

Additional Cars for Montreal Tramways Company.

As stated in Canadian Railway and Marine World for April, the Montreal Tramways Co. has ordered 100 cars to be built in the United States to be operated in pairs, the first car in each pair to be equipped with four motors, and the trailer car to be equipped with two motors. The value of the new equipment is placed at \$1,250,000, and delivery is expected to commence in June. Following are the chief details:

Weight, total	Motor, 43,800 lb. Trailer, 36,740 lb.
Capacity	Motor, 42 Trailer, 45
Bolster centres	Motor, 21 ft. Trailer, 21 ft.
Length over bumpers	Motor, 45 ft. 3 in. Trailer, 44 ft. 3 in.
Length over vestibule	Motor, 44 ft. 3 in. Trailer, 43 ft. 3 in.
Width over all	8 ft. 5 in.
Rail to trolley base	11 ft. 4½ in.
Body	Steel with wood posts.
Interior trim	Cherry.
Headlining	Agasote.
Roof	Arch.
Air brakes	Westinghouse.
Fare boxes	Coleman stationary.
Heaters	Consolidated car.
Lightning arresters	Westinghouse.
Motors	Westinghouse 533-T-4, motor cars, 4; trailers, 2; outside hung.
Control	Westinghouse P.K. multiple.
Couplers	Tomlinson.
Designation signs	Keystone.
Seating upholstery	Rattan.
Trolley retrievers	Keystone.
Trucks, type	76 E.
Wheels	Standard cast iron, 30 in.

The cars will also be equipped with fenders, hand brakes, sanders, heat regulators, etc., and the door signal will be interlocked with the control circuit. The lighting will be by 94 watt lamps with reflectors and automatic compensating device for burned out lamps.

In a recent interview, J. E. Hutcheson, General Manager, stated that the coupling up of single car units into two-car trains is the most effective way to relieve traffic congestion. The factors controlling the transportation of passengers by cars are: speed between stops, number of stops, interference of vehicular and pedestrian traffic, delays at street intersections, time for loading, spacing between car units. The greatest time saving is effected by the use of two-car trains, in the last three mentioned factors. There is no more delay at intersections, two cars can be loaded as quickly as one, and the free headway is doubled, enabling every motorman to move more quickly between stops. The total power of motors per train is 330 h.p., but 600 h.p. can safely be developed for short periods, and 400 h.p. is necessary to operate on the heavier cross town grades. The air brakes are so designed as to provide a high degree of safety, and so that they can be applied to all the wheels of both cars by either conductor or motorman. In case of the accidental separation of the cars, the brakes are automatically applied. The Westinghouse type P.K. control has the advantage of removing from car platforms all heavy current carrying parts, eliminating controller burnouts and circuit breaker flashes, and giving increased space on the platform by the use of a small master controller, and incidentally reducing the weight of the platforms, less car wiring, greater ease for the motorman properly to manipulate the small master controller, thereby avoiding abuse of the motors, greater ease of application of automatic emergency features on master controllers, etc. The control is especially adapted to meet the requirements of service in congested districts. The doors are interlocked with

the power system, so that the car cannot be started until all doors are closed. All automatic features on the cars are operated from storage batteries so that their normal operation continues if the power is off, or the trolley leaves the wire. The electric heaters are controlled by a thermostat, and an automatic switch is installed to maintain an even heating in the cars.

In addition to the 25 double equipments of type 533 40 h.p. motors equipped with the P.K. control, required for the fore-mentioned cars, the company has ordered 25 P.K. control equipments for use with some motors supplied previously by the Canadian Westinghouse Co.

Nipissing Central Railway Annual Report.

Following are extracts from the annual report of this railway for the year ended Oct. 31, 1916, issued by the Timiskaming and Northern Ontario Ry. Commission, which operates it for the Ontario Government.

Assets.	
Cost of road	\$306,338.12
Cost of equipment	74,290.98
Townsite property, North Cobalt	242,700.20
Working assets	45,383.53
Deferred debit items	2,064.13
Value of franchise	141,383.32
	\$812,160.28
Liabilities.	
Capital stock	\$530,000.00
Advance from T. & N.O.R.	247,639.50
Working liabilities	33,101.35
Deferred credit	4.30
Profit and loss balance	1,415.13
	\$812,160.28

Transportation revenue	\$109,937.34
Non-transportation revenue	1,460.61

Total operating revenue	\$110,397.95
Maintenance of way and structures	\$11,248.74
Maintenance of equipment	4,998.11
Power	18,556.07
Conducting transportation	28,821.55
Traffic	531.40
General and miscellaneous	10,578.76

