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Appendix B

Steam Railroads: Basic Series

Data for steam railroads shown in Tables 3 and 4, and not reproduced in this Appendix, will be found in Interstate Commerce Commission, *Statistics of Railways in the United States, 1939*.

Table B-1

STEAM RAILROADS: TRAFFIC, REVENUE, AND EMPLOYMENT, 1890-1946

Year ending June 30	ALL PASSENGERS ^a			ALL FREIGHT ^a			EMPLOYMENT					
	Passenger -miles ^b (bil.)	Revenue per passenger -mile (cents)	Ton -miles ^c (bil.)	Revenue per ton-mile (cents)	Line haul roads	Switching and terminal companies	Number of Workers (th.) ^d		Line haul Pullman companies	Express haul Pullman companies	Roads* Company	Pullman Company ^e
							Switching and terminal companies	Line haul Pullman companies				
												Manhours (bil.)
1890	12.0	2.17	76.2	.941	749	...	...	...	...	...	...	...
1891	13.1	2.14	82.1	.895	784	...	...	...	...	...	...	...
1892	13.5	2.13	88.8	.898	821	...	...	...	...	...	...	...
1893	14.3	2.11	94.2	.878	874	...	...	...	...	...	...	...
1894	14.4	1.99	81.1	.860	780	...	...	...	...	...	...	...
1895	12.4	2.04	86.8	.839	785	...	...	...	...	...	...	...
1896	13.2	2.02	97.3	.806	827	...	...	...	...	...	...	...
1897	12.4	2.02	96.6	.798	823	...	...	...	...	...	...	...
1898	13.5	1.97	116	.753	875	...	...	...	...	...	...	...
1899	14.7	1.98	126	.724	929	...	...	...	...	...	...	...
1900	16.2	2.00	144	.729	1,018	...	...	...	...	...	...	...
1901	17.5	2.01	149	.750	1,071	...	...	...	...	...	...	...
1902	19.8	1.99	159	.757	1,189	...	...	...	...	...	...	...
1903	21.0	2.01	175	.763	1,312	...	...	...	...	...	...	...
1904	22.1	2.01	176	.780	1,296	...	...	...	...	...	...	...
1905	24.1	1.96	189	.766	1,382	...	...	...	...	...	...	...
1906	25.5	2.00	219	.748	1,521	...	...	...	...	...	...	...
1907	28.0	2.01	240	.759	1,672	...	...	...	...	...	...	...
1908	29.3	1.94	219	.754	1,436	...	...	...	...	...	...	...
1909	29.2	1.93	219	.763	1,503	...	...	...	...	...	...	...
1910	32.5	1.94	255	.753	1,699	...	...	...	...	...	...	...
1911	33.3	1.97	254	.757	1,670	...	...	...	...	...	...	...
1912	33.2	1.99	264	.744	1,716	...	...	...	...	...	...	...
1913	34.7	2.01	302	.729	1,832	...	...	...	...	...	...	...
1914	35.4	1.99	289	.737	1,710	...	...	...	...	...	...	...
1915	32.5	1.99	277	.735	1,548	...	...	...	...	...	...	...
1916	34.3	2.01	343	.719	1,654	...	...	...	...	...	...	4.96

