CENSUS OF ELECTRICAL INDUSTRIES

TELEPHONES

1927

U. S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON

U. S. DEPARTMENT OF COMMERCE
R. P. LAMONT, SECRETARY
BUREAU OF THE CENSUS
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UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1930

For sale by the Superintendent of Documents, Washington, D. C. - - - - - - - Price 10 cents

CONTENTS

Chapter I.—INTRODUCTION

	Page
General description	1
Period covered	1
Unit of enumeration	1
Collection of the data	1
Change in classification according to income	2
Geographic divisions and States	2

TABLES

1. Summary—All systems and lines: 1927	3
2. Number of systems and lines, wire mileage, and number of central offices, the Bell System and all other systems and lines, by geographic divisions and States: 1927	4
3. Number of telephones, classified as residence and business, the Bell System and all other systems and lines, by geographic divisions and States: 1927	6
4. Number of originating calls, the Bell System and all other systems and lines, by geographic divisions and States: 1927	8

Chapter II.—DEVELOPMENT OF THE INDUSTRY

Growth during 25 years	10
Effect of change in classification according to income	11
Comparability of statistics for 1890 and 1902 with those for later years	12

TABLES

5. Summary—Systems reporting annual incomes of $10,000 or more, 1927 and 1922, and those reporting $5,000 or more, 1890 to 1917	11
6. Summary—Systems reporting annual incomes of $10,000 or more: 1922 and 1917	12
7. Summary—All systems reporting incomes of $5,000 or more; such systems exclusive of the Bell System; and all systems reporting incomes from $5,000 to $10,000; with percentages: 1917	12
8. Number of systems and lines, grouped according to annual income, by geographic divisions and States: 1912 to 1927	13
9. Miles of wire, all systems and lines, by income groups, by geographic divisions and States: 1912 to 1927	14
10. Number of telephones, all systems and lines, by income groups, by geographic divisions and States: 1912 to 1927	16
11. Per cent of increase or decrease in miles of wire and in number of telephones, all systems and lines, grouped according to annual income, by geographic divisions and States: 5-year and 10-year periods, 1917 to 1927	18
12. Per cent distribution, miles of wire and number of telephones, all systems and lines, grouped according to annual income, by geographic divisions and States: 1927, 1922, and 1917	20
13. Summary—Telephone and telegraph systems: 1902 to 1927	22

Chapter III.—EQUIPMENT AND TRAFFIC

Equipment reported	23
Wire mileage	23
Telephones	23
Central offices	23
Number of originating calls	24
Exchange and toll calls	24
Number of originating calls per telephone per day	24
Per capita figures	24

TABLES

14. Equipment—Wire mileage, central offices, and telephones, all systems and lines, grouped according to annual income: 1912 to 1927	25
15. Miles of wire, overhead and underground, exchange and toll, all systems and lines: 1912 to 1927	25
16. Miles of wire, overhead (in cable and not in cable) and underground, exchange and toll, all systems and lines: 1927	26
17. Miles of wire, overhead and underground, all systems and lines: 1902 to 1927	26

Page

18. Originating calls, exchange and toll, systems reporting annual incomes of $10,000 or more, 1922 and 1927, and for those reporting $5,000 or more, 1902 to 1917 26
19. Telephones—Number, by geographic divisions and States, the Bell System and other systems reporting annual incomes of $10,000 or more, 1927 and 1922, and those reporting $5,000 or more, 1917 27
20. Telephones, originating calls, and calls per telephone per day, by geographic divisions and States, systems reporting annual incomes of $10,000 or more, 1927 and 1922, and those reporting $5,000 or more, 1917 28
21. Originating calls, exchange and toll, systems reporting annual incomes of $10,000 or more, by geographic divisions and States: 1927 29
22. Telephones—Number per 1,000 population, for all systems and lines, by geographic divisions and States: 1907 to 1927 30
23. Originating calls—Number per capita, by geographic divisions, for systems and lines reporting annual incomes of $10,000 or more, 1927 and 1922, and for those reporting $5,000 or more, 1902 to 1917 30
24. Originating calls—Number per capita, by States, for systems and lines reporting annual incomes of $10,000 or more, 1927 and 1922, and those reporting $5,000 or more, 1907 to 1917 31

Chapter IV.—COMPARISON OF BELL AND OTHER SYSTEMS; STATISTICS FOR SMALL SYSTEMS AND LINES

Bell-controlled companies 32
Effect of change in classification according to income 32
Statistics for small systems and lines 33

TABLES

25. Systems and lines, miles of wire, and telephones, the Bell System and all other systems and lines: 1902 to 1927 33
26. Detailed statistics, the Bell System and other systems reporting annual incomes of $10,000 or more, 1927 and 1922, and those reporting $5,000 or more, 1917 34
27. Miles of wire, overhead and underground, exchange and toll, the Bell System and all other systems and lines: 1927 and 1922 35
28. Miles of wire, exchange and toll, overhead and underground, for the Bell System and other systems reporting annual incomes of $10,000 or more: 1927 35
29. Miles of wire, the Bell System and all other systems and lines, by geographic divisions and States: 1927, 1922, and 1917 36
30. Number of telephones, the Bell System and all other systems and lines, by geographic divisions and States: December 31, 1927, 1922, and 1917 38
31. Number of central offices, the Bell System and all other systems and lines, grouped according to annual income, by geographic divisions and States: 1912 to 1927 41
32. Originating calls, exchange and toll, and number of calls per telephone per day, the Bell System and all other systems and lines, by geographic divisions and States: 1927 42
33. Principal statistics, systems and lines reporting annual incomes of less than $10,000, by geographic divisions and States: 1927 44

Chapter V.—FINANCIAL STATISTICS

Character of the statistics 46
Increase in salaries and wages 46
Operating revenue per telephone and per call 46
Employees, salaries, and wages 46

TABLES

34. Operating revenues, the Bell System and other systems reporting annual incomes of $10,000 or more, for 1927 and 1922, and those reporting $5,000 or more, 1917 47
35. Operating revenue per telephone and per originating call, systems reporting annual incomes of $10,000 or more, 1927 and 1922, and those reporting $5,000 or more, 1907 to 1917 48
36. Employees, salaries, and wages, all systems and lines: 1917 to 1927 48

TELEPHONES: 1927

CHAPTER I.—INTRODUCTION

General description.—The census of telephones has been taken quinquennially since 1902, and statistics of telephones were compiled and published in connection with the decennial censuses of 1880 and 1890. This report presents the statistics for 1927, with comparative figures for earlier years. Preliminary summary statistics, subject to correction, were published in the form of a press announcement under date of May 27, 1929.

Each census has covered the public telephone systems or lines operated within the United States, exclusive of outlying possessions, during all or any part of the census year. Reports have not been required from certain private lines—for example, those used exclusively by railroads for dispatching and operating trains[1] and those connecting branches or departments of manufacturing or mercantile establishments, hotels, mines, lumber camps, etc.; nor were telephone lines operated by the Federal, State, or municipal governments covered by the canvass for 1922 and 1927.

Period covered.—The statistics for income and traffic relate to calendar years or to the business years most nearly conforming thereto. The statistics in regard to equipment relate to December 31 or the last day of the business year covered by the report of each company. The number of employees reported by the Bell System represents the average number of employees during the year instead of the number on June 30, 1927, since this average gives a more accurate representation of the number of persons engaged in the Bell telephone business in 1927. Moreover, this average figure is more consistent with the data on salaries and wages paid during the year.

Except for the Bell System for 1927, as noted above, the number of employees was reported for 1927 and 1922 as of June 30; for 1917, as of September 29; for 1912, as of September 16; and for 1907 and 1902, as an average for the year.

Unit of enumeration ("system" or "line").—So far as practicable, a report was obtained 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 it may be a party line without an exchange or connected with an exchange owned jointly with other lines or under independent ownership. In the tables which present statistics for only those companies reporting annual incomes of $10,000 or more for 1927 and 1922 or of $5,000 or more for earlier years, the term "system" is used; but where figures are given for both the large and the small companies, the operating units are referred to as "systems and lines."

Collection of the data.—In gathering the data for the telephone census two schedules have been employed, namely, a short form requiring only a brief report, used for the smaller systems and lines, and a longer form calling for more detailed information, used for the larger systems. From the short form the only substantially accurate information obtained prior to 1917 was that in regard

[1] Statistics in regard to train dispatching by telephone are given in the report on telegraphs.

to mileage of wire and number of telephones in use. At the censuses for 1917 and 1922, however, this form was lengthened so as to call for data on number of systems operating switchboards, number of calls originating with the system reporting, number of employees, male and female, salaries and wages, gross receipts, total assessments levied by mutual companies, and amount of investment. In addition, data on the number of central offices [2] (switchboards) and the number of telephones located in homes (residence telephones) were called for at the 1927 census. The longer form required, in addition to these items, detailed information in regard to equipment, traffic, and revenues for the year ended December 31 or for the fiscal year most nearly conforming to the calendar year.

The long-form schedules were filled out from the reports made to the Interstate Commerce Commission for practically all the telephone companies having incomes of $10,000 or more in 1922, except that the data in regard to employees and salaries and wages were obtained by correspondence, as those reported to the commission in respect to these items did not meet the census requirements.

As the Interstate Commerce Commission no longer requires reports from companies having annual incomes of less than $50,000, reports for all companies having annual incomes of $10,000 or more in 1927, as well as returns for systems and lines to be reported on the short-form schedule, were obtained in part by correspondence and in part through a canvass by special agents of the Bureau of the Census.

Change in classification according to income.—At the census for 1922 the collection of detailed data on the long-form schedule was limited to those telephone systems having incomes of $10,000 or more, whereas at former censuses such data were obtained from all systems having incomes of $5,000 or more. This change was made in order to bring the census practice into conformity with that of the Interstate Commerce Commission, which, for 1922, required reports from only those telephone systems having annual incomes of $10,000 or more. The same classification was employed for 1927. The resultant effect on the comparability of the statistics for 1922 with those for earlier years is inconsiderable, since the equipment, traffic, number of employees, etc., of the companies with incomes between $5,000 and $10,000 constitute but small proportions of the corresponding totals for all systems having incomes of $5,000 or more. (See Table 7, p. 12.)

Geographic divisions and States (Tables 2, 3, 4, 8–12, 19–22, and 29–33).—At the censuses for 1927 and 1922 each system having an income of $10,000 or more was requested to report separately wire mileage, number of telephones, number of central offices, and number of calls originating on its lines for each State in which it operated. In compiling the statistics for all such companies for 1927 and 1922 and for the Bell companies for preceding years, an exact presentation of these items by States has been made. For 1917 and earlier years, however, the statistics show, for the non-Bell companies with incomes of $5,000 or more, for each State, the total equipment and the traffic reported by the companies operating wholly or mainly within the State. The differences between the actual equipment and traffic located or originating in a particular State and the equipment and traffic reported by the companies operating wholly or principally within that State were, however, very small, since the non-Bell companies did very little interstate business. The classes of companies which reported, for 1927 and 1922, annual incomes of less than $10,000 and also those which reported less than $5,000 at earlier censuses did not report separate figures for each State in which they operated; but naturally these small companies did even less interstate business than the non-Bell companies in the larger income classes.

[2] See "Equipment reported," p. 23.

TABLE 1.—SUMMARY—ALL SYSTEMS AND LINES: 1927

	All systems and lines	Bell System	ALL OTHER SYSTEMS AND LINES	
			Reporting annual incomes of $10,000 or more	Reporting annual incomes of less than $10,000
Number of systems and lines	60, 148	25	1, 343	58, 780
Miles of wire [1]	63, 836, 182	56, 819, 036	5, 458, 210	1, 558, 936
Exchange	55, 840, 231	49, 279, 379	5, 001, 916	[2] 1, 558, 936
Toll	7, 995, 951	7, 539, 657	456, 294	
Number of central offices	20, 227	6, 115	5, 370	8, 742
Number of telephones	18, 522, 767	13, 726, 056	2, 986, 439	1, 810, 272
Residence	12, 128, 617	8, 332, 814	2, 165, 987	1, 629, 816
Business	6, 394, 150	5, 393, 242	820, 452	180, 456
Number of calls originating with systems reporting [3]	31, 614, 172, 621	23, 693, 017, 950	5, 503, 369, 496	2, 417, 785, 175
Exchange	30, 527, 181, 724	22, 752, 021, 612	5, 357, 374, 937	[4] 2, 417, 785, 175
Toll	1, 086, 990, 897	940, 996, 338	145, 994, 559	
Number of employees	375, 272	308, 865	47, 874	18, 533
Male	131, 802	107, 710	17, 253	6, 839
Female	243, 470	201, 155	30, 621	11, 694
Salaries and wages	$486, 597, 070	$429, 876, 779	$45, 963, 541	$10, 756, 750
Revenue, operating [5]	$1, 023, 573, 567	$894, 699, 173	$102, 212, 579	$26, 661, 815
Exchange	$701, 381, 400	$604, 266, 112	$76, 955, 399	[6] $20, 159, 889
Toll	$294, 625, 256	$271, 174, 270	$23, 450, 986	
Investment in plant and equipment	$3, 548, 874, 716	$3, 085, 612, 970	$389, 588, 986	$73, 672, 760
Per cent of total:				
Number of systems or lines	100. 0	0. 1	2. 2	97. 7
Miles of wire	100. 0	89. 0	8. 6	2. 4
Exchange	100. 0	88. 3	8. 9	2. 8
Toll	100. 0	94. 3	5. 7	
Number of central offices	100. 0	30. 2	26. 6	43. 2
Number of telephones	100. 0	74. 1	16. 1	9. 8
Residence	100. 0	68. 7	17. 9	13. 4
Business	100. 0	84. 4	12. 8	2. 8
Number of originating calls	100. 0	75. 0	17. 4	7. 6
Exchange	100. 0	74. 5	17. 6	7. 9
Toll	100. 0	86. 6	13. 4	
Number of employees	100. 0	82. 3	12. 8	4. 9
Male	100. 0	81. 7	13. 1	5. 2
Female	100. 0	82. 6	12. 6	4. 8
Salaries and wages	100. 0	88. 4	9. 4	2. 2
Revenue, operating	100. 0	87. 4	10. 0	2. 6
Exchange	100. 0	86. 2	11. 0	2. 8
Toll	100. 0	92. 0	8. 0	
Investment in plant and equipment	100. 0	86. 9	11. 0	2. 1

[1] The distribution of miles of wire, overhead and underground, according to exchange and toll, is shown in Table 15.

[2] Total miles of wire. Distribution of wire as between exchange and toll not called for on the schedule used for this class of systems and lines; therefore, all wire treated as exchange wire.

[3] See "Number of 'originating calls,'" p. 24.

[4] Total number of calls. Distribution between exchange and toll calls not called for on the schedule used for this class of systems and lines; therefore, all calls treated as exchange calls.

[5] Includes $20,937,754 representing miscellaneous operating revenues, and $6,629,157, assessments levied by mutual companies.

[6] Total operating revenue. Distribution of operating revenue as between exchange and toll not called for on the schedule used for this class of systems and lines; therefore, all revenue treated as exchange revenue.

TABLE 2.—NUMBER OF SYSTEMS AND LINES, WIRE MILEAGE, AND NUMBER OF CENTRAL OFFICES, THE BELL SYSTEM AND ALL OTHER SYSTEMS AND LINES, BY GEOGRAPHIC DIVISIONS AND STATES: 1927

DIVISION AND STATE	NUMBER OF SYSTEMS AND LINES				MILES OF WIRE [1]				NUMBER OF CENTRAL OFFICES			
	Total	Bell System [2]	All other systems and lines [3]: Reporting annual incomes of $10,000 or more	All other systems and lines [3]: Reporting annual incomes of less than $10,000	Total	Bell System	All other systems and lines: Reporting annual incomes of $10,000 or more	All other systems and lines: Reporting annual incomes of less than $10,000	Total	Bell System	All other systems and lines: Reporting annual incomes of $10,000 or more	All other systems and lines: Reporting annual incomes of less than $10,000
UNITED STATES	60,148	25	1,343	58,780	63,836,182	56,819,036	5,458,210	1,558,936	20,227	6,115	5,370	8,742
GEOGRAPHIC DIVISIONS:												
New England	328	2	43	283	5,586,569	5,458,003	108,472	20,094	921	566	211	144
Middle Atlantic	2,485	5	159	2,321	19,992,689	18,778,094	1,140,532	74,063	2,144	959	686	499
East North Central	8,022	6	469	7,547	15,223,410	13,317,189	1,555,191	351,030	4,447	948	1,565	1,934
West North Central	19,127	2	330	18,795	6,044,901	4,248,731	1,270,808	525,362	4,806	718	1,441	2,647
South Atlantic	4,263	5	117	4,141	4,244,852	3,747,502	389,512	107,838	1,868	589	426	853
East South Central	6,487	------	36	6,451	2,001,125	1,728,389	158,156	114,580	1,502	520	160	822
West South Central	12,093	------	78	12,015	3,619,976	3,145,614	263,503	210,859	2,409	640	511	1,258
Mountain	2,268	2	27	2,239	1,198,550	1,098,661	40,604	59,285	877	474	93	310
Pacific	5,075	3	84	4,988	5,924,110	5,296,853	531,432	95,825	1,253	701	277	275
NEW ENGLAND:												
Maine	175	------	16	159	326,120	269,148	46,355	10,617	247	81	93	73
New Hampshire	55	------	7	48	211,448	182,481	26,198	2,769	133	61	46	26
Vermont	78	------	14	64	105,645	79,116	20,765	5,764	142	42	62	38
Massachusetts	14	1	2	11	3,165,833	3,161,787	3,170	876	281	270	5	6
Rhode Island	1	------	1	------	429,451	421,470	7,981	------	29	27	2	------
Connecticut	5	1	3	1	1,348,072	1,344,001	4,003	68	89	85	3	1
MIDDLE ATLANTIC:												
New York	922	2	74	846	11,592,418	11,035,512	529,115	27,791	932	434	298	200
New Jersey	74	1	12	61	3,012,459	2,984,332	26,259	1,868	211	163	35	13
Pennsylvania	1,489	2	73	1,414	5,387,812	4,758,250	585,158	44,404	1,001	362	353	286
EAST NORTH CENTRAL:												
Ohio	1,016	2	125	889	3,658,505	3,113,873	481,287	63,345	1,024	223	428	373
Indiana	1,431	1	102	1,328	1,558,005	1,072,281	416,913	68,811	863	90	298	475
Illinois	2,992	1	114	2,877	5,688,146	5,213,718	382,708	91,720	1,265	266	457	542
Michigan	1,510	1	33	1,476	2,067,217	2,790,346	128,122	48,749	638	257	145	236
Wisconsin	1,073	1	95	977	1,351,537	1,126,971	146,161	78,405	657	112	237	308

West North Central:												
Minnesota	2,318	------	67	2,251	1,422,716	792,880	528,612	101,224	738	106	229	403
Iowa	4,809	------	85	4,724	960,226	661,904	205,578	92,744	996	136	301	559
Missouri	5,060	1	57	5,002	1,988,764	1,800,538	84,880	103,346	997	134	205	658
North Dakota	946	------	15	931	140,923	85,565	17,578	37,780	380	96	66	218
South Dakota	745	------	15	730	154,601	48,681	76,090	29,830	316	44	149	123
Nebraska	1,778	1	38	1,739	606,425	336,138	208,207	62,080	555	110	235	210
Kansas	3,471	------	53	3,418	771,246	523,025	149,863	98,358	824	92	256	476
South Atlantic:												
Delaware	44	------	------	44	118,539	118,093	------	446	25	23	------	2
Maryland	175	1	1	173	936,353	932,836	667	2,850	141	128	1	12
District of Columbia	1	1	------	------	540,152	540,152	------	------	12	12	------	------
Virginia	695	1	25	669	615,286	551,234	40,535	23,517	336	66	85	185
West Virginia	411	1	10	400	349,899	305,138	24,263	20,498	339	81	44	214
North Carolina	1,128	------	33	1,095	392,455	269,256	100,507	22,692	331	57	127	147
South Carolina	646	------	13	633	171,678	142,882	15,791	13,005	156	59	17	80
Georgia	1,089	1	23	1,065	538,751	489,378	28,218	21,155	359	108	71	180
Florida	74	------	12	62	581,739	398,533	179,531	3,675	169	55	81	33
East South Central:												
Kentucky	2,351	------	20	2,331	722,120	579,224	102,514	40,382	520	161	74	285
Tennessee	2,251	------	5	2,246	642,096	561,741	35,885	44,470	487	146	58	283
Alabama	874	------	10	864	421,927	388,831	15,648	17,448	263	79	17	167
Mississippi	1,011	------	1	1,010	214,982	198,593	4,109	12,280	232	134	11	87
West South Central:												
Arkansas	2,210	------	14	2,196	318,868	273,513	19,797	25,558	337	98	54	185
Louisiana	939	------	3	936	560,262	551,477	1,178	7,607	166	101	14	51
Oklahoma	3,115	------	15	3,100	655,102	581,582	20,592	52,928	593	154	88	351
Texas	5,829	------	46	5,783	2,085,744	1,739,042	221,936	124,766	1,313	287	355	671
Mountain:												
Montana	430	------	3	427	135,536	117,658	5,942	11,936	163	75	13	75
Idaho	436	------	3	433	111,940	87,070	16,120	8,750	130	64	27	39
Wyoming	321	------	1	320	60,622	51,252	1,056	8,314	82	39	5	38
Colorado	743	1	3	739	559,873	537,864	3,549	18,460	250	163	9	78
New Mexico	175	------	------	175	48,765	43,153	659	4,953	76	37	2	37
Arizona	51	------	4	47	89,305	83,672	2,510	3,123	52	32	11	9
Utah	60	------	6	54	167,393	159,109	6,094	2,190	87	45	15	27
Nevada	52	1	7	44	25,116	18,883	4,674	1,559	37	19	11	7
Pacific:												
Washington	1,194	1	24	1,169	739,138	649,334	61,375	28,429	304	118	82	104
Oregon	1,268	------	14	1,254	490,820	436,654	29,915	24,251	240	83	60	97
California	2,613	2	46	2,565	4,694,152	4,210,865	440,142	43,145	709	500	135	74

[1] For distribution of miles of wire overhead, in cable and not in cable, and underground, exchange and toll, see Tables 16 and 28.
[2] The 25 Bell System companies have been assigned to the States in which their operating headquarters are located. The Bell System, however, operates in every State.
[3] Systems operating in more than 1 State have been assigned to the State in which their operating headquarters are located.

TABLE 3.—NUMBER OF TELEPHONES, CLASSIFIED AS RESIDENCE AND BUSINESS, THE BELL SYSTEM AND ALL OTHER SYSTEMS AND LINES, BY GEOGRAPHIC DIVISIONS AND STATES: 1927

DIVISION AND STATE	NUMBER OF TELEPHONES										
				Bell System			All other systems and lines				
	Total	Residence	Business	Total	Residence	Business	Total	Reporting annual incomes of $10,000 or more		Reporting annual incomes of less than $10,000	
								Residence	Business	Residence	Business
UNITED STATES	18,522,767	12,128,617	6,394,150	13,726,056	8,332,814	5,393,242	4,796,711	2,165,987	820,452	1,629,816	180,456
GEOGRAPHIC DIVISIONS:											
New England	1,548,931	1,033,714	515,217	1,453,469	958,799	494,670	95,462	55,553	18,757	19,362	1,790
Middle Atlantic	4,588,211	2,649,227	1,938,984	3,980,241	2,238,373	1,741,868	607,970	320,906	187,614	89,948	9,502
East North Central	4,589,751	3,175,391	1,414,360	3,177,753	2,013,477	1,164,276	1,411,998	772,185	211,101	389,729	38,983
West North Central	2,594,081	1,968,234	625,847	1,158,441	777,339	381,102	1,435,640	568,876	181,188	622,019	63,557
South Atlantic	1,262,222	756,620	505,602	951,422	534,813	416,609	310,800	121,161	72,219	100,646	16,774
East South Central	644,270	446,784	197,486	443,609	282,444	161,165	200,661	49,475	22,766	114,865	13,555
West South Central	1,149,357	779,492	369,865	787,547	483,779	303,768	361,810	108,684	43,023	187,029	23,074
Mountain	456,198	291,062	165,136	391,510	240,560	150,950	64,688	17,418	8,576	33,084	5,610
Pacific	1,689,746	1,028,093	661,653	1,382,064	803,230	578,834	307,682	151,729	75,208	73,134	7,611
NEW ENGLAND:											
Maine	131,367	95,708	35,659	88,437	61,530	26,907	42,930	24,264	7,864	9,914	888
New Hampshire	83,066	60,755	22,311	61,430	44,778	16,652	21,636	12,762	5,274	3,215	385
Vermont	60,793	45,828	14,965	37,168	26,629	10,539	23,625	13,900	3,998	5,299	428
Massachusetts	867,888	563,654	304,234	864,951	561,444	303,507	2,937	1,366	638	844	89
Rhode Island	114,944	76,246	38,698	112,868	74,854	38,014	2,076	1,392	684	----------	----------
Connecticut	290,873	191,523	99,350	288,615	189,564	99,051	2,258	1,869	299	90	----------
MIDDLE ATLANTIC:											
New York	2,595,537	1,428,719	1,166,818	2,329,131	1,235,406	1,093,725	266,406	154,477	68,938	38,836	4,155
New Jersey	599,336	363,860	235,476	582,710	354,896	227,814	16,626	7,305	7,289	1,659	373
Pennsylvania	1,393,338	856,648	536,690	1,068,400	648,071	420,329	324,938	159,124	111,387	49,453	4,974
EAST NORTH CENTRAL:											
Ohio	1,122,036	791,126	330,910	748,874	482,437	266,437	373,162	242,065	57,951	66,624	6,522
Indiana	552,249	415,263	136,986	227,218	151,095	76,123	325,031	177,055	52,967	87,113	7,896
Illinois	1,685,690	1,115,757	569,933	1,293,340	795,475	497,865	392,350	206,156	61,349	114,126	10,719
Michigan	711,315	473,884	237,431	587,228	371,172	216,056	124,087	51,861	15,798	50,851	5,577
Wisconsin	518,461	379,361	139,100	321,093	213,298	107,795	197,368	95,048	23,036	71,015	8,269

West North Central:											
Minnesota	487,611	364,117	123,494	195,402	132,523	62,879	292,209	138,165	49,248	93,429	11,367
Iowa	565,533	454,763	110,770	227,555	165,515	62,040	337,978	128,483	36,089	160,765	12,641
Missouri	657,946	466,024	191,922	414,683	257,734	156,949	243,263	69,639	19,338	138,651	15,635
North Dakota	86,198	63,821	22,377	34,820	21,650	13,170	51,378	10,846	5,448	31,325	3,759
South Dakota	107,641	85,559	22,082	21,865	15,068	6,797	85,776	40,824	12,034	29,667	3,251
Nebraska	295,274	226,560	68,714	107,028	73,332	33,696	188,246	94,031	28,990	59,197	6,028
Kansas	393,878	307,390	86,488	157,088	111,517	45,571	236,790	86,888	30,041	108,985	10,876
South Atlantic:											
Delaware	28,901	17,701	11,200	28,396	17,215	11,181	505	----------	----------	486	19
Maryland	197,135	118,161	78,974	193,520	115,035	78,485	3,615	433	117	2,693	372
District of Columbia	144,985	72,148	72,837	144,985	72,148	72,837	----------	----------	----------	----------	----------
Viriginia	183,698	123,929	59,769	122,912	77,439	45,473	60,786	22,104	10,437	24,386	3,859
West Virginia	146,677	101,883	44,794	103,885	65,109	38,776	42,792	10,165	3,149	26,609	2,869
North Carolina	160,507	103,094	57,413	81,208	46,067	35,141	79,299	38,403	19,278	18,624	2,994
South Carolina	64,616	40,029	24,587	44,922	26,008	18,914	19,694	5,660	3,616	8,361	2,057
Georgia	173,410	107,276	66,134	136,723	79,093	57,630	36,687	10,423	4,883	17,760	3,621
Florida	162,293	72,399	89,894	94,871	36,699	58,172	67,422	33,973	30,739	1,727	983
East South Central:											
Kentucky	222,735	161,562	61,173	139,653	94,517	45,136	83,082	24,250	11,670	42,795	4,367
Tennessee	220,559	154,484	66,075	148,413	94,557	53,856	72,146	18,218	7,909	41,709	4,310
Alabama	121,115	77,502	43,613	92,094	54,434	37,660	29,021	4,532	2,614	18,536	3,339
Mississippi	79,861	53,236	26,625	63,449	38,936	24,513	16,412	2,475	573	11,825	1,539
West South Central:											
Arkansas	118,178	80,331	37,847	73,535	44,031	29,504	44,643	11,366	4,655	24,934	3,688
Louisiana	137,610	81,699	55,911	128,995	74,718	54,277	8,615	1,489	367	5,492	1,267
Oklahoma	278,912	195,801	83,111	184,698	116,462	68,236	94,214	18,616	7,508	60,723	7,367
Texas	614,657	421,661	192,996	400,319	248,568	151,751	214,338	77,213	30,493	95,880	10,752
Mountain:											
Montana	59,238	37,218	22,020	48,057	28,352	19,705	11,181	2,193	1,146	6,673	1,169
Idaho	54,822	37,540	17,282	36,476	23,780	12,696	18,346	6,455	3,892	7,305	694
Wyoming	28,049	17,977	10,072	22,902	13,679	9,223	5,147	573	302	3,725	547
Colorado	183,250	117,939	65,311	168,442	104,969	63,473	14,808	2,340	572	10,630	1,266
New Mexico	21,580	12,879	8,701	17,835	10,212	7,623	3,745	486	292	2,181	786
Arizona	33,194	18,646	14,548	30,638	17,577	13,061	2,556	607	895	462	592
Utah	63,106	40,784	22,322	58,824	37,274	21,550	4,282	1,800	487	1,710	285
Nevada	12,959	8,079	4,880	8,336	4,717	3,619	4,623	2,964	990	398	271
Pacific:											
Washington	299,109	193,375	105,734	227,756	136,220	91,536	71,353	33,035	10,995	24,120	3,203
Oregon	185,171	119,966	65,205	135,085	80,458	54,627	50,086	16,427	8,985	23,081	1,593
California	1,205,466	714,752	490,714	1,019,223	586,552	432,671	186,243	102,267	55,228	25,933	2,815

