

CANADA
DOMINION BUREAU OF STATISTICS
TRANSPORTATION BRANCH

OPERATING REVENUES, EXPENSES AND STATISTICS

of

RAILWAYS

With Annual Operating Revenue of \$500,000

For

January

1922

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OTTAWA

1922

DOMINION BUREAU OF STATISTICS
TRANSPORTATION BRANCH
OTTAWA

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OPERATING REVENUES, EXPENSES & STATISTICS

OF

RAILWAYS WITH AN ANNUAL OPERATING REVENUE OF \$500,000

For the Month of January 1922.

The monthly operating report of the railways has been enlarged and somewhat altered. The data for January 1922 and 1921 as given in this report are directly comparable but the following changes must be noted when making comparisons with previous reports.

Items one to six in the revised report include rail line revenues only, on the old report they included water line. Operating Income items have been added. Freight and Passenger train miles contain a proportion of mixed train miles, divided on the basis of freight and passenger car miles in mixed train service. In the old report the total mixed train miles was added to both freight and passenger train miles when computing averages. Total train miles includes freight, passenger with their proportions of mixed train miles, special train and non revenue train miles. The average freight revenue per freight train mile includes only rail line revenue. Average passenger train revenue per passenger train mile includes revenue from passenger, mail, express, excess baggage, parlour car, etc., whereas the old report gave an average per train mile of passenger receipts only. The number of employees is also a new feature of the report.

Due to the Canadian Government, Canadian Northern and Grand Trunk Pacific Railways being under one management and operated as one system, the monthly operating report commencing with this issue, will contain a consolidated report for these railways under "Canadian National Railways".

There is a slight increase in the number of roads included under "All Railways" so the data for 1922 and 1921 as published will not be directly comparable with previous reports.

The railways as a whole showed an operating deficit of \$827,619 for the month. This was, however, \$1,244,547 less than for January 1921 operations. The improvement was effected by cutting operating expenses 23 per cent, with a reduction in freight traffic of 13 per cent and in passenger traffic of 27 per cent while the revenues declined 21 per cent. Savings were effected in maintenance of way and structures of \$1,363,465 in maintenance of equipment of \$2,147,311 and in transportation of \$5,545,304. There was a decrease of 19 per cent in the freight train miles but an increase in the loading of 30.7 tons of revenue freight and 19.4 tons of all freight per train mile while the passengers per train mile were 10 per cent less. The average freight receipts per ton mile and the average passenger receipts per passenger mile showed decreases of 9.5 per cent and 13 per cent respectively, reflecting in a degree the effect of the general decrease in freight and passenger rates.

Canadian National Railways showed a decrease in revenues of \$2,640,508 or 24.3 per cent. Expenses, however, were reduced \$3,280,403 or 23.9 per cent giving an operating ratio of 127.08 per cent for 1922 as against 126.39 per cent for 1921. The freight and passenger traffic showed decreases of 5.7 per cent and 14 per cent respectively. The greater

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decrease in expenses was due in part to the heavier loading of trains, viz., 442 tons of revenue freight per train mile as against 338 tons for 1921 and a slight increase in passengers per train mile also to reductions in wages. The pay roll showed a decrease of \$2,380,042 or 27.5 per cent with a decrease of 10,287 in the number of employees.

Canadian Pacific Railways showed an operating ratio of 95.96 per cent as against 95.14 per cent for January 1921. Revenues decreased \$3,311,667 or over 22 per cent and operating expenses decreased \$3,056,657 or 21.8 per cent with a decrease of 16 per cent in freight traffic and 24 per cent in passenger traffic. There was a slight decrease in train loading and a decrease of 2.1 tons per car, while the average revenues per ton mile and per passenger mile both showed decreases. The pay roll showed a decrease of \$1,554,518 with a decrease of 1,949 in the number of employees.

Grand Trunk Railway showed a decrease in revenues of \$864,048 or over 13 per cent but by reducing expenses on maintenance of way and structures 32 per cent, on maintenance of equipment 38 per cent, on transportation 24 per cent, the latter with a reduction of 17 per cent in freight traffic and 8 per cent in total train miles, the total expenses were reduced \$1,934,577 or 27 per cent. This left a net revenue of \$369,363 as against a deficit for January 1921 of \$701,165. The Pay roll showed a decrease of \$923,500 while the number of employees showed a decrease of 1,882.

