15.—WAGES, HOURS OF LABOR, AND EMPLOYMENT

No. 353.—WAGES AND HOURS OF LABOR: AVERAGE FULL-TIME HOURS PER WEEK AND EARNINGS PER HOUR IN SPECIFIED MANUFACTURING INDUSTRIES

NOTE.—"The general index" (based on 1913=100) covers all occupations of industry or branch of industry indicated, including various occupations not shown separately. For hours of labor in mines and quarries see Table 725; also consult index under "Wages" for data in other sections

TEXTILES

Year	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour
	Cotton goods													
	Weavers, male		Weavers, female		Spinners, frame, male		Spinners, frame, female		Speeder tenders, male		Speeder tenders, female		General index[1]	
		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		
1910	58.8	0.161	57.8	0.147	57.2	0.120	59.0	0.108	61.4	0.131	57.8	0.133	102.1	87.5
1913	57.6	.170	56.7	.164	56.9	.143	57.8	.128	59.8	.145	56.5	.153	100.0	100.0
1916	56.7	.205	55.7	.201	56.6	.164	57.2	.149	58.5	.174	55.6	.188	98.6	120.6
1918	56.2	.301	55.4	.285	54.3	.248	56.1	.233	58.2	.265	55.0	.277	97.0	179.9
1920	51.8	.573	50.3	.528	50.7	.475	51.8	.427	54.2	.533	50.2	.486	89.7	323.5
1022	52.6	.389	51.6	.380	53.4	.292	52.6	.301	54.1	.358	51.0	.369	91.5	222.4
1924	52.8	.449	51.8	.429	53.2	.369	53.1	.319	54.3	.394	51.2	.411	91.8	250.7
1926	53.2	.396	51.9	.375	55.1	.289	53.5	.282	55.1	.343	51.0	.368	92.3	221.0
1928	53.4	.392	52.2	.371	57.8	.339	52.9	.276	55.1	.345	51.2	.359	92.5	218.3
	Men's clothing													
	Cutters, cloth, male		Pressers, coat, male		Operators, coat, male		Operators, coat, female		Hand sewers, coat, female		Basters, coat, male		General index[1]	
1911	49.9	0.408	55.1	0.240	55.9	0.264	54.2	0.195	54.8	0.155	55.3	0.220	104.6	86.7
1913	49.0	.433	52.3	.291	52.5	.305	52.1	.199	52.1	.179	52.5	.267	100.0	100.0
1919	47.7	.628	47.8	.541	47.6	.591	48.1	.361	47.8	.334	47.5	.511	92.6	173.5
1922	44.0	1.033	44.1	.869	44.1	.962	43.9	.593	44.2	.526	44.3	.848	85.3	283.7
1924	44.2	1.111	44.2	.934	44.1	1.033	43.6	.614	44.1	.555	44.4	.889	85.3	295.8
1926	44.2	1.123	44.3	.933	44.1	1.034	44.4	.638	44.4	.545	44.3	.925	85.7	291.2
1928	43.8	1.129	44.0	.912	44.2	1.016	43.3	.632	43.9	.527	44.2	.905	85.1	284.4
	Woolen and worsted goods													
	Weavers, male		Weavers, female		Spinners, mule, male		Spinners, frame, female		Burlers, female		Laborers, dyehouse, male		General index[1]	
1910	57.1	0.207	56.3	0.180	57.0	0.224	56.0	0.122	56.5	0.130	56.3	0.143	101.3	90.4
1913	56.3	.232	56.0	.197	56.5	.239	55.5	.140	55.6	.146	55.6	.159	100.0	100.0
1916	54.9	.304	54.5	.271	55.3	.316	53.9	.180	54.6	.185	55.0	.197	97.8	126.7
1918	54.5	.470	54.1	.406	54.9	.499	52.4	.278	54.1	.276	54.7	.304	97.0	192.6
1920	48.3	.807	48.3	.747	48.2	.816	48.2	.481	48.4	.452	48.3	.504	86.2	353.7
1922	48.3	.616	48.4	.576	49.2	.670	48.4	.345	48.2	.371	48.9	.435	87.1	267.0
1924	48.8	.701	48.9	.654	48.9	.755	48.9	.417	49.2	.420	49.2	.490	87.7	300.2
1926	48.9	.652	49.2	.600	49.7	.695	49.8	.362	49.3	.381	49.4	.445	88.0	276.5
1928	48.9	.658	48.8	.605	49.5	.684	49.7	.383	49.3	.383	49.1	.463	88.0	289.5
	Hosiery and underwear													
	Boarders, hosiery, male		Finishers, underwear, female		Knitters, web or tube underwear, male		Knitters, transfer, hosiery, female		Loopers, hosiery, female		Seamers, underwear, female		General index[1]	
1910	57.0	0.193	57.9	0.150	58.0	0.201	57.5	0.121	57.3	0.133	57.8	0.143	104.2	82.0
1913	55.8	.219	54.7	.184	55.4	.249	56.0	.149	56.0	.150	54.5	.176	100.0	100.0
1919	52.5	.450	51.9	.297	52.9	.407	53.0	.272	52.2	.296	51.3	.287	94.2	183.1
1922	51.3	.462	50.2	.327	51.8	.448	50.7	.293	50.8	.327	50.3	.325	91.9	213.0
1924	51.9	.531	49.8	.377	51.3	.528	50.8	.344	50.8	.384	50.3	.372	91.3	246.1
1926	53.4	.481	50.3	.358	52.0	.534	52.5	.298	52.4	.371	50.2	.374	92.4	266.6
1928	53.8	.521	50.2	.341	52.2	.490	53.1	.294	53.0	.385	50.2	.355	92.4	267.2

[1] Includes occupations shown, together with other occupations in the industry.

No. 353.—Wages and Hours of Labor, Etc.—Continued

BOOTS AND SHOES

Year	Cutters, hand, male		Treers, male		Vampers, female		Bed-machine operators, male		Top stitchers, female		Lining makers, female		General index [1]	
	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour
		Dolls.		*Dolls.*		*Dolls.*		*Dolls.*		*Dolls.*		*Dolls.*		
1910	56.3	0.319	55.9	0.259	56.9	0.238	56.4	0.311	56.3	0.188	56.5	0.164	102.7	92.0
1913	54.5	.351	55.3	.282	54.7	.246	55.2	.330	54.6	.212	54.6	.190	100.0	100.0
1916	53.9	.375	54.9	.291	53.9	.254	55.0	.349	54.0	.220	53.9	.198	99.1	107.5
1918	52.0	.484	52.3	.403	51.7	.312	52.1	.500	51.6	.285	51.5	.241	94.9	139.7
1920	47.8	.820	48.3	.677	48.8	.506	48.7	.789	48.5	.448	48.6	.378	88.2	232.0
1922	48.3	.787	48.6	.577	49.0	.480	48.9	.668	48.8	.433	48.8	.362	88.4	207.9
1924	48.4	.838	48.8	.624	49.4	.519	49.1	.692	49.3	.462	49.3	.369	88.9	214.1
1926	48.9	.808	49.2	.611	49.1	.531	49.1	.700	49.3	.486	49.3	.413	88.9	219.1
1928	48.6	.824	49.2	.624	49.3	.505	49.2	.682	49.4	.451	49.2	.398	89.2	220.3

IRON AND STEEL

Year	Blast furnaces													
	Stockers		Larrymen		Blowers		Keepers		Keepers' helpers		Laborers		General index [1]	
	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour
		Dolls.		*Dolls.*		*Dolls.*		*Dolls.*		*Dolls.*		*Dolls.*		
1913	78.0	0.192	82.3	0.217	82.2	0.332	82.0	0.235	82.2	0.186	72.5	0.171	100	100
1915	74.6	.188	78.6	.211	80.6	.336	79.4	.232	80.1	.182	71.3	.171	97	101
1917	77.4	.295	77.2	.327	77.8	.485	77.4	.344	77.6	.292	75.3	.281	(2)	(2)
1919	78.1	.465	80.4	.542	79.8	.755	80.6	.562	80.2	.480	77.9	.457	(2)	(2)
1920	75.5	.527	73.8	.586	73.2	.863	73.3	.635	74.5	.522	72.3	.474	94	279
1922	74.4	.352	75.1	.402	72.4	.678	75.3	.420	75.3	.349	67.7	.315	94	194
1924	60.5	.465	57.7	.548	58.3	.889	57.1	.579	58.6	.475	62.4	.401	78	254
1926	60.1	.465	57.9	.551	58.5	.902	57.4	.577	59.1	.471	62.4	.389	78	252

Year	Open-hearth furnaces													
	Stockers		Charging-machine operators		Melters' helpers, first		Steel pourers		Ladle cranemen		Laborers		General index [1]	
	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour
		Dolls.		*Dolls.*		*Dolls.*		*Dolls.*		*Dolls.*		*Dolls.*		
1913	77.8	0.197	78.0	0.335	77.1	0.440	77.0	0.370	77.2	0.341	76.2	0.187	100	100
1915	77.3	.199	77.7	.330	75.5	.437	75.7	.366	76.0	.327	70.8	.186	97	104
1917	77.4	.296	77.1	.467	76.3	.586	76.0	.466	76.4	.466	74.4	.292	(2)	(2)
1919	75.7	.506	75.3	.753	74.9	.966	73.2	.796	75.6	.733	76.2	.468	(2)	(2)
1920	70.9	.573	67.2	.895	60.4	1.089	68.0	.929	68.3	.837	68.5	.525	90	283
1922	73.9	.379	72.2	.625	71.4	.775	70.4	.645	72.9	.588	67.9	.354	92	203
1924	58.2	.540	56.3	.863	55.5	1.064	56.5	.837	55.2	.832	59.0	.434	76	268
1926	57.8	.535	55.7	.951	55.3	1.170	55.6	.889	54.9	.900	59.2	.429	74	286

Year	Bar mills													
	Stockers		Rollers		Roughers		Finishers		Hotbed men		Laborers		General index [1]	
	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour
		Dolls.		*Dolls.*		*Dolls.*		*Dolls.*		*Dolls.*		*Dolls.*		
1913	60.2	0.216	59.3	0.985	59.8	0.436	59.6	0.350	60.3	0.217	62.5	0.169	100	100
1915	60.2	.198	59.4	.944	58.9	.438	59.8	.352	60.0	.216	62.9	.173	100	92
1918	63.7	.524	61.3	1.821	60.7	.933	61.6	.766	59.4	.545	66.1	.443	(2)	(2)
1920	61.5	.612	59.5	1.919	57.8	1.034	60.0	.866	58.8	.618	65.1	.506	100	248
1922	59.2	.420	58.4	1.416	57.3	.709	57.9	.638	58.3	.439	64.5	.316	100	169
1924	56.0	.502	53.9	1.577	54.7	.819	54.0	.749	53.8	.538	57.5	.392	90	203
1926	54.2	.519	53.2	1.609	53.2	.847	53.0	.848	53.0	.564	55.0	.411	89	205

[1] Includes occupations shown, together with other occupations in the industry.
[2] Not available. Data were collected for a group of selected occupations only in 1917 and 1919.

No. 353.—Wages and Hours of Labor, Etc.—Continued

IRON AND STEEL—Continued

Year	Tin-plate mills													
	Rollers		Roughers		Doublers		Heaters, level-handed		Tinners		Assorters, female		General index[1]	
	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour
		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		
1913	42.7	1.139	42.7	0.533	42.7	0.740	42.7	0.595	43.6	0.433	53.7	0.163	100	100
1915	42.7	1.106	42.7	.562	42.7	.718	42.7	.611	43.3	.442	55.4	.162	109	103
1919	42.7	2.248	42.7	1.193	42.7	1.408	42.7	1.273	43.0	.977	48.5	.417	(2)	(2)
1920	42.7	2.642	42.7	1.363	42.7	1.655	42.7	1.465	42.9	1.114	46.9	.465	110	223
1922	42.7	1.701	42.7	.893	42.7	1.046	42.7	1.001	43.3	.795	43.3	.365	108	156
1924	42.7	2.099	42.7	1.150	42.7	1.243	42.7	1.229	43.4	.976	43.6	.422	106	191
1926	42.7	1,635	42.7	.902	42.7	.787	42.7	.917	43.5	.840	43.4	.384	104	169

GENERAL INDEXES FOR OTHER BRANCHES—IRON AND STEEL

Year	Bessemer converters		Puddling mills		Blooming mills		Plate mills		Standard-rail mills		Sheet mills	
1913	100	100	(3)	(3)	100	100	100	100	100	100	100	100
1915	98	93	98	96	97	101	98	106	100	97	100	93
1920	100	238	101	270	92	249	98	263	86	249	96	215
1922	98	165	98	151	93	178	95	187	87	185	98	144
1924	75	220	105	220	75	231	82	220	81	226	96	167
1926	75	226	98	200	74	237	80	238	78	234	93	157

FOUNDRIES[4]

Year	Core makers, males		Core makers, females		Laborers, males		Molders, hand, floor, males		Pattern makers, males		Employees in all occupations			
											Males		Females	
		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.
1923	51.4	0.690	49.2	0.431	53.5	0.428	51.2	0.729	51.1	0.750	52.4	0.560	49.3	0.404
1925	50.3	.734	48.6	.444	52.5	.481	50.4	.802	50.4	.804	51.5	.612	49.0	.427
1927	50.4	.755	48.4	.491	52.1	.491	49.9	.820	50.3	.830	51.1	.626	49.0	.459

MACHINE SHOPS[4]

Year	Assemblers, males		Fitters and bench hands, males		Laborers, males		Lathe hands and operators, engine, males		Machinists, males		Employees in all occupations			
											Males		Females	
		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.
1923	50.6	0.575	49.9	0.616	51.1	0.418	50.9	0.633	50.0	0.683	50.8	0.560	49.1	0.366
1925	49.6	.634	49.8	.643	50.6	.456	50.3	.663	49.9	.702	50.4	.604	49.3	.420
1927	50.1	.653	49.5	.662	50.4	.456	50.2	.695	49.5	.728	50.1	.629	48.9	.403

AUTOMOBILE[4]

Year	Assemblers, chassis, males		Assemblers, motor, males		Gear-cutter operators, males		Grinding-machine operators, males		Tool and die makers, males		Employees in all occupations			
											Males		Females	
		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.
1922	50.2	0.647	50.0	0.661	50.2	0.678	50.0	0.710	50.0	0.769	50.1	0.662	50.3	0.438
1925	49.9	.694	49.8	.747	50.6	.746	50.1	.765	50.2	.875	50.3	.729	50.1	.467
1928	49.0	.758	50.1	.762	49.5	.760	48.8	.792	48.8	.919	49.4	.756	50.3	.487

[1] Includes occupations shown, together with other occupations in the industry.
[2] Not available. Data were collected for a group of selected occupations only in 1919.
[3] No data.
[4] Data are not collected annually, but at intervals, and are available only for the years specified.

No. 353.—Wages and Hours of Labor, Etc.—Continued

LUMBER

Year	Doggers: Hours per week	Doggers: Wages per hour	Setters: Hours per week	Setters: Wages per hour	Sawyers, head, band: Hours per week	Sawyers, head, band: Wages per hour	Edgermen: Hours per week	Edgermen: Wages per hour	Trimmer operators: Hours per week	Trimmer operators: Wages per hour	Laborers: Hours per week	Laborers: Wages per hour	General index[1]: Hours per week	General index[1]: Wages per hour
		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		
1910	(5)	(5)	(5)	(5)	61.2	0.543	61.2	0.255	61.0	0.209	61.3	0.166	100	97
1913	61.2	0.184	61.0	0.258	60.9	.557	61.0	.268	61.0	.217	61.1	.171	100	100
1915	61.3	.178	61.2	.239	61.0	.539	61.0	.252	61.1	.203	61.3	.157	100	91
1919	57.8	.358	57.0	.446	57.5	.768	57.5	.450	57.3	.405	57.1	.345	92	194
1921	58.1	.306	57.6	.412	57.8	.797	57.5	.437	57.0	.380	57.2	.285	94	166
1923	57.6	.343	57.0	.474	57.0	.883	57.1	.492	56.9	.430	57.5	.310	94	180
1925	58.2	.332	57.5	.458	57.7	.877	57.8	.468	57.7	.409	57.5	.309	94	178
1928	57.6	.335	56.5	.468	56.7	.887	56.7	.470	55.8	.429	56.9	.303	91	185

SLAUGHTERING AND MEAT PACKING

Year	Cattle killing: Headers, male: Hours per week	Headers, male: Wages per hour	Leg breakers, male: Hours per week	Leg breakers, male: Wages per hour	Floormen or siders, male: Hours per week	Floormen or siders, male: Wages per hour	Gutters and bung droppers, male: Hours per week	Gutters and bung droppers, male: Wages per hour	Splitters, male: Hours per week	Splitters, male: Wages per hour	Laborers, male: Hours per week	Laborers, male: Wages per hour	Hog killing: Stickers, male: Hours per week	Stickers, male: Wages per hour
		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.		Dolls.
1917	(3)	0.384	(3)	0.318	(3)	0.563	(3)	0.319	(3)	0.591	(3)	0.238	(3)	0.357
1921	47.6	[6] .645	47.8	[6] .574	49.0	[6] .848	47.8	[6] .578	47.8	[6] .855	47.8	[6] .471	49.6	[6] .611
1923	52.1	.627	52.8	.529	52.6	.849	52.5	.554	52.5	.857	52.2	.436	53.0	.652
1925	50.0	.641	49.9	.558	49.9	.856	50.1	.575	50.0	.855	50.2	.442	51.8	.627
1927	49.0	.662	49.1	.556	49.2	.877	49.0	.587	49.1	.876	49.4	.451	50.3	.631

Year	Hog killing—Continued: Scalders, male[8]: Hours per week	Scalders, male[8]: Wages per hour	Shavers and scrapers, male: Hours per week	Shavers and scrapers, male: Wages per hour	Gutters, bung droppers, and rippers-open, male: Hours per week	Gutters, bung droppers, and rippers-open, male: Wages per hour	Splitters, male: Hours per week	Splitters, male: Wages per hour	Laborers, male[9]: Hours per week	Laborers, male[9]: Wages per hour	All departments[7]: All males: Hours per week	All males: Wages per hour	All females: Hours per week	All females: Wages per hour
1917	(3)	0.295	(3)	0.290	(3)	0.337	(3)	0.364	(3)	0.237	(3)	0.271	(3)	0.178
1921	48.8	[6] .516	48.9	[6] .502	48.7	[6] .584	48.8	[6] .621	48.8	[6] .451	48.4	[6] .511	48.3	[6] .365
1923	52.1	.496	52.5	.497	52.4	.572	52.3	.627	52.2	.444	52.2	.499	52.8	.361
1925	51.9	.514	51.4	.523	51.9	.590	51.5	.635	51.7	.433	50.2	.507	49.4	.359
1927	50.5	.521	50.6	.535	50.4	.589	50.1	.630	51.0	.442	49.3	.520	49.1	.364

[1] Includes occupations shown together with other occupations in the industry.
[3] No data.
[5] Data for doggers and setters combined are shown as carriage men prior to 1911.
[6] Not including data for 1 establishment in which employees are paid biweekly.
[7] Includes cattle, hog, sheep, and calf killing, offal, hide, casing, cutting or fresh beef, cutting or fresh pork, lard and oleo oil, sausage, cured meat, canning, and maintenance and repair departments.
[8] Includes tub men, droppers, gamb cutters, polemen, and duckers.
[9] Includes drivers, penners, steamers, singers, washers, aitchbone breakers, and toe pullers.

No. 354.—WAGES PER HOUR IN THE COAL-MINING INDUSTRY

NOTE.—Practically all mines operate on a 48-hour week, but contract miners and their laborers in anthracite mines, and loaders, hand or pick miners, and machine miners in bituminous mines, generally work less hours. General averages are weighted according to relative importance of the different occupations. Data are not collected annually, but at intervals, and are available only for the years specified

Industry and occupation	1922	1924	Industry and occupation	1922	1924	1926
Anthracite:[1]			**Bituminous:**			
Average wages, (cents per hour)—			Average wages, (cents per hour)—			
General average	79.5	85.7	General average [2]	85.3	78.8	76.3
Contract miners	117.3	143.2	Brakemen [1]	77.9	71.0	68.7
Laborers	82.9	97.1	Drivers [1]	82.4	74.8	70.8
Drivers	58.0	63.2	Loaders, hand [3]	90.2	81.1	77.9
Company miners	69.7	79.5	Miners, hand or pick [3]	84.0	80.8	78.3
Laborers	62.9	69.6	Miners, machine [3]	127.4	116.3	119.5
Trackmen	67.5	74.1	Trackmen [1]	82.6	73.7	70.5

[1] Based on hours actually worked, excluding lunch time.
[2] Based on a combination of hours at place of work in mine, including lunch time for loaders and miners, and hours actually worked for all other employees.
[3] Based on hours actually worked, plus lunch time.

Source of Tables 353 and 354: Bureau of Labor Statistics, Department of Labor.

No. 355.—WAGES PER HOUR AND HOURS OF LABOR PER WEEK IN SUNDRY INDUSTRIES

NOTE.—The averages for wages are weighted according to the relative importance of the different occupations in the industry. Data are not collected annually, but at intervals, and are available only for the years specified

Year and industry	Hours, average		Wages, average	
	Males	Females	Males	Females
1923			*Cents*	*Cents*
Automobile tire	49.6	49.0	74.1	46.0
Paper and pulp mills:				
Pulp	52.8	49.7	46.9	33.4
Book paper	51.4	51.5	52.7	31.9
Newsprint	49.3	50.3	58.9	32.9
Wrapping paper	52.4	52.7	52.8	30.2
Writing paper	51.3	51.2	55.1	37.9
1924				
Metalliferous mines	53.0	-------	55.9	-------
1925				
Paper box board	54.3	53.9	51.8	28.3
Potteries:				
Semivitreous	(1)	(1)	70.5	38.5
Vitreous	(1)	(1)	63.8	32.9
1927			*Cents*	*Cents*
Aluminum, brass, and copper wares	52.2	52.6	57.9	35.5
Brass and copper sheet, rod, tube, wire and shape mills	53.8	54.7	55.6	34.8
Batteries and small motors:				
Dry cell	49.5	49.3	54.1	41.6
Storage	48.6	49.2	69.8	39.2
Motors (1 H. P. or less)	48.9	48.0	64.2	42.9
Radio manufacture:				
Receiving sets	48.5	48.3	59.0	38.4
Speakers	48.4	46.8	55.5	39.9
Tubes	48.9	48.5	60.2	40.7
Cotton compresses	56.2	[2] 55.9	31.6	[2] 13.2
Cottonseed-oil mills	70.9	(3)	24.0	(3)
Cotton gins	66.2	(3)	29.3	(3)

[1] The normal or customary hours of operation of the great majority of the potteries included in the study are 9 hours per day and 54 hours per week. Working hours in a pottery, however, are more nominal than normal, as so many employees are pieceworkers and to quite an extent determine their own time.
[2] All female workers were "Colored."
[3] No females employed in the plants covered.

Source: Bureau of Labor Statistics, Department of Labor.

No. 356.—WAGES OF COMMON LABOR IN ROAD BUILDING: CENTS PER HOUR

NOTE.—The current data beginning January, 1922, are compiled directly from Federal-aid project reports. Earlier data included reports on farm labor or other farms of common labor closely correlated, as reported to the Department of Agriculture and the Department of Labor

Year and month	United States, average	New England	Middle Atlantic	South Atlantic	East South Central	West South Central	East North Central	West North Central	Mountain	Pacific
Monthly average:										
1915	20	20	20	14	12	16	21	25	25	26
1916	23	25	24	16	13	17	24	28	29	28
1917	28	31	30	21	17	21	29	34	36	36
1918	36	39	38	27	23	26	39	45	44	45
1919	41	41	41	32	28	36	43	53	47	52
1920	49	49	50	37	32	40	53	62	55	60
1921	36	38	35	26	25	28	35	45	46	50
1922	32	39	37	21	20	24	31	31	37	48
1923	38	51	45	25	22	25	39	34	42	54
1924	38	50	45	28	24	27	40	36	41	52
1925	38	46	45	27	25	27	37	38	44	52
1926	39	50	46	30	25	27	38	36	43	52
1927	39	49	47	28	25	30	39	38	45	53
1928	40	50	44	26	26	28	39	38	46	53
1927										
March	39	51	51	32	24	26	39	37	42	52
June	39	51	46	29	25	26	38	38	44	54
September	40	49	46	26	25	33	40	38	46	54
December	39	55	46	24	24	32	42	37	46	54
1928										
March	38	51	48	23	28	[illegible]	41	37	42	52
June	40	48	42	26	26	30	37	36	45	53
September	43	48	42	24	25	26	38	39	52	54
December	39	51	44	28	26	30	41	38	46	53

Source: Bureau of Public Roads, Department of Agriculture.

No. 357.—INDEX NUMBERS OF UNION WAGE RATES AND HOURS OF LABOR

NOTE.—Index numbers subsequent to 1924 cover only the occupations listed in Table 359; for previous years they included also the metal and millwork trades. See also headnote, Table 358

[Rates and hours for 1913=100.]

Year	Rates of wages per hour	Full-time hours per week	Rates of wages per week, full time	Year	Rates of wages per hour	Full-time hours per week	Rates of wages per week, full time
1907	89.7	102.6	91.5	1918	132.7	97.0	129.6
1908	91.0	102.1	92.5	1919	154.5	94.7	147.8
1909	91.9	101.9	93.3	1920	190.0	93.8	188.5
1910	94.4	101.1	95.2	1921	205.3	93.9	193.3
1911	96.0	100.7	96.5	1922	193.1	94.4	183.0
1912	97.6	100.3	97.7	1923	210.6	94.3	198.6
1913	100.0	100.0	100.0	1924	228.1	93.9	214.3
1914	101.9	99.6	101.6	1925	237.9	93.0	222.3
1915	102.8	99.4	102.3	1926	250.3	92.8	233.4
1916	107.2	98.8	106.2	1927	259.5	92.4	240.8
1917	114.2	98.4	112.4	1928	260.6	91.9	240.6

Source: Bureau of Labor Statistics, Department of Labor.

No. 358.—INDEX NUMBERS OF UNION HOURS OF LABOR PER WEEK AND RATES OF WAGES PER HOUR, BY OCCUPATIONS

NOTE.—The figures cover the principal cities of the United States. The relative hours are percentages showing the change in the regular full-time working hours per week, account not being taken of loss of time from slack work or other causes nor of overtime work. The relative wages are percentages which indicate the change in wages per hour. The figures are based on the scale prevailing May 15 each year. For absolute hourly wage rates for the same and other occupations, see Table 359. Data for the metal and millwork trades for 1924 and earlier years may be found in previous issues of this publication

[1913=100]

Year	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour
	Bakers		Building trades									
			Bricklayers		Building laborers		Carpenters		Cement finishers		Cement finishers' helpers	
1910	109.1	85.8	100.6	96.7	100.0	94.5	100.7	95.1	102.1	94.2	100.1	93.2
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1916	98.1	107.0	99.2	103.8	99.2	106.1	99.4	105.8	97.9	103.0	99.5	101.5
1918	96.0	142.2	98.9	115.4	97.7	137.4	98.5	126.1	96.2	120.2	99.2	123.6
1920	89.9	264.0	98.7	174.7	94.8	225.9	98.5	194.8	95.0	182.9	99.2	225.9
1921	90.3	278.7	98.7	172.7	94.7	227.7	98.4	197.8	95.0	188.4	99.2	226.2
1923	90.2	276.0	98.6	191.1	94.7	218.1	98.8	204.0	95.0	191.2	99.2	223.4
1924	90.1	283.5	98.6	202.2	94.4	242.4	98.8	218.3	95.0	211.4	99.2	248.3
1925	89.7	293.4	98.5	213.4	94.5	231.6	98.8	222.8	94.7	212.6	99.2	260.8
1926	90.5	277.2	98.5	226.4	94.7	254.9	98.8	238.4	94.7	226.9	99.2	288.0
1927	90.2	286.8	98.1	231.9	94.9	255.8	98.8	246.7	94.4	236.8	99.2	294.1
1928	89.6	285.9	98.0	233.9	94.8	257.0	98.2	247.5	93.8	234.6	99.2	281.9
	Building trades—Continued											
	Engineers, portable and hoisting		Hod carriers		Inside wiremen		Lathers		Marble setters		Painters	
1910	------	------	101.2	97.2	100.8	95.9	------	------	100.5	92.5	101.3	92.6
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1916	9.89	102.5	98.7	104.9	98.4	107.2	99.5	106.0	99.6	102.4	99.1	113.2
1918	96.8	123.8	98.6	136.6	97.3	127.0	99.0	119.1	99.5	107.9	97.7	129.4
1920	95.8	175.6	98.1	232.4	96.2	192.0	98.1	188.9	99.1	158.4	94.7	206.0
1921	96.3	178.2	98.0	237.8	96.2	201.9	98.1	192.1	99.2	160.6	94.7	212.8
1923	95.6	185.5	98.1	215.4	96.2	197.1	98.4	199.3	99.2	178.0	95.1	218.7
1924	95.6	197.2	98.0	224.9	96.2	220.5	98.2	215.1	99.2	186.1	95.0	230.5
1925	95.9	205.7	97.9	251.5	96.2	232.4	97.9	234.5	99.2	190.0	95.3	243.1
1926	96.1	217.2	98.0	273.8	96.1	244.6	97.6	240.6	99.2	212.3	94.9	257.5
1927	97.7	224.2	98.0	280.4	96.2	254.9	97.2	250.3	99.1	217.0	94.5	266.2
1928	96.6	233.5	98.0	280.7	95.7	257.2	96.7	251.0	99.1	218.0	92.0	270.8

No. 358.—Index Numbers of Union Hours of Labor per Week and Rates of Wages per Hour, by Occupations—Continued

Year	Building trades—Continued											
	Plasterers		Plasterers' laborers		Plumbers and gas fitters		Sheet-metal workers		Steam fitters		Stonemasons	
	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour
1910	100.6	96.6	100.6	96.4	101.1	90.9	101.7	91.0	101.3	91.9	100.8	94.7
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1916	98.4	104.7	99.1	105.0	99.1	103.0	99.3	106.9	98.5	106.2	99.7	105.5
1918	98.0	113.5	99.0	129.3	98.2	117.5	98.2	130.6	97.4	120.6	99.6	120.4
1920	97.9	170.7	98.6	213.5	97.9	172.1	97.5	193.2	97.3	178.8	99.0	188.1
1921	97.5	180.5	98.3	219.1	97.8	181.1	97.1	202.3	97.0	171.3	99.2	193.0
1923	98.1	193.2	98.4	212.0	97.7	185.6	97.1	201.9	97.0	175.6	99.2	212.5
1924	98.2	216.1	98.3	227.8	97.7	202.4	97.1	221.7	97.0	201.5	98.9	225.2
1925	97.9	219.8	98.1	243.1	97.7	206.6	97.1	229.3	97.0	212.2	98.9	229.5
1926	95.1	236.1	94.9	257.2	97.7	222.7	97.1	244.8	96.9	229.7	99.1	253.1
1927	94.7	241.0	94.9	259.7	97.6	227.2	96.8	252.2	96.8	236.2	98.9	256.0
1928	93.9	241.6	95.1	264.1	97.5	232.1	91.5	247.4	96.8	239.5	98.8	259.3

Year	Building trades—Cont.											
	Structural-iron workers		Tile layers		Chauffeurs		Teamsters and drivers		Longshoremen		Granite cutters	
	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour
1910	101.7	92.7	------	------	------	------	------	------	------	------	101.8	93.7
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1916	99.5	103.6	99.1	102.6	96.8	106.1	98.8	106.9	99.9	116.5	100.3	105.2
1918	98.9	126.5	98.8	110.8	94.0	130.9	96.6	133.2	93.3	149.0	100.2	130.1
1920	98.7	179.4	98.2	162.6	87.2	200.1	90.4	216.4	76.7	233.5	100.2	189.5
1921	98.7	184.0	98.3	161.9	87.5	202.5	88.2	223.0	76.6	236.8	100.1	209.0
1923	98.8	178.4	98.4	174.0	88.6	197.7	89.3	224.9	81.8	269.2	99.8	212.7
1924	98.7	202.5	98.4	197.5	89.1	205.6	89.5	244.7	81.8	238.5	100.2	214.2
1925	98.8	204.5	98.4	202.3	87.7	223.5	88.2	254.3	77.5	239.9	100.2	216.8
1926	98.7	218.5	98.4	212.0	85.1	226.3	89.0	256.6	76.7	242.0	100.0	244.1
1927	98.7	235.5	98.3	221.9	83.8	242.1	88.3	269.1	75.7	236.7	100.2	242.6
1928	98.7	235.7	98.0	221.8	84.0	243.2	88.2	277.1	75.6	248.6	100.2	245.3

Year	Printing and publishing: Book and job											
	Bookbinders		Compositors		Electrotypers		Machine operators		Press assistants and feeders		Pressmen, cylinder	
	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour
1910	100.3	95.1	100.1	94.1	100.8	91.5	100.3	93.9	100.2	92.4	100.0	95.4
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1916	100.0	102.0	100.0	105.3	99.7	109.8	100.1	101.6	100.0	104.5	100.0	103.7
1918	100.0	121.6	100.0	118.6	99.6	119.1	100.1	112.5	100.0	128.8	100.0	117.2
1920	100.0	204.0	100.0	190.6	99.5	195.5	100.1	174.6	99.9	227.7	100.0	184.5
1921	94.7	220.1	94.3	219.6	96.5	223.1	93.9	200.6	94.2	245.8	94.5	205.5
1923	93.4	224.0	91.4	228.5	95.9	241.6	92.2	203.8	92.5	266.2	93.0	216.7
1924	93.1	233.9	91.7	238.5	95.7	250.6	91.8	212.9	92.7	263.8	93.1	223.1
1925	93.3	236.6	91.7	237.4	96.6	249.7	92.2	211.7	92.4	278.8	92.6	225.0
1926	93.2	240.8	91.7	242.1	96.6	252.2	92.0	215.2	92.3	281.9	92.4	230.5
1927	93.0	246.0	91.7	246.6	96.6	255.2	92.2	223.0	92.2	285.3	92.4	230.9
1928	93.6	244.8	91.7	250.1	96.6	257.1	92.0	224.6	92.2	287.0	92.8	232.7

Year	Printing and publishing: Book and job—Con.		Printing and publishing: Newspaper									
	Pressmen, platen		Compositors, daywork		Machine operators, daywork		Machine tenders, (machinists), daywork		Pressmen, web presses, daywork		Stereotypers, daywork	
	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour
1910	99.8	94.9	100.4	92.7	100.5	94.8	------	------	100.3	95.5	100.5	92.1
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1916	100.0	104.1	99.6	102.3	99.2	102.7	99.7	101.3	100.0	102.0	99.8	102.4
1918	100.0	120.4	99.6	110.0	99.3	110.1	99.7	108.1	99.9	113.1	99.8	109.4
1920	99.9	200.4	99.9	160.7	99.5	167.5	99.8	171.7	101.1	169.5	99.9	149.8
1921	94.7	231.7	99.5	174.9	99.2	175.5	99.8	178.5	100.6	184.1	98.1	173.9
1923	92.9	235.8	100.6	177.9	100.3	183.1	100.5	180.9	102.3	182.4	99.9	174.9
1924	93.1	242.9	99.7	189.0	99.1	193.4	99.9	191.5	100.5	199.4	99.8	180.4
1925	93.1	244.3	99.4	193.7	99.0	198.0	100.3	185.3	100.0	208.2	99.6	184.5
1926	92.3	255.8	99.3	196.7	98.9	201.6	100.2	185.2	100.3	212.2	99.6	188.1
1927	92.3	258.3	99.3	201.8	98.5	208.9	100.1	194.5	99.9	223.3	99.1	191.0
1928	92.5	253.9	98.9	206.6	98.2	213.8	100.0	198.4	99.9	224.9	99.5	191.0

Source: Bureau of Labor Statistics, Department of Labor.

No. 359.—AVERAGE UNION RATES OF WAGES PER HOUR IN TRADES SPECIFIED, FOR THE UNITED STATES, AS OF MAY 15

NOTE.—Statistics cover the principal cities of the United States. For index numbers in the principal trades, based on these rates, see Table 358

Occupation	1923	1927	1928
	Dolls.	*Dolls.*	*Dolls.*
Grand average, all trades herein covered [1]	0.966	1.190	1.195
Bakers	.921	.957	.954
BUILDING TRADES			
Asbestos workers	1.005	1.309	1.317
Bricklayers	1.321	1.603	1.617
Sewer, tunnel, and caisson	1.534	2.101	2.059
Building laborers	.728	.854	.858
Carpenters	1.084	1.311	1.315
Millwrights	1.164	1.389	1.292
Parquetry-floor layers	1.262	1.422	1.342
Wharf and bridge	.994	1.317	1.304
Cement finishers	1.118	1.379	1.366
Cement finishers' helpers	.805	1.060	1.016
Composition roofers	.977	1.302	1.333
Composition roofers' helpers	.695	.750	.803
Elevator constructors	1.116	1.433	1.447
Elevator constructors' helpers	.806	1.038	1.052
Engineers, portable and hoisting	1.141	1.379	1.436
Glaziers	1.041	1.323	1.337
Hod carriers	.788	1.026	1.027
Inside wiremen	1.079	1.395	1.408
Fixture hangers	1.065	1.206	1.222
Lathers:			
Piece-work	[2] 7.720	[2] 9.336	[2] 9.457
Time-work	1.188	1.492	1.496
Marble setters	1.188	1.448	1.455
Marble setters' helpers	.873	.990	1.001
Mosaic and terrazzo workers	.978	1.291	1.351
Painters:			
Building	1.108	1.349	1.372
Fresco	1.125	1.335	1.235
Sign	1.330	1.566	1.568
Plasterers	1.306	1.628	1.632
Plasterers' laborers	.872	1.068	1.086
Plumbers and gas fitters	1.151	1.409	1.430
Plumbers' laborers	.879	.975	.965
Sheet-metal workers	1.065	1.330	1.305
Ship carpenters	.935	.860	.900
Slate and tile roofers	1.224	1.535	1.538
Steam and sprinkler fitters	1.052	1.415	1.435
Steam and sprinkler fitters' helpers	.751	.947	.967
Stonemasons	1.297	1.563	1.583
Structural-iron workers	1.109	1.464	1.465
Finishers	1.086	1.420	1.431
Finishers' helpers	.838	(3)	(3)
Tile layers	1.140	1.454	1.453
Tile layers' helpers	.798	.979	.999
Average, building trades	1.068	1.323	1.330
PRINTING AND PUBLISHING: BOOK AND JOB			
	Dolls.	*Dolls.*	*Dolls.*
Bindery women	0.507	0.522	0.525
Bookbinders	.907	.996	.991
Compositors	1.024	1.105	1.121
Electrotypers	1.158	1.223	1.232
Machine operators:			
Piece-work	[4] 1.150	[4] 1.150	(3)
Time-work	1.062	1.162	1.170
Machine tenders (machinists)	1.088	1.234	1.178
Machinist operators	1.028	1.148	1.069
Photo-engravers	1.043	1.276	1.312
Press assistants and feeders	.781	.857	.842
Pressmen:			
Cylinder	1.052	1.121	1.130
Platen	.859	.941	.925
Average, printing and publishing, book and job	.926	1.021	1.036
PRINTING AND PUBLISHING: NEWSPAPER			
Compositors:			
Day work	1.013	1.149	1.176
Night work	1.151	1.290	1.311
Machine operators, day work:			
Piece-work	[4] 1.130	[4] 1.150	[4] 1.154
Time-work	1.031	1.176	1.204
Machine operators, night work:			
Piece-work	[4] 1.160	[4] 1.160	[4] 1.154
Time-work	1.130	1.268	1.320
Machine tenders (machinists):			
Day work	1.064	1.144	1.167
Night work	1.179	1.275	1.300
Machinist operators:			
Day work	1.007	1.070	1.082
Night work	1.040	1.204	1.219
Photo-engravers:			
Day work	1.085	1.266	1.337
Night work	1.289	1.541	1.577
Pressmen, web presses:			
Day work	.871	1.066	1.074
Night work	.987	1.220	1.255
Stereotypers:			
Day work	.922	1.007	1.007
Night work	1.082	1.141	1.142
Average, printing and publishing, newspaper	1.047	1.190	1.220
MISCELLANEOUS			
Chauffeurs	.574	.703	.706
Teamsters and drivers	.590	.706	.727
Longshoremen	.722	.817	.858
Granite cutters	1.089	1.242	1.256
Stonecutters	1.151	1.400	1.406
Laundry workers	.414	.432	.447
Linemen	.898	.991	1.007

[1] Except piece-work. [2] Per 1,000 laths. [3] No data. [4] Rate per 1,000 ems.

Source: Bureau of Labor Statistics, Department of Labor.

No. 360.—EMPLOYMENT AND PAY-ROLL INDEXES IN MANUFACTURING INDUSTRIES

NOTE.—Indexes based on monthly average 1926=100. Statistics cover 54 industries comprising the 12 groups shown in Table 363 and are based on reports from nearly 12,000 establishments employing approximately 3,250,000 persons. Indexes are weighted according to relative importance of industries included. The returns cover one week in each month

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
EMPLOYMENT													
1923	106.6	108.4	110.8	110.8	110.8	110.9	109.2	108.5	108.6	108.1	107.4	105.4	108.8
1924	103.8	105.1	104.9	102.8	98.8	95.6	92.3	92.5	94.3	95.6	95.5	97.3	98.2
1925	97.9	99.7	100.4	100.2	98.9	98.0	97.2	97.8	98.9	100.4	100.7	100.8	99.2
1926	100.4	101.5	102.0	101.0	99.8	99.3	97.7	98.7	100.3	100.7	99.5	98.9	100.0
1927	97.3	99.0	99.5	98.6	97.6	97.0	95.0	95.1	95.8	95.3	93.5	92.6	96.4
1928	91.6	93.0	93.7	93.3	93.0	93.1	92.2	93.6	95.0	95.9	95.4	95.6	93.8
PAY-ROLL TOTALS													
1923	95.8	99.4	104.7	105.7	109.4	109.3	104.3	103.7	104.4	106.8	105.4	103.2	104.3
1924	98.6	103.8	103.3	101.1	96.5	90.8	84.3	87.2	89.8	92.4	91.4	95.7	94.6
1925	93.9	99.3	100.8	98.3	98.5	95.7	93.5	95.4	94.4	100.4	100.4	101.3	97.7
1926	93.0	102.2	103.4	101.5	99.8	99.7	95.2	98.7	99.3	102.9	99.6	99.8	100.0
1927	94.9	100.6	102.0	100.8	99.8	97.4	93.0	95.0	94.1	95.2	91.6	93.2	96.5
1928	89.6	93.9	95.2	93.8	94.1	94.2	91.2	94.2	95.4	99.0	96.1	97.7	94.5

Source: Bureau of Labor Statistics, Department of Labor.

No. 361.—MANUFACTURING ESTABLISHMENTS: AVERAGE PERCENTAGE OF FULL FORCE EMPLOYED AND OF FULL TIME ACTIVE, OPERATING ESTABLISHMENTS ONLY

NOTE.—Statistics cover the same industries as Table 360, but the reports are somewhat less complete covering usually about 8,000 establishments. Data were not collected prior to March, 1924

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Average percentage of normal full force employed:												
1924	------	------	82	80	77	76	75	77	79	81	81	81
1925	82	83	83	83	82	82	82	85	84	85	85	85
1926	85	87	87	87	86	85	86	87	88	88	87	87
1927	86	87	88	88	87	87	87	87	86	88	85	84
1928	84	85	86	86	87	87	87	87	90	90	89	89
Average percentage of full time operated:												
1924	------	------	94	92	90	88	87	88	91	92	91	92
1925	92	93	93	92	92	92	92	94	93	94	94	94
1926	93	94	94	93	93	92	96	97	98	98	97	97
1927	96	97	97	97	97	96	97	97	97	97	96	96
1928	96	96	96	96	96	97	96	97	97	98	97	98

Source: Bureau of Labor Statistics, Department of Labor.

No. 362.—EMPLOYMENT AND PAY-ROLL INDEXES IN MANUFACTURING ESTABLISHMENTS: BY GEOGRAPHIC DIVISIONS

NOTE.—Figures are unweighted relative numbers. April, 1924, was the first month for which the bureau published a recapitulation by geographic division of the total employment figures

[Monthly average 1926=100]

Year and month	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
	Employment								
1924									
June	98.1	96.9	89.3	98.1	92.2	94.7	98.4	107.9	100.8
September	94.9	95.1	88.0	99.0	90.2	93.8	101.4	105.8	97.2
December	101.4	98.8	91.3	99.5	94.2	99.3	102.3	98.2	93.9
1925									
March	104.4	101.5	96.7	100.2	97.7	102.6	99.9	96.6	93.8
June	99.2	98.5	97.0	100.1	94.0	100.0	96.1	105.2	102.1
September	97.8	99.0	99.7	102.0	95.8	102.1	98.9	102.4	103.0
December	101.7	102.2	101.2	101.0	100.7	104.3	100.2	104.3	97.2

No. 362.—EMPLOYMENT AND PAY-ROLL INDEXES IN MANUFACTURING ESTABLISHMENTS: BY GEOGRAPHIC DIVISIONS—Continued

Year and month	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
	Employment—Continued								
1926									
March	104.4	102.1	103.6	99.0	102.1	102.8	98.8	95.6	96.5
June	98.4	99.2	99.9	100.1	98.1	98.6	100.5	103.1	102.5
September	99.1	99.7	100.9	102.0	100.6	98.7	101.2	103.4	101.8
December	99.5	98.9	94.1	98.2	101.4	97.2	99.8	100.4	97.8
1927									
January	98.6	96.8	93.1	96.3	100.6	94.9	97.9	97.5	94.1
February	99.8	97.8	97.4	96.8	102.1	95.9	98.6	94.2	94.3
March	99.4	97.8	99.0	96.6	102.9	95.4	97.4	93.0	97.0
April	98.0	96.1	99.1	96.5	103.1	94.7	96.3	94.3	98.2
May	96.8	94.6	98.9	97.3	101.5	93.3	94.8	97.3	99.9
June	95.3	94.0	97.7	99.5	100.9	93.0	94.9	99.0	101.7
July	94.0	92.5	94.4	98.6	99.8	91.2	93.1	100.7	100.7
August	93.4	92.5	95.7	98.9	99.3	92.4	93.9	99.3	101.0
September	95.5	93.6	94.5	98.9	101.8	92.6	95.3	98.2	100.7
October	95.2	93.4	93.8	98.2	101.5	93.2	93.6	96.6	100.3
November	93.8	91.8	90.7	94.9	100.8	91.9	92.2	97.5	97.7
December	92.0	90.6	91.5	93.3	99.9	92.0	90.8	93.4	94.6
1928									
January	91.4	88.7	93.3	92.6	98.2	90.9	89.2	88.5	90.4
February	92.1	89.2	97.8	95.5	98.5	92.0	89.4	89.2	91.1
March	90.9	89.4	100.1	96.0	100.0	91.8	89.6	90.0	93.8
April	89.4	88.4	100.4	95.5	98.4	92.0	89.3	91.2	97.1
May	86.8	88.2	102.4	96.2	96.6	90.4	88.8	94.1	98.6
June	85.8	88.3	102.7	98.7	96.5	90.0	89.0	97.2	99.3
July	85.8	87.4	102.1	97.4	94.2	86.8	90.0	97.9	97.8
August	86.0	87.9	105.8	97.2	96.8	89.9	90.9	97.0	99.7
September	88.0	89.4	107.5	97.1	98.2	90.8	92.1	97.6	101.5
October	90.7	91.0	107.5	97.6	98.7	90.3	91.9	98.0	100.4
November	91.3	91.1	104.1	95.9	99.7	91.3	92.3	97.0	97.9
December	91.6	91.1	104.2	96.1	99.0	91.3	90.2	95.3	95.5
	Pay-roll totals								
1924									
June	92.6	91.9	83.4	96.6	85.9	89.2	94.9	106.6	102.6
September	93.2	90.8	82.7	95.7	84.3	89.3	95.3	100.2	94.8
December	101.7	97.5	89.2	98.7	92.9	99.6	99.9	91.5	94.4
1925									
March	105.2	101.3	98.3	99.6	97.6	102.0	101.1	98.6	95.8
June	96.3	95.1	97.0	99.8	91.2	97.6	94.1	105.0	102.3
September	93.4	93.8	96.3	98.6	90.9	97.8	95.1	98.3	99.9
December	103.0	102.4	104.3	100.6	102.4	106.4	101.5	102.3	98.4
1926									
March	106.7	103.2	106.5	100.4	103.1	103.8	97.6	97.2	97.2
June	97.4	99.6	100.2	102.2	97.4	98.7	100.5	104.3	104.6
September	98.2	99.4	99.4	101.2	99.6	97.0	100.8	101.0	101.2
December	100.1	100.4	92.1	96.4	104.0	99.3	102.9	102.6	99.0
1927									
January	98.5	96.0	84.7	92.1	98.7	93.6	98.1	97.2	91.9
February	101.3	99.4	99.2	96.5	103.4	98.1	101.0	97.6	95.2
March	101.5	99.8	102.9	96.5	104.1	98.1	100.3	97.6	99.0
April	97.6	97.3	103.4	97.3	104.4	96.4	98.6	98.5	100.4
May	98.2	95.4	103.2	99.6	102.0	94.8	99.8	101.6	103.4
June	96.0	94.1	97.4	99.9	100.3	93.7	98.5	102.1	104.0
July	93.6	89.8	91.2	97.3	96.9	89.6	95.0	100.5	99.0
August	94.2	91.8	96.5	98.4	97.5	91.8	96.8	99.8	102.1
September	96.7	92.3	91.7	96.8	99.9	91.8	98.0	97.9	100.5
October	94.8	92.4	94.4	98.1	101.1	93.3	97.9	97.8	102.9
November	91.4	89.7	88.7	93.0	99.2	90.0	94.6	99.0	99.1
December	92.0	90.6	92.3	92.1	99.4	91.1	94.7	91.2	97.9
1928									
January	90.1	86.8	90.2	90.3	94.7	86.6	92.9	90.3	89.8
February	91.6	89.8	102.4	95.8	98.0	92.4	93.5	91.3	92.7
March	90.2	90.6	105.4	97.4	99.5	91.9	93.0	94.1	96.6
April	88.0	87.4	104.9	96.1	96.2	92.1	92.3	96.9	100.2
May	86.0	88.8	107.3	97.3	96.4	90.5	91.9	97.8	102.1
June	86.1	89.0	105.7	100.5	95.9	89.3	91.6	99.8	101.8
July	85.4	86.2	102.3	97.4	91.9	85.4	92.9	98.8	99.4
August	85.8	88.5	109.8	98.2	95.7	89.0	95.1	98.7	101.5
September	90.5	89.8	109.7	97.0	97.1	88.3	95.4	100.1	101.6
October	92.9	93.4	114.8	99.5	100.7	89.9	97.6	102.6	102.4
November	91.6	92.1	107.2	92.2	100.7	90.2	96.3	100.9	98.7
December	95.3	93.5	106.7	94.9	100.9	93.0	95.3	98.7	96.6

Source: Bureau of Labor Statistics, Department of Labor.

No. 363.—EMPLOYMENT AND PAY-ROLL INDEXES IN MAJOR GROUPS OF MANUFACTURING INDUSTRIES

NOTE.—Monthly average 1926=100. Combined index for each group is weighted according to relative importance of industries covered. Figures represent the number on the pay roll and amount of pay roll for one week in each month. See also Table 360

Yearly average and month	Food products		Textile products		Iron and steel products		Other metal products		Lumber and products		Leather and products	
	Employed	Pay roll	Employed	Pay roll	Employed	Pay roll	Employed	Pay roll	Employed	Pay roll	Employed	Pay roll
1923 average	111.1	106.3	116.1	116.4	108.5	102.7	102.6	101.5	110.0	102.4	110.7	113.9
March	106.6	101.1	122.3	123.6	108.6	100.0	108.5	107.5	107.3	95.5	116.6	123.2
June	109.8	106.6	117.2	119.1	112.9	110.6	105.4	108.1	112.6	107.8	108.0	113.2
September	116.4	111.3	113.4	113.7	110.7	105.0	97.8	94.9	112.9	106.6	108.9	110.5
December	113.4	111.6	111.4	112.0	102.7	101.3	97.6	98.2	108.4	105.4	106.6	109.2
1924 average	106.4	104.4	102.4	101.0	93.8	89.1	95.1	93.0	104.4	99.6	100.3	100.6
March	107.7	105.1	111.5	112.8	102.8	102.4	104.2	106.9	106.6	103.2	107.4	109.5
June	104.9	104.2	98.4	91.9	92.5	84.5	93.6	88.0	104.2	101.2	91.9	90.1
September	108.1	106.2	97.2	97.2	86.8	79.3	87.2	84.9	102.9	97.9	100.3	103.9
December	106.5	106.7	103.0	105.1	91.8	91.0	95.8	97.0	102.1	99.0	100.6	100.6
1925 average	101.2	99.9	103.7	104.2	95.0	93.3	99.2	99.4	102.5	100.4	101.9	101.8
March	100.3	98.7	107.3	112.9	96.5	96.7	99.8	101.4	101.9	100.2	105.6	109.3
June	99.4	99.5	102.0	98.7	94.1	91.3	98.4	98.5	103.2	102.6	95.1	93.7
September	102.8	99.1	100.9	96.9	93.9	87.9	98.8	94.0	103.7	102.0	105.0	103.2
December	103.0	103.1	104.1	104.8	97.9	99.7	104.1	107.3	100.9	102.1	98.8	96.0
1926 average	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
March	98.3	96.0	104.5	108.3	101.2	103.6	105.5	108.5	98.8	98.6	101.2	102.7
June	98.8	100.1	97.6	94.8	100.9	101.2	98.8	99.0	101.4	102.4	94.5	94.2
September	102.9	102.7	97.8	96.5	100.7	98.8	98.2	95.0	101.1	102.6	104.0	105.6
December	100.7	101.5	101.9	103.8	97.6	99.1	96.0	97.1	97.1	98.7	99.9	97.9
1927 average	99.4	100.0	101.3	103.0	93.2	91.9	92.9	91.6	91.9	93.1	97.9	97.4
March	97.1	97.0	104.2	109.4	98.2	100.6	97.0	99.4	91.3	92.7	101.4	102.5
June	101.0	102.8	99.9	100.3	94.5	94.4	93.0	92.9	92.5	94.9	94.4	94.0
September	102.6	102.2	100.9	103.1	91.3	87.1	91.2	87.3	93.7	95.9	101.1	103.6
December	100.1	100.9	100.6	102.3	86.6	85.2	88.2	88.4	87.9	90.1	91.8	87.1
1928 average	98.4	99.8	96.3	95.6	91.5	92.8	92.8	96.1	87.8	88.8	92.8	89.7
March	97.3	98.9	100.3	101.2	90.0	92.5	90.7	92.1	86.2	87.6	96.5	96.8
June	96.9	99.5	94.1	91.6	91.7	93.3	92.0	93.7	88.3	90.2	89.3	85.0
September	100.0	101.2	93.6	93.2	93.2	92.9	94.2	98.2	90.1	91.7	95.1	95.7
December	102.1	104.4	97.7	99.5	95.0	98.0	98.6	108.2	87.6	88.3	87.8	83.6

Yearly average and month	Paper and printing		Chemicals and allied products		Stone, clay, and glass		Tobacco products		Vehicles		Miscellaneous products	
	Employed	Pay roll	Employed	Pay roll	Employed	Pay roll	Employed	Pay roll	Employed	Pay roll	Employed	Pay roll
1923 average	96.5	89.7	101.8	98.2	100.2	93.5	116.9	114.0	109.6	107.7	103.3	98.1
March	96.8	89.6	107.2	98.7	96.8	86.5	120.4	118.0	109.4	106.9	110.6	103.0
June	96.7	90.0	100.6	99.6	105.5	99.3	117.1	114.5	112.5	111.6	107.4	108.0
September	96.6	89.1	101.3	100.0	102.2	97.3	115.7	110.6	111.3	107.5	96.6	93.3
December	98.3	93.2	99.0	96.8	98.5	96.2	117.3	121.3	106.5	105.5	98.6	94.4
1924 average	96.7	91.7	93.1	91.0	97.0	95.2	109.8	108.9	97.2	94.3	90.7	89.0
March	97.7	93.5	104.2	99.6	99.4	98.9	111.4	111.7	105.2	104.0	98.9	97.4
June	95.9	90.6	86.0	87.0	99.7	99.6	107.7	108.8	93.5	90.9	87.6	84.5
September	96.3	90.8	89.4	87.4	95.3	91.7	110.9	110.1	92.3	87.9	84.9	82.9
December	98.2	95.2	91.7	90.3	94.6	94.3	112.5	116.9	93.6	92.8	90.1	88.7
1925 average	97.3	94.3	95.8	94.2	97.9	97.3	107.5	105.7	99.8	100.7	94.6	92.8
March	98.0	95.1	100.6	98.5	95.8	95.8	109.3	103.1	98.6	103.0	96.3	96.3
June	95.9	92.0	88.5	89.4	101.0	99.6	105.8	105.2	99.0	99.8	93.9	91.1
September	96.7	91.9	98.9	93.9	100.1	97.2	107.5	104.8	101.0	98.0	93.1	88.9
December	100.0	100.9	99.6	98.8	98.6	99.9	111.0	115.4	101.6	104.4	97.3	97.1
1926 average	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
March	99.5	100.2	106.9	103.9	96.6	97.6	103.0	102.7	105.4	108.0	101.5	101.0
June	98.9	99.4	95.2	98.2	104.3	105.6	101.3	101.0	101.0	102.0	97.9	98.4
September	100.4	99.4	101.9	100.7	103.9	101.6	99.4	101.6	100.1	98.4	99.6	97.4
December	102.4	104.3	98.6	101.7	96.7	98.5	100.8	102.4	90.6	88.7	104.3	107.7
1927 average	100.1	101.2	96.6	99.1	94.5	94.2	98.1	97.1	90.8	91.6	99.5	100.0
March	100.8	102.4	106.7	108.1	95.1	96.6	97.5	93.6	94.6	98.4	105.9	109.3
June	98.8	99.6	91.8	98.2	99.3	99.2	98.8	100.1	93.3	92.5	102.0	102.9
September	99.8	100.2	95.3	96.8	95.3	93.4	102.6	104.2	89.6	87.9	94.4	91.5
December	101.7	104.9	91.9	96.5	89.1	89.0	98.7	100.2	85.0	87.1	93.4	97.9
1928 average	99.2	101.5	93.4	95.9	89.7	89.6	96.0	93.5	95.8	98.3	91.6	91.9
March	98.8	101.4	101.7	100.7	87.3	87.1	96.0	91.4	93.2	99.1	89.7	90.4
June	98.0	100.8	87.5	91.7	93.4	92.8	95.3	94.9	97.7	99.8	90.0	92.0
September	98.6	100.9	94.7	96.6	93.4	91.8	98.9	98.2	101.5	101.4	91.7	91.8
December	101.2	105.1	95.1	97.2	87.3	88.4	98.0	99.5	94.6	96.4	97.9	100.1

Source: Bureau of Labor Statistics, Department of Labor.

No. 364.—EMPLOYMENT AND PAY-ROLL INDEXES IN MANUFACTURING ESTABLISHMENTS: ANNUAL AVERAGES BY INDUSTRIES

NOTE.—Monthly average 1926=100. For general index of all industries and for group totals see Tables 360 and 363, respectively

Industry group and industry	Employment						Pay-roll totals					
	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928
Food and kindred products:												
Slaughtering and meat packing	122.9	115.1	104.4	100.0	99.5	99.5	118.4	111.8	102.6	100.0	99.9	101.0
Confectionery	116.3	103.2	98.1	100.0	96.5	93.0	107.0	99.9	96.4	100.0	97.9	93.3
Ice cream	103.9	100.3	101.3	100.0	94.0	92.4	95.8	93.1	98.3	100.0	93.4	93.1
Flour	114.2	108.1	103.1	100.0	99.3	100.0	110.9	108.2	102.5	100.0	99.4	102.1
Baking	99.2	100.5	98.7	100.0	101.4	100.9	94.8	98.4	97.1	100.0	102.2	101.6
Sugar refining, cane	106.8	104.6	104.5	100.0	98.8	91.1	104.6	105.4	104.0	100.0	98.8	94.9
Textiles and products:												
Cotton goods	120.3	99.9	101.1	100.0	105.0	95.2	123.5	99.6	101.1	100.0	108.5	91.7
Hosiery and knit goods	102.1	92.6	100.2	100.0	99.0	94.7	91.3	82.9	96.4	100.0	102.2	97.3
Silk goods	99.8	94.1	103.1	100.0	98.4	96.9	93.9	88.6	102.7	100.0	99.2	100.2
Woolen and worsted goods	124.5	113.3	110.7	100.0	99.7	95.0	126.7	114.1	110.0	100.0	100.6	94.4
Carpets and rugs	106.5	98.1	100.7	100.0	102.5	101.0	110.1	95.2	101.2	100.0	104.1	95.9
Dyeing and finishing textiles	102.1	94.0	101.7	100.0	108.7	99.5	99.9	91.8	102.3	100.0	102.8	101.0
Clothing, men's	118.6	106.9	103.1	100.0	97.8	92.2	128.4	111.0	105.8	100.0	97.3	89.0
Shirts and collars	118.9	100.6	103.3	100.0	95.0	92.2	117.1	97.5	103.2	100.0	96.3	89.9
Clothing, women's	126.3	111.9	105.6	100.0	105.4	105.4	124.4	108.6	109.3	100.0	107.4	105.2
Millinery and lace goods	138.1	120.3	117.1	100.0	95.6	93.5	133.1	117.1	115.8	100.0	96.8	92.7
Iron and steel and products:												
Iron and steel	102.1	95.4	97.9	100.0	92.9	90.9	97.3	91.3	96.4	100.0	91.4	92.7
Cast-iron pipe	94.3	98.2	95.6	100.0	89.8	80.1	92.8	97.8	96.2	100.0	88.1	75.9
Structural ironwork	100.0	91.7	92.5	100.0	94.9	95.0	93.9	86.3	91.5	100.0	95.0	97.9
Foundry and machine-shop products	115.3	93.0	93.1	100.0	93.8	92.3	110.7	87.2	90.6	100.0	92.4	92.8
Hardware	113.4	104.2	103.6	100.0	92.2	88.9	102.0	95.7	98.4	100.0	90.9	88.4
Machine tools	98.1	82.0	85.8	100.0	92.8	100.8	88.5	74.9	83.4	100.0	92.2	107.5
Steam fittings and steam and hot-water heating apparatus	103.3	98.6	100.1	100.0	92.5	82.2	98.0	95.4	97.4	100.0	91.9	81.9
Stoves	116.3	100.3	97.8	100.0	91.2	87.6	113.9	101.0	97.8	100.0	90.4	84.7
Metal products:												
Stamped and enameled ware	105.2	94.7	99.0	100.0	88.9	88.8	109.3	93.2	100.2	100.0	90.6	90.4
Brass, bronze, and copper	101.3	95.2	99.2	100.0	94.5	94.4	98.9	92.9	99.1	100.0	92.0	98.0
Lumber and its products:												
Lumber, sawmills	115.1	108.0	103.6	100.0	91.0	86.7	106.5	102.8	101.7	100.0	92.4	88.0
Lumber, millwork	101.5	101.2	103.0	100.0	89.2	85.5	95.5	98.0	101.8	100.0	89.2	85.6
Furniture	100.4	95.2	99.1	100.0	96.1	92.5	94.2	90.7	95.6	100.0	98.2	93.2
Leather and its products:												
Leather	109.6	96.9	98.7	100.0	98.4	95.4	107.0	95.7	97.5	100.0	97.2	93.7
Boots and shoes	111.1	101.6	102.9	100.0	97.7	91.9	117.0	102.8	103.6	100.0	97.6	88.0
Paper and printing:												
Paper and pulp	104.6	98.6	98.7	100.0	97.5	94.4	97.6	94.4	96.8	100.0	96.6	94.9
Paper boxes	98.9	98.2	98.8	100.0	96.8	94.0	91.3	93.3	95.6	100.0	99.0	99.4
Printing, book and job	96.1	97.9	97.5	100.0	100.3	99.2	87.8	90.8	93.1	100.0	102.1	101.6
Printing, newspapers	89.5	93.1	95.4	100.0	103.4	105.2	84.5	89.7	93.0	100.0	104.6	107.4
Chemicals and allied products:												
Chemicals	104.9	96.2	97.3	100.0	100.0	99.3	96.6	92.5	94.3	100.0	103.7	103.3
Fertilizers	96.2	86.9	95.1	100.0	91.2	95.4	91.8	83.6	90.6	100.0	94.0	97.1
Petroleum refining	99.7	91.8	94.0	100.0	94.6	84.8	102.1	91.7	95.2	100.0	95.6	87.2
Stone, clay, and glass:												
Cement	109.0	108.9	105.3	100.0	95.8	87.7	104.2	107.9	104.9	100.0	96.5	88.3
Brick, tile, and terra cotta	99.3	97.4	98.9	100.0	94.3	84.9	95.1	98.5	99.1	100.0	94.1	82.8
Pottery	93.7	100.6	98.3	100.0	94.5	95.3	85.8	95.1	96.3	100.0	94.2	93.4
Glass	101.1	91.4	94.4	100.0	94.2	92.9	92.6	88.2	93.4	100.0	93.4	94.3
Tobacco products:												
Chewing and smoking tobacco and snuff	105.4	105.2	97.0	100.0	97.7	95.2	100.1	101.2	98.3	100.0	97.7	94.1
Cigars and cigarettes	118.3	110.4	109.0	100.0	98.1	96.0	115.9	109.9	106.7	100.0	97.0	93.4
Vehicles:												
Automobiles	93.0	87.0	99.0	100.0	91.2	111.3	92.0	83.8	102.4	100.0	90.3	114.4
Carriages and wagons	108.8	90.8	100.2	100.0	78.7	76.7	108.3	95.0	100.4	100.0	83.6	82.1
Car building and repairing—												
Electric-railroad	112.7	100.0	99.6	100.0	100.9	94.9	110.1	97.8	100.5	100.0	101.1	96.2
Steam-railroad	123.8	105.8	100.6	100.0	90.3	83.5	120.9	102.8	99.4	100.0	92.3	85.4
Miscellaneous:												
Agricultural implements	101.3	81.2	93.6	100.0	91.9	106.8	89.8	75.2	90.8	100.0	92.2	111.8
Electrical machinery, apparatus, and supplies	101.3	95.1	92.1	100.0	95.1	93.9	97.0	94.7	92.2	100.0	95.7	95.9
Pianos and organs	105.3	99.9	98.9	100.0	90.4	77.1	94.9	96.6	97.8	100.0	87.4	74.3
Rubber boots and shoes	116.7	82.7	97.1	100.0	108.3	101.1	107.2	76.6	97.7	100.0	107.7	101.0
Automobile tires	91.1	88.6	102.2	100.0	97.3	103.3	88.7	88.1	100.4	100.0	98.2	105.7
Shipbuilding	108.6	90.2	92.6	100.0	104.8	82.8	103.0	88.8	90.3	100.0	105.8	83.0

Source: Bureau of Labor Statistics, Department of Labor.

No. 365.—INDEXES OF FACTORY EMPLOYMENT IN SPECIFIED STATES

[Index numbers for all States relative to 1923 monthly average as 100, except Massachusetts which is relative to 1919–1923 average as 100]

Year and month	Employees on pay roll						Amount of pay roll			
	Massachusetts [1]	New York [2]	New Jersey [3]	Pennsylvania [3]	Illinois [4]	Wisconsin [5]	New York [2]	New Jersey [3]	Pennsylvania [3]	Wisconsin [5]
Monthly average:										
1919	109.2	103.5	-------	-------	-------	-------	89.3	-------	-------	-------
1920	106.4	107.4	-------	-------	-------	-------	110.9	-------	-------	-------
1921	88.6	83.9	-------	-------	[6] 86.5	-------	79.2	-------	-------	-------
1922	93.7	90.3	-------	-------	90.6	-------	83.1	-------	-------	-------
1923	102.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1924	90.2	91.2	90.4	88.0	91.6	95.1	92.7	90.0	86.2	97.1
1925	90.5	90.5	90.1	91.0	88.7	99.3	93.9	90.7	89.5	105.9
1926	92.1	90.7	95.6	92.0	91.7	99.5	96.6	101.2	93.4	106.8
1927	87.6	87.0	95.5	85.6	86.3	94.8	93.6	103.6	87.2	101.4
1928	78.1	83.5	92.1	80.7	84.7	94.2	90.3	100.7	82.8	102.4
1923										
March	106.1	102.5	104.5	100.8	101.6	100.4	101.2	105.1	99.7	97.1
June	102.4	100.3	101.7	101.2	103.0	100.9	102.6	106.3	105.4	104.1
September	100.8	99.1	96.9	101.6	98.7	99.9	99.8	94.5	101.2	101.2
December	97.3	97.8	95.8	96.8	97.6	97.2	100.5	97.4	99.2	98.5
1924										
March	95.4	98.0	95.2	94.5	98.0	101.7	101.3	96.6	95.2	107.1
June	85.3	88.4	88.5	85.8	91.2	90.4	88.3	88.6	80.3	90.2
September	88.0	88.4	87.8	84.9	88.0	92.3	91.0	87.0	79.7	92.1
December	91.7	90.2	90.5	89.6	88.4	94.6	93.5	91.0	91.1	99.1
1925										
March	92.5	92.3	88.5	92.5	89.6	97.7	96.4	89.3	92.4	103.6
June	87.1	88.7	86.7	90.4	87.4	99.4	91.0	87.7	87.4	105.8
September	90.1	90.3	92.5	90.2	88.5	100.7	93.9	90.0	85.2	106.4
December	92.4	93.2	96.9	92.5	90.3	100.4	99.4	100.9	94.7	108.1
1926										
March	95.4	93.3	95.2	92.7	92.1	101.3	99.5	98.9	95.7	112.3
June	89.4	89.7	90.3	90.7	91.5	98.4	95.5	96.1	93.0	107.3
September	92.4	90.4	100.0	93.0	93.2	100.6	97.3	100.0	92.7	106.3
December	91.3	89.4	100.1	91.1	90.3	94.3	96.7	110.7	95.5	97.9
1927										
January	90.7	87.7	99.5	89.1	88.6	93.5	95.1	106.8	90.2	96.9
February	92.3	88.8	99.2	89.3	89.1	96.2	96.0	108.8	94.2	104.7
March	91.4	89.3	98.9	89.5	88.9	96.9	97.6	108.4	94.0	104.2
April	89.3	88.1	97.0	86.9	88.3	95.1	94.3	106.1	91.6	102.9
May	87.7	86.8	94.4	87.0	87.8	93.4	92.9	102.4	89.4	99.4
June	85.9	86.6	94.1	85.6	87.5	94.1	92.7	102.8	87.3	102.2
July	83.9	85.1	93.0	84.1	84.3	97.1	90.4	98.0	81.1	98.1
August	85.9	85.7	93.4	83.9	85.5	98.7	92.2	101.4	84.8	106.9
September	87.1	87.5	94.8	83.8	85.3	95.9	95.0	102.1	82.9	101.7
October	87.4	87.6	94.7	83.6	85.3	94.9	94.2	102.4	84.7	100.6
November	86.2	85.9	93.9	83.0	83.2	90.9	90.7	100.4	83.6	99.6
December	83.0	84.4	93.3	81.2	82.2	90.7	91.7	103.3	82.7	99.5
1928										
January	82.3	82.6	91.2	80.2	80.5	90.3	88.6	98.4	78.9	88.9
February	83.3	83.5	90.7	81.6	82.7	92.1	89.4	99.6	85.4	99.1
March	82.1	83.9	90.2	81.6	83.7	92.6	91.3	98.7	84.7	106.7
April	80.4	82.9	89.6	80.0	82.6	91.8	87.6	96.4	79.7	97.6
May	75.4	82.0	90.0	80.0	83.2	91.8	87.8	98.0	83.0	99.9
June	73.6	82.2	89.9	80.2	85.1	92.9	89.0	98.2	82.6	104.8
July	72.9	81.5	89.8	78.8	83.4	96.8	87.2	96.1	76.2	98.7
August	74.2	82.5	90.7	80.8	85.6	97.9	89.0	98.5	83.1	108.7
September	75.6	84.3	94.1	81.4	86.8	97.1	92.0	102.3	82.9	106.5
October	78.8	86.0	94.6	81.6	86.9	97.0	94.0	105.1	87.0	110.2
November	79.3	85.8	96.8	81.5	87.3	95.7	93.5	106.8	84.9	107.3
December	78.9	85.3	97.9	80.4	88.1	94.8	94.3	109.9	84.6	100.5

[1] Compiled by the Massachusetts Department of Labor and Industries, Division of Statistics, from about 1,000 firms each month. Data are connected by the chain relative method.

[2] Compiled by the New York State Department of Labor from reports of 1,648 firms employing more than one-third of the factory workers of the State.

[3] Compiled by the Federal Reserve Bank of Philadelphia from reports of about 1,000 plants each month in the States of New Jersey, Pennsylvania, and Delaware. Since August, 1926, figures for New Jersey are from the New Jersey Department of Labor.

[4] Compiled from data furnished by the Illinois Department of Labor from reports by about 1,400 manufacturing establishments, employing about 400,000 people, based on the pay roll nearest the 15th of the month.

[5] Compiled by the Industrial Commission of Wisconsin, based on link relatives from reports of about 850 manufacturing firms.

[6] Index number represents 5 months' average, August to December, inclusive.

Source: Department of Commerce, Survey of Current Business.

No. 366.—WEEKLY EARNINGS OF FACTORY LABOR IN SPECIFIED STATES

NOTE.—Index numbers relative to 1923, except for New York which is relative to an average of the seven months June to December, 1914. For original sources of data, numbers of firms reporting, etc., in each State, see notes 2 to 5, Table 365

Year and month	Average amount per week			Index numbers					
	New York	Illinois	Wisconsin	New York	New Jersey	Pennsylvania	Delaware	Illinois	Wisconsin
Monthly average:									
1919	$23.50			188.3					95.9
1920	28.15		$28.58	225.6					116.5
1921	25.72		22.80	206.1					92.8
1922	25.04	$24.70	21.66	200.6				[1] 91.3	90.0
1923	27.24	27.07	23.97	218.3	100.0	100.0	100.0	100.0	100.0
1924	27.68	27.55	24.40	221.8	99.6	97.1	100.5	101.8	101.5
1925	28.26	27.93	25.56	226.4	100.8	98.3	98.9	103.2	106.6
1926	29.02	28.67	25.67	232.5	106.1	101.2	101.3	105.9	107.1
1927	29.30	28.52	25.45	234.8	109.5	101.3	102.7	105.4	106.2
1928	29.44	28.56	26.12	235.9	110.0	101.9	102.4	105.5	109.7
1926									
March	29.04	28.68	26.56	232.7	104.0	103.1	100.6	105.9	110.8
June	28.99	29.02	26.13	232.3	106.9	102.2	103.0	107.2	109.0
September	29.31	27.95	25.32	234.9	106.4	99.2	98.9	103.3	105.6
December	29.47	28.87	24.61	236.1	111.1	104.1	106.2	106.6	102.8
1927									
March	29.78	28.72	25.80	238.6	110.3	104.5	103.9	106.1	107.6
June	29.17	29.27	26.05	233.7	110.0	101.6	102.7	108.1	108.7
September	29.57	27.65	25.40	236.9	108.5	98.3	100.9	102.1	105.9
December	29.57	28.15	25.24	237.1	111.4	101.3	106.0	104.0	105.3
1928									
March	29.64	28.48	27.62	237.5	110.1	103.5	103.8	105.2	115.2
June	29.48	29.28	27.03	236.2	110.0	102.2	103.4	108.2	112.8
September	29.72	28.31	26.30	238.1	109.5	101.1	100.7	104.6	109.7
December	30.12	29.55	25.40	241.3	113.1	104.6	107.9	109.2	106.0

[1] Average of last 6 months of the year.

Source: Department of Commerce, Survey of Current Business.

No. 367.—AVERAGE WEEKLY AND HOURLY EARNINGS: ALL WAGE EARNERS AND CLASSIFIED GROUPS OF LABOR, 25 MANUFACTURING INDUSTRIES

Year	All wage earners		Male, unskilled		Male, skilled and semiskilled		Women	
	Actual amount	Index number	Actual amount	Index number	Actual amount	Index number	Actual amount	Index number
WEEKLY EARNINGS								
1914 (July)	$12.54	100	$10.71	100	$14.16	100	$7.84	100
1920 [1]	29.52	235	27.11	253	33.31	235	18.27	233
1921	23.60	188	20.48	191	26.56	188	16.07	205
1922 [2]	24.04	192	20.53	192	27.43	194	16.00	204
1923	26.54	212	22.59	211	30.18	213	17.46	223
1924	26.28	210	22.97	215	30.01	212	16.72	213
1925	26.93	215	23.74	222	30.89	217	17.21	220
1926	27.16	217	23.97	224	31.23	221	17.24	220
1927	27.22	217	24.40	228	31.14	220	17.32	221
1928	27.42	218	24.85	232	31.71	224	17.15	219
HOURLY EARNINGS								
1914 (July)	.245	100	.203	100	.280	100	.154	100
1920 [1]	.606	247	.547	269	.692	247	.421	274
1921	.523	214	.446	220	.594	212	.368	239
1922 [2]	.493	202	.409	201	.562	201	.355	231
1923	.540	221	.451	222	.616	220	.388	252
1924	.561	229	.473	233	.638	228	.391	254
1925	.558	228	.469	232	.641	230	.390	253
1926	.562	230	.477	235	.647	231	.398	258
1927	.570	233	.490	241	.652	233	.400	260
1928	.570	233	.494	243	.658	235	.398	258

[1] Average of last 7 months.

[2] Average of last 6 months.

Source: National Industrial Conference Board, Inc.