TABLE 4.—NUMBER OF ORIGINATING CALLS,[1] THE BELL SYSTEM AND ALL OTHER SYSTEMS AND LINES, BY GEOGRAPHIC DIVISIONS AND STATES: 1927

DIVISION AND STATE	NUMBER OF ORIGINATING CALLS DURING YEAR									
				Bell System			All other systems and lines			
	Total	Exchange	Toll	Total	Exchange	Toll	Total	Reporting annual incomes of $10,000 or more		Reporting annual incomes of less than $10,000 [2]
								Exchange	Toll	
UNITED STATES	31, 614, 172, 621	30, 527, 181, 724	1, 086, 990, 897	23, 693, 017, 950	22, 752, 021, 612	940, 996, 338	7, 921, 154, 671	5, 357, 374, 937	145, 994, 559	2, 417, 785, 175
GEOGRAPHIC DIVISIONS:										
New England	2, 328, 376, 339	2, 215, 023, 785	113, 352, 554	2, 199, 379, 479	2, 090, 707, 254	108, 672, 225	128, 996, 860	97, 616, 481	4, 630, 329	26, 700, 050
Middle Atlantic	6, 908, 063, 149	6, 433, 505, 496	474, 557, 653	5, 878, 939, 167	5, 427, 960, 642	450, 978, 525	1, 029, 123, 982	870, 095, 579	23, 579, 128	135, 449, 275
East North Central	7, 538, 040, 822	7, 365, 020, 885	173, 019, 937	5, 195, 326, 085	5, 058, 787, 524	136, 538, 561	2, 342, 714, 737	1, 749, 769, 986	36, 481, 376	556, 463, 375
West North Central	4, 577, 326, 232	4, 497, 747, 887	79, 578, 345	2, 357, 781, 413	2, 306, 723, 658	51, 057, 755	2, 219, 544, 819	1, 309, 987, 579	28, 520, 590	881, 036, 650
South Atlantic	2, 425, 485, 231	2, 365, 066, 790	60, 418, 441	1, 837, 367, 806	1, 789, 369, 008	47, 998, 798	588, 117, 425	393, 526, 507	12, 419, 643	182, 171, 275
East South Central	1, 536, 693, 745	1, 514, 137, 662	22, 556, 083	1, 213, 435, 532	1, 196, 425, 031	17, 010, 501	323, 258, 213	156, 699, 506	5, 545, 552	161, 013, 125
West South Central	2, 648, 610, 049	2, 606, 085, 008	42, 525, 041	2, 041, 686, 216	2, 009, 773, 951	31, 913, 165	606, 923, 833	331, 776, 257	10, 611, 876	264, 535, 700
Mountain	780, 339, 532	763, 624, 269	16, 715, 263	626, 409, 764	610, 841, 544	15, 568, 220	153, 929, 768	39, 932, 650	1, 147, 043	112, 850, 075
Pacific	2, 871, 237, 522	2, 766, 969, 942	104, 267, 580	2, 342, 692, 488	2, 261, 433, 900	81, 258, 588	528, 545, 034	407, 970, 392	23, 008, 992	97, 565, 650
NEW ENGLAND:										
Maine	213, 918, 516	206, 311, 386	7, 607, 130	153, 945, 809	148, 314, 586	5, 631, 223	59, 972, 707	45, 062, 125	1, 975, 907	12, 934, 675
New Hampshire	117, 374, 777	112, 102, 537	5, 272, 240	87, 267, 680	83, 308, 445	3, 959, 235	30, 107, 097	23, 441, 667	1, 313, 005	5, 352, 425
Vermont	84, 327, 792	80, 702, 145	3, 625, 647	56, 523, 574	53, 761, 619	2, 761, 955	27, 804, 218	20, 046, 626	863, 092	6, 893, 900
Massachusetts	1, 333, 989, 391	1, 274, 032, 679	59, 956, 712	1, 328, 690, 551	1, 268, 893, 523	59, 797, 028	5, 298, 840	3, 766, 356	159, 684	1, 372, 800
Rhode Island	116, 850, 532	105, 030, 200	11, 820, 332	114, 296, 058	102, 608, 267	11, 687, 791	2, 554, 474	2, 421, 933	132, 541	----------
Connecticut	461, 915, 331	436, 844, 838	25, 070, 493	458, 655, 807	433, 820, 814	24, 834, 993	3, 259, 524	2, 877, 774	235, 500	146, 250
MIDDLE ATLANTIC:										
New York	3, 935, 534, 778	3, 694, 054, 784	241, 479, 994	3, 516, 556, 662	3, 285, 984, 375	230, 572, 287	418, 978, 116	345, 975, 259	10, 907, 707	62, 095, 150
New Jersey	773, 695, 215	642, 007, 288	131, 687, 927	758, 025, 369	627, 414, 195	130, 611, 174	15, 669, 846	12, 451, 668	1, 076, 753	2, 141, 425
Pennsylvania	2, 198, 833, 156	2, 097, 443, 424	101, 389, 732	1, 604, 357, 136	1, 514, 562, 072	89, 795, 064	594, 476, 020	511, 668, 652	11, 594, 668	71, 212, 700
EAST NORTH CENTRAL:										
Ohio	1, 957, 967, 753	1, 927, 017, 031	30, 950, 722	1, 297, 639, 685	1, 275, 900, 786	21, 738, 899	660, 328, 068	548, 481, 570	9, 211, 823	102, 634, 675
Indiana	1, 060, 990, 009	1, 045, 126, 027	15, 863, 982	465, 988, 204	457, 148, 028	8, 840, 176	595, 001, 805	452, 277, 499	7, 023, 806	135, 700, 500
Illinois	2, 571, 340, 386	2, 485, 192, 572	86, 147, 814	1, 953, 415, 412	1, 881, 033, 102	72, 382, 310	617, 924, 974	450, 581, 370	13, 765, 504	153, 578, 100
Michigan	1, 140, 155, 560	1, 113, 042, 848	27, 112, 712	943, 589, 956	918, 957, 600	24, 632, 356	196, 565, 604	112, 805, 023	2, 480, 356	81, 280, 225
Wisconsin	807, 587, 114	794, 642, 407	12, 944, 707	534, 692, 828	525, 748, 008	8, 944, 820	272, 894, 286	185, 624, 524	3, 999, 887	83, 269, 875

West North Central:										
Minnesota	931, 055, 225	917, 376, 144	13, 679, 081	421. 511, 059	414, 066, 180	7, 444, 879	509, 544, 166	367, 546, 739	6, 234. 202	135, 763, 225
Iowa	915, 514, 778	896, 275, 931	19, 238, 847	432, 013, 491	420, 965, 826	11, 047, 665	483, 501, 287	260, 283, 930	8, 191, 182	215, 026, 175
Missouri	1, 269, 017, 834	1, 246, 335, 699	22, 682, 135	912, 438, 117	891, 795, 960	20, 642. 157	356, 579, 717	137, 899, 939	2, 039, 978	216, 639, 800
North Dakota	129, 479, 400	127, 039. 327	2, 440, 073	62, 257, 076	60, 184, 080	2, 072, 996	67, 222, 324	28, 704, 472	367, 077	38, 150, 775
South Dakota	171, 240, 263	166, 494, 087	4, 746, 176	38, 238, 493	37, 217, 730	1, 020, 763	133, 001, 770	95, 681, 432	3, 725, 413	33, 594, 925
Nebraska	524, 444, 787	517, 238, 519	7, 206, 268	208, 147, 229	204, 219, 180	3, 928, 049	316, 297, 558	232, 320, 864	3, 278, 219	80, 698, 475
Kansas	636, 573, 945	626, 988. 180	9, 585, 765	283, 175, 948	278, 274, 702	4, 901, 246	353, 397, 997	187, 550, 203	4, 684, 519	161, 163, 275
South Atlantic:										
Delaware	53, 130, 321	51, 122, 877	2, 007, 444	52. 437, 096	50, 429, 652	2, 007, 444	693, 225	----------	----------	693, 225
Maryland	293, 790, 512	279, 519, 126	14, 271, 386	290. 027, 760	275, 792, 844	14, 234, 916	3, 762, 752	492, 532	36, 470	3, 233, 750
Dist. of Columbia	186, 008, 388	181, 624, 680	4, 383, 708	186, 008, 388	181, 624, 680	4, 383, 708	----------	----------	----------	----------
Virginia	382, 018, 835	374, 702, 007	7, 316, 828	279, 850, 968	274, 079, 100	5, 771, 868	102, 167, 867	61, 816, 282	1, 544, 960	38, 806, 625
West Virginia	279, 156, 792	269. 275, 809	9, 880, 983	197, 588, 376	191, 995, 068	5, 593, 308	81, 568, 416	23, 564, 416	4, 287, 675	53, 716, 325
North Carolina	379, 241, 964	372, 094, 083	7, 147, 881	201, 255, 676	197, 123, 683	4, 131, 993	177, 986, 288	139, 381, 600	3, 015, 888	35, 588, 800
South Carolina	146, 181, 383	143, 253. 181	2, 928, 202	111, 031, 468	108, 473, 652	2, 557, 816	35, 149, 915	18, 368, 004	370, 386	16, 411, 525
Georgia	436, 291, 701	430, 980, 838	5, 310, 863	377, 680, 828	373, 168, 205	4, 512, 623	58, 610, 873	28, 710, 833	798, 240	29, 101, 800
Florida	269, 665, 335	262, 494, 189	7, 171, 146	141, 487, 246	136, 682, 124	4, 805, 122	128, 178, 089	121, 192, 840	2, 366, 024	4, 619, 225
East South Central:										
Kentucky	484, 983, 750	479, 500, 404	5, 483, 346	339, 971, 469	335, 654, 728	4, 316, 741	145, 012, 281	81, 703, 726	1, 166, 605	62, 141, 950
Tennessee	558, 424, 183	550, 771, 250	7, 652, 933	433, 269, 534	429, 431, 635	3, 837, 899	125, 154, 649	61, 667, 990	3, 815, 034	59, 671, 625
Alabama	312, 881. 155	307, 888, 785	4, 992, 370	278, 451, 997	274, 010, 370	4, 441, 627	34, 429, 158	12, 460, 590	550, 743	21, 417, 825
Mississippi	180, 404, 657	175, 977, 223	4, 427, 434	161, 742, 532	157, 328, 298	4, 414, 234	18, 662, 125	867, 200	13, 200	17, 781, 725
West South Central:										
Arkansas	238, 578, 745	234, 461, 283	4, 117, 462	175, 547, 355	172, 087, 540	3, 459, 815	63, 031, 390	29, 474, 643	657, 647	32, 899, 100
Louisiana	385, 103, 417	380, 256, 631	4, 846, 786	374, 496, 085	369, 938, 887	4, 557, 198	10, 607, 332	1, 904, 469	289, 588	8, 413, 275
Oklahoma	581, 432, 397	568, 910, 802	12, 521, 595	461, 501, 118	451, 045, 858	10, 455, 260	119, 931, 279	41, 772, 044	2, 066, 335	76, 092, 900
Texas	1, 443, 495, 490	1, 422, 456, 292	21, 039, 198	1, 030, 141, 658	1, 016, 700, 766	13, 440, 892	413, 353, 832	258, 625, 101	7, 598, 306	147, 130, 425
Mountain:										
Montana	80, 613. 737	78. 893, 892	1, 719, 845	65, 598, 536	64, 007, 820	1, 590, 716	15, 015, 201	5, 860, 822	129, 129	9. 025, 250
Idaho	128, 428, 386	126, 086, 062	2, 342, 324	63, 772, 805	62, 004, 003	1, 768. 802	64, 655, 581	17, 367, 859	573, 522	46, 714, 200
Wyoming	38, 823, 110	38, 014, 758	808, 352	32, 058, 345	31, 284, 489	773, 856	6, 764, 765	829, 244	34, 496	5, 901, 025
Colorado	312, 926, 084	306, 209, 587	6, 716, 497	274, 045, 476	267, 357, 295	6, 688. 181	38, 880, 608	3, 444, 192	28, 316	35, 408, 100
New Mexico	35, 237, 219	34, 662, 102	575, 117	30, 171, 069	29, 653, 452	517, 617	5, 066, 150	1, 847, 700	57, 500	3, 160, 950
Arizona	37, 208, 484	36, 130, 306	1, 078, 178	33, 334, 505	32, 337, 893	996, 612	3, 873, 979	2, 549, 938	81, 566	1, 242, 475
Utah	127, 263. 384	124, 170, 924	3, 092, 460	114, 717, 452	111, 731, 988	2, 985, 464	12, 545, 932	2, 657, 736	106, 996	9, 781, 200
Nevada	19, 839, 128	19, 456, 638	382, 490	12, 711, 576	12, 464, 604	246, 972	7, 127, 552	5, 375, 159	135, 518	1, 616, 875
Pacific:										
Washington	554, 142, 657	545, 275, 528	8, 867, 129	437, 720, 004	430, 741, 116	6, 978, 888	116, 422, 653	77, 955, 337	1, 888, 241	36, 579, 075
Oregon	331, 246, 528	325, 353, 271	5, 893, 257	259, 944, 984	255, 137, 616	4, 807, 368	71, 301, 544	42, 509, 405	1, 085, 889	27, 706, 250
California	1, 985, 848, 337	1, 896, 341, 143	89. 507, 194	1, 645, 027, 500	1, 575, 555, 168	69, 472, 332	340, 820, 837	287, 505, 650	20, 034, 862	33, 280, 325

[1] See "Number of 'originating calls'," p. 24.
[2] Distribution between exchange and toll calls not called for on schedule used for this class of systems and lines; therefore all calls treated as "Exchange."

CHAPTER II.—DEVELOPMENT OF THE INDUSTRY

This chapter presents, for the United States as a whole and for geographic divisions and States, comparative statistics for 1927 and earlier census years.

Growth during 25 years.—As already explained (see "Collection of the data," p. 1), the only substantially accurate information obtained prior to 1917 for the small systems and lines—those with incomes of less than $5,000—was that in regard to mileage of wire and number of telephones in use. The following statement shows, for the several census years from 1902 to 1927, inclusive, the total wire mileage; the total number of telephones reported by all systems and lines, including those with incomes below $5,000; and the number of telephones per 1,000 population (based on the estimates of population as of July 1 for each year).

CENSUS YEAR	Number of systems and lines	Miles of wire	NUMBER OF TELEPHONES	
			Total	Per 1,000 population
1927	60, 148	63, 836, 182	18, 522, 767	156
1922	57, 253	37, 265, 958	14, 347, 395	130
1917	53, 234	28, 827, 188	11, 716, 520	115
1912	32, 233	20, 248, 326	8, 729, 592	92
1907	22, 971	12, 999, 304	6, 118, 578	70
1902	9, 136	4, 900, 451	2, 371, 044	30

More detailed statistics for all systems and lines can be given, however, for the last two census years, as follows:

	1927	1922	Per cent of increase or decrease (—) 1922–1927
Number of systems and lines	60, 148	57, 253	5.1
Miles of wire	63, 836, 182	37, 265, 958	71.3
Exchange [1]	55, 840, 231	32, 669, 630	70.9
Toll	7, 995, 951	4, 596, 328	74.0
Number of central offices	20, 227	[2] 19, 260	5.0
Number of telephones	18, 522, 767	14, 347, 395	29.1
Residence	12, 128, 617	(3)	----------
Business	6, 394, 150	(3)	----------
Number of calls originating with systems reporting [4]	31, 614, 172, 621	24, 647, 560, 860	28.3
Exchange [1]	30, 527, 181, 724	23, 981, 633, 651	27.3
Toll	1, 086, 990, 897	665, 927, 209	63.2
Number of employees	375, 272	312, 015	20.3
Male	131, 802	104, 433	26.2
Female	243, 470	207, 582	17.3
Salaries and wages	$486, 507, 070	$352, 925, 570	37.9
Revenue, operating [5]	$1, 023, 573, 567	$665, 568, 279	53.8
Exchange [1]	$701, 381, 400	$467, 231, 512	50.1
Toll	$294, 625, 256	$180, 069, 891	63.6
Investment in plant and equipment	$3, 548, 874, 716	$2, 205, 183, 150	60.9

[1] Figures include data for systems and lines reporting incomes of less than $10,000. Separate data for exchange and for toll lines were not called for on the schedule used for this class of systems and lines, and therefore they have all been included under "Exchange."

[2] Includes 8,594 central offices of systems and lines reporting incomes of less than $10,000. These figures represent the numbers of systems and lines reporting central offices. The actual numbers of central offices were probably slightly larger. The 1927 figures are the actual numbers of central offices operated.

[3] Not called for on schedule.

[4] See "Number of 'originating calls,'" p. 24.

[5] The statistics include, for 1927, $20,037,745 for miscellaneous operating revenues and $6,629,157 for assessments levied by mutual companies; and for 1922, $10,331,731 for miscellaneous revenues and $7,935,145 for assessments of mutual companies.

It will be seen from Table 5 below and Table 23, p. 30 that during the 25-year period from 1902 to 1927 the number of "originating calls" reported by the larger systems—those with incomes of $5,000 or more in 1902 and those with incomes of $10,000 or more in 1927—increased from somewhat more than 5,000,000,000, or 64 per capita, in 1902 to more than 29,000,000,000, or 246 per capita, in 1927.

Effect of change in classification according to income.—In order to bring out the effect of the change from $5,000 to $10,000 as the minimum income for companies from which detailed data were collected (see "Change in classification according to income," p. 2), Tables 6 and 7 have been prepared. As will be seen from a comparison of Tables 5 and 6, there are, with a few exceptions in the cases of comparatively unimportant items, no very great differences between the two sets of percentages covering the 5-year period 1917–1922. From Table 7 it appears that the systems with incomes of from $5,000 to $10,000 contributed only small proportions of the total traffic, equipment, employees, revenues, etc., reported by all companies having incomes of $5,000 or more in 1917. For the group of non-Bell companies considered separately, the corresponding proportions were, of course, larger.

TABLE 5.—SUMMARY—SYSTEMS REPORTING ANNUAL INCOMES OF $10,000 OR MORE, 1927 AND 1922, AND THOSE REPORTING $5,000 OR MORE, 1890 TO 1917[1]

[For total number of systems and lines, total wire mileage, and total number of telephones see Table 25, p. 33]

	1927	1922	1917	1912
Number of systems	1,368	1,323	2,200	1,916
Miles of wire	62,277,246	35,502,983	27,298,026	19,019,391
Number of telephones	16,712,495	12,295,234	9,953,710	7,326,748
Number of central offices	11,485	10,666	12,294	11,515
Number of calls originating with systems reporting [2]	29,196,387,446	21,901,387,070	19,809,061,085	13,735,658,245
Number of employees	356,739	200,333	244,490	183,361
Salaries and wages	$475,840,320	$341,537,822	$169,655,066	$96,040,541
Revenue, operating [3]	$996,911,752	$637,468,630	$363,831,921	$244,476,264
Investment in plant and equipment	$3,475,201,956	$2,129,773,760	$1,435,912,142	$1,081,433,227

	1907	1902 [4]	1890 [5]	PER CENT OF INCREASE OR DECREASE (—)		
				1922–1927	1917–1922	1912–1917
Number of systems	1,636	4,151	53	3.4	—39.9	14.8
Miles of wire	11,921,960	4,850,486	240,412	75.4	30.1	43.5
Number of telephones	4,906,693	2,315,297	233,678	35.9	23.5	35.9
Number of central offices	10,613	10,361	1,241	7.7	—13.2	6.8
Number of calls originating with systems reporting [2]	10,400,433,958	5,070,554,553	453,200,000	33.3	10.6	44.2
Number of employees	131,670	78,752	8,645	22.9	18.8	33.3
Salaries and wages	$65,009,349	$36,255,621	(6)	39.3	101.3	76.6
Revenue, operating [3]	$176,104,302	$81,599,769	$16,404,583	56.4	75.2	48.8
Investment in plant and equipment	$794,096,971	$398,967,723	$72,341,736	63.2	45.3	32.8

[1] See "Change in classification according to income," p. 2, and Tables 6 and 7, p. 12.
[2] See "Number of 'originating calls,'" p. 24.
[3] Including assessments of mutual companies and miscellaneous operating revenues.
[4] Figures do not include data for "farmer or rural lines" but do include data for some systems with incomes of less than $5,000.
[5] Partial enumeration only; figures not strictly comparable with those for later census years.
[6] Not reported.

Comparability of statistics for 1890 and 1902 with those for later years (Tables 5 and 13).—The statistics for 1902 exclude data for the "farmer or rural" lines but include figures for all commercial and mutual systems which operated switchboards, regardless of the amounts of their annual income. In the original compilation of the data for 1907 the same practice was followed. At the census for 1912, however, detailed data were not collected from companies reporting incomes of less than $5,000; and, in order to obtain exact comparability between the statistics for 1912 and those for 1907, the figures for 1907 were revised so as to exclude data for all systems reporting incomes of less than $5,000. It was impossible, however, to make a similar revision of the statistics for 1902, the original returns for that year having been destroyed. The returns for 1890 were incomplete. Thus the statistics for the years prior to 1907 are not strictly comparable with those for 1907 and subsequent years.

TABLE 6.—SUMMARY—SYSTEMS REPORTING ANNUAL INCOMES OF $10,000 OR MORE: 1922 AND 1917

[The statistics for 1917, previously published for systems and lines having annual incomes of $5,000 or more, have been revised by deducting data for systems reporting incomes between $5,000 and $10,000]

	1922	1917	Per cent of increase
Number of systems	1,323	1,118	18.3
Miles of wire	35,502,983	26,878,320	32.1
Number of telephones	12,205,234	9,493,543	29.5
Number of central offices	10,666	10,606	.6
Number of calls originating with systems reporting [1]	21,901,387,070	19,153,055,280	14.3
Number of employees	290,333	237,309	22.4
Salaries and wages	$341,537,822	$166,372,804	105.3
Revenue, operating [2]	$637,408,030	$356,186,842	79.0
Investment in plant and equipment	$2,120,773,760	$1,414,098,460	50.5

[1] See "Number of 'originating calls'," p. 24.
[2] The statistics include figures for miscellaneous operating revenues and assessments, as follows: For 1922, $10,331,781; for 1917, $3,034,798.

TABLE 7.—SUMMARY—ALL SYSTEMS REPORTING INCOMES OF $5,000 OR MORE; SUCH SYSTEMS EXCLUSIVE OF THE BELL SYSTEM; AND ALL SYSTEMS REPORTING INCOMES FROM $5,000 TO $10,000; WITH PERCENTAGES: 1917

[See "Change in classification according to income," p. 2]

	A All systems with incomes of $5,000 or more	B Non-Bell systems with incomes of $5,000 or more	C All systems with incomes from $5,000 to $10,000	Per cent C forms of A	Per cent C forms of B
Number of systems and lines	2,200	2,055	1,082	49.2	52.6
Miles of wire	27,298,026	4,104,308	419,706	1.5	10.1
Number of telephones	9,053,710	2,626,852	460,167	4.6	17.5
Number of central offices	12,294	6,006	1,688	13.7	28.1
Number of calls originating with systems reporting [1]	19,809,061,085	5,211,403,216	656,005,805	3.3	12.6
Number of employees	244,490	45,790	7,181	2.9	15.7
Salaries and wages	$169,055,006	$24,740,199	$3,282,202	1.9	13.2
Revenue, operating [2]	$303,831,921	$59,968,074	$7,645,079	2.1	12.7
Investment in plant and equipment	$1,435,912,142	$295,272,476	$21,213,082	1.5	7.2

[1] See "Number of 'originating calls'," p. 24.
[2] Including miscellaneous operating revenues and assessments levied by mutual companies.

TABLE 8.—NUMBER OF SYSTEMS AND LINES,[1] GROUPED ACCORDING TO ANNUAL INCOME,[2] BY GEOGRAPHIC DIVISIONS AND STATES: 1912 TO 1927

DIVISION AND STATE	TOTAL				REPORTING ANNUAL INCOMES OF [2]—							
					$10,000 or more		$5,000 or more		Less than $10,000		Less than $5,000	
	1927	1922	1917	1912	1927	1922	1917	1912	1927	1922	1917	1912
UNITED STATES	60,148	57,253	53,234	32,233	1,368	1,323	2,200	1,916	58,780	55,930	51,034	30,317
GEOGRAPHIC DIVISIONS:												
New England	328	331	384	377	45	39	54	49	283	292	330	328
Middle Atlantic	2,485	2,652	2,809	2,319	164	144	233	201	2,321	2,508	2,576	2,118
East North Central	8,022	7,966	7,705	4,960	475	465	739	664	7,547	6,601	6,966	4,296
West North Central	19,127	17,110	17,483	10,679	332	339	656	551	18,795	16,771	16,827	10,128
South Atlantic	4,263	4,577	4,189	2,717	122	94	137	110	4,141	4,483	4,052	2,607
East South Central	6,487	6,816	4,900	3,006	36	48	72	78	6,451	6,768	4,828	2,928
West South Central	12,093	11,687	10,244	5,851	78	86	155	134	12,015	11,601	10,089	5,717
Mountain	2,268	2,176	1,560	972	29	29	50	35	2,239	2,147	1,510	937
Pacific	5,075	4,838	3,960	1,352	87	79	104	94	4,988	4,759	3,856	1,258
NEW ENGLAND:												
Maine	175	178	204	173	16	14	18	16	159	164	186	157
New Hampshire	55	50	60	70	7	5	9	8	48	45	51	62
Vermont	78	76	91	95	14	12	16	14	64	64	75	81
Massachusetts	14	18	19	30	3	4	6	5	11	14	13	25
Rhode Island	1	1	1	2	1	1	1	2	------	------	------	------
Connecticut	5	8	9	7	4	3	4	4	1	5	5	3
MIDDLE ATLANTIC:												
New York	922	984	1,091	879	76	69	111	101	846	915	980	778
New Jersey	74	90	104	104	13	8	13	14	61	82	91	90
Pennsylvania	1,489	1,578	1,614	1,336	75	67	109	86	1,414	1,511	1,505	1,250
EAST NORTH CENTRAL:												
Ohio	1,016	996	944	775	127	135	195	203	889	861	749	572
Indiana	1,431	1,452	1,675	1,098	103	102	163	151	1,328	1,350	1,512	947
Illinois	2,092	2,095	2,637	1,256	115	119	198	165	2,877	1,976	2,439	1,091
Michigan	1,510	1,387	1,358	1,028	34	32	60	53	1,476	1,355	1,298	975
Wisconsin	1,073	1,136	1,001	803	96	77	123	92	977	1,059	968	711
WEST NORTH CENTRAL:												
Minnesota	2,318	2,013	2,089	1,372	67	61	102	77	2,251	1,952	1,987	1,295
Iowa	4,809	4,897	5,223	3,444	85	94	152	146	4,724	4,803	5,071	3,298
Missouri	5,060	3,990	4,746	2,301	58	59	113	89	5,002	3,931	4,633	2,212
North Dakota	946	672	746	372	15	20	41	29	931	652	705	343
South Dakota	745	731	661	467	15	18	41	31	730	693	620	436
Nebraska	1,778	1,562	1,402	876	39	33	81	79	1,739	1,529	1,321	797
Kansas	3,471	3,265	2,616	1,847	53	54	126	100	3,418	3,211	2,490	1,747
SOUTH ATLANTIC:												
Delaware	44	42	48	51	(3)	1	1	1	44	41	47	50
Maryland	175	168	169	153	2	1	1	4	173	167	168	149
District of Columbia	1	1	(3)	(3)	1	1	(3)	(3)	------	------	------	------
Virginia	695	753	683	337	26	15	26	19	669	738	657	318
West Virginia	411	366	383	298	11	5	10	13	400	361	373	285
North Carolina	1,128	1,106	1,039	625	33	25	30	22	1,095	1,081	1,009	603
South Carolina	646	799	538	393	13	10	10	9	633	789	528	384
Georgia	1,089	1,216	1,207	776	24	21	38	25	1,065	1,195	1,169	751
Florida	74	126	122	84	12	15	21	17	62	111	101	67
EAST SOUTH CENTRAL:												
Kentucky	2,351	2,343	1,600	993	20	34	42	47	2,331	2,309	1,558	946
Tennessee	2,251	2,690	1,416	1,076	5	6	13	15	2,246	2,684	1,403	1,061
Alabama	874	881	945	484	10	6	12	8	864	875	933	476
Mississippi	1,011	902	939	453	1	2	5	8	1,010	900	934	445
WEST SOUTH CENTRAL:												
Arkansas	2,210	2,406	1,965	1,042	14	13	24	19	2,196	2,393	1,941	1,023
Louisiana	939	440	445	183	3	2	5	3	936	438	440	180
Oklahoma	3,115	3,036	2,617	1,363	15	20	38	27	3,100	3,016	2,579	1,336
Texas	5,829	5,805	5,217	3,263	46	51	88	85	5,783	5,754	5,129	3,178
MOUNTAIN:												
Montana	430	425	283	155	3	2	7	11	427	423	276	144
Idaho	436	346	337	202	3	4	7	5	433	342	330	197
Wyoming	321	251	172	125	1	------	3	------	320	251	169	125
Colorado	743	841	503	320	4	5	6	5	739	836	497	315
New Mexico	175	164	114	65	------	2	6	2	175	162	108	63
Arizona	51	59	49	35	4	4	5	2	47	55	44	33
Utah	60	65	62	45	6	5	7	3	54	60	55	42
Nevada	52	25	40	25	8	7	9	7	44	18	31	18
PACIFIC:												
Washington	1,194	1,084	1,094	363	25	23	26	29	1,169	1,061	1,068	334
Oregon	1,268	1,325	958	323	14	17	27	20	1,254	1,308	931	303
California	2,613	2,429	1,908	666	48	39	51	45	2,565	2,390	1,857	621

[1] Systems operating in more than one State have been assigned to the State in which their operating headquarters are located.
[2] See "Change in classification according to income," p. 2, and Table 7, p. 12.
[3] System operating in District of Columbia treated as part of Maryland system.

