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HIGHWAY STATISTICS

CANADA, 1949

The modernisation of Canada's system of highways is illustrated by the steady increase in the mileage of improved and surfaced roads. The total highway mileage in 1949 advanced to 561,347 miles or 5,081 miles more than reported for the previous year. Some 2,323 miles of the increase was due to the inclusion of Newfoundland roads for the first time while an additional 2,758 miles were shown for the rest of Canada. Mileage of surfaced roads rose from 150,495 to 161,799, an increase of 11,306 miles, 1,733 of which lay in the province of Newfoundland. Thus, the proportion of surfaced roads climbed from 27.1 to 28.8 per cent of total road mileage. At the same time, registrations of motor vehicles rose even more sharply so that the number of motor vehicles per mile of surfaced road advanced from 13.5 to 14.2. Heavier traffic volume resulted in increased maintenance, especially on gravelled roads. All of the provinces, recognizing this factor, have embarked on large scale post-war construction programs aimed at paving or surfacing with bituminous materials all main traffic routes and many feeder routes which carry sufficient traffic to warrant the expense. This trend is confirmed by the increase in bituminous pavements and surfaces from 18,292 miles in 1948 to 20,503 miles in 1949 while the decreasing popularity of concrete pavement is reflected in a drop from 2,359 to 2,237 miles. The current Trans-Canada Highway program based on Federal-Provincial Agreements was not yet operative during 1949 and some Provincial projects were probably held in abeyance in anticipation of the determination of detailed financial arrangements, highway standards, etc. However, a slight increase in total expenditures on roads, bridges, ferries, etc., occurred during 1949. The 1948 total of \$265.8 millions rose by some \$4.4 million to \$270.2 millions. Excluding Newfoundland, this represented an increase of approximately \$0.9 million in moneys spent by the identical authorities included in the 1948 report.

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Table 1

HIGHWAY MILEAGE, 1949

Province	Portland Cement Concrete	Bitum- inous Pavement	Bitum- inous Surface	Gravel Crushed Stone	Other Surfaces	Total Surfaced Road	Improved Earth	Other Earth	Total Mileage
Newfoundland	-	24	89	1,620	-	1,733	440	150	2,323
Prince Edward Island	4	-	220	1,516	-	1,740	1,685	-	3,625
Nova Scotia	7	53	1,044	6,789	-	7,873	3,297	3,963	15,133
New Brunswick	-	-	1,415	11,951	-	13,366	5	-	13,389
Quebec	320	4,865	924	20,469	-	26,578	54	14,454	40,650
Ontario	1,794	3,249	4,418	49,157	-	58,617	14,297	-	72,914
Manitoba	72	-	584	8,445	-	9,101	8,062	1/74,184	91,347
Saskatchewan	-	-	599	15,513	62	14,174	1/80,427	2/118,377	212,978
Alberta	-	-	916	15,374	-	16,290	1/28,360	1/ 38,750	83,400
British Columbia	41	132	1,991	8,959	17	11,140	10,008	2,581	3/23,729
Yukon - N.W.T.	-	-	-	1,187	-	1,187	258	-	1,445
Total	2,237	8,303	12,200	138,980	79	161,799	147,089	252,459	561,347

1/ Includes all road allowances.

2/ Includes 59,916 unimproved road allowances not in use.

3/ Includes 699 miles of gravelled and 177 miles of improved earth roads of the Northwest Highway System.

