

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

WM. J. HARRIS, DIRECTOR

BULLETIN 123

TELEPHONES AND
TELEGRAPHS

1912



WASHINGTON
GOVERNMENT PRINTING OFFICE

1914

LETTER OF TRANSMITTAL.

DEPARTMENT OF COMMERCE,
BUREAU OF THE CENSUS,
Washington, D. C., May 16, 1914.

SIR:

I have the honor to transmit herewith a series of tables presenting the principal data in regard to telephones and telegraphs, to be published as a bulletin for the census of these industries which covered the calendar year 1912.

These tables do not present in full detail all of the results of the census. It is the intention to issue later a full detailed report which will contain analytical text discussing the statistics and giving information in regard to the development of the industries. The bulletin is published at this time in order to distribute the important facts at an earlier date than they would be available if the publication was delayed until the final report is finished.

This census was taken in accordance with the provisions of the act of Congress of June 7, 1906, amendatory of section 7 of the act approved March 6, 1902, which provides that the statistics shall be collected every five years. This bulletin was prepared under the supervision of Mr. W. M. Steuart, chief statistician for manufactures.

Very respectfully,


Director of the Census.

Hon. WILLIAM C. REDFIELD,
Secretary of Commerce.

TELEPHONES

TELEPHONES.

Classes of telephone systems included.—The statistics for telephones cover all systems whether operated on a commercial, mutual, or cooperative basis, and also all farmer or rural lines. They do not include private lines used exclusively for communication between different rooms or departments of manufacturing or mercantile establishments, hotels, or private residences, unless connected with lines elsewhere through a private or branch exchange. Systems operated by Federal, state, or municipal governments for communication between different bureaus or offices are not included, nor those owned or leased by steam or electric railroads and operated by them for their own exclusive use. No effort was made to secure reports for systems in Alaska, Hawaii, Porto Rico, or the Philippine Islands. The scope of the inquiry corresponds with the censuses of 1902 and 1907; therefore the totals for the three censuses are comparable except as hereinafter indicated.

Statistics collected at prior censuses concerning the financial transactions of the small systems and farmer lines were very unsatisfactory. No financial statistics were collected at the census of 1912 for any companies or systems that reported an annual income of less than \$5,000, and such companies were required to report only the miles of wire and number of telephones in use. In all tables presenting statistics for prior censuses the figures for 1907 have been arranged to bring them into comparison with those for 1912. It was impossible to readjust the figures for the census of 1902; therefore those for that census are not strictly comparable with either 1907 or 1912. The absence of financial data for some companies makes it necessary in presenting the statistics to divide the companies and systems into two groups. The first group includes all companies reporting an annual income of \$5,000 or more, and the second group consists principally of the farmer or rural lines and small mutual systems, and those operated by associations or individuals. It also includes the small commercial companies.

In addition to the separation according to size of company, the statistics reported by the American Telephone and Telegraph Company and its subsidiary companies, commonly known as the "Bell Telephone System," are presented separately and in comparison with the totals for "All other systems."

Period covered.—The statistics for the companies and systems reporting an annual income of \$5,000 and over relate to the year ending December 31, 1912, or the business year of each company most nearly conform-

ing thereto. The number of telephones and miles of wire and the statistics contained in the balance sheet are reported as of the last day of the business year covered by the return of each company. The number of telephones and miles of wire reported by the companies and systems reporting an income of less than \$5,000 relate to December 1, 1912.

The statistics do not represent a full year's operations for every company reported, as many systems were installed, a number abandoned, and many absorbed by or consolidated with other companies during the year 1912. Moreover, the rapid advance being made in the industry necessitates a constant change in the number of telephones in use, and the numbers given in the annual reports of many companies do not agree with the number reported to the census for the date on which its report was obtained. These conditions should be considered in comparing the census figures with those compiled for other purposes.

Limitations of the statistics.—As previously stated, complete data for all systems are confined to the miles of wire and the number of telephones in use. Statistics of capitalization, income, expenses, number of persons employed, the amount paid in salaries and wages, and other features presented in detail were secured only from such companies as showed an annual income of \$5,000 or more. In some cases, even these companies did not have books from which exact data for all inquiries could be obtained, and it was necessary to secure estimates.

Uniform systems of accounts, which became effective January 1, 1913, were provided for telephone companies by the Interstate Commerce Commission under the provision of the act of Congress to regulate commerce as amended in 1910, and future presentations of census statistics may be affected thereby.

Where systems were operated in more than one state, it was impossible in compiling the statistics to assign to each state the amount of capital, income, expenses, and other items incident to the operation of the system, hence the miles of wire and the number of telephones only were segregated by states for such companies, all other items being credited to the state in which the main or general office is located.

Systems or lines.—The terms "company," "system," and "line" are frequently used as synonymous terms. They represent a statistical unit the connotation of which varies slightly to meet the requirements of the different methods of bookkeeping of the various companies and the practice of the office in

the compilation of the data. As a rule, a distinct ownership marks the separation of the statistical units and all exchanges and lines operated under the same ownership are counted as one system. Where several lines are combined under one ownership or several properties have been brought under one management by purchase or stock control, they are counted as one system. The subsidiary companies of the Bell Telephone System and other large companies which furnished separate reports for their subsidiary companies, are, of course, counted as separate units. The number of systems in the report, therefore, represents only the number of separate ownerships reporting an annual income of \$5,000 or more, without regard to the character of the ownership.

The statistics are presented in the following tables.

TABLE 1.—*All systems and lines—Miles of wire, number of telephones, and estimated number of messages or talks, classified as the Bell Telephone System and all other systems: 1912, 1907, and 1902.*—The figures given for messages for 1907 and 1912 are confined to those for systems reporting an annual income of \$5,000 or more, only the miles of wire and the number of telephones being reported for the smaller companies. In 1902 they include messages for all systems operating switchboards. Therefore the figures in this table should not be used to compute the average number of messages per telephone or other unit of measurement.

TABLE 2.—*All systems and lines—Miles of wire, number of telephones, estimated number of messages or talks, population, and number of telephones per 1,000 of population, by geographic divisions and states: 1912, 1907, and 1902.*—This table shows the magnitude and relative importance of the telephone industry in each geographic division and state. The states with the largest population naturally contain the greatest amount of telephone equipment. The average number of telephones for each 1,000 of population in the United States as a whole increased from 72 in 1907 to 91 in 1912. Iowa shows the highest average, 171 for 1912, followed by California with 168 and Nebraska with 165.

TABLE 3.—*All systems and lines—Per cent of increase in miles of wire, number of telephones, and estimated number of messages or talks, by geographic divisions: 1902 to 1912.*—Percentages of increase in the totals shown in Table 2 are here given by geographic divisions for the decade and for each five-year period. The percentages show that there has been a rapid development of the telephone service in all sections of the country. The largest percentages of gain in miles of

wire and number of telephones are shown for the West South Central, Mountain, and Pacific divisions. The large percentages are due not only to the development in these states, but to the fact that the totals on which they are based are smaller than those for the more populous states.

TABLE 4.—*All systems and lines—Per cent distribution of miles of wire, number of telephones, and estimated number of messages or talks, by geographic divisions: 1912, 1907, and 1902.*—The proportion of wire, telephones, and messages or talks in each geographic division of the total reported by all systems for the United States is presented in this table for each of the three censuses.

TABLE 5.—*All systems and lines—Miles of wire, number of telephones, and estimated number of messages or talks, classified as the Bell Telephone System and all other systems, by geographic divisions and states: 1912.*—In this table the wire, telephones, and messages or talks of all systems are separated into those for the Bell Telephone System and all other systems, both groups being shown by geographic divisions and states.

TABLE 6.—*Telephone systems reporting an annual income of \$5,000 or more, classified as the Bell Telephone System and all other systems—Traffic: 1912, 1907, and 1902.*—The traffic details are summarized in this table for both the Bell Telephone System and for all other systems reporting an annual income of \$5,000 or more. The number of telephones, with estimated number of messages or talks annually, divided into local exchange and long distance or toll, are given with average per telephone and percentages of increase for all three censuses.

The figures given for 1902 are not strictly comparable with those for 1912 and 1907, as they include a large number of systems that had an annual income of less than \$5,000.

Table 7.—*Telephone systems reporting an annual income of \$5,000 or more—Estimated number of messages or talks and the number of messages or talks per telephone per day, by geographic divisions and states: 1912, 1907, and 1902.*—The estimate of the number of messages or talks was furnished by the companies. The decrease shown for some states is explained by the companies stating that an error was evidently made in the estimate for the preceding census. As switchboards are operated to their full capacity, as a rule, 325 days during the year, this number has been used as the divisor in computing the average number of messages per day. The statistics are for all three censuses.

TABLE 8.—*Telephone systems reporting an annual income of less than \$5,000, including farmer or rural lines—Number of systems, miles of wire, and number of telephones, by geographic divisions and states: 1912 and 1907.*—This table summarizes the equipment by geographic divisions and states for systems reporting an annual income of less than \$5,000. The figures are for two censuses only, 1912 and 1907, those for 1902 not being available. Farmer or rural lines are included.

TABLE 9.—*Telephone systems reporting an annual income of \$5,000 or more—Income and expenses: 1912 and 1907.*—During the period from 1907 to 1912 a number of the telephone companies changed and improved their methods of accounting. These changes necessitated segregating some items in the income and expense accounts and combining others. The changes have been so numerous that it is impossible to make a correct comparison of the detailed income accounts reported at the two censuses. By consolidating certain items a fairly satisfactory abbreviated comparative income account has been constructed, and is presented in Table 9. This table shows the percentage of increase in each item of income and expenses, and also the relative importance of each item as reported for 1907 and 1912. It appears from this table that the total expenses, including taxes and interest, have increased by 50.4 per cent, while the total income increased 44.4 per cent. Of the three items reported for income the largest per cent of increase, 69.6 per cent, is shown for receipts from leased lines, wires, and conduits, of which much the larger amount was, of course, reported for the Bell Telephone System. The net income after paying operating expenses and fixed charges increased by 24.5 per cent, and the dividends declared during the year increased by 45.5 per cent. There was no great change in the relative importance of the various items of income and expenses. The greatest change in these items appears for interest, which formed 11.8 per cent of the total expenses for 1907 as compared with 9.9 per cent for 1912.

TABLE 10.—*Telephone systems reporting an annual income of \$5,000 or more—Income and expenses: 1912.*—The impossibility of constructing a detailed comparative income and expense account as stated in connection with Table 9 makes it desirable to give a detailed table for 1912. In addition to showing the actual amounts reported by telephone companies for the different items of income and expenses, this table also shows the relative importance of each item. It is interesting only that it shows further details than was possible to present in Table 9.

TABLE 11.—*Telephone systems reporting an annual income of \$5,000 or more—Employees, salaries, and wages: 1912, 1907, and 1902.*—This table gives separate totals for the number and salaries of salaried employees, the number and wages of male and female operators, and the number and wages of all other wage earners.

The table also gives the per cent that males and females, respectively, form of the total operators and the percentage of increase for each class of employees. The relative importance of females in the operative force has been constantly increasing, and in 1912 they formed 98 per cent of the operators.

TABLE 12.—*Telephone systems reporting an annual income of \$5,000 or more—Comparative summary: 1912 and 1907.*—This is a summary of the principal statistics for systems or lines reporting an annual income of \$5,000 or more, classified as the Bell Telephone System and all other systems. Comparative statistics of this character are not available for 1902.

