125 D.—1.

The average expenditure on maintenance per mile per annum on the whole highways system by the Board and local authorities, since 1924, is shown in the following table:—

Year.		Average Expenditure per Mile per Annum.	Year.				Average Expenditure per Mile per Annum.	
		£						£
1924-25	 	 51.7	1930-31					$103 \cdot 1$
1925-26	 	 $$ $73 \cdot 2$	1931 - 32					$92 \cdot 5$
1926-27	 	 111.9	1932 – 33					$70 \cdot 7$
1927-28	 	 119.9	1933 – 34					$78 \cdot 6$
1928-29	 	 100.1	1934 – 35					$100 \cdot 3$
1929-30	 	 128.6	1935 – 36					$122 \cdot 4$

CONSTRUCTION, RECONSTRUCTION, AND SURFACING.

The expenditure from the Construction Fund for the year 1935-36 was £428,024, an increase of 32 per cent. on the corresponding expenditure for the preceding year.

The season just past was not a good one for bituminous surfacing in most districts owing to wet weather being generally experienced.

During the year ended 31st March, 1936, 152 miles of main highways were reconstructed, formed, or widened, 358 miles of dustless surfacing, including stage construction, were completed, of which 245 miles were sealing, and 93 miles plant-mix or road-mix pavement.

The table below shows the extent and types of work carried out on the main highways system by the Board and local authorities since the Board commenced active operations in 1924.

Year.		Formation and Widening.	Gravelling and Metalling.	Bituminous	Plant.mix	Bituminous Macadam (Penetra- tion).	Bituminous Concrete.	Portland- cement Concrete.	Bridges.
		Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Ft.
1924-25		19	63	6	• •	6	,		2,434
1925–26		45	88	16	• •	45	$_{1}$ 4	6	5,168
1926-27		174	151	35		38	12	16	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	12	7,547
1930–31		130	128	95		4.1	14	9	11,175
1931–32		139	69	129		32	9	3	4,062
1932–33		56	45	72		8			3,178
1933-34		44	28	75		7		1	4,988
1934–35		113	69	172	27	3		2	6,641
1935-36	• • •	152	98	24 5	91	2			8,718
Totals		1,442	1,236	1,183	118	306	84	66	77,561

A description of some of the major works is as follows:-

Auckland District.

Auckland-Wellington Main Highway, Waipa County Division.—This work, extending over a length of 30 miles and estimated to cost £162,000, consists of improving the alignment, remetalling, and plant-mix surfacing, together with the reconstruction of several bridges in reinforced concrete, and the renewal of all culverts in permanent materials.

As this highway is one of the most heavily trafficked in the Dominion, a high standard has been set. The minimum radius of curvature is 10 chains and vertical sight distances 500 ft. Good progress has been maintained and at least half of the work completed. The surfacing comprises a cushion course of sand or inferior metal on the subgrade, followed by a 6 in. consolidated thickness of crushed basalt rock. A mulch-dressing of chippings is then applied, and maintained for at least three weeks under traffic, after which a first-seal coat of No. 1 tar is laid. Finally a plant-mix surface, $\frac{3}{4}$ in. thick, of densely-graded aggregate with M.C. 3 binder is planed on with a long base planer.

Tauranga District.

Rotorua County, Sealing.—Rotorua is one of the most important tourist resorts in the Dominion, and in the holiday season there is a large influx of visitors. It has been recorded that 2,400 vehicles traversed the main road between 5 p.m. and 5 a.m. on one day. The original surfacing was for the most part the natural pumice, which in dry weather dispersed clouds of dust, to the great discomfort and danger of motorists. The Board undertook some 20 miles of surface sealing in the area at a cost of £26,000. It was necessary to utilize local materials, as much as possible, as stone-chipping, which had to be obtained from remote areas, cost as much as £1 6s. per cubic yard. The pumice itself consists of fine fragments of glass, with very little cohesion, and is very absorbent. When the surface was