18,153	276
1918	12,078	115.2	7,202	3,864	1,012	30,001	1,067	18,753	285
1917	11,717	112.	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.	5,087	2,369					
1912	8,730	90.7	4,804	2,496	1,430	21,532	738	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	16,213	247
1908	6,484	72.4	3,176	1,188	2,119	15,576	463	15,717	239
1907	6,119	70.	3,132						
1907	6,119	69.6	3,013	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.	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		
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		

TELEPHONE AND TELEGRAPH SYSTEMS

R 1-27

Series R 1-9. Telephones and Average Daily Calls (Bell and Independent Companies): 1876 to 1956—Con.

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

Year	Telephones				Average daily calls			
	Total		Bell	Independent companies not connecting with Bell	Bell		Independent companies	
	Number	Per 1,000 population			Local exchange	Toll	Local exchange	Toll
	1	2	3	5	6	7	8	9
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	0.9	48		237	2		
1879	31	0.6	31					
1878	26	0.5	26					
1877	9	0.2	9					
1876	3	0.1	3					

Series R 10-13. Telephone Toll Rates Between New York City and Selected Cities: 1902 to 1957

[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
	10	11	12	13		10	11	12	13
1957	\$0.50	\$1.50	\$2.20	\$2.50	1929, Feb.	\$0.60	\$3.00	\$6.00	\$9.00
1952, Mar.	.50	1.50	2.20	2.50	1927, Dec.	.60	3.25	6.00	9.00
1946, Feb.	.45	1.55	2.20	2.50	1926, Oct.	.60	3.40	7.25	11.30
1945, July	.45	1.75	2.35	2.50	1919, Jan.	.55	4.65	10.40	16.50
1941, July	.45	1.75	3.25	4.00	1917, June	¹ .75	¹ 5.00	11.25	18.50
1940, May	.45	1.90	3.25	4.00	1917, Mar.	(²)	(²)	11.25	19.80
1937, Jan.	.45	2.20	4.50	6.50	1915, Jan.	(²)	(²)	11.25	20.70
1936, Sept.	.50	2.50	5.25	7.50	1911	(²)	(²)	11.25	
1930, Jan.	.50	3.00	6.00	9.00	1902 ³	.55	5.45		

¹ Rates in effect immediately prior to Jan. 21, 1919, according to an item in the New York Times for Jan. 23, 1919.

² Not available.

³ Toll rates were \$0.006 per mile for all mileages.

Series R 14-27. Bell Telephone Companies—Property, Revenues, Expenses, Interest, Net Income, Dividends, Employees, and Wages: 1880 to 1956

[In thousands, except series R 26. Census figures in italics]

Year	Telephone plant		Miles of wire	Operating revenues			Operating expenses ¹	Federal income taxes	Income from Western Electric Co. ³	Interest expenses	Net income	Dividends declared ⁴	Employees	
	Book value	Depreciation reserves		Total ¹	Local	Toll							Number	Wages and salaries
	14	15		17	18	19							26	27
1956	\$17,555,590	\$4,228,966	222,551	\$5,964,876	\$3,457,640	\$2,220,488	\$4,437,810	\$714,260	\$127,604	\$147,778	\$792,632	\$546,924	652,974	\$2,883,990
1955	15,773,373	4,007,118	203,474	5,424,246	3,168,480	1,999,553	4,039,159	644,404	90,084	133,910	696,857	483,619	629,769	2,631,154
1954	14,525,346	3,766,530	187,931	4,901,162	2,914,754	1,755,241	3,746,294	524,995	79,777	132,347	577,303	439,327	591,445	2,443,560
1953	13,419,650	3,555,901	175,390	4,523,707	2,713,501	1,603,608	3,500,599	472,994	69,359	117,668	501,805	389,057	600,618	2,327,884
1952	12,301,975	3,352,297	164,035	4,135,537	2,460,438	1,500,063	3,240,896	403,031	54,622	118,773	427,459	339,186	591,989	2,151,286
1951	11,250,819	3,125,706	153,924	3,727,632	2,205,117	1,369,682	2,929,122	350,134	54,244	118,857	383,763	296,541	563,540	1,927,900
1950	10,375,100	2,904,820	145,973	3,341,308	1,995,659	1,207,509	2,652,421	248,328	41,455	114,637	367,377	262,901	534,974	1,741,907
1949	9,688,160	2,724,745	137,013	2,965,852	1,746,771	1,092,395	2,530,899	233,878	52,224	113,469	247,830	227,929	528,276	1,704,105
1948	8,848,572	2,597,371	127,913	2,698,027	1,551,742	1,030,474	2,325,618	104,297	63,649	91,497	235,264	214,061	559,613	1,621,347
1947	7,552,159	2,447,046	116,169	2,282,446	1,311,401	880,227	2,013,725	77,024	40,613	63,420	168,890	198,469	536,737	1,395,042
1946	6,474,011	2,286,952	108,508	2,146,894	1,198,802	874,497	1,789,686	104,121	9,829	42,950	219,966	193,802	508,564	1,273,137
1945	5,865,065	2,108,385	102,816	1,978,418	1,072,731	845,008	1,454,113	259,274	² 30,198	47,177	187,656	187,972	396,198	910,929
1944	5,670,879	1,934,419	101,246	1,814,113	1,017,244	746,594	1,308,853	233,136	7,037	48,998	180,163	181,294	345,744	784,178
1943	5,543,992	1,763,868	100,381	1,690,720	981,094	666,238	1,212,515	243,608	5,989	52,525	188,061	177,877	350,998	731,276
1942	5,450,471	1,601,916	100,661	1,507,336	923,765	544,234	1,089,074	195,906	4,023	52,147	174,232	178,132	335,010	651,904
1941	5,196,319	1,482,590	98,115	1,333,064	872,089	424,521	986,412	110,375	17,118	49,886	203,509	179,341	321,422	586,207
1940	4,887,900	1,397,339	92,120	1,205,435	811,400	360,792	913,023	64,419	39,297	43,349	223,941	180,268	282,465	522,095
1939	4,727,050	1,339,563	88,219	1,136,412	766,956	338,391	870,762	41,387	23,222	43,597	203,888	180,360	266,806	497,276
1938	4,621,914	1,286,582	86,076	1,080,591	734,687	317,290	849,079	35,015	14,655	43,256	167,896	180,847	264,435	488,888
1937	4,389,549		81,578	1,051,379	703,444	321,503							268,432	463,642
1936	4,516,998	1,231,712	84,151	1,079,004	724,658	327,229	833,789	31,740	27,302	43,320	197,457	183,308	275,713	476,164
1935	4,380,881	1,156,227	81,911	1,020,698	685,110	311,489	766,287	28,807	27,287	51,267	201,624	184,209	262,888	421,447

See footnotes at end of table.

Series R 14-27. Bell Telephone Companies—Property, Revenues, Expenses, Interest, Net Income, Dividends, Employees, and Wages: 1880 to 1956—Con.

[In thousands, except series R 26. Census figures in italics]

Year	Telephone plant		Miles of wire	Operating revenues			Operating expenses ¹	Federal income taxes	Income from Western Electric Co. ²	Interest expenses	Net income	Dividends declared ⁴	Employees	
	Book value	Depreciation reserves		Total ¹	Local	Toll							Number	Wages and salaries
	14	15		16	17	18							19	20
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	125,352	183,181	248,996	371,727
1933	4,169,370	891,883	80,281	872,406	617,253	243,906	684,424	17,109	* 1,942	54,351	114,580	183,240	248,563	356,287
1932	4,269,268	820,195	80,586	956,355	670,737	263,148	747,713	19,073	17,717	55,135	139,336	185,032	266,288	414,342
1931	4,195,064	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	21,931	47,626	66,229	201,646	156,625	324,343	534,468
1929	3,671,100	699,085	69,619	1,063,633	691,359	354,286	807,988	22,924	43,966	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	600,664	56,819	894,699	604,266	271,174	670,397	23,908	21,888	50,511	166,059	112,401	309,005	429,877
1926	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
1925	2,524,906	530,071	45,474	736,648	506,026	219,913	557,295	16,829	19,920	45,941	136,503	93,243	293,095	381,857
1924	2,266,923	485,661	39,894	653,459	454,326	190,318	511,905	13,091	20,314	41,531	107,246	82,603	278,838	365,071
1923	1,978,948	443,130	34,524	598,153	412,009	178,427	470,556	11,748	21,526	37,751	99,624	72,429	271,979	333,786
1922	1,783,079	395,297	30,614	546,890	374,719	163,098	438,592	15,186	36,790	86,623	60,305	60,305	249,710	299,350
1921	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
1920	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
1919	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
1918	1,215,944	276,304	24,163	387,659	263,659	122,885	343,777	6,635	27,693	48,621	39,840	209,860	199,183	229,818
1917	1,142,498	235,395	23,349	326,524	222,885	103,547	301,547	5,893	23,111	46,383	39,735	187,458	156,451	199,183
1916	1,140,640	206,863	23,134	308,864	214,119	86,814	237,002	5,539	21,266	51,135	37,021	192,700	144,915	179,032
1915	1,064,893	201,090	22,610	293,666	207,472	84,560	224,766	4,342	7,976	50,714	36,863	198,364	137,861	179,032
1914	946,293	168,044	19,850	263,095	188,888	72,972	197,772	1,103	7,080	18,379	52,921	35,160	179,032	116,549
1913	880,069	142,307	18,506	232,721	169,156	62,930	171,888	674	6,023	18,096	48,086	32,897	156,294	99,454
1912	847,205	122,338	17,476	224,500	160,311	58,466	166,102	603	1,452	18,940	40,307	30,304	142,527	99,404
1911	797,159	105,720	16,111	214,126	151,260	57,009	156,883	1,447	1,447	16,653	42,037	30,302	156,928	95,209
1910	780,018	206,131	15,133	206,131	144,119	58,814	163,024	1,374	5,539	13,107	29,710	14,903	141,903	76,901
1909	742,288	92,458	14,611	197,798	139,630	53,037	142,285	1,374	1,374	14,205	42,681	29,460	141,340	95,209
1908	666,661	73,832	12,933	178,267	126,238	47,413	127,892	1,211	1,211	13,611	37,975	25,967	129,724	95,209
1907	611,000	54,051	11,642	164,245	114,896	45,004	114,618	1,368	11,557	39,438	25,161	121,310	95,209	95,209
1906	557,417	38,980	10,480	148,951	103,502	40,095	101,547	964	10,222	38,146	23,911	104,956	95,209	95,209
1905	528,717	17,819	9,831	137,863	93,964	35,800	93,577	781	10,874	33,894	20,719	98,533	95,209	95,209
1904	526,079	12,246	8,947	138,804	88,682	34,411	87,395	721	7,527	31,447	20,202	95,811	95,209	50,576
1903	502,988	7,469	8,611	127,859	88,682	34,411	87,395	685	721	30,676	18,152	100,789	95,209	95,209
1902	450,061	5,780	7,469	111,080	77,243	30,192	77,967	685	685	25,582	16,990	104,646	95,209	95,209
1901	368,065	4,671	5,780	96,923	67,620	26,412	66,189	577	5,836	25,474	15,818	89,661	95,209	95,209
1900	316,521	3,959	4,671	85,296	59,841	22,638	58,152	577	577	22,487	15,436	67,756	95,209	95,209
1899	284,568	3,388	3,959	75,089	52,710	19,879	50,946	553	553	20,321	14,096	61,476	95,209	95,209
1898	250,013	3,282	3,282	64,176	44,845	16,906	44,338	457	1,745	16,129	10,608	55,403	95,209	95,209
1897	211,780	2,445	2,445	54,177	37,971	14,329	35,824	373	373	15,464	9,884	45,990	95,209	95,209
1896	180,700	1,962	1,962	46,086	32,414	12,098	30,632	300	2,390	13,364	7,894	37,067	95,209	95,209
1895	145,511	1,519	1,519	37,863	26,353	9,831	26,353	198	198	12,095	6,647	29,818	95,209	95,209
1894	118,124	1,159	1,159	30,192	22,285	8,611	22,285	168	168	10,577	6,294	22,955	95,209	95,209
1893	104,488	951	951	24,059	18,114	6,713	18,114	144	144	9,735	6,127	19,603	95,209	95,209
1892	95,242	806	806	19,850	14,888	5,402	14,888	144	144	8,833	5,481	16,558	95,209	95,209
1891	87,859	675	675	16,405	12,098	4,607	12,098	138	656	8,053	5,067	14,699	95,209	95,209
1890	77,731	577	577	10,002	7,469	2,833	7,469	117	7,708	4,662	4,662	12,553	95,209	95,209
1889	73,136	508	508	6,647	5,067	1,980	5,067	105	8,630	4,967	4,967	11,862	95,209	95,209
1888	67,636	441	441	4,607	3,542	1,315	3,542	84	8,114	4,631	4,631	11,602	95,209	95,209
1887	62,190	382	382	3,542	2,833	1,049	2,833	83	6,741	4,398	4,398	9,713	95,209	95,209
1886	58,512	332	332	2,833	2,122	771	2,122	11,144	59	279	6,866	4,101	8,740	95,209
1885	51,572	280	280	2,122	1,603	519	1,603	9,068	60	6,202	3,802	7,550	95,209	95,209
1884	44,436	244	244	1,603	1,202	401	1,202	75	5,747	3,658	7,445	6,683	95,209	95,209
1883	40,799	203	203	1,202	901	301	901	42	5,506	3,444	6,683	6,683	95,209	95,209
1882	38,325	172	172	901	671	230	671	32	5,160	3,246	6,162	6,162	95,209	95,209
1881	38,619	156	156	671	500	171	500	5,124	32	28	4,882	3,107	5,766	95,209
1880	15,702	34	34	500	382	118	382	2,374	8	8	3,107	3,107	5,766	95,209
1880	15,702	30	30	3,098	2,374	824	2,374	2,374	303	303	3,338	3,338	5,766	95,209

