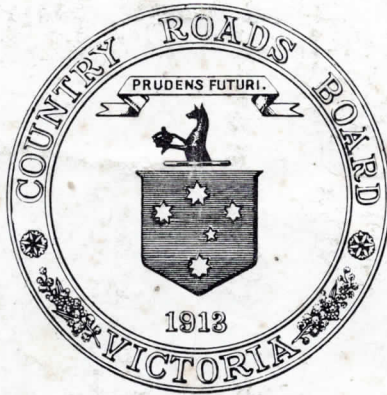


# COUNTRY ROADS BOARD

VICTORIA



# 1913-1963



# GOLDEN JUBILEE

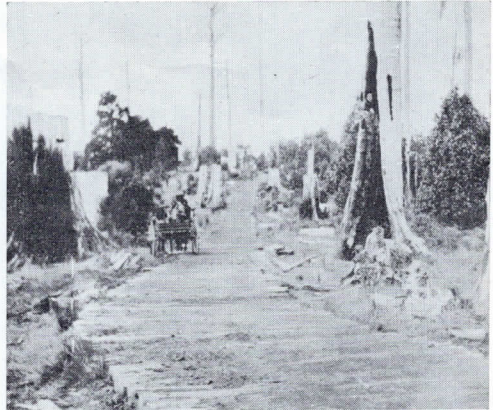
## WHY THE C.R.B. WAS CONSTITUTED

In 1913, when the C.R.B. was first established, the roads throughout Victoria were generally in very poor condition. For many years previously road construction and maintenance had been the responsibility of the municipal councils. As a result, some short sections of good roads had been constructed, but little attention had been given to the development of a systematic road net-work linking together all parts of the State.

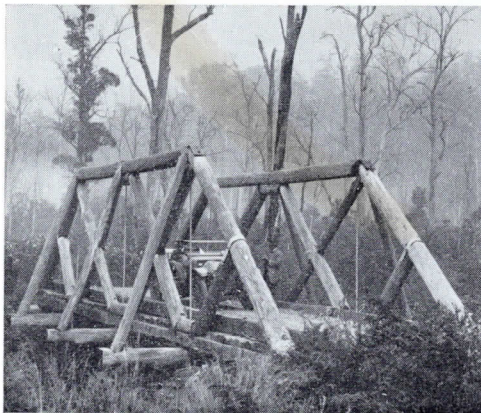
At this time the only means of long distance communication was the railway. Many settlers, however, particularly in the more remote parts of the State, had no proper means of access even to the railways, the primitive tracks which existed being quite impassable in winter for months at a time. By 1913 the need for a proper road system had become imperative and consequently the Government constituted the C.R.B. to undertake the task.



Horse-drawn sledge on Gippsland road 1913.



Corduroy construction (log road) Beech Forest  
— Lavers Hill 1913.



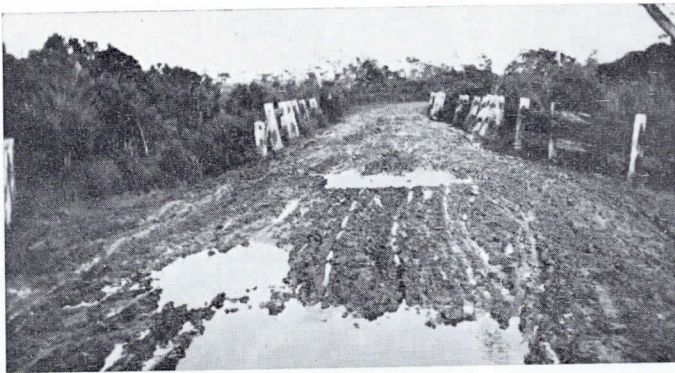
Timber bridge in Gippsland 1913.



Masonry bridge on Calder Highway at Woodend,  
constructed 1862.