16. POSTAL SERVICE

Postal statistics, unless otherwise noted, include data for outlying territories and possessions except Philippine Islands and Canal Zone

No. 368.—UNITED STATES POSTAL SERVICE, 1800 TO 1928

Year ended June 30—	Number of post offices	Mileage of post routes [1]	Finances, thousands of dollars			Revenue per capita, dollars	Money orders issued, thousands of dollars		Number of ordinary postage stamps issued, millions	Number of pieces of mail handled, millions [4]
			Gross revenue	Gross expenditure	Surplus (+) or deficit (−) [2]		Domestic [3]	International [3]		
1800	903	20,817	281	214	+67					
1810	2,300	36,406	552	496	+56					
1820	4,500	72,492	1,112	1,161	−49					
1830	8,450	115,176	1,851	1,933	−82					
1840	13,468	155,739	4,544	4,718	−175	0.27				
1850	18,417	178,672	5,500	5,213	+287	.20			[5] 2	
1860	28,498	240,594	8,518	19,171	−10,653	.27			216	
1865	20,550	142,340	14,556	13,695	+917	.42	[6] 1,360		387	
1870	28,492	231,232	18,880	23,999	−5,098	.49	34,054	[7] 22	468	
1875	35,547	277,873	26,791	33,611	−6,820	.61	77,431	1,965	682	
1880	42,989	343,888	33,315	36,543	−3,222	.66	100,353	3,464	876	
1885	51,252	365,251	42,561	50,046	−7,481	.76	117,859	6,840	1,465	
1890	62,401	427,990	60,882	66,260	−5,401	.97	114,363	13,230	2,220	4,005
1891	64,329	439,027	65,932	73,060	−7,151	1.03	119,122	14,444	2,398	4,370
1892	67,119	447,591	70,930	76,981	−6,111	1.09	120,067	15,120	2,543	4,777
1893	68,403	453,833	75,897	81,582	−5,717	1.14	127,576	16,342	2,750	5,022
1894	69,805	454,746	75,080	84,994	−9,978	1.11	138,794	13,792	2,602	4,919
1895	70,064	456,026	76,983	87,180	−10,230	1.12	156,709	12,906	2,795	5,134
1896	70,360	463,313	82,499	90,933	−8,444	1.17	172,101	13,853	3,025	5,694
1897	71,022	470,032	82,665	94,077	−11,432	1.15	174,483	13,588	3,064	5,781
1898	73,570	480,461	89,013	98,034	−9,055	1.22	191,354	13,240	3,418	6,214
1899	75,000	496,948	95,021	101,632	−6,630	1.28	211,214	13,745	3,603	6,576
1900	76,688	500,989	102,355	107,740	−5,410	1.34	238,921	16,749	3,999	7,130
1901	76,945	511,808	111,631	115,555	−3,982	1.43	274,546	20,073	4,239	7,424
1902	75,924	507,540	121,848	124,786	−2,961	1.53	313,551	22,974	4,621	8,085
1903	74,169	506,268	134,224	138,784	−4,587	1.66	353,628	35,238	5,271	8,887
1904	71,131	496,818	143,583	152,362	−8,813	1.74	378,778	42,550	5,331	9,502
1905	68,131	486,805	152,827	167,399	−14,594	1.81	396,903	47,516	5,751	10,188
1906	65,600	478,711	167,933	178,450	−10,543	1.96	444,516	63,048	6,284	11,361
1907	62,658	463,406	183,585	190,238	−6,692	2.11	479,650	84,081	7,061	12,256
1908	61,158	450,738	191,479	208,352	−16,910	2.15	498,700	88,972	7,651	13,364
1909	60,144	448,618	203,582	221,094	−17,480	2.24	491,075	76,755	8,732	14,005
1910	59,580	447,998	224,129	229,977	−5,881	2.43	547,994	99,743	9,067	14,850
1911	59,237	435,488	237,880	237,649	+219	2.53	578,111	109,605	10,046	16,901
1912	58,729	436,469	246,744	248,525	−1,786	2.58	583,337	97,660	9,929	17,589
1913	58,020	436,293	266,620	262,068	+4,511	2.74	624,489	102,668	10,813	18,567
1914	56,810	435,597	287,935	283,544	+4,376	2.91	667,231	101,963	11,112	
1915	56,380	433,334	287,248	298,546	−11,333	2.85	656,139	60,772	11,226	
1916	55,935	425,950	312,058	306,204	+5,829	3.05	719,365	46,357	11,672	
1917	55,414	454,835	329,726	319,839	+9,836	3.18	813,319	41,645	12,452	
1918 [8]	54,347	465,371	388,976	324,834	+64,127	3.70	904,650	35,865	13,066	
1919 [8]	53,084	455,498	436,239	362,498	+73,735	4.11	1,109,613	39,766	15,020	
1920	52,641	435,342	437,150	454,323	−17,270	4.10	1,332,700	32,960	13,213	
1921	52,168	434,349	463,491	620,994	−157,518	4.28	1,305,370	24,399	13,870	
1922	51,950	454,901	484,854	545,644	−60,815	4.41	1,205,327	20,651	14,262	
1923	51,613	460,171	532,828	556,851	−24,065	4.78	1,376,461	34,119	15,478	22,821
1924	51,266	467,896	572,949	587,377	−14,464	5.08	1,510,705	50,615	15,954	24,358
1925	50,957	464,269	599,591	639,282	−39,745	5.28	1,532,567	52,650	17,387	25,835
1926	50,601	470,779	659,820	679,704	−19,972	5.63	1,590,486	63,172	16,333	25,484
1927	50,266	478,662	683,122	714,577	−31,506	5.76	1,647,580	68,952	16,000	26,687
1928	49,944	487,778	693,634	725,700	−32,121	5.78	1,630,157	71,520	16,676	26,837

[1] Not counting rural free delivery routes.
[2] Audited postal surplus or deficit which is greater or less than excess of receipts or expenditures by the amount of adjusted losses and contingencies.
[3] International includes foreign countries on domestic basis. For explanation see note on Table 370.
[4] Data are for continental United States and are estimates except in 1923 and beginning with 1926, when figures are accurate calculations. No estimates made from 1914 to 1922, inclusive.
[5] Postage stamps first issued under act of Mar. 3, 1847, and placed on sale at New York July 1, 1847.
[6] From Nov. 1, 1864, when money-order system first went into operation, to June 30, 1865.
[7] From Sept. 1, 1869, to June 30, 1870. International money orders first issued under convention of Oct. 12, 1867.
[8] Gross revenues of department for 1918 and 1919 include $44,500,000 and $71,292,000, respectively, war-tax revenue accruing from increased postage.

Source: Annual Reports of the Postmaster General.

No. 369.—REVENUES, UNITED STATES POSTAL SERVICE

[All figures in thousands of dollars]

Item	Year ended June 30—							
	1910	1915	1920	1924	1925	1926	1927	1928
Total	224,129	287,248	437,150	572,949	599 591	659,820	683,122	693,634
Ordinary postal revenue	219,339	279,460	424,406	553,610	585,333	641,658	664,603	675,043
Stamps, postal cards, etc.	202,065	256,037	379,587	483,372	507,572	552,525	568,512	576,199
Second-class postage paid in money (pound rates)[1]	8,174	10,468	25,100	29,254	29,619	31,986	32,884	32,651
Other postage paid in money under permit	4,418	7,527	12,960	32,286	39,301	47,839	53,503	55,986
Box rents	4,139	4,981	6,145	7,552	7,817	8,078	8,369	8,461
Miscellaneous	542	448	614	1,147	1,024	1,229	1,335	1,746
Money-order revenues	4,790	7,175	10,314	11,249	12,909	16,715	16,985	17,021
Revenue from postal savings		612	2,430	8,089	1,349	1,446	1,534	1,570

[1] For volume of this item, see Table 374.

No. 370.—POSTAL MONEY-ORDER BUSINESS

NOTE.—For revenues from money orders, see Table 369. For value of orders issued for other years, see Table 368. Money orders are exchanged on a domestic basis not only within this country, but with its outlying possessions, Canada, Cuba, and numerous islands and minor countries neighboring the United States. International-basis orders are exchanged between the United States and its outlying possessions, on the one hand, and other than "domestic basis" foreign countries, on the other. In this table, however, "International" includes money orders exchanged between the United States and "domestic basis" foreign countries, and these are not included in "Domestic"

Item	Year ended June 30—							
	1910	1915	1920	1924	1925	1926	1927	1928
Number of money-order offices	51,791	55,670	54,395	54,195	54,269	55,589	54,616	54,803
DOMESTIC [1]								
Orders issued:								
Number (1,000)	76,918	105,073	148,491	188,552	197,054	193,410	194,217	196,287
Amount (1,000 dollars)	547,994	656,139	1,332,700	1,510,705	1,532,567	1,590,486	1,647,580	1,630,157
Orders paid:								
Number (1,000)	76,496	103,884	147,520	187,835	196,038	193,695	195,041	196,932
Amount (1,000 dollars)	545,632	652,786	1,333,046	1,505,606	1,531,597	1,590,452	1,647,113	1,629,443
Excess of issues: [2]								
Number (1,000)	422	1,190	971	717	1,015	−285	−825	−644
Amount (1,000 dollars)	2,362	1,353	−346	5,100	970	34	468	714
INTERNATIONAL [3,4]								
Orders issued:								
Number (1,000)	4,500	3,055	1,852	2,709	2,966	3,323	3,734	3,843
Amount (1,000 dollars)	99,743	60,772	32,960	50,615	52,650	63,172	68,952	71,520
Orders paid:								
Number (1,000)	1,956	2,217	1,508	1,838	1,765	2,026	1,955	2,129
Amount (1,000 dollars)	27,244	24,743	25,362	21,453	19,765	22,983	23,886	26,402
Excess of issues:								
Number (1,000)	2,544	837	343	871	1,201	1,297	1,779	1,714
Amount (1,000 dollars)	72,499	36,029	7,598	29,162	32,886	40,188	45,066	45,119
FOREIGN "DOMESTIC BASIS" [5]								
Paid in foreign countries:								
Number (1,000)	667	655	601	890	938	965	990	1,049
Amount (1,000 dollars)	10,184	9,110	9,568	16,387	16,920	20,019	19,718	20,323
Paid in the United States:								
Number (1,000)	1,566	1,936	1,246	1,603	1,498	1,691	1,574	1,753
Amount (1,000 dollars)	17,766	18,386	17,916	15,910	15,118	17,472	17,723	19,101

[1] Domestic money orders first issued Nov. 1, 1864, under act of Congress approved May 17, 1864.
[2] Minus sign indicates excess of payments.
[3] Includes foreign countries on "domestic basis."
[4] International money orders first issued Sept. 1, 1869, under Postal Convention of Oct. 12, 1867.
[5] Included under "International" above.

Sources of Tables 369 and 370: Annual Reports of the Postmaster General.

No. 371.—EXPENDITURES, UNITED STATES POSTAL SERVICE

NOTE.—All figures in thousands of dollars. For total expenditures see Table 368. Data cover expenditures during the specified year ended June 30, whether on account of that fiscal year or of previous years

Item	1910	1915	1920	1924	1925	1926	1927	1928
Service in post offices (total)	107,771	139,937	234,102	304,764	338,046	371,127	392,141	402,210
Salaries of postmasters	27,514	30,400	40,103	45,434	47,562	49,807	50,741	50,626
Salaries of clerks, etc	38,045	53,317	102,319	135,244	153,336	172,328	182,778	187,824
City delivery service	31,805	42,608	63,626	84,285	95,161	107,134	114,795	118,856
All other expenditures	10,405	13,552	28,049	39,801	41,987	41,864	43,827	44,904
Railway Mail Service	19,389	28,408	38,711	48,901	52,906	56,236	58,051	58,681
Rural Delivery Service	37,074	49,806	75,794	84,105	93,163	101,690	104,445	105,014
Transportation of domestic mail	61,940	76,914	99,520	138,005	142,141	139,428	145,400	146,154
By railroads	49,405	59,576	70,714	99,008	99,720	95,320	99,350	98,035
By other means	12,535	17,338	28,805	38,998	42,421	44,108	46,050	47,219
Transportation foreign mail	3,204	3,273	5,912	8,033	9,175	7,385	10,634	9,624
Payment account of invalid money orders	600	208	284	139	138	136	127	146
Post Office Department [1]				3,430	3,712	3,701	3,880	3,871

[1] Paid out of the General Treasury prior to 1923.

No. 372.—TRANSPORTATION OF DOMESTIC MAILS

NOTE.—Amounts, except as indicated, in thousands of dollars. Since Nov. 1, 1916, all service on steam railroads is authorized and paid for under the space basis system; formerly, payments were based on a system of quadrennial weighings. Railway mail space units of service vary in size and character and may consist of a car, a section of a car, or a closed pouch carried on a car. Some cars are railway post offices, others are for storage only, over 20 classes of units being distinguished. The "equated unit" represents a calculation of the equivalent of all the different units in terms of a 60-foot car. Annual rate of expenditure (regular authorizations) represents estimated cost for transporting normal mail traffic over regular routes only, based on contracts outstanding at the end of each fiscal year. "Annual cost" includes emergency and side and transfer service. Average rates are based on "regular authorizations"

Class of service and item	Year ended June 30, or as of June 30 of year specified						
	1910	1915	1920	1925	1926	1927	1928
Steam railway service:							
Length of routes (miles)	220,730	233,676	232,358	230,470	229,281	228,992	226,965
Annual travel (thousand miles)—							
Regular space units	[1] 426,923	[1] 499,011	561,827	579,256	575,732	575,120	572,938
Prorated to 60-foot car basis			218,349	226,395	227,408	229,944	231,540
Annual expenditure—							
Regular authorizations	49,302	58,149	83,731	88,991	89,135	89,811	90,175
Annual cost			89,661	107,491	106,656	107,181	107,646
Average rate of cost—							
Per mile of length (dollars)	223.36	248.84	360.35	386.12	388.75	392.20	397.39
Per unit mile traveled (cents)	[1] 11.55	[1] 11.65	14.90	15.36	15.48	15.61	15.73
Per 60-foot car mile (cents)			38.34	39.31	39.20	39.13	38.97
Railway mail employees—							
Number of employees	16,795	19,599	20,407	20,693	20,411	20,550	20,854
Expenditure for salary	19,047	21,205	35,644	48,913	51,508	52,994	53,559
Electric railway service:							
Number of routes	530	569	543	288	279	262	254
Length of routes (miles)	7,198	8,183	8,043	8,042	8,205	8,029	7,876
Annual travel of space units (thousand miles)	[1] 11,630	[1] 13,948	[1] 11,752	10,487	10,327	10,510	10,211
Annual rate of expenditure	674	819	471	566	665	662	642
Average cost per unit mile traveled (cents)	[1] 5.79	[1] 5.87	[1] 4.01	5.39	6.43	6.29	6.28
Power boat service:							
Number of routes	217	260	266	284	276	275	280
Length of routes (miles)	27,256	32,402	34,642	49,791	46,871	45,625	41,206
Annual travel (thousand miles)	4,826	5,685	3,992	5,298	5,591	4,908	5,212
Annual rate of expenditure	705	990	[2] 773	1,492	1,423	1,318	1,361
Average cost per mile traveled (cents)	14.61	17.42	19.36	28.16	25.44	26.84	26.10
	1918	1920	1922	1924	1926	1927	1928
Air mail service: [3]							
Mileage scheduled (thousands)	18	654	1,629	1,590	2,816	5,575	6,009
Miles traveled with mail (thousands)	16	549	1,538	1,523	2,652	5,135	5,585
Mail carried (thousand pounds)	18	527	1,225	1,500	[4] 354	[4] 1,033	[4] 1,862
Cost of service	14	1,264	1,418	1,499	2,872	3,619	4,043

[1] Annual travel in thousands of miles and average cost per mile traveled. Space basis was not in force.
[2] Exclusive of freight and express service to Alaska or New York Harbor service.
[3] Contract service was inaugurated in 1926, Government service was discontinued in 1927. All data represent total service, except as otherwise noted.
[4] Only specially paid air mail was carried in 1926, 1927, and 1928; data for 1926 represent Government service only.

Sources of Tables 371 and 372: Annual Reports of the Postmaster General.

No. 373.—CITY AND RURAL FREE DELIVERY AND STAR ROUTE SERVICE

NOTE.—Free city delivery was inaugurated in 1863; rural free delivery in 1897. Star routes are mail routes between towns which are let on a contract basis. Data in all cases relate to contracts or organization at June 30 and do not represent actual mileage traveled or expenditure during previous fiscal year. Star route service in Alaska is not included in the accompanying table, data for 1928 being as follows: Number of routes, 60; length, 8,844 miles; annual travel, 281,907 miles; annual rate of expenditure, $141,485

As of June 30—	City free delivery			Rural free delivery				Star routes	
	Number of offices	Number of carriers	Annual cost (1,000 dollars)	Number of routes	Length of routes (miles)	Annual travel (1,000 miles)	Annual cost (1,000 dollars)	Number of routes (regular service)	Annual cost (1,000 dollars)
1870	51	1,362	1,230					7,295	5,050
1880	104	2,628	2,364					9,863	7,321
1885	*178*	*4,358*	*3,986*					*12,971*	*5,415*
1890	454	9,066	7,976					15,887	5,321
1895	604	12,714	12,136					20,733	5,754
1900	796	15,322	14,512	1,259	28,685		420	22,834	5,088
1905	1,144	21,778	20,919	32,110	721,237		20,855	17,199	7,342
1910	1,492	28,715	31,684	41,079	993,068	303,007	36,915	13,425	6,928
1912	1,621	29,962	34,153	42,199	1,021,492	310,906	41,859	12,668	6,815
1913	*1,675*	30,923	36,601	42,805	1,038,076	315,781	45,643	12,432	*6,966*
1914	1,759	32,292	40,399	43,652	1,060,679	322,432	47,377	11,970	8,001
1915	1,808	32,902	42,458	43,866	1,067,674	325,305	52,566	11,557	8,713
1916	1,864	34,114	43,137	42,927	1,088,070	326,435	51,952	11,391	8,466
1917	1,948	34,592	48,048	43,464	1,112,556	336,303	52,420	11,208	8,383
1918	1,992	34,593	49,995	43,453	1,127,110	344,100	52,196	10,958	8,606
1919	2,018	35,024	59,527	43,210	1,143,467	346,066	65,448	10,773	10,055
1920	2,086	36,142	74,933	*43,445*	*1,151,832*	*348,627*	*75,562*	*10,739*	*11,106*
1921	2,161	38,532	87,830	43,672	1,163,896	352,533	83,034	10,664	12,390
1922	2,229	39,485	89,908	44,186	1,180,448	357,254	84,430	10,715	12,641
1923	2,277	40,154	93,804	44,439	1,190,534	360,256	86,172	10,802	12,610
1924	2,325	43,829	97,892	44,760	1,205,714	363,670	86,765	10,802	12,735
1925	2,401	46,251	110,357	45,189	1,227,654	370,273	102,945	10,906	12,774
1926	2,522	48,238	126,219	45,318	1,240,978	377,046	104,117	10,991	12,955
1927	*2,812*	*50,117*	*132,005*	*44,730*	*1,270,746*	383,851	104,447	11,215	12,996
1928	2,899	51,293	136,528	44,288	1,289,613	390,054	105,008	11,472	13,541

No. 374.—POSTAL SERVICE: VOLUME OF CERTAIN ITEMS OF BUSINESS

NOTE.—For sales of postage stamps and other stamped paper and postage collected on second-class matter see Table 369

	Year ended June 30—						
	1910	1915	1920	1925	1926	1927	1928
Transactions in stamped paper:							
Ordinary postage stamps issued (millions)	9,067	11,226	13,213	17,387	16,333	16,000	16,676
Stamped envelopes and wrappers issued (millions)	1,507	1,794	2,350	2,997	3,002	3,146	3,219
Postal cards issued (millions)	726	976	986	1,497	1,668	1,834	1,872
Pieces of mail carried [1] (millions)	14,850			25,835	25,484	26,687	26,837
Second-class matter carried:							
Free in county (1,000 pounds)	55,639	62,142	61,528	69,195	72,660	74,565	74,545
Paid at pound rates (1,000 pounds)	817,773	1,047,144	1,307,227	1,348,297	1,420,576	1,473,637	1,476,274
Foreign mails dispatched by sea:							
Letters (1,000 pounds)	[2] 3,142	3,401	4,608	5,640	5,630	6,131	6,574
Other articles (1,000 pounds)	[2] 17,832	22,848	66,725	66,229	64,316	70,731	76,045
Mail registered:							
Domestic, paid (1,000 pieces)	33,682	27,688	56,951	70,512	63,867	65,252	66,941
Foreign, paid (1,000 pieces)	4,782	4,325	11,300	10,993	10,134	9,334	8,721
Official, free (1,000 pieces)	3,589	5,297	8,663	8,414	8,357	7,943	8,132
Registry fees (1,000 dollars)	3,594	3,201	6,825	8,850	10,947	11,245	11,408
Mail insured:							
Domestic, parcel post (1,000 pieces)		18,012	95,385	152,078	137,686	133,210	131,764
International (1,000 pieces)				608	670	647	659
Total fees paid (1,000 dollars)		941	5,416	8,061	9,689	9,316	9,159
Mail sent C. O. D.:							
Total pieces sent (1,000)		4,721	20,098	52,362	51,157	49,897	49,367
Total fees (1,000 dollars)		472	2,070	5,562	6,459	6,312	6,225

[1] Data are for continental United States and are estimates in 1910 and 1925. No estimates made in 1915 and 1920.

[2] Excluding mails carried by domestic contract steamers, or steamers subsidized by foreign countries.

Source of Tables 373 and 374: Annual Reports of the Postmaster General.

No. 375.—GROSS RECEIPTS, COST OF CITY DELIVERY SERVICE AND OF CLERK HIRE AT THE LARGER POST OFFICES: YEARS ENDED JUNE 30

Post office	Gross receipts (1,000 dollars)				Cost of city delivery, 1928		Cost of clerk hire, 1923	
	1920	1925	1927	1928	Amount (1,000 dollars)	Per cent to receipts	Amount (1,000 dollars)	Per cent to receipts
Total (55 post offices)	237,410	332,746	380,828	386,556	71,584	18.52	99,979	25.86
New York, N. Y	49,612	65,523	74,449	77,160	9,967	12.92	23,341	30.25
Chicago, Ill	41,000	56,359	61,895	61,855	8,436	13.65	15,331	24.78
Philadelphia, Pa	14,695	17,777	20,432	20,103	4,169	20.73	4,996	24.85
Boston, Mass	11,124	14,769	17,164	17,269	4,852	28.09	5,675	32.86
St. Louis, Mo	8,235	12,099	13,659	12,962	2,223	17.15	3,214	24.80
Detroit, Mich	5,567	8,467	10,782	11,086	2,739	24.71	3,069	27.69
Kansas City, Mo	6,036	9,424	11,067	10,905	1,188	10.89	1,905	17.47
Los Angeles, Calif	3,583	8,065	9,553	10,012	2,434	24.30	2,494	24.91
Cleveland, Ohio	6,028	8,055	9,604	9,882	2,140	21.66	2,230	22.57
Brooklyn, N. Y	5,466	7,412	8,967	9,278	3,922	42.27	3,080	33.19
San Francisco, Calif	5,072	7,763	8,796	9,003	1,480	16.43	2,308	25.63
Pittsburgh, Pa	4,976	6,826	7,792	7,636	1,773	23.23	1,835	24.04
Cincinnati, Ohio	4,314	6,710	7,613	7,542	1,245	16.51	1,682	22.30
Baltimore, Md	4,052	5,427	6,972	6,871	1,680	24.45	1,863	27.11
Minneapolis, Minn	4,083	6,133	6,214	6,464	1,171	18.12	1,396	21.60
Washington, D. C	3,536	4,770	5,731	5,860	1,272	21.70	2,276	38.84
Milwaukee, Wis	2,893	4,712	5,448	5,805	1,130	19.47	1,058	18.23
Indianapolis, Ind	2,593	4,280	4,803	4,791	865	18.06	1,187	24.78
Buffalo, N. Y	3,325	4,633	4,916	4,762	1,429	30.00	1,281	26.90
St. Paul, Minn	2,384	4,258	4,597	4,549	726	15.97	892	19.61
Atlanta, Ga	2,748	3,470	4,456	4,525	561	12.40	923	20.40
Newark, N. J	2,110	3,520	4,180	4,420	1,029	23.27	943	21.33
Dallas, Tex	2,301	3,217	3,813	3,880	534	13.77	786	20.25
Denver, Colo	2,356	3,281	3,686	3,732	719	19.26	735	19.70
Seattle, Wash	2,232	2,998	3,415	3,463	818	23.62	912	26.35
Des Moines, Iowa	1,992	2,875	3,284	3,327	346	10.38	503	15.11
Portland, Oreg	1,788	2,776	3,097	3,110	744	23.92	767	24.66
Columbus, Ohio	1,721	2,641	2,991	3,054	559	18.29	610	19.98
Omaha, Nebr	2,312	2,846	3,032	3,037	620	20.41	764	25.15
Louisville, Ky	1,705	2,619	2,966	2,999	581	19.39	729	24.30
Rochester, N. Y	1,839	2,623	2,975	2,995	656	21.89	734	24.52
New Orleans, La	1,999	2,651	2,794	2,801	634	22.62	851	30.37
Memphis, Tenn	1,361	1,880	2,128	2,629	458	17.41	582	22.14
Toledo, Ohio	1,531	2,021	2,405	2,391	547	22.87	513	21.47
Dayton, Ohio	981	1,863	2,321	2,348	361	15.36	460	19.57
Hartford, Conn	1,271	1,782	2,189	2,253	361	16.04	482	21.38
Richmond, Va	1,376	1,966	2,197	2,252	448	19.91	563	24.98
Providence, R. I	1,356	1,860	2,084	2,206	630	28.55	555	25.18
Houston, Tex	1,252	1,579	1,933	2,064	389	18.86	487	23.59
Oakland, Calif	702	1,517	1,971	1,985	650	32.72	530	26.70
Akron, Ohio	1,191	1,275	1,637	1,846	392	21.20	373	20.18
Nashville, Tenn	1,211	1,645	1,789	1,843	316	17.14	456	24.75
Albany, N. Y	859	1,459	1,735	1,827	269	14.74	326	17.82
Birmingham, Ala	853	1,319	1,697	1,754	387	22.09	432	24.65
Syracuse, N. Y	1,145	1,493	1,728	1,744	431	24.70	422	24.20
New Haven, Conn	1,012	1,495	1,733	1,737	368	21.16	442	25.46
Grand Rapids, Mich	993	1,417	1,673	1,685	361	21.39	300	17.79
Oklahoma City, Okla	982	1,371	1,608	1,637	244	14.89	374	22.84
Jersey City, N. J	935	1,227	1,407	1,495	429	28.72	375	25.11
Scranton, Pa	723	1,070	1,189	1,415	341	24.07	312	22.07
Salt Lake City, Utah	904	1,257	1,373	1,403	338	24.13	368	26.26
Springfield, Mass	885	1,204	1,317	1,378	347	25.14	357	25.89
Worcester, Mass	833	1,067	1,262	1,247	358	28.72	318	25.52
Spokane, Wash	799	1,033	1,149	1,171	261	22.29	259	22.16
Jacksonville, Fla	670	962	1,275	1,110	258	23.28	322	28.99

Source: Reports of the Postmaster General.

No. 376.—POSTAL SERVICE: By States and Outlying Areas

Division and State	Number of post offices, June 30, 1928	Mileage of rural free-delivery routes, June 30, 1928	Gross postal receipts [1]					
			1920	1924	1925	1926	1927	1928
			In thousands of dollars for years ended June 30					
Grand total	49,944	1,289,613	424,525	552,986	584,755	640,932	663,669	673,954
United States proper	49,580	1,289,595	423,463	551,723	583,427	639,532	662,216	672,445
New England	2,654	41,734	32,276	41,412	43,498	47,346	49,092	49,703
Maine	823	11,880	2,866	3,742	3,946	4,035	3,975	3,938
New Hampshire	378	6,057	1,504	2,010	2,035	2,239	2,292	2,323
Vermont	384	8,173	1,220	1,525	1,540	1,640	1,685	1,688
Massachusetts	646	7,730	18,913	23,878	25,064	27,193	28,536	28,669
Rhode Island	94	1,166	2,029	2,597	2,702	3,188	3,027	3,169
Connecticut	329	6,728	5,744	7,658	8,211	9,051	9,577	9,916
Middle Atlantic	5,756	111,439	117,897	152,757	161,532	178,029	185,028	190,060
New York	2,219	48,280	74,772	96,992	102,514	112,641	116,973	120,963
New Jersey	665	8,416	9,512	13,473	14,655	16,403	17,468	18,475
Pennsylvania	2,872	54,743	33,613	42,292	44,363	48,985	50,587	50,622
East North Central	6,443	294,491	107,343	141,774	151,924	166,546	172,066	174,274
Ohio	1,544	66,032	24,800	32,499	35,417	39,051	40,576	41,142
Indiana	1,044	57,300	9,226	13,099	13,774	14,976	15,554	15,755
Illinois	1,611	71,736	51,357	66,061	70,753	76,423	78,227	78,761
Michigan	1,182	51,806	13,199	17,784	18,978	21,616	22,920	23,304
Wisconsin	1,062	47,617	8,761	12,331	13,002	14,480	14,789	15,252
West North Central	7,424	317,232	58,971	70,131	73,365	78,361	80,794	80,297
Minnesota	1,206	51,389	10,847	15,342	15,836	16,923	16,844	17,063
Iowa	1,227	62,265	9,392	11,334	11,720	12,712	13,116	13,141
Missouri	1,771	59,034	18,624	25,721	27,230	29,652	30,785	29,806
North Dakota	686	27,537	2,062	2,179	2,360	2,534	2,582	2,668
South Dakota	637	23,506	2,066	2,391	2,539	2,736	2,775	2,783
Nebraska	860	35,331	5,504	6,470	6,663	6,932	7,101	7,180
Kansas	1,037	58,170	5,476	6,694	7,017	7,372	7,591	7,566
South Atlantic	8,905	178,056	34,415	43,830	46,072	52,071	53,726	53,227
Delaware	95	2,931	811	954	999	1,086	1,145	1,268
Maryland	673	11,108	5,292	6,799	7,101	8,512	8,802	8,695
District of Columbia	1	200	3,536	4,519	4,771	5,315	5,731	5,861
Virginia	2,195	28,154	5,621	6,953	7,236	7,810	7,941	8,070
West Virginia	1,890	10,910	3,154	4,289	4,395	4,639	4,830	4,781
North Carolina	1,470	38,378	4,138	5,640	5,814	6,272	6,454	6,503
South Carolina	663	24,654	2,239	2,522	2,530	2,609	2,626	2,652
Georgia	1,079	50,058	6,395	7,529	7,734	8,263	9,010	9,079
Florida	839	11,663	3,179	4,625	5,492	8,405	7,187	6,228
East South Central	5,605	131,007	15,546	20,019	20,576	22,371	22,916	23,927
Kentucky	2,671	24,436	4,392	6,202	6,283	6,723	7,018	7,088
Tennessee	982	42,216	5,289	6,853	7,107	7,724	7,835	8,441
Alabama	1,065	33,960	3,418	4,213	4,385	4,839	4,944	5,182
Mississippi	887	30,395	2,447	2,751	2,801	3,085	3,119	3,216
West South Central	5,653	141,384	24,678	29,077	30,646	33,539	35,150	35,787
Arkansas	1,371	21,830	2,928	3,454	3,585	3,838	3,888	3,837
Louisiana	946	11,257	4,015	4,873	5,055	5,438	5,412	5,445
Oklahoma	1,084	40,514	4,730	5,518	5,889	6,397	6,733	6,820
Texas	2,252	67,783	13,005	15,232	16,117	17,866	19,117	19,685
Mountain	3,876	33,954	12,178	14,396	15,004	15,776	16,259	16,551
Montana	840	6,507	2,016	2,112	2,180	2,236	2,303	2,397
Idaho	495	6,333	1,397	1,318	1,324	1,397	1,451	1,484
Wyoming	399	1,158	712	950	953	974	983	979
Colorado	753	14,400	4,398	5,582	5,878	6,222	6,425	6,497
New Mexico	552	2,432	679	890	900	948	991	1,012
Arizona	307	1,326	943	1,060	1,137	1,216	1,286	1,336
Utah	354	1,651	1,647	2,042	2,179	2,304	2,312	2,359
Nevada	176	147	386	442	453	479	508	487
Pacific	3,264	40,298	25,158	38,330	40,812	44,094	47,182	48,617
Washington	896	13,078	5,636	7,186	7,494	8,011	8,368	8,492
Oregon	774	8,739	3,324	4,668	4,809	5,172	5,337	5,361
California	1,594	18,481	16,198	26,476	28,509	30,911	33,477	34,764
Outlying offices	364	18	[2] 1,062	1,264	1,328	1,401	1,453	1,509
Alaska	171	----------	82	65	71	78	81	90
Guam	1	----------	1	2	2	2	2	2
Hawaii	92	18	352	533	611	634	645	710
Porto Rico	94	----------	406	520	522	537	537	559
Samoa (Tutuila)	1	----------	2	2	2	2	(3)	(3)
Virgin Islands	5	----------	17	12	11	12	12	13
Philatelic agency	----------	----------	----------	130	109	136	176	154

[1] Revenues from money-order business, postal savings, and certain miscellaneous items not included.
[2] Includes receipts from agencies in China, France, and Siberia.
[3] Less than $500.

Source: Annual Reports of the Postmaster General.

No. 377.—MONEY ORDERS: By States and Outlying Areas

Note.—Amounts in thousands of dollars for years ended June 30. "Domestic basis" money orders include those to or from "domestic basis" foreign countries. For explanation see headnote, Table 370

Division and State	Domestic basis money orders				International money orders			
	Issued		Paid		Issued		Paid	
	1927	1928	1927	1928	1927	1928	1927	1928
Grand total	1,667,298	1,650,480	1,664,836	1,648,544	49,234	51,198	6,163	7,301
United States proper	1,653,449	1,635,468	1,658,250	1,641,740	48,694	50,667	6,142	7,280
New England	188,937	187,048	117,138	116,179	4,971	4,989	474	597
Maine	15,844	15,631	9,438	9,256	119	145	17	20
New Hampshire	9,772	9,773	5,080	5,087	102	102	9	9
Vermont	7,347	7,067	3,681	3,916	51	52	9	17
Massachusetts	71,049	69,720	76,005	74,708	3,070	3,030	279	294
Rhode Island	9,331	9,402	6,585	6,796	329	333	29	38
Connecticut	25,594	25,455	16,349	16,416	1,300	1,327	131	219
Middle Atlantic	397,975	395,472	442,494	435,074	22,196	24,066	2,285	3,296
New York	210,687	218,884	273,010	267,465	14,433	16,359	1,415	2,086
New Jersey	53,328	53,525	35,517	36,418	3,634	3,856	286	412
Pennsylvania	133,960	123,063	133,967	131,191	4,129	3,851	584	798
East North Central	347,809	337,681	470,320	456,809	9,477	9,347	1,546	1,523
Ohio	81,461	78,449	95,668	91,808	1,623	1,564	211	314
Indiana	35,636	34,714	42,854	42,079	796	684	64	129
Illinois	102,433	100,195	251,278	242,545	4,238	4,199	946	694
Michigan	82,839	79,002	52,153	52,038	1,968	2,008	218	256
Wisconsin	45,440	45,321	28,367	28,339	852	892	107	130
West North Central	161,718	163,775	179,259	181,214	1,645	1,847	324	386
Minnesota	35,264	36,003	47,650	51,130	448	444	93	102
Iowa	31,210	29,860	21,985	21,762	221	220	45	53
Missouri	34,486	34,430	76,144	74,712	453	466	100	121
North Dakota	13,318	15,123	4,828	5,108	54	65	17	21
South Dakota	14,786	14,470	6,543	5,876	52	72	16	14
Nebraska	14,182	15,251	11,800	11,962	150	164	34	52
Kansas	18,472	18,638	10,309	10,664	267	416	19	23
South Atlantic	190,952	175,053	153,315	146,074	1,110	1,066	264	320
Delaware	3,064	2,920	1,372	1,349	55	65	9	14
Maryland	17,139	17,575	33,279	29,687	229	243	30	41
District of Columbia	8,479	8,446	17,591	19,438	200	225	127	152
Virginia	23,183	22,733	16,798	15,995	103	104	13	11
West Vriginia	30,908	27,606	10,168	10,101	75	75	32	50
North Carolina	23,684	23,962	13,407	13,325	65	65	5	6
South Carolina	13,827	14,841	7,964	7,780	28	29	5	3
Georgia	26,938	26,663	32,214	31,359	51	55	6	7
Florida	43,730	30,307	20,522	17,040	304	207	37	36
East South Central	74,522	76,501	43,193	48,175	158	178	23	29
Kentucky	19,730	19,155	11,190	10,760	55	59	8	11
Tennessee	16,866	17,658	15,708	21,731	43	47	6	6
Alabama	20,559	21,022	10,567	10,172	47	61	7	10
Mississippi	17,367	18,666	5,728	5,512	13	11	2	2
West South Central	124,874	128,992	81,867	82,613	1,331	1,502	277	241
Arkansas	17,592	18,344	9,186	9,181	17	15	5	5
Louisiana	21,227	20,476	15,002	13,103	125	117	24	15
Oklahoma	28,368	28,707	13,655	14,276	124	157	19	12
Texas	57,687	61,465	44,024	46,053	1,065	1,213	229	209
Mountain	80,982	80,850	46,678	47,206	1,547	1,555	142	158
Montana	16,544	17,087	6,908	7,088	204	231	21	27
Idaho	9,437	9,410	2,911	3,249	88	92	6	11
Wyoming	8,135	8,026	2,282	2,191	102	114	16	6
Colorado	17,720	16,967	16,426	16,293	322	318	40	57
New Mexico	8,299	8,390	3,132	3,065	118	134	7	6
Arizona	9,041	9,393	3,944	4,159	402	333	30	27
Utah	7,911	7,781	9,725	9,779	206	231	19	21
Nevada	3,895	3,791	1,350	1,382	105	102	3	3
Pacific	135,677	140,098	123,984	128,395	6,257	6,112	806	725
Washington	30,205	31,233	26,786	27,468	827	822	228	101
Oregon	16,631	17,167	17,404	16,983	428	377	38	40
California	88,751	91,698	79,794	83,944	5,002	4,913	540	584
Outlying offices	13,850	15,011	6,585	6,805	540	530	22	21
Alaska	2,926	3,006	332	566	92	90	1	1
Guam	53	64	3	4	4	5	(1)	(1)
Hawaii	5,512	6,753	1,765	1,853	391	395	18	17
Porto Rico	4,858	4,680	4,418	4,271	22	17	2	1
Samoa (Tutuila)	32	24	----------	3	25	17	----------	1
Virgin Islands	459	484	67	108	6	6	1	1

[1] Less than $500.

Source: Annual Reports of the Postmaster General.

17.—TELEPHONE, TELEGRAPH, AND CABLE SYSTEMS

[Data cover public telephone systems and land (wire) and wireless commercial telegraph systems operated in continental United States and commercial cable systems operated by companies incorporated in United States]

No. 378.—TELEPHONE SYSTEMS: Equipment, Traffic, Employees, Salaries and Wages, Revenue, and Investment

Note.—The more detailed data were collected only for companies reporting an annual income of $5,000 or more previous to 1922 and $10,000 or more in 1922 and 1927

[All money figures in thousands of dollars]

	1902 [1]	1907	1912	1917	1922	1927
ALL SYSTEMS						
Number of systems and lines	9,136	22,971	32,233	53,234	57,253	60,148
Miles of wire (thousands)	4,900	12,999	20,248	28,827	37,266	63,836
Number of telephones (thousands)	2,371	6,119	8,780	11,717	14,347	18,523
Number of calls originating with systems reporting (millions)	(2)	(2)	(2)	21,846	24,648	31,614
Number of employees	(2)	(2)	(2)	262,629	312,015	375,272
Salaries and wages	(2)	(2)	(2)	175,670	352,926	486,597
Revenue, operating [3]	(2)	(2)	(2)	363,832	665,568	1,023,574
Investment in plant and equipment	(2)	(2)	(2)	1,492,329	2,205,183	3,548,875
SYSTEMS REPORTING ANNUAL INCOME OF $5,000 OR MORE, 1902–1917, AND THOSE REPORTING $10,000 OR MORE, 1922 AND 1927						
Number of systems and lines	4,151	1,636	1,916	2,200	1,323	1,368
Miles of wire, total (thousands)	4,850	11,922	19,019	27,298	35,503	62,277
Underground	(4)	(4)	9,165	14,849	21,440	39,893
Overhead	(4)	(4)	9,854	12,449	14,063	22,384
Exchange lines	(4)	(4)	16,336	23,723	30,907	54,281
Toll lines	(4)	(4)	2,683	3,575	4,596	7,996
Number of telephones (thousands)	2,315	4,907	7,327	9,954	12,295	16,713
Number of central offices	10,361	10,613	11,515	12,294	10,666	11,485
Number of private-branch exchanges	7,883	28,276	52,651	80,914	102,622	(5)
Number of calls originating with systems reporting (millions)	[6] 5,071	10,400	13,736	19,809	21,901	29,196
Local exchange	[6] 4,950	10,161	13,395	19,366	21,235	28,109
Long distance or toll	[6] 121	240	341	443	666	1,087
Number of employees	78,752	131,670	183,361	244,490	290,333	356,739
Salaries and wages	36,256	65,009	96,041	169,655	341,538	475,840
Operators (included above):						
Number	39,858	72,518	96,332	138,971	159,558	(5)
Male	2,525	2,457	1,972	1,679	932	(5)
Female	37,333	70,061	94,360	137,292	158,626	(5)
Wages	10,765	22,637	32,474	66,137	138,897	(5)
BELL SYSTEM (INCLUDED ABOVE)						
Miles of wire (thousands)	3,388	8,947	15,133	23,134	30,614	56,819
Number of telephones (thousands)	1,317	3,132	5,087	7,327	9,515	13,726
Number of originating calls (millions)	3,075	6,401	9,133	14,598	16,567	23,693
SYSTEMS REPORTING ANNUAL INCOME OF LESS THAN $5,000, 1902–1917, AND LESS THAN $10,000, 1922 AND 1927						
Miles of wire (thousands)	50	1,077	1,229	1,529	1,763	1,559
Number of telephones (thousands)	56	1,212	1,403	1,763	2,052	1,810
Number of originating calls (millions)	(4)	(4)	(4)	2,037	2,746	2,418

[1] Statistics for 1902 not strictly comparable with those for later years, except miles of wire and number of telephones.
[2] Not reported except for the larger systems and lines.
[3] Including assessments of mutual companies.
[4] Comparable data not available.
[5] Not called for on schedule.
[6] *Number shown for all systems and lines.*

Source: Bureau of the Census, Department of Commerce.

No. 379.—TELEPHONE SYSTEMS: MILES OF WIRE, NUMBER OF TELEPHONES, AND NUMBER OF ORIGINATING CALLS, ALL SYSTEMS AND LINES, BY STATES

Division and State	Miles of wire		Number of telephones				Telephones per 1,000 population, 1927	Number of originating calls (millions)	
	1922	1927	1902	1912	1922	1927		1922	1927
United States	37,265,958	63,836,182	2,371,044	8,729,592	14,347,395	18,522,767	156	24,648	31,614
New England	3,346,608	5,586,569	166,107	625,438	1,223,497	1,548,931	169	1,909	2,328
Maine	210,707	326,120	14,070	68,914	113,725	131,367	166	184	214
New Hampshire	134,326	211,448	9,949	40,017	68,874	83,066	183	104	117
Vermont	78,991	105,645	12,151	40,142	54,530	60,793	172	83	84
Massachusetts	1,908,091	3,165,833	96,512	329,992	687,700	867,888	205	1,100	1,334
Rhode Island	213,713	429,451	33,485	41,664	92,766	114,944	163	125	117
Connecticut	800,780	1,348,072		104,759	205,902	290,873	178	313	462
Middle Atlantic	10,818,580	19,992,689	483,054	1,782,145	3,249,710	4,588,211	184	4,826	6,908
New York	6,121,696	11,592,418	247,340	970,449	1,780,663	2,595,537	227	2,728	3,935
New Jersey	1,523,354	3,012,459	48,980	185,632	383,496	599,336	160	473	774
Pennsylvania	3,173,530	5,387,812	186,734	626,064	1,085,651	1,393,338	143	1,625	2,199
East North Central	8,763,146	15,223,410	740,059	2,378,257	3,693,101	4,589,751	187	6,077	7,588
Ohio	2,415,187	3,658,505	224,083	631,206	902,837	1,122,036	167	1,555	1,958
Indiana	1,058,314	1,558,005	136,561	354,550	508,726	552,249	175	959	1,061
Illinois	3,060,595	5,688,146	221,008	807,253	1,283,449	1,685,690	231	2,018	2,571
Michigan	1,390,945	2,967,217	95,415	335,074	508,140	711,315	158	856	1,140
Wisconsin	838,105	1,351,537	62,992	250,174	429,949	518,461	178	689	808
West North Central	4,487,007	6,044,901	399,865	1,621,523	2,315,996	2,594,081	197	4,083	4,577
Minnesota	1,147,278	1,422,716	63,192	272,359	424,777	487,611	182	804	931
Iowa	757,600	960,226	138,400	380,294	533,847	565,533	233	808	916
Missouri	1,247,503	1,988,764	103,155	404,150	550,980	657,946	187	1,046	1,269
North Dakota	124,873	140,923	6,762	51,241	77,586	86,198	134	110	129
South Dakota	108,414	154,601	10,387	65,858	101,595	107,641	155	159	171
Nebraska	514,374	606,425	36,766	201,689	273,500	295,274	212	520	524
Kansas	586,965	771,246	41,193	245,932	354,251	393,878	216	636	637
South Atlantic	2,448,357	4,244,852	146,765	531,402	937,324	1,262,222	79	1,818	2,426
Delaware	93,891	118,539	36,383	15,842	23,534	28,901	119	41	53
Maryland	540,089	936,353		84,801	153,790	197,135	123	237	294
District of Columbia	314,636	540,152		46,603	102,231	144,985	268	121	186
Virginia	379,693	615,286	25,762	76,652	155,490	183,698	72	267	382
West Virginia	226,739	349,899	22,801	80,251	116,081	146,677	86	203	279
North Carolina	199,594	392,455	17,036	65,152	116,129	160,507	55	274	379
South Carolina	126,284	171,578	10,753	33,239	54,078	64,616	35	125	146
Georgia	390,382	538,751	25,761	96,436	136,334	173,410	55	372	437
Florida	178,149	581,739	8,269	32,426	79,657	162,293	119	178	270
East South Central	1,248,559	2,001,125	112,851	337,292	521,120	644,270	69	1,274	1,537
Kentucky	467,781	722,120	46,949	130,751	201,545	222,735	88	429	485
Tennessee	399,932	642,096	36,302	104,353	171,413	220,559	89	479	559
Alabama	229,934	421,927	14,170	56,292	84,401	121,115	48	219	313
Mississippi	150,912	214,982	15,340	45,896	63,761	79,861	45	147	180
West South Central	2,148,789	3,619,976	114,939	543,102	872,157	1,149,357	99	1,963	2,649
Arkansas	219,398	318,868	16,928	68,303	99,490	118,178	62	216	239
Louisiana	256,372	560,262	17,543	46,602	87,354	137,610	71	260	385
Oklahoma	424,005	655,102	15,732	116,217	222,889	278,912	117	462	581
Texas	1,249,014	2,085,744	64,736	311,980	462,424	614,657	114	1,025	1,444
Mountain	927,662	1,193,550	48,067	226,652	385,730	456,198	114	636	780
Montana	120,725	135,536	5,451	35,537	55,115	59,238	83	75	81
Idaho	105,027	111,940	3,886	29,454	48,745	54,822	103	88	128
Wyoming	50,223	60,622	[1] 7,258	9,946	24,949	28,049	116	42	39
Colorado	412,816	559,873	24,533	90,397	150,652	183,250	171	247	313
New Mexico	37,428	48,765	2,510	10,346	18,342	21,580	55	33	35
Arizona	55,518	89,305	3,264	11,224	33,353	33,194	72	31	37
Utah	129,193	167,393	(2)	34,064	53,261	63,106	121	104	127
Nevada	16,732	25,116	1,165	5,684	10,313	12,959	168	16	20
Pacific	3,076,750	5,924,110	159,287	683,731	1,148,760	1,699,746	245	2,062	2,871
Washington	533,515	739,138	31,447	150,016	238,275	299,109	192	449	554
Oregon	368,342	490,820	21,190	99,713	146,847	185,171	208	277	331
California	2,174,893	4,694,152	106,650	434,002	763,638	1,205,466	272	1,336	1,986

[1] Includes Utah.
[2] Included with Wyoming.

Source: Bureau of the Census, Department of Commerce.

No. 380.—AMERICAN TELEPHONE & TELEGRAPH CO. AND ASSOCIATED OPERATING COMPANIES: NUMBER OF TELEPHONES AND MILES OF WIRE

Dec. 31—	Total telephones [1]	Bell system		Dec. 31—	Total telephones [1]	Bell system	
		Telephones [2]	Miles of wires			Telephones [2]	Miles of wire
1895	339,500	309,502	675,415	1920	13,329,400	12,601,935	25,377,404
1900	1,355,900	855,911	1,961,801	1921	13,875,200	13,380,219	27,819,821
1905	4,126,900	2,530,924	5,779,913	1922	[3] 14,347,395	14,050,565	30,616,522
1910	7,635,400	5,882,719	11,642,212	1923	15,369,500	15,000,101	34,523,842
1915	10,523,500	9,172,495	18,505,545	1924	16,072,500	15,906,550	39,393,619
1916	11,241,400	9,893,610	19,850,315	1925	16,935,900	16,720,224	45,473,540
1917	[3] 11,716,520	10,539,576	22,610,487	1926	17,746,000	17,574,252	50,801,150
1918	12,077,600	11,065,999	23,346,132	1927	18,523,000	18,365,486	56,822,895
1919	12,668,500	11,795,747	24,162,999	1928	19,341,000	19,197,035	62,192,744

[1] Partly estimated, except as indicated.
[2] Bell-owned and Bell-connecting (owned by other companies).
[3] From Bureau of the Census.

No. 381.—AMERICAN TELEPHONE & TELEGRAPH CO. AND ASSOCIATED OPERATING COMPANIES (BELL TELEPHONE SYSTEM): SUMMARY OF STATISTICS

	1910	1915	1920	1925	1926	1927	1928
	Operating statistics and employees as of Dec. 31 (in thousands, except as indicated)						
Exchange messages, daily average	21,681	25,184	31,835	46,702	49,980	52,581	56,196
Toll messages, daily average	603	819	1,327	2,098	2,375	2,614	2,839
Central offices (number)	4,933	5,300	5,702	6,017	5,998	6,115	6,224
Miles of wire, total	11,642	18,506	25,377	45,474	50,861	56,823	62,193
Aerial wire	5,625	7,932	9,630	14,991	16,593	18,936	21,112
Underground wire	6,017	10,573	15,748	30,483	34,169	37,887	41,081
Exchange wire	9,678	16,052	21,604	39,841	44,564	49,279	53,416
Toll wire	1,964	2,453	3,773	5,633	6,297	7,544	8,777
Miles of phantom circuit [1]	116	197	508	795	947	1,140	1,238
Telephone stations, total	5,883	9,172	12,002	16,720	17,574	18,365	19,197
Bell-owned [2]	3,933	5,963	8,334	12,035	12,816	13,726	14,525
Bell-connecting (owned by other companies)	1,950	3,204	4,268	4,685	4,758	4,639	4,672
Employees (number)	120,311	156,294	231,316	293,095	300,628	308,911	334,335
	Income statement year ended Dec. 31 (in thousands of dollars) [3]						
Gross revenues	165,613	239,910	461,135	761,219	844,546	916,587	1,003,048
Expenses	114,618	173,728	381,626	578,776	639,676	700,017	760,326
Net revenue	50,994	66,182	79,509	182,443	204,870	216,570	242,722
Interest	11,557	18,096	31,724	45,940	49,809	50,511	51,635
Net income	39,438	48,086	47,785	136,503	155,061	166,059	191,087
Dividends	25,161	32,897	40,000	93,243	100,614	112,401	119,348
Balance	14,277	15,189	7,785	43,260	54,447	[4] 53,658	71,739
	Telephone plant, capital stock, and funded debt Dec. 31 (in thousands of dollars) [3]						
Telephone plant	611,000	880,069	1,303,826	2,524,906	2,788,023	3,013,985	3,275,687
Capital stock	344,645	440,711	511,493	1,144,619	1,312,881	1,351,940	1,564,644
Funded debt	224,792	353,236	585,794	890,337	921,523	919,790	912,126

[1] A phantom circuit is an extra circuit obtained without use of additional line wires by special interconnection of the four wires forming two existing physical circuits.
[2] Includes private line stations.
[3] All duplications between companies excluded.
[4] Does not include special nonrecurring dividend of $47,938,865 received from Western Electric Co. (Inc.).

Source of Tables 380 and 381: The American Telephone & Telegraph Co.

No. 382.—TELEPHONE SYSTEMS: REPORTS TO INTERSTATE COMMERCE COMMISSION

NOTE.—*Companies engaged in interstate business are required to report both as regards interstate and intrastate business.* Prior to 1923 the classification of companies based on the amount of annual operating revenues was as follows: Class A, over $250,000; Class B, $50,000 to $250,000; Class C, $10,000 to $50,000. Class B now includes companies with revenues from $100,000 to $250,000 and Class C those with revenues from $50,000 to $100,000. The smaller companies, Class D, are not covered in the table

Year ended Dec. 31—	Miles of wire (thousands)	Number of company stations (thousands)	Operating revenues	Operating expenses	Operating income before deduction of taxes	Operating income after deduction of taxes	Investment: Plant and equipment	Investment: All other
			Thousands of dollars					
All companies:								
1916	23,099	8,963	314,801	209,233	(1)	(1)	1,217,756	(1)
1917	26,405	9,432	346,101	239,161	(1)	(1)	1,311,574	(1)
1920	29,640		530,349			88,024	1,704,304	1,122,289
1922	35,475		634,134			133,505	2,019,726	1,223,639
1923	38,615		671,436	475,463		142,369	2,198,446	1,354,596
1924	44,066		729,826	513,779		156,713	2,501,828	1,491,939
1925	49,773	13,875	818,218	556,993	257,231	193,599	2,790,056	1,633,124
1926	56,021	14,812	907,564	608,150	294,925	219,508	3,101,797	1,744,637
1927	62,696	15,702	979,414	658,231	316,951	235,047	3,367,860	1,955,742
Class A companies:								
1920	27,402	9,294	486,427	375,372	112,069	81,362	1,518,660	1,092,698
1925	48,487	13,037	792,428	539,072	248,476	186,777	2,674,926	1,631,335
1927	60,723	14,877	952,149	639,203	307,821	228,012	3,237,984	1,951,825
1928	(1)	15,759	1,038,810	694,608	337,585	252,244	(1)	(1)
Class B companies: 1927	925	515	17,528	11,964	5,480	4,056	71,982	1,231
Class C companies: 1927	448	310	9,737	7,064	3,650	2,979	57,894	636

[1] Data not available.

Source: Interstate Commerce Commission.

No. 383.—WIRELESS TELEGRAPH SYSTEMS: SUMMARY OF STATISTICS

NOTE.—1917 omitted owing to war conditions

	1907	1912	1922	1927
Number of companies or systems	5	4	4	5
Number of messages	154,617	[1] 285,091	2,365,109	3,777,533
Number of tower stations	117	74	37	55
Income, total	$106,791	[2] $669,158	[2] $8,111,102	[2] $24,829,340
Expenses, total	$160,329	$664,420	$5,111,574	$12,808,636
General operation and maintenance	$117,480	$588,712	$3,534,474	$5,116,264
Interest and taxes	$5,562	$7,826	$156,467	$249,435
All other expenses	$37,287	$67,882	$1,420,642	$7,500,937
Net income		$4,738	$2,999,528	$11,962,704
Deficit	$53,538			
Assets, total	$32,958,897	$10,377,197	$46,494,909	$81,147,512
Plant and equipment	$317,614	$1,205,770	$34,716,814	$35,751,904
Investment and marketable securities, long-term advances, and miscl. investments			$1,225,169	$17,711,433
Cash and current assets	$32,196,456	$9,171,427	[3] $4,427,830	$19,312,823
Materials and supplies			$5,883,877	$6,831,530
Sundries			$241,210	$1,387,342
Deficit	$444,827			$152,430
Liabilities, total	$32,958,897	$10,377,197	$46,494,909	$81,147,512
Capital stock	$32,676,242	$9,602,570	$36,034,309	$38,174,134
Funded and long-term debt			$525,000	
Floating debt			$659,280	$320,961
Accounts payable	$282,655	$287,866	$3,254,556	$11,436,628
Reserves (depreciation and other)			$4,040,280	$17,206,630
Sundries		$313,777	$1,172,509	$5,746,973
Surplus		$172,984	$808,885	$8,262,186
Number of employees	176	958	1,258	1,985
Salaries and wages	$81,771	$393,606	$2,095,506	$2,558,179

[1] Includes 5,013 land messages sent over a leased wire by a wireless company doing a land-telegraph business also.

[2] Includes revenues from transmission for 1922, $4,207,785; for 1927, $6,226,183; other operating revenues, 1922, $3,644,201; 1927, $14,791,565; nonoperating income, 1922, $259,116; 1927, $3,811,587.

[3] Includes sinking funds and stock and bond discounts.

Source: Bureau of the Census, Department of Commerce.

TELEGRAPH AND CABLE SYSTEM: SUMMARY OF REPORTS TO THE INTERSTATE COMMERCE COMMISSION

[All money figures in thousands of dollars]

l Dec. 31—	Miles of wire (thousands)	Investments		Operating revenues	Operating ratio (per cent)	Operating income	Net income	Dividends
		Plant and equipment	Other					
	1,936	149,936	(1)	74,847	73.77	(1)	13,955	6,036
	1,937	152,402	(1)	90,791	74.82	(1)	13,807	7,078
	1,781	258,097	21,275	153,264		21,512	16,158	11,471
	1,858	270,976	20,549	136,063		18,607	13,311	9,078
	1,874	279,402	19,907	138,190		22,894	18,138	13,960
	1,894	288,481	27,001	144,610	81.11	21,025	16,656	9,309
	1,946	307,143	27,565	146,176	81.94	20,229	15,805	9,386
	2,075	321,687	28,191	162,693	81.64	23,204	18,854	9,066
	2,056	338,794	27,017	165,831	82.81	21,767	16,806	10,750
	2,207	379,514	27,434	176,843	80.58	25,714	21,046	11,618
n Co.: 1927	1,783	257,386	25,543	131,771	80.04	20,197	15,133	7,981
anies: 1927	354	62,891	354	26,515	92.91	1,309	610	

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—LAND AND OCEAN-CABLE TELEGRAPH SYSTEMS COMBINED: FINANCIAL STATISTICS

[All figures in thousands of dollars]

	1902	1912	1917	1922	1927
INCOME ACCOUNT					
	40,930	64,763	109,708	151,858	182,998
h traffic	35,301	60,403	106,990	146,305	177,589
ner sources	5,629	4,360	2,713	5,053	5,409
al	30,948	58,379	91,871	127,991	159,153
n and maintenance	24,456	[1] 46,780	[1] 74,985	[1] 113,140	[1] 141,987
and taxes	2,539	3,955	7,982	10,195	11,838
	3,953	7,644	[2] 8,954	[2] 4,656	[2] 5,328
	9,982	6,384	17,832	23,867	23,845
	6,257	6,180	9,817	10,716	14,199
BALANCE SHEET					
	195,504	298,289	363,017	459,469	572,939
d equipment	161,680	222,047	243,358	326,662	426,699
es and investments	25,940	33,934	56,035	78,839	52,270
d current assets	7,884	[4] 42,308	[4] 63,024	[4] 53,969	[4] 93,970
	195,504	298,289	363,017	459,469	572,939
stock	117,053	163,646	167,260	177,204	180,095
l debt	45,893	62,741	61,828	71,394	97,037
	7,860	20,804	53,663	90,222	118,031
abilities	6,619	35,248	45,484	50,133	64,557
plus	18,079	15,850	34,782	70,517	113,219

s charges for depreciation.
s payment for use of leased lines.
come less all expenses, including depreciation; for 1917, 1922, and 1927, does not include charges and other reserve funds.
s sinking funds and stock and bond discount.
Bureau of the Census, Department of Commerce.

No. 386.—LAND AND OCEAN-CABLE TELEGRAPH SYSTEMS: FINANCIAL STATISTICS

NOTE.—Western Union figures, which constitute the largest item of the totals, do not segregate land telegraph from ocean-cable business and are shown as totals under land telegraphs. Consequently, data in these columns overstate and those under ocean cables understate the true amounts

[All figures in thousands of dollars]

	Land systems				Ocean systems			
	1912	1917	1922	1927	1912	1917	1922	1927
INCOME ACCOUNT								
Income, total	56, 293	92, 954	130, 539	162, 860	8, 470	16, 749	21, 319	20, 137
Telegraph traffic	52, 337	91, 313	128, 631	159, 682	8, 066	15, 677	18, 174	17, 907
From other sources	3, 956	1, 642	1, 908	3, 178	404	1, 072	3, 145	2, 230
Expenses	52, 863	80, 829	114, 864	146, 771	5, 516	11, 042	13, 127	12, 382
Net income	[1] 3, 431	[1] 12, 125	[1] 15, 675	[1] 16, 089	2, 953	5, 707	8, 193	7, 755
BALANCE SHEET								
Assets	190, 706	226, 407	321, 913	412, 720	107, 583	136, 610	137, 557	160, 219
Plant and equipment	[2] 143,911	[2] 163,488	254, 030	338, 143	[3] 78, 136	[3] 79, 871	72, 632	88, 556
Securities and investments	17, 123	29, 565	31, 875	12, 567	16, 811	26, 470	46, 964	39, 704
Cash and current assets	[4] 29, 672	[4] 33, 355	[4] 36, 008	[4] 62, 010	[5] 12, 636	[5] 30, 269	[5] 17, 961	[5] 31, 959
Liabilities	190, 706	226, 407	321, 913	412, 720	107, 583	136, 610	137, 556	160, 219
Capital stock	108, 156	106, 360	104, 466	104, 472	55, 490	60, 900	72, 738	75, 623
Funded debt	[6] 34, 741	[6] 33, 828	67, 394	92, 872	[7] 28, 000	[7] 28, 000	4, 000	4, 165
Reserves	5, 255	20, 627	46, 773	64, 607	15, 549	33, 036	43, 449	53, 424
Other liabilities	33, 201	37, 024	40, 430	57, 983	2, 047	8, 460	9, 702	6, 574
Net surplus	9, 353	28, 568	62, 849	92, 786	6, 497	6, 214	7, 668	20, 433

[1] Total income less all expenses, including depreciation; for 1917, 1922, and 1927 does not include charges for sinking and other reserve funds.
[2] Not including land-line-system plant and equipment to the value of $20,000,000 reported as cable-system plant and equipment for 1912 and 1917. (In statistics for preceding censuses an item of $20,000,000 funded debt, offset by the same amount for plant and equipment, was carried against ocean-cable telegraphs. This debt being really a land-line-system debt and being so reported for 1922, is eliminated from the figures for ocean-cable system.)
[3] Includes land-line-system plant and equipment to the value of $20,000,000 (see note [2]).
[4] Includes sinking funds and stock and bond discount.
[5] Includes sinking and other special funds.
[6] Not including land-line-system funded debt to the amount of $20,000,000 reported as cable-system indebtedness in 1912 and 1917 (see note 2).
[7] Includes land-line-system indebtedness to the amount of $20,000,000 (see note [2]),

No. 387.—LAND AND OCEAN-CABLE TELEGRAPH SYSTEMS COMBINED: EQUIPMENT, TRAFFIC, EMPLOYEES, SALARIES, AND WAGES

	1902	1912	1917	1922	1927
Miles of pole line [1]	237, 990	247, 528	241, 128	252, 991	256, 809
Miles of single wire [2]	1, 318, 350	1, 814, 196	1, 890, 245	1, 853, 250	2, 146, 822
Aerial	(3)	(3)	1, 809, 482	1, 718, 251	1, 940, 069
Underground	(3)	(3)	77, 187	131, 448	200, 811
Submarine	(3)	(3)	3, 576	3, 551	5, 942
Nautical miles of ocean cable	16, 677	67, 676	71, 251	76, 711	104, 541
Number of officers	27, 377	30, 864	28, 940	27, 354	27, 666
Operated jointly with railway companies	(3)	26, 247	23, 272	21, 906	21, 449
Telegrams, thousands	91, 655	109, 378	[4] 127, 074	191, 121	229, 511
Governmental	(3)	(3)	4, 597	3, 199	2, 732
Full commercial rate	(3)	(3)	110, 618	175, 847	214, 093
Contract rate and free	(3)	(3)	11, 858	12, 075	12, 686
Number of employees	27, 627	37, 295	51, 574	68, 632	81, 498
Salaries and wages ($1,000)	15, 040	24, 965	39, 644	76, 162	99, 520

[1] Exclusive of pole line owned and operated wholly by railway companies.
[2] Exclusive of wire owned and operated wholly by railway companies, as follows: Reported by all railway companies, 1912, 314,329 miles; reported by railway companies having annual operating revenues of $1,000,000 or more, 1917, 344,110 miles; 1922, 285,002 miles; 1927, 333,898 miles. No data for 1902.
[3] Figures not available.
[4] In addition, 31,102,577 lettergrams, not distributed according to rate, were reported by land systems.

Source of Tables 386 and 387: Bureau of the Census, Department of Commerce.

No. 388.—LAND AND OCEAN-CABLE TELEGRAPH SYSTEMS: EQUIPMENT, TRAFFIC, EMPLOYEES, SALARIES AND WAGES

NOTE.—The land business and the ocean business of the Western Union Telegraph Co. are not segregated in this table for 1912. The total (estimated) number of messages in 1912 was 103,536,418 on land systems and 5,841,280 on ocean systems

	Land systems				Ocean systems			
	1912	1917	1922	1927	1912	1917	1922	1927
Miles of pole line [1]	247,528	241,012	252,991	254,720	--------	116	--------	2,089
Miles of single wire [2]	1,814,196	1,888,793	1,845,237	2,143,686	(3)	1,452	8,013	8,136
Aerial	(3)	1,808,325	1,714,211	1,938,833	(3)	1,157	4,040	1,236
Underground	(3)	76,892	127,475	198,011	(3)	295	3,973	1,900
Submarine	(3)	3,576	3,551	5,942	--------	--------	--------	--------
Nautical miles of ocean cable	--------	--------	--------	--------	67,676	71,251	76,711	104,541
Number of offices	30,781	28,826	27,214	27,560	83	114	140	106
Operated jointly with railway companies	26,247	23,272	21,906	21,449	--------	--------	--------	--------
Telegrams, thousands	106,583	[4] 120,623	181,519	222,062	2,845	6,451	9,603	7,449
Governmental	(3)	4,309	3,130	2,678	(3)	288	69	54
Full commercial rate	(3)	106,159	166,730	206,827	(3)	4,459	9,117	7,266
Contract rate and free	(3)	10,154	11,659	12,557	(3)	1,704	417	129
Number of employees	35,639	47,227	62,299	77,235	1,656	4,347	6,333	4,263
Salaries and wages ($1,000)	23,798	36,392	68,737	93,413	1,167	3,252	7,425	6,108

[1] Exclusive of pole line owned and operated wholly by railway companies.
[2] Exclusive of wire owned and operated wholly by railway companies, as follows: Reported by all railway companies, 1912, 314,329 miles; reported by railway companies having annual operating revenues of $1,000,000 or more, 1917, 344,110 miles; 1922, 285,002 miles; 1927, 333,898 miles.
[3] Figures not available.
[4] In addition, 31,102,577 lettergrams, not distributed according to rate, were reported.

No. 389.—WESTERN UNION TELEGRAPH CO.: MILEAGE OF LINES AND WIRES, NUMBER OF OFFICES, AND FINANCES

Year ended—	Miles of pole line and cable	Miles of wire	Number of offices	Receipts	Expenses	Net income
June 30—				*Dollars*	*Dollars*	*Dollars*
1867	46,270	85,291	2,565	6,568,925	3,944,006	2,624,920
1870	54,109	112,191	3,972	7,138,738	4,910,772	2,227,966
1875	72,833	179,496	6,565	9,564,575	6,335,415	3,229,158
1880	85,645	233,534	9,077	12,782,895	6,948,957	5,833,938
1885	147,500	462,283	14,184	17,706,834	12,005,910	5,700,924
1890	183,917	678,997	19,382	22,387,029	15,074,304	7,312,725
1895	189,714	802,651	21,360	22,218,019	16,076,630	6,141,389
1900	192,705	933,153	22,900	24,758,570	18,593,206	6,165,364
1905	200,224	1,184,557	23,814	29,033,635	21,845,570	7,188,065
1910	214,360	1,429,049	24,825	33,889,202	26,614,302	7,274,900
1913	238,033	1,558,181	[1] 26,000	47,423,443	42,959,934	4,463,508
Dec. 31—						
1913	237,807	1,562,170	25,060	46,899,267	42,327,121	4,572,146
1914	240,231	1,609,346	25,784	47,287,388	40,578,751	6,708,637
1915	238,940	1,610,709	25,142	52,475,721	40,972,541	11,503,180
1916	237,664	1,627,342	25,234	63,621,601	[2] 49,894,346	13,727,255
1917	228,766	1,626,963	25,466	78,480,223	62,783,006	15,697,217
1918	[3] 247,303	1,382,547	25,452	[4] 88,093,247	[4] 76,713,028	[4] 11,380,219
1919	245,560	1,433,978	25,159	[4] 104,082,147	[4] 90,312,033	[4] 13,770,114
1920	246,214	1,449,710	24,881	121,473,685	108,134,041	13,339,644
1921	246,064	1,521,085	24,632	105,228,075	95,542,563	9,685,512
1922	242,729	1,534,009	24,580	107,116,306	93,910,954	13,205,352
1923	244,001	1,557,399	24,678	113,628,470	99,982,165	13,646,305
1924	246,742	1,593,963	24,478	115,235,563	101,815,734	13,419,829
1925	246,307	1,635,236	24,428	129,151,617	112,861,832	16,289,785
1926	249,916	1,668,293	24,688	136,406,026	121,098,832	15,307,194
1927	251,756	1,783,140	24,765	134,460,816	119,328,218	15,132,598
1928	255,088	1,889,632	24,842	139,387,321	123,817,517	15,569,804

[1] Estimated.
[2] Includes special payment to employees, $1,166,424.
[3] Figures readjusted.
[4] Corporate and Federal.

Sources: Table 388, Bureau of the Census, Department of Commerce; Table 389, Annual Reports of the Western Union Telegraph Co.

18.—POWER—ELECTRIC AND OTHER

[Data in this section relate to continental United States]

No. 390.—ANNUAL SUPPLY OF ENERGY FROM MINERAL FUELS AND WATER POWER IN THE UNITED STATES

NOTE.—The figures, except coal equivalent, represent the equivalent of the heating power of the classes of fuel in trillions of British thermal units. Data represent production, except those for oil imports, and take no account of changes in stocks

Annual average or year	Anthracite coal	Bituminous coal	Total coal	Domestic oil	Natural gas	Imported oil	Water power [1]	Grand total fuels and water power	Equivalent in bituminous coal [2]	
									Million tons (2,000 lbs.)	Per capita, tons
1871–1875	637	754	1,391	49	-------	-------	(1)	1,520	58	1.4
1876–1880	718	955	1,673	101	-------	-------	(1)	1,857	71	1.6
1881–1885	985	1,863	2,848	153	[3] 24	-------	(1)	3,110	119	2.2
1886–1890	1,195	2,474	3,669	198	[3] 264	-------	(1)	4,221	161	2.7
1891–1895	1,453	3,286	4,739	307	[3] 166	-------	104	5,316	203	3.0
1896–1900	1,513	4,493	6,006	357	[3] 198	-------	129	6,690	255	3.5
1901–1905	1,818	7,140	8,958	612	323	-------	209	10,102	386	4.8
1906–1910	2,207	9,783	11,990	1,037	470	1	369	13,867	529	5.9
1911–1915	2,427	11,527	13,954	1,486	619	72	591	16,722	638	6.6
1916–1920	2,523	13,981	16,504	2,176	820	297	851	20,648	788	7.6
1921–1925	2,112	12,610	14,722	3,888	1,024	569	1,105	21,308	813	7.3
1913	2,490	12,535	15,025	1,491	626	102	588	17,831	681	7.1
1918	2,688	15,180	17,868	2,136	775	226	837	21,842	834	8.1
1925	1,681	13,625	15,306	4,582	1,278	371	1,290	22,827	871	7.5
1926	2,297	15,022	17,319	4,625	1,411	362	1,492	25,209	962	8.2
1927	2,179	13,565	15,744	5,407	1,554	350	1,687	24,742	944	8.0
Per cent of total—										
1901–1905	18.0	70.7	88.7	6.1	3.2	-------	2.1	100.0	-------	-------
1911–1915	14.5	68.9	83.4	8.9	3.7	0.4	3.5	100.0	-------	-------
1921–1925	9.9	59.2	69.1	18.2	4.8	2.7	5.2	100.0	-------	-------
1927	8.8	54.8	63.6	21.9	6.3	1.4	6.8	100.0	-------	-------

[1] The fuel equivalent for water power is calculated from the reported horsepower of installed water wheels. Prior to 1890 data were unsatisfactory, but estimates are included in the total.
[2] Calculated at 26,200,000 British thermal units per ton.
[3] Based on the amount of coal displaced by gas, as estimated by the gas companies at the time.

Source: Bureau of Mines, Department of Commerce.

No. 391.—ELECTRICITY PRODUCED, CONSUMPTION OF FUEL, AND CAPACITY OF GENERATORS IN PUBLIC-UTILITY POWER PLANTS

NOTE.—Data prior to 1919 are totals for central stations and electric railways as reported by Bureau of the Census; thereafter they are estimated totals for all plants, based on returns from about 3,500 plants in 1919 to about 3,800 in 1928, each producing 10,000 kilowatt-hours or more per month, engaged in public service, including central stations, electric railways, steam railroads generating electricity for traction, and certain other plants. The capacity of plants reporting is about 95 per cent of that of all plants

Calendar year	Production of electricity			Consumption of fuel			Consumption—Coal or coal equivalent		Capacity of generators
	Total	Water power	Fuel power	*Coal*	*Fuel oil*	*Gas*	*Total*	*Per kilowatt-hour*	
	Million kilowatt-hours	*Million kilowatt-hours*	*Million kilowatt-hours*	*Thousand tons* [1]	*Thousand barrels* [2]	*Million cubic feet*	*Thousand tons* [1]	*Pounds*	*Thousand kilowatts*
1902	4,768	-------	-------	-------	-------	-------	-------	-------	[3] 2,112
1907	10,621	-------	-------	-------	-------	-------	-------	-------	4,432
1912	17,572	-------	-------	-------	-------	-------	-------	-------	7,670
1917	32,679	-------	-------	-------	-------	-------	-------	-------	11,919
1919	38,921	14,606	24,315	35,100	11,050	21,406	38,880	3.2	13,094
1920	43,555	16,150	27,405	37,124	13,123	24,702	41,420	3.0	14,399
1921	40,975	14,970	26,005	31,585	12,045	23,722	35,240	2.7	15,483
1922	47,054	17,207	30,447	34,179	13,197	27,172	38,000	2.5	15,971
1923	55,665	19,343	36,322	38,966	14,684	31,433	43,522	2.4	17,369
1924	59,014	19,969	39,044	37,556	16,630	48,443	43,130	2.2	19,519
1925	65,870	22,356	43,514	40,222	10,246	46,521	44,780	2.1	23,619
1926	73,791	26,189	47,602	41,311	9,309	53,207	45,856	1.95	25,398
1927	80,205	29,875	50,330	41,888	6,782	62,919	45,910	1.84	27,691
1928	87,850	34,696	53,154	41,350	7,158	77,326	46,387	1.76	29,630

[1] Of 2,000 pounds. [2] Of 42 gallons. [3] Partly estimated.

Sources: 1902 to 1917, Bureau of the Census, Department of Commerce; thereafter, Geological Survey, Department of the Interior.

No. 392.—PRODUCTION OF ELECTRIC POWER AND CAPACITY OF GENERATORS IN PUBLIC UTILITY POWER PLANTS: BY STATES

[Production in millions of kilowatt-hours; capacity of generators in thousands of kilowatts]

Division and State	Production of electric power										Capacity of generators, 1928
	Total						Generated by water power		Generated by fuel power		
	1920	1922	1924	1926	1927	1928	1920	1928	1920	1928	
United States	43,555	47,654	59,014	73,791	80,205	87,850	16,150	34,696	27,405	53,154	29,630
New England	3,407	3,730	4,335	5,166	5,471	5,959	1,134	2,378	2,273	3,581	2,556
Maine	352	405	474	544	627	694	344	690	9	4	193
New Hampshire	97	196	216	264	276	302	61	268	36	33	102
Vermont	200	137	224	265	268	452	196	445	4	8	170
Massachusetts	1,740	1,850	2,098	2,499	2,609	2,751	358	680	1,382	2,071	1,306
Rhode Island	334	411	427	476	490	490	6	5	328	485	248
Connecticut	684	731	896	1,118	1,195	1,270	169	290	515	980	537
Middle Atlantic	12,349	13,062	16,306	20,527	21,717	22,657	3,665	6,525	8,684	16,132	7,406
New York	6,939	7,421	9,289	11,333	11,989	13,030	3,030	5,573	3,909	7,458	4,159
New Jersey	1,096	1,112	1,304	1,737	1,904	2,085	2	32	1,094	2,053	674
Pennsylvania	4,314	4,529	5,713	7,457	7,825	7,542	633	920	3,681	6,622	2,572
East North Central	9,958	10,876	13,791	17,664	18,848	20,947	1,382	2,627	8,576	18,320	6,754
Ohio	2,930	3,043	3,702	4,761	4,950	5,539	28	44	2,902	5,494	1,846
Indiana	933	1,077	1,298	1,758	1,864	1,989	35	128	898	1,862	687
Illinois	3,043	3,483	4,665	5,930	6,319	6,966	185	262	2,858	6,704	2,178
Michigan	2,093	2,180	2,697	3,393	3,774	4,347	672	1,138	1,421	3,208	1,322
Wisconsin	960	1,094	1,430	1,821	1,936	2,106	463	1,055	497	1,051	722
West North Central	3,179	3,568	3,934	4,587	4,841	5,126	1,166	1,757	2,013	3,369	2,068
Minnesota	703	788	870	1,040	1,054	1,065	410	712	293	353	484
Iowa	1,017	1,042	1,175	1,345	1,411	1,521	662	888	354	633	440
Missouri	698	871	889	913	958	991	46	75	652	916	487
North Dakota	28	32	39	48	57	85	-------	-------	28	85	47
South Dakota	48	56	66	80	88	106	15	12	33	94	52
Nebraska	247	284	338	395	431	464	13	35	235	430	188
Kansas	438	496	557	766	842	893	21	37	417	857	360
South Atlantic	3,980	4,851	5,950	7,197	8,768	10,500	1,614	5,532	2,365	4,968	3,754
Delaware	76	85	88	119	120	100	-------	-------	76	100	32
Maryland	283	394	482	588	602	1,477	3	878	280	599	610
District of Columbia	255	282	315	381	414	467	-------	11	255	456	170
Virginia	521	638	744	926	1,089	1,168	203	315	318	854	408
West Virginia	1,128	1,351	1,763	1,807	2,048	2,045	23	173	1,105	1,872	570
North Carolina	260	443	647	1,117	2,087	2,225	208	1,968	51	257	758
South Carolina	730	869	944	1,038	1,117	1,399	673	1,264	57	135	491
Georgia	595	628	749	711	710	981	491	906	104	75	358
Florida	133	160	218	510	582	637	13	17	120	619	358
East South Central	1,464	1,535	2,064	3,049	3,408	3,326	840	2,641	623	685	1,497
Kentucky	276	315	405	514	566	625	-------	285	276	340	339
Tennessee	573	512	694	894	929	956	441	707	132	249	328
Alabama	550	647	890	1,583	1,867	1,695	399	1,649	150	46	774
Mississippi	66	60	74	59	46	50	-------	-------	66	50	57
West South Central	1,230	1,463	1,923	2,640	3,315	4,035	7	53	1,222	3,982	1,239
Arkansas	119	131	155	164	167	150	1	40	117	110	91
Louisiana	219	250	308	520	633	821	-------	-------	219	821	147
Oklahoma	214	266	331	463	676	844	2	4	212	839	284
Texas	679	817	1,129	1,493	1,839	2,221	4	9	675	2,212	716
Mountain	2,581	2,390	2,963	3,425	3,520	3,918	2,247	3,428	334	490	973
Montana	1,126	985	1,145	1,408	1,395	1,619	1,119	1,605	7	14	226
Idaho	591	616	703	811	806	948	589	946	2	2	224
Wyoming	47	39	54	59	66	84	2	29	44	54	44
Colorado	307	403	490	562	551	541	185	227	213	314	212
New Mexico	15	17	20	26	33	52	1	1	14	51	25
Arizona	159	145	158	172	279	336	107	285	53	51	99
Utah	212	146	267	350	338	283	212	281	(1)	1	132
Nevada	34	39	42	37	51	55	33	53	1	2	10
Pacific	5,408	6,178	7,748	9,537	10,322	11,382	4,094	9,754	1,314	1,628	3,382
Washington	1,197	1,286	1,504	1,808	2,122	2,361	1,154	2,235	43	126	606
Oregon	476	513	678	831	845	1,041	371	754	105	287	268
California	3,736	4,380	5,566	6,898	7,356	7,980	2,569	6,765	1,167	1,215	2,508

[1] Less than 500,000 kilowatt-hours.