TABLE 9.—MILES OF WIRE, ALL SYSTEMS AND LINES, BY INCOME GROUPS,[1] BY GEOGRAPHIC DIVISIONS AND STATES: 1912 TO 1927

DIVISION AND STATE	TOTAL				REPORTING ANNUAL INCOMES OF [1]—							
					$10,000 or more		$5,000 or more		Less than $10,000		Less than $5,000	
	1927	1922	1917	1912	1927	1922	1917	1912	1927	1922	1917	1912
UNITED STATES	63,836,182	37,265,958	28,827,188	20,248,326	62,277,246	35,502,983	27,298,026	19,019,391	1,558,936	1,762,975	1,529,162	1,228,935
GEOGRAPHIC DIVISIONS:												
New England	5,586,569	3,346,608	2,383,580	1,545,252	5,566,475	3,323,627	2,365,292	1,523,273	20,094	22,981	18,288	21,979
Middle Atlantic	19,992,689	10,818,580	7,338,055	5,035,019	19,918,626	10,707,160	7,246,573	4,949,078	74,063	111,420	91,482	85,941
East North Central	15,223,410	8,763,146	7,137,419	4,645,218	14,872,380	8,354,549	6,801,515	4,353,416	351,030	408,597	335,904	291,802
West North Central	6,044,901	4,487,007	3,934,372	2,932,578	5,519,539	3,931,043	3,450,826	2,530,833	525,362	555,964	483,546	401,745
South Atlantic	4,244,852	2,448,857	1,735,286	1,121,458	4,137,014	2,308,856	1,608,351	1,016,144	107,838	140,001	126,935	105,314
East South Central	2,001,125	1,248,559	1,107,025	977,694	1,886,545	1,120,373	952,613	896,912	114,580	128,186	124,412	80,782
West South Central	3,619,976	2,148,789	1,912,756	1,312,553	3,409,117	1,911,177	1,686,562	1,152,823	210,859	237,612	226,194	159,730
Mountain	1,198,550	927,662	725,512	558,450	1,139,265	869,089	683,950	525,976	59,285	58,573	41,562	32,474
Pacific	5,924,110	3,076,750	2,553,183	2,120,104	5,828,285	2,977,169	2,472,344	2,070,936	95,825	99,641	80,839	49,168
NEW ENGLAND:												
Maine	326,120	210,707	176,983	141,687	315,503	199,732	168,633	132,127	10,617	10,975	8,350	9,560
New Hampshire	211,448	134,326	110,691	75,917	208,679	130,597	107,588	72,350	2,769	3,729	3,103	3,567
Vermont	105,645	78,991	67,355	54,756	99,881	72,205	61,510	48,387	5,764	6,768	5,845	6,369
Massachusetts	3,165,833	1,908,091	1,353,251	863,426	3,164,957	1,907,195	1,352,395	861,107	876	896	856	2,319
Rhode Island	429,451	213,713	161,075	102,906	429,451	213,713	161,075	102,906				
Connecticut	1,348,072	800,780	514,225	306,560	1,348,004	800,185	514,091	306,396	68	595	134	164
MIDDLE ATLANTIC:												
New York	11,592,418	6,121,696	4,154,657	2,790,060	11,564,627	6,083,246	4,118,929	2,758,352	27,791	38,450	35,728	31,708
New Jersey	3,012,459	1,523,354	1,002,075	644,984	3,010,591	1,520,457	999,262	642,190	1,868	2,897	2,813	2,794
Pennsylvania	5,387,812	3,173,530	2,181,323	1,599,975	5,343,408	3,103,457	2,128,382	1,548,536	44,404	70,073	52,941	51,439
EAST NORTH CENTRAL:												
Ohio	3,658,505	2,415,187	1,906,635	1,161,032	3,595,160	2,344,614	1,849,165	1,109,216	63,345	70,573	57,470	51,816
Indiana	1,558,005	1,058,314	933,261	667,839	1,489,194	977,123	857,579	602,740	68,811	81,191	75,682	65,099
Illinois	5,688,146	3,060,595	2,564,910	1,689,074	5,596,426	2,959,690	2,478,371	1,608,428	91,720	100,905	86,539	80,646
Michigan	2,967,217	1,390,945	1,072,651	728,184	2,918,468	1,332,920	1,025,710	689,671	48,749	58,025	46,941	38,513
Wisconsin	1,351,537	838,105	659,962	399,089	1,273,132	740,202	590,690	343,361	78,405	97,903	69,272	55,728
WEST NORTH CENTRAL:												
Minnesota	1,422,716	1,147,278	1,058,989	653,479	1,321,492	1,053,015	985,128	597,883	101,224	94,263	73,861	55,596
Iowa	960,226	757,600	650,513	504,101	867,482	657,735	550,957	419,672	92,744	99,865	99,556	84,429
Missouri	1,988,764	1,247,503	1,119,048	874,334	1,885,418	1,132,061	1,005,139	779,712	103,346	115,442	113,909	94,622
North Dakota	140,923	124,873	105,820	76,174	103,143	93,844	76,865	58,512	37,780	31,029	28,955	17,662
South Dakota	154,601	108,414	104,208	73,921	124,771	75,675	78,184	51,164	29,830	32,739	26,024	22,757

Nebraska	606,425	514,374	448,807	393,319	544,345	444,908	398,685	349,646	62,080	69,466	50,122	43,673
Kansas	771,246	586,965	446,987	357,250	672,888	473,805	355,868	274,244	98,358	113,160	91,119	83,006
SOUTH ATLANTIC:												
Delaware	118,539	93,891	75,196	48,632	118,093	93,441	74,483	48,037	446	450	713	595
Maryland	936,353	540,089	354,588	228,744	933,503	536,204	352,077	225,476	2,850	3,885	2,511	3,268
District of Columbia	540,152	314,636	162,032	126,279	540,152	314,636	162,032	126,279				
Virginia	615,286	379,093	271,549	161,136	591,769	351,119	248,422	142,023	23,517	27,974	23,127	19,113
West Virginia	349,899	226,739	179,357	112,954	329,401	201,894	155,685	94,397	20,498	24,845	23,702	18,557
North Carolina	392,455	199,594	148,348	109,110	369,763	165,878	115,622	82,537	22,692	33,716	32,726	26,573
South Carolina	171,678	126,284	97,916	73,712	158,673	110,910	85,952	62,781	13,005	15,374	11,964	10,931
Georgia	538,751	390,382	314,273	206,591	517,596	363,066	288,273	185,737	21,155	27,316	26,000	20,854
Florida	581,739	178,149	131,997	54,300	578,064	171,708	125,805	48,877	3,675	6,441	6,192	5,423
EAST SOUTH CENTRAL:												
Kentucky	722,120	467,781	386,107	352,544	681,738	425,675	348,946	324,212	40,382	42,106	37,161	28,332
Tennessee	642,096	399,932	368,678	287,685	597,626	347,926	320,598	256,959	44,470	52,006	48,080	30,726
Alabama	421,927	229,934	206,585	152,849	404,479	213,901	185,089	140,123	17,448	16,033	21,496	12,726
Mississippi	214,982	150,912	145,655	184,616	202,702	132,871	127,980	175,618	12,280	18,041	17,675	8,998
WEST SOUTH CENTRAL:												
Arkansas	318,868	219,398	170,105	141,014	293,310	186,329	142,508	119,765	25,558	33,069	27,597	21,249
Louisiana	560,262	256,372	196,917	138,905	552,655	248,749	189,708	135,248	7,607	7,623	7,209	3,657
Oklahoma	655,102	424,005	334,533	211,175	602,174	368,834	281,753	170,055	52,928	55,171	52,780	41,120
Texas	2,085,744	1,249,014	1,211,201	821,459	1,960,978	1,107,265	1,072,593	727,755	124,766	141,749	138,608	93,704
MOUNTAIN:												
Montana	135,536	120,725	94,666	54,259	123,600	107,339	85,745	47,172	11,936	13,386	8,921	7,087
Idaho	111,940	105,027	81,745	58,205	103,190	96,522	74,011	52,394	8,750	8,505	7,734	5,811
Wyoming	60,622	50,223	30,435	20,368	52,308	42,956	24,938	15,634	8,314	7,267	5,497	4,734
Colorado	559,873	412,816	312,326	261,987	541,413	395,173	301,756	254,588	18,460	17,643	10,570	7,399
New Mexico	48,765	37,428	31,963	22,492	43,812	31,808	27,874	20,418	4,953	5,620	4,089	2,074
Arizona	89,305	55,518	39,455	18,621	86,182	53,152	38,299	17,193	3,123	2,366	1,156	1,428
Utah	167,393	129,193	120,938	112,726	165,203	126,127	118,288	109,678	2,190	3,066	2,650	3,048
Nevada	25,116	16,732	13,984	9,792	23,557	16,012	13,039	8,899	1,559	720	945	893
PACIFIC:												
Washington	739,138	533,515	429,718	487,079	710,709	505,005	403,414	470,350	28,429	28,510	26,304	16,729
Oregon	490,820	368,342	275,191	272,481	466,569	341,554	251,523	257,718	24,251	26,788	23,668	14,763
California	4,694,152	2,174,893	1,848,274	1,360,544	4,651,007	2,130,550	1,817,407	1,342,868	43,145	44,343	30,867	17,676

[1] See "Change in classification according to income," p. 2, and Table 7, p. 12.

TABLE 10.—NUMBER OF TELEPHONES, ALL SYSTEMS AND LINES, BY INCOME GROUPS,[1] BY GEOGRAPHIC DIVISIONS AND STATES: 1912 TO 1927

DIVISION AND STATE	TOTAL				REPORTING ANNUAL INCOMES OF [1]—							
					$10,000 or more		$5,000 or more		Less than $10,000		Less than $5,000	
	1927	1922	1917	1912	1927	1922	1917	1912	1927	1922	1917	1912
UNITED STATES	18, 522, 767	14, 347, 395	11, 716, 520	8, 729, 592	16, 712, 495	12, 295, 234	9, 953, 710	7, 326, 748	1, 810, 272	2, 052, 161	1, 762, 810	1, 402, 844
GEOGRAPHIC DIVISIONS:												
New England	1, 548, 931	1, 223, 497	878, 354	625, 488	1, 527, 779	1, 197, 433	856, 658	600, 207	21, 152	26, 064	21, 696	25, 281
Middle Atlantic	4, 588, 211	3, 249, 710	2, 444, 205	1, 782, 145	4, 488, 761	3, 112, 921	2, 332, 774	1, 675, 681	99, 450	136, 789	111, 431	106, 464
East North Central	4, 589, 751	3, 693, 101	3, 158, 989	2, 378, 257	4, 161, 039	3, 179, 335	2, 745, 921	2, 020, 802	428, 712	513, 766	413, 068	357, 455
West North Central	2, 594, 081	2, 315, 996	2, 119, 735	1, 621, 523	1, 908, 505	1, 597, 239	1, 500, 091	1, 109, 359	685, 576	718, 757	619, 644	512, 164
South Atlantic	1, 262, 222	937, 324	739, 631	531, 402	1, 144, 802	791, 707	604, 704	428, 311	117, 420	145, 617	134, 927	103, 091
East South Central	644, 270	521, 120	436, 853	337, 292	515, 850	379, 996	309, 636	261, 294	128, 420	141, 124	127, 217	75, 998
West South Central	1, 149, 357	872, 157	740, 004	543, 102	939, 254	632, 352	504, 929	387, 022	210, 103	239, 805	235, 075	156, 080
Mountain	456, 198	385, 730	307, 627	226, 652	417, 504	344, 443	277, 893	204, 508	38, 694	41, 287	29, 734	22, 144
Pacific	1, 689, 746	1, 148, 760	891, 122	683, 731	1, 609, 001	1, 059, 808	821, 104	639, 564	80, 745	88, 952	70, 018	44, 167
NEW ENGLAND:												
Maine	131, 367	113, 725	88, 226	68, 914	120, 565	101, 786	78, 111	57, 988	10, 802	11, 939	10, 115	10, 926
New Hampshire	83, 066	68, 874	52, 534	40, 017	79, 466	64, 909	49, 536	36, 052	3, 600	3, 965	2, 998	3, 965
Vermont	60, 793	54, 530	47, 968	40, 142	55, 066	46, 182	40, 611	31, 498	5, 727	8, 348	7, 357	8, 644
Massachusetts	897, 888	687, 700	475, 231	329, 992	866, 955	686, 731	474, 427	328, 593	933	969	804	1, 489
Rhode Island	114, 944	92, 766	64, 726	41, 664	114, 944	92, 766	64, 726	41, 664				
Connecticut	290, 873	205, 902	149, 669	104, 759	290, 783	205, 059	149, 247	104, 502	90	843	422	257
MIDDLE ATLANTIC:												
New York	2, 595, 537	1, 780, 563	1, 335, 055	970, 449	2, 552, 546	1, 722, 653	1, 283, 892	923, 136	42, 991	57, 910	51, 253	47, 313
New Jersey	599, 336	383, 496	254, 444	185, 632	597, 304	379, 303	251, 519	182, 419	2, 032	4, 193	2, 925	3, 213
Pennsylvania	1, 393, 338	1, 085, 651	854, 706	626, 064	1, 338, 911	1, 010, 965	797, 453	570, 126	54, 427	74, 686	57, 253	55, 938
EAST NORTH CENTRAL:												
Ohio	1, 122, 036	962, 837	845, 649	631, 206	1, 048, 890	874, 133	774, 122	567, 573	73, 146	88, 704	71, 527	63, 633
Indiana	552, 249	503, 726	458, 992	354, 550	457, 240	389, 100	366, 928	274, 291	95, 009	119, 626	92, 064	80, 259
Illinois	1, 685, 690	1, 283, 449	1, 070, 997	807, 253	1, 560, 845	1, 145, 616	952, 964	704, 230	124, 845	137, 833	118, 033	103, 623
Michigan	711, 315	508, 140	434, 128	335, 074	654, 887	445, 739	380, 200	288, 154	56, 428	62, 401	53, 928	46, 920
Wisconsin	518, 461	429, 949	349, 223	250, 174	439, 177	324, 747	271, 707	186, 554	79, 284	105, 202	77, 516	63, 620
WEST NORTH CENTRAL:												
Minnesota	487, 611	424, 777	408, 222	272, 359	382, 815	329, 542	325, 977	208, 340	104, 796	95, 235	82, 245	64, 019
Iowa	565, 533	533, 347	489, 432	380, 294	392, 127	346, 880	320, 757	242, 963	173, 406	186, 467	168, 675	137, 331
Missouri	657, 946	550, 980	511, 246	404, 150	503, 660	394, 792	365, 463	285, 472	154, 286	156, 188	145, 783	118, 678
North Dakota	86, 198	77, 586	75, 349	51, 241	51, 114	47, 588	47, 613	32, 915	35, 084	29, 998	27, 736	18, 326

South Dakota	107, 641	101, 555	88, 946	65, 858	74, 723	59, 905	58, 237	39, 299	32, 918	41, 650	30, 709	26, 559
Nebraska	295, 274	273, 500	248, 267	201, 689	230, 049	206, 144	195, 942	156, 619	65, 225	67, 356	52, 325	45, 070
Kansas	393, 878	354, 251	298, 273	245, 932	274, 017	212, 388	186, 102	143, 751	119, 861	141, 863	112, 171	102, 181
SOUTH ATLANTIC:												
Delaware	28, 901	23, 534	22, 222	15, 842	28, 396	22, 972	21, 625	15, 210	505	562	596	632
Maryland	197, 135	153, 790	118, 397	84, 801	194, 070	150, 298	115, 154	81, 686	3, 065	3, 492	3, 243	3, 115
District of Columbia	144, 985	102, 231	70, 751	46, 603	144, 985	102, 231	70, 751	46, 603	----------	----------	----------	----------
Virginia	183, 698	155, 490	119, 597	76, 652	155, 453	120, 627	93, 704	59, 968	28, 245	34, 863	25, 893	19, 684
West Virginia	146, 677	116, 081	99, 530	80, 251	117, 199	85, 381	66, 021	55, 033	29, 478	30, 700	33, 509	25, 218
North Carolina	160, 507	116, 129	91, 928	65, 152	138, 859	85, 161	61, 551	41, 177	21, 618	30, 968	30, 377	23, 975
South Carolina	64, 616	54, 078	43, 716	33, 239	54, 198	41, 505	31, 835	24, 871	10, 418	12, 573	11, 881	8, 368
Georgia	173, 410	136, 334	124, 479	96, 436	152, 029	110, 347	99, 654	78, 864	21, 381	25, 987	24, 825	17, 572
Florida	162, 293	79, 657	49, 011	32, 426	159, 583	73, 185	44, 408	27, 899	2, 710	6, 472	4, 603	4, 527
EAST SOUTH CENTRAL:												
Kentucky	222, 735	201, 545	162, 843	130, 751	175, 573	150, 373	121, 324	100, 174	47, 162	51, 172	41, 519	30, 577
Tennessee	220, 559	171, 413	140, 669	104, 353	174, 540	118, 992	96, 357	78, 717	46, 019	52, 421	44, 312	25, 636
Alabama	121, 115	84, 401	76, 693	56, 292	99, 240	64, 820	53, 000	44, 144	21, 875	19, 581	23, 693	12, 148
Mississippi	79, 861	63, 761	56, 648	45, 896	66, 497	45, 811	38, 955	38, 259	13, 364	17, 950	17, 693	7, 637
WEST SOUTH CENTRAL:												
Arkansas	118, 178	99, 490	87, 872	68, 303	89, 556	66, 785	56, 072	45, 743	28, 622	32, 705	31, 800	22, 560
Louisiana	137, 610	87, 354	63, 890	46, 602	130, 851	81, 071	57, 869	43, 906	6, 759	6, 283	6, 021	2, 696
Oklahoma	278, 912	222, 889	176, 835	116, 217	210, 822	148, 602	105, 072	65, 215	68, 090	74, 287	71, 763	51, 002
Texas	614, 657	462, 424	411, 407	311, 980	508, 025	335, 894	285, 916	232, 158	106, 632	126, 530	125, 491	79, 822
MOUNTAIN:												
Montana	59, 238	55, 115	51, 409	35, 537	51, 396	46, 666	45, 067	31, 188	7, 842	8, 449	6, 342	4, 349
Idaho	54, 822	48, 745	37, 204	29, 454	46, 823	40, 442	30, 126	23, 475	7, 999	8, 303	7, 078	5, 979
Wyoming	28, 049	24, 949	15, 774	9, 946	23, 777	20, 846	12, 624	7, 471	4, 272	4, 103	3, 150	2, 475
Colorado	183, 250	150, 652	114, 364	90, 397	171, 354	138, 513	107, 160	85, 886	11, 896	12, 139	7, 204	4, 511
New Mexico	21, 580	18, 342	15, 314	10, 346	18, 613	14, 357	13, 124	9, 047	2, 967	3, 985	2, 190	1, 299
Arizona	33, 194	24, 353	18, 225	11, 224	32, 140	23, 318	17, 394	10, 128	1, 054	1, 035	831	1, 096
Utah	63, 106	53, 261	46, 621	34, 064	61, 111	50, 448	44, 087	32, 018	1, 995	2, 813	2, 534	2, 046
Nevada	12, 959	10, 313	8, 716	5, 684	12, 290	9, 853	8, 311	5, 295	669	460	405	389
PACIFIC:												
Washington	299, 109	238, 275	188, 407	150, 016	271, 786	207, 431	162, 754	134, 040	27, 323	30, 844	25, 653	15, 976
Oregon	185, 171	146, 847	125, 660	99, 713	160, 497	118, 455	103, 623	84, 923	24, 674	28, 392	22, 037	14, 790
California	1, 205, 466	763, 638	577, 055	434, 002	1, 176, 718	733, 922	554, 727	420, 601	28, 748	29, 716	22, 328	13, 401

[1] See "Change in classification according to income," p. 2, and Table 7, p. 12.

TABLE 11.—PER CENT OF INCREASE OR DECREASE IN MILES OF WIRE AND IN NUMBER OF TELEPHONES, ALL SYSTEMS AND LINES, GROUPED ACCORDING TO ANNUAL INCOME,[1] BY GEOGRAPHIC DIVISIONS AND STATES: 5-YEAR AND 10-YEAR PERIODS, 1917 TO 1927

DIVISION AND STATE	MILES OF WIRE FOR SYSTEMS AND LINES—									NUMBER OF TELEPHONES FOR SYSTEMS AND LINES—								
	Total			Reporting annual incomes of $10,000 or more for 1927 and 1922, and of $5,000 or more for 1917 [1]			Reporting annual incomes of less than $10,000 for 1927 and 1922, and of less than $5,000 for 1917 [1]			Total			Reporting annual income of $10,000 or more for 1927 and 1922, and of $5,000 or more for 1917 [1]			Reporting annual incomes of less than $10,000 for 1927 and 1922, and of less than $5,000 for 1917 [1]		
	1917–1927	1922–1927	1917–1922	1917–1927	1922–1927	1917–1922	1917–1927	1922–1927	1917–1922	1917–1927	1922–1927	1917–1922	1917–1927	1922–1927	1917–1922	1917–1927	1922–1927	1917–1922
UNITED STATES	121.4	71.3	29.3	128.1	75.4	30.1	1.9	−11.6	15.3	58.1	29.1	22.5	67.9	35.9	23.5	2.7	−11.8	16.4
GEOGRAPHIC DIVISIONS:																		
New England	134.4	66.9	40.4	135.3	67.5	40.5	9.9	−12.6	25.7	76.3	26.6	39.3	78.3	27.6	39.8	−2.5	−18.8	20.1
Middle Atlantic	172.5	84.8	47.4	174.9	86.0	47.8	−19.0	−33.5	21.8	87.7	41.2	33.0	92.4	44.2	33.4	−10.8	−27.3	22.8
East North Central	113.3	73.7	22.8	118.7	78.0	22.8	4.5	−14.1	21.6	45.3	24.3	16.9	51.5	30.9	15.8	3.8	−16.6	24.4
West North Central	53.6	34.7	14.0	59.9	40.4	13.9	8.6	−5.5	15.0	22.4	12.0	9.3	27.2	19.5	6.5	10.6	−4.6	16.0
South Atlantic	144.6	73.3	41.1	157.2	79.2	43.6	−15.0	−23.0	10.3	70.7	34.7	26.7	89.3	44.6	30.9	−13.0	−19.4	7.9
East South Central	80.8	60.3	12.8	92.0	68.4	14.0	−7.9	−10.6	3.0	47.5	23.6	19.3	66.6	35.8	22.7	.9	−9.0	10.9
West South Central	89.3	68.5	12.3	102.1	78.4	13.3	−6.8	−11.3	5.0	55.3	31.8	17.9	86.0	48.5	25.2	−10.6	−12.4	2.0
Mountain	65.2	29.2	27.9	66.6	31.1	27.1	42.6	1.2	40.9	48.3	18.3	25.4	50.2	21.2	23.9	30.1	−6.3	38.9
Pacific	132.0	92.5	20.5	135.7	95.8	20.4	18.5	−3.8	23.3	89.6	47.1	28.9	96.0	51.8	29.1	15.3	−9.2	27.0
NEW ENGLAND:																		
Maine	84.3	54.8	19.1	87.1	58.0	18.4	27.1	−3.3	31.4	48.9	15.5	28.9	54.4	18.4	30.3	6.8	−9.5	18.0
New Hampshire	91.0	57.4	21.4	94.0	59.8	21.4	−10.8	−25.7	20.2	58.1	20.6	31.1	60.4	22.4	31.0	20.1	−9.2	32.3
Vermont	56.8	33.7	17.3	62.4	38.3	17.4	−1.4	−14.8	15.8	26.7	11.5	13.7	35.6	19.2	13.7	−22.2	−31.4	13.5
Massachusetts	133.9	65.9	41.0	134.0	65.9	41.0	2.3	−2.2	4.7	82.6	26.2	44.7	82.7	26.2	44.7	16.0	−3.7	20.5
Rhode Island	166.6	100.9	32.7	166.6	100.9	32.7	------	------	------	77.6	23.9	43.3	77.6	23.9	43.3	------	------	------
Connecticut	162.2	68.3	55.7	162.2	68.5	55.7	−49.3	−88.6	344.0	94.3	41.3	37.6	94.8	41.8	37.4	−78.7	−89.3	99.8
MIDDLE ATLANTIC:																		
New York	179.0	89.4	47.3	180.8	90.1	47.7	−22.2	−27.7	7.6	94.4	45.8	33.4	98.8	48.2	34.2	−16.1	−25.8	13.0
New Jersey	200.6	97.8	52.0	201.3	98.0	52.2	−33.6	−35.5	3.0	135.5	56.3	50.7	137.5	57.5	50.8	−30.5	−51.5	43.4
Pennsylvania	147.0	69.8	45.5	151.1	72.2	45.8	−16.1	−36.6	32.4	63.0	28.3	27.0	67.9	32.4	26.8	−4.9	−27.1	30.4
EAST NORTH CENTRAL:																		
Ohio	91.9	51.5	26.7	94.4	53.3	26.8	10.2	−10.2	22.8	32.7	16.5	13.9	35.5	20.0	12.9	2.3	−17.5	24.0
Indiana	66.9	47.2	13.4	73.7	52.4	13.9	−9.1	−15.2	7.3	20.3	8.6	10.8	24.6	17.5	6.0	3.2	−20.6	29.9
Illinois	121.8	85.9	19.3	125.8	89.1	19.4	6.0	−9.1	16.6	57.4	31.3	19.8	63.8	36.2	20.2	5.8	−9.4	16.8
Michigan	176.6	113.3	29.7	184.5	119.0	30.0	3.9	−16.0	23.6	63.8	40.0	17.0	72.2	46.9	17.2	4.6	−9.6	15.7
Wisconsin	104.8	61.3	27.0	115.5	72.0	25.3	13.2	−19.9	41.3	48.5	20.6	23.1	61.6	35.2	19.5	2.3	−24.6	35.7