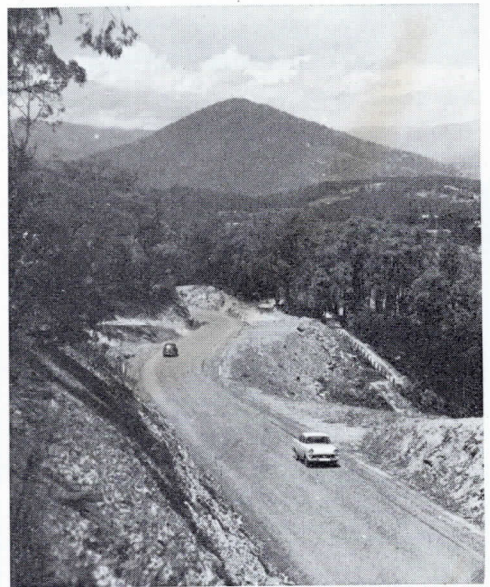
## MAIN ROADS

Members of the C.R.B. on horseback in Gippsland, 1913.



Wonthaggi-Inverloch Main Road, 1913.

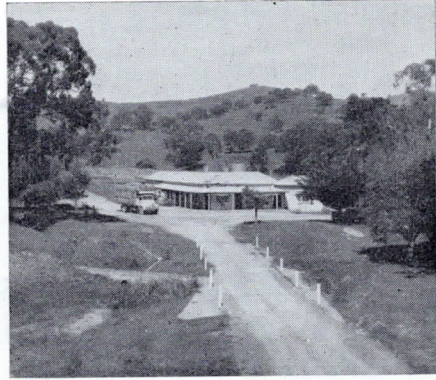
The first task which faced the C.R.B. was to determine which roads should be main roads, these being the roads which carried extensive traffic between towns and from one district to another or provided access from rural districts to the railway. The Board therefore visited every municipality in the State and after conference with the councils an initial plan of the road system was drawn up and the important roads were declared as main roads. With the enormous increases in traffic which have occurred since 1913 it has been necessary to amplify the system from time to time and there are now 9,111 miles of Main Roads. The C.R.B. pays at least two thirds of the cost of approved works carried out by Municipal Councils on such roads. Between 1913 and 30th June, 1962, a total of £76,079,000 has been spent on these roads.



Healesville-Yarra Glen Main Road west of Healesville.

## DEVELOPMENTAL ROADS

It was soon realised by the C.R.B. that the development of a "main road" system was insufficient to meet the problem of providing the former with access to the railways and markets. Consequently, in 1918, Parliament passed the Developmental Roads Act which enabled the C.R.B. to declare as a developmental road any road which, in its opinion, would serve to develop any area of land by providing access to a railway station or to a main road leading to a railway station. By 1937, when the last of the works undertaken under this Act was completed, a total amount of some six and a half million pounds had been expended.



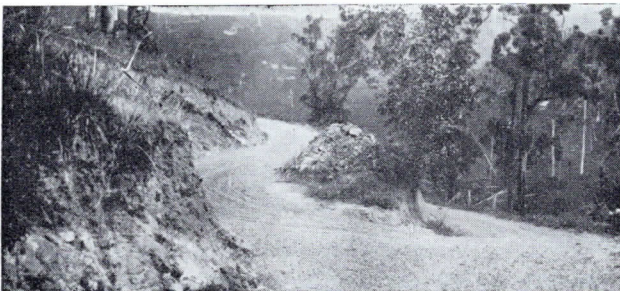
Sandy Creek Road, Omeo Shire.

## ISOLATED SETTLERS ROADS

While the construction of main and developmental roads went a considerable way to satisfying the immediate road needs of the time there were still many isolated settlers who had no road whatsoever. The Government therefore passed an Act in 1925 which provided funds for the construction of roads of this type and later, in the depression years, funds provided for unemployment relief were also used for this purpose. Between 1930 and 1943 over £330,000 were expended on the construction of some 5,000 access roads.