Source: Geological Survey, Department of the Interior.

No. 393.—CENTRAL ELECTRIC STATIONS: Equipment, Employees, Output, and Sales

NOTE.—A central electric station is one selling current to public or private consumers, or a municipal plant supplying current for streets, public buildings, etc. Isolated or private plants operated solely for the benefit of the owner in connection with factories, mines, stores, hotels, institutions, etc., which in the aggregate produce great quantities of current, are not included. The business of electric street railways is shown only so far as that portion of their business relating to the sale of current can be segregated. Electric plants operated by the Federal or State Governments are excluded even when they sell current to private consumers. One central electric station often sells current to another, so that there is considerable duplication in total sales. Net sales are considerably less than current generated because of wire losses, self consumption, etc.

	All central electric stations					
	1902	1907	1912	1917	1922	1927
Number of stations [1]	3,620	4,714	5,221	6,542	6,355	4,334
Prime movers, horsepower ... thousands	1,845	4,098	7,530	12,937	19,851	36,710
Steam engines	1,394	1,876	1,895	1,702	1,371	1,057
Steam turbines		817	3,054	6,747	12,355	24,261
Water wheels and turbines	439	1,349	2,469	4,277	5,822	9,844
Internal-combustion engines	12	56	111	210	303	548
Dynamos:						
Number	12,484	12,173	12,610	13,428	12,701	11,967
Kilowatt capacity ... thousands	1,212	2,709	5,165	8,994	14,313	25,811
Output ... millions of kilowatt hours			14,183	31,044	50,274	96,829
Generated	2,507	5,862	11,569	25,438	40,292	74,687
Purchased	(2)	(2)	2,614	5,606	9,983	22,142
Sold	(2)	(2)	(2)	25,752	41,965	79,011
Sales to ultimate consumers	(2)	(2)	(2)	(2)	32,948	63,612
Sales for resale	(2)	(2)	(2)	(2)	9,017	15,399
Number of customers ... thousands	(2)	1,947	3,838	7,179	12,710	21,790
Salaried employees ... number	6,996	12,990	26,093	35,406	55,112	101,381
Salaries ... 1,000 dollars	5,664	11,734	24,307	36,788	86,951	(3)
Wage earners ... number	[4] 23,330	[4] 34,642	[5] 53,242	[5] 70,135	[5] 95,650	[5] 149,605
Wages ... 1,000 dollars	14,983	23,687	36,855	58,454	125,481	(3)

[1] The term "station" as here used may represent a single electric station or a number of stations operated under the same ownership.
[2] Figures not available.
[3] Salaries and wages were not reported for 1927 by municipal plants. Commercial plants reported 95,917 salaried employees, with salaries amounting to $166,340,946, and 138,796 wage earners, with wages amounting to $201,290,810. The percentages which the salaried employees and wage earners reported by the commercial plants formed of the corresponding totals for both commercial and municipal plants were 94.6 and 92.8, respectively.
[4] Average number for the year.
[5] Number Sept. 16, 1912; Sept. 29, 1917; June 30, 1922; and June 30, 1927, or nearest representative day.

No. 394.—CENTRAL ELECTRIC STATIONS: Equipment, Employees, and Finances of Commercial and Municipal Stations

NOTE.—See headnote to Table 393

	Commercial stations				Municipal stations			
	1912	1917	1922	1927	1912	1917	1922	1927
Number of establishments	3,659	4,224	3,774	2,137	1,562	2,318	2,581	2,198
Horsepower of prime movers ... thousands	6,971	12,078	18,571	33,661	559	859	1,280	2,049
Capacity of dynamos ... thousands of kw.	4,769	8,412	13,407	24,383	397	582	996	1,428
Current millions of kw. hrs.	13,557	29,812	47,833	92,299	626	1,232	2,441	4,529
Generated	11,032	24,399	38,413	71,307	537	1,039	1,878	3,379
Purchased	2,525	5,413	9,420	20,992	89	193	563	1,150
Sold—								
To ultimate consumers	(1)	24,723	30,941	60,537	(1)	1,029	2,007	3,075
For resale			8,971	14,808			45	591
Customers ... thousands	3,312	6,202	11,065	19,661	526	977	1,645	2,129
Employees ... number	71,395	94,679	136,105	234,713	7,940	10,862	14,657	16,273
Income ... 1,000 dollars	279,054	486,634	986,684	1,841,227	23,219	40,260	85,436	122,437
Expenses ... do	217,660	395,127	792,496	1,318,255	16,917	31,441	67,129	(1)
Assets ... do	2,490,023	3,031,973	5,504,614	12,950,388	86,521	148,345	288,623	(1)
Value of plant and equipment ... 1,000 dollars	2,098,613	2,933,017	4,220,356	[2] 8,880,291	77,065	127,375	235,660	417,097

[1] Not called for on schedule.
[2] Includes plant and equipment valued at $902,057,279, not separated as to electric light and power and other properties.

Source of Tables 393 and 394: Bureau of the Census, Department of Commerce.

No. 395.—CENTRAL ELECTRIC STATIONS: STATISTICS OF COMMERCIAL

[See headnote

Division and State	Horsepower of prime movers (thousands)				Millions of kilowatt-hours generated			
	Total		Steam engines and turbines and internal-combustion engines, 1927	Water wheels and turbines, 1927	1907	1912	1917	1922
	1922	1927						
Continental United States	19,851	35,710	25,866	9,844	5,862	11,569	25,438	40,292
New England	1,980	3,009	2,250	759	474	865	1,336	2,070
Maine	128	252	50	202	66	117	166	278
New Hampshire	72	157	61	96	55	127	160	95
Vermont	139	204	20	184	30	43	65	218
Massachusetts	1,065	1,529	1,340	189	219	386	937	1,493
Rhode Island	222	264	262	2	36	62	162	342
Connecticut	354	603	517	86	67	131	346	544
Middle Atlantic	5,060	8,615	6,907	1,708	2,009	3,549	7,659	10,766
New York	2,684	4,212	2,788	1,424	1,452	2,175	3,829	5,431
New Jersey	475	1,004	997	7	141	384	781	1,053
Pennsylvania	1,901	3,399	3,122	277	417	990	3,049	4,277
East North Central	4,588	8,668	7,866	802	1,076	2,528	5,757	9,368
Ohio	1,212	2,354	2,331	23	217	399	1,084	2,404
Indiana	451	870	822	48	130	227	441	795
Illinois	1,405	2,904	2,838	66	468	1,151	2,210	3,090
Michigan	945	1,610	1,263	356	208	526	1,504	2,103
Wisconsin	575	921	612	309	53	215	518	976
West North Central	1,610	2,671	2,227	444	386	713	1,776	2,969
Minnesota	312	516	342	174	88	186	441	589
Iowa	331	649	443	206	38	67	615	859
Missouri	429	648	626	22	147	233	266	701
North Dakota	43	56	56	----------	8	12	23	40
South Dakota	53	70	63	7	14	25	32	62
Nebraska	155	250	229	21	32	56	130	246
Kansas	286	482	468	14	60	133	270	473
South Atlantic	1,910	4,394	2,695	1,699	266	730	1,745	3,789
Delaware, Maryland, Dist. of Columbia	430	695	669	26	78	118	326	622
Virginia	163	502	404	98	10	29	108	319
West Virginia	393	755	670	85	25	42	204	1,199
North Carolina	231	773	301	472	13	71	372	404
South Carolina	449	700	164	536	69	357	500	844
Georgia	149	609	136	473	59	88	184	266
Florida	95	360	351	9	12	26	51	131
East South Central	717	1,447	779	668	119	228	1,049	1,420
Kentucky	135	395	257	138	37	76	123	232
Tennessee	204	456	283	173	35	76	565	493
Alabama	320	508	151	357	31	49	331	634
Mississippi	59	88	88	----------	16	28	30	62
West South Central	626	1,563	1,532	31	139	234	483	1,041
Arkansas	57	131	117	14	12	18	39	84
Louisiana	44	277	277	----------	26	18	26	52
Oklahoma	162	300	298	2	25	49	101	243
Texas	362	855	840	15	76	149	317	662
Mountain	1,005	1,406	386	1,020	381	845	2,036	2,239
Montana	356	378	15	363	137	379	965	988
Idaho	209	307	4	303	10	116	145	531
Wyoming	41	48	44	4	5	12	27	39
Colorado	153	269	190	79	123	165	274	290
New Mexico	20	33	32	1	5	9	17	22
Arizona	82	153	48	105	9	33	66	147
Utah	129	199	50	149	62	87	487	146
Nevada	16	19	3	16	30	45	54	45
Pacific	2,355	3,937	1,224	2,713	1,012	1,878	3,097	5,759
Washington	512	848	149	699	258	71	242	1,144
Oregon	107	308	139	169	93	59	108	267
California	1,735	2,781	936	1,845	662	1,747	2,747	4,348

[1] Less than 500,000 kilowatt-hours.

AND MUNICIPAL PLANTS WITH CURRENT GENERATED AND SOLD, BY STATES

to Table 393]

Millions of kilowatt-hours generated—Continued			Millions of kilowatt hours sold, 1927—		Income (in thousands of dollars), 1927—		Division and State
1927	Commercial stations, 1927	Municipal stations, 1927	To ultimate consumers	For resale	From sale of electric current to ultimate consumers	From electric current sold for resale	
74, 686	71, 307	3, 379	63, 612	15, 399	1, 667, 045	135, 610	Continental United States.
4, 750	4, 660	90	3, 956	1, 868	138, 141	18, 853	New England.
561	557	4	473	41	9, 819	420	Maine.
226	225	1	151	27	6, 697	298	New Hampshire.
339	322	17	127	195	4, 897	1, 667	Vermont.
2, 245	2, 182	63	2, 019	988	75, 943	10, 578	Massachusetts.
411	411	----------	378	376	12, 451	3, 355	Rhode Island.
968	963	5	808	241	28, 334	2, 335	Connecticut.
19, 282	19, 158	124	17, 869	3, 419	475, 197	24, 704	Middle Atlantic.
9, 918	9, 840	78	9, 378	1, 678	242, 482	10, 794	New York.
1, 862	1, 852	10	1, 688	52	68, 507	557	New Jersey.
7, 502	7, 466	36	6, 803	1, 689	164, 208	13, 353	Pennsylvania.
18, 212	17, 329	883	15, 257	3, 840	403, 177	32, 408	East North Central.
4, 724	4, 429	295	4, 224	698	111, 878	6, 856	Ohio.
1, 746	1, 590	156	1, 522	411	45, 288	4, 014	Indiana.
6, 075	5, 876	199	4, 932	1, 938	128, 474	14, 147	Illinois.
3, 774	3, 597	177	3, 225	251	70, 040	2, 624	Michigan.
1, 893	1, 837	56	1, 354	542	38, 497	4, 767	Wisconsin.
4, 549	4, 134	415	4, 061	553	140, 750	8, 534	West North Central.
843	784	59	924	96	31, 045	1, 643	Minnesota.
1, 429	1, 375	54	685	180	26, 521	2, 990	Iowa.
891	839	52	1, 452	120	41, 978	1, 547	Missouri.
60	56	4	48	5	3, 799	223	North Dakota.
90	75	15	67	12	4, 797	402	South Dakota.
405	340	65	301	70	12, 627	1, 434	Nebraska.
831	665	166	584	70	19, 983	1, 295	Kansas.
8, 445	8, 187	258	7, 015	1, 961	153, 834	16, 869	South Atlantic.
1, 102	1, 085	17	1, 236	83	31, 615	1, 168	Delaware. Maryland. Dist. of Columbia.
974	933	41	687	15	17, 120	161	Virginia.
1, 903	1, 902	1	970	1, 163	21, 481	6, 818	West Virginia.
2, 036	1, 997	39	1, 908	369	27, 313	4, 112	North Carolina.
1, 116	1, 112	4	799	165	13, 032	1, 510	South Carolina.
746	733	13	980	141	20, 466	1, 563	Georgia.
568	425	143	435	25	22, 807	537	Florida.
2, 777	2, 706	71	2, 455	1, 243	59, 820	8, 204	East South Central.
505	487	18	548	171	17, 686	1, 887	Kentucky.
937	914	23	748	271	18, 284	2, 257	Tennessee.
1, 270	1, 264	6	1, 039	797	17, 790	5, 013	Alabama.
65	41	24	120	4	6, 060	47	Mississippi.
3, 275	3, 123	152	2, 703	562	89, 947	5, 890	West South Central.
174	161	13	186	36	8, 421	403	Arkansas.
635	598	37	447	143	14, 412	1, 237	Louisiana.
654	605	49	597	72	20, 692	1, 071	Oklahoma.
1, 812	1, 759	53	1, 473	311	46, 422	3, 179	Texas.
3, 390	3, 329	61	2, 857	121	51, 159	1, 586	Mountain.
1, 399	1, 399	(1)	1, 197	11	10, 595	112	Montana.
713	704	9	264	21	5, 405	141	Idaho.
67	65	2	49	7	2, 533	211	Wyoming.
500	466	34	397	17	13, 942	326	Colorado.
33	32	1	26	2	1, 013	38	New Mexico.
280	279	1	202	46	5, 273	539	Arizona.
341	327	14	658	10	9, 832	155	Utah.
57	57	(1)	64	7	1, 666	64	Nevada.
10, 006	8, 681	1, 325	7, 439	1, 832	155, 020	17, 762	Pacific.
2, 105	1, 639	466	1, 620	179	25, 498	1, 394	Washington.
840	810	30	658	48	13, 898	354	Oregon.
7, 061	6, 232	829	5, 161	1, 605	115, 624	16, 014	California.

Source: Bureau of the Census, Department of Commerce.

No. 396.—CENTRAL ELECTRIC STATIONS: FINANCIAL STATISTICS

[All figures in thousands of dollars. See headnote to Table 393]

	Commercial electric stations						Municipal electric stations
	1902	1907	1912	1917	1922	1927	1927
INCOME ACCOUNT							
Income, total	78,736	161,630	279,054	486,634	986,684	1,841,227	122,437
Electric service, total	77,350	156,000	264,475	462,474	936,852	1,680,218	122,437
Commercial and domestic light and power	57,195	122,885	205,974	373,280	773,111	1,424,998	100,649
Municipal lighting	16,130	19,772	27,131	31,462	40,854	66,141	11,058
Sales to other public service corporations	4,025	13,343	30,857	57,207	122,321	189,079	10,730
Value of free service	(1)	(1)	513	525	566	(1)	(1)
Interest and dividends from investments	(1)	(1)	4,869	8,807	16,527	53,959	(1)
Other sources	1,386	5,630	9,710	15,353	33,305	107,050	(1)
Expenses, total	62,835	123,880	217,660	395,127	792,496	1,318,255	(1)
Fuel	10,190	19,825	30,502	78,286	146,323	157,912	--------
Current purchased	2,007	6,081	16,913	35,733	79,037	143,711	--------
Supplies, materials, and miscellaneous	14,751	27,897	27,565	48,118	80,492	121,529	--------
Rent of offices, conduits, etc	1,272	2,884	4,214	9,881	18,626	(2)	--------
Salaries and wages	18,767	31,935	55,059	86,473	194,148	367,632	--------
Taxes	2,655	6,346	13,117	29,897	73,128	150,253	--------
Injuries, damages, insurance	1,074	2,070	3,316	5,145	10,209	(1)	--------
Interest	12,119	26,842	46,865	71,145	125,596	269,602	--------
Depreciation	(1)	(1)	17,989	26,292	59,273	107,616	--------
Sinking and reserve funds	(1)	(1)	1,520	4,157	5,064	(1)	--------

[1] Not called for on schedule.
[2] No comparable data.

Source: Bureau of the Census, Department of Commerce.

No. 397.—PROPORTION OF "ELECTRIFICATION" OF FACTORY POWER EQUIPMENT

Item	Horsepower (thousands)			
	1914	1923	1925	1927
Combined capacity of prime movers and electric motors using purchased current	22,291	33,057	35,773	39,035
Electric motors operated by prime movers owned by factories	4,939	8,819	10,255	11,216
Estimated capacity of prime movers used to actuate these motors	3,550	6,350	7,380	8,080
Electric motors using purchased current	3,885	13,333	15,869	19,144
Total last two items, "Electrified" equipment	7,435	19,683	23,249	27,224
Per cent of total power equipment	33	60	65	70
Capacity of all prime movers in factories	18,406	19,724	19,904	19,891

Source: Basic figures from Bureau of the Census.

No. 398.—RETAIL PRICES OF ELECTRICITY IN PRINCIPAL CITIES

NOTE.—Net price in cents per kilowatt hour, electricity for household use. For cities having more than one tariff for domestic consumers rates are shown for the schedule or schedules under which most residences are served. "Demand" is a term applied to an amount of current consumption bearing a given ratio to the capacity of consumers' installation as a basis for graduating rates. The method of determination varies from city to city. For example, in Buffalo the lighting demand is 25 per cent of the total installation, but not less than 250 watts. If the capacity of the total installation is 2,000 watts, the "demand" is 25 per cent of this, or 500 watts, and the first 60 hours' use amounts to 30 kilowatt hours and is subject to the first price schedule (5 cents, 1928); the next 120 hours' use (60 kilowatt hours) to the next rate (4 cents), and above 90 kilowatt hours to the excess rate (1½ cents). Measure of consumption as stated in second column refers to tariffs of 1928. For some cities primary and secondary rates applied to somewhat different amounts of current consumption in previous years. For full details see Monthly Labor Review, February, 1929.

City	Measure of consumption per month	December—							
		1913	1921	1923	1924	1925	1926	1927	1928
Atlanta	First 100 kilowatt hours	7.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Baltimore	First 20 hours' use of demand	8.5	8.0	8.0	8.0	8.0	8.0	7.0	7.0
Birmingham	First 100 kilowatt hours	8.5	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Boston	First 2 kilowatt hours per 100 square feet of floor area.	10.0	11.0	9.5	9.5	8.5	8.5	8.5	8.5
Buffalo	First 60 hours' use of demand	7.0	7.0	6.0	6.0	5.0	5.0	5.0	5.0
	Next 120 hours' use of demand	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	Excess	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Chicago	First 3 kilowatt hours per room	10.0	9.0	8.0	8.0	8.0	8.0	8.0	7.0
	Next 3 kilowatt hours per room	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Excess	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Cleveland	Company A, first 80 kilowatt hours.	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Company B, all current	8.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Columbus	First 75 kilowatt hours	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Dallas	All current	10.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Denver	First 15 kilowatt hours	8.0	8.0	8.0	8.0	8.0	8.0	7.0	7.0
Detroit	First 3 kilowatt hours per active room; minimum, 3 rooms.	12.6	12.6	10.8	10.8	10.8	9.0	9.0	9.0
	Next 50 kilowatt hours	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Fall River	First 25 kilowatt hours	9.5	10.5	9.0	9.0	9.0	8.5	8.5	8.0
	Next 75 kilowatt hours	------	------	8.5	8.5	8.5	7.5	7.5	5.0
Jacksonville	All current	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Little Rock	First 200 kilowatt hours	13.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Los Angeles	First 50 kilowatt hours	5.5	6.2	5.6	5.6	5.6	5.6	5.0	5.0
Louisville	1 to 149 kilowatt hours	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
Memphis	First 6 kilowatt hours per room	10.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0
	Excess	------	------	5.0	5.0	5.0	5.0	5.0	5.0
Mobile	First 50 kilowatt hours	7.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Newark	First 20 kilowatt hours	10.0	10.0	9.0	9.0	9.0	9.0	9.0	9.0
	Next 30 kilowatt hours	------	------	------	8.0	8.0	8.0	8.0	8.0
New Haven	All current	9.0	8.5	7.5	7.0	6.5	6.5	6.0	5.5
New Orleans	First 20 kilowatt hours	13.0	9.1	9.1	9.1	9.1	9.1	9.1	9.1
	Next 30 kilowatt hours	6.0	7.8	7.8	7.8	7.8	7.8	7.8	7.8
New York	Company A, first 1,000 kilowatt hours.	10.0	7.7	7.5	7.4	7.2	7.2	7.3	7.0
	Company B, all current	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	Company C, first 60 hours' use of demand.	11.0	8.7	8.5	8.3	7.8	7.8	7.3	7.0
Norfolk	First 100 kilowatt hours	9.0	9.0	9.0	9.0	9.0	9.0	8.5	8.5
Omaha	All current	11.4	6.0	5.5	5.5	5.5	5.5	6.6	5.5
Philadelphia	Company A, first 12 kilowatt hours.	10.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0
	Next 36 kilowatt hours	------	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	Company B, first 20 kilowatt hours.	10.0	10.0	9.0	9.0	9.0	9.0	9.0	9.0
	Next 30 kilowatt hours	------	------	------	8.0	8.0	8.0	8.0	8.0
Pittsburgh	First 10 kilowatt hours	10.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	Next 20 kilowatt hours	------	6.0	5.5	5.5	5.5	5.5	5.5	5.5
Providence	All current	10.0	7.5	7.0	6.9	6.8	6.9	6.5	6.5
Richmond	First 100 kilowatt hours	9.0	9.0	9.0	9.0	9.0	9.0	8.5	8.5
Rochester	All current	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
St. Paul	First 3 kilowatt hours per room	9.9	9.9	9.9	9.9	9.9	9.5	9.5	8.6
	Next 3 kilowatt hours per room	------	------	------	------	------	7.1	7.1	7.1
	Excess	6.6	6.6	6.6	6.6	6.6	2.9	2.9	2.9
Salt Lake City	First 250 kilowatt hours	9.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1
San Francisco	Company A, first 200 kilowatt hours.	7.0	8.5	9.0	9.0	9.0	9.0	5.0	5.0
	Next 800 kilowatt hours	------	------	6.0	6.0	6.0	6.0	2.5	4.0
	Company B, first 200 kilowatt hours.	7.0	8.5	9.0	9.0	9.0	9.0	9.0	5.0
	Next 800 kilowatt hours	------	------	6.0	6.0	6.0	6.0	6.0	4.0
Scranton	First 150 kilowatt hours	9.0	10.0	10.0	10.0	10.0	10.0	10.0	9.0
Seattle	First 40 kilowatt hours	6.0	6.0	5.5	5.5	5.5	5.5	5.5	5.5
Washington, D. C.	First 120 hours' use of demand	10.0	10.0	10.0	10.0	7.5	7.0	6.3	5.9

Source: Bureau of Labor Statistics, Department of Labor.

No. 399.—DEVELOPED AND POTENTIAL WATER POWER

NOTE.—In thousands of horsepower. Data for developed water power cover capacity of actual installation of water wheels and turbines in plants of 100 horsepower or more. The figures for potential power are estimates showing the 24-hour horsepower available 90 per cent of the time and 50 per cent of the time at an over-all efficiency of 70 per cent at all developed and undeveloped sites. These figures for potential power are not directly comparable with those for developed power, because developed power is usually given in terms of the capacity of installed water wheels or turbines, which may be several times the potential power available 90 per cent of the time. Probably with complete development of the water-power resources of the whole country the installed capacity would amount to 80,000,000 horsepower or more

Division and State	Developed water power (capacity of actual installation)							Potential water power available—	
	November, 1921	March, 1924	March, 1925	January, 1926	January, 1927	January, 1928	January, 1929	90 per cent of the time	50 per cent of the time
Continental U. S.	7,927	9,087	10,038	11,177	11,721	12,296	13,572	38,110	59,166
New England	1,311	1,387	1,399	1,485	1,535	1,558	1,654	998	1,978
Maine	450	473	477	497	526	537	539	536	1,074
New Hampshire	229	236	243	272	277	278	278	186	350
Vermont	130	168	168	193	200	200	260	80	169
Massachusetts	338	344	344	344	354	362	362	106	235
Rhode Island	30	30	30	30	30	30	30	25	40
Connecticut	134	136	136	148	148	148	184	65	110
Middle Atlantic	1,479	1,732	1,948	1,995	2,056	2,078	2,123	4,373	6,050
New York	1,292	1,543	1,714	1,750	1,757	1,779	1,814	4,010	4,960
New Jersey	17	19	19	19	19	19	19	50	90
Pennsylvania	170	170	226	226	280	280	291	313	1,000
East North Central	739	830	885	979	1,010	1,037	1,076	742	1,428
Ohio	29	30	30	29	30	30	30	55	166
Indiana	27	29	51	56	56	57	57	45	145
Illinois	85	85	87	94	94	94	94	189	361
Michigan	267	282	305	352	355	378	378	168	274
Wisconsin	331	404	413	446	474	477	517	285	480
West North Central	444	460	515	525	533	542	555	929	1,937
Minnesota	205	212	263	267	275	276	293	203	401
Iowa	173	177	177	179	180	184	182	169	395
Missouri	18	18	20	21	21	21	21	67	152
North Dakota	(1)	(1)	(1)	(1)	(1)	(1)	(1)	82	193
South Dakota	18	18	19	20	20	20	20	121	203
Nebraska	15	20	21	21	21	24	24	183	342
Kansas	15	15	14	17	17	17	16	104	251
South Atlantic	1,082	1,301	1,594	1,702	1,841	1,967	2,595	2,924	5,048
Delaware	3	3	3	1	1	1	1	5	10
Maryland	7	7	7	38	38	38	416	106	238
Dist. of Columbia	1	1	1	1	1	6	6		
Virginia	104	110	118	139	138	141	140	459	812
West Virginia	15	15	15	21	91	91	91	355	980
North Carolina	330	432	535	538	543	644	814	852	1,160
South Carolina	330	358	507	514	571	574	574	555	860
Georgia	286	369	400	441	449	463	544	572	958
Florida	7	7	9	9	9	8	9	20	30
East South Central	241	341	392	745	868	966	1,119	1,328	2,272
Kentucky	1	1	1	34	34	142	142	172	280
Tennessee	127	128	166	174	174	177	177	654	882
Alabama	113	211	224	537	659	646	799	472	1,050
Mississippi								30	60
West South Central	16	17	31	32	32	44	47	569	1,110
Arkansas	1	1	16	16	16	16	16	200	300
Louisiana								1	2
Oklahoma	2	2	2	2	2	2	2	70	194
Texas	13	14	14	14	15	27	29	288	614
Mountain	827	881	937	981	1,030	1,118	1,140	10,844	15,552
Montana	344	345	360	376	376	378	393	2,550	3,700
Idaho	224	271	299	319	320	355	358	2,122	4,032
Wyoming	8	8	8	10	10	17	17	704	1,182
Colorado	92	88	91	95	96	95	98	873	1,609
New Mexico	1	1	1	2	2	2	2	116	186
Arizona	39	39	49	49	59	104	104	2,759	2,837
Utah	106	115	115	115	153	153	154	1,420	1,586
Nevada	13	14	14	14	13	13	14	300	370
Pacific	1,789	2,139	2,336	2,733	2,815	2,938	3,263	15,413	23,793
Washington	454	480	561	656	657	707	747	7,145	11,225
Oregon	185	207	244	242	242	289	289	3,665	5,894
California	1,149	1,452	1,531	1,835	1,917	1,993	2,227	4,603	6,674
Outlying areas:									
Alaska		40	40	[2] 40	[2] 40	[2] 40	32	1,000	2,500
Hawaii		25	25	32	32	32	32	19	28
Porto Rico		15	15	[2] 15	[2] 15	[2] 15	[2] 15	100	200

[1] Less than 500.
[2] Capacity in 1925; data for 1926, 1927, and 1928 not available.

Source: Geological Survey, Department of the Interior.

19.—PUBLIC ROADS AND MOTOR VEHICLES

No. 400.—RURAL ROADS IN THE UNITED STATES

NOTE.—Mileage data included for county and township roads in 1921, 1926, and 1927 were secured from county records; data for other years shown in this and subsequent tables contain some estimates and are not as accurate as to detail. Mileage data in most cases refer to calendar years; there are, however, exceptions in several States. Data relate to continental United States only except as noted

Item	1921	1923	1924	1925	1926	1927
Mileage at end of year:						
All types	2,941,294	2,995,727	3,002,917	3,006,083	3,000,190	3,013,584
Earth roads	2,553,534	2,556,386	2,535,011	2,484,822	2,450,126	2,424,362
Surfaced roads	387,760	439,341	467,906	521,260	550,064	588,721
Sand, clay, gravel, etc.	263,238	290,143	307,964	360,518	405,917	433,533
Macadam	87,609	100,805	104,455	106,432	85,738	90,273
Sheet asphalt and concrete	22,190	33,983	40,850	48,507	53,202	59,885
Block pavements	[1] 14,723	[1] 14,409	[1] 14,637	5,803	5,206	5,030
Mileage built during year:						
All types	110,976	76,238	51,638	73,776	116,413	86,454
Earth roads	69,804	39,895	20,097	31,873	60,059	33,031
Surfaced roads	41,172	36,343	31,541	41,903	56,353	53,424
Sand, clay, gravel, etc.	20,019	22,641	19,465	28,784	41,079	38,556
Macadam	5,413	6,665	4,801	6,069	8,368	7,484
Sheet asphalt and concrete	6,037	6,626	7,027	6,798	6,640	7,246
Block pavements	[2] 703	[2] 410	[2] 248	252	267	138
Mileage of State highway systems at end of year: [3]						
All types		251,611	259,721	274,911	287,928	298,358
Earth roads		140,211	131,374	130,057	124,569	116,786
Surfaced roads		111,400	128,347	144,854	163,059	176,566
Sand, clay, gravel, etc.		58,909	68,401	79,796	90,682	98,675
Macadam		27,151	28,922	28,814	31,356	31,248
Sheet asphalt and concrete		22,475	28,008	33,059	37,642	43,313
Block pavements		2,865	3,017	3,185	3,380	3,330
Mileage of State highway systems built during year: [3]						
All types		20,311	23,164	23,152	27,387	26,722
Earth roads		5,814	5,957	5,316	7,060	7,151
Surfaced roads		14,496	17,207	17,836	20,327	19,572
Sand, clay, gravel, etc.		7,852	9,045	10,005	13,073	11,132
Macadam		2,007	2,464	2,144	2,258	2,812
Sheet asphalt and concrete		4,389	5,535	5,540	4,359	5,559
Block pavements		[4] 248	164	146	137	69
Funds available for rural road purposes during year, all authorities (1,000 dollars):						
Total	1,149,438	1,199,432	1,358,508	1,560,994	1,740,390	1,941,221
Proceeds of bonds	438,109	216,969	250,190	285,815	272,422	272,060
Federal aid [5]	70,333	72,343	91,401	92,180	79,163	80,460
Motor vehicle fees and gasoline taxes	122,626	202,804	266,455	360,553	436,449	516,774
Other taxes and appropriations	415,680	416,038	415,155	467,705	491,194	527,477
All other sources	93,689	291,278	326,307	354,741	461,162	544,451
Expenditures for rural roads and bridges (1,000 dollars):						
All roads, by all authorities	1,036,588	996,781	1,181,521	1,288,940	1,300,546	1,448,121
Construction	626,965	518,293	637,030	651,933	616,941	689,219
Maintenance	248,593	265,898	297,179	315,877	338,863	376,754
Principal and interest of bonds	89,281	45,914	108,943	176,415	213,325	244,886
Equipment and miscellaneous	71,748	166,677	138,370	144,715	131,427	137,263
By or under supervision of State highway departments, incl. Federal aid	413,242	447,362	605,665	649,125	621,744	699,875
Highway construction under Federal aid: [6]						
Projects completed up to end of year—						
Miles		27,212	37,117	52,016	56,717	64,620
Total cost (1,000 dollars)		460,943	632,487	962,920	1,051,456	1,240,302
Federal aid (1,000 dollars)		197,713	276,305	424,964	466,019	548,290
Projects under construction—						
Miles		18,648	17,837	10,978	14,581	13,433
Total cost (1,000 dollars)		356,550	394,971	264,113	365,730	353,497
Federal aid (1,000 dollars)		164,389	176,575	111,284	151,490	145,627
Federal-aid fund available for new projects (1,000 dollars)		70,636	55,627	119,771	113,070	110,803

[1] Includes miscellaneous roads, as follows: 1921, 11,303 miles; 1923, 9,975 miles; 1924, 9,996 miles.
[2] Includes miscellaneous roads, as follows: 1921, 368 miles; 1923, 46 miles; 1924, 21 miles.
[3] Data for total United States not compiled in 1921.
[4] Includes 16 miles miscellaneous roads.
[5] For road and bridge purposes under supervision of State highway department only.
[6] Includes data for Hawaii, as follows: Federal-aid fund available for new projects, beginning 1924; projects under construction (all items), 1925; all items in 1926 and 1927.

Source: Bureau of Public Roads, Department of Agriculture.

No. 401.—RURAL ROAD MILEAGE AS OF DECEMBER 31

NOTE.—Lack of definite information in the earlier years accounts for the fact that in some of the States the total road mileage reported is considerably greater than in the preceding year shown, while mileage of surfaced roads is less. Figures include county and township roads and also State highway systems. (See also headnote, Table 400)

Division and State	All types					Surfaced roads				
	1904	1914	1921	1926	1927	1904	1914	1921	1926	1927
Continental U. S.	2,151,379	2,445,761	2,941,294	3,000,190	3,013,584	153,530	257,292	387,760	550,064	588,721
New England	86,706	86,718	83,295	83,521	83,936	16,797	18,038	17,725	23,614	24,631
Maine	25,528	23,527	21,483	21,003	21,002	2,324	2,762	2,953	4,429	4,832
New Hampshire	15,116	14,020	13,841	11,944	12,025	1,293	1,660	1,692	2,218	2,391
Vermont	14,521	14,249	14,677	15,036	15,036	1,954	1,442	3,545	4,490	4,691
Massachusetts	17,092	18,681	18,868	19,097	19,348	7,844	8,506	6,575	8,280	8,485
Rhode Island	2,361	2,170	2,274	2,469	2,538	1,022	693	754	876	853
Connecticut	14,088	14,061	12,152	13,972	13,987	2,360	2,975	2,206	3,321	3,379
Middle Atlantic	188,417	185,771	186,935	187,355	187,407	10,459	31,516	38,948	58,298	62,071
New York	73,708	79,398	81,878	79,517	79,489	5,876	15,636	18,566	26,957	29,481
New Jersey	14,842	14,817	14,066	16,665	16,677	2,422	5,897	6,459	7,836	8,057
Pennsylvania	99,777	91,556	90,991	91,173	91,241	2,161	9,983	13,921	23,505	24,533
East North Central	364,775	405,245	412,753	416,505	416,526	72,920	94,366	124,298	153,853	160,664
Ohio	69,439	86,354	84,219	84,872	84,753	23,460	30,569	36,068	42,361	43,977
Indiana	68,306	73,347	76,246	73,612	73,609	23,877	30,962	39,857	49,440	50,284
Illinois	94,141	95,647	96,326	97,620	97,620	7,924	11,606	11,473	16,928	18,118
Michigan	69,296	74,190	77,283	81,010	81,016	7,026	7,829	17,186	21,698	22,493
Wisconsin	63,593	75,707	78,679	79,391	79,528	10,633	13,399	19,714	23,426	25,792
West North Central	589,190	650,058	759,820	772,949	774,637	11,304	14,968	30,223	61,503	69,989
Minnesota	79,324	93,517	107,103	110,223	110,249	6,248	3,968	16,905	30,011	32,399
Iowa	102,448	104,074	104,082	103,115	103,634	1,664	615	2,585	9,284	11,811
Missouri	108,133	96,041	111,520	110,366	110,547	2,733	6,713	7,879	11,043	11,739
North Dakota	59,332	68,796	106,523	107,410	106,794	212	955	710	1,874	2,366
South Dakota	59,295	96,306	115,485	118,741	120,265	151	363	548	3,510	4,087
Nebraska	79,462	80,272	86,556	93,992	93,902	23	1,205	496	3,273	3,979
Kansas	101,196	111,052	128,551	129,102	129,246	273	1,149	1,100	2,508	3,608
South Atlantic	263,933	297,193	365,567	366,860	366,545	9,147	33,154	61,178	82,282	89,541
Delaware	3,000	3,674	3,933	3,797	3,796	66	244	448	884	927
Maryland	16,773	16,459	14,772	14,632	14,711	1,570	2,489	3,663	4,640	5,307
Virginia	51,812	53,388	59,080	59,698	57,535	1,600	3,910	7,260	10,542	11,192
West Virginia	26,178	32,024	35,173	34,800	34,799	254	1,065	1,367	3,037	3,713
North Carolina	49,763	50,758	68,204	71,529	71,530	1,259	6,004	16,755	26,885	27,811
South Carolina	41,830	42,226	61,850	56,079	56,129	1,878	3,270	6,908	12,475	13,841
Georgia	57,203	80,669	94,912	97,390	98,462	1,634	12,342	18,339	11,416	13,015
Florida	17,374	17,995	27,643	28,935	29,583	886	2,830	6,438	12,403	13,735
East South Central	194,913	205,191	242,745	245,340	246,232	15,640	27,626	41,478	55,274	58,931
Kentucky	57,137	57,916	68,704	61,261	61,261	9,486	12,403	15,436	15,236	15,619
Tennessee	48,989	46,050	62,546	64,204	64,490	4,285	8,102	9,878	11,238	12,521
Alabama	50,089	55,446	58,410	63,251	63,706	1,720	4,988	10,420	17,514	18,204
Mississippi	38,698	45,779	53,085	56,624	56,775	149	2,133	5,744	11,286	12,587
West South Central	226,305	312,182	416,617	420,534	419,856	2,398	13,815	23,986	40,285	42,187
Arkansas	36,445	50,743	74,866	74,285	74,545	236	1,098	3,871	5,981	6,269
Louisiana	24,897	24,563	39,803	35,411	33,120	34	2,068	2,771	8,697	9,501
Oklahoma	43,554	107,916	[1] 134,263	122,274	123,627	-------	122	2,461	2,930	3,300
Texas	121,409	128,960	167,685	188,564	188,564	2,128	10,527	14,883	22,677	23,117
Mountain	122,231	163,117	306,382	327,056	334,795	1,499	4,881	15,539	25,827	28,574
Montana	22,419	39,204	64,732	66,987	66,881	65	609	1,772	2,508	2,799
Idaho	18,163	24,396	31,099	32,986	37,349	212	679	2,982	6,961	7,940
Wyoming	10,447	14,797	46,528	45,021	45,328	153	468	440	1,284	1,361
Colorado	30,214	39,780	48,143	65,606	68,279	178	1,194	4,598	5,997	6,383
New Mexico	15,326	11,873	45,549	48,028	48,217	2	262	1,802	1,954	2,144
Arizona	5,987	12,075	21,227	21,536	21,666	217	253	1,233	3,070	3,150
Utah	7,090	8,810	23,047	23,179	23,416	603	1,154	2,544	2,600	3,001
Nevada	12,585	12,182	26,057	23,712	23,659	64	262	168	1,453	1,796
Pacific	112,909	140,286	167,180	180,075	183,649	13,368	19,928	34,387	49,126	52,135
Washington	31,998	42,428	45,816	46,730	46,835	1,976	4,922	12,062	16,483	16,655
Oregon	34,258	36,819	45,475	51,743	51,658	2,589	4,726	8,050	11,578	11,815
California	46,653	61,039	75,889	81,602	85,156	8,803	10,280	14,275	21,065	23,665

[1] Includes about 26,000 miles of section lines declared public highways by law but which are not open for general traffic.

Source: Bureau of Public Roads, Department of Agriculture.

No. 402.—RURAL ROAD MILEAGE AS OF DECEMBER 31, 1927, AND CONSTRUCTION OF ROADS DURING 1925, 1926, AND 1927

NOTE.—Figures include county and township roads and also State highway systems shown in Tables 403 and 404. See also headnote, Table 400

Division and State	Existing mileage, end of year 1927							Mileage graded and drained and mileage surfaced during—		
	Total, all types	Earth roads	Surfaced roads							
			Total	Sand-clay, gravel, etc.	Macadam	Sheet asphalt and concrete	Block pavements	1925 [1]	1926 [2]	1927 [2]
Continental U. S.	3,013,584	2,424,862	588,721	433,533	90,273	59,885	5,030	73,776	116,413	86,454
New England	83,935	59,303	24,633	16,984	5,595	2,029	25	1,218	1,343	1,554
Maine	21,002	16,170	4,832	4,483	259	91	-------	326	187	449
New Hampshire	12,024	9,633	2,392	1,987	309	96	-------	157	214	179
Vermont	15,036	10,344	4,692	4,476	112	102	(3)	304	301	306
Massachusetts	19,348	10,863	8,485	4,492	3,048	926	20	219	255	387
Rhode Island	2,538	1,685	853	197	408	245	3	86	84	88
Connecticut	13,987	10,608	3,379	1,349	1,459	569	2	127	302	145
Middle Atlantic	187,407	125,336	62,071	23,821	24,332	12,731	1,188	4,317	5,239	4,339
New York	79,489	50,008	29,481	6,819	17,719	4,666	277	2,068	2,743	2,166
New Jersey	16,677	8,620	8,057	3,830	1,612	2,503	113	549	557	534
Pennsylvania	91,241	66,708	24,533	13,172	5,001	5,562	798	1,700	1,939	1,639
East North Central	416,526	255,862	160,663	122,700	18,383	17,378	2,203	13,827	18,296	17,795
Ohio	84,753	40,776	43,977	28,450	11,134	2,647	1,746	2,302	6,268	4,175
Indiana	73,609	23,325	50,284	44,205	3,182	2,662	235	1,036	1,329	1,351
Illinois	97,620	79,502	18,118	11,206	522	6,186	204	1,598	1,181	1,367
Michigan	81,016	58,523	22,492	17,101	2,153	3,223	16	1,064	1,408	1,494
Wisconsin	79,528	53,736	25,792	21,738	1,392	2,660	2	7,826	8,110	9,408
West North Central	774,637	704,650	69,988	63,542	1,735	4,454	256	26,730	31,168	23,711
Minnesota	110,249	77,851	32,398	31,272	72	1,030	25	4,692	10,694	5,803
Iowa	103,634	91,823	11,811	10,797	-------	981	33	992	2,900	3,699
Missouri	110,547	98,808	11,739	8,622	1,396	1,700	21	4,015	2,012	1,080
North Dakota	106,794	104,428	2,366	2,356	-------	10	-------	3,836	2,093	1,152
South Dakota	120,265	116,178	4,087	4,083	-------	3	-------	7,870	5,967	6,113
Nebraska	93,902	89,924	3,979	3,824	6	126	22	2,855	4,652	3,416
Kansas	129,246	125,638	3,608	2,588	261	604	155	2,470	2,850	2,448
South Atlantic	366,544	277,003	89,541	64,232	15,048	9,147	1,114	8,852	13,122	11,998
Delaware	3,796	2,809	927	102	209	609	7	85	97	52
Maryland	14,711	9,404	5,307	2,174	2,009	1,123	2	365	346	366
Virginia	57,535	46,343	11,192	7,113	3,355	724	-------	972	1,102	950
West Virginia	34,799	31,086	3,713	1,247	1,377	892	197	881	1,131	1,108
North Carolina	71,530	43,719	27,811	23,556	1,070	3,102	82	2,627	3,428	2,629
South Carolina	56,128	42,287	13,841	13,278	56	504	3	1,233	1,917	1,318
Georgia	98,462	85,447	13,015	11,560	620	832	3	966	2,057	2,549
Florida	29,583	15,848	13,735	5,202	6,352	1,361	820	1,722	3,046	2,966
East South Central	246,232	187,301	58,930	41,883	15,351	1,641	57	4,083	7,788	6,409
Kentucky	61,261	45,642	15,618	5,871	9,444	277	26	1,168	1,036	1,703
Tennessee	64,490	51,969	12,521	6,568	5,378	575	1	981	1,497	2,143
Alabama	63,706	45,502	18,204	17,480	385	334	5	570	2,990	1,159
Mississippi	56,775	44,188	12,587	11,964	144	455	25	1,364	2,265	1,404
West South Central	419,856	377,669	42,187	36,176	3,166	2,710	133	4,268	25,089	6,320
Arkansas	74,545	68,276	6,269	5,401	353	515	-------	1,186	4,172	1,155
Louisiana	33,120	23,619	9,501	9,349	44	93	15	509	2,399	1,914
Oklahoma	123,627	120,327	3,300	2,292	44	927	36	522	6,700	1,233
Texas	188,564	165,447	23,117	19,134	2,725	1,175	82	2,050	11,818	2,018
Mountain	334,795	306,223	28,573	26,789	199	1,586	-------	6,279	9,735	4,799
Montana	66,881	64,083	2,799	2,752	10	37	-------	896	4,451	281
Idaho	37,349	29,409	7,940	7,619	87	234	-------	1,550	1,125	1,598
Wyoming	45,328	43,967	1,361	1,322	-------	39	-------	456	766	464
Colorado	68,279	61,897	6,382	6,102	-------	281	-------	1,824	1,211	765
New Mexico	48,217	46,073	2,144	2,071	-------	73	-------	350	570	864
Arizona	21,666	18,516	3,150	2,581	48	521	-------	383	353	236
Utah	23,416	20,415	3,001	2,624	42	335	-------	281	885	372
Nevada	23,659	21,863	1,796	1,718	12	66	-------	539	374	219
Pacific	183,649	131,515	52,135	37,407	6,461	8,208	56	4,203	4,633	9,531
Washington	46,835	30,180	16,655	13,323	1,729	1,546	55	1,132	1,358	3,367
Oregon	51,658	39,844	11,815	9,334	1,066	1,414	-------	1,120	1,846	475
California	85,156	61,491	23,665	14,750	3,666	5,248	-------	1,950	1,429	5,689

[1] Includes 16,076 miles of earth road partially graded.
[2] Surfaced mileage includes both new surfacing and reconstructed surfacing.
[3] Less than five-tenths of 1 mile.

Source: Bureau of Public Roads, Department of Agriculture.

No. 403.—ROAD MILEAGE IN STATE HIGHWAY SYSTEMS AS OF DECEMBER 31, 1927

NOTE.—These statistics relate only to highways maintained wholly or in part by State governments, not including those maintained only by county or local governments

Division and State	Total, all types	Earth roads	Surfaced roads				
			Total	Sand-clay, gravel, etc.	Macadam	Sheet asphalt and concrete	Block pavements
Continental United States	298,353	116,786	176,566	98,675	81,248	43,313	3,330
New England	12,747	2,042	10,704	6,495	2,876	1,422	5
Maine	1,788	293	1,495	1,176	232	88	----------
New Hampshire	2,310	239	2,070	1,699	277	95	----------
Vermont	4,226	982	3,244	3,033	112	100	(1)
Massachusetts [2]	1,590	25	1,565	111	996	456	3
Rhode Island	867	388	479	23	252	204	----------
Connecticut [3]	1,966	115	1,851	363	1,007	479	2
Middle Atlantic	27,917	7,227	20,690	1,730	8,797	9,468	696
New York	13,929	3,725	10,204	126	5,977	3,824	277
New Jersey	1,821	162	1,659	310	192	1,109	49
Pennsylvania	12,167	3,340	8,827	1,294	2,628	4,535	370
East North Central	42,678	8,610	34,068	13,981	5,785	12,643	1,659
Ohio	11,000	1,104	9,896	3,438	3,063	1,917	1,478
Indiana	4,364	15	4,349	1,530	1,362	1,376	81
Illinois	9,890	4,821	5,069	----------	5	4,977	87
Michigan	7,144	1,036	6,108	3,324	702	2,071	11
Wisconsin	10,280	1,634	8,646	5,689	653	2,302	2
West North Central	48,784	23,941	24,845	20,206	245	4,141	252
Minnesota	6,936	393	6,544	5,610	----------	909	25
Iowa	7,078	2,636	4,442	3,434	----------	975	33
Missouri	7,482	3,569	3,913	2,204	94	1,593	21
North Dakota	7,185	5,457	1,728	1,718	----------	10	----------
South Dakota	6,015	3,119	2,896	2,892	----------	3	----------
Nebraska	6,166	2,827	3,340	3,227	----------	93	20
Kansas	7,922	5,940	1,982	1,121	151	558	153
South Atlantic	37,607	10,621	26,985	13,145	6,121	7,192	528
Delaware	629	----------	629	23	28	572	6
Maryland [4]	2,519	----------	2,519	384	1,106	1,028	2
Virginia	5,245	1,089	4,156	1,812	1,745	599	----------
West Virginia	3,820	1,610	2,210	646	789	629	146
North Carolina [3]	7,083	857	6,226	2,876	560	2,732	57
South Carolina	5,592	1,069	4,522	4,027	49	446	----------
Georgia	6,380	2,875	3,505	2,580	319	606	1
Florida	6,339	3,121	3,218	797	1,525	580	316
East South Central	25,322	10,574	14,748	9,117	4,326	1,261	46
Kentucky [3]	9,647	5,121	4,526	1,746	2,504	250	26
Tennessee [3]	5,033	1,324	3,709	1,534	1,678	498	----------
Alabama [4]	3,919	1,535	2,384	2,087	82	215	(1)
Mississippi	6,723	2,594	4,129	3,750	62	298	20
West South Central	41,355	20,599	20,756	15,679	2,569	2,373	133
Arkansas	8,506	4,080	4,426	3,617	300	509	----------
Louisiana	7,979	2,754	5,225	5,103	20	87	15
Oklahoma	6,142	4,308	1,834	949	31	817	36
Texas	18,728	9,457	9,271	6,010	2,218	960	82
Mountain	42,676	28,675	14,003	12,773	90	1,139	----------
Montana	7,957	6,883	1,075	1,032	6	37	----------
Idaho	4,219	2,060	2,159	1,955	16	188	----------
Wyoming	3,123	2,090	1,033	994	----------	39	----------
Colorado	9,095	5,326	3,770	3,495	----------	275	----------
New Mexico	9,253	7,460	1,793	1,720	----------	73	----------
Arizona	2,041	575	1,466	1,252	23	191	----------
Utah	3,436	2,048	1,388	1,085	33	270	----------
Nevada	3,552	2,233	1,319	1,240	12	66	----------
Pacific	14,266	4,498	9,769	5,639	439	3,675	14
Washington	3,300	630	2,670	1,982	31	642	14
Oregon	4,393	984	3,410	2,506	8	896	----------
California	6,573	2,884	3,689	1,151	400	2,137	----------

[1] Less than five-tenths of 1 mile.
[2] Mileage as of Nov. 30, 1927.
[3] Mileage as of June 30, 1927.
[4] Mileage as of Sept. 30, 1927.

Source: Bureau of Public Roads, Department of Agriculture.

No. 404.—CONSTRUCTION OF ROADS IN STATE HIGHWAY SYSTEMS DURING 1926 AND 1927

NOTE.—Highways under control of State highway departments only

Division and State	Mileage built during 1927								Mileage built during 1926	
	Total, all types	Earth, improved, graded, and drained	Surfaced roads						Total, all types	Surfaced roads
			Total	New	Reconstructed	Sand-clay and gravel	Macadam	Paved		
Continental United States	26,722	7,151	19,572	16,208	3,364	11,132	2,812	5,628	27,387	20,327
New England	626	1	625	555	71	290	177	158	814	736
Maine	85	--------	85	69	16	65	6	14	135	135
New Hampshire	152	1	151	130	22	113	27	11	186	169
Vermont	156	--------	156	156	--------	106	16	34	139	139
Massachusetts [1]	73	--------	73	56	17	--------	48	25	103	103
Rhode Island	40	--------	40	40	--------	(2)	23	17	50	50
Connecticut [3]	120	--------	120	104	16	6	57	57	201	200
Middle Atlantic	1,524	36	1,488	1,408	81	91	263	1,133	1,680	1,367
New York	725	28	697	649	48	28	66	602	581	566
New Jersey	119	8	111	111	(2)	1	2	108	54	50
Pennsylvania	680	--------	680	648	33	62	195	423	1,045	751
East North Central	4,121	231	3,890	2,099	1,791	1,685	796	1,409	4,645	4,406
Ohio	1,063	56	1,007	278	729	348	463	196	2,481	2,411
Indiana	538	25	513	313	199	118	166	228	386	377
Illinois	612	90	521	493	29	--------	--------	521	408	362
Michigan	336	23	313	301	12	70	3	240	354	354
Wisconsin	1,572	37	1,536	714	822	1,149	163	224	1,016	952
West North Central	7,759	2,736	5,022	4,574	448	4,285	46	692	3,291	4,950
Minnesota	1,106	349	757	594	163	643	--------	114	1,728	1,412
Iowa	1,211	214	997	997	--------	637	--------	360	994	499
Missouri	537	--------	537	527	10	380	--------	157	1,167	823
North Dakota	1,072	585	487	413	73	487	--------	--------	977	539
South Dakota	852	388	464	464	--------	464	--------	--------	473	445
Nebraska	1,630	493	1,136	935	202	1,128	--------	9	1,476	834
Kansas	1,351	707	644	644	--------	546	46	52	1,476	404
South Atlantic	4,774	1,028	3,745	3,463	281	1,601	833	1,311	3,546	3,014
Delaware	39	--------	39	39	--------	--------	9	30	85	85
Maryland [4]	103	--------	103	101	2	25	14	64	148	148
Virginia	235	13	221	221	--------	40	97	84	187	166
West Virginia	735	240	495	485	10	315	107	73	494	494
North Carolina	[5] 1,109	314	795	795	--------	204	106	485	1,255	859
South Carolina	613	58	555	528	27	445	11	100	632	584
Georgia	927	152	775	700	74	343	131	300	387	328
Florida	1,013	251	762	594	168	229	358	175	358	350
East South Central	2,166	776	1,390	1,062	327	711	436	243	2,004	1,432
Kentucky [6]	1,079	426	654	437	217	263	328	63	451	214
Tennessee	[5] 389	133	255	227	28	41	108	106	473	292
Alabama [7]	441	138	303	266	36	231	(2)	21	496	467
Mississippi	257	79	178	132	46	126	--------	52	584	459
West South Central	3,070	1,475	1,595	1,591	3	913	189	493	2,946	1,758
Arkansas	940	650	290	290	--------	260	--------	30	947	431
Louisiana	612	48	564	560	3	518	--------	45	594	594
Oklahoma	555	387	168	168	--------	33	--------	135	436	236
Texas	963	390	573	573	--------	102	189	283	969	497
Mountain	1,952	690	1,263	1,014	249	1,152	63	48	2,160	1,349
Montana	136	19	118	92	25	116	--------	1	160	155
Idaho	457	28	429	248	181	407	16	6	373	269
Wyoming	208	93	115	105	10	114	--------	1	241	137
Colorado	142	54	88	88	--------	59	--------	29	407	295
New Mexico	656	479	177	177	(2)	176	--------	1	482	74
Arizona	66	17	49	36	13	33	14	2	117	79
Utah	169	--------	169	150	20	133	33	4	180	150
Nevada	118	--------	118	118	--------	114	--------	4	200	190
Pacific	732	176	556	442	113	404	12	140	1,302	1,190
Washington	212	98	114	114	--------	63	--------	51	127	96
Oregon	287	78	209	137	72	205	--------	4	910	829
California	233	--------	233	191	41	136	12	85	265	265

[1] Data for Jan. 1 to Nov. 30, 1926, and year ended Nov. 30, 1927.
[2] Less than five-tenths of 1 mile.
[3] Data for years ended June 30.
[4] Data for years ended Sept. 30.
[5] Data for Jan. 1 to June 30, 1927.
[6] Data for Jan. 1 to June 30, 1926, and year ended June 30, 1927.
[7] Data for Jan. 1 to Sept. 30, 1926, and year ended Sept. 30, 1927.

Source: Bureau of Public Roads, Department of Agriculture.

No. 405.—EXPENDITURES FOR RURAL HIGHWAYS BY OR UNDER SUPERVISION OF STATE HIGHWAY DEPARTMENTS, INCLUDING FEDERAL AID

NOTE.—Figures include expenditures, whether from current revenues or the proceeds of loans, for construction, maintenance, and interest and principal payments on highway bonds.

Division and State	Year in which first State aid law passed	1904	1914	1919	1921	1923	1924	1925	1926	1927
		Thousands of dollars								
Continental U. S.		2,550	24,221	106,861	413,242	447,362	605,665	649,125	821,744	699,875
New England		1,090	2,967	11,046	26,758	31,503	38,339	39,289	45,178	51,735
Maine	1901	45	467	1,739	7,372	6,149	6,960	7,105	10,279	8,684
New Hampshire	1903	44	492	1,361	2,360	2,993	3,843	4,027	3,017	3,565
Vermont	1898	127	458	901	951	2,880	2,832	3,618	3,713	4,030
Massachusetts	1892	576	243	3,620	7,364	10,514	13,240	12,881	13,794	18,380
Rhode Island	1902	79		1,132	2,213	2,052	2,770	3,046	3,871	4,242
Connecticut	1895	219	1,307	2,293	5,998	6,915	8,690	8,612	10,504	12,784
Middle Atlantic		1,434	11,827	36,754	101,477	73,316	112,079	135,603	117,072	136,625
New York	1898	1,056	8,544	13,714	36,857	38,128	42,258	49,369	41,781	58,798
New Jersey	1891	250	1,307	6,320	15,608	12,032	21,488	23,939	24,378	27,763
Pennsylvania	1903	128	1,977	16,719	49,012	23,156	48,333	62,294	50,913	50,064
East North Central			4,383	16,717	68,512	76,834	116,002	118,903	104,321	106,712
Ohio	1904		1,855	4,604	15,547	12,876	27,080	24,086	20,496	18,214
Indiana	1917			401	8,110	9,276	14,920	14,518	12,429	14,798
Illinois	1905		388	4,404	15,693	30,994	40,851	36,376	24,267	30,270
Michigan	1905		657	4,246	16,744	15,586	24,270	36,139	25,998	25,883
Wisconsin	1911		1,482	3,063	12,417	8,102	8,882	7,785	12,131	17,547
West North Central			1,670	5,686	47,144	64,700	81,663	84,876	88,723	101,852
Minnesota	1905		1,310	2,691	7,480	10,853	16,762	17,963	17,979	17,837
Iowa	1904		74	614	18,276	17,980	17,911	14,108	15,272	24,077
Missouri	1907		277	684	4,727	19,589	26,107	31,594	30,841	25,996
North Dakota	1909			233	1,030	1,082	21,844	1,862	1,978	4,567
South Dakota	1911			319	4,738	2,466	[1] 5,596	6,378	5,843	4,862
Nebraska	1911			1,098	4,836	5,775	6,804	5,564	7,639	8,004
Kansas	1911		9	48	6,058	6,955	6,639	7,407	9,171	16,509
South Atlantic		14	916	7,217	51,181	79,792	99,992	103,836	113,651	133,328
Delaware	1903	14	31	1,147	3,765	3,748	3,658	3,493	3,469	3,480
Maryland	1898		357	2,237	7,616	7,762	12,728	12,025	10,598	[2] 10,598
Virginia	1906		524	2,262	7,114	9,849	14,611	14,072	12,014	14,714
West Virginia	1909			480	1,877	15,665	14,124	16,139	17,492	19,311
North Carolina	1901		5	1,010	15,100	28,148	34,733	32,589	37,216	33,144
South Carolina	1917			30	3,941	4,522	5,887	9,133	9,640	13,410
Georgia	1908				9,664	5,475	7,301	7,902	9,565	15,114
Florida	1915			(3)	2,103	4,623	6,949	8,484	13,657	23,557
East South Central			188	1,826	16,621	19,588	36,975	45,008	38,845	44,734
Kentucky	1912		18	926	5,757	6,437	15,470	14,916	9,820	11,484
Tennessee	1915			794	6,328	4,158	8,405	14,379	14,037	16,003
Alabama	1911		170	65	1,036	5,117	7,779	10,917	10,290	10,766
Mississippi	1915			40	3,500	2,876	5,321	4,795	4,698	6,481
West South Central			276	3,360	33,952	40,029	51,925	52,733	50,205	58,119
Arkansas	1913		115	585	7,055	11,924	11,214	11,200	9,563	14,532
Louisiana	1910		161	(3)	5,347	6,082	8,843	8,611	10,563	10,753
Oklahoma	1911			2,125	4,775	5,731	6,638	12,938	10,420	12,816
Texas	1917			650	16,775	16,293	25,230	19,985	19,659	20,018
Mountain			638	3,870	28,002	24,747	30,151	27,387	23,810	27,318
Montana	1913		14	397	3,640	1,454	1,788	1,267	1,155	1,541
Idaho	1905		50	850	4,863	2,534	2,585	3,637	4,191	3,847
Wyoming	1911			771	3,701	3,877	4,805	3,973	2,974	2,873
Colorado	1909		301	1,775	4,156	5,741	6,491	5,565	5,850	5,232
New Mexico	1909		116	839	3,713	3,205	4,009	3,323	2,928	5,089
Arizona	1909			1,451	2,948	2,884	3,071	2,443	2,565	2,608
Utah	1909		158	2,445	3,391	2,709	3,627	4,124	2,448	3,929
Nevada	1911			342	1,590	2,343	3,174	3,056	1,699	2,199
Pacific		11	1,354	15,386	39,596	37,854	38,541	41,490	39,938	39,450
Washington	1905		1,343	2,895	9,970	7,169	[4] 7,671	7,846	8,825	8,628
Oregon	1913		11	5,923	18,246	10,786	[4] 9,360	15,553	10,018	10,263
California	1895	11		6,568	11,380	19,899	21,509	18,091	21,095	20,559

[1] Excludes State bridge fund receipts and disbursements.
[2] Data are for 1926.
[3] Data not available.
[4] Excludes expenditures on forest-aid roads, also on market roads for Oregon.

Source: Bureau of Public Roads, Department of Agriculture.

No. 406.—EXPENDITURES FOR RURAL HIGHWAYS: CONSOLIDATED DATA FOR ALL STATES, COUNTIES, TOWNSHIPS, AND DISTRICTS (APPROXIMATE)

NOTE.—All figures in thousands of dollars. For the items entering into the totals see Table 408.

Division and State	1904	1914	1919	1921	1923	1924	1925	1926	1927
Continental U. S.	59,527	240,264	389,456	1,036,588	996,781	1,181,521	1,288,940	1,300,546	1,448,121
New England	7,356	15,436	25,462	45,301	40,381	48,353	63,080	69,183	76,440
Maine	1,472	2,642	4,525	8,702	8,684	10,460	11,003	12,923	11,384
New Hampshire	873	1,590	2,882	3,699	4,288	5,311	5,589	4,968	5,772
Vermont	567	1,024	2,140	2,150	3,030	3,502	4,693	4,706	5,080
Massachusetts	2,871	6,092	10,225	19,536	12,161	14,740	26,881	28,144	33,262
Rhode Island	377	446	1,847	2,828	2,878	3,082	3,894	4,883	5,196
Connecticut	1,195	3,641	3,844	8,446	9,341	11,259	11,021	13,559	15,746
Middle Atlantic	12,100	40,865	67,990	160,471	130,125	176,615	247,348	226,098	258,528
New York	3,938	23,232	24,448	57,025	52,422	66,658	89,383	69,543	98,798
New Jersey	3,275	7,208	15,320	28,096	20,116	26,624	55,470	50,716	54,951
Pennsylvania	4,887	10,425	28,222	75,350	57,587	83,333	102,494	105,839	104,779
East North Central	15,800	56,445	83,621	267,988	254,123	284,278	260,899	281,642	302,045
Ohio	4,776	14,334	18,213	76,580	62,876	76,035	73,626	83,043	80,580
Indiana	3,438	14,234	18,702	54,502	54,525	62,502	49,991	49,810	52,023
Illinois	3,844	8,735	16,524	39,619	55,451	51,431	45,154	50,453	57,931
Michigan	1,817	9,262	16,525	55,573	37,691	52,614	60,847	62,517	66,576
Wisconsin	1,924	9,880	13,657	41,714	43,580	41,606	31,281	35,819	44,935
West North Central	7,435	33,120	64,779	148,866	152,413	184,108	176,603	171,548	107,794
Minnesota	1,607	6,459	13,223	38,780	35,327	42,984	44,352	37,815	41,283
Iowa	2,344	10,188	16,773	39,325	34,838	36,946	33,161	34,521	48,351
Missouri	1,571	5,513	7,724	16,128	31,177	42,717	41,224	41,058	37,172
North Dakota	456	2,402	6,236	7,247	5,751	6,080	6,210	6,340	8,797
South Dakota	269	1,218	4,244	14,189	10,105	13,347	13,056	13,319	11,085
Nebraska	495	1,796	5,551	10,528	14,246	19,033	16,041	15,688	16,909
Kansas	693	5,544	11,027	22,670	20,969	23,001	22,560	22,807	34,197
South Atlantic	4,530	24,429	35,458	106,657	151,858	180,087	192,389	229,594	263,194
Delaware	91	512	1,994	6,036	5,432	4,892	6,161	5,077	5,148
Maryland	873	6,001	6,965	10,208	12,945	16,356	15,553	14,213	14,565
Virginia	688	3,225	5,140	15,485	18,849	24,287	22,578	22,230	25,368
West Virginia	588	2,484	5,290	10,060	25,665	27,084	29,098	32,030	32,681
North Carolina	624	5,215	6,717	29,324	43,148	50,783	46,799	59,618	58,865
South Carolina	334	1,024	2,435	10,049	9,437	12,108	19,652	16,855	19,767
Georgia	895	3,688	6,917	15,817	16,506	25,675	20,940	20,576	29,450
Florida	437	2,280	(1)	9,588	19,876	18,903	31,608	58,995	77,350
East South Central	2,608	12,755	12,974	51,236	58,860	72,383	97,015	81,036	91,418
Kentucky	1,161	2,475	3,803	12,623	15,647	24,397	22,118	16,284	18,383
Tennessee	729	2,371	4,468	12,697	14,565	15,167	31,124	23,354	27,152
Alabama	378	3,949	1,812	5,608	14,503	15,764	18,860	19,006	21,272
Mississippi	340	3,960	2,890	20,308	14,147	17,056	24,912	22,392	24,611
West South Central	4,018	15,333	32,524	103,820	78,896	108,791	113,210	107,241	119,720
Arkansas	682	1,523	9,381	21,211	15,484	20,474	22,360	18,438	23,432
Louisiana	345	1,778	(1)	14,022	15,142	18,077	18,557	19,910	22,559
Oklahoma	447	2,113	9,052	14,680	14,196	18,849	28,308	24,568	25,541
Texas	2,544	9,920	14,092	53,907	34,075	51,390	43,985	44,325	48,188
Mountain	1,528	9,454	25,143	58,158	44,220	45,392	46,090	42,518	46,388
Montana	309	2,888	2,583	10,383	4,892	3,593	4,520	5,961	6,306
Idaho	202	1,371	4,300	11,807	5,908	5,585	7,597	7,959	8,318
Wyoming	74	670	1,915	4,725	4,751	5,785	4,650	3,872	3,609
Colorado	635	1,938	4,295	9,049	10,675	11,639	10,520	10,829	10,272
New Mexico	35	556	1,584	4,259	3,659	5,173	3,769	3,391	5,581
Arizona	68	983	4,018	10,048	7,192	4,843	4,048	4,359	4,218
Utah	158	803	5,545	5,175	4,209	5,127	7,274	3,793	5,206
Nevada	47	245	902	2,111	2,844	3,647	3,712	2,354	2,878
Pacific	4,152	32,427	41,505	94,031	85,903	81,514	92,306	91,684	92,591
Washington	1,345	7,945	11,616	24,239	17,239	16,671	15,710	18,821	18,322
Oregon	650	5,310	10,391	27,969	19,991	15,360	28,928	23,078	22,973
California	2,157	19,172	19,497	41,823	48,674	49,483	47,668	49,785	51,296

[1] Data not available.

Source: Bureau of Public Roads, Department of Agriculture.

No. 407.—FUNDS AVAILABLE FOR RURAL ROAD PURPOSES: CONSOLIDATED DATA FOR ALL STATES, COUNTIES, TOWNSHIPS, AND DISTRICTS, 1927

NOTE.—All figures except percentages in thousands of dollars. Funds are those available for the purposes indicated in Table 408

Division and State	Total	Proceeds of bonds		Federal aid post-road funds [1]		Motor vehicle fees and gasoline taxes		Other taxes and appropriations		All other sources [2]	
		Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent
Continental U. S.	1,941,221	272,060	14.0	80,460	4.1	516,774	26.6	527,477	27.2	544,451	28.0
New England	95,647	5,386	5.6	3,716	3.9	35,347	37.0	24,980	26.1	26,218	27.4
Maine	12,589	546	4.3	632	5.0	4,576	36.3	3,680	29.2	3,154	25.1
New Hampshire	8,671	------	------	454	5.2	3,093	35.7	3,720	42.9	1,399	16.1
Vermont	5,686	------	------	702	12.3	2,665	46.9	1,363	24.0	957	16.8
Massachusetts	34,258	1,290	3.8	884	2.6	12,458	36.4	9,232	26.9	10,394	30.3
Rhode Island	8,564	3,550	41.5	430	5.0	2,826	33.0	1,019	11.9	739	8.6
Connecticut	25,879	------	------	614	2.4	9,724	37.6	5,966	23.1	9,575	37.0
Middle Atlantic	366,966	39,729	10.8	8,288	2.3	81,234	22.1	100,712	27.4	137,003	37.3
New York	147,675	3,675	2.5	3,647	2.5	22,743	15.4	49,737	33.7	67,872	46.0
New Jersey	67,471	25,222	37.4	1,072	1.6	16,430	24.4	14,354	21.3	10,394	15.4
Pennsylvania	151,820	10,832	7.1	3,569	2.4	42,061	27.7	36,621	24.1	58,737	38.7
East North Central	391,804	54,533	13.9	12,463	3.2	110,965	28.3	143,224	36.6	70,570	18.0
Ohio	120,250	17,680	14.7	2,368	2.0	34,751	28.9	44,265	36.8	21,186	17.6
Indiana	65,253	10,824	16.6	2,076	3.2	13,457	20.6	25,937	39.7	12,959	19.9
Illinois	65,953	13,342	20.2	2,998	4.5	19,542	29.6	27,520	41.7	2,551	3.9
Michigan	84,780	7,424	8.8	2,664	3.1	28,043	33.1	26,481	31.2	20,169	23.8
Wisconsin	55,568	5,313	9.6	2,357	4.2	15,172	27.3	19,021	34.2	13,705	24.7
West North Central	243,376	10,615	4.4	17,256	7.1	74,804	30.7	72,403	29.7	68,301	28.1
Minnesota	50,192	1,020	2.0	2,056	4.1	15,258	30.4	20,347	40.5	11,511	22.9
Iowa	56,677	1,274	2.2	2,573	4.5	15,767	27.8	13,652	24.1	23,412	41.3
Missouri	43,515	5,613	12.9	3,468	8.0	14,546	33.4	9,947	22.9	9,941	22.8
North Dakota	11,342	------	------	2,550	22.5	2,554	22.5	4,000	35.3	2,238	19.7
South Dakota	12,960	------	------	718	5.5	4,554	35.1	4,532	35.0	3,156	24.4
Nebraska	20,006	------	------	2,425	12.1	7,285	36.4	6,456	32.3	3,841	19.2
Kansas	48,684	2,708	5.6	3,466	7.1	14,840	30.5	13,469	27.7	14,202	29.2
South Atlantic	378,662	100,444	26.5	11,633	3.1	72,418	19.1	65,942	17.4	128,223	33.9
Delaware	5,905	1,083	18.3	511	8.7	1,479	25.0	1,311	22.2	1,521	25.8
Maryland	17,440	3,173	18.2	720	4.1	3,993	22.3	6,199	35.5	3,454	19.8
Virginia	30,001	1,558	5.2	1,869	6.2	10,916	36.4	6,062	20.2	9,595	32.0
West Virginia	40,705	12,000	29.5	1,262	3.1	7,469	18.2	9,680	23.8	10,355	25.4
North Carolina	89,325	29,642	33.2	1,713	1.9	14,014	15.7	13,586	15.2	30,369	34.0
South Carolina	43,271	13,658	31.6	1,124	2.6	7,055	16.3	2,933	6.8	18,501	42.8
Georgia	34,536	1,566	4.5	2,746	8.0	10,672	30.9	11,982	34.7	7,571	21.9
Florida	117,479	37,764	32.1	1,688	1.4	16,980	14.5	14,189	12.1	46,857	39.9
East South Central	131,708	25,626	19.5	6,428	4.9	31,562	24.0	32,619	24.8	35,472	26.9
Kentucky	22,432	3,462	15.4	1,420	6.3	9,952	44.4	6,979	31.1	620	2.8
Tennessee	39,598	7,841	19.8	1,812	4.6	7,377	18.6	7,284	18.4	15,284	38.6
Alabama	25,045	5,213	20.8	1,251	5.0	7,507	30.0	5,448	21.8	5,626	22.5
Mississippi	44,633	9,112	20.4	1,945	4.4	6,726	15.1	12,908	28.9	13,942	31.2
West South Central	159,497	28,091	17.6	7,750	4.9	50,223	31.5	36,058	22.6	27,373	23.4
Arkansas	31,850	13,236	41.6	505	1.6	8,001	25.1	2,400	7.5	7,708	24.2
Louisiana	29,838	2,855	9.6	1,073	3.6	7,108	23.8	8,408	28.2	10,395	34.8
Oklahoma	30,576	1,500	4.9	1,207	3.9	12,337	40.3	7,950	26.0	7,583	24.8
Texas	67,233	10,500	15.6	4,965	7.4	22,777	33.9	17,300	25.7	11,692	17.4
Mountain	55,932	1,768	3.2	8,688	15.5	13,131	23.8	15,893	28.4	13,453	24.1
Montana	7,625	120	1.6	895	11.7	1,781	23.4	2,970	39.0	1,860	24.4
Idaho	11,465	66	.6	1,067	9.3	3,085	26.9	3,420	29.8	3,827	33.4
Wyoming	3,994	------	------	930	23.3	1,292	32.3	680	17.0	1,092	27.3
Colorado	12,512	------	------	1,148	9.2	4,137	33.1	4,124	33.0	3,103	24.8
New Mexico	5,819	1,447	24.9	1,782	30.6	1,551	26.7	841	14.5	197	3.4
Arizona	4,221	------	------	721	17.1	1,644	38.9	1,631	38.6	225	5.3
Utah	6,552	------	------	1,149	17.5	1,936	29.5	1,441	22.0	2,026	30.9
Nevada	3,744	135	3.6	996	26.6	705	18.8	786	21.0	1,123	30.0
Pacific	117,628	5,818	4.9	4,240	3.6	44,092	37.5	35,646	30.3	27,831	23.7
Washington	19,078	95	.5	699	3.7	8,594	45.0	7,120	37.3	2,570	13.5
Oregon	25,717	4,000	15.6	1,112	4.3	10,138	39.4	5,300	20.6	5,167	20.1
California	72,833	1,723	2.4	2,429	3.3	25,360	34.8	23,226	31.9	20,094	27.6

[1] For road and bridge purposes under supervision of State highway departments only.
[2] Includes balance from previous year, miscellaneous income, and funds transferred.

Source: Bureau of Public Roads, Department of Agriculture.

No. 408.—DISTRIBUTION OF EXPENDITURES FOR ALL RURAL ROAD PURPOSES, 1927: ALL STATES, COUNTIES, TOWNSHIPS, AND DISTRICTS

[All figures except percentages in thousands of dollars]

Division and State	Total	New and reconstructed roads and bridges		Maintenance roads and bridges		Principal and interest on highway bonds		Equipment and miscellaneous [1]	
		Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent
Continental U. S.	1,448,121	689,219	47.6	376,754	26.0	244,886	16.9	137,263	9.5
New England	76,440	38,835	50.8	27,242	35.6	2,968	3.9	7,393	9.7
Maine	11,384	5,484	48.2	3,670	32.2	1,136	10.0	1,094	9.6
New Hampshire	5,772	1,625	28.2	3,351	58.1			796	13.8
Vermont	5,080	2,821	55.5	1,919	37.8			340	6.7
Massachusetts	33,262	18,738	56.3	9,245	27.8	1,420	4.3	3,858	11.6
Rhode Island	5,196	1,646	31.7	2,395	46.1	412	7.9	742	14.3
Connecticut	15,746	8,521	54.1	6,662	42.3			563	3.6
Middle Atlantic	258,528	130,040	50.3	45,585	17.6	46,068	17.8	36,837	14.2
New York	98,798	66,305	67.1	11,069	11.2	8,820	8.9	12,605	12.8
New Jersey	54,951	24,112	43.9	6,678	12.2	15,856	28.9	8,306	15.1
Pennsylvania	104,779	39,623	37.8	27,838	26.6	21,392	20.4	15,926	15.2
East North Central	302,045	127,065	42.1	91,382	30.2	61,722	20.4	21,924	7.3
Ohio	80,580	25,832	32.1	27,395	34.0	24,382	30.3	2,971	3.7
Indiana	52,023	20,407	39.2	13,664	26.3	15,236	29.3	2,715	5.2
Illinois	57,931	27,219	47.0	17,875	30.9	8,492	14.7	4,344	7.5
Michigan	66,576	32,534	48.9	18,103	27.2	11,984	18.0	3,955	5.9
Wisconsin	44,935	21,073	46.9	14,295	31.8	1,628	3.6	7,939	17.7
West North Central	197,794	114,288	57.8	49,516	25.0	16,205	8.2	17,728	9.0
Minnesota	41,283	25,242	61.1	8,950	21.7	3,815	9.2	3,277	7.9
Iowa	48,351	24,227	50.1	15,373	31.8	2,115	4.4	6,637	13.7
Missouri	37,172	18,934	50.9	8,599	23.1	6,782	18.2	2,857	7.7
North Dakota	8,797	7,077	80.4	925	10.5			795	9.0
South Dakota	11,085	5,700	51.4	3,942	35.6	755	6.8	688	6.2
Nebraska	16,909	9,747	57.6	5,230	30.9	289	1.7	1,543	9.7
Kansas	34,197	23,361	68.3	6,496	19.0	2,509	7.3	1,831	5.4
South Atlantic	263,194	141,169	53.6	51,669	19.6	45,523	17.3	24,835	9.4
Delaware	5,148	2,403	46.7	622	12.1	1,435	27.9	689	13.4
Maryland	14,565	4,935	33.9	5,822	40.0	3,636	25.0	173	1.2
Virginia	25,368	11,499	45.3	9,644	38.0	2,866	11.3	1,359	5.4
West Virginia	32,681	19,105	58.6	5,172	15.8	7,322	22.4	1,022	3.1
North Carolina	58,865	23,395	39.7	7,919	13.5	16,875	28.7	10,676	18.1
South Carolina	19,767	11,072	56.0	3,964	20.1	2,276	11.5	2,455	12.4
Georgia	29,450	17,001	57.7	7,959	27.0	2,323	7.9	2,167	7.4
Florida	77,350	51,699	66.8	10,567	13.7	8,790	11.4	6,294	8.1
East South Central	91,418	35,151	38.5	29,973	32.8	17,818	19.5	8,475	9.3
Kentucky	18,383	8,487	46.2	5,373	29.2	1,896	10.3	2,627	14.3
Tennessee	27,152	12,117	44.6	7,277	26.8	4,591	16.9	3,167	11.7
Alabama	21,272	8,227	38.7	6,842	32.2	4,434	20.8	1,768	8.3
Mississippi	24,611	6,320	25.7	10,481	42.6	6,897	28.0	913	3.7
West South Central	119,720	44,749	37.4	36,491	30.5	30,604	25.6	7,876	6.6
Arkansas	23,432	5,162	22.0	4,092	17.5	11,590	49.5	2,588	11.0
Louisiana	22,559	9,577	42.5	5,601	24.8	5,404	24.0	1,976	8.8
Oklahoma	25,541	12,420	48.6	9,393	36.8	2,050	8.0	1,679	6.6
Texas	48,188	17,590	36.5	17,405	36.1	11,560	24.0	1,633	3.4
Mountain	46,388	19,582	42.2	14,916	32.2	6,757	14.6	5,132	11.1
Montana	6,306	2,034	32.3	2,359	37.4	1,290	20.5	623	9.9
Idaho	8,318	2,789	33.5	1,928	23.2	2,319	27.9	1,281	15.4
Wyoming	3,609	2,059	57.1	1,087	30.1	160	4.4	303	8.4
Colorado	10,272	3,992	38.9	4,167	40.6	1,085	10.6	1,028	10.0
New Mexico	5,581	3,100	55.5	1,283	23.0	502	9.0	695	12.5
Arizona	4,218	1,602	38.0	2,018	47.8	140	3.3	459	10.9
Utah	5,206	2,437	46.8	1,404	27.0	962	18.5	402	7.7
Nevada	2,878	1,569	54.5	670	23.3	299	10.4	341	11.8
Pacific	92,591	38,338	41.4	30,031	32.4	17,158	18.5	7,064	7.6
Washington	18,322	9,434	51.5	6,143	33.5	1,594	8.7	1,151	6.3
Oregon	22,973	10,368	45.1	5,734	25.0	5,613	24.4	1,258	5.5
California	51,296	18,536	36.1	18,154	35.4	9,951	19.4	4,655	9.1

[1] Includes administration and engineering.