TABLE 13.—*Telephone and telegraph systems—Comparative summary: 1912 and 1907.*—A comparison of the statistics of land and ocean telegraph and the telephone systems for 1912 shows that the mileage of wire devoted to the transmission of telephone messages is more than eleven times as great as that used for telegraph purposes, while in 1907 it was only eight times greater.

The capital invested in telephone companies in 1912 was more than five times the sum reported by telegraph companies, both land and ocean. The statistics do not include those of systems in Alaska or in the insular possessions.

TABLE 1.—*ALL SYSTEMS AND LINES—MILES OF WIRE, NUMBER OF TELEPHONES, AND ESTIMATED NUMBER OF MESSAGES OR TALKS, CLASSIFIED AS THE BELL TELEPHONE SYSTEM AND ALL OTHER SYSTEMS: 1912, 1907, AND 1902.*

	Year.	Miles of wire. ¹	Number of telephones.	Estimated number of messages or talks. ²
United States.....	1912	20,248,326	8,729,592	³ 13,735,658,245
	1907	12,999,364	6,118,578	³ 10,400,493,958
	1902	4,900,451	2,371,044	⁴ 5,070,554,553
Bell Telephone System.....	1912	15,133,186	5,087,027	9,133,226,836
	1907	8,947,266	3,132,063	6,401,044,799
	1902	3,387,924	1,317,178	3,074,530,060
All other systems.....	1912	5,115,140	3,642,565	³ 4,602,431,409
	1907	4,052,098	2,986,515	³ 3,999,389,159
	1902	1,512,527	1,053,866	⁴ 1,996,024,493

¹ Exclusive of 1,565 miles in Canada in 1912, and 5 miles in 1907.

² The number of messages reported by the Bell Telephone System includes only completed calls, while the figures for all other companies may include some original calls not necessarily completed; such as calls that the operator reports as "Line busy," or "Does not answer."

³ Exclusive of systems reporting an annual income of less than \$5,000.

⁴ Exclusive of independent farmer or rural lines.

TELEPHONES AND TELEGRAPHS.

TABLE 2.—ALL SYSTEMS AND LINES—MILES OF WIRE, NUMBER OF TELEPHONES, ESTIMATED NUMBER OF MESSAGES OR TALKS, POPULATION, AND NUMBER OF TELEPHONES PER 1,000 OF POPULATION, BY GEOGRAPHIC DIVISIONS AND STATES: 1912, 1907, AND 1902.

DIVISION AND STATE.	Cen- sus.	Miles of wire.	Number of telephones.	Estimated number of messages or talks. ¹	Population. ²	Telephones per 1,000 of popu- lation.
UNITED STATES.....	1912	20,248,326	8,729,592	13,735,658,245	95,545,336	91
	1907	12,999,364	6,118,573	10,400,433,958	85,532,701	72
	1902	4,900,451	2,371,044	5,070,554,553	78,576,436	30
GEOGRAPHIC DIVISIONS:						
New England.....	1912	1,545,252	625,488	810,524,037	6,767,513	92
	1907	997,865	410,269	572,523,863	6,111,093	67
	1902	408,337	166,167	293,292,134	5,769,477	29
Middle Atlantic.....	1912	5,035,019	1,732,145	2,422,868,211	20,179,371	88
	1907	3,056,193	1,252,903	1,947,571,139	17,667,920	71
	1902	1,261,843	483,054	909,887,004	16,008,710	30
East North Central.....	1912	4,645,213	2,378,257	4,025,906,387	18,757,149	127
	1907	3,308,021	1,712,390	3,067,416,613	17,663,394	97
	1902	1,466,145	740,059	1,733,817,138	16,462,313	46
West North Central.....	1912	2,932,573	1,621,523	2,238,770,606	11,926,513	136
	1907	2,043,383	1,251,555	1,664,198,498	11,363,251	110
	1902	588,290	399,855	712,440,737	10,624,893	38
South Atlantic.....	1912	1,121,458	531,402	869,439,943	12,586,562	42
	1907	875,173	365,764	749,930,984	11,574,988	32
	1902	328,022	146,765	353,559,870	10,770,414	14
East South Central.....	1912	977,694	337,292	662,046,512	8,602,701	39
	1907	714,871	243,234	731,000,908	8,330,783	29
	1902	305,989	112,851	377,950,187	7,768,517	15
West South Central.....	1912	1,312,553	543,102	1,079,517,948	9,288,200	58
	1907	799,608	342,255	646,501,299	8,037,775	43
	1902	236,884	114,939	303,547,439	6,883,018	17
Mountain.....	1912	558,450	226,652	435,366,129	2,847,946	80
	1907	364,605	154,061	299,270,686	1,992,696	77
	1902	88,846	48,067	102,374,364	1,763,813	27
Pacific.....	1912	2,120,104	683,731	1,191,218,442	4,589,381	149
	1907	839,647	386,147	722,010,968	2,790,861	138
	1902	216,905	159,287	278,685,620	2,525,272	63
NEW ENGLAND:						
Maine.....	1912	141,687	68,914	84,033,152	753,085	92
	1907	94,073	53,134	73,197,982	717,832	74
	1902	25,451	14,070	21,923,915	700,072	20
New Hampshire.....	1912	75,917	40,017	49,984,600	434,818	92
	1907	49,448	23,920	36,537,513	436,128	66
	1902	18,390	9,949	16,987,012	418,602	24
Vermont.....	1912	54,756	40,142	48,306,101	358,710	112
	1907	36,419	30,833	35,660,768	351,495	88
	1902	16,379	12,151	19,075,847	345,885	35
Massachusetts.....	1912	863,426	329,992	401,817,540	3,461,888	94
	1907	534,220	209,383	298,824,440	3,083,013	68
	1902	257,461	96,512	183,115,320	2,917,796	33
Connecticut and Rhode Island.....	1912	409,466	146,423	226,382,644	1,729,012	85
	1907	283,705	87,999	128,297,160	1,522,625	58
	1902	90,656	33,485	57,190,040	1,387,122	24
MIDDLE ATLANTIC:						
New York.....	1912	2,766,060	970,449	1,297,849,047	9,526,146	102
	1907	1,630,076	635,512	1,034,651,594	8,386,673	82
	1902	623,625	247,340	360,098,123	7,533,011	33
New Jersey.....	1912	644,984	185,632	192,311,511	2,683,309	60
	1907	338,608	116,988	138,914,642	2,248,332	52
	1902	136,617	48,980	56,171,223	1,969,821	25
Pennsylvania.....	1912	1,599,975	626,064	932,707,683	7,969,916	79
	1907	1,087,509	450,403	774,004,903	7,032,915	64
	1902	501,601	186,734	493,617,718	6,505,887	29
EAST NORTH CENTRAL:						
Ohio.....	1912	1,161,032	631,206	1,301,503,565	4,903,439	129
	1907	986,053	495,636	1,014,222,376	4,497,198	110
	1902	515,892	224,083	558,707,801	4,252,372	53
Indiana.....	1912	667,839	354,550	583,621,519	2,742,117	129
	1907	530,044	289,452	498,560,985	2,743,305	106
	1902	213,157	136,561	294,657,565	2,581,575	53
Illinois.....	1912	1,689,074	807,253	1,105,751,431	5,821,305	139
	1907	986,949	558,585	833,749,155	5,518,190	101
	1902	428,301	221,008	541,161,932	5,019,628	44
Michigan.....	1912	728,184	335,074	694,363,258	2,897,207	116
	1907	494,612	209,842	413,557,846	2,611,790	80
	1902	197,863	95,415	237,695,112	2,480,764	38
Wisconsin.....	1912	399,089	250,174	340,666,614	2,393,081	105
	1907	310,363	158,875	307,327,151	2,292,911	69
	1902	110,929	62,992	101,594,728	2,127,974	30

¹ Exclusive of farmer or rural lines in 1902 and systems reporting an annual income of less than \$5,000 in 1907 and 1912.

² Official estimates of the Bureau of the Census.

TELEPHONES.

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TABLE 2.—ALL SYSTEMS AND LINES—MILES OF WIRE, NUMBER OF TELEPHONES, ESTIMATED NUMBER OF MESSAGES OR TALKS, POPULATION, AND NUMBER OF TELEPHONES PER 1,000 OF POPULATION, BY GEOGRAPHIC DIVISIONS AND STATES: 1912, 1907, AND 1902—Continued.

DIVISION AND STATE.	Cen- sus.	Miles of wire.	Number of telephones.	Estimated number of messages or talks. ¹	Population. ²	Telephones per 1,000 of popu- lation.
WEST NORTH CENTRAL:						
Minnesota.....	1912	653,479	272,359	418,720,464	2,148,235	127
	1907	387,758	171,479	274,434,452	2,071,318	83
	1902	137,274	63,192	113,124,262	1,822,106	35
Iowa.....	1912	504,101	380,294	471,126,059	2,223,189	171
	1907	360,884	332,545	336,184,981	2,201,331	151
	1902	147,586	138,400	193,054,738	2,301,427	60
Missouri.....	1912	874,334	404,150	655,616,330	3,355,080	121
	1907	640,560	312,527	468,138,352	3,405,901	92
	1902	177,072	103,155	242,309,227	3,187,031	32
North Dakota.....	1912	76,174	51,241	49,861,643	634,731	81
	1907	61,728	34,087	39,874,764	487,890	70
	1902	9,532	6,762	14,106,733	344,778	20
South Dakota.....	1912	73,921	65,858	47,881,574	624,658	105
	1907	66,946	48,405	60,548,810	476,631	101
	1902	10,877	10,387	17,919,004	429,808	24
Nebraska.....	1912	393,319	201,689	291,615,175	1,220,371	165
	1907	257,812	152,279	246,047,337	1,068,849	142
	1902	53,285	36,766	73,227,030	1,087,526	34
Kansas.....	1912	357,250	245,932	303,949,361	1,740,249	141
	1907	267,695	200,233	238,969,302	1,651,331	121
	1902	52,664	41,193	58,699,143	1,452,217	28
SOUTH ATLANTIC:						
Maryland, Delaware, and District of Columbia.....	1912	403,655	147,246	177,755,722	1,868,374	79
	1907	312,282	110,282	165,995,216	1,798,652	61
	1902	107,827	36,383	70,981,973	1,693,019	21
Virginia.....	1912	161,136	76,652	164,421,931	2,107,998	36
	1907	108,588	55,541	115,354,885	1,992,925	28
	1902	46,678	25,762	65,494,626	1,899,440	14
West Virginia.....	1912	112,954	80,251	103,255,136	1,279,781	63
	1907	99,844	62,144	109,063,223	1,096,006	57
	1902	56,812	22,801	41,605,891	998,004	23
North Carolina.....	1912	109,110	65,152	90,831,013	2,276,165	29
	1907	83,251	37,104	80,867,891	2,086,912	18
	1902	26,120	17,036	36,485,398	1,948,984	9
South Carolina.....	1912	73,712	33,239	68,170,380	1,554,554	21
	1907	50,226	20,911	51,558,785	1,472,734	14
	1902	19,445	10,753	23,898,914	1,378,150	8
Georgia.....	1912	206,591	96,436	206,631,042	2,696,061	36
	1907	187,904	82,260	187,647,940	2,431,617	25
	1902	54,301	25,761	96,192,066	2,298,713	11
Florida.....	1912	54,300	32,426	58,374,719	802,729	40
	1907	33,078	17,522	39,650,044	646,142	27
	1902	16,839	8,269	18,906,002	554,104	15
EAST SOUTH CENTRAL:						
Kentucky.....	1912	352,544	130,751	287,807,892	2,321,823	56
	1907	262,691	93,996	276,476,958	2,349,152	40
	1902	155,482	46,949	143,101,564	2,202,804	21
Tennessee.....	1912	287,685	104,353	188,865,474	2,221,503	47
	1907	202,505	71,130	231,213,675	2,197,785	32
	1902	86,640	36,392	128,274,719	2,070,354	18
Alabama.....	1912	152,849	56,292	100,983,408	2,207,283	26
	1907	134,337	40,481	102,736,572	2,049,407	20
	1902	32,966	14,170	46,158,943	1,891,755	7
Mississippi.....	1912	184,616	45,896	84,389,738	1,852,092	25
	1907	115,338	37,627	120,569,603	1,734,439	22
	1902	30,001	15,340	60,414,961	1,603,604	10
WEST SOUTH CENTRAL:						
Arkansas.....	1912	141,014	68,303	124,445,991	1,633,238	42
	1907	98,932	49,576	71,950,886	1,439,910	34
	1902	24,273	16,928	36,716,883	1,347,934	13
Louisiana.....	1912	138,905	46,602	101,597,617	1,717,834	27
	1907	101,325	35,692	120,647,396	1,565,752	23
	1902	49,588	17,543	68,083,915	1,434,033	12
Oklahoma.....	1912	211,175	116,217	163,999,696	1,850,987	63
	1907	104,780	68,125	108,725,669	1,414,177	48
	1902	21,498	15,732	31,667,627	897,748	18
Texas.....	1912	821,459	311,980	689,474,644	4,086,141	76
	1907	494,569	188,862	345,177,378	3,617,936	52
	1902	141,525	64,736	167,079,014	3,203,303	20