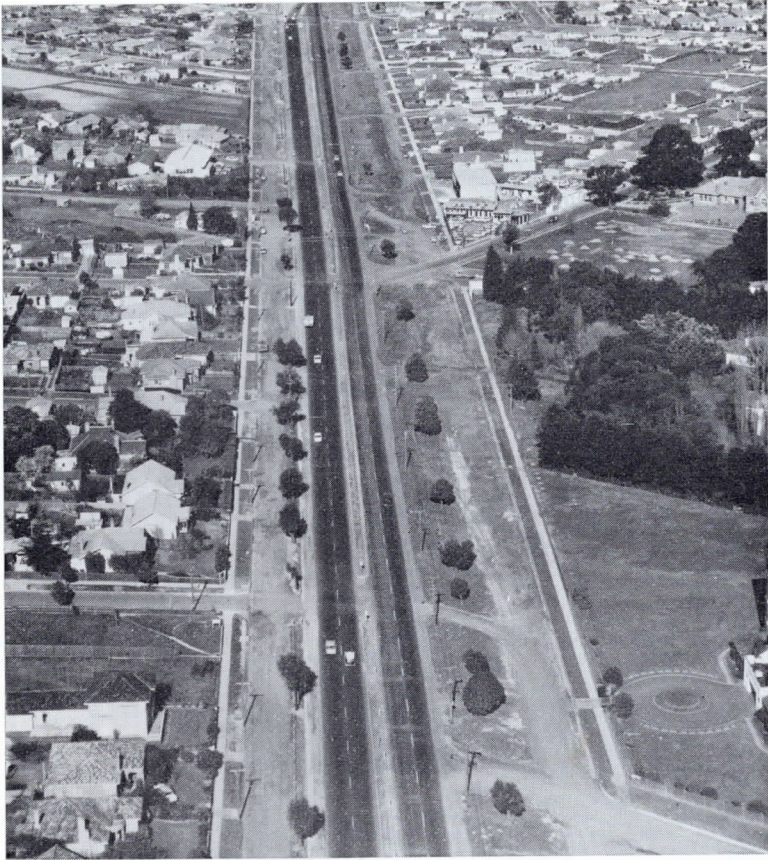
Typical isolated settlers road before reconstruction by C.R.B.



Isolated settlers road constructed under C.R.B. supervision.

## STATE HIGHWAYS

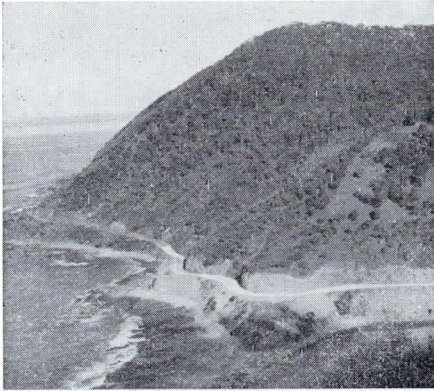
By 1924, the rapid development of the motor car was resulting in far greater volumes of long-distance traffic on the main arterial routes, particularly those leading inter-State. Many municipal councils were reluctant to incur additional expenditure on these roads as the traffic was not of local origin. The Government, recognizing the importance of these routes to the economy, passed the Highways and Vehicles Act in 1924 which provided for the declaration of State highways and placed upon the C.R.B. the responsibility of accepting the full costs of both construction and maintenance for that portion of the carriageway required for through traffic. Today, there are 4,502 miles of State highways upon which a total of £61,351,000 has been spent between 1925 and the 30th June, 1962.



Nepean Highway between Moorabbin and Cheltenham showing duplication 1963.

## TOURISTS ROADS

During the financial year 1923-24 funds were provided by the Government for the improving and making accessible places of interest, tourist resorts, etc., and a Tourist Committee was appointed to administer the funds. Owing to the fact that the Committee did not have at its disposal any professional or administrative staff, the C.R.B. was appointed by the Government to be the road constructing authority. In 1936 the Tourists' Roads Act was passed, under which the Governor-in-Council, on the recommendation of the C.R.B., may proclaim roads of sufficient interest to be tourists' roads. This Act also empowered the Board to carry out permanent works on and maintain such roads. The C.R.B.



Great Ocean Road from Teddy's Lookout.

bears the full cost of the works required for these roads and has expended a total amount of £5,220,000 to 30th June, 1962 since 1936. There are now 426 miles of proclaimed tourists' roads in the State.

## FOREST ROADS

From time to time requests had been made by municipalities for Government assistance towards roads carrying timber traffic from State Forests and privately owned timbered land. In order to enable assistance to be given in these cases, the Forest Roads and Stock Routes Act was passed in 1943. Under this Act the Governor-in-Council on the recommendation of the C.R.B., after consultation with the Minister of Forests and the Commissioner of Crown Lands and Survey, and on the recommendation of the Commissioner of Public Works, may proclaim any existing road or part of any existing road to be a forest road, or approve of a new forest road or deviation. Forest roads shall only be proclaimed or constructed in those areas of the State within or adjacent to any State forest area or as the C.R.B. considers to be timbered, mountainous, or undeveloped areas. Under the Act, municipalities are relieved of all costs of construction and maintenance of such roads. Total expenditure to 30th June, 1962, amounted to £1,950,000 on 461 miles of proclaimed forest roads.



