and passenger traffic have in recent years been affected by the increase in the use of motor vehicles for purposes of transportation.

The statistics of gross earnings and operating expenses illustrate the difficulties confronting our railways in recent years. Before the war it was generally held that, on account of the enormous initial investment required in roadbed and equipment, a railway's operating expenses should not exceed about two-thirds or 70 p.c. of its gross earnings, the remainder being required to meet interest on capital invested, whether in stocks or bonds, as well as to provide for necessary improvements. The ratio of operating expenses to gross earnings is called the operating ratio, and in 1913 the Canadian operating ratio was 70.90 p.c. The new conditions of the war period, especially the higher cost of labour and of fuel, swelled the operating ratio, in spite of advances in freight and passenger rates, until in 1920 it reached 97.18 p.c., since when there has been a decline to a ratio of 78.53 in 1928. While gross earnings increased by \$64,668,053, due to increased freight traffic, operating expenses increased by \$35,054,990, resulting in an increase of \$29,613,063 in net operating revenues for 1928.

In Table 7 will be found an analysis of the distribution of the operating expenses of steam railways for the last four years, the 1928 figures showing considerable increases compared with 1927, due to increased volume of traffic, and also an increase in all but general expenses. The earnings and operating expenses per mile of line and per train-mile are analysed in Table 8.

## 6.—Summary of Steam Railway Statistics of Freight and Passenger Traffic, and Ratio of Expenses to Earnings, years ended June 30, 1911-1919, and calendar years 1919-1928.

Note.—These statistics were published for the years 1875-1910 on p. 434 of the 1916-17 Year Book, and for 1901-1910 on p. 591 of the 1926 Year Book.

Years.	Miles in opera- tion.	Total train- miles.	Passengers carried.	Freight carried.	Gross earnings.	Operating expenses.	Ratio of expenses to receipts.
	No.	No.	No.	tons.	\$	\$	p.c.
1911	25,400 26,727 29,304 30,795 35,582	100,930,271 113,437,208	41,124,181 46,185,968 46,702,280	79,884,282 89,444,331 106,992,710 101,393,989 87,204,838	188,733,494 219,403,753 256,702,703 243,083,539 199,843,072	150,726,540 182,011,690 178,975,259	68·70 70·90 73·63
1916	37,434 38,604 38,484 38,501 38,663	111,075,890 115,797,100 109,857,560 103,832,835 107,053,735	48,106,530 44,948,638 43,754,194	100,659,088 121,916,272 127,543,687 116,699,572 111,487,780	261,888,654 310,771,479 330,220,150 382,976,901 408,598,361	222,890,637	71·72 82·96 89·27
1920 ( " ) 1921 ( " ) 1922 ( " ) 1923 ( " ) 1924 ( " )	38,976 39,363 39,360 39,665 40,061	117,384,819 104,652,167 107,625,144 113,907,613 110,032,845	46,793,251 44,383,620 44,834,337	127,429,154 103,131,132 108,530,518 118,289,604 106,429,355	492,101,104 458,008,891 440,687,128 478,338,047 445,923,877	422,581,205 393,927,406	92·25 89·39 86·52
1925 ( " ) 1926 ( " ) 1927 ( " ) 1928 ( " )	40,352 40,352 40,572 41,024	109,289,865 113,538,876 116,895,751 125,034,253	41,840,550	109,850,925 122,476,822 125,967,439 141,230,026	455,297,288 493,599,754 499,064,207 563,732,260		78·91 81·68