"'The public has no conception of the fragile character measured by time durability of perhaps 75 per cent. of our surfaced mileage. The fragile character of this mileage may be realized by my estimate that the lack of adequate maintenance would be seriously noticed on 75 per cent. of our road-mileages within thirty days; within six months we would be losing money so fast (through depreciation and drops in gas-tax revenues) that we would soon not have enough money to take care of the fixed charges and maintenance alone—to say nothing about ruining our chances of even approximating the upwards of a billion dollars' income from the road-user taxes obtained last year from adequately maintained roads.

"'This is a nationally vital concern. It is impossible to overstress the hazard to the public's interests in any breakdown of maintenance and technical control by highway departments."

The average cost of maintenance per mile per annum since 1924 on the primary and secondary highways and on the whole highway system is shown in the following table:—

Year.				Primary Highways.	Secondary Highways.	Complete System.	
				£	£	£	
1924-25				$51 \cdot 7$		51.7	
1925 – 26				$73 \cdot 2$		$73 \cdot 2$	
1926-27				111-9		111.9	
1927-28				$119 \cdot 9$	į l	119.9	
1928–29			:	$125 \cdot 2$	55.5	$100 \cdot 1$	
1929-30				$151 \cdot 2$	88.5	$128 \cdot 6$	
930-31				$121 \cdot 4$	71.0	$103 \cdot 1$	
1931 - 32				$\overline{115 \cdot 6}$	55.3	92.5	
1932–33				$85 \cdot 3$	$47 \cdot 3$	$70 \cdot 7$	

Construction.

The expenditure on construction for the year 1932-33 was less than 15 per cent. of the expenditure on similar purposes in 1929-30.

The following table shows the extent and type of work accomplished by the Board and the local authorities on the highway system since the Board commenced active operation in 1924:—

Year.			Formation and Widening.	Gravelling and Metalling.	Tar and Bituminous Scaling.	Bituminous Macadam (Penetra- tion).	Bituminous Concrete.	Portland- cement Concrete.	Bridges.
1004.05			Miles.	Miles.	Miles.	Miles.	Miles.	Miles,	Ft.
1924-25			19	63	6	6			2,434
1925-26			45	88	16	45	4	6	5,168
1926-27			174	151	35	38	12	$1\dot{6}$	6,408
1927-28			173	133	83	34		6	7,760
1928-29			224	185	122	51	14	11	9,482
1929-30			173	179	133	39	31	$\frac{11}{12}$	7,547
1930-31			130	128	95	41	14	9	11,175
1931–32			139	69	129	$\frac{32}{32}$	9	3	$\frac{11,118}{4,062}$
1932–33	• .	• •	56	45	72	8			$\frac{4,002}{3,178}$
Totals			1,133	1,041	691	294	84	63	57,214

The most serious problem in connection with highway construction is the renewal of old and inadequate bridges. Improvements to the highways may be postponed, but replacements of bridges cannot be avoided. Seventy-six per cent. of the bridging in New Zealand is of timber, and consequently bridge-depreciation is a heavy item.

The Board's policy has been to renew as many of such structures as possible in more permanent materials. During the year under review only 10 per cent. of new highway bridging was constructed in timber, the balance being in steel and reinforced concrete.

As mentioned in last year's report, it has been found that bridge replacements per annum on the highway system should total 9,000 lineal feet. The figures for the past two years have been 4,062 and 3,178 lineal feet respectively. It will be seen, therefore, that the programme is over 10,000 lineal feet behind safe requirements.

Most of the construction funds available for 1933-34 will be devoted to bridge renewals, but the amount will be quite inadequate to enable any leeway to be made up, and indeed will be insufficient to meet the normal annual necessary programme.