Licola Forest Road showing heavy log truck.

## UNCLASSIFIED ROADS

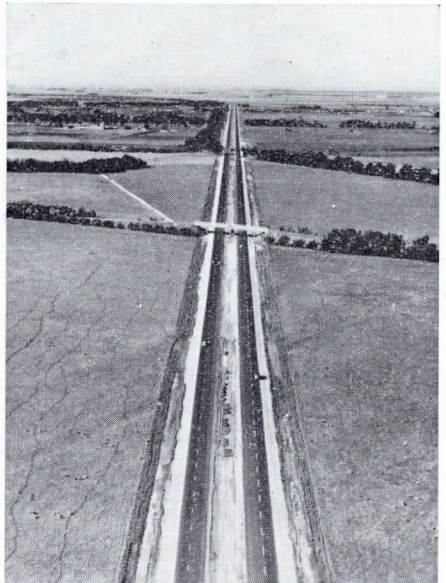
In 1926 the Federal Aid Roads Agreement Act was passed by the Federal Parliament, and money was provided from Federal Funds for State roads. In the following year, the C.R.B. began to make available to the various municipalities throughout the State, funds for the improvement of unclassified roads, that is, roads generally of local importance which are the statutory responsibility of the municipalities in which they lie. Today there are some 90,000 miles of this category of road and each year the Country Roads Board contributes funds towards works on 20,000 to 25,000 miles of them. Of each year's expenditure, the C.R.B. contribution accounts for nearly 70% of the total spent on construction and approximately 80% on maintenance. Total funds contributed amount to £37,998,000 to 30th June, 1962.



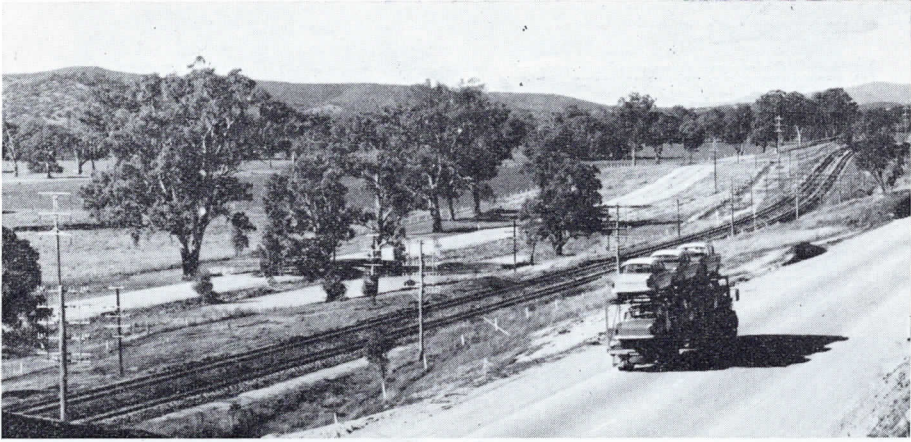
Typical unclassified road. Winton-Lurg Road near Winton.

## BY-PASS ROADS

In the years immediately following the Second World War, the volumes of traffic on our roads increased at a far greater rate than ever before, and serious congestion, particularly in urban areas, was becoming acute. Recognizing the need for special roads to carry traffic in these situations the Government in 1956 empowered the C.R.B. to undertake the construction of by-pass roads, or "freeways" as they are more generally known. The distinguishing features of these roads are that no access is permitted to them except at specially selected points and that any roads which cross them are taken either over or under them. So far the C.R.B. has constructed 23 miles of such roads.