Total operating expenses	74,734.63
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Net operating expenses	\$35,663.32
Other income	499.95

Total income	\$36,163.27
Deductions from income	13,965.82

Net	\$22,197.45
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Compared with the year ended Oct. 31, 1915, transportation revenue increased \$3,478.85; and the other than transportation revenue increased \$208.48, while the expenditures increased \$183.17, giving a net increased revenue from operation of \$3,504.16. The "other income" increased \$281.95, making a total increased income of \$3,786.11. The deductions from income, which represent rental paid for leased line, increased \$6,710.84. The "net result" shows \$27.19 less than the previous year. Out of profit and loss \$20,000 was paid to the T. and N. O. Ry. Commission.

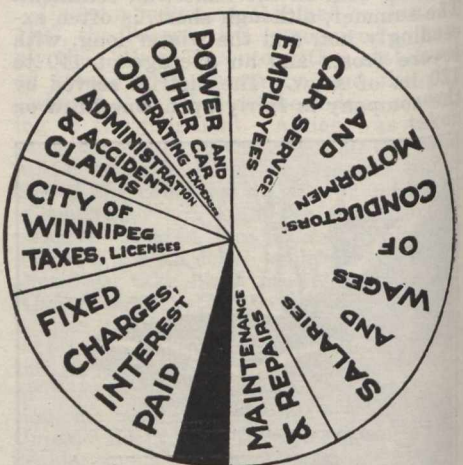
Traffic Statistics.	
Passenger car hours	26,785
Passenger car miles	274,241
Total passengers carried	1,439,896
Average daily receipts	\$297.64
Average receipts per car hour—passenger	\$3.55
Average receipts per car mile—passenger, cents	0.347
Earnings per passenger, cents	0.06½

The Board of Railway Commissioners, on April 17, heard complaints of residents of Chambly and St. Hubert and other points complaining of the fares charged and the service given on the Montreal & Southern Counties Ry. The commission will make an investigation into the company's equipment and facilities for handling traffic before making any order.

How Car Fares are Distributed in Winnipeg.

The accompanying diagram was used by the Winnipeg Electric Ry. recently, in one of a series of advertisements which it has been running in Winnipeg papers, with the following reading matter appended:

"Take a look at the circle! It tells an



interesting story, for it represents 4c, or one white car ticket—the average amount paid by Winnipeggers for a car ride. And, further, it tells graphically and truthfully just how we spend that 4c, in order that the people of Winnipeg may be served. The darkened portion is the amount of that 4c which the company earns as profit on its service."

Electric Railway Finance, Meetings, Etc.

British Columbia Electric Ry. and allied companies:

	Feb. 1917	Feb. 1916	Feb. 28, '17	Feb. 28, '16
Gross	\$581,555	\$572,935	\$4,647,475	\$4,405,030
Expenses	479,875	476,413	3,875,610	3,839,642
Net	101,680	96,522	771,865	565,388

Toronto Ry., Toronto & York Radial Ry. and allied companies:

	Feb. 1917	Feb. 1916	Feb. 28, '17	Feb. 28, '16
Gross	\$932,567	\$846,256	\$1,935,036	\$1,752,606
Expenses	491,351	459,539	1,023,019	931,832
Net	441,216	386,717	912,017	820,774

Toronto Ry.:		City		
	1917	percentage	1916	percentage
Jan . . .	\$510,053	\$ 76,508	\$473,784	\$68,847
Feb . . .	473,184	70,976	470,704	70,614
Mar . . .	531,080	105,875	518,555	97,237
	<u>\$1,514,317</u>	<u>\$253,359</u>	<u>\$1,463,043</u>	<u>\$236,698</u>

Winnipeg Electric Ry.:

	Feb. 1917	Feb. 1916	Feb. 28, '17	Feb. 28, '16
Gross	\$280,717	\$293,250	\$600,662	\$590,810
Expenses	202,207	185,000	433,630	374,085
Net	78,510	108,250	167,032	216,725

The New Brunswick Power Co., owning the St. John Ry, informed the St. John, N.B., City Council, April 11, that it could not supply 8 workmen's tickets for 25c as requested by the council but that it was considering the propriety of abolishing the sale of 6 tickets for 25c in favor of a straight 5c fare, and of doing away with certain transfer points.

Windsor, Essex & Lake Shore Rapid Ry. Fire.—A fire in the Kingsville, Ont., car barn, on April 25, badly damaged an electric locomotive and three passenger cars, among other things.