Calendar Year

1916	35.2	2.05	366	.719	1,701	....	18.3	....	5.19	.07
1917	40.1	2.10	398	.728	1,786	....	20.2	....	5.44	.07
1918	43.2	2.42	409	.862	1,892	....	17.7	....	5.70	.07
1919	46.8	2.55	367	.987	1,960	....	21.5	....	5.03	.06
1920	47.4	2.75	414	1.069	2,076	....	22.9	....	5.45	.07
1921	37.7	3.09	310	1.294	1,705	59.1	21.1	77.0	4.08	.06
1922	35.8	3.04	342	1.194	1,670	49.5	19.1	74.5	4.19	.06
1923	38.3	3.03	416	1.132	1,902	56.6	23.6	72.8	4.80	.07
1924	36.4	2.99	392	1.132	1,796	57.6	25.1	66.1	4.41	.07
1925	36.2	2.94	417	1.114	1,786	59.8	26.6	66.4	4.40	.08
1926	35.7	2.94	447	1.096	1,822	61.8	26.2	66.3	4.51	.08
1927	33.8	2.90	432	1.095	1,776	60.3	27.4	62.4	4.36	.08
1928	31.7	2.85	436	1.094	1,682	57.6	26.8	60.7	4.14	.08
1929	31.2	2.81	450	1.088	1,694	58.5	29.2	59.4	4.17	.08
1930	26.9	2.72	386	1.074	1,517	54.6	26.2	51.2	3.60	.08
1931	21.9	2.52	311	1.062	1,283	47.7	22.5	44.1	2.89	.07
1932	17.0	2.22	235	1.056	1,092	40.0	17.1	36.0	2.26	.05
1933	16.4	2.02	251	1.009	991	37.7	15.9	35.7	2.12	.05
1934	18.1	1.92	270	.989	1,027	39.2	19.1	36.2	2.27	.05
1935	18.5	1.94	284	.998	1,014	38.9	19.1	38.0	2.27	.05
1936	22.5	1.84	341	.984	1,086	42.1	21.7	40.8	2.53	.06
1937	24.7	1.80	363	.945	1,137	45.5	23.4	42.7	2.65	.06
1938	21.7	1.88	292	.994	998	39.8	20.8	40.4	2.19	.05
1939	22.7	1.84	335	.983	1,007	42.0	21.3	41.9	2.34	.06
1940	23.8	1.76	375	.955	1,046	46.0	20.9	44.6	2.46	.05
1941	29.4	1.75	478	.944	1,159	50.8	22.7	48.9	2.82	.06
1942	53.7	1.92	641	.940	1,291	56.9	26.6	51.1	3.22	.07
1943	87.9	1.88	730	.940	1,375	60.1	33.2	62.6	3.58	.09
1944	95.7	1.87	741	.957	1,434	64.5	39.7	73.7	3.72	.10
1945	91.8	1.87	684	.967	1,439	63.5	41.6	79.6	3.68	.11
1946	64.8	1.95	595	.986	1,378	63.4	39.3	82.7	3.35	.10

Notes to Table B-1

^a Interstate Commerce Commission, *Statistics of Railways in the United States* (annual). Class I, II, and III roads; 1890-1907, includes switching and terminal companies; since 1908, excludes switching and terminal companies.

^b For 1914 and later years coverage is substantially complete. For 1913 coverage was practically complete but cannot be estimated accurately. For 1912 and earlier years coverage of original data varied between 97 and 100 percent (judged by passenger revenue), and data shown here have been adjusted upward on this account, i.e., divided by the percentage of coverage.

^c For 1911 and later years coverage is substantially complete. For 1891 to 1910 coverage of original data varied between 97 and 100 percent (judged by freight revenue), and data shown here have been adjusted upward on this account; i.e., we divided the figures as originally reported by the percentage of coverage. For 1890 coverage could not be determined but was assumed to be 100 percent. For 1906 and earlier years published totals include the small amount of ton-miles reported by switching and terminal companies. Such companies did not report traffic after 1907; accordingly figures shown for 1890-1906 have been adjusted downward, on the basis of the relationship in 1907, to exclude switching and terminal companies.

^d Data from *Statistics of Railways. Class I Companies*: For line haul companies 1914 and prior year figures represent a single count on June 30 (end of fiscal year to which other data in the table apply). The 1915 figure is an average of six counts distributed throughout the year; however, the estimate as originally published was considered incomplete and was later written up (*Statistics of Railways*, 1919, p. 20). For 1916-21 the figures are based on four counts during the year. Since 1922 twelve monthly counts have been averaged in order to arrive at employment for the year. Apparently figures for Class I switching and terminal companies were compiled in the same manner as those for line haul companies. *Class II and III Companies*: Figures represent single counts. In 1915 no data for class III line haul companies were collected, and accordingly we made an estimate on the basis of adjoining years. *Pullman Company*: In 1935 and prior years, figures represent a single year-end count; in 1936 to 1944, an average of twelve monthly counts; in 1945, a year-end count; and in 1946, mean of counts at the beginning and end of the year. *Express Companies*: In 1933 and prior years, figures represent a single year-end count; in 1934 and later years, an average of twelve monthly counts.