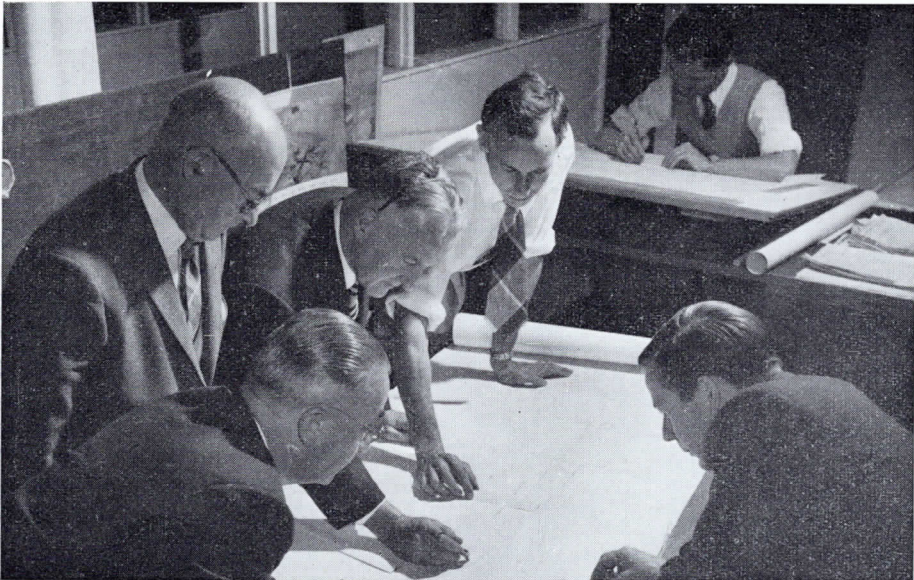
Maltby By-pass Road completed 1961.



Hume By-pass Road completed 1962.

## ROAD DESIGN

In carrying out its task of developing the State road system, the C.R.B. must of course pay particular attention to the standards to which roads and bridges must be constructed. It is obvious that a road such as the Hume Highway, which carries large volumes of fast-moving heavy traffic, must be constructed to higher standards than a road such as the Great Ocean Road, which carries mainly light tourist traffic. It is necessary, therefore, for the C.R.B. to take a census from time to time of all vehicles using its roads to discover the volume and nature of the traffic using them. This practice was begun in 1928 on State highways and was subsequently extended to other categories of road also.



Group of C.R.B. engineers discussing a design problem.

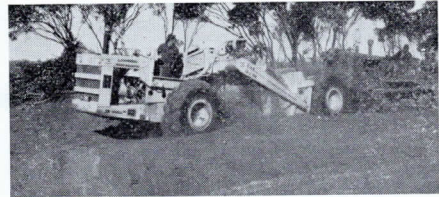


## CONSTRUCTION METHODS AND MATERIALS RESEARCH

In addition to determining standards of construction the C.R.B. must also give consideration to the methods used and is continually carrying out research to determine what are the most effective and economical. The C.R.B. must also give careful consideration to the materials used, and in 1923 established a laboratory in conjunction with the engineering school of the University of Melbourne. As its resources increased the C.R.B. established its own laboratory and today materials research is one of the most important of its many tasks.



Road construction by pick and shovel methods.



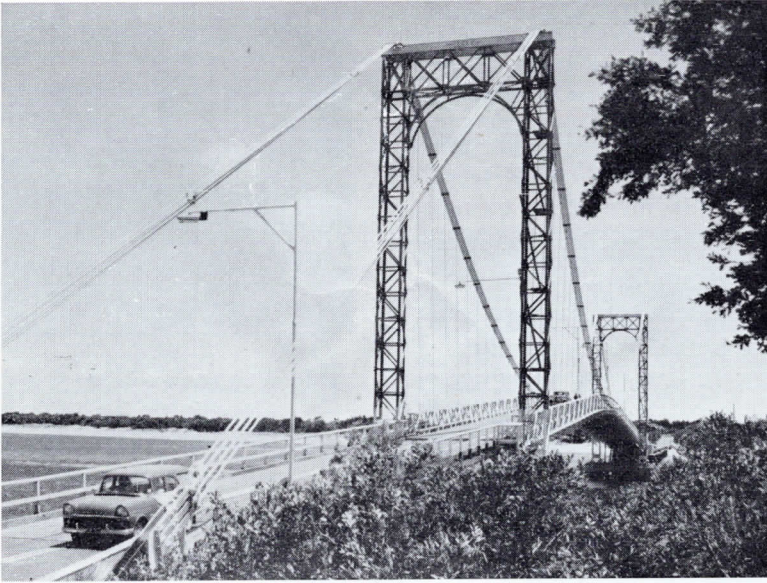
Loading a tournapul with the help of an H.D. 16 tractor.