The chart on the last page shows graphically the fluctuations in the average freight revenue per ton mile for the years ended June 30th, 1910 to 1919 and the calendar years 1919 to 1921 inclusive, also the average freight revenue per ton mile for each month of 1920 and 1921. These are plotted as per centages of the 1910 average, which was .739 cents per ton mile. The monthly averages show very clearly how the average revenue per ton mile rises and falls with the changes in traffic. The tendency is for the average to drop in autumn and winter months due to the relatively heavy movement of coal and grain and rise again during the summer months. The general increase in rates September 13, 1920 prevented this seasonal decline but it is very marked in 1921.

It is difficult without more complete supporting data to state how much the general reduction in rates December 1, 1921 was responsible for the decline in the average for that month in view of the somewhat similar decline in December 1920 with no general change in rates. The average at the close of 1921 was 144 per cent of the 1910 average while the average for entire year was 162.7 per cent of the 1910 average.

The decline in 1916 was undoubtedly caused by the exceedingly heavy crop of 1915. The general increase in rates of 15 per cent March 1918, in effect over three months of 1918 fiscal year, increased the average for that year and had a still greater effect on the 1919 average, which was still further raised by the increases of 25 per cent in rates August 1918. On September 13, 1920 further increases in rates were granted with certain decreases January 1, 1921 and December 1, 1921 causing the average to reach the peak in May 1921. At the close of 1921, however, the average (1.064 cents) was slightly under the 1920 average (1.075 cents) being 144 per cent and 145.4 per cent respectively of the 1910 average.

This chart should not be considered as an accurate barometer of freight rates, as it reflects the combined effect of fluctuations in freight rates and the fluctuations in the relative quantities of high and low rate freight carried.

OPERATING REVENUES, EXPENSES & STATISTICS

STEAM RAILWAYS OF CANADA

With an annual Operating Revenue of \$500,000

For the Month of January 1922.

	1922	1921
OPERATING REVENUES:		
Freight	\$20,515,639.84	\$26,219,959.18
Passenger	4,968,084.52	6,898,729.82
Mail	649,049.59	325,761.15
Express	1,006,294.39	1,247,994.25
Other Freight Train	Dr. 1,979.41	7,001.24
Other Passenger Train	430,507.50	467,534.24
Water Line	47,985.66	50,957.02
All Other	1,000,644.19	1,205,480.50
Total Railway Operating Revenues	28,616,226.28	36,423,417.40
OPERATING EXPENSES:		
Maint. of Way and Structures	\$4,499,121.08	\$5,862,586.99
Maint. of Equipment	7,033,206.87	9,180,517.15
Traffic	1,020,953.75	857,958.86
Transportation	15,593,536.75	21,138,840.18
Misc. Operations	404,792.60	490,057.56
General	953,887.80	982,084.86
Trans. for Investment	Cr. 61,652.94	Cr. 16,461.67
Total Railway Operating Expenses	29,443,845.91	38,495,583.93
OPERATING INCOME:		
Net Operating Revenue	Dr. 827,619.63	Dr. 2,072,166.53
Railway Tax Accruals	441,863.08	428,059.04
Uncollectable Revenues	3,564.96	461.78
Hire of Equipment	Cr. 595,571.14	Cr. 176,492.70
Joint Facilities Rents	Dr. 33,153.11	Dr. 81,369.35
Operating Income	Dr. 713,153.85	Dr. 2,405,564.00
OPERATING STATISTICS:		
Average Miles of Road Operated	38,733.25	38,408.60
No. of Tons Carried (Rev. Fr)	6,765,509	8,686,148
No. of Tons Carried One Mile (Rev. Fr)	1,900,310,034	2,195,008,213
No. of Tons Carried (All Fr)	7,829,591	10,293,710
No. of Tons Carried One Mile (All Fr)	2,092,196,557	2,494,975,228
No. of Revenue Pass. Carried	3,203,119	3,638,837
No. of Revenue Pass. Carried One Mile	173,138,060	209,343,438
# Freight Train Miles	4,371,575	5,433,471
# Passenger Train Miles	3,566,048	3,880,979
Total Train Miles (Rev. & Non Rev.)	8,099,314	9,515,871
Freight Car Miles-Loaded	82,888,089	93,617,644
Freight Car Miles-Empty	36,703,044	47,390,735
Passenger Train Car Miles	23,277,942	25,494,076
Total Amount of Pay Roll	\$17,190,978.02	\$22,510,522.15
Number of Employees	148,228	163,851
AVERAGES PER MILE OF ROAD OPERATED:		
Operating Revenue	\$738.80	\$948.31
Operating Expenses	\$760.23	\$1,002.67
No. of Tons Moved One Mile (Rev.)	49,061	57,149
No. of Tons Moved One Mile (All Fr.)	54,015	64,958
# AVERAGES PER FREIGHT TRAIN MILE:		
Freight Revenue	\$4.69	\$4.83
No. of Tons of Freight (Revenue)	434.7	404.0
No. of Tons of Freight (All Fr.)	478.6	459.2
Loaded Freight Cars	19.0	17.2
Empty Freight Cars	8.4	8.7
# AVERAGES PER PASS. TRAIN MILE:		
Passenger Train Revenue	\$1.98	\$2.30
Passengers Carried	48.6	53.9
Passenger Cars	6.5	6.6
Average Length of Haul (Rev. Fr.) Miles	280.9	252.7
Average Passenger Journey Miles	54.0	57.5
Average Tons per loaded Fr. Car	25.2	26.6
Av. Fr. Receipt per Rev. Ton Mile	1.080¢	1.195¢
Av. Passenger Receipt per Pass. per Mile	2.869¢	3.295¢
Ratio of Pay Roll to Operating Revenues	60.1%	61.8%
Ratio of Pay Roll to Operating Expenses	58.4%	58.5%
Ratio of Operating Expenses to Revenues	102.90%	105.73%

