# 1974-75 COUNTRY ROADS BOARD VICTORIA



## SIXTY-SECOND ANNUAL REPORT

FOR YEAR ENDED 30th JUNE, 1975

PRESENTED TO BOTH HOUSES OF PARLIAMENT PURSUANT TO ACT No. 6229

 $By \ \ \textit{Authority}$  C. H. RIXON, GOVERNMENT PRINTER, MELBOURNE.



(Left to right) Mr W. S. Brake, Member; Mr T. H. Russell, Deputy Chairman; Dr K. G. E. Moody, Engineer in Chief; Mr R. E. V. Donaldson, Chairman; Mr R. G. Cooper, Chief Accountant; Mr N. L. Allanson, Secretary.

## **COUNTRY ROADS BOARD**

Chairman .	 	 	 R. E. V. Donaldson
Deputy Chairman	 	 	 T. H. Russell
Member	 	 	 W. S. Brake

#### PRINCIPAL OFFICERS AS AT 30th JUNE, 1975 HEAD OFFICE

Engineer in Chief	 	 	Dr K. G. E. Moody
Secretary	 	 	N. L. Allanson
Chief Accountant	 	 	R. G. Cooper
Deputy Engineer in Chief	 	 	N. S. Guerin
Deputy Secretary	 	 	C. C. Liddell
Deputy Chief Accountant	 	 	R. J. C. Bulman

#### REGIONAL DIVISIONAL OFFICES

Division			Divisional Engineer
Bairnsdale	 	 	 A. N. Jephcott
Ballarat	 	 	 E. T. Oppy
Benalla	 	 	 R. R. Patterson
Bendigo	 	 	 T. M. Glazebrook
Dandenong .	 	 	 R. W. Angus
Geelong	 	 	 G. W. Marshallsea
Horsham	 	 	 J. W. Heid
Metropolitan	 	 	 L. M. Jones
Traralgon	 	 	 A. Jacka
Warrnambool	 	 	 F. G. Lodge

The Honorable E. R. Meagher, M.B.E., E.D., M.P.

Minister of Transport 100 Exhibition Street Melbourne 3000

Sir,

In accordance with the requirements of Section 128 of the Country Roads Act 1958 No. 6229, the Board has the honour to submit to you for presentation to Parliament the report of its proceedings for the year ended 30th June, 1975.

The Board thanks you, Sir, for your support and interest in its activities and wishes to place on record its appreciation of the continued co-operation and assistance of other State Ministers, Government departments, State instrumentalities and municipal councils.

We have the honour to be,
Sir,
your obedient servants

R. E. V. DONALDSON, A.A.S.A. (Senior), A.I.M.A., F.C.I.T., J.P., Chairman

T. H. RUSSELL, M.Eng.Sc., B.C.E., Dip.C.E., C.E., F.I.E.Aust., Deputy Chairman

W. S. BRAKE, B.C.E., C.E., M.I.E.Aust., Member

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## **ANNUAL REPORT 1974/75**

#### **REVIEW**

#### PROBLEMS OF FINANCE

Unprecedented steep increases in road construction and maintenance costs, without matching increases in revenue, created severe financial problems for the Board during the 1974/75 year.

Material prices soared and overall road construction prices rose by 20.2%. The price of road metal for delivery in the metropolitan urban area increased by 53.9%; hot mix, supply and lay, by 27.1%; bitumen by 84.6%; distillate by 38.3%; cement by 22.9%; steel by 14.1%; reinforced concrete pipes by 50.2% and reinforced concrete box culverts by 99.4%.

Wages increased by 13.4% after the huge 34.1% increase in the previous year. Salaries increased by 11.6% following the 29.7% rise in 1973/74.

In recognition of the Board's need for additional revenue the State Government increased motor registration fees as from 10th February 1975 by 35%. Notwithstanding this increase the Board was forced to institute drastic economies especially in the last quarter of the year. The workforce was retrenched by some 360 men and staff recruitment was severely restricted. Works in progress were retarded and several new projects postponed. Road maintenance work was reduced to a minimum compatible with safety and long term economy.

In the urban areas of Melbourne, Geelong, Ballarat and Bendigo funds were barely adequate for the continuation of current projects, leaving little scope for commencing new projects which are urgently required.

#### Particular Problems of Rural Roads

The inadequacy of funds provided by the Commonwealth for rural roads is very serious.

The Commonwealth Aid Roads Act 1969 placed emphasis on urban roads, thereby directing a concentration of effort on these roads. The current Commonwealth Roads Grants Act and National Roads Act further reduce the support for rural roads other than national highways.

The funds provided by the Commonwealth for expenditure on national highways have resulted in a serious reduction in the amount of funds provided by the Commonwealth for rural arterial roads and rural local roads.

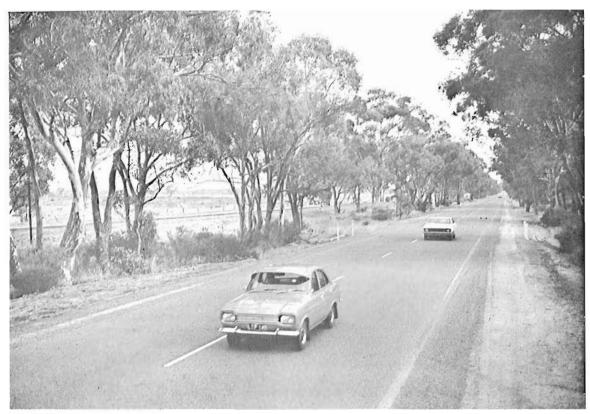
While the Commonwealth Government has stated that it intends to finance in full all work on national highways, Victoria in 1974/75 was forced to expend \$2,339,000 from its own funds on the Hume Highway and Western Highway to meet the cost of works in progress.

During the final three years, 1971/72–1973/74, of the Commonwealth Aid Roads Act 1969, Commonwealth grants to Victoria for rural roads totalled \$60.76 million. Under current Commonwealth legislation an amount of \$92.46 million, which includes the supplementary grants made in 1974/75, is provided for rural roads in the three year period from 1st July 1974 to 30th June 1977. However, \$59.55 million of this sum is required to be spent on national highways, i.e. the Hume Highway and the Western Highway, leaving only \$32.91 million for all other rural roads

The Roads Grants Act 1974 provides \$3.7 million in 1974/75, reducing to \$2.8 million in 1976/77, for the construction of rural arterial and developmental roads. No Commonwealth funds are provided for the maintenance of these roads. The length of rural arterial roads under this current legislation is  $15,380 \, \text{km} (9,560 \, \text{miles})$  compared with a length of only  $4,040 \, \text{km} (2,510 \, \text{miles})$  under the Commonwealth Aid Roads Act 1969. Finance for the construction and maintenance of rural local roads is also most inadequate.

The Victorian system of rural State highways and other declared roads is approximately  $21,700~\rm km$  ( $13,500~\rm miles$ ) in extent and about  $90\,\%$  of this length has a sealed surface. It is necessary each year to carry out a programme of pavement reconstruction and resealing work of sufficient size to prevent deterioration of the existing asset. A deficiency of about  $260~\rm km$  ( $160~\rm miles$ ) of reconstruction and  $450~\rm km$  ( $280~\rm miles$ ) of reseal annually cannot be carried out because of lack of funds. Such deficiencies are cumulative and in a relatively few years will build up to a massive rehabilitation problem similar in size to that which faced the State in the late  $40s~\rm and~early~50s$ .

Already, during the wet winter of 1974, there were increased pavement failures on the rural roads. This condition will accelerate and unless adequate amounts of money are made available the danger exists that large parts of the rural road system will deteriorate to such an extent that many additional lengths of pavement will fail. This financial situation developed during the period of the Commonwealth Aid Roads Act 1969 and is accelerating more rapidly under the current Acts. No amount of additional expenditure on national highways will provide a solution. Money must be made available to enable the State to apply the appropriate remedies on the ordinary rural roads.



Section of the Calder Highway reconstructed near Kurting, between Bendigo and Charlton.

#### Undesirable Features of Commonwealth Legislation

A detailed account of the funds made available to Victoria from 1st July 1974 to 30th June 1977 under the Commonwealth National Roads Act and the Commonwealth Roads Grants Act in on Page 22 of this Annual Report.

The most undesirable feature of the Commonwealth legislation is the fact that the amounts provided under the Act are much less than those recommended by the Commonwealth Bureau of Roads following a comprehensive road needs survey. The Bureau has recommended \$61 million more than granted under the Act during the three year period — a difference which is all the more marked by the fact that the Bureau's recommended level of grants allowed for an inflationary factor of only  $6\,\%$  per annum which is considerably less than the present inflation rate of over  $20\,\%$  being experienced in the Board's work.

After allowing for inflation the Commonwealth funds to be made available to Victoria as contained in the National Roads Act and the Roads Grants Act will be 18.6% less than those received over the preceding three years in terms of real financial capacity to perform works.

Other undesirable features of the legislation concern the intrusion of the Commonwealth into the development of Victoria's road system in accordance with the priorities and standards determined by Victoria.

These features include:

#### National Roads Act

- 1. The Commonwealth Minister for Transport may request the State to submit for his approval a programme of proposed projects to be carried out on national roads, i.e. national highways, export roads and major commercial roads.
- 2. The Commonwealth Minister for Transport may modify the State's programme of proposed projects.
- 3. The Commonwealth Minister for Transport may
  - (a) notify a State of the standards to be observed in connection with the construction and maintenance of national roads,
  - (b) notify a State of the order in which work in connection with national roads should be carried out,

(c) after consultation with the State, notify the State of the works on national roads that the Commonwealth Government considers necessary to be carried out.

#### **Roads Grants Act**

- 1. The Commonwealth Minister for Transport may require a State to submit programmes of work of a specific kind for his approval.
- 2. The Commonwealth Minister for Transport may require a State to submit programmes of work on the construction of roads designated as "urban arterial roads" to include all projects whether they are to be financed from Commonwealth, State or local authority funds.
- 3. If the Commonwealth Minister for Transport notifies a State that he is satisfied that the State or a local authority has expended any money on the carrying out of projects on roads designated as "urban arterial roads" that were not in the programme of projects approved by the Minister, the State will be required to repay the amount received under the Act or such lesser amount as the Commonwealth Minister for Transport determines.

#### FUTURE MAJOR ROAD PROPOSALS IN THE METROPOLITAN AREA

During the year much progress was made by the Board in the development of a plan of its intentions for future major road projects in the Melbourne metropolitan area. The plan was being formulated as part of a review of metropolitan Melbourne's roading requirements following the tranfer to the Board of the roading responsibilities of the Melbourne and Metropolitan Board of Works on 1st July 1974.

The projects considered for inclusion in the plan would greatly improve conditions for motorists and give an improved degree of service and safety. Particular emphasis was given to projects which could be integrated with the pattern of development envisaged in Melbourne's regional planning scheme and those projects which would service the proposed growth corridors.

The proposed routes of many of the projects to be included in the plan have been known for some years. Other projects are being investigated in depth by the Board in close consultation with other relevant authorities, local municipal councils, and representatives of local communities.

Some of the major projects being considered for inclusion in the plan of intentions are:

#### • Outer Ring Road

The route of the proposed outer ring road swings in a wide arc around Melbourne from Frankston north through Noble Park to Ringwood (the Scoresby Freeway route), thence north-west towards Greensborough (section now under investigation) where it follows the proposed F5 freeway reservation west across the northern suburbs through Broadmeadows to Keilor. The route south-west from Keilor to join the Princes Freeway West (Geelong Road) in the vicinity of Altona North has yet to be finally determined.

#### ■ Lower Yarra Freeway — F9 Extension

The extension of the Lower Yarra Freeway (F9) from Graham Street, Port Melbourne to Kingsway near Grant Street would provide for three lanes of traffic in each direction. Sections of the extension would be on an elevated structure to pass over the railway lines and some local roads. Connections with St. Kilda Road via Grant Street and with appropriate arterial streets would be provided.

#### • South Melbourne Arterial Routes

Major arterial routes in the Port Melbourne — South Melbourne — St. Kilda area would be improved to help keep through traffic out of residential areas. Routes under consideration include Graham Street — Beaconsfield Parade — The Esplanade; Kingsway — Queens Road — St. Kilda Road; Ferrars Street — Canterbury Road to connect with St. Kilda Road; and Kerferd Road — Albert Road, between Beaconsfield Parade and Kingsway.

#### Mulgrave Freeway

The Mulgrave Freeway would be extended westerly to Warrigal Road, Chadstone. Arterial roads in the vicinity would be improved and the need for a road connection between the Mulgrave Freeway at Warrigal Road and the South Eastern Freeway at Tooronga investigated.

#### Dandenong Road, Malvern

The narrow section of Dandenong Road between Glenferrie Road, Malvern and the Caulfield shopping centre would be widened to provide three lanes in each direction.

#### • Bridge Road, Richmond

The narrow section of Bridge Road between Punt Road and Church Street would be widened to provide for three lanes of traffic each way with twin tram tracks in the centre of the road. The widened road would be similar to Bridge Road east of Church Street.