¹ Includes miscellaneous revenues not shown elsewhere.² Excludes Federal income taxes.³ Beginning 1915, includes miscellaneous sources of income, less miscellaneous deductions.⁴ Excludes intercompany payments.⁵ Represents net loss.

TELEPHONE AND TELEGRAPH SYSTEMS

R 28-52

Series R 28-42. Independent Telephone Companies—Property, Revenues, Expenses, Interest, Net Income, Dividends, Employees, and Wages: 1916 to 1956

[In thousands, except series R 28 and R 41. Census figures in italics and represent "systems and lines" (see text)]

Year	Com- panies included	Telephone plant		Miles of wire	Operating revenues			Operat- ing ex- penses ¹	Federal income taxes	Miscel- laneous income items (net)	Interest expenses	Net income	Divi- dends declared	Employees	
		Book value	Depre- ciation reserves		Total ¹	Local	Toll							Number	Wages and salaries
1956	437	\$1,926,743	\$364,616	17,478	\$570,929	\$370,587	\$178,728	\$402,318	\$67,472	\$2,035	\$25,749	\$76,686	\$51,584	78,000	\$261,218
1955	406	1,655,908	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	295,965	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	407,738	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	239,885	11,337	347,307	226,436	109,943	265,597	31,140	984	15,038	36,368	24,598	68,000	163,349
1951	369	981,071	216,863	10,277	303,060	195,352	98,343	234,478	26,366	917	13,244	29,202	15,000	65,000	156,007
1950	379	878,167	203,265	9,176	270,347	170,536	91,512	211,493	18,762	1,217	11,974	28,765	15,000	63,000	147,317
1949	305	791,486	186,789	7,128	238,064	145,007	80,829	199,238	12,843	874	8,015	21,621	4,877	60,000	134,033
1948	291	667,762	174,735	6,566	203,578	124,219	72,898	161,499	11,213	124	5,176	17,939	11,117	54,000	112,565
1947	281	574,100	162,380	6,566	176,358	107,235	63,784	140,500	11,213	124	5,176	17,939	11,117	50,000	93,900
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	78,211
1945	227	449,739	138,333	5,637	135,494	84,155	48,019	94,889	19,697	382	5,285	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	14,327	4,538	31,409	46,177
1943	291	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	41,886
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	400,836	92,055	5,829	88,519	64,276	21,878	68,712	11,875	173	5,346	13,705	6,695	32,196	40,473
1940	210	383,315	85,453	5,829	80,846	59,993	18,676	61,478	11,875	181	5,541	11,768	6,695	32,196	40,473
1939	201	369,809	81,047	5,829	75,768	56,539	17,172	55,992	11,875	338	5,809	12,444	6,695	32,196	40,473
1938	201	357,472	76,290	5,829	71,508	53,678	15,923	53,866	11,875	338	5,823	10,573	6,695	32,196	40,473
1937	200	351,350	73,127	5,829	69,957	51,956	16,145	51,634	11,875	338	5,771	10,823	6,695	32,196	40,473
1936	50,534	612,254	126,454	9,253	123,619	96,058	29,258	123,316	11,875	338	5,771	10,823	6,695	32,196	40,473
1935	201	346,061	70,889	5,829	65,500	49,041	14,803	47,481	11,875	346	6,148	10,259	6,695	32,196	40,473
1934	202	341,949	67,001	5,829	61,170	46,273	13,029	43,974	11,875	396	6,347	8,830	6,695	32,196	40,473
1933	211	374,654	71,263	4,803	63,934	48,466	12,883	48,466	1,283	327	6,229	6,977	27,048	25,010	25,010
1932	261	429,087	74,832	5,027	68,533	51,940	1,073	51,940	1,073	338	5,823	10,573	6,695	32,196	40,473
1931	271	428,189	67,967	5,141	77,067	55,725	1,147	55,725	1,147	338	5,771	10,823	6,695	32,196	40,473
1930	55,353	522,634	105,176	7,092	105,176	70,351	17,900	88,251	1,293	346	6,148	10,259	6,695	32,196	40,473
1929	287	431,749	64,909	5,154	87,867	61,538	1,293	61,538	1,293	346	6,148	10,259	6,695	32,196	40,473
1928	314	418,456	59,758	4,880	90,884	63,860	1,454	63,860	1,454	346	6,148	10,259	6,695	32,196	40,473
1927	323	410,294	60,701	5,023	90,926	63,549	1,661	63,549	1,661	346	6,148	10,259	6,695	32,196	40,473
1926	316	376,955	56,284	4,756	83,866	59,446	1,740	59,446	1,740	346	6,148	10,259	6,695	32,196	40,473
1925	312	334,944	51,725	4,476	76,411	55,550	1,878	55,550	1,878	346	6,148	10,259	6,695	32,196	40,473
1924	60,123	463,262	70,017	123,874	76,955	23,451	57,376	1,661	1,661	346	6,148	10,259	6,695	32,196	40,473
1923	293	327,450	50,623	4,728	78,240	57,376	1,661	57,376	1,661	346	6,148	10,259	6,695	32,196	40,473
1922	268	289,157	49,051	4,045	73,122	54,339	1,878	54,339	1,878	346	6,148	10,259	6,695	32,196	40,473
1921	274	271,607	43,508	4,169	69,236	52,163	1,878	52,163	1,878	346	6,148	10,259	6,695	32,196	40,473
1920	268	270,076	48,686	3,770	67,486	51,078	1,878	51,078	1,878	346	6,148	10,259	6,695	32,196	40,473
1919	1,134	339,963	4,837	85,130	67,945	67,945	1,878	67,945	1,878	346	6,148	10,259	6,695	32,196	40,473
1918	57,227	422,104	64,302	6,652	119,854	72,348	16,972	68,812	16,972	346	6,148	10,259	6,695	32,196	40,473
1917	1,083	339,733	4,565	79,704	66,781	66,781	1,878	66,781	1,878	346	6,148	10,259	6,695	32,196	40,473
1916	1,034	349,795	4,735	80,561	67,548	67,548	1,878	67,548	1,878	346	6,148	10,259	6,695	32,196	40,473
1915	702	245,787	3,890	50,485	40,967	40,967	9,152	37,260	9,152	346	6,148	10,259	6,695	32,196	40,473
1914	53,089	351,689	27,515	5,693	79,582	48,579	10,436	46,411	10,436	310	5,603	8,264	5,246	63,922	30,755
1913	694	258,417	3,871	48,591	48,591	48,591	34,521	34,521	34,521	310	5,603	8,264	5,246	63,922	30,755

¹ Includes miscellaneous revenues not shown elsewhere.

² Excludes Federal income taxes.

Series R 43-52. Western Union Telegraph Company—Summary of Facilities, Traffic, and Finances: 1866 to 1915

[In thousands, except series R 43. 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 capital- ization	Revenues	Expenses ¹	Miscel- laneous income items (net)	Interest expenses	Net income	Dividends declared
	43	44	45	46	47	48	49	50	51	52
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	226,387	62,822	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	29,110	1,578	103,794	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	9,982	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

¹ Including facility rentals and taxes.

Series R 43-52. Western Union Telegraph Company—Summary of Facilities, Traffic, and Finances: 1866 to 1915—Con.

[In thousands, except series R 43. Census figures in italics]

As of, or for, year ending—	Telegraph offices	Miles of wire	Messages handled	Total book capitalization	Revenues	Expenses ¹	Miscellaneous income items (net)	Interest expenses	Net income	Dividends declared
	43	44	45	46	47	48	49	50	51	52
1895, June 30	21,860	803	58,307	\$121,278	\$20,421	\$14,756	\$477	\$898	\$5,244	\$4,766
1894, June 30	21,166	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	22,988	16,057	575	899	6,602	4,632
1892, June 30	20,700	739	62,887	118,423	21,769	14,926	599	982	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	6,098	4,955
1889, June 30	18,470	648	54,108	108,430	19,075	13,328	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	16,658	525	47,395	96,481	15,683	12,021	504	608	3,557	812
1886, June 30	16,142	490	43,290	93,794	14,871	11,384	511	580	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	5,597
1883, June 30	12,917	433	41,181	90,961	16,596	10,490	469	433	6,132	4,999
1882, June 30	12,068	374	38,842	88,971	14,819	9,085	579	430	5,983	4,798
1881, June 30	10,737	327	32,500	87,123	11,552	7,630	2,228	437	5,718	3,733
1880, June 30	9,077	284	29,216	64,080	10,581	5,863	437	435	4,720	3,280
1880, June 1	12,510	291	31,703	96,031	16,697	10,218	—	564	5,970	4,137
1879, June 30	8,534	212	25,070	62,699	9,118	5,239	395	438	3,836	2,259
1878, June 30	8,014	206	23,919	58,237	8,637	5,656	179	462	2,698	2,035
1877, June 30	7,500	194	21,159	56,318	9,039	6,096	194	443	2,694	1,521
1876, June 30	7,072	184	18,780	55,844	9,143	6,061	314	535	2,862	2,532
1875, June 30	6,565	179	17,154	54,673	4,380	2,832	333	228	1,804	1,351
1874, Dec. 31	6,188	176	16,329	54,773	8,872	5,985	148	333	2,752	151
1873, Dec. 31	5,740	154	14,457	53,331	8,612	6,506	155	266	1,995	239
1872, Dec. 31	5,237	137	12,444	—	8,471	5,558	97	370	2,640	259
1871, Dec. 31	4,606	121	10,646	—	7,384	4,916	74	318	2,224	222
1870, Dec. 31	3,972	112	9,158	—	6,781	4,539	116	327	1,982	1,035
1869, Dec. 31	3,607	105	7,985	48,402	6,672	4,346	225	325	2,226	1,810
1868, Dec. 31	3,219	98	6,405	47,677	6,636	3,873	139	346	2,557	332
1867, Dec. 31	2,565	85	5,879	47,426	5,964	3,693	182	371	2,082	1,606
1866, Dec. 31	2,250	76	—	24,205	4,619	2,686	185	162	1,956	1,051

¹ Including facility rentals and taxes.
² Income data are for 6 months ending June 30.