¹ Exclusive of farmer or rural lines in 1902 and systems reporting an annual income of less than \$5,000 in 1907 and 1912.² Official estimates of the Bureau of the Census.

TELEPHONES AND TELEGRAPHS.

TABLE 2.—ALL SYSTEMS AND LINES—MILES OF WIRE, NUMBER OF TELEPHONES, ESTIMATED NUMBER OF MESSAGES OR TALKS, POPULATION, AND NUMBER OF TELEPHONES PER 1,000 OF POPULATION, BY GEOGRAPHIC DIVISIONS AND STATES: 1912, 1907, AND 1902—Continued.

DIVISION AND STATE.	Cen- sus.	Miles of wire.	Number of telephones.	Estimated number of messages or talks. ¹	Population. ²	Telephones per 1,000 of popu- lation.
MOUNTAIN:						
Montana.....	1912	54,259	35,537	74,199,468	405,734	88
	1907	28,386	17,168	18,869,410	313,615	55
	1902	8,609	5,451	11,352,976	286,120	20
Idaho.....	1912	58,205	29,454	45,634,700	362,229	81
	1907	37,364	16,394	24,833,595	213,028	77
	1902	6,366	3,886	6,451,762	176,416	22
Colorado.....	1912	261,987	90,397	165,041,703	857,016	105
	1907	173,633	65,908	138,203,561	628,216	105
	1902	52,115	24,533	60,258,533	559,715	44
New Mexico.....	1912	22,492	10,346	20,174,439	356,819	29
	1907	12,506	6,653	12,548,942	219,830	30
	1902	3,366	2,510	4,297,920	202,316	12
Arizona.....	1912	18,621	11,224	11,573,427	222,563	50
	1907	10,277	6,203	10,379,750	147,214	42
	1902	3,890	3,264	5,072,727	129,869	25
Utah and Wyoming.....	1912	133,094	44,010	110,244,799	552,867	80
	1907	92,396	37,134	87,596,483	428,458	87
	1902	13,106	7,258	13,531,312	388,046	19
Nevada.....	1912	9,792	5,684	8,497,593	90,718	62
	1907	10,043	4,601	6,788,945	42,335	110
	1902	1,394	1,165	1,409,134	41,331	28
PACIFIC:						
Washington.....	1912	487,079	150,016	295,273,362	1,281,508	117
	1907	208,810	98,846	200,184,465	630,712	157
	1902	43,027	31,447	64,623,982	558,055	56
Oregon.....	1912	272,481	99,713	170,065,267	730,736	136
	1907	87,723	49,629	83,833,537	484,938	102
	1902	29,531	21,190	35,777,238	429,380	49
California.....	1912	1,360,544	434,002	725,879,813	2,577,137	168
	1907	543,114	237,672	437,992,966	1,675,211	142
	1902	144,437	106,650	178,284,400	1,537,837	69

¹ Exclusive of farmer or rural lines in 1902 and systems reporting an annual income of less than \$5,000 in 1907 and 1912.

² Official estimates of the Bureau of the Census.

TABLE 3.—ALL SYSTEMS AND LINES—PER CENT OF INCREASE IN MILES OF WIRE, NUMBER OF TELEPHONES, AND ESTIMATED NUMBER OF MESSAGES OR TALKS, BY GEOGRAPHIC DIVISIONS: 1902 TO 1912.

DIVISION.	PER CENT OF INCREASE. ¹								
	Miles of wire.			Number of telephones.			Estimated number of messages or talks. ²		
	1902-1912	1907-1912	1902-1907	1902-1912	1907-1912	1902-1907	1902-1912	1907-1912	1902-1907
United States.....	313.2	55.8	165.3	268.2	42.7	158.1	170.9	32.1	105.1
New England.....	278.4	54.9	144.4	276.4	52.5	146.9	171.7	41.6	91.9
Middle Atlantic.....	299.0	64.7	142.2	268.9	42.2	159.4	166.3	24.4	114.0
East North Central.....	216.8	40.4	125.6	221.4	38.9	131.4	132.2	31.2	76.9
West North Central.....	398.5	43.5	247.3	305.5	29.6	213.0	214.2	34.5	133.6
South Atlantic.....	241.9	28.1	166.8	262.1	45.3	149.2	145.9	15.9	112.1
East South Central.....	220.5	36.8	134.3	198.9	38.7	115.5	75.2	-9.4	93.4
West South Central.....	454.1	64.1	237.6	372.5	58.7	197.8	255.6	67.0	113.0
Mountain.....	528.6	53.2	310.4	371.5	47.2	220.5	325.3	45.5	192.3
Pacific.....	877.0	152.5	286.9	329.2	77.1	142.4	327.4	65.0	159.1

¹ A minus sign (-) denotes decrease.

² Exclusive of farmer or rural lines in 1902 and systems reporting an annual income of less than \$5,000 in 1907 and 1912.

TABLE 4.—ALL SYSTEMS AND LINES—PER CENT DISTRIBUTION OF MILES OF WIRE, NUMBER OF TELEPHONES, AND ESTIMATED NUMBER OF MESSAGES OR TALKS, BY GEOGRAPHIC DIVISIONS: 1912, 1907, AND 1902.

DIVISION.	PER CENT DISTRIBUTION.								
	Miles of wire.			Number of telephones.			Estimated number of messages or talks.		
	1912	1907	1902	1912	1907	1902	1912	1907	1902
United States.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
New England.....	7.6	7.7	8.3	7.2	6.7	7.0	5.9	5.5	5.9
Middle Atlantic.....	24.9	23.5	25.8	20.4	20.5	20.4	17.6	18.7	17.9
East North Central.....	22.9	25.4	29.9	27.2	28.0	31.2	29.3	29.5	34.2
West North Central.....	14.5	15.7	12.0	18.6	20.5	16.9	16.3	16.0	14.0
South Atlantic.....	5.5	6.7	6.7	6.1	6.0	6.2	6.3	7.2	7.0
East South Central.....	4.8	5.5	6.2	3.9	4.0	4.8	4.8	7.0	7.5
West South Central.....	6.5	6.2	4.8	6.2	5.6	4.8	7.9	6.2	6.0
Mountain.....	2.8	2.8	1.8	2.6	2.5	2.0	3.2	2.9	2.0
Pacific.....	10.5	6.5	4.4	7.8	6.3	6.7	8.7	6.9	5.5

¹ Exclusive of farmer or rural lines in 1902 and systems reporting an annual income of less than \$5,000 in 1907 and 1912.

TELEPHONES.

TABLE 5.—ALL SYSTEMS AND LINES—MILES OF WIRE, NUMBER OF TELEPHONES, AND ESTIMATED NUMBER OF MESSAGES OR TALKS, CLASSIFIED AS THE BELL TELEPHONE SYSTEM AND ALL OTHER SYSTEMS, BY GEOGRAPHIC DIVISIONS AND STATES: 1912.