#### Eastern Freeway

The Eastern Freeway would be extended easterly from Bulleen Road, with high priority being given to investigation of a connection to Doncaster Road, North Balwyn as the first stage.

#### • Greensborough Freeway

The Greensborough Freeway would be constructed north of the intersection of Greensborough Road — Watsonia Road to connect with Diamond Creek Road bypassing the Greensborough shopping centre. Construction of the Watsonia section would be co-ordinated with the duplication of the railway line between Macleod and Greensborough.

#### • Hume Freeway

The construction of some sections of the proposed Hume Freeway from Collingwood to Craigieburn would proceed to relieve the severe congestion on roads in the Brunswick, Coburg, Reservoir and Thomastown areas.

#### Calder Freeway

The Calder Freeway would be constructed to by-pass the township of Keilor to serve the developing Melton and Sunbury corridors and provide a route through the suburbs for traffic to Bendigo and north-western Victoria.

#### ■ Tullamarine Freeway

Lancefield Road alongside the Essendon Airport would be constructed to freeway standard to provide freeway conditions from Mt. Alexander Road, Flemington to Melbourne Airport, Tullamarine. An interchange would provide access to the Essendon Airport at English Street.

#### Western Highway, Braybrook

Improvements to the narrow section of the Western Highway between Geelong Road (Princes Highway West), Footscray and Ashley Street, Braybrook.

#### Mornington Peninsula Freeway

The section of the Mornington Peninsula Freeway from north of the Frankston Freeway terminal at Seaford to Springvale Road, Edithvale would be constructed to relieve traffic congestion on the Nepean Highway south of Mordialloc and on Wells Road, particularly in holiday periods.

#### Nepean Highway

The Nepean Highway between Cochrane Street, Elsternwick and South Road, Moorabbin would be widened to provide four lanes of traffic in each direction.

#### CONSTRUCTION OF FREEWAYS AND DUAL CARRIAGEWAY ROADS

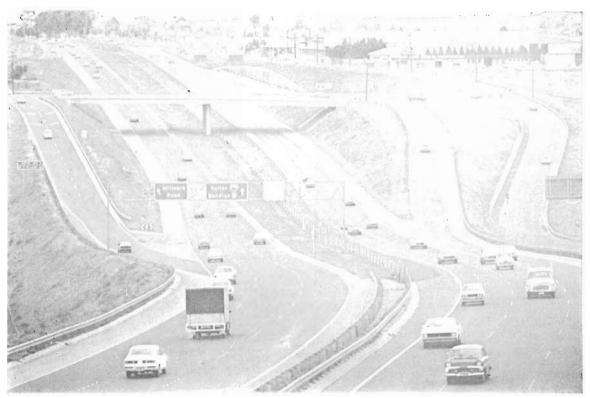
Once again the Board's construction programme was severely hampered because of limited finance. Notwithstanding this the Board was able to complete the construction of 32 km (20 miles) of additional dual carriageways on freeways and State highways during the year. This increased the total length of dual carriageways on freeways, State highways and main roads to 603 km (375 miles).

The more important dual carriageway projects completed or in progress during the year are briefly described below:

#### Calder Freeway, Keilor East

The Calder Freeway, between The Avenue and Erebus Street, Keilor East, was opened to traffic in December 1974.

The project, costing \$2.5 million, is a 2 km extension of the existing Calder Freeway, which connects to the Tullamarine Freeway at Lancefield Road, Essendon.



The Calder Freeway at Keilor East.

#### **Eastern Freeway**

The construction of the Eastern Freeway between Hoddle Street, Collingwood and Bulleen Road, Bulleen, a distance of 9 km, commenced in 1971 under the supervision of the Melbourne and Metropolitan Board of Works and was taken over by the Country Roads Board on 1st July 1974.



The Eastern Freeway under construction.

This section of the freeway will be generally of eight-lane capacity with a ten-lane capacity between the Merri Creek and the Chandler Highway interchange. The central reservation is designed to cater for a fixed rail public transport system in the median to serve East Doncaster area.

Hoddle Street, Belford Road and Burke Road overpasses over the freeway were opened to traffic during the year and work on the freeway carriageways progressed satisfactorily. The freeway is expected to be operational in 1977.

The total cost of this first section of the Eastern Freeway, including provision of the central reservation for public transport, is estimated to exceed \$80 million.

#### Frankston Freeway

Construction continued on 2.5 km of the Frankston Freeway between Eel Race Road and Armstrongs Road, Seaford.

This section is expected to be completed by mid-1977 at an estimated cost of \$0.65 million.

#### Hume Freeway, Wallan to Broadford

Construction continued over the whole length of the 34.1 km of four-lane freeway from south of Wallan to north of Broadford.

In March 1975 traffic using the Hume Highway was transferred to completed sections of the Wallan and Broadford interchanges to allow connections between the highway and the new freeway carriageways to be constructed.

Bridge structures were completed at the Wandong, Glenelgin and Strath Creek Road interchanges, the North Eastern railway, the Kilmore East-Wandong Road, McDonalds Road and Mia Road.

Construction of the freeway commenced in January 1972 and is expected to be completed in early 1976, at an estimated cost of \$33.8 million.

#### Hume Highway, Wodonga

Work on widening the Lincoln Causeway between Wodonga and the State border at the Murray River proceeded satisfactorily and should be completed late in 1975. Two lanes in each direction will be provided for traffic.

The works include the widening of five bridges. The estimated cost of the project is \$2 million.



Providing for dual carriageways on the Lincoln Causeway (Hume Highway) between Wodonga and the Murray River

#### Mornington Peninsula Freeway

The section of Mornington Peninsula Freeway between the Nepean Highway, Dromana and Jetty Road, Rosebud was completed with the opening of the Kangerong

Avenue overpass, Dromana in July 1975. This 8 km section of freeway cost more than \$7 million.

When completed the Mornington Peninsula Freeway will extend from the Frankston Freeway, north of Frankston to Canterbury Jetty Road, Blairgowrie.

#### Mulgrave Freeway

Work advanced satisfactorily on the construction of 3.5 km of the Mulgrave Freeway between Springvale Road, Mulgrave and Forsters Road, Mount Waverley and on the earthworks along the adjoining section to Stanley Avenue, East Oakleigh. The section of freeway between Springvale Road and Forster Road is expected to be completed early in 1977.

Stephensons Road overpass across Scotchmans Creek and the Mulgrave Freeway was opened to traffic in June 1975. Construction proceeded on the bridge structures at Ferntree Gully Road, Blackburn Road, Forster Road and Stanley Avenue.

#### Princes Freeway West (Geelong Road)

Work progressed on the widening of the Princes Freeway to three lanes in each direction from the Lower Yarra Freeway to the Maltby By-pass Road near Werribee, a distance of 12 km. The project is estimated to cost \$4.1 million. The first section from the Lower Yarra Freeway to Point Cook Road is scheduled for completion in December 1975.

The Princes Highway is also being widened to three lanes in each direction between McDonalds Road and the Old Geelong Road, Brooklyn. This work is scheduled for completion in early 1976 and is estimated to cost \$0.55 million.

#### South Gippsland Freeway

Construction works continued on the southerly extension of the South Gippsland Freeway from the Princes Highway East to the South Gippsland Highway at Hampton Park

Bridges across the Gippsland railway line and the Hallam Main Drain were completed during the year.

This section of freeway is expected to be completed early in 1977.

#### South Gippsland Highway

Construction of dual carriageways of the South Gippsland Highway, between Cranbourne and the South Gippsland Freeway construction works at Hampton Park, a distance of 17 km, was completed.

A new overpass at the Y-junction of the South Gippsland Highway and the Bass Highway was almost completed at the end of the year. The estimated cost of the intersection improvements is \$1 million.



Dua! carriageways constructed on the South Gippsland Highway.

#### Western Freeway, Myrniong

The construction of 5.8 km of freeway to by-pass the township of Myrniong is expected to be opened to traffic in October 1975 at an estimated cost of \$3 million.

The project will connect the Pentland Hills and the Pykes Creek sections of the Western Freeway.



Work in progress on the Western Freeway (Myrniong Section).

#### Nepean Highway, Mentone

Work progressed on the widening of the Nepean Highway to three lanes in each direction between Centre Dandenong Road, Cheltenham and Lower Dandenong Road, Mentone.

The widening of the highway is estimated to cost \$1.3 million and is scheduled for completion in September 1975.

#### High Street, St. Kilda

During the year the major works involved in the reconstruction and widening of High Street, St. Kilda between Carlisle Street and the St. Kilda Junction were substantially completed and opened to traffic.



Widened and reconstructed section of High Street, St Kilda.

The project included the construction of approximately 1.9 km of dual carriageways, each of four traffic lanes, and the relocation of the tram tracks. The estimated cost of the project is \$11.2 million. The work was commenced under the supervision of the Melbourne and Metropolitan Board of Works in 1973.

The new dual carriageways replace the old narrow bottleneck section of High Street, providing continuous dual carriageways between the St. Kilda Junction and Carlisle Street. In conjunction with this work the section of Punt Road northerly from St Kilda Junction to Raleigh Street was also reconstructed with dual carriageways.

#### **Hoddle Street**

The widening of Hoddle Street, Collingwood between Victoria Parade and Alexandra Parade was completed during the year to provide dual carriageways each of four traffic lanes. The work included the construction of an eight-lane overpass to carry Hoddle Street over the Eastern Freeway.

The Hoddle Street-Punt Road route between Clifton Hill and St. Kilda is one of Melbourne's major arterial routes by-passing the central Melbourne area and will become one of the major feeder routes to the Eastern Freeway.

In the past, with traffic restricted to two lanes in each direction, an average of 22,500 vehicles used Hoddle Street between 7.00 a.m. and 7.00 p.m. each week day. Traffic volumes are expected to further increase on the opening of the Eastern Freeway.

Traffic signals at the various intersections with Hoddle Street will be synchronized to improve traffic flow.

The total cost of widening this section of Hoddle Street, including land acquisition, is estimated to be \$8.7 million.

The work was commenced by the Melbourne and Metropolitan Board of Works in 1973 and taken over by the Board on 1st July 1974.



Dual carriageways provided on Hoddle Street, Collingwood.

#### Johnson Street Bridge — South Melbourne City

Work on the construction of the Johnson Street bridge and its approach roads commenced under contract in January 1975.

This new crossing of the Yarra River is located approximately 0.7 km downstream of the Spencer Street bridge and will consist of dual four-lane structures. The approaches will connect the bridge to Footscray Road at Mountain Street on the north side of the river, and Lorimer, Montague and Brady Streets on the south side of the river.

The works are designed to be compatible with the proposed freeway F9 connecting West Gate Bridge approaches with Kingsway and St. Kilda Road.

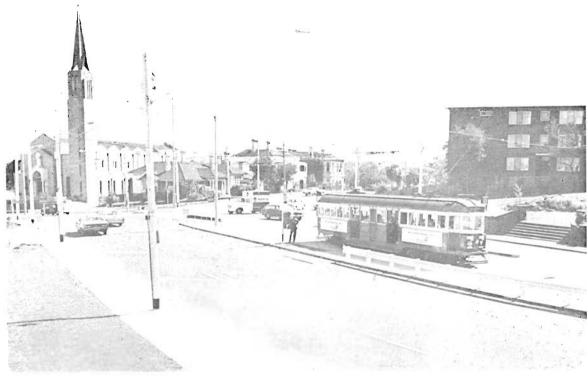
The construction of the new bridge will prevent shipping access to wharves and dry dock facilities upstream. Replacement wharves have therefore been constructed in Victoria Dock, and the Duke's and Orr's dry dock will be replaced by a floating dry dock purchased in Germany and located downstream of the new bridge at a mooring facility in the Interstate Swinging Basin.

The bridgeworks and the necessary road approaches are expected to be complete by late 1977 at an estimated total cost of approximately \$30 million.

#### **USAGE OF ROADS**

In August 1974 the Commonwealth Bureau of Statistics conducted a survey throughout Australia to obtain among other things, information about the means by which persons travel to work and students travel to school, university, or other type of educational institution.

The findings of the study indicated a large increase in the percentage of persons travelling by car to work and to educational institutions since 1970. The findings of the survey are consistent with the results of the Board's traffic counts. The convenience of motor car travel and the need for most people in the community to have access to a motor car for recreational, shopping and emergency purposes as part of the community's desire for an improving standard of living are no doubt reflected in the findings of the survey.



Works to improve the intersection of Power Street, Riversdale Road, and Wallen Road were carried out by the City of Hawthorn with financial assistance from the Board.