^e Class I companies only. Data from *Statistics of Railways and ICC, 'Wage Statistics of Class I Steam Railways'* (monthly). Figures for 1916-20 are described as 'hours actually on duty', and exclude 'constructive allowances' for time not worked, e.g., time allowed for vacations, holidays, leaves of absence, etc. with pay; they were also intended to exclude other time paid for but not worked by transportation (train and engine) employees. The existence of additional time paid for but not worked (currently referred to in the *Statistics of Railways* as 'other straight time paid for') in the case of these employees results from the method of payment of train and engine crews whose runs exceed the mileage equivalent of the standard workday; or who perform runs in less than the scheduled time, and so cut their own tours of duty, without loss of pay. However, some of this additional time paid for but not worked may perhaps have crept into the hourly data for 1916-20; in any case no adjustment of the data on this account is possible. Figures for 1921-27 represent 'total hours worked' which, for these years, have been definitely stated to exclude both constructive allowances and additional time paid for but not worked by train and engine crews. (Minor adjustments had to be made in 1921 and 1922 to exclude switching and terminal companies, since line haul companies are not separately distinguished in the tabulations for these years.) For 1928 and later years, the figures shown here represent 'straight time actually worked' plus 'overtime paid for'. This amount falls short of 'total time paid for': for train

Notes to Table B-1 concluded

and engine employees it excludes 'other straight time paid for' (e.g., the excess of the hourly equivalent of a standard day's run over the time actually taken to make the run, or the hourly equivalent of the excess of a minimum day's run over the run actually made) and 'constructive allowances' (hours paid for when "held away from home terminal, called and not used, runaround, deadheading, attending court, suspensions, investigations, and claim and safety meetings"); for other employees it excludes 'time paid for but not worked' (the hourly equivalent of pay for "holidays, absence on definite leave, vacations, attending court, suspensions, sickness, time allowed for meals, and . . . allowance to complete a minimum day when less than a minimum day is worked"). See ICC, *Rules Governing the Classification of Steam Railway Employees* (1921). To the extent that the allowances represent hours actually worked (as in deadheading, or attending court) the figures may understate time worked. (In 1928-32 minor adjustments had to be made to exclude switching and terminal companies in estimating the latter deduction.)

Roughly one railroad worker in ten is paid by the day: time paid for by the day was converted to an hourly basis by assuming a ten-hour day in 1916-18 and an eight-hour day thereafter. The series shown in this column probably offers the nearest approach to continuously comparable data on hours actually worked.

^f For 1935 and prior years, days worked are to be found in ICC Statement No. 3631, 'Sleeping Car Statistics, 1890-1935' (mimeo., Aug. 1936); days were converted to hours on the basis of a ten-hour day in 1918 and prior years and an eight-hour day thereafter. Figures for 1936 and later years were extrapolated on the basis of the number of workers.

Table B-2

**STEAM RAILROADS: PASSENGER TRAFFIC AND REVENUE
BY KIND OF PASSENGER, 1911-1921^a**

<i>Year Ending June 30</i>	COMMUTATION AND COACH		PARLOR AND SLEEPING CAR	
	<i>Passenger- miles (bil.)</i>	<i>Revenue per passenger- mile (cents)</i>	<i>Passenger- miles (bil.)</i>	<i>Revenue per passenger- mile^b (cents)</i>
1911	24.64	1.87	7.73	2.75
1912	24.38	1.88	7.93	2.76
1913	25.74	1.91	8.14	2.80
1914	26.27	1.88	8.30	2.77
1915	23.65	1.88	8.14	2.76
<i>Calendar Year</i>				
1916	25.26	1.94	9.32	2.82
1917	28.72	1.98	10.76	2.88
1918	32.34	2.30	10.34	3.27
1919	33.09	2.40	13.27	3.39
1920	33.03	2.55	13.82	3.79
1921	26.44	2.83	10.88	4.33

^a *Statistics of Railways*; see also ICC Statement 3631. This breakdown is not available prior to 1911. Data relate to class I railroads only; for this reason passenger-miles shown here do not add exactly to the totals of Table B-1.