DIVISION AND STATE.	TOTAL.			BELL TELEPHONE SYSTEM.			ALL OTHER SYSTEMS.		
	Miles of wire.	Number of telephones.	Estimated number of messages or talks. ¹	Miles of wire.	Number of telephones.	Estimated number of messages or talks.	Miles of wire.	Number of telephones.	Estimated number of messages or talks. ¹
UNITED STATES.....	20,248,326	8,729,592	13,735,658,245	15,133,186	5,087,027	9,133,226,836	5,115,140	3,642,565	4,602,431,409
GEOGRAPHIC DIVISIONS:									
New England.....	1,545,252	625,488	810,524,037	1,498,417	580,097	778,472,201	46,835	45,391	32,051,836
Middle Atlantic.....	5,035,019	1,782,145	2,422,868,241	4,227,908	1,355,352	1,756,522,790	807,111	426,793	666,345,451
East North Central.....	4,045,218	2,378,257	4,025,906,387	3,006,320	1,159,303	2,208,734,660	1,638,898	1,218,954	1,817,171,727
West North Central.....	2,932,578	1,621,523	2,238,770,606	1,636,056	619,069	1,135,454,339	1,296,522	1,102,454	1,103,316,267
South Atlantic.....	1,121,458	531,402	869,439,943	886,897	340,227	678,091,893	234,561	191,175	191,348,050
East South Central.....	977,694	337,292	662,046,512	662,218	184,355	437,251,959	315,476	152,937	224,794,553
West South Central.....	1,312,553	543,102	1,079,517,948	971,439	283,681	860,106,989	341,114	259,421	219,410,959
Mountain.....	658,450	226,052	435,366,129	498,564	177,617	372,292,039	59,886	49,035	63,074,000
Pacific.....	2,120,104	683,731	1,191,218,442	1,745,367	487,326	906,299,966	374,737	196,405	284,918,476
NEW ENGLAND:									
Maine.....	141,687	68,914	84,033,152	124,749	52,564	79,734,699	16,938	16,350	4,298,453
New Hampshire.....	75,917	40,017	49,984,600	69,686	33,387	42,597,908	6,231	6,630	7,385,692
Vermont.....	54,756	40,142	48,306,101	41,503	23,818	35,539,241	13,253	16,324	12,766,860
Massachusetts.....	863,426	329,992	401,817,540	854,894	325,186	395,927,259	8,532	4,806	5,890,281
Rhode Island.....	102,906	41,664	48,211,556	102,906	41,664	48,211,556			
Connecticut.....	306,560	104,759	178,171,088	304,679	103,478	176,461,538	1,881	1,281	1,709,550
MIDDLE ATLANTIC:									
New York.....	2,700,000	970,449	1,297,849,047	2,565,015	809,635	1,037,894,644	225,045	160,814	259,954,403
New Jersey.....	644,984	185,632	192,311,511	579,281	161,037	161,925,950	65,703	24,695	30,385,561
Pennsylvania.....	1,509,975	626,064	932,707,683	1,083,612	384,680	566,702,196	516,363	241,384	376,005,487
EAST NORTH CENTRAL:									
Ohio.....	1,161,032	631,206	1,301,503,565	623,307	251,116	547,068,736	537,725	380,090	754,444,829
Indiana.....	667,839	354,550	583,621,519	378,492	117,897	252,578,455	289,347	236,653	331,043,064
Illinois.....	1,689,074	807,253	1,105,751,431	1,204,666	473,799	713,993,119	484,408	333,454	391,758,312
Michigan.....	728,184	335,074	694,363,258	524,172	193,599	458,146,344	204,012	141,475	236,216,914
Wisconsin.....	399,089	250,174	340,666,614	275,683	122,892	236,958,006	123,406	127,282	103,708,608
WEST NORTH CENTRAL:									
Minnesota.....	653,479	272,359	418,720,464	373,733	99,093	204,606,168	279,746	173,266	214,114,296
Iowa.....	504,101	380,294	471,126,059	296,784	116,813	241,438,739	207,317	263,481	229,687,680
Missouri.....	874,334	404,150	655,616,330	492,739	140,239	322,331,011	331,595	263,911	333,285,319
North Dakota.....	76,174	51,241	49,861,643	43,180	17,328	27,920,018	32,994	33,913	21,941,625
South Dakota.....	73,021	65,858	47,881,574	17,177	7,836	14,201,488	56,744	58,022	33,680,086
Nebraska.....	393,319	201,689	291,615,175	195,615	62,246	128,625,549	197,704	139,443	162,989,626
Kansas.....	357,250	245,932	303,949,361	216,828	75,514	196,331,726	140,422	170,418	107,617,635
SOUTH ATLANTIC:									
Delaware.....	48,632	15,842	26,810,915	40,838	12,648	22,145,989	7,794	3,194	4,664,926
Maryland.....	228,744	84,801	104,008,361	223,170	79,410	101,210,919	5,574	5,391	2,797,442
District of Columbia.....	126,279	46,603	46,936,446	126,279	46,603	46,936,446			
Virginia.....	161,136	76,652	164,421,931	132,827	47,497	148,083,057	28,309	29,155	16,338,874
West Virginia.....	112,954	80,251	103,255,136	64,255	27,593	52,420,225	48,699	52,658	50,834,911
North Carolina.....	109,110	65,152	90,831,013	65,356	27,951	68,767,607	43,754	37,201	22,073,406
South Carolina.....	73,712	33,239	68,170,380	58,848	20,926	60,087,496	14,864	12,313	8,082,884
Georgia.....	206,591	96,436	206,631,042	149,889	64,052	151,675,074	56,702	32,384	54,955,968
Florida.....	54,300	32,426	58,374,719	25,435	13,547	26,775,080	28,865	18,879	31,599,639
EAST SOUTH CENTRAL:									
Kentucky.....	352,544	130,751	287,807,892	199,151	51,185	124,681,052	153,393	79,566	163,126,840
Tennessee.....	287,685	104,353	188,865,474	232,979	62,194	147,577,363	54,707	42,159	41,288,111
Alabama.....	152,849	56,292	100,983,408	130,168	39,233	88,499,665	22,681	17,069	12,483,743
Mississippi.....	184,616	45,896	84,389,738	99,920	31,743	76,493,879	84,696	14,153	7,895,859
WEST SOUTH CENTRAL:									
Arkansas.....	141,014	68,303	124,445,991	111,623	37,658	112,397,972	29,391	30,645	12,048,019
Louisiana.....	138,905	46,602	101,597,617	133,434	41,802	100,700,585	5,479	4,799	897,032
Oklahoma.....	211,175	116,217	133,999,696	160,576	55,339	149,005,621	50,691	60,878	14,994,075
Texas.....	821,459	311,980	689,474,644	565,806	148,881	498,002,811	255,653	163,099	191,471,833
MOUNTAIN:									
Montana.....	54,259	35,537	74,199,468	30,652	16,180	29,034,109	23,607	19,357	45,165,359
Idaho.....	58,205	29,454	45,634,700	50,191	17,560	36,577,475	8,014	11,894	9,057,225
Wyoming.....	20,368	9,946	17,121,932	15,634	7,471	17,121,932	4,734	2,475	(²)
Colorado.....	261,987	90,397	105,041,703	253,518	84,625	163,508,703	8,469	5,771	1,533,000
New Mexico.....	22,492	10,346	20,174,439	8,482	19,648	19,387,139	2,844	1,864	787,300
Arizona.....	18,621	11,224	11,573,427	16,669	9,802	11,121,388	1,952	1,422	452,039
Utah.....	112,726	34,064	93,122,867	108,316	30,971	90,575,087	4,410	3,093	2,547,780
Nevada.....	9,792	5,684	8,497,593	3,936	2,525	4,966,206	5,856	3,159	3,531,337
PACIFIC:									
Washington.....	487,079	150,016	295,273,362	429,025	106,151	236,826,440	58,054	43,865	58,446,922
Oregon.....	272,481	99,713	170,065,267	186,103	58,030	119,183,718	86,378	41,683	50,881,549
California.....	1,360,644	434,002	725,879,813	1,130,239	323,145	550,289,808	230,305	110,857	175,590,509

¹ Exclusive of systems reporting an annual income of less than \$5,000.
² Not reported, there being no "All other systems" in Wyoming with an annual income of \$5,000 or more.

TELEPHONES AND TELEGRAPHS.

TABLE 6.—TELEPHONE SYSTEMS REPORTING AN ANNUAL INCOME OF \$5,000 OR MORE, CLASSIFIED AS THE BELL TELEPHONE SYSTEM AND ALL OTHER SYSTEMS—TRAFFIC: 1912, 1907, AND 1902.

	1912	1907	1902	PER CENT OF INCREASE. ¹		
				1902-1912	1907-1912	1902-1907
TOTAL.						
Number of systems.....	1,916	1,636	4,151	-53.8	17.1	-60.0
Number of telephones.....	7,326,748	4,906,693	2,315,207	216.4	40.3	111.9
Estimated number of messages or talks.....	13,735,658,245	10,400,433,958	5,070,554,553	170.9	32.1	105.1
Local exchange.....	13,394,885,442	10,160,630,944	4,949,849,709	170.6	31.8	105.3
Long distance or toll.....	340,772,803	239,803,014	120,704,844	182.3	42.1	98.7
Average messages or talks per telephone.....	1,875	2,120	2,190	-14.4	-11.6	-3.2
Local exchange.....	1,828	2,071	2,138	-14.5	-11.7	-3.1
Long distance or toll.....	47	49	52	-9.6	-4.1	-5.8
BELL TELEPHONE SYSTEM.						
Number of systems.....	176	175	44	300.0	0.6	297.7
Number of telephones.....	5,087,027	3,132,063	1,317,178	286.2	62.4	137.8
Estimated number of messages or talks.....	9,133,226,836	6,401,044,799	3,074,530,060	197.1	42.7	108.2
Local exchange.....	8,886,838,093	6,209,430,515	2,998,344,933	196.4	43.1	107.1
Long distance or toll.....	246,388,743	191,614,284	76,185,127	223.4	28.6	151.5
Average messages or talks per telephone.....	1,795	2,044	2,334	-23.1	-12.2	-12.4
Local exchange.....	1,747	1,983	2,276	-23.2	-11.0	-12.0
Long distance or toll.....	48	61	58	-17.2	-21.3	5.2
ALL OTHER SYSTEMS.						
Number of systems.....	1,740	1,461	4,107	-57.6	19.1	-64.4
Number of telephones.....	2,239,721	1,774,630	998,119	124.4	26.2	77.8
Estimated number of messages or talks.....	4,602,431,409	3,999,389,159	1,996,024,493	130.6	15.1	100.4
Local exchange.....	4,508,047,349	3,951,200,429	1,951,504,776	131.0	14.1	102.5
Long distance or toll.....	94,384,060	48,188,730	44,519,717	112.0	95.9	8.2
Average messages or talks per telephone.....	2,055	2,254	2,000	2.8	-8.8	12.7
Local exchange.....	2,013	2,227	1,955	3.0	-9.6	13.9
Long distance or toll.....	42	27	45	-6.7	55.6	-40.0

¹A minus sign (-) denotes decrease.

TELEPHONES.

TABLE 7.—TELEPHONE SYSTEMS REPORTING AN ANNUAL INCOME OF \$5,000 OR MORE—ESTIMATED NUMBER OF MESSAGES OR TALKS AND THE NUMBER OF MESSAGES OR TALKS PER TELEPHONE PER DAY, BY GEOGRAPHIC DIVISIONS AND STATES: 1912, 1907, AND 1902.