Table 2

EXPENDITURES ON HIGHWAYS, 1949

	Canada	Newfound- land	Prince Edward Island ^{5/}	Nova Scotia
	\$	\$	\$	\$
Roads				
Construction 1/ 2/	133,908,621	1,662,064	968,339	12,976,860
Maintenance	93,414,090	1,423,971	762,820	6,123,409
Administration and General	9,308,114	171,700	87,969	576,913
Total 1/ 2/	236,630,825	3,257,735	1,819,128	19,677,182
Bridges and Ferries				
Construction	22,283,432	200,065	208,874	1,629,841
Maintenance	10,635,415	18,937	125,665	1,163,737
Administration and General	552,911	8,000	-	74,262
Total	33,471,758	227,002	334,539	2,867,840
Footpaths and Sidewalks	67,359	-	-	1,339
Grand Total 1/ 2/	270,169,942	3,484,737	2,153,667	22,546,361
Dominion Expenditures				
Construction	6,704,299	-	17,558	441,585
Maintenance	2,864,276	-	10,924	68,752
Administration and General	330,855	-	1,572	14,741
Subsidies and Grants in Aid (Paid + Received -) 2/	+ 413,464	-	-	-
Total 2/	10,312,894	-	30,054	525,078
Provincial Expenditures				
Construction	136,739,799	1,862,129	1,159,655	14,165,116
Maintenance	77,717,481	1,442,908	877,561	7,219,483
Administration and General	9,534,870	179,700	86,397	636,684
Subsidies and Grants in Aid (Paid + Received -)	+ 14,755,424	-	-	- 158,191
Total	240,747,574	3,484,737	2,123,613	21,863,092
Municipal Expenditures				
Construction	10,284,272	-	-	-
Maintenance	23,498,604	-	-	-
Administration and General	-	-	-	-
Subsidies and Grants in Aid (Paid + Received -)	- 15,188,174	-	-	+ 158,191
Total	18,594,702	-	-	158,191
Expenditures by Others 1/	+ 514,772	-	-	-
Grand Total 1/ 2/	270,169,942	3,484,737	2,153,667	22,546,361
Total Expenditures				
Construction 1/ 2/	156,223,856	1,862,129	1,177,213	14,606,701
Maintenance	104,080,361	1,442,908	888,485	7,288,235
Administration and General	9,865,725	179,700	87,969	651,425
Toll Bridges, Ferries and Roads				
Revenues	3,607,971	-	-	134,994

1/ Includes \$251,911 paid by Railways on railway grade crossings - not allocated by Provinces.

2/ Includes \$243,575 contributed from Railway Grade Crossing Fund - " " " "

EXPENDITURES ON HIGHWAYS, 1949

New Brunswick	Quebec ^{5/}	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon Northwest Territories
\$	\$	\$	\$	\$	\$	\$	\$
8,907,601	31,340,690	28,654,195	7,185,748	5,429,619	11,705,733	22,309,920	4/2,272,366
4,416,628	16,707,047	37,238,973	1,761,921	2,484,312	10,743,985	10,779,678	971,346
232,289	1,561,500	4,726,010	587,950	234,640	55,417	921,473	152,253
13,556,518	49,609,237	70,619,178	9,535,619	8,148,571	22,505,135	34,011,071	3,395,965
940,675	6,637,066	5,519,546	813,034	818,343	1,134,745	4,261,637	119,606
861,441	2,626,423	1,740,269	78,345	146,008	978,394	2,844,174	52,022
16,913	448,706	2,012	100	163	2,755	-	-
1,819,029	9,712,195	7,261,827	891,479	964,514	2,115,894	7,105,811	171,628
-	4,700	36,002	4,005	526	16,212	4,575	-
15,375,547	59,326,132	77,917,007	10,431,103	9,113,611	24,637,241	41,121,457	3,567,593
283,521	36,855	80,079	289,036	313,962	1,433,578	1,416,153	2,391,972
19,245	53,998	418,111	38,206	30,952	351,322	849,398	1,023,368
743	1,064	15,709	800	1,087	61,193	81,693	152,253
-	-	- 74,760	+ 401,068	-	-	- 156,419	-
303,509	91,917	439,139	729,110	346,001	1,846,093	2,190,825	3,567,593
9,564,755	37,940,901	23,835,985	7,709,746	5,934,000	11,412,108	25,155,404	-
5,244,818	19,283,972	20,946,253	1,805,965	2,599,840	5,517,872	12,778,809	-
248,459	2,009,342	4,713,168	587,350	233,770	-	840,000	-
+ 14,006	- 257,833	+ 15,654,433	- 645,039	3/ - 8,371	3/ -	+ 156,419	-
15,072,038	58,976,382	65,149,839	9,458,022	8,759,239	16,929,980	38,930,632	-
-	-	10,284,272	-	-	-	-	-
14,006	-	17,623,430	-	-	5,861,168	-	-
-	-	-	-	-	-	-	-
- 14,006	+ 238,943	- 15,579,673	-	+ 8,371	-	-	-
-	238,943	12,328,029	-	8,371	5,861,168	-	-
-	+ 18,890	-	+ 243,971	-	-	-	-
15,375,547	59,326,132	77,917,007	10,431,103	9,113,611	24,637,241	41,121,457	3,567,593
9,848,276	37,977,756	34,200,336	7,998,782	6,247,962	12,845,686	26,571,557	2,391,972
5,278,069	19,337,970	38,987,794	1,844,171	2,630,792	11,730,362	13,628,207	1,023,368
249,202	2,010,406	4,728,877	588,150	234,857	61,193	921,693	152,253
-	1,567,911	-	-	-	-	2,105,066	-

3/ \$5,839 was paid by Alberta to Saskatchewan towards maintaining Highway 17 and the Lloydminster Ferry; this sum is not included in the grants paid by Alberta or received by Saskatchewan, but is included in Alberta total

4/ Includes \$37,235 on improvement of a winter truck-tractor road from Hay River to Yellowknife, N.W.T.