Source: Bureau of Public Roads, Department of Agriculture.

No. 409.—HIGHWAY CONSTRUCTION UNDER FEDERAL AID: STATUS AS OF DECEMBER 31, 1928

[Total cost and Federal aid expressed in thousands of dollars]

Division and State	Mileage completed prior to Jan. 1, 1929	Projects under construction			Projects approved for construction			Federal aid fund available for new projects
		Total cost	Federal aid	Miles	Total cost	Federal aid	Miles	
Grand total [1]	76,075	230,649	91,343	9,216	32,434	12,819	1,598	101,372
New England	1,975	8,821	2,618	161	1,980	714	36	6,287
Maine	466	2,246	750	53	192	94	9	1,453
New Hampshire	332	279	109	8				399
Vermont	229	965	289	20				410
Massachusetts	568	2,827	897	49	739	191	13	2,411
Rhode Island	160	611	153	9	381	150	10	776
Connecticut	220	1,893	420	22	668	279	4	838
Middle Atlantic	4,473	47,128	10,752	708	3,707	985	63	11,560
New York	2,034	28,763	6,341	422	1,891	383	26	6,981
New Jersey	443	5,225	907	61	108	34	2	946
Pennsylvania	1,996	13,140	3,504	225	1,708	568	35	3,633
East North Central	8,531	52,302	22,377	1,453	7,386	2,610	163	13,966
Ohio	1,960	10,899	3,852	238	3,997	1,168	65	3,549
Indiana	1,244	5,833	2,786	179	997	433	32	1,960
Illinois	1,778	20,208	9,218	635	1,539	648	39	3,113
Michigan	1,441	11,181	4,724	272	779	324	21	2,163
Wisconsin	2,108	4,121	1,797	129	74	37	6	3,181
West North Central	22,084	26,399	11,079	2,262	4,200	1,689	458	14,174
Minnesota	4,090	1,083	336	107	166	15	(2)	2,147
Iowa	2,995	2,525	1,005	126	563	257	37	2,075
Missouri	2,280	7,658	2,886	216	1,466	636	61	1,816
North Dakota	3,678	2,794	1,210	514	883	301	264	1,240
South Dakota	3,234	2,341	1,273	465	245	135	21	1,364
Nebraska	3,462	3,736	1,847	448	330	164	36	3,394
Kansas	2,345	6,262	2,522	386	547	181	39	2,138
South Atlantic	9,038	24,134	8,971	1,008	1,887	608	84	10,705
Delaware	205	534	256	16				461
Maryland	558	1,742	800	78				664
Virginia	1,313	3,662	1,115	108	644	21	22	1,450
West Virginia	692	1,173	551	49	471	211	21	1,103
North Carolina	1,666	1,999	1,015	98	510	251	22	1,889
South Carolina	1,717	6,804	1,488	247	3	1	1	1,077
Georgia	2,457	5,436	2,513	296	259	124	18	1,995
Florida	430	2,784	1,233	116				2,066
East South Central	5,820	18,150	8,351	924	2,556	1,184	142	7,517
Kentucky	1,259	4,934	2,215	220	789	325	47	1,426
Tennessee	1,068	4,709	2,103	172	541	246	24	2,115
Alabama	1,902	3,246	1,619	261	936	468	51	2,519
Mississippi	1,591	5,261	2,414	271	290	145	20	1,457
West South Central	10,798	22,665	10,136	1,050	6,921	2,943	398	11,099
Arkansas	1,736	3,743	1,657	109	74	37	11	3,051
Louisiana	1,281	4,682	2,333	193	103	25	(2)	1,209
Oklahoma	1,704	3,330	1,520	176	549	248	24	1,678
Texas	6,077	10,930	4,626	572	6,195	2,633	363	5,166
Mountain	9,834	17,255	11,150	1,288	1,852	1,071	177	17,642
Montana	1,518	3,240	1,982	255	716	376	80	5,515
Idaho	1,077	1,836	1,096	139	70	42	4	1,001
Wyoming	1,611	1,374	845	160				1,029
Colorado	1,064	3,461	1,863	172	322	181	18	3,043
New Mexico	1,786	3,255	2,130	202	279	177	28	1,347
Arizona	877	1,461	1,233	80	160	43	4	3,717
Utah	899	1,347	885	69	123	91	7	995
Nevada	1,002	1,291	1,116	211	182	161	36	1,085
Pacific	3,486	13,595	5,854	359	1,943	1,015	77	6,989
Washington	830	3,896	1,314	93	83	44	5	1,538
Oregon	1,132	550	322	32	108	67	(2)	2,344
California	1,524	9,149	4,218	234	1,752	904	72	3,107
Hawaii	39	176	58	2				1,432

[1] Includes Hawaii.
[2] Less than five-tenths of 1 mile.

Source: Bureau of Public Roads, Department of Agriculture.

No. 410.—PRODUCTION AND REGISTRATION OF MOTOR VEHICLES

NOTE.—Figures for earlier years are largely estimates. Beginning with 1921, data include production of plants located in Canada, making motor vehicles of United States design, and cars assembled in foreign countries from American parts. Motorcycles and trailers are not included

Year	Production [1]						Registration (in thousands)		
	Number (in thousands)			Wholesale value (thousands of dollars)			Total	Passenger cars, busses, and taxis	Trucks and road tractors [2]
	Total	Passenger cars	Motor trucks	Total	Passenger cars	Motor trucks			
1900 [3]	4	4	--------	4,899	4,899	--------	8	--------	--------
1901	7	7	--------	8,183	8,183	--------	15	--------	--------
1902	9	9	--------	10,395	10,395	--------	23	--------	--------
1903	11	11	--------	13,000	13,000	--------	33	--------	--------
1904 [3]	23	22	(4)	24,629	23,682	947	55	55	(4)
1905	25	25	(4)	40,000	39,030	970	78	77	1
1906	34	33	1	62,900	61,850	1,050	107	106	1
1907	44	43	1	93,400	92,040	1,360	142	140	2
1908	65	63	2	137,800	135,250	2,550	198	194	3
1909 [3]	131	128	3	165,149	159,919	5,230	312	306	6
1910	187	181	6	225,000	215,340	9,660	468	458	10
1911	210	199	11	246,000	225,000	21,000	640	620	20
1912	378	356	22	378,000	335,000	43,000	944	903	41
1913	485	462	23	443,902	399,902	44,000	1,258	1,194	64
1914 [3]	569	544	25	458,958	413,859	45,098	1,711	1,626	86
1915	970	896	74	701,778	575,978	125,800	2,446	2,310	136
1916	1,618	1,526	92	1,082,378	921,378	161,000	3,513	3,298	215
1917	1,874	1,746	128	1,274,488	1,053,506	220,983	4,983	4,657	326
1918	1,171	943	227	1,236,107	801,938	434,169	6,147	5,622	525
1919	1,934	1,658	276	1,885,113	1,461,786	423,327	7,565	6,771	794
1920	2,227	1,906	322	2,232,420	1,809,171	423,249	9,232	8,226	1,006
1921	1,682	1,529	153	1,261,667	1,095,883	165,784	10,463	9,483	980
1922	2,646	2,398	248	1,793,023	1,571,569	221,454	12,238	10,960	1,279
1923	4,180	3,780	400	2,592,033	2,282,954	309,080	15,092	13,540	1,553
1924	3,758	3,328	410	2,367,413	2,049,102	318,311	17,594	15,461	2,133
1925	4,428	3,905	523	3,015,164	2,555,419	459,744	19,937	17,496	2,441
1926	4,506	3,984	522	3,214,817	2,758,446	456,371	22,001	19,237	2,764
1927	3,580	3,093	487	2,700,706	2,269,056	431,650	23,133	20,219	2,914
1928	4,601	4,025	577	3,162,799	2,708,955	453,844	24,493	21,379	3,114

[2] See headnote.
[3] Road tractors are not included prior to 1924.
[4] Production data are from United States Census Reports and in 1900 are for fiscal year ended June 30. Less than 500.

Sources: National Automobile Chamber of Commerce and Bureau of Public Roads.

No. 411.—PRODUCTION OF OPEN AND CLOSED CARS BY PRICE GROUPS IN UNITED STATES AND CANADA [1]

Year	Under $1,000		$1,000 to $2,000		$2,000 to $3,000		$3,000 and over		Per cent closed, all classes
	Open	Closed	Open	Closed	Open	Closed	Open	Closed	
1919	888,500	87,900	532,200	46,300	52,900	16,700	23,100	10,100	9.7
1920	904,900	213,700	545,300	74,300	63,200	17,800	49,700	14,300	17.0
1921	820,100	224,600	287,800	65,000	51,600	30,100	19,500	15,300	22.1
1922	1,343,000	431,400	315,400	207,300	11,700	48,200	8,700	32,100	30.0
1923	2,074,200	994,100	396,300	221,000	7,700	37,500	2,900	27,300	34.0
1924	1,648,360	786,440	227,257	572,943	9,567	33,333	3,689	39,211	43.1
1925	1,432,557	1,421,143	239,363	674,237	14,060	56,240	10,920	51,480	56.5
1926	979,040	2,080,460	120,667	657,833	9,922	53,678	17,900	53,700	71.6
1927	320,912	1,684,788	202,306	704,894	30,141	108,759	6,204	27,696	81.9
1928	618,821	2,313,979	66,103	851,997	5,998	127,302	4,939	34,261	82.7

[1] Prior to 1922 figures are based only on price of five-passenger open cars of a given chassis. Thus, if this model sold for less than $1,000, the total production of cars with the same chassis is included in the "under $1,000" class, even though closed models sold for over $1,000. In 1922 and later years actual f. o. b. prices of open and closed models are considered separately and the cars included under proper classification.

Source: Automotive Industries. The grouping is based on retail prices f. o. b. factory.

No. 412.—MOTOR-VEHICLE: PRODUCTION IN THE UNITED STATES

Month	1920	1921	1922	1923	1924	1925	1926	1927	1928
	Passenger cars								
Total	1,905,560	1,463,111	2,302,923	3,051,130	3,210,005	3,763,993	3,819,162	2,946,601	3,826,613
January	157,115	45,397	80,194	224,549	287,198	211,765	278,995	199,650	205,646
February	158,921	60,326	104,936	254,808	337,045	249,397	326,472	264,171	291,151
March	193,641	98,941	152,311	324,314	347,164	329,115	388,703	346,031	371,821
April	149,457	137,640	197,003	340,283	337,238	385,058	389,954	358,682	304,877
May	182,027	144,007	232,439	350,279	277,284	374,289	378,826	358,725	375,863
June	192,826	177,086	252,704	338,424	220,794	359,595	343,388	280,620	356,622
July	181,051	165,616	223,823	300,896	242,177	356,688	320,411	237,811	338,792
August	176,234	167,756	246,867	317,141	254,610	222,314	383,227	275,585	400,593
September	160,520	144,670	184,485	300,647	262,695	266,506	354,355	226,443	358,872
October	138,031	134,774	211,164	335,836	260,244	396,590	292,562	183,042	339,976
November	118,944	106,081	210,955	286,006	204,323	333,742	222,419	109,758	217,256
December	96,793	70,727	205,142	277,947	179,233	283,934	139,850	106,083	205,144
	Motor trucks and busses								
Total	321,789	143,712	241,253	382,882	392,535	496,837	481,772	454,725	530,771
January	30,822	7,840	9,180	21,340	31,391	28,814	30,003	39,258	26,082
February	29,109	10,273	12,935	23,283	33,524	34,241	37,180	40,564	32,645
March	35,571	13,512	19,176	35,162	36,260	45,291	44,764	48,482	41,506
April	23,941	14,561	21,491	38,855	38,630	48,734	49,382	47,700	45,227
May	27,992	12,708	23,133	45,276	37,893	44,767	46,341	46,923	49,020
June	32,851	13,434	26,172	41,686	31,006	38,929	42,881	43,197	40,174
July	28,601	11,254	21,932	30,948	27,635	42,259	39,199	31,585	53,284
August	28,971	13,514	23,971	31,075	30,083	37,922	43,624	34,409	60,705
September	27,994	14,090	19,442	27,073	33,687	59,222	44,583	33,867	56,422
October	27,267	13,235	21,660	30,625	34,309	45,391	41,859	36,640	57,136
November	16,031	10,563	21,963	28,498	30,238	38,529	33,832	24,612	39,679
December	12,639	8,728	20,143	29,061	27,829	32,738	28,074	27,488	27,991

No. 413.—STATE GASOLINE TAXES

NOTE.—In a majority of States all the proceeds of these taxes and in all but a few of the others the great bulk of the proceeds are applied to road purposes

State	Total gross receipts in thousands of dollars			Tax in cents per gallon on Dec. 31—	
	1925	1927	1928	1927	1928
Total	146,029	258,339	305,284	----	----
Alabama	2,141	5,909	6,614	4	4
Arizona	856	1,389	2,018	4	4
Arkansas	[1] 2,950	[2] 4,339	5,383	5	5
California	14,957	22,467	29,567	3	3
Colorado	1,961	3,140	3,921	3	3
Connecticut	1,909	3,055	3,512	2	2
Delaware	342	662	800	3	3
Dist. of Col	890	1,149	1,263	2	2
Florida	7,658	10,981	11,258	5	5
Georgia	4,419	7,066	8,245	4	4
Idaho	895	1,572	1,884	4	4
Illinois	(3)	6,200	[4] 837	2	(4)
Indiana	7,653	10,134	11,178	3	3
Iowa	3,505	7,248	8,536	3	3
Kansas	2,905	4,595	5,395	2	2
Kentucky	3,042	5,913	6,743	5	5
Louisiana	2,340	3,034	3,381	2	2
Maine	1,268	2,280	3,192	4	4
Maryland	1,977	4,169	5,426	4	4
Michigan	8,236	14,261	18,335	3	3
Minnesota	3,864	5,175	5,768	2	2
Mississippi	2,494	[5] 4,801	[5] 5,697	4	5
Missouri	4,159	6,331	6,948	2	2
Montana	675	1,436	1,683	3	3
Nebraska	2,194	3,665	3,941	2	2
Nevada	319	472	531	4	4
New Hampshire	707	1,269	1,884	3	4
New Jersey	(3)	4,083	8,470	2	2
New Mexico	537	1,416	1,852	5	5
North Carolina	6,082	8,787	9,787	4	4
North Dakota	634	1,276	1,479	2	2
Ohio	9,010	19,910	24,886	3	3
Oklahoma	5,144	7,198	8,148	3	3
Oregon	2,909	3,643	4,008	3	3
Pennsylvania	8,353	17,296	21,998	3	3
Rhode Island	318	916	1,182	2	2
South Carolina	3,865	5,080	5,518	5	5
South Dakota	1,848	2,394	3,159	4	4
Tennessee	3,408	4,476	5,135	3	3
Texas	4,642	15,651	17,945	3	2
Utah	1,064	1,461	1,665	3½	3½
Vermont	502	905	1,119	3	3
Virginia	3,702	7,140	8,616	4½	5
Washington	3,021	3,821	4,207	2	2
West Virginia	2,187	3,794	4,308	4	4
Wisconsin	4,032	6,027	6,857	2	2
Wyoming	456	756	954	3	3

[1] In addition, $438,436 was collected on motor-oil tax of 10 cents per gallon.
[2] Tentative data; accounts to be audited.
[3] No tax imposed.
[4] January receipts only; law found invalid Feb. 24, 1928.
[5] Includes $130,206 in 1927 and $131,842 in 1928 extra tax for sea wall to protect State highway.

Sources: Table 412, Survey of Current Business, Department of Commerce; Table 413, Bureau of Public Roads, Department of Agriculture.

No. 414.—MOTOR VEHICLE REGISTRATIONS: PASSENGER CARS AND MOTOR TRUCKS COMBINED, BY STATES

NOTE.—Net number of cars and trucks shown when possible, excluding registrations and nonresident registrations. Totals in this table do not include those official cars which are exempt (or partially exempt) from paying regular registration fees to the States

Division and State	1913	1915	1920	1924 [1]	1926 [1]	1927 [1]	1928 [1]	
							Total	Per 1,000 population
Continental United States	1,258,062	2,445,666	9,231,941	17,593,677	22,001,393	23,133,241	24,493,124	204
New England	121,327	206,609	573,321	1,143,222	1,378,721	1,432,801	1,523,298	184
Maine	11,022	21,545	62,907	127,598	151,486	163,623	172,698	217
New Hampshire	8,237	13,449	34,680	71,149	89,001	96,009	102,644	225
Vermont	5,913	11,499	31,625	[2] 61,179	74,063	79,527	86,231	245
Massachusetts	62,600	102,633	274,493	570,578	690,190	694,107	726,295	169
Rhode Island	10,295	16,362	50,477	95,482	110,746	118,014	125,698	176
Connecticut	23,200	41,121	119,134	217,236	263,235	281,521	309,792	186
Middle Atlantic	266,038	497,227	1,474,106	3,146,194	3,922,033	4,205,229	4,484,579	178
New York	134,495	255,242	676,205	1,412,879	1,815,434	1,937,918	2,083,942	180
New Jersey	51,360	81,848	227,737	504,470	651,415	712,396	758,430	198
Pennsylvania	80,178	160,137	570,164	1,228,845	1,455,184	1,554,915	1,642,207	167
East North Central	314,524	653,665	2,229,396	4,405,307	5,404,142	5,676,418	5,969,230	239
Ohio	86,156	181,332	621,390	1,241,600	1,480,246	1,570,734	1,649,699	242
Indiana	45,000	96,915	333,067	651,705	772,326	813,637	823,806	259
Illinois	94,656	180,832	568,924	1,119,236	1,370,503	1,438,985	1,504,359	203
Michigan	54,366	114,845	412,717	867,545	1,118,785	1,154,773	1,249,221	272
Wisconsin	34,346	79,741	293,298	525,221	662,282	698,289	742,136	251
West North Central	232,044	499,992	1,782,946	2,639,413	3,167,938	3,239,370	3,410,057	257
Minnesota	46,000	93,269	324,166	503,437	630,285	646,682	673,573	247
Iowa	70,299	145,109	437,378	616,123	693,998	704,203	733,466	302
Missouri	38,140	76,462	297,008	540,500	654,554	682,419	712,965	202
North Dakota	15,187	24,908	90,840	117,346	157,822	160,701	173,525	271
South Dakota	14,457	28,724	120,395	142,396	168,230	169,552	191,374	272
Nebraska	18,411	59,000	219,000	308,715	366,773	373,912	391,355	278
Kansas	34,550	72,520	294,159	410,891	491,276	501,901	533,799	291
South Atlantic	77,823	150,594	806,053	1,642,194	2,204,899	2,344,596	2,428,176	151
Delaware	2,440	5,052	18,300	35,136	44,834	47,124	51,210	210
Maryland	14,217	31,047	102,841	193,465	252,852	276,863	285,311	177
Dist. of Columbia	4,000	8,009	34,161	88,762	111,497	111,680	126,556	229
Virginia	9,022	21,357	115,470	261,945	322,614	337,607	360,545	140
West Virginia	5,144	13,279	80,664	191,085	227,836	245,819	251,556	146
North Carolina	10,000	21,000	140,860	302,232	[3,5] 385,047	[3] 430,499	464,376	158
South Carolina	10,000	15,000	93,843	161,753	181,189	199,635	216,805	116
Georgia	[4] 20,000	25,000	146,000	207,683	277,468	300,635	318,856	100
Florida	[4] 3,000	[4] 10,850	73,914	195,123	401,562	394,734	352,961	250
East South Central	26,360	48,421	357,658	726,426	992,326	1,041,770	1,142,129	121
Kentucky	7,210	19,500	112,683	229,804	281,557	285,621	304,231	119
Tennessee	[5] 10,000	[6] 7,618	101,852	204,680	279,639	294,567	322,137	129
Alabama	5,300	11,634	74,637	157,262	225,930	243,539	269,519	105
Mississippi	3,850	9,669	68,486	134,680	205,200	218,043	246,242	137
West South Central	48,563	84,433	772,655	1,491,719	1,998,726	2,076,101	2,223,364	168
Arkansas	3,583	8,021	59,082	141,983	209,419	206,563	214,931	111
Louisiana	[5] 10,000	11,380	73,000	[7] 178,000	239,500	255,000	264,293	136
Oklahoma	[4] 3,000	25,032	212,880	369,903	499,938	503,126	529,843	218
Texas	[5] 32,000	[5] 40,000	427,693	801,833	1,049,869	1,111,407	1,214,297	221
Mountain	33,215	78,530	374,473	591,750	735,298	794,606	861,418	220
Montana	5,916	14,540	60,650	79,605	103,958	112,735	126,035	230
Idaho	2,113	7,071	50,861	69,227	94,760	101,336	108,154	198
Wyoming	1,584	3,976	23,926	43,639	49,883	51,955	56,336	228
Colorado	13,000	28,894	129,255	213,247	248,613	268,492	284,867	261
New Mexico	1,898	5,100	22,100	41,680	54,996	59,291	65,737	166
Arizona	3,613	7,753	34,601	57,828	73,682	81,047	94,372	199
Utah	4,000	9,177	42,616	68,316	85,380	93,974	98,541	186
Nevada	1,091	2,009	10,464	18,118	24,014	25,776	27,376	356
Pacific	138,153	226,205	861,333	1,807,452	2,197,322	2,322,350	2,450,663	348
Washington	24,178	38,823	173,920	295,443	363,279	384,583	402,875	254
Oregon	13,975	23,585	103,790	192,615	233,568	244,572	248,118	275
California	[5] 100,000	163,797	583,623	1,319,394	1,600,475	1,693,195	1,799,890	395

[1] Includes road tractors (excluding farm tractors) not included prior to 1924.
[2] Includes nonresident registrations.
[3] Fiscal registration year ends June 30; figures represent registration July 1 to Dec. 31.
[4] Registrations incomplete.
[5] Estimated.
[6] Cars registered during 1915 only; total, approximately 26,000.
[7] Approximate.

Source: Bureau of Public Roads, Department of Agriculture.

No. 415.—REGISTRATIONS AND REVENUES FROM MOTOR VEHICLES, 1928

Division and State	Number of motor cars: Total	Number of motor cars: Individually and commercially owned, registered: Passenger cars, busses, and taxis	Number of motor cars: Individually and commercially owned, registered: Trucks and road tractors	Number of motor cars: Tax-exempt official motor cars	Trailers, registered [1]	Motor cycles, registered and official combined	Receipts from motor-vehicle administration: Total receipts [2]	Receipts from motor-vehicle administration: Registration motor cars [3]	Amount applied to rural highway work
							Thousands of dollars		
Continental U. S.	[4] 24,629,921	21,379,125	3,113,999	[4] 136,797	148,169	121,656	322,630	258,528	301,105
New England	1,528,029	1,311,138	212,160	4,731	2,663	13,832	30,494	24,192	28,404
Maine	174,028	139,460	33,178	1,390	1,068	1,204	2,764	2,147	2,403
New Hampshire	102,666	88,594	14,050	22	545	1,330	2,071	1,074	1,906
Vermont	86,259	78,685	7,546	28	218	521	2,091	1,784	2,091
Massachusetts	726,351	637,153	89,142	556	547	6,856	13,920	11,128	12,568
Rhode Island	126,439	106,155	19,543	741	61	1,166	2,274	1,832	2,062
Connecticut	311,786	261,091	48,701	1,994	224	2,665	7,374	5,627	7,374
Middle Atlantic	4,509,795	3,811,254	673,326	25,216	13,429	37,088	74,990	61,778	65,997
New York	2,099,761	1,760,549	323,393	15,819	7,148	15,802	34,307	31,084	29,197
New Jersey	765,501	629,748	128,682	7,071	1,996	7,479	13,569	9,934	12,419
Pennsylvania	1,644,533	1,420,957	221,250	2,326	4,285	13,807	27,114	20,760	24,381
East North Central	5,992,104	5,203,072	766,148	22,884	49,842	24,974	63,946	50,969	61,906
Ohio	1,662,158	1,450,994	198,705	12,459	14,606	9,472	11,840	11,266	11,454
Indiana	831,521	706,713	117,093	7,715	7,884	3,124	5,752	5,348	5,503
Illinois	1,505,338	[5] 1,314,008	[5] 190,350	979	3,742	5,826	15,522	14,579	15,486
Michigan	1,249,592	[5] 1,084,615	[5] 164,606	371	23,198	3,686	20,057	18,367	19,328
Wisconsin	743,495	646,747	95,388	1,360	412	2,866	10,775	10,409	10,135
West North Central	3,421,691	3,045,868	364,189	11,634	9,462	8,386	43,583	53,863	42,322
Minnesota	674,978	583,789	89,784	1,405	3,894	2,083	10,102	10,011	10,102
Iowa	736,710	672,447	61,019	3,244	230	1,728	10,693	10,134	10,436
Missouri	714,748	636,717	76,248	1,783	2,004	1,824	8,766	--------	8,396
North Dakota	173,528	151,778	21,747	3	--------	236	1,775	1,760	[6] 1,605
South Dakota	192,404	171,067	20,307	1,030	--------	230	2,902	2,872	2,842
Nebraska	392,869	358,173	33,182	1,514	2,975	1,026	3,951	3,729	3,833
Kansas	536,454	[5] 471,897	[5] 61,902	2,655	359	1,259	5,394	5,377	5,108
South Atlantic	2,455,079	2,139,322	288,854	26,903	7,627	11,733	31,660	23,369	28,737
Delaware	51,254	[5] 41,195	[5] 10,015	44	301	345	929	745	929
Maryland	288,780	275,221	10,090	3,469	683	2,232	3,035	2,381	2,124
Dist. Columbia	129,581	112,505	14,051	3,025	--------	1,292	474	135	--------
Virginia	364,748	306,911	53,634	4,203	646	2,271	5,572	5,169	5,312
West Virginia	253,683	215,787	35,769	2,127	600	1,479	4,143	3,807	3,903
North Carolina	471,005	418,864	45,512	6,629	1,944	1,244	6,088	--------	5,788
South Carolina	219,550	194,267	22,538	2,745	1,637	432	2,441	2,282	2,415
Georgia	319,790	277,881	40,975	934	816	1,078	4,042	3,976	3,899
Florida	356,688	296,691	56,270	3,727	[7] 1,000	1,360	4,936	4,874	4,367
East South Central	1,148,457	1,016,721	125,408	6,328	4,371	2,547	15,079	4,582	14,482
Kentucky	306,231	272,636	31,595	2,000	(1)	808	4,725	4,582	4,530
Tennessee	325,558	294,305	27,832	3,421	(1)	1,059	4,066	--------	3,957
Alabama	270,352	235,026	34,493	833	1,952	611	3,474	--------	3,322
Mississippi	246,316	214,754	31,488	74	2,919	69	2,814	--------	2,673
West South Central	2,227,498	1,930,303	293,061	4,134	18,009	5,599	32,130	24,970	31,554
Arkansas	215,821	181,280	33,651	890	2,054	369	3,786	3,706	3,710
Louisiana	264,502	223,445	40,848	209	4,000	625	4,384	4,303	4,384
Oklahoma	530,373	465,550	64,293	530	--------	1,124	6,259	--------	6,259
Texas	1,216,802	1,060,028	154,269	2,505	11,955	3,481	17,701	16,961	17,201
Mountain	867,730	766,589	94,529	6,312	1,676	3,116	7,463	4,840	6,976
Montana	127,506	104,231	21,804	1,471	--------	185	1,299	--------	1,190
Idaho	109,488	96,960	11,194	1,334	264	424	1,627	1,578	1,627
Wyoming	56,841	48,760	7,576	505	--------	128	573	570	573
Colorado	285,150	260,906	23,961	283	85	1,234	1,790	1,659	1,624
New Mexico	66,638	63,743	1,994	901	340	250	628	599	557
Arizona	95,533	86,036	8,336	1,161	809	281	566	434	566
Utah	98,714	84,220	14,321	173	--------	520	731	--------	601
Nevada	27,860	21,733	5,643	484	178	94	249	--------	238
Pacific	2,471,679	2,154,858	296,025	20,796	40,590	14,381	23,289	20,946	20,731
Washington	407,493	344,977	57,898	4,618	2,279	2,737	7,028	6,368	6,241
Oregon	249,553	227,404	20,714	1,435	1,238	2,046	6,969	6,720	6,669
California	1,814,633	1,582,477	217,413	14,743	37,073	9,598	9,292	7,858	7,821

[1] Some States include trailers with trucks, as noted; other States do not register trailers.
[2] Includes registration fees, licenses, permits, fines, etc.; excludes gasoline taxes.
[3] Totals include only the States shown; separate data not available for 9 States.
[4] Includes 7,859 "cars at large" not allocated to any State.
[5] Busses included with trucks.
[6] Includes $130,000 for State bridge fund.
[7] Estimated.

Source: Bureau of Public Roads, Department of Agriculture.

No. 416.—AUTOMOBILE FATALITIES IN ENTIRE DEATH REGISTRATION AREA IN CONTINENTAL UNITED STATES

NOTE.—Figures include all deaths from accidents caused by motor vehicles except motor cycles, but exclude deaths from collisions of automobiles with railroad trains and street cars.

Year	Entire registration area			Registration States				
	Population	Number of deaths	Rate per 100,000 population	Population	Number of deaths	Rate per 100,000 population	Number of cars registered	Deaths per 100,000 cars
1911	59,183,071	1,291	2.2	54,285,189	1,150	2.2		
1912	60,359,974	1,758	2.9	55,188,437	1,563	2.8		
1913	63,200,625	2,488	3.9	58,236,115	2,241	3.8	882,911	253.8
1914	65,813,315	2,826	4.3	60,943,063	2,571	4.2	1,234,844	208.2
1915	67,095,681	3,978	5.9	61,881,753	3,589	5.8	1,775,064	202.2
1916	71,349,162	5,193	7.3	66,371,691	4,737	7.1	2,511,805	188.6
1917	74,984,498	6,724	9.0	69,646,824	6,064	8.7	3,530,268	171.8
1918	81,333,675	7,525	9.3	79,536,574	7,310	9.2	4,715,317	155.0
1919	85,166,043	7,968	9.4	83,612,508	7,771	9.3	5,922,572	131.2
1920	87,486,713	9,103	10.4	86,043,627	8,878	10.3	7,440,420	119.3
1921	88,667,602	10,168	11.5	87,183,738	9,903	11.4	8,578,536	115.4
1922	93,241,643	11,666	12.5	91,959,620	11,466	12.5	10,374,993	110.5
1923	96,986,371	14,411	14.9	95,613,844	14,157	14.8	13,359,965	106.0
1924	99,200,298	15,528	15.7	97,667,916	15,221	15.6	15,713,654	96.9
1925	103,108,000	17,571	17.0	101,319,000	17,149	16.9	17,892,640	95.8
1926	105,167,000	18,871	17.9	103,284,000	18,419	17.8	19,838,947	92.8
1927	108,327,000	21,160	19.5	106,510,200	20,704	19.4	21,084,564	98.2

Year	Rural area of registration States			Cities in registration States			Cities in nonregistration States		
	Population	Number of deaths	Rate per 100,000 population	Population	Number of deaths	Rate per 100,000 population	Population	Number of deaths	Rate per 100,000 population
1911	26,901,350	306	1.1	27,383,839	844	3.1	4,807,882	141	2.9
1912	27,144,493	442	1.6	28,043,944	1,121	4.0	5,171,537	195	3.8
1913	29,108,597	687	2.4	29,126,518	1,554	5.3	4,965,510	247	5.0
1914	30,829,210	896	2.9	30,114,453	1,675	5.6	4,869,552	255	5.2
1915	31,078,193	1,226	3.9	30,803,560	2,363	7.7	5,213,928	389	7.5
1916	34,752,780	1,684	4.8	31,618,911	3,053	9.7	4,977,471	456	9.2
1917	36,928,787	2,174	5.9	32,718,037	3,890	11.9	5,337,674	660	12.4
1918	41,844,499	2,368	5.7	37,692,075	4,942	13.1	1,797,101	215	12.0
1919	44,664,983	2,508	5.6	38,947,525	5,263	13.5	1,553,535	197	12.7
1920	44,310,060	2,757	6.2	41,733,567	6,121	14.7	1,443,086	225	15.6
1921	44,572,803	3,368	7.6	42,610,935	6,535	15.3	1,483,864	265	17.9
1922	47,859,762	4,020	8.4	44,099,858	7,446	16.9	1,282,023	200	15.6
1923	49,882,530	5,209	10.4	45,731,314	8,948	19.6	1,372,527	254	18.5
1924	51,208,182	5,668	11.1	46,459,734	9,553	20.6	1,532,382	307	20.0
1925	53,779,000	6,509	12.1	47,540,000	10,640	22.4	1,789,000	422	23.6
1926	54,663,900	7,348	13.4	48,620,300	11,071	22.8	1,883,300	452	24.0
1927	56,717,500	8,452	14.9	49,792,700	12,252	24.6	1,816,500	456	25.1

Sources: Bureau of the Census, Department of Commerce, and Bureau of Public Roads, Department of Agriculture.

No. 417.—AUTOMOBILE FATALITIES IN STATES AND LARGE CITIES HAVING DEATH REGISTRATION

NOTE.—Figures include all deaths from accidents caused by motor vehicles except motor cycles, but exclude deaths from collisions of automobiles with railroad trains and street cars. See Table 81 for per cent of total population included in the registration area for each year

State	Number of deaths						Rate per estimated 100,000 population					
	1921–1925, average	1923	1924	1925	1926	1927	1921–1925, average	1923	1924	1925	1926	1927
Registration area in continental United States	13,869	14,411	16,528	17,571	18,871	21,160	14.4	14.9	15.7	17.0	17.9	19.5
Registration States[1]	13,579	14,157	15,221	17,149	18,419	20,704	14.2	14.8	15.6	16.9	17.8	19.4
Cities[1]	8,624	8,948	9,553	10,640	11,071	12,252	19.0	19.6	20.6	22.4	22.8	24.6
Rural	4,955	5,209	5,668	6,509	7,348	8,452	9.9	10.4	11.1	12.1	13.4	14.9
Cities in nonregistration States	290	254	307	422	452	456	19.1	18.5	20.0	23.6	24.0	25.1
All registration cities[1]	8,914	9,202	9,860	11,062	11,523	12,708	18.9	19.5	20.5	22.4	22.8	24.6
REGISTRATION STATES												
Alabama	[2] 252	(3)	(3)	252	319	361	[2] 10.1	(3)	(3)	10.1	12.6	14.2
Arizona	(3)	(3)	(3)	(3)	116	140	(3)	(3)	(3)	(3)	26.1	30.5
Arkansas	(3)	(3)	(3)	(3)	(3)	170	(3)	(3)	(3)	(3)	(3)	8.8
California	1,131	1,239	1,254	1,327	1,464	1,628	29.0	32.6	32.0	31.7	33.9	36.7
Colorado	148	157	158	146	175	234	14.8	15.9	15.7	14.0	16.5	21.8
Connecticut	260	249	277	340	307	327	17.3	16.9	18.4	21.6	19.1	20.6
Delaware	36	55	46	37	50	62	15.5	23.9	19.8	15.5	20.8	25.5
Florida	217	170	242	449	515	425	18.6	16.2	19.7	35.5	39.1	31.2
Georgia	[4] 260	259	307	(5)	(5)	(5)	[4] 8.6	8.6	10.1	(5)	(5)	(5)
Idaho	[6] 46	51	54	56	77	76	[6] 9.5	10.8	11.2	11.0	14.8	14.2
Illinois	1,051	1,031	1,065	1,268	1,338	1,512	15.3	15.2	15.5	17.9	18.6	20.7
Indiana	399	433	480	500	547	665	13.2	14.4	15.8	16.4	17.5	21.1
Iowa	[7] 241	242	211	271	264	284	[7] 10.0	9.8	8.7	11.2	10.9	11.7
Kansas	193	217	169	240	241	253	10.7	12.1	9.4	13.2	13.2	13.8
Kentucky	167	166	197	237	277	299	6.8	6.7	8.0	9.4	11.0	11.8
Louisiana	162	158	210	241	271	295	8.7	8.5	11.3	12.7	14.1	15.3
Maine	83	91	91	98	100	112	10.6	11.7	11.7	12.5	12.7	14.1
Maryland	232	243	246	271	312	330	15.3	16.1	16.2	17.4	19.7	20.7
Massachusetts	609	611	685	729	682	696	15.1	15.2	16.7	17.6	16.2	16.4
Michigan	714	738	863	955	1,112	1,266	17.6	18.6	21.2	22.3	25.3	28.2
Minnesota	306	328	366	361	326	369	12.1	13.1	14.5	13.8	12.3	13.7
Mississippi	96	78	125	170	215	243	5.4	4.4	7.0	9.5	12.0	13.6
Missouri	391	398	449	509	493	517	11.3	11.6	13.0	14.6	14.1	14.7
Montana	60	49	69	84	93	73	9.6	8.0	11.0	12.5	13.4	10.2
Nebraska	119	123	113	125	154	198	8.9	9.2	8.4	9.1	11.1	14.2
New Hampshire	59	59	61	87	68	71	13.1	13.2	13.6	19.2	15.0	15.6
New Jersey	643	672	746	771	792	973	18.7	19.9	21.7	21.4	21.5	26.0
New York	1,889	1,930	1,985	2,111	2,178	2,334	17.4	17.8	18.0	18.9	19.3	20.9
North Carolina	254	258	328	376	455	503	9.3	9.6	12.0	13.4	15.9	17.4
North Dakota	[8] 52	(3)	45	59	70	72	[8] 8.1	(3)	7.0	9.2	10.9	11.2
Ohio	988	1,078	1,024	1,285	1,317	1,494	15.9	17.6	16.5	19.9	20.9	22.3
Oregon	125	120	144	144	187	194	15.0	14.6	17.3	16.7	21.3	21.8
Pennsylvania	1,405	1,592	1,535	1,576	1,734	1,860	15.3	17.5	16.7	16.6	18.0	19.1
Rhode Island	104	97	113	133	127	131	15.9	15.5	16.9	19.6	18.3	18.6
South Carolina	123	119	167	179	192	279	7.0	6.8	9.5	9.9	10.5	15.1
Tennessee	195	171	232	278	312	345	8.1	7.1	9.6	11.4	12.6	13.9
Utah	68	60	81	89	80	79	14.0	12.6	16.7	17.7	15.6	15.1
Vermont	42	46	48	56	45	60	11.9	13.1	13.6	15.9	12.8	17.0
Virginia	198	200	240	271	303	376	8.2	8.3	9.9	10.9	12.0	14.8
Washington	236	240	265	299	342	365	16.2	16.7	18.2	19.8	22.2	23.4
West Virginia	[2] 208	(3)	(3)	208	231	298	[2] 12.7	(3)	(3)	12.7	13.8	17.6
Wisconsin	306	292	363	397	384	511	11.1	10.7	13.1	13.9	13.3	17.5
Wyoming	[6] 51	51	59	67	56	66	[6] 23.3	24.1	27.2	29.3	23.7	27.4
REGISTRATION CITIES												
Akron	39	40	39	60	62	75	[9] 13.5	(10)	(10)	(10)	(10)	(10)
Albany	28	27	28	35	41	36	23.9	23.0	23.9	29.7	34.5	30.1
Atlanta	53	55	53	65	68	65	[11] 22.7	24.7	(10)	(10)	27.9	26.1
Baltimore	130	131	129	158	178	171	16.8	16.9	16.4	19.8	22.0	20.9
Birmingham	46	49	55	51	57	51	23.5	25.0	27.4	24.8	27.1	23.4
Boston	132	133	143	154	149	140	7.2	17.3	18.4	19.8	18.9	17.7
Bridgeport	25	23	21	26	31	25	[9] 19.4	(10)	(10)	(10)	(10)	(10)

For footnotes see following page.

No. 417.—AUTOMOBILE FATALITIES IN STATES AND LARGE CITIES HAVING DEATH REGISTRATION—Continued

City	Number of deaths						Rate per estimated 100,000 population					
	1921–1925, average	1923	1924	1925	1926	1927	1921–1925, average	1923	1924	1925	1926	1927
Buffalo	111	137	112	119	135	137	20.9	25.5	21.0	22.1	24.8	24.9
Cambridge	22	28	27	22	19	28	19.3	25.1	22.8	18.4	15.6	22.0
Camden	37	44	36	43	59	65	29.8	35.4	28.5	33.3	45.1	48.8
Chicago	597	589	560	645	693	787	20.7	20.4	19.0	21.5	22.7	25.4
Cincinnati	91	102	85	115	109	119	22.4	25.1	20.8	28.1	26.5	28.9
Cleveland	189	203	220	231	265	250	21.4	22.8	24.1	24.7	27.6	25.4
Columbus	54	58	59	71	70	72	20.6	22.2	22.0	25.4	24.5	24.7
Dallas	37	34	36	59	61	49	20.4	18.7	19.2	30.4	30.1	23.2
Dayton	28	27	26	44	52	44	16.9	16.3	15.4	25.4	29.4	24.3
Denver	44	45	40	37	48	61	16.2	(10)	15.6	13.2	16.8	21.0
Des Moines	[7] 19	18	17	23	30	30	[7] 13.5	12.8	12.1	16.3	20.6	20.1
Detroit	242	252	305	346	399	403	22.3	(10)	25.5	27.8	30.9	30.2
Fall River	16	22	16	17	19	11	12.9	18.2	12.5	13.2	14.5	8.3
Fort Worth	[6] 21	9	27	32	30	31	[6] 14.8	6.3	18.2	20.6	18.8	18.9
Grand Rapids	28	27	31	45	32	35	19.0	18.5	20.9	29.2	20.5	21.6
Hartford	38	40	33	53	46	49	26.0	26.3	21.1	33.1	28.0	29.1
Houston	28	25	31	31	40	57	[9] 17.6	(10)	22.4	(10)	(10)	(10)
Indianapolis	58	53	71	78	83	84	16.9	15.5	20.2	21.7	22.6	22.4
Jersey City	46	37	56	64	41	65	14.9	12.0	17.9	20.3	12.9	20.2
Kansas City, Kans.	17	12	18	27	8	20	15.0	10.4	15.6	23.3	6.8	17.0
Kansas City, Mo.	78	86	87	87	82	80	22.2	24.4	24.2	23.7	21.8	20.9
Los Angeles	220	224	267	258	286	353	[9] 28.3	(10)	(10)	(10)	(10)	(10)
Louisville	53	66	58	64	64	81	19.7	25.6	19.8	21.2	20.6	25.3
Lowell	19	18	23	26	22	16	16.8	15.6	20.8	23.6	19.9	14.5
Memphis	41	46	40	52	57	68	24.1	27.0	23.2	29.7	32.3	38.0
Milwaukee	73	62	83	102	101	121	15.0	12.8	16.8	20.0	19.5	22.6
Minneapolis	68	60	86	76	69	64	16.6	14.7	20.6	17.9	15.9	14.3
Nashville	29	28	34	38	39	46	23.4	22.8	27.5	27.9	28.5	33.4
New Bedford	14	8	13	18	11	16	11.3	6.2	10.0	15.1	9.2	13.4
New Haven	34	28	48	40	42	48	19.7	16.2	27.3	22.3	23.1	26.0
New Orleans	64	68	84	78	85	96	15.8	16.8	20.5	18.8	20.3	22.6
New York	961	964	1,000	1,060	1,082	1,099	16.4	16.3	17.2	18.0	18.3	18.4
Newark, N. J.	94	107	104	110	109	122	21.4	24.4	23.3	24.3	23.7	26.1
Norfolk	17	13	16	24	25	35	11.5	8.2	(10)	14.2	14.4	19.5
Oakland	44	50	49	44	51	53	18.3	20.8	19.8	17.3	19.6	19.8
Omaha	30	40	29	35	33	49	14.7	19.6	13.9	16.5	15.3	22.4
Paterson	39	39	49	41	34	52	27.9	27.9	34.8	28.9	23.8	36.2
Philadelphia	262	294	263	296	329	324	13.6	15.3	13.5	15.0	16.4	15.9
Pittsburgh	146	146	186	166	163	215	23.6	23.5	29.7	26.3	25.6	32.3
Portland, Oreg.	40	39	41	42	52	62	[12] 14.8	14.3	14.7	(10)	(10)	(10)
Providence	56	52	58	79	61	64	22.3	21.5	22.0	29.5	22.2	22.8
Reading	20	27	24	19	19	30	18.0	24.3	21.5	16.8	16.7	26.2
Richmond	28	26	33	41	37	46	15.5	14.4	18.0	22.0	19.6	24.0
Rochester	48	44	48	54	65	62	15.3	13.8	15.3	17.0	20.3	19.1
St. Louis	164	168	197	201	172	159	20.4	20.9	24.2	24.5	20.7	18.9
St. Paul	45	59	55	42	40	57	18.6	24.4	22.5	17.1	18.5	22.8
Salt Lake City	28	20	34	42	33	30	22.2	15.8	26.4	32.1	24.7	22.1
San Antonio	30	30	22	39	40	48	16.2	16.2	11.5	19.7	19.5	22.7
San Francisco	107	107	113	105	128	166	19.9	19.9	20.6	18.8	22.6	28.8
Scranton	30	41	24	33	32	34	21.3	29.2	17.0	23.2	22.4	23.6
Seattle	52	55	53	66	69	79	[9] 13.9	(10)	(10)	(10)	(10)	21.0
Spokane	17	15	22	21	27	21	16.2	(10)	21.0	19.3	24.8	19.3
Springfield, Mass.	22	23	27	21	38	24	15.6	15.9	19.2	14.8	26.2	16.3
Syracuse	37	43	41	29	44	43	20.4	23.3	22.7	15.9	23.7	21.8
Toledo	52	63	46	67	74	108	19.3	23.4	16.4	23.3	25.1	35.4
Trenton	32	36	34	39	33	40	25.2	28.3	26.2	29.5	24.6	29.3
Washington, D. C.	80	86	108	88	98	108	17.2	18.1	22.2	17.1	18.6	20.0
Wilmington, Del.	21	29	29	21	29	40	17.8	24.6	24.2	17.2	23.3	31.6
Worcester	33	33	29	40	32	46	17.5	17.2	15.3	21.0	16.5	23.5
Yonkers	16	17	16	15	19	25	14.8	15.8	14.4	13.2	16.3	21.0
Youngstown	36	37	39	43	42	56	25.4	24.6	25.1	26.9	25.5	33.1

[1] Including the District of Columbia.
[2] 1925 only.
[3] Not added to registration area until a later date.
[4] Average, 1922–1924.
[5] State registration law declared unconstitutional.
[6] Average, 1922–1925.
[7] Average, 1923–1925.
[8] Average, 1924–1925.
[9] Average, 1921–1922.
[10] Estimates of population unsatisfactory.
[11] Average, 1921–1923.
[12] Average, 1921–1924.

Source: Bureau of the Census, Department of Commerce.

20.—STEAM AND ELECTRIC RAILWAYS AND EXPRESS COMPANIES

[Data in this section relate to continental United States unless otherwise stated]

GENERAL NOTE.—The total steam railroad mileage of the United States includes: (a) Regular interstate carriers (and their nonoperating subsidiaries) reporting to the Interstate Commerce Commission, (b) switching and terminal railroads, also reporting to the commission; and (c) private railroads (defined by the commission as "circular" because they report on brief circulars and as "unofficial"). Except in certain mileage data the circular and unofficial companies are not included in any of the statistics. The switching and terminal roads were formerly included with operating railways, but are now separated, and data for them do not appear in most of the tables.

Nonoperating subsidiaries include proprietary companies, which are covered by the reports of operating carriers, and lessor companies which have no traffic and whose reports appear only in statistics of capitalization, dividends, and investment.

Operating railways are divided into three classes, according to the amount of gross operating revenue in 1919: Class I, having more than $1,000,000 of such revenue; Class II, from $100,000 to $1,000,000; and Class III, less than $100,000. During recent years more detailed reports are required from Class I carriers than from smaller companies. The basis of the figures in each table is indicated by notes. Omission of Class II and Class III railroads affects very little the comparability of statistics with those of earlier years as regards most items, since the bulk of the business is done by Class I.

The Interstate Commerce Commission divides railroads geographically into three districts and eight subsidiary regions. Each railroad is treated as a unit and placed wholly in some one district or region. Broadly speaking, the eastern district includes territory east of Chicago and north of the Ohio and Potomac Rivers; southern district, territory east of the Mississippi River and south of the Ohio and Potomac Rivers; and western district the remainder of the country. The principal railroads of the eight regions are listed in Table 444.

Class I companies make monthly reports and the yearly totals from these become available earlier than the sometimes slightly corrected totals from the final annual reports. The latest figures in these tables are in many cases from the monthly reports.

No. 418.—RAILWAY MILEAGE OWNED AND MILEAGE OPERATED CLASSIFIED BY TRACKAGE

NOTE.—Beginning with 1908 switching and terminal roads are omitted (they operate about 2,000 miles of first main track). The first and second columns cover all railways including "circular" and "unofficial" lines; the last five columns omit "circular" and "unofficial" lines. Mileage owned excludes all duplication and covers continental United States only. Mileage operated includes some duplication under trackage rights and some mileage in Canada operated by United States companies

Year	Miles of road (first track) owned	Miles operated					
		All railways: Road (first track)	Reporting railways				Class I railways: Road (first track)
			Road (first track)	Other main tracks	Yard track and sidings	Total track	
June 30, 1890	163,597	167,191	156,404	9,760	33,711	199,875	----------
1895	180,657	184,628	177,746	12,348	43,181	233,275	----------
1900	193,346	198,964	192,556	14,075	52,153	258,784	----------
1905	218,101	225,196	216,974	19,881	69,942	306,797	----------
1910	240,293	249,992	240,831	25,354	85,582	351,767	----------
1911	243,979	254,732	246,238	27,612	88,974	362,824	216,877
1912	246,777	258,033	249,852	29,367	92,019	371,238	220,063
1913	249,777	261,036	253,470	30,827	95,211	379,508	224,236
1914	252,105	263,547	256,547	32,376	98,285	387,208	220,999
1915	253,789	264,378	257,569	33,662	99,910	391,141	228,989
Dec. 31, 1916	254,037	266,381	259,705	34,325	102,984	397,014	231,674
1917	253,626	266,015	259,705	35,066	105,582	400,353	232,697
1918	253,529	264,233	258,507	36,228	107,608	402,343	233,145
1919	253,152	263,707	258,525	36,730	108,637	403,892	234,363
1920	252,845	263,821	259,941	36,894	109,744	406,579	235,234
1921	251,176	262,544	258,362	37,614	111,555	407,531	234,702
1922	250,413	261,084	257,425	37,888	114,046	409,359	234,976
1923	250,222	262,482	258,084	38,697	116,212	412,993	235,574
1924	250,156	262,158	258,238	39,916	116,874	415,028	235,894
1925	249,398	261,871	258,631	40,962	118,361	417,954	236,849
1926	249,138	261,562	258,815	41,686	120,840	421,341	237,054
1927	249,131	262,091	259,639	42,071	123,027	424,737	238,634

Source: Interstate Commerce Commission.

No. 419.—RAILWAY MILEAGE OWNED: By States

NOTE.—See headnote to Table 418. The data are for the actual length of line in each State without duplication. Figures relate to June 30 prior to 1920 and Dec. 31 thereafter; they include reporting, circular, and unofficial railways, but since 1908 exclude switching and terminal roads

State	1860 [1]	1870 [1]	1880 [1]	1890	1900	1910 [2]	1920	1925	1926	1927
United States [3]	30,626	52,922	93,267	163,597	193,346	240,439	252,845	249,398	249,138	249,131
New England	3,660	4,494	5,982	6,718	7,521	7,921	7,942	7,754	7,655	7,636
Maine	472	786	1,005	1,338	1,915	2,248	2,295	2,228	2,218	2,198
New Hampshire	661	736	1,015	1,145	1,239	1,246	1,252	1,234	1,198	1,198
Vermont	554	614	914	921	1,012	1,100	1,077	1,057	1,057	1,057
Massachusetts	1,264	1,480	1,915	2,094	2,119	2,115	2,106	2,071	2,019	2,019
Rhode Island	108	136	210	213	212	212	211	196	196	196
Connecticut	601	742	923	1,007	1,024	1,000	1,001	968	967	968
Middle Atlantic	5,640	9,709	13,332	18,161	20,709	21,980	22,293	22,003	21,986	21,919
New York	2,682	3,928	5,957	7,661	8,121	8,430	8,390	8,373	8,358	8,364
New Jersey	560	1,125	1,684	2,047	2,257	2,260	2,352	2,292	2,297	2,294
Pennsylvania	2,598	4,656	6,191	8,453	10,331	11,290	11,551	11,338	11,331	11,261
South Atlantic	5,976	7,349	9,789	18,270	23,362	29,795	32,380	31,935	31,925	31,860
Delaware	127	197	275	323	347	335	335	332	332	332
District of Columbia	(4)	(4)	(4)	30	32	36	36	37	36	36
Maryland	386	671	1,040	1,231	1,376	1,426	1,436	1,447	1,447	1,447
Virginia	1,379	1,486	1,803	3,160	3,779	4,535	4,703	4,554	4,548	4,528
West Virginia	352	387	691	1,328	2,228	3,601	3,996	4,038	4,024	4,007
North Carolina	937	1,178	1,486	3,001	3,831	4,932	5,522	5,347	5,308	5,223
South Carolina	973	1,139	1,427	2,194	2,818	3,442	3,814	3,748	3,745	3,744
Georgia	1,420	1,845	2,459	4,532	5,652	7,056	7,326	6,980	6,932	6,835
Florida	402	446	518	2,471	3,299	4,432	5,212	5,452	5,553	5,708
East North Central	9,583	14,701	25,109	36,924	41,007	44,928	44,904	43,843	43,740	43,684
Ohio	2,946	3,538	5,792	7,912	8,807	9,134	9,002	8,812	8,825	8,881
Indiana	2,163	3,177	4,373	5,971	6,471	7,420	7,426	7,187	7,187	7,182
Illinois	2,790	4,823	7,851	10,214	11,003	11,878	12,188	11,994	11,997	12,004
Michigan	779	1,638	3,938	7,243	8,195	9,021	8,734	8,349	8,356	8,261
Wisconsin	905	1,525	3,155	5,584	6,531	7,475	7,554	7,501	7,375	7,356
West North Central	1,472	8,646	19,094	38,354	42,988	49,730	52,180	51,656	51,722	51,950
Minnesota	--------	1,092	3,151	5,466	6,943	8,669	9,114	8,787	8,790	8,827
Iowa	655	2,683	5,400	8,356	9,185	9,755	9,808	9,814	9,811	9,760
Missouri	817	2,000	3,965	6,004	6,875	8,083	8,117	8,051	8,022	8,018
North Dakota	--------	[5] 65	[5] 1,225	1,941	2,731	4,201	5,311	5,277	5,274	5,274
South Dakota	--------	(6)	(6)	2,486	2,860	3,948	4,276	4,245	4,245	4,235
Nebraska	--------	705	1,953	5,295	5,685	6,067	6,166	6,189	6,201	6,174
Kansas	--------	1,501	3,400	8,806	8,719	9,007	9,388	9,493	9,379	9,362
South Central	3,392	4,656	6,343	11,144	13,343	17,074	17,754	17,492	17,422	17,563
Kentucky	534	1,017	1,530	2,746	3,060	3,526	3,929	4,005	4,010	4,049
Tennessee	1,253	1,492	1,843	2,752	3,137	3,816	4,078	4,063	4,059	4,063
Alabama	743	1,157	1,843	3,314	4,226	5,226	5,378	5,254	5,184	5,185
Mississippi	862	990	1,127	2,332	2,920	4,506	4,369	4,170	4,169	4,266
West South Central	680	1,417	5,044	13,732	18,221	31,122	32,972	32,588	32,563	32,694
Louisiana	335	450	652	1,759	2,824	5,554	5,223	4,868	4,828	4,790
Texas	307	711	3,244	8,613	9,886	14,282	16,125	16,198	16,266	16,429
Oklahoma	--------	--------	239	1,214	2,151	5,930	6,572	6,621	6,581	6,602
Arkansas	38	256	859	2,196	3,360	5,306	5,052	4,901	4,888	4,873
Mountain	--------	1,466	5,082	12,676	15,608	22,956	25,170	24,723	24,900	24,942
Montana	--------	--------	106	2,181	3,010	4,207	5,072	5,037	5,095	5,094
Wyoming	--------	459	512	942	1,229	1,645	1,931	1,992	1,994	1,988
Colorado	--------	157	1,570	4,176	4,587	5,533	5,519	5,077	5,011	5,063
New Mexico	--------	--------	758	1,324	1,753	3,032	2,972	2,998	2,998	2,998
Arizona	--------	--------	349	1,097	1,512	2,097	2,478	2,378	2,496	2,496
Utah	--------	257	842	1,090	1,547	1,986	2,161	2,189	2,190	2,194
Nevada	--------	593	739	925	909	2,277	2,160	2,137	2,207	2,200
Idaho	--------	--------	206	941	1,261	2,179	2,877	2,915	2,909	2,909
Pacific	23	1,084	2,992	7,567	10,389	14,932	17,248	17,204	17,225	17,183
Washington	--------	--------	289	1,783	2,914	4,875	5,587	5,559	5,555	5,557
Oregon	--------	159	508	1,428	1,724	2,285	3,305	3,357	3,393	3,362
California	23	925	2,195	4,356	5,751	7,772	8,356	8,288	8,277	8,264
Alaska Territory	--------	--------	--------	--------	22	300	246	801	790	793
Hawaii Territory	--------	--------	--------	--------	--------	175	243	252	255	256

[1] Represents mileage operated.
[2] Revised total 240,293 not distributed by States.
[3] Totals exclude Alaska and Hawaii.
[4] Included in returns for Maryland.
[5] Figures for Dakota.
[6] For total Dakota see North Dakota.

Source: Interstate Commerce Commission.

No. 420.—RAILWAY MILEAGE OWNED AND OPERATED

NOTE.—See note to Table 418. Since 1890 the columns correspond to the first and third columns of that table. The exact basis of the data prior to 1890 is not stated. For years 1842 to 1889 and 1916 to date data relate to Dec. 31; for years 1890 to 1915 data relate to June 30

Year	Owned	Operated	Year	Owned	Operated	Year	Owned	Operated
1842	----------	4,026	1886	----------	136,338	1907	229,951	227,455
1850	----------	9,021	1887	----------	149,214	1908	233,468	230,494
1855	----------	18,374	1888	----------	156,114	1909	236,834	235,402
1860	----------	30,626	1889	----------	161,276	1910	240,293	240,831
1865	----------	35,085	1890	163,597	156,404	1911	243,979	246,238
1870	----------	52,922	1891	168,403	161,275	1912	246,777	249,852
1871	----------	60,301	1892	171,564	162,397	1913	249,777	253,470
1872	----------	66,171	1893	176,461	169,780	1914	252,105	256,547
1873	----------	70,268	1894	178,709	175,691	1915	253,789	257,569
1874	----------	72,385	1895	180,657	177,746	1916	254,037	259,705
1875	----------	74,096	1896	182,777	181,983	1917	253,626	259,705
1876	----------	76,808	1897	184,428	183,284	1918	253,529	258,507
1877	----------	79,082	1898	186,396	184,648	1919	253,152	258,525
1878	----------	81,747	1899	189,295	187,535	1920	252,845	259,941
1879	----------	86,556	1900	193,346	192,556	1921	251,176	258,362
1880	----------	93,262	1901	197,237	195,562	1922	250,413	257,425
1881	----------	103,108	1902	202,472	200,155	1923	250,222	258,084
1882	----------	114,677	1903	207,977	205,314	1924	250,156	258,238
1883	----------	121,422	1904	213,904	212,243	1925	249,398	258,631
1884	----------	125,345	1905	218,101	216,074	1926	249,138	258,815
1885	----------	128,320	1906	224,363	222,340	1927	249,131	259,639

Source: Poor's Manual of Railroads prior to 1890; Interstate Commerce Commission thereafter.

No. 421.—MILEAGE OPERATED AND EQUIPMENT: CLASS I CARRIERS

NOTE.—Mileage operated includes some duplication due to trackage rights and some mileage in Canada operated by United States companies. For car equipment in detail see Table 425

Year ended Dec. 31	Mileage operated				Locomotives			Aggregate capacity of freight cars (1,000 tons)
	Road (first track)	Other main tracks	Yard track and sidings	Total track	Number, steam and electric	Tractive power, steam only		
						Aggregate (1,000 lbs.)	Average (lbs.)	
Total:								
1916	231,674	34,129	98,334	364,137	61,332	2,024,119	33,138	92,280
1920	235,234	36,737	105,408	377,379	64,746	2,340,761	36,365	98,343
1921	234,702	37,454	107,008	379,254	64,949	2,385,470	36,935	98,504
1922	234,976	37,704	109,463	382,143	64,512	2,401,452	37,441	98,847
1923	235,574	38,573	111,708	385,855	65,327	2,544,115	39,177	101,318
1924	235,894	39,735	112,253	387,882	65,358	2,593,178	39,891	104,149
1925	236,849	40,817	113,873	391,539	63,974	2,586,868	40,666	105,570
1926	237,054	41,537	116,353	394,944	62,761	2,611,238	41,886	105,953
1927	238,634	[1] 41,926	118,654	399,214	61,344	2,606,171	42,798	105,846
Eastern district:								
1916	59,175	20,879	40,056	120,110	28,179	958,339	34,333	47,185
1921	58,885	22,108	43,031	124,024	29,468	1,118,251	38,313	49,161
1923	59,302	22,404	44,820	126,526	29,479	1,193,235	40,888	49,633
1924	59,283	22,725	44,761	126,769	29,339	1,208,126	41,551	51,166
1925	59,249	22,882	45,054	127,185	28,409	1,193,573	42,406	51,449
1926	59,114	23,157	45,430	127,701	27,583	1,190,510	43,660	51,697
1927	59,135	23,264	45,869	128,268	26,915	1,181,792	44,475	51,597
Southern district:								
1916	42,753	3,940	15,695	62,388	9,754	323,023	33,165	15,633
1921	43,826	4,475	17,379	65,680	10,780	401,280	37,273	17,174
1923	43,894	4,694	18,188	66,776	10,893	428,896	39,435	17,818
1924	43,824	4,891	18,436	67,151	11,089	448,478	40,513	18,428
1925	44,241	5,707	19,199	69,147	11,158	457,579	41,112	18,968
1926	44,727	5,985	20,404	71,116	11,418	484,490	42,551	19,359
1927	45,416	6,075	20,815	72,306	11,229	483,124	43,155	19,424
Western district:								
1916	129,746	9,310	42,583	181,639	23,399	742,757	31,827	29,463
1921	131,991	10,871	46,698	189,550	24,701	865,939	35,155	32,169
1923	132,378	11,475	48,700	192,553	24,955	921,984	37,057	33,867
1924	132,787	12,119	49,056	193,962	24,930	936,574	37,674	34,555
1925	133,359	12,228	49,620	195,207	24,407	935,716	38,448	35,153
1926	133,213	12,395	50,519	196,127	23,760	936,238	39,524	34,897
1927	134,083	12,587	51,970	198,640	23,200	941,255	40,698	34,825

[1] Includes second track, 36,229 miles; third track, 3,129 miles; fourth and other, 2,568 miles.

Source: Interstate Commerce Commission.

No. 422.—MILEAGE OF ROAD AND TRACKS OPERATED: CLASS I CARRIERS, BY DISTRICTS

District and year ended Dec. 31	Total, all tracks	Road (first main track)	Second main track	Third main track	Fourth and other main tracks	Yard track and sidings	Electrified mileage			
							Total track	Road, (first main track)	Other main tracks	Yard track and sidings
All districts:										
1916	[1] 364,137	[1] 231,674	29,223	2,716	2,190	98,334	(2)	(2)	(2)	(2)
1920	[3] 377,379	[3] 235,234	31,512	2,936	2,289	105,408	3,132	1,449	900	783
1925	[4] 391,539	236,848	35,200	3,111	2,506	113,874	3,598	[5] 1,674	972	[5] 952
1927	[7] 399,214	238,634	36,229	3,129	2,568	118,654	4,066	[5] 1,854	1,146	[6] 1,066
Eastern district:										
1916	120,110	59,175	16,666	2,408	1,805	40,056	(2)	(2)	(2)	(2)
1927	128,268	59,135	18,524	2,699	2,041	45,869	2,141	622	888	631
Southern district:										
1916	62,389	42,753	3,725	43	173	15,695	(2)	(2)	(2)	(2)
1927	72,306	45,416	5,627	126	322	20,815	625	270	176	179
Western district:										
1916	181,638	129,746	8,832	265	212	42,583	(2)	(2)	(2)	(2)
1927	198,640	134,083	12,078	304	205	51,970	1,300	962	82	256

[1] Includes 2,097 miles in Canada and 52 miles in Mexico.
[2] Data not available.
[3] Includes 1,949 miles in Canada.
[4] Includes 20,407 miles of industrial tracks; also 3,087 miles in Canada, consisting of 1,906 miles of road, 502 miles of second main track, 67 miles of industrial tracks, and 612 miles of yard track and sidings.
[5] Does not include 43 miles in 1925 and 29 miles in 1927 of electric street railways operated by Boston & Maine R. R.
[6] Includes 45 miles of industrial tracks in 1925 and 39 miles in 1927.
[7] Includes 21,403 miles of industrial tracks; also 2,929 miles in Canada consisting of 1,754 miles of road, 501 miles of second main track, 74 miles of industrial tracks, and 501 miles of yard track and sidings.

Source: Interstate Commerce Commission.

No. 423.—RAILWAY EQUIPMENT INSTALLED AND RETIRED FROM SERVICE: CLASS I CARRIERS

Year ended—	Locomotives		Freight-train cars		Passenger-train cars	
	Number installed	Number retired	Number installed	Number retired	Number installed	Number retired
June 30:						
1907	3,774	36	192,896	1,541	1,989	41
1908	3,227	1,140	171,556	70,976	2,183	1,630
1909	1,549	1,333	67,925	83,223	1,786	1,591
1910	3,073	1,452	134,503	75,652	3,505	1,914
1911	3,694	1,468	125,582	68,031	4,250	1,701
1912	2,861	1,858	97,972	69,876	3,060	1,387
1913	4,381	2,338	162,670	96,825	2,823	1,842
1914	3,245	1,862	150,813	96,985	3,629	1,854
1915	1,114	1,507	86,012	90,347	2,664	1,385
1916	1,475	2,576	88,254	109,996	1,261	2,156
Dec. 31:						
1917	2,148	1,423	117,210	62,253	2,535	1,671
1918	2,803	977	65,249	56,024	1,817	1,051
1919	2,062	999	76,019	43,274	435	670
1920	1,017	1,254	36,044	75,197	621	885
1921	1,330	1,130	63,406	69,245	1,681	929
1922	1,226	1,682	105,394	126,471	1,328	1,286
1923	4,360	3,746	232,060	213,789	2,658	2,360
1924	2,786	2,529	156,572	118,590	2,755	2,295
1925	1,600	2,873	139,083	128,573	3,230	3,569
1926	1,882	3,105	93,369	103,152	3,455	3,309
1927	1,542	2,976	73,254	96,991	2,646	3,612

Source: Interstate Commerce Commission.

No. 424.—RAILWAY EQUIPMENT IN SERVICE, ALL REPORTING COMPANIES

NOTE.—"All reporting companies" include switching and terminal but not circular and unofficial lines. Data for tractive power and capacity of cars exclude switching roads beginning with 1908 and smaller roads during recent years; they would not be materially different if all carriers were included. The large number of cars owned by private car lines is not included

Year	Locomotives					Freight-train cars [1]			Passenger train cars
	Total number	Steam			Electric, number	Total number	Capacity		
		Number	Tractive capacity				Aggregate (1,000 tons)	Average (tons)	
			Aggregate (1,000 lbs.)	Average (lbs.)					
June 30, 1890	[2] 30,140	-------	-------	-------	-------	918,491	-------	-------	26,820
1895	35,699	-------	-------	-------	-------	1,196,110	-------	-------	33,112
1900	37,663	-------	-------	-------	-------	1,365,531	-------	-------	34,713
1905	48,357	-------	1,128,771	23,666	-------	1,731,409	53,255	30.8	40,713
1910	60,019	-------	1,588,894	27,282	-------	2,148,478	76,579	35.9	47,179
1915	66,502	66,229	[2] 2,014,201	[2] 31,546	273	2,341,567	[3] 92,238	[3] 39.6	55,810
Dec. 31, 1916	65,595	65,253	[2] 2,066,166	[2] 32,890	342	2,329,475	[3] 94,441	[3] 40.8	55,193
1917	66,070	65,699	[4] 2,087,950	[4] 33,932	371	2,379,472	[4] 95,467	[4] 41.5	55,939
1918	67,936	67,563	[4] 2,223,246	[4] 34,995	373	2,397,943	[4] 96,767	[4] 41.6	56,611
1919	68,977	68,592	[4] 2,312,634	[4] 35,789	385	2,426,389	[4] 99,001	[4] 41.9	56,290
1920	68,942	68,554	[4] 2,340,761	[4] 36,365	388	2,388,424	[4] 98,343	[4] 42.4	56,102
1921	69,122	68,733	[4] 2,385,470	[4] 36,935	389	2,373,510	[4] 98,504	[4] 42.5	56,950
1922	68,518	68,121	[4] 2,401,452	[4] 37,441	397	2,352,483	[4] 98,847	[4] 43.1	56,827
1923	69,414	69,005	[4] 2,544,115	[4] 39,177	409	2,379,131	[4] 101,318	[4] 43.8	57,159
1924	69,486	69,114	[4] 2,593,178	[4] 39,891	372	2,411,627	[4] 104,149	[4] 44.3	57,451
1925	68,092	67,713	[4] 2,586,808	[4] 40,666	379	2,414,083	[4] 105,570	[4] 44.8	56,814
1926	66,816	66,381	[4] 2,611,238	[4] 41,886	435	2,403,967	[4] 105,953	[4] 45.1	56,855
1927	65,348	64,843	[4] 2,606,171	[4] 42,798	467	2,378,800	[4] 105,846	[4] 45.5	55,729

[1] Excludes caboose cars.
[2] Class I, Class II, and Class III roads.
[3] Class I and Class II roads.
[4] Class I roads.

No. 425.—CLASSIFICATION OF RAILWAY CARS IN SERVICE

NOTE.—Data relate to June 30 prior to 1910 and Dec. 31 thereafter. Figures for "All operating companies" include switching and terminal companies but not circular and unofficial lines. Cars owned by private car lines, roughly equaling one-tenth of those owned by railway companies, are not included

	All operating companies					Class I, 1927			
	1910	1915	1920	1925	1927	Total	Eastern district	Southern district	Western district
Freight cars [1]	2,148,478	2,341,567	2,388,424	2,414,083	2,378,800	2,324,799	1,075,259	423,712	825,828
Box	966,603	1,041,695	1,050,514	1,086,562	1,075,398	1,066,365	455,301	169,062	442,002
Flat	153,958	146,343	117,604	113,562	109,999	99,962	21,826	22,803	55,333
Stock	78,811	86,326	81,678	87,452	84,224	83,619	14,858	8,161	60,600
Coal	818,731	910,637	968,034	979,483	964,980	940,488	555,805	209,984	174,699
Tank	7,434	10,165	11,130	12,151	11,578	10,234	308	22	9,954
Refrigerator	30,918	52,446	60,768	49,488	44,907	44,225	4,874	6,230	33,121
Other	78,666	93,955	92,696	85,385	87,714	79,856	22,287	7,450	50,119
Steel [2]	(3)	501,309	630,150	757,065	799,820	799,820	530,644	144,573	124,603
Steel underframe [2]	(3)	676,176	886,296	1,056,125	1,086,982	1,086,982	464,438	190,920	431,624
Caboose cars	27,224	28,965	29,575	31,325	31,064	30,050	12,803	5,829	11,418
Passenger-train cars	[4] 47,179	55,810	56,102	56,814	55,729	53,822	26,620	8,411	18,791
Coaches	25,881	30,135	29,343	28,744	27,696	26,765	13,965	4,035	8,765
Combination	5,697	8,847	8,570	8,624	8,521	7,765	3,290	1,346	3,129
Emigrant	97	50	11	7	1	1	1	-------	-------
Parlor	634	651	574	502	468	459	90	70	299
Sleeping	490	750	558	377	256	253	-------	7	246
Baggage and express	[5] 11,524	9,938	12,101	13,174	13,219	13,078	6,751	1,881	4,446
Postal	(5)	1,566	1,243	1,092	1,011	1,007	382	188	437
Other	2,752	3,873	3,702	4,294	4,557	4,494	2,141	884	1,469
Steel [2]	(3)	10,859	15,111	21,190	25,342	25,342	14,173	3,314	7,855
Steel underframe [2]	(3)	5,160	6,573	9,369	9,677	9,677	5,409	1,521	2,747
Company service equipment	80,891	98,752	108,485	112,592	112,942	109,298	36,295	19,121	53,882
Motor cars and trailers [2]	(3)	(3)	(3)	2,479	3,395	3,395	2,396	361	638

[1] Excludes caboose cars; total for 1910 includes 13,357 unclassified cars.
[2] Data represent Class I roads only.
[3] Data not available.
[4] Includes 104 unclassified cars.
[5] Postal cars included with baggage and express.

Source of Tables 424 and 425: Interstate Commerce Commission.

No. 426.—FREIGHT-CAR PERFORMANCE AND EQUIPMENT CONDITION

NOTE.—Data relate to Class I carriers. Yearly averages for 1920, 1921, 1922, and 1923 are as follows: Freight car-miles per car day 1920, 25.1; 1921, 22.4; 1922, 23.5; 1923, 27.8; percentage of unserviceable freight cars, 1920, 7.0; 1921, 13.1; 1922, 12.8; 1923, 8.0; percentage of unserviceable locomotives, 1920, 24.5; 1921, 23.7; 1922, 24.0; 1923, 21.4

Month	Freight car-miles per car day					Percentage of unserviceable freight cars					Percentage of unserviceable locomotives				
	1924	1925	1926	1927	1928	1924	1925	1926	1927	1928	1924	1925	1926	1927	1928
Yearly average	**26.8**	**28.5**	**30.4**	**30.3**	**31.3**	**7.8**	**7.7**	**6.5**	**5.9**	**6.2**	**18.7**	**17.8**	**16.6**	**16.2**	**16.3**
January	24.9	26.5	27.6	28.5	27.6	6.7	8.0	6.6	5.6	5.8	18.8	18.8	17.1	16.6	16.0
February	27.4	26.9	28.6	30.4	29.8	7.0	7.8	6.7	5.7	5.9	19.0	18.8	17.3	16.8	16.7
March	27.2	26.4	29.2	30.9	31.0	7.1	7.8	6.7	5.6	6.0	19.2	18.9	17.6	17.0	16.6
April	25.5	26.6	29.0	29.5	29.9	7.4	7.9	6.7	5.6	6.2	19.1	18.5	17.5	16.9	16.7
May	25.8	27.4	29.8	30.2	31.2	7.7	8.1	6.8	5.9	6.4	18.8	18.0	17.0	16.6	16.5
June	25.1	27.5	30.1	30.0	30.4	8.0	8.3	6.9	6.1	6.3	18.6	17.7	16.6	16.4	16.1
July	25.5	27.8	30.5	29.1	30.4	8.4	8.2	7.0	6.2	6.4	18.5	17.3	16.1	15.8	16.1
August	26.6	29.6	31.5	30.9	32.1	8.6	8.1	7.0	6.2	6.5	18.3	17.1	16.1	15.8	16.1
September	28.8	30.8	32.7	32.6	33.9	8.7	7.8	6.6	6.0	6.5	18.3	17.1	15.8	15.3	16.0
October	30.6	32.3	34.3	34.7	36.2	8.2	7.1	6.1	5.9	6.2	18.4	17.2	15.8	15.5	16.2
November	28.4	31.0	32.1	30.2	33.3	7.8	6.9	5.8	5.9	6.1	18.5	17.2	16.3	16.7	16.2
December	25.6	28.0	29.3	26.9	29.6	7.9	6.8	5.5	5.8	5.9	18.4	16.9	16.0	15.6	18.8

Source: Bureau of Railway Economics.

No. 427.—RECEIVERSHIPS OF RAILWAYS

Year (calendar, except as noted)	Under receivership end of year [1]		Placed under receivership			Year (calendar, except as noted)	Under receivership end of year [1]		Placed under receivership		
	Number	Mileage operated	Number	Miles	Stocks and bonds (1,000 dollars)		Number	Mileage operated	Number	Miles	Stocks and bonds (1,000 dollars)
1881	------	--------	5	110	3,742	1906	34	3,971	6	204	55,042
1882	------	--------	12	912	30,074	1907	29	3,926	7	317	13,585
1883	------	--------	11	1,990	108,470	1908	52	9,529	24	8,009	596,359
1884	------	--------	37	11,038	714,755	1909	44	10,530	5	859	78,095
1885	------	--------	44	8,836	335,460	1910	39	5,257	7	735	51,428
1886	------	--------	13	1,799	70,346	1911	39	4,593	5	2,606	210,607
1887	------	--------	9	1,046	90,318	1912	44	9,786	13	3,784	182,112
1888	------	--------	22	3,279	186,814	1913	49	16,286	17	9,020	477,781
1889	------	--------	22	3,803	99,664	1914	68	18,608	22	4,222	199,571
1890	------	--------	26	2,963	105,007	1915	85	30,223	12	20,143	1,070,809
1891	------	--------	26	2,159	84,479	1916	80	34,804	9	4,439	208,160
1892	------	--------	36	10,508	357,692	1917	82	17,376	19	2,486	61,170
1893	------	--------	74	29,340	1,781,046	1918	74	19,208	8	3,519	242,091
1894	192	40,819	38	7,025	395,791	1919	65	16,590	7	244	11,887
1895	169	37,856	31	4,089	369,075	1920	61	16,290	10	541	21,620
1896	151	30,475	34	5,441	275,597	1921	68	13,512	14	1,744	63,872
1897	128	18,862	18	1,537	92,909	1922	64	15,259	12	4,330	329,115
1898	94	12,745	18	2,069	133,701	1923	64	12,623	10	2,218	87,914
1899	71	9,853	10	1,019	52,285	1924	61	8,105	11	920	30,223
1900	52	4,178	16	1,165	78,234	1925	53	18,687	6	11,368	680,422
1901	45	2,497	4	73	1,627	1926	45	17,632	6	88	2,821
1902	27	1,475	5	278	5,835	1927	40	16,752	6	924	45,237
1903	27	1,185	9	229	18,823	1928	(2)	(2)	1	19	529
1904	28	1,323	8	744	36,069						
1905	26	796	10	3,593	176,321						

[1] Data relate to June 30 prior to 1916, Dec. 31 thereafter. [2] Data not available.