DIVISION AND STATE.	Census.	Number of telephones.	ESTIMATED NUMBER OF MESSAGES OR TALKS.		DIVISION AND STATE.	Census.	Number of telephones.	ESTIMATED NUMBER OF MESSAGES OR TALKS.	
			Total.	Per telephone per day. ¹				Total.	Per telephone per day. ¹
UNITED STATES.....	1912	7,326,748	13,735,658,245	5.8	WEST NORTH CENTRAL—Con.				
	1907	4,906,693	10,400,433,958	6.5	Nebraska.....	1912	156,619	291,615,175	5.7
	1902	2,315,297	5,070,554,553	6.7		1907	107,518	246,047,837	7.0
GEOGRAPHIC DIVISIONS:						1902	36,153	73,227,030	6.2
New England.....	1912	600,207	810,524,037	4.2	Kansas.....	1912	143,751	303,949,361	6.5
	1907	384,413	572,523,803	4.6		1907	104,131	238,969,302	7.1
	1902	166,103	298,292,134	5.5		1902	40,972	58,699,143	4.4
Middle Atlantic.....	1912	1,675,681	2,422,868,241	4.4	SOUTH ATLANTIC:				
	1907	1,167,067	1,947,571,139	5.1	Maryland, Delaware, and District of Columbia.....	1912	143,499	177,755,722	3.8
	1902	481,567	909,887,064	5.8		1907	107,553	165,095,216	4.7
East North Central.....	1912	2,020,802	4,025,906,387	6.1		1902	36,383	70,981,973	6.0
	1907	1,360,544	3,007,416,613	7.6	Virginia.....	1912	56,968	164,421,031	8.9
	1902	721,540	1,733,817,138	7.4		1907	38,963	115,354,885	9.1
West North Central.....	1912	1,109,359	2,238,770,606	6.2		1902	24,130	65,494,626	8.4
	1907	767,050	1,664,198,498	6.7	West Virginia.....	1912	55,033	103,255,136	5.8
	1902	369,619	712,440,737	5.9		1907	46,709	109,065,223	7.2
South Atlantic.....	1912	428,311	869,439,943	6.2		1902	22,376	41,905,891	5.7
	1907	296,271	749,939,984	7.8	North Carolina.....	1912	41,177	90,831,013	6.8
	1902	143,314	353,559,870	7.6		1907	22,379	80,967,891	11.1
East South Central.....	1912	261,294	662,046,512	7.8		1902	16,232	36,485,398	6.9
	1907	197,291	731,000,908	11.4	South Carolina.....	1912	24,871	68,170,380	8.4
	1902	111,472	377,950,187	10.4		1907	15,393	51,558,785	10.3
West South Central.....	1912	387,022	1,079,517,948	8.6		1902	10,467	23,893,914	7.0
	1907	239,746	646,501,299	8.3	Georgia.....	1912	78,864	206,631,042	8.1
	1902	114,527	303,547,439	8.2		1907	52,568	187,047,940	11.0
Mountain.....	1912	204,508	435,366,129	6.8		1902	25,490	96,192,066	11.6
	1907	141,339	299,270,686	6.5	Florida.....	1912	27,899	58,374,719	6.4
	1902	47,953	102,374,364	6.6		1907	12,706	39,650,044	9.6
Pacific.....	1912	639,564	1,191,218,442	5.7		1902	8,216	18,906,002	7.1
	1907	352,372	722,010,968	6.3	EAST SOUTH CENTRAL:				
	1902	159,193	278,685,620	5.4	Kentucky.....	1912	100,174	287,807,892	8.8
NEW ENGLAND:						1907	75,370	276,476,058	11.3
Maine.....	1912	57,988	84,033,152	4.5		1902	40,266	143,101,564	9.5
	1907	43,846	73,197,982	5.1	Tennessee.....	1912	78,717	188,865,474	7.4
	1902	14,045	21,923,915	4.8		1907	60,357	231,218,675	11.8
New Hampshire.....	1912	36,052	49,984,600	4.3		1902	36,060	128,274,719	10.9
	1907	24,345	36,537,513	4.6	Alabama.....	1912	44,144	100,983,408	7.0
	1902	9,949	16,987,012	5.3		1907	32,473	82,786,572	9.7
Vermont.....	1912	31,498	48,306,101	4.7		1902	14,077	46,158,943	10.1
	1907	22,117	35,666,768	5.0	Mississippi.....	1912	38,259	84,380,738	6.8
	1902	12,112	19,075,847	4.8		1907	29,091	120,669,603	12.3
Massachusetts.....	1912	323,503	401,817,540	3.8		1902	15,069	60,414,961	12.3
	1907	207,201	298,824,440	4.4	WEST SOUTH CENTRAL:				
	1902	96,512	183,115,320	5.8	Arkansas.....	1912	45,743	124,445,991	8.4
Connecticut and Rhode Island.....	1912	146,166	226,382,644	4.8		1907	32,288	71,950,886	6.9
	1907	86,904	128,297,160	4.5		1902	16,892	36,716,883	6.7
	1902	33,485	57,190,040	5.3	Louisiana.....	1912	43,906	101,597,617	7.1
MIDDLE ATLANTIC:						1907	33,448	120,947,300	11.1
New York.....	1912	923,136	1,297,849,047	4.3		1902	17,509	68,089,915	12.0
	1907	637,881	1,034,651,594	5.0	Oklahoma.....	1912	65,215	163,999,696	7.7
	1902	246,015	360,098,123	4.5		1907	36,758	108,725,669	9.1
New Jersey.....	1912	182,419	192,311,511	3.2		1902	15,716	31,667,627	6.2
	1907	114,528	138,914,642	3.7	Texas.....	1912	232,158	689,474,644	9.1
	1902	48,980	56,171,223	3.5		1907	137,252	345,177,378	7.7
Pennsylvania.....	1912	570,126	932,707,683	5.0		1902	64,410	167,079,014	8.0
	1907	415,258	774,004,903	5.7	MOUNTAIN:				
	1902	186,572	493,617,718	8.1	Montana.....	1912	31,188	74,199,468	7.3
EAST NORTH CENTRAL:						1907	14,699	18,899,410	8.9
Ohio.....	1912	567,573	1,301,503,565	7.1		1902	5,421	11,352,976	6.4
	1907	431,851	1,014,222,376	7.2	Idaho.....	1912	23,475	45,634,700	6.0
	1902	222,767	558,707,801	7.7		1907	13,743	24,883,595	5.6
Indiana.....	1912	274,291	583,621,519	6.5		1902	3,862	6,451,762	5.1
	1907	202,492	498,560,085	7.6	Colorado.....	1912	85,886	165,041,703	5.9
	1902	132,489	294,657,565	6.8		1907	62,861	138,203,561	6.8
Illinois.....	1912	704,230	1,105,751,431	4.8		1902	24,533	60,258,533	7.6
	1907	494,518	833,749,155	5.9	New Mexico.....	1912	9,047	20,174,439	7.9
	1902	211,187	541,161,932	7.9		1907	5,496	12,548,942	7.0
Michigan.....	1912	288,154	694,363,258	7.4		1902	2,481	4,297,920	5.3
	1907	179,203	413,557,846	7.1	Arizona.....	1912	10,128	11,573,427	3.5
	1902	93,961	237,695,112	7.8		1907	5,285	10,379,750	6.0
Wisconsin.....	1912	186,554	340,666,614	5.6		1902	3,259	5,072,727	4.8
	1907	112,420	307,327,151	8.4	Utah and Wyoming.....	1912	39,489	110,244,799	8.6
	1902	61,145	101,594,728	5.1		1907	35,156	87,596,483	7.7
WEST NORTH CENTRAL:						1902	7,232	13,531,312	5.8
Minnesota.....	1912	208,340	418,720,464	6.2	Nevada.....	1912	5,295	8,497,593	4.9
	1907	125,884	274,434,452	6.7		1907	4,099	6,788,945	5.1
	1902	62,039	113,124,262	5.6		1902	1,165	1,409,134	3.7
Iowa.....	1912	242,963	471,126,059	6.0	PACIFIC:				
	1907	187,938	336,154,981	5.5	Washington.....	1912	134,040	295,278,362	6.8
	1902	120,017	193,054,738	5.0		1907	86,439	200,184,465	7.1
Missouri.....	1912	285,472	655,616,330	7.1		1902	31,447	64,623,982	6.3
	1907	192,943	468,138,352	7.5	Oregon.....	1912	84,923	170,065,267	6.2
	1902	93,371	242,309,227	8.0		1907	37,171	89,833,537	6.9
North Dakota.....	1912	32,915	49,861,643	4.7		1902	21,172	35,777,238	5.2
	1907	20,835	39,874,764	4.6	California.....	1912	420,601	725,879,813	5.3
	1902	6,762	14,106,733	5.9		1907	228,762	437,992,966	5.9
South Dakota.....	1912	39,299	47,881,574	3.7		1902	106,674	178,284,400	5.1
	1907	27,801	60,548,810	6.7					
	1902	10,305	17,919,604	5.4					

¹ Computed for 325 days to the year.

² Exclusive of independent farmer or rural lines.

TELEPHONES AND TELEGRAPHS.

TABLE 8.—TELEPHONE SYSTEMS REPORTING AN ANNUAL INCOME OF LESS THAN \$5,000, INCLUDING FARMER OR RURAL LINES—NUMBER OF SYSTEMS, MILES OF WIRE, AND NUMBER OF TELEPHONES, BY GEOGRAPHIC DIVISIONS AND STATES: 1912 AND 1907.

DIVISION AND STATE.	NUMBER OF SYSTEMS OR LINES.		MILES OF WIRE.		NUMBER OF TELEPHONES.		PER CENT OF INCREASE. ¹		
	1912	1907	1912	1907	1912	1907	Number of systems or lines.	Miles of wire.	Number of telephones.
UNITED STATES.....	30,317	21,335	1,228,935	1,077,404	1,402,844	1,211,885	42.1	14.1	15.8
GEOGRAPHIC DIVISIONS:									
New England.....	328	319	21,979	23,950	25,281	25,856	2.8	-8.2	-2.2
Middle Atlantic.....	2,118	1,400	85,941	70,419	106,464	85,236	51.3	22.0	24.9
East North Central.....	4,296	4,375	291,802	296,857	357,455	351,846	-1.8	-1.7	1.6
West North Central.....	10,128	9,176	401,745	378,614	512,164	484,505	10.4	6.1	5.7
South Atlantic.....	2,607	1,279	105,314	84,241	103,091	69,493	103.8	25.0	48.3
East South Central.....	2,928	1,138	80,782	53,401	75,998	45,943	157.3	51.3	65.4
West South Central.....	5,717	2,187	159,730	107,004	156,080	102,509	161.4	49.3	52.3
Mountain.....	937	425	32,474	22,192	22,144	12,722	120.5	46.3	74.1
Pacific.....	1,258	1,036	49,168	40,726	44,167	33,775	21.4	20.7	30.8
NEW ENGLAND:									
Maine.....	157	138	9,560	7,815	10,926	9,288	13.8	22.3	17.6
New Hampshire.....	62	54	3,567	5,078	3,965	4,575	14.8	-29.8	-13.3
Vermont.....	81	85	6,369	7,144	8,644	8,716	-4.7	-10.8	-0.8
Massachusetts.....	25	30	2,319	2,386	1,489	2,182	-16.7	-2.8	-31.8
Rhode Island.....	(²)	2	(²)	403	(²)	170			
Connecticut.....	3	10	164	1,124	257	925	-70.0	-85.4	-72.2
MIDDLE ATLANTIC:									
New York.....	778	881	31,708	32,221	47,313	47,631	-6.4	-1.6	-0.7
New Jersey.....	90	20	2,704	2,887	3,213	2,460	350.0	-3.2	30.6
Pennsylvania.....	1,250	549	51,439	35,311	55,938	35,145	127.7	45.7	59.2
EAST NORTH CENTRAL:									
Ohio.....	572	803	51,816	54,203	63,633	63,785	-28.8	-4.4	-0.2
Indiana.....	947	754	65,099	75,408	80,259	86,960	25.6	-13.7	-7.7
Illinois.....	1,091	1,672	80,646	96,111	103,023	124,067	-34.7	-16.1	-17.0
Michigan.....	975	498	38,513	27,085	46,920	30,579	95.8	42.2	53.4
Wisconsin.....	711	648	55,728	44,050	63,620	46,455	9.7	26.5	36.9
WEST NORTH CENTRAL:									
Minnesota.....	1,295	770	55,596	44,590	64,019	45,595	68.2	24.7	40.4
Iowa.....	3,298	3,316	84,429	92,452	137,331	144,607	-0.5	-8.7	-5.0
Missouri.....	2,212	2,577	94,622	92,917	118,678	119,584	-14.2	1.8	-0.8
North Dakota.....	343	238	17,662	11,649	18,326	13,252	44.1	51.6	38.3
South Dakota.....	436	306	22,757	16,380	26,559	20,604	42.5	38.9	28.9
Nebraska.....	797	812	43,673	46,348	45,070	44,761	-1.8	-5.8	0.7
Kansas.....	1,747	1,157	83,006	74,278	102,181	96,102	51.0	11.8	6.3
SOUTH ATLANTIC:									
Delaware.....	50	1	595	10	632	41	4,900.0	5,850.0	1,441.5
Maryland.....	149	17	3,268	2,536	3,115	2,688	776.5	28.9	15.9
Virginia.....	318	273	19,113	16,871	19,684	16,578	16.5	13.3	18.7
West Virginia.....	285	177	18,557	14,148	25,218	15,435	61.0	31.2	63.4
North Carolina.....	603	388	26,573	23,556	23,975	14,725	55.4	12.8	62.8
South Carolina.....	384	136	10,931	10,245	8,368	5,518	182.4	6.7	51.6
Georgia.....	751	200	20,854	10,582	17,572	9,692	275.5	97.1	81.3
Florida.....	67	87	5,423	6,293	4,527	4,816	-23.0	-13.8	-6.0
EAST SOUTH CENTRAL:									
Kentucky.....	946	387	28,332	20,354	30,577	18,626	144.4	39.2	64.2
Tennessee.....	1,061	199	30,726	12,525	25,636	10,773	433.2	145.3	138.0
Alabama.....	476	289	12,726	9,208	12,148	8,008	64.7	38.2	51.7
Mississippi.....	445	263	8,998	11,314	7,637	8,536	69.2	-20.5	-10.5
WEST SOUTH CENTRAL:									
Arkansas.....	1,023	516	21,249	17,993	22,560	17,288	68.3	18.1	30.5
Louisiana.....	180	64	3,657	3,012	2,696	2,244	181.2	21.4	20.1
Oklahoma.....	1,336	693	41,120	22,982	51,002	31,367	92.8	78.9	62.6
Texas.....	3,178	914	93,704	63,017	79,822	51,610	247.7	48.7	54.7
MOUNTAIN:									
Montana.....	144	89	7,087	4,839	4,349	2,469	61.8	46.5	76.1
Idaho.....	197	79	5,811	3,387	5,979	2,651	149.4	71.6	125.5
Wyoming.....	125	64	4,734	2,993	2,475	1,368	95.3	58.2	30.9
Colorado.....	315	97	7,399	5,409	4,511	3,047	224.7	36.8	48.0
New Mexico.....	63	37	2,074	2,298	1,209	1,157	70.3	-9.7	12.3
Arizona.....	33	31	1,428	1,269	1,096	918	6.5	12.5	19.4
Utah.....	42	13	3,043	949	2,046	610	223.1	221.2	235.4
Nevada.....	18	15	893	1,048	389	502	20.0	-14.8	-22.5
PACIFIC:									
Washington.....	334	467	16,729	13,743	15,976	12,407	-28.5	21.7	28.8
Oregon.....	303	287	14,763	13,077	14,790	12,458	5.6	12.9	18.7
California.....	621	282	17,676	13,906	13,401	8,910	120.2	27.1	50.4