Contains a proportion of mixed train miles

OPERATING REVENUES, EXPENSES & STATISTICS

CANADIAN NATIONAL RAILWAYS

For the Month of January 1922.

	1922	1921
OPERATING REVENUES		
Freight	\$6,198,819.59	\$8,381,009.89
Passenger	1,181,570.96	1,685,777.36
Mail	192,093.41	90,677.58
Express	282,045.47	256,069.73
Other Freight Train	Dr. 7,535.00	
Other Passenger Train	126,312.58	140,228.93
All Other	237,093.71	297,146.30
Total Railway Operating Revenue	8,210,400.72	10,850,909.58
OPERATING EXPENSES		
Maint. of Way & Structures	\$2,053,467.69	\$2,593,104.74
Maint. of Equipment	2,460,850.73	2,781,697.74
Traffic	233,058.26	198,803.05
Transportation	5,326,329.61	7,723,775.12
Miscellaneous	135,450.54	185,558.81
General	285,590.38	246,543.92
Transportation for Investment Cr.	61,184.65	15,516.34
Total Railway Operating Expenses	10,433,563.26	13,713,967.04
OPERATING INCOME		
Net Operating Revenue	Dr. \$2,223,162.54	Dr. \$2,863,057.46
Railway Tax Accruals	12,903.71	31,237.39
Uncollectible Revenues	-5.95	43.52
Hire of Equipment	Cr. 197,769.58	Cr. 255,577.06
Joint Facilities Rents	Cr. 15,191.25	Dr. 4,107.41
Operating Income	Dr. 2,023,111.37	Dr. 2,642,868.72
OPERATING STATISTICS		
Average Miles of Road Operated	17,212.10	17,023.77
No. of Tons Carried (Rev. Fr.)	1,577,673	1,948,232
No. of Tons Carried One Mile (Rev. Fr.)	686,345.861	727,672.828
No. of Tons Carried (All Fr.)	1,874,296	2,415,468
No. of Tons Carried One Mile (All Fr.)	771,825.297	873,125.157
No. of Revenue Passengers Carried	858,586	1,000,929
No. of Revenue Pass. Carried One Mile	44,074.568	51,256.642
# Freight Train Miles	1,552,445	2,152,673
# Passenger Train Miles	1,019,155	1,240,636
Total Train Miles (Rev. & Non Revenue)	2,674,600	3,537,498
Freight Car Miles-Loaded	27,761,138	34,403,156
Freight Car Miles-Empty	10,768,540	18,274,033
Passenger Train Car Miles	6,922,287	8,093,978
Total amount of Pay roll	\$6,289,565.59	\$8,669,608.10
Number of Employees	53,180	63,467
AVERAGES PER MILE OF ROAD OPERATED		
Operating Revenue	\$477.01	\$637.40
Operating Expenses	\$606.18	\$805.58
No. of Tons Moved One Mile (Revenue)	39,875	42,745
No. of Tons Moved One Mile (All Fr.)	44,842	51,289
AVERAGES PER FREIGHT TRAIN MILE		
Freight Revenue	\$3.99	\$3.89
No. of Tons of Freight (Revenue)	442.1	338.0
No. of Tons of Freight (All Fr.)	497.2	405.6
Loaded Freight Cars	17.9	16.0
Empty Freight Cars	6.9	8.5
AVERAGES PER PASS. TRAIN MILE		
Passenger Train Revenue	\$1.75	\$1.75
Passengers Carried	43.2	41.3
Passenger Cars	6.8	6.5
Average Length of Haul (Rev. Fr.) Miles	435.0	373.5
Average Passenger Journey Miles	51.3	51.2
Average Tons per loaded Fr. Car	27.8	25.4
Av. Fr. Receipt per Rev. Ton Mile	.903%	1.152%
Av. Passenger Receipt per Pass. per Mile	2.681%	3.289%
Ratio of Pay roll to Operating Revenues	76.6%	79.9%
Ratio of Pay roll to Operating Expenses	60.3%	63.2%
Ratio of Operating Expenses to Revenues	127.08%	126.39%