Sources: First two columns, Interstate Commerce Commission; others, The Railway Age, Chicago.

128.—EMPLOYEES OF RAILWAYS: NUMBER AND COMPENSATION [1]

All operating carriers				Year ended—	All operating carriers			
Average number of employees	Total yearly compensation (1,000 dollars)	Average compensation			Average number of employees	Total yearly compensation (1,000 dollars)	Average compensation	
		Per hour [2]	Per year				Per hour [2]	Per year
749,301				June 30:				
785,034	445,508		$568	1908	1,436,275	1,035,438		$721
1,017,653	577,265		567	1909	1,502,823	988,324		658
1,071,160	610,714		570	1910	1,699,420	1,143,725		673
1,189,315	676,029		568	1911	1,669,809	1,208,466		724
1,312,537	757,321		577	1912	1,716,380	1,252,348		730
1,296,121	817,599		631	1913	1,815,239	1,373,831		757
1,382,196	839,945		608	1914	1,710,296	1,381,117		808
1,521,355	900,802		592	1916	1,654,075	1,403,968	$0.266	849
1,672,074	1,072,386		641	Dec. 31:				
				1916	1,700,814	1,506,961	.275	886

1 Dec. 31—	All operating carriers: Average number of employees	Class I carriers					
		Average number of employees	Total hours (thousands)	Total yearly compensation (1,000 dollars)	Average hours per employee	Average compensation	
						Per hour [2]	Per year
	1,700,814	1,647,097	5,189,791	1,468,576	3,150.9	$0.283	$892
	(3)	1,732,876	5,437,977	1,739,482	3,138.1	.320	1,004
	(3)	1,841,575	5,701,417	2,613,813	3,095.9	.458	1,419
	(3)	1,913,422	5,032,493	2,843,128	2,630.1	.565	1,486
	(3)	2,022,832	5,446,741	3,681,801	2,692.6	.676	1,820
	(3)	1,659,513	4,147,319	2,765,218	2,499.1	.667	1,666
	1,669,640	1,626,834	4,311,097	2,640,817	2,650.0	.613	1,623
	1,902,222	1,857,674	4,928,651	3,604,072	2,653.1	.610	1,617
	1,795,493	1,751,362	4,534,879	2,825,775	2,589.3	.623	1,613
	1,786,411	1,744,311	4,531,361	2,860,600	2,597.8	.631	1,640
	1,821,804	1,779,275	4,671,736	2,946,114	2,625.6	.631	1,656
	1,775,549	1,735,105	4,519,281	2,910,183	2,604.6	.644	1,677
	1,694,896	1,656,289	4,310,541	2,813,749	2,602.5	.654	1,702

ıde switching and terminal companies beginning 1910. Class III roads are excluded in 1913. the latter has practically no effect on the comparability of the figures. Information for 1915 as 20 of the larger railways did not report, and is not shown.
l for all classes of employees, including those not paid on an hourly basis.
ıvailable.
r Federal reports, reports of companies not under Federal control, and corporate reports.
erstate Commerce Commission.

.—EMPLOYEES AND THEIR COMPENSATION: CLASS I CARRIERS

relate to years ended Dec. 31. Class I switching and terminal companies are included. npensation in fifth and sixth columns is per day where so indicated in the footnote or stub. ı for principal occupations only. Data for occupations not shown included in group totals

cupation	Average number of employees		Total compensation (1,000 dollars)		Average per hour, straight time (dollars)		Average per month, total compensation (dollars)	
	1927	1928	1927	1928	1927	1928	1927	1928
, all districts	1,760,998	1,680,187	2,953,211	2,862,100				
	125,058	*123,074*	*338,274*	*333,555*	*8.15*	*8.29*	*222*	*236*
is	*1,635,960*	*1,557,113*	*2,619,937*	*2,528,515*	*.598*	*.612*	*133*	*135*
t	766,769	727,068	1,363,302	1,307,655				
	60,857	*59,367*	*155,859*	*155,375*	*7.77*	*7.94*	*213*	*218*
is	*705,932*	*667,699*	*1,207,443*	*1,152,280*	*.641*	*.654*	*143*	*144*
ot	340,681	314,680	519,737	486,544				
	20,312	*19,717*	*56,926*	*55,699*	*8.65*	*8.70*	*234*	*235*
is	*320,369*	*294,963*	*462,811*	*430,845*	*.551*	*.566*	*120*	*123*
t	653,548	638,441	1,070,172	1,067,901				
	43,889	*43,990*	*120,489*	*122,511*	*8.44*	*8.57*	*229*	*232*
is	*609,659*	*594,451*	*949,683*	*945,390*	*.574*	*.591*	*130*	*133*

No. 429.—Employees and Their Compensation: Class I Carriers—Con.

Occupation	Average number of employees		Total compensation (1,000 dollars)		Average per hour, straight time (dollars)		Average per month, total compensation (dollars)	
	1927	1928	1927	1928	1927	1928	1927	1928
Executives, officials, and staff assistants	17,006	16,890	93,006	93,976				
Daily basis	*17,006*	*16,890*	*93,006*	*93,976*	*17.23*	*17.53*	*456*	*464*
Executives, general officers, and assistants	7,519	7,570	54,255	55,427	[1]23.37	[1]23.69	601	610
Division officers and assistants	9,487	9,320	38,751	38,549	[1]12.57	[1]12.73	340	345
Professional, clerical, and general	280,973	271,388	473,890	470,022				
Daily basis	*53,473*	*53,171*	*121,809*	*123,473*	*7.29*	*7.44*	*190*	*194*
Hourly basis	*227,500*	*218,217*	*352,081*	*346,549*	*.604*	*.620*	*129*	*133*
Supervisory clerks (major departments)	5,056	4,984	14,755	14,847	[1]9.36	[1]9.56	243	248
Chief clerks (minor departments)	13,165	12,937	29,937	29,976	[1]7.19	[1]7.33	189	193
Clerks	163,200	155,460	260,482	255,458	.625	.644	133	137
Mechanical device operators (office)	8,318	8,097	11,188	11,122	.550	.562	112	114
Stenographers and typists	21,589	20,979	31,228	31,074	.593	.608	121	123
Telephone switchboard operators and office assistants	5,192	5,029	4,922	4,865	.387	.394	79	81
Messengers and office boys	6,512	6,261	4,645	4,529	[1]2.26	[1]2.28	59	60
Lieutenants and sergeants of police	2,499	2,406	5,214	5,078	[1]5.97	[1]6.07	174	176
Patrolmen	5,610	5,282	10,102	9,643	.553	.564	150	152
Traffic, advertising, and development agents	7,236	7,526	19,286	20,242	[1]8.66	[1]8.77	222	224
Janitors and cleaners	7,862	7,678	7,498	7,352	.370	.373	79	80
Maintenance of way and structures	421,535	400,198	470,696	449,344				
Daily basis	*5,081*	*5,051*	*14,925*	*14,980*	*9.19*	*9.25*	*245*	*247*
Hourly basis	*416,454*	*395,147*	*456,771*	*434,364*	*.435*	*.439*	*91*	*92*
Roadmasters and general foremen	3,408	3,393	10,246	10,285	[1]9.39	[1]9.45	251	253
Bridge and building gang foremen (skilled)	5,545	5,438	11,469	11,304	.814	.823	172	173
Bridge and building carpenters	22,593	21,756	33,952	32,811	.614	.622	125	126
Bridge and building painters	2,979	2,746	4,356	4,031	.622	.626	122	122
Skilled trades helpers	10,651	10,277	12,787	12,355	.494	.499	100	100
Pumping equipment operators	5,066	4,625	5,107	4,740	.338	.339	85	85
Gang foremen (extra gang, work train, bridge, and building and signal and telegraph laborers)	5,157	4,755	9,038	8,380	.651	.659	146	147
Gang or section foremen	40,430	40,038	62,527	62,602	.602	.613	129	130
Laborers (extra gang and work train)	70,147	62,145	65,329	57,931	.364	.361	78	78
Track and roadway section laborers	215,932	207,174	190,025	181,266	.355	.355	73	73
Maintenance of way laborers (not track and roadway)	8,462	8,053	7,820	7,478	.374	.379	77	77
General foremen and supervising inspectors (signal, telegraph, etc.)	560	551	1,714	1,712	[1]9.57	[1]9.66	255	259
Gang foremen (signal and telegraph, skilled trades)	1,594	1,475	3,841	3,585	.927	.940	201	203
Signalmen and signal maintainers	9,445	9,169	18,545	18,161	.765	.774	164	165
Assistant signalmen and signal maintainers	3,568	3,198	5,386	4,944	.610	.628	126	129
Signalmen and signal maintainer helpers	4,057	3,670	5,120	4,689	.515	.521	105	106
Maintenance of equipment and stores	490,730	461,285	777,953	734,359				
Daily basis	*16,496*	*15,923*	*49,389*	*47,909*	*9.03*	*9.02*	*250*	*251*
Hourly basis	*474,234*	*445,362*	*728,564*	*686,450*	*.612*	*.614*	*128*	*128*
General foremen	1,445	1,426	5,277	5,239	[1]10.85	[1]10.88	304	306
Assistant general and department foremen	11,101	10,703	34,839	33,690	[1]9.30	[1]9.25	262	262
Gang foremen and leaders, (skilled)	11,059	10,337	29,468	27,729	.938	.936	222	224
Blacksmiths	8,451	7,864	15,541	14,461	.801	.802	153	153
Boiler makers	18,314	16,838	35,485	32,512	.794	.795	161	161
Carmen	105,119	99,912	188,704	180,056	.721	.723	150	150

[1] Daily basis.

No. 429.—Employees and Their Compensation: Class I Carriers—Con.

Occupation	Average number of employees		Total compensation (1,000 dollars)		Average per hour, straight time (dollars)		Average per month, total compensation (dollars)	
	1927	1928	1927	1928	1927	1928	1927	1928
Maintenance of equipment, etc.—Continued.								
Electrical workers	10,515	10,331	20,666	20,315	0.749	0.754	164	164
Machinists	53,792	55,792	111,874	105,945	.781	.780	159	158
Sheet-metal workers	11,418	10,954	21,660	20,682	.781	.781	158	157
Skilled trades helpers	108,050	101,122	145,260	136,356	.545	.547	112	112
Helper apprentices	6,394	5,405	8,553	7,251	.582	.586	111	112
Regular apprentices	12,381	10,975	11,906	10,385	.429	.424	80	70
Gang foremen laborers (shops, engine houses, power plants, stores)	4,027	3,850	6,574	6,301	.600	.605	136	136
Coach cleaners	12,667	12,189	14,598	14,135	.410	.413	96	97
Laborers	97,545	90,748	102,108	94,870	.404	.405	87	87
Stationary engineers and firemen	7,800	7,457	13,412	12,882	.589	.593	143	144
Transportation (other than train service, engine, and yard)	205,026	197,467	304,836	298,472				
Daily basis	*25,961*	*25,269*	*31,774*	*31,151*	*3.45*	*3.48*	*102*	*108*
Hourly basis	*179,065*	*172,198*	*273,062*	*267,321*	*.560*	*.571*	*127*	*129*
Train dispatchers and directors	5,386	5,291	17,667	17,683	1.207	1.232	273	270
Station agents—								
Nontelegraphers—								
Supervisory—major stations	2,513	2,474	7,679	7,638	[1] 9.33	[1] 9.45	255	257
Supervisory—smaller stations	5,376	5,234	11,445	11,422	.791	.815	177	182
Nonsupervisory—smaller stations	3,428	3,299	4,260	4,124	.481	.491	104	104
Telegraphers and telephoners	19,077	18,853	33,668	33,745	.633	.647	147	149
Clerks—telegraphers and telephoners	13,614	13,340	23,945	23,907	.625	.641	147	150
Telegraphers, telephoners, and towermen	24,679	23,398	45,284	43,597	.652	.668	153	155
Baggage agents and assistants	767	721	1,305	1,243	.530	.501	142	144
Baggage, parcel-room, and station attendants	9,171	8,660	11,513	11,110	.454	.468	105	107
Gang foremen (freight station, warehouse, grain elevator, and dock labor)	3,627	3,521	6,297	6,242	.652	.666	145	148
Callers, loaders, sealers, sealers, and perishable-freight inspectors	15,513	14,872	19,768	19,235	.520	.523	106	108
Truckers	37,063	34,270	41,653	39,405	.452	.462	94	96
Laborers	6,033	6,343	7,054	7,233	.430	.424	97	95
Crossing and bridge flagmen and gatemen	21,891	21,240	20,226	19,607	[1] 2.56	[1] 2.57	77	77
Transportation (yardmasters, switch tenders, and hostlers)	23,409	22,142	53,875	52,237				
Daily basis	*7,020*	*6,770*	*22,371*	*22,095*	*8.73*	*8.91*	*266*	*272*
Hourly basis	*16,389*	*15,372*	*31,504*	*30,142*	*.676*	*.688*	*160*	*163*
Yardmasters and assistants	7,020	6,770	22,371	22,095	[1] 8.73	[1] 8.91	266	272
Switch tenders	5,620	5,327	10,039	9,600	.637	.644	149	150
Hostlers	8,997	8,317	18,151	17,382	.716	.730	170	174
Transportation (train and engine service)	322,320	310,817	778,955	763,689				
Hourly basis	*322,320*	*310,817*	*778,955*	*763,689*	*.812*	*.831*	*201*	*205*
Road passenger conductors	10,392	10,094	31,916	31,222	.926	.932	256	258
Road freight conductors	24,821	23,925	70,042	66,733	.835	.838	235	232
Road passenger baggagemen	5,712	5,548	13,424	13,127	.601	.700	196	197
Road passenger brakemen and flagmen	13,938	13,402	28,886	27,790	.645	.650	173	173
Road freight brakemen and flagmen	59,384	56,763	125,251	118,893	.663	.665	176	175
Yard conductors and yard foremen	21,437	21,020	53,537	53,320	.883	.896	208	211
Yard brakemen and yard helpers	53,653	51,680	114,108	112,228	.813	.827	177	181
Road passenger engineers and motormen	12,971	12,509	41,916	42,595	1.193	1.253	269	282
Road freight engineers and motormen	30,521	29,275	96,132	95,318	.977	1.021	262	271
Yard engineers and motormen	21,562	21,075	53,682	54,744	.889	.928	207	216
Road passenger firemen and helpers	12,254	11,732	30,487	30,056	.944	.978	207	213
Road freight firemen and helpers	32,315	30,962	73,971	72,076	.754	.773	191	194
Yard firemen and helpers	22,100	21,492	42,344	42,268	.708	.724	160	164

[1] Daily basis.

Source: Interstate Commerce Commission.

No. 430.—CAPITALIZATION OF RAILROADS: ALL REPORTING COMPANIES

NOTE.—All amounts except "per mile of road" in millions of dollars. Switching and terminal companies excluded beginning with 1908; their total capitalization in 1927 was $692,283,196. Figures include both operating and nonoperating railways. The gross figures include considerable amounts of securities held by the companies issuing them as well as larger amounts held by other railway companies

Year	Total capitalization				Held by railroads		Net capitalization				
	Total	Common stock	Preferred stock	Funded debt	Stock	Funded debt	Total	Per mile of road (dollars)	Stock	Funded debt	Funded debt, per cent of total
June 30, 1890	8,984	3,803	606	4,575	964	443	7,577	----------	3,445	4,132	54.5
1895	10,347	4,202	760	5,385	1,052	396	8,900	----------	3,910	4,989	56.1
1900	11,491	4,522	1,323	5,645	1,470	473	9,548	----------	4,375	5,172	54.2
1905	13,805	5,181	1,374	7,251	2,070	568	11,167	----------	4,485	6,683	59.8
1910	18,417	6,710	1,403	10,303	2,555	1,486	14,376	62,819	5,559	8,817	61.3
Dec. 31, 1916	21,049	7,594	1,455	12,000	2,633	2,084	16,333	66,591	6,416	9,917	60.7
1917	21,249	7,455	1,848	11,947	2,720	2,128	16,402	66,699	6,583	9,819	59.9
1918	20,785	7,249	1,806	11,730	2,323	2,008	16,454	66,893	6,732	9,722	59.1
1919	20,950	7,193	1,898	11,859	2,314	2,086	16,550	67,170	6,777	9,773	59.1
1920	21,891	7,216	1,898	12,778	2,407	2,490	16,994	68,787	6,707	10,287	60.5
1921	22,292	7,275	1,800	13,216	2,402	2,807	17,083	69,816	6,673	10,409	60.9
1922	22,200	7,307	1,834	13,149	2,390	2,621	17,280	70,899	6,751	10,528	60.9
1923	22,839	7,398	1,852	13,589	2,402	2,626	17,810	73,417	6,847	10,963	61.6
1924	23,636	7,539	1,935	14,162	2,668	2,766	18,202	75,322	6,806	11,396	62.6
1925	23,644	7,602	1,937	14,105	2,654	2,800	18,190	74,460	6,885	11,305	62.1
1926	23,677	7,560	1,925	14,192	2,654	2,789	18,234	74,398	6,831	11,403	62.5
1927	23,615	7,683	1,980	13,952	2,907	2,571	18,137	73,984	6,756	11,381	62.7

No. 431.—RAILWAY STOCK OUTSTANDING, DIVIDENDS, AND INTEREST

NOTE.—Data relate to years ending June 30 prior to 1916 and to calendar years thereafter. Nonoperating as well as operating roads are included. Switching and terminal roads are excluded since 1908. Dividend figures throughout cover all classes of roads but interest figure for 1913 excludes the unimportant Class III roads. The amount of stock shown in the first column is exclusive of stock held by the issuing company but includes that held by other railway companies

Year or yearly average	Stock			Dividends			Interest accrued on funded debt (1,000 dolls.)
	Actually outstanding (1,000 dolls.)	Paying dividends (1,000 dolls.)	Per cent paying dividends	Amount declared (1,000 dolls.)	Per cent on stock paying dividends	Per cent on all stock outstanding	
1891–1895	----------	1,737,048	----------	94,093	5.42	----------	243,013
1896–1900	----------	1,977,832	----------	104,295	5.27	----------	249,548
1901	----------	2,977,575	51.27	156,736	5.26	2.70	262,095
1902	----------	3,337,645	55.40	185,392	5.55	3.08	274,422
1903	----------	3,450,738	56.06	196,728	5.70	3.20	283,953
1904	----------	3,643,427	57.47	221,941	6.09	3.50	297,675
1905	----------	4,119,087	62.84	237,964	5.78	3.63	310,632
1906	----------	4,526,959	66.54	272,796	6.03	4.01	322,556
1907	----------	4,948,756	67.27	308,089	6.23	4.19	344,243
1908	7,300,739	4,843,371	65.69	390,695	8.07	5.30	368,296
1909	7,612,411	4,920,174	64.01	321,072	6.53	4.18	332,675
1910	8,010,730	5,412,578	66.71	405,771	7.50	5.00	399,582
1911	8,363,276	5,730,250	67.65	460,195	8.03	5.42	410,327
1912	8,552,447	5,581,289	64.73	400,315	7.17	4.64	429,027
1913	8,599,993	5,739,482	66.14	369,078	6.37	4.22	434,753
1914	8,654,215	5,667,073	64.39	451,653	7.97	5.13	442,595
1915	8,635,319	5,219,847	60.45	328,478	6.29	3.80	464,186
1916	8,755,404	5,430,123	62.02	366,561	6.75	4.19	481,426
1917	9,003,797	5,610,774	62.32	381,852	6.81	4.24	474,123
1918	8,846,717	5,138,851	58.09	339,186	6.60	3.83	468,286
1919	8,883,125	5,298,321	59.64	335,242	6.33	3.77	476,076
1920	8,843,100	5,075,040	57.30	331,103	6.52	3.74	500,354
1921	8,889,921	5,059,844	56.92	456,482	9.02	5.13	529,398
1922	8,961,637	5,321,347	59.38	338,806	6.37	3.78	538,594
1923	9,002,933	5,646,076	62.09	411,882	7.30	4.53	551,705
1924	9,300,054	6,042,268	64.97	385,130	6.37	4.14	588,301
1925	9,413,101	6,278,532	66.70	409,645	6.52	4.35	583,875
1926	9,365,272	6,473,280	69.12	473,683	7.32	5.06	581,709
1927	9,539,491	6,701,427	70.25	567,281	8.47	5.95	583,452

Source of Tables 430 and 431: Interstate Commerce Commission.

No. 432.—RAILWAY SECURITIES ACTUALLY OUTSTANDING

NOTE.—All figures in thousands of dollars. Capital actually outstanding represents securities in the hands of the public or of railway companies other than those issuing same; securities held by or for the issuing company are excluded. Switching and terminal companies are not included

Security and year ended Dec. 31—	All railroads				Class I	Class II	Class III	Non-operating subsidiaries
	All districts	Eastern district	Southern district	Western district				
Total:								
1916	19,630,610	7,506,045	2,880,243	9,244,322	16,088,847	660,027	143,862	2,737,874
1920	20,098,046	7,881,150	3,004,582	9,212,314	16,855,230	537,113	107,269	2,598,434
1925	21,734,096	8,527,168	3,444,426	9,762,502	18,098,164	437,022	86,157	3,112,753
1926	21,748,806	8,510,392	3,518,220	9,720,194	18,256,527	427,069	84,436	2,980,774
1927	21,848,929	8,610,430	3,517,218	9,721,281	18,297,036	417,301	81,244	3,053,348
Stock:								
1916	8,755,403	3,426,697	1,167,376	4,161,330	6,953,102	382,614	91,634	1,328,053
1920	8,843,100	3,474,212	1,166,809	4,202,079	7,209,735	286,688	67,247	1,279,430
1925	9,413,101	3,771,338	1,324,472	4,317,291	7,633,456	253,208	56,452	1,469,935
1926	9,365,272	3,737,040	1,344,673	4,283,559	7,685,014	245,199	55,731	1,379,328
1927	9,539,491	3,933,885	1,343,196	4,262,410	7,831,282	243,285	55,141	1,409,783
Funded debt:								
1916	10,875,207	4,079,348	1,712,867	5,082,992	9,135,745	277,413	52,228	1,409,821
1920	11,254,946	4,406,938	1,837,773	5,010,235	9,645,495	250,425	40,022	1,319,004
1925	12,320,995	4,755,830	2,119,954	5,445,211	10,464,708	183,814	29,705	1,642,768
1926	12,383,534	4,773,352	2,173,547	5,436,635	10,571,513	181,870	28,705	1,601,446
1927	12,309,438	4,676,545	2,174,022	5,458,871	10,465,754	174,016	26,103	1,643,565
1927								
Common stock	7,574,638	3,304,022	1,130,622	3,139,994	6,024,967	218,732	51,172	1,279,767
Preferred stock	1,964,853	629,863	212,574	1,122,416	1,806,315	24,553	3,969	130,016
Mortgage bonds	9,549,547	3,488,814	1,628,913	4,431,820	7,873,196	162,229	23,509	1,490,619
Collateral trust bonds	835,702	378,880	171,686	335,136	828,538	746	183	56,235
Income bonds	299,288	28,624	37,136	233,528	267,003	3,067	1,250	27,968
Miscellaneous obligations	511,355	207,333	62,775	151,247	458,050	2,127	761	50,417
Equipment obligations	1,063,546	482,894	273,512	307,140	1,038,973	5,847	400	18,326

No. 433.—PROPERTY INVESTMENT, INCOME, INTEREST, AND DIVIDENDS: REPORTED BY OPERATING ROADS

NOTE.—All figures except as indicated in thousands of dollars. Investment is as reported by the carrier and should not be confused with the tentative valuation fixed by the Interstate Commerce Commission. It relates only to railway property, but includes leased lines, which are not included, however, under the other columns. All data exclude switching and terminal companies

Year ended—	Investment [1]	Investment per mile of road (dollars)	Net railway operating income	Return on investment (per ct.)	Other income	Interest, rents, and other deductions	Dividends declared
June 30:							
1908	13,213,767	61,779	634,794	4.80	246,420	485,311	329,062
1909	13,609,184	61,391	710,474	5.22	175,706	408,016	272,043
1910 [2]	14,557,816	64,382	805,097	5.53	222,915	511,417	351,202
1913	16,588,603	69,780	806,801	4.86	243,599	564,414	327,967
1914	17,153,786	72,079	674,190	3.93	246,187	576,487	389,339
1915	17,441,420	73,208	694,276	3.98	189,300	575,198	264,267
1916	17,689,425	73,795	1,002,935	5.67	195,458	594,378	286,618
Dec. 31:							
1916	17,842,777	74,466	1,058,506	5.93	213,324	623,180	311,876
1917	18,574,298	77,163	950,557	5.12	[3] 233,252	[3] 574,290	325,601
1918	18,984,756	78,820	646,223	3.40	(4)	[3] 667,588	279,929
1919	19,300,121	79,974	454,132	2.35	(4)	[3] 630,559	281,569
1920	19,849,320	81,954	12,101	.06	(4)	[3] 640,516	275,348
1921	20,329,224	84,530	601,139	2.96	[3] 375,001	[3] 662,375	403,991
1922	20,580,168	86,004	769,411	3.74	[3] 265,033	[3] 655,647	275,722
1923	21,372,858	89,619	974,918	4.56	[3] 200,655	[3] 667,616	353,127
1924	22,182,267	93,233	984,463	4.44	[3] 269,188	[3] 684,559	325,983
1925	[5] 23,230,916	94,917	1,136,728	4.89	[3] 268,142	[3] 688,387	349,089
1926	[5] 23,880,740	97,433	1,229,020	5.15	[3] 297,929	[3] 701,965	411,208
1927	[5] 24,453,871	99,546	1,077,843	4.41	[3] 311,198	[3] 706,284	503,146

[1] Prior to 1925 figures include investment of leased lines and exclude investment of proprietary companies which do not render annual reports. Beginning with 1925, the investment in road and equipment of proprietary companies is included. In this column no allowance is made for cash and material and supplies, and no deduction is made for depreciation.
[2] Investment originally published is increased by $170,000,000, estimated reserve for depreciation.
[3] Does not include returns for Class II and Class III companies.
[4] Figures not comparable on account of Federal control accounting requirements.
[5] Includes investment of proprietary companies: 1925, $493,923,000; 1926, $831,574,000; 1927, $919,095,000.

Source of Tables 432 and 433: Interstate Commerce Commission.

No. 434.—FREIGHT TRAFFIC: TRAIN AND CAR MOVEMENT

NOTE.—Figures prior to 1916 relate to years ended June 30, thereafter to calendar years. Switching and terminal roads excluded beginning with 1908. The tonnage "per loaded car" for "All roads" is based on revenue tonnage only; and for "Class I roads" on revenue and nonrevenue tonnage, with exception of the "District" figures for 1916–1920. Tons are of 2,000 pounds

Class and year or yearly average	Train-miles (thousands)	Car-miles (thousands)		Tons of revenue freight		Freight revenue		Average miles per car per day
		Loaded (revenue and nonrevenue)	Empty	Per train	Per loaded car	Per train-mile (dollars)	Per loaded car-mile (cents)	
All roads:								
1891–1895	467,299	----------	----------	184	--------	1.62	--------	--------
1896–1900	489,723	----------	----------	229	--------	1.76	--------	--------
1901–1905	519,896	9,631,628	4,320,300	304	17.4	2.35	--------	--------
1906–1910	603,105	11,754,421	5,234,008	359	19.5	2.72	--------	--------
1911–1915	608,512	13,369,203	6,169,216	432	20.7	3.19	--------	--------
1916–1920	617,430	15,444,150	6,904,625	604	25.3	[1] 5.30	--------	--------
1921–1925	577,844	15,243,111	8,096,532	621	24.6	[1] 7.28	--------	--------
1901	491,942	8,889,233	3,921,979	281	16.6	2.13	--------	--------
1902	499,711	9,296,427	4,030,087	296	16.9	2.27	--------	--------
1903	526,312	9,844,158	4,346,790	311	17.6	2.44	--------	--------
1904	536,091	9,849,577	4,501,805	308	17.7	2.43	--------	--------
1905	546,424	10,278,745	4,801,290	322	18.1	2.50	--------	--------
1906	594,006	11,410,599	5,176,955	344	18.9	2.61	--------	--------
1907	629,996	12,021,326	5,098,572	357	19.7	2.74	--------	--------
1908	587,218	11,128,231	5,153,181	352	19.6	2.65	--------	--------
1909	568,855	11,360,655	5,242,995	363	19.3	2.76	--------	--------
1910	635,451	12,851,295	5,498,337	380	19.8	2.86	--------	--------
1911	626,496	12,859,386	5,832,515	383	19.7	2.90	--------	--------
1912	612,345	13,088,332	5,767,144	407	20.2	3.02	--------	--------
1913	[2] 643,841	[2] 14,271,944	[2] 6,120,861	[2] 445	[2] 21.1	[2] 3.24	--------	--------
1914	607,872	13,686,818	6,531,274	447	21.1	[2] 3.31	--------	--------
1915	552,004	12,939,535	6,594,287	476	21.1	[2] 3.47	[2] 15.5	--------
1916	632,304	15,855,103	6,779,225	552	22.8	[2] 3.93	[2] 16.3	--------
1917	646,402	15,911,203	6,780,872	588	24.8	[1] 4.27	[1] 17.7	--------
1918	628,436	14,995,557	7,167,144	621	27.0	[1] 5.33	[1] 22.9	--------
1919	560,499	14,273,422	6,531,570	623	25.4	[1] 6.14	[1] 24.8	[1] 23.0
1920	619,507	15,336,778	7,264,316	639	26.7	[1] 6.81	[1] 28.1	[1] 25.1
1921	519,817	12,449,086	7,309,192	567	24.6	[1] 7.38	[1] 31.4	[1] 22.4
1922	544,486	13,926,355	6,798,121	599	24.3	[1] 7.19	[1] 28.6	[1] 23.5
1923	631,167	16,374,750	8,536,002	632	25.2	[1] 7.19	[1] 28.1	[1] 27.8
1924	590,879	15,859,163	8,519,637	634	24.5	[1] 7.22	[1] 27.3	[1] 26.8
1925	602,873	16,836,710	9,319,706	663	24.6	[1] 7.41	[1] 26.9	[1] 28.5
1926	622,295	17,759,004	10,154,842	689	25.0	[1] 7.58	[1] 27.0	[1] 30.4
1927	598,435	17,390,777	10,298,061	690	24.6	[1] 7.59	[1] 26.6	[1] 30.3
Class I roads, total:								
1916–1920	604,422	15,156,421	6,836,894	613	25.4	5.30	21.9	--------
1921–1925	567,286	14,988,046	8,032,691	633	27.1	7.28	28.3	25.8
1926	610,980	17,640,926	10,077,357	701	27.4	7.58	27.0	30.4
1927	588,081	17,288,758	10,231,801	702	27.1	7.59	26.6	30.3
1928	601,648	17,854,323	10,508,601	720	26.7	7.78	26.2	31.3
Eastern district:								
1916–1920	244,387	6,512,690	3,059,466	738	28.1	6.05	23.0	--------
1921–1925	220,500	6,183,778	3,317,411	744	28.8	8.51	30.7	22.4
1926	239,823	7,185,667	4,079,957	795	28.8	8.70	29.4	26.5
1927	226,704	6,952,881	4,141,499	796	28.5	8.70	28.8	26.2
1928	221,161	7,092,721	4,177,697	830	27.7	9.09	28.4	26.8
Southern district:								
1916–1920	113,132	2,620,391	1,246,908	581	26.0	4.44	19.9	--------
1921–1925	118,509	2,857,938	1,614,396	632	29.3	6.15	26.1	30.0
1926	135,916	3,540,988	2,203,300	727	31.1	6.55	25.7	36.7
1927	127,386	3,409,143	2,176,295	735	30.7	6.66	25.4	36.8
1928	124,814	3,328,529	2,118,108	737	30.2	6.68	25.1	36.4
Western district:								
1916–1920	246,903	6,023,340	2,530,519	510	22.2	5.00	21.7	--------
1921–1925	228,277	5,946,330	3,100,884	531	24.3	6.70	26.9	28.2
1926	235,241	6,914,271	3,794,100	596	23.9	7.07	25.2	32.6
1927	233,991	6,926,734	3,914,007	598	23.9	7.05	24.9	32.5
1928	255,673	7,433,073	4,212,796	616	24.2	7.18	24.7	34.5

[1] Data available for Class I roads only. [2] Class I and Class II roads.

Source: Interstate Commerce Commission.

No. 435.—FREIGHT TRAFFIC: TONNAGE AND REVENUE

NOTE.—Figures before 1916 relate to years ended June 30; thereafter to calendar years. Switching and terminal roads excluded beginning with 1908. For certain principal items for individual years, 1890 to 1900, see Table 439, p. 409. Tons are of 2,000 pounds

Class and year or yearly average	Tons of revenue freight carried (thousands)		Tons carried 1 mile (millions)		Revenue ton-miles per mile of road	Average haul, revenue freight (miles)		Freight revenue	
	Originated	Total	Revenue freight	Revenue and nonrevenue		System	Individual road	Amount (1,000 dolls.)	Per ton-mile (cents)
All roads:									
1891–1895	----------	692, 446	85, 693	--------	506, 809	--------	123. 75	758, 930	0. 886
1896–1900	----------	874, 389	113, 962	--------	611, 128	--------	130. 33	879, 337	. 772
1901–1905	601, 120	1, 266, 313	167, 715	--------	820, 016	242. 67	132. 44	1, 298, 713	. 774
1906–1910	930, 254	1, 673, 431	228, 936	--------	1, 006, 849	246. 10	136. 81	1, 744, 525	. 762
1911–1915	1, 074, 121	1, 903, 074	277, 073	--------	1, 104, 718	257. 95	145. 59	2, 051, 625	. 740
1916–1920	1, 325, 772	2, 378, 164	390, 815	--------	1, 510, 297	294. 78	164. 33	3, 419, 260	. 875
1921–1925	1, 231, 193	2, 216, 318	375, 468	--------	1, 455, 688	304. 96	169. 41	4, 377, 618	1. 166
1901	583, 692	1, 089, 226	147, 077	--------	760, 414	251. 98	135. 03	1, 118, 543	. 750
1902	657, 847	1, 200, 316	157, 289	--------	793, 351	239. 10	131. 04	1, 207, 229	. 757
1903	714, 768	1, 304, 394	173, 221	--------	855, 442	242. 35	132. 80	1, 338, 020	. 763
1904	714, 375	1, 309, 899	174, 522	--------	829, 476	244. 30	133. 23	1, 379, 003	. 780
1905	784, 920	1, 427, 732	186, 463	--------	861, 396	237. 56	130. 60	1, 450, 773	. 766
1906	896, 159	1, 631, 374	215, 878	--------	982, 401	240. 89	132. 33	1, 640, 387	. 748
1907	977, 489	1, 796, 337	236, 601	--------	1, 052, 119	242. 05	131. 71	1, 823, 052	. 759
1908	869, 798	1, 532, 982	218, 382	--------	974, 654	253. 94	143. 83	1, 655, 419	. 754
1909	881, 334	1, 556, 560	218, 803	--------	953, 986	251. 10	141. 87	1, 677, 614	. 763
1910	1, 026, 492	1, 849, 900	255, 017	--------	1, 071, 086	259. 68	138. 31	1, 925, 553	. 753
1911	1, 003, 054	1, 781, 638	253, 784	--------	1, 053, 566	254. 10	142. 88	1, 925, 951	. 757
1912	1, 031, 207	1, 844, 978	264. 081	--------	1, 078, 580	256. 87	143. 44	1, 968, 599	. 744
1913	1, 182, 548	[1] 2, 058, 035	301, 730	--------	1, 190, 397	255. 15	[2] 144. 40	[1] 2, 198, 931	[1] . 729
1914	1, 129, 992	2, 002, 026	288, 637	--------	1, 125, 084	255. 43	144. 17	2, 126, 717	. 737
1915	1, 023, 803	1, 828, 692	277, 135	--------	1, 075, 962	270. 69	151. 55	2, 037, 926	. 735
1916	1, 317, 246	2, 347, 306	366, 173	--------	1, 409, 957	277. 98	155. 99	2, 631, 092	. 719
1917	1, 382, 005	2, 453, 423	398, 263	--------	1, 538, 211	288. 18	162. 33	2, 897, 436	. 728
1918	1, 376, 845	2, 477, 092	408, 778	--------	1, 582, 796	296. 89	165. 02	3, 522, 052	. 862
1919	1, 189, 765	2, 185, 285	367, 161	--------	1, 423, 390	308. 60	168. 60	3, 624, 886	. 987
1920	1, 362, 999	2, 427, 622	413, 699	--------	1, 507, 133	303. 52	170. 41	4, 420, 833	1. 069
1921	1, 017, 818	1, 808, 836	300, 533	--------	1, 190, 328	304. 11	171. 12	4, 004, 109	1. 294
1922	1, 111, 822	1, 974, 618	342, 188	--------	1, 330, 460	307. 77	173. 29	4, 085, 742	1. 194
1923	1, 387, 755	2, 503, 117	416, 256	--------	1, 615, 741	299. 94	166. 29	4, 712, 495	1. 132
1924	1, 287, 413	2, 331, 291	391, 945	--------	1, 581, 556	304. 44	168. 12	4, 437, 380	1. 132
1925	1, 351, 155	2, 463, 725	417, 418	--------	1, 613, 862	308. 93	169. 43	4, 648, 364	1. 114
1926	1, 439, 612	2, 627, 492	447, 444	--------	1, 732, 295	310. 81	170. 29	4, 905, 981	1. 096
1927	1, 372, 547	2, 510, 054	432, 014	--------	1, 668, 800	314. 75	172. 11	4, 728, 885	1. 095
Class I Roads:									
1916–1920	1, 216, 452	2, 211, 754	387, 377	--------	1, 662, 549	318. 52	175. 14	3, 336, 480	. 861
1921–1925	1, 135, 499	2, 068, 262	372, 216	409, 740	1, 581, 865	327. 80	179. 97	4, 277, 134	1. 149
1926	1, 336, 142	2, 465, 369	443, 746	486, 265	1, 875, 304	332. 11	179. 99	4, 797, 780	1. 081
1927	1, 281, 611	2, 363, 639	428, 737	471, 793	1, 801, 414	334. 53	181. 39	4, 682, 321	1. 080
1928	1, 285, 943	2, 361, 623	432, 985	476, 994	1, 814, 461	336. 71	185. 50	4, 679, 837	1. 081
Eastern district:									
1916–1920	590, 689	1, 262, 780	183, 006	--------	3, 089, 938	309. 78	144. 92	1, 485, 056	. 811
1921–1925	510, 141	1, 112, 147	166, 644	178, 569	2, 827, 013	326. 66	149. 84	1, 906, 544	1. 144
1926	580, 200	1, 309, 242	193, 717	207. 798	3, 284, 052	333. 88	147. 96	2, 120, 301	1. 094
1927	541, 075	1, 237, 669	183, 739	198, 474	3, 115, 925	339. 58	148. 46	2, 008, 130	1. 093
1928	545, 968	1, 238, 607	183, 553	196, 445	3, 124, 176	336. 20	150. 00	2, 010, 938	1. 096
Southern district:									
1916–1920	208, 528	324, 057	68, 621	--------	1, 590, 465	329. 07	211. 76	524, 210	. 764
1921–1925	234, 018	353, 728	77, 047	84, 282	1, 756, 460	329. 24	217. 81	749, 632	. 973
1926	310, 578	461, 263	101, 426	110, 692	2, 282, 063	326. 57	219. 89	913, 966	. 901
1927	308, 893	449, 753	96, 339	105, 219	2, 128, 963	311. 88	214. 20	871, 910	. 905
1928	294, 173	427, 027	91, 977	100, 554	2, 022, 108	312. 66	217. 69	834, 050	. 907
Western district:									
1916–1920	417, 235	624, 917	135, 751	--------	1, 030, 046	325. 23	217. 61	1, 327, 215	. 978
1921–1925	391, 340	602, 387	128, 525	146, 889	970, 062	328. 42	213. 36	1, 620, 958	1. 261
1926	445, 364	694, 864	148, 603	167, 775	1, 115, 686	333. 67	213. 86	1, 763, 513	1. 187
1927	431, 643	676, 217	148, 629	168, 100	1, 111, 412	344. 40	219. 84	1, 752, 275	1. 179
1928	445, 802	695, 989	157, 455	179, 995	1, 171, 609	353. 19	228. 87	1, 834, 849	1. 165

[1] Class I and Class II roads.
[2] Includes estimates for traffic roads of Class II or Class III or both where these roads were not included in the published totals.

Source: Interstate Commerce Commission.

No. 436.—REVENUE AND TRAFFIC BY MONTHS: CLASS I CARRIERS

NOTE.—Except at times of general revisions in freight rates changes in freight revenue are closely parallel to those of ton mileage. Data except as indicated include Class I switching and terminal companies

Year	Average	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
TOTAL OPERATING REVENUES (millions of dollars)													
1910 [1]	234.7	209.1	200.7	235.7	223.9	232.5	236.2	231.5	253.0	254.8	261.2	244.9	233.2
1911	231.2	211.6	196.0	223.5	214.9	226.2	228.4	228.9	249.9	253.6	261.9	244.2	234.9
1912	249.8	209.2	216.1	235.8	219.2	232.3	242.9	253.0	275.8	274.4	298.2	275.9	264.4
1913	460.9	247.0	229.9	245.9	242.3	262.1	258.9	266.3	279.6	283.4	296.3	266.6	252.4
1914	244.0	231.3	207.1	247.5	235.4	237.7	249.3	256.0	267.1	269.6	266.6	233.8	226.3
1915	259.6	214.1	205.1	231.5	231.0	237.9	249.5	259.2	273.1	287.2	303.7	299.1	288.1
1916	302.1	260.9	262.8	290.2	282.0	301.0	300.0	303.2	327.2	325.3	338.7	322.7	311.1
1917	337.4	300.8	265.4	317.1	319.3	345.9	349.7	348.4	366.2	358.8	382.5	357.3	337.1
1918	410.5	285.4	290.0	366.4	371.6	379.0	395.2	470.4	504.7	489.7	490.8	440.9	441.5
1919	432.0	397.2	352.4	377.4	389.5	413.9	426.1	455.3	471.7	498.6	509.8	438.1	453.4
1920	519.0	500.8	424.6	460.2	402.3	457.6	494.7	529.1	555.5	618.9	641.8	592.1	550.6
1921	464.2	470.4	406.5	469.0	433.4	444.9	461.6	462.9	505.7	498.3	536.7	465.9	425.3
1922	468.3	395.8	401.6	475.2	417.1	449.4	474.0	443.8	474.1	500.9	550.3	523.6	513.6
1923	523.9	502.5	446.9	535.8	523.3	548.1	541.3	536.3	564.5	546.1	587.9	532.0	494.6
1924	499.0	469.0	479.5	505.4	475.2	477.5	465.7	481.8	508.5	541.0	572.9	505.9	505.2
1925	515.6	485.0	455.2	486.7	473.7	489.0	507.0	522.5	555.5	565.6	591.5	533.0	524.1
1926	538.8	481.4	460.8	531.5	500.5	518.0	541.4	557.9	580.3	591.2	610.4	562.3	527.7
1927	517.6	487.6	469.6	531.6	498.9	519.6	517.5	509.7	557.8	565.5	581.0	504.3	467.7
1928	514.9	457.4	456.6	505.2	474.3	510.7	502.5	513.0	557.9	556.0	617.8	531.2	495.8
FREIGHT REVENUE (millions of dollars)													
1914	166.0	156.1	140.9	174.3	160.2	159.0	164.1	168.5	177.0	185.1	188.8	163.3	154.3
1915	178.9	147.2	143.3	163.4	161.9	165.3	168.8	170.3	181.0	198.7	220.6	219.3	206.4
1916	214.6	185.9	191.1	212.3	202.7	217.9	208.1	204.2	227.3	228.8	245.6	236.4	214.6
1917	236.1	211.7	185.1	227.3	227.9	251.9	247.3	241.6	250.3	242.2	271.4	254.7	221.7
1918	288.2	188.8	198.6	259.9	264.5	263.3	263.8	328.4	350.9	342.1	365.4	322.6	309.7
1919	296.3	278.4	242.3	256.0	265.7	286.7	284.3	306.5	313.8	340.7	368.5	303.5	303.7
1920	360.6	311.6	299.2	324.6	268.8	314.1	340.3	356.1	369.6	438.9	480.4	436.9	386.6
1921	327.2	324.9	284.2	320.8	304.8	313.1	322.2	314.8	353.8	354.8	402.0	342.4	288.7
1922	334.1	277.1	294.6	354.3	288.9	319.6	331.9	299.6	326.5	355.9	406.4	389.9	364.2
1923	385.5	367.0	326.8	398.8	386.3	405.5	387.3	379.3	402.1	390.9	441.5	395.9	344.1
1924	362.4	333.4	352.7	371.7	342.9	344.8	323.4	340.1	358.5	399.2	439.0	381.0	362.2
1925	379.4	350.8	336.9	360.8	347.2	359.4	366.1	377.5	403.4	419.7	450.6	402.5	379.5
1926	401.7	347.8	340.8	402.0	370.6	385.5	397.8	409.5	429.6	445.0	472.4	433.5	384.9
1927	387.5	358.1	354.1	406.6	371.6	391.3	382.2	370.1	415.3	426.9	452.9	386.0	334.9
1928	390.8	337.4	346.0	387.7	356.0	391.1	370.3	381.6	421.0	423.3	492.3	415.1	367.2
PASSENGER REVENUE (millions of dollars)													
1918	86.0	66.5	62.3	73.1	72.5	79.2	94.8	104.7	113.8	105.9	84.8	81.8	93.0
1919	98.3	87.1	79.3	89.4	89.6	92.7	105.6	113.7	120.7	110.2	99.0	92.5	100.1
1920	107.3	91.9	82.6	92.6	93.0	98.9	107.4	123.2	132.9	129.9	113.9	106.7	114.8
1921	96.2	105.2	88.5	97.3	90.6	93.5	99.8	108.9	109.2	100.6	88.9	82.6	88.7
1922	89.7	83.7	73.6	80.6	83.5	85.5	96.0	100.7	101.6	97.5	90.2	84.8	98.5
1923	95.6	91.1	79.1	88.3	87.8	90.0	102.8	107.5	113.0	105.9	93.8	87.1	101.1
1924	89.7	91.7	83.4	87.1	85.2	85.6	96.0	97.4	104.6	93.2	82.9	78.8	90.9
1925	88.0	88.7	77.6	79.6	78.4	82.0	92.6	98.0	104.0	95.7	86.5	81.1	92.0
1926	87.0	89.6	78.6	80.8	80.7	82.8	92.5	97.9	99.0	92.7	82.2	77.4	89.7
1927	81.4	86.0	74.3	76.7	77.4	78.6	86.0	91.7	91.7	86.3	75.2	70.9	81.9
1928	75.1	78.5	69.6	70.5	71.0	70.3	81.7	82.7	85.1	80.1	69.6	65.2	76.5
FREIGHT TON-MILES (millions) [2]													
1918	36,410	27,620	29,678	37,706	37,903	37,507	37,668	39,347	40,776	39,579	39,842	35,564	33,639
1919	32,814	30,356	25,630	28,813	28,593	32,276	31,881	34,916	36,416	38,678	40,361	32,497	33,303
1920	37,445	34,904	32,958	37,865	28,592	37,892	38,246	40,449	42,734	40,998	42,570	37,349	34,726
1921	34,478	29,784	24,915	26,816	25,591	28,220	28,146	28,402	30,420	30,864	36,872	29,222	25,723
1922	31,320	27,151	28,451	32,941	24,735	27,940	29,062	27,115	30,472	34,334	39,287	38,077	36,271
1923	38,133	37,707	32,628	39,222	38,321	39,508	38,001	38,518	40,344	39,461	42,210	38,158	33,427
1924	36,803	34,510	35,982	36,426	31,926	33,915	31,968	33,185	36,457	39,064	43,134	38,067	35,006
1925	38,007	37,026	33,570	35,332	33,571	37,126	35,854	37,944	41,709	41,305	44,054	40,775	37,856
1926	40,725	37,080	35,405	38,669	36,300	39,834	39,252	41,717	43,734	44,345	48,296	43,360	40,116
1927	39,559	39,233	37,259	41,817	37,111	40,118	38,477	38,369	41,984	42,959	45,537	37,250	34,592
1928	40,004	39,269	35,701	39,467	35,866	39,250	37,304	39,196	42,406	43,778	48,206	41,965	37,645

[1] Returns for January to October, inclusive, do not include switching and terminal companies.
[2] Exclusive of switching and terminal companies.

Source: Interstate Commerce Commission.

No. 437.—PASSENGERS CARRIED AND PASSENGER REVENUE

NOTE.—Figures relate to years ended June 30 prior to 1916, to calendar years thereafter. Passenger service revenue per train-mile includes revenue from mail, express, etc., but average revenue per passenger-mile is computed only from revenue from passengers themselves

Class and year or yearly average	Passengers carried (thousands)	Passengers carried 1 mile (millions)	Average journey per passenger (miles)	Passenger train-miles (thousands)	Passenger train car-miles (thousands)	Passenger revenue (thousand dollars)	Passenger service train revenue per train-mile	Revenue per passenger per mile (cts.)	Average passengers per train
All roads:									
1891–1895	546,762	13,383	24.48	321,031	----------	281,415	$1.05	2.10	42
1896–1900	520,459	13,863	26.64	345,457	----------	279,900	.99	2.02	39
1901–1905	681,261	20,737	30.44	423,244	----------	416,609	1.11	2.01	45
1906–1910	885,003	28,683	32.41	509,868	----------	566,815	1.26	1.98	53
1911–1915	1,018,804	33,768	33.14	587,501	3,264,399	672,792	1.32	1.99	54
1916–1920	1,152,566	42,548	36.92	560,364	3,416,933	1,021,536	[1] 2.13	2.40	[1] 72
1921–1925	982,320	36,869	37.53	571,456	3,603,117	1,112,634	[1] 2.47	3.02	[1] 65
1901	607,278	17,354	28.58	385,173	----------	351,356	1.03	2.01	42
1902	649,879	19,690	30.30	405,613	----------	392,963	1.09	1.99	45
1903	694,892	20,916	30.10	425,142	----------	421,705	1.12	2.01	46
1904	715,420	21,923	30.64	440,465	----------	444,327	1.14	2.01	46
1905	738,835	23,800	32.21	459,827	----------	472,695	1.16	1.96	48
1906	797,946	25,167	31.54	479,038	----------	510,033	1.20	2.00	49
1907	873,905	27,719	31.72	509,328	----------	564,606	1.26	2.01	51
1908	890,010	29,083	32.86	505,946	2,705,660	566,833	1.27	1.94	54
1909	891,472	29,109	32.85	506,011	2,746,511	563,609	1.27	1.93	54
1910	971,683	32,338	33.50	549,015	2,998,171	628,992	1.30	1.94	56
1911	997,410	33,202	33.48	572,929	3,136,774	657,638	1.31	1.97	55
1912	1,004,081	33,132	33.18	585,854	3,235,634	660,373	1.29	1.99	53
1913	1,043,603	34,673	33.31	[2] 593,061	[2] 3,320,488	[2] 695,988	[2] 1.36	[2] 2.01	[2] 55
1914	1,063,249	35,357	33.25	605,212	3,399,604	703,484	[2] 1.34	1.99	[2] 56
1915	*985,676*	*32,475*	*32.95*	*580,448*	*3,229,496*	*646,475*	[2] 1.31	1.99	[2] 53
1916	1,048,987	35,229	33.58	595,441	3,499,639	722,359	[2] 1.44	2.05	[2] 56
1917	1,109,943	40,165	36.13	593,338	3,485,788	840,910	[1] 1.69	2.10	[1] 65
1918	1,122,963	43,212	38.48	544,327	3,276,480	1,046,166	[1] 2.23	2.42	[1] 76
1919	1,211,022	46,838	38.68	553,147	3,446,787	1,193,431	[1] 2.46	2.55	[1] 82
1920	1,269,913	47,370	37.30	574,826	3,618,617	1,304,815	[1] 2.78	2.76	[1] 80
1921	1,061,131	37,706	35.53	568,242	3,503,514	1,166,252	[1] 2.51	3.09	[1] 67
1922	989,509	35,811	36.19	553,919	3,445,869	1,087,516	[1] 2.50	3.04	[1] 65
1923	1,008,538	38,294	37.97	573,938	3,616,342	1,158,925	[1] 2.56	3.03	[1] 67
1924	950,459	36,368	38.26	579,384	3,676,746	1,085,672	[1] 2.41	2.99	[1] 63
1925	901,963	36,167	40.10	581,792	3,773,114	1,064,806	[1] 2.37	2.94	[1] 63
1926	874,589	35,673	40.79	584,972	3,862,610	1,049,210	[1] 2.33	2.94	[1] 61
1927	840,030	33,798	40.23	578,355	3,850,116	980,528	[1] 2.23	2.90	[1] 59
Class I roads:									
1916–1920	1,114,055	41,989	37.69	556,495	3,406,925	1,005,690	2.13	2.40	72
1921–1925	962,153	36,556	37.99	558,568	3,572,292	1,100,602	2.47	3.01	65
1926	862,361	35,478	41.14	573,627	3,836,788	1,041,816	2.33	2.94	61
1927	829,918	33,650	40.55	568,538	3,830,557	974,951	2.23	2.90	59
1928	778,731	31,538	40.50	562,537	3,718,903	898,951	-------	2.85	56
Eastern district:									
1916–1920	693,837	19,590	28.23	231,816	1,427,364	439,137	2.32	2.24	83
1921–1925	642,356	18,636	29.01	230,179	1,507,410	528,429	2.84	2.84	81
1926	608,365	18,762	30.84	238,329	1,634,092	523,475	2.77	2.79	78
1927	591,510	18,165	30.71	236,208	1,640,957	502,365	2.70	2.77	76
1928	560,685	17,322	30.89	231,815	1,558,592	473,009	-------	2.73	75
Southern district:									
1916–1920	139,052	6,295	45.27	91,976	535,612	160,704	1.98	2.55	65
1921–1925	108,845	5,191	47.69	96,314	582,587	174,435	2.22	3.36	53
1926	88,671	5,187	58.49	103,399	667,380	173,755	2.10	3.35	50
1927	85,609	4,508	52.65	100,870	642,168	147,282	1.87	3.27	44
1928	78,941	4,034	51.10	98,502	615,094	129,613	-------	3.21	41
Western district:									
1916–1920	281,166	16,105	57.28	232,704	1,444,548	405,849	2.00	2.52	64
1921–1925	210,952	12,729	60.34	232,075	1,482,295	397,738	2.21	3.12	54
1926	165,325	11,529	69.74	231,899	1,535,316	344,586	1.99	2.99	49
1927	152,799	10,977	71.84	231,460	1,547,432	325,304	1.90	2.96	47
1928	139,105	10,182	73.20	232,220	1,545,217	296,329	-------	2.91	44

[1] Data available for Class I only. [2] Class I and Class II roads.

Source: Interstate Commerce Commission.

No. 438.—REVENUES, EXPENSES, AND INCOME OF OPERATING COMPANIES

NOTE.—Data relate to years ended June 30 prior to 1916, to calendar years thereafter. The method of calculating net revenue and net operating income is more fully shown in Table 442. Switching and terminal companies are excluded beginning with 1908. For certain principal items for individual years 1890 to 1900, see Table 440, p 409

Class and year or yearly average	Average miles of line (first track) operated	Income account items (thousands of dollars)					Per mile of line		Per cent operating expenses of revenues
		Operating revenues	Operating expenses	Net revenue from operations	Tax accruals	Net railway operating income	Operating revenues	Net revenue from operations	
All roads:									
1891–1895	169,378	1,127,531	759,588	367,942	34,915	333,027	$6,657	$2,172	67.37
1896–1900	186,001	1,264,048	832,377	431,671	41,970	389,701	6,796	2,321	65.85
1901–1905	206,050	1,854,632	1,226,737	627,945	53,106	574,840	9,001	3,048	66.14
1906–1910	229,404	2,528,171	1,705,542	822,630	89,931	727,407	11,021	3,586	67.46
1911–1915	246,952	3,007,262	2,123,282	883,980	123,345	729,172	12,164	3,578	70.61
1916–1920	258,295	4,870,468	3,971,453	899,015	227,680	624,304	18,856	3,481	81.54
1921–1925	257,932	6,003,699	4,684,135	1,319,563	328,822	899,332	23,276	5,116	78.02
1901	195,562	1,588,526	1,030,397	558,129	46,708	511,421	8,123	2,854	64.86
1902	200,155	1,726,380	1,116,249	610,131	50,054	560,077	8,625	3,048	64.66
1903	205,314	1,900,847	1,257,539	643,308	53,252	590,056	9,258	3,133	66.16
1904	212,243	1,975,174	1,338,896	636,278	56,802	579,476	9,306	2,998	67.79
1905	216,974	2,082,482	1,390,602	691,880	58,712	633,168	9,598	3,189	66.78
1906	222,340	2,325,765	1,536,877	788,888	69,064	719,824	10,460	3,548	66.08
1907	227,455	2,589,106	1,748,516	840,590	73,743	766,846	11,383	3,696	67.53
1908	227,257	2,440,639	1,710,402	730,237	78,674	634,794	10,740	3,213	70.08
1909	232,981	2,473,205	1,650,034	823,171	85,140	710,474	10,615	3,533	66.72
1910	236,987	2,812,142	1,881,879	930,263	98,035	805,097	11,866	3,925	66.92
1911	243,434	2,852,855	1,976,332	876,523	102,657	744,669	11,719	3,601	69.28
1912	246,829	2,906,416	2,035,058	871,358	113,819	727,458	11,775	3,530	70.02
1913	[1] 242,657	[1] 3,193,118	[1] 2,235,923	[1] 957,195	[1] 122,005	[1] 805,266	[1] 13,159	[1] 3,946	[1] 70.02
1914	254,775	3,127,730	2,280,416	847,314	140,470	674,190	12,276	3,326	72.91
1915	256,214	2,956,193	2,088,683	867,510	137,775	694,276	11,538	3,386	70.65
1916	257,325	3,691,065	2,426,251	1,264,815	161,825	1,058,506	14,344	4,915	65.73
1917	258,913	4,115,413	2,906,283	1,209,130	218,632	950,557	15,895	4,670	70.62
1918	258,263	4,985,290	4,071,522	913,768	229,533	646,223	19,303	3,538	81.67
1919	257,949	5,250,420	4,498,817	751,603	230,136	454,132	20,354	2,914	85.68
1920	259,026	6,310,151	5,954,394	355,757	289,272	12,101	24,361	1,373	94.36
1921	258,089	5,632,665	4,668,998	963,667	283,163	601,139	21,825	3,734	82.89
1922	257,195	5,674,483	4,509,991	1,164,492	308,145	769,411	22,063	4,528	79.48
1923	257,625	6,419,210	4,999,383	1,419,827	339,577	974,918	24,917	5,511	77.88
1924	258,104	6,045,252	4,608,807	1,436,445	347,437	984,463	23,422	5,565	76.24
1925	258,646	6,246,883	4,633,497	1,613,386	365,790	1,136,728	24,152	6,238	74.17
1926	258,295	6,508,679	4,766,235	1,742,444	396,538	1,229,020	25,199	6,746	73.23
1927	258,877	6,245,716	4,662,521	1,583,195	383,112	1,077,842	24,126	6,116	74.65
Class I roads:									
1916–1920	232,974	4,763,030	3,879,220	883,819	219,774	616,987	20,445	3,794	81.44
1921–1925	235,302	5,881,855	4,583,425	1,298,431	321,536	883,599	24,997	5,518	77.92
1926	236,626	6,382,940	4,669,337	1,713,603	388,923	1,213,090	26,975	7,242	73.15
1927	238,000	6,136,300	4,574,178	1,562,122	376,110	1,067,985	25,783	6,564	74.54
1928	239,700	6,104,322	4,422,484	1,681,838	389,225	1,171,460	25,466	7,016	72.45
Eastern district:									
1916–1920	59,228	2,128,577	1,816,825	311,752	84,004	188,683	35,939	5,264	85.35
1921–1925	58,947	2,668,020	2,125,217	542,803	128,138	364,374	45,261	9,208	79.66
1926	58,987	2,898,986	2,167,706	731,280	159,240	514,945	49,146	12,397	74.77
1927	58,968	2,758,469	2,096,757	661,712	152,390	450,276	46,779	11,222	76.01
1928	58,816	2,724,296	1,998,023	726,273	162,719	502,352	46,319	12,348	73.34
Southern district:									
1916–1920	43,128	739,378	595,867	143,511	33,198	114,870	17,144	3,328	80.59
1921–1925	43,865	992,307	762,100	230,207	54,088	170,826	22,622	5,248	76.80
1926	44,445	1,165,528	830,126	335,402	75,720	253,499	26,224	7,546	71.22
1927	45,251	1,090,867	798,113	292,754	72,463	217,771	24,107	6,470	73.16
1928	45,718	1,033,071	749,171	283,900	71,214	212,958	22,597	6,210	72.52
Western district:									
1916–1920	130,618	1,895,083	1,466,527	428,557	102,572	313,433	14,509	3,281	77.39
1921–1925	132,490	2,221,528	1,696,108	525,421	139,310	348,399	16,767	3,966	76.35
1926	133,194	2,318,426	1,671,505	646,921	153,963	444,046	17,406	4,857	72.10
1927	133,781	2,286,964	1,679,308	607,656	151,257	399,938	17,095	4,542	73.43
1928	135,172	2,346,955	1,675,290	671,665	155,292	456,150	17,363	4,969	71.38

[1] Class I and Class II roads.

Source: Interstate Commerce Commission.

No. 439.—FREIGHT TRAFFIC: TONNAGE AND REVENUE, 1890 TO 1900

NOTE.—Includes switching and terminal companies. Further data for freight traffic are presented in Table 435, p. 405. Tons are of 2,000 pounds

Year ended June 30—	Total tons of revenue freight carried (thousands)	Tons of revenue freight carried 1 mile (millions)	Freight revenue		Year ended June 30—	Total tons of revenue freight carried (thousands)	Tons of revenue freight carried 1 mile (millions)	Freight revenue	
			Amount (1,000 dollars)	Per ton-mile (cents)				Amount (1,000 dollars)	Per ton-mile (cents)
1890	636,542	76,207	714,464	0.941	1896	753,717	95,328	786,616	0.806
1891	675,608	81,074	736,794	.895	1897	728,900	96,139	772,849	.798
1892	706,555	88,241	799,316	.898	1898	863,629	114,078	876,728	.753
1893	745,119	93,588	820,054	.878	1899	943,715	123,667	913,737	.724
1894	638,187	80,335	699,491	.860	1900	1,081,983	141,597	1,049,256	.729
1895	696,761	85,228	729,993	.839					

Source: Interstate Commerce Commission.

No. 440.—REVENUES AND EXPENSES OF OPERATING COMPANIES, 1890 TO 1900

NOTE.—Includes switching and terminal companies. Further data for revenues and expenses are presented in Table 438, p. 408.

Year ended June 30—	Average miles of line (first track) operated	Operating revenues (1,000 dollars)	Operating expenses (1,000 dollars)	Per cent operating expenses of revenues	Year ended June 30—	Average miles of line (first track) operated	Operating revenues (1,000 dollars)	Operating expenses (1,000 dollars)	Per cent operating expenses of revenues
1890	156,404	1,051,878	692,094	65.80	1896	181,983	1,150,169	772,989	67.20
1891	161,275	1,096,761	731,888	66.73	1897	183,284	1,122,090	752,525	67.06
1892	162,397	1,171,407	780,998	66.67	1898	184,648	1,247,326	817,973	65.58
1893	169,780	1,220,752	827,921	67.82	1899	187,535	1,313,610	856,969	65.24
1894	175,691	1,073,362	731,414	68.14	1900	192,556	1,487,045	961,429	64.65
1895	177,746	1,075,371	725,720	67.48					

Source: Interstate Commerce Commission.

No. 441.—OPERATING REVENUES AND EXPENSES OF ALL CLASSES OF RAILWAYS

Class	1926				1927			
	Operating revenues		Operating expenses		Operating revenues		Operating expenses	
	Amount (1,000 dollars)	Per cent of grand total	Amount (1,000 dollars)	Per cent of grand total	Amount (1,000 dollars)	Per cent of grand total	Amount (1,000 dollars)	Per cent of grand total
Class I	6,382,939	96.41	4,669,337	96.30	6,136,300	96.63	4,574,178	96.44
Class II	107,666	1.63	80,700	1.67	92,923	1.46	72,679	1.53
Class III	18,073	.27	16,198	.33	16,492	.26	15,664	.33
Total	*6,508,678*	*98.31*	*4,766,235*	*98.30*	*6,245,715*	*98.35*	*4,662,521*	*98.30*
Switching and terminal companies	112,130	1.69	82,382	1.70	104,958	1.65	80,489	1.70
Grand total	6,620,808	100.00	4,848,617	100.00	6,350,673	100.00	4,743,010	100.00

Source: Interstate Commerce Commission.

No. 442.—INCOME ACCOUNT OF CLASS I CARRIERS: OPERATING ROADS

NOTE.—All figures in thousands of dollars. Switching and terminal companies are excluded.

Item	1916–1920 (average)	1921–1925 (average)	1924	1925	1926	1927	1928 [1]
Revenues	4,763,039	5,881,856	5,921,496	6,122,510	6,382,939	6,136,300	6,104,322
Freight	3,336,480	4,277,134	4,333,585	4,541,646	4,797,780	4,632,321	4,685,970
Passenger	1,005,690	1,100,603	1,075,039	1,056,395	1,041,816	974,951	900,306
Mail	76,598	94,900	97,952	97,097	96,157	95,961	104,317
Express	118,933	137,886	143,372	145,355	149,049	143,365	142,445
All other transportation	92,041	129,878	133,918	138,395	148,773	141,005	141,185
All other	133,387	141,455	137,630	143,622	154,364	148,697	130,099
Expenses	3,879,220	4,583,425	4,507,885	4,536,880	4,669,337	4,574,178	4,422,484
Maintenance, way, etc.	663,681	781,577	792,678	816,443	866,819	868,581	837,137
Maintenance, equipment	1,040,185	1,297,802	1,260,020	1,259,835	1,283,091	1,219,052	1,165,663
Traffic	59,749	93,919	98,873	106,053	114,691	120,349	124,750
Transportation	1,947,814	2,194,358	2,141,469	2,128,471	2,171,904	2,127,506	2,066,962
All other	167,791	215,769	214,845	226,078	232,832	238,690	227,972
Net revenue from railway operations	883,819	1,298,431	1,413,611	1,585,630	1,713,602	1,562,122	1,681,838
Deduct—							
Tax accruals	219,774	321,536	340,337	358,516	388,923	376,110	389,225
Uncollectible revenues	868	1,895	2,306	1,924	1,851	1,492	1,580
Equipment rents	25,647	67,659	72,908	79,394	82,888	88,351	92,421
Joint facility rents	20,543	23,742	24,223	24,719	26,850	28,184	27,152
Net railway operating income	616,987	883,599	973,837	1,121,077	1,213,090	1,067,985	1,171,460

Item	Eastern district			Southern district			Western district		
	1926	1927	1928	1926	1927	1928	1926	1927	1928
Revenues	2,898,986	2,758,469	2,724,286	1,165,527	1,090,867	1,033,071	2,318,426	2,286,964	2,346,955
Freight	2,120,301	2,008,136	2,007,141	913,966	871,910	833,931	1,763,513	1,752,275	1,844,898
Passenger	523,475	502,365	473,442	178,755	147,282	129,565	344,586	325,304	297,299
Mail	36,577	36,474	40,311	16,789	16,624	17,739	42,791	42,863	46,267
Express	70,591	67,133	64,977	22,953	21,633	21,142	55,505	54,594	56,326
All other transportation	75,871	74,339	73,321	15,485	13,705	13,006	52,417	52,961	54,858
All other	72,171	70,017	65,104	22,579	19,713	17,688	59,614	58,067	47,307
Expenses	2,167,706	2,096,757	1,998,023	880,126	798,113	749,171	1,671,505	1,679,308	1,675,290
Maintenance, way, etc.	368,337	363,433	344,725	167,397	157,959	146,003	331,085	347,189	346,409
Maintenance, equipment	620,645	573,813	542,188	227,862	220,610	207,471	434,584	424,629	416,004
Traffic	42,046	44,690	46,286	23,546	24,201	24,238	49,099	51,458	54,226
Transportation	1,027,563	1,003,474	960,542	377,128	358,447	333,891	767,213	765,685	772,529
All other	109,115	111,347	104,282	34,193	36,806	37,568	89,524	90,447	86,122
Net revenue from railway operations	731,280	661,712	726,273	335,401	292,754	283,900	646,921	607,656	671,665
Deduct—									
Tax accruals	159,240	152,390	162,719	75,720	72,463	71,214	153,963	151,257	155,292
Uncollectible revenues	997	575	874	255	308	245	599	609	461
Equipment rents	43,954	45,295	47,641	3,353	[2] 97	[2] 2,770	35,581	43,153	47,550
Joint facility rents	12,144	13,176	12,687	2,574	2,309	2,253	12,132	12,699	12,212
Net railway operating income	514,945	450,276	502,352	253,499	217,771	212,958	444,646	399,938	456,150

[1] Water line transportation apportioned to the several accounts; included in "All other" in prior years.
[2] Add.

Source: Interstate Commerce Commission.

No. 443.—TAXES AND SPECIAL ASSESSMENTS OF CLASS I CARRIERS, BY STATES

NOTE.—Data for 1910 relate to year ended June 30, thereafter to calendar years, and for all years exclude switching and terminal companies and include nonoperating subsidiaries. Data for 1910 include also Class II and Class III and for 1916, Class II. Total railroad taxes, Federal and State, in 1927, by classes were as follows: Class I and subsidiaries, $378,024,762 (including $977,731 Canadian, $7 Cuban, $4,047 Mexican, and $4,403 not distributed by States); Class II and subsidiaries, $6,204,398; Class III and subsidiaries, $820,194; switching and terminal companies, $13,946,520; grand total, $390,004,874

State	Amount (thousands of dollars)						Per mile of line (dollars)			
	1910	1916	1920	1925	1926	1927	1910	1920	1925	1927
Total	103,738	162,475	282,751	359,370	389,753	377,039	--------	1,262	1,603	1,666
United States Government taxes	4,315	12,531	50,543	87,680	109,818	86,031	--------	226	391	380
New England:										
Maine	675	1,026	1,725	1,977	2,014	2,084	301	831	977	1,054
New Hampshire	778	746	1,005	1,042	1,130	1,147	629	827	868	985
Vermont	257	491	451	453	420	464	251	608	592	593
Massachusetts	3,097	2,575	3,339	3,920	4,137	4,185	1,484	1,616	1,929	2,096
Rhode Island	276	397	585	604	630	678	1,302	2,996	3,348	3,750
Connecticut	1,868	1,114	1,975	2,058	2,093	2,021	1,867	1,977	2,138	2,101
Middle Atlantic:										
New York	7,312	11,724	17,861	22,613	24,221	24,144	877	2,271	2,876	3,072
New Jersey	5,066	7,656	11,189	17,355	17,323	16,962	2,290	5,292	8,466	8,259
Pennsylvania	6,352	9,957	9,342	11,134	12,770	13,023	587	945	1,131	1,319
South Atlantic:										
Delaware	161	153	165	182	175	172	482	493	609	575
Dist. of Columbia	56	64	79	126	147	124	1,562	2,201	3,661	3,578
Maryland	1,016	1,211	2,004	1,352	2,053	2,217	742	1,591	1,112	1,823
Virginia	1,756	3,012	4,695	5,614	7,095	7,872	400	1,129	1,375	1,899
West Virginia	1,454	2,355	3,879	6,046	5,969	6,225	463	1,195	1,744	1,755
North Carolina	952	1,706	2,129	4,748	5,126	5,243	220	552	1,322	1,444
South Carolina	764	1,091	1,951	2,840	3,134	3,268	232	623	911	1,052
Georgia	1,386	1,957	2,481	3,310	3,476	3,663	206	455	612	668
Florida	839	1,572	2,167	3,888	4,490	5,483	208	542	879	1,105
East North Central:										
Ohio	5,457	10,618	16,841	18,518	18,926	20,140	611	2,048	2,184	2,356
Indiana	3,845	5,803	9,422	11,627	12,145	11,911	521	1,328	1,634	1,727
Illinois	5,938	9,049	16,422	21,576	21,567	21,255	501	1,421	1,908	1,898
Michigan	4,052	4,220	7,579	7,556	8,140	8,995	469	1,083	1,076	1,273
Wisconsin	3,162	4,968	6,876	7,295	6,410	6,563	440	995	1,030	937
West North Central:										
Minnesota	3,958	6,445	9,753	7,965	7,679	7,697	461	1,151	962	925
Iowa	2,463	3,871	7,855	6,842	6,835	6,901	253	808	706	712
Missouri	1,830	2,258	3,359	3,716	3,833	3,766	230	457	498	505
North Dakota	1,427	2,289	4,997	4,290	4,113	4,294	341	969	834	833
South Dakota	834	1,635	3,718	3,161	1,807	2,644	211	900	752	629
Nebraska	2,031	2,704	4,159	4,747	4,577	5,167	335	677	770	837
Kansas	3,074	4,108	6,188	6,670	8,405	8,869	344	688	727	966
South Central:										
Kentucky	1,073	2,018	2,184	4,246	5,099	5,323	312	624	1,157	1,419
Tennessee	1,181	1,718	2,584	3,107	2,905	3,270	326	702	847	930
Alabama	1,410	1,751	2,548	2,687	2,919	3,170	297	560	603	714
Mississippi	997	1,916	3,612	5,064	5,094	4,929	250	942	1,364	1,283
West South Central:										
Louisiana	1,238	2,235	3,788	4,578	4,825	4,911	250	971	1,180	1,219
Texas	2,688	4,656	5,098	6,514	6,456	6,952	196	364	469	481
Oklahoma	2,967	3,653	5,463	5,682	5,344	5,611	499	864	917	896
Arkansas	1,347	2,248	3,912	2,663	2,568	2,768	277	948	622	642
Mountain:										
Montana	1,486	2,781	4,284	4,728	4,586	4,539	356	871	966	917
Wyoming	614	901	1,213	1,659	1,672	1,809	384	686	924	1,005
Colorado	1,637	2,451	3,344	3,719	3,720	3,943	306	729	828	880
New Mexico	745	1,179	2,467	2,212	2,153	2,508	254	915	796	866
Arizona	321	1,341	1,572	2,485	2,495	3,029	158	776	1,187	1,370
Utah	692	1,123	1,856	2,161	2,139	2,201	383	997	1,039	1,047
Nevada	668	1,028	1,543	1,762	1,826	1,805	388	942	1,088	1,065
Idaho	714	1,475	3,844	2,872	2,900	3,106	345	1,500	1,099	1,185
Pacific:										
Washington	3,151	4,064	8,795	6,647	6,658	7,418	685	1,698	1,309	1,462
Oregon	913	1,492	2,722	2,736	3,157	3,461	444	1,060	1,025	1,291
California	3,444	5,142	7,187	12,863	12,579	13,088	508	1,071	1,893	1,911

Source: Interstate Commerce Commission.

No. 444.—PRINCIPAL RAILWAY COMPANIES: MILES OF ROAD OPERATED AND

NOTE.—Totals for regions include

Region and road	Average mileage of road operated, 1928	Ton-miles of revenue freight (millions)		Operating revenues (thousands of dollars)		Operating expenses (thousands of dollars)	
		1927	1928	1927	1928	1927	1928
All regions	240,579	428,737	432,985	6,136,300	6,177,761	4,574,178	4,472,480
New England Region	7,302	9,232	9,202	269,880	264,968	204,373	191,806
1. Boston & Maine	2,083	2,857	2,894	77,848	76,624	61,836	57,429
2. N. Y., New Haven & Hartford	2,149	3,852	3,886	139,824	137,633	100,278	94,149
Great Lakes Region	24,865	73,478	74,079	1,103,625	1,124,622	838,678	828,109
1. Delaware & Hudson	882	3,535	3,298	42,693	40,230	34,546	31,586
2. Del., Lackawanna & Western	996	4,647	4,535	84,686	81,135	60,183	57,975
3. Erie	2,047	8,489	8,841	108,357	110,092	91,623	86,469
4. Chicago & Erie	270	1,672	1,666	14,121	14,885	8,641	8,894
Total Erie and Chi. & Erie	2,317	10,161	10,507	122,478	124,977	100,264	95,363
5. Lehigh Valley	1,364	5,263	5,138	74,503	71,935	59,270	53,827
6. Michigan Central	1,858	4,282	4,522	89,751	93,217	62,244	62,644
7. New York Central	6,011	22,300	22,202	383,377	381,733	293,400	288,250
8. N. Y., Chicago & St. Louis	1,601	4,832	4,989	53,620	52,877	38,574	37,867
9. Pere Marquette	2,245	3,249	3,388	44,745	45,762	31,640	31,036
10. Pittsburgh & Lake Erie	231	2,479	2,435	31,786	31,407	26,320	25,603
11. Wabash	2,524	5,089	5,558	67,108	71,073	51,379	52,412
Central Eastern Region	27,027	101,030	99,673	1,384,965	1,382,439	1,053,706	1,011,619
1. Baltimore & Ohio	5,638	20,842	20,243	246,079	236,819	186,169	172,551
2. Central R. R. Co. of New Jersey	691	2,820	2,847	58,746	58,002	43,344	42,122
3. Chicago & Eastern Illinois	945	2,547	2,122	26,714	24,894	21,530	19,421
4. Cleveland, Cincinnati, Chicago & St. Louis.	2,397	8,413	8,125	91,186	88,830	70,323	66,989
5. Elgin, Joliet & Eastern	460	1,689	1,712	24,282	24,602	17,000	16,820
6. Long Island	404	177	180	40,887	40,533	30,112	28,434
7. Pennsylvania	10,467	45,168	44,990	664,851	650,567	510,669	480,172
8. Reading Co	1,141	6,604	6,410	92,500	89,940	71,880	69,826
Pocahontas Region	5,633	37,906	36,187	277,701	261,288	179,471	166,969
1. Chesapeake & Ohio	2,724	19,334	18,187	133,042	124,825	89,733	82,543
2. Norfolk & Western	2,241	15,024	15,016	110,948	106,947	69,696	66,522
Southern Region	40,140	58,432	55,790	813,166	773,417	618,642	583,120
1. Atlantic Coast Line	5,118	3,787	3,314	80,426	71,393	64,330	55,966
2. Central of Georgia	1,917	1,747	1,554	27,641	25,133	20,946	19,209
3. Illinois Central	5,002	14,832	14,003	155,822	152,570	118,983	116,434
4. Louisville & Nashville	5,076	13,442	12,921	144,605	135,638	112,858	106,231
5. Seaboard Air Line	4,499	3,391	3,177	61,790	57,245	46,873	42,903
6. Southern	6,761	8,483	8,413	147,639	144,116	103,908	101,888
7. Yazoo & Mississippi Valley	1,708	1,290	1,491	26,976	26,351	22,740	20,852
Northwestern Region	48,960	49,930	53,007	714,793	750,318	536,518	541,791
1. Chicago & North Western	8,463	8,590	8,794	150,133	152,090	116,994	116,639
2. Chicago, Milwaukee, St. Paul & Pacific.[1]	11,252	12,530	13,143	162,943	170,555	133,506	126,241
3. Chicago, St. Paul, Minneapolis & Omaha.	1,747	1,640	1,692	26,847	27,063	21,800	22,989
4. Great Northern	8,277	8,958	10,127	117,904	126,737	78,356	83,235
5. Minneapolis, St. Paul & Sault Ste. Marie.	4,385	3,621	3,739	49,157	50,292	35,736	36,407
6. Northern Pacific	6,730	6,571	7,052	95,575	101,273	67,855	70,802
7. Oregon-Washington R. R. & Navigation Co.	2,354	1,624	1,674	29,126	29,693	22,206	23,387
Central Western Region	52,638	64,138	67,663	1,042,856	1,066,344	742,158	749,470
1. Atchison, Topeka & Santa Fe	9,428	11,417	11,719	206,294	206,277	142,755	142,765
2. Chicago & Alton	1,028	1,869	2,014	28,346	28,540	22,264	22,423
3. Chicago, Burlington & Quincy	9,375	11,943	12,932	156,320	162,891	111,918	114,191
4. Chicago, Rock Island & Pacific	7,566	8,191	8,771	132,928	134,317	98,271	98,354
5. Denver & Rio Grande Western	2,558	2,036	2,082	33,121	33,201	25,079	24,442
6. Oregon Short Line	2,539	2,450	2,720	36,000	38,732	24,443	25,389
7. Southern Pacific Co.—Pacific Lines.	8,906	11,134	11,679	226,956	230,043	160,051	161,639
8. Union Pacific	3,732	8,119	8,989	113,384	121,972	73,235	77,712
Southwestern Region	34,014	34,501	36,784	529,314	554,165	400,632	398,597
1. Gulf, Colorado & Santa Fe	1,945	3,328	2,305	34,195	28,099	24,031	19,991
2. Missouri-Kansas-Texas	1,799	2,145	2,340	35,237	35,894	23,363	22,404
3. Missouri-Kansas-Texas of Texas	1,389	1,235	1,296	20,945	20,655	15,976	16,470
4. Missouri Pacific	7,445	9,386	10,312	125,728	131,577	99,566	99,091
5. St. Louis-San Francisco	5,178	4,839	4,845	84,430	81,653	58,101	56,532
6. Texas & New Orleans	4,697	3,486	4,016	61,420	70,061	49,845	55,095
7. Texas & Pacific	2,015	2,319	3,920	38,950	50,796	28,797	34,536

[1] Successor to Chicago, Milwaukee & St. Paul as of Jan. 14, 1928.