³ Telegraph offices, miles of wire, messages handled, and total book capitalization are as of June 30.

Series R 53-67. Domestic Telegraph Industry—Messages, Property, Revenues, Expenses, Net Income, Dividends, Employees, and Wages: 1916 to 1957

[In thousands, except series R 64 and R 66. Census figures in italics]

Year	Messages handled	Private-line telegraph service revenues		Telegraph plant		Miles of wire	Operating revenues	Operating expenses ¹	Federal income taxes	Net income	Dividends declared	Employees		Bell Teletypewriter Exchange (T.W.X.) Service			
		Telegraph companies	Telephone companies	Book value	Depreciation reserves							Number	Wages and salaries	Number of teletypewriters	Revenues		
																53	54
1957	143,947	—	—	—	\$147,334	1,078	\$245,549	\$228,219	—	—	\$7,165	36,467	\$159,157	—	—	—	—
1956	151,600	\$29,859	\$66,074	\$332,726	141,490	1,088	238,362	219,231	\$6,665	\$12,060	6,226	37,754	153,624	41,628	\$44,872	—	—
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	17,458	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	40,828	286,372	126,580	1,194	184,336	183,395	199	2,724	3,689	39,853	126,974	33,338	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	7,353	2,459	40,482	116,937	28,393	20,445	—	—
1949	175,323	7,528	28,017	306,316	133,979	1,438	171,393	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	906	—	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	152,462	3,655	20,727	358,882	152,795	2,272	173,207	160,169	2,267	5,117	2,167	61,481	112,531	15,979	20,613	—	—
1943	231,692	3,688	17,590	366,347	153,730	2,303	166,953	159,020	3,236	746	2,090	61,037	111,872	16,013	23,456	—	—
1942	223,148	3,889	19,318	384,352	120,863	2,294	145,789	134,031	4,448	3,836	2,090	64,674	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	14,266	7,782	—	—
1938	185,639	2,056	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	1,568	64,084	77,745	12,499	6,775	—	—
1937	206,987	—	—	418,231	—	2,302	117,032	—	—	—	1,604	64,254	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	—	387	—	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	383,960	44,191	2,239	97,902	96,339	—	5,099	1,045	60,997	65,760	2,524	514	—	—
1932	147,941	—	—	415,694	—	2,260	97,729	—	—	—	—	60,933	66,983	—	—	—	—
1931	183,373	1,787	25,245	382,737	46,222	2,250	126,697	120,166	—	537	7,838	72,916	90,084	1,479	7	—	—

See footnotes at end of table.

Series R 53-67. Domestic Telegraph Industry—Messages, Property, Revenues, Expenses, Net Income, Dividends, Employees, and Wages: 1916 to 1957—Con.

[In thousands, except series R 64 and R 66. Census figures in italics]

Year	Messages handled	Private-line telegraph service revenues		Telegraph plant		Miles of wire	Operating revenues	Operating expenses ¹	Federal income taxes	Net income	Dividends declared	Employees	
		Telegraph companies	Telephone companies	Book value	Depreciation reserves							Number	Wages and salaries
1930	211,971	\$1,881	\$27,084	\$379,869	\$53,095	2,269	\$148,223	\$189,141	\$486	\$8,942	\$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	208,865	1,853	18,016	292,817	46,991	2,095	147,845	128,940	2,126	14,105	7,981	76,183	91,498
1926	215,595	1,899	16,548	338,143	43,432	2,138	159,682	142,313	2,070	16,090	8,191	74,903	89,984
1925	208,035	1,899	16,548	281,503	43,432	1,977	149,721	131,473	2,070	13,841	7,981	79,755	101,003
1924	185,187	1,601	15,153	266,571	40,675	1,944	141,680	122,613	2,062	15,153	7,232	73,262	90,911
1923	162,700	1,510	13,207	252,878	38,146	1,884	125,490	111,853	2,062	12,152	6,983	68,561	80,692
1922	158,468	1,502	13,106	238,923	35,326	1,886	124,172	109,197	2,062	13,094	6,983	69,045	79,341
1921	149,219	1,689	12,145	230,644	32,100	1,807	116,659	100,352	2,062	14,311	6,983	62,576	70,497
1920	181,519	1,878	11,270	254,030	28,298	1,845	128,639	111,784	2,062	15,675	7,143	62,399	68,737
1919	139,544	1,878	11,270	224,876	28,298	1,787	111,707	101,817	2,062	7,932	6,983	64,395	71,942
1918	155,884	1,489	10,541	214,986	19,289	1,711	124,379	113,253	2,062	9,199	6,983	74,448	86,037
1917	139,436	1,318	7,969	203,010	16,967	1,686	105,409	98,165	2,062	9,595	6,983	65,181	66,351
1916	134,031	1,121	5,811	190,712	12,965	1,620	90,369	80,511	2,062	8,103	6,983	69,528	58,376
1915	129,273	1,300	5,202	184,351	10,792	1,863	81,623	67,084	2,062	12,336	6,983	60,122	46,953
1914	151,725	1,365	4,162	183,388	10,792	1,889	91,313	79,409	2,062	12,125	7,166	60,376	40,512
1913	151,725	1,365	4,162	183,388	10,792	1,877	66,471	54,335	2,062	11,764	5,985	60,376	40,512

¹ Excludes Federal income taxes.
² Figures represent net loss.

³ Excludes wire owned and operated wholly by Class I railroads and of landwire of ocean-cable companies.

Series R 68-71. Domestic Telegraph Message Rates and Teletypewriter Exchange Service (TWX) Rates Between New York City and Selected Cities: 1850 to 1956

Year	Between New York City and—				Year	Between New York City and—			
	Philadelphia	Chicago	Denver	San Francisco		Philadelphia	Chicago	Denver	San Francisco
	68	69	70	71		68	69	70	71
TELEGRAPH RATES¹					TELEGRAPH RATES—Con.				
Made effective:					In effect in—Con.				
1956, Aug. 26	\$0.95	\$1.30	\$1.75	\$1.75	1877	(²)	\$0.50	\$2.00	\$2.00
1954, July 15	.85	1.25	1.70	1.70	1875	(²)	.25	(²)	(²)
1952, July 6	.65	1.10	1.55	1.70	1873	\$0.30	1.00	2.50	2.50
1951, Sept. 1	.60	1.00	1.45	1.60	1870	.25	1.00	(²)	5.00
1950, Feb. 1	.40	.75	1.25	1.45	1869	.45	2.05	(²)	7.45
1946, Dec. 29	.36	.72	1.08	1.44	1866	.25	1.85	7.00	7.45
1946, June 12	.33	.66	.99	1.32	1850	.25	1.55		
1919, Apr. 1	.30	.60	.90	1.20	TELETYPEWRITER EXCHANGE SERVICE RATES³				
In effect in—					Made effective:				
1908	.25	.50	.75	1.00	1953, July 1	.45	1.20	1.65	1.75
1890	.20	.40	.75	1.00	1946, Feb. 1	.35	1.05	1.55	1.75
1889	.25	.50	.75	1.00	1931, Nov. 21	.35	1.10	1.80	2.40
1884	(²)	.50	(²)	1.00					
1883	(²) .15	.50	1.25	1.50					
1877	(²)	.60	(²)	(²)					

¹ Beginning Sept. 1, 1951, minimum charge for 15 text words or less; prior to that, for 10 text words or less.
² Not available.

³ For 3 minutes or less, 2-way.
⁴ Beginning of service.

Series R 72-85. International Telegraph Industry—Messages, Property, Ocean-Cable Mileage, Countries Served by Radiotelegraph, Revenues, Expenses, Net Income, Employees, and Wages: 1907 to 1957

[In thousands, except series R 79 and R 84. Census figures in italics]

Year	Telegraph messages				Telegraph plant		Nautical miles of ocean-telegraph cable	Overseas countries served by direct radio-telegraph circuits	Operating revenues	Operating expenses ¹	Federal income taxes	Net income	Employees	
	Total	Cable	Radio	Overseas telephone calls	Book value	Depreciation reserves							Number	Wages and salaries
	72	73	74	75	76	77							78	79
1957	27,838	10,647	17,191	1,817	\$149,439	\$80,069	76	85	\$76,845	\$66,258	\$5,783	\$6,186	11,502	\$41,994
1956	27,348	11,012	16,336	1,817	139,819	77,629	76	85	73,472	60,862	5,783	6,186	11,306	41,288
1955	25,642	10,671	14,971	1,553	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	1,363	133,667	75,987	78	85	63,811	54,654	4,854	5,333	11,814	39,241
1953	23,725	10,085	13,640	1,279	131,168	75,343	78	85	59,727	53,217	4,308	3,390	11,686	37,507
1952	23,880	9,756	14,124	1,216	127,101	72,923	78	85	57,606	51,557	2,434	4,393	11,540	36,055
1951	24,043	10,059	13,984	1,130	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	896	136,168	82,840	88	83	50,333	45,226	1,304	4,538	10,759	30,240
1949	20,891	10,390	10,501	764	134,332	82,897	88	83	46,595	45,959	525	619	11,150	31,269
1948	22,136	11,022	11,114	717	135,626	82,087	90	81	46,348	47,435	519	778	11,644	31,717
1947	23,960	11,835	12,125	605	132,534	79,426	91	76	45,579	49,358	263	2,715	12,404	33,678
1946	22,272	11,069	11,203	590	129,147	76,769	91	75	45,199	44,999	230	836	11,557	30,497

See footnotes at end of table.

Series R 72-85. International Telegraph Industry—Messages, Property, Ocean-Cable Mileage, Countries Served by Radiotelegraph, Revenues, Expenses, Net Income, Employees, and Wages: 1907 to 1957—Con.

[In thousands, except series R 79 and R 84. Census figures in italics]

Year	Telegraph messages			Overseas telephone calls	Telegraph plant		Nautical miles of ocean-telegraph cable	Overseas countries served by direct radiotelegraph circuits	Operating revenues	Operating expenses ¹	Federal income taxes	Net income	Employees	
	Total	Cable	Radio		Book value	Depreciation reserves							Number	Wages and salaries
	72	73	74		75	76							77	78
1945	21,047	10,531	10,516	326	\$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	166	136,329	84,550	91	69	46,981	34,340	6,983	7,454	7,898	20,002
1943	15,991	10,159	5,832	152	138,436	83,909	95	68	40,254	29,450	6,424	6,508	7,591	16,533
1942	13,020	8,012	5,008	134	139,360	83,807	95	65	35,812	28,423	4,600	4,525	7,232	14,553
1941	16,511	7,434	9,077	114	141,292	82,723	95	61	36,022	28,425	3,201	3,814	8,206	13,723
1940	16,619	7,667	8,952	72	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	75	146,236	81,860	95	55	30,612	26,518	524	2,074	8,176	12,663
1938	18,306	9,612	8,694	74	147,747	81,263	95	53	26,895	25,577	219	1 27	8,229	12,383
1937	16,331	11,129	5,202	-----	88,533	-----	104	-----	28,275	-----	-----	-----	5,403	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	28	147,708	76,613	95	50	25,360	23,693	186	693	8,134	11,033
1934	14,464	9,287	5,177	26	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	74,528	97	48	24,649	21,532	227	3,467	7,337	9,615
1932	10,437	10,437	-----	-----	90,751	-----	96	-----	16,927	-----	-----	-----	5,790	9,961
1932	14,940	10,443	4,497	28	145,913	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
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	16,473	5,092	30	135,797	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	-----	11,868	2,299	3,392
1927	17,765	13,937	3,778	-----	83,556	-----	99	-----	20,137	11,549	-----	7,555	6,595	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	12,450	-----	8,193	6,333	7,485
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	6	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	-----	16,749	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	1,656	1,167
1907	6,024	5,869	155	-----	57,438	-----	46	-----	7,672	2,205	-----	4,029	1,207	915

¹ Excludes Federal income taxes.
² Figures represent net loss.