5/ Provincial data taken from Public Accounts.

Table 3

1/ STATISTICS ON URBAN STREETS, SIDEWALKS, BRIDGES AND CULVERTS
IN CITIES AND LARGE TOWNS, 1949

Expenditures	Canada	Newfound- land *	Prince Edward Island	Nova Scotia
	\$	\$	\$	\$
New Construction	21,426,399	153,962	1,100	1,442,409
Major Improvements, widening, etc.	6,450,347	32,896	-	212,459
Maintenance repairs and minor improvements	8,711,801	38,955	26,799	561,759
Cleaning, snow clearing, sanding, etc.	10,023,367	3,250	1,444	182,809
Administration and General expenses	2,319,013	30,742	595	111,266
Total	48,930,927	259,805	29,938	2,510,702
Construction /	29,233,350	211,933	1,107	1,731,607
Maintenance /	2/19,761,133	47,872	2/92,387	779,095
Total Expenditures on roads	39,799,885	240,285	25,004	2,062,204
Total Expenditures on bridges and ferries	1,622,761	19,520	-	21,343
Total Expenditures on footpaths and sidewalks	7,254,422	-	4,934	389,550
Undistributed amounts shown in expenditures	317,415	-	63,556	37,605
<u>Subsidies and Amounts Collectable</u>				
From Dominion Government	80,000	-	-	-
From Provincial Government	3,920,751	192,115	475	17,866
From County, Township, etc.	371	-	-	-
From Other Sources	52,941	-	-	-
Total	4,054,063	192,115	475	17,866
Net Expenditures (total expenditures less subsidies)	44,876,864	67,690	29,463	2,492,836
<u>Class of Road</u>	<u>Miles</u>	<u>Miles</u>	<u>Miles</u>	<u>Miles</u>
Concrete (Portland Cement)	895.35	-	7.31	27.87
Bituminous Pavements	3,735.36	-	22.25	186.63
Bituminous Surfaces	2,454.66	8.00	3.56	157.78
Gravel (traffic bound gravel or crushed stone and stabilized gravel or stone, not surfaced treated)	3,437.97	17.65	33.06	172.81
Other surfaces - brick, granite block, wood block, etc.	210.54	-	-	1.00
Total Mileage of Surfaced Roads	10,733.88	25.65	66.18	546.09
Improved earth roads (graded and drained)	2,852.20	101.50	16.37	138.83
Other earth roads	1,452.04	94.50	8.50	89.60
Total Mileage of All Roads	15,038.12	221.65	91.05	774.52

/ Includes proportion of Administration and General Expenses and undistributed items.

* Newfoundland totals are incomplete as data for St. John's was not forthcoming. The 1948 expenditures of that city were \$324,765.

1/ STATISTICS ON URBAN STREETS, SIDEWALKS, BRIDGES AND CULVERTS
IN CITIES AND LARGE TOWNS, 1949

New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia
\$	\$	\$	\$	\$	\$	\$
809,194	5,952,348	6,058,989	1,943,572	590,127	2,554,445	1,920,253
38,664	1,196,304	4,200,089	17,256	43,488	65,292	643,899
341,376	1,334,773	3,224,595	539,718	299,134	608,805	1,735,887
287,585	4,902,375	3,317,067	534,805	110,965	224,185	458,882
88,405	1,080,327	393,788	169,204	30,879	161,908	251,899
1,565,224	14,466,127	17,194,528	3,204,555	1,074,593	3,614,635	5,010,820
898,612	7,725,598	10,499,538	2,070,133	652,361	2,742,584	2,699,877
666,612	6,740,529	6,694,990	1,134,422	422,232	872,051	2,310,943
1,425,923	11,504,008	14,326,517	2,908,181	754,134	2,159,510	4,394,119
16,500	217,290	571,018	73,856	15,692	611,875	75,667
115,151	2,685,716	2,218,952	220,088	303,367	855,470	481,194
7,650	59,113	78,041	2,430	1,400	7,780	59,840
-	80,000	-	-	-	-	-
116,334	40,623	3,469,477	15,965	4,532	9,739	53,625
-	-	371	-	-	-	-
-	15,185	1,465	-	2,407	-	33,884
116,334	135,808	3,471,313	15,965	6,939	9,739	87,509
1,448,890	14,330,319	13,723,215	3,188,590	1,067,654	3,604,896	4,923,311
<u>Miles</u>	<u>Miles</u>	<u>Miles</u>	<u>Miles</u>	<u>Miles</u>	<u>Miles</u>	<u>Miles</u>
31.35	121.87	451.82	150.92	2.75	9.84	91.62
150.01	935.60	1,635.10	213.29	112.99	200.54	278.95
67.81	455.71	813.35	79.94	57.15	177.37	633.99
59.33	285.42	868.45	520.29	334.68	704.76	441.52
-	25.57	40.55	1.46	1.68	3.25	137.03
308.50	1,824.17	3,809.27	965.90	509.25	1,095.76	1,583.11
45.78	180.92	603.02	523.85	595.39	459.71	186.83
2.50	226.12	144.30	32.50	175.80	499.81	178.41
356.78	2,231.21	4,556.59	1,522.25	1,280.44	2,055.28	1,948.35