¹ A minus sign (—) denotes decrease.² No systems reported an annual income of less than \$5,000.

TABLE 9.—TELEPHONE SYSTEMS REPORTING AN ANNUAL INCOME OF \$5,000 OR MORE—INCOME AND EXPENSES: 1912 AND 1907.

	1912	1907	Per cent of increase: 1907-1912	PER CENT OF TOTAL.	
				1912	1907
Income, total.....	\$255,081,234	\$176,700,408	44.4	100.0	100.0
From telephone business, including assessments.....	243,591,929	167,148,389	45.7	95.5	94.6
From leased lines, wires, and conduits.....	4,076,278	2,403,650	69.6	1.6	1.4
All other income.....	7,413,027	7,148,369	3.7	2.9	4.0
Expenses, total.....	203,754,909	135,475,177	50.4	100.0	100.0
Operating expenses:					
Salaries and wages.....	96,040,541	65,009,349	47.7	47.1	48.0
All other.....	75,138,892	48,316,961	55.5	36.9	35.7
Taxes.....	12,411,516	6,213,472	99.8	6.1	4.6
Interest.....	20,163,960	15,935,395	26.5	9.9	11.8
Net income.....	51,326,325	41,225,231	24.5		
Dividends declared during year, total.....	34,120,809	23,448,212	45.5	100.0	100.0
On common stock.....	32,255,125	21,753,565	48.3	94.5	92.8
On preferred stock.....	1,865,684	1,694,647	10.1	5.5	7.2
Surplus.....	17,205,516	17,777,019	3.2		

TABLE 10.—TELEPHONE SYSTEMS REPORTING AN ANNUAL INCOME OF \$5,000 OR MORE—INCOME AND EXPENSES: 1912.

	1912	Per cent of total.
Income, total.....	\$255,081,234	100.0
From telephone business.....	243,427,611	95.4
Interest on bonds and dividends on stock of other telephone companies.....	857,619	0.3
Interest on bonds and dividends on stock of companies other than telephone companies ¹	3,507,347	1.4
From leased telephone lines, wires, and conduits.....	4,076,278	1.6
Real estate rentals.....	404,949	0.2
Interest.....	1,698,777	0.7
Assessments.....	164,318	0.1
Miscellaneous.....	884,335	0.3
Expenses, total.....	203,754,909	100.0
General operation and maintenance.....	28,444,000	14.0
Salaries and wages.....	96,040,541	47.1
Rentals of instruments and apparatus.....	116,425	0.1
Rentals of offices and other real estate.....	2,280,545	1.1
Rentals of conduits and underground privileges.....	1,206,015	0.6
Payments for telephone traffic made to other companies.....	1,187,265	0.6
Miscellaneous.....	402,784	0.2
Taxes.....	12,411,516	6.1
Interest.....	20,163,960	9.9
Payments for use of leased lines.....	405,907	0.2
Depreciation charges.....	40,755,657	20.0
Sinking fund charges.....	340,294	0.2
Net income.....	51,326,325	
Dividends declared during the year, total.....	34,120,809	100.0
On common stock.....	32,255,125	94.5
On preferred stock.....	1,865,684	5.5
Surplus.....	17,205,516	

¹ Includes income from other permanent investments.

TABLE 11.—TELEPHONE SYSTEMS REPORTING AN ANNUAL INCOME OF \$5,000 OR MORE—EMPLOYEES, SALARIES, AND WAGES: 1912, 1907, AND 1902.

	1912	1907	1902	PER CENT OF INCREASE. ¹		
				1902-1912	1907-1912	1902-1907
Employees, total:						
Number.....	² 183,361	131,670	78,752	132.8	39.3	67.2
Salaries and wages.....	\$96,040,541	\$65,009,349	\$36,255,621	164.9	47.7	79.3
Salaried employees—						
Number.....	38,753	22,819	14,124	174.4	69.8	61.6
Salaries.....	\$32,681,482	\$18,542,619	\$9,885,886	230.6	76.2	87.6
Wage earners—						
Total average number.....	144,608	108,851	64,628	123.8	32.8	68.4
Total wages.....	\$63,359,059	\$46,468,730	\$26,360,735	140.3	36.4	76.2
Operators—						
Average number.....	96,332	72,513	39,858	141.7	32.3	81.9
Wages.....	\$32,474,093	\$22,636,671	\$10,765,098	201.7	43.5	110.3
Men—						
Average number.....	1,972	2,457	2,525	-21.9	-19.7	-2.7
Wages.....	\$870,671	\$942,455	\$729,666	19.3	-7.6	29.2
Per cent of total operators.....	2.0	3.4	6.3			
Women—						
Average number.....	94,360	70,061	37,333	152.8	34.7	87.7
Wages.....	\$31,603,422	\$21,694,216	\$10,035,432	214.9	45.7	116.2
Per cent of total operators.....	98.0	96.6	93.7			
All other wage earners—						
Average number.....	48,276	36,333	24,770	94.9	32.9	46.7
Wages.....	\$30,884,966	\$23,830,059	\$15,604,637	97.9	29.6	52.7

¹ A minus sign (—) denotes decrease.

² Number employed Sept. 16, 1912.

TELEPHONES AND TELEGRAPHS.

TABLE 12.—TELEPHONE SYSTEMS REPORTING AN ANNUAL INCOME OF \$5,000 OR MORE—COMPARATIVE SUMMARY: 1912 AND 1907.

	TOTAL.		BELL TELEPHONE SYSTEM.		ALL OTHER SYSTEMS.	
	1912	1907	1912	1907	1912	1907
Number of systems.....	1,916	1,636	176	175	1,740	1,461
Miles of single wire.....	19,019,391	11,921,960	15,133,186	8,947,266	3,886,205	2,974,694
Miles of pole line.....	671,686	553,752	353,422	287,458	318,264	230,294
Number of public exchanges.....	11,515	10,613	5,853	5,418	5,662	5,195
Number of telephones.....	7,326,743	4,906,693	5,087,027	3,132,063	2,239,721	1,774,630
Estimated number of messages or talks.....	13,735,658,245	10,400,433,958	9,133,226,836	6,401,044,799	4,602,431,409	3,999,389,159
Income, total.....	\$255,081,234	\$176,700,408	\$206,130,830	\$138,803,831	\$48,950,404	\$37,890,577
Expenses, including taxes and fixed charges, total.....	\$203,754,909	\$135,475,177	\$163,024,105	\$107,356,551	\$40,730,804	\$28,118,620
Net income.....	\$51,326,325	\$41,225,231	\$43,106,725	\$31,447,280	\$8,219,600	\$9,777,951
Dividends.....	\$34,120,809	\$23,448,212	\$29,709,841	\$20,201,937	\$4,410,968	\$3,240,275
Assets, total.....	\$1,295,670,101	\$940,357,998	\$934,805,563	\$623,036,358	\$360,864,538	\$317,321,640
Cost of construction and equipment.....	\$1,081,433,879	\$794,096,971	\$780,017,745	\$526,169,031	\$301,415,482	\$268,017,940
Stocks and bonds and other permanent investments.....	\$104,554,667	\$60,731,090	\$72,629,170	\$25,090,795	\$31,925,497	\$35,640,295
Cash and current assets.....	\$96,618,255	\$82,963,172	\$82,158,648	\$71,866,532	\$14,459,607	\$11,006,640
Sundries, including stock and bond discount and sinking and other special funds.....	\$13,063,952	\$2,566,765			\$13,063,952	\$2,566,765
Liabilities, total.....	\$1,295,670,101	\$940,357,998	\$934,805,563	\$623,036,358	\$360,864,538	\$317,321,640
Capital stock.....	\$586,763,879	\$456,788,725	\$397,885,433	\$294,578,646	\$188,878,446	\$162,210,079
Funded debt.....	\$404,530,236	\$301,333,489	\$295,872,053	\$197,071,800	\$108,658,133	\$104,261,659
Real estate mortgages, floating debt, and accounts payable.....	\$71,742,634	\$74,388,503	\$49,818,920	\$50,525,741	\$21,923,714	\$23,562,702
Cash investments.....	\$3,287,138	\$2,583,833			\$3,287,138	\$2,583,833
Interest, taxes, and dividends, due and accrued.....	\$17,520,891	\$11,855,910	\$14,405,707	\$9,703,462	\$3,115,184	\$2,152,448
Reserves.....	\$148,818,981	\$38,991,858	\$137,967,085	\$36,168,979	\$10,831,896	\$2,322,879
Sundries.....	\$2,234,721	\$6,210,884	\$434,304		\$1,800,417	\$6,210,884
Net surplus.....	\$60,771,621	\$48,204,796	\$38,422,061	\$34,687,730	\$22,349,560	\$13,517,636
Salaried employees:						
Number.....	38,753	22,819	31,435	17,039	7,318	5,780
Salaries.....	\$32,651,432	\$13,542,619	\$27,004,837	\$14,501,916	\$5,676,645	\$4,040,703
Wage earners:						
Average number.....	144,608	108,851	110,468	78,772	134,140	30,079
Wages.....	\$63,359,059	\$46,460,730	\$49,896,524	\$36,073,994	\$13,462,535	\$10,392,736

1 Number employed Sept. 16, 1912.

TABLE 13.—TELEPHONE AND TELEGRAPH SYSTEMS—COMPARATIVE SUMMARY: 1912 AND 1907.