³ As of September 16.

Series R 86-89. International Cable and Radiotelegraph Rates and International Telephone Rates Between New York City and Selected Cities: 1866 to 1956

[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
	86	87	88	89		86	87	88	89
INTERNATIONAL CABLE AND RADIOTELEGRAPH RATES¹					1901	\$0.25	(?)	\$1.76	\$1.00
1950, July 1, to 1956	\$0.19	\$0.30	\$0.30	\$0.27	1892, May 1	.25	(?)	2.21	1.50
1949, Feb. 2	.25	.40	.40	.35	1892, Jan. 26	.25	(?)	2.21	1.70
1948, Apr. 28	.25	.30	.30	.28	1890	.25	(?)	(?)	1.82
1947, Aug. 5	.25	.30	.30	.22	1888	.25	(?)	(?)	3.98
1946, May 1	.20	.30	.20	.20	1886	.12	(?)	(?)	3.98
1945, May 1	.20	.42	.24	.20	1884	.40	(?)	(?)	3.98
1943, Aug. 16	.20	.42	.72	.26	1882	.50	(?)	(?)	3.98
1940	.20	.42	.72	.42	1882	.50	(?)	(?)	4.60
1937	.20	.42	.72	.42	1880	.50	(?)	(?)	7.50
1931	.20	.39	.80	.42	1868	1.575	(?)	(?)	(?)
1928	.20	.39	.80	.42	1866	10.00	(?)	(?)	(?)
1927	.20	.45	.80	.42	INTERNATIONAL TELEPHONE RATES⁴				
1925	.20	.42	.85	.42	1946	12.00	\$12.00	12.00	12.00
1924	.20	(?)	1.09	.50	1945	12.00	30.00	19.50	12.00
1924	.20	(?)	.85	.50	1944	21.00	30.00	19.50	12.00
1923 ²	.20	(?)	1.09	.50	1940	21.00	30.00	19.50	15.00
1921 ²	.18	(?)	.85	.50	1939	21.00	30.00	30.75	15.00
1919	.25	(?)	1.09	.50	1937	21.00	30.00	30.75	21.00
1917	.25	(?)	1.33	.50	1936	21.00	30.00	33.00	21.00
1916 ²	.17	(?)	.92	.65	1934	30.00	36.00	39.00	30.00
1912	.25	(?)	1.33	.65	1932	30.00	36.00	-----	30.00
1910	.25	(?)	1.33	.85	1930	30.00	-----	-----	30.00
1905	.25	.56	1.33	1.00	1928	30.00	-----	-----	36.00
1903	.25	(?)	1.53	1.00	1927	75.00	-----	-----	-----
1903	.25	.61	1.76	1.00					

¹ Per plain language telegraph-word, including address and signature.
² Not available.

³ Change in radiotelegraph messages.
⁴ For 3-minute telephone conversations.

RADIO AND TELEVISION (Series R 90-138)

R 90-138. 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. Census reports: *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*, vol. I, part 1.

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

3. *Annual Report of the Federal Radio Commission, 1927-1933*.

4. *Annual Report of the Federal Communications Commission, 1938-1956*.

5. Federal Radio Commission, *Commercial Radio Advertising, 1931*.

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

7. Federal Communications Commission reports: *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*.

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, 1939-1949*; 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 90-94. 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 FCC (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 become operating

stations. This has occurred mainly in the newer broadcast services, 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 90. Standard broadcast (AM) stations, operating, 1921-1956.

Source: 1921, FCC, records; 1922-1926, *Annual Report of the Secretary of Commerce*, various issues; 1927-1933, *Seventh Annual Report of the Federal Radio Commission for Fiscal Year 1933*, p. 18; 1934-1956, FCC, records.

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 non-commercial AM stations because there is no separate non-commercial 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). Since 1945, the number of noncommercial AM stations has remained fairly constant at about 35. 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 91-92. Frequency modulation (FM) stations operating, 1941-1956.

Source: FCC, records.

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

R 93-94. Television (TV) stations operating, 1941-1956.

Source: FCC, records.

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 non-operation.

R 95-96. Sets produced, 1922-1956.

Source: Electronic Industries Association, *Electronics Industry Fact Book*, 1957, pp. 4, 5.

Figures are based on reports of members of the Electronic Industries Association (formerly Radio-Electronic-Television Manufacturers Association) adjusted for estimated production of nonmembers. Radio set figures include home sets for all years; auto sets, 1930-1956; portable sets, 1939-1956; and clock sets, 1951-1956. Auto sets have constituted over 30 percent of total radio set production for 1949-1956. The figures also include sets produced for export. As of July 1, 1957, it was estimated by Electronic Industries Association that there were 135 million radio sets in working order in the United States, including 90 million sets in homes, 35 million in automobiles, and 10 million in public places.

R 97. Families with radio sets, 1922-1956.

Source: Annual figures, National Broadcasting Company (NBC), records. 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, *U.S. Census of Housing: 1950*, vol. I, part 1, table 13.

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 families 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. As of January 1, 1956, a joint network Radio Advertising Association estimate showed that there were 1,800,000 households with radio sets not in working order.

The figures exclude radio sets in places of business, institutions, and hotels.

R 98. Families with television sets, 1946-1956.

Source: National Broadcasting Company, records. Census data for 1950 from *U.S. Census of Housing: 1950*, vol. I, part 1, table 13.

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 Foundation. These studies have yielded the following estimates:

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

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 99-102 and R 110-113. Radio and television advertising expenditures, 1935-1957.

Source: 1935-1939, *Printers' Ink Advertisers' Guide to Marketing for 1956*, 1955, p. 68; 1940-1956, same publication, 1959, 1958, pp. 154-155; 1957, *Printers' Ink*, Feb. 6, 1959, p. 9.

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.

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 FCC, multiplied by the 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 elements in the FCC radio figures merit noting. First, the financial results of approximately 12 "key" stations owned by the networks in the major centers of New York, Chicago, and Los Angeles have been included with network time sales because of difficulties in allocations between national and station operations in these cities. This has had the effect of overstating network time sales and understating national spot and local time sales to some extent. In addition, the FCC data on time sales exclude stations with annual revenues of \$25,000 or less. These stations have not been required to detail their time sales. Neither of these elements is present in the FCC series on television time sales.

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 90-138; 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 100 and R 111, 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 nonnetwork time sales of the stations owned by the networks.

The Publisher's Information Bureau (PIB) provides a monthly series on the billings of each nationwide television network, and through 1956 of each nationwide radio network. The PIB billings differ from either total advertiser expenditures or total broadcast revenues. They are limited to expenditures for time; and they are gross figures before trade or cash discounts or payment of commissions. The PIB figures are published

by trade magazines such as *Broadcasting-Telecasting* and *Television Digest*.

R 101 and R 112, 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 the estimated adjustment factor for program and production.

R 102 and R 113, local advertising expenditures. These include total time sales (after trade discounts but including commissions to advertising agencies) multiplied by the 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 103-109 and R 114-119. Networks and stations reporting broadcast revenues, expenses, income, gross investment, and employees, 1935-1957.

Source: 1935, *Census of Business, 1935, Radio Broadcasting*, pp. 15, 25; 1937-1957, Federal Communications Commission, *Annual Report*, 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. Both sources are used prior to 1949; however, only the latter is used subsequently.

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, 1938-1956*; *Statistics of the Communications Industry in the United States, 1939-1949*; and in processed releases.

R 103, R 104, and R 114, reporting networks and stations. Prior to 1949 the radio data are limited to commercial standard broadcasting (AM) stations and networks operating in the continental United States and its Territories and possessions, including Puerto Rico. 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 continental United States and its Territories and possessions.

R 105 and R 115, 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 106 and R 116, 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 107 and R 117, 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 108 and R 118, 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. It is, therefore, not a measure of total investment in broadcasting.

R 109 and R 119, 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 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; 1955-1956, as of Dec. 31.

R 120-126. Safety and special radio stations authorized, by class, 1913-1957.

Source: 1913-1926, *Annual Report of the Secretary of Commerce*, various issues; 1927-1934, Federal Radio Commission, *Annual Report*, various issues; 1935-1957, FCC, *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: A single fixed transmitter, or a single mobile transmitter; a single frequency; a system including a land station and one or more mobile units; two or more fixed stations; a number of low-power mobile units in one authorization and a single higher-power mobile transmitter in another. 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.

In addition to the safety and special services, radio is assuming an ever larger role in the operations of the telephone and telegraph industries. By June 30, 1956, telephone companies operated 819 land mobile radio systems for 2-way communications.

R 127-138. Authorized land stations and mobile transmitters in the safety and special radio services, 1948-1956.

Source: See source for series R 120-126.

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 transportation, etc.). In land transportation radio services, a land station is often referred to as a base station. Thus, in the taxicab radio service, the base station is used to send and receive communications to and from the associated mobile transmitter-receivers located in the taxicabs. In the marine radio services, coastal stations are examples of land stations, and in the aviation radio services, aeronautical stations are the land stations.

Fixed stations are similar to land stations but are employed in the nonmobile radio services to communicate, or transmit messages, to other land points.

Mobile transmitters, as the name implies, are installed in moving vehicles. They have relatively simple antenna and switching equipment, and are used for transmitting and/or receiving information. Such transmitters usually tie in with a land station, the latter serving as a central control point for communicating with the various mobile units.

One major shortcoming of the transmitter data, however, is that they measure authorized rather than operating transmitters. This divergence is not too great in the case of the land or fixed transmitters. It is estimated that over 90 percent of the authorized transmitters are in operation. However, an entirely different situation prevails with respect to mobile transmitters. As a rough approximation, only 50 percent of the authorized mobile transmitters were estimated as in operation in 1953. Licensees, in applying for authorizations, have wide latitude in estimating the number of mobile units they expect to have in operation within the license period.

See also text for series R 120-126.