West North Central:																		
Minnesota	34.3	24.0	8.3	34.1	25.5	6.9	37.0	7.4	27.6	19.4	14.8	4.1	17.4	16.2	1.1	27.4	10.0	15.8
Iowa	47.6	26.7	16.5	57.5	31.9	19.4	−6.8	−7.1	.3	15.5	6.0	9.0	22.3	13.0	8.1	2.8	−7.0	10.5
Missouri	77.7	59.4	11.5	87.6	66.5	12.6	−9.3	−10.5	1.3	28.7	19.4	7.8	37.8	27.6	8.0	5.8	−1.2	7.1
North Dakota	33.2	12.9	18.0	34.2	9.9	22.1	30.5	21.8	7.2	14.4	11.1	3.0	7.4	7.4	−.1	26.5	17.0	8.2
South Dakota	48.4	42.6	4.0	59.6	64.9	−3.2	14.6	−8.9	25.8	21.0	6.0	14.2	28.3	24.7	2.9	7.2	−21.0	35.6
Nebraska	35.1	17.9	14.6	36.5	22.4	11.6	23.9	−10.6	38.6	18.9	8.0	10.2	17.4	11.6	5.2	24.7	−3.2	28.7
Kansas	72.5	31.4	31.3	89.1	42.0	33.1	7.9	−13.1	24.2	32.1	11.2	18.8	47.2	29.0	14.1	6.9	−15.5	26.5
South Atlantic:																		
Delaware	57.6	26.3	24.9	58.6	26.4	25.5	−37.4	−.9	−36.9	30.1	22.8	5.9	31.3	23.6	6.2	−15.3	−10.1	−5.7
Maryland	164.1	73.4	52.3	165.1	74.1	52.3	13.5	−26.6	54.7	66.5	28.2	29.9	68.5	29.1	30.5	−5.5	−12.2	7.7
District of Columbia	233.4	71.7	94.2	233.4	71.7	94.2	------	------	------	104.9	41.8	44.5	104.9	41.8	44.5	------	------	------
Virginia	126.6	62.3	39.6	138.2	68.5	41.3	1.7	−15.9	21.0	53.6	18.1	30.0	65.9	28.9	28.7	9.1	−19.0	34.6
West Virginia	95.1	54.3	26.4	111.6	63.2	29.7	−13.5	−17.5	4.8	47.4	26.4	16.6	77.5	37.3	29.3	−12.0	−4.0	−8.4
North Carolina	164.6	96.6	34.5	219.8	122.9	43.5	−30.7	−32.7	3.0	74.6	38.2	26.3	125.6	63.1	38.4	−28.8	−30.2	1.9
South Carolina	75.3	35.9	29.0	84.6	43.1	29.0	8.7	−15.4	28.5	47.8	19.5	23.7	70.2	30.6	30.4	−12.3	−17.1	5.8
Georgia	71.4	38.0	24.2	79.6	42.6	25.9	−18.6	−22.6	5.1	39.3	27.2	9.5	52.6	37.8	10.7	−13.9	−17.7	4.7
Florida	340.7	226.5	35.0	359.5	236.7	36.5	−40.6	−42.9	4.0	231.1	103.7	62.5	259.4	118.1	64.8	−41.1	−58.1	40.6
East South Central:																		
Kentucky	87.0	54.4	21.2	95.4	60.2	22.0	8.7	−4.1	13.3	36.8	10.5	23.8	44.7	16.8	23.9	13.6	−7.8	23.2
Tennessee	74.2	60.6	8.5	86.4	71.8	8.5	−7.5	−14.5	8.2	56.8	28.7	21.9	81.1	46.7	23.5	3.9	−12.2	18.3
Alabama	104.2	83.5	11.3	118.5	89.1	15.6	−18.8	8.8	−25.4	57.9	43.5	10.0	87.2	53.1	22.3	−7.7	11.7	−17.4
Mississippi	47.6	42.5	3.6	58.4	52.6	3.8	−30.5	−31.9	2.1	41.0	25.3	12.6	70.7	45.2	17.6	−24.5	−25.5	1.5
West South Central:																		
Arkansas	87.5	45.3	29.0	105.8	57.4	30.7	−7.4	−22.7	19.8	34.5	18.8	13.2	59.7	34.1	19.1	−10.0	−12.5	2.8
Louisiana	184.5	118.5	30.2	191.3	122.2	31.1	5.5	−.2	5.7	115.4	57.5	36.7	126.1	61.4	40.1	12.3	7.6	4.4
Oklahoma	95.8	54.5	26.7	113.7	63.3	30.9	.3	−4.1	4.5	57.7	25.1	26.0	100.6	41.9	41.4	−5.1	−8.3	3.5
Texas	72.2	67.0	3.1	82.8	77.1	3.2	−10.0	−12.0	2.3	49.4	32.9	12.4	77.7	51.2	17.5	−15.0	−15.7	.8
Mountain:																		
Montana	43.2	12.3	27.5	44.1	15.1	25.2	33.8	−10.8	50.1	15.2	7.5	7.2	14.0	10.1	3.5	23.7	−7.2	33.2
Idaho	36.9	6.6	28.5	39.4	6.9	30.4	13.1	2.9	10.0	47.4	12.5	31.0	55.4	15.8	34.2	13.0	−3.7	17.3
Wyoming	99.2	20.7	65.0	109.8	21.8	72.3	51.2	14.4	32.2	77.8	12.4	58.2	88.3	14.1	65.1	35.6	4.1	30.3
Colorado	79.3	35.6	32.2	79.4	37.0	31.0	74.6	4.6	66.9	60.2	21.6	31.7	59.9	23.7	29.3	65.1	−2.0	68.5
New Mexico	52.6	30.3	17.1	57.2	37.7	14.1	21.1	−11.9	37.4	40.9	17.7	19.8	41.8	29.6	9.4	35.5	−25.5	82.0
Arizona	126.3	60.9	40.7	125.0	62.1	38.8	170.2	32.0	104.7	82.1	36.3	33.6	84.8	37.8	34.1	26.8	1.8	24.5
Utah	38.4	29.6	6.8	39.7	31.0	6.6	−17.4	−28.6	15.7	35.4	18.5	14.2	38.6	21.1	14.4	−21.3	−29.1	11.0
Nevada	79.6	50.1	19.7	80.7	47.1	22.8	65.0	116.5	−23.8	48.7	25.7	18.3	47.9	24.7	18.6	65.2	45.4	13.6
Pacific:																		
Washington	72.0	38.5	24.2	76.2	40.7	25.2	8.1	−.3	8.4	58.8	25.5	26.5	67.0	31.0	27.5	6.5	−11.4	20.2
Oregon	78.4	33.3	33.8	85.5	36.6	35.8	2.5	−9.5	13.2	47.4	26.1	16.9	54.9	35.5	14.3	12.0	−13.1	28.8
California	154.0	115.8	17.7	155.9	118.3	17.2	39.8	−2.7	43.7	108.9	57.9	32.3	112.1	60.3	32.3	28.8	−3.3	33.1

[1] See "Change in classification according to income," p. 2, and Table 7, p. 12.

TABLE 12.—PER CENT DISTRIBUTION, MILES OF WIRE AND NUMBER OF TELEPHONES, ALL SYSTEMS AND LINES, GROUPED ACCORDING TO ANNUAL INCOME,[1] BY GEOGRAPHIC DIVISIONS AND STATES: 1927, 1922, AND 1917

DIVISION AND STATE	MILES OF WIRE									NUMBER OF TELEPHONES								
	Total			Systems and lines reporting incomes of [1]—						Total			Systems and lines reporting incomes of [1]—					
				$10,000 or more		$5,000 or more	Less than $10,000		Less than $5,000				$10,000 or more		$5,000 or more	Less than $10,000		Less than $5,000
	1927	1922	1917	1927	1922	1917	1927	1922	1917	1927	1922	1917	1927	1922	1917	1927	1922	1917
UNITED STATES	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GEOGRAPHIC DIVISIONS:																		
New England	8.8	9.0	8.3	8.9	9.4	8.7	1.3	1.3	1.2	8.3	8.5	7.5	9.1	9.7	8.6	1.2	1.3	1.2
Middle Atlantic	31.3	29.0	25.5	32.0	30.2	26.5	4.8	6.3	6.0	24.8	22.7	20.9	26.9	25.3	23.4	5.5	6.7	6.3
East North Central	23.8	23.5	24.8	23.9	23.5	24.9	22.5	23.2	22.0	24.8	25.7	27.0	24.9	25.9	27.6	23.7	25.0	23.4
West North Central	9.5	12.0	13.6	8.9	11.1	12.6	33.7	31.5	31.6	14.0	16.1	18.1	11.4	13.0	15.1	37.9	35.0	35.2
South Atlantic	6.6	6.6	6.0	6.6	6.5	5.9	6.9	7.9	8.3	6.8	6.5	6.3	6.9	6.4	6.1	6.5	7.1	7.7
East South Central	3.1	3.4	3.8	3.0	3.2	3.6	7.3	7.3	8.1	3.5	3.6	3.7	3.1	3.1	3.1	7.1	6.9	7.2
West South Central	5.7	5.8	6.6	5.5	5.4	6.2	13.5	13.5	14.8	6.2	6.1	6.3	5.6	5.1	5.1	11.6	11.7	13.3
Mountain	1.9	2.5	2.5	1.8	2.4	2.5	3.8	3.3	2.7	2.5	2.7	2.6	2.5	2.8	2.8	2.1	2.0	1.7
Pacific	9.3	8.3	8.9	9.4	8.4	9.1	6.2	5.7	5.3	9.1	8.0	7.6	9.6	8.6	8.2	4.4	4.3	4.0
NEW ENGLAND:																		
Maine	.5	.6	.6	.5	.6	.6	.7	.6	.5	.7	.8	.8	.7	.8	.8	.6	.6	.6
New Hampshire	.3	.4	.4	.3	.4	.4	.1	.2	.2	.4	.5	.4	.5	.5	.5	.2	.2	.2
Vermont	.2	.2	.2	.1	.2	.2	.4	.4	.4	.3	.4	.4	.3	.4	.4	.3	.4	.4
Massachusetts	5.0	5.1	4.7	5.1	5.4	5.0	.1	.1	.1	4.7	4.8	4.0	5.2	5.6	4.8	.1	(2)	(2)
Rhode Island	.7	.6	.6	.7	.6	.6				.6	.6	.6	.7	.8	.6			
Connecticut	2.1	2.1	1.8	2.2	2.2	1.9	(2)	(2)	(2)	1.6	1.4	1.3	1.7	1.7	1.5	(2)	(2)	(2)
MIDDLE ATLANTIC:																		
New York	18.2	16.4	14.4	18.6	17.1	15.1	1.8	2.2	2.3	14.0	12.4	11.4	15.3	14.0	12.9	2.4	2.8	2.9
New Jersey	4.7	4.1	3.5	4.8	4.3	3.6	.1	.2	.2	3.3	2.7	2.2	3.6	3.1	2.5	.1	.2	.2
Pennsylvania	8.4	8.5	7.6	8.6	8.7	7.8	2.9	4.0	3.5	7.5	7.6	7.3	8.0	8.2	8.0	3.0	3.6	3.2
EAST NORTH CENTRAL:																		
Ohio	5.7	6.5	6.6	5.8	6.6	6.8	4.1	4.0	3.8	6.1	6.7	7.2	6.3	7.1	7.8	4.1	4.3	4.0
Indiana	2.5	2.8	3.2	2.4	2.8	3.1	4.4	4.6	4.9	3.0	3.5	3.9	2.7	3.2	3.7	5.2	5.8	5.2
Illinois	8.9	8.2	8.9	9.0	8.3	9.1	5.9	5.7	5.7	9.1	8.9	9.2	9.4	9.3	9.6	6.9	6.7	6.7
Michigan	4.6	3.7	3.7	4.7	3.8	3.8	3.1	3.3	3.1	3.8	3.5	3.7	3.9	3.6	3.8	3.1	3.0	3.1
Wisconsin	2.1	2.3	2.3	2.0	2.1	2.2	5.0	5.6	4.5	2.8	3.0	3.0	2.6	2.6	2.7	4.4	5.1	4.4

West North Central:																		
Minnesota	2.3	3.1	3.7	2.1	3.0	3.6	6.5	5.3	4.8	2.6	3.0	3.5	2.3	2.7	3.3	5.8	4.6	4.7
Iowa	1.5	2.0	2.2	1.4	1.9	2.0	6.0	5.7	6.5	3.1	3.7	4.2	2.4	2.8	3.2	9.7	9.1	9.6
Missouri	3.1	3.3	3.9	3.0	3.2	3.7	6.6	6.5	7.4	3.5	3.8	4.4	3.0	3.2	3.7	8.5	7.6	8.3
North Dakota	.2	.3	.4	.2	.3	.3	2.4	1.8	1.9	.5	.5	.6	.3	.4	.5	1.9	1.5	1.5
South Dakota	.2	.3	.4	.2	.2	.3	1.9	1.9	1.7	.6	.7	.8	.4	.5	.6	1.8	2.0	1.7
Nebraska	1.0	1.4	1.5	.9	1.2	1.5	4.0	3.9	3.3	1.6	1.9	2.1	1.4	1.7	2.0	3.6	3.3	3.0
Kansas	1.2	1.6	1.5	1.1	1.3	1.3	6.3	6.4	6.0	2.1	2.5	2.5	1.6	1.7	1.9	6.6	6.9	6.4
South Atlantic:																		
Delaware	.2	.3	.3	.2	.3	.3	(2)	(2)	(2)	.1	.2	.2	.2	.2	.2	(2)	(2)	(2)
Maryland	1.5	1.5	1.2	1.5	1.5	1.3	.2	.2	.2	1.1	1.1	1.0	1.2	1.2	1.2	.2	.2	.2
District of Columbia	.8	.8	.6	.9	.9	.6	----	----	----	.8	.7	.6	.9	.8	.7	----	----	----
Virginia	1.0	1.0	.9	.9	1.0	.9	1.5	1.6	1.5	1.0	1.1	1.0	.9	1.0	.9	1.6	1.7	1.5
West Virginia	.5	.6	.6	.5	.6	.6	1.3	1.4	1.5	.8	.8	.8	.7	.7	.7	1.6	1.5	1.9
North Carolina	.6	.5	.5	.6	.5	.4	1.5	1.9	2.1	.9	.8	.8	.8	.7	.6	1.2	1.5	1.7
South Carolina	.3	.3	.3	.3	.3	.3	.8	.9	.8	.3	.4	.4	.3	.3	.3	.6	.6	.7
Georgia	.8	1.1	1.1	.8	1.0	1.0	1.4	1.5	1.7	.9	.9	1.1	.9	.9	1.0	1.2	1.3	1.4
Florida	.9	.5	.5	.9	.5	.5	.2	.4	.4	.9	.6	.4	1.0	.6	.4	.1	.3	.3
East South Central:																		
Kentucky	1.1	1.3	1.3	1.1	1.2	1.3	2.6	2.4	2.4	1.2	1.4	1.4	1.1	1.2	1.2	2.6	2.5	2.4
Tennessee	1.0	1.1	1.3	1.0	1.0	1.2	2.8	3.0	3.1	1.2	1.2	1.2	1.0	1.0	1.0	2.6	2.6	2.5
Alabama	.7	.6	.7	.6	.6	.7	1.1	.9	1.4	.7	.6	.6	.6	.5	.5	1.2	1.0	1.3
Mississippi	.3	.4	.5	.3	.4	.4	.8	1.0	1.2	.4	.4	.5	.4	.4	.4	.7	.9	1.0
West South Central:																		
Arkansas	.5	.6	.6	.5	.5	.5	1.6	1.9	1.8	.6	.7	.7	.5	.5	.6	1.6	1.6	1.8
Louisiana	.9	.7	.7	.9	.7	.7	.5	.4	.5	.8	.6	.5	.8	.7	.6	.4	.3	.3
Oklahoma	1.0	1.1	1.2	1.0	1.0	1.0	3.4	3.1	3.4	1.5	1.6	1.5	1.3	1.2	1.0	3.7	3.6	4.1
Texas	3.3	3.4	4.2	3.1	3.1	3.9	8.0	8.0	9.1	3.3	3.2	3.5	3.0	2.7	2.9	5.9	6.2	7.1
Mountain:																		
Montana	.2	.3	.3	.2	.3	.3	.8	.8	.6	.3	.4	.4	.3	.4	.5	.4	.4	.4
Idaho	.2	.3	.3	.1	.3	.3	.6	.5	.5	.3	.3	.3	.3	.3	.3	.4	.4	.4
Wyoming	.1	.1	.1	.1	.1	.1	.5	.4	.3	.2	.2	.1	.1	.2	.1	.2	.2	.2
Colorado	.9	1.1	1.1	.9	1.1	1.1	1.2	1.0	.7	1.0	1.1	1.0	1.0	1.1	1.1	.7	.6	.4
New Mexico	.1	.1	.1	.1	.1	.1	.3	.3	.3	.1	.1	.1	.1	.1	.1	.2	.2	.1
Arizona	.1	.2	.1	.1	.1	.1	.2	.1	.1	.2	.2	.2	.2	.2	.2	.1	.1	(2)
Utah	.3	.3	.4	.3	.4	.4	.1	.2	.2	.3	.4	.4	.4	.4	.4	.1	.2	.1
Nevada	(2)	.1	(2)	(2)	(2)	(2)	.1	(2)	.1	.1	.1	.1	.1	.1	.1	(2)	(2)	(2)
Pacific:																		
Washington	1.1	1.4	1.5	1.2	1.4	1.5	1.8	1.6	1.7	1.6	1.7	1.6	1.6	1.7	1.6	1.5	1.5	1.5
Oregon	.8	1.0	1.0	.7	1.0	.9	1.6	1.5	1.5	1.0	1.0	1.1	1.0	1.0	1.0	1.3	1.4	1.2
California	7.4	5.8	6.4	7.5	6.0	6.7	2.8	2.5	2.0	6.5	5.3	4.9	7.0	6.0	5.6	1.6	1.4	1.3

[1] See "Change in classification according to income," p. 2, and Table 7, p. 12.
[2] Less than one-tenth of 1 per cent.

TABLE 13.—SUMMARY—TELEPHONE AND TELEGRAPH SYSTEMS: 1902 TO 1927

	Census year	Total	Telephones [1]	Telegraphs [2]	PER CENT OF TOTAL	
					Telephones	Telegraphs
Number of systems and lines	1927	60, 173	60, 148	25	-------	-------
	1922	57, 278	57, 253	25	-------	-------
	1917	53, 262	53, 234	28	99.9	0.1
	1912	32, 261	32, 233	28	99.9	.1
	1907	22, 998	22, 971	27	99.9	.1
	1902	9, 161	9, 136	25	99.7	.3
Miles of single wire	1927	65, 983, 004	63, 836, 182	[3] 2, 146, 822	96.7	3.3
	1922	39, 119, 208	37, 265, 958	[3] 1, 853, 250	95.3	4.7
	1917	30, 717, 433	28, 827, 188	[3] 1, 890, 245	93.8	6.2
	1912	22, 062, 522	20, 248, 326	[3] 1, 814, 196	91.8	8.2
	1907	14, 577, 325	12, 999, 364	1, 577, 961	89.2	10.8
	1902	6, 218, 801	4, 900, 451	1, 318, 350	78.8	21.2
Ocean cable, nautical miles	1927	105, 893	-------	105, 893	-------	100.0
	1922	76, 711	-------	76, 711	-------	100.0
	1917	71, 251	-------	71, 251	-------	100.0
	1912	67, 676	-------	67, 676	-------	100.0
	1907	46, 301	-------	46, 301	-------	100.0
	1902	16, 677	-------	16, 677	-------	100.0
Number of employees	1927	456, 770	375, 272	81, 498	82.2	17.8
	1922	380, 647	312, 015	68, 632	82.0	18.0
	1917	327, 352	262, 629	64, 723	80.2	19.8
	1912	228, 172	183, 361	[4] 44, 811	80.4	19.6
	1907	172, 203	144, 169	28, 034	83.7	16.3
	1902	106, 379	78, 752	27, 627	74.0	26.0
Salaries and wages	1927	$586, 117, 427	$486, 597, 070	$99, 520, 357	83.0	17.0
	1922	429, 087, 496	352, 925, 570	76, 161, 926	82.3	17.7
	1917	219, 434, 650	175, 670, 449	43, 764, 201	80.1	19.9
	1912	121, 005, 535	96, 040, 541	[4] 24, 964, 994	79.4	20.6
	1907	86, 087, 376	68, 279, 127	17, 808, 249	79.3	20.7
	1902	51, 295, 294	36, 255, 621	15, 039, 673	70.7	29.3
Revenue, operating [5]	1927	1, 201, 162, 663	1, 023, 573, 567	177, 589, 096	85.2	14.8
	1922	812, 373, 494	665, 568, 279	146, 805, 215	81.9	18.1
	1917	489, 819, 495	382, 829, 752	106, 989, 743	78.2	21.8
	1912	304, 879, 273	244, 476, 264	60, 403, 009	80.2	19.8
	1907	223, 142, 947	177, 887, 760	45, 255, 187	79.7	20.3
	1902	117, 951, 738	82, 651, 169	35, 300, 569	70.1	29.9
Investment in plant and equipment.	1927	3, 975, 573, 458	3, 548, 874, 716	426, 698, 742	89.3	10.7
	1922	2, 531, 845, 010	2, 205, 183, 150	326, 661, 860	87.1	12.9
	1917	1, 735, 687, 447	1, 492, 329, 015	243, 358, 432	86.0	14.0
	1912	1, 303, 479, 973	1, 081, 433, 227	222, 046, 746	83.0	17.0
	1907	1, 030, 462, 967	820, 417, 008	210, 045, 959	79.6	20.4
	1902	550, 957, 811	389, 278, 232	161, 679, 579	70.7	29.3

[1] For the items "Number of systems and lines" and "Miles of single wire," the statistics comprise data for all systems and lines. For the other items the exclusions are as follows: The figures for 1912 and 1907 exclude data for systems and lines reporting annual incomes of less than $5,000, and those for 1902 exclude data for "farmer and rural lines." (See "Change in classification according to income," p. 2.)

[2] Not including wireless-telegraph systems. The Western Union Telegraph Co., which operated both land and ocean-cable systems, is counted as two companies.

[3] Exclusive of data for wire owned and operated wholly by railway companies, as follows: For 1927, 333,898 miles; for 1922, 285,002 miles; for 1917, 344,110 miles; and for 1912, 314,329 miles.

[4] Includes 7,516 messengers, whose wages were not separately reported and are not, therefore, included in the figure for salaries and wages.

[5] The figures for telephone companies include data for miscellaneous operating revenues and assessments by mutual companies.

CHAPTER III.—EQUIPMENT AND TRAFFIC

Equipment reported.—At the censuses for 1922 and 1917 the larger companies were required to report mileage of wire, pole line, and phantom circuit [1] and numbers of central offices or public exchanges, private-branch exchanges, and telephone instruments. The same items were reported for 1912, with the exception of mileage of phantom circuit. At the census for 1927, however, the inquiries regarding pole line, phantom circuit,[1] and private-branch exchanges were discontinued, but detailed data were required for overhead-wire mileage—in cable and not in cable—on exchange and on toll circuits, and for numbers of residence telephones on all systems and lines. As already explained (see "Collection of the data," p. 1), the smaller systems and lines—those having incomes of less than $10,000 in 1927 and 1922 and those with incomes below $5,000 in prior census years—reported mileage of wire and number of telephones and indicated whether central offices were operated. No information was obtained prior to 1927 as to the number of central offices operated by each of these small companies; but, since in the great majority of cases each company operated only one central office, the number of companies reporting central offices has been assumed to represent substantially the number of central offices. It is probable, however, that in a few cases a small company had more than one central office, and to the extent to which this was true the number of central offices shown for such companies is less than the actual number. At the census for 1927, however, the number of central offices operated was reported.

Wire mileage (Tables 14–17).—A large proportion of the mileage of telephone wire is carried in cables, and to a large extent these cables in cities are in underground conduits. In reporting mileage of wire in cables the length of each individual wire was included. The larger systems made a distribution of wire mileage according to whether used for exchange or for toll circuits and whether overhead (in cable and not in cable) or underground. The smaller systems made no such distribution, but, although a small proportion of the wire operated by them was undoubtedly toll wire, the inclusion of the total reported by these small systems as overhead wire on exchange circuits has little effect on the accuracy of the statistics.

Telephones (Tables 14, 19, 20, and 22).—The term "telephone" as here used refers to the complete instrument or set, consisting of transmitter, receiver, and associated parts. The number of telephones is almost invariably a matter of record or can readily be ascertained. The figures for this item are therefore fairly accurate. The number reported represents telephones wired for general service on December 31 and therefore does not include those used exclusively within hotels and mercantile or other commercial or private buildings for connections with different rooms, departments, etc., and having no connection with outside exchanges, and also does not include telephones belonging to railway, police, and fire-alarm systems, etc.

"Central offices" (Tables 14 and 31).—For census purposes a "central office" or "public exchange" is defined as a place or office in which lines for the use of the general public are interconnected by means of a switchboard. As already explained, the numbers of central offices shown for the smaller systems are fairly accurate for 1927, but are to a slight degree understated for 1922. (See tabular

[1] "A phantom circuit is an extra circuit obtained without use of additional line wires by special interconnection of the 4 wires forming 2 existing physical circuits."

statement, p. 10, and "Equipment reported," on this page.) The numbers of central offices reported for 1927 and earlier census years are shown in Table 5.

Number of "originating calls" (Tables 18, 20, 21, 23, and 24).—Systems and lines having incomes of $10,000 or more in 1927 and 1922 were requested to report the "estimated total number of telephone connections or calls, both completed and uncompleted, *orginating* during the year from telephones owned and operated by the company reporting." Both the Bell System and the larger non-Bell systems ordinarily make actual counts of their calls at least as often as one day in each month, and their estimates, therefore, may be considered as fairly close approximations to accuracy. The smaller companies were also called upon for estimates, but their figures have a wider margin of probable error, since these companies do not, as a rule, make periodical counts of their calls. Nevertheless, inasmuch as the calls of the small companies, as estimated by them for 1927, constituted only about one-thirteenth or less than eight per cent of the total for all companies (see Table 1), it is not likely that the margin of error contained in that total, as given in Table 1 and in the tabular statement on page 10, is very greatly in excess of the margin of error in the total for the large companies alone.

Although the schedules called for information in regard to "originating calls" only, there is no doubt that a small number of calls over the lines of the smaller systems were also reported by the larger systems performing switchboard service for them. This results in some slight duplication in the total number of calls reported by all systems.

The estimates of originating calls made both by the large and by the small companies were in many cases stated, not in the round numbers in which approximations are usually shown, but in exact-appearing figures, and therefore the totals obtained by the addition of the estimates made by the individual companies are also in exact-appearing figures. It should be borne in mind in making use of these figures that, despite their appearance of exactness, they probably do not correctly represent any number more nearly exact than round billions for the country as a whole, or round millions or tens or hundreds of millions for individual States.

Exchange and toll calls (Tables 18 and 21).—Calls originating and terminating within central offices of a local area are counted as exchange calls, and those which involve any interchange of business between separate companies or between different localities, and which are therefore subject to toll charges, are counted as long-distance or toll calls. The distribution of originating calls as exchange or as long-distance or toll was reported for 1927 and 1922 only by those companies having incomes of $10,000 or more and for 1917 and earlier years only by those companies with incomes of $5,000 or more. Although toll business was done by some of the smaller systems, the great majority of their calls were exchange messages. In classifying as exchange or toll all calls on systems and lines with incomes below $10,000 in 1927 and 1922 and on those with incomes below $5,000 in 1917 and earlier years have been treated as exchange calls.

Number of originating calls per telephone per day (Table 20).—The numbers of originating calls per telephone per day, for 1927, 1922, and 1917, as shown in Table 20, are based on the actual number of telephones reported as in use on December 31 of each year, and on the assumption that a year's traffic is equivalent to 325 full days' traffic, due allowance being made for the decreased use of the telephone on Sundays and holidays.

Per capita figures (Tables 22, 23, and 24).—In calculating the numbers of telephones per 1,000 population and the numbers of originating calls per capita, estimates of population have been used. The estimates for 1907 were computed by distributing the increase shown between the censuses for 1900 and 1910 in

even annual amounts, and those for 1912 and 1917 were similarly computed by distributing the increase between 1910 and 1920. The estimates for 1922 and 1927 for the United States as a whole were based on birth, death, immigration, and emigration figures, and the annual increases thus estimated were distributed among the several States, with the exceptions noted below, according to the percentages which their increases formed of the total increase in the United States between 1910 and 1920. In the cases of those States which took censuses in 1925, the State figures for that year and the Federal census figures for 1920 were used. In the cases of those States which reported decreases in population between 1910 and 1920 and which took no censuses in 1925, the 1920 figures were used in lieu of estimates for 1922 and 1927; and for those States which took censuses in 1925 and which reported decreases between 1920 and 1925, the 1920 figures were used in lieu of estimates for 1922 and the 1925 figures were used in lieu of estimates for 1927.