	TOTAL.		TELEPHONE SYSTEMS. ¹		TELEGRAPH SYSTEMS. ²		PER CENT OF TOTAL.			
	1912	1907	1912	1907	1912	1907	Telephones.		Telegraphs.	
							1912	1907	1912	1907
Number of systems and lines.....	1,943	1,662	1,916	1,636	27	26	98.6	98.4	1.4	1.6
Miles of single wire.....	20,833,587	13,499,921	19,019,391	11,921,960	* 1,814,196	1,577,961	91.3	88.3	8.7	11.7
Ocean cables, nautical miles.....	67,676	46,301			67,676	46,301				
Employees, salaries and wages:										
Average number.....	4220,656	159,704	183,361	131,670	37,295	28,034	83.1	82.4	16.9	17.6
Salaries and wages.....	\$121,005,535	\$82,817,598	\$96,040,541	\$65,000,340	\$24,964,994	\$17,808,249	79.4	78.5	20.6	21.5
Capital stock and bonds outstanding.....	\$1,217,451,802	\$978,415,789	\$991,064,992	\$758,122,214	\$226,386,810	\$220,293,575	81.4	77.5	18.6	22.5
Income.....	\$319,844,077	\$228,284,276	\$255,081,234	\$176,700,408	\$64,762,843	\$51,583,868	79.8	77.4	20.2	22.6
Expenses.....	\$262,133,861	\$177,854,790	\$203,754,909	\$135,475,177	\$58,378,952	\$41,879,613	77.7	76.4	22.3	23.6

1 Exclusive of systems reporting an annual income of less than \$5,000; 1,223,935 miles of wire in 1912 and 1,077,404 miles in 1907.

2 Exclusive of wireless telegraph systems.

3 Exclusive of 314,329 miles of wire owned and operated by railway companies.

4 Number employed Sept. 16, 1912.

TELEGRAPHS

TELEGRAPHS.

The census of 1912 covered all commercial telegraph companies, including ocean cable and wireless systems operating in the continental United States. The inquiry did not extend to Alaska, Porto Rico, Hawaii, the Panama Canal Zone, or the Philippine Islands. The final report on telegraphs will contain statistics for railway and governmental systems. These data, however, are not included in this bulletin.

The companies, statistics for which are included in the tables for ocean telegraphs are: Central and South American Telegraph Company, Commercial Cable Company of New York, Commercial Cable Company of Cuba, Commercial Pacific Cable Company, Mexican Telegraph Company, and United States and Hayti Telegraph and Cable Company. All these companies are incorporated in the United States. The figures do not embrace the business of the French Telegraph Cable Company of Paris or the German Atlantic Telegraph Company of Cologne; these, although doing some business with this country, are foreign corporations.

It has not been practicable to secure statistics concerning wires leased from commercial companies by press associations or newspapers, nor the number of messages transmitted. The miles of these leased wires, however, are included in the reports of commercial companies owning them.

Statistics of telegraph offices in railway stations are included when such offices are controlled by telegraph companies or do a commercial business, but the number of messages does not include the number sent on railway business only. The number of wage earners does not include operators employed in railway telegraph offices and paid by railway companies under a contract with the telegraph company.

The reports for the census of 1912 were made before the accounting system formulated by the Interstate Commerce Commission was in force. This system was started January 1, 1914, and in future census reports certain changes may be made in the form of presentation for the sake of uniformity with this new system.

TABLE 1.—*Land and ocean telegraph systems combined: 1912, 1907, and 1902.*—This is a comparative summary covering the principal items reported for the land and ocean telegraph companies at the last three censuses.

TABLE 2.—*Land telegraph systems: 1912 and 1907.*—This table summarizes the statistics reported for the land telegraph companies at the last two censuses. At the census of 1902 the statistics for land telegraph

and ocean cable systems were combined, and it is now impracticable to segregate them so as to obtain data for the land companies comparable with the statistics reported for 1907 and 1912. The Western Union Telegraph Company reported that it was impossible to furnish separate statistics for its ocean cable business and therefore the operations of the entire company are included. The table also includes the statistics for the business done in the United States by the Great North Western Telegraph Company of Canada. This company could not furnish a separate balance sheet for its business in the United States and therefore the balance sheet entries do not include its operations.

The differences in the methods of accounting followed in 1907 and 1912 to some extent invalidate the comparison of expenses. No statement of charges for depreciation or for sinking fund, if charged against income, was made in 1907, but these charges were included for 1912. In order to avoid the disclosure of amounts reported by individual companies it was necessary to combine some items in the balance sheet in a manner that is not in harmony with up-to-date accounting methods.

TABLE 3.—*Land telegraph systems—Revenue and income account: 1912 and 1907.*—This table sets forth in detail, so far as they can be shown, the revenues derived by land telegraph companies at both censuses from telegraph traffic and from all other sources. The net income shown in this table is obtained by deducting operating expenses, including depreciation, and fixed charges, from the gross income.

TABLE 4.—*Land telegraph systems—Operating expenses: 1912 and 1907.*—A detailed statement of operating expenses of land telegraph companies is given in this table for both censuses. Thus are shown the amounts paid for salaries and wages, for rentals, and to other companies for traffic.

TABLE 5.—*Ocean cable telegraph systems: 1912 and 1907.*—This is a comparative summary of the statistics reported by ocean cable telegraph companies at the last two censuses. This table does not include statistics for the ocean cables operated by the Western Union Telegraph Company. This statement applies also to Tables 6 and 7. The miles of ocean cable and number of ocean messages, however, reported by this company are given in a footnote.

TABLE 6.—*Ocean cable telegraph systems—Revenue and income account: 1912 and 1907.*—The revenue of ocean cable telegraph companies for both censuses is shown in detail in this table and in such a manner as to present the net surplus or net deficit.

TABLE 7.—*Ocean cable telegraph systems—Operating expenses: 1912 and 1907.*—This table gives, by kind, the expenses incident to the operation of ocean cable telegraph companies for both censuses.

TABLE 8.—*Wireless telegraph systems: 1912 and 1907.*—This is a summary of statistics reported by wireless telegraph companies at the last two censuses. The statistics for 1907 do not agree with the figures published in the reports of that census because the statistics for Hawaii have been deducted in order to

make the totals comparative. The amount given as wages does not fully show the compensation of operators, as many of these serve on ships where they receive, in addition to wages, board and quarters.

The capital reported for 1907 was reduced nearly three-fourths during the five-year period by the bankruptcy of one company having a very large capitalization. The tangible assets of this company are now owned by the Marconi Wireless Telegraph Company of America.

TABLE 1.—LAND AND OCEAN TELEGRAPH SYSTEMS COMBINED: 1912, 1907, AND 1902.

	1912	1907	1902	PER CENT OF INCREASE. ¹		
				1902-1912	1907-1912	1902-1907
Number of companies or systems.....	2 27	2 26	25	8.0	3.8	4.0
Miles of pole line.....	2 247,528	2 239,646	2 237,990	4.0	3.3	0.7
Miles of single wire owned and leased.....	4 1,814,196	4 1,577,961	4 1,318,350	37.6	15.0	19.7
Nautical miles of ocean cable.....	67,676	46,301	16,677	305.8	46.2	177.6
Number of messages.....	109,377,098	103,794,076	91,655,287	19.3	5.4	13.2
Number of telegraph offices.....	30,864	29,110	27,377	12.7	6.0	6.3
Income, total.....	\$04,762,843	\$51,583,868	\$40,930,038	58.2	25.5	26.0
Telegraph traffic.....	\$60,403,000	\$45,255,187	\$35,300,560	71.1	33.5	28.2
All other sources.....	\$4,359,843	\$6,328,681	\$5,629,460	-22.6	-31.1	12.4
Net income.....	\$6,383,891	\$9,704,255	\$9,982,004	-36.0	-34.2	-2.8
Expenses, total.....	\$58,378,952	\$41,879,613	\$30,948,034	88.6	39.4	35.3
General operation and maintenance, including salaries and wages and legal expenses.....	5 \$46,780,041	\$34,057,298	\$24,455,511	91.3	37.4	39.3
Interest and taxes.....	\$3,955,381	\$3,436,690	\$2,530,008	55.8	15.1	35.4
All other expenses.....	\$7,643,530	\$4,385,625	\$3,963,515	93.3	74.3	10.9
Balance sheet:						
Assets, total.....	\$298,288,006	\$261,807,899	\$195,503,775	52.6	13.9	33.9
Construction and equipment.....	\$222,046,746	\$210,045,959	\$161,679,579	37.3	5.7	29.9
Stocks and bonds of other companies.....	6 \$33,933,679	6 \$36,486,446	\$25,939,944	30.8	-7.0	40.7
Cash and current assets, including supplies and sundries.....	7 \$12,308,481	\$15,275,491	\$7,884,252	436.6	177.0	93.7
Liabilities, total.....	\$268,288,906	\$261,807,899	\$195,503,775	52.6	13.9	33.9
Capital stock.....	8 \$163,645,810	\$155,080,575	\$117,053,525	39.8	5.5	32.5
Funded debt.....	\$62,741,000	\$65,204,000	\$45,893,000	36.7	-3.8	42.1
Reserves.....	\$20,803,780	\$8,257,063	\$7,859,648	164.7	151.9	5.1
Accounts payable ⁹	\$10,755,480	\$10,411,379	\$6,244,585	216.4	89.7	66.7
Dividends, interest, and taxes due and accrued, and sundries.....	10 \$15,402,888	\$2,519,043	\$373,976	4,042.7	515.0	373.6
Net surplus.....	\$15,840,948	\$20,325,939	\$18,079,041	-12.3	-22.0	12.4
Capitalization:						
Capital stock outstanding, par value.....	\$163,645,810	\$155,080,575	\$117,053,525	39.8	5.5	32.5
Dividends on stock.....	\$6,180,061	\$7,477,083	\$6,256,603	-1.2	-17.3	19.5
Funded debt outstanding, par value.....	\$62,741,000	\$65,204,000	\$45,893,000	36.7	-3.8	42.1
Employees and salaries and wages:						
Average number.....	11 37,205	28,034	27,027	35.0	33.0	1.5
Salaries and wages.....	\$24,964,991	\$17,808,249	\$15,039,673	66.0	40.2	18.4

¹ A minus sign (-) denotes decrease.

² Commercial Cable Company of Cuba (not reporting in 1902) counted as a separate company in both 1912 and 1907.

³ Exclusive of pole line wholly owned and wholly operated by railway companies.

⁴ Exclusive of wire wholly owned and wholly operated by railway companies; this in 1912 was 314,329 miles. In 1902 includes mileage operated outside of the United States by Western Union Telegraph Company.

⁵ Includes charges for depreciation.

⁶ Includes treasury stock and "other permanent investments."

⁷ Includes sinking funds and stock and bond discount.

⁸ Includes assumed stock of subcompanies.

⁹ Includes floating debt and cash investments (for unincorporated companies).

¹⁰ Includes deferred noninterest-bearing obligations payable only on determination of leases—not reported at previous censuses—and real estate mortgages.

¹¹ Number employed Sept. 16, 1912.

TABLE 2.—LAND TELEGRAPH SYSTEMS: 1912 AND 1907.