PRINCIPAL ITEMS OF TRAFFIC, REVENUES, AND EXPENSES OF LARGER COMPANIES

smaller roads of Class I not listed

Operating ratio (per cent)		Railway tax accruals		Net railway operating income		Freight revenue		Passenger revenue		Region and road
		Thousands of dollars								
1927	1928	1927	1928	1927	1928	1927	1928	1927	1928	
74.5	72.4	376,110	395,066	1,067,985	1,193,134	4,632,321	4,688,760	974,951	900,327	All regions.
75.7	72.4	13,330	14,735	39,615	47,462	163,868	163,557	75,616	71,567	New England.
79.4	75.0	3,573	3,946	9,501	12,803	50,055	50,397	18,426	16,989	1.
71.7	68.4	6,435	7,494	25,235	29,238	75,002	75,341	49,436	47,271	2.
76.0	73.6	63,225	68,933	184,382	208,297	816,866	826,328	181,206	179,142	Great Lakes.
80.9	78.5	1,404	1,050	6,711	7,633	36,208	33,623	3,604	3,497	1.
71.1	71.5	7,457	6,393	17,398	17,119	61,676	59,708	13,007	12,003	2.
84.6	78.5	4,233	4,351	12,125	18,434	87,483	90,361	11,691	10,675	3.
61.2	59.8	588	707	836	1,613	12,309	13,129	639	579	4.
81.9	76.3	4,821	5,058	12,961	20,047	99,783	103,490	12,330	11,254	Total 3 and 4.
70.6	74.8	3,474	3,678	9,836	12,315	61,208	59,510	7,688	6,995	5.
69.4	67.2	6,248	6,328	20,939	23,156	60,355	64,998	20,203	19,793	6.
76.5	75.5	25,194	29,137	61,824	62,222	234,381	254,613	99,105	96,917	7.
71.9	71.6	2,720	2,981	9,996	9,557	50,031	49,346	1,818	1,815	8.
70.7	67.8	2,491	2,725	9,292	10,506	38,767	40,033	3,247	2,968	9.
82.8	81.5	2,005	2,039	8,005	7,771	28,006	27,938	2,754	2,409	10.
76.6	73.7	2,788	3,052	9,612	11,950	53,993	58,840	8,154	7,195	11.
76.1	73.2	75,835	82,509	226,279	259,335	1,027,402	1,019,703	245,543	228,793	Central Eastern.
75.7	72.9	12,287	11,639	44,817	49,388	203,568	197,215	26,287	23,712	1.
73.8	72.6	3,738	5,059	10,384	9,385	45,767	45,564	8,731	8,450	2.
80.6	78.0	1,400	1,583	2,292	2,201	20,492	19,184	4,123	3,606	3.
77.1	75.4	5,047	4,929	14,603	15,623	67,980	67,594	15,570	14,558	4.
70.0	68.4	1,380	2,164	4,179	3,731	22,294	22,383	--------	--------	5.
73.7	70.2	2,472	2,689	6,163	7,542	11,857	11,605	26,357	26,460	6.
76.8	73.8	35,710	37,846	103,977	117,298	461,612	457,294	140,811	131,180	7.
77.6	77.6	5,185	4,521	16,700	17,099	78,576	76,312	8,923	7,775	8.
64.6	63.9	21,819	20,195	81,282	79,636	244,827	232,735	20,601	16,871	Pocahontas.
67.5	66.1	8,746	8,491	36,321	36,324	119,220	112,842	8,555	7,083	1.
62.8	62.2	10,300	9,200	34,011	34,204	99,992	97,502	6,894	5,727	2.
76.1	75.4	50,644	51,148	136,488	133,803	627,983	601,220	127,281	112,694	Southern.
80.0	78.4	6,050	5,800	10,271	9,895	58,839	52,019	14,956	13,065	1.
75.8	76.4	1,555	1,513	5,051	4,450	20,758	19,020	4,423	3,720	2.
76.4	76.3	10,012	10,253	25,616	25,702	121,456	119,939	23,115	21,432	3.
78.1	78.3	7,640	7,605	23,877	22,205	116,384	110,019	20,027	17,354	4.
75.9	75.0	3,567	3,536	10,380	10,055	46,432	43,844	9,715	7,958	5.
70.4	70.7	9,454	9,579	32,765	30,843	109,331	108,641	26,749	24,017	6.
84.3	77.7	1,869	1,949	1,599	3,175	21,297	21,614	3,950	3,552	7.
75.1	72.2	49,399	53,493	114,466	142,243	557,434	590,593	89,847	82,604	Northwestern.
77.9	76.7	9,784	9,608	20,258	23,226	108,330	111,418	25,183	23,579	1.
81.9	73.4	8,870	10,239	14,073	29,119	127,804	136,226	19,213	18,091	2.
81.2	85.0	1,327	1,392	2,679	1,858	20,071	20,607	4,648	4,190	3.
66.5	65.7	9,046	10,298	29,203	31,294	94,405	103,980	12,717	11,505	4.
72.7	72.4	2,964	2,968	8,663	9,006	39,711	41,473	5,604	4,989	5.
71.0	69.9	8,907	9,688	22,593	25,089	75,463	81,725	11,773	10,733	6.
76.2	78.3	2,389	2,245	2,931	2,143	22,710	23,451	3,752	3,339	7.
71.2	70.3	76,996	75,206	200,639	217,122	771,226	814,327	168,514	155,246	Central Western.
69.2	69.2	17,856	15,923	45,894	47,554	150,944	153,969	38,279	34,684	1.
78.5	78.6	1,233	1,202	2,734	2,751	19,444	20,102	6,189	5,603	2.
71.6	70.1	11,677	11,192	28,143	32,912	118,497	126,953	22,059	19,715	3.
73.9	73.6	7,653	8,054	21,927	22,396	99,556	103,184	21,866	19,290	4.
75.7	73.6	2,380	2,300	6,391	7,095	26,438	27,041	4,090	3,627	5.
67.9	65.6	3,275	3,444	6,937	8,574	29,151	31,877	4,210	3,944	6.
70.5	70.3	17,636	17,597	45,303	46,020	154,036	159,487	40,686	38,846	7.
64.6	63.7	8,673	8,591	27,575	31,072	88,166	96,870	15,581	14,987	8.
75.7	72.1	24,862	28,847	84,834	105,236	423,615	439,937	66,943	59,470	Southwestern.
72.9	71.1	1,435	1,317	5,960	5,293	29,682	24,080	2,859	2,382	1.
66.3	62.6	2,458	2,464	9,378	10,543	28,643	29,874	3,958	3,350	2.
76.3	79.7	673	610	2,322	1,061	15,319	15,389	3,854	3,418	3.
79.2	75.3	4,769	5,813	16,899	21,348	100,788	107,388	14,653	13,553	4.
68.8	69.1	4,811	5,052	22,045	20,660	64,305	63,923	13,975	11,485	5.
81.2	78.6	2,982	3,927	6,120	8,875	46,075	53,589	10,262	10,862	6.
73.9	68.0	1,839	2,246	6,498	10,446	30,596	41,694	5,694	5,971	7.

Source: Interstate Commerce Commission.

No. 445.—REVENUE FREIGHT CARRIED, BY CLASSES OF COMMODITIES: CLASS I CARRIERS

NOTE.—The classification was changed in 1920, but comparable figures for earlier years for many commodities appear in Table 245, Statistical Abstract, 1921. See headnote, Table 446

Commodity	Revenue freight originated (thousands of tons of 2,000 pounds)											Total revenue freight carried, 1928 (thousands of tons of 2,000 pounds)		
	All districts								1928					
	1920	1922	1923	1924	1925	1926	1927	1928	Eastern district	Southern district	Western district	Eastern district	Southern district	Western district
Grand total, carload and l. c. l.	1,255,421	1,028,745	1,279,030	1,187,296	1,247,242	1,336,142	1,281,611	1,285,943	545,968	294,173	445,802	1,238,607	427,027	695,989
Grand total, carload traffic	1,202,219	980,516	1,234,692	1,146,747	1,206,655	1,296,651	1,243,171	1,245,989	527,779	286,892	434,318	1,205,678	414,126	673,558
Products of agriculture, total	110,840	111,787	109,318	116,587	109,313	111,787	113,343	118,022	21,451	14,289	32,282	38,913	32,685	123,942
Wheat	23,131	24,805	23,091	27,444	21,548	24,379	26,237	26,950	2,632	648	23,670	6,731	2,025	30,095
Corn	12,689	19,275	15,151	14,883	12,680	13,927	13,162	17,045	3,425	1,987	11,633	7,605	3,424	15,927
Oats	8,615	7,646	8,332	8,507	8,450	6,496	5,518	5,888	1,572	882	3,434	3,985	1,730	4,339
Other grain	5,669	5,245	4,739	5,606	4,564	4,014	5,212	5,508	469	116	4,921	1,953	424	6,469
Flour and meal	10,952	10,694	10,518	10,331	9,901	10,137	10,027	10,753	2,644	844	7,265	10,928	3,093	10,628
Other mill products	8,891	9,000	10,002	10,085	9,578	9,768	10,178	10,581	3,105	1,232	6,244	9,223	3,065	9,017
Hay, straw, and alfalfa	7,957	5,723	5,965	5,802	5,506	5,028	4,467	3,999	1,562	213	2,224	3,077	1,279	2,998
Tobacco	1,081	882	1,099	1,070	1,038	1,010	1,053	[1]945	[2]116	[1]797	[1]32	[1]362	[1]1,258	[1]41
Cotton	3,379	3,073	2,887	3,259	4,127	4,482	4,180	3,773	122	1,326	2,325	1,331	2,976	3,923
Cottonseed and products, except oil	4,573	3,546	3,574	4,598	5,849	6,484	6,046	4,984	21	2,217	2,746	592	3,191	3,883
Citrus fruits	1,464	1,141	1,542	1,650	1,363	1,533	1,750	1,543	34	582	927	1,653	1,622	3,280
Other fresh fruits	5,271	5,063	5,249	5,114	5,910	6,321	5,648	6,401	1,106	1,519	3,776	6,403	3,459	10,168
Potatoes	4,118	4,829	4,698	4,591	4,614	4,339	4,727	[2]4,511	[2]1,799	[2]520	[2]2,192	[2]6,633	[2]1,655	[2]5,102
Other fresh vegetables	2,205	2,324	2,473	2,685	2,828	2,800	3,083	3,124	737	584	1,803	3,582	1,748	5,694
Dried fruits and vegetables	1,165	1,154	1,135	1,438	1,533	1,568	1,527	1,878	433	97	1,348	1,276	346	2,609
Other products of agriculture	9,741	7,386	8,863	9,524	9,824	9,501	10,526	10,141	1,674	725	7,742	3,574	1,400	9,269
Animals and products, total	26,595	26,230	26,254	27,747	26,324	26,244	26,003	25,634	6,025	1,985	17,624	18,119	4,101	23,504
Horses and mules	936	491	603	531	544	513	541	577	47	106	424	118	211	602
Cattle and calves	9,809	9,567	9,400	9,315	9,330	9,240	8,634	7,977	886	574	6,517	2,070	786	8,781
Sheep and goats	1,344	1,159	1,159	1,215	1,224	1,270	1,297	1,361	159	62	1,140	384	75	1,858
Hogs	5,421	5,795	6,944	6,707	5,502	5,272	5,369	5,871	1,156	443	4,272	2,320	531	4,941
Fresh meats	2,770	2,614	3,023	3,000	2,904	2,996	2,987	2,935	889	205	1,841	3,871	658	2,180
Other packing-house products	2,206	2,049	2,395	2,395	2,139	2,022	1,957	2,203	982	239	982	2,513	953	1,449
Poultry	264	292	366	376	357	409	407	406	62	50	294	849	99	417
Eggs	536	565	597	572	591	644	651	635	117	51	467	955	129	728
Butter and cheese	425	507	571	648	686	725	747	754	136	28	590	1,103	121	774
Wool	293	360	291	294	263	281	356	394	247	5	142	698	17	268
Hides and leather	1,051	1,031	1,090	1,026	1,026	985	1,010	915	528	109	278	1,526	244	447
Other animals and products	1,540	1,750	1,814	1,668	1,758	1,887	2,049	1,606	816	113	677	1,712	227	1,059

Products of mines, total	712,154	583,993	713,735	637,582	678,336	757,703	713,402	696,583	300,508	203,635	192,440	710,562	252,476	271,447
Anthracite coal	78,100	48,821	83,342	76,108	58,260	76,015	72,176	69,997	69,347	67	[2] 583	114,956	243	1,363
Bituminous coal	384,349	287,617	360,641	320,367	346,346	388,736	361,551	346,057	140,069	160,649	45,339	415,369	193,111	87,821
Coke	23,895	15,407	27,871	18,023	19,798	22,193	16,164	16,241	12,765	1,566	1,910	20,476	2,397	3,248
Iron ore	84,433	54,457	77,817	55,851	72,134	76,023	66,355	65,684	2,859	2,496	63,329	41,833	3,202	64,604
Other ores and concentrates	21,550	7,953	10,491	10,504	12,289	13,039	11,335	11,838	1,627	504	9,707	4,323	1,224	17,269
Clay, gravel, sand, and stone	98,720	102,933	133,934	136,650	145,405	157,295	161,776	[3] 128,304	[3] 46,207	[3] 28,322	[3] 53,775	[3] 63,446	[3] 36,892	[3] 65,651
Crude petroleum	6,435	5,937	8,403	8,412	11,245	10,744	10,531	7,633	98	120	7,415	1,331	261	14,752
Asphaltum	1,424	1,909	2,102	2,517	2,531	3,101	3,170	2,899	1,598	704	597	3,282	1,608	1,525
Salt	3,250	3,245	3,393	3,303	3,403	3,238	3,251	3,341	1,659	30	1,652	4,204	1,136	3,292
Other products of mines	6,997	4,726	5,741	5,847	6,925	7,319	7,094	41,589	24,279	9,177	8,133	42,242	12,402	11,922
Products of forests, total	100,766	89,059	115,918	108,094	107,391	104,851	99,351	96,737	11,151	29,773	55,808	48,929	49,672	88,746
Logs, posts, poles, and cordwood	38,571	35,627	47,178	45,551	45,428	45,163	41,676	39,541	2,413	7,393	29,235	5,213	9,567	33,073
Ties	5,472	3,761	6,681	5,508	4,292	4,833	5,338	4,240	809	1,610	1,821	2,063	2,283	2,697
Pulp wood	4,992	3,931	5,367	5,603	5,826	5,943	6,989	6,893	2,000	947	3,946	4,548	1,569	5,982
Lumber, timber, shooks, staves, headings	48,618	43,507	53,540	48,612	49,019	46,062	42,846	42,508	4,612	17,872	20,024	33,568	34,061	45,733
Other forest products	3,112	2,233	2,852	2,820	2,826	2,850	2,501	3,555	1,317	1,456	782	3,537	2,192	1,261
Manufactures and miscellaneous, total	251,884	220,442	267,767	256,737	285,291	296,066	291,073	312,013	188,644	37,205	86,184	359,155	75,182	170,919
Refined petroleum and its products	29,616	30,870	36,641	41,298	46,273	48,938	51,661	58,480	26,825	6,038	31,617	41,566	13,988	59,415
Vegetable oils	938	937	969	1,150	1,446	1,621	1,893	1,561	362	395	804	1,144	807	1,477
Sugar, sirup, glucose, and molasses	5,664	5,691	4,891	5,407	5,700	5,744	5,582	5,605	1,626	1,020	2,959	3,829	2,367	6,018
Iron, pig, and bloom	16,451	9,991	14,960	12,071	14,577	15,132	11,488	[4] 8,033	[4] 5,993	[4] 1,338	[4] 702	[4] 8,616	[4] 1,662	[4] 1,560
Rails and fastenings	3,047	2,378	3,192	2,471	2,646	2,875	2,595	[5] 2,551	[5] 1,925	[5] 289	[5] 337	[5] 2,907	[5] 664	[5] 1,212
Bar, sheet, and structural iron and pipe	27,443	22,162	30,141	24,800	29,144	30,508	31,878	[6] 45,461	[6] 40,114	[6] 2,277	[6] 3,070	[6] 68,200	[6] 5,662	[6] 12,341
Other metals, pig, bar, and sheet	5,170	4,337	5,330	4,904	5,419	5,604	2,898	2,648	1,026	40	1,582	4,121	257	4,316
Castings, machinery, and boilers	9,391	4,214	5,936	4,930	5,359	5,772	5,176	[7] 3,772	[7] 2,619	[7] 249	[7] 904	[7] 5,604	[7] 956	[7] 2,185
Cement	15,400	18,453	21,118	22,970	24,516	24,921	25,889	26,080	12,680	3,596	9,804	26,718	6,705	15,167
Brick and artificial stone	15,251	15,640	18,798	18,165	19,668	20,337	19,556	19,019	11,367	3,529	4,123	19,771	5,445	7,228
Lime and plaster	4,410	5,199	5,896	6,008	6,830	6,642	6,092	5,300	2,992	632	1,676	6,192	1,545	3,223
Sewer pipe and drain tile	2,165	2,093	2,220	2,281	2,426	2,387	2,712	2,556	1,548	355	653	2,944	662	1,089
Agricultural implements and vehicles other than automobiles	3,324	1,720	2,603	2,158	2,281	2,304	3,118	2,304	806	183	1,315	1,758	445	2,453
Automobiles and autotrucks	3,427	4,160	6,612	6,061	6,930	7,387	6,324	8,016	6,713	294	1,009	14,901	1,872	4,987
Furniture (new)	743	692	882	837	970	987	1,004	1,063	458	297	308	1,385	621	813
Beverages	1,240	614	684	683	841	760	804	813	301	61	451	644	124	652
Ice	5,795	5,158	5,070	4,430	4,928	4,145	4,062	3,922	2,123	328	1,471	2,589	361	1,528
Fertilizers (all kinds)	9,204	6,813	7,639	7,815	8,463	8,197	10,465	12,859	4,502	5,984	2,373	7,672	8,739	3,654
Paper, printed matter, and books	3,144	2,765	2,913	3,051	3,328	3,441	3,322	[8] 3,303	[8] 2,514	[8] 137	[8] 652	[8] 3,837	[8] 416	[8] 2,327
Chemicals and explosives	8,348	7,545	9,030	8,423	9,579	10,084	9,116	2,979	1,464	707	808	2,436	1,302	1,172
Textiles	805	878	958	882	966	933	785	937	326	434	177	1,040	932	410
Canned goods (all canned food products)	3,074	3,106	3,435	3,740	4,144	4,070	4,204	4,805	2,070	264	2,471	5,389	864	4,861
Other manufactures and miscellaneous	77,814	65,625	77,849	72,202	78,807	83,217	80,447	89,946	64,290	8,758	16,898	120,892	18,786	32,851
Merchandise—All l. c. l. freight	53,202	48,229	44,338	40,549	40,537	39,491	38,440	36,954	18,189	7,281	11,484	32,929	12,901	17,431

[1] Leaf tobacco only; refuse, stems, etc., included in "Other products of agriculture."
[2] Potatoes, except sweet.
[3] Gravel, sand, and stone.
[4] Pig iron only.
[5] Includes frogs and switches.
[6] Iron and steel (5th and 6th class), tin and terne plate, and cast-iron and steel pipes and fittings.
[7] Machinery and boilers only.
[8] Printing paper only.

Source: Interstate Commerce Commission.

No. 446.—REVENUE FREIGHT CARRIED, BY COMMODITY GROUPS

NOTE.—*All figures in thousands of tons of 2,000 pounds.* Data relate to years ended June 30 prior to 1916, to calendar years thereafter. Switching and terminal roads excluded since 1908. Figures for 1911 to 1916, inclusive, exclude Class III roads but this affects the comparability very slightly; those after 1916 exclude both Class II and Class III, thereby reducing the grand total about 6 per cent. Nonrevenue freight is excluded; this is a large item in the case of a few commodities, notably coal

Class of road and year or yearly average	Total	Products of agriculture	Animals and products	Products of mines		Products of forests	Manufactures and miscellaneous	
				Coal and coke	Other		Carload shipments	Less than carload
I. REVENUE FREIGHT ORIGINATED								
All roads:								
1901–1905	[1] 691,121	59,406	16,608	237,753	85,803	72,786	119,707	27,800
1906–1910	[1] 930,255	73,864	20,000	324,282	147,864	98,870	162,225	33,991
1911–1915 [2]	[1] 1,053,648	99,095	25,731	392,808	192,058	101,143	181,191	41,314
1915 [2]	[1] 1,005,029	113,040	26,660	371,882	184,700	93,971	163,988	48,163
1916 [2]	[1] 1,203,091	116,867	31,294	461,608	275,543	111,850	239,849	54,420
Class I:								
1916	[1] 1,203,367	113,635	30,473	429,751	250,342	93,819	231,038	52,911
1917	1,264,016	104,629	31,858	481,632	251,021	100,838	240,260	53,769
1918	1,263,344	116,051	35,777	500,769	234,027	97,256	226,077	53,387
1919	1,096,111	115,033	35,494	399,072	190,879	94,076	210,256	51,302
1920	1,255,421	110,840	26,595	489,344	222,810	100,766	251,864	53,202
1921	940,183	114,069	24,263	376,220	135,050	76,419	172,169	41,992
1922	1,023,745	111,787	26,230	351,846	181,152	89,059	220,442	43,229
1923	1,279,030	109,318	28,254	471,854	241,881	115,618	267,767	44,338
1924	1,187,296	116,587	27,747	414,499	223,083	108,094	256,737	40,549
1925	1,247,242	109,313	26,324	424,403	253,933	107,391	285,291	40,557
1926	1,336,142	111,787	26,243	486,944	270,759	104,851	296,007	39,491
1927	1,281,611	113,342	26,003	449,891	263,511	99,351	291,073	38,440
1928	1,285,943	118,022	25,634	432,296	264,287	96,737	312,013	36,954
Eastern district:								
1925	531,308	23,481	5,844	215,344	79,360	11,941	175,860	19,478
1926	580,200	23,950	5,777	258,428	78,472	11,497	183,282	18,794
1927	541,075	23,168	5,843	228,161	78,974	10,751	175,775	18,403
1928	545,968	21,451	6,024	222,180	78,328	11,151	188,643	18,191
Southern district:								
1925	281,716	14,666	1,957	152,694	35,574	33,343	34,890	8,592
1926	310,579	15,157	1,936	172,652	42,927	32,752	36,694	8,461
1927	308,893	14,593	2,064	172,668	41,205	32,249	37,894	8,220
1928	294,173	14,288	1,985	162,283	41,352	29,778	37,206	7,281
Western district:								
1925	434,218	71,166	18,523	56,365	138,999	62,107	74,541	12,517
1926	445,363	72,680	18,530	55,864	149,360	60,602	76,091	12,236
1927	431,643	75,581	18,096	49,062	143,332	56,351	77,404	11,517
1928	445,802	82,283	17,625	47,833	144,607	55,808	86,164	11,482
II. TOTAL REVENUE FREIGHT [3]								
All roads:								
1901–1905	[1] 1,266,314	125,234	34,596	419,764	150,474	122,927	231,259	51,468
1906–1910	[1] 1,673,431	150,384	38,769	589,884	228,563	168,023	314,007	59,277
1911–1915 [2]	[1] 1,881,635	193,252	44,194	712,193	284,499	183,292	356,669	71,347
Class I:								
1916–1920	[1] 2,212,267	225,505	55,199	826,912	349,783	193,436	466,202	93,550
1921–1925	2,068,262	221,961	46,065	757,498	316,014	192,256	465,097	69,371
1925	2,304,275	215,124	46,315	823,354	388,660	210,077	552,544	68,201
1926	2,465,369	223,924	47,023	926,854	414,723	204,790	579,830	68,225
1927	2,363,639	221,384	46,096	871,713	400,591	192,774	564,643	65,838
1928	2,361,623	225,550	45,724	838,085	396,400	187,347	605,256	63,261
Eastern district:								
1925	1,208,296	72,062	17,788	538,708	158,066	55,631	330,948	35,093
1926	1,309,242	73,474	18,083	617,234	165,393	53,456	346,586	35,016
1927	1,237,669	72,361	18,021	569,139	160,416	50,216	334,034	33,482
1928	1,238,607	68,913	18,119	549,901	160,661	48,929	359,155	32,929
Southern district:								
1925	423,769	33,984	4,238	187,454	52,695	57,457	73,704	14,237
1926	461,263	34,951	4,337	211,599	60,998	56,026	78,801	14,491
1927	449,753	33,155	4,414	210,676	57,252	53,709	76,291	14,256
1928	427,027	32,695	4,101	195,752	56,724	49,672	75,182	12,901
Western district:								
1925	672,210	109,078	24,289	97,192	177,899	96,989	147,892	18,871
1926	694,864	115,499	24,603	98,021	188,332	95,308	154,383	18,718
1927	676,217	115,868	24,261	91,898	182,923	88,849	154,318	18,100
1928	695,989	123,942	23,504	92,432	179,015	88,746	170,919	17,431

[1] Includes some undistributed freight. [2] Excluding Class III. [3] Including receipts from connecting lines.
Source: Interstate Commerce Commission.

No. 447.—CAR LOADINGS: AVERAGE WEEKLY LOADINGS OF REVENUE FREIGHT, CLASS I RAILWAYS, BY PRINCIPAL COMMODITY GROUPS

NOTE.—Averages for earlier years for all commodities are: 1918, 857,540; 1919, 804,472; 1920, 867,663; 1921, 756,215; 1922, 830,915; 1923, 957,925

Month	1924	1925	1926	1927	1928	1924	1925	1926	1927	1928
	Total, all commodities					Grain and grain products				
Year	933,354	985,080	1,021,131	992,996	991,860	49,436	44,341	45,449	45,745	48,290
January	841,162	889,895	921,674	939,165	861,931	43,113	49,323	47,094	44,747	46,799
February	904,232	914,080	919,333	950,480	897,424	49,255	44,623	42,766	43,408	46,761
March	924,763	908,435	969,349	996,509	950,406	44,448	38,495	39,812	39,061	47,453
April	881,124	931,920	958,201	968,897	934,574	36,637	33,289	37,518	37,131	39,783
May	913,294	985,073	1,036,455	1,027,118	1,001,514	39,976	36,598	39,964	39,738	40,778
June	884,370	971,446	1,022,335	999,171	984,661	37,380	36,525	39,314	40,205	34,447
July	886,632	978,528	1,042,752	978,440	985,738	42,471	40,341	54,754	46,477	51,794
August	955,797	1,060,854	1,097,030	1,062,462	1,057,702	58,942	53,681	55,637	55,084	57,795
September	1,020,185	1,075,337	1,130,778	1,097,621	1,117,257	67,089	53,064	49,079	58,829	59,156
October	1,094,002	1,113,406	1,193,515	1,116,218	1,175,199	69,097	47,994	51,852	54,813	54,824
November	1,024,104	1,065,416	1,062,068	955,726	1,061,257	58,052	48,484	43,687	45,641	52,389
December	870,804	924,708	898,078	835,055	882,756	47,326	50,888	42,666	44,022	48,416
	Livestock					Coal				
Year	33,712	31,454	30,696	29,749	29,238	164,182	171,257	190,996	177,562	168,642
January	36,236	36,523	33,479	32,330	31,914	194,906	202,662	187,445	222,743	177,529
February	33,135	32,054	28,231	27,687	32,501	191,986	180,812	174,564	213,204	170,360
March	31,436	28,168	28,374	27,255	28,677	171,966	151,868	181,477	204,142	162,992
April	29,178	27,465	27,056	27,585	26,286	129,576	139,779	164,159	154,326	145,128
May	31,623	27,808	27,728	28,846	26,715	134,526	153,933	168,237	161,636	157,556
June	29,948	25,948	26,871	26,935	25,187	135,654	154,308	171,663	151,017	145,021
July	29,159	26,515	26,796	25,488	22,730	138,737	161,905	176,000	144,240	142,908
August	29,982	29,324	29,261	28,074	24,736	150,238	191,202	190,556	173,988	162,376
September	35,579	31,547	36,775	31,750	32,882	172,835	179,902	199,114	183,028	180,483
October	40,607	41,603	40,049	39,578	38,655	193,401	182,671	225,771	190,665	206,575
November	41,486	37,828	34,578	33,642	33,400	185,272	189,796	236,060	169,253	197,386
December	36,082	32,179	29,091	28,869	27,782	175,869	173,135	213,938	164,385	177,524
	Coke					Ore				
Year	9,069	11,987	13,142	10,547	10,237	32,280	38,665	41,907	36,380	36,686
January	11,883	13,502	17,966	12,176	10,659	8,250	9,908	9,879	9,461	7,934
February	12,729	13,277	17,992	12,361	11,204	9,392	10,610	10,196	10,688	7,848
March	13,729	12,586	14,371	12,303	10,875	10,749	11,477	10,544	10,920	8,572
April	11,564	11,465	12,507	11,447	10,118	16,817	20,736	15,042	25,473	10,264
May	9,197	9,650	11,841	10,693	10,149	49,818	62,533	55,301	59,883	41,300
June	7,743	9,238	11,476	10,367	9,665	58,646	62,206	67,063	64,742	65,597
July	6,980	9,143	11,272	9,669	8,813	55,980	62,683	72,788	63,003	62,517
August	6,980	9,626	11,464	9,691	9,229	51,589	62,863	77,601	62,188	63,271
September	8,086	10,990	12,174	9,780	10,067	47,768	59,100	75,196	55,897	63,916
October	9,697	12,849	13,023	9,447	10,725	44,613	53,008	67,666	48,046	60,247
November	9,910	15,495	12,832	9,067	10,734	23,957	38,165	32,078	19,291	37,910
December	11,226	15,671	11,777	9,597	10,556	10,169	12,411	9,564	8,370	10,414
	Forest products					Miscellaneous and L. C. L.				
Year	70,522	71,862	70,277	65,819	64,128	573,254	615,493	628,665	627,193	634,639
January	64,064	66,985	66,959	64,344	58,342	482,710	511,930	558,853	553,364	528,753
February	80,258	78,914	74,826	68,896	67,728	527,474	553,791	570,756	574,236	561,019
March	81,627	80,522	76,972	70,522	68,756	570,756	585,320	617,798	632,306	623,082
April	77,730	78,869	75,692	68,439	64,329	579,622	620,319	626,227	644,496	638,666
May	74,460	76,588	76,704	71,026	67,442	573,696	617,904	656,670	655,296	657,574
June	68,587	73,461	74,244	67,690	66,005	546,414	609,759	631,103	638,184	638,740
July	61,541	66,034	67,227	63,344	59,938	551,764	611,906	633,915	626,220	637,033
August	68,334	71,233	70,739	68,964	66,534	589,730	642,724	661,770	664,474	673,761
September	67,556	69,668	70,546	67,633	64,508	621,272	671,066	687,894	690,706	706,246
October	70,329	70,782	72,218	67,172	66,468	666,258	704,498	722,935	706,497	737,705
November	69,893	67,590	65,504	61,097	65,026	635,533	668,059	638,320	617,734	664,413
December	64,001	64,511	54,547	52,050	55,022	526,130	575,913	536,494	527,761	553,042

Source: American Railway Association.

No. 448.—STEAM RAILWAY ACCIDENTS, BY CAUSES

NOTE.—See headnote to Table 449

Cause of accident	Killed					Injured				
	1916-1920, average	1921-1925, average	1926	1927	1928	1916-1920, average	1921-1925, average	1926	1927	1928
All accidents	8,662	6,618	7,090	6,821	6,509	176,693	141,688	130,235	104,799	85,531
Train accidents	684	394	360	286	272	8,457	4,409	3,916	3,072	2,873
Passengers	125	72	79	10	16	4,052	2,423	1,829	1,511	1,404
Employees	434	237	193	195	143	3,756	1,597	1,630	1,221	1,139
Other persons	125	85	88	81	113	649	389	457	340	330
Causes:										
Collisions	------	139	152	80	70	--------	2,071	2,319	1,557	1,192
Passengers	------	37	38	6	8	--------	1,172	1,233	897	577
Employees	------	89	107	65	53	--------	764	877	549	498
Other persons	------	14	7	9	9	--------	135	219	111	117
Derailments	------	197	141	122	129	--------	2,109	1,362	1,271	1,496
Passengers	------	34	36	4	8	--------	1,212	587	589	784
Employees	------	111	64	83	69	--------	690	599	520	545
Other persons	------	52	41	35	52	--------	208	176	162	167
Other causes	------	58	67	84	73	--------	228	235	244	185
Passengers	------	2	5	------	------	--------	39	19	25	43
Employees	------	36	22	47	21	--------	143	154	152	96
Other persons	------	20	40	37	52	--------	46	62	67	46
Train-service accidents	7,462	5,794	6,329	6,096	5,872	55,240	44,420	45,733	39,531	34,514
Passengers	179	100	73	69	67	3,368	3,155	2,632	2,375	2,055
Employees	2,002	1,088	1,181	1,039	895	42,903	31,503	32,572	26,936	22,640
Other persons	5,281	4,605	5,078	4,988	4,910	8,969	9,701	10,529	10,220	9,819
Causes:										
Coupling or uncoupling locomotives or cars	------	80	64	48	37	--------	1,624	1,591	1,325	1,135
Coupling or uncoupling air hose	------	22	20	21	28	--------	435	455	398	354
Operating locomotives	------	20	11	22	13	--------	6,259	5,697	4,467	3,402
Operating hand brakes	------	30	29	32	25	--------	2,090	2,474	2,158	1,336
Operating switches	------	2	------	1	1	--------	905	1,142	802	684
Contact with fixed structures	------	69	67	71	45	--------	836	706	625	521
Getting on or off cars or locomotives	------	484	447	428	368	--------	9,125	9,351	7,810	6,729
Highway grade-crossing accidents [1]	------	1,997	2,442	2,328	2,496	--------	5,826	6,896	6,482	6,573
Struck or run over, not at public crossings	------	[2] 2,415	2,579	2,487	2,253	--------	[2] 2,079	2,121	1,959	1,639
Miscellaneous	------	1,157	670	658	606	--------	15,595	15,300	13,505	11,641
Nontrain accidents	516	430	401	439	365	112,996	92,860	80,586	62,196	48,174
Passengers	(3)	[2] 4	3	3	2	(3)	[2] 634	688	674	568
Employees	419	329	301	332	289	110,865	90,630	77,701	60,066	46,467
Other persons	97	97	97	104	74	2,132	1,724	2,197	1,456	1,139

[1] Excludes persons killed and injured at highway grade crossings in connection with derailments and miscellaneous train accidents.
[2] Average for 1922 to 1924. Separate data not available for 1921.
[3] No data available.

Source: Interstate Commerce Commission.

No. 449.—PERSONS KILLED AND INJURED IN RAILWAY ACCIDENTS

NOTE.—For various reasons, including the fact that returns were required under different acts, the statistics are not strictly comparable. Prior to 1921, train accidents were those causing damage to railway property in excess of $150 or any damage and a resulting casualty. Thereafter they were considered as such when the damage exceeded $150 with or without a casualty. Where the damage is less than $150 and there is a reportable casualty it is classified as a train-service accident. Figures for years 1911–1915 include industrial and other nontrain accidents to employees only, and for years 1908–1910 do not cover switching and terminal roads. Otherwise the statement covers all reportable accidents

Yearly average or year ended—	Total		Passengers		Employees		Other persons		Trespassers [1]	
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
June 30:										
1891–1895	6,821	35,313	292	2,967	2,315	27,051	4,214	5,294	-------	-------
1896–1900	6,946	42,248	222	3,237	2,054	32,793	4,670	6,219	-------	-------
1901–1905	9,326	72,943	392	7,894	3,249	57,209	5,686	7,840	-------	-------
1906	10,618	97,706	359	10,784	3,929	76,701	6,330	10,241	-------	-------
1907	11,839	111,016	610	13,041	4,534	87,644	6,695	10,331	-------	-------
1908	10,188	104,230	381	11,556	3,405	82,487	6,402	10,187	-------	-------
1909	8,722	95,626	253	10,311	2,610	75,006	5,859	10,309	-------	-------
1910	9,682	119,507	324	12,451	3,382	95,671	5,976	11,385	-------	-------
1911	10,396	150,159	299	12,042	3,602	126,039	6,495	12,078	-------	-------
1912	10,585	169,538	283	14,938	3,635	142,442	6,667	12,158	-------	-------
1913	10,964	200,308	350	15,130	3,715	171,417	6,899	13,761	-------	-------
1914	10,302	192,662	232	13,887	3,259	165,212	6,811	13,563	-------	-------
1915	8,621	162,040	199	10,914	2,152	138,092	6,270	13,034	-------	-------
Dec. 31:										
1916	10,001	196,722	246	7,152	2,941	176,923	6,814	12,647	-------	-------
1917	10,087	194,805	301	7,582	3,199	174,247	6,587	12,976	-------	-------
1918	9,286	174,575	471	7,316	3,419	156,013	5,396	11,246	-------	-------
1919	6,978	149,053	273	7,456	2,138	131,018	4,567	10,579	-------	-------
1920	6,958	168,309	229	7,591	2,578	149,414	4,151	11,304	-------	-------
1921	5,996	120,685	205	5,584	1,446	104,530	4,345	10,571	-------	-------
1922	6,325	134,871	203	6,712	1,657	117,197	1,967	7,834	2,498	3,128
1923	7,385	171,712	143	6,463	2,026	152,678	2,397	9,279	2,819	3,292
1924	6,617	143,739	153	6,023	1,543	125,319	2,300	9,268	2,621	3,129
1925	6,766	137,435	176	5,643	1,599	119,224	2,347	9,640	2,644	2,928
1926	7,090	130,235	155	5,149	1,672	111,903	2,640	10,387	2,623	2,796
1927	6,821	104,799	82	4,560	1,566	88,223	2,519	9,020	2,654	2,996
1928	6,509	85,561	85	4,027	1,327	70,246	2,718	8,652	2,379	2,636

[1] Trespassers included with "other persons" prior to 1922.

No. 450.—CONSUMPTION OF FUEL AND REPLACEMENTS OF RAILS AND TIES: CLASS I CARRIERS

NOTE.—Rails and ties laid in new construction are not included

	All districts			1927		
	1925	1926	1927	Eastern district	Southern district	Western district
Consumption of fuel by locomotives:						
Anthracite coal ... 1,000 tons	2,174	2,005	1,603	1,603	-------	-------
Bituminous coal ... do	117,714	122,823	115,883	55,581	26,100	34,202
Fuel oil [1] ... 1,000 gallons	2,457,827	2,459,678	2,429,936	11,802	49,550	2,368,584
Hardwood [1] ... cords	27,784	30,581	27,294	9,916	16,914	464
Softwood [1] ... do	82,998	74,240	67,394	19,638	2,600	45,156
Total, coal equivalent [2] ... 1,000 tons	135,420	140,426	132,945	57,274	26,409	49,262
Rails laid in replacement and betterment:						
Total tonnage ... 1,000 long tons	3,485	3,818	3,819	1,662	752	1,405
Total charges [3] ... 1,000 dollars	126,487	139,899	138,732	57,351	28,000	53,381
Ties laid in previously constructed tracks:						
Crossties ... thousands	82,717	80,745	78,340	21,013	17,386	39,941
Switch and bridge ties ... 1,000 board feet	[4] 282,630	[4] 275,972	259,997	95,945	60,114	103,938
Total charges [3] ... 1,000 dollars	[4] 120,644	[4] 117,532	117,871	43,004	23,871	50,996

[1] The ratio of fuel oil to coal is based upon the experience of the various roads; 1 cord of hardwood equals two-thirds ton of coal; 1 cord of softwood equals one-half ton of coal.
[2] Totals include equivalent of a small amount of miscellaneous fuel.
[3] The total charges shown do not include the labor cost of applying the rails or ties.
[4] Figures do not include data for 1,435 linear feet of steel ties in 1925, and 450 in 1926.

Source of Tables 449 and 450: Interstate Commerce Commission.

No. 451.—EXPRESS COMPANIES: Income Account

NOTE.—Mileage covered by operations of express companies, 1928: Total, 269,076; steam road, 232,748; electric line, 2,930; steamboat line, 24,290; airplane, 7,748; stage line, 1,360. Of the total, the American Railway Express Co. operates 258,766 miles and the Southeastern Express Co. 10,310 miles

[All figures in thousands of dollars]

Calendar year	Receipts for transportation	Paid for express privileges	Total operating revenues [1]	Operating expenses	Net operating revenues	Express taxes	Operating income [2]	Other income	Net income [3]
American Railway Express Co.:									
1920	333,890	141,829	195,665	234,810	[4] *39,144*	2,182	[4] *41,864*	2,076	[4] *39,886*
1921	294,664	113,491	184,897	182,265	2,631	2,095	508	2,074	2,309
1922	291,349	142,323	152,503	149,142	3,361	2,214	1,108	1,956	2,774
1923	309,579	155,736	157,444	154,446	2,998	2,138	834	1,851	2,460
1924	287,281	139,997	150,640	147,447	3,193	2,102	1,045	1,458	2,282
1925	290,303	143,832	149,715	146,433	3,282	2,059	1,195	1,088	2,184
1926	294,519	147,812	150,097	146,825	3,272	2,143	1,110	1,237	2,318
1927	284,513	139,494	148,730	145,467	3,263	2,197	1,050	1,204	2,207
1928	281,545	141,288	143,877	140,675	3,202	2,038	1,146	1,216	2,321
Southeastern Express Co.:									
1921 [5]	4,374	1,649	2,781	2,719	61	25	37	10	47
1922	7,103	3,320	3,880	3,750	130	79	50	20	70
1923	7,866	3,877	4,097	3,908	189	88	99	24	123
1924	7,910	3,755	4,266	4,103	163	109	51	19	70
1925	8,041	3,912	4,241	4,086	155	86	67	20	87
1926	8,257	4,021	4,357	4,196	161	83	76	24	100
1927	8,176	3,971	4,342	4,188	154	88	62	28	90
1928	7,870	3,738	4,268	4,126	142	100	40	30	70

[1] Includes revenues from sources other than transportation.
[2] Deducting, besides taxes, a small amount of uncollectible revenue.
[3] Sum of two preceding columns less small deductions.
[4] Deficit.
[5] Result of operations for eight months ended Dec. 31, 1921.

No. 452.—THE PULLMAN CO.: Abstract of Operations

[All money figures in thousands of dollars]

Year ended—	Gross revenues, car operations	Association revenues, debtor	Contract revenues, debtor [1]	Expenses, car operations		Net revenues, car operation	Operating income	Revenue passengers carried	
				Total	Conducting car operations			Thousands	Number per car day
June 30:									
1910	35,334	66	893	23,962	(2)	11,372	13,151	20,203	14
1911	35,698	508	1,517	25,917	10,683	9,781	10,471	21,655	12
1912	37,090	486	1,419	26,258	11,119	10,832	11,788	22,915	12
1913	40,103	513	2,035	26,713	11,785	13,390	12,417	24,864	12
1914	41,499	491	1,969	28,116	12,376	13,383	12,270	26,189	12
1915	38,723	467	1,954	26,633	11,716	12,090	10,816	24,252	12
1916	43,347	487	3,239	28,836	12,762	14,511	13,017	26,782	12
Dec. 31:									
1916	44,203	482	2,694	30,879	13,457	13,324	11,745	27,866	12
1917	51,777	102	4,498	35,449	16,047	16,328	12,469	32,261	14
1918	49,967	--------	3,918	40,593	20,202	9,374	7,763	28,751	13
1919	69,071	--------	31	48,618	26,392	20,453	19,194	37,346	15
1920	72,124	--------	13,155	61,031	30,805	11,093	9,304	39,255	16
1921	64,439	--------	7,679	64,744	28,136	[3] *905*	[2] *3,277*	31,225	13
1922	65,582	--------	8,379	53,029	26,022	12,553	8,540	31,743	13
1923	72,570	--------	8,555	55,385	27,365	16,601	12,289	34,249	13
1924	72,758	--------	9,075	61,609	30,023	11,149	7,755	34,086	12
1925	80,198	--------	8,873	63,513	32,247	16,685	12,546	35,526	12
1926	81,834	--------	9,463	68,204	35,009	13,630	9,565	36,073	11
1927	80,952	--------	8,906	66,503	34,848	14,449	10,360	35,197	11
1928	80,846	--------	8,604	66,656	34,935	14,190	10,938	33,924	11

[1] Represents amounts due other carriers under the provisions of definite contracts.
[2] Not separated.
[3] Deficit.

Source of Tables 451 and 452: Interstate Commerce Commission.

No. 453.—ALASKAN GOVERNMENT RAILROAD TRAFFIC: Analysis of Statistics of Passenger and Freight Services, Years Ended June 30

	1927	1928		1927	1928
Road mileage operated—monthly average	543.7	543.7	FREIGHT TRAFFIC		
PASSENGER TRAFFIC			Freight train-miles	99,295	97,341
			Mixed train-miles	124,617	112,351
Passenger train-miles [1]	29,919	38,598	Loaded cars, 1 mile, freight and mixed trains	1,528,507	1,559,705
Mixed train-miles	124,617	112,351	Empty cars, 1 mile, freight and mixed trains	923,468	961,059
Passenger car-miles, passenger trains [1]	29,919	38,598	All cars, 1 mile	2,451,975	2,520,764
Passenger car-miles, mixed trains	211,870	210,185	Tons of revenue freight carried:		
Total revenue passengers carried	53,609	51,587	Coal	41,059	49,141
Revenue passengers carried 1 mile	3,628,300	3,859,509	Miscellaneous	41,357	47,836
Total passenger revenue	$207,148	$221,368	Tons of revenue freight carried 1 mile	16,939,211	19,712,037
Average revenue per passenger per mile	$0.05700	$0.05736	Total freight revenue	$811,507	$875,298
			Average revenue per ton per mile	$0.04791	$0.04440

[1] Motor miles.

Source: Department of the Interior.

No. 454.—ELECTRIC RAILWAYS: Summary of Operations

NOTE.—This table does not include the electric operations of steam railway companies. Many electric railway companies also engage in other operations, especially in the sale of current for light and power; wherever possible, such light and power business has been excluded, but for numerous companies this is impossible. No distinction can be made in the statistics between purely urban street railways and suburban and interurban lines. The insignificant amount of business still conducted by cable and animal traction is included, as well as some operations conducted by primarily electric railways by means of steam traction and gasoline engine cars. In the trackage statistics of this table, each track of a double or multiple line is counted separately

	1890	1902	1907	1912	1917	1922
Number of companies	789	987	1,236	1,260	[1] 1,307	[1] 1,200
Miles of all track operated	8,123.02	22,576.99	34,381.51	41,064.82	44,835.37	43,931.86
Operated by:						
Electricity	1,261.97	21,901.53	34,037.64	40,808.39	44,676.51	43,789.08
Cable	488.31	240.69	61.71	66.41	45.32	45.90
Animal traction	5,661.44	259.10	136.11	57.52	11.16	4.02
Steam	711.30	169.61	105.06	76.34	41.03	1.06
Gasoline-engine cars	----------	[2] 6.06	40.99	66.16	55.61	[3] 86.06
Gravity	----------	----------	----------	----------	5.74	5.74
Value of road and equipment (thousand dollars)	389,357	2,167,634	3,637,669	4,596,563	5,136,442	5,058,762
Number of employees	70,764	140,769	221,429	282,461	294,826	300,523
Number of passenger cars	32,505	60,290	70,016	76,162	79,914	77,301
Revenue passengers, including pay transfer [4] (thousands)	2,023,010	4,774,212	7,441,115	9,545,555	11,304,660	12,666,558
Operating revenues	$90,617,211	$247,553,999	$418,187,858	$567,511,704	$709,825,092	$1,016,719,092
Operating expenses	$62,011,185	$142,312,597	$251,369,252	$332,896,350	$452,594,654	$727,795,168
Operating ratio (per cent)	68.4	57.5	60.1	58.7	63.8	71.6

[1] Includes companies maintaining separate organizations, though leased to and controlled through stock ownership by other companies, largely in Pennsylvania. In 1912 and 1907 these companies were treated as merged and not included in the number reported.

[2] Compressed air.

[3] Includes 1.26 miles operated by tractor.

[4] Not including motor-bus passengers.

Source: Bureau of the Census, Department of Commerce.

No. 455.—ELECTRIC RAILWAYS: MILEAGE, EQUIPMENT, OUTPUT OF ELECTRICITY, TRAFFIC, EMPLOYEES, AND SALARIES AND WAGES

NOTE.—See headnote to Table 454

	All companies				Surface lines, 1922	Subway and elevated lines, 1922
	1907	1912	1917	1922		
Number of operating companies	945	975	943	858	851	
Miles of all track, total [1]	34,403.56	41,064.82	44,835.37	43,931.86	43,073.93	857.93
First track (length of line)	25,547.19	30,437.86	32,547.58	31,264.26	(2)	(2)
Second and other main tracks	6,938.62	7,895.76	8,899.09	9,100.07	(2)	(2)
Sidings and turnouts	1,917.69	2,731.20	1,918.16	2,085.76	(2)	(2)
Car houses, yards, etc.			1,470.54	1,481.77	(2)	(2)
Electric track with—						
Overhead trolley [3]	32,501.71	38,958.06	42,490.71	41,417.91	[4] 41,367.18	[5] 50.73
Third rail [3]	1,209.78	1,305.13	1,689.37	1,893.11	[4] 1,065.55	[5] 827.50
Conduit trolley	322.70	351.72	361.54	421.30	421.30	----------
Storage battery	3.00	64.67	112.64	37.61	37.61	----------
Gas-electric motor	22.50	38.81	24.43	40.11	40.11	----------
Number of cars, total	83,641	94,016	102,603	99,255	91,159	8,096
Passenger	70,016	76,162	79,914	77,301	69,397	7,904
Express, freight, baggage, and mail	5,669	7,794	11,534	11,406	11,406	----------
Service cars	7,956	10,060	11,155	10,548	10,356	192
Number of electric locomotives	117	277	357	404	404	----------
Horsepower of power-plant equipment, total	[6] 2,519,823	3,661,385	4,200,192	4,119,306	(2)	(2)
Steam turbines	535,404	1,462,300	2,322,602	2,856,006	(2)	(2)
Other steam engines	[6] 1,876,123	1,703,088	1,221,223	827,027	(2)	(2)
Internal-combustion engines	16,335	24,190	28,294	32,495	(2)	(2)
Water wheels and turbines	91,961	471,307	627,983	403,778	(2)	(2)
Kilowatt capacity of generators	1,723,416	2,505,316	2,924,779	2,972,834	(2)	(2)
Electric energy (1,000 kilowatt hours)	----------	9,020,018	12,187,851	12,405,053	(2)	(2)
Generated	4,759,130	6,002,659	7,240,503	6,473,451	(2)	(2)
Purchased	(7)	3,017,359	4,947,348	5,931,602	(2)	(2)
Passengers carried, total (thousands)	9,533,081	12,135,342	14,506,915	[8] 15,331,400	13,586,232	1,745,168
Revenue passengers, including pay transfer	7,441,115	9,545,555	11,304,661	12,666,558	10,923,274	1,743,284
Free-transfer passengers	1,995,658	2,423,918	3,021,138	2,496,570	2,662,958	1,884
Free passengers	96,308	165,869	181,116	168,272		
Revenue car mileage, total (thousands)	1,617,731	1,921,620	2,130,802	2,124,523	1,821,177	303,346
Passenger	1,583,831	1,885,870	2,087,819	2,068,294	1,764,948	303,346
Express, freight, and mail	33,900	35,750	51,983	56,229	56,229	----------
Average number of revenue passengers:						
Per mile of all track [9]	216,522	232,556	252,323	288,600	253,842	2,031,965
Per passenger car hour	43.06	48.38	53.69	61.14	(2)	(2)
Revenue car hours, total (thousands)	151,330	190,478	203,057	201,838	----------	----------
Passenger	148,678	187,590	199,053	197,146	----------	----------
Express, freight, and mail	2,661	2,888	4,004	4,692	----------	----------
Salaried employees:						
Number	11,700	23,271	27,151	30,239	28,867	1,372
Salaries	$12,909,466	$26,128,786	$33,909,674	$57,489,091	$54,481,024	$3,008,067
Wage earners:						
Number	209,729	259,190	267,675	270,284	244,277	26,007
Wages	$138,081,633	$174,762,153	$233,330,688	$338,191,044	$347,203,108	$40,987,936
Conductors, motormen, and one-man car and bus operators—						
Number	115,518	131,321	136,184	130,628	126,717	[10] 3,911
Wages	$75,705,054	$95,451,625	$127,222,144	$205,238,478	$197,131,208	$8,107,270
Other wage earners—						
Number	94,211	127,869	131,491	139,656	117,560	22,096
Wages	$62,376,579	$79,310,528	$106,108,544	$132,952,566	$150,071,900	$32,880,666

[1] Includes track lying outside the United States (1922 and 1917, 27.06 miles; 1912, 31.91; and 1907, 27.52 miles).
[2] Not shown separately.
[3] Includes 20.96 miles in 1922 and 2.18 miles in 1917 operated by both overhead trolley and third rail.
[4] Includes 0.60 mile operated by both overhead trolley and third rail.
[5] Includes 20.36 miles operated by both overhead trolley and third rail.
[6] Includes 857 units of 43,344 horsepower reported as auxiliary engines.
[7] No data.
[8] In addition there were 16,120,000 passengers carried by 370 motor busses operated by electric railway companies.
[9] Exclusive of idle track and freight and switching roads.
[10] Exclusive of guards on subway and elevated trains, who are classified under "All other wage earners."

Source: Bureau of the Census, Department of Commerce.

No. 456.—FINANCIAL STATISTICS OF ELECTRIC RAILWAYS

NOTE.—See headnote to Table 454

[All figures, except percentages, in thousands of dollars]

	All companies				Surface lines, 1922	Subway and elevated lines, 1922
	1907	1912	1917	1922		
INCOME ACCOUNT—OPERATING COMPANIES						
Gross operating revenue	418,188	567,511	709,825	1,016,719	910,857	105,862
Railway operations	400,896	535,996	650,150	925,477		
Passenger	382,132	502,652	603,130	854,663	757,736	96,927
Baggage, express, and milk	1,561	3,688	4,966	5,285		
Freight	5,231	10,165	18,546	31,560	153,121	8,935
Other railway operations	11,972	19,491	23,508	33,969		
Auxiliary operations	17,292	31,515	59,675	91,242		
Operating expenses (total)	251,309	332,896	452,595	727,795	660,135	67,660
Railway operating expenses	245,140	318,700	421,251	678,563	612,099	66,464
Way and structures	28,521	44,270	55,470	102,003	94,126	7,877
Equipment	31,486	38,717	48,982	87,236	77,500	9,736
Power	43,972	53,599	76,968	107,246	92,790	14,456
Conducting transportation	[1] 97,123	[1] 129,205	174,973	286,690	256,957	29,733
All other	44,038	52,909	64,868	95,388	90,726	4,662
Auxiliary operations	6,169	14,196	31,344	49,232	48,036	1,196
Ratio of expenses to revenue (per cent)	60.1	58.7	63.8	71.6	72.5	63.9
Net operating revenue	166,879	234,615	257,230	288,924	250,722	38,202
Taxes (deduct)	19,756	35,028	45,756	64,788	58,347	6,441
Operating income	147,123	199,587	211,474	224,136	192,375	31,761
Nonoperating income (add)	11,556	18,419	20,283	32,329	29,708	2,621
Gross income	158,679	218,006	231,757	256,465	222,083	34,382
Deductions from gross income (total)	[2] 118,339	149,866	175,306	199,277	164,421	34,856
Rent for leased roads	48,022	44,785	48,303	43,771	30,937	12,834
Interest on debt	63,741	98,025	119,113	139,126	119,901	19,225
Miscellaneous	[2] 6,576	7,056	7,890	16,380	13,583	2,797
Net income	40,340	68,140	56,451	57,188	57,662	[3] 474
Dividends	26,455	51,650	48,337	36,729	36,729	
Surplus	13,885	16,490	8,114	20,459	20,933	[3] 474
INCOME STATISTICS—OPERATING AND LESSOR COMPANIES COMBINED [4]						
Gross income	159,092	218,467	232,213	257,217		
Interest	81,771	113,259	135,260	152,247		
Other deductions from gross income [5]	[2] 8,533	17,553	15,183	30,764		
Net income	68,788	87,655	81,770	74,206		
Dividends	54,485	70,992	73,263	53,663		
Surplus	14,303	16,663	8,507	20,543		
Per cent of stock paying dividends	48.3	53.3	49.2	39.6		
Average rate of dividend on stock paying dividends (per cent)	5.4	5.6	6.0	5.8		
Average rate of dividend on all stock, pct.	2.6	3.0	3.0	2.3		
BALANCE SHEET—OPERATING AND LESSOR COMPANIES COMBINED [4]						
Total assets or liabilities [6]	4,300,041	5,448,695	6,272,617	6,655,274		
Assets—						
Road and equipment	3,637,669	4,596,563	5,136,442	5,058,763		
Other physical property			79,608	89,180		
Securities of other electric railways	210,343	266,962	312,606	276,534		
Securities of other companies	(7)	57,775	63,395	95,757		
Treasury securities	27,553	93,143	77,883	169,902		
Other permanent investments	136,768	47,371	108,769	153,497		
Current assets and miscellaneous	251,529	348,732	415,173	618,202		
Profit and loss deficit [8]	36,179	38,140	78,741	193,439		
Liabilities—						
Capital stock	2,031,986	2,379,340	2,473,847	2,329,173		
Funded debt	1,672,960	2,329,222	3,051,179	3,103,826		
Real estate mortgages	4,060	6,097	7,198	13,795		
Floating debt	278,927	296,162	166,592	176,735		
Reserves	27,223	80,776	75,744	152,082		
Accrued depreciation	(7)	(7)	73,934	181,127		
Miscellaneous liabilities	178,262	223,656	267,310	531,796		
Profit and loss surplus [8]	106,623	133,436	156,813	166,740		
Net surplus	70,444	95,287	78,072	[8] 26,699		

[1] Includes superintendence of power. [2] Includes "Charges for sinking fund."
[3] Deficit. [4] Not shown separately for surface, subway, and elevated groups.
[5] Exclusive of rentals paid by operating to lessor companies.
[6] Figures for 1907 and 1912 not strictly comparable with those for later years.
[7] Not reported separately.
[8] For companies having surplus or deficit, respectively.

Source: Bureau of the Census, Department of Commerce.

No. 457.—ELECTRIC RAILWAYS:

NOTE.—See headnote to Table 454. The track mileage represents that actually lying in each State, but conducted in other States. The differences among the States in the relation of passengers carried to interurban as against purely urban traffic. The information obtained in regard to motor-bus operations age represents passenger, express, freight, and mail-car mileage

Division and State	Miles of track lying in State or division[1]				Revenue passengers carried by companies domiciled in State (in thousands)				
	1907	1912	1917	1922	1907	1912	1917	1922 Car lines	1922 Motor bus
United States	34,354	41,033	44,808	43,905	7,441,115	9,545,555	11,304,660	12,666,558	12,791
New England	4,863	5,299	5,556	5,049	875,116	1,051,162	1,242,077	1,133,706	3,400
Maine	418	530	572	566	36,730	47,049	55,463	50,010	-------
New Hampshire	208	268	269	203	20,087	23,673	23,405	19,050	-------
Vermont	113	121	126	117	7,103	8,136	8,739	6,950	-------
Massachusetts	2,851	2,951	3,056	2,688	597,470	705,918	834,529	731,999	448
Rhode Island	431	435	454	403	91,172	94,086	113,191	142,156	853
Connecticut	781	993	1,080	1,011	122,554	172,300	206,740	182,941	2,099
Middle Atlantic	8,891	10,064	10,604	10,519	2,899,019	3,513,721	4,225,237	4,978,142	85
New York	3,809	4,486	4,773	4,737	1,657,687	2,126,964	2,402,325	3,090,878	-------
New Jersey	1,320	1,309	1,368	1,342	269,099	356,858	432,875	466,811	8
Pennsylvania	3,762	4,270	4,462	4,440	912,233	1,029,899	1,300,087	1,420,453	80
East North Central	10,358	11,884	12,703	12,431	1,607,895	2,169,621	2,712,625	2,977,484	3,933
Ohio	3,671	3,999	4,236	3,974	480,844	632,332	811,913	870,166	2,004
Indiana	1,029	2,323	2,356	2,305	137,547	173,019	191,132	241,871	2
Illinois	2,754	3,186	3,441	3,416	703,493	932,668	1,096,804	1,127,719	386
Michigan	1,324	1,526	1,768	1,817	183,239	286,956	447,780	557,549	351
Wisconsin	676	849	901	919	102,772	134,646	164,996	180,185	1,190
West North Central	2,455	3,031	3,607	3,604	615,631	787,301	962,369	941,841	1,026
Minnesota	438	538	656	681	136,122	186,918	235,943	262,740	41
Iowa	641	784	1,015	999	61,440	93,418	103,898	95,494	-------
Missouri	867	959	1,094	1,098	346,302	402,210	442,756	463,618	985
North Dakota	14	19	24	21	1,872	2,862	2,841	3,378	-------
South Dakota	5	22	24	17	126	1,667	1,915	2,023	-------
Nebraska	184	214	211	206	49,323	64,709	74,560	76,846	-------
Kansas	306	494	582	581	20,386	35,527	40,466	37,742	-------
South Atlantic	2,244	2,900	3,221	3,191	487,982	616,726	747,562	830,216	298
Delaware	105	99	102	96	15,724	18,024	20,047	20,860	290
Maryland	552	720	775	758	152,268	186,828	228,634	248,594	
District of Columbia.	160	188	195	199	91,569	114,100	125,536	155,952	
Virginia	513	561	581	554	77,300	91,980	112,814	116,289	-------
West Virginia	208	330	395	422	42,750	52,842	76,163	91,079	-------
North Carolina	106	190	228	216	14,086	21,241	26,915	29,964	-------
South Carolina	131	228	314	301	15,695	17,873	25,042	20,211	-------
Georgia	351	417	450	449	59,701	86,601	93,640	105,950	8
Florida	118	165	183	197	18,880	27,236	32,771	41,317	-------
East South Central	1,075	1,291	1,457	1,477	220,887	268,785	292,004	308,021	-------
Kentucky	402	502	516	517	85,859	103,512	109,105	115,594	-------
Tennessee	292	361	447	495	73,747	91,896	101,825	110,369	-------
Alabama	294	309	369	368	52,197	62,494	70,343	73,646	-------
Mississippi	86	119	124	98	9,084	10,883	10,731	8,412	-------
West South Central	840	1,372	1,704	1,724	193,338	270,746	313,203	380,560	1,507
Arkansas	82	114	122	120	17,145	24,304	26,283	29,305	649
Louisiana	239	285	331	305	85,194	94,053	105,753	123,337	-------
Oklahoma	100	252	302	324	9,502	22,121	30,766	35,402	858
Texas	419	721	950	975	81,497	130,268	150,401	187,536	-------
Mountain	630	1,048	1,311	1,291	113,304	154,224	162,222	148,706	42
Montana	69	99	121	111	13,862	15,351	22,197	15,255	-------
Colorado	317	468	467	431	73,458	86,597	84,624	81,613	-------
New Mexico	10	11	11	11	1,029	951	1,486	1,383	42
Arizona	31	46	53	44	1,902	4,554	7,483	5,474	-------
Idaho	73	129	155	149	1,327	4,170	3,279	3,256	-------
Wyoming	-------	23	23	23	-------	1,399	1,457	634	-------
Nevada	7	11	12	5	620	750	805	480	-------
Utah	123	260	469	517	21,106	40,452	40,891	40,561	-------
Pacific	3,003	4,146	4,647	4,619	487,943	723,270	707,311	967,862	2,497
Washington	730	991	1,022	954	110,507	126,687	145,922	142,745	684
Oregon	259	549	603	612	49,459	75,842	67,223	71,804	-------
California	2,013	2,605	3,022	3,053	327,977	520,741	494,166	753,313	1,813

[1] Mileage figures expressed to nearest mile, original figures to nearest hundredth.

Source: Bureau of Census, Department of Commerce.

Operating Statistics, by States

all other data relate to the total operations of companies domiciled in the State, part of which may be passenger revenue and in other similar ratios are largely due to differences in the relative importance of related only to those lines which formed integral parts of electric-railway companies. Revenue car mile-

Passenger revenue of companies domiciled in State (thousands of dollars)			Revenue car miles operated by companies domiciled in State (thousands)			Electric kilowatt hours generated or purchased by companies (thousands) [2]			Division and State
1912	1917	1922	1912	1917	1922	1912	1917	1922	
502, 652	603, 130	854, 663	1, 921, 620	2, 139, 802	2, 124, 523	9, 020, 018	12, 187, 951	12, 405, 053	United States.
52, 521	63, 944	87, 704	191, 451	209, 504	173, 083	772, 103	999, 938	856, 732	New England.
2, 458	3, 055	4, 243	11, 124	12, 255	11, 027	74, 907	102, 270	123, 069	Maine.
1, 202	1, 191	1, 585	4, 726	3, 890	4, 006	17, 555	16, 498	17, 668	New Hampshire.
423	487	451	1, 776	1, 865	1, 406	8, 989	21, 755	15, 330	Vermont.
35, 146	42, 442	58, 521	125, 894	137, 560	105, 162	485, 620	634, 368	507, 560	Massachusetts.
} 13, 202	16, 769	22, 904	{ 15, 085	17, 204	16, 244	66, 619	80, 610	69, 521	Rhode Island.
			32, 846	36, 730	35, 228	118, 353	144, 437	123, 578	Connecticut.
180, 634	217, 573	297, 530	663, 589	705, 861	710, 550	2, 717, 966	3, 305, 150	3, 582, 761	Middle Atlantic.
110, 700	128, 286	168, 451	411, 008	432, 207	442, 114	1, 701, 299	2, 068, 249	2, 317, 327	New York.
17, 616	21, 561	30, 863	60, 994	68, 966	69, 214	216, 670	267, 944	257, 563	New Jersey.
52, 318	67, 726	98, 246	191, 587	204, 028	199, 222	799, 997	968, 957	1, 007, 871	Pennsylvania.
118, 128	148, 331	213, 365	474, 239	543, 029	546, 337	2, 268, 984	3, 205, 026	3, 183, 161	East North Central.
32, 672	42, 631	55, 359	137, 548	153, 469	141, 247	602, 017	1, 195, 401	1, 057, 656	Ohio.
12, 796	14, 679	20, 286	47, 879	52, 214	58, 552	277, 337	359, 504	393, 750	Indiana.
40, 815	59, 941	93, 817	201, 027	225, 445	230, 127	950, 837	1, 197, 748	1, 248, 193	Illinois.
15, 877	23, 025	31, 473	61, 189	82, 294	83, 571	218, 892	303, 852	303, 934	Michigan.
6, 968	8, 055	12, 430	26, 596	29, 607	32, 840	124, 881	149, 121	179, 578	Wisconsin.
40, 854	48, 538	66, 880	152, 347	173, 868	174, 012	696, 396	953, 196	905, 889	West North Central.
9, 420	12, 189	15, 850	32, 793	38, 794	36, 066	153, 369	176, 330	168, 131	Minnesota.
5, 259	6, 138	7, 850	22, 122	25, 293	20, 152	103, 564	184, 534	249, 323	Iowa.
20, 216	23, 001	34, 137	72, 573	80, 670	80, 738	361, 995	485, 181	386, 272	Missouri.
} 222	245	342	{ 661	709	926	851	1, 095	1, 583	North Dakota.
			474	563	579	866	1, 108	1, 018	South Dakota.
3, 277	3, 784	4, 930	12, 613	14, 018	13, 980	39, 660	52, 583	61, 215	Nebraska.
2, 460	3, 181	3, 771	11, 111	13, 819	12, 571	36, 151	52, 365	38, 347	Kansas.
30, 931	39, 395	58, 863	124, 591	142, 658	153, 154	643, 079	1, 265, 465	1, 553, 814	South Atlantic.
			{ 3, 967	4, 123	3, 883	22, 512	49, 041	72, 552	Delaware.
} 15, 480	19, 225	30, 995	34, 439	40, 328	42, 401	134, 350	186, 992	218, 853	Maryland
			18, 558	18, 538	21, 037	84, 892	98, 905	134, 842	District of Columbia.
4, 532	6, 078	7, 540	19, 903	21, 968	24, 312	123, 110	231, 491	347, 532	Virginia
3, 034	4, 502	6, 570	11, 707	14, 623	15, 238	67, 168	112, 161	166, 287	West Virginia.
1, 177	1, 323	2, 068	5, 998	6, 725	6, 887	41, 822	86, 247	50, 563	North Carolina.
929	1, 750	1, 755	4, 658	8, 236	7, 719	17, 876	103, 864	65, 907	South Carolina.
4, 395	4, 893	7, 521	19, 217	20, 908	22, 619	125, 820	364, 691	448, 304	Georgia.
1, 374	1, 624	2, 414	6, 144	7, 209	9, 058	25, 529	32, 073	48, 974	Florida.
15, 668	15, 127	20, 840	58, 056	64, 293	58, 389	290, 343	411, 335	389, 189	East South Central.
5, 592	5, 895	7, 643	22, 274	22, 865	20, 372	88, 875	101, 774	80, 978	Kentucky.
4, 664	5, 217	7, 735	18, 936	21, 401	19, 122	100, 072	170, 036	131, 742	Tennessee.
3, 004	3, 425	4, 812	13, 313	16, 037	15, 820	87, 751	116, 223	166, 282	Alabama.
608	590	650	3, 533	3, 990	3, 075	13, 650	23, 302	10, 187	Mississippi.
14, 790	18, 663	29, 529	61, 617	77, 411	80, 091	245, 030	375, 989	549, 756	West South Central.
1, 183	1, 279	1, 731	5, 594	5, 917	5, 735	27, 364	37, 442	60, 402	Arkansas.
4, 725	5, 334	9, 388	21, 812	23, 833	20, 429	109, 350	137, 777	209, 374	Louisiana.
1, 254	1, 900	3, 127	6, 143	7, 979	9, 356	20, 477	27, 522	45, 834	Oklahoma.
7, 628	10, 150	15, 233	28, 068	39, 682	44, 571	87, 889	173, 248	234, 146	Texas.
8, 661	9, 267	11, 459	30, 150	34, 120	32, 739	206, 842	181, 010	193, 463	Mountain.
800	1, 150	951	2, 901	3, 592	2, 979	10, 227	17, 927	18, 304	Montana.
4, 521	4, 409	6, 222	17, 202	17, 031	15, 746	106, 373	111, 508	120, 175	Colorado.
			309	453	410	466	389	608	New Mexico.
} 282	439	382	{ 1, 019	1, 277	981	2, 969	5, 149	2, 499	Arizona.
			1, 420	1, 488	1, 323	5, 108	5, 743	5, 540	Idaho.
} 451	424	388	381	308	253	1, 036	844	798	Wyoming.
			270	236	108	652	588	283	Nevada.
} 2, 007	2, 845	3, 516	{ 6, 648	9, 735	10, 939	80, 011	39, 812	45, 256	Utah.
42, 875	42, 282	68, 463	165, 580	189, 060	196, 168	1, 184, 240	1, 489, 242	1, 190, 288	Pacific.
7, 283	8, 134	12, 273	29, 517	36, 128	36, 299	508, 794	743, 746	266, 632	Washington.
4, 578	4, 231	6, 285	19, 509	22, 529	21, 341	182, 547	233, 153	339, 636	Oregon.
31, 014	29, 927	49, 905	116, 554	130, 403	138, 528	492, 899	512, 343	584, 020	California.

[2] Includes duplication of energy purchased from electric-railway companies; amount not ascertainable.

No. 458.—ELECTRIC RAILWAYS: MILEAGE AND CARS AND BUSSES OPERATED

NOTE.—This table includes mileage and equipment of city interurban, and electrified steam railroads in continental United States. Steam locomotives and cars owned by electric railways and used primarily for steam service are omitted. All data beginning 1924 and data for busses in 1923 are about December; all other data are about July

Year, division, and State	Companies operating	Miles of all track [1]	Passenger cars		Freight cars		Service cars	Other cars	Electric locomotives	Busses operated by electric railways	
			Motor	Trailer	Motor	Trailer				Number	Mileage [1]
1915	1,027	46,454	79,007	3,048	538	1,884	14,036	380	512	(2)	(2)
1920	831	47,705	77,722	6,027	1,215	7,441	5,723	6,809	751	(2)	(2)
1921	838	47,555	77,921	6,142	1,324	7,712	7,005	4,754	760	129	(2)
1922	827	47,150	75,442	7,624	1,375	7,903	8,761	2,795	772	300	(2)
1923	821	47,283	75,249	7,423	1,712	8,442	8,971	2,435	814	1,173	(2)
1924	769	46,837	75,678	6,768	1,790	9,016	9,092	2,491	799	2,394	(2)
1925	759	46,750	74,898	6,737	1,760	9,138	9,004	2,370	809	5,207	(2)
1926	734	46,624	73,694	7,050	1,960	9,850	8,731	2,600	870	7,505	15,300
1927	703	46,149	72,030	7,355	2,265	10,500	8,474	2,950	910	8,864	17,500
1928	[3] 686	45,272	69,862	7,660	2,488	11,037	8,208	3,286	948	10,719	22,032
New England	66	5,068	6,089	426	100	88	1,017	322	159	964	1,343
Maine	12	472	345	11	27	69	103	36	3	5	25
New Hampshire	11	125	182			1	27	11	2	39	(2)
Vermont	5	49	30		2	1	7		3	3	(2)
Massachusetts	26	2,700	4,081	289	41	13	749	146	4	590	809
Rhode Island	3	405	729	21	30	4	125	124	3	106	129
Connecticut	9	1,317	1,322	105			6	5	144	221	380
Middle Atlantic	167	10,854	27,400	3,637	429	236	2,722	1,317	213	3,599	5,298
New York	75	5,688	17,867	3,272	276	154	1,487	110	208	739	568
New Jersey	13	1,238	2,477	100	3		326	155		1,883	2,044
Pennsylvania	79	3,928	7,056	265	150	82	909	1,052	5	977	2,684
East North Central	161	11,659	15,041	2,052	1,162	3,199	1,936	717	153	3,024	7,113
Ohio	48	3,304	3,623	603	307	452	634	292	25	890	1,645
Indiana	25	2,649	1,724	123	410	567	398	140	26	456	1,421
Illinois	50	3,357	6,254	973	365	2,026	724	180	68	424	1,084
Michigan	23	1,549	2,246	298	63	153	137	102	25	965	1,695
Wisconsin	15	800	1,194	55	17	1	43	3	9	289	1,268
West North Central	69	3,603	5,067	299	111	1,320	731	109	62	581	1,644
Minnesota	8	700	1,197	26	1		102		2	117	139
Iowa	23	1,013	661	53	13	1,297	180	23	37	120	1,028
Missouri	15	1,162	2,379	187	17	22	342	30	7	166	339
North Dakota	3	25	41				9	4		4	7
South Dakota	1	14	19				2	4		19	32
Nebraska	4	192	431	10	4	1	63	36	2	30	35
Kansas	15	497	339	23	76		33	12	14	125	64
South Atlantic	59	3,598	4,869	325	92	323	513	334	84	988	3,114
Delaware	1	81	106				15			25	35
Maryland	5	602	1,433	156	28	95	152	179	3	193	2,072
Dist. of Columbia	5	417	864	40	6	20	99	29	6	128	207
Virginia	13	671	706	87	12	7	44	52	38	258	161
West Virginia	10	659	387		25	27	60	11	19	165	446
North Carolina	8	322	205	14	4	159	39	5	17	57	32
South Carolina	4	60	86		3		8			9	33
Georgia	6	477	677	28	5	11	65	43	1	53	38
Florida	7	219	405		9	4	31	15		100	90
East South Central	32	1,322	1,825	190	50	1	254	72	3	237	169
Kentucky	7	498	733	71	24		128	19		159	73
Tennessee	9	453	629	53	9	1	60	53	3	47	74
Alabama	10	344	427	66	17		64			13	17
Mississippi	6	27	36				2			18	5
West South Central	50	1,840	2,538	137	124	78	263	262	16	512	618
Arkansas	7	133	229	10			20	13		30	22
Louisiana	8	267	740	47	2		78	177		52	26
Oklahoma	12	365	220	27	94	62	32	23	14	127	91
Texas	23	1,075	1,349	53	28	16	133	49	2	303	479
Mountain	30	1,688	744	203	18	2,008	173	54	48	80	164
Montana	8	706	97	14	7	1,429	34		29	8	12
Idaho	1									6	(2)
Wyoming	1									9	(2)
Colorado	9	475	366	127	1	222	79	48	9	29	54
New Mexico	1									1	(2)
Arizona	3	31	31		3		3	1		11	13
Utah	7	476	250	62	7	357	57	5	10	16	85
Nevada											
Pacific	52	5,638	5,689	391	402	3,784	599	99	210	734	2,578
Washington	18	1,367	960	66	216	234	69	38	88	186	1,154
Oregon	6	723	616	76		488	131	11	24	43	60
California	28	3,548	4,113	249	186	3,062	399	50	98	505	1,362

[1] Expressed in nearest mile. [2] No report. [3] Includes 56 companies operating busses only.