^b Railroad fare plus Pullman charge.

Table B-3

STEAM RAILROADS: PASSENGER TRAFFIC AND REVENUE BY KIND OF PASSENGER, 1922-1946^a

	COMMUTATION		COACH (OTHER THAN COMMUTATION)		PARLOR AND SLEEPING CAR		FREE RIDERS ^c	
	Passenger- miles (bil.)	Revenue per passenger- miles (cents)	Passenger- miles (bil.)	Revenue per passenger- miles (cents)	Passenger- miles (bil.)	Revenue per passenger- miles ^b (cents)	Passenger- miles (bil.)	Revenue per passenger- miles ^d (cents)
1922	6.12	1.10	18.08	3.31	11.26	4.23	0.50	0.61
1923	6.39	1.09	19.18	3.29	12.39	4.20	0.59	0.61
1924	6.40	1.10	17.35	3.26	12.34	4.17	0.74	0.61
1925	6.59	1.11	16.39	3.21	12.97	4.13	1.05	0.62
1926	6.60	1.13	15.66	3.21	13.22	4.13	1.19	0.62
1927	6.65	1.11	14.20	3.19	12.80	4.11	1.30	0.62
1928	6.62	1.11	12.32	3.15	12.65	4.08	1.28	0.62
1929	6.90	1.10	11.42	3.13	12.75	4.06	1.30	0.62
1930	6.67	1.09	8.85	3.08	11.30	4.01	1.21	0.62
1931	6.02	1.06	6.94	2.89	8.93	3.82	0.96	0.62
1932	4.98	1.07	5.88	2.54	6.10	3.47	0.65	0.62
1933	4.31	1.08	6.47	2.21	5.57	3.12	0.58	0.61
1934	4.16	1.09	7.69	2.02	6.18	2.98	0.71	0.64
1935	4.12	1.09	7.94	2.03	6.42	2.99	0.73	0.64
1936	4.19	1.06	10.74	1.89	7.49	2.83	0.86	0.63
1937	4.12	1.10	12.41	1.71	8.13	2.95	1.04	0.62
1938	4.03	1.01	10.24	1.86	7.35	3.00	0.92	0.64
1939	4.01	1.02	11.12	1.80	7.53	2.98	0.96	0.65

1940	4.00	1.01	12.48	1.67	7.29	2.94	0.93	0.64
1941	4.09	1.01	16.11	1.64	9.17	2.88	0.90	0.60
1942	4.76	1.06	30.91	1.77	17.85	2.94	1.22	0.54
1943	5.26	1.07	57.91	1.74	24.67	2.94	1.22	0.55
1944	5.34	1.07	63.29	1.70	26.94	2.99	1.32	0.56
1945	5.42	1.08	59.42	1.71	26.91	2.95	0.36	0.56
1946	5.86	1.08	39.00	1.82	19.84	3.06	0.83	0.61

^a *Statistics of Railways*; see also ICC Statement 3631. This breakdown is not available prior to 1922, but see Table B-2 above. Data relate to Class I railroads only; for this reason passenger-miles shown in the first three columns do not add exactly to the totals of Table B-1. Revenue figures for coach and for parlor and sleeping car passengers in 1936 and prior years are not shown separately in the sources mentioned, but were estimated as follows. Railroads collected a surcharge from parlor and sleeping car passengers equal to one-half of the Pullman charge. Therefore the difference between revenues per passenger-mile accruing to the railroads from coach travel and from parlor and sleeping car travel was approximately equal to one-half the revenue per passenger-mile reported by the Pullman Company.

^b Railroad fare plus Pullman charge.

^c Pullman passengers riding on free railroad passes. Data are estimated by deducting parlor and sleeping car passenger-miles reported by railroads (shown at left) from passenger-miles reported by the Pullman Company (not shown). The resulting total, shown in this column, is only approximate because the Pullman Company total includes operations in Canada and Mexico, but excludes passenger-miles of chartered car passengers. The revenue figure is the Pullman charge.

^d Pullman charge.

