

Toronto Exhibition Grounds. Before many years their safety and convenience resulted in the discarding of the older systems. The first electric railway line in Canada and probably the first in North America, which ran between Windsor and Walkerville, was established early in June, 1886 (it is recorded that it was in active operation before June 11). An electric system 7 miles in length was opened at St. Catharines in 1887, using the double overhead trolley. The third electric railway in the Dominion was established at Victoria on Feb. 23, 1890, and the fourth commenced operation at Vancouver in June, 1890. These were followed by the completion of the Ottawa Electric Railway in 1891 and the electrification of the Montreal and Toronto systems in 1892. The street railways of other eastern cities were generally electrified during the 1890's, while in the newer western cities electricity was used from the commencement. In the cities of Eastern Canada, electric street railways are generally operated by private companies under city franchises, while in a considerable number of cities in Ontario and the West the street railways are owned and operated by the municipalities.

Many difficulties are met in operating the cars during the winter season, owing to the heavy falls of snow. This, however, has been overcome by the use of sweepers, scrapers and ploughs. The single overhead-trolley system is used by all electric railways but Edmonton, Montreal and Winnipeg have begun using also a double overhead trolley, and trackless trolley-buses (28 of these buses being in service in 1939). Of the 36 systems 17 operated both electric cars and motor-buses in 1939, the increase in buses for these systems being 92, exclusive of the buses of the Sandwich Windsor and Amherstburg systems (40 in 1938 and 71 in 1939) and buses of the Guelph Radial (9 in 1938 and 1939) which ceased operating electric cars in 1939. Advantages of motor-buses are that the cars are not restricted to routes and there are no expenses for tracks. The capacity of each bus, however, is considerably less than that of an electric car. Since 1920, twenty-nine electric railways have either entirely succumbed to the competition of the motor-vehicle, or substituted a motor-bus service.

Subsection 1.—Mileage and Equipment of Electric Railways

Track mileage of electric railways has been gradually decreasing in recent years. Very little new construction has taken place; on the other hand, systems or parts of systems are being abandoned.

23.—Mileage and Equipment of Electric Railways, 1936-39

Item	1936	1937	1938	1939	Item	1936	1937	1938	1939
	miles	miles	miles	miles		No.	No.	No.	No.
TRACK MILEAGE—					PASSENGER VEHICLES—				
Length of first main track.....	1,247	1,222	1,154	1,083	Closed cars.....	3,329	3,303	3,358	3,261
Length of second main track.....	553	549	539	509	Open cars.....	17	13	13	8
Totals, Main Track	1,800	1,771	1,693	1,592	Combination passenger and baggage.....	9	13	10	11
Length of sidings and turnouts.....	272	267	264	253	Cars without electrical equipment.....	250	249	184	180
TOTALS, COMPUTED AS SINGLE TRACK.....	2,072	2,038	1,957	1,845	Buses.....	605	653	760	803
					Trackless trolley-cars..	7	7	13	28
Baggage, express, and mail cars.....	No. 23	No. 24	No. 23	No. 21	TOTALS, PASSENGER VEHICLES.....	4,217	4,238	4,338	4,291
Freight cars.....	206	203	201	187	Snow ploughs.....	72	71	74	73
Locomotives.....	46	46	47	46	Sweepers.....	162	161	170	152
					Trucks.....	21	3	109	66
					Miscellaneous.....	348	344	237	226