Source: Electric Railway Journal.

No. 459.—ELECTRIC RAILWAYS: MILEAGE OF ELEVATED AND SUBWAY AND TUNNEL TRACK, BY STATES

NOTE.—In these statistics all track is included; each track of a double or multiple line is counted separately

Class of trackage and State	1907	1912	1917	1922
Elevated, total	362.39	417.80	497.29	601.69
New York	200.41	230.80	296.99	362.80
Illinois	125.77	141.90	146.89	163.88
Pennsylvania	7.67	9.87	16.71	32.40
Massachusetts	16.70	26.58	26.23	30.08
New Jersey	[1] 7.26	4.37	4.41	4.36
Missouri	3.18	2.88	2.96	2.88
Washington				2.69
Maryland	1.40	1.40	1.40	1.40
California			1.20	1.20
Kansas			.50	
Subways and tunnels, total	74.77	112.70	218.79	325.56
New York [2]	60.38	70.54	162.37	269.14
Massachusetts	7.75	18.46	25.24	26.98
New Jersey [3]		11.68	12.62	12.62
Pennsylvania	5.62	8.42	8.95	7.95
California		.30	5.43	5.35
Illinois	.60	1.87	1.93	1.80
All other States [4]	.42	1.44	2.25	1.72

[1] Includes 3.06 miles of Camden and Atlantic branch of West Jersey & Seashore Railroad Co., tabulated as an electrified division of a steam road for 1917 and 1912.
[2] Excludes 11.68 miles operated in New Jersey.
[3] Includes 11.68 miles owned by a New York company.
[4] Rhode Island, Minnesota and Missouri, 1922: Connecticut, Minnesota, Missouri, Rhode Island, West Virginia, and Wisconsin, 1917; Kansas, Missouri, Oregon, and Tennessee, 1912; Missouri, 1907.

Source: Bureau of the Census, Department of Commerce.

No. 460.—RECEIVERSHIPS OF ELECTRIC RAILWAYS

Year	Placed under receivership				Sold under foreclosure				
	Number of companies	Miles of track	Outstanding securities: Stock	Outstanding securities: Bonds	Number of companies	Miles of track	Outstanding securities: Stock	Outstanding securities: Bonds	Receivers' certificates
			Dollars	*Dollars*			*Dollars*	*Dollars*	*Dollars*
1909	22	558	20,962,200	22,325,000	24	488	22,265,700	21,174,000	(1)
1910	11	697	12,629,400	75,490,735	22	724	19,106,613	26,374,075	(1)
1911	19	519	29,533,450	38,973,293	25	661	91,354,800	115,092,750	(1)
1912	26	374	20,410,700	11,133,800	18	267	14,197,300	10,685,250	(1)
1913	18	343	31,006,900	47,272,200	17	302	15,243,700	19,094,500	(1)
1914	10	362	35,562,550	19,050,460	11	181	26,239,700	44,094,241	(1)
1915	27	1,152	40,298,050	39,372,375	19	308	30,508,817	16,759,997	(1)
1916	15	359	14,476,600	10,840,200	19	430	13,895,400	22,702,300	(1)
1917	21	1,177	33,918,725	33,778,400	26	745	27,281,900	27,313,045	(1)
1918	29	2,018	92,130,388	163,257,102	23	524	37,740,325	20,149,384	(1)
1919	48	3,781	321,259,354	312,915,104	20	2,675	89,893,400	79,836,738	42,300
1920	19	1,065	28,758,455	72,283,575	13	260	7,782,400	11,227,328	52,000
1921	19	986	32,909,525	36,177,800	13	778	33,042,255	30,863,526	5,000
1922	14	695	18,140,150	20,304,400	13	323	7,491,500	12,640,600	114,683
1923	12	334	8,332,100	14,707,066	15	927	118,077,959	110,638,250	12,265,000
1924	12	1,022	28,489,700	35,716,000	14	869	21,022,800	34,845,535	3,440,388
1925	14	1,260	51,383,195	54,696,525	13	569	18,074,300	18,329,555	53,000
1926	16	1,228	17,769,435	117,560,073	28	1,291	20,054,700	57,340,303	214,000
1927	13	624	17,615,050	20,875,450	16	941	53,345,000	78,445,100	3,140,000
1928	8	262	9,216,700	14,790,700	8	1,004	26,084,325	40,683,400	168,150

[1] Data not available.

Source: Annual Statistical Number, Electric Railway Journal.

21.—WATERWAYS, WATER TRAFFIC, AND SHIPPING

Data in this section cover the following areas unless otherwise indicated: From Board of Engineers of the United States Army, and Bureau of Foreign and Domestic Commerce, United States customs area which includes Alaska, Hawaii, and Porto Rico; from United States Shipping Board, continental United States

General note as to units of measurement.—"Cargo tonnage" represents weight of cargo in long tons (2,240 pounds) or short tons (2,000 pounds). All other tonnage figures refer to capacity of vessels. The terms gross and net tonnage refer to space measurement *100 cubic feet being called 1 ton. Gross tonnage is the* capacity of the entire space within the frames and the ceiling of the hull, together with those closed-in spaces above deck available for cargo, storage, passengers or crew, with certain minor exemptions. Net or registered tonnage is what remains after deducting from the gross tonnage the spaces occupied by the propelling machinery, fuel, crew quarters, master's cabin, and navigation spaces. It represents substantially space available for cargo and passengers. The net tonnage capacity of a ship recorded as "entered with cargo" may bear little relation to actual weight of cargo. Dead-weight tonnage is the weight in long tons required to depress a vessel from light water line (that is, with only the machinery and equipment on board) to load line. It is therefore the weight of the cargo, fuel, etc., which a vessel is designed to carry with safety. Displacement tonnage (naval vessels) has reference to weight of the vessel itself with its normal equipment, fuel, etc.

No. 461.—CARGO TONNAGE OF WATER-BORNE COMMERCE OF THE UNITED STATES

[In thousands of short tons of 2,000 pounds]

	1924	1925	1926	1927
Foreign commerce, total	*101, 562*	*108, 547*	*131, 293*	*120, 528*
Imports, through seaports	36, 425	42, 792	44, 834	43, 388
Exports, through seaports	49, 008	49, 251	69, 859	56, 550
Imports, Great Lakes ports	4, 962	7, 317	6, 424	8, 098
Exports, Great Lakes ports	11, 167	9, 187	10, 176	12, 487
Domestic commerce, unadjusted total	384, 454	443, 022	470, 208	473, 113
Coastwise, between ports	88, 554	105, 090	108, 023	121, 036
Great Lakes, between ports	93, 188	111, 568	116, 486	113, 917
Local traffic of seaports and Great Lakes ports [1]	77, 270	64, 981	80, 168	78, 162
Traffic between seaports and river points	32, 315	47, 214	34, 510	38, 191
Traffic on rivers, canals, and connecting channels [2]	[3] 93, 127	114, 169	122, 021	121, 812
Foreign and domestic, unadjusted total	486, 015	551, 568	601, 501	593, 641
Deduction of duplications:				
Traffic between seaports and river points	32, 315	47, 214	34, 510	38, 191
Other duplications (canals, etc.) [4]	(5)	20, 954	26, 491	22, 950
Net total, foreign and domestic	453, 700	483, 400	540, 500	532, 500
Approximate net total, domestic [6]	*352, 139*	*374, 854*	409, 207	411, 977

[1] Includes the following, with figures for 1927: Harbor traffic of New York, Philadelphia, and San Francisco (48,105,000 tons); local traffic of other seaports (24,198,000); local traffic of lake ports (5,859,000).

[2] Excluding Sault Ste. Marie Canal traffic (83,354,000 tons in 1927) and additional Detroit River traffic (13,334,000 tons), both of which are already counted in Great Lakes traffic; also excluding duplications relating to rivers and canals themselves.

[3] Not comparable with later years; see note 5.

[4] Principally coastwise and lake traffic passing through canals and connecting channels, other than the Sault Ste. Marie Canal and the Detroit River.

[5] Not available; the figures were for the most part deducted from river and canal traffic.

[6] Estimated from data in this table on the assumption that all the duplications deducted from the grand total represent duplications in domestic traffic; there are, however, some minor cases of duplication connected with foreign traffic.

Source: Board of Engineers for Rivers and Harbors.

No. 462.—COMMERCE OF PRINCIPAL UNITED STATES OCEAN PORTS, 1927

NOTE.—In thousands of short tons of 2,000 pounds. In addition to the commerce here shown, many of the ports have (1) commerce with ports on internal rivers and canals; (2) purely local port traffic, including in the case of New York, Philadelphia, and San Francisco, what is called intraport traffic between parts of a harbor for which separate statistics are maintained. These forms of traffic, although the aggregate tonnage is large, are of much less economic importance than foreign and coastwise traffic

Port	Imports	Exports	Coastwise	
			Receipts	Shipments
Grand total	**43,388**	**56,550**	**120,832**	**121,240**
Atlantic ports	**32,793**	**23,185**	**76,625**	**54,775**
Searsport, Me	8	-------	463	-------
Portland, Me	740	171	2,167	223
Portsmouth, N. H	36	-------	285	15
Boston Harbor, Mass	2,662	292	11,321	1,457
Beverly, Mass	7	(1)	431	17
Salem, Mass	12	-------	450	-------
Lynn, Mass	2	-------	323	-------
New Bedford and Fair Haven, Mass	4	(1)	859	110
Fall River, Mass	863	(1)	1,107	812
Newport, R. I	-------	-------	117	12
Providence, R. I	367	(1)	4,181	468
New London, Conn	21	(1)	606	140
New Haven, Conn	23	-------	1,257	85
Bridgeport, Conn	5	-------	1,067	75
Stamford, Conn	-------	-------	399	21
Greenwich, Conn	-------	-------	218	15
New York Harbor, N. Y	15,790	13,041	31,376	14,618
Hempstead, N. Y	-------	-------	457	7,728
Huntington Bay, N. Y	-------	-------	2	1,272
Port Jefferson, N. Y	-------	-------	26	2,639
Philadelphia, Pa.[2]	4,073	2,397	8,698	3,068
Baltimore, Md	4,867	1,978	3,137	1,953
Hampton Roads, Va	670	3,207	1,320	17,401
Wilmington, N. C	172	38	508	38
Charleston Harbor, S. C.[3]	780	463	890	263
Savannah, Ga	408	482	905	444
Brunswick, Ga	144	129	320	352
Fernandina, Fla	-------	253	-------	(1)
Jacksonville, Fla	593	220	1,268	711
Miami, Fla	83	27	546	84
Key West, Fla	129	435	158	2
San Juan, P. R	199	18	538	294
Gulf ports	**7,084**	**16,014**	**6,611**	**32,454**
Charlotte, Fla	-------	99	1	318
Tampa, Fla	212	874	1,169	872
Gulf ports—Con.				
Mobile, Ala	353	714	628	669
Pensacola, Fla	81	258	363	51
Gulfport, Miss	36	384	192	8
New Orleans, La	5,186	4,402	1,607	1,315
Baton Rouge, La	272	1,376	82	2,441
Galveston, Tex	481	2,121	1,018	1,797
Texas City, Tex	100	283	37	4,048
Houston, Tex	185	2,874	909	5,725
Freeport, Tex	58	252	19	182
Sabine, Tex	-------	26	(1)	599
Port Arthur, Tex	10	950	116	6,719
Beaumont, Tex	95	1,156	52	6,604
Corpus Cristi, Tex	6	93	11	882
Pacific ports	**3,510**	**17,351**	**37,596**	**34,010**
San Diego, Calif	41	12	886	27
Los Angeles, Calif	570	7,314	5,011	13,333
San Luis Obispo, Calif	-------	504	30	857
San Francisco Bay, Calif	1,135	3,505	14,087	8,168
Monterey, Calif	-------	-------	92	74
Humboldt, Calif	-------	118	148	336
Long Beach, Calif	81	303	394	695
Coos Bay, Oreg	-------	112	46	347
Portland, Oreg	142	1,786	2,268	783
Other ports on Columbia and lower Willamette Rivers	7	507	186	1,031
Grays Harbor, Wash	1	823	133	1,731
Willapa, Wash	-------	21	2	197
Port Gamble, Wash	-------	30	172	111
Olympia, Wash	2	133	400	208
Tacoma, Wash	333	836	2,718	868
Seattle, Wash	516	784	5,667	1,669
Everett, Wash	44	299	1,074	675
Anacortes, Wash	157	60	984	309
Bellingham, Wash	65	99	989	526
Port Angeles, Wash	254	32	263	198
Port Ludlow, Wash	-------	13	209	95
Honolulu, Hawaii	117	62	1,153	750
Kahului, Hawaii	5	-------	160	209
Hilo, Hawaii	18	-------	140	230

[1] Less than 500 tons. [2] Including Delaware and Schuylkill Rivers, Pa. [3] Including Ashley River.

Source: Annual Report of the Chief of Engineers, United States Army.

No. 463.—GREAT LAKES, COMMERCE OF THE PRINCIPAL PORTS

NOTE.—In thousands of short tons of 2,000 pounds. Foreign imports and exports and coastwise receipts and shipments are included

Port	Receipts				Shipments			
	1924	1925	1926	1927	1924	1925	1926	1927
Total	**98,249**	**119,814**	**122,188**	**120,557**	**104,265**	**119,827**	**127,384**	**127,862**
Agate Bay, Minn	183	190	250	191	5,463	6,753	7,027	6,413
Alpena, Mich	202	227	229	249	961	1,168	1,372	1,313
Ashland, Wis	760	749	760	833	5,399	7,466	7,998	7,089
Ashtabula, Ohio	7,342	8,792	10,376	7,954	2,793	1,868	2,068	3,049
Buffalo, N. Y.:								
By lake	14,971	14,985	13,313	14,793	3,895	2,970	3,693	3,069
By canal	167	503	393	384	775	1,036	998	926

No. 463.—Great Lakes, Commerce of the Principal Ports—Continued

Port	Receipts				Shipments			
	1924	1925	1926	1927	1924	1925	1926	1927
Calcite, Mich	43	93	67	112	6,856	8,413	9,041	10,345
Charlotte, N. Y. (Rochester)	183	176	105	154	1,012	555	973	832
Chicago, Ill.[1]	8,578	12,924	10,906	11,551	2,542	1,502	1,892	1,875
Cleveland, Ohio	8,633	11,426	11,903	10,730	1,951	666	761	1,204
Conneaut, Ohio	8,305	9,777	10,656	8,944	1,880	1,612	2,144	772
Detroit, Mich	2,846	4,019	4,042	2,424	127	197	279	422
Duluth-Superior	10,399	10,935	11,780	13,816	35,018	40,130	41,915	38,896
Erie, Pa	1,189	951	1,685	1,791	1,170	575	1,198	921
Escanaba, Mich	270	327	578	201	4,777	6,474	7,093	6,884
Fairport, Ohio	2,794	3,327	3,495	3,276	602	1,001	697	1,537
Frankfort, Mich	855	933	898	897	652	716	732	670
Gary, Ind	3,465	6,760	5,967	5,393				4
Grand Haven, Mich	343	408	417	518	447	546	516	720
Green Bay, Wis	975	1,166	1,271	1,417	224	257	266	286
Huron, Ohio	831	1,165	1,358	1,324	800	747	612	247
Indiana Harbor, Ind	3,344	3,956	4,646	4,596	851	1,332	798	929
Kewaunee, Wis	157	192	175	124	201	207	212	209
Keweenaw Waterway, Mich	609	614	809	957	52	48	68	65
Lorain, Ohio	3,862	5,259	4,731	4,511	2,282	1,581	2,104	2,756
Ludington, Mich	1,001	1,012	985	965	1,472	1,522	1,449	1,447
Manistique, Mich	100	96	83	85	224	212	183	184
Manitowoc, Wis	1,291	1,440	1,422	1,422	727	765	734	846
Marquette Harbor, Mich	241	290	241	207	1,178	1,402	1,018	926
Marquette Bay, Mich					1,645	2,517	2,820	2,720
Menominee, Mich. and Wis	469	457	527	514	248	291	285	240
Milwaukee, Wis	5,100	5,611	6,111	6,512	1,377	1,297	1,426	1,721
Muskegon, Mich	328	356	310	402	29	33	30	30
Ogdensburg, N. Y	519	592	643	1,492	29	68	733	45
Rockport, Mich	18	13	26	15	1,190	1,415	1,847	1,760
Rouge River, Mich	2,067	2,946	3,163	3,069	25	64	36	72
Sandusky, Ohio	580	243	158	124	4,233	6,120	6,934	7,985
Sault Ste. Marie, Mich.[2]	687	761	704	808	1			
Sheboygan, Wis	413	384	458	464	11	12	11	12
Sturgeon Bay, Wis	26	20	19	25	215	330	381	370
Toledo, Ohio	1,874	1,871	2,278	1,767	9,446	14,049	14,202	16,799
Tonawanda, N. Y.[3]	352	484	453	486	2	21		16
Wyandotte, Mich		1,029	1,159	874				
All other	1,878	2,356	2,485	4,187	1,482	1,888	1,164	1,496

[1] Includes Chicago Harbor, Chicago River and Calumet Harbor.
[2] Port of.
[3] By lake and Niagara River.

Source: Annual Reports of the Chief of Engineers, United States Army.

No. 464.—COMMERCE ON THE PRINCIPAL RIVERS, CANALS, AND CONNECTING CHANNELS OF THE UNITED STATES, 1927

Note.—There is much duplication as between different rivers, canals, and channels, and between those different sections of a single river which are separately reported

[In thousands of short tons of 2,000 pounds]

River, canal, or channel	Total	Rafted and floated timber[1]	River, canal, or channel	Total	Rafted and floated timber[1]
ATLANTIC COAST			ATLANTIC COAST—continued		
Penobscot, Me	604		Delaware River, Philadelphia, Pa., to Trenton	[2] 5,734	
Kennebec River, Me	167		Potomac River (below Washington, D. C)	2,403	
Herring River, Mass	585		Rappahannock River, Va	341	
Pawtucket River, R. I	303		York River, Va	312	
Thames River, Conn	417		James River, Va	983	35
Connecticut River (below Hartford)	593		Nansemond River, Va	316	
Housatonic River, Conn	182		Pamlico and Tar Rivers, N. C	235	89
Hudson River, N. Y:			Neuse River, N. C	238	48
Middle section	[2] 8,339		Cape Fear River, N. C. (above Wilmington)	153	37
Upper section	[2] 1,482		Wando River, S. C	236	203
Cooper River, N. J	423		Altamaha River, Ga	163	22
Maurice River, N. J	194				

[1] Included in the total.
[2] Excludes car ferry, general ferry, and cargoes in transit.

No. 464.—Commerce on the Principal Rivers, Canals, and Connecting Channels of the United States, 1927—Continued

River, canal, or channel	Total	Rafted and floated timber[1]
GULF COAST		
Appalachicola River, cut-off, Lee Slough, and Lower Chipola River, Fla	223	15
Alabama River, Ala	166	19
Black Warrior, Warrior, and Tombigbee Rivers, Ala	1,468	204
Pascagoula River, Miss	112	-------
Mobile River, Ala., tributaries	616	246
Atchafalaya River, Morgan City to Gulf of Mexico	730	80
Lake Ponchartrain, La	899	-------
Calcasieu River and Pass, La	295	-------
Clear Creek, Tex	193	-------
Goose Creek, Tex	324	-------
MISSISSIPPI RIVER AND TRIBUTARIES		
Ouachita and Black Rivers, Ark. and La	[2] 327	22
Yazoo River, Miss	[2] 157	1
Big Sunflower River, Miss	75	9
Arkansas River, Ark. and Okla	302	96
White River, Ark	150	44
Black River, Ark. and Mo	60	9
St. Francis and L'Angeille Rivers and Blackfish Bayou, Ark	130	117
Mississippi River:		
Between Missouri River and Minneapolis, Minn	[2] 715	-------
Between Ohio and Missouri Rivers	1,110	2
Between Cairo and Memphis	2,144	16
Between Memphis and Vicksburg	4,358	82
Between Vicksburg and New Orleans	8,817	81
Missouri River:		
Kansas City to mouth	551	2
Kansas City to Sioux City	118	-------
Cumberland River, Tenn., and Ky. (below Nashville)	279	9
Cumberland River, Tenn. and Ky. (above Nashville)	253	31
Tennessee River	2,292	65
Monongahela River, Pa. and W. Va	[2] 25,873	-------
Allegheny River, Pa	3,861	-------
Youghiogheny River, Pa	272	-------
Little Kanawha River, W. Va	264	1
Kanawha River, W. Va	1,421	-------
Ohio River, Ohio	20,129	-------
Muskingum River, Ohio	804	-------
Kentucky River, Ky	166	48
Green and Barren Rivers, Ky	522	18
INTERIOR RIVERS AND OTHER WATERWAYS		
Fox River, Wis	342	-------
Grand River, Mich	252	-------
Niagara River, N. Y	178	-------
San Joaquin River, Calif	1,153	-------
Sacramento River, Calif	1,210	-------
Umpqua River, Oreg	451	379
Coquille River, Oreg	196	141
Yaquina River, Oreg	293	194
Colombia River from Vancouver to The Dalles	705	300
Clatskamie River, Oreg	326	324
Willamette River (above Portland and Yamhill River, Oreg.)	1,717	886
INTERIOR RIVERS AND OTHER WATERWAYS—continued		
Cowlitz River, Oreg	1,403	1,312
Colombia and Willamette Rivers, Wash. and Oreg.[3]	7,768	5,437
Hoquiam River, Wash	1,036	706
Stillaguamish River, Wash	191	105
Snohomish River, Wash	1,975	1,443
Skagit River, Wash	322	260
Chehalis River, Wash	773	-------
Wishkah River, Wash	748	660
Pend d'Oreille River, Wash. and Idaho	188	-------
Priest River, Idaho	160	-------
Coeur d'Alene Lake and St. Joe River, Idaho	508	496
FEDERAL CANALS AND CONNECTING CHANNELS		
Inland waterway from Delaware River to Chesapeake Bay, Del. and Md	608	2
Waterway from Norfolk, Va., to the sounds of North Carolina	155	25
Inland waterway from Norfolk, Va., to Beaufort Inlet, N. C	650	29
Waterway between Beaufort, S. C., and St. Johns River, Fla	482	25
Intracoastal waterway, Jacksonville to Miami, Fla	[2] 289	-------
Narrows in Santa Rosa Sound, Fla	135	45
Channel between Mobile Bay and Mississippi Sound, Ala	315	-------
Intracoastal waterway, Calcasieu River to Sabine River, La. and Tex	255	-------
Harvey Canal, La	151	10
Intracoastal waterway, Mississippi River to Bayou Teche, La (Black Bayou)	154	10
Sabine-Neches Canal, Tex.:		
Local traffic	16	-------
Traffic in transit	8,346	-------
Keweenaw Waterway, Mich	1,406	-------
Sturgeon Bay and Lake Michigan Ship Canal, Wis. (through traffic only)	477	-------
St. Marys Falls Canal, Mich	83,354	-------
Detroit River, Mich.[4]	13,884	-------
Lake Washington Ship Canal, Wash	[2] 3,127	1,528
Canal and locks at Willamette Falls, Oreg	250	35
STATE AND PRIVATE CANALS		
Cape Cod Canal, Mass	895	-------
New York State Barge Canal System	2,582	-------
Lehigh and Delaware Division Canals, Pa	326	-------
Delaware and Raritan Canal	120	-------
New Basin Canal, La	508	-------
Navigation Canal, Inner Harbor, La	710	-------
Miami Canal, Fla	233	-------
Chicago Sanitary Drainage Canal, Ill	915	-------

[1] Included in total.
[2] Excludes car ferry, general ferry, and cargoes in transit.
[3] Internal traffic only; total traffic, including foreign and coastwise, was 14,479,000 tons.
[4] Excludes traffic through the St. Marys Falls Canal, which also passes through the Detroit River; the total traffic through the Detroit River was 97,188,000 tons.

Source: Annual Report of the Chief of Engineers, United States Army.

No. 465.—SAULT STE. MARIE CANALS: General Traffic Statistics

Note.—Includes both American and Canadian canals and traffic to and from Canadian as well as American ports. Average distances, ton-miles, freight charges, etc., are based on total haul from port of origin to port of destination in process of performance by vessels passing through the canals

Season	Freight carried (1,000 short tons of 2,000 pounds)					Total ton-miles (millions)	Freight charges		Valuation of freight (millions of dollars)
	Total	Eastbound	Westbound	By American vessels	By Canadian vessels		Amount (1,000 dollars)	Average per ton per mile (mills)	
1890	9,041	6,429	2,612	8,679	362	7,207	9,472	1.30	102
1895	15,063	12,030	3,033	14,497	566	12,503	14,239	1.14	160
1900	25,643	20,532	5,111	24,896	747	21,179	24,953	1.18	267
1905	44,271	36,779	7,492	42,061	2,210	36,893	31,421	.85	417
1907	58,217	45,544	12,673	55,469	2,748	48,221	38,457	.80	570
1908	41,391	30,381	11,010	38,392	2,999	34,854	23,903	.69	470
1909	57,895	46,379	11,516	54,265	3,630	46,813	36,292	.78	626
1910	62,363	47,134	15,229	58,569	3,794	52,406	38,711	.74	654
1911	53,477	36,429	17,048	49,844	3,633	44,174	29,492	.67	595
1912	72,473	55,378	17,095	68,469	4,004	60,243	40,578	.67	791
1913	79,718	59,206	20,512	74,789	4,929	65,331	44,381	.68	866
1914	55,370	39,471	15,899	50,469	4,901	46,112	27,597	.60	695
1915	71,290	56,369	14,921	66,877	4,413	59,317	41,984	.71	882
1916	91,888	74,148	17,740	86,174	5,714	75,717	60,845	.80	974
1917	89,814	70,047	19,767	84,685	5,129	73,635	89,277	1.21	1,197
1918	85,680	66,285	19,395	80,958	4,722	70,108	83,508	1.19	987
1919	68,236	52,832	15,404	63,408	4,828	55,612	58,479	1.05	915
1920	79,282	63,464	15,818	74,866	4,416	64,702	85,742	1.33	1,120
1921	48,259	32,113	16,146	43,016	5,243	38,043	43,344	1.14	746
1922	66,067	55,020	11,047	60,812	5,255	53,564	64,154	1.20	957
1923	91,380	71,236	20,144	83,795	7,585	73,218	80,843	1.10	1,026
1924	72,037	56,840	15,197	65,447	6,590	58,579	59,769	1.02	1,080
1925	81,875	67,305	14,570	75,764	6,111	65,577	71,093	1.08	1,118
1926	85,679	69,530	16,149	78,006	7,673	69,360	78,517	1.13	1,064
1927	83,354	64,393	18,961	76,091	7,264	67,387	69,331	1.03	1,132
1928	86,993	70,166	16,827	78,072	8,921	70,259	81,281	1.16	1,183

	1900	1910	1915	1920	1925	1927	1928
Date of opening canal	Apr. 19	Apr. 12	Apr. 13	Apr. 19	Apr. 8	Apr. 12	May 1
Date of closing canal	Dec. 16	Dec. 15	Dec. 20	Dec. 26	Dec. 17	Dec. 18	Dec. 16
Number of vessels passing	19,452	20,899	21,233	18,847	20,650	18,759	19,286
Registered tonnage of vessels passing 1,000 net tons	22,316	49,856	56,399	58,194	69,240	64,325	66,835
Eastbound do	11,143	24,725	28,316	29,123	34,653	32,260	33,356
Westbound do	11,173	25,132	28,083	29,071	34,587	32,065	33,479
Passengers carried number	58,555	66,933	50,336	68,451	56,956	55,115	56,053
Freight, eastbound 1,000 short tons	20,532	47,134	56,369	63,464	67,305	64,393	70,166
Flour 1,000 bbls	6,755	7,576	8,437	7,478	9,289	9,383	9,283
Wheat 1,000 bus	40,489	86,260	255,482	143,456	292,818	330,898	406,760
Other grain do	16,064	39,243	64,755	51,630	149,927	119,520	131,039
Lumber 1,000 ft. b. m	909,651	603,101	456,451	192,854	186,486	152,608	187,205
Iron ore 1,000 short tons	16,444	41,600	45,212	56,643	53,821	49,963	53,225
Pig iron do	20	49	18	1	28	79	117
Stone do	49	10	----------	67	24	79	67
Copper do	131	148	156	52	63	67	86
General merchandise do	86	173	332	56	107	95	136
Freight, westbound 1,000 short tons	5,111	15,229	14,921	15,818	14,570	18,961	16,827
Coal do	4,487	13,514	13,357	14,156	12,874	17,107	14,870
Salt do	49	78	105	99	58	59	61
Oil do	----------	----------	----------	353	223	257	321
Stone do	----------	----------	----------	496	643	579	561
Iron ore do	----------	3	2	138	53	135	96
Manufactured iron and steel 1,000 short tons	116	396	194	76	119	116	186
General merchandise do	459	1,238	1,263	500	600	708	732

Source: Annual Report of the Chief of Engineers, United States Army.

No. 466.—NEW YORK STATE CANALS: TONNAGE OF FREIGHT MOVED

NOTE.—In short tons of 2,000 pounds. Tonnage handled over State terminals but not moved through any portion of the canal channel is not included

Yearly average	All canals	Erie division	Yearly average or year	All canals	Erie division			
					Total freight	Grain	Sand, gravel, stone	Petroleum
1837–1840	1,339,016	771,741	1906–1910	3,238,129	2,206,595			
1841–1845	1,613,317	884,522	1911–1915	2,448,837	1,626,451			
1846–1850	2,781,410	1,556,696	1916–1920	1,348,365	798,706			
1851–1855	3,976,501	2,141,476	1921–1925	1,905,291	1,548,408	630,453	333,250	191,496
1856–1860	3,911,407	1,889,759	1920	1,421,434	891,221	112,821	327,633	64,174
1861–1865	5,049,341	2,743,929	1921	1,270,407	993,639	356,985	247,653	103,400
1866–1870	5,987,724	3,018,359	1922	1,873,434	1,485,109	550,831	337,656	164,176
1871–1875	5,974,097	3,326,073	1923	2,006,284	1,626,062	629,763	375,964	190,104
1876–1880	5,219,888	3,542,620	1924	2,032,317	1,691,766	698,246	365,266	237,018
1881–1885	5,210,389	3,495,590	1925	2,344,013	1,945,466	916,441	330,713	262,331
1886–1890	5,281,441	3,589,631	1926	2,369,367	1,935,278	795,598	287,189	263,292
1891–1895	4,112,061	2,962,528	1927	2,581,892	2,047,774	791,037	325,076	327,616
1896–1900	3,544,951	2,446,065	1928	3,089,998	2,535,684	1,118,788	307,642	343,593
1901–1905	3,335,210	2,144,492						

Source: Commissioner of Canals and Waterways, Department of Public Works, State of New York.

No. 467.—PRINCIPAL COMMODITIES CARRIED ON THE OHIO RIVER

NOTE.—In short tons of 2,000 pounds. Ferry traffic is excluded. Totals include small items not shown

Commodity	Total			1927			
	1923	1926	1927	Inbound	Outbound	Upbound	Downbound
Total	8,280,520	19,754,978	20,128,518	7,438,857	3,266,044	1,854,452	7,569,165
Animals and animal products	13,393	15,098	32,746	3,875	607	10,289	17,975
Livestock	11,280	6,407	24,722	3,292	386	3,514	17,530
Poultry and eggs	922	6,661	6,557	286		6,156	115
Hides and leather	891	168	149			18	131
Dairy products	102	786	727	297	221	176	33
Vegetable food products	35,069	57,479	40,520	547	8,937	12,634	18,402
Groceries	7,140	13,313	7,421		2,584	1,048	3,789
Sugar and molasses	1,694	919	739		623	71	45
Grains	8,312	31,086	22,078	110	1,269	8,165	12,534
Flour	1,566	2,834	2,233		1,946	49	238
Hay, feed, straw	5,743	4,781	2,902	85	598	739	1,480
Vegetables	8,436	491	1,908	2	1,440	450	16
Other vegetable products	1,332						
Textiles	2,041	3,316	1,502	1	4	1,046	451
Dry goods	1,412	2,905	1,485	1	4	1,043	437
Wood and paper	141,673	397,634	474,045	452,165	2,596	16,343	2,941
Furniture	2,213	2,805	2,284		54	1,729	501
Logs and lumber	15,373	142,048	77,171	61,095	2,542	11,683	1,851
Railroad ties of wood	123,955	252,731	394,590	391,070		2,931	589
Minerals, nonmetallic	7,483,127	18,516,099	18,357,676	6,348,945	3,036,301	1,739,978	7,232,452
Cement	3,960	29,980	48,540	4,350	2,361	35,923	5,906
Sand and gravel	1,201,926	8,997,515	9,187,007	35,000	2,669,651	1,193,336	5,289,020
Stone	170,478	436,073	386,862	27,924	11,281	341,967	5,690
Coal	6,008,918	8,355,478	8,141,217	5,774,739	310,023	154,147	1,902,308
Coke	32,790	358,229	376,497	374,170		2,325	2
Fluorspar	1,622	2,360	6,643			6,643	
Crude oil	28,037	236,522	104,262	50,031	30,162	3,153	20,866
Gasoline and kerosene	22,151	72,236	94,580	79,149	7,809	56	7,566
Other refined oils		9,197	6,755	757	4,543	670	785
Sulphur		10,002					
Ores, metals, etc.	389,793	538,085	981,999	566,222	190,454	22,123	203,200
Iron and steel, unmfd	[1] 50,128	210,960	462,070	232,798	145,085	13,391	70,796
Pipe	3,323						
Structural steel	103,827	[2] 327,125	[2] 519,929	[2] 333,424	[2] 45,369	[2] 8,732	[2] 132,404
Other iron and steel	221,914						
Machinery and vehicles	3,531	44,953	62,052	2,794	16,933	1,358	40,967
Machinery	3,162	6,996	3,380	1,059	478	917	926
Boats and barges		37,377	57,822	1,735	16,455	270	39,362
Automobiles and trucks	181	580	850			171	679
Chemicals	2,493	23,920	33,178	26,397	109	4,567	2,105
Acids		20,758	29,459	26,305		3,101	53
Fertilizers	2,343	3,068	2,744		109	1,466	1,169
Unclassified	208,069	158,488	144,800	37,911	10,103	46,114	50,672

[1] Scrap iron. [2] Manufactured iron and steel.

Source: Annual Report of the Chief of Engineers, United States Army.

No. 468.—OHIO RIVER TRAFFIC: Tonnage, Ton-mileage, and Freight

Note.—Figures exclude ferry traffic. In 1927 the tons of freight carried on ferries were reported as 2,064,878, but the hauls, of course, are very short. The passenger traffic other than on ferries for 1927 was: Passengers, 2,004,513; passenger miles, 26,055,734. Leaders indicate data not available

Year	Freight carried	Ton-miles	Value of freight	Year	Freight carried	Ton-miles	Value of freight
	1,000 short tons	*Thousands*	*1,000 dollars*		*1,000 short tons*	*Thousands*	*1,000 dollars*
1914	7,589	----------	38,069	1925—Total	15,737	325,497	151,622
1915	7,346	1,095,423	50,906	Up	3,353	77,673	49,208
1916	6,045	598,383	38,774	Down	12,384	747,824	102,414
1917	4,599	378,491	70,510	1926—Total	19,755	----------	150,086
1918	6,171	315,504	77,685	Up	4,782	----------	40,931
1919	5,004	604,751	88,912	Down	14,973	----------	109,155
1920	9,382	1,138,915	223,443	1927—Total	20,129	1,214,491	168,423
1921	7,308	844,895	93,275	Up	1,854	----------	23,524
1922	6,292	807,793	144,796	Down	7,569	----------	49,446
1923	8,281	----------	110,022	Inbound	7,439	----------	74,649
1924	10,867	----------	128,356	Outbound	3,266	----------	20,804

No. 469.—LOWER MISSISSIPPI RIVER TRAFFIC: Freight by Sections, and Petroleum at Baton Rouge

Note.—In short tons of 2,000 pounds. Each section of the river is treated separately and some of the traffic of each is duplicated in others. The section "Between Ohio and Missouri Rivers" for 1921 and previous years was reported as "St. Louis to Cairo." Ferry traffic is not included

Year	Between Ohio and Missouri Rivers		Cairo to Memphis		Memphis to Vicksburg		Vicksburg to New Orleans		Petroleum, Baton Rouge	
	Up-bound	Down-bound	Up-bound	Down-bound	Up-bound	Down-bound	Up-bound	Down-bound	Up-bound to	Down-bound from
1921	194,724	909,426	185,289	717,534	983,631	646,116	3,443,908	8,870,427	[1] 94,573	[1] 1,136,398
1922	202,446	345,668	369,194	554,192	801,841	639,207	2,177,686	3,366,820	1,442,596	2,405,602
1923	263,720	459,339	395,828	652,494	724,953	727,884	1,583,880	3,909,417	740,381	2,614,074
1924	300,009	438,719	528,431	624,590	917,475	748,965	1,589,202	6,044,075	766,463	3,872,316
1925	420,246	583,323	651,002	1,037,652	1,391,234	1,821,025	1,363,254	7,738,396	467,616	5,359,639
1926	420,379	585,600	732,729	927,459	1,165,142	3,627,638	1,462,325	9,612,163	529,590	6,116,517
1927	448,459	659,743	839,718	1,304,599	1,371,134	2,986,963	1,727,352	7,089,393	354,117	4,447,025

	Between Ohio and Missouri Rivers		Cairo to Memphis		Memphis to Vicksburg		Vicksburg to New Orleans	
	1926	1927	1926	1927	1926	1927	1926	1927
Upbound	420,379	448,459	732,729	839,721	1,165,142	1,371,134	1,462,325	1,727,352
Coffee, cocoa, and spices	9,469	7,636	14,424	12,372	16,451	15,174	17,371	16,557
Sugar	77,622	116,761	201,028	282,513	279,512	367,115	306,435	381,443
Sisal and hemp	15,445	5,621	33,342	15,627	33,342	15,627	33,342	15,627
Burlap and bagging		1,711	7,524	----------	11,652	----------	11,652	----------
Logs, barged	34,292	30,895	151,829	150,230	55,950	109,511	113,860	72,173
Petroleum and products	697	185	5,873	8,069	102,472	203,906	633,624	753,496
Receipts at Baton Rouge	----------	----------	----------	----------	----------	----------	529,590	354,117
Shipments from Baton Rouge	----------	----------	----------	----------	----------	----------	----------	186,313
Gravel and sand	540	27	32,000	30,023	300,356	215,916	1,255	16,660
Cement	----------	24	----------	3	50,018	1,576	985	775
Bauxite ore	156,553	132,317	202,036	244,944	202,036	244,944	202,036	244,944
Sulphur	----------	187	11,539	14,857	11,539	14,857	11,539	14,857
All other	125,761	153,195	73,134	81,083	101,814	182,508	130,236	210,820
Downbound	585,599	659,743	927,459	1,304,599	3,627,638	2,986,963	9,612,163	7,089,393
Wheat	123,529	154,719	116,660	158,555	116,660	158,587	116,660	158,555
Corn	41,056	7,870	49,938	8,093	49,818	8,183	50,318	8,263
Tobacco	----------	243	348	1,157	13,452	26,024	13,475	26,000
Cotton, raw	1	----------	2,051	1,379	39,009	49,169	50,325	59,146
Logs, barged	----------	6,623	70,388	196,502	346,994	143,475	140,788	128,724
Logs, rafted or floated	----------		12,897	16,100	25,926	81,942	63,704	81,188
Coal and coke	8,392	6,358	81,565	144,811	76,492	81,492	10,456	5,728
Petroleum and products	6,652	4,065	2,146	240	2,301,711	1,803,310	8,768,963	6,244,073
Receipts at Baton Rouge	----------	----------	----------	----------	----------	----------	2,298,482	1,796,359
Shipments from Baton Rouge	----------	----------	----------	----------	----------	----------	6,116,517	4,447,025
Stone	153,497	204,603	67,910	48,294	70,282	26,567	342	600
Gravel and sand	----------	3,027	159,000	233,745	270,000	204,108	157,507	1,235
Bauxite ore concentrates	13,820	11,510	19,617	17,582	19,617	17,582	19,617	17,582
Iron and steel manufactures	22,302	23,478	169,027	286,774	73,558	123,329	72,056	118,671
All other	216,351	237,247	184,912	191,367	219,119	263,195	147,952	239,628

[1] Coastwise only.

Source of Tables 468 and 469: Annual Reports of the Chief of Engineers, United States Army.

No. 470.—UNITED STATES MERCHANT MARINE: DOCUMENTED TONNAGE

NOTE.—For definition of "gross ton" see general note, p. 429. All data after 1840 are as of June 30

Year	Number			Thousands of gross tons			Tonnage (thousands of gross tons) employed in—			
	Total	Sailing [1]	Steam and motor	Total	Sailing [1]	Steam and motor	Foreign trade	Coastwise and internal trade	Whale fisheries	Cod and mackerel fisheries
1789 [2]	-------	-------	-------	202	202	-------	124	69	-------	9
1800 [2]	-------	-------	-------	972	972	-------	667	272	3	29
1810 [2]	-------	-------	-------	1,425	1,425	-------	981	405	4	35
1820 [2,3]	-------	-------	-------	1,280	1,280	-------	584	588	36	72
1830 [2,3]	-------	-------	-------	1,192	1,127	64	538	517	40	98
1840 [4]	-------	-------	-------	2,181	1,978	202	763	1,177	137	104
1850	-------	-------	-------	3,535	3,010	526	1,440	1,798	146	152
1860	-------	-------	-------	5,354	4,486	868	2,379	2,645	167	163
1870	28,998	25,474	3,524	4,247	3,171	1,075	1,449	2,638	68	91
1880	24,712	19,995	4,717	4,008	2,856	1,212	1,314	2,638	38	78
1890	23,467	17,502	5,965	4,424	2,565	1,859	928	3,409	19	68
1900	23,333	16,280	7,053	5,165	2,507	2,658	817	4,287	10	52
1910	25,740	13,288	12,452	7,508	2,608	4,900	783	6,669	9	47
1915	26,701	10,753	15,948	8,389	2,446	5,944	1,863	6,486	9	32
1916	26,444	10,383	16,061	8,470	2,400	6,070	2,185	6,245	7	33
1917	26,397	10,155	16,242	8,871	2,438	6,433	2,441	6,393	6	32
1918	26,711	10,053	16,658	9,925	2,453	7,471	3,599	6,282	4	38
1919	27,513	9,862	17,651	12,907	2,492	10,416	6,665	6,201	4	36
1920	28,183	9,369	18,814	16,324	2,501	13,823	9,925	6,358	4	38
1921	28,012	8,941	19,071	18,282	2,537	15,745	11,077	7,163	4	37
1922	27,358	8,398	18,960	18,463	2,481	15,982	10,720	7,703	4	36
1923	27,017	8,071	18,946	18,285	2,463	15,821	9,069	9,177	4	35
1924	26,575	7,825	18,750	17,741	2,425	15,315	8,794	8,911	3	32
1925	26,367	7,730	18,637	17,406	2,430	14,976	8,151	9,216	4	35
1926	26,343	7,654	18,689	17,311	2,463	14,848	7,719	9,552	3	38
1927	25,778	7,394	18,384	16,888	2,381	14,507	7,309	9,533	8	38
1928	25,385	7,115	18,270	16,683	2,336	14,347	6,934	9,706	7	36

Classes	Number					Thousands of gross tons				
	1900	1910	1920	1925	1928	1900	1910	1920	1925	1928
By utilization:										
Registered—										
Foreign trade	1,288	1,490	5,932	4,695	4,312	817	783	9,925	8,151	6,934
Whale fisheries	42	36	26	19	13	10	9	4	4	7
Enrolled—										
Coasting and internal trade	13,241	13,654	12,181	12,586	12,436	4,196	6,555	6,233	9,097	9,592
Cod and mackerel fisheries	545	395	196	185	219	44	39	32	29	30
Licensed—										
Coasting and internal trade	7,327	9,328	9,463	8,599	8,109	91	114	124	119	115
Cod and mackerel fisheries	890	837	385	283	296	8	8	6	6	7
By location:										
Atlantic and Gulf [5]	16,532	17,084	16,850	15,723	14,541	2,728	3,523	9,739	11,108	10,372
Pacific [6]	2,217	3,574	6,512	6,035	6,307	613	937	3,326	3,282	3,355
Northern lakes	3,167	3,273	3,091	2,677	2,537	1,566	2,895	3,139	2,853	2,773
Western rivers	1,417	1,809	1,730	1,932	2,000	258	154	120	162	182
By power:										
Sail	13,271	8,947	4,030	2,533	1,939	1,885	1,655	1,272	1,125	915
Steam [7]	7,053	12,452	8,103	7,454	6,619	2,658	4,900	13,466	14,495	13,614
Motor [7]	-------	-------	10,711	11,183	11,651	-------	-------	357	481	733
Canal boats	647	674	448	342	270	73	74	52	40	33
Barges	2,362	3,667	4,891	4,855	4,906	549	878	1,177	1,264	1,388
By material:										
Wood	22,108	23,527	23,781	21,384	20,318	3,572	3,391	3,876	2,907	2,619
Metal	1,225	2,213	4,402	4,983	5,067	1,593	4,117	12,448	14,499	14,064

[1] Including canal boats and barges. [2] Dec. 31.
[3] The decrease of tonnage arises principally from the registered tonnage having been corrected in 1818, 1829, and 1830 by striking off all vessels the registers of which were granted prior to 1815, which were supposed by the collectors to have been lost at sea, captured, etc.
[4] Sept. 30.
[5] Including Porto Rico in 1910, 1920, 1925 and 1928, and also Virgin Islands in 1920, 1925 and 1928.
[6] Including Hawaii and Alaska. [7] Motor vessels included in steam in 1900 and 1910.

Source: Reports of the Commissioner of Navigation.

No. 471.—UNITED STATES MERCHANT MARINE: LARGER SEAGOING VESSELS, BY CLASSES AND SIZE, AS OF JULY 1

NOTE.—For definition of "gross ton" see general note, p. 429. The number and tonnage reached their maximum in 1921

	Number					Thousands of gross tons				
	1919	1921	1924	1927	1928	1919	1921	1924	1927	1928
Vessels of 500 gross tons or over, total	2,658	3,723	3,322	2,836	2,695	7,755	13,234	12,535	11,376	11,164
Private ownership	1,676	1,925	1,983	1,957	1,934	3,928	5,241	6,245	6,836	7,054
Shipping Board [1]	982	1,798	1,339	879	761	3,827	7,994	6,290	4,540	4,110
Steam and gas	-------	2,888	2,574	2,218	2,139	-------	12,216	11,575	10,572	10,434
Sailing and unrigged	-------	835	748	618	556	-------	1,019	960	804	730
Foreign trade	-------	2,559	1,885	1,305	1,201	-------	10,621	8,415	6,291	6,162
Coasting trade	-------	1,164	1,437	1,531	1,494	-------	2,614	4,120	5,085	5,002
Steel	1,605	2,549	2,469	2,195	2,122	6,308	11,441	11,387	10,597	10,461
Wood	1,053	1,174	853	641	573	1,447	1,793	1,148	779	703
Power vessels of 1,000 gross tons and over, total	1,729	2,752	2,461	2,116	2,037	6,766	12,116	11,490	10,496	10,358
Steel	1,436	2,387	2,310	2,055	1,982	6,073	11,210	11,147	10,389	10,259
Wood	293	365	151	61	55	694	906	344	107	99
Passenger	208	238	197	198	202	887	1,271	1,214	1,270	1,317
Freight	1,328	2,145	1,853	1,532	1,447	4,822	8,620	7,817	6,869	6,669
Tank	179	351	396	372	374	982	2,124	2,377	2,282	2,297
Refrigerator	14	18	15	14	14	75	101	83	75	75
Steam engine	-------	2,607	2,395	2,042	1,951	-------	11,984	11,315	10,234	10,024
Oil burning	-------	1,595	1,692	1,632	1,613	-------	8,240	8,889	8,650	8,647
Coal burning	-------	1,102	703	410	338	-------	3,744	2,426	1,584	1,377
Oil engine (internal-combustion)	-------	55	[2] 66	[2] 74	[2] 86	-------	132	175	262	334
Size—gross tons:										
1,000 to 1,999	186	151	165	125	116	297	234	265	185	174
2,000 to 2,999	652	879	630	425	357	1,609	2,209	1,588	1,102	949
3,000 to 3,999	221	362	306	230	227	754	1,232	1,058	762	751
4,000 to 4,999	133	199	230	215	213	610	922	1,074	1,005	996
5,000 to 5,999	215	558	503	505	508	1,102	3,110	2,824	2,806	2,823
6,000 to 6,999	208	337	350	345	341	1,325	2,149	2,220	2,207	2,177
7,000 to 7,999	60	158	153	145	145	450	1,164	1,133	1,066	1,067
8,000 to 8,999	26	54	58	57	59	217	451	485	477	494
9,000 to 9,999	3	10	23	27	26	28	96	220	259	249
10,000 and over	25	44	43	42	45	284	548	629	627	678

[1] One thousand gross tons or over; the Shipping Board fleet is almost wholly of such vessels.
[2] Includes 9 vessels of 25,819 gross tons, propelled by electrically driven screws.

No. 472.—VESSELS BUILT IN THE UNITED STATES AND DOCUMENTED FOR AMERICAN SHIPOWNERS: YEARS ENDED JUNE 30

Yearly average or year	Number	Gross tons	Year	Number	Gross tons
1797-1800	----------	72,574	1910	1,361	342,068
1801-1810	----------	[1] 102,452	1911	1,422	291,162
1811-1820	----------	89,797	1912	1,505	282,669
1821-1830	790	89,372	1913	1,475	346,155
1831-1840	924	118,960	1914	1,151	316,250
1841-1850	1,195	185,309	1915	1,157	225,122
1851-1860	1,466	366,603	1916	937	325,413
1861-1870	1,054	299,602	1917	1,297	664,479
1871-1880	1,455	253,800	1918	1,528	1,300,868
1881-1890	1,056	230,197	1919	1,953	3,326,621
1891-1900	1,055	235,699	1920	2,067	3,880,639
1901-1910	1,311	418,178	1921	1,361	2,265,115
1911-1920	1,449	1,090,938	1922	845	661,232
1904	1,184	378,542	1923	770	335,630
1905	1,102	330,316	1924	1,049	223,968
1906	1,221	418,745	1925	967	199,846
1907	1,157	471,332	1926	924	224,673
1908	1,457	614,216	1927	917	245,144
1909	1,247	238,090	1928	909	257,180

[1] Nine-year average, there being no record of the tonnage for 1802.

Source of Tables 471 and 472: Reports of the Commissioner of Navigation.

No. 473.—VESSELS BUILT IN UNITED STATES: By Classes and Regions

Note.—For definition of "gross ton" see general note p. 429. Data are for years ended June 30

Class and where built	1901–1910, average	1911–1915, average	1916–1920, average	1921–1925, average	1925	1926	1927	1928
BUILT AND DOCUMENTED IN THE UNITED STATES								
Total.....number	1,311	1,342	1,556	998	967	924	917	969
Gross tons	418,178	282,272	1,899,604	737,190	199,646	224,673	245,144	257,180
Sailing.....number	300	70	82	38	28	11	8	5
Gross tons	59,857	16,339	70,599	27,685	2,869	263	326	230
Steam and gas.....number	681	911	1,111	697	679	645	661	675
Gross tons	287,593	200,669	1,734,296	630,341	141,053	140,586	181,504	172,901
Canal boats.....number	46	36	19	9	2	7	10	1
Gross tons	5,022	4,090	2,613	1,043	270	1,508	2,147	140
Barges.....number	284	325	344	254	258	261	238	288
Gross tons	65,705	61,164	92,096	69,121	55,654	82,316	61,167	83,909
Metal.....gross tons	270,852	181,166	1,511,043	631,109	125,693	132,646	179,756	201,437
Wood.....do	147,326	101,106	388,561	106,081	74,153	92,027	65,388	55,743
Gross tons built on:								
New England coast	59,491	21,474	112,835	45,913	5,615	4,995	6,574	11,434
Middle Atlantic and Gulf coasts	130,226	149,941	833,438	442,721	76,784	131,994	124,068	146,532
Pacific coast	34,482	34,439	687,076	174,926	41,534	22,669	45,565	23,715
Northern lakes	184,724	69,794	260,138	58,317	66,087	55,169	52,746	50,478
Western rivers	9,256	6,623	6,117	15,313	9,826	9,846	16,191	25,021

BUILT FOR FOREIGNERS [1]

	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1926	1927	1928
Number	1	2	5	36	41	22	59	23	33	10	4	7	9	12
Gross tons	12	414	275	2,949	124,560	48,531	121,098	39,507	65,938	55,991	17,408	272	610	1,228

[1] None were built for foreigners in 1924 and 1925.

Source: Reports of the Commissioner of Navigation.

No. 474.—MERCHANT VESSELS LAUNCHED: World Total and United States

Note.—Vessels of 100 gross tons and over. For definition of "gross ton" see general note, p. 429. Vessels under construction Dec. 31, 1928, numbered 622 of 2,618,001 gross tons

Calendar year	World				United States	
	Total		Steam and motor			
	Number	Gross tons	Number	Gross tons	Number	Gross tons
1910–1914, average	1,533	2,739,079	1,180	2,631,779	162	252,864
1915–1920, average [1]	1,488	4,046,860	1,296	3,918,746	518	1,877,382
1921–1925, average	942	2,578,620	830	2,531,592	99	313,321
1918 [1]	1,866	5,447,444	1,697	5,341,199	929	3,033,030
1919 [1]	2,483	7,144,549	2,095	6,788,632	1,051	4,075,385
1920	1,759	5,861,666	1,563	5,742,984	509	2,476,253
1921	1,377	4,341,670	1,205	4,274,375	173	1,006,413
1922	851	2,467,084	745	2,425,729	59	119,138
1923	701	1,643,181	620	1,614,790	83	172,817
1924	924	2,247,751	838	2,200,741	79	139,463
1925	855	2,193,404	742	2,142,325	101	128,776
1926	600	1,674,977	525	1,630,134	78	150,613
1927	802	2,285,670	734	2,239,522	66	179,218
1928	860	2,699,239	809	2,660,321	63	91,357

[1] Figures during the war period are shown only for allied and neutral countries.

[2] Figures for Germany are omitted because complete totals for that country are not available.

Source: Lloyd's Register of Shipping.

No. 475.—MERCHANT MARINE OF THE WORLD AND THE UNITED STATES

NOTE.—Vessels of 100 tons and over. Prior to 1919 tonnage figures are gross for steamers and net for sailing vessels, thereafter gross for both. Wooden vessels on the Great Lakes and vessels on the Caspian Sea are not included. Japanese sailing vessels and most sailing vessels belonging to Greece, Turkey, and southern Russia are not included. Figures for Philippine Islands are included with United States beginning with 1910. See general note, p. 429

Year	World total	United States	Year	World total	United States	Year	World total	United States
	1,000 tons	*1,000 tons*		*1,000 tons*	*1,000 tons*		*1,000 tons*	*1,000 tons*
1895	25,086	2,165	1920	57,314	16,049	1925	64,641	15,377
1900	28,957	2,750	1921	61,975	17,026	1926	64,784	14,879
1905	35,998	3,996	1922	64,371	17,062	1927	65,193	14,670
1910	41,913	5,059	1923	65,166	16,945	1928	66,955	14,633
1915	49,262	5,893	1924	64,624	15,957			

	Number					Thousands of tons (see headnote)					
	1900	1910	1920	1925	1928	1900	1910	1914	1920	1925	1928
World total	28,422	30,058	31,595	32,916	32,408	29,044	41,915	49,090	57,314	64,641	66,955
Steam and motor	15,898	22,008	26,513	29,205	29,387	22,369	37,291	45,404	53,905	62,380	65,159
Steel and iron	14,548	20,403	23,382	26,468	26,929	21,915	36,769	44,934	51,661	61,317	64,364
Wood and composite	1,350	1,605	3,131	2,737	2,458	454	521	470	2,244	1,063	796
Sailing	12,524	8,050	5,082	3,711	3,021	6,674	4,624	3,686	3,409	2,261	1,795
Steel and iron	2,468	2,115	1,314	919	786	2,992	2,508	2,095	1,524	954	744
Wood and composite	10,056	5,935	3,768	2,792	2,235	3,683	2,116	1,590	1,885	1,307	1,051
United States	3,135	3,469	5,457	4,882	4,435	2,750	5,059	5,368	16,049	15,377	14,633
Steam and motor	932	1,712	4,110	3,921	3,653	1,455	3,827	4,330	14,574	14,272	13,703
Steel and iron	638	1,270	3,242	3,349	3,120	1,267	3,602	4,120	13,341	13,882	13,394
Wood and composite	294	442	868	572	533	188	226	210	1,234	391	309
Sailing	2,203	1,757	1,347	961	782	1,295	1,232	1,038	1,475	1,105	931
Steel and iron	93	139	154	155	148	180	245	236	304	323	295
Wood and composite	2,110	1,618	1,193	806	634	1,116	987	803	1,171	782	635

No. 476.—EXPENSES AND REVENUES OF THE PANAMA CANAL

Year ended June 30—	Transit operations					Business operations		
	Tolls	Taxes, licenses, fees, fines, postal receipts, etc.	Total transit revenues	Net canal transit expenses	Net revenues (surplus)	Business revenues	Business expenses	Net revenues (surplus)
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
1914	14,619		14,619	166,031	[1] *151,412*	690,298	695,721	[1] *5,423*
1915	4,343,384		4,343,384	4,123,128	220,256	2,135,075	2,191,476	[1] *56,401*
1916	2,399,830	158,712	2,558,542	6,999,750	[1] *4,441,208*	6,488,522	6,476,628	*11,893*
1917	5,631,782	176,617	5,808,399	6,788,048	[1] *979,649*	7,579,588	7,540,161	39,428
1918	6,264,766	147,078	6,411,843	5,920,343	491,500	10,324,072	10,317,912	6,160
1919	6,156,119	197,898	6,354,017	6,112,195	241,822	13,684,881	13,623,854	61,027
1920	8,493,083	442,789	8,935,872	6,548,272	2,387,599	14,705,372	14,465,636	239,736
1921	11,261,919	778,197	12,040,117	9,328,300	2,711,817	15,232,317	14,668,106	564,211
Total [2]	44,565,501	1,901,291	46,466,792	45,986,067	480,725	70,840,125	69,979,538	860,587
Adjusted status to 1921 [2]	44,565,501	1,420,566	45,986,067	45,986,067		71,469,710	70,359,400	1,100,310
1922	11,193,383	192,209	11,385,592	7,919,018	3,466,575	7,747,228	7,423,968	323,259
1923	17,507,631	184,214	17,691,844	7,690,778	10,001,067	10,872,343	9,732,201	1,140,643
1924	24,289,603	392,251	24,681,854	8,373,905	16,307,949	12,968,777	12,067,153	901,624
1925	21,374,664	207,954	21,582,618	8,116,693	13,465,925	14,564,115	13,798,198	765,917
1926	22,927,456	217,680	23,145,137	7,993,468	15,151,668	15,874,478	15,033,168	841,310
1927	24,217,185	391,624	24,608,809	8,997,715	15,611,094	15,878,655	15,002,118	876,537
1928	26,943,513	232,533	27,176,046	8,951,201	18,224,845	16,929,247	16,192,528	736,719
Grand total	193,018,937	3,239,030	196,257,966	104,028,845	92,229,121	166,295,063	159,608,734	6,686,319

[1] Deficit.

[2] To and including 1921 "Net revenues from business operations" shown in last column are included in "Taxes, licenses, etc.," "Total transit revenues," and "Net revenues from transit operations"; therefore the $480,725 shown under the latter is the net revenue to June 30, 1921, from all operations. In the adjusted total this item is transferred to "Surplus from business operations" by deducting from the amount shown in this column $379,862, which is added to "Business expenses," to "Business revenues," and to "Surplus from business operations," to which is also added $619,585 interest on public works in Panama and Colon received prior to June 30, 1921, but not taken up as a canal revenue.

Sources: Table 475, Lloyd's Register; Table 476, Report of the Governor of the Panama Canal.

No. 477.—COMMERCIAL TRAFFIC THROUGH THE PANAMA CANAL: BY NATIONALITY OF VESSEL

NOTE.—See general note, p. 429. Net tonnage is according to Panama Canal measurement

Nationality and year ended June 30	Number of vessels	Net tonnage (thousands)	Tolls (thousands of dollars)	Tons of cargo (thousands)
Total traffic:				
1915–1928, total	46,833	204,137	193,808	215,286
1915	1,075	3,793	4,368	4,888
1916	758	2,396	2,408	3,094
1917	1,803	5,799	5,627	7,059
1918	2,069	6,574	6,439	7,532
1919	2,024	6,125	6,173	6,917
1920	2,478	8,546	8,514	9,374
1921	2,892	11,416	11,277	11,599
1922	2,736	11,417	11,108	10,885
1923	3,967	18,606	17,508	19,568
1924	5,230	26,149	24,291	26,995
1925	4,673	22,855	21,401	23,959
1926	5,197	24,775	22,931	26,037
1927	5,475	26,228	24,229	27,748
1928	6,456	29,459	26,944	29,631
United States:				
1915–1928, total	20,998	99,698	93,630	108,022
1915	459	1,700	2,003	2,188
1916	213	653	724	849
1917	404	1,239	1,238	1,476
1918	567	1,704	1,714	2,098
1919	784	2,257	2,327	2,759
1920	1,129	3,791	3,806	4,547
1921	1,210	4,862	4,785	5,163
1922	1,095	4,972	4,867	4,951
1923	1,994	10,209	9,474	11,055
1924	2,947	15,807	14,483	16,654
1925	2,326	12,271	11,302	13,080
1926	2,432	12,565	11,540	13,711
1927	2,685	13,915	12,720	15,242
1928	2,753	13,753	12,646	14,249
British:				
1915–1928, total	13,729	60,333	57,940	59,717
1927	1,351	6,943	6,453	6,437
1928	1,842	8,977	8,074	8,075
Norwegian:				
1915–1928, total	2,373	8,391	7,704	9,570
1927	265	908	809	1,052
1928	313	1,181	1,052	1,268
Japanese:				
1915–1928, total	1,676	7,748	8,187	9,619
1927	165	818	863	1,037
1928	188	909	949	1,041
Chilean:				
1915–1928, total	774	2,350	2,062	1,348
1927	27	114	107	87
1928	32	125	110	82
Danish:				
1915–1928, total	736	2,672	2,570	3,601
1927	46	198	188	262
1928	69	285	272	380
Dutch:				
1915–1928, total	956	4,646	4,284	4,833
1927	105	575	542	572
1928	137	644	561	637
Peruvian:				
1915–1928, total	865	2,217	1,710	1,398
1927	63	143	123	108
1928	53	140	108	96
French:				
1915–1928, total	901	3,583	3,690	3,549
1927	116	536	518	530
1928	127	581	577	600
Swedish:				
1915–1928, total	600	2,415	2,039	3,494
1927	106	395	330	652
1928	111	480	397	705
Spanish:				
1917–1928, total	339	1,099	1,056	759
1927	30	111	103	48
1928	46	157	151	105
Italian:				
1915–1928, total	491	2,135	2,191	1,680
1927	74	344	363	308
1928	118	581	568	499
German:				
1920–1928, total	1,167	4,464	4,069	5,197
1927	212	780	708	974
1928	316	996	893	1,185
Miscellaneous:				
1915–1928, total	1,228	2,387	2,176	2,500
1927	230	448	397	439
1928	351	649	579	708

No. 478.—COMMERCIAL TRAFFIC THROUGH PANAMA CANAL: BY DIRECTION

NOTE.—A to P=Atlantic to Pacific; P to A=Pacific to Atlantic. See also general note, p. 429

Years ended June 30—	Number of vessels	Thousands of gross tons	Thousands of net tons[1]	Thousands of cargo tons		
				Total	A to P	P to A
1915	1,075	5,417	3,793	4,888	2,071	2,817
1916	758	3,597	2,396	3,094	1,369	1,725
1917	1,803	8,531	5,799	7,059	2,929	4,129
1918	2,069	9,371	6,574	7,532	2,639	4,893
1919	2,024	7,877	6,125	6,917	2,740	4,176
1920	2,478	11,060	8,546	9,374	4,093	5,282
1921	2,892	14,522	11,416	11,599	5,892	5,707
1922	2,736	14,361	11,417	10,885	5,496	5,389
1923	3,967	23,633	18,606	19,568	7,086	12,482
1924	5,230	33,412	26,149	26,995	7,860	19,135
1925	4,673	29,148	22,855	23,959	7,398	16,560
1926	5,197	31,673	24,775	26,037	8,037	18,000
1927	5,475	33,556	26,228	27,748	8,583	19,165
1928	6,456	37,203	29,459	29,631	8,310	21,321

[1] Panama Canal measurement.

Source of Tables 477 and 478: Report of the Governor of the Panama Canal.

No. 479.—CARGO TONNAGE THROUGH PANAMA CANAL: By Origin and Destination, Years Ended December 31

[In thousands of cargo tons of 2,240 pounds]

Origin and destination	Atlantic to Pacific			Origin and destination	Pacific to Atlantic		
	1926	1927	1928		1926	1927	1928
Grand total	8,420	8,406	9,068	Grand total	19,166	20,697	20,336
To W. coast United States	3,308	3,437	3,802	To E. coast United States	12,077	11,797	10,745
To W. coast other N. America	626	627	607	To E. coast other N. America	1,316	1,850	1,224
To W. coast S. America	1,193	1,165	1,234	To Europe	5,520	6,609	8,188
To Asia	1,804	1,742	2,061	To Africa and S. America	254	441	179
To Australasia	1,489	1,434	1,363				
From E. coast United States, total	5,639	5,629	6,009	**From W. coast United States, total**	11,679	12,427	10,088
To W. coast United States	2,655	2,725	2,915	To E. coast United States	8,267	8,183	6,848
To W. coast other N. America	180	144	156	To E. coast other N. America	749	1,023	498
To W. coast S. America	432	365	366	To Europe	2,560	2,966	2,696
To Asia	1,576	1,634	2,013	To Africa and S. America	103	255	47
To Australasia	796	761	558				
From E. coast other N. America, total	700	585	619	**From W. coast other N. America, total**	1,970	2,005	3,295
To W. coast N. America	208	231	294	To E. coast N. America	813	719	628
To W. coast S. America	81	91	97	To Europe	1,131	1,263	2,633
To Asia	215	87	41	To Africa and S. America	26	23	34
To Australasia	196	176	186				
From Europe, total	1,943	2,008	2,282	**From W. coast S. America, total**	4,559	5,139	5,666
To W. coast N. America	771	801	933	To E. coast United States	2,773	2,534	2,859
To W. coast S. America	674	699	764	To E. coast other N. America	367	562	451
To Asia and Australasia	498	508	585	To Europe	1,295	1,880	2,258
				To Africa and S. America	124	164	98
From E. coast S. America and Africa, total	138	183	156	**From Asia and Australasia, total**	957	1,126	1,286
				To E. coast N. America	424	626	685
				To Europe	534	500	602

Source: Panama Canal Record.

No. 480.—LIVES LOST BY ACCIDENT ON VESSELS SUBJECT TO UNITED STATES STEAMBOAT INSPECTION SERVICE: Years Ended June 30

Cause	1922	1923	1924	1925	1926	1927	1928		
							Total	Passengers	Crew
Total	266	247	297	310	368	262	275	81	194
Fire	8	7	8	31	8	6	17	--------	17
Collision	5	20	9	3	4	8	19	7	12
Grounding	--------	--------	4	1	--------	1	2	--------	2
Wreck	--------	--------	22	--------	11	1	--------	--------	--------
Explosion, escape of steam, etc	12	10	10	9	97	13	8	--------	8
Foundered in storm	11	5	38	43	4	12	7	--------	7
Sinking	52	14	19	8	52	22	28	27	1
Accidental drowning	87	94	107	100	89	104	100	20	80
Suicide	34	39	31	36	36	34	30	20	10
Miscellaneous	57	58	49	39	67	61	64	7	57

Source: Steamboat Inspection Service, Department of Commerce.

No. 481.—UNITED STATES COAST GUARD: Years Ended June 30

Item	1927	1928	Item	1927	1928
Lives saved or persons rescued from peril	3,313	3,983	Instances of lives saved and vessels assisted	2,791	3,262
Persons on board vessels assisted	14,496	17,383	Instances of miscellaneous assistance	2,717	3,584
Persons in distress cared for	899	690	Derelicts and other obstructions to navigation removed or destroyed	136	167
Vessels boarded and papers examined	68,223	65,710	Value of vessels assisted (including cargoes)	$37,801,357	$39,479,729
Vessels seized or reported for violations of law	1,788	1,554	Total expended and obligated for the Coast Guard	$24,626,321	$27,854,307
Fines and penalties incurred by vessels reported	$375,009	$279,510			

Source: Annual Reports of the Secretary of the Treasury.

No. 482.—MARINE WRECKS AND CASUALTIES OCCURRING TO VESSELS OF THE UNITED STATES: By Regions

Note.—The table covers all disasters involving damage or loss amounting to $300 or more. The figures exclude some reports of casualties to United States vessels received after the closing of the report for the year which are not distributed by regions. These were in 1927 as follows: Number of vessels completely lost, 15; tonnage, 5,074; vessels partially lost, 28; tonnage, 90,503; value of property lost, vessels $870,127, cargoes $4,500, persons on board, passengers 27, crews 804; loss of life, 1. Casualties to United States vessels in the Panama Canal Zone, which are excluded, were in 1928 as follows: Vessels involved, 12; tonnage, 76,113; property loss, $128,380; persons on board, 458; no loss of life

Yearly average or year	Number of vessels		Vessel capacity—1,000 tons		Losses—1,000 dollars		Persons on board		Lives lost
	Complete loss	Partial loss	Complete loss	Partial loss	To vessel	To cargo	Passengers	Crews	
Total:									
1905-1910	358	1,091	145	1,666	10,781	2,671	17,038	21,954	461
1911-1915	296	952	126	1,496	9,551	2,341	17,389	22,295	288
1916-1920	322	678	192	1,487	39,440	13,803	9,889	19,733	651
1921-1925	253	665	113	1,808	18,794	4,374	10,207	19,859	189
1920	285	789	215	2,089	54,955	17,612	14,499	26,100	551
1921	222	555	122	1,435	28,663	6,269	7,081	16,005	206
1922	277	630	131	1,762	18,728	3,976	8,989	19,065	227
1923	273	707	117	1,941	17,203	3,711	14,144	21,198	116
1924	237	708	96	1,917	14,201	3,803	8,861	20,255	202
1925	255	725	96	1,986	15,177	4,114	11,958	22,771	196
1926	254	728	94	2,015	15,597	4,324	12,331	21,970	236
1927	300	933	118	2,788	18,704	5,315	10,493	27,635	222
1928	273	769	107	2,286	16,570	4,135	14,856	23,482	166
Atlantic, Gulf, and Pacific coasts of the United States:									
1921-1925	148	370	58	802	8,856	1,895	5,996	9,908	98
1926	163	421	59	1,018	10,364	2,055	8,244	12,236	145
1927	175	510	63	1,303	10,240	1,627	5,629	13,602	125
1928	170	456	52	1,176	8,185	1,786	6,652	12,237	73
Great Lakes:									
1921-1925	20	92	11	357	1,894	192	1,491	2,586	25
1926	18	73	4	216	1,366	120	1,513	1,792	17
1927	20	109	17	409	2,823	197	927	3,286	5
1928	18	118	13	435	3,053	27	2,695	2,965	31
Rivers of the United States:									
1921-1925	45	86	7	160	1,815	127	820	1,881	12
1926	49	108	4	260	1,542	33	1,422	2,873	8
1927	68	136	7	314	1,994	158	1,152	3,217	24
1928	54	74	9	151	1,581	220	2,088	1,860	11
At sea and on the coasts of foreign countries:									
1921-1925	39	118	36	490	6,230	2,161	1,900	5,484	55
1926	24	126	27	521	2,325	2,116	1,152	5,069	66
1927	37	178	31	761	3,647	3,333	2,785	7,530	68
1928	31	121	32	523	3,751	2,102	3,421	6,420	51

Source: Reports of the United States Coast Guard, Treasury Department.

No. 483.—UNITED STATES SHIPPING BOARD AND UNITED STATES SHIPPING BOARD MERCHANT FLEET CORPORATION: Net Appropriations and Allotments from Inception to July 1, 1928

For fiscal years ended prior to July 1, 1927	**$3,561,402,191**
United States Shipping Board	4,456,185
United States Shipping Board Emergency Fleet Corporation	3,557,006,006
Act of Sept. 7, 1916, permanent fund	50,000,000
Acts from June 15, 1917, to June 12, 1922, emergency shipping fund	3,325,863,502
Acts of Feb. 13, 1923, June 7, 1924, Mar. 3, 1925, and Apr. 22, 1926, current maintenance and operations	117,900,000
Act of June 12, 1922, claims, damage charges, and miscellaneous adjustments	38,254,185
Acts of Apr. 17, 1917, and July 1, 1918, national security and defense (presidential allotments)	24,988,319
For fiscal year ended June 30, 1928	**17,290,000**
United States Shipping Board	290,000
United States Shipping Board Emergency Fleet Corporation—for current maintenance and operations	17,000,000
For fiscal year ending June 30, 1929	**18,688,750**
United States Shipping Board	288,750
United States Shipping Board Emergency Fleet Corporation	18,400,000
Current maintenance and operations	13,400,000
Operation of trade lines, ex-purchasers (expenditures on approval of President of the United States)	5,000,000
Net appropriations and allotments to June 30, 1929	**3,597,440,941**

Source: United States Shipping Board.

No. 484.—UNITED STATES SHIPPING BOARD AND UNITED STATES SHIPPING BOARD MERCHANT FLEET CORPORATION: STATEMENT OF PROFIT AND LOSS (EXCLUDING LIQUIDATION), FISCAL YEAR 1928

[All money figures in thousands of dollars]

	Grand total	Ocean operations					Tugs	Chartered vessels
		Total	United States lines	Other passenger lines	Freighters	Tankers		
Number of voyages terminated	1,280	1,272	61	52	1,095	64	8	
Cargo carried, thousand tons	9,816	9,816	202	164	8,852	598		
Passengers carried	94,170	94,170	88,891	5,279				
Voyage revenue, estimated	78,602	78,501	16,266	2,651	58,218	1,365	53	48
Operating costs, total	93,703	93,654	16,731	2,734	72,988	1,200	30	18
Voyage expense	76,724	76,700	14,223	2,331	59,284	862	24	
Adjustment	1,094	1,094	162	60	850	22		
Insurance	4,104	4,099	409	83	3,504	103	2	4
Repairs—								
Maintenance	6,668	6,656	964	123	5,394	175	4	9
Betterments	639	639	286	36	315	2		
Advertising	572	572	382	24	166			
Administrative expense	3,902	3,895	306	76	3,477	37	(1)	6
Profit or *loss* on vessel operations	[2] *15,100*	[2] *15,153*	[2] *465*	[2] *83*	[2] *14,770*	165	23	30
Expenses of inactive vessels	*2,073*							
Miscellaneous income	894							
Net loss	*16,279*							

[1] $439. [2] Loss.

Source: United States Shipping Board.

No. 485.—SHIPPING BOARD VESSELS SOLD; BY TYPE.

NOTE.—Data for earlier years are as follows: 1921, grand total, 50 vessels of 254,125 dead-weight tons; 20 steel vessels of 157,875 dead-weight tons; 30 wood vessels of 96,250 dead-weight tons; 1922, grand total, 262 vessels of 1,510,676 dead-weight tons; 104 steel vessels of 582,249 dead-weight tons; 1 concrete vessel of 7,500 dead-weight tons; 10 composite vessels of 35,600 dead-weight tons; and 247 wood vessels of 885,327 dead-weight tons; 1923, grand total, 112 vessels of 728,721 dead-weight tons; 106 steel vessels of 705,108 dead-weight tons; 1 concrete vessel of 3,078 dead-weight tons; 1 composite vessel of 3,575 dead-weight tons, and 4 wood vessels of 16,960 dead-weight tons

Type	1924		1925		1926		1927		1928	
	Number	Dead-weight tons [1]	Number	Dead-weight tons [1]	Number	Dead-weight tons [1]	Number	Dead-weight tons [1]	Number	Dead-weight tons [1]
Grand total	**49**	**345,396**	**147**	**768,142**	**278**	**1,415,536**	**49**	**304,921**	**82**	**692,876**
Steel vessels	46	328,224	141	747,474	275	1,415,536	48	304,921	81	692,876
Cargo	22	122,980	107	545,198	258	1,250,156	37	215,175	76	649,602
Passenger	12	136,510	8	91,999	8	90,825	1	11,000		
Tankers	4	40,102	9	84,627	6	53,500	9	71,668	4	34,574
All other	6	11,325	15	4,000					1	8,700
For conversion to Diesel—										
Cargo			1	11,679						
Tankers	2	17,307	1	9,971	3	21,055	1	7,078		
Concrete vessels	3	17,172	2	9,298						
Composite vessels: Cargo			1	3,500						
Wood vessels			3	7,870	3		1		1	

[1] See general note, p. 429. No tonnage is shown on tugs; the number includes tugs.

Source: United States Shipping Board.

No. 486.—VESSELS CONTROLLED BY THE UNITED STATES SHIPPING BOARD MERCHANT FLEET CORPORATION: As of December 31, 1928

Note.—For definition of dead-weight tons see general note, p. 429. The number of tugs is shown under "All other" except as noted; there is no tonnage for these

Origin and class	1923	1928	
	Dead-weight tons	Number	Dead-weight tons
Grand total	9, 195, 452	717	5, 624, 665
ORIGIN			
Requisitioned steel	1, 461, 634	125	1, 058, 852
Contract steel	7, 280, 775	560	4, 364, 192
Contract wood or concrete	63, 153	[1] 8	7, 500
Purchased	158, 840	13	100, 462
Seized enemy	215, 144	8	87, 659
All other	5, 900	3	
CLASS			
Steel	9, 119, 899	709	5, 617, 165
Cargo (completed)	8, 140, 521	672	5, 328, 427
Cargo and passenger	431, 768	13	132, 330
Tankers	395, 055	6	54, 788
Refrigerators	100, 920	13	92, 220
Transports	38, 235		
All other	13, 400	5	9, 400
Wood and composite and concrete	65, 553	[1] 8	7, 500

Class	1923	1928	
	Dead-weight tons	Number	Dead-weight tons
Active steel	3, 362, 576	260	2, 298, 014
Cargo	2, 875, 947	243	2, 163, 386
Cargo and passenger	278, 734	11	115, 330
Tankers	194, 158	2	19, 298
All other	13, 737	4	
Temporarily inactive steel	206, 847		
Inactive steel	5, 550, 476	449	3, 319, 151
Cargo	5, 126, 361	430	3, 174, 441
Cargo and passenger	127, 952	2	17, 000
Refrigerators	82, 483	13	92, 220
U. S. Army transports	38, 235		
Tankers	175, 445	4	35, 490
Wood and composite, active and inactive, and inactive concrete	65, 553	[1] 8	7, 500

[1] Includes 7 tugs.