The main features of the survey relating to Victoria as published by the Bureau were:

- (a) persons who travel to work:
  - in August 1974, of the 1,295,000 persons who travelled to work, more than two out of every three (890,000) travelled by car and only one in five (259,000) used public transport.
  - between May 1970 and August 1974, the percentage of persons travelling to work by car increased from 58.0 to 65.7 in Melbourne and from 71.8 to 80.0 in other areas
  - in the same period the proportion of persons using public transport in Melbourne fell from 30.9% to 24.4% and in other areas from 6.7% to 3.4%.
- (b) students who travel to school, university, etc:
  - In August 1974, 821,000 students travelled to school, university, etc., 197,000 using public transport and 186,000 travelling by car.
  - $\bullet$  public transport was used by 20.4% of students in Melbourne and 32.3% of students in other areas.
  - between May 1970 and August 1974, the percentage of students travelling by car increased from 15.7 to 23.1 in Melbourne and from 16.5 to 21.4 in other areas.

#### **ROAD PLANNING STUDIES**

The need to undertake road planning studies in which community attitudes have every opportunity of being considered is recognised by the Board as an essential factor in investigating requirements for particular road improvements, especially in urban areas. The social and environmental impacts of road proposals are receiving more detailed consideration than at any period in the Board's history.

#### Ringwood Roads Impact Study

The Ringwood Roads Impact Study was commenced in September 1974 with the objective of investigating the effects of four alternative road proposals on the environment, the community structure and aesthetic enjoyment of the Ringwood-Donvale-Mitcham area. Three of the alternatives involved the construction of a freeway or major road and the fourth alternative was restricted to the improvement of road services by traffic management and minor intersection works.

The factors being examined in the study include:

- the effect on open space, historical buildings and residents in the areas under study,
- the number of properties that may have to be acquired and the ability of the residents affected to be relocated both physically and socially,
- landscape quality and vistas, and the ecology of the study area; and
- the bands of likely noise and atmosphere pollution, and positive remedial measures that could be adopted.



Reconstructed and realigned section of the Goulburn Valley Highway between Trawool and Kerrisdale.

The consultant engaged by the Board to carry out the study obtained views and suggestions from municipal councils, community groups and interested individuals. Because of a possible conflict of interests of a principal of one of the sub-consultants engaged in sociological aspects of the study, an independent Board of Review was appointed to review the work already carried out by the sub-consultant. In summary, the Board of Review found that the work that had been done on the sociological aspects of the study constituted a proper basis for a reasonable and objective assessment of the alternatives under consideration.

The adjacent section of the Eastern Freeway corridor between Thompsons Road, Bulleen and Mitcham Road, Donvale was being examined by the Melbourne and Metropolitan Board of Works for transportation improvements. In June 1975 the State Government directed that this study and the Ringwood study be combined. The management committee for the combined study includes representatives of the Ministry of Transport, Ministry of Planning, Ministry of Conservation, Melbourne and Metropolitan Board of Works, and the Country Roads Board. To assist the management committee Mr H. Watt, who has had extensive experience in the management field, has been appointed as an independent study manager.

#### **Geelong Transportation Study**

The Geelong Transportation Study was completed in 1972/73 and the consultants recommended three alternative road improvement proposals. The first alternative involved only those new arterial roads which were already envisaged in the Geelong Town Plan. The second alternative was based on a north-south freeway by-passing the urban centres to the west, and the third alternative was for a central freeway which would attract the maximum possible proportion of the local traffic demand.

A further study of the environmental and social benefits and costs of these alternatives was undertaken by the Geelong Regional Planning Authority with financial assistance from the Cities Commission and the Board. The Board also provided technical support concerning design feasibility and estimates of traffic, and was represented on the Technical Advisory Committee. The Study incorporated an extensive community involvement programme and the findings were recently made available to the public.

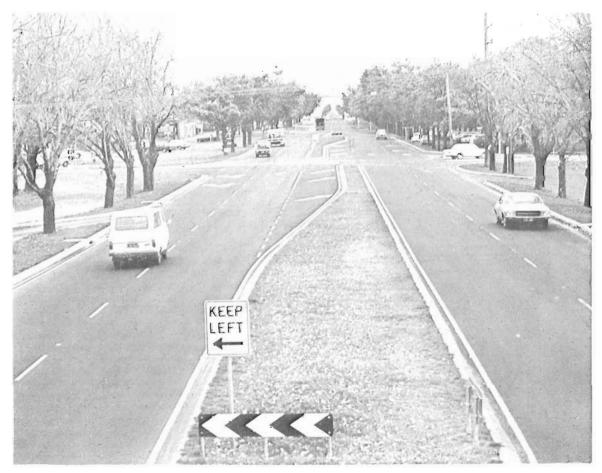
The Board has been requested by the Geelong Regional Planning Authority to comment on the findings and the discussion papers prepared by the consultants.

#### **Ballarat Transportation Study**

The consultant's final report on the Ballarat Transportation Study was released in December 1971. The recommendations generally provided for a freeway by-pass north of Ballarat to cater for traffic not destined for the city, the development of a by-pass through the northern suburbs and improvements in and near the central area.

The Board accepted responsibility for planning the freeway by-pass and design is in progress to ensure that residential and industrial development will be clear of the freeway. Ballaarat City Council has also undertaken to control development along the line of the by-pass through the northern suburbs.

A traffic management study including a public meeting concerning the central Ballarat area, which was commenced by the Board during 1973/74, was completed in financial year 1974/75. The Board and Ballaarat City Council held detailed discussions on the basis for future road planning and traffic management in the central city area.



The Western Highway, reconstructed to provide dual carriageways at Ballarat West.

#### Western Highway Corridor

The need for improvements in the Western Highway corridor in Sunshine City was the subject of detailed investigation during the year.

The results of the Board's investigation were summarised in a report and publication entitled "Road Planning Report, Western Suburbs, Sunshine—St Albans Area". The report contained information about the social, economic and physical structure of the corridor; road transportation needs at present and in 1990; road transportation improvement proposals including a comparison of five alternative alignments in the proposed Western Freeway corridor evaluated on the factors of community impact, traffic and accessibility, cost and economic impact; and further studies of the arterial road system in the corridor, integrated with other transportation systems.

The Sunshine City Council expressed opposition to the Board's suggested freeway route and employed a consultant to obtain independent advice. The consultant's report to the Council questioned the need for a freeway in this area, but concluded that if a freeway were to be provided it should be located along a southern route mentioned in the Board's report. The consultant's report is being examined by the Board.

#### MEDIAN SAFETY BARRIER WALL

A new type of median barrier wall designed to more safely protect traffic from out of control vehicles travelling in the opposite direction has been built by the Board along a section of the Princes Freeway (Geelong Road) near Laverton.

The wall will also reduce the severity of injury to the occupants of out of control vehicles. Head-on collisions, or side-swiping across the centre of the roadway, are virtually eliminated by the barrier.

The barrier wall, between 80 cm (32 inches) and 150 cm (60 inches) high, is made of solid concrete specially shaped to redirect vehicles back on to the carriageway on which they are travelling should they run off course and strike the wall. The shape is designed so that initially, only the tyres of the vehicle running off course strike the wall and are redirected towards the roadway. Tyres and vehicle suspension thus absorb much of the shock of impact, reducing the severity of damage to the vehicle.

The Board proposes to build similar barrier walls on some other busy highways and major roads where the relatively narrow width of the roadway reservation makes it impossible to provide wider medians.



Section of median barrier wall built along the Princes Freeway near Laverton.

The Board imported a special self-propelled concrete forming machine, the first of its type in Australia, to build the barrier walls efficiently and economically. The new machine, costing approximately \$100,000 is capable of forming median barrier walls of up to 1.8 metres (70 inches) in height. It can also be used to form concrete bridge parapets and kerb and channelling and to line open drains. Completely automated, it is capable of forming more than 500 metres (550 yards) of median barrier wall 80 cm (32 inches) high per day.

Electronic sensors following a preset line automatically control the direction of the machine and its elevation above the ground to produce a barrier wall in the required position and of the required height.

Pre-mixed concrete is fed into a hopper at the front of the machine and lifted into a silp-form, called a 'mule', mounted under the machine. The concrete is then compacted by internal and surface vibration. As the machine moves forward the concrete is slip-formed through the mule to form the median barrier wall.

Even after severe impact, damage to the new barrier walls is minimal, thus reducing both maintenance costs and the period when the road must be partly closed whilst repairs are made.

#### PRICE ADJUSTMENT CLAUSES

During the year the Board found it necessary to depart from its long established practice of entering into fixed price contracts. Price adjustment clauses were included in new contracts entered into by the Board subsequent to August 1974.

Prior to August 1974, the Board's contracts did not include price adjustment clauses and it was left to the contractors to allow for expected price escalations in their tender prices. Many representations were received by the Board from contractors for financial relief as a direct result of the unprecedented rises in costs of labour and materials.



Reconstructed section of the Calder Highway providing dual carriageways in Bendigo City.

The risks involved in tendering on a fixed price basis in such an inflationary climate were far beyond those normally required to be taken into calculations by contractors. For these reasons the Board decided to include price adjustment clauses in its contracts.

The formula used by the Board in its price adjustment clauses for road and bridge construction contracts involved the use of a labour index and a material index. The "Adult Males Index Number for the Building and Construction Industry Group for Victoria" published by the Commonwealth Bureau of Statistics was selected for the

labour index and the "Wholesale Price Index of Materials Used in Building Other Than House Building — Special Purpose Index Group for Melbourne" was selected for the materials index. Price adjustments are made in relation to the completed work for the period concerned on the basis of 35% of labour cost increases as disclosed by the labour index and 45% of materials cost increases as disclosed by the materials index.

#### CHANGE IN MEMBERS OF BOARD

#### Retirement of Mr J. D. Thorpe

Mr J. D. Thorpe, C.E., F.I.E. Aust., M.I.T.E. (U.S.), F.C.I.T. retired as Deputy Chairman of the Board on 10th January 1975, after 49 years service.

Mr Thorpe joined the Board in 1926 as a junior clerk and transferred to the engineering staff as a junior engineering assistant the following year. He qualified as an engineer in 1933.

During his long and distinguished career with the Board Mr Thorpe held many positions including Assistant Asphalt Engineer, Assistant Divisional Engineer – Dandenong, and Assistant Highways Engineer. In 1956 he was seconded to the Traffic Commission and became the Commission's first Chairman. In 1968 Mr Thorpe returned to the Board as Board Member and was appointed Deputy Chairman in 1971.

As Chairman of the Traffic Commission for 12 years Mr Thorpe took a prominent part in the preparation of the Victorian Road Traffic Regulations, the setting up of the State Accident Record System, the Metropolitan Route Marking System and the Clearway System, as well as the preparation of standards for the design and use of traffic control signals and road signs in use in Victoria.

#### Mr T. H. Russell appointed as Deputy Chairman

Following Mr Thorpe's retirement Mr T. H. Russell, M.Eng.Sc., B.C.E., Dip.C.E., C.E., F.I.E.Aust. was appointed Deputy Chairman of the Board.

Mr Russell joined the Board's staff in January 1943 as a Diplomate Engineer and has held the positions of Assistant Divisional Engineer – Traralgon, Assistant Engineer for Plans and Survey, Assistant Bridge Engineer, Deputy Chief Engineer – Bridges, Deputy Chief Engineer, and Chief Engineer. In 1971 he was appointed as Board Member.

#### Mr W. S. Brake appointed as Board Member

Following the appointment of Mr T. H. Russell as Deputy Chairman of the Board, Mr W. S. Brake, B.C.E., C.E., M.I.E.Aust. was appointed as Board Member.

Mr Brake joined the Board's Bairnsdale Division in 1949 after completing his Civil Enginering Degree at the University of Melbourne. Between 1953 and 1958 he served in Benalla and Dandenong Divisions and later held the positions of Assistant Divisional Engineer — Dandenong, Assistant Deputy Chief Engineer — Road Design, Deputy Chief Engineer, and Chief Engineer.

## TRANSFER OF PERSONNEL FROM MELBOURNE AND METROPOLITAN BOARD OF WORKS

On 1st July 1974, the Metropolitan Bridges Highways and Foreshores Act No. 8573 came into effect and the Board became the principal road construction authority for the State by assuming responsibility for the design and construction of those metropolitan roads and bridges which were formerly under the control of the Melbourne and Metropolitan Board of Works.

The legislation also provided the opportunity for M.M.B.W. staff engaged on roadworks to transfer to the Board without loss of status or adverse effect on their previous conditions of employment. On 1st July 1974, 213 personnel made up of 114 salaried staff and 99 field employees transferred to the Board.

Salaried officers were absorbed into the establishments of the following areas within the Board:

Bridge Sub-branch	35
Materials Research Division	1
Metropolitan Division	3
Plans and Surveys Division	33
Road Planning Division	12
Traffic Engineering Division	9
Urban Projects Sub-branch	18
Metropolitan Transportation	
Committee (seconded)	1
Estates Section	2

Field employees were incorporated into the establishment of the Urban Projects Sub-branch, Metropolitan Division, Materials Research Division and Central Depot Store, Syndal.

The Urban Projects Sub-branch is a new Sub-branch created in July 1974 and staffed initially mainly by officers transferring from the M.M.B.W. to administer the planning, design and construction of specific major projects in the metropolitan urban area. The Sub-branch is headed by Mr V. R. Moll who has the title of Chief Urban Projects Engineer.

