

taining to the scientific location, construction, operation and maintenance of railways. Great progress has been made in that respect since the formation of the Association ten years ago. It is realized more fully that the railway problems coming under our immediate purview are being brought under the influence of common conditions and tendencies. We meet the propositions which ever present themselves with the knowledge that conditions to-day are not to be governed entirely by the experience acquired in earlier days. It is our endeavor, also, to realize how, in carrying out the objects of the Association, true economics require proper discernment between what is expedient and what is essential, as well as a clear insight into what will tend to the permanent commercial success of the companies by which we are respectively employed. We are also striving, and not unsuccessfully, for a better understanding of the relationship of capital invested to maintenance and operating expenses. In this respect it is borne in mind, that as the ratio of progress of all kinds is ever increasing, and that as railways are commercial undertakings, the various factors which produce the greatest permanent profit per cent. of the expenditure, as well as those which have an adverse effect, must be carefully studied. We realize more and more the value of a free exchange of experiences and the practical uses that such exchange can be put to, as well as the results brought about by scientific analysis of theories that have not yet been put to experimental tests."

**Railway Statistics for 1907-1908.**

In submitting his annual report of the steam railway statistics for the year ended June 30, 1908, J. L. Payne, Comptroller of Railway Statistics, says the various tables are based upon schedules and classifications which were put into effect in 1907. With the introduction of these new forms it is claimed perfect uniformity was secured in the method of preparing railway statistics in both Canada and the United States. During the year it was found necessary to widen some of the classifications, notably with respect to operating expenses, and these will be applied to the statistics for the twelve months now current. It is hoped, he adds, further changes may not be called for in the near future.

The total railway mileage in Canada on June 30, 1908, was 22,966, an addition of 514 miles as compared with 1,099 for the year ended June 30, 1907. There were, however, 4,327 miles of line reported as being actually under construction, and it is now known that upwards of 750 miles were put in operation very shortly after June 30, 1908. The distribution by provinces is as follows:

	Miles	Increase
Ontario.....	7,932.90	294.99
Quebec.....	3,573.65	69.51
Manitoba.....	3,110.91	36.45
Saskatchewan.....	2,081.30	56.44
British Columbia.....	1,732.83	64.78
New Brunswick.....	1,509.36	18.78
Nova Scotia.....	1,344.05	2.58
Alberta.....	1,323.02	.....
Prince Edward Island.....	267.50	.....
Yukon Territory.....	90.91	0.31

The total increased mileage, however, is partly offset by the abandonment of some tracks, so that the net increase is 514 miles. During the year there was an increase in second track of 144 miles, bringing the total up to 1,211; and an increase of 454 miles of terminal, yard and siding tracks. The aggregate of all tracks in the Dominion was 28,600 miles, against 27,796.80 miles at June 30, 1907.

The capital invested is \$1,239,295,013, of which \$607,425,349 is represented by stocks, and \$631,869,664 by bonds and other funded debt. These figures show an increase of \$18,856,758 in stocks, and of \$48,500,447 in bonds, etc. The figures,

however, do not include the cost of the Intercolonial and the Prince Edward Island Railways, owned by the Dominion Government; the Temiskaming and Northern Ontario Ry., owned by the Ontario Government, and the New Brunswick Coal and Ry. Co.'s line, owned by the New Brunswick Ry., or the cost to June 30 of the National Transcontinental Ry. between Moncton and Winnipeg. The expenditures on these lines total \$325,345,031, making a grand total of \$1,564,640,044. The amounts include cash grants in aid of railways, but it has been found impossible to estimate the value of the lands granted to aid railway construction. In regard to stock and bond liability the report states that a revision of the statistics is necessary, and may be undertaken during the current year, as some of it is no longer a legal liability at all; and in other cases it has disappeared altogether, or appears in some other form. During the year \$4,374,323 was added to the amount granted by way of subsidies to railways, \$4,221,727.30 being by the Dominion Government, \$68,284 by the Provincial Governments, and \$84,311.70 by municipalities. The Dominion Parliament and Provincial Parliaments have guaranteed railway companies' bonds to the amount of \$58,920,551. The acreage of land voted by the Dominion and the Provincial Parliaments totals 52,284,183 acres.

The number of passengers carried during the year was 34,044,992, an increase of 5.90%; the number of passengers carried one mile was 2,081,960,864, against 2,049,549,813; the number of passengers carried one mile per mile of road was 90,650, an actual decrease of 636 in the density of passenger traffic for the year; the number of passengers carried per mile of railway was 1,482, an increase of 51; the average receipts per passenger was \$1.921, an increase of .009 cent; the average passenger journey was 61 miles, and the average number of passengers per train 54. The passenger train mileage was 31,950,349, against 30,220,461 in 1906-07; the mixed train mileage was 6,210,807, against 5,971,414 for 1906-07.