Series R 90-98. Radio and Television Stations, Sets Produced, and Families With Sets: 1921 to 1956

[Census figures in italics]

Year	Operating broadcast stations					Sets produced		Families with—		Year	Operating standard broadcast stations (AM) ¹	Radio sets produced	Families with radio sets
	Standard broadcast (AM) ²	Frequency modulation (FM) ³		Television (TV) ⁴		Radio	Television	Radio sets	Television sets				
		Commercial	Non-commercial	Commercial	Non-commercial								
	90	91	92	93	94	95	96	97	98				
1956	2,824	540	123	442	16	13,982	7,387	46,800	34,900	1938	689	7,142	26,667
1955	2,869	553	122	411	10	14,529	7,757	45,900	30,700	1937	646	8,063	24,500
1954	2,521	560	112	349	2	10,400	7,347	45,100	26,000	1936	616	8,249	22,889
1953	2,391	616	98	125	-----	13,369	7,218	44,800	20,400	1935	585	6,080	21,456
1952	2,331	637	85	106	-----	10,985	6,098	42,800	15,300	1934	588	4,479	20,400
1951	2,232	676	78	107	-----	12,627	5,385	41,900	10,320	1933	599	4,157	19,250
1950	2,086	733	43	97	-----	14,590	7,464	40,700	3,875	1932	604	2,446	18,450
1949	1,912	700	30	50	-----	11,400	3,000	40,411	5,080	1931	612	3,584	16,700
1948	1,821	874	22	17	-----	16,500	975	39,300	940	1930	618	3,789	13,750
1947	1,062	140	3	7	-----	20,000	179	37,623	172	1929	-----	-----	18,048
1946	948	48	6	6	-----	15,955	6	35,900	14	1928	606	4,423	10,250
1945	919	46	6	6	-----	(⁵)	-----	33,998	8	1927	677	3,250	8,000
1944	910	43	6	6	-----	(⁵)	-----	33,100	-----	1926	681	1,850	6,750
1943	910	12	6	4	-----	(⁵)	-----	32,500	-----	1925	571	2,000	2,750
1942	887	2	5	4	-----	4,307	-----	30,800	-----	1924	580	1,500	1,250
1941	831	1	4	2	-----	13,642	-----	30,600	-----	1923	556	500	400
1940	765	-----	-----	-----	-----	11,881	-----	29,300	-----	1922	30	100	60
1939	722	-----	-----	-----	-----	10,763	-----	28,500	-----	1921	1	-----	-----
								28,048	-----				
								27,500	-----				

¹ As of Sept. 15 for 1921; Jan. 1, 1922; Mar. 1, 1923; Oct. 1, 1924; June 30, 1925-1932; Jan. 1, 1933-1956.
² As of May 1 for 1941; June 30, 1942; Jan. 1, 1943-1956.
³ As of July 1, 1941; June 30, 1942-1943; Jan. 1, 1944-1956.
⁴ "Freeze" on new TV authorizations Sept. 1943-July 1953; only stations authorized before Sept. 30, 1948, permitted to operate in these years.

⁵ Authorization of new radio stations and production of radio receivers for commercial use halted from April 1942 until Oct. 1945.
⁶ First station to receive regular license as of Sept. 15; other stations in operation experimentally.

Series R 99-119. Radio and Television Advertising Expenditures, Revenues, Expenses, Income, Investment, and Employees: 1935 to 1957

Year	Radio										
	Advertising expenditures				Networks reporting	Stations reporting	Broadcasting revenues	Broadcasting expenses	Broadcasting income ¹	Gross investment	Employees
	Total	Net-work	National spot	Local							
	90	190	101	102	103	104	105	106	107	108	109
	<i>Mil. dol.</i>	<i>Mil. dol.</i>	<i>Mil. dol.</i>	<i>Mil. dol.</i>	<i>Number</i>	<i>Number</i>	<i>Mil. dol.</i>	<i>Mil. dol.</i>	<i>Mil. dol.</i>	<i>Mil. dol.</i>	<i>1,000</i>
1957	618.9	64.7	187.1	367.1	7	3,164	517.9	463.3	54.6	328.2	48.9
1956	567.0	60.5	161.0	345.5	7	2,967	480.6	481.4	49.2	297.5	47.6
1955	544.9	84.4	134.1	326.4	7	2,742	453.4	407.4	46.0	234.7	45.3
1954	558.7	114.4	134.9	309.4	7	2,598	449.5	407.7	41.8	278.8	(²)
1953	611.2	141.2	145.6	324.4	7	2,479	475.3	420.3	55.0	276.2	(²)
1952	624.1	161.5	141.5	321.1	7	2,380	469.7	409.6	60.1	267.4	(²)
1951	606.8	179.5	138.3	288.5	7	2,266	450.4	392.9	57.5	254.7	(²)
1950	605.4	196.3	135.8	273.3	7	2,229	444.5	376.3	68.2	244.4	(²)
1949	571.4	208.0	123.4	245.0	7	2,125	415.2	362.5	52.7	230.6	52.0
1948	561.6	210.6	121.1	229.9	7	1,824	407.0	342.9	64.1	201.8	48.3
1947	506.4	201.2	106.4	198.8	7	1,464	363.7	291.9	71.8	150.0	(²)
1946	454.4	199.6	98.2	156.6	8	1,025	322.6	246.1	76.5	107.8	40.0
1945	423.9	197.9	91.8	134.2	10	901	299.3	215.7	83.6	88.1	37.8
1944	393.5	191.8	87.4	114.3	9	875	275.3	185.0	90.3	83.0	34.3
1943	313.6	156.5	70.9	86.2	9	841	215.3	148.8	66.5	81.1	31.8
1942	260.0	128.7	58.3	72.5	10	851	178.8	134.2	44.6	81.3	29.6
1941	247.2	125.4	52.3	69.5	8	817	168.8	124.0	44.8	78.0	27.6
1940	215.6	113.3	42.1	60.2	8	765	147.1	113.8	33.3	70.9	25.7
1939	183.8	98.6	35.0	50.2	3	705	123.9	100.1	23.8	64.4	23.9
1938	167.1	89.2	34.0	43.9	3	660	111.4	92.5	18.9	61.4	22.5
1937	164.6	88.5	28.0	48.1	3	629	114.2	91.6	22.6	55.1	-----
1936	122.3	75.6	22.7	24.0	-----	-----	-----	-----	-----	-----	-----
1935	112.6	62.6	14.9	35.1	8	561	86.5	-----	-----	-----	14.6

¹ Before Federal income taxes.
² Not available.
³ Includes 4 experimental stations.

Series R 99-119. Radio and Television Advertising Expenditures, Revenues, Expenses, Income, Investment, and Employees: 1935 to 1957—Con.

Year	Television										Year	Television	
	Advertising expenditures				Stations reporting ¹	Broad-casting revenues	Broad-casting expenses	Broad-casting income ¹	Gross investment	Employees		Stations reporting ¹	Broad-casting revenues
	Total	Net-work	National spot	Local									
	110	111	112	113	114	115	116	117	118	119		114	115
Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.		Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	1,000		Mil. dol.		
1957	1,265.3	670.1	351.6	243.6	501	943.2	783.2	160.0	477.6	87.8	1947	15	1.9
1956	1,206.7	625.1	329.0	252.6	474	896.9	707.8	189.6	429.7	85.7	1946	7	.7
1955	1,025.3	540.2	260.4	224.7	437	744.7	594.5	150.2	364.7	82.3	1945	6	.3
1954	809.2	422.2	206.8	180.2	410	598.0	502.7	90.3	315.0	29.4	1944	6	.2
1953	606.1	319.9	145.5	140.7	334	432.7	364.7	68.0	233.1	18.2	1943	4	.1
1952	458.9	256.4	98.8	103.7	122	324.2	268.7	55.5	124.1	14.1			
1951	332.3	180.8	69.9	81.6	108	235.7	194.1	41.6	93.0				
1950	170.8	85.0	30.8	55.0	107	105.9	115.1	* 9.2	70.3				
1949	57.8	29.4	9.2	19.2	97	34.3	59.6	* 25.3	55.9				
1948					50	8.7	23.6	* 14.9					

¹ Before Federal income taxes.

¹ Includes 4 networks (ABC, CBS, NBC, and DuMont) until Sept., 1955; at that time, DuMont withdrew.

* Represents net loss.

Series R 120-126. Safety and Special Radio Stations Authorized, by Class: 1913 to 1957

[As of June 30. Includes Alaska, Hawaii, Puerto Rico, and Virgin Islands]

Year	Amateur and disaster services	Aviation services	Industrial services	Land transportation services	Marine services	Public safety services	Other services	Year	Amateur and disaster services	Aviation services	Industrial services	Marine services	Public safety services	Other services
	120	121	122	123	124	125	126		120	121	122	124	125	126
1957	165,908	49,699	85,711	37,523	63,844	23,270	801	1935	45,561	678	146	2,157	298	975
1956	154,337	48,745	80,597	27,554	56,915	20,718	716	1934	46,390	671	129	2,195	230	681
1955	142,387	48,855	24,854	20,002	50,714	18,415	625	1933	41,555	646	121	2,192	152	256
1954	124,324	40,154	21,598	18,945	46,299	15,697	586	1932	30,374	579	134	2,225	123	168
1953	111,579	39,315	17,378	9,751	40,357	13,631	444	1931	22,739	463	130	2,392	91	160
1952	113,163	32,603	18,680	6,428	35,500	11,143	369	1930	18,994	281		2,178	20	
1951	90,587	34,061	9,551	4,813	29,544	9,129	404	1929	16,829	181			12	
1950	87,967	23,794	5,099	3,330	24,921	7,607	466	1928	16,923					
1949	81,675	27,227	4,266	3,588	20,004	5,700	501	1927	16,926					
1948	78,434	20,858	2,855	3,122	15,024	4,908	652	1926	14,902			1,954		
1947	75,000	15,943	1,787	1,692	11,955	4,620	532	1925	15,000			1,901	4	
1946	70,000	6,205	702	156	8,676	4,760	1,374	1924	15,540			2,741	3	
1945	60,000	3,793	576			4,446	487	1923	16,570				3	
1944	60,000	3,445	468		6,817	4,144	572	1922						
1943	60,000	3,553	386		6,609	3,772	458	1921						
1942	60,000	4,713	356			3,455	497	1920	5,719				1	
1941	60,000	3,000	306		5,322	2,967	460	1919						
1940	56,295	2,099	340		4,945	2,334	295	1918						
1939	53,558	1,324	307		4,036	1,536	372	1917						
1938	49,911	1,460	232		3,516	662	2,842	1916					1	
1937	47,444	1,212	221		2,422	535	1,971	1915						
1936	46,350	852	195		2,219	406	1,576	1914						
								1913	1,312			701		

Series R 127-138. Authorized Land Stations and Mobile Transmitters in the Safety and Special Radio Services: 1948 to 1956

[Includes Territories and possessions]

Year	Aviation		Land transportation		Marine		Public safety		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	Land or fixed stations	Portable or mobile units	Land or fixed stations	Portable or mobile units
	127	128	129	130	131	132	133	134	135	136	137	138
1956, Jan. 1	7,978	40,735	8,069	243,457	2,106	56,265	18,526	207,195	22,937	252,265	148,509	8,406
1955, Jan. 1	5,373	36,595	6,616	154,358	1,385	49,742	13,731	187,670	16,009	164,262	129,029	3,123
1954, Jan. 1	4,657	37,467	6,041	132,944	1,250	42,573	11,742	152,811	13,515	132,425	116,286	1,173
1953, March 1	6,145	37,951	5,277	110,514	1,174	37,629	10,306	131,549	12,074	115,024	116,902	252
1952, Jan. 1	2,716	39,307	4,302	92,000	1,102	34,187	7,732	104,559	8,676	81,418	113,159	335
1951, Jan. 1	3,181	32,575	3,721	74,966	1,273	28,085	6,579	80,433	6,458	64,172	90,601	61
1949, June 15	1,987	28,037	2,759	51,774	443	19,170	4,301	59,122	2,765	33,608	81,675	
1949, Jan. 1		24,695		149,650		17,414		53,733		27,842		
1948, Jan. 1		20,517		31,852		13,180		38,929		10,924		

¹ Includes Class 2 experimental stations as follows: 46,085 taxicab units and 668 trucks and buses.

² Includes 68 Class 2 experimental industrial units.
³ Includes 30,000 Class 2 experimental taxicab units.

POSTAL SERVICE, NEWSPAPERS, AND BOOKS (Series R 139-186)

R 139. Post offices, 1789-1957.

Source: Post Office Department, *Annual Report of the Postmaster General, 1958*, pp. 144-149.

The source also presents a classification of the number of post offices into first, second, third, and fourth class for 1946-1956.

R 140-141. Revenues and expenditures, 1789-1957.

Source: See source for series R 139.

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 1954-1957, 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.

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 in recent years 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 \$43.2 million for 1956.

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 \$157.2 million in 1956.

R 142-143. Ordinary postage stamps and stamped envelopes and wrappers issued, 1848-1957.

Source: See source for series R 139.

R 144. Postal cards issued, 1873-1957.

Source: See source for series R 139.

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. The rate for this service since October 1, 1928, has been 1 cent each plus regular postage collected on delivery.