#Contains a proportion of mixed train miles

OPERATING REVENUES EXPENSES & STATISTICS

CANADIAN PACIFIC RY.
MONTREAL & ATLANTIC RY.
ESQUIMALT & NANAIMO RY.

For the Month of January 1922.

	1922	1921
OPERATING REVENUES		
Freight	\$7,807,750.58	\$9,941,009.96
Passenger	2,065,318.88	2,988,835.44
Mail	312,157.79	162,620.66
Express	471,450.78	750,838.95
Other Freight Train	5,529.59	7,001.24
Other Passenger Train	225,582.18	266,112.07
Water Line	47,985.66	51,002.02
All Other	508,750.20	588,772.45
Total Railway Operating Revenues	11,444,525.66	14,756,192.79
OPERATING EXPENSES		
Maint. of Way and Structures	\$1,369,256.85	\$1,845,908.55
Maint. of Equipment	2,619,399.40	3,522,560.74
Traffic	589,379.91	454,489.45
Transportation	5,897,144.07	7,633,546.56
Misc. Operations	199,919.08	233,870.37
General	307,415.65	348,795.59
Trans. for Investment		
Total Railway Operating Expenses	10,982,514.96	14,039,171.26
OPERATING INCOME		
Net Operating Revenue	\$462,010.70	\$717,021.53
Railway Tax Accruals	246,306.62	233,927.43
Uncollectable Revenues		
Hire of Equipment	Cr. 243,670.90	Cr. 153,699.14
Joint Facilities Rents	Cr. 47,679.63	Cr. 10,531.47
Operating Income	507,054.61	647,324.71
OPERATING STATISTICS		
Average Miles of Road Operated	13,877.2	13,772.1
No. of Tons Carried {Rev. Fr.}	1,989,956	2,290,887
No. of Tons Carried One Mile {Rev. Fr.}	716,248,068	854,514,448
No. of Tons Carried {All Fr.}	2,419,545	3,048,102
No. of Tons Carried One Mile {All Fr.}	793,563,088	973,488,322
No. of Revenue Pass. Carried	1,083,702	1,216,149
No. of Revenue Pass. Carried One Mile	69,783,449	91,418,022
# Freight Train Miles	1,573,445	1,885,617
# Passenger Train Miles	1,534,458	1,575,979
Total Train Miles (Rev. & Non Rev.)	3,149,166	3,500,442
Freight Car Miles-Loaded	30,437,757	34,485,929
Freight Car Miles-Empty	12,584,180	12,158,877
Passenger Train Car Miles	10,078,084	10,886,263
Total amount of Pay Roll	\$6,150,052.68	\$7,704,570.41
Number of Employees	57,110	59,059
AVERAGES PER MILE OF ROAD OPERATED		
Operating Revenue	\$824.70	\$1,071.46
Operating Expenses	\$791.41	\$1,019.39
No. of Tons Moved One Mile (Rev.)	51,613	62,047
No. of Tons Moved One Mile (All Fr.)	57,185	70,686
# AVERAGES PER FREIGHT TRAIN MILE		
Freight Revenue	\$4.97	\$5.28
No. of Tons of Freight (Revenue)	455.2	453.2
No. of Tons of Freight (All Fr.)	504.3	516.3
Loaded Freight Cars	19.3	18.3
Empty Freight Cars	8.1	6.4
# AVERAGES PER PASS. TRAIN MILE		
Passenger Train Revenue	\$2.00	\$2.64
Passengers Carried	45.5	58.0
Passenger Cars	6.6	6.9
Average Length of Haul (Rev. Fr.) Miles	359.9	373.0
Average Passenger Journey Miles	64.4	75.2
Average Tons per loaded Fr. Car	26.1	28.2
Av. Fr. Receipt per Rev. Ton Mile	1.090¢	1.163¢
Av. Passenger Receipt per Pass. per Mile	2.960¢	3.269¢
Ratio of Pay Roll to Operating Revenues	53.7%	52.2%
Ratio of Pay Roll to Operating Expenses	56.0%	54.9%
Ratio of Op. Expenses to Revenue	95.96%	95.14%