1/ These statistics are for all cities and towns of 2,000 population and up in Nova Scotia and New Brunswick, 4,000 and up in Quebec and Ontario, 1,000 and up in the four Western Provinces, and all urban municipalities in Prince Edward Island, and in Newfoundland.

2/ Includes \$63,556 "Total" Maintenance Expenditure not distributed (Charlottetown report not received).

Several provinces held elections during 1948, notably Quebec, Ontario, Alberta, Saskatchewan and New Brunswick, and the high level of highway expenditures during that year may have derived some impetus from these events. Quebec and New Brunswick expenditures were much lower while British Columbia, Alberta and Ontario totals were up considerably. Expenditures in all other provinces remained at approximately the same level as in 1948. Part of the increase in the British Columbia total is accounted for by the inclusion of roughly \$1 million expended on the Northwest Highway System. All mileages and costs of this road system had previously been included in the Yukon-Northwest Territories totals. Some 875 miles of the system lie within the Province of British Columbia and the total expenditures on the Highway for 1949 have been divided proportionately in order that they may be included with the appropriate province or territory.

Road construction costs at \$134 million were \$5 million lower than in 1948 due principally to a drop in the Quebec expenditures which more than offset an \$11 million increase in British Columbia where the 1949 figure at \$22 millions was double that of 1948. A 3.5% increase over 1948 in construction costs resulted in a somewhat larger decrease in the actual volume of work done during 1949 than is indicated by the \$5 million drop in expenditures for highway construction.

Quebec tripled and British Columbia doubled respectively, their 1948 expenditures on Bridge and Ferry construction to lead a general increase in this field. The 1949 national total of \$22 million was nearly 84% higher than the \$12 million spent in 1948.

Per capita expenditures on highway systems in 1949 ranged from a low of \$10 per person in Newfoundland to the high of \$36 for British Columbia. Highway and bridge expenditures made since the beginning of the "Automobile Age" have caused enormous increases in the debts of all Provinces. Present expenditures continue to far exceed motor vehicle, gasoline and similar revenues in most provinces. However, during World War II, the reverse had been the case when man power and materials available limited highway expenditures.

Data supplied by the Provinces and the Federal Departments are based on their fiscal years ending nearest to December 31, 1949. For example, the Ontario Municipal Roads statistics are for the calendar year while those for the Niagara Parks Commission cover the twelve months ended October 31, 1949.

Toll Bridges, Ferries and Roads

Toll ferries are operated by Nova Scotia and by British Columbia where a toll road is also maintained. Two toll bridges are under the authority of the National Harbours Board, one at Montreal and the other at Vancouver. Privately and municipally owned toll bridges are also in operation in Nova Scotia, Quebec and British Columbia. The total revenue of \$3.8 million does not include the revenues of company operated ferries nor of international bridge, ferry and tunnel companies. Annual statistics on the latter are published separately by the Bureau.

Urban Streets, Sidewalks, Bridges and Culverts

Statistics on urban streets, sidewalks, etc., are given in table 3. The data are based on reports received from places having populations as indicated at the foot of the table. Newfoundland is included in the report for the first time but is incomplete because no return was made by the City of St. John's. Total expenditures on streets, etc., increased by over \$8 million to a 1949 total of \$48,994,483 (1). Excluding the \$259,805 spent by towns in Newfoundland this represented a 20% increase over the 1948 total. Surfaced road mileage increased by some 250 miles to 10,734 miles or 71.38% of the grand total of 15,038 miles.

(1) This includes \$63,556 for Charlottetown, P.E.I., which was not distributable.