The number of tons of freight hauled was 63,071,167, a decrease of 1.24%; the average receipts were .723 cent, against .812 in 1906-07; the number of tons hauled one mile was 12,961,512,519, against 11,687,711,830; the density of freight traffic as shown by the number of tons hauled one mile per mile of line was 564,374, against 520,564; average distance hauled 206 miles, against 183; average number of tons per train 278, against 260; revenue freight train mileage 40,476,370, against 38,923,890; mileage of loaded freight cars 748,924,820, of which 400,494,410 miles were north or east, and 348,430,410 miles were south or west; mileage of empty freight cars, 284,944,529; total freight car mileage, 1,033,869,349. The commodities carried were classified as follows:

	1907-8	1906-07
Products of mines.....	22,636,227	18,460,172
Products of forests.....	12,912,226	10,229,635
Products of agriculture.....	9,396,967	9,521,661
Manufactures.....	6,655,719	7,974,641
Products of animals.....	2,472,359	2,469,266
Merchandise.....	2,008,267	2,309,084
Miscellaneous.....	6,938,135	5,533,426

The total of the figures for 1907-08 shows a shortage of 51,267 tons when compared with the table showing the total freight carried. Of the total tonnage relating to commodities 38,821,418 tons were reported as originating on the line, and 24,198,482 as having been received from connecting roads.

The gross earnings were \$146,918,313.61, an increase of \$180,098.93, the distribution being as follows: Passenger service, 31.89%; freight service, 63.81%; stock yards, elevators, etc., 0.28%; car mileage, switching, etc., 0.19%; telegraphs, rents and other sources, 3.83%. Receipts from freight service, stock yards, elevators, etc., decreased \$1,583,557.16, while receipts from passenger ser-

vice, car mileage, switching, telegraphs, rents, etc., increased \$1,763,656.09, the net increase being \$180,098.93. The gross earnings represented an average of \$6,389.37 per mile of railway as compared with \$6,535.64 in 1906-07.

The operating expenses aggregated \$107,304,142.51, an increase of 3.42%; the distribution being as follows: Way and structures, 19.37%; maintenance of equipment, 18.89%; conducting transportation, 58.23%; general expenses, 3.51%. The cost of conducting transportation increased \$5,160,727.33, while each of the other items showed decreases amounting to \$1,604,257.09, leaving a net increase of \$3,555,470.24. The principal increases in conducting transportation were on account of wages and the cost of fuel. The operating expenses averaged \$4,672.30 per mile of line, an increase of \$51.40 a mile; the operating expenses per train mile of all trains was \$1.364, a decrease of .017 cent. The cost of running a train one mile has increased from \$0.779 in 1898-99, to \$1.364 in 1907-08, while the gross earnings per train mile have only increased from \$1.192 in 1898-99, to \$1.869 in 1907-08. The percentage of operating expenses to gross earnings was 73.04, an increase of 2.34%.

The net earnings were \$39,614,171.10, against \$42,989,537.41, a decrease of \$3,375,366.31. The net earnings were equal to \$1,724.90 per mile of line, as compared with \$1,941.73, a decrease of \$189.83. On a capitalization of \$1,239,295,013, representing the stock and bond issue, the net earnings would yield a dividend of 3.19%. There were, however, 29 out of 87 reporting railways which showed a deficit on the year's operations.

**Railways Outside Dominion Jurisdiction.**

There appears to be considerable doubt as to what railway companies are not under the Board of Railway Commissioners' jurisdiction. At the 1908 parliamentary session a return was made to the Senate by the Department of Railways transmitting a list, prepared in the Commission's offices, of companies which it was stated were not under the Board's jurisdiction. This list was published in our Oct., 1908, issue, and we were shortly afterwards informed by the Board's Secretary that it was incorrect. Subsequently the Secretary furnished us with a revised list, which was published in our Mar. issue, pg. 209. He has since advised us that the Moncton and Buctouche Ry. is not subject to the Board's jurisdiction, and should be added to that list.

In the list referred to as published in our Mar. issue, there is only one electric railway, viz., the Hamilton, Grimsby and Beamsville. Being of the opinion that there are a number of other electric railways which are not under the Board's jurisdiction, we communicated further with the Secretary, who advises us that the Board's Law Clerk does not know of a complete list of railways subject to the Board's jurisdiction, and of those not subject to it, and that therefore the list published in our Mar. issue, with the addition of the Moncton and Buctouche Ry. as made above, will have to be taken as approximately correct.

The Interstate Commerce Commission has decided the Act to Regulate Commerce, that in complaints for recovery of damages caused by unreasonable or unduly discriminatory rates, the cause of action accrues when the payment is made; in any other complaints for recovery or damages for alleged violations of the act to regulate commerce of which the Commission has jurisdiction, the cause of action accrues when the carrier does the unlawful act or fails to do what the law requires.