No. 487.—CARGO TONNAGE OF FOREIGN AND INTERCOASTAL COMMERCE

Note.—In thousands of cargo tons of 2,240 pounds. Coastwise trade other than from Atlantic and Gulf to Pacific and vice versa is not included

	Total United States ports			Atlantic coast ports			Gulf coast ports		
	1925	1926	1927	1925	1926	1927	1925	1926	1927
Total commerce	[1] 105, 553	[1] 127, 196	[1] 113, 734	57, 194	74, 696	58, 152	21, 964	22, 435	21, 314
Inbound	53, 821	56, 878	54, 570	32, 868	36, 578	35, 698	8, 977	8, 477	6, 664
Outbound	60, 299	80, 367	69, 536	24, 326	38, 118	22, 454	13, 007	13, 958	14, 650
With foreign countries	92, 801	112, 826	99, 118	48, 049	63, 962	47, 210	20, 959	21, 488	20, 029
Imports	43, 135	44, 686	42, 183	26, 151	28, 614	27, 436	8, 539	8, 184	6, 094
Exports	49, 666	68, 140	56, 935	21, 898	35, 348	19, 774	12, 420	13, 304	13, 935
Intercoastal				7, 845	9, 400	9, 720	722	559	652
Inbound	8, 567	10, 049	10, 372	5, 949	7, 268	7, 565	409	245	278
Outbound	8, 567	10, 049	10, 372	1, 896	2, 222	2, 155	313	314	374
With noncontiguous territories	4, 185	4, 321	4, 244	1, 300	1, 244	1, 222	303	388	633
Imports	2, 119	2, 143	2, 015	768	696	697	29	48	292
Exports	2, 066	2, 178	2, 229	532	548	525	274	340	341

	Pacific coast ports			Great Lakes ports			Ports in noncontiguous territories [2]		
Total commerce	22, 107	26, 900	28, 912	12, 835	13, 214	15, 728	7, 283	7, 562	7, 566
Inbound	6, 133	5, 647	6, 390	5, 843	5, 176	5, 818	4, 277	4, 241	4, 278
Outbound	15, 974	20, 253	22, 522	6, 992	8, 038	9, 910	5, 569	3, 321	3, 288
With foreign countries	10, 958	14, 162	16, 157	12, 835	13, 214	15, 728	1, 877	2, 043	1, 941
Imports	2, 602	2, 712	2, 835	5, 843	5, 176	5, 818	1, 446	1, 562	1, 510
Exports	8, 356	11, 450	13, 316	6, 992	8, 038	9, 910	431	481	431
Intercoastal	8, 567	10, 049	10, 372						
Inbound	2, 209	2, 536	2, 529						
Outbound	6, 358	7, 513	7, 843						
With noncontiguous territories	2, 582	2, 689	2, 389				[3] 5, 406	[3] 5, 519	[3] 5, 625
Imports	1, 322	1, 399	1, 026				[3] 2, 831	[3] 2, 679	[3] 2, 768
Exports	1, 260	1, 290	1, 363				[3] 2, 575	[3] 2, 840	[3] 2, 857

[1] Duplication in intercoastal trade is eliminated.
[2] Including Philippine Islands.
[3] With continental United States.

Sources of Tables 486 and 487: United States Shipping Board.

No. 488.—CARGO TONNAGE OF WATER-BORNE IMPORTS AND EXPORTS

NOTE.—In thousands of cargo tons of 2,240 pounds. This and the following tables do not include cargoes (small in aggregate) carried by ships of less than 100 tons gross capacity

	Imports in vessels of—					Exports in vessels of—				
	Total	U. S. Shipping Board	Independent American	British	Other	Total	U. S. Shipping Board	Independent American	British	Other
Total:										
1921	33,057	4,835	18,635	(1)	9,587	48,431	7,254	11,150	(1)	30,027
1922	44,682	5,269	22,665	8,600	8,148	42,502	6,644	10,205	14,109	11,544
1923	43,296	3,031	19,753	9,218	11,294	49,080	6,903	9,286	18,824	14,067
1924	40,899	2,663	19,630	8,406	10,200	52,261	6,663	11,653	18,867	15,078
1925	43,135	2,285	18,930	9,586	12,334	49,666	5,624	10,092	18,836	15,564
1926	44,686	2,888	18,217	10,702	12,879	68,140	5,591	11,531	28,269	22,749
1927	42,183	2,195	19,263	9,328	11,397	56,935	6,185	12,510	20,728	17,512
1928	45,642	1,904	21,498	10,133	12,107	57,035	4,871	13,752	20,567	17,845
Per cent distribution:										
1921	100.0	15	56	(1)	29	100.0	15	23	(1)	62
1926	100.0	6	41	24	29	100.0	8	17	42	33
1927	100.0	5	46	22	27	100.0	11	22	37	30
1928	100.0	4	47	22	27	100.0	9	24	36	31
Dry cargoes:										
1921	15,695	2,173	6,192	(1)	7,330	42,451	6,529	9,483	(1)	26,439
1922	25,526	3,162	8,106	7,259	6,999	30,002	6,386	8,144	11,276	10,256
1923	27,962	2,724	8,253	7,531	9,454	39,592	6,713	7,104	13,985	11,790
1924	26,242	2,267	8,462	6,914	8,599	41,204	6,460	8,290	14,146	12,308
1925	30,352	2,077	9,691	8,065	10,519	39,241	5,467	6,574	14,348	12,852
1926	32,085	2,323	9,132	9,386	11,244	55,851	5,486	7,838	23,222	19,305
1927	30,740	2,027	10,382	8,165	10,166	43,416	5,986	8,617	15,449	13,364
1928	31,991	1,900	11,269	8,530	10,292	42,340	4,827	9,487	15,500	12,526
Per cent distribution:										
1921	100.0	14	39	-------	47	100.0	15	22	-------	63
1927	100.0	7	34	26	33	100.0	14	20	35	31
1928	100.0	6	35	27	32	100.0	11	22	37	30
Tanker cargoes:										
1921	17,362	2,662	12,443	(1)	2,257	5,980	725	1,667	(1)	3,588
1922	19,156	2,107	14,559	1,341	1,149	6,440	258	2,061	2,833	1,288
1923	15,334	307	11,500	1,687	1,840	9,488	190	2,182	4,839	2,277
1924	14,657	396	11,168	1,492	1,601	11,057	203	3,363	4,721	2,770
1925	12,783	208	9,239	1,521	1,815	10,425	157	3,518	4,038	2,712
1926	12,601	565	9,085	1,316	1,635	12,289	105	3,693	5,047	3,444
1927	11,443	168	8,882	1,163	1,230	13,519	199	3,893	5,279	4,148
1928	13,651	4	10,229	1,603	1,815	14,695	44	4,265	5,067	5,319
Per cent distribution:										
1921	100.0	15	72	-------	13	100.0	12	28	-------	60
1927	100.0	1	78	10	11	100.0	1	30	39	30
1928	100.0	-------	75	12	13	100.0	-------	29	35	36
North Atlantic ports:										
1923	24,270	1,891	7,886	6,249	8,244	20,715	2,909	2,094	7,942	7,770
1924	22,351	1,682	7,885	5,596	7,188	20,696	2,873	2,516	7,855	7,452
1925	24,069	1,501	7,756	6,224	8,588	20,817	2,504	2,595	7,891	7,827
1926	26,449	1,895	8,781	6,720	9,053	33,994	2,164	3,352	15,330	13,148
1927	25,860	1,358	10,400	5,955	8,147	18,648	2,234	2,972	6,447	6,995
South Atlantic ports:										
1923	1,561	167	557	169	668	927	207	192	128	400
1924	1,726	97	571	535	523	822	202	152	162	306
1925	2,082	96	821	339	826	1,081	94	314	293	380
1926	2,165	121	1,003	349	692	1,354	220	69	486	579
1927	1,576	138	655	284	499	1,126	231	48	286	561
Gulf ports:										
1923	10,028	485	6,876	1,029	1,638	10,599	2,553	1,751	3,068	3,227
1924	9,889	400	6,987	812	1,690	12,805	2,607	2,321	3,823	4,054
1925	8,539	312	5,051	1,071	2,105	12,420	2,093	2,264	3,334	4,729
1926	8,184	552	4,304	1,062	2,266	13,304	2,445	2,043	3,650	5,166
1927	6,094	412	2,918	850	1,914	13,935	2,849	2,034	3,476	5,576
Pacific ports:										
1923	2,524	488	548	773	715	8,472	1,234	1,466	3,150	2,622
1924	2,585	484	551	765	785	9,360	981	2,233	2,898	3,248
1925	2,602	376	558	589	779	8,356	933	2,144	2,744	2,535
1926	2,712	320	681	877	834	11,450	762	2,912	4,021	3,755
1927	2,835	287	911	865	772	13,316	871	3,386	4,810	4,249
Great Lakes ports:										
1923	4,913	-------	3,886	998	29	8,367	-------	3,783	4,536	48
1924	4,348	-------	3,636	698	14	8,578	-------	4,431	4,129	18
1925	5,843	-------	4,744	1,063	36	6,992	-------	2,775	4,124	93
1926	5,176	-------	3,448	1,694	34	8,038	-------	3,155	4,782	101
1927	5,818	-------	4,379	1,374	65	9,910	-------	4,070	5,709	131

[1] British not segregated in 1921; included in "Other."

Source: Bureau of Research United States Shipping Board.

No. 489.—CARGO TONNAGE OF WATER-BORNE IMPORTS AND EXPORTS: By Regions of Origin and Destination and Method of Carriage

[In thousands of cargo tons of 2,240 pounds]

Foreign trade region	1924	1925	1926	1927—In vessels of—				
				Total	U. S. Shipping Board	Independent American-	British	Others
Imports, total	40,899	43,135	44,686	42,183	2,195	19,263	9,328	11,397
United Kingdom	1,644	1,923	1,946	1,385	126	153	923	183
North Atlantic and Baltic Europe	1,183	1,108	1,014	1,231	163	11	25	1,032
Havre-Hamburg range	2,763	3,366	4,498	3,481	737	148	449	2,147
South Atlantic Europe	443	487	564	399	32	6	163	198
West Mediterranean	893	1,143	1,192	1,174	15	166	225	768
East Mediterranean and Black Sea	318	412	420	429	--------	60	198	171
West Indies	5,396	6,702	8,042	7,763	44	3,815	1,595	2,309
Mexico	13,242	10,510	8,375	5,476	105	4,407	206	758
Central America	1,103	1,231	1,177	1,344	--------	477	204	663
North Coast South America	486	719	1,703	3,075	9	2,385	236	445
East Coast South America	1,416	1,287	1,682	1,720	329	484	437	470
West Coast South America	2,689	2,744	2,901	2,617	--------	1,501	326	790
West Africa	197	235	260	259	101	8	127	23
South and East Africa	210	201	250	247	--------	52	193	2
Australasia	94	103	108	131	13	19	71	28
East Indies	405	511	550	547	14	122	290	121
East Asia	1,182	1,344	1,249	1,391	478	239	251	423
India, Persian Gulf, and Red Sea	750	816	777	730	29	128	561	12
Pacific Canada	1,197	1,296	1,350	1,321	--------	596	598	127
Atlantic Canada and Newfoundland	5,289	6,996	6,628	7,463	--------	4,486	2,250	727
Exports, total	52,261	49,666	68,140	56,935	6,185	12,510	20,728	17,512
United Kingdom	8,229	7,459	19,505	8,634	1,483	461	5,576	1,114
North Atlantic and Baltic Europe	1,653	1,872	1,703	2,007	130	84	208	1,585
Havre-Hamburg range	8,442	8,023	8,525	9,252	2,576	428	1,434	4,814
South Atlantic Europe	1,255	1,274	2,055	1,365	154	123	323	765
West Mediterranean	4,225	3,650	4,434	2,864	218	176	357	2,113
East Mediterranean and Black Sea	625	654	829	527	17	130	132	248
West Indies	3,252	3,383	3,142	3,245	--------	1,595	662	988
Mexico	1,037	759	593	514	--------	291	9	214
Central America	1,105	1,453	1,755	2,084	84	1,687	176	137
North Coast South America	252	361	539	424	--------	203	43	178
East Coast South America	3,030	2,939	4,945	3,777	362	704	1,740	971
West Coast South America	1,255	1,200	1,306	1,270	--------	713	312	245
West Africa	197	280	474	290	110	36	95	49
South and East Africa	300	406	340	456	--------	112	321	23
Australasia	1,283	1,460	1,740	1,964	169	179	1,022	594
East Indies	229	289	406	403	18	78	173	134
East Asia	5,140	4,316	5,407	5,613	805	805	1,348	2,655
India, Persian Gulf, and Red Sea	425	403	453	465	31	115	236	83
Pacific Canada	712	719	854	910	19	369	512	10
Atlantic Canada and Newfoundland	9,616	8,764	9,135	10,871	9	4,221	6,049	592

Foreign trade region	Ocean-borne imports, 1927				Ocean-borne exports, 1927			
	North Atlantic	South Atlantic	Gulf	Pacific	North Atlantic	South Atlantic	Gulf	Pacific
Total	25,860	1,576	6,094	2,835	18,648	1,126	13,935	13,316
United Kingdom	1,115	37	144	84	3,645	228	2,888	1,873
North Atlantic and Baltic Europe	1,085	40	38	65	824	55	1,034	94
Havre-Hamburg range	2,308	307	465	401	4,220	464	3,772	796
South Atlantic Europe	366	16	11	6	524	2	800	39
West Mediterranean	1,092	6	58	17	1,350	31	1,215	268
East Mediterranean and Black Sea	422	--------	7	--------	374	--------	150	3
West Indies	5,409	172	2,131	51	1,816	159	1,120	150
Mexico	3,338	428	1,611	99	143	3	153	215
Central America	540	21	728	55	585	--------	276	1,223
North Coast South America	2,612	164	287	12	335	--------	66	23
East Coast South America	1,310	25	231	154	1,714	120	734	1,208
West Coast South America	1,937	347	169	164	301	--------	35	934
West Africa	242	--------	17	--------	201	--------	89	--------
South and East Africa	243	2	2	--------	271	--------	162	23
Australasia	99	--------	--------	32	501	--------	230	1,233
East Indies	520	--------	5	22	215	10	1	177
East Asia	624	--------	46	721	784	53	713	4,063
India, Persian Gulf, and Red Sea	612	7	105	6	231	--------	222	12
Pacific Canada	380	--------	9	932	11	--------	17	882
Atlantic Canada and Newfoundland	1,606	4	30	14	603	1	258	100

Source: Bureau of Research, United States Shipping Board.

No. 490.—CARGO TONNAGE OF WATER-BORNE IMPORTS AND EXPORTS: BY TRADE REGIONS AND INDIVIDUAL COUNTRIES

NOTE.—In cargo tons of 2,240 pounds. Note that a country may appear in part under one trade region and in part under another. Minor countries are omitted but their trade is included in regional totals

Foreign origin or destination	Imports			Exports		
	1925	1926	1927	1925	1926	1927
Grand total	43,135,154	44,686,235	42,182,967	49,666,499	68,139,521	56,935,043
United Kingdom	1,923,449	1,946,356	1,884,559	7,459,266	19,565,183	8,634,499
England	1,456,538	1,325,181	1,177,876	6,548,553	15,684,452	7,521,564
Ireland	8,506	5,902	5,537	268,378	971,829	410,114
Scotland	146,511	167,628	87,225	600,653	1,862,245	583,439
Wales	311,894	447,645	113,921	41,682	1,086,657	119,282
North Atlantic and Baltic Europe	1,108,060	1,014,477	1,230,983	1,872,202	1,702,767	2,007,297
Greenland	9,680	7,380	6,111	24	52	----------
U. S. S. R. (Russia)	2,024	3,861	14,202	260,426	72,318	123,680
Finland	95,228	103,718	104,218	86,311	162,642	92,173
Norway	294,796	258,296	351,049	337,420	374,051	337,766
Sweden	609,316	520,994	688,918	294,451	838,804	424,731
Denmark	38,358	72,438	35,086	750,156	702,677	884,678
Danzig	27,937	20,547	27,760	51,394	22,528	95,022
Germany	30,186	26,748	885	60,319	18,475	30,457
Estonia	350	494	----------	76	481	2,427
Latvia	285	1	----------	31,025	10,756	15,763
Lithuania	----------	----------	2,754	----------	----------	600
Havre-Hamburg range	3,365,751	4,497,667	3,481,007	8,028,162	8,526,201	9,251,960
Germany	1,171,410	1,305,395	1,021,047	3,237,762	3,169,952	3,913,272
Netherlands	690,274	1,108,762	703,482	2,099,381	2,405,410	2,721,748
Belgium	1,205,612	1,688,457	1,373,980	1,655,619	1,506,722	1,634,446
France	298,455	335,053	382,498	1,030,400	1,443,117	982,494
South Atlantic Europe	486,880	564,297	399,159	1,274,491	2,054,653	1,365,149
France	51,117	52,398	47,433	945,061	1,200,623	937,141
Portugal	58,238	71,079	33,740	91,567	327,766	175,041
Spain	377,114	440,350	317,316	199,442	216,594	202,615
Azore Islands	348	370	227	14,748	20,658	4,938
Canary Islands	51	98	439	20,598	274,916	38,639
Madeira	12	2	4	3,075	14,096	6,775
West Mediterranean	1,142,727	1,192,536	1,173,881	3,650,376	4,434,098	2,863,723
Spain	268,793	230,049	161,241	349,729	439,798	301,506
France	82,195	84,438	80,602	603,453	651,633	625,735
Italy	518,097	495,863	427,496	2,511,978	2,957,433	1,761,379
Yugoslavia	67,027	56,119	32,893	365	5,864	340
Malta	55	31	269	18,636	53,824	11,703
Tunis	57,473	35,883	109,954	31,459	35,018	23,208
Algeria	148,937	278,254	361,335	125,039	266,567	110,645
Morocco	150	11,899	91	9,708	23,948	29,207
East Mediterranean and Black Sea	412,025	419,551	429,331	654,046	828,782	526,412
Bulgaria	772	859	----------	1,065	2,121	----------
Rumania	1,007	20,940	4,271	5,432	13,488	13,313
U. S. S. R. (Russia)	----------	242,641	261,058	125,421	31,183	45,060
Crete	----------	----------	491	8,239	----------	----------
Georgia	213,424	----------	----------	30,304	----------	----------
Turkey	51,697	34,414	40,112	52,300	47,954	16,907
Cyprus	----------	----------	3,639	----------	----------	----------
Greece	70,505	45,669	36,537	242,396	286,284	289,220
Egypt	57,559	68,269	79,316	143,380	410,202	137,774
Palestine	246	177	179	4,835	20,188	6,120
Syria	8,627	2,268	3,728	37,943	16,927	18,018
West Indies	6,702,426	8,041,752	7,762,132	3,382,887	3,141,632	3,245,247
Cuba	5,572,928	5,948,097	4,924,180	2,547,346	2,142,739	2,306,626
Jamaica	303,502	300,133	372,055	128,309	193,204	135,419
Bahama Islands	38,372	29,114	14,612	32,216	40,722	37,764
Haiti	32,190	25,243	30,984	92,902	102,033	96,467
Dominican Republic	60,432	126,859	115,488	116,736	131,902	151,674
Lesser Antilles	690,910	1,607,020	2,301,834	426,434	491,257	468,227
Bermudas	4,092	6,286	2,970	38,944	38,875	49,070
Mexico	10,510,237	8,375,489	5,475,758	758,573	592,733	514,332
Central America	1,230,795	1,176,976	1,342,613	1,452,845	1,755,257	2,084,366
British Honduras	76,839	89,697	104,089	12,834	14,357	15,472
Guatemala	183,108	179,030	201,893	59,584	81,081	78,503
Honduras	425,612	375,347	515,884	114,099	87,515	139,502
Nicaragua	189,881	147,794	145,427	38,198	59,112	55,690
Costa Rica	148,001	157,427	156,374	38,837	41,940	45,438
Panama	64,823	45,174	43,289	7,758	4,369	8,100
Canal Zone	134,714	156,019	169,974	1,125,591	1,401,632	1,687,999
Salvador	7,817	26,488	5,683	55,944	65,242	53,662

No. 490.—Cargo Tonnage of Water-Borne Imports and Exports: By Trade Regions and Individual Countries—Continued

Foreign origin or destination	Imports			Exports		
	1925	1926	1927	1925	1926	1927
North Coast South America	719,277	1,703,129	3,074,799	360,912	538,725	424,312
Venezuela	287,613	857,091	1,542,094	145,300	293,456	214,633
British Guiana	175,213	180,808	162,433	27,924	34,147	26,877
Netherlands Guiana	94,326	48,145	162,370	17,550	22,901	21,477
French Guiana	41	13	----------	2,691	2,089	2,502
Colombia	162,084	616,982	1,207,902	167,447	186,132	158,823
East Coast South America	1,287,420	1,681,748	1,719,786	2,938,921	4,945,361	3,776,428
Brazil	715,477	821,698	736,642	1,177,286	2,107,231	1,152,179
Uruguay	33,943	56,716	44,890	313,434	473,335	504,370
Argentina	520,621	789,041	925,416	1,448,152	2,354,133	2,110,337
South Atlantic Islands	17,379	14,293	12,838	----------	10,592	9,042
West Coast South America	2,744,069	2,900,993	2,617,078	1,200,118	1,305,938	1,269,770
Colombia	24,267	31,732	12,911	34,284	56,439	53,629
Chile	2,456,052	2,366,623	2,274,196	912,208	925,122	861,229
Peru	248,872	489,269	310,557	229,892	298,471	314,557
Ecuador	14,878	13,369	19,414	23,644	25,906	40,355
West Africa	234,896	259,795	259,069	279,860	473,916	289,563
Morocco	3,778	3,866	18,067	32,694	37,427	34,388
Cape Verde Islands	2	1	212	2,477	120,309	28,852
Senegal	556	3,734	3,233	112,722	154,936	31,466
Gambia	----------	----------	----------	1,366	1,045	1,981
Sierra Leone	790	971	1,169	8,071	8,153	9,726
Liberia	149	178	384	1,202	1,869	4,583
Ivory Coast	27,608	34,824	35,970	4,675	5,750	6,849
Gold Coast	154,370	168,521	136,537	40,402	46,585	55,809
Dahomey	2,139	900	2,327	6,023	6,595	6,483
Nigeria	33,228	30,779	45,912	40,629	41,795	67,876
Cameroon	2	723	715	3,057	4,858	5,813
Belgian Congo	11,010	12,660	13,411	8,715	25,756	12,924
Angola	13	18	14	2,992	6,216	6,382
South and East Africa	200,805	249,861	247,506	406,450	339,519	455,797
Union of South Africa	42,986	77,373	46,983	303,118	234,679	304,477
Mozambique	149,690	168,836	192,632	79,040	63,851	107,308
British East Africa	[1] 221	[1] 2,490	[1] 6,876	[1] 12,085	[1] 14,765	[1] 24,838
Madagascar	1,634	4,140	1,014	4,064	3,442	5,685
Mauritius Island	----------	----------	1	3,359	5,705	10,576
Australasia	102,997	108,139	131,428	1,460,341	1,740,354	1,964,047
New Zealand	28,909	32,714	50,854	370,864	437,031	443,711
Australia	47,256	41,482	41,501	1,057,020	1,263,137	1,468,865
Fiji Islands	2,040	4,617	4,256	4,086	7,843	5,247
Friendly Islands	731	399	----------	319	1,016	170
New Caledonia	5,066	8,872	11,907	3,886	5,058	4,680
Society Islands	11,434	12,111	12,470	11,475	9,830	10,132
Cook Islands	1,963	918	813	319	610	450
Gilbert Islands	----------	700	503	----------	----------	----------
Tasmania	586	628	528	10,626	13,002	13,184
New Guinea	5,012	5,698	2,266	1,746	2,827	10,761
East Indies	511,437	549,605	546,849	289,455	406,417	403,358
Straits Settlements	317,554	369,456	344,005	71,557	96,213	125,098
French Indo-China	743	179	----------	33,473	45,279	32,533
Sumatra	52,681	53,717	58,326	30,236	42,653	43,026
Java	118,242	103,194	121,435	133,138	158,437	163,022
Borneo	7,598	3,373	5,103	8,277	43,219	28,507
Celebes	9,939	13,091	17,654	2,298	4,657	5,901
East Asia	1,343,720	1,249,425	1,390,691	4,316,487	5,407,362	5,612,671
China	317,948	289,415	259,448	1,348,198	1,459,888	1,278,155
U. S. S. R. (Russia)	1,548	2,075	525	307	1,018	925
Japan	259,532	261,104	288,252	2,512,348	3,445,576	3,794,396
Philippine Islands	764,692	696,831	842,466	455,634	500,880	539,195
India, Persian Gulf, and Red Sea	816,367	776,656	739,289	403,209	452,986	464,945
Iraq	34,400	26,792	20,118	1	22	----------
Arabia	5,304	4,557	612	11,867	5,251	1,811
India	713,247	666,210	617,420	364,571	416,256	417,425
Ceylon	62,317	72,385	74,166	26,362	30,395	36,107
Canada	8,291,766	7,977,783	8,786,049	9,482,679	9,988,642	11,781,589
Pacific	1,295,671	1,349,540	1,321,352	718,679	853,568	909,988
Atlantic and Newfoundland	1,162,505	1,452,699	1,647,005	1,774,227	1,097,764	961,812
Great Lakes	5,833,590	5,175,544	5,817,692	6,989,992	8,037,320	9,909,789

[1] Kenya and Tanganyika Territory only.

Source: Bureau of Research, United States Shipping Board.

No. 491.—CARGO TONNAGE OF WATER-BORNE IMPORTS AND EXPORTS: By States and Individual Ports

Note.—In cargo tons of 2,240 pounds. State totals cover all tonnage, including small ports not shown

State and port	Imports			Exports		
	1925	1926	1927	1925	1926	1927
Atlantic ports, total	26,103,390	27,943,698	27,348,849	21,962,379	34,875,556	19,743,314
Maine, total	548,220	688,785	694,023	241,669	243,937	154,599
Portland	511,902	644,707	648,195	240,061	243,882	154,599
New Hampshire: Portsmouth	----------	22,044	39,230	----------	----------	13
Massachusetts, total	2,563,514	2,684,349	3,072,665	340,201	326,837	263,839
Boston	2,171,615	2,514,897	2,214,400	325,272	298,105	258,100
Fall River	353,323	105,172	719,877	23,364	21,850	14
Rhode Island, total	695,292	459,447	316,817	559	512	234
Providence	663,721	458,947	316,817	559	512	234
Connecticut	45,785	79,881	49,098	2,227	3	2
New York, total[1]	11,967,958	13,405,471	13,441,749	11,770,797	10,951,295	11,434,523
New York[1]	11,963,644	13,392,216	13,404,699	11,770,797	10,949,743	11,434,523
New Jersey	175	----------	----------	7,440	2,836	27,464
Delaware, total	234,470	215,678	342,996	552	569	11,565
Claymont	165,744	157,038	147,758	----------	----------	----------
Wilmington	68,726	58,640	195,238	552	569	11,565
Pennsylvania, total	3,362,243	3,170,594	2,764,509	2,494,249	3,439,076	2,052,581
Chester	120,231	219,309	223,410	6,221	8,004	55,745
Marcus Hook	----------	----------	----------	130,548	95,258	75,501
Philadelphia[1]	3,242,012	2,951,285	2,541,099	2,357,480	3,335,814	1,921,335
Maryland: Baltimore	3,938,947	4,472,784	4,452,413	1,753,722	7,089,674	1,922,194
District of Columbia	----------	900	----------	----------	----------	----------
Virginia, total	665,583	617,706	606,059	4,260,385	11,470,802	2,760,125
Newport News	201,622	123,383	161,357	1,824,894	4,426,546	850,664
Norfolk	463,961	494,323	444,702	2,435,491	7,043,516	1,909,461
North Carolina: Wilmington	203,720	196,285	151,662	19,917	22,699	32,954
South Carolina, total	653,651	742,773	653,795	386,760	681,351	357,821
Charleston	653,651	742,773	653,795	386,202	681,851	357,821
Georgia, total	593,435	562,963	376,784	385,448	438,214	470,017
Brunswick	52,552	51,619	56,298	41,454	51,207	50,877
Savannah	540,883	511,344	320,486	343,994	387,007	419,140
Florida, east coast, total	630,397	624,038	387,049	289,453	207,251	260,383
Fernandina	----------	----------	136	147,989	110,326	123,180
Jacksonville	436,930	509,175	326,533	133,065	86,334	120,716
Miami	193,127	114,863	60,380	8,358	954	15,699
Gulf ports, total	8,584,397	8,167,152	6,072,998	12,412,272	13,450,118	13,909,796
Florida, west coast, total	800,024	959,912	401,216	1,312,100	1,115,702	1,358,782
Boca Grande	1,000	1,808	1	131,234	102,014	84,106
Key West	337,302	445,256	147,867	286,567	252,048	269,760
Pensacola	90,295	95,440	77,339	249,677	229,377	248,238
Tampa	371,425	415,608	176,009	578,317	492,492	725,673
Alabama: Mobile	341,681	433,704	346,188	766,754	572,450	647,047
Mississippi, total	42,910	48,522	27,443	342,101	285,044	356,800
Gulfport	42,910	48,522	27,443	328,260	272,023	348,940
Louisiana, total	5,136,346	5,064,140	4,462,455	4,955,349	4,859,341	4,671,318
Baton Rouge	298,963	168,465	243,249	999,468	963,337	1,069,984
New Orleans	4,830,037	4,877,069	4,177,355	3,799,464	3,785,112	3,520,293
Avondale	----------	----------	----------	67,110	31,603	----------
Saint Rose	----------	----------	----------	65,509	29,058	11,716
Texas, total	2,263,436	1,660,874	835,696	5,035,968	6,617,581	6,875,849
Beaumont	188	2,084	6,929	732,204	945,992	703,545
Freeport	288,223	217,182	54,236	131,314	132,482	233,539
Galveston	775,209	723,398	393,766	1,080,074	1,036,277	1,343,238
Houston	433,538	364,534	192,311	1,467,922	2,183,698	2,606,647
Orange	6,927	4,718	8,801	77,112	59,437	88,398
Port Arthur	496,335	219,889	87,880	932,730	1,058,691	1,082,579
Sabine	----------	----------	----------	377,931	91,092	6,000
Texas City	263,016	129,069	86,427	222,375	108,608	219,579

[1] Includes commerce of New Jersey ports which enters or clears through this customhouse.

No. 491.—Cargo Tonnage of Water-Borne Imports and Exports: By States and Individual Ports—Continued

State and port	Imports			Exports		
	1925	1926	1927	1925	1926	1927
Pacific ports, total	**2,542,168**	**2,693,134**	**2,785,792**	**8,325,560**	**11,384,564**	**13,320,987**
California, total	1,383,664	1,481,968	1,522,343	5,395,705	6,759,865	8,563,387
Eureka	2,200			46,674	52,056	93,845
Los Angeles	393,258	451,832	510,657	3,231,141	4,435,046	5,663,401
San Diego	23,994	13,877	30,658	8,636	6,530	5,381
San Francisco [2]	958,012	1,015,927	981,020	1,360,265	2,097,250	2,268,153
Port San Luis		332	8	240,030	358,029	465,874
Oregon, total	133,058	126,247	133,085	1,047,796	1,909,297	1,974,750
Westport				59,439	52,544	41,971
Astoria	24,011	8,593		69,443	120,814	82,413
Coos Bay [3]		2,169		82,214	98,349	93,527
Portland	105,759	112,585	125,729	764,444	1,527,470	1,644,285
Washington, total	1,025,466	1,084,919	1,130,364	1,882,059	2,515,402	2,782,844
Anacortes	110,304	88,496	113,655	50,427	51,421	60,920
Bellingham	78,647	65,585	35,585	62,198	52,907	98,678
Everett	8,738	9,723	15,622	164,523	144,866	186,519
Grays Harbor [4]	1,072	2,586	575	466,474	689,072	652,300
Longview		203		31,597	82,167	90,832
Olympia		80	1,882	6,963	64,301	127,709
Port Angeles	44,753	142,618	99,567	14,543	19,471	28,730
Seattle	428,469	403,347	454,984	545,737	786,012	804,399
Tacoma	335,741	350,470	391,321	454,880	528,092	586,986
Great Lakes ports, total	**5,829,603**	**5,171,672**	**5,817,674**	**6,990,775**	**8,023,418**	**9,922,342**
New York, total	4,672,945	3,993,220	4,209,551	1,759,806	1,691,207	2,486,707
Buffalo	4,094,993	3,516,543	3,681,624	997,266	742,755	1,587,467
Fair Haven				36,981	54,264	7,718
Ogdensburg	200,514	172,071	193,450	26,951	2,194	1,990
Oswego	5,654	2,723	26,028	111,642	93,184	70,314
Rochester	160,721	99,969	140,066	385,224	591,480	675,534
Sodus Point				200,219	202,029	136,925
Tonawanda	73,744	58,750	37,242			
Waddington	135,200	137,000	118,400			
Pennsylvania: Erie	144,395	208,368	232,248	73,587	113,660	92,928
Ohio, total	638,736	458,774	463,866	3,610,797	4,225,154	4,250,493
Ashtabula				356,605	466,391	361,762
Cleveland	277,214	131,001	157,842	149,192	187,226	216,394
Conneaut	300			91,145	117,031	84,489
Fairport	123,186	180,634	137,454	581,945	387,340	231,805
Lorain	13,150	6,000	2,982	174,874	233,836	392,559
Sandusky	188,668	115,000	102,087	974,465	1,111,954	1,099,975
Toledo	36,218	26,048	63,501	1,282,571	1,721,376	1,863,509
Indiana	2,400		23	9,082	15,550	15,020
Illinois: Chicago	62,601	79,891	80,559	199,125	321,227	336,819
Michigan, total	77,575	253,525	611,402	345,673	528,303	639,801
Calcite				31,339	10,025	
Detroit	4,250	146,414	459,404	1,685	13,116	125,436
Escanaba	2,156	1,360	2,846	173,225	292,406	283,889
Marquette				137,200	158,299	115,500
Wisconsin, total	183,378	132,126	184,032	654,913	820,180	1,316,710
Ashland	119,077	98,349	143,734	134,516	124,287	98,762
Milwaukee	16,512	15,172	12,689	73,687	29,443	49,056
Superior	21,694	6,874	1,340	445,510	664,307	1,158,197
Minnesota, total	47,573	45,768	35,993	337,792	308,137	783,864
Duluth	47,573	45,768	35,993	326,862	308,137	783,864

[2] San Francisco, Calif., includes all ports within San Francisco Bay.
[3] Coos Bay, Oreg., includes Marshfield and North Bend.
[4] Grays Harbor, Wash., includes Aberdeen and Hoquiam.

Source: Bureau of Research, United States Shipping Board.

No. 492.—CARGO TONNAGE OF WATER-BORNE IMPORTS AND EXPORTS: By Major Commodities and by Coastal Districts

Note.—In thousands of cargo tons of 2,240 pounds. Leaders indicate no data or less than 500 tons

Commodity	1924	1925	1926	1927					
				Total	North Atlantic	South Atlantic	Gulf	Pacific	Great Lakes
Imports, total	40,899	43,135	44,686	42,183	25,860	1,576	6,094	2,835	5,818
Wheat	2,359	3,407	3,150	3,475	3	------	------	2	3,470
Other grains	705	699	605	623	68	------	15	79	461
Vegetables	735	796	826	651	502	8	21	120	------
Meat, fish, and dairy products	237	245	279	389	290	2	18	78	1
Bananas	1,170	1,353	1,321	1,531	811	24	679	17	------
Coconuts and copra	205	218	266	264	62	1	45	156	------
Other fruits and nuts	349	415	361	276	202	------	43	31	------
Sugar	3,631	3,929	4,058	3,590	2,379	160	970	81	------
Molasses	903	1,306	1,330	1,195	627	6	543	19	------
Coffee	659	613	667	607	396	9	189	73	------
Cocoa	169	167	187	198	194	------	------	4	------
Tobacco and manufactures	49	51	48	58	52	------	4	2	------
Cotton, raw	80	82	89	93	82	------	------	11	------
Cotton manufactures	92	92	108	98	54	------	22	22	------
Wool, raw	122	146	139	110	96	------	------	14	------
Wool manufactures	46	38	37	34	30	------	------	4	------
Jute	65	68	76	103	99	2	------	2	------
Jute manufactures	306	311	349	319	226	3	58	32	------
Other fibers and grasses	361	459	355	300	143	5	87	21	44
Other fibers and grasses manufactured	92	76	74	127	92	------	4	31	------
Silk manufactures	42	38	38	37	29	------	------	8	------
Paper stock (except wood pulp)	245	292	245	175	153	2	10	10	------
Paper manufactures	357	342	381	445	164	12	73	142	54
Clays	414	392	423	352	336	------	3	9	4
Clay manufactures	211	190	299	293	229	------	7	57	------
Rubber	308	408	434	459	450	------	------	9	------
Coal and coke	272	657	1,109	449	300	------	------	145	4
Petroleum, crude	13,614	11,165	11,138	10,037	7,340	753	1,919	15	10
Iron ore	2,036	2,203	2,607	2,797	2,748	------	34	15	------
Manganese and manganese ore	499	598	675	615	578	------	32	5	------
Iron and steel and manufactures	486	834	1,029	722	422	12	100	182	6
Copper and manufactures	534	460	540	564	318	------	------	246	------
Miscellaneous metals	546	925	710	728	318	------	276	133	1
Hides, skins, and manufactures	179	173	168	206	196	------	------	10	------
Logs and lumber	1,426	1,608	1,693	1,576	903	------	191	385	97
Pulpwood and wood pulp	1,598	1,851	1,791	2,050	1,146	3	2	37	862
Dyeing and tanning material	130	150	182	197	178	------	16	3	------
Sulphur and pyrites	281	333	370	283	247	16	------	20	------
Potash	635	789	781	542	265	164	110	2	1
Nitrates	994	1,242	933	829	314	254	181	63	17
Other fertilizers	77	96	129	136	55	31	20	30	------
Chemicals, n. e. s.	540	568	586	645	274	42	260	69	------
Gypsum	424	506	716	753	692	------	------	61	------
All others	2,714	2,844	3,294	3,192	1,797	67	162	380	786
Exports, total	52,261	49,666	68,140	56,935	18,648	1,126	13,935	13,316	9,910
Wheat	7,267	5,300	6,768	7,610	3,069	------	939	1,232	2,370
Rye	1,015	759	365	1,019	225	------	41	2	751
Corn	356	224	330	295	118	------	133	------	44
Barley	690	1,077	723	1,250	678	------	50	261	261
Other grains	503	817	483	434	168	------	144	51	71
Wheat flour	1,880	1,387	1,395	1,401	757	------	350	294	------
Vegetables	884	932	908	343	272	1	42	27	1
Meat, fish, and dairy products	841	866	789	746	508	6	111	121	------
Fruits and nuts	591	537	694	745	342	1	10	392	------
Sugar, refined and manufactured	251	378	120	167	143	------	12	7	5
Tobacco and manufactures	308	255	272	272	207	3	53	9	------
Cotton, raw	1,566	1,853	2,049	2,125	129	314	1,639	43	------
Cotton manufactures	82	93	85	103	80	19	3	1	------
Wool and manufactures	14	5	9	8	8	------	------	------	------
Hides, skins, and manufactures	66	45	39	29	22	------	1	6	------

No. 492.—Cargo Tonnage of Water-Borne Imports and Exports Major Commodities and by Coastal Districts—Continued

Commodity	1924	1925	1926	1927				
				Total	North Atlantic	South Atlantic	Gulf	Pacific
Exports—Continued.								
Coal and coke	9,427	9,092	24,711	8,409	2,927	205	113	18
Petroleum and products	13,759	13,174	14,959	16,512	3,569	9	5,715	7,132
Iron ore	571	583	813	744	10	-------	-------	-------
Iron and steel and manufactures, n. e. s.	1,305	1,223	1,528	1,552	1,115	9	211	48
Machinery, including agricultural	431	470	494	492	431	1	35	24
Vehicles	450	644	578	654	626	-------	10	18
Copper manufactures	454	440	394	443	348	1	4	88
Lumber	4,560	4,539	4,750	5,430	238	117	1,997	3,068
Cement	129	150	152	131	123	-------	6	2
Sulphur	463	612	507	709	7	-------	763	2
Phosphates	795	869	759	924	44	122	757	1
Other fertilizers	198	208	250	220	168	9	20	23
Chemicals, n. e. s.	264	278	348	454	296	-------	98	59
Naval stores	367	291	290	391	51	264	72	4
All others	2,773	2,564	2,518	3,233	1,969	45	606	388

Source: Bureau of Research, United States Shipping Board.

No. 493.—NET TONNAGE OF VESSELS ENTERED AND CLEARED IN FO TRADE

Note.—Domestic trade is not included. For definition of net tonnage see general note, p. 429. cover years ended June 30 to and including 1918, calendar years thereafter. Owing to the mark of the war on shipping a special average for the 6½ years July 1, 1914, to Dec. 31, 1920, is prese

[In thousands of net tons]

Yearly average or year	Entered		Cleared	
	Seaports	Other ports	Seaports	Other ports
1840 [1]	1,788	501	1,861	492
1850	3,169	1,170	3,167	1,194
1860	5,000	3,275	5,257	3,533
1870	6,270	2,886	6,302	2,807
1871-1875	8,462	2,997	8,514	2,994
1876-1880	12,134	2,792	12,197	2,807
1881-1885	13,604	2,931	13,781	2,917
1886-1890	13,479	2,602	13,655	2,593
1891-1895	16,801	2,816	16,965	2,876
1896-1900	20,931	3,989	21,077	4,007
1901-1905	24,551	5,939	24,633	5,918
1906-1910	29,651	8,071	29,156	8,036
1911-1915	36,035	11,879	35,954	12,061
1915-1920 [2]	38,071	13,440	40,137	13,511
1921-1925	52,959	13,334	53,578	13,075
1910-1914	35,212	11,408	34,965	11,614
1914-1920 [3]	37,604	13,169	39,417	13,190
1881	15,631	2,688	15,794	2,676
1882	14,656	2,945	14,840	2,911
1883	13,361	3,021	13,565	2,976
1884	12,085	2,984	12,206	2,999
1885	12,287	3,018	12,496	3,019
1886	12,230	2,906	12,413	2,915
1887	13,532	2,284	13,511	2,242
1888	12,956	2,437	13,252	2,417
1889	13,312	2,640	13,672	2,671
1890	15,366	2,741	15,429	2,720
1891	15,394	2,810	15,411	2,850
1892	18,180	2,833	18,258	2,903
1893	16,679	2,903	16,825	2,936
1894	17,025	2,965	17,306	2,966
1895	16,725	2,570	17,024	2,727
1896	17,453	3,536	17,810	3,596

Year	Entered		Cle
	Seaports	Other ports	Seaports
1897	20,003	3,757	19,878
1898	21,700	3,879	21,892
1899	21,963	4,148	22,177
1900	23,534	4,629	23,618
1901	24,791	4,977	24,889
1902	24,361	6,293	24,242
1903	24,698	6,396	24,823
1904	24,111	5,841	24,192
1905	24,793	6,190	25,020
1906	27,401	6,754	26,970
1907	29,248	7,374	28,499
1908	30,444	8,095	30,198
1909	30,243	8,815	29,604
1910	30,917	9,319	30,510
1911	32,457	10,218	32,299
1912	34,650	11,499	34,706
1913	37,973	12,666	37,566
1914	40,052	13,337	39,743
1915	35,032	11,678	35,458
1916	37,744	13,806	38,946
1917	36,521	13,951	38,094
1918	31,101	14,356	31,869
1918 (July-Dec.)	16,113	8,916	16,112
1919	36,381	10,320	40,750
1920	51,532	12,572	54,981
1921	49,958	12,327	50,423
1922	51,701	13,490	51,799
1923	52,775	13,544	53,215
1924	54,726	13,565	55,294
1925	55,636	13,742	57,160
1926	63,759	13,174	65,583
1927	58,921	15,389	59,759
1928	62,809	17,402	63,331

[1] Year ended Sept. 30.
[2] Average for period July 1, 1915 to Dec. 31, 1920.
[3] Average for period July 1, 1914, to Dec. 31, 1920.

Source: Bureau of Foreign and Domestic Commerce.

No. 494.—NET TONNAGE OF VESSELS ENTERED AND CLEARED IN FOREIGN TRADE: BY CUSTOMS DISTRICTS AND BY REGIONS

Note.—In thousands of net tons. See headnote, Table 493

Customs district	1925		1926		1927		1928	
	Entered	Cleared	Entered	Cleared	Entered	Cleared	Entered	Cleared
Grand total	69,378	70,229	76,933	79,041	74,310	75,440	80,211	80,667
Seaports, total	55,636	57,160	63,759	65,583	58,921	59,759	62,809	63,331
North Atlantic coast, total	26,920	26,166	28,517	26,236	28,345	26,532	31,071	29,048
Maine and New Hampshire	695	750	669	676	677	509	623	520
Massachusetts	3,896	2,453	3,783	2,511	4,397	2,884	4,257	2,846
Rhode Island	417	367	289	255	249	200	237	236
Connecticut	31	21	37	13	20	17	28	6
New York	19,210	20,835	20,575	20,427	20,558	21,327	22,873	23,607
Philadelphia	2,671	1,740	3,134	2,354	2,444	1,505	3,053	1,833
South Atlantic coast, total	5,044	6,925	10,413	12,885	4,896	6,642	4,607	6,070
Maryland	1,915	1,478	4,132	3,767	2,052	1,488	1,909	1,380
Virginia	1,312	3,507	4,355	6,900	887	2,722	551	2,383
North Carolina	109	63	95	77	65	46	170	74
South Carolina	455	445	551	524	492	408	416	343
Georgia	404	578	353	640	286	760	304	584
Porto Rico	849	854	927	977	1,124	1,218	1,257	1,306
Gulf coast, total	12,047	12,140	11,875	12,487	11,612	11,904	11,629	12,437
Florida	2,721	2,231	2,630	2,225	2,649	2,158	2,476	2,044
Mobile	566	921	614	894	689	914	659	852
New Orleans	5,372	5,047	5,421	4,843	5,189	4,535	5,119	4,695
Sabine	1,059	1,119	837	1,094	675	1,005	765	963
Galveston	2,329	2,822	2,373	3,410	2,410	3,292	2,610	3,883
Mexican border: San Antonio	--------	--------	4	--------	101	29	210	61
Pacific coast, total	11,625	11,929	12,950	13,995	13,967	14,652	15,292	15,715
Washington	5,362	5,621	5,536	6,031	5,430	5,574	6,273	6,278
Oregon	617	572	899	920	960	910	927	976
San Francisco	1,721	1,912	1,759	2,125	1,811	2,365	1,996	2,457
Los Angeles	2,814	2,482	3,623	3,464	4,556	4,375	4,792	4,573
Alaska	333	303	320	241	333	255	362	267
Hawaii	778	1,039	813	1,214	877	1,173	942	1,164
Northern border, total	13,742	13,069	13,174	13,458	15,389	15,681	17,402	17,336
Vermont	7	9	5	7	4	7	5	6
St. Lawrence	1,247	905	1,144	847	1,773	828	1,239	872
Rochester	2,416	2,411	2,401	2,475	2,675	2,727	3,372	3,422
Buffalo	3,633	1,424	3,087	1,407	3,534	2,147	4,122	2,060
Ohio	3,429	4,311	3,475	4,655	3,781	4,745	4,179	5,430
Michigan	1,744	1,896	1,472	1,917	2,146	2,179	2,053	2,600
Chicago	273	368	203	512	199	508	228	490
Wisconsin	58	435	237	374	477	538	410	430
Duluth and Superior	935	1,310	1,150	1,264	1,400	2,002	1,794	2,026

Yearly average or year	Atlantic coast		Gulf coast		Pacific coast		Mexican border, total	Northern border	
	Total	With cargo	Total	With cargo	Total	With cargo		Total	With cargo
Entrances:									
1901–1905	17,427	15,149	4,056	1,770	3,068	2,286	--------	5,939	2,602
1906–1910	20,921	18,494	5,159	2,420	3,570	2,707	--------	8,072	3,207
1911–1915	24,293	20,708	6,635	3,377	5,055	3,649	52	11,879	4,564
1915–1920 [1]	24,581	16,094	7,939	4,646	5,487	4,329	64	13,440	5,646
1921–1925	30,979	27,133	12,390	8,243	9,562	6,070	28	13,334	6,475
1924	30,515	27,222	12,947	8,659	11,259	6,522	5	13,565	6,435
1925	31,964	28,681	12,047	8,085	11,625	6,684	--------	13,742	7,323
1926	38,930	30,029	11,875	8,082	12,950	7,600	4	13,174	7,131
1927	33,174	26,303	11,904	10,410	14,652	12,678	29	15,682	10,656
1928	35,678	33,438	11,629	7,020	15,292	8,249	210	17,402	8,571
Clearances:									
1901–1905	17,077	15,714	4,499	4,328	3,057	2,418	--------	5,918	3,825
1906–1910	20,162	18,659	5,477	5,187	3,517	2,922	--------	8,036	5,673
1911–1915	23,608	21,765	7,193	6,414	5,104	4,643	50	12,060	8,567
1916–1920 [1]	25,921	23,168	8,528	6,915	5,626	4,762	62	13,511	9,637
1921–1925	30,837	24,284	12,833	9,589	9,880	8,360	28	13,075	9,236
1924	31,016	24,282	12,713	9,758	11,563	9,746	2	13,616	9,933
1925	33,091	26,457	12,140	9,665	11,929	9,628	--------	13,059	8,805
1926	39,121	32,537	12,467	10,103	13,995	11,597	--------	13,458	9,241
1927	33,241	30,514	11,612	7,337	13,967	7,580	101	15,389	7,824
1928	35,118	27,488	12,437	10,879	15,715	13,184	61	17,336	11,898

[1] July 1, 1915, to Dec. 31, 1920.

Source: Bureau of Foreign and Domestic Commerce.

No. 495.—NET TONNAGE OF VESSELS ENTERED IN FOREIGN TRADE: BY CLASSES

[All figures except number of vessels and percentages in thousands of net tons. See headnote, Table 493]

Yearly average or year	Number of vessels, all ports	All ports				Seaports				
		Total	American	Foreign	Per cent American	All vessels	Sailing vessels	Steam vessels	With cargo	In ballast
1881–1890	32,038	16,308	3,395	12,913	20.7	13,542	5,251	8,291	11,560	1,982
1891–1900	31,781	22,269	4,978	17,291	22.4	18,866	3,816	15,050	14,184	4,682
1901–1905	34,040	30,490	6,802	23,688	22.3	24,551	2,606	21,945	19,205	5,346
1906–1910	34,375	37,722	8,372	29,350	22.2	29,650	1,816	27,834	23,621	6,029
1911–1915	38,951	47,914	12,205	35,709	25.5	36,035	1,574	34,461	27,778	8,257
1915–1920 [1]	42,713	51,511	21,999	29,512	42.7	38,071	1,899	36,173	25,128	12,943
1921–1925	41,546	66,293	29,645	36,648	44.7	52,959	1,004	51,955	41,471	11,488
1910–1914	33,038	46,619	11,328	35,291	24.3	35,212	1,558	33,654	28,096	7,116
1914–1920 [2]	42,257	50,773	20,657	30,116	40.7	37,604	1,853	35,750	24,938	12,666
1913	41,015	50,639	13,072	37,567	25.8	37,973	1,734	36,239	29,127	8,846
1915	39,754	46,710	13,275	33,435	28.4	35,032	1,605	33,427	23,893	11,139
1916	42,514	51,550	17,928	33,622	34.8	37,744	2,137	35,607	24,253	13,491
1917	44,172	50,472	18,725	31,747	37.1	36,521	2,123	34,398	23,726	12,795
1918	40,512	45,456	19,284	26,172	42.4	31,101	1,789	29,312	21,147	9,954
1918 (July–Dec.)	23,032	25,029	11,006	14,023	44.0	16,113	932	15,181	9,649	6,464
1919	39,052	46,702	21,933	24,769	47.0	36,381	1,614	34,767	24,041	12,340
1920	45,637	64,104	32,119	31,985	50.1	51,531	1,847	49,684	35,387	16,144
1921	40,758	62,285	31,185	31,100	50.1	49,958	1,379	48,579	36,066	13,892
1922	40,926	65,191	31,738	33,453	48.7	51,701	1,104	50,597	43,219	8,482
1923	41,591	66,319	27,725	38,594	41.8	52,775	958	51,817	42,219	10,556
1924	42,435	68,292	29,628	38,664	43.4	54,726	849	53,877	42,403	12,323
1925	42,019	69,378	27,947	41,431	40.3	55,636	731	54,905	43,450	12,186
1926	44,757	76,933	26,890	50,043	35.0	63,759	549	63,210	45,113	18,646
1927	45,459	74,310	29,289	45,021	39.4	58,921	530	58,391	45,462	13,458
1928	48,252	80,211	31,285	48,926	39.0	62,809	453	62,356	48,757	14,052

Yearly average or year	Seaports—Continued					Northern border ports			
	American vessels		Foreign vessels		Per cent American	Total	With cargo	American	Foreign
	Total	With cargo	Total	With cargo					
1881–1890	2,933	2,559	10,609	9,001	21.7	2,766	1,976	462	2,304
1891–1900	3,619	2,956	15,247	11,228	19.2	3,403	1,589	1,359	2,044
1901–1905	3,962	3,246	20,589	15,960	16.1	5,939	2,602	2,840	3,099
1906–1910	4,175	3,471	25,475	20,150	14.1	8,072	3,207	4,197	3,875
1911–1915	5,276	4,200	30,759	23,578	14.6	11,879	4,564	6,929	4,950
1915–1920 [1]	14,508	11,375	23,563	13,753	38.1	13,440	5,646	7,490	5,950
1921–1925	22,526	18,404	30,433	23,068	42.5	13,334	6,455	7,119	6,215
1910–1914	4,753	3,787	30,459	24,309	13.5	11,407	4,501	6,575	4,832
1914–1920 [2]	13,327	10,481	24,276	14,456	35.4	13,169	5,430	7,330	5,840
1913	5,241	3,954	32,732	25,173	13.8	12,666	4,796	7,831	4,835
1915	6,830	5,567	28,202	18,326	19.5	11,678	4,241	6,445	5,233
1916	9,446	7,773	28,298	16,480	25.0	13,806	6,539	8,482	5,324
1917	10,898	8,942	25,623	14,784	29.8	13,951	6,796	7,827	6,124
1918	11,256	9,136	19,845	12,011	36.2	14,355	5,400	8,027	6,328
1918 (July–Dec.)	5,747	4,595	10,366	5,054	35.7	8,916	2,704	5,259	3,657
1919	16,224	12,294	20,157	11,747	44.6	10,321	3,763	5,709	4,612
1920	26,225	19,822	25,306	15,565	50.9	12,573	5,852	5,894	6,679
1921	24,402	18,620	25,556	17,446	48.8	12,327	5,672	6,783	5,544
1922	23,633	20,368	28,068	22,911	45.7	13,490	6,178	8,105	5,385
1923	20,984	17,790	31,791	24,429	39.8	13,544	6,766	6,741	6,803
1924	22,462	18,267	32,264	24,136	41.0	13,565	6,335	7,166	6,399
1925	21,148	17,033	34,487	26,417	38.0	13,742	7,323	6,798	6,944
1926	21,091	17,103	42,668	28,010	33.1	13,174	7,131	5,799	7,375
1927	22,001	17,668	36,920	27,794	37.3	15,389	7,824	7,288	8,101
1928	22,994	18,404	39,818	30,353	36.6	17,402	8,571	8,294	9,108

[1] Average for period July 1, 1915, to Dec. 31, 1920. [2] Average for period July 1, 1914, to Dec. 31, 1920.

Source: Bureau of Foreign and Domestic Commerce.

No. 496.—NET TONNAGE OF VESSELS CLEARED IN FOREIGN TRADE: BY CLASSES

[All figures except number of vessels and percentages in thousands of net tons. See headnote, Table 493]

Yearly average or year	Number of vessels, all ports	All ports				Seaports				
		Total	American	Foreign	Percent American	All vessels	Sailing vessels	Steam vessels	With cargo	In ballast
1881–1890	32,159	16,473	3,450	13,023	20.9	13,719	5,363	8,356	12,795	924
1891–1900	31,902	22,463	5,038	17,425	22.4	19,021	3,818	15,203	17,514	1,507
1901–1905	33,863	30,551	6,812	23,739	22.3	24,633	2,621	22,012	22,460	2,173
1906–1910	33,897	37,192	8,282	28,910	22.3	29,156	1,850	27,306	26,768	2,388
1911–1915	38,790	48,015	12,512	35,503	26.1	35,955	1,654	34,301	32,827	3,128
1915–1920 [1]	42,687	53,647	23,005	30,643	42.9	40,137	2,057	38,080	34,851	5,285
1921–1925	40,120	66,653	29,554	37,099	44.3	53,578	984	52,594	42,233	11,345
1910–1914	37,883	46,579	11,590	34,989	24.9	34,965	1,620	33,345	32,024	2,941
1914–1920 [2]	42,141	52,607	21,529	31,078	40.9	39,417	2,010	37,407	34,394	5,023
1913	43,094	51,152	13,946	37,206	27.3	37,566	1,824	35,742	34,310	3,256
1915	39,139	46,885	13,418	33,467	28.6	35,458	1,749	33,709	31,878	3,580
1916	42,136	52,423	17,902	34,521	34.1	38,945	2,310	36,635	35,203	3,742
1917	43,749	52,077	19,146	32,931	36.8	38,094	2,239	35,855	34,383	3,711
1918	39,893	46,014	19,206	26,808	41.7	31,869	1,925	29,944	28,125	3,744
1918 (July–Dec.)	22,580	25,472	11,223	14,249	44.1	16,112	1,011	15,101	13,594	2,518
1919	39,974	51,257	24,992	26,265	48.8	40,751	1,819	38,932	34,689	6,062
1920	46,447	67,817	34,053	33,764	50.2	54,980	2,009	52,971	45,687	9,293
1921	39,553	62,665	30,181	32,484	48.2	50,423	1,218	49,205	39,985	10,438
1922	39,314	64,839	31,759	33,080	49.0	51,799	1,109	50,690	39,244	12,555
1923	40,256	66,624	27,932	38,692	41.9	53,215	1,035	52,180	42,398	10,817
1924	41,100	68,910	30,092	38,818	43.7	55,294	810	54,483	43,787	11,506
1925	40,379	70,229	27,808	42,421	39.6	57,160	746	56,414	45,750	11,410
1926	43,951	79,041	28,532	50,509	36.1	65,583	566	65,017	54,237	11,346
1927	43,619	75,440	29,793	45,647	39.5	59,759	526	59,233	49,419	10,340
1928	46,201	80,667	31,734	48,933	39.3	63,331	436	62,895	51,609	11,722

Yearly average or year	Seaports—Continued					Northern border ports			
	American vessels		Foreign vessels		Per cent American	Total	With cargo	American	Foreign
	Total	With cargo	Total	With cargo					
1881–1890	2,978	2,541	10,741	10,254	21.7	2,754	1,778	472	2,282
1891–1900	3,644	2,914	15,377	14,600	19.2	3,442	2,129	1,394	2,048
1901–1905	4,000	3,284	20,633	19,176	16.2	5,918	3,825	2,812	3,106
1906–1910	4,084	3,498	25,072	23,270	14.0	8,036	5,673	4,198	3,838
1911–1915	5,361	4,522	30,594	28,305	14.9	12,060	8,567	7,161	4,909
1915–1920 [1]	15,455	11,505	24,681	23,346	38.5	13,511	9,637	7,550	5,962
1921–1925	22,556	14,977	31,022	28,057	42.1	13,075	9,236	6,998	6,077
1910–1914	4,778	4,109	30,187	27,915	13.7	11,614	8,380	6,812	4,802
1914–1920 [2]	14,171	10,611	25,245	23,783	36.0	13,190	9,279	7,358	5,832
1913	5,289	4,517	32,277	29,793	14.1	13,586	10,173	8,657	4,929
1915	7,110	5,692	28,348	26,186	20.1	11,427	7,309	6,308	5,119
1916	9,763	7,720	29,182	27,483	25.1	13,478	8,645	8,139	5,339
1917	11,339	8,805	26,755	25,578	29.8	13,983	9,745	7,807	6,176
1918	11,280	8,491	20,589	19,634	35.4	14,145	10,200	7,926	6,219
1918 (July–Dec.)	5,614	3,537	10,498	10,057	34.8	9,360	7,433	5,609	3,751
1919	19,133	14,539	21,617	20,150	47.0	10,506	7,616	5,858	4,648
1920	27,875	20,188	27,106	25,499	50.7	12,837	9,365	6,179	6,658
1921	23,432	15,215	26,991	24,770	46.5	12,242	8,692	6,749	5,493
1922	23,755	14,743	28,044	24,501	45.9	13,040	9,234	8,004	5,036
1923	21,305	14,584	31,910	27,814	40.0	13,409	9,514	6,627	6,782
1924	22,896	15,397	32,397	32,398	41.4	13,616	9,033	7,195	6,421
1925	21,394	14,948	35,766	30,802	37.4	13,068	8,805	6,414	6,654
1926	22,234	15,838	43,349	38,399	33.9	13,458	9,241	6,298	7,160
1927	22,078	16,524	37,681	32,895	36.9	15,682	10,656	7,716	7,966
1928	23,180	16,969	40,151	34,640	36.6	17,336	11,898	8,554	8,782

[1] Average for period July 1, 1915, to Dec. 31, 1920. [2] Average for period July 1, 1914, to Dec. 31, 1920.

Source: Bureau of Foreign and Domestic Commerce.

No. 497.—NET TONNAGE OF VESSELS ENTERED AND CLEARED AT SEA-PORTS IN FOREIGN TRADE: BY COUNTRIES OF ORIGIN AND DESTINATION

NOTE.—In thousands of net tons. Only traffic by sea is included. First two columns cover years ended June 30, third column the period July 1, 1914, to Dec. 31, 1920, the others calendar years. For definition of net tonnage see general note, p. 429

Country	1900–1909, average	1910–1914, average	1914–1920, average	1921–1925, average	1925	1926	1927	1928
Total by sea:								
Entered	26,362	35,212	37,604	52,959	55,636	63,759	58,921	62,809
Cleared	26,206	34,965	39,417	53,578	57,160	65,583	59,759	63,331
Belgium:								
Entered	905	955	392	1,231	1,428	1,865	1,600	1,535
Cleared	901	1,039	452	1,190	1,249	1,157	1,358	1,254
Denmark:								
Entered	184	297	373	372	359	424	437	589
Cleared	352	305	408	450	582	615	623	728
France:								
Entered	611	1,047	2,251	1,953	1,980	2,385	2,266	2,375
Cleared	1,062	1,453	3,345	2,250	2,245	2,399	2,390	2,554
Germany:								
Entered	2,384	3,113	290	2,998	3,261	3,370	3,489	3,929
Cleared	2,773	3,474	298	3,165	3,384	3,150	3,597	3,446
Italy:								
Entered	1,097	1,305	2,171	1,707	1,846	2,083	1,915	2,177
Cleared	1,003	1,062	2,489	1,986	1,947	2,369	1,836	1,890
Netherlands:								
Entered	846	1,169	1,291	1,654	1,670	2,957	1,904	1,978
Cleared	1,206	1,521	1,459	1,464	1,344	1,496	1,612	1,672
Norway:								
Entered	----------	193	521	334	389	349	354	275
Cleared	----------	159	830	412	345	422	356	328
Spain:								
Entered	483	724	838	608	649	869	672	823
Cleared	265	337	490	463	454	504	618	617
Sweden:								
Entered	----------	68	240	504	501	578	679	651
Cleared	----------	66	440	353	336	436	491	516
United Kingdom:								
Entered	7,440	7,238	8,765	9,378	9,716	13,088	10,417	10,432
Cleared	7,153	7,162	8,164	8,647	9,733	14,575	9,705	9,648
Canada:								
Atlantic coast—								
Entered	1,355	1,479	1,092	1,201	1,344	1,309	1,452	1,661
Cleared	1,454	1,594	1,007	1,331	1,511	1,479	1,578	1,759
British Columbia—								
Entered	1,508	2,539	3,117	4,571	5,875	5,711	5,687	6,574
Cleared	1,509	2,589	3,094	4,573	6,085	6,121	5,805	6,546
Central America:								
Entered	799	1,879	1,535	1,734	1,970	2,031	2,410	2,454
Cleared	830	2,121	1,610	1,640	2,005	2,159	2,553	2,725
Mexico:								
Entered	856	1,789	3,783	8,160	5,783	4,759	3,349	2,165
Cleared	745	1,847	3,727	8,391	5,962	4,905	3,145	2,155
British West Indies and British Honduras:								
Entered	1,001	1,038	564	1,351	1,762	1,607	1,829	1,864
Cleared	982	1,181	642	1,435	1,884	1,881	2,038	2,027
Cuba:								
Entered	2,018	3,030	3,450	4,769	5,308	5,615	5,476	5,430
Cleared	1,766	2,449	3,560	4,659	5,553	5,610	5,306	5,277
Dominican Republic:								
Entered	111	179	345	380	451	517	616	771
Cleared	94	200	404	449	609	687	791	1,047
Haiti:								
Entered	106	123	108	105	147	175	183	224
Cleared	81	124	186	230	209	195	181	181
Argentina:								
Entered	207	792	633	1,006	855	1,224	1,161	763
Cleared	328	619	762	707	797	1,140	998	1,004
Brazil:								
Entered	587	1,131	550	552	940	631	681	1,060
Cleared	253	558	841	913	1,031	1,568	1,194	1,203
Chile:								
Entered	206	462	853	975	1,382	1,307	1,190	1,438
Cleared	138	327	797	793	1,056	896	1,006	1,221
Colombia:								
Entered	195	199	231	144	138	511	792	1,064
Cleared	172	196	213	226	166	479	1,007	1,249
British East Indies:								
Entered	238	329	347	576	729	782	808	773
Cleared	107	131	204	330	340	392	462	379

No. 497.—Net Tonnage of Vessels Entered and Cleared at Seaports in Foreign Trade: By Countries of Origin and Destination—Contd.

Country	1900–1909, average	1910–1914, average	1914–1920, average	1921–1925, average	1925	1926	1927	1928
China, Hong Kong, and Kwantung:								
Entered	346	442	519	959	778	1,019	876	1,028
Cleared	389	391	479	963	802	898	846	1,034
Japan:								
Entered	441	646	733	1,607	1,612	2,149	2,264	2,496
Cleared	351	542	796	2,106	2,142	2,901	2,958	3,438
Philippine Islands:								
Entered	63	85	132	408	576	634	584	530
Cleared	93	144	124	359	535	499	484	537
British Australasia:								
Entered	256	238	379	509	617	823	866	930
Cleared	413	534	567	946	1,230	1,435	1,518	1,385
All other countries:								
Entered	2,117	2,725	2,094	3,165	3,571	4,989	4,966	6,820
Cleared	1,788	2,240	1,938	3,149	3,623	5,216	5,301	7,476

No. 498.—NET TONNAGE OF VESSELS ENTERED AND CLEARED AT SEAPORTS IN FOREIGN TRADE: By Nationality of Vessel

Note.—In thousands of net tons. Only traffic by sea and to and from foreign countries is included. The large trade with Canada on the Great Lakes and the St. Lawrence is handled about equally by vessels of the United States and of the British (Canadian) flag. See Tables 495 and 496 in which the columns for northern border represent the trade with Quebec and Ontario. See note, Table 497

	1900–1909, average	1910–1914, average	1914–1920, average	1921–1925, average	1925	1926	1927	1928
Total by sea:								
Entered	26,362	35,212	37,604	52,959	55,636	63,759	58,921	62,809
Cleared	26,206	34,965	39,417	53,578	57,180	65,583	59,759	63,331
American:								
Entered	4,044	4,753	13,327	22,526	21,149	21,092	22,001	22,991
Cleared	4,023	4,778	14,171	22,556	21,394	22,234	22,078	23,180
Total foreign:								
Entered	22,318	30,459	24,276	30,433	34,487	42,668	36,920	39,818
Cleared	22,182	30,186	25,245	31,022	35,766	43,349	37,681	40,151
Belgian:								
Entered	262	412	269	332	375	483	353	367
Cleared	269	404	283	343	380	464	351	342
British:								
Entered	13,564	17,991	14,168	16,807	18,569	22,834	18,820	19,435
Cleared	13,422	17,814	14,755	17,064	19,314	23,010	19,065	19,559
Danish:								
Entered	398	472	774	929	1,166	1,165	1,098	1,185
Cleared	398	450	795	928	1,165	1,175	1,106	1,233
Dutch:								
Entered	667	1,004	1,007	1,300	1,368	1,754	1,648	1,735
Cleared	661	1,007	1,055	1,292	1,376	1,748	1,650	1,759
French:								
Entered	636	997	876	1,492	1,604	1,744	1,768	1,995
Cleared	642	990	919	1,518	1,663	1,753	1,849	1,943
German:								
Entered	3,160	4,362	107	847	1,299	1,809	2,109	2,676
Cleared	3,171	4,300	79	870	1,440	1,885	2,185	2,713
Italian:								
Entered	542	821	1,211	1,490	1,910	2,759	1,979	2,081
Cleared	538	850	1,366	1,569	1,978	2,796	2,026	1,973
Japanese:								
Entered	127	353	1,099	2,059	2,266	2,285	2,439	2,750
Cleared	107	244	1,046	2,235	2,468	2,531	2,602	2,831
Norwegian:								
Entered	1,941	2,679	2,744	2,817	3,249	3,872	3,482	4,143
Cleared	1,946	2,684	2,822	2,784	3,256	3,979	3,517	4,224
Spanish:								
Entered	424	413	606	480	425	880	486	467
Cleared	420	398	637	487	415	881	521	484
Swedish:								
Entered	62	70	353	564	653	888	900	945
Cleared	65	70	367	566	636	907	936	977
All other foreign:								
Entered	535	975	1,062	1,317	1,602	2,205	1,838	2,129
Cleared	542	977	1,122	1,366	1,675	2,221	1,873	2,108

Source of Tables 497 and 498: Bureau of Foreign and Domestic Commerce.

No. 499.—EXPORTS (INCLUDING REEXPORTS) AND IMPORTS OF MERCHANDISE: VALUE, BY METHOD OF CARRIAGE

NOTE.—All figures except percentages expressed in millions of dollars. Figures cover fiscal years ended Sept. 30, 1830 and 1840, and June 30, 1850 to 1915, calendar years thereafter

Yearly average or year	Exports (including reexports)					Imports					Water borne—per cent in American vessels	
	Total	Total by water	In American vessels	In foreign vessels	By land vehicles [1]	Total	Total by water	In American vessels	In foreign vessels	By land vehicles [1]	Exports	Imports
1830 [2]	74	74	64	10	(3)	71	71	66	5	(3)	86.6	93.1
1840 [2]	132	132	106	27	(3)	107	107	93	14	(3)	80.0	87.6
1850 [2]	152	152	100	52	(3)	178	178	140	39	(3)	65.5	78.4
1860 [2]	400	400	279	121	(3)	362	362	228	134	(3)	70.0	63.0
1870 [2]	451	451	170	281	(3)	462	462	153	309	(3)	37.7	33.1
1871–1875 [2]	586	578	157	422	8	599	584	170	414	16	27.1	35.1
1876–1880 [2]	711	704	142	562	7	514	501	147	354	13	20.2	29.3
1881–1885	792	773	100	673	19	667	646	130	517	21	12.9	20.1
1886–1890	738	714	76	638	25	717	685	122	563	33	10.6	17.8
1891–1895	892	851	73	778	42	785	748	125	623	38	8.6	16.7
1896–1900	1,157	1,079	78	1,001	79	742	706	101	604	36	7.2	14.4
1901–1905	1,454	1,316	97	1,218	138	972	909	122	787	63	7.4	13.5
1906–1910	1,779	1,576	128	1,448	203	1,345	1,262	159	1,103	83	8.1	12.6
1911–1915	2,371	2,049	187	1,862	322	1,712	1,590	198	1,392	123	9.1	12.5
1915–1920 [4]	6,515	5,712	1,556	4,156	803	3,358	2,961	978	1,984	397	27.2	33.0
1921–1925	4,397	3,788	1,405	2,383	609	3,450	3,013	3,978	2,035	5,437	37.1	32.5
1916	5,483	4,820	665	4,155	663	2,392	2,157	532	1,625	234	13.8	24.7
1917	6,234	5,403	946	4,457	830	2,953	2,590	733	1,857	362	17.5	28.3
1918	6,149	5,226	986	4,240	923	3,031	2,577	717	1,860	454	18.9	27.8
1919	7,020	7,090	2,596	4,494	831	3,904	3,414	1,228	2,186	491	36.6	36.0
1920	8,228	7,252	3,165	4,087	976	5,279	4,731	1,988	2,743	548	43.6	42.0
1921	4,485	3,888	1,402	2,486	597	2,509	2,187	765	1,422	[1] 322	36.1	35.0
1922	3,832	3,281	1,261	2,020	551	3,113	2,704	921	1,783	409	38.4	34.1
1923	4,168	3,539	1,358	2,181	629	3,792	3,312	1,040	2,272	481	38.4	31.4
1924	4,591	4,010	1,532	2,478	[1] 581	3,610	3,145	1,012	2,133	466	38.2	32.1
1925	4,910	4,224	1,473	2,751	686	4,227	3,716	1,151	2,565	510	34.9	31.0
1926	4,809	4,050	1,401	2,649	59	4,431	3,891	1,195	2,696	540	34.6	30.7
1927	4,865	4,097	1,434	2,663	768	4,185	3,662	1,215	2,447	523	35.0	33.2
1928	5,128	4,277	1,472	2,804	851	4,091	3,550	1,133	2,418	541	34.4	31.9

TOTAL WATER-BORNE EXPORTS AND IMPORTS COMBINED

Yearly average or year	Total	In American vessels	In foreign vessels	Per cent in American vessels	Year	Total	In American vessels	In foreign vessels	Per cent in American vessels
1830 [2]	145	130	15	89.7	1916	6,977	1,197	5,780	17.2
1840 [2]	239	198	41	82.3	1917	7,994	1,679	6,315	21.0
1850 [2]	330	239	91	72.5	1918	7,803	1,703	6,100	21.8
1860 [2]	762	507	255	66.5	1919	10,504	3,824	6,680	36.4
1870 [2]	913	323	590	35.6	1920	11,983	5,153	6,830	43.0
1871–1875 [2]	1,162	326	835	30.6	1921	6,075	2,167	3,908	35.7
1876–1880 [2]	1,206	289	917	23.9	1922	5,985	2,183	3,803	36.5
1881–1885	1,419	229	1,190	16.2	1923	6,850	2,398	4,453	35.0
1886–1890	1,398	198	1,200	14.1	1924	7,155	2,544	4,611	35.7
1891–1895	1,598	198	1,400	12.4	1925	7,940	2,624	5,316	33.0
1896–1900	1,784	179	1,605	10.0	1926	7,941	2,596	5,345	34.0
1901–1905	2,225	220	2,005	9.9	1927	7,759	2,649	5,110	34.1
1906–1910	2,838	287	2,552	10.1	1928	7,827	2,605	5,222	33.3
1911–1915	3,639	385	3,254	10.6					
1915–1920 [4]	8,673	2,534	6,140	29.2					
1921–1925	6,801	2,383	4,418	35.0					

[1] Exports include parcel post beginning 1924; imports, beginning 1921.
[2] Includes gold and silver coin and bullion to 1879, inclusive.
[3] Included in American and foreign vessels.
[4] Average for period July 1, 1915, to Dec. 31, 1920.

Source: Bureau of Foreign and Domestic Commerce.

No. 500.—EXPORTS (EXCLUDING REEXPORTS) AND IMPORTS OF MERCHANDISE: VALUE BY METHOD OF CARRIAGE, AND NATIONALITY OF VESSEL

NOTE.—All figures in thousands of dollars. All data for calendar years

	1914	1920	1922	1924	1925	1926	1927	1928
Exports, excluding reexports	2,071,058	8,080,481	3,765,091	4,497,649	4,818,722	4,711,721	4,758,864	5,030,099
American vessels	186,926	3,116,440	1,248,730	1,514,802	1,458,199	1,387,814	1,419,967	1,459,913
Foreign vessels:								
Belgian	7,763	76,370	25,369	37,442	37,702	36,163	33,569	36,825
British	1,011,691	2,587,813	1,147,027	1,321,242	1,423,507	1,340,361	1,333,325	1,341,764
Danish	(1)	71,841	53,348	88,164	94,980	81,107	94,650	93,654
Dutch	83,895	157,957	91,486	127,952	166,413	168,064	172,705	164,090
French	70,037	166,126	111,539	117,423	137,218	132,300	121,166	123,183
German	158,640	9,671	54,702	149,660	163,767	168,304	221,028	252,283
Italian	44,544	215,441	94,707	119,932	146,858	124,631	114,792	143,614
Japanese	23,957	208,876	158,416	167,638	173,205	163,492	144,140	158,532
Norwegian	89,821	236,696	132,729	128,603	172,324	177,310	197,300	236,005
Spanish	(1)	113,291	55,878	65,223	62,167	62,788	48,796	50,505
Swedish	(1)	54,074	34,051	51,430	53,598	73,542	78,932	83,504
All other	126,611	130,515	32,006	61,685	89,975	91,167	69,512	86,338
Total foreign	1,616,959	4,028,671	1,991,348	2,436,394	2,721,804	2,619,229	2,629,915	2,770,298
Parcel post	----------	----------	----------	21,420	26,052	27,977	27,785	29,014
Cars and other land vehicles	267,173	935,370	525,007	525,033	612,667	676,701	681,197	770,873
Imports	1,789,276	5,278,481	3,112,747	3,609,962	4,226,589	4,430,888	4,184,742	4,091,444
American vessels	216,199	1,987,861	921,054	1,011,686	1,151,242	1,194,995	1,214,827	1,132,598
Foreign vessels:								
Belgian	24,404	24,736	10,342	10,915	10,211	13,839	12,063	11,309
British	808,344	1,600,697	974,273	1,116,906	1,384,926	1,366,926	1,133,818	1,120,985
Danish	(1)	40,767	51,863	62,673	54,142	49,131	58,943	57,452
Dutch	90,840	187,478	99,554	96,898	122,278	151,499	141,500	135,495
French	82,945	141,181	140,112	138,202	147,809	160,865	151,833	140,621
German	151,613	14	27,755	73,482	85,945	139,517	162,508	199,154
Italian	39,796	60,618	45,254	60,057	70,663	78,483	75,630	65,170
Japanese	57,545	454,180	212,203	267,081	390,393	382,236	404,540	377,108
Norwegian	82,679	111,811	147,689	183,094	164,095	167,684	154,068	150,157
Spanish	(1)	36,148	11,220	16,884	15,886	29,933	20,897	16,926
Swedish	(1)	27,663	21,975	37,095	36,102	51,072	54,933	50,173
All other	77,410	57,959	40,764	69,459	82,624	104,635	75,826	93,085
Total foreign	1,415,576	2,743,252	1,783,004	2,132,836	2,565,074	2,695,820	2,446,567	2,417,633
Parcel post	----------	----------	98,375	107,189	125,133	129,161	111,501	110,153
Cars and other land vehicles	157,501	547,368	310,314	358,251	385,140	410,912	411,846	431,061

[1] Included in "All other."

Source: Bureau of Foreign and Domestic Commerce.