TABLE 14.—EQUIPMENT—WIRE MILEAGE, CENTRAL OFFICES, AND TELEPHONES, ALL SYSTEMS AND LINES, GROUPED ACCORDING TO ANNUAL INCOME:[1] 1912 TO 1927

	1927	1922	1917	1912
All systems and lines:				
Miles of wire	63, 836, 182	37, 265, 958	28, 827, 188	20, 248, 326
Number of central offices	20, 227	[2] 19, 260	[2] 21, 175	[3] 11, 515
Number of telephones	18, 522, 767	14, 347, 395	11, 716, 520	8, 729, 592
Systems reporting annual incomes of $10,000 or more, 1927 and 1922, and those reporting $5,000 or more, 1917 and 1912:				
Miles of wire	62, 277, 246	35, 502, 983	27, 298, 026	19, 019, 391
Number of central offices	11, 485	10, 666	12, 294	11, 515
Number of telephones	16, 712, 495	12, 205, 234	9, 953, 710	7, 326, 748
Systems and lines reporting annual incomes of less than $10,000, 1927 and 1922, and those reporting less than $5,000, 1917 and 1912:				
Miles of wire	1, 558, 936	1, 762, 975	1, 529, 162	1, 228, 935
Number of central offices	8, 742	[4] 8, 594	[4] 8, 881	(3)
Number of telephones	1, 810, 272	2, 052, 161	1, 762, 810	1, 402, 844

[1] See "Change in classification according to income," p. 2, and Table 7, p. 12.
[2] This number is probably slightly smaller than the actual number of central offices. See note 4.
[3] Not reported for systems and lines having less than $5,000 annual income.
[4] This figure represents the number of systems and lines reporting central offices. The actual number of central offices was probably slightly larger. See "Equipment reported," p. 23.

TABLE 15.—MILES OF WIRE, OVERHEAD AND UNDERGROUND, EXCHANGE AND TOLL, ALL SYSTEMS AND LINES: 1912 TO 1927

	1927	1922	1917	1912
Total	63, 836, 182	37, 265, 958	28, 827, 188	20, 248, 326
Overhead	23, 943, 170	15, 825, 487	13, 978, 008	11, 083, 338
Underground	39, 893, 012	21, 440, 471	14, 849, 180	9, 164, 988
Exchange	55, 840, 231	32, 609, 630	25, 252, 276	17, 565, 110
Overhead [1]	18, 703, 396	12, 787, 226	11, 393, 178	8, 876, 594
Underground	37, 136, 835	19, 882, 404	13, 859, 098	8, 688, 516
Toll	7, 995, 951	4, 596, 328	3, 574, 912	2, 683, 216
Overhead	5, 239, 774	3, 038, 261	2, 584, 830	2, 206, 744
Underground	2, 756, 177	1, 558, 067	990, 082	476, 472

[1] Figures include data for wire not distributed as to overhead and underground nor as to exchange and toll, as follows: Operated by systems and lines with annual incomes of less than $10,000—1927, 1,558,936 miles; 1922, 1,762,975 miles. Operated by systems and lines with annual incomes of less than $5,000—1917, 1,529,162 miles; 1912, 1,228,935 miles.

TABLE 16.—MILES OF WIRE, OVERHEAD (IN CABLE AND NOT IN CABLE) AND UNDERGROUND, EXCHANGE AND TOLL, ALL SYSTEMS AND LINES: 1927

[Distribution of overhead wire not called for on schedules used prior to 1927]

	Total	OVERHEAD			UNDER-GROUND
		Total	In cable	Not in cable	
Total	63, 836, 182	23, 943, 170	16, 104, 272	7, 838, 898	39, 893, 012
Exchange	55, 849, 231	18, 703, 396	13, 752, 008	4, 951, 388	37, 136, 835
Toll	7, 995, 951	5, 239, 774	2, 352, 264	2, 887, 510	2, 756, 177
Bell	56, 819, 036	18, 932, 035	14, 443, 441	4, 488, 594	37, 887, 001
Exchange	49, 279, 379	14, 117, 423	12, 121, 584	1, 995, 839	35, 161, 956
Toll	7, 539, 657	4, 814, 612	2, 321, 857	2, 492, 755	2, 725, 045
Other systems and lines	7, 017, 146	5, 011, 135	1, 660, 831	3, 350, 304	2, 006, 011
Exchange	6, 569, 852	4, 585, 973	1, 630, 424	[1] 2, 955, 549	1, 974, 879
Toll	456, 294	425, 162	30, 407	394, 755	31, 132

[1] Includes data for total wire mileage for systems and lines reporting annual incomes of less than $10,000. A distribution of the data between exchange and toll, overhead (in cable and not in cable) and underground, was not called for on the schedule used for this class of systems and lines; therefore the reported wire mileage has been included as exchange, overhead, not in cable.

TABLE 17.—MILES OF WIRE, OVERHEAD AND UNDERGROUND, ALL SYSTEMS AND LINES: 1902 TO 1927

CENSUS YEAR	Total	Overhead [1]	Underground	PER CENT OF TOTAL	
				Over-head	Under-ground
1927	63, 836, 182	23, 943, 170	39, 893, 012	37. 5	62. 5
1922	37, 265, 958	15, 825, 487	21, 440, 471	42. 5	57. 5
1917	28, 927, 188	13, 978, 008	14, 849, 180	48. 5	51. 5
1912	20, 248, 326	11, 083, 338	9, 164, 988	54. 7	45. 3
1907	12, 999, 364	8, 009, 332	4, 990, 032	61. 6	38. 4
1902	4, 900, 451	3, 200, 409	1, 700, 042	65. 3	34. 7

[1] Figures for 1927 and 1922 include data for wire operated by systems and lines reporting annual incomes of less than $10,000, and those for 1917 and 1912, data for that operated by systems and lines reporting incomes of less than $5,000. (See "Change in classification according to income," p. 2, and Table 7, p. 12.) Figures for 1907 and 1902 include data for wire operated by farmer and rural lines.

TABLE 18.—ORIGINATING CALLS,[1] EXCHANGE AND TOLL, SYSTEMS REPORTING ANNUAL INCOMES OF $10,000 OR MORE, 1922 AND 1927, AND THOSE REPORTING $5,000 OR MORE, 1902 TO 1917[2]

CENSUS YEAR	Total	Exchange	Toll	PER CENT OF TOTAL	
				Ex-change	Toll
1927	29, 196, 387, 446	28, 109, 396, 549	1, 086, 990, 897	96. 3	3. 7
1922	21, 001, 387, 070	21, 235, 459, 861	665, 927, 209	97. 0	3. 0
1917	19, 809, 061, 085	19, 366, 111, 091	442, 949, 994	97. 8	2. 2
1912	13, 735, 658, 245	13, 394, 885, 442	340, 772, 803	97. 5	2. 5
1907	10, 400, 433, 958	10, 160, 630, 944	239, 803, 014	97. 7	2. 3
1902 [3]	5, 070, 554, 553	4, 949, 849, 709	120, 704, 844	97. 6	2. 4

[1] See "Number of 'originating calls,'" p. 24.
[2] See "Change in classification according to income," p. 2, and Table 7, p. 12.
[3] Figures represent numbers reported by all systems which had central offices or exchanges.

TABLE 19.—TELEPHONES—NUMBER, BY GEOGRAPHIC DIVISIONS AND STATES, THE BELL SYSTEM AND OTHER SYSTEMS REPORTING ANNUAL INCOMES OF $10,000 OR MORE, 1927 AND 1922, AND THOSE REPORTING $5,000 OR MORE, 1917

DIVISION AND STATE	TOTAL			BELL SYSTEM			OTHER SYSTEMS		
	1927	1922	1917	1927	1922	1917	1927	1922	1917
UNITED STATES	16,712,495	12,295,234	9,953,710	13,726,056	9,514,813	7,326,858	2,986,439	2,780,421	2,626,852
GEOGRAPHIC DIVS:									
New England	1,527,779	1,197,433	856,658	1,453,469	1,135,359	827,407	74,310	62,074	29,251
Middle Atlantic	4,488,761	3,112,921	2,332,774	3,980,241	2,703,858	1,952,501	508,520	409,063	380,173
E. N. Central	4,161,039	3,179,335	2,745,921	3,177,753	2,255,352	1,714,650	983,286	923,983	1,031,271
W. N. Central	1,908,505	1,597,239	1,500,091	1,158,441	771,453	781,254	750,064	825,786	718,837
South Atlantic	1,144,802	791,707	604,704	951,422	651,271	500,697	193,380	140,436	104,007
E. S. Central	515,850	379,996	309,636	443,609	279,804	222,109	72,241	100,192	87,527
W. S. Central	939,254	632,352	504,929	787,547	481,904	376,900	151,707	150,448	128,029
Mountain	417,504	344,443	277,893	391,510	320,661	257,653	25,994	23,782	20,240
Pacific	1,609,001	1,059,808	821,104	1,382,064	915,151	693,587	226,937	144,657	127,517
NEW ENGLAND:									
Maine	120,565	101,786	78,111	88,437	74,891	69,471	32,128	26,895	8,640
New Hampshire	79,466	64,909	49,536	61,430	50,932	45,913	18,036	13,977	3,623
Vermont	55,066	46,182	40,611	37,168	31,162	29,105	17,898	15,020	11,506
Massachusetts	866,955	686,731	474,427	864,951	683,386	470,174	2,004	3,345	4,253
Rhode Island	114,944	92,766	64,726	112,868	91,271	64,726	2,076	1,495	-------
Connecticut	290,783	205,059	149,247	288,615	203,717	148,018	2,168	1,342	1,229
MIDDLE ATLANTIC:									
New York	2,552,545	1,722,653	1,283,802	2,329,131	1,561,017	1,159,659	223,415	161,636	124,143
New Jersey	597,304	379,303	251,519	582,710	368,439	238,172	14,594	10,864	13,347
Pennsylvania	1,338,911	1,010,965	797,453	1,068,400	774,402	554,770	270,511	236,563	242,683
E. N. CENTRAL:									
Ohio	1,048,890	874,133	774,122	748,874	600,173	381,677	300,016	273,960	392,445
Indiana	457,240	389,100	366,928	227,218	193,114	176,769	230,022	195,986	190,159
Illinois	1,560,845	1,145,616	952,964	1,293,340	898,235	725,767	267,505	247,381	227,197
Michigan	654,887	445,739	380,200	587,228	338,718	260,711	67,659	107,021	119,489
Wisconsin	439,177	324,747	271,707	321,093	225,112	189,726	118,084	99,635	101,981
W. N. CENTRAL:									
Minnesota	382,815	329,542	325,977	195,402	170,676	173,696	187,413	158,966	152,281
Iowa	392,127	346,880	320,757	227,555	177,151	195,295	164,572	169,729	125,462
Missouri	503,660	394,792	365,463	414,683	179,664	176,124	88,977	215,128	189,339
North Dakota	51,114	47,588	47,613	34,820	22,637	28,647	16,294	24,951	18,966
South Dakota	74,723	59,905	58,237	21,865	20,706	13,059	52,858	39,199	45,178
Nebraska	230,049	206,144	195,942	107,028	102,527	83,992	123,021	103,617	111,950
Kansas	274,017	212,388	186,102	157,088	98,192	110,441	116,929	114,196	75,661
SOUTH ATLANTIC:									
Delaware	28,396	22,972	21,626	28,396	22,972	19,231	-------	-------	2,395
Maryland	194,070	150,208	115,154	193,520	150,268	114,769	550	30	385
Dist. Columbia	144,985	102,231	70,751	144,985	102,231	70,751	-------	-------	-------
Virginia	155,453	120,627	93,704	122,912	97,991	74,845	32,541	22,636	18,859
West Virginia	117,199	85,381	66,021	103,885	77,147	53,631	13,314	8,234	12,390
North Carolina	138,339	85,161	61,551	81,208	35,874	40,374	57,681	49,287	21,177
South Carolina	54,198	41,505	31,835	44,922	32,726	27,126	9,276	8,779	4,709
Georgia	152,029	110,347	99,654	136,723	97,512	79,016	15,306	12,835	20,638
Florida	159,583	73,185	44,408	94,871	34,550	20,954	64,712	38,635	23,454
E. S. CENTRAL:									
Kentucky	175,573	150,373	121,324	139,653	76,490	61,551	35,920	73,883	59,773
Tennessee	174,540	118,992	96,357	148,413	100,823	77,984	26,127	18,169	18,373
Alabama	99,240	64,820	53,000	92,094	59,410	47,440	7,146	5,410	5,560
Mississippi	66,497	45,811	38,955	63,449	43,081	35,134	3,048	2,730	3,821
W. S. CENTRAL:									
Arkansas	89,556	66,785	56,072	73,535	55,843	41,986	16,021	10,942	14,086
Louisiana	130,851	81,071	57,869	128,995	78,788	54,014	1,856	2,283	3,855
Oklahoma	210,822	148,602	105,072	184,698	134,161	89,047	26,124	14,441	16,025
Texas	508,025	335,894	285,916	400,319	213,112	191,853	107,706	122,782	94,063
MOUNTAIN:									
Montana	51,396	46,666	45,067	48,057	43,992	41,117	3,339	2,674	3,950
Idaho	46,823	40,442	30,126	36,476	31,863	26,455	10,347	8,579	3,671
Wyoming	23,777	20,846	12,624	22,902	19,583	11,879	875	1,263	745
Colorado	171,354	138,513	107,160	168,442	135,635	105,599	2,912	2,878	1,621
New Mexico	18,613	14,357	13,124	17,835	13,441	11,310	778	916	1,814
Arizona	32,140	23,318	17,394	30,638	21,877	15,825	1,502	1,441	1,569
Utah	61,111	50,448	44,087	58,824	47,831	41,814	2,287	2,617	2,273
Nevada	12,290	9,863	8,311	8,336	6,439	3,714	3,954	3,414	4,597
PACIFIC:									
Washington	271,786	207,431	162,754	227,756	174,007	130,225	44,030	33,424	32,519
Oregon	160,497	118,455	103,623	135,085	98,143	75,631	25,412	20,307	27,992
California	1,176,718	733,922	554,727	1,019,223	642,996	487,721	157,495	90,926	67,006

TABLE 20.—TELEPHONES, ORIGINATING CALLS,[1] AND CALLS PER TELEPHONE PER DAY, BY GEOGRAPHIC DIVISIONS AND STATES, SYSTEMS REPORTING ANNUAL INCOMES OF $10,000 OR MORE, 1927 AND 1922, AND THOSE REPORTING $5,000 OR MORE, 1917

DIVISION AND STATE	NUMBER OF TELEPHONES [2]			NUMBER OF ORIGINATING CALLS [1]			Per telephone per day [3]		
	1927	1922	1917	1927	1922	1917	1927	1922	1917
UNITED STATES	16,712,495	12,295,234	9,953,710	29,196,387,446	21,901,387,070	19,809,061,085	5.4	5.5	6.1
GEOG. DIVS.:									
New England	1,527,779	1,197,433	856,658	2,301,676,289	1,871,150,190	1,491,798,705	4.6	4.8	5.4
Mid. Atlantic	4,488,761	3,112,921	2,332,774	6,772,613,874	4,659,783,310	3,759,253,241	4.6	4.6	5.0
E. N. Central	4,161,039	3,179,335	2,745,921	6,981,577,447	5,360,088,497	5,459,843,328	5.2	5.2	6.1
W. N. Central	1,908,505	1,597,239	1,500,091	3,696,289,582	3,167,016,446	3,080,583,974	6.0	6.1	6.3
South Atlantic	1,144,802	791,707	604,704	2,243,313,956	1,603,096,379	1,409,721,700	6.0	6.2	7.2
E. S. Central	515,850	379,996	309,636	1,375,680,620	1,078,012,779	962,576,140	8.2	8.7	9.6
W. S. Central	939,254	632,352	504,929	2,384,074,349	1,666,025,307	1,515,971,215	7.8	8.1	9.2
Mountain	417,504	344,443	277,893	667,480,457	572,907,641	500,269,587	4.9	5.1	5.5
Pacific	1,609,001	1,059,808	821,104	2,773,671,872	1,923,306,521	1,629,043,194	5.3	5.6	6.1
NEW ENGLAND:									
Maine	120,565	101,786	78,111	200,983,841	170,660,169	144,507,158	5.1	5.2	5.7
N. Hampshire	79,466	64,909	49,536	112,022,352	98,099,726	87,351,473	4.3	4.6	5.4
Vermont	55,066	46,182	40,611	77,433,892	67,447,558	98,614,464	4.3	4.5	7.5
Massachusetts	866,955	686,731	474,427	1,332,616,591	1,097,990,574	800,057,085	4.7	4.9	5.2
Rhode Island	114,944	92,766	64,726	116,850,532	125,331,921	105,594,600	3.1	4.2	5.0
Connecticut	290,783	205,059	149,247	461,769,081	311,620,242	255,673,925	4.9	4.7	5.3
MID. ATLANTIC:									
New York	2,552,546	1,722,653	1,283,802	3,873,439,628	2,652,808,461	2,101,225,651	4.7	4.7	5.0
New Jersey	597,304	379,303	251,519	771,553,790	467,618,686	335,130,108	4.0	3.8	4.1
Pennsylvania	1,338,911	1,010,965	797,453	2,127,620,456	1,539,356,163	1,322,897,482	4.9	4.7	5.1
E. N. CENTRAL:									
Ohio	1,048,890	874,133	774,122	1,855,333,078	1,433,328,989	1,662,588,046	5.4	5.0	6.6
Indiana	457,240	389,100	366,928	925,289,509	790,838,385	784,487,523	6.2	6.3	6.6
Illinois	1,560,845	1,145,616	952,964	2,417,762,286	1,827,326,484	1,682,589,280	4.8	4.9	5.4
Michigan	654,887	445,739	389,200	1,058,875,335	771,152,117	841,989,847	5.0	5.3	6.8
Wisconsin	439,177	324,747	271,707	724,317,239	537,442,522	488,188,633	5.1	5.1	5.5
W. N. CENTRAL:									
Minnesota	382,815	329,542	325,977	795,292,000	678,216,101	630,210,504	6.4	6.3	5.9
Iowa	392,127	346,880	320,757	700,488,603	582,345,568	634,311,700	5.5	5.2	6.1
Missouri	503,660	394,792	365,463	1,052,378,034	848,767,544	842,595,853	6.4	6.6	7.1
North Dakota	51,114	47,588	47,613	91,328,625	75,696,870	81,705,350	5.5	4.9	5.3
South Dakota	74,723	59,905	58,237	137,645,338	108,275,315	92,113,268	5.7	5.6	4.9
Nebraska	230,049	206,144	195,942	443,746,312	437,458,080	425,428,689	5.9	6.5	6.7
Kansas	274,017	212,388	186,102	475,410,670	436,256,968	374,218,610	5.3	6.3	6.2
S. ATLANTIC:									
Delaware	28,396	22,972	21,626	52,437,096	40,201,236	36,604,568	5.7	5.4	5.2
Maryland	194,070	150,298	115,154	290,556,762	234,499,460	182,654,086	4.6	4.8	4.9
Dist. Col	144,985	102,231	70,751	186,008,388	120,858,120	111,132,636	3.9	3.6	4.8
Virginia	155,453	120,627	93,704	343,212,210	214,681,864	219,957,057	6.8	5.5	7.2
West Virginia	117,199	85,381	66,021	225,440,467	161,015,227	126,701,314	5.9	5.8	5.9
N. Carolina	138,889	85,161	61,551	343,653,164	232,996,454	173,012,977	7.6	8.4	8.6
S. Carolina	54,198	41,505	31,835	129,769,858	106,965,936	94,142,343	7.4	7.9	9.1
Georgia	152,029	110,347	99,654	407,189,901	326,523,807	324,047,185	8.2	9.1	10.0
Florida	159,588	73,185	44,408	265,046,110	165,354,275	141,469,534	5.1	7.0	9.8
E. S. CENTRAL:									
Kentucky	175,573	150,373	121,324	422,841,800	367,902,969	339,414,688	7.4	7.5	8.6
Tennessee	174,540	118,992	96,357	498,752,558	387,958,215	321,450,557	8.8	10.0	10.3
Alabama	99,240	64,820	53,000	291,463,330	198,428,871	175,658,670	9.0	9.4	10.2
Mississippi	66,497	45,811	38,955	162,622,932	123,722,724	126,052,215	7.5	8.3	10.0
W. S. CENTRAL:									
Arkansas	89,556	66,785	56,072	205,679,645	179,778,512	167,274,716	7.1	8.3	9.2
Louisiana	130,851	81,071	57,869	376,690,142	251,351,610	192,731,445	8.9	9.5	10.2
Oklahoma	210,822	148,602	105,072	505,339,497	366,874,478	306,691,645	7.4	7.6	9.0
Texas	508,025	335,894	285,916	1,296,365,065	868,020,707	849,273,409	7.9	8.0	9.1
MOUNTAIN:									
Montana	51,396	46,666	45,067	71,588,487	64,080,206	78,355,645	4.3	4.2	5.4
Idaho	46,823	40,442	36,126	81,714,186	72,809,399	52,878,610	5.4	5.5	5.4
Wyoming	23,777	20,846	12,624	32,922,085	35,394,898	28,912,599	4.3	5.2	7.0
Colorado	171,354	138,513	107,160	277,517,984	229,101,860	182,030,107	5.0	5.1	5.2
New Mexico	18,613	14,357	13,124	32,076,269	26,203,759	25,462,623	5.3	5.6	6.0
Arizona	32,140	23,318	17,394	35,966,009	28,315,177	21,031,654	3.4	3.8	3.7
Utah	61,111	50,448	44,087	117,482,184	100,856,042	99,014,412	5.9	6.2	6.9
Nevada	12,290	9,853	8,311	18,222,253	15,636,300	12,583,937	4.6	4.9	4.7
PACIFIC:									
Washington	271,786	207,431	162,754	517,563,582	400,069,975	328,583,795	5.9	5.9	6.2
Oregon	160,497	118,455	103,623	303,540,278	233,813,936	202,998,735	5.8	6.1	6.0
California	1,176,718	733,922	554,727	1,952,568,012	1,289,422,610	1,097,460,664	5.1	5.4	6.1

[1] See "Number of 'originating calls,'" p. 24.
[2] Number on Dec. 31 of each year.
[3] Computed on the basis of 325 days to the year. (See note 1; see also "Number of originating calls per telephone per day," p. 24.)

TABLE 21.—ORIGINATING CALLS,[1] EXCHANGE AND TOLL, SYSTEMS REPORTING ANNUAL INCOMES OF $10,000 OR MORE, BY GEOGRAPHIC DIVISIONS AND STATES: 1927

DIVISION AND STATE	Total	Exchange	Toll	PER CENT OF TOTAL	
				Exchange	Toll
UNITED STATES	29,196,387,446	28,109,396,549	1,086,990,897	96.3	3.7
GEOGRAPHIC DIVISIONS:					
New England	2,301,676,289	2,188,323,735	113,352,554	95.1	4.9
Middle Atlantic	6,772,613,874	6,298,056,221	474,557,653	93.0	7.0
East North Central	6,981,577,447	6,808,557,510	173,019,937	97.5	2.5
West North Central	3,696,289,582	3,616,711,237	79,578,345	97.8	2.2
South Atlantic	2,243,313,956	2,182,895,515	60,418,441	97.3	2.7
East South Central	1,375,680,620	1,353,124,537	22,556,083	98.4	1.6
West South Central	2,384,074,349	2,341,549,308	42,595,041	98.2	1.8
Mountain	667,489,457	650,774,194	16,715,263	97.5	2.5
Pacific	2,773,871,872	2,669,404,292	104,267,580	96.2	3.8
NEW ENGLAND:					
Maine	200,983,841	193,376,711	7,607,130	96.2	3.8
New Hampshire	112,022,352	106,750,112	5,272,240	95.3	4.7
Vermont	77,433,892	73,808,245	3,625,647	95.3	4.7
Massachusetts	1,332,616,591	1,272,659,879	59,956,712	95.5	4.5
Rhode Island	116,850,532	105,030,200	11,820,332	89.9	10.1
Connecticut	461,769,081	436,698,588	25,070,493	94.6	5.4
MIDDLE ATLANTIC:					
New York	3,873,439,628	3,631,959,634	241,479,994	93.8	6.2
New Jersey	771,553,760	639,865,863	[2] 131,687,927	82.9	[2] 17.1
Pennsylvania	2,127,620,456	2,026,230,724	101,389,732	95.2	4.8
EAST NORTH CENTRAL:					
Ohio	1,855,333,078	1,824,382,356	30,950,722	98.3	1.7
Indiana	925,289,509	909,425,527	15,863,982	98.3	1.7
Illinois	2,417,762,286	2,331,614,472	86,147,814	96.4	3.6
Michigan	1,058,875,335	1,031,762,623	27,112,712	97.4	2.6
Wisconsin	724,317,239	711,372,532	12,944,707	98.2	1.8
WEST NORTH CENTRAL:					
Minnesota	795,292,000	781,612,919	13,679,081	98.3	1.7
Iowa	700,488,603	681,249,756	19,238,847	97.3	2.7
Missouri	1,052,378,034	1,029,695,899	22,682,135	97.8	2.2
North Dakota	91,328,625	88,888,552	2,440,073	97.3	2.7
South Dakota	137,645,338	132,899,162	4,746,176	96.6	3.4
Nebraska	443,746,312	436,540,044	7,206,268	98.4	1.6
Kansas	475,410,670	465,824,905	9,585,765	98.0	2.0
SOUTH ATLANTIC:					
Delaware	52,437,096	50,429,652	2,007,444	96.2	3.8
Maryland	290,556,762	276,285,376	14,271,386	95.1	4.9
District of Columbia	186,008,388	181,624,680	4,383,708	97.6	2.4
Virginia	343,212,210	335,895,382	7,316,828	97.9	2.1
West Virginia	225,440,467	215,559,484	9,880,983	95.6	4.4
North Carolina	343,653,164	336,505,283	7,147,881	97.9	2.1
South Carolina	129,769,858	126,841,656	2,928,202	97.7	2.3
Georgia	407,189,901	401,879,038	5,310,863	98.7	1.3
Florida	265,046,110	257,874,964	7,171,146	97.3	2.7
EAST SOUTH CENTRAL:					
Kentucky	422,841,800	417,358,454	5,483,346	98.7	1.3
Tennessee	498,752,558	491,069,625	7,682,933	98.5	1.5
Alabama	291,463,330	286,470,960	4,992,370	98.3	1.7
Mississippi	162,622,932	158,195,498	4,427,434	97.3	2.7
WEST SOUTH CENTRAL:					
Arkansas	205,679,645	201,582,183	4,117,462	98.0	2.0
Louisiana	376,690,142	371,843,356	4,846,786	98.7	1.3
Oklahoma	505,339,497	492,817,902	12,521,595	97.5	2.5
Texas	1,296,365,065	1,275,325,867	21,039,198	98.4	1.6
MOUNTAIN:					
Montana	71,588,487	69,868,642	1,719,845	96.6	2.4
Idaho	81,714,186	79,371,862	2,342,324	97.1	2.9
Wyoming	32,922,085	32,113,733	808,352	97.5	2.5
Colorado	277,517,984	270,801,487	6,716,497	97.6	2.4
New Mexico	32,076,269	31,501,152	575,117	98.2	1.8
Arizona	35,966,009	34,887,831	1,078,178	97.0	3.0
Utah	117,482,184	114,389,724	3,092,460	97.4	2.6
Nevada	18,222,253	17,839,763	382,490	97.9	2.1
PACIFIC:					
Washington	517,563,582	508,696,453	8,867,129	98.3	1.7
Oregon	303,540,278	297,647,021	5,893,257	98.1	1.9
California	1,952,568,012	1,863,060,818	89,507,194	95.4	4.6

[1] See "Number of 'originating calls,'" p. 24.
[2] The proportion of toll calls in New Jersey is high because of the large volume of toll calls across the Hudson River to New York and across the Delaware River to Philadelphia.