The Board greatly appreciates and welcomes the skill, expertise and technical knowledge possessed by the officers and employees who transferred from the Melbourne and Metropolitan Board of Works and is proud that these personnel have now joined the Board's work force.

#### FINANCE

After deducting the cost of collecting revenue received under the Motor Car Act, the the total funds available for expenditure by the Board during the year, including the allocation from the Roads (Special Projects) Fund, was \$166,626,355. The funds were derived from:—

State sources Commonwealth sources	\$ 86,817,945 78,976,800
Balance brought forward from year 1973/74	831,610
	\$166,626,355

#### RECEIPTS

The Board's receipts were obtained from the following main sources —

#### A. State Sources:

1. Motor Registration Fees:

Fees payable on the registration and re-registration of motor vehicles and trailers less the costs of collecting the fees (excluding Metropolitan omnibus registration fees and the specified proportion of registration fees paid to the Roads (Special Projects) Fund).

2. Registration Number Plate Fees:

Fees payable for the provision and/or replacement of number plates less the costs of providing the plates and collecting the fees.

3. Examiners' Licence Fees:

Fees payable by persons licensed to conduct motor car roadworthiness examinations, less cost of collection of the fees.

4. Authorized Log Book Fees:

Fees payable for the purchase of log books less the cost of providing the books and collecting the fees.

5. Learner Driver Permit Fees:

Seven-eighths of the permit fee and the permit extension fee payable by applicants for and/or holders of learner driver permits less seven-eighths of the cost of collection of the fees (one-eighth less one-eighth cost of collection is paid to the Drivers' Licence Suspense Account).

6. Drivers' Licence Testing Fees:

Seven-eighths of \$4 of the fee payable for the test of proficiency of candidates for motor car drivers' licences less seven-eighths of the cost of conducting the test and collecting the fee (one-eighth of \$4 less one-eighth cost of collection is paid to the Drivers' Licence Suspense Account) and the amount of each fee above \$4 is paid to the Consolidated Fund.

7. Motor Car Drivers' Licence Fees and Tractor Drivers' Licence Fees:

One-eighth of the fees payable for the issue of drivers' licences less one-eighth of the cost of collecting the fees (one-half, less one-half cost of collection, is paid to the Consolidated Fund; one-quarter, less one-quarter cost of collection, is paid to the Municipalities Assistance Fund; one-eighth, less one-eighth cost of collection, is paid to the Drivers' Licence Suspense Account).

8. Motor Driving Instructors' Appointment and Testing Fees:

Fees payable by candidates for Motor Driving Instructors' Licences, less cost of collection of the fees.

9. Motor Driving Instructors' Licence Fees:

One-quarter of the fees payable for the issue of Motor Driving Instructors' Licences less one-quarter of the costs of collection of the fees (one-half, less one-half cost of collection, is paid to the Consolidated Fund; one-quarter, less one-quarter cost of collection, is paid to the Municipalities Assistance Fund).

10. Unregistered Vehicle Permit Fee:

A fee for the issue of a permit to use an unregistered motor car or trailer on a highway for a period of not more than 7 days, less the costs of collection of the fee.

11. Proprietorship Notification Fee:

A fee payable with notification by a proprietor of a motor car or trailer of repossession of the item under a hire purchase agreement, bill of sale or like instrument, less the costs of collection of the fee.

- 12. Fines imposed under the provisions of the Country Roads Act.
- 13. All moneys received under Part II of the Commercial Goods Vehicles Act (tonne kilometre tax).
- 14. Municipal payments on account on main road works.
- 15. Special moneys appropriated by Parliament.
- 16. Loan Money.
- 17. Allocation from Roads (Special Projects) Fund.



Sealing the deck of the new bridge over Wattle Tree Creek on the Gelantipy Road, Tambo Shire.

#### **B.** Commonwealth Sources:

- 1. Receipts under the National Roads Act 1974, Roads Grants Act 1974, and Transport (Planning & Research) Act 1974.
- 2. Commonwealth grant for general employment purposes.
- 3. Grant towards Traffic Engineering and Road Safety Improvements.

The following table shows the funds available to the Board for the construction and maintenance of roads in 1974/75 compared with 1973/74:—

	ltem	1973	3/4	1974/75	
- 181		\$	\$	\$	\$
	RECEIPTS FROM STATE SOURCE	ES			
	Fees under the Motor Car Act less cost of collection Less: Payment to —	37,537,474		41,984,641	
	<ul><li>(a) Interest and Sinking Fund</li><li>(b) Research Grant —</li></ul>	2,618,683		2,688,496	
	Melbourne University (c) Traffic Authority Fund (d) Tourist Fund (e) Transport Regulation Fund	4,000 354,278 708,555 584,684	33,267,274	375,375 750,749 621,528	37,548,493
	Commercial Goods Vehicle Act Municipalities Contributions Loan Funds Special Grant from State Treasury General Receipts Allocation from Roads		10,358,795 2,135,534 300,000 568,162 860,433		10,037,593 2,047,269 300,000 772,371 1,247,398
	(Special Projects) Fund		7,643,373		30,428,673
	Balance B/Fwd at 1st July		55,133,571 1,895,804		82,381,797 831,610
			57,029,375		83,213,407
	RECEIPTS UNDER COMMONWE AID ROADS ACT 1969	ALTH			
	Urban Arterial Roads Rural Arterial Roads Rural Other Roads Planning and Research		32,492,478 4,870,000 16,910,000 990,000 55,262,478		
	DECEMBER 11 IDED		33,202,110		
	receipts under Commonwealth grants				
	Regional Employment Development Scheme Traffic Engineering and Road Safety General Employment Purposes		11,106		133,583 172,217 3,000,000
			11,106		3,305,800
	RECEIPTS UNDER NATIONAL ROADS ACT 1974				
	National Highways				18,920,000
	RECEIPTS UNDER ROAD GRANT ACT 1974	S			
	Urban Arterial Roads Urban Local Roads Rural Arterial Roads Rural Local Roads Minor Traffic Engineering and				35,890,000 1,670,000 4,150,000 13,160,000
	Road Safety Improvements				640,000
					55,510,000
	RECEIPTS UNDER TRANSPORT (PLANNING AND RESEARCH)				
	ACT 1974				1,241,000

Total funds available for expenditu by the Country Roads Board		112,302,959	1	62,190,207
Less: Expenditure on Planning and Research	1,035,694		2,204,749	
Capital Expenditure (Plant, Workshops, Offices, etc.) Salaries, Operating A/cs and	1,680,563		2,589,526	
Other Admin. Expenditure	16,206,533	18,922,790	21,431,592	26,225,867
Funds available for construction and	<u></u>	10,722,170		20,225,001
maintenance of roads and bridge		93,380,169	1	35,9 <u>64,</u> 340
The following amounts were allocat the Melbourne and Metropolitan Board of Works for expenditure on roads in 1973/74:	red to			
(1) Roads (Special Projects) Fund (2) Commonwealth Aid Road	l	12,115,037		
(Urban Arterial) Fund		10,617,678		
		22,732,715		
TOTAL	\$	116,112,884	\$1	<u>35,964,340</u>

#### **EXPENDITURE**

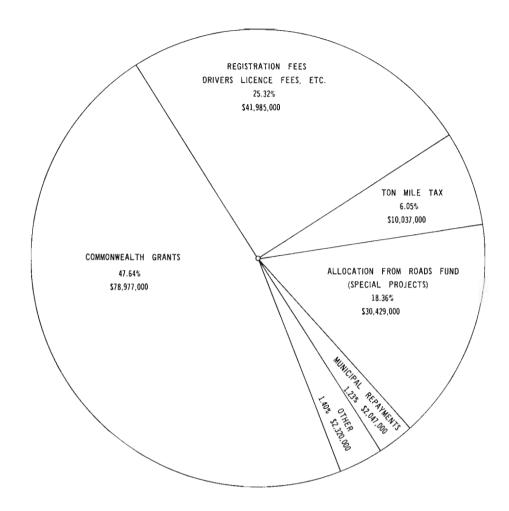
Expenditure in the form of cash payments during the financial year amounted to \$165,969,127 leaving balances of \$657,228 to be carried forward into financial year 1975/76.

The following table shows expenditure incurred by the Board, including that from the Roads (Special Projects) Fund, in the years 1973/74 and 1974/75.

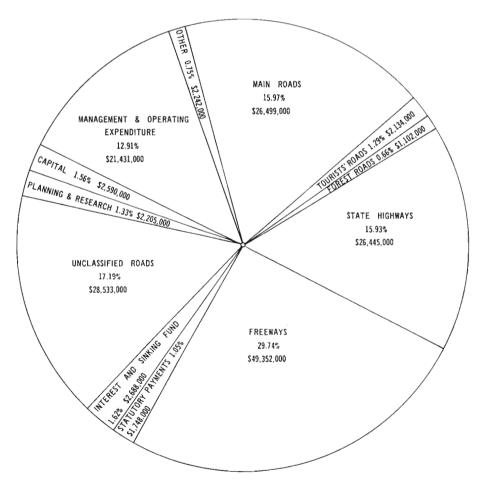
ltem	1973/74	1974/75
	\$	\$
Construction and maintenance of roads and bridges Capital expenditure (plant, workshops, offices, etc.) Planning and Research Salaries, operating accounts and other administrative expenditure Statutory payments to Traffic Authority Fund, Transport Regulation Fund and Tourist Fund Interest and Sinking Fund Payments	92,548,559 1,680,563 1,035,694 16,206,533 1,651,517 2,618,683	135,307,111 2,589,527 2,204,749 21,431,592 1,747,652 2,688,496
SUB-TOTAL Expenditure by Melbourne and Metropolitan Board of Works from Commonwealth Aid Road funds and the Roads (Special Projects) Fund	22,732,715	165,969,127
TOTAL	\$138,474,264	\$165,969,127

#### SHARING THE COSTS OF ROADWORKS

The Country Roads Act provides that no more than one-half of the amount expended from loan funds and one-third of the amount expended from the Country Roads Board Fund on main roads during the preceding financial year shall be apportioned between the various municipalities benefited thereby. The Act also provides that the amount apportioned to a council in respect of expenditure charged to the Country Roads Board Fund may be reduced where the cost of maintenance is excessive due either to motor traffic not of local origin or to timber traffic. The revenue, valuation, and rating of the municipality and its financial obligations for loan expenditure on permanent works are taken into account in deciding the level of contribution by a council.

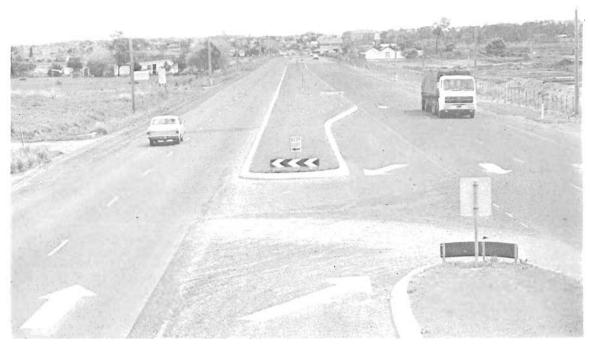


RECEIPTS 1974 - 75



EXPENDITURE 1974-75

In September 1974 expenditure on main roads in financial year 1973/74 was apportioned in accordance with the Country Roads Act, resulting in the following distribution of expenditure other than Loan Fund expenditure:



Dual carriageways constructed on the Geelong-Portarlington Road by the Bellarine Shire Council.

Expenditure from Country Roads Board Fund	\$11,843,848
Expenditure from Commonwealth Aid Roads moneys	4,943,422
Expenditure from proceeds of ton/mile tax (Commercial Goods Vehicles Act)	3,354,661
TOTAL	\$20,141,931
Amount of Country Roads Board Fund expenditure apportioned to councils	\$1,993,317

Within the limit of funds available, the Board made allocations to municipal councils for works on unclassified roads. The expenditure incurred from the allocations made by the Board in financial year 1974/75 compared with 1973/74 was as follows:

	1973	/74	1974	/75
	C.R.B.	Council Contribution	C.R.B.	Council Contribution
Patrol Maintenance	\$ 2,112,282	\$ 929,251	\$ 2,200,195	\$ 937,103
Construction, Reconstruction and Other Maintenance	17,190,492	4,238,431	18,928,299	4,642,896
TOTAL	\$19,302,774	\$5,167,682	\$21,128,494	\$5,579,999

Municipal councils were not required to contribute towards the cost of works involving an expenditure during the year of \$79,032,876 on State highways, freeways, tourists' roads and forest roads (including expenditure from the Roads (Special Projects) Fund).



Station Street, Box Hill South, reconstructed by the Box Hill City Council with financial assistance from the Board.

#### COMMONWEALTH FINANCIAL ASSISTANCE TO STATES FOR ROADS

Since 1923 the Commonwealth Government has made grants available to the various States to assist their road programmes.

In 1926 the Commonwealth Government adopted the principle of road grants being made proportional to the use of petrol, the petrol tax being increased in that year and a definite amount per gallon being "hypothecated" for roads. This principle was retained for 33 years.