## BRIDGES

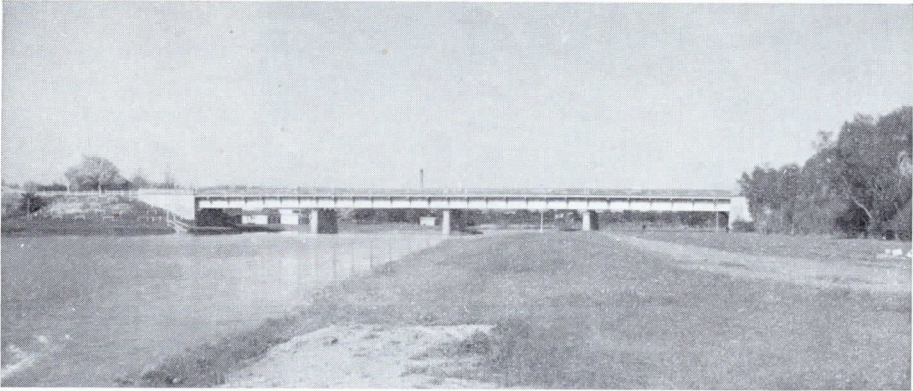
In 1913 most of the bridges in Victoria were of timber construction and many of these were in poor condition. It was obvious that they should quickly be replaced with bridges of more durable materials such as reinforced concrete. Between the two wars, many reinforced concrete bridges were constructed, though it was still necessary owing to limited funds to construct a number of timber bridges. In recent years considerable progress has been made with the production of pre-cast reinforced concrete components and this, together with standardization of design, is enabling the C.R.B. to make good the deficiencies as fast as its finances permit.



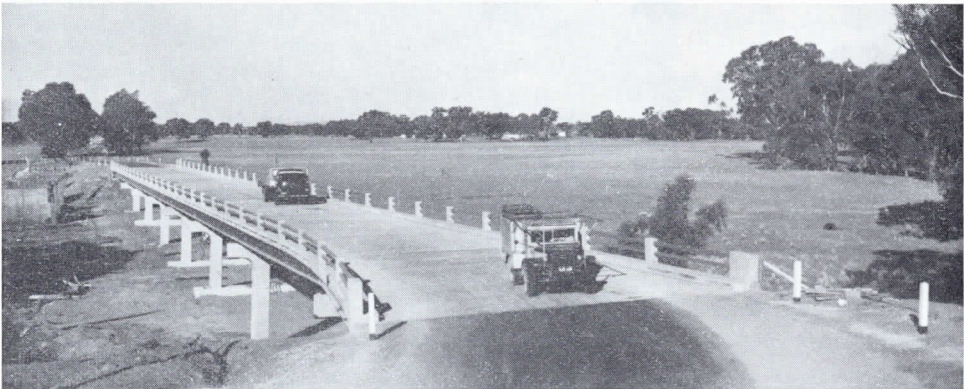
Typical timber bridge in existence 1913.



Phillip Island Bridge, constructed 1936.



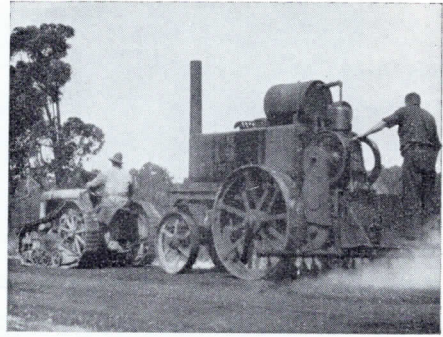
Barwon River Bridges, Geelong, constructed 1926.



Bridge over the Campaspe River at Elmore completed 1962.

## BITUMINOUS SURFACE TREATMENT

In 1913, the cost of bituminous treatment restricted its use to roads in the metropolitan and other urban areas, but it is interesting to note that the C.R.B. bought its first steam driven sprayer in 1915. Since then, modern developments have reduced the cost of bituminous surfacing and today 11,500 miles of the C.R.B.'s declared road system are protected by a bitumen seal.