TABLE 22.—TELEPHONES—NUMBER PER 1,000 POPULATION,[1] FOR ALL SYSTEMS AND LINES, BY GEOGRAPHIC DIVISIONS AND STATES: 1907 TO 1927

[The figures in this table are based on the numbers of telephones reported as of Dec. 31 for the specified years, and on population estimated as follows: For the years 1912 and 1907, estimated as of July 1; for the years 1927, 1922, and 1917, estimated as of Jan. 1, 1928, 1923, and 1918, respectively]

DIVISION AND STATE	1927	1922	1917	1912	1907
UNITED STATES	155	130	112	92	70
GEOG. DIVISIONS:					
New England	188	160	120	93	65
Middle Atlantic	183	140	109	89	69
E. N. Central	185	164	158	125	97
W. N. Central	196	181	168	137	111
South Atlantic	79	64	55	42	31
E. S. Central	69	58	48	40	30
W. S. Central	98	82	70	60	42
Mountain	117	109	91	81	65
Pacific	242	192	160	152	105
NEW ENGLAND:					
Maine	165	147	113	92	73
N. Hampshire	183	154	118	92	68
Vermont	172	155	131	113	87
Massachusetts	203	172	125	95	65
Rhode Island	162	149	102	75	47
Connecticut	176	141	117	89	60
MIDDLE ATLANTIC:					
New York	226	165	126	103	80
New Jersey	158	115	83	69	50
Pennsylvania	142	120	98	79	62
E. N. CENTRAL:					
Ohio	166	159	161	126	108
Indiana	175	170	161	129	109
Illinois	229	190	171	138	103
Michigan	156	129	139	111	78
Wisconsin	177	158	137	104	70
W. N. CENTRAL:					
Minnesota	180	171	175	127	86
Iowa	233	217	221	168	149
Missouri	187	160	149	122	96
North Dakota	134	116	97	86	68
South Dakota	154	156	122	111	91
Nebraska	210	206	192	166	132
Kansas	215	198	160	144	123
SOUTH ATLANTIC:					
Delaware	119	103	103	77	64
Maryland	123	103	86	64	52
Dist. of Col.	266	217	190	131	99
Virginia	72	65	54	36	28
West Virginia	86	75	70	63	54
North Carolina	55	44	38	28	18
South Carolina	35	31	26	21	14
Georgia	54	46	43	36	25
Florida	117	77	53	40	25
E. S. CENTRAL:					
Kentucky	87	82	68	56	42
Tennessee	88	72	61	47	33
Alabama	47	35	32	26	20
Mississippi	45	36	28	26	22
W. S. CENTRAL:					
Arkansas	61	55	49	42	33
Louisiana	71	47	34	28	23
Oklahoma	116	104	76	67	48
Texas	113	94	90	77	52
MOUNTAIN:					
Montana	108	91	107	86	51
Idaho	101	105	82	84	59
Colorado	169	153	114	109	91
New Mexico	55	49	36	31	23
Arizona	71	65	68	48	34
Utah	120	113	104	87	88
Wyoming	114	119	84	63	51
Nevada	168	136	77	70	65
PACIFIC:					
Washington	190	167	116	126	102
Oregon	207	180	144	143	83
California	268	204	188	166	112

Based on number of telephones shown in Table 10, p. 16. See "Per capita figures," p. 24.

TABLE 23.—ORIGINATING CALLS—NUMBER PER CAPITA, BY GEOGRAPHIC DIVISIONS, FOR SYSTEMS AND LINES REPORTING ANNUAL INCOMES OF $10,000 OR MORE, 1927 AND 1922, AND FOR THOSE REPORTING $5,000 OR MORE, 1902 TO 1917[1]

[The figures in this table are based on the population estimated as of July 1 of each year. For explanation of method of estimating population, and of differences between per capita figures for 1917 and for earlier years, as given in this report and in preceding reports, see "Per capita figures," p. 24]

DIVISION	1927	1922	1917	1912	1907	1902
United States	246	200	194	144	119	64
New England	281	246	208	120	91	51
Middle Atlantic	272	202	175	121	107	56
East North Central	284	240	264	212	174	105
West North Central	280	248	250	180	148	67
South Atlantic	141	111	104	69	64	33
East South Central	147	120	110	78	90	49
West South Central	205	157	154	118	79	43
Mountain	166	163	159	156	127	55
Pacific	403	325	312	264	196	100

[1] See "Change in classification according to income," p. 2, and Table 7, p. 12.

TABLE 24.—ORIGINATING CALLS—NUMBER PER CAPITA, BY STATES, FOR SYSTEMS AND LINES REPORTING ANNUAL INCOMES OF $10,000 OR MORE, 1927 AND 1922, AND THOSE REPORTING $5,000 OR MORE, 1907 TO 1917 [1]

[The figures in this table are based on the population estimated as of July 1 of each year. For explanation of method of estimating population, and of differences between per capita figures for 1917 and for earlier years, as given in this report and in preceding reports, see "Per capita figures," p. 24. The States are ranked according to the number of calls per capita in 1927]

STATE	1927	1922	1917	1912	1907	STATE	1927	1922	1917	1912	1907
California	440	349	348	277	206	Delaware	216	176	168	130	------
Dist. of Columbia	344	276	271	132	------	Oklahoma	212	173	159	94	77
Oregon	341	288	269	244	140	New Jersey	206	141	112	72	59
New York	339	248	209	138	120	Tennessee	201	163	140	85	108
Washington	331	283	252	248	207	South Dakota	198	167	148	80	114
Illinois	331	273	268	190	154	Louisiana	195	137	109	60	76
Nebraska	318	331	335	240	213	Florida	194	161	155	73	58
Massachusetts	314	276	215	116	93	Maryland	182	157	130	78	------
Missouri	300	247	250	198	144	Kentucky	167	150	142	124	123
Minnesota	296	275	273	195	138	Rhode Island	166	202	179	87	------
Indiana	294	265	273	212	188	Idaho	153	159	131	130	89
Iowa	289	238	269	208	164	North Dakota	142	114	130	84	79
Connecticut	282	215	195	152	------	Wyoming	137	171	159	109	------
Ohio	276	238	302	261	227	Virginia	135	90	98	78	58
Kansas	260	244	214	178	147	West Virginia	133	106	90	81	95
Colorado	258	235	201	199	190	Georgia	128	110	115	77	75
Maine	253	220	190	112	100	North Carolina	119	88	70	40	38
Wisconsin	248	198	191	142	136	Alabama	114	83	77	46	50
New Hampshire	246	220	199	115	86	Arkansas	107	100	98	77	48
Texas	240	179	190	169	94	Montana	100	108	155	179	56
Michigan	236	198	244	231	153	Mississippi	91	69	70	47	70
Nevada	235	202	160	105	96	New Mexico	82	71	72	60	43
Utah	225	215	230	238	------	Arizona	78	78	70	49	57
Vermont	220	191	279	136	101	South Carolina	70	62	57	44	35
Pennsylvania	219	171	157	118	106						

[1] See "Change in classification according to income," p. 2, and Table 7, p. 12.

CHAPTER IV.—COMPARISON OF BELL AND OTHER SYSTEMS; STATISTICS FOR SMALL SYSTEMS AND LINES

A very large proportion of the telephone business of the United States is conducted by a single organization, the American Telephone & Telegraph Co., and its associated companies, commonly known as the Bell System. This system made one consolidated report for its constituent companies, but supplied separate data for its equipment and traffic in each State. (See Tables 29–32.)

Wire mileage and number of telephones are the only items for which satisfactory comparisons between the Bell and all other systems and lines (including those with incomes below $5,000) can be made for years prior to 1917.

The growth of the Bell System and of all other systems during the past 25 years is shown by Table 25. During the 25-year period from 1902 to 1927 the number of telephones reported by the Bell System increased by more than 900 per cent, while the corresponding increase for all other telephone systems was less than 400 per cent. The proportion which the number of telephones reported by the Bell System formed of the total decreased from 55.6 per cent in 1902 to 51.2 in 1907, but thereafter increased to 58.3 per cent in 1912, 62.5 in 1917, 66.3 in 1922, and 74.1 per cent in 1927. In addition to the 13,726,056 telephones operated directly by the Bell System in 1927, there were, according to the annual report of the American Telephone & Telegraph Co., 4,639,430 telephones of other systems and lines which were connected with and received service over the Bell lines. These make a total of 18,365,486 interconnected telephones in the United States.

Bell-controlled companies.—Prior to 1922 the statistics for the Bell System as compiled for census purposes included data for a number of relatively small systems and lines controlled by the constituent Bell companies. The data for these small systems and lines were not, however, included with those for the Bell System as published in the annual reports of the American Telephone & Telegraph Co. and reprinted in other publications. The resultant differences between the census statistics and other published figures relating to the Bell System had given rise to some confusion in the minds of persons making use of these statistics. In subsequent reports, therefore, the Bell-controlled companies have not been treated as a part of the Bell System. The 145 Bell companies for which statistics were shown in the tables for 1917 comprised 37 constituent and 108 controlled companies. As the result of reorganization and changes in ownership the number of constituent companies has been reduced to 25 in 1927, while the number of controlled companies has been reduced to 65. Although these controlled companies far outnumber the constituent companies, they are nevertheless relatively unimportant, and therefore their inclusion with one group or the other has no very great effect on the comparability of the group totals as between one census year and another. In fact, the investment in plant and equipment reported by the controlled companies for 1927 was equal to only 1.7 per cent of the investment reported by the Bell System; and the corresponding percentages for number of telephones and total operating revenues were only 2.4 and 1.5, respectively.

Effect of change in classification according to income.—The change from $5,000 to $10,000 in the minimum income limit of companies from which detailed data were collected (see "Change in classification according to income," p. 2) did not, of course, have any effect on the statistics for the Bell System; but it did materially impair the comparability of the non-Bell statistics for 1922 with those

for earlier years. As will be seen from Table 7, 28.1 per cent of the number of central offices, 17.5 per cent of the number of telephones, 12.6 per cent of the number of originating calls, and 10.1 per cent of the wire mileage for all non-Bell companies having incomes of $5,000 or over in 1917 were reported by companies with incomes from $5,000 to $10,000.

Statistics for small systems and lines.—A distinctive feature of the telephone business is the large number of farmer or rural lines. Although practically always connected with exchanges, these lines are, in many cases, owned jointly by the individuals who have telephones connected with them and not by the companies owning the exchanges. Lack of central ownership, and sometimes even of a definite name, makes it difficult to obtain information in regard to lines of this character. Moreover, it is exceedingly difficult to obtain complete and reliable data or even incomplete data for some of the small telephone exchanges. For these reasons, the statistics for the small systems and lines are less nearly complete than those for the large ones. It is believed, however, that the degree of incompleteness is not sufficient to impair appreciably the value of the statistics given in preceding chapters for the telephone business as a whole.

Table 33 presents, by geographic divisions and States, the principal statistics for systems and lines reporting annual incomes of less than $10,000. These small systems and lines comprise not only the farmer and rural lines but also the systems operating in many small towns and villages.

TABLE 25.—SYSTEMS AND LINES, MILES OF WIRE, AND TELEPHONES, THE BELL SYSTEM AND ALL OTHER SYSTEMS AND LINES: 1902 TO 1927

	Census year	Number of systems and lines	Miles of wire	Number of telephones
All systems and lines	1927	60, 148	63, 836, 182	18, 522, 767
	1922	57, 253	37, 265, 958	14, 347, 395
	1917	53, 234	28, 827, 188	11, 716, 520
	1912	32, 233	20, 248, 326	8, 729, 592
	1907	22, 971	12, 999, 364	6, 118, 578
	1902	9, 136	4, 900, 451	2, 371, 044
Bell System	1927	[1] 25	56, 819, 036	13, 726, 056
	1922	[1] 26	30, 613, 687	9, 514, 813
	1917	145	23, 133, 718	7, 326, 858
	1912	176	15, 133, 186	5, 087, 027
	1907	175	8, 947, 266	3, 132, 063
	1902	44	3, 387, 924	1, 317, 178
All other systems and lines	1927	60, 123	7, 017, 146	4, 796, 711
	1922	57, 227	6, 652, 271	4, 832, 582
	1917	53, 089	5, 693, 470	4, 389, 662
	1912	32, 057	5, 115, 140	3, 642, 565
	1907	22, 796	4, 052, 098	2, 986, 515
	1902	9, 092	1, 512, 527	1, 053, 866

[1] Not including Bell-controlled companies; previous to 1922 these were included with the Bell System, but for 1927 and 1922 they are classified under "All other systems and lines." (See "Bell-controlled companies," p. 32.)

TABLE 26.—DETAILED STATISTICS, THE BELL SYSTEM AND OTHER SYSTEMS REPORTING ANNUAL INCOMES OF $10,000 OR MORE, 1927 AND 1922, AND THOSE REPORTING $5,000 OR MORE, 1917 [1]

	TOTAL			BELL SYSTEM [2]			OTHER SYSTEMS [2] REPORTING ANNUAL INCOMES OF [1]—		
							$10,000 or more		$5,000 or more, 1917
	1927	1922	1917	1927	1922	1917	1927	1922	
Number of systems	1,368	1,323	2,200	25	26	145	1,343	1,297	2,055
Miles of wire	62,277,246	35,502,983	27,298,026	56,819,036	30,613,687	23,133,718	5,458,210	4,889,296	4,164,308
Exchange	54,281,295	30,906,655	23,723,114	49,279,379	26,407,285	19,962,997	5,001,916	4,499,370	3,760,117
Toll	7,995,951	4,596,328	3,574,912	7,539,657	4,206,402	3,170,721	456,294	389,926	404,191
Number of central offices	11,485	10,666	12,294	6,115	5,796	6,288	5,370	4,870	6,006
Number of telephones	16,712,495	12,295,234	9,953,710	13,726,056	9,514,813	7,326,858	2,986,439	2,780,421	2,626,852
Residence	10,498,801	(3)	(3)	8,332,814	(3)	(3)	2,165,987	(3)	(3)
Business	6,213,694	(3)	(3)	5,393,242	(3)	(3)	820,452	(3)	(3)
Number of calls originating with systems reporting	29,196,387,446	21,901,387,070	19,809,061,085	23,693,017,950	16,566,555,900	14,597,567,869	5,503,369,496	5,334,831,170	5,211,493,216
Exchange	28,109,396,549	21,235,459,861	19,366,111,091	22,752,021,612	16,022,216,844	14,236,304,195	5,357,374,937	5,213,243,017	5,129,806,896
Toll	1,086,990,897	665,927,209	442,949,994	940,996,338	544,339,056	361,263,674	145,994,559	121,588,153	81,686,320
Number of employees	356,739	290,333	244,490	308,865	242,710	198,700	47,874	47,623	45,790
Male	124,963	97,084	85,239	107,710	81,942	69,457	17,253	15,142	15,782
Female	231,776	193,249	159,251	201,155	160,768	129,243	30,621	32,481	30,008
Salaries and wages	$475,840,320	$341,537,822	$169,655,066	$429,876,779	$299,350,041	$144,914,867	$45,963,541	$42,187,781	$24,740,199
Revenue, operating [4]	$996,911,752	$637,468,630	$363,831,921	$894,699,173	$546,820,113	$303,863,847	$102,212,579	$90,648,517	$59,968,074
Exchange	$681,221,511	$447,067,008	$262,698,775	$604,266,112	$374,718,580	$214,119,479	$76,955,399	$72,348,428	$48,579,296
Toll	$294,625,256	$180,069,891	$97,250,496	$271,174,270	$163,097,837	$86,814,336	$23,450,986	$16,972,054	$10,436,160
Investment in plant and equipment	$3,475,201,956	$2,129,773,760	$1,435,912,142	$3,085,612,970	$1,783,079,046	$1,140,639,666	$389,588,986	$346,694,714	$295,272,476

[1] See "Change in classification according to income," p. 2, and Table 7, p. 12.
[2] Bell-controlled companies included with the Bell System for 1917 and with "other systems" for 1922 and 1927. (See "Bell-controlled companies," p. 32.)
[3] Not called for on schedule.
[4] Includes miscellaneous telephone operating revenues, as follows: 1927, $20,937,754; 1922, $10,318,302; 1917, $3,681,346. Also includes assessments levied by mutual companies, as follows: 1927, $127,231; 1922, $13,429; 1917, $201,304.

TABLE 27.—MILES OF WIRE, OVERHEAD AND UNDERGROUND, EXCHANGE AND TOLL, THE BELL SYSTEM AND ALL OTHER SYSTEMS AND LINES: 1927 AND 1922

	TOTAL		OVERHEAD		UNDERGROUND		PER CENT OF TOTAL				PER CENT OF INCREASE OR DECREASE (—)		
							Overhead		Underground				
	1927	1922	1927	1922	1927	1922	1927	1922	1927	1922	Total	Overhead	Underground
Total	63,836,182	37,265,958	23,943,170	15,825,487	39,893,012	21,440,471	37.5	42.5	62.5	57.5	71.3	51.3	86.1
Bell System	56,819,036	30,613,687	18,932,035	10,834,605	37,887,001	19,779,082	33.3	35.4	66.7	64.6	85.6	74.7	91.6
All other systems	7,017,146	6,652,271	5,011,135	4,990,882	2,006,011	1,661,389	71.4	75.0	28.6	25.0	5.5	.4	20.7
Exchange	55,840,231	32,669,630	18,703,396	12,787,226	37,136,835	19,882,404	33.5	39.1	66.5	60.9	70.9	46.3	86.8
Bell System	49,279,379	26,407,285	14,117,423	8,184,372	35,161,956	18,222,913	28.6	31.0	71.4	69.0	86.6	72.5	93.0
All other systems	6,560,852	6,262,345	[1] 4,585,973	[1] 4,602,854	1,974,879	1,659,491	69.9	73.5	30.1	26.5	4.8	—.4	19.0
Toll	7,995,951	4,596,328	5,239,774	3,038,261	2,756,177	1,558,067	65.5	66.1	34.5	33.9	74.0	72.5	76.9
Bell System	7,539,657	4,206,402	4,814,612	2,650,233	2,725,045	1,556,169	63.9	63.0	36.1	37.0	79.2	81.7	75.1
All other systems	456,294	389,926	425,162	388,028	31,132	1,898	93.2	99.5	6.8	.5	17.0	9.6	(2)

[1] Includes 1,558,936 miles of wire for 1927 and 1,762,975 miles for 1922, operated by systems and lines reporting annual incomes of less than $10,000, for which no distribution as to overhead and underground was called for on the schedule used for this class of systems and lines.
[2] Per cent not shown when increase is greater than 1,000.

TABLE 28.—MILES OF WIRE, EXCHANGE AND TOLL, OVERHEAD AND UNDERGROUND, FOR THE BELL SYSTEM AND OTHER SYSTEMS REPORTING ANNUAL INCOMES OF $10,000 OR MORE: 1927 [1]

	ALL SYSTEMS			BELL SYSTEM			OTHER SYSTEMS REPORTING ANNUAL INCOMES OF $10,000 OR MORE		
	Total	Exchange	Toll	Total	Exchange	Toll	Total	Exchange	Toll
Total	62,277,246	54,281,295	7,995,951	56,819,036	49,279,379	7,539,657	5,458,210	5,001,916	456,294
Overhead	22,384,234	17,144,460	5,239,774	18,932,035	14,117,423	4,814,612	3,452,199	3,027,037	425,162
In cable	16,104,272	13,752,008	2,352,264	14,443,441	12,121,584	2,321,857	1,660,831	1,630,424	30,407
Not in cable	6,279,962	3,392,452	2,887,510	4,488,594	1,995,839	2,492,755	1,791,368	1,396,613	394,755
Underground	39,893,012	37,136,835	2,756,177	37,887,001	35,161,956	2,725,045	2,006,011	1,974,879	31,132

[1] Distribution of overhead wire in cable and not in cable, not called for on schedule used prior to 1927 and not called for on schedule used for companies having incomes of less than $10,000 for 1927.

TABLE 29.—MILES OF WIRE, THE BELL SYSTEM AND ALL OTHER SYSTEMS

	DIVISION AND STATE	TOTAL			BELL SYSTEM [1]		
		1927	1922	1917	1927	1922	1917
1	UNITED STATES	63,836,182	37,265,958	28,827,188	56,819,036	30,613,687	23,133,718
	GEOGRAPHIC DIVISIONS:						
2	New England	5,586,569	3,346,608	2,383,580	5,458,003	3,239,272	2,333,679
3	Middle Atlantic	19,992,689	10,818,580	7,938,055	18,778,094	9,909,083	6,588,839
4	East North Central	15,223,410	8,763,146	7,137,419	13,317,189	7,032,060	5,317,369
5	West North Central	6,044,901	4,487,007	3,934,372	4,248,731	2,315,378	2,291,458
6	South Atlantic	4,244,852	2,448,857	1,735,286	3,747,502	2,078,787	1,438,272
7	East South Central	2,001,125	1,248,559	1,107,025	1,728,389	913,666	898,030
8	West South Central	3,619,976	2,148,789	1,912,756	3,145,614	1,563,389	1,471,474
9	Mountain	1,198,550	927,662	725,512	1,098,661	837,094	660,211
10	Pacific	5,924,110	3,076,750	2,553,183	5,296,853	2,724,958	2,224,386
	NEW ENGLAND:						
11	Maine	326,120	210,707	176,983	269,148	163,679	159,658
12	New Hampshire	211,448	134,326	110,691	182,481	110,948	102,702
13	Vermont	105,645	78,991	67,355	79,116	58,286	52,078
14	Massachusetts	3,165,833	1,908,091	1,353,251	3,161,787	1,990,403	1,346,082
15	Rhode Island	429,451	213,713	161,075	421,470	208,509	161,075
16	Connecticut	1,348,072	800,780	514,225	1,344,001	797,447	512,084
	MIDDLE ATLANTIC:						
17	New York	11,592,418	6,121,696	4,154,657	11,035,512	5,755,722	3,893,741
18	New Jersey	3,012,459	1,523,354	1,002,075	2,984,332	1,496,010	974,525
19	Pennsylvania	5,387,812	3,173,530	2,181,323	4,758,250	2,657,351	1,720,573
	EAST NORTH CENTRAL:						
20	Ohio	3,658,505	2,415,187	1,906,635	3,113,873	1,995,257	1,200,538
21	Indiana	1,558,005	1,058,314	933,261	1,072,281	683,227	608,998
22	Illinois	5,688,146	3,060,595	2,564,910	5,213,718	2,625,311	2,205,636
23	Michigan	2,967,217	1,390,945	1,072,651	2,790,346	1,113,446	810,646
24	Wisconsin	1,351,537	838,105	659,962	1,126,971	614,819	491,551
	WEST NORTH CENTRAL:						
25	Minnesota	1,422,716	1,147,278	1,058,989	792,880	634,227	634,589
26	Iowa	960,226	757,600	650,513	661,904	453,018	455,309
27	Missouri	1,988,764	1,247,503	1,119,048	1,800,538	572,269	597,286
28	North Dakota	140,923	124,873	105,820	85,565	59,544	59,499
29	South Dakota	154,601	108,414	104,208	48,681	34,014	26,097
30	Nebraska	606,425	514,374	448,807	336,138	209,451	229,041
31	Kansas	771,246	586,965	446,987	523,025	292,855	289,637
	SOUTH ATLANTIC:						
32	Delaware	118,539	93,891	75,196	118,093	93,441	67,615
33	Maryland	936,353	540,089	354,588	932,836	536,187	351,682
34	District of Columbia	540,152	314,636	162,032	540,152	314,636	162,032
35	Virginia	615,286	379,093	271,549	551,234	323,808	226,602
36	West Virginia	349,899	226,739	179,387	305,138	190,439	142,580
37	North Carolina	392,455	199,594	148,348	269,256	89,268	90,150
38	South Carolina	171,678	126,284	97,916	142,882	98,870	81,718
39	Georgia	538,751	390,382	314,273	489,878	333,239	249,850
40	Florida	581,739	178,149	131,997	398,533	98,899	66,043
	EAST SOUTH CENTRAL:						
41	Kentucky	722,120	467,781	386,107	579,224	261,889	211,603
42	Tennessee	642,096	399,932	368,678	561,741	319,465	299,697
43	Alabama	421,927	229,934	206,585	388,831	202,314	175,096
44	Mississippi	214,982	150,912	145,655	198,593	129,998	121,634
	WEST SOUTH CENTRAL:						
45	Arkansas	318,868	219,398	170,105	273,513	174,214	132,498
46	Louisiana	560,262	256,372	196,917	551,477	246,430	184,637
47	Oklahoma	655,102	424,005	334,533	581,582	359,255	269,750
48	Texas	2,085,744	1,249,014	1,211,201	1,739,042	783,490	884,589
	MOUNTAIN:						
49	Montana	135,536	120,725	94,666	117,658	105,087	82,218
50	Idaho	111,940	105,027	81,745	87,070	82,998	70,037
51	Wyoming	60,622	50,223	30,435	51,252	40,803	24,320
52	Colorado	559,873	412,816	312,326	537,864	392,470	299,655
53	New Mexico	48,765	37,428	31,963	43,153	30,859	25,762
54	Arizona	89,305	55,518	39,455	83,672	50,773	36,388
55	Utah	167,393	129,193	120,938	159,109	122,251	115,555
56	Nevada	25,116	16,732	13,984	18,883	11,853	6,276
	PACIFIC:						
57	Washington	739,138	533,515	429,718	649,334	455,722	358,883
58	Oregon	490,820	368,342	275,191	436,554	322,528	189,083
59	California	4,694,152	2,174,893	1,848,274	4,210,865	1,946,708	1,676,420

[1] See "Bell-controlled companies," p. 32.

AND LINES, BY GEOGRAPHIC DIVISIONS AND STATES: 1927, 1922, AND 1917

ALL OTHER SYSTEMS AND LINES			PER CENT OF TOTAL						PER CENT OF INCREASE OR DECREASE (—)				
			Bell System [1]			All other systems			1922–1927		1917–1922		
1927	1922	1917	1927	1922	1917	1927	1922	1917	Bell	All other	Bell	All other	
7,017,146	6,052,271	5,693,470	89.0	82.1	80.2	11.0	17.9	19.8	85.6	5.5	32.3	16.8	1
128,566	107,336	49,901	97.7	96.8	97.9	2.3	3.2	2.1	68.5	19.8	38.8	115.1	2
1,214,595	999,497	749,216	93.9	91.6	89.8	6.1	8.4	10.2	89.5	33.5	50.4	21.4	3
1,906,221	1,731,086	1,820,050	87.5	80.2	74.5	12.5	19.8	25.5	89.4	10.1	32.2	—4.9	4
1,796,170	2,171,629	1,642,914	70.3	51.6	58.2	29.7	48.4	41.8	83.5	—17.3	1.0	32.2	5
497,350	370,070	297,014	88.3	84.9	82.9	11.7	15.1	17.1	80.3	34.4	44.5	24.6	6
272,736	334,893	298,995	86.4	73.2	73.0	13.6	26.8	27.0	89.2	—18.6	13.1	12.0	7
474,362	585,400	441,282	86.9	72.8	76.9	13.1	27.2	23.1	101.2	—19.0	6.2	32.7	8
99,889	90,568	65,301	91.7	90.2	91.0	8.3	9.8	9.0	31.2	10.3	26.8	38.7	9
627,257	351,792	328,797	89.4	88.6	87.1	10.6	11.4	12.9	94.4	78.3	22.5	7.0	10
56,972	47,028	17,325	82.5	77.7	90.2	17.5	22.3	9.8	64.4	21.1	2.5	171.4	11
28,967	23,378	7,989	86.3	82.6	92.8	13.7	17.4	7.2	64.5	23.9	8.0	192.6	12
26,529	20,705	15,277	74.9	73.8	77.3	25.1	26.2	22.7	35.7	28.1	11.9	35.5	13
4,046	7,688	7,169	99.9	99.6	99.5	.1	.4	.5	66.4	—47.4	41.2	7.2	14
7,981	5,204	----------	98.1	97.6	100.0	1.9	2.4	------	102.1	53.4	29.4	------	15
4,071	3,333	2,141	99.7	99.6	99.6	.3	.4	.4	68.5	22.1	55.7	55.7	16
556,906	365,974	260,916	95.2	94.0	93.7	4.8	6.0	6.3	91.7	52.2	47.8	40.3	17
28,127	27,344	27,550	99.1	98.2	97.2	.9	1.8	2.7	99.5	2.9	53.5	—.7	18
629,562	516,179	460,750	88.3	83.7	78.9	11.7	16.3	21.1	79.1	22.0	54.4	12.0	19
544,632	419,930	706,097	85.1	82.6	63.0	14.9	17.4	37.0	56.1	29.7	66.2	—40.5	20
485,724	375,087	324,263	68.8	64.6	65.3	31.2	35.4	34.7	56.9	29.5	12.2	15.7	21
474,428	435,284	359,274	91.7	85.8	86.0	8.3	14.2	14.0	98.6	9.0	19.0	21.2	22
176,871	277,499	262,005	94.0	80.0	75.6	6.0	20.0	24.4	150.6	—36.3	37.4	5.9	23
224,566	223,286	168,411	83.4	73.4	74.5	16.6	26.6	25.5	83.3	.6	25.1	32.6	24
629,836	513,051	424,400	55.7	55.3	59.9	44.3	44.7	40.1	25.0	22.8	—.1	20.9	25
298,322	304,582	195,204	68.9	69.8	70.0	31.1	40.2	30.0	46.1	—2.1	—.5	56.0	26
188,226	675,234	521,762	90.5	45.9	53.4	9.5	54.1	46.6	214.6	—72.1	—4.2	29.4	27
55,358	65,329	46,321	60.7	47.7	56.2	39.3	52.3	43.8	43.7	—15.3	.1	41.0	28
105,920	74,400	78,111	31.5	31.4	25.0	68.5	68.6	75.0	43.1	42.4	30.3	—4.8	29
270,287	244,923	219,766	55.4	52.4	51.0	44.6	47.6	49.0	24.7	10.4	17.6	11.4	30
248,221	294,110	157,350	67.8	49.9	64.8	32.2	50.1	35.2	78.6	—15.6	1.1	86.9	31
446	450	7,581	99.6	99.5	89.9	.4	.5	10.1	26.4	—.9	38.2	—94.1	32
3,517	3,902	2,906	99.6	99.3	99.2	.4	.7	.8	74.0	—9.9	52.5	34.3	33
----------	----------	----------	100.0	100.0	100.0	------	------	------	71.7	------	94.2	------	34
64,052	55,285	44,947	89.6	85.4	83.4	10.4	14.6	16.6	70.2	15.9	42.9	23.0	35
44,761	36,300	36,807	87.2	84.0	79.5	12.8	16.0	20.5	60.2	23.3	33.6	—1.4	36
123,199	110,326	58,198	68.6	44.7	50.8	31.4	55.3	39.2	201.6	11.7	—1.0	89.6	37
28,796	27,414	16,198	83.2	78.3	83.4	16.8	21.7	16.5	44.5	5.0	21.0	69.2	38
49,378	57,143	64,423	90.8	85.4	79.5	9.2	14.6	20.5	46.9	—13.6	33.4	—11.3	39
183,206	79,250	65,954	68.5	55.5	50.0	31.5	44.5	50.0	303.0	131.2	49.7	20.2	40
142,896	205,892	174,504	80.2	56.0	54.8	19.8	44.0	45.2	121.2	—30.6	23.8	18.0	41
80,355	80,467	68,981	87.5	79.9	81.3	12.5	20.1	18.7	75.8	—.1	6.6	16.7	42
33,996	27,020	31,489	92.2	88.0	84.8	7.8	12.0	15.2	92.2	19.8	15.5	—12.3	43
16,389	20,914	24,021	92.4	86.1	83.5	7.6	13.9	16.5	52.8	—21.6	6.9	—12.9	44
45,355	45,184	37,607	85.8	79.4	77.9	14.2	20.6	22.1	57.0	.4	31.5	20.1	45
8,785	9,942	12,280	98.4	96.1	93.8	1.6	3.9	6.2	123.8	—11.6	33.5	—19.0	46
73,520	64,750	64,783	88.8	84.7	80.6	11.2	15.3	19.4	61.9	13.5	33.2	—.1	47
346,702	465,524	326,612	83.4	62.7	73.0	16.6	37.3	27.0	122.0	—25.5	—11.4	42.5	48
17,878	15,638	12,448	86.8	87.0	86.9	13.2	13.0	13.1	12.0	14.3	27.8	25.6	49
24,870	22,029	11,708	77.8	79.0	85.7	22.2	21.0	14.3	4.9	12.9	18.5	88.2	50
9,370	9,420	6,115	84.5	81.2	79.9	15.5	18.8	20.1	25.6	—.5	67.8	54.0	51
22,009	20,346	12,671	96.1	95.1	95.9	3.9	4.9	4.1	37.0	8.2	31.0	60.6	52
5,612	6,569	6,201	88.5	82.4	80.6	11.5	17.6	19.4	39.8	14.6	19.8	5.9	53
5,633	4,745	3,067	93.7	91.5	92.2	6.3	8.5	7.8	64.8	18.7	39.5	54.7	54
8,284	6,942	5,383	95.1	94.6	95.5	4.9	5.4	4.5	30.1	19.3	5.8	29.0	55
5,233	4,879	7,708	75.2	70.8	44.9	24.8	29.2	55.1	59.3	27.8	88.9	—36.7	56
89,804	77,793	70,835	87.9	85.4	83.5	12.1	14.6	16.5	42.5	15.4	27.0	9.8	57
54,166	45,814	86,108	89.0	87.6	68.7	11.0	12.4	31.3	35.4	18.2	70.6	—46.8	58
483,287	228,185	171,854	89.7	89.5	90.7	10.3	10.5	9.3	116.3	111.8	16.1	32.8	59