R 145. Pieces of matter of all kinds handled by the Post Office, 1886-1957.

Source: See source for series R 139.

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 146-160.

R 146-160. 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.

A regular, continuing Cost Ascertainment System was begun in 1926, pursuant to a Congressional Act of February 28, 1925 (39 U.S.C. 826). Selected post offices, grouped according to receipts, furnish basic data as to revenues and expenditures and the related weights and volumes of the several classes and subclasses of mail matter and special services. The data so obtained are used to develop ratios for segregating the audited revenues and the operating costs of each homogeneous group of offices in order to apportion the postal revenues and expenditures to the several classes of mail matter and to the special services.

Since 1926, various changes have been made in the number of offices used in the sample and the detailed revenue and expense apportionments and allocations. These are described in the annual *Cost Ascertainment Report* of the Post Office Department and in the *Report on Cost Ascertainment System of the Post Office Department*, December 29, 1944.

The statistics of expenses as published annually are subject to later readjustments as a result of increases in the charges of railroad or air or of 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 146-148. First-class mail, 1926-1957.

Source: 1926-1946, Post Office Department, *Budget Digest*, 1949, chapter IV, tables 5-11; 1947-1957, Post Office Department, *Cost Ascertainment Report*, 1956 and 1958 issues, tables 250-252.

Figures include letters and packages (including local delivery letters), Government postal cards, and private mailing cards. For 1926-1929, domestic airmail could not be segregated and is included with first-class mail. Mail fees are included for 1950-1957. Box rent revenues, previously reported as unassignable are allocated to classes of mail, 1951-1955, and classified with special services for 1956-1957. For 1951-1956, the expense of free mail from members of the Armed Forces is included in first-class mail expenditures.

R 149-151. Second-class mail, 1926-1957.

Source: See source for series R 146-148.

This category includes newspapers, magazines, and pamphlets under the special low-rate "second-class privilege," the purposes of which are set forth in the Act of 1879. 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, 1950-1957; domestic mail fees, 1951-1957; and box rent revenue allocation, 1951-1955.

Expenses include cost of free-in-county service (delivery of newspapers free in the county of publication at offices not having city or village carrier service); publishers' second-class matter forwarded or returned, 1950-1957; and for 1953-1957, also includes the expense of sending notices to publishers regarding undelivered mail.

R 152-154. Third-class mail, 1926-1957.

Source: See source for series R 146-148.

Third-class mail embraces all matter not exceeding 8 ounces in weight and not qualifying as first or second class. A significant proportion of the matter mailed under third class is advertising material. In 1928, a special "bulk rate" was made applicable to separately addressed identical pieces of third-class matter mailed at one time in quantities of at least 20 pounds or 200 pieces. Revenues include postage revenues and permits; domestic mail fees, 1951-1957; and box rent revenue allocation, 1951-1955.

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 1953-1957, controlled circulation publications are shown separately.

R 155-157. Fourth-class mail, 1926-1957.

Source: See source for series R 146-148.

This class includesailable matter exceeding 8 ounces 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, library books, catalogs, and matter for the blind included in fourth class carry special rates. Revenues include domestic mail fees for 1951-1957; box rent revenue allocations, 1951-1955; and special handling fees.

R 158-160. Domestic airmail, 1930-1957.

Source: See source for series R 146-148.

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 possessions of the United States, formerly in international airmail, is included with domestic airmail, 1947-1957. For 1951-1956, 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 1954-1957, 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 161. Post Office employees, 1926-1957.

Source: 1926-1946, Post Office Department, *Budget Digest*, 1949, chapter II, table 1; 1947-1957, *Annual Report of the Postmaster General*, 1957, p. 107.

Includes 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 162-163. Postal rates for first-class mail, letters and postal cards, 1792-1957.

Source: Post Office Department, *United States Domestic Postage Rates, 1789-1956*, table I.

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 ship-letter 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 letters and all correspondence, wholly or partly in writing, except book manuscripts and corrected proof sheets passing between authors and publishers. In 1879, it was redefined to include letters, postal cards, and all matter wholly or partly in writing, except such writing as is authorized to be placed on mail of other classes. See Jane Kennedy, "Development of Postal Rates: 1845-1955," *Land Economics*, May 1957 issue, pp. 93-112, for additional materials on postal rates, particularly rates for second-, third-, and fourth-class mail.

R 164. Postal rates for domestic airmail, 1918-1957.

Source: See source for series R 162-163, table III, p. 25.

Until 1948, domestic airmail rates applied not only to letters but also to otherailable matter, including sealed parcels up to specified maxima (prescribed according to weight or according to length and girth). Effective September 1, 1948, an Air Parcel Post Service was established. Matter carried by air weighing 8 ounces or less was classified as "airmail" and over 8 ounces "air parcel post."

R 165-168. New books, new editions, and pamphlets published, 1880-1957.

Source: R. R. Bowker Co., New York, N.Y., *Publishers' Weekly* (usually the third or fourth weekly issue in January).

Figures represent the number of titles published, not the number of books which were printed. The data are compiled from information and actual books submitted to R. R. Bowker Company by the various book publishing firms. The source also contains the number of books by subject matter and the number of publications for some foreign nations.

R 169-172. Number and circulation of daily and Sunday newspapers, 1920-1957.

Source: Editor and Publisher, New York, N.Y., *International Year Book Number*, various issues.

The term "daily" refers to papers that are published either morning or evening. About 90 percent of the circulation figures are credited by the Audit Bureau of Circulations. The

remaining 10 percent is based on publishers' statements to the Post Office Department. The compilation is checked annually with a questionnaire to every daily newspaper in the country. Source also presents data for individual States.

R 173-186. Number and circulation of newspapers and periodicals, 1850-1954.

Source: 1850-1899, Twelfth Census Reports, *Manufactures*, vol. IX, part III; 1904-1909, Thirteenth Census Reports, *Manufactures*, vol. X; 1914-1927, *Census of Manufactures* for each census year; 1929-1947, *Census of Manufactures: 1947, Product Supplement*, pp. 67 and 68; 1954, *U.S. Census of Manufactures: 1954*, vol. II, part I, p. 27A-16.

For data prior to 1850, which is not comparable to the data since that time, see Tenth Census Reports, S. N. D. North, *History and Present Conditions of the Newspaper and Periodical Press of the United States*, p. 47; and W. S. Rossiter, *A Century of Population Growth in the United States*, Government Printing Office, 1909, p. 32.

Series R 139-145. Postal Service—Post Offices, Revenues and Expenditures, Postage Stamps, Stamped Envelopes and Postal Cards Issued, and Pieces of Mail Handled: 1789 to 1957

[In thousands, except number of post offices. For years ending June 30]

Year	Post offices ¹	Revenues ²	Expenditures ³	Ordinary postage stamps issued ⁴	Stamped envelopes and wrappers issued ⁴	Postal cards issued ⁴	Pieces of matter of all kinds handled
	139	140	141	142	143	144	145
1957	37,012	\$2,496,614	\$3,044,438	24,257,859	1,966,335	2,046,515	59,077,633
1956	37,515	2,419,353	2,833,305	23,722,489	2,571,416	2,911,276	56,441,216
1955	38,316	2,349,476	2,712,150	23,105,454	2,189,520	2,515,392	55,233,568
1954	39,405	2,268,516	2,667,664	22,219,068	2,265,309	2,360,534	52,213,170
1953	40,609	2,091,714	2,742,126	22,960,961	2,338,622	2,330,921	50,945,156
1952	40,919	1,947,316	2,666,860	22,067,082	2,274,659	2,984,123	49,905,874
1951	41,193	1,776,816	2,341,399	21,521,806	2,004,568	4,183,748	46,908,410
1950	41,464	1,677,487	2,222,949	20,847,164	2,052,155	3,872,300	45,063,736
1949	41,607	1,571,851	2,149,322	21,047,376	2,219,743	3,468,719	43,555,107
1948	41,695	1,410,971	1,687,805	20,432,059	2,117,572	3,656,590	40,280,374
1947	41,760	1,299,141	1,504,799	19,542,257	1,996,449	2,951,299	37,427,706
1946	41,751	1,224,572	1,353,654	19,180,426	1,815,915	2,477,853	36,318,158
1945	41,792	1,314,240	1,145,002	20,239,986	2,064,773	2,282,280	37,912,067
1944	42,161	1,112,877	1,068,986	19,106,171	1,902,312	1,912,990	34,930,635
1943	42,654	966,227	952,529	19,123,977	1,797,400	2,316,990	32,818,261
1942	43,358	859,817	873,950	19,492,121	1,676,573	2,370,061	30,117,633
1941	43,739	812,827	836,858	16,381,321	1,645,254	2,400,188	29,235,791
1940	44,024	766,948	807,629	16,381,427	1,649,548	2,256,519	27,749,467
1939	44,327	745,955	784,549	15,073,795	1,605,075	2,170,572	26,444,846
1938	44,586	728,634	772,307	14,912,092	1,643,815	2,186,720	26,041,979
1937	44,877	726,201	772,743	15,108,639	1,663,818	2,226,153	25,801,278
1936	45,230	665,343	753,616	13,835,399	1,647,891	1,917,793	23,571,315
1935	45,686	630,795	696,503	13,610,497	1,617,677	1,754,030	22,331,752
1934	46,506	536,733	630,732	12,525,716	1,580,819	1,590,257	20,625,326
1933	47,641	587,631	699,887	11,917,442	1,644,993	1,839,523	19,968,455
1932	48,159	538,171	793,684	14,650,970	2,334,792	1,334,753	24,306,743
1931	48,733	656,463	802,484	15,559,164	2,847,439	1,531,245	26,544,362
1930	49,063	705,484	803,667	16,268,856	3,164,127	1,643,212	27,887,823
1929	49,482	696,947	782,343	16,917,274	3,228,596	1,733,897	27,951,543
1928	49,944	693,633	725,699	16,676,492	3,201,458	1,872,040	26,337,006
1927	50,266	633,122	714,577	15,999,701	3,145,946	1,834,456	26,686,555
1926	50,601	659,819	679,704	16,333,410	3,001,858	1,668,240	25,433,523
1925	50,957	599,591	639,281	17,366,555	2,997,177	1,497,366	-----
1924	51,266	572,943	537,376	15,954,475	2,964,464	1,293,184	-----
1923	51,613	532,827	556,851	15,478,095	2,721,475	1,253,196	23,054,331
1922	51,950	434,853	545,644	14,261,948	2,864,372	1,111,124	-----
1921	52,168	463,491	620,993	13,869,934	2,738,934	1,081,206	-----
1920	52,641	437,150	454,322	13,212,790	2,350,073	986,156	-----
1919	53,084	*436,239	362,497	15,020,470	1,844,334	456,924	-----
1918	54,347	*388,976	324,833	13,065,784	1,819,307	707,111	-----
1917	55,414	329,726	319,338	12,451,522	2,161,108	1,112,337	-----
1916	55,935	312,057	306,204	11,671,842	1,853,791	1,047,394	-----
1915	56,880	237,248	298,546	11,226,336	1,738,764	975,542	-----
1914	56,810	237,934	233,543	11,112,254	1,864,713	962,072	-----
1913	58,020	266,619	262,067	10,812,507	1,724,730	946,861	13,567,445
1912	58,729	246,744	248,526	9,929,173	1,634,624	909,411	17,533,658
1911	59,237	237,379	237,648	10,046,068	1,690,775	975,133	16,900,532
1910	59,580	224,128	229,977	9,067,164	1,506,861	726,441	14,850,102
1909	60,144	203,562	221,004	8,731,375	1,509,626	926,478	14,004,577
1908	60,704	191,473	208,351	7,651,400	1,266,002	809,426	13,364,063
1907	62,653	133,535	190,238	7,061,036	1,418,840	805,568	12,255,666
1906	65,600	167,932	178,449	6,234,450	1,230,237	793,917	11,361,030
1905	68,131	152,826	167,399	5,751,017	1,074,918	723,235	10,137,505
1904	71,131	143,532	152,362	5,330,336	1,020,255	702,907	9,502,459
1903	74,169	134,224	133,734	5,270,549	943,654	770,653	8,837,457
1902	75,924	121,843	124,735	4,621,235	853,123	547,204	8,035,446
1901	76,945	111,631	115,554	4,239,273	772,339	659,614	7,424,330
1900	76,633	102,354	107,740	3,998,544	707,555	537,815	7,129,990
1899	75,000	95,021	101,332	3,632,775	628,456	573,634	6,576,310
1898	73,570	89,012	93,033	3,413,453	606,447	556,330	6,214,447
1897	71,022	82,665	94,077	3,063,633	535,032	523,603	5,781,002
1896	70,360	82,499	90,932	3,025,431	616,040	524,320	5,633,719
1895	70,064	76,933	37,179	2,795,424	593,843	492,305	5,134,231
1894	69,805	75,030	34,994	2,602,273	571,475	463,499	4,919,090
1893	68,403	75,397	31,531	2,750,293	636,279	530,505	5,021,341
1892	67,119	70,930	26,930	2,543,270	593,634	511,433	4,776,575
1891	64,329	65,931	23,059	2,397,503	556,226	424,216	4,369,300
1890	62,401	60,332	26,259	2,219,737	513,333	429,515	4,005,406
1889	58,999	56,175	22,317	1,961,980	451,864	336,303	3,360,200
1888	57,376	52,695	18,458	1,867,173	433,635	331,797	3,576,100
1887	55,157	48,337	13,006	1,746,985	331,611	256,939	3,495,160
1886	53,614	43,943	11,004	1,620,784	354,008	355,643	3,747,000
1885	51,252	42,560	10,046	1,465,122	322,751	339,416	-----
1884	48,434	43,326	47,224	1,459,768	322,232	362,376	-----
1883	46,820	45,503	43,282	1,202,743	259,266	379,516	-----
1882	46,231	41,876	40,432	1,114,560	256,565	351,433	-----
1881	44,512	36,735	39,592	954,123	227,067	303,536	-----

