

SOME ASPECTS OF 1918 ROAD WORK IN UNITED STATES.

Road work in 1918 must differ in a number of important particulars from that done in previous years. Conditions unlike any that have obtained before are confronting road builders and the work must be planned to meet them.

The winning of the war is the one great task to be accomplished. It must be done and done in the least possible time, and to that end everything else must be subordinated. This does not mean that road work should stop nor even that it should be curtailed; it does mean, however, that the available money should be spent and the labor obtainable should be used on the roads that will contribute most to a complete and speedy victory.

Fighting men alone cannot win the war. The troops at the front must be fed and clothed and kept supplied with arms and ammunition. Food and other supplies must also be sent to meet the needs of civilians in allied countries.

To do all this we must keep the production of our mines, our farms and forests and our factories at the highest possible point. We must provide ships to carry men, munitions and supplies to the front, and to carry food, raw materials and manufactured articles to allied countries. In addition, we must keep all industry at as nearly normal as possible in order to enable the country to raise money to meet the enormous cost of the war.

To do all this we must have adequate transportation facilities within our own borders. Unlimited natural resources are of no value until we provide means of transportation; bumper crops are worthless unless they can be moved; record breaking production in factories is useless unless goods can be shipped.

Transportation does not mean railroad transportation only. Almost without exception, every ton of freight that is carried once by rail is carried twice by road. Under normal conditions practically all shipments involve one long haul by rail and two short hauls by road. Under the conditions obtaining during the past year and likely to obtain for some time to come, a not inconsiderable portion of the long-haul transportation also must be taken care of by the highways.

For these reasons we must keep on building roads and we must under no circumstances fail in the upkeep of the roads already built. We must do as much as we have done in other years—more than we have done before, if we possibly can—but we must do it differently.

We must stop building patchwork systems of roads laid out to please petty politicians and, instead, fill in the gaps in our through routes.

We must postpone for the present the construction of scenic roads and build highways for freight traffic.

We must defer for a while, the building of roads to open up new territory and bend our efforts to perfecting the roads required to serve the farms now partly unused because of inability to market the crops.

We must end the neglect of improved roads and take steps to safeguard the heavy investment they represent.

MACADAM MAINTENANCE.

Col. Wm. Sohler, in a paper given some time back, gave the approximate cost for the maintenance of the main French roads, which are built of macadam as follows:

French Roads.	Miles.	Total Expense.	Per Mile
Routes Nationales	23,800	\$6,500,000	\$273
Routes Departementales	8,100	1,500,000	185
De grande communication	107,300	16,900,000	157
D'interet commun	47,500	6,000,000	126
Ordinaires	184,700	14,500,000	78

Col. Sohler, in referring to these roads, says that the French Engineers state that on the main roads near the cities \$273.00 a mile per year for maintenance is not keeping the roads up. The paper further states that, "to keep these roads in first-class condition it would require \$500.00 a mile additional," which would make the total cost practically \$770.00 per mile per year. It should be carefully noted that this is the cost in France, where both wages and materials are cheaper than here, so that in applying this cost to Canada it would probably mean double that amount.

Col. Sohler gives the following statistics regarding the maintenance of English roads:—

County Councils:	Miles.	Yearly Maint'ce Per Mile.
Urban Main Roads	4,189	\$1,100
Rural Main Roads	23,565	431
	27,754	
County Boroughs	9,366	685
London Authorities	2,192	1,680
	11,558	
Urban Roads	11,411	425
Urban Roads	4,871	555
Rural Roads	95,077	122
	111,359	
Total all Roads	150,671	290

We must do without imported materials so far as possible and develop to the fullest the use of local materials.

We must get along with the fewest laborers possible, substituting labor saving machinery.

We must make careful studies of the needs of our respective localities and then spend the available funds where they will go farthest towards winning the war.—American Good Roads.

CONCRETE HIGHWAYS IN CANADA (Number of Municipalities using same, to end of 1915).

Classification	Up to	1909	1910	1911	1912	1913	1914	1915
Streets	4	7	7	14	30	30	28	
Roadways	0	0	1	3	7	6	7	
Lanes	2	1	1	2	2	6	2	

SQUARE YARDS CONCRETE HIGHWAYS IN CANADA (BY PROVINCES).

Province.	Prior to 1909	1909	1910	1911	1912	1913	1914	1915	Totals
Alberta		1,319	114,676	10,020	13,895	53,413	10,683		204,006
British Columbia			10,283	28,075	31,899	40,414	36,871		147,042
Manitoba						52,594	43,466	37,480	133,540
New Brunswick						540			540
Nova Scotia						650	10,670	17,439	28,759
Ontario	72,806	23,664	17,831	26,055	130,569	209,366	297,734	441,580	1,219,605
Quebec				5,745	37,805	112,023	151,391	185,915	492,879
Saskatchewan			16,000	16,710					32,710
Totals	72,806	24,983	158,790	86,605	214,168	469,000	550,315	682,414	259,081