TABLE 30.—NUMBER OF TELEPHONES, THE BELL SYSTEM AND ALL OTHER 1927, 1922,

	DIVISION AND STATE	TOTAL			BELL SYSTEM [1]		
		1927	1922	1917	1927	1922	1917
1	UNITED STATES	18,522,767	14,347,395	11,716,520	13,726,056	9,514,813	7,326,858
	GEOGRAPHIC DIVISIONS:						
2	New England	1,548,931	1,223,497	878,354	1,453,469	1,135,359	827,407
3	Middle Atlantic	4,588,211	3,249,710	2,444,205	3,980,241	2,703,858	1,952,601
4	East North Central	4,589,751	3,693,101	3,158,989	3,177,753	2,255,352	1,714,650
5	West North Central	2,594,081	2,315,996	2,119,735	1,158,441	771,453	781,254
6	South Atlantic	1,262,222	937,324	739,631	951,422	651,271	500,697
7	East South Central	644,270	521,120	436,853	443,609	279,804	222,109
8	West South Central	1,149,357	872,157	740,004	787,547	481,904	376,900
9	Mountain	456,198	385,730	307,627	391,510	320,661	257,653
10	Pacific	1,689,746	1,148,760	891,122	1,382,064	915,151	693,587
	NEW ENGLAND:						
11	Maine	131,367	113,725	88,226	88,437	74,891	69,471
12	New Hampshire	83,066	68,874	52,534	61,430	50,932	45,913
13	Vermont	60,793	54,530	47,968	37,168	31,162	29,105
14	Massachusetts	867,888	687,700	475,231	864,951	683,386	470,174
15	Rhode Island	114,944	92,766	64,726	112,868	91,271	64,726
16	Connecticut	290,873	205,902	149,669	288,615	203,717	148,018
	MIDDLE ATLANTIC:						
17	New York	2,595,537	1,780,563	1,335,055	2,329,131	1,561,017	1,159,659
18	New Jersey	599,336	383,496	254,444	582,710	368,439	238,172
19	Pennsylvania	1,393,338	1,085,651	854,706	1,068,400	774,402	554,770
	EAST NORTH CENTRAL:						
20	Ohio	1,122,036	962,837	845,649	748,874	600,173	381,677
21	Indiana	552,249	508,726	458,992	227,218	193,114	176,769
22	Illinois	1,685,690	1,283,449	1,070,997	1,293,340	898,235	725,767
23	Michigan	711,315	598,140	434,128	587,228	338,718	260,711
24	Wisconsin	518,461	429,949	349,223	321,093	225,112	169,726
	WEST NORTH CENTRAL:						
25	Minnesota	487,611	424,777	408,222	195,402	170,576	173,696
26	Iowa	565,533	533,347	489,432	227,555	177,151	195,295
27	Missouri	657,946	550,980	511,246	414,683	179,664	176,124
28	North Dakota	86,198	77,586	75,349	34,820	22,637	28,647
29	South Dakota	107,641	101,555	88,946	21,865	20,706	13,059
30	Nebraska	295,274	273,500	248,267	107,028	102,527	83,992
31	Kansas	393,878	354,251	298,273	157,088	98,192	110,441
	SOUTH ATLANTIC:						
32	Delaware	28,901	23,534	22,222	28,396	22,972	19,231
33	Maryland	197,135	153,790	118,397	193,520	150,268	114,769
34	District of Columbia	144,985	102,231	70,751	144,985	102,231	70,751
35	Virginia	183,698	155,490	119,597	122,912	97,991	74,845
36	West Virginia	146,677	116,081	99,530	103,885	77,147	53,631
37	North Carolina	160,507	116,129	91,928	81,208	35,874	40,374
38	South Carolina	64,616	54,078	43,716	44,922	32,726	27,126
39	Georgia	173,410	136,334	124,479	136,723	97,512	79,016
40	Florida	162,293	79,657	49,011	94,871	34,550	20,954
	EAST SOUTH CENTRAL:						
41	Kentucky	222,735	201,545	162,843	139,653	76,490	61,551
42	Tennessee	220,559	171,413	140,669	148,413	100,823	77,984
43	Alabama	121,115	84,401	76,693	92,094	59,410	47,440
44	Mississippi	79,861	63,761	56,648	63,449	43,081	35,134
	WEST SOUTH CENTRAL:						
45	Arkansas	118,178	99,490	87,872	73,535	55,843	41,986
46	Louisiana	137,610	87,354	63,890	128,995	78,788	54,014
47	Oklahoma	278,912	222,889	176,835	184,698	134,161	89,047
48	Texas	614,657	462,424	411,407	400,319	213,112	191,853
	MOUNTAIN:						
49	Montana	59,238	55,115	51,409	48,057	43,992	41,117
50	Idaho	54,822	48,745	37,204	36,476	31,863	26,455
51	Wyoming	28,049	24,949	15,774	22,902	19,583	11,879
52	Colorado	183,250	150,652	114,364	168,442	135,635	105,539
53	New Mexico	21,586	18,342	15,314	17,835	13,441	11,310
54	Arizona	33,194	24,353	18,225	30,638	21,877	15,825
55	Utah	63,106	53,261	46,621	58,824	47,831	41,814
56	Nevada	12,959	10,313	8,716	8,336	6,439	3,714
	PACIFIC:						
57	Washington	299,109	238,275	188,407	227,756	174,007	130,235
58	Oregon	185,171	146,847	125,660	135,085	98,148	75,631
59	California	1,205,466	763,638	577,055	1,019,223	642,996	487,721

[1] See "Bell-controlled companies," p. 32.

SYSTEMS AND LINES, BY GEOGRAPHIC DIVISIONS AND STATES: DECEMBER 31, AND 1917.

ALL OTHER SYSTEMS AND LINES			PER CENT OF TOTAL						PER CENT OF INCREASE OR DECREASE (—)				
			Bell System [1]			All other systems			1922–1927		1917–1922		
1927	1922	1917	1927	1922	1917	1927	1922	1917	Bell	All other	Bell	All other	
4,796,711	4,832,582	4,389,662	74.1	66.3	62.5	25.9	33.7	37.5	44.3	—0.7	29.9	10.1	1
95,462	88,138	50,947	93.8	92.8	94.2	6.2	7.2	5.8	28.0	8.3	37.2	73.0	2
607,970	545,852	491,604	86.7	83.2	79.9	13.3	16.8	20.1	47.2	11.4	38.5	11.0	3
1,411,998	1,437,749	1,444,339	69.2	61.1	54.3	30.8	38.9	45.7	40.9	—1.8	31.5	—.5	4
1,435,640	1,544,543	1,338,481	44.7	33.3	36.9	55.3	66.7	63.1	50.2	—7.1	—1.3	15.4	5
310,800	286,053	238,934	75.4	69.5	67.7	24.6	30.5	32.3	46.1	8.7	30.1	19.7	6
200,661	241,316	214,744	68.9	53.7	50.8	31.1	46.3	49.2	58.5	—16.8	26.0	12.4	7
361,810	390,253	363,104	68.5	55.3	50.9	31.5	44.7	49.1	63.4	—7.3	27.9	7.5	8
64,688	65,069	49,974	85.8	83.1	83.8	14.2	16.9	16.2	22.1	—.6	24.5	30.2	9
307,682	233,609	197,535	81.8	79.7	77.8	18.2	20.3	22.2	51.0	31.7	31.9	18.3	10
42,930	38,834	18,755	67.3	65.9	78.7	32.7	34.1	21.3	18.1	10.5	7.8	107.1	11
21,636	17,942	6,621	74.0	73.9	87.4	26.0	26.1	12.6	20.6	20.6	10.9	171.0	12
23,625	23,368	18,863	61.1	57.1	60.7	38.9	42.9	39.3	19.3	1.1	7.1	23.9	13
2,937	4,314	5,057	99.7	99.4	98.9	.3	.6	1.1	26.6	—31.9	45.3	—14.7	14
2,076	1,495	-------	98.2	98.4	100.0	1.8	1.6	------	23.7	38.9	41.0	-------	15
2,258	2,185	1,651	99.2	98.9	98.9	.8	1.1	1.1	41.7	3.3	37.6	32.3	16
266,406	219,546	175,396	89.7	87.7	86.9	10.3	12.3	13.1	49.2	21.3	34.6	25.2	17
16,626	15,057	16,272	97.2	96.1	93.6	22.8	3.9	6.4	58.2	10.4	54.7	—7.5	18
324,938	311,249	299,936	76.7	71.3	64.9	23.3	28.7	35.1	38.0	4.4	39.6	3.8	19
373,162	362,664	463,972	66.7	62.3	45.1	33.3	37.7	54.9	24.8	2.9	57.2	—21.8	20
325,031	315,612	282,223	41.1	38.0	38.5	58.9	62.0	61.5	17.7	3.0	9.2	11.8	21
392,350	385,214	345,230	76.7	70.0	67.8	23.3	30.0	32.2	44.0	1.9	23.8	11.6	22
124,087	169,422	173,417	82.6	66.7	60.1	17.4	33.3	39.9	73.4	—26.8	29.9	—2.3	23
197,368	204,837	179,497	61.9	52.4	48.6	38.1	47.6	51.4	42.6	3.6	32.6	14.1	24
292,209	254,201	234,526	40.1	40.2	42.5	59.9	59.8	57.5	14.6	15.0	—1.8	8.4	25
337,978	356,196	294,137	40.2	33.2	39.9	59.8	66.8	60.1	28.5	—5.1	—9.3	21.1	26
243,263	371,316	335,122	63.0	32.6	34.4	37.0	67.4	65.6	130.8	—34.5	2.0	10.8	27
51,378	54,949	46,702	40.4	29.2	38.0	59.6	70.8	62.0	53.8	—6.5	—21.0	17.7	28
85,776	80,849	75,887	20.3	20.4	14.7	79.7	79.6	85.3	5.6	6.1	58.6	6.5	29
188,246	170,973	164,275	36.2	37.5	33.8	63.8	62.5	66.2	4.4	10.1	22.1	4.1	30
236,790	256,059	187,832	39.9	27.7	37.0	60.1	72.3	63.0	60.0	—7.5	—11.1	36.3	31
505	562	2,991	98.3	97.6	86.5	1.7	2.4	13.5	23.6	—10.1	19.5	—81.2	32
3,615	3,522	3,628	98.2	97.7	96.9	1.8	2.3	3.1	28.8	2.6	30.9	—2.9	33
-------	-------	-------	100.0	100.0	100.0	------	------	------	41.8	------	44.5	-------	34
60,786	57,499	44,752	66.9	63.0	62.6	33.1	37.0	37.4	25.4	5.7	30.9	28.5	35
42,792	38,934	45,899	70.8	66.5	53.9	29.2	33.5	46.1	34.7	9.9	43.8	—15.2	36
79,299	80,255	51,554	50.6	30.9	43.9	49.4	69.1	56.1	126.4	—1.2	—11.1	—55.7	37
19,694	21,352	16,590	69.5	60.5	62.1	30.5	39.5	37.9	37.3	—7.8	20.6	28.7	38
36,687	38,822	45,463	78.8	71.5	63.5	21.2	28.5	36.5	40.2	—5.5	23.4	—14.6	39
67,422	45,107	28,057	58.5	43.4	42.8	41.5	56.6	57.2	174.6	49.5	64.9	60.8	40
83,082	125,055	101,292	62.7	38.0	37.8	37.3	62.0	62.2	82.6	—33.6	24.3	23.5	41
72,146	70,590	62,685	67.3	58.8	55.4	32.7	41.2	44.6	47.2	2.2	29.2	12.6	42
29,021	24,991	29,253	76.0	70.4	61.9	24.0	29.6	38.1	55.0	16.1	25.2	—14.6	43
16,412	20,680	21,514	79.4	67.6	62.0	20.6	32.4	38.0	47.3	—20.6	22.6	—3.9	44
44,643	43,647	45,886	62.2	56.1	47.8	37.8	43.9	52.2	31.7	2.3	33.0	—4.9	45
8,615	8,566	9,876	93.7	90.2	84.5	6.3	9.8	15.5	63.7	.6	45.9	—13.3	46
94,214	88,728	87,788	66.2	60.2	50.4	33.8	39.8	49.6	37.7	6.2	50.7	1.1	47
214,338	249,312	219,554	65.1	46.1	46.6	34.9	53.9	53.4	87.8	14.0	11.1	13.6	48
11,181	11,123	10,292	81.1	79.8	80.0	18.9	20.2	20.0	9.2	.5	7.0	8.1	49
18,346	16,882	10,749	66.5	65.4	71.1	33.5	34.6	28.9	14.5	8.7	20.4	57.1	50
5,147	5,366	3,895	81.6	78.5	75.3	18.4	21.5	24.7	16.9	—4.1	64.9	37.8	51
14,808	15,017	8,825	91.9	90.0	92.3	8.1	10.0	7.7	24.2	—1.4	28.5	70.2	52
3,745	4,901	4,004	82.6	73.3	73.9	17.4	26.7	26.1	32.7	—23.6	18.8	22.4	53
2,556	2,476	2,400	92.3	89.8	86.8	7.7	10.2	13.2	40.0	3.2	38.2	3.2	54
4,282	5,430	4,807	93.2	89.8	89.7	6.8	10.2	10.3	23.0	—21.1	14.4	13.0	55
4,623	3,874	5,002	64.3	62.4	42.6	35.7	37.6	57.4	29.5	19.3	73.4	—22.6	56
71,353	64,268	58,172	76.1	73.0	69.1	23.9	27.0	30.9	30.9	11.0	33.6	10.5	57
50,086	48,699	50,029	73.0	66.8	60.2	27.0	33.2	39.8	37.6	2.8	29.8	—2.7	58
186,243	120,642	89,334	84.6	84.2	84.5	15.4	15.8	15.5	58.5	54.4	31.8	35.0	59

TABLE 31.—NUMBER OF CENTRAL OFFICES, THE BELL SYSTEM AND ALL OTHER
GRAPHIC DIVISIONS AND

	DIVISION AND STATE	TOTAL				BELL SYSTEM [2]			
		1927	1922	1917	1912 [3]	1927	1922	1917	1912
1	UNITED STATES	20,227	19,260	21,175	11,515	6,115	5,796	6,288	5,853
	GEOGRAPHIC DIVISIONS:								
2	New England	921	895	910	731	566	551	633	625
3	Middle Atlantic	2,144	2,205	2,410	1,862	959	920	1,011	1,001
4	East North Central	4,447	4,461	4,846	2,858	948	910	942	967
5	West North Central	4,806	4,422	5,007	2,209	718	653	838	640
6	South Atlantic	1,868	1,669	1,886	783	589	508	586	464
7	East South Central	1,502	1,408	1,673	746	520	511	569	553
8	West South Central	2,409	2,146	2,425	948	640	614	619	600
9	Mountain	877	800	772	504	474	463	428	397
10	Pacific	1,253	1,194	1,246	874	701	666	662	666
	NEW ENGLAND:								
11	Maine	247	241	244	167	81	80	128	126
12	New Hampshire	133	124	133	98	61	61	94	87
13	Vermont	142	138	147	107	42	44	49	61
14	Massachusetts	281	276	275	257	270	269	257	253
15	Rhode Island	29	28	28	29	27	26	28	29
16	Connecticut	89	88	83	73	85	81	77	69
	MIDDLE ATLANTIC:								
17	New York	932	882	970	705	434	373	459	476
18	New Jersey	211	188	193	186	163	148	144	137
19	Pennsylvania	1,001	1,135	1,247	971	362	399	408	388
	EAST NORTH CENTRAL:								
20	Ohio	1,024	1,070	1,173	802	223	269	220	234
21	Indiana	863	892	958	484	90	108	144	160
22	Illinois	1,265	1,182	1,362	772	266	225	268	237
23	Michigan	638	645	710	501	257	213	209	232
24	Wisconsin	657	672	643	299	112	95	101	104
	WEST NORTH CENTRAL:								
25	Minnesota	738	636	729	363	106	117	123	112
26	Iowa	996	961	1,129	442	136	137	214	128
27	Missouri	997	884	1,015	379	134	88	113	119
28	North Dakota	380	342	385	171	96	67	110	59
29	South Dakota	316	286	339	186	44	49	41	29
30	Nebraska	555	537	561	363	110	116	104	97
31	Kansas	824	776	849	305	92	79	133	96
	SOUTH ATLANTIC:								
32	Delaware	25	22	23	19	23	22	22	18
33	Maryland	141	131	134	109	128	123	122	88
34	District of Columbia	12	9	7	7	12	9	7	7
35	Virginia	336	304	337	108	66	68	76	54
36	West Virginia	339	358	314	139	81	70	81	55
37	North Carolina	331	317	345	115	57	28	71	65
38	South Carolina	156	153	175	65	59	53	58	52
39	Georgia	359	334	421	169	108	108	125	115
40	Florida	169	141	130	52	55	27	24	10
	EAST SOUTH CENTRAL:								
41	Kentucky	520	524	572	278	161	158	181	175
42	Tennessee	487	491	508	221	146	139	167	163
43	Alabama	263	219	283	91	79	82	86	81
44	Mississippi	232	234	310	156	134	132	135	134
	WEST SOUTH CENTRAL:								
45	Arkansas	337	312	368	138	98	100	99	100
46	Louisiana	166	145	170	113	101	101	104	106
47	Oklahoma	593	537	594	175	154	154	149	115
48	Texas	1,313	1,152	1,293	522	287	259	267	279
	MOUNTAIN:								
49	Montana	163	152	132	92	75	78	77	47
50	Idaho	130	130	139	84	64	66	64	68
51	Wyoming	82	67	61	25	39	37	24	25
52	Colorado	250	214	208	164	163	156	158	158
53	New Mexico	76	74	65	31	37	34	28	27
54	Arizona	52	53	55	32	32	32	32	27
55	Utah	87	75	75	49	45	39	38	40
56	Nevada	37	35	37	27	19	21	7	5
	PACIFIC:								
57	Washington	304	292	308	211	118	115	112	119
58	Oregon	240	257	269	122	83	85	89	77
59	California	709	645	669	541	500	466	461	410

[1] See "Change in classification according to income," p. 2, and Table 7, p. 12.
[2] See "Bell-controlled companies," p. 32.
[3] Not reported for systems and lines having incomes of less than $5,000.

SYSTEMS AND LINES, GROUPED ACCORDING TO ANNUAL INCOME,[1] BY GEO-
STATES: 1912 TO 1927

ALL OTHER SYSTEMS AND LINES											
Total				Reporting annual incomes of [1]—							
				$10,000 or more		$5,000 or more		Less than $10,000		Less than $5,000	
1927	1922	1917	1912 [3]	1927	1922	1917	1912	1927 [4]	1922 [4]	1917 [4]	
14,112	13,464	14,887	5,662	5,370	4,870	6,006	5,662	8,742	8,594	8,881	1
355	344	277	106	211	201	137	106	144	143	140	2
1,185	1,285	1,399	861	686	721	886	861	499	564	513	3
3,499	3,551	3,904	1,891	1,505	1,504	1,996	1,891	1,934	2,047	1,908	4
4,088	3,769	4,169	1,569	1,441	1,331	1,611	1,569	2,647	2,438	2,558	5
1,279	1,161	1,300	319	426	316	349	319	853	845	951	6
982	957	1,104	193	100	182	199	193	822	775	905	7
1,769	1,532	1,806	348	511	305	423	348	1,258	1,227	1,383	8
403	337	344	107	93	90	134	107	310	247	210	9
552	528	584	268	277	220	271	268	275	308	313	10
166	161	116	41	93	90	47	41	73	71	69	11
72	63	39	11	46	42	17	11	26	21	22	12
100	94	98	46	62	55	61	46	38	39	37	13
11	17	18	4	5	9	9	4	6	8	9	14
2	2	------	------	2	2	------	------	------	------	------	15
4	7	6	4	3	3	3	4	1	4	3	16
498	509	511	229	208	260	262	229	200	249	249	17
48	40	49	49	35	28	39	49	13	12	10	18
639	736	839	583	353	433	585	583	286	303	254	19
801	801	953	568	428	425	597	568	373	376	356	20
773	784	814	324	298	261	332	324	475	523	482	21
999	957	1,094	535	457	431	528	535	542	526	566	22
381	432	501	269	145	199	285	269	236	233	216	23
545	577	542	195	237	188	254	195	308	389	288	24
632	519	606	251	229	202	285	251	403	317	321	25
860	824	915	314	301	249	261	314	559	575	654	26
863	796	902	260	205	222	277	260	658	574	625	27
284	275	275	112	66	121	116	112	218	154	159	28
272	237	298	157	149	112	172	157	123	125	126	29
446	421	457	266	235	221	272	266	210	200	185	30
732	697	716	209	256	204	228	209	476	493	488	31
2	------	1	1	------	------	1	1	2	------	------	32
13	8	12	21	1	------	2	21	12	8	10	33
------	------	------	------	------	------	------	------	------	------	------	34
270	236	261	54	85	45	68	54	185	191	193	35
258	188	233	84	44	28	47	84	214	160	186	36
274	289	274	50	127	105	70	50	147	184	204	37
97	100	117	13	17	13	13	13	80	87	104	38
251	226	296	54	71	63	94	54	180	163	202	39
114	114	106	42	81	62	54	42	33	52	52	40
359	366	391	103	74	105	115	103	285	261	276	41
341	352	341	53	58	57	48	53	283	295	293	42
184	137	197	10	17	10	21	10	167	127	176	43
98	102	175	22	11	10	15	22	87	92	160	44
239	212	269	38	54	35	51	38	185	177	218	45
65	44	66	7	14	2	19	7	51	42	47	46
439	383	445	60	88	52	77	60	351	331	368	47
1,026	893	1,026	243	355	216	276	243	671	677	750	48
88	74	55	45	13	7	13	45	75	67	42	49
66	64	75	16	27	30	34	16	39	34	41	50
43	30	37	------	5	4	7	------	38	26	30	51
87	58	50	6	9	9	8	6	78	49	42	52
39	40	37	4	2	3	12	4	37	37	25	53
20	21	23	5	11	13	15	5	9	8	8	54
42	36	37	9	15	15	20	9	27	21	17	55
18	14	30	22	11	9	25	22	7	5	5	56
186	177	196	92	82	62	78	92	104	115	118	57
157	172	180	45	60	53	60	45	97	119	120	58
209	179	208	131	135	105	133	131	74	74	75	59

[4] For 1927, actual number of central offices operated; for 1922 and 1917, number of systems and lines reporting central offices, actual number of central offices operated not reported. See "Equipment reported," p. 23.