- Contains a proportion of mixed train miles

OPERATING REVENUES, EXPENSES & STATISTICS

GRAND TRUNK RAILWAY.

For the Month of January 1922.

	1922	1921
OPERATING REVENUES		
Freight	\$3,922,440.00	\$4,626,598.58
Passenger	955,377.00	1,166,124.35
Mail	102,000.00	44,962.00
Express	179,500.00	176,079.68
Other Freight Train		
Other Passenger Train	62,806.50	35,804.74
Water Line		
All Other	132,193.50	168,796.06
Total Railway Operating Revenues	5,354,317.00	6,218,365.41
OPERATING EXPENSES		
Maint. of Way and Structures	\$515,322.67	\$759,460.00
Maint. of Equipment	1,268,506.30	2,053,964.14
Traffic	131,286.96	133,627.35
Transportation	2,814,276.16	3,711,035.51
Misc. Operations	34,365.95	33,308.02
General	221,194.97	229,035.72
Trans. for Investment		Cr. 899.81
Total Railway Operating Expenses	4,984,953.01	6,919,530.93
OPERATING INCOME		
Net Operating Revenue	\$ 369,363.99	D. \$701,165.52
Railway Tax Accruals	110,850.00	106,669.00
Uncollectable Revenues	3,517.65	418.26
Hire of Equipment	Cr. 368,314.87	Cr. 41,801.43
Joint Facilities Rents	Cr. 42,149.91	Cr. 39,685.78
Operating Income	665,461.12	D. 726,765.57
OPERATING STATISTICS		
Average Miles of Road Operated	3,612	3,612
No. of Tons Carried (Rev. Fr.)	1,617,445	1,959,090
No. of Tons Carried One Mile (Rev. Fr.)	302,462.215	365,814.934
No. of Tons Carried (All Fr.)	1,862,108	2,264,532
No. of Tons Carried One Mile (All Fr.)	324,553.020	393,534.570
No. of Revenue Pass. Carried	842,975	928,994
No. of Revenue Pass. Carried One Mile	36,247.925	38,729.547
# Freight Train Miles	777,277	863,215
# Passenger Train Miles	626,573	654,939
Total Train Miles (Rev. & Non Rev.)	1,403,855	1,529,330
Freight Car Miles-Loaded	14,443,612	14,281,950
Freight Car Miles-Empty	7,439,129	9,604,779
Passenger Train Car Miles	3,549,366	3,748,105
Total amount of Pay Roll	\$3,284,510.38	\$4,208,010.67
Number of Employees	27,343	29,225
AVERAGES PER MILE OF ROAD OPERATED		
Operating Revenue	\$1,482.37	\$1,721.59
Operating Expenses	\$1,380.11	\$1,915.71
No. of Tons Moved One Mile (Revenue)	83,738	101,278
No. of Tons Moved One Mile (All Fr.)	89,854	108,966
AVERAGES PER FREIGHT TRAIN MILE		
Freight Revenue	\$5.05	\$5.36
No. of Tons of Freight (Revenue)	389.1	423.8
No. of Tons of Freight (All Fr.)	417.6	456.1
Loaded Freight Cars	18.6	16.5
Empty Freight Cars	9.6	11.1
AVERAGES PER PASS. TRAIN MILE		
Passenger Train Revenue	\$2.07	\$2.18
Passengers Carried	57.9	59.2
Passenger Cars	5.7	5.7
Average Length of Haul (Rev. Fr.) Miles	187.1	186.7
Average Passenger Journey Miles	43.0	41.7
Average Tons per Loaded Fr. Car	22.5	27.6
Av. Fr. Receipt per Rev. Ton Miles	1.297¢	1.265¢
Av. Passenger Receipt per Pass. per Mile	2.636¢	3.011¢
Ratio of Pay Roll to Operating Revenues	61.3%	67.2%
Ratio of Pay Roll to Operating Expenses	65.9%	60.8%
Ratio of Op. Expenses to Revenue	93.10%	111.28%