	1912	1907	Per cent of increase. ¹
Number of companies or systems	21	20	5.0
Miles of pole line	² 247,528	2 239,646	3.3
Miles of single wire owned and leased	³ 1,814,196	1,577,961	15.0
Number of messages ⁴	100,532,530	101,424,750	5.0
Number of telegraph offices	30,781	29,056	5.9
Income, total	\$56,293,469	\$43,912,168	28.2
Telegraph traffic	\$52,337,211	\$37,916,907	38.0
All other sources	\$3,956,258	\$5,995,261	-34.0
Net income	⁵ \$3,431,044	\$5,675,181	-39.5
Expenses, total	\$52,862,425	\$38,230,987	38.2
General operation and maintenance, including salaries and wages and legal expenses	⁶ \$42,771,823	\$31,852,359	34.3
Interest and taxes	\$2,740,827	\$2,246,382	22.0
All other expenses	\$7,349,775	\$4,132,246	77.6
Balance sheet:			
Assets, total	\$190,705,751	\$166,183,007	14.8
Construction and equipment	\$143,010,031	\$132,607,020	8.5
Stocks and bonds, including "other permanent investments"	⁷ \$17,122,592	\$23,514,882	-27.2
Cash and current assets, including supplies and sundries	⁸ \$29,072,528	\$10,060,505	194.9
Liabilities, total	\$190,705,751	\$166,183,007	14.8
Capital stock	⁹ \$103,156,410	\$102,289,575	5.7
Funded debt	\$34,741,000	\$37,204,000	-6.6
Reserves	\$5,254,329	\$1,876,858	180.0
Accounts payable ¹⁰	\$18,295,683	\$7,916,138	131.1
Dividends, interest, and taxes due and accrued	\$1,400,733	—	—
Sundries	¹¹ \$13,444,926	\$6,692	—
Net surplus	\$9,352,070	\$16,829,744	-44.4
Capitalization:			
Capital stock outstanding, par value	\$108,156,410	\$102,289,575	5.7
Dividends on stock	\$3,139,861	\$4,944,042	-36.5
Funded debt	\$34,741,000	\$37,204,000	-6.6
Employees and salaries and wages:			
Average number	12 35,639	26,827	32.8
Salaries and wages	\$23,797,980	\$16,893,166	40.9

¹ A minus sign (-) denotes decrease.
² Exclusive of pole line wholly owned and used by railway companies.
³ Does not include 22,816 nautical miles of ocean cable operated by the Western Union Telegraph Company. Exclusive also of 314,329 miles of wire wholly owned and operated by railway companies for their own business.
⁴ Does not include land messages sent over its 207 miles of leased land wire by a wireless company in 1912 nor ocean cable messages except those reported by the Western Union Telegraph Company.
⁵ Less all expenses, including charges for depreciation.
⁶ Includes charges for depreciation, which were not included in expenses in 1907.
⁷ Includes treasury stock.
⁸ Includes sinking fund and stock and bond discount.
⁹ Includes assumed stock of subcompanies.
¹⁰ Includes floating debt and cash investments (for unincorporated companies).
¹¹ Includes deferred noninterest-bearing obligations payable only on determination of leases, and real estate mortgages.
¹² Number employed Sept. 16, 1912.

TABLE 3.—LAND TELEGRAPH SYSTEMS—REVENUE AND INCOME ACCOUNT: 1912 AND 1907.

	1912	1907	Per cent of increase. ¹
Gross receipts from operation	\$52,337,211	\$37,916,907	38.0
Operating expenses	45,527,564	34,205,745	33.1
Net earnings from operation	6,809,647	3,711,162	83.5
Income from other sources	3,956,258	5,985,261	-34.0
Interest on bonds and dividends on stock of other companies	375,903	1,081,619	-65.2
Leased telegraph lines, wires and conduits	2,419,065	4,430,245	-45.4
Real estate rentals	191,154	210,014	-9.0
Miscellaneous ²	970,136	273,383	254.9
Gross income less operating expenses	10,765,905	9,706,423	10.9
Deductions from income (fixed charges)	7,334,861	4,031,242	82.0
Taxes	1,132,234	753,378	50.3
Interest	1,608,593	1,493,004	7.7
Payments for use of leased lines	4,594,034	1,784,860	157.4
Net income	3,431,044	5,675,181	-39.5
Dividends on stock	3,139,861	4,944,042	-36.5
Surplus	291,183	731,139	-60.2

¹ A minus sign (-) denotes decrease. ² Including interest.

TABLE 4.—LAND TELEGRAPH SYSTEMS—OPERATING EXPENSES: 1912 AND 1907.

	1912	1907	Per cent of increase. ¹
Total	\$45,527,564	\$34,205,745	33.1
General operation and maintenance	42,771,823	31,852,359	34.3
Salaries and wages	23,797,980	16,893,166	40.9
Operation and maintenance, including legal expenses	15,260,031	14,959,193	2.1
Charges for depreciation	3,704,812	—	—
Rentals of offices and other real estate	2,247,311	1,596,456	40.8
Rentals of conduits and underground privileges	101,035	5,920	1,606.7
Payments for telegraph traffic made to other companies	228,907	667,501	-65.7
Miscellaneous	178,488	83,509	113.7

¹ A minus sign (-) denotes decrease.

TABLE 5.—OCEAN CABLE TELEGRAPH SYSTEMS—SUMMARY: 1912 AND 1907.

	1912	1907	Per cent of increase. ¹
Number of companies or systems ²	6	6	—
Nautical miles of ocean cable ³	44,860	40,572	10.6
Number of messages ⁴	2,845,168	2,369,317	20.1
Number of cable offices ⁵	83	54	53.7
Income, total	\$8,460,374	\$7,671,700	10.4
Telegraph traffic	\$8,065,793	\$7,338,280	9.9
All other sources	\$403,576	\$333,420	21.0
Net income	\$2,652,847	\$4,029,074	-29.7
Expenses, total	\$5,516,527	\$3,642,626	51.4
General operation and maintenance, including salaries and wages and legal expenses	\$4,008,218	\$2,204,939	81.8
Interest and taxes	\$1,214,554	\$1,190,308	2.0
All other expenses	\$293,755	\$247,379	18.7
Balance sheet:			
Assets, total	\$107,583,155	\$95,624,892	12.5
Construction and equipment	\$78,136,115	\$77,438,339	0.9
Stocks and bonds of other companies, treasury stock, and "other permanent investments"	\$16,811,087	\$12,971,564	29.6
Cash and current assets, including supplies ⁶	\$12,635,953	\$5,214,989	142.3
Liabilities, total	\$107,583,155	\$95,624,892	12.5
Capital stock	\$55,489,400	\$52,800,000	5.1
Funded debt	\$28,000,000	\$28,000,000	—
Reserves	\$15,549,451	\$6,331,105	143.7
Accounts payable	\$1,459,797	\$2,435,241	-41.5
Dividends due and sundries	\$87,229	\$2,452,351	139.5
Surplus	\$6,407,278	\$3,406,195	85.5
Capitalization:			
Capital stock outstanding, par value	\$55,489,400	\$52,800,000	5.1
Dividends on stock	\$3,040,200	\$2,533,041	20.0
Funded debt	\$28,000,000	\$28,000,000	—
Employees and salaries and wages:			
Average number	⁶ 1,656	1,207	37.2
Salaries and wages	\$1,167,014	\$915,033	27.5

¹ A minus sign (-) denotes decrease.
² Does not include returns for Western Union Telegraph Company, as no segregation could be made of financial statistics or employees for the cable business of this company. The number of nautical miles of ocean cable owned and leased by this company was, in 1912, 22,816 miles, and in 1907, 5,729 miles. The number of ocean messages reported by this company for 1912 was 2,996,112, and as estimated by it for 1907, 3,500,000.
³ Includes sinking and other special funds and sundries for 1912 and sundries only for 1907.
⁴ Includes floating debt.
⁵ Includes interest due and accrued.
⁶ Number employed Sept. 16, 1912.

TELEPHONES AND TELEGRAPHS.

TABLE 6.—OCEAN CABLE TELEGRAPH SYSTEMS—REVENUE AND INCOME ACCOUNT: 1912 AND 1907.

	1912	1907	Per cent of increase. ¹
Gross receipts from operation.....	\$8,065,798	\$7,338,230	9.9
Operating expenses.....	4,214,264	2,373,339	77.6
Net earnings from operation.....	3,851,534	4,964,941	-22.4
Income from other sources.....	403,576	333,420	21.0
Gross income less operating expenses.....	4,255,110	5,298,361	-19.7
Deductions from income (fixed charges).....	1,302,263	1,269,237	2.6
Taxes.....	54,554	30,308	80.0
Interest.....	1,160,000	1,160,000	-----
Payments for use of leased lines.....	87,709	78,979	11.1
Net income.....	2,952,847	4,029,074	-26.7
Dividends on stock.....	3,040,200	2,533,041	20.0
Surplus.....	(²)	1,496,033	-----

¹ A minus sign (-) denotes decrease. ² Deficit of \$87,353.

TABLE 7.—OCEAN CABLE TELEGRAPH SYSTEMS—OPERATING EXPENSES: 1912 AND 1907.

	1912	1907	Per cent of increase.
Total.....	\$4,214,264	\$2,373,339	77.6
General operation and maintenance.....	4,008,218	2,204,939	81.8
Salaries and wages.....	1,167,014	915,083	27.5
Operation and maintenance, including legal expenses.....	2,841,204	1,289,856	120.3
Rentals of offices and other real estate.....	104,748	87,896	19.2
Miscellaneous ¹	101,298	80,504	25.8

¹ Includes also rentals of conduits and underground privileges and payments for telegraph traffic made to other companies.

TABLE 8.—WIRELESS TELEGRAPH SYSTEMS: 1912 AND 1907.

	1912	1907	Per cent of increase. ¹
Number of companies or systems.....	4	5	-20.0
Number of messages.....	² 285,091	154,617	84.4
Number of tower stations.....	74	117	-36.8
Income, total.....	\$669,158	\$106,791	526.6
Net income.....	³ \$4,738	-----	-----
Expenses, total.....	\$664,420	\$160,329	314.4
General operation and maintenance, including salaries and wages and legal expenses.....	\$588,712	\$117,480	401.1
Interest and taxes.....	\$7,826	\$5,562	40.7
All other expenses.....	\$67,882	\$37,287	82.1
Net deficit.....	-----	\$53,538	-----
Balance sheet:			
Assets, total.....	\$10,377,197	\$32,958,897	-68.5
Construction and equipment.....	\$1,205,770	\$317,614	279.6
Cash and current assets, including supplies ⁴	\$9,171,427	\$32,196,456	-71.5
Net deficit.....	-----	\$444,827	-----
Liabilities, total.....	\$10,377,197	\$32,958,897	-68.5
Capital stock.....	\$9,602,570	\$32,676,242	-70.6
Floating debt and mortgages.....	\$18,483	\$37,145	-50.2
Accounts payable.....	⁵ \$583,160	\$245,510	137.5
Net surplus.....	\$172,984	-----	-----
Capitalization:			
Capital stock outstanding, par value.....	\$9,602,570	\$32,676,242	-70.6
Employees and salaries and wages:			
Average number.....	⁶ 958	176	444.3
Salaries and wages.....	\$393,606	\$81,771	381.4

¹ A minus sign (-) denotes decrease.

² Includes 5,013 land messages sent over a leased land wire by a wireless company doing land telegraph business also.

³ Less all expenses, including charges for depreciation.

⁴ Includes stocks, bonds, and sundries.

⁵ Includes reserves, cash investments, interest and taxes due and accrued, and sundries.

⁶ Number employed Sept. 16, 1912. Includes, in some cases, number of operators on shipboard who, in addition to wages, receive board and quarters.

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