See footnotes at end of table.

POSTAL SERVICE, NEWSPAPERS, AND BOOKS

R 139-145

Series R 139-145. Postal Service—Post Offices, Revenues and Expenditures, Postage Stamps, Stamped Envelopes and Postal Cards Issued, and Pieces of Mail Handled: 1789 to 1957—Con.

[In thousands, except number of post offices]

Year	Post offices ¹	Revenues ²	Expenditures ²	Ordinary postage stamps issued ³	Stamped envelopes and wrappers issued ⁴	Postal cards issued ⁵	Year	Post offices ¹	Revenues ²	Expenditures ²	Ordinary postage stamps issued ³	Stamped envelopes and wrappers issued ⁴
	139	140	141	142	143	144		139	140	141	142	143
1880	42,989	\$33,315	\$36,542	875,632	297,137	272,550	1883	29,047	\$11,163	\$11,314	333,340	25,548
1879	40,588	30,042	33,449	774,358	177,562	221,797	1882	28,875	8,299	11,125	251,307	27,234
1878	38,253	29,277	34,165	742,461	183,560	206,630	1881	28,586	8,349	13,606	211,783	*26,027
1877	37,845	27,531	33,436	689,530	170,651	170,015	1880	28,498	8,518	19,170	216,370	29,280
1876	36,333	28,644	33,263	698,799	165,520	156,815	1859	28,539	7,968	11,453	192,201	30,280
1875	35,547	26,791	33,611	682,342	149,766	107,616	1858	27,977	7,496	12,722	176,761	30,971
1874	34,294	26,471	32,126	632,733	136,418	91,079	1857	26,586	7,354	11,508	164,729	33,083
1873	33,244	22,996	29,084	601,931	131,172	31,094	1856	25,565	6,920	10,405	126,045	33,764
1872	31,863	21,915	26,558	541,445	113,925	-----	1855	24,410	6,642	9,968	72,977	23,451
1871	30,045	20,087	24,390	498,126	104,675	-----	1854	23,548	6,255	8,577	56,330	21,384
1870	28,492	18,879	23,998	468,118	86,239	-----	1853	22,320	5,240	7,982	56,344	5,000
1869	27,106	17,314	23,698	421,047	81,675	-----	1852	20,901	5,184	7,108	54,136	-----
1868	26,481	16,232	22,730	383,470	73,364	-----	1851	19,796	6,410	6,273	1,246	-----
1867	25,163	15,237	19,235	371,599	63,695	-----	1850	18,417	5,500	5,213	1,540	-----
1866	23,823	14,387	15,362	347,734	39,094	-----	1849	16,749	4,705	4,479	955	-----
1865	23,550	14,556	13,694	337,419	*26,206	-----	1848	16,159	4,555	4,326	860	-----
1864	20,578	12,438	12,644	334,054	23,218	-----						

Year	Post offices ¹	Revenues ²	Expenditures ²	Year	Post offices ¹	Revenues ²	Expenditures ²	Year	Post offices ¹	Revenues ²	Expenditures ²
	139	140	141		139	140	141		139	140	141
1847	15,146	\$3,890	\$3,979	1827	7,300	\$1,524	\$1,470	1807	1,848	\$478	\$453
1846	14,601	3,487	4,076	1826	6,150	1,447	1,366	1806	1,710	446	417
1845	14,133	4,239	4,320	1825	5,677	1,306	1,229	1805	1,558	421	377
1844	14,103	4,237	4,296	1824	5,132	1,197	1,138	1804	1,405	389	337
1843	13,814	4,296	4,374	1823	4,043	1,130	1,157	1803	1,258	351	322
1842	13,733	4,546	5,672	1822	4,709	1,117	1,167	1802	1,114	327	281
1841	13,778	4,407	4,499	1821	4,650	1,059	1,165	1801	1,025	320	255
1840	13,463	4,543	4,713	1820	4,500	1,111	1,160	1800	908	280	214
1839	12,790	4,484	4,636	1819	4,000	1,204	1,117	1799	677	264	188
1838	12,519	4,233	4,430	1818	3,613	1,130	1,035	1798	639	233	179
1837	11,767	4,101	3,233	1817	3,459	1,003	916	1797	554	214	150
1836	11,091	3,408	2,841	1816	3,260	961	804	1796	468	195	131
1835	10,770	2,998	2,757	1815	3,000	1,043	743	1795	453	160	117
1834	10,693	2,823	2,910	1814	2,670	730	727	1794	450	128	90
1833	10,127	2,617	2,930	1813	2,708	703	631	1793	209	104	72
1832	9,205	2,253	2,266	1812	2,610	649	540	1792	195	67	54
1831	8,636	1,997	1,936	1811	2,403	587	499	1791	89	46	36
1830	8,450	1,850	1,932	1810	2,300	551	496	1790	75	37	32
1829	8,004	1,707	1,782	1809	2,012	506	498	1789	75	*7	*7
1828	7,530	1,659	1,639	1808	1,944	460	762				

¹ Excludes branches and stations.

² Accounting basis changed from cash to accrual basis in 1954.

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

⁴ Stamped envelopes first issued June 1853, under act of Aug. 31, 1852.

⁵ First issued May 1, 1873, under Act of June 8, 1872.

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

⁷ Special-request envelopes first issued in this year.

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

⁹ For 3 months only.

Series R 146-161. Postal Service—Revenues, Expenses, and Volume of Mail, by Classes of Mail, and Employees: 1926 to 1957

[In millions, except employees in thousands]

Year	First-class mail ¹			Second-class mail			Third-class mail			Fourth-class mail			Airmail, domestic ^{2,3}			Post Office employees
	Revenues ⁴	Expenses	Pieces	Revenues ⁴	Expenses	Pieces	Revenues ⁴	Expenses	Pieces	Revenues ⁴	Expenses	Pieces	Revenues ⁴	Expenses	Pieces	
	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	
1957	\$1,066	\$1,086	31,561	\$66	\$323	6,888	\$281	\$527	15,702	\$586	\$627	1,184	\$189	\$152	1,483	521
1956	1,013	978	30,078	65	318	6,915	266	471	14,676	592	607	1,178	187	127	1,487	506
1955	967	905	28,718	65	298	6,740	269	441	15,050	595	593	1,186	180	121	1,467	511
1954	908	844	27,085	61	293	6,483	252	399	13,866	587	608	1,195	127	127	1,470	507
1953	908	822	27,257	57	297	6,762	217	374	12,004	491	623	1,245	121	157	1,480	506
1952	842	786	26,502	51	287	6,956	170	360	11,630	484	619	1,257	120	148	1,391	523
1951	784	678	25,578	48	244	6,520	157	286	10,534	431	537	1,235	95	116	1,094	498
1950	741	665	24,500	45	242	6,265	153	291	10,343	408	506	1,179	74	109	853	500
1949	706	628	23,206	43	234	6,387	135	266	9,389	366	485	1,209	65	103	856	517
1948	668	518	21,948	41	209	6,344	112	200	8,188	271	368	1,143	53	82	796	503
1947	627	499	20,665	38	201	6,124	95	171	6,803	235	297	1,067	54	68	772	471
1946	597	454	20,059	33	181	5,832	83	135	6,055	208	251	994	68	49	716	467
1945	615	373	21,010	29	144	5,522	76	99	5,446	232	232	1,028	81	49	876	436
1944	540	369	20,760	29	137	4,635	62	87	4,409	202	216	961	79	49	1,032	339
1943	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
1942	459	293	16,972	26	112	4,571	74	98	5,435	150	163	779	33	37	463	349
1941	432	278	15,989	25	109	4,607	82	105	6,075	141	161	738	23	31	323	361
1940	413	267	15,224	24	110	4,577	75	101	5,556	133	155	712	19	28	259	353
1939	400	263	14,657	23	111	4,310	70	94	5,181	133	150	698	16	25	221	348
1938	389	259	14,226	24	114	4,377	71	94	5,272	129	146	670	15	22	210	345
1937	384	254	13,882	24	113	4,529	71	91	5,356	132	146	685	12	19	168	332
1936	355	246	12,731	22	112	4,353	63	86	4,674	121	139	618	9	16	134	323
1935	343	229	12,498	20	106	4,138	54	75	4,030	112	133	573	6	12	89	306
1934	325	205	11,557	21	98	3,956	50	67	3,612	101	121	531	5	15	57	314
1933	332	227	10,878	19	108	3,869	50	79	3,753	100	132	530	6	23	60	321
1932	310	276	14,598	23	125	4,552	50	79	3,641	118	146	617	6	23	89	332
1931	335	277	15,824	27	124	4,857	58	81	4,100	138	158	766	6	17	88	338
1930	359	278	16,832	30	120	4,968	61	88	4,325	151	167	837	5	15	69	339
1929	365	287	17,170	29	123	4,834	61	80	4,341	142	162	770	-----	-----	-----	339
1928	355	268	16,706	34	119	4,678	66	72	3,838	143	150	752	-----	-----	-----	336
1927	345	262	16,284	35	119	4,753	68	72	4,062	141	145	743	-----	-----	-----	332
1926	321	247	15,266	34	117	4,658	69	71	3,982	144	147	770	-----	-----	-----	329

¹ For 1926-1929, domestic airmail included with first-class mail.
² For 1951-1955, box rent revenue, previously classified as unassignable, allocated to classes of mail; thereafter, classified as "Special services."
³ Beginning 1947, includes airmail to and from Armed Forces overseas, previously included with foreign mail. Beginning 1954, excludes reimbursement for airmail transportation.
⁴ Not available.