In 1959 the Commonwealth Aid Roads Act severed the connection between petrol tax and road grants and made provision for allocations from consolidated revenue for distribution to the States. The Commonwealth Aid Roads Act 1964, which expired on 30th June 1969 continued this method of providing funds to the States for road construction and maintenance.

The Commonwealth Aid Roads Act 1969 covered the period from 1st July 1969 to 30th June 1974. The Act provided for the distribution to the States out of consolidated revenue over the five year period, of a total sum of \$1,252,050,000 for expenditure on road construction and maintenance and on road planning and research.

From 1st July 1974 to 30th June 1977, Commonwealth financial assistance to the States for roads will be provided under the following Commonwealth Acts:

#### National Roads Act

This Act provides financial assistance for national roads including national highways, export roads and major commercial roads.

A national highway is a road or proposed road that in the opinion of the Commonwealth Minister for Transport is or will be the principal road linking —

- (a) two or more State capitals,
- (b) a State capital city and Canberra,
- (c) a State capital city and Darwin,
- (d) Brisbane and Cairns, or
- (e) Hobart and Burnie.

or a road or proposed road that should in the opinion of the Commonwealth Minister for Transport be treated, by reason of its national importance, as a national highway.

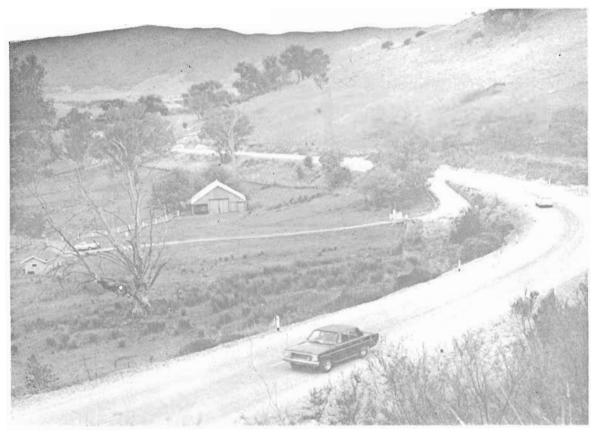
The Hume Highway and the Western Highway are declared as national highways in Victoria.

An export road is a road or proposed road that facilitates or will facilitate trade and commerce or the development of trade and commerce with other countries.

A major commercial road is a road or proposed road that facilitates or will facilitate trade and commerce or the development of trade and commerce among the States.

No roads in Victoria were declared as export roads or major commercial roads during the year.

As at 30th June 1975 the amount allocated to Victoria under the National Roads Act for the three year period is \$72,920,000 as indicated below:



The Omeo Highway, reconstructed north of Noorongong.

Year commencing	1 July 1974		1 July 1975	1 July 1976	Total
	Original	Supple- mentary			
	\$	\$	\$	\$	\$
National Highways Construction Maintenance Export roads and major commercial roads	12,800,000 1,500,000	1,120,000 130,000	16,800,000 1,600,000	23,800,000 1,800,000	54,520,000 5,030,000
Construction and Maintenance	3,100,000		4,800,000		
	\$17,400,000	\$1,520,000	\$23,200,000	\$30,800,000	\$72,920,000

#### **Road Grants Act**

This Act provides financial assistance for the following categories of roads and for minor traffic engineering and road safety improvements:

#### **Rural Arterial Roads**

Rural arterial roads are rural roads that are for the time being declared by the Commonwealth Minister for Transport to be rural arterial roads for the purposes of the Act. In general such roads are the principal highways and main roads connecting rural cities, towns and tourist areas to each other and to the system of national highways.

#### **Developmental Roads**

Developmental roads are rural roads that are for the time being declared by the Commonwealth Minister for Transport to be developmental roads for the purposes of the Act. In general such roads provide access to navigation installations, areas of mineral exploration or development, and roads opening up new tourist areas.

#### Rural Local Roads

Rural local roads are rural roads that are not national roads, rural arterial roads, developmental roads or beef roads

#### **Urban Arterial Roads**

Urban arterial roads are roads in an urban area that are for the time being declared by the Commonwealth Minister for Transport to be urban arterial roads or urban sub-arterial roads for the purposes of the Act. In general such roads carry the greatest volumes of traffic and the highest proportions of heavy vehicles.

#### **Urban Local Roads**

Urban local roads are roads in urban areas that are not national roads or urban arterial roads.

#### **Beef Roads**

Beef roads are rural roads that are for the time being declared by the Commonwealth Minister for Transport to be beef roads for the purposes of the Act.

#### Minor Traffic Engineering and Road Safety Improvements

Improvements under this heading include

- (a) works for the purpose of regulating the movement of persons or vehicles on a road, and
- (b) works designed to promote the safety of persons using a road. "Urban area" in Victoria means an area designated for the purposes of the Census taken in the year 1971 as —

Melbourne Statistical Division Geelong Statistical District Urban Ballarat Urban Bendigo

The following table shows the amounts allocated as at 30th June 1975 to the State of Victoria under this Act —

Year commencing	1 July 74		1 July <b>7</b> 5	1 July 76	Total
	Original	Supple- mentary			
Carata att (	\$	\$	\$	\$	\$
Construction of Rural Arterial and Develop-	3,700,000	450,000	3,000,000	2,800,000	0.050.000
mental Roads Construction and maintenance of Rural Local	3,700,000	430,000	3,000,000	2,800,000	9,950,000
Roads Construction of Urban Arterial	12,100,000	1,060,000	5,100,000	4,700,000	22,960,000
Roads Construction of Urban Local	33,000,000	2,890,000	38,100,000	38,100,000	112,090,000
Roads Minor Traffic Engineering and Road Safety	2,000,000	170,000	3,200,000	4,600,000	9,970,000
Improvements	1,500,000		2,100,000	2,600,000	6,200,000
	\$52,300,000	\$4,570,000	\$51,500,000	\$52,800,000	\$161,170,000

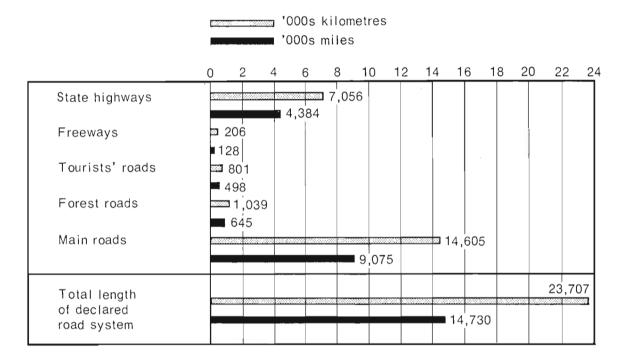
Each State is required each year to expend from its own resources on road construction and maintenance a "quota". Where, over the period of the operation of the Act, the amount of the quota exceeds the amount which a State has expended from its own resources the State shall pay to the Commonwealth an amount equal to the excess or such lesser amount as the Commonwealth Treasurer determines.

As at 30th June 1975 the quotas for Victoria were —

<sup>&</sup>quot;Rural road" means a road or a proposed road not in an urban area.

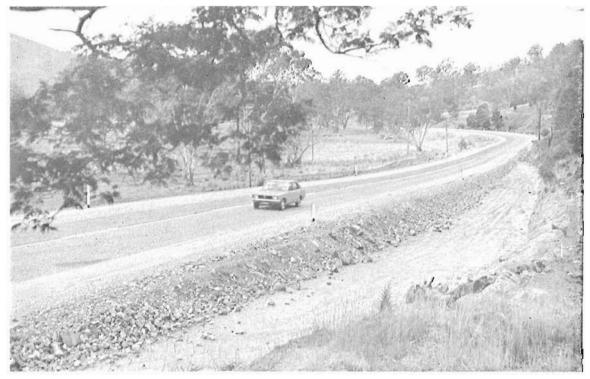
#### THE DECLARED ROAD SYSTEM

The total length of roads declared or proclaimed in Victoria under the Country Roads Act was 23,707 kilometres (14,730 miles) as at 30th June 1975.



Apart from alterations consequent upon the newly completed sections of freeways and deviations from existing declared or proclaimed roads the Board's declared and proclaimed road network was not altered during the year.

The Board has on hand from municipal councils throughout the State a large number of applications for the declaration or proclamation of additional State highways, main roads, tourists' roads and forest roads. However, the funds available are insufficient to enable the Board to accept any further statutory financial responsibilities which would accrue from the extension of the declared road system. The applications have been recorded and will be considered when the Board's financial position permits.



Section of the Northern Highway reconstructed at Tooborac.

#### STATE HIGHWAYS

State highways are the principal arteries forming interstate connections and links between the larger centres of population in the State. Some State highways in Victoria form part of the National Route system of highways with uniform route numbering throughout Australia.

The Board bears the full cost of both construction and maintenance works required to meet the needs of through traffic.

The total length of State highways was reduced by approximately 4 km during the year, due mainly to the declaration of certain sections as freeways.

The total expenditure of \$26,445,000 on Victoria's 32 State highways during the year included an amount of \$2,003,000 made available from the Roads (Special Projects) Fund

Appendix 1 includes a list of State highways declared by the Board, and details of the more significant works completed during the year on State highways are given in Appendix 2.

The Hume Highway and the Western Highway were declared by the Commonwealth Minister for Transport as national highways under the provisions of the Commonwealth National Roads Act. These declarations permitted funds made available under the Commonwealth National Roads Act to be spent on the Hume Highway and the Western Highway. During the year \$15,597,000 from Commonwealth sources and \$2,339,000 from State sources was spent on these two State highways.

#### **FREEWAYS**

A freeway is a road having dual carriageways with no direct access from adjoining properties and side roads. All crossings of a freeway are by means of overpass or underpass bridges, and traffic enters or leaves the freeway carriageway by means of carefully designed ramps.

The Board bears the total cost of all work on freeways. The total expenditure of \$49,352,000 on freeways during the year included an amount of \$16,258,000 made available from the Roads (Special Projects) Fund.

The table in Appendix 1 lists the freeways constructed by the Board and opened to traffic. The significant works completed during the year are shown in Appendix 2.



The Frankston Freeway under construction south of Eel Race Road, Seaford.

#### **TOURISTS' ROADS**

Tourists' roads proclaimed under the provisions of the Country Roads Act provide access to places of special interest to tourists, both in summer and winter. The Board bears the full cost of works required to cater for the needs of through traffic. In general the works are carried out under the direct supervision of the Board's staff.



Reconstructed section of the Great Ocean Road west of Torquay.

Details of the more significant works carried out on tourists' roads during the year are listed in Appendix 3.

The table in Appendix 1 lists the tourists' roads proclaimed under the provisions of the Country Roads Act.

#### FOREST ROADS

Forest roads proclaimed under the provisions of the Country Roads Act are situated within or adjacent to any State forest or in areas which are considered by the Board to be timbered, mountainous or undeveloped. The Board bears the full cost of works required to cater for the needs of through traffic, with approximately half the work carried out on these roads being undertaken by municipal councils on behalf of the Board

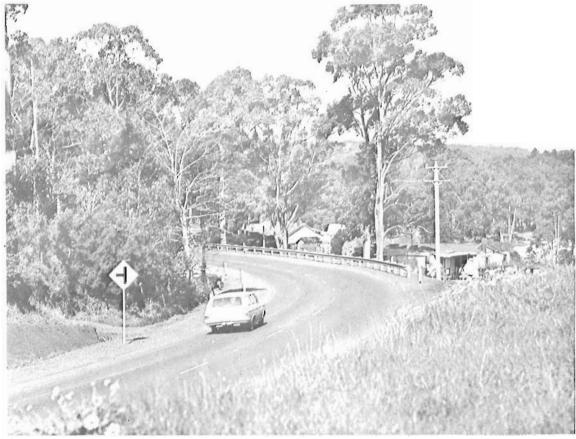
Appendix 3 lists the more important works completed during the year.

The table in Appendix 1 lists the forest roads proclaimed under the provisions of the Country Roads Act.

#### MAIN ROADS

Main roads are roads linking centres of population with other centres or with areas of industry, commerce, or settlement. Generally main roads are constructed and maintained by municipal councils to the satisfaction of, and with financial assistance from, the Board. In some cases, at the request of the council and with the approval of the Minister, works are carried out under the direct supervision of the Board's staff.

A summary of the more important works on main roads completed during the year is given in Appendix 4.



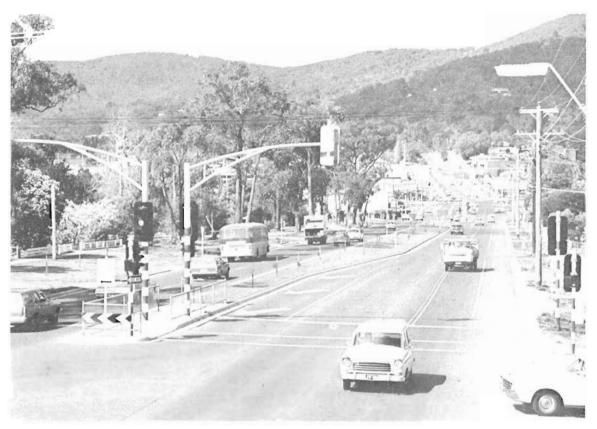
The Lilydale-Monbulk Road, reconstructed south of Mt Evelyn.