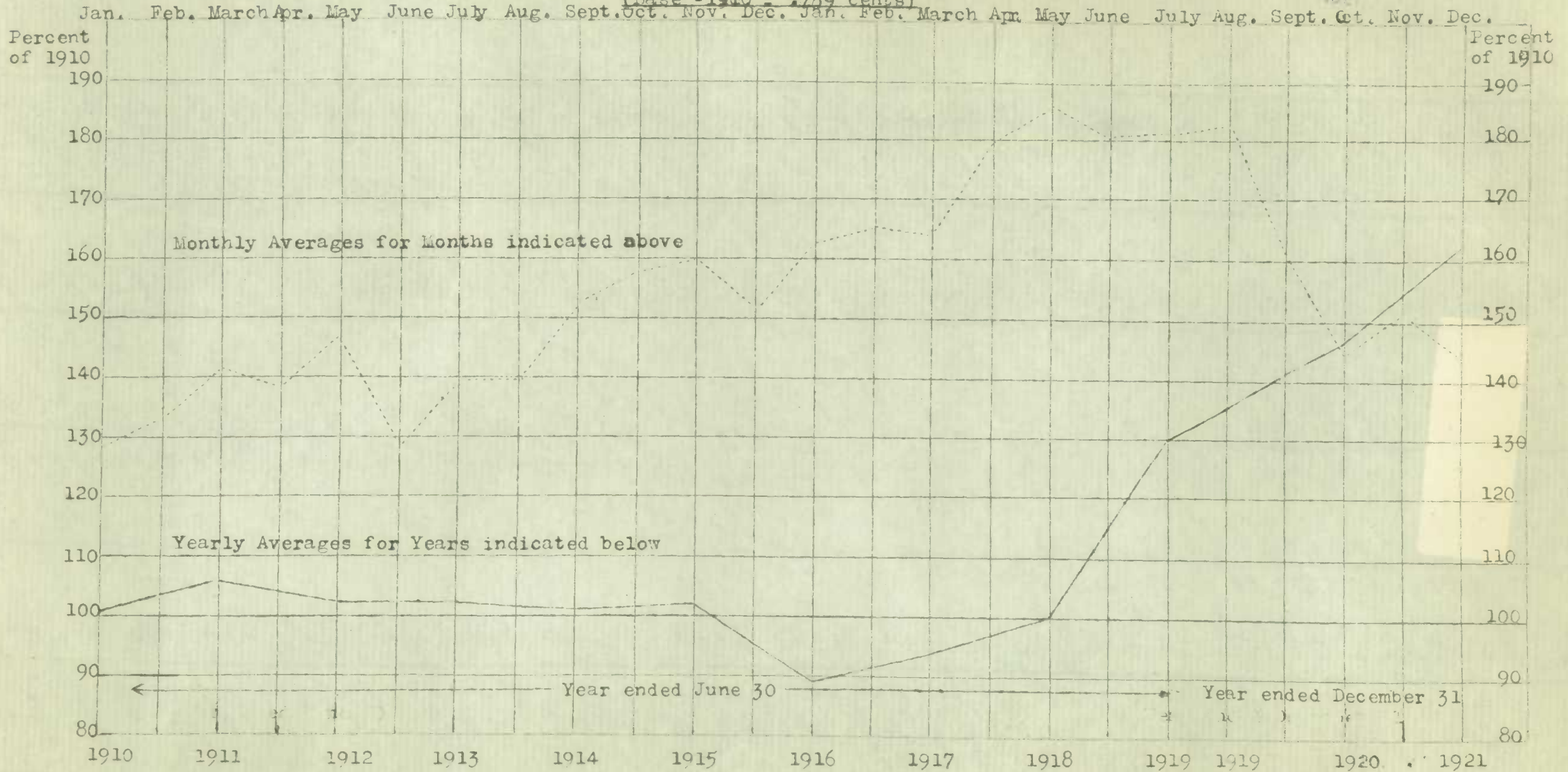
- Contains a proportion of mixed train miles

AVERAGE FREIGHT REVENUE PER TON MILE (ALL RAILWAYS)

1920

(Base - 1910 = 4739 cents)

1921



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