TABLE 32.—ORIGINATING CALLS,[1] EXCHANGE AND TOLL, AND NUMBER OF CALLS PER TELEPHONE PER DAY, THE BELL SYSTEM AND ALL OTHER SYSTEMS AND LINES, BY GEOGRAPHIC DIVISIONS AND STATES: 1927

DIVISION AND STATE	BELL SYSTEM					ALL OTHER SYSTEMS AND LINES					TOTAL CALLS PER TELEPHONE PER DAY [3]	
	Total	Exchange	Toll	Per cent of total		Total	Exchange [2]	Toll	Per cent of total			
				Exchange	Toll				Exchange	Toll	Bell	All other
UNITED STATES	23,693,017,950	22,752,021,612	940,996,338	96.0	4.0	7,921,154,671	7,775,160,112	145,994,559	98.2	1.8	5.3	5.1
GEOGRAPHIC DIVISIONS:												
New England	2,199,379,479	2,090,707,254	108,672,225	95.1	4.9	128,996,860	124,316,531	4,680,329	96.4	3.6	4.7	4.2
Middle Atlantic	5,878,939,167	5,427,960,642	450,978,525	92.3	7.7	1,029,123,982	1,005,544,854	23,579,128	97.7	2.3	4.5	5.2
East North Central	5,195,326,085	5,058,787,524	136,538,561	97.4	2.6	2,342,714,737	2,306,233,361	36,481,376	98.4	1.6	5.0	5.1
West North Central	2,357,781,413	2,306,723,658	51,057,755	97.8	2.2	2,219,544,819	2,191,024,229	28,520,590	98.7	1.3	6.3	4.8
South Atlantic	1,837,367,806	1,789,369,008	47,998,798	97.4	2.6	588,117,425	575,697,782	12,419,643	97.9	2.1	5.9	5.8
East South Central	1,213,435,532	1,196,425,031	17,010,501	98.6	1.4	323,258,213	317,712,631	5,545,582	98.3	1.7	8.4	5.0
West South Central	2,041,686,216	2,009,773,051	31,913,165	98.4	1.6	606,923,733	596,311,957	10,611,876	98.3	1.7	8.0	5.2
Mountain	626,409,764	610,841,544	15,568,220	97.5	2.5	153,929,768	152,782,725	1,147,043	99.3	.7	4.9	7.3
Pacific	2,342,692,488	2,261,433,900	81,258,588	96.5	3.5	528,545,034	505,536,042	23,008,992	95.6	4.4	5.2	5.3
NEW ENGLAND:												
Maine	153,945,809	148,314,586	5,631,223	96.3	3.7	59,972,707	57,996,800	1,975,907	96.7	3.3	5.3	4.3
New Hampshire	87,267,680	83,308,445	3,959,235	95.5	4.5	30,107,097	28,794,092	1,313,005	95.6	4.4	4.4	4.3
Vermont	56,523,574	53,761,619	2,761,955	95.1	4.9	27,804,218	26,940,526	863,692	96.9	3.1	4.7	3.6
Massachusetts	1,328,690,551	1,268,893,523	59,797,028	95.5	4.5	5,298,840	5,139,156	159,684	97.0	3.0	4.7	5.6
Rhode Island	114,296,058	102,608,267	11,687,791	89.8	10.2	2,554,474	2,421,933	132,541	94.8	5.2	3.1	3.8
Connecticut	458,655,807	433,820,814	24,834,993	94.6	5.4	3,259,524	3,024,024	235,500	92.8	7.2	4.9	4.4
MIDDLE ATLANTIC:												
New York	3,516,556,662	3,285,984,375	230,572,287	93.4	6.6	418,978,116	408,070,409	10,907,707	97.4	2.6	4.6	4.8
New Jersey	758,025,369	627,414,195	130,611,174	82.8	17.2	15,669,846	14,593,093	1,076,753	93.1	6.9	4.0	2.9
Pennsylvania	1,604,357,136	1,514,562,072	89,795,064	94.4	5.6	594,476,020	582,881,352	11,594,668	98.0	2.0	4.6	5.6
EAST NORTH CENTRAL:												
Ohio	1,297,639,685	1,275,900,786	21,738,899	98.3	1.7	660,323,068	651,116,245	9,211,823	98.6	1.4	5.3	5.4
Indiana	465,988,204	457,148,028	8,840,176	98.1	1.9	595,001,805	587,977,999	7,023,806	98.8	1.2	6.3	5.6
Illinois	1,953,415,412	1,881,033,102	72,382,310	96.3	3.7	617,924,974	604,159,470	13,765,504	97.8	2.2	4.6	4.8
Michigan	943,589,956	918,957,600	24,632,356	97.4	2.6	196,565,604	194,085,248	2,480,356	98.7	1.3	4.9	4.9
Wisconsin	534,692,828	525,748,008	8,944,820	98.3	1.7	272,894,286	268,894,399	3,999,887	98.5	1.5	5.1	4.3
WEST NORTH CENTRAL:												
Minnesota	421,511,059	414,066,180	7,444,879	98.2	1.8	509,544,166	503,309,964	6,234,202	98.8	1.2	6.6	5.4
Iowa	432,013,491	420,965,826	11,047,665	97.4	2.6	483,501,287	475,310,105	8,191,182	98.3	1.7	5.8	4.4

Missouri	912,438,117	891,795,960	20,642,157	97.7	2.3	356,579,717	354,539,739	2,039,978	99.4	.6	6.8	4.5
North Dakota	62,257,076	60,184,080	2,072,996	96.7	3.3	67,222,324	66,855,247	367,077	99.5	.5	5.5	4.0
South Dakota	38,238,493	37,217,730	1,020,763	97.3	2.7	133,001,770	129,276,357	3,725,413	97.2	2.8	5.4	4.8
Nebraska	208,147,229	204,219,180	3,928,049	98.1	1.9	316,297,558	313,019,339	3,278,219	99.0	1.0	6.0	5.2
Kansas	283,175,948	278,274,702	4,901,246	98.3	1.7	353,397,997	348,713,478	4,684,519	98.7	1.3	5.5	4.6
SOUTH ATLANTIC:												
Delaware	52,437,096	50,429,652	2,007,444	96.2	3.8	693,225	693,225	----------	100.0	------	5.7	4.2
Maryland	290,027,760	275,792,844	14,234,916	95.1	4.9	3,762,752	3,726,282	36,470	99.0	1.0	4.6	3.2
District of Columbia	186,008,388	181,624,680	4,383,708	97.6	2.4	----------	----------	----------	------	------	3.9	------
Virginia	279,850,968	274,079,100	5,771,868	97.9	2.1	102,167,867	100,622,907	1,544,960	98.5	1.5	7.0	5.2
West Virginia	197,588,376	191,995,068	5,593,308	97.2	2.8	81,568,416	77,280,741	4,287,675	94.7	5.3	5.9	5.9
North Carolina	201,255,676	197,123,683	4,131,993	97.9	2.1	177,986,288	174,970,400	3,015,888	98.3	1.7	7.6	6.9
South Carolina	111,031,468	108,473,652	2,557,816	97.7	2.3	35,149,915	34,779,529	370,386	98.9	1.1	7.6	5.5
Georgia	377,680,828	373,168,205	4,512,623	98.8	1.2	58,610,873	57,812,633	798,240	98.6	1.4	8.5	4.9
Florida	141,487,246	136,682,124	4,805,122	96.6	3.4	128,178,089	125,812,065	2,366,024	98.2	1.8	4.6	5.8
EAST SOUTH CENTRAL:												
Kentucky	339,971,469	335,654,728	4,316,741	98.7	1.3	145,012,281	143,845,676	1,166,605	99.2	.8	7.5	5.4
Tennessee	433,269,534	429,431,635	3,837,899	99.1	.9	125,154,649	121,339,615	3,815,034	97.0	3.0	9.0	5.3
Alabama	278,451,997	274,010,370	4,441,627	98.4	1.6	34,429,158	33,878,415	550,743	98.4	1.6	9.3	3.6
Mississippi	161,742,532	157,328,298	4,414,234	97.3	2.7	18,662,125	18,648,925	13,200	99.9	.1	7.8	3.5
WEST SOUTH CENTRAL:												
Arkansas	175,547,355	172,087,540	3,459,815	98.0	2.0	63,031,390	62,373,743	657,647	99.0	1.0	7.3	4.3
Louisiana	374,496,085	369,938,887	4,557,198	98.8	1.2	10,607,332	10,317,744	289,588	97.3	2.7	8.9	3.8
Oklahoma	461,501,118	451,045,858	10,455,260	97.7	2.3	119,931,279	117,864,944	2,066,335	98.3	1.7	7.7	3.9
Texas	1,030,141,658	1,016,700,766	13,440,892	98.7	1.3	413,353,832	405,755,526	7,598,306	98.2	1.8	7.9	5.9
MOUNTAIN:												
Montana	65,598,536	64,007,820	1,590,716	97.6	2.4	15,015,201	14,886,072	129,129	99.1	.9	4.2	4.1
Idaho	63,772,805	62,004,003	1,768,802	97.2	2.8	64,655,581	64,082,059	573,522	99.1	.9	5.4	10.8
Wyoming	32,058,345	31,284,489	773,856	97.6	2.4	6,764,765	6,730,269	34,496	99.5	.5	4.3	4.0
Colorado	274,045,476	267,357,295	6,688,181	97.6	2.4	38,880,608	38,852,292	28,316	99.9	.1	5.0	8.1
New Mexico	30,171,069	29,653,452	517,617	98.3	1.7	5,066,150	5,008,650	57,500	98.9	1.1	5.2	4.2
Arizona	33,334,505	32,337,893	996,612	97.0	3.0	3,873,979	3,792,413	81,566	97.9	2.1	3.4	4.7
Utah	114,717,452	111,731,988	2,985,464	97.4	2.6	12,545,932	12,438,936	106,996	99.1	.9	6.0	9.0
Nevada	12,711,576	12,464,604	246,972	98.1	1.9	7,127,552	6,992,034	135,518	98.1	1.9	4.7	4.7
PACIFIC:												
Washington	437,720,004	430,741,116	6,978,888	98.4	1.6	116,422,653	114,534,412	1,888,241	98.4	1.6	5.9	5.0
Oregon	259,944,984	255,137,616	4,807,368	98.2	1.8	71,301,544	70,215,655	1,085,889	98.5	1.5	5.9	4.4
California	1,645,027,500	1,575,555,168	69,472,332	95.8	4.2	340,820,837	320,785,975	20,034,862	94.1	5.9	5.0	5.6

[1] See "Number of 'originating calls,'" p. 24.

[2] Includes all calls reported by systems and lines with annual incomes of less than $10,000, no distribution as to "exchange" and "toll" calls having been called for on the schedule used for this class of systems and lines.

[3] Computed on the basis of 325 days to the year. (See footnote 1; see also "Number of originating calls per telephone per day," p. 24.)

TABLE 33.—PRINCIPAL STATISTICS, SYSTEMS AND LINES REPORTING ANNUAL INCOMES OF LESS THAN $10,000, BY GEOGRAPHIC DIVISIONS AND STATES: 1927

DIVISION AND STATE	Number of systems and lines	Miles of single wire	Number of central offices	NUMBER OF TELEPHONES		Number of calls originating with systems reporting	Total gross receipts exclusive of assessments of mutual companies	Assessments of mutual companies	EMPLOYEES			Salaries and wages paid	Investment in plant and equipment
				Total	Residence				Total	Male	Female		
UNITED STATES	58,780	1,558,936	8,742	1,810,272	1,629,816	2,417,785,175	$20,159,889	$6,501,926	18,533	6,839	11,694	$10,756,750	$73,672,760
GEOGRAPHIC DIVISIONS:													
New England	283	20,094	144	21,152	19,362	26,700,050	377,477	26,401	309	130	179	182,072	884,804
Middle Atlantic	2,321	74,063	499	99,450	89,948	135,449,275	1,435,501	349,479	1,256	504	752	710,186	5,056,465
East North Central	7,547	351,030	1,934	428,712	389,729	556,463,375	4,989,211	1,255,913	5,152	2,075	3,077	2,888,531	16,424,732
West North Central	18,795	525,362	2,647	685,576	622,019	881,036,650	6,733,074	2,537,917	6,059	2,163	3,896	3,737,767	26,281,014
South Atlantic	4,141	107,838	853	117,420	100,646	182,171,275	1,448,221	425,502	1,507	587	920	789,413	4,735,158
East South Central	6,451	114,580	822	128,420	114,865	161,013,125	1,107,594	481,352	1,286	444	842	588,096	3,883,777
West South Central	12,015	210,859	1,258	210,103	187,029	264,535,700	2,624,531	739,372	1,892	555	1,337	1,140,361	8,446,272
Mountain	2,239	59,285	310	38,694	33,084	112,850,075	623,703	245,798	481	149	332	291,656	3,079,125
Pacific	4,988	95,825	275	80,745	73,134	97,565,650	820,577	440,192	591	232	359	428,668	4,881,413
NEW ENGLAND:													
Maine	159	10,617	73	10,802	9,914	12,934,675	188,228	13,547	148	68	80	90,131	489,163
New Hampshire	48	2,769	26	3,600	3,215	5,352,425	71,952	5,135	58	23	35	36,309	133,444
Vermont	64	5,764	38	5,727	5,299	6,893,900	92,082	6,412	85	30	55	44,330	222,260
Massachusetts	12	944	7	1,023	934	1,519,050	25,215	1,307	18	9	9	11,302	39,937
Rhode Island													
Connecticut [1]													
MIDDLE ATLANTIC:													
New York	846	27,791	200	42,991	38,836	62,095,150	694,892	108,246	520	197	323	354,456	1,843,674
New Jersey	61	1,868	13	2,032	1,659	2,141,425	37,484	9,833	25	14	11	15,878	190,324
Pennsylvania	1,414	44,404	286	54,427	49,453	71,212,700	703,125	231,400	711	293	418	339,852	3,022,467
EAST NORTH CENTRAL:													
Ohio	889	63,345	373	73,146	66,624	102,634,675	897,609	174,798	961	347	614	570,925	2,750,786
Indiana	1,328	68,811	475	95,009	87,113	135,700,500	1,213,605	145,674	1,230	491	739	638,800	3,412,293
Illinois	2,877	91,720	542	124,845	114,126	153,578,100	1,117,695	431,049	1,399	565	834	720,115	4,041,640
Michigan	1,476	48,749	236	56,428	50,851	81,280,225	625,608	263,857	567	239	328	336,283	2,180,872
Wisconsin	977	78,405	308	79,284	71,015	83,269,875	1,134,694	240,535	995	433	562	622,408	4,039,141
WEST NORTH CENTRAL:													
Minnesota	2,251	101,224	403	104,796	93,429	135,763,225	1,235,289	343,923	983	369	614	621,249	5,478,314
Iowa	4,724	92,744	559	173,406	160,765	215,026,175	1,444,362	752,102	1,341	492	849	856,332	4,994,024
Missouri	5,002	103,346	658	154,286	138,651	216,639,800	1,169,135	534,068	1,316	383	933	694,554	4,485,968
North Dakota	931	37,780	218	35,084	31,325	38,150,775	495,555	151,352	378	144	234	262,663	2,474,484
South Dakota	730	29,830	123	32,918	29,667	33,594,925	451,204	67,732	254	97	157	182,960	1,613,655
Nebraska	1,739	62,080	210	65,225	59,197	80,698,475	752,533	207,064	569	222	347	369,750	3,209,819
Kansas	3,418	98,358	476	119,861	108,985	161,163,275	1,184,996	481,676	1,218	456	762	750,259	4,024,750

South Atlantic:													
Delaware	44	446	2	505	486	693,225	2,689	5,135					22,080
Maryland	173	2,850	12	3,065	2,693	3,233,750	24,010	27,632	24	13	11	13,560	139,609
District of Columbia													
Virginia	669	23,517	185	28,245	24,386	38,806,625	256,550	98,677	352	144	208	161,869	1,138,731
West Virginia	400	20,498	214	29,478	26,609	53,716,325	224,491	81,450	351	131	220	156,431	784,962
North Carolina	1,095	22,692	147	21,618	18,624	35,588,800	307,649	93,936	235	82	153	147,875	956,525
South Carolina	633	13,005	80	10,418	8,361	16,411,525	180,516	50,053	137	48	89	83,245	597,627
Georgia	1,065	21,155	180	21,381	17,760	29,101,800	380,533	66,374	337	139	198	178,758	879,198
Florida	62	3,675	33	2,710	1,727	4,619,225	71,683	2,245	71	30	41	47,675	216,426
East South Central:													
Kentucky	2,331	40,382	285	47,162	42,795	62,141,950	298,204	186,224	467	138	329	182,277	1,391,960
Tennessee	2,246	44,470	283	46,019	41,709	59,671,625	317,632	180,200	498	206	292	196,116	1,248,150
Alabama	864	17,448	167	21,875	18,536	21,417,825	320,698	45,767	228	73	155	136,025	755,815
Mississippi	1,010	12,280	87	13,364	11,825	17,781,725	171,060	69,161	93	27	66	73,678	487,852
West South Central:													
Arkansas	2,196	25,558	185	28,622	24,934	32,899,100	340,706	98,851	241	64	177	117,246	856,640
Louisiana	936	7,607	51	6,759	5,492	8,413,275	125,611	15,790	85	33	52	57,192	321,593
Oklahoma	3,100	52,928	351	68,090	60,723	76,092,900	837,900	266,680	633	202	431	434,275	2,633,582
Texas	5,783	124,766	671	106,632	95,880	147,130,425	1,320,314	358,051	933	256	677	531,648	4,634,457
Mountain:													
Montana	427	11,936	75	7,842	6,673	9,025,250	145,057	39,071	101	35	66	56,092	773,205
Idaho	433	8,750	39	7,999	7,305	46,714,200	103,290	49,620	81	26	55	54,934	439,559
Wyoming	320	8,314	38	4,272	3,725	5,901,025	74,511	17,991	57	14	43	30,184	480,500
Colorado	739	18,460	78	11,896	10,630	35,408,100	148,897	123,698	126	46	80	67,899	694,826
New Mexico	175	4,953	37	2,967	2,181	3,160,950	71,038	7,026	39	3	36	23,719	219,561
Arizona	47	3,123	9	1,054	462	1,242,475	9,757	2,272	21	5	16	23,290	189,239
Utah	54	2,190	27	1,995	1,710	9,781,200	50,896	4,065	50	19	31	28,398	178,981
Nevada	44	1,559	7	669	398	1,616,875	15,257	2,055	6	1	5	7,140	103,254
Pacific:													
Washington	1,169	28,429	104	27,323	24,120	36,579,075	356,611	115,536	242	87	155	188,803	1,530,003
Oregon	1,254	24,251	97	24,674	23,081	27,706,250	204,588	126,338	174	62	112	112,982	1,088,004
California	2,565	43,145	74	28,748	25,933	33,280,325	259,378	198,318	175	83	92	126,883	2,263,406

[1] System operating in Connecticut treated as part of Massachusetts systems.

CHAPTER V.—FINANCIAL STATISTICS

Character of the statistics.—Detailed financial data for 1922 were collected only from telephone systems with incomes of $10,000 or more, and for 1917 and prior years only from those systems having incomes of $5,000 or more. The data supplied by these systems comprised detailed income statements showing revenue and expenditures for the year, balance sheets showing financial condition at the end of the year, and the amounts of salaries and wages paid the several classes of employees. The schedules for 1922 and 1917 were modeled on those used by the Interstate Commerce Commission in its annual collection of telephone data. For the 1927 census, however, the schedule was simplified. The short-form schedule called for the total gross receipts from the operation of the system or line, and both the long-form and short-form schedules called for the total amount of assessments levied by the mutual companies for the operation and maintenance of the system or line, the total amount of salaries and wages paid during the year, and the investment in plant and equipment.

The financial statistics for the larger systems are presented only for the United States as a whole. Since not only the Bell System but many of the others operate in more than one State, it is impracticable to apportion the various financial items among the States.

Increase in salaries and wages.—An important consideration, so far as the telephone business is concerned, is the increase in salary and wage scales, for the reason that salaries and wages constitute a large proportion of the total expenses. The total salaries and wages paid by the larger telephone systems increased by 100.9 per cent between 1917 and 1922, 37.9 per cent between 1922 and 1927, and 177 per cent during the 10-year period 1917 to 1927, whereas the corresponding rates of increase in number of employees were only 18.8 per cent, 20.3 per cent, and 42.9 per cent, respectively. (See Table 36.)

Operating revenue per telephone and per call (Table 35).—In making use of the figures in Table 35, some allowance must be made for differences in the methods of charging for telephone service and for the fact that a considerable proportion of the smaller companies, especially among those reporting for 1917 and 1912 (when the minimum income limit was $5,000) had very imperfect systems of accounting, as a result of which the data reported by them were inaccurate. Since the averages per telephone and per originating call for 1917 and 1912 are necessarily based on totals which include these inaccurate data, the revenues for those years should be accepted as approximations only rather than as exact figures. These approximations, however, reflect in a fairly trustworthy manner the general relationship of income to number of telephones and amount of traffic and show the trend of this relationship from census to census.

Employees, salaries, and wages (Table 36).—At the census for 1922, detailed data for employees, salaries, and wages were collected by correspondence from the telephone companies having incomes of $10,000 or more, whereas at the 1927 census these companies reported only the total number of employees, classified as male and female, together with the total amount of salaries and wages paid during the year.

TABLE 34.—OPERATING REVENUES, THE BELL SYSTEM AND OTHER SYSTEMS REPORTING ANNUAL INCOMES OF $10,000 OR MORE, FOR 1927 AND 1922, AND THOSE REPORTING $5,000 OR MORE, 1917 [1]

SYSTEM AND CENSUS YEAR	OPERATING REVENUES											
	Total	Per cent of total	Per cent distribution	Exchange	Per cent of total	Per cent distribution	Toll	Per cent of total	Per cent distribution	Miscellaneous	Per cent of total	Per cent distribution
Total:												
1927	$996,911,752	100.0		$681,221,511	68.3		$294,625,256	29.6		[2] $21,064,985	2.1	
1922	637,468,630	100.0		447,067,008	70.1		180,069,891	28.3		10,331,731	1.6	
1917	363,831,921	100.0		262,698,775	72.2		97,250,496	26.7		3,882,650	1.1	
Bell System: [3]												
1927	894,699,173	100.0	89.7	604,266,112	67.5	88.7	271,174,270	30.4	92.0	19,258,791	2.1	91.4
1922	546,820,113	100.0	85.8	374,718,580	68.5	83.8	163,097,837	29.9	90.6	9,003,696	1.6	87.1
1917	303,863,847	100.0	83.5	214,119,479	70.4	81.5	86,814,336	28.6	89.3	2,930,032	1.0	75.5
Other systems:												
1927	102,212,579	100.0	10.3	76,955,399	75.3	11.3	23,450,986	22.9	8.0	[4] 1,806,194	1.8	8.6
1922	90,648,517	100.0	14.2	72,348,428	79.8	16.2	16,972,054	18.7	9.4	[4] 1,328,035	1.5	12.9
1917	59,968,074	100.0	16.5	48,579,296	81.0	18.5	10,436,160	17.4	10.7	[4] 952,618	1.6	24.5

[1] See "Change in classification according to income," p. 2, and Table 7, p. 12.
[2] Not called for separately on the schedule used at the 1927 census; figures arrived at by deduction.
[3] Excludes intercompany duplications within the Bell System.
[4] Includes assessments levied by mutual companies.

TABLE 35.—OPERATING REVENUE PER TELEPHONE AND PER ORIGINATING CALL, SYSTEMS REPORTING ANNUAL INCOMES OF $10,000 OR MORE, 1927 AND 1922, AND THOSE REPORTING $5,000 OR MORE, 1907 TO 1917 [1]

	1927	1922	1917	1912	1907
Average number of originating calls per telephone [2] per year	1,747	1,781	1,990	1,875	2,120
Average total operating revenue:					
Per telephone [2]	$59.65	$51.85	$36.55	$33.37	$35.89
Per originating call (cents)	3.414	2.911	1.837	1.780	1.693
Average exchange and toll revenue—					
Per telephone [2]	$58.39	$51.01	$36.16	$33.23	$35.53
Per originating call (cents)	3.342	2.864	1.817	1.772	1.676
Average miscellaneous operating revenue—					
Per telephone [2]	$1.26	$0.84	$0.39	$0.14	$0.36
Per originating call (cents)	0.072	0.047	0.020	0.008	0.017

[1] See "Change in classification according to income," p. 2, and Table 7, p. 12.
[2] Based on actual numbers of telephones reported as in use on Dec. 31 of each year.

TABLE 36.—EMPLOYEES, SALARIES, AND WAGES, ALL SYSTEMS AND LINES: 1917 TO 1927

	1927	1922	1917	PER CENT OF INCREASE OR DECREASE (—)		
				1922–1927	1917–1922	1917–1927
Employees:						
Total number [1]	375,272	312,015	262,629	20.3	18.8	42.9
Male	131,802	104,433	91,510	26.2	14.1	44.0
Female	243,470	207,582	171,119	17.3	21.3	42.3
Salaries and wages	$486,597,070	$352,925,570	$175,070,449	37.9	100.9	177.0

[1] The number of employees shown for 1927 refers to June 30, except for the Bell System, which reported the average number of employees during the year (see "Period covered," Ch. I, p. 1); for 1922 to June 30; and for 1917 to Sept. 29.

APPENDIX

Page
Schedule used in collecting data for telephone systems having incomes of $10,000 or more in 1927..... 50
Schedule used in collecting data for telephone systems having incomes of less than $10,000 in 1927..... 52

FORM 9062

File No. .....

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON

CENSUS OF TELEPHONES, 1927

This schedule is to be used only by companies or systems having annual operating revenues of $10,000 or more.

NAME OF COMPANY OR SYSTEM .....

STATE ..... CITY ..... COUNTY .....

ADDRESS OF GENERAL OFFICE: Street and number ..... City or town .....
County ..... State .....

AUTHORIZATION

An act of Congress approved June 7, 1906, authorizes the Director of the Census to collect, at five-year intervals, statistics relating to electrical industries. An act approved March 3, 1919, directs that it shall be the duty of every owner, official, agent, person in charge, or assistant to the person in charge of any company or establishment covered by the census inquiry, to furnish the information called for by any schedule prepared under the authority of any census law.

The statistics should relate to the calendar year ending December 31, 1927.

The information given in your reports will be held in strict confidence.

No publication will be made disclosing the names or operations of individual lines or systems.

No one not a sworn employee of the Bureau of the Census will be permitted to examine the individual reports.

W. M. STEUART,
Director of the Census.

CERTIFICATE

THIS IS TO CERTIFY that the information contained in this report is complete and correct to the best of my knowledge and belief, and that it covers the period from ....., 192 , to ....., 192

.....
(Signature and official designation of the person furnishing the information)

.....
(Address of person furnishing the information)

.....
(Signature of Special Agent)

Each question should be answered. If not applicable, write "None"

1. CHARACTER OF ORGANIZATION.—(State the form of organization as it existed on the last day of the year covered by the report, whether individual, firm or partnership, mutual company, cooperative association, incorporated company, or other form; if mutual or cooperative and also incorporated, give both.)

.....

2. MILES OF WIRE.—(The answer to this inquiry should show the total number of miles of single wire in operation, or ready for operation. If several wires are on one line of poles or in one conduit or cable, count length of each wire separately.)

	Total	Overhead		Underground
		In cable	Not in cable	
Wire on exchange circuits				
Wire on toll circuits				
TOTAL MILES OF WIRE				

3. Number of central offices, December 31, 1927 .....

4. Total number of telephones, December 31, 1927 .....
(Include all telephones—those of regular exchange subscribers; those on private-branch exchanges; those in local pay and outlying toll stations and farmer, rural, or party lines owned by the company; and those used by the company for communication between its different departments. *Do not* include telephones on wire of other companies or lines.)

5. Approximate number of these telephones located in homes (residence telephones) .....

6. Estimated total number of telephone connections or calls, both completed and uncompleted, originating during the year from telephones owned and operated by the company reporting (do not include interior private-branch calls), divided between:

Exchange connections or calls .....

Long-distance and toll connections or calls .....

7. Total telephone operating revenues, excluding nonoperating revenues, during 1927 ..... $.....
(Report total exchange revenues, toll revenues, and miscellaneous operating revenues as shown by Account 300 of Uniform System of Accounts for Telephone Companies, prescribed by the Interstate Commerce Commission.)

8. Total exchange revenues during 1927 ..... $.....
(I. C. C. Accounts 500–506, Classes A and B; Account 500, Class C.)

9. Total toll revenues during 1927 ..... $.....
(I. C. C. Accounts 510–516, Classes A and B; Account 510, Class C.)

10. Total amount of assessments levied by mutual companies for operation and maintenance of company during 1927 ..... $.....

11. Number of employees, including salaried officers, and including part-time and temporary employees, as of June 30, 1927, or last weekly pay roll for the month. If data are not available for that day or month, give data as of nearest representative normal day, and state day and month here ..... $.....

Male employees ..... Female employees ..... Total .....

12. Total salaries and wages paid to all employees during 1927 ..... $.....

13. Investment in plant and equipment, December 31, 1927 ..... $.....
(I. C. C. Accounts 100, 101, and 104, Classes A and B; Account 100, Class C.)

Each question should be answered. If not applicable, write "None"

14. Companies operating in more than one State should report data on wire, central offices, telephones, and calls by *States* in the table below. (If exact figures are not available, carefully prepared estimates should be supplied and marked "E.")

STATE	TOTAL MILES OF SINGLE WIRE	NUMBER OF CENTRAL OFFICES	NUMBER OF TELEPHONES			NUMBER OF ORIGINATING CALLS DURING YEAR		
			Business	Residence	Total	Exchange	Toll	Total

16. Names and addresses of farmer or rural lines connected with but not owned by the company reporting. Give only the lines (or which statistics are not included in this report. (Use back of schedule if necessary.)

REMARKS:

File No. .....

Form 2022

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON

The law makes it obligatory upon every telephone company, line, or system to furnish census data.

CENSUS OF TELEPHONES, 1927

SMALL LINES AND SYSTEMS

(THOSE WHOSE INCOME WAS LESS THAN $10,000 IN 1927)

In compliance with an act of Congress approved June 7, 1906, a census of telephones is taken every fifth year. The Bureau of the Census is now taking the census for 1927. Please answer the following questions and return this report at once in the inclosed envelope, which requires no postage.

The information given in your report will be held in strict confidence.

No publication will be made disclosing the names or operations of individual lines or systems.

No one not a sworn employee of the Bureau of the Census will be permitted to examine the individual reports.

A separate report is required for each separately owned company, line, or system.

W. M. STEUART,
Director of the Census.

1. Name of company, line, or system.....
2. Post office address of business office: State..... City or town..... County.....
3. Character of organization (state whether individual, firm or partnership, incorporated company, mutual company, or cooperative association).....
4. Number of miles of single wire in your entire line or system December 31, 1927.....
5. Number of central offices (switchboards) operated by you.....
6. If answer to inquiry 5 is "none," does your line or system connect directly with any other central office or switchboard? (Yes or No)..... If "Yes," who owns it and where is it located?.....
7. Number of telephones on your line or system December 31, 1927.....
8. Approximate number of these telephones located in homes (residence telephones).....
9. Estimated total number of outgoing calls per day on your line or system.....
10. Total gross receipts from the operation of your line or system (not including assessments of mutual companies) during 1927, $.....
11. Total amount of assessments levied by mutual companies for operation and maintenance of line or system during 1927, $.....
12. Number of regular employees (including salaried officers) in 1927..... Male..... Female..... Total amount expended for salaries and wages during 1927, $.....
13. Total investments in lines or systems to December 31, 1927, $..... (The total should represent the cost of all poles, wire, telephones, switchboards, etc. If poles, etc., were constructed or set up by individual subscribers, include an estimate of the value of such material and labor.)
14. Names and addresses of farmer or rural lines or systems in your vicinity not covered by this report (use back of schedule if necessary).....

.....
(Signature and official title of person furnishing the information)

.....
(Signature of Special Agent)

.....
(Address of person furnishing the information)

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