#### **UNCLASSIFIED ROADS**

Roads which are not included in the Board's declared and proclaimed road system are referred to as unclassified roads. These roads are the responsibility of municipal councils, but each year the Board provides financial assistance towards the cost of construction and maintenance works, generally in accordance with priorities allotted by municipal councils.

Municipal contributions are determined at the time the allocation is made, and are based on many factors including the nature, extent, and location of the particular work and the financial position of the municipality concerned.

A list of the more significant works on unclassified roads carried out during the year with financial assistance from the Board appears in Appendix 5.



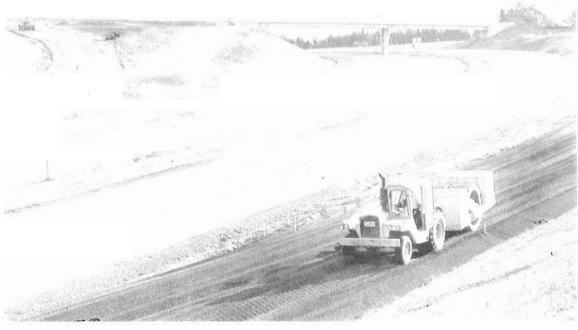
Boronia Road, reconstructed by the City of Knox with financial assistance from the Board.

### ROAD CONSTRUCTION AND MAINTENANCE

Appendices 2 to 5 list the more significant works completed during the year with funds provided wholly or partly by the Board.

In Appendix 11, the report of the Engineer in Chief, a more detailed and technical account of road construction and maintenance activities for the year is given.

The following table shows the kilometres of road declared or proclaimed under the Country Roads Act as at 30th June 1975, and the expenditure incurred on such roads during the year.



Work in progress at the Greendale interchange on the Western Freeway (Myrniong Section).

Road	Declared or Proclaimed	Road Expenditure (including Special Projects)			
Classification	Length	Patrol Maintenance	Other Maintenance	Construction and Reconstruction	
Freeways State highways Tourists' roads Forest roads Main roads	km 206 7,056 801 1,039 14,605	\$000s 1,262 7,124 991 504 6,322	\$000s 107 2,156 111 178 2,148	\$000s 47,893 17,165 1,032 416 18,029	
TOTALS	23,707	\$16,203	\$4,700	\$84,625	

#### **CONTRACTS**

#### Contracts under the Board's Supervision

Details of the types and numbers of contracts entered into showing their respective values, together with a comparison with those of financial year 1973/74 are shown in the following table:

	1974/75 No. of		1973/74	
Type of Contract	Contracts	Value	No. of Contracts	Value
Road Construction — 1 Over \$1,000,000 2 \$100,000 to \$1,000,000 3 Under \$100,000		1,313,472 33,000	1 6 1	\$ 7,255,947 1,867,422 54,762
Supply of roadmaking materials	88	2,931,605	114	3,320,139
Bituminous treatment and supply of materials	45	4,009,145	49	4,208,730
Bridge Construction — 1 Over \$1,000,000 2 \$100,000 to \$1,000,000 3 Under \$100,000	3 7 19	16,503,382 1,317,133 1,127,179	<u> </u>	 2,366,333 818,310
Components and Fabricated Steel	20	1,124,517	17	736,612
Concrete Pipes and Box Culverts	_	_	15	907,638
Construction Equipment	16	1,011,737	35	796,000
Divisional Facilities	7	287,535	1	32,000
Stores	12	2,096,800	15	2,003,256
Miscellaneous Services	29	2,210,014	18	640,401
TOTAL	249	\$33,965,519	304	\$25,007,550

These totals include contracts being financed from the Roads (Special Projects) Fund, which for the year amounted to 27 in number for a total value of \$19,404,373.

#### **Contracts under Councils' Supervision**

During the year the Board approved the acceptance by municipal councils of 198 tenders for a total amount of \$8,305,962 for road and bridge works for which the Board allocated funds in whole or part. In 1973/74 197 tenders were approved for a total amount of \$5,329,396.

The Board also approved the use of 77 municipal contracts for the supply of materials for works partly financed from funds provided by the Board compared with 88 last year.

### BITUMINOUS SURFACING

The application of a bituminous surface to roads maintains good riding qualities and protects the pavement materials from damage by motor vehicle tyres and water.

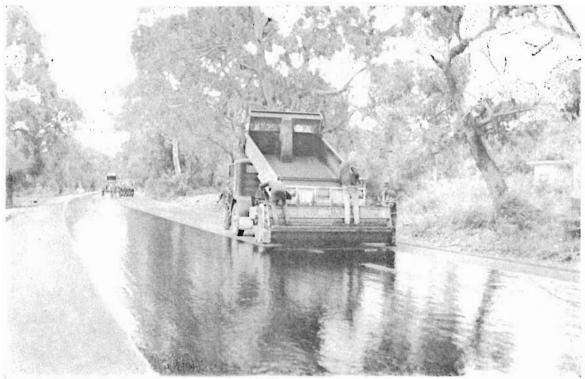
The price of bituminous materials increased dramatically during the year in line with other roadmaking materials and costs generally. The cost per tonne to the Board in purchasing bitumen over the years is reflected in the following tabulation:

	Bitumen Price
Date or Season	per tonne
	\$
1966/67	<del>4</del> 2.32
1967/68	42.32
1968/69	44.39
1969/70	44.39
1970/71	44.39
1st July 1971 to 24th January 1974	48.72
25th January 1974 (\$8.07 increase)	56. <b>7</b> 9
13th May 1974 (\$14.92 increase)	71. <b>7</b> 1
7th June 1974 (\$7.38 increase)	79.09
October-November 1974 (\$4.92 increase)	84.01
7th March 1975 (\$5.91 increase)	89.02

The Board produced 25,705 tonnes of bitumen during the year at a cost of \$2,317,105. The same quantity of bitumen last financial year would have cost approximately \$970,400 less.

A bituminous surface may be provided by the spraying of a bituminous binder covered immediately with a layer of uniformly spread aggregate which is compacted by rolling. Alternatively the bituminous surface may be applied by the spreading of a pre-mixed layer of bitumen and aggregate produced at fixed mixing plants.

The total length of bituminous surfacing including both sprayed work and plant mix work completed during the year amounted to 4,636 km at an approximate cost of \$16,898,000.



Bituminous surfacing of the Yarram-Port Albert Road in Alberton Shire.

The Board's 17 mobile bituminous surfacing units together with plant owned by municipal councils and contractors completed 4,460 km of sprayed work at a cost of approximately \$11,362,000.

Contractors operating from fixed asphalt plants completed 176 km of plant mix work on densely trafficked roads at a cost of approximately \$5,536,000, using 319,000 tonnes of asphalt.

The lengths of the various types of work completed during the year were:

- 250 km of sealing widened pavements,
- 52 km of initial sealing on dual carriageways,
- 751 km of restoration of sealed coats on reconstructed sections,
- 376 km of final sealing on initial treatments,
- 2,341 km of maintenance retreatments,
  - 228 km sealed on behalf of other State and municipal authorities, and
  - 363 km of extensions to the bituminous sealed road system of the State including 103 km of roads declared or proclaimed under the Country

The following quantities of materials were used by the Board or by contractors during the year on bituminous surfacing works:

Material	Quantity
Bitumen for sprayed work	26,100 tonnes
Bitumen for bituminous concrete	16,000 tonnes
Aggregate for sprayed work	240,800 cubic metres
Aggregate for bituminous concrete	206,000 cubic metres
Other bituminous materials for sprayedwork and maintenance	10,700 tonnes

The total length of sealed roads in the Board's declared or proclaimed road network is 21,713 km or 92% of the total length of declared or proclaimed roads.

#### LINE MARKING

The Board's line marking operations were carried out during the year by an establishment consisting of one Superintendent of Works, seven overseers and twenty-six men based nominally at the Board's Central Depot at Syndal and an overseer and two men operating in each of the board and Bendigo Divisions. In all, ten line marking units were used consistently throughout the year.

The length of line marking maintained during the year is as follows:

•	9	•		
State highways and	freeways	7,3	85 km	(4,589 miles)
Other declared and Country Roads A	proclaimed roads under the	5,0	81 km	(3,517 miles)
Unclassified roads		1,5	02 km	(933 miles)
		13,9	68 km	(9,039 miles)

The total expenditure incurred on line marking was \$673,245 compared with \$652,327 last financial year. Due to inflationary factors the unit costs of line marking increased by approximately  $30\,\%$  during the year. The unit costs are shown below.

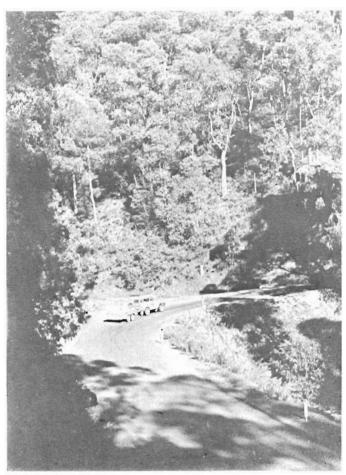
	1973/74	1974/75
	\$	\$
Cost per km of standard stripe of 3 m with 9 m gap	12.29	16.08
Cost per km of solid stripe of 75 mm width	27.63	31.17
Cost per square metre	2.78	4.00
, ,		

### ROADS TO SNOW RESORTS

During the summer months the following major improvements were carried out on those tourists' roads which give access to snowfields.

### The Alpine Road

Sealing 4.8 km (3.0 miles) between Harrietville and The Meg.



The Alpine Road near The Meg.

### The Bogong High Plains Road

Sealing 1.8 km (1.1 miles) between Howmans Gap and Turnback Creek, and sealing 3.2 km (2.0 miles) between Crankie Charlie and Dynamite Creek.

Widening 3.2 km (2.0 miles) between Dynamite Creek and Mt. Beauty.

### SNOW CLEARING

Snow clearing was carried out when required to maintain access on:

The Mount Buller Road,

The Mount Buffalo Road,

The Alpine Road to Mount Hotham, from both the Omeo and Harrietville approaches,

The Bogong High Plains Road from Mount Beauty to Falls Creek. The Bogong High Plains Road was closed beyond Falls Creek, towards the Omeo Highway, when snowfalls made it impassable.

Mansfield-Woods Point Road,

Mount Donna Buang Road,

Warburton-Woods Point Road,

Alpine Tourists' Road,

Bonang Highway,

Omeo Highway — Section 3.

Swiss built Rolba snow blowers were used in conjunction with specially equipped graders to clear the Mount Hotham Road and the car parks at Mount Buffalo and Mount Buller.

### LAND PURCHASE

During the year the Board paid compensation and costs totalling \$19.34 million for land required for the construction of new roads, the widening of existing roads or deviations from existing roads.

The following table shows the composition of the expenditure charged to the Board's funds on land purchase during the year, under both the Commonwealth road categories and the Board's road classifications.

		Commonwealth Road Category				
Road Classification	National Highways	Urban Arterial Roads	Urban Local Roads	Rural Arterial Roads	Rural Local Roads	Totals
Freeways State Highways Tourists' Roads Forest Roads Main Roads Unclassified Roads	\$000s 889 83 — — —	\$000s 9,499 400 42 — 2,953 367	\$000s    3,677	\$000s 374 610 5 6 200	\$000s   4 90 144	\$000s 10,762 1,093 47 10 3,243 4,188
Totals	\$972	\$13,261	\$3,677	\$1,195	\$238	\$19,343

The following table shows the number of land purchase transactions completed and the amount of compensation paid over the last five years.

	1970/71	1971/72	1972/73	1973/74	1974/75
Number of land purchase cases settled	1,022	977	865	864	923
Compensation and associated costs paid by the Board	\$5.00m	\$5.14m	\$10.07m	\$11.71m	\$19.34m
Reimbursement to Councils for purchase of land for unclassified roadworks	\$0.26m	\$0.33m	\$0.46m	\$0.88m	\$0.53m

The significant increase in the value of land purchased in the year 1974/75 over that of the previous year is largely attributable to the transfer to the Board of the road projects previously under the control of the Melbourne and Metropolitan Board of Works. The previous M.M.B.W. projects on which substantial land purchase expenditure was incurred were Eastern Freeway, Collingwood to Bulleen Section; Hoddle Street widening, City of Collingwood; and High Street widening, City of St. Kilda.

The average amount paid per settled case during the year was \$20,954 compared with \$13,553 in the previous year.

In order to assist owners of properties who incur hardship due to the Board's road proposals, it is frequently necessary for the Board to purchase properties well ahead of the time they are required for road construction purposes. Of the \$19.34 million spent on land compensation and costs during the year \$7.3 million was spent on properties purchased in response to owners' requests and this involved 143 individual property owners.