Series R 162-163. Postal Rates for First-Class Mail, Letters and Postal Cards: 1792 to 1957

[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	Single letters ¹		Year of rate change	Single letters ¹	
				Distance (miles)	Rate (cents)		Distance (miles)	Rate (cents)
				162	163		162	163
1952 to 1957	3¢ per oz.	(²) 2	1855	not over 3,000	3	1816	over 500	increase repealed
1940	(²)	(²) 1		over 3,000 (all prepaid)	10	1815	do	50% increase
1932	3¢ per oz.	1	1851	not over 3,000 (prepaid)	3	1799	not over 40	8
1919	2¢ per oz.	2		not over 3,000 (not prepaid)	5		41-90	10
1917	3¢ per oz.	1		over 3,000 (prepaid)	6		91-150	12 1/2
1885	2¢ per oz.	1		over 3,000 (prepaid)	6		151-300	17
1883	2¢ per 1/2 oz.	1		over 3,000 (not prepaid)	10	1794	301-500	20
1872	3¢ per 1/2 oz.	1		over 3,000 (not prepaid)	10		over 500	25
1863 ³	3¢ per 1/2 oz.	-----	1847	(⁴)	(⁴)	1792	do	*25
1861 ⁴	do	-----	1845	not over 300	5		not over 30	6
			1816	over 300	10		31-60	8
				not over 30	6		61-100	10
				31-80	10		101-150	12 1/2
				81-150	12 1/2		151-300	15
				151-400	18 1/2		301-500	20
				over 400	25		501-750	25
							751-1000	22
							over 1000	25

¹ 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 entirely within a corporate city.
² Government postal cards first authorized in 1872.
³ A uniform rate regardless of distance, a free city delivery service, and a letter unit of 1/2 ounce instead of the former "single letter" were inaugurated.
⁴ 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.
⁵ A communication of 1 sheet. Proportionately higher rates charged for letters of 2, 3, and 4 or more sheets (packet).
⁶ Various acts between 1847 and 1850 established special rates for the western and southwestern U.S.
⁷ In 1825, rates for single letters, 151 to 400 miles, increased to 18 1/2 cents.
⁸ Between 1794 and 1863, extra fees were charged for city delivery service. The proceeds went to the letter carrier.

Series R 164. Postal Rates for Domestic Airmail: 1918 to 1957

Effective date	Rate	Effective date	Rate	Effective date	Rate
1949, Jan. 1, to 1957	6¢ per oz., 4¢ each for airmail postal and post cards ¹	1926, Feb. 15...	Contract air routes: Under 1,000 miles, 10¢ per oz. plus 5¢ for each air-mail zone 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 8¢ per oz., per zone ² 2¢ per oz. ⁴ 6¢ per oz. 16¢ per oz. and 6¢ each additional oz., of which 10¢ was for special delivery 24¢ per oz., of which 10¢ was for special delivery
1948, Sept. 1	(³)			1924, July 1...	
1946, Oct. 1	5¢ per oz.			1919, July 18...	
1944, Mar. 26	8¢ per oz.			1918, Dec. 15...	
1934, July 1	6¢ per oz.			1918, July 15...	
1932, July 6	8¢ first oz.; 13¢ each additional oz.		Government routes: Daytime zone rate, 8¢ per oz. New York to Chicago (overnight), 10¢ per oz.	1918, May 15...	
1928, Aug. 1	5¢ first oz.; 10¢ each additional oz.				
1927, Feb. 1	10¢ per ½ oz., regardless of distance (both contract and Government-operated air routes)				

¹ Airmail postal and post card service started Jan. 1, 1949.
² 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."
³ Zones were (1) New York-Chicago, (2) Chicago-Cheyenne, (3) Cheyenne-San Francisco.
⁴ 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 165-168. Books—New Books, New Editions, and Pamphlets Published: 1880 to 1957

Year	Total			Year	Total			Pamphlets ¹	Year	Total		
	165	166	167		165	166	167			165	166	167
1957	13,142	10,561	2,581	1930	10,027	8,134	1,893	-----	1905	8,112	7,514	598
1956	12,538	10,007	2,531	1929	10,187	8,242	1,945	-----	1904	8,291	6,971	1,320
1955	12,589	10,226	2,363	1928	10,354	7,614	1,662	1,178	1908	7,865	5,793	2,072
1954	11,901	9,690	2,211	1927	10,153	7,450	1,449	1,254	1902	7,833	5,485	2,348
1953	12,050	9,724	2,326	1926	9,925	6,832	1,527	1,566	1901	8,141	5,496	2,645
1952	11,840	9,399	2,441	1925	9,574	6,680	1,493	1,401	1900	6,356	4,490	1,866
1951	11,255	8,765	2,490	1924	9,012	6,380	1,158	1,474	1899	5,321	4,749	572
1950	11,032	8,634	2,398	1923	8,863	6,257	921	1,685	1898	4,886	4,382	554
1949	10,892	8,460	2,432	1922	8,638	5,998	865	1,775	1897	4,928	4,171	757
1948	9,897	7,807	2,090	1921	8,329	5,438	1,008	1,883	1896	5,708	5,189	514
1947	9,182	7,243	1,939	1920	8,422	5,101	1,086	2,285	1895	5,469	5,101	368
1946	7,735	6,170	1,565	1919	8,594	7,625	969	(2,853)	1894	4,484	3,837	647
1945	6,548	5,386	1,162	1918	9,237	8,085	1,152	(2,376)	1893	5,134	4,231	853
1944	6,970	5,807	1,163	1917	10,060	8,849	1,211	(2,051)	1892	4,862	4,074	738
1943	8,325	6,764	1,561	1916	10,445	9,160	1,285	(1,941)	1891	4,665	-----	-----
1942	9,525	7,786	1,739	1915	9,784	8,349	1,385	(1,532)	1890	4,559	-----	-----
1941	11,112	9,337	1,775	1914	12,010	10,175	1,835	(1,662)	1889	4,014	-----	-----
1940	11,328	9,515	1,813	1913	12,230	10,607	1,623	(1,920)	1888	4,631	-----	-----
1939	10,640	9,015	1,625	1912	10,908	10,135	768	-----	1887	4,437	-----	-----
1938	11,067	9,464	1,603	1911	11,123	10,440	783	-----	1886	4,676	-----	-----
1937	10,912	9,273	1,639	1910	13,470	11,671	1,799	-----	1885	4,030	-----	-----
1936	10,436	8,584	1,852	1909	10,901	10,198	708	-----	1884	4,068	-----	-----
1935	8,766	6,914	1,852	1908	9,254	8,745	509	-----	1883	3,481	-----	-----
1934	8,198	6,788	1,410	1907	9,620	8,925	695	-----	1882	3,472	-----	-----
1933	8,092	6,813	1,279	1906	7,139	6,724	415	-----	1881	2,991	-----	-----
1932	9,035	7,556	1,479					-----	1880	2,076	-----	-----
1931	10,307	8,506	1,801					-----				

¹ From 1880 to 1913, pamphlets were counted but were not separately identified. The number of pamphlets that are included with new books and new editions for 1913 to 1920 are shown in parentheses. After 1923, pamphlets were not counted.

² Agrees with source; however, figures for components do not add to total shown.

Series R 169-172. Newspapers—Number and Circulation of Daily and Sunday Newspapers: 1920 to 1957

[Figures as of October 1 of each year]

Year	Daily		Sunday		Year	Daily		Sunday	
	Number	Circulation	Number	Circulation		Number	Circulation	Number	Circulation
	169	170	171	172		169	170	171	172
1957	1,762	57,805,445	544	47,044,849	1938	1,936	39,571,829	523	30,480,922
1956	1,761	57,101,510	546	47,162,246	1937	1,993	41,418,730	539	30,958,916
1955	1,760	56,147,359	541	46,447,658	1936	1,989	40,292,266	520	29,962,120
1954	1,765	55,072,480	544	46,176,450	1935	1,950	38,155,540	518	28,147,843
1953	1,785	54,472,286	544	45,948,554	1934	1,929	36,709,010	505	26,544,516
1952	1,786	53,950,615	545	46,210,136	1933	1,911	35,175,233	506	24,040,630
1951	1,778	54,017,988	543	46,279,358	1932	1,913	36,407,689	513	24,859,858
1950	1,772	53,829,072	549	46,582,848	1931	1,923	38,761,187	513	25,701,796
1949	1,780	52,845,551	546	46,398,968	1930	1,942	39,589,172	521	28,413,047
1948	1,781	52,285,297	530	45,968,595	1929	1,944	39,425,615	528	26,879,536
1947	1,769	51,678,276	511	46,151,319	1928	1,939	37,972,488	522	25,771,588
1946	1,763	50,927,505	497	43,665,364	1927	1,949	37,966,656	526	25,469,037
1945	1,749	48,384,188	484	39,860,036	1926	2,001	36,001,303	545	24,435,192
1944	1,744	45,954,588	481	37,945,622	1925	2,008	33,789,369	548	23,354,622
1943	1,754	44,392,829	467	37,291,832	1924	2,014	32,999,437	539	22,219,646
1942	1,787	43,374,850	474	35,293,543	1923	2,036	31,453,683	547	21,463,239
1941	1,857	42,080,391	510	33,435,575	1922	2,033	29,780,323	546	19,712,874
1940	1,878	41,131,611	525	32,371,092	1921	2,023	28,423,740	545	19,041,413
1939	1,888	39,670,682	524	31,519,009	1920	2,042	27,790,656	522	17,033,604

Series R 173-186. Newspapers and Periodicals—Number and Circulation: 1850 to 1954

[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 (1,000)	Number	Circulation (1,000)	Number	Circulation (1,000)	Number	Circulation (1,000)	Number	Circulation (1,000)	Number	Circulation (1,000)	Number	Circulation (1,000)
	173	174	175	176	177	178	179	180	181	182	183	184	185	186
1954	9,022	136,853	1,820	56,410	510	46,950	6,249	30,336	443	3,257	3,427	449,285	487	82,066
1947	10,282	119,568	1,854	53,237	416	42,736	7,705	21,408	307	2,137	4,610	384,628	892	69,393
1939	9,173	96,476	2,040	42,966	542	33,007	6,212	18,295	379	2,209	4,985	239,698	1,109	55,325
1937	8,326	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	40,371	523	29,196	5,337	15,185	369	1,844	4,019	178,621	966	42,648
1933	6,884	76,298	1,903	37,630	489	25,454	4,218	12,048	274	1,166	3,459	174,759	878	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	30,732
1929	10,176	91,778	2,086	42,015	578	29,012	7,075	18,384	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	179,231	1,133	34,826
1923	9,248	76,408	2,271	35,471	602	24,512	5,903	16,425	472	(?)	3,329	(?)	984	31,436
1921	9,419	75,411	2,334	33,742	538	20,353	6,059	20,316	488	(?)	3,747	(?)	995	23,090
1919	15,697	73,139	2,441	33,029	604	19,369	12,145	20,741	507	(?)	4,796	(?)	1,230	31,162
1914	16,944	67,108	2,580	28,777	571	16,480	13,793	21,851	(?)	(?)	-----	-----	1,379	23,486
1909	17,023	58,505	2,600	24,212	520	13,347	13,903	20,946	(?)	(?)	-----	-----	1,194	19,877
1904	16,459	50,464	2,452	19,633	494	12,022	13,513	18,809	(?)	(?)	-----	-----	1,493	17,418
1900	-----	-----	2,226	15,102	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1890	-----	-----	1,610	8,387	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1880	-----	-----	971	3,566	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1870	-----	-----	574	2,602	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1860	-----	-----	387	1,478	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1850	-----	-----	254	758	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

¹ Does not include circulation of "other" newspapers (series R 182), not available prior to 1925.
² Not available.

³ Does not include a number of "other" newspapers (series R 181), not available prior to 1919.
⁴ Includes a small number of periodicals.