300 gallon tractor-drawn sprayer still in use in the late 1920's.



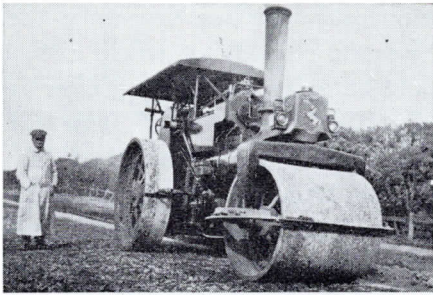
Hand pouring bitumen, 1928.



800 gallon sprayer in operation, 1962.

## PLANT

Fifty years ago there was very little road construction plant in Victoria and most of the work of construction was carried out by pick and



C.R.B.'s first steam roller 1914.

shovel labour. Today the drudgery has been eliminated by the use of

pneumatic drills, front-end loaders and mechanical excavators, and transport by wheel barrows on short leads has been replaced by the use of the bulldozer and its variations. In addition many other types of plant have been designed for special purposes.



Heavy plant on Ramrod Flat Road 1961.

## MAINTENANCE

Since its early days, the C.R.B. has emphasized the essential need for proper maintenance of a road if the asset provided by its construction is not to be lost. In early days maintenance was carried out by patrolmen equipped with horses and drays, each looking after a length of the order of 5-10 miles. Where the pavement was of gravel, the patrolman was also provided with a drag to assist him in maintaining a good riding surface. With the increase in the length of roads to which a bituminous surface had been applied, it



Triangular Webster drag used in road maintenance.



Truck patrol at work.

was determined that the necessary work could be carried out more economically by truck patrols generally responsible for lengths of up to 40 or 50 miles of "black" road in rural areas. As a result of economies obtained, this form of patrol was extended in the 1930's to cover unsealed roads by providing the patrols with small graders which could be towed behind the truck. This system is now practically universal, while on more heavily trafficked roads occasional assistance of a heavy power grader to clean up shoulders and drains is often necessary.

## C.R.B. ROAD POLICY

The general road policy adopted in Victoria has been to give the maximum service to the majority of users in terms of miles of all-weather roads. Beginning in the late 1920's the C.R.B. adopted a policy of low-cost stage construction. This led to many pavements being built with the knowledge that they would have a limited life but that the work carried out would not be wasted when increases in traffic, which would be accompanied by greater revenue made strengthening necessary. Today, the application of stage construction is more limited and, at least on important roads, permanent construction is undertaken with adequate pavement thicknesses from the outset. As money becomes available further progress will be made. Roads and bridges cannot be built without money. It is as true of them as of anything else, you get only what you pay for but in this case you also pay more for what you do not get. Poor roads are expensive.



Additional climbing lane for slow moving traffic Western Highway near Bacchus Marsh.

## C.R.B. FINANCES

To enable the C.R.B. to carry out its responsibilities, two main sources of finance are available. From State sources, it receives the proceeds of all motor registration fees less cost of collection, two-thirds of motor vehicle transfer fees, less cost of collection, a proportion of the revenue derived from drivers' licenses, the proceeds from the Commercial Goods Vehicles Act and fines under the Motor Car Act. In addition, it also receives from the municipalities their share of the expenditure on main roads. In the financial year 1961/62 revenue from these sources amounted to £14,166,000.

From Commonwealth sources, money is provided to the State under the Commonwealth Aid Roads Act. The C.R.B.'s share of this money amounted to £9,878,000 in 1961/62.

In addition, the C.R.B. also receives from time to time small amounts of loan moneys. In 1961/62 total funds available to the C.R.B. amounted to £24,044,000.

A recent survey carried out by the C.R.B. and municipalities to determine the actual expenditure needed to bring the State road system to a satisfactory standard for the growth in traffic expected during the ten year period 1955-1965 indicated that an amount of £570,000,000 would be required. Revenues to meet these needs will total only £434,000,000 thus leaving a deficit of £136,000,000 or nearly £14,000,000 a year. Unless further funds are quickly made available the increasing congestion on many of our roads will become acute before the end of this period.



Princes Highway East — first stage of duplication between Oakleigh and Dandenong.