In some cases owners prefer the Board to purchase the whole of their properties where the portion required for road purposes has a significant effect on the continuing usage of the remainder of the property. The portion not required for road purposes can later be sold by the Board. During the year the Board sold 14 such areas of vacant land for \$170,068 and 10 residential properties with dwellings for \$241,550. Houses sold for removal resulted in receipts totalling \$67,885.

Properties purchased well ahead of the time they are required for road construction purposes are rented or leased through local estate agents. During the year the Board received \$958,868 from the rental of 628 properties with improvements erected thereon and 210 areas of vacant land.

### **BRIDGES**

#### CONSTRUCTION OF NEW BRIDGES

During the year work was commenced on the construction of 103 new bridges estimated to cost \$13,635,000, either under the direct supervision of the Board, or under municipal supervision with financial contribution from the Board. The table below shows a comparison between the number and estimated cost of bridge projects commenced in 1974/75 and those for the preceding year:

	No. Estimated Cost		1974/75	
			No.	Estimated Cost
Bridges commenced under the supervision of the Board's staff.	58	\$12,400,000	40	\$11,500,000
Bridges commenced under municipal supervision with financial assistance from the Board.	85	\$2,350,000	63	\$2,135,000
Total Bridges Commenced:	143	\$14,750,000	103	\$13,635,000

Plans were completed for 22 additional bridges estimated to cost \$4,160,000. The construction of these bridges was deferred because of the lack of adequate funds.

### LARGE BRIDGES COMPLETED IN RURAL AREAS

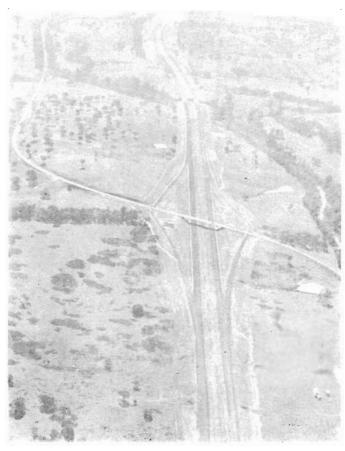
Some of the larger bridges completed in rural areas during the year under the direct supervision of the Board's staff included:

### (a) Hume Freeway — Wallan-Broadford Section:

Ten prestressed and reinforced concrete bridges totalling approximately 549 lineal metres of bridging.

### (b) Princes Highway East — Nicholson River, Shire of Tambo:

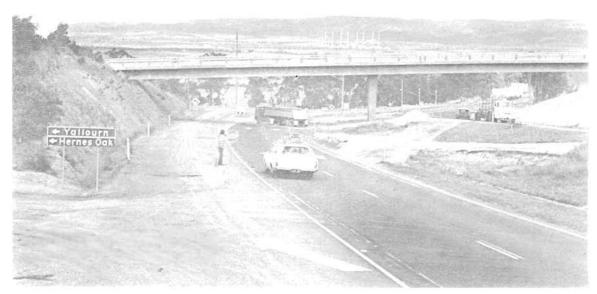
A major widening and construction of an end span on the existing bridge to finished dimensions of 111 m long by 8.5 m between kerbs, using steel girders and reinforced concrete.



Bridge over the Hume Freeway (Wallan-Broadford Section) at the Glenelgin interchange, and twin freeway bridges over Sunday Creek.

- (c) Princes Highway West Hopkins River, at Allansford, Shire of Warrnambool:
  A four-span prestressed concrete beam and reinforced concrete bridge 99 m long and 10 m between kerbs.
- (d) Princes Freeway (Haunted Hills Section) Shire of Morwell:

  A three-span prestressed concrete beam and reinforced concrete bridge 81 m long by 8.5 m between kerbs over the Princes Freeway at Hernes Oak.



The Hernes Oak interchange bridge over the Princes Freeway (Haunted Hills Section).

- (e) South Gippsland Highway Bass Highway Intersection, Shire of Cranbourne: A four-span prestressed concrete beam and reinforced concrete overpass structure 87 m long by 10 m between kerbs over the Bass Highway near Lang Lang.
- (f) Western Freeway (Pentland Hills and Myrniong Sections) Shires of Bacchus Marsh and Ballan:

Three prestressed and reinforced concrete overpass structures totalling 223 lineal metres of bridging.

Amongst some of the larger bridges completed during the year under municipal supervision with financial assistance from the Board were:

(a) Gibson-Knox Bridge — Thomson River, Maffra-Rosedale Road, Shire of Rosedale:

A complex of several bridges, the major one being a four-span reinforced concrete beam and slab bridge 55 m long and 8.5 m between kerbs. The Chairman, Mr R. E. V. Donaldson officiated at the opening ceremony on 28th May 1975.

- (b) McGauchies Bridge Bendigo Creek, Old Murray Road, Shire of Huntly:

  A three-span precast reinforced concrete slab bridge 24 m long and 7.3 m between kerbs.
- (c) Pennyroyal Creek Cape Otway Road, Shire of Winchelsea:

  A three-span precast reinforced concrete slab bridge 23 m long and 8.5 m between kerbs
- (d) Henty Bridge Salt Creek, Cape Nelson Road-Bentinck Street, Town of Portland:

A three-span prestressed concrete beam and reinforced concrete bridge 33 m long and 8.5 m between kerbs.

### (e) House Creek — Brockley Street, Rural City of Wodonga:

A three-span precast reinforced concrete slab bridge 31 m long and 8.5 m between kerbs plus a 1.7 m footway.

### METROPOLITAN BRIDGES AND OVERPASSES

Among the larger vehicular bridges in the metropolitan area completed during the year under the direct supervision of the Board's Staff, were:

### (a) Mulgrave Freeway — Stephensons Road, City of Waverley:

A four-span prestressed concrete beam and reinforced concrete bridge 156 m long by 13 m between kerbs plus two 1.8 m wide footways on Stephensons Road over the freeway and Scotchmans Creek.

### (b) Banksia Street — Yarra River Bridge, City of Heidelberg:

A three-span steel plate girder and reinforced concrete duplicate bridge  $85\,\mathrm{m}$  long providing, with the existing bridge, dual carriageways each  $10\,\mathrm{m}$  wide between kerbs and two footways each  $1.8\,\mathrm{m}$  wide.

### (c) Riggal Street, City of Broadmeadows:

A four-span prestressed concrete beam and reinforced concrete overpass 108 m long by 10 m between kerbs plus a 1.8 m wide footway crossing Pascoe Vale Road and the adjacent railway line.



Bridge over the Mulgrave Freeway at Stephensons Road.

### (d) South Gippsland Freeway — Hallam Valley Contour Drain Bridges:

Dual prestressed concrete slab and reinforced concrete bridges each 64 m long by 10.4 m between kerbs over the Hallam Valley Contour Drain.

### (e) Klauer Street — Overpass Structures, City of Frankston:

A two-span prestressed concrete beam and reinforced concrete overpass structure 52 m long with dual carriageways respectively 8.5 m and 5.5 m between kerbs plus a 1.8 m wide footway over the Frankston Freeway on Klauer Street. A three-span precast concrete beam and reinforced concrete overpass structure 35 m long with dual kerbs plus a 1.8 m wide footway over the adjacent Frankston railway line.

### GRADE SEPARATED PEDESTRIAN CROSSINGS

Grade separated pedestrian crossings considerably reduce the risk of conflict between motor vehicles and pedestrians. The Board can be involved in the provision of these crossings as follows:

- (1) the construction of pedestrian overpasses across freeways or other important arterial roads to restore access to areas on either side of the road;
- (2) the replacement of at-grade school crossings on heavily trafficked roads with pedestrian overpasses or underposses, under a scheme introduced by the State Government in 1965. The scheme provides for:
  - applications for subsidies to be submitted to the Board by municipal councils,
  - priorities to be allotted by the Road Safety and Traffic Authority and the Board, taking into account traffic volume, average speed of traffic, the number and age range of children crossing the road, and the type of road to be crossed, and
  - the costs of approved crossings to be shared equally between the Government, the Board and the municipal council concerned.
- (3) assistance to municipal councils in the preparation of plans and specifications, and supervision of construction in cases where the whole cost of construction is borne by the Council.

During the past year the following grade separated pedestrian crossings were constructed by the Board:

### Restoration of Pedestrian Access

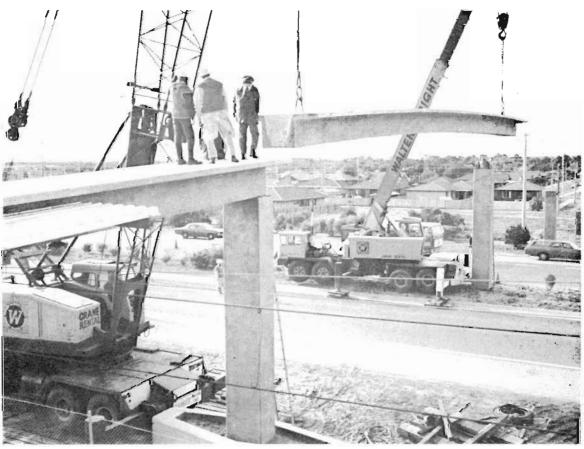
### (i) Coonan's Road, Pascoe Vale South:

A six-span prestressed concrete beam and reinforced concrete overpass  $75\,\mathrm{m}$  long by  $1.8\,\mathrm{m}$  wide.

This overpass restored access to two schools in the area.

### (ii) Frankston Freeway — Kananook Railway Station access overpass:

A five-span prestressed concrete beam and reinforced concrete overpass 109 m long by 1.8 m wide providing pedestrian access over the Frankston Freeway to the new Kananook Railway Station.



Pedestrian overpass, Frankston Freeway, during construction.

### The State Government's Scheme for Grade-separated Crossings to Serve Schools

Twenty-five structures have been approved under this scheme and sixteen have been constructed. Two overpasses were under construction at the end of the year.

The overpass across South Road in the City of Moorabbin to serve the Tucker Road Primary School, Moorabbin Technical School and St. Catherine's School was completed during the year. The overpass is a six-span prestressed concrete beam and reinforced concrete structure 143 m long and 1.8 m wide.



Pedestrian overpass of South Road, City of Moorabbin.

### ELIMINATION OF RAILWAY LEVEL CROSSINGS

Since the inception of the State Government Scheme in 1954, the Board and the Victorian Railways Board have replaced 60 railway level crossings with overpasses or underpasses as a means of reducing accidents and traffic delays. The work represents a total expenditure to 30th June 1975 of approximately \$32.6 million.

For some years up to 30th June 1974 expenditure on such projects was shared on the basis of the Country Roads Board 50%, Victorian Railways Board 5% and the Level Crossings Fund 45%. On 1st July 1974 moneys remaining in the Level Crossings Fund were transferred to the Transport Fund and expenditure on the elimination of railway level crossings has since been charged wholly to the Transport Fund in accordance with the Ministry of Transport (Transport Fund) Act 1974.

Construction continued on the following projects during 1974/75:

### Princes Highway West --- Colac

This project consists of a road-over-rail overpass of the Port Fairy railway which will make it possible to close three level crossings. Approximately 5,000 vehicles use the level crossings in a whole day and the normal rail traffic is 14 trains in a 24 hour day. The Board is the constructing authority. The estimated cost of the project is \$870,000.

### Melbourne Road — Spotswood

This project involves the construction of a road-over-rail overpass of the Newport-Sunshine railway. Approximately 11,000 vehicles use the level crossing between 7.00 a.m. and 7.00 p.m. daily, and approximately 40 trains use the railway in a 24 hour day. The Board is the constructing authority. The estimated cost of the project is \$2,340,000.

### NATIONAL PARKS ROADS

The State Government again provided \$100,000 loan funds for expenditure on roads and associated purposes in or near National Parks. The loan funds are repayable by the Board.

Allocations were made by the Board after consultation with the National Parks Service for works in or near  $-\!-\!$ 

Bulga National Park in Alberton Shire

Captain James Cook National Park in Orbost Shire

Ferntree Gully National Park in Sherbrooke Shire

Fraser National Park in Alexandra Shire

Glenaladale National Park in Bairnsdale Shire

Hattah Lakes National Park in Mildura Shire

Kingslake National Park in Eltham and Whittlesea Shires

Lind National Park in Orbost Sire

Lower Glenelg National Park in Portland Shire

Mount Buffalo National Park in Bright Shire

Mount Eccles National Park in Minhamite Shire

Mount Richmond National Park, Portland Shire

Organ Pipes National Park in Keilor City and Bulla Shire

Port Campbell National Park in Heytesbury Shire

Tarra Valley National Park in Alberton Shire

Wilsons Promontory National Park in South Gippsland Shire

Wyperfeld National Park in Karkarooc Shire

The works consisted of construction and sealing of access roads and roads within National Parks, parking areas and the maintenance of roads and parking areas already constructed. The works were carried out either by the Board or the local municipal council concerned.

The Government has made loan funds totalling \$1,197,000 available for these purposes since 1st July 1963.

### ROADS OF TOURIST INTEREST

The State Government again provided loan funds amounting to \$200,000 during the financial year for expenditure on roads of a tourist nature other than roads proclaimed as tourists' roads under the provisions of the Country Roads Act.

As in previous years allocations for particular projects were made by the Board after consultation with the Ministry of Tourism. The total loan funds made available since 1960 is \$2,994,000. The loan moneys are repayable by the Board.

Significant progress in the provision of adequate access to many tourist attractions in Victoria has been possible from the Government's allocations since 1960, even though the applications for financial assistance far exceed the amount of funds available.

The Board is required to make an annual payment into the Tourist Fund amounting to two per cent of the amount credited to the Country Roads Board Fund in the previous year from receipts under the Motor Car Act. An amount of \$750,749 was paid during the year. The Tourist Fund is administered by the Ministry of Tourism.

# MUNICIPALITIES FOREST ROADS IMPROVEMENT FUND

The Municipalities Forest Roads Improvement Fund was established in the State Treasury in 1955 for the purpose of assisting municipal councils in the improvement and protection of roads adjacent to State Forest areas to facilitate the extraction of forest produce.

The Board's Divisional Engineers and the appropriate Forests Commission Officers combine to determine the priorities of eligible works. Allocations for particular works are made by the Board with the agreement of the Forests Commission.

An amount of \$50,000 was authorized to be contributed to the Fund by the Government during the year. Authorized contributions to the Fund to 30th June 1975 total \$640,000.

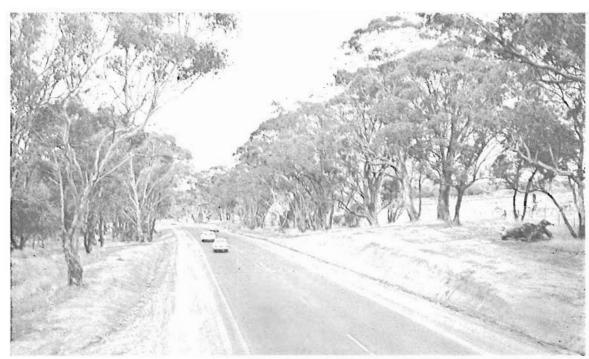
Outstanding applications for assistance from the Fund at present total approximately \$250,000. The limited funds have enabled grants to be made for only the most urgent works.

### CONTROL OF HEAVY TRAFFIC

In the interests of providing safe conditions for road users and to protect road surfaces, it is necessary for the Government to impose statutory limits on the weight, width, height and length of vehicles and their loads. The limits are prescribed in the Motor Car Act.

The Motor Car Act also provides that the Board shall be the authority responsible for issuing permits for the movement of vehicles and loads exceeding the legal weight, height, length and width on:

- (a) roads declared or proclaimed under the provisions of the Country Roads Act; and
- (b) a journey which includes unclassified roads in two or more greater metropolitan municipalities as defined in the Motor Car Act.



Reconstructed section of the Calder Highway south of Ravenswood.

The number and types of permits issued during the year compared with those issued during financial year 1973/74 are shown below:

	1973/74	1974/75
Single trip permits issued Annual permits issued	28,138 4,262	26,760 3,833
Total number of permits issued	32,400	30,593

The number of offences reported by the Board's twenty-one Traffic Officers and four Police Officers on attachment from the Victoria Police was 7,494. This number represented an increase of 1,554 over last financial year.

This increase was attributable to:

- improved co-ordination of the activities of Traffic Officers,
- an increase in the incidence of overloading due to the general economic conditions, and
- the relatively low fines imposed as a result of offences under the Motor Car Act.

The revenue received during the year from fines under the Motor Car Act as a result of the Board's activities amounted to \$541,000. The amount concerned was paid into consolidated revenue.

The present scale of fines under the Motor Car Act for overloading offences was introduced in September 1960. At that time the level of fines was adequate because the degree of overloading was limited by the vehicles then available. The vehicles were restricted to a comparatively low gross load because of the horsepower and design of the vehicles.

In recent years, however, it has become apparent that the scale of fines is insufficient to act as a real deterrent to the transport operator who intentionally exceeds the legal weights.

In view of the above factors the Board made representations during the year for the scale of fines under the Motor Car Act for overloading to be increased.

### LEGISLATION AFFECTING THE BOARD

Legislation enacted during the year which affected the Board included the following:

### Town and Country Planning (Outdoor Advertising) Act 1975 No. 8716

This Act amongst other things amended the Country Roads Act by:

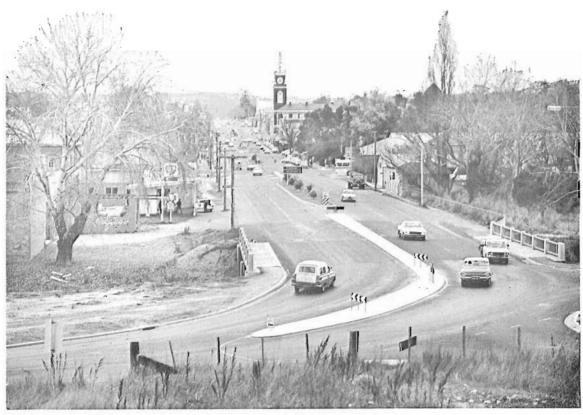
- (a) removing all reference to hoardings and advertisements in Section 60 which prescribes the purposes for which the Board may make by-laws;
- (b) inserting a new Section 61 which:
  - (i) sets out the purposes for which the Board may make by-laws concerning outdoor advertising within 1,000 metres from the centre of the road pavement of a State highway, main road, tourists' road, forest road or freeway,
  - (ii) gives the right of appeal to the Town Planning Appeals Tribunal by persons who feel aggrieved by a decision or determination of the Board to refuse to grant a permit; and



The Ballan-Daylesford Road, reconstructed in the Shire of Ballan.

- (c) inserting a new Section 61A which enables the Board by proclamation to declare that any part of the area within 1,000 metres of the centre of the road pavement of any State highway, main road, tourists' road, forest road or freeway (but not including any part of such a highway, road or freeway):
  - (i) shall cease to be an area to which the Board's outdoor advertising by-laws apply; or
  - (ii) shall cease to be an area to which the Board's outdoor advertising by-laws other than by-laws in respect of specified classes of advertisements apply.

The Act will come into operation on a day to be fixed by proclamation of the Governor in Council and published in the Government Gazette.



Midland Highway, Castlemaine City, reconstructed to provide dual carriageways.

### Country Roads (Salaries and Contributions) Act 1974 No. 8611

This Act made provision for:

- (a) the Minister's consent to be obtained before the Board approves the appointment of an officer or employee at a salary exceeding the rate of \$15,000 per annum (the amount was previously \$8,500 per annum).
- (b) the Board, with the Minister's approval, to make payments in excess of \$20,000 in any one year to any person, body or fund engaged in or established to promote research into matters revelant to efficient transportation in Victoria or to the system of roads in Victoria. The Board may make payments up to a total of \$20,000 in any one year on its own initiative.

### Revocation and Excision of Crown Reservations Act 1974 No. 8601

This Act provided amongst other things for the excision of land from the site of the Kingston Centre Geriatric Hospital. This excision was required by the Board for road improvements at the intersection of Warrigal and Kingston Roads.

As the land had been granted by the Crown to the institution for charitable purposes it was agreed that the trustee institution was entitled to compensation for the loss of the land. By mutual agreement between the Board and the Kingston Centre the sum to be paid by the Board was fixed at \$74,000.

#### Motor Car (Fees) Act 1974 No. 8596

This Act made provision for:

- (i) the Driver's Licence fee to be increased from \$12 to \$18 for a three year period. Revenue for this fee is shared
  - 1/8 Country Roads Board Fund
  - 1 Driver's Licence Suspense Account
  - 4 Municipalities Assistance Fund
  - ½ Consolidated Fund;
- (ii) the surcharge on Third Party Insurance premiums to be increased from \$2 per annum to \$4 per annum. The whole of the revenue from this source is payable to the Consolidated Fund.

The increase in the Third Party Insurance premiums came into operation on the 10th December 1974 and the increase in the Driver's Licence fee on the 1st January 1975.

### Motor Car Act 1974 No. 8657

This Act provided amongst other things for:

- (i) the increase of motor car registration fees generally by 35%. Approximately one-third of the additional revenue derived from these increased fees is paid in to the Roads (Special Projects) Fund and expended on the construction of major road projects approved by the Treasurer. The balance of the revenue received is paid into the Country Roads Board Fund and expended on the maintenance and construction of roads throughout the State; and
- (ii) a reduction in registration fees from \$15 per annum to \$2 per annum for private buses licensed by the Transport Regulation Board for regular route services as metropolitan, urban and country stage omnibuses.

The Section of the Act which provides for the increases in registration fees was proclaimed to come into operation on the 5th February 1975. The other sections of the Act were proclaimed to come into operation on the 1st day of January 1975.

# THIRTY-FIRST CONFERENCE OF MUNICIPAL ENGINEERS

The Thirty-first Conference of Municipal Engineers was held in the Board's theatrette on 4th and 6th March 1975, concluding with a tour of the Eastern Freeway, currently under construction.

The Conference, under the chairmanship of the Chairman of the Board, Mr R. E. V. Donaldson, was officially opened by the Hon. E. R. Meagher, M.B.E., E.D., M.P., Minister of Transport. Those attending totalled approximately 250 and included representatives of most Victorian municipal councils, civil engineers from State Government Departments and State Instrumentalities and senior C.R.B. engineers. Some municipal engineers from Tasmania also attended.

For the first time two half-day panel discussions were conducted to provide an opportunity for in-depth consideration of selected topics.

The first panel discussion was entitled "The New Legislation dealing with Roads". The speakers and panel members for this subject were Mr R. J. Nuttall, Shire Engineer, Avoca; Mr W. Sewart, City Engineer, Nunawading; Mr N. S. Guerin, the Board's Deputy Engineer-in-Chief, and Mr R. G. Cooper, the Board's Chief Accountant.

The second panel discussion was entitled "Transport Energy Problems". The leader of the discussion and Chairman of the panel was Professor S. R. Siemon, Dean of the Faculty of Engineering, University of Melbourne whose paper discussed "Production of Bitumen and Fuel from Coal". The other three speakers and panel members were Mr R. G. Chapman, Assistant General Manager (Marketing and Distribution), State Electricity Commission of Victoria, who spoke on "Electric Power as a Source of Energy for Transport"; Mr R. N. Morse, Director, Solar Energy Studies, Commonwealth Scientific and Industrial Research Organization, whose subject was "Solar Power for Australia"; and Mr R. B. Hamilton, Environmental Affairs Co-ordinator of the Shell Group of Companies, who spoke on "Fossil Fuel Usage and New Fields and Developments".

Other papers and addresses covered a wide range of engineering and technical interests. Mr I. Meacham, Divisional Engineer, State Rivers and Water Supply

Commission discussed the new drainage legislation, and Mr R. C. Page, Consulting Engineer, Borough of Koroit, spoke about the town's unique drainage. Country Roads

Board contributions included talks on rise and fall clauses in contracts; the introduction of priority roads; photogrammetry; the NAASRA Economics of Road Vehicle Limits Study; and the search for road making materials.

Reports on overseas study tours made during the preceding twelve months were presented by Mr K. H. Scott, Shire Engineer, Lillydale and Dr K. G. E. Moody, the Board's Engineer-in-Chief.

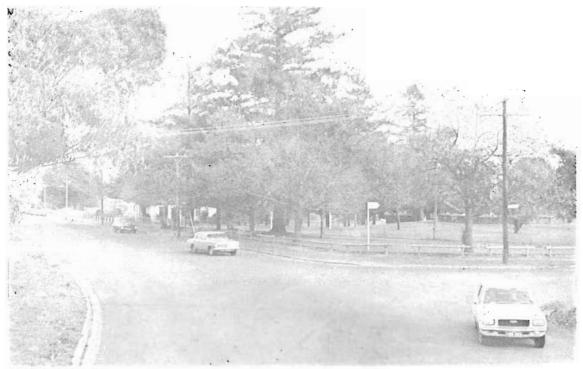
The Board expresses its thanks and appreciation to the Local Government Engineers Association of Victoria for its assistance in planning the Conference, and to the contributors of papers and speakers at the Conference, particularly the guest speakers who made a major contribution to the success of the Thirty-first Conference.

### VISITS TO MUNICIPALITIES

Each year the Board Members visit a number of municipalities throughout the State. This has been the practice since the inception of the Board in 1913 and in a continuing programme every municipality in Victoria is visited at approximately six year intervals. These visits include a tour of the municipality's roads, in company with Councillors and Council officers, and discussions on local road problems. Through these visits the Board Members gain important information about road conditions and developments throughout the State.

During the year the Board made official visits to 36 municipalities:

the Shires of Bacchus Marsh, Belfast, Dundas, Euroa, Flinders, Huntly, Mirboo, Narracan, Nathalia, Numurkah, Orbost, Pakenham, Rodney, Romsey, Tallangatta, Violet Town, Wangaratta, Warragul, Shepparton, Sherbrooke, Tallangatta, Violet Town, Wangaratta, Warragul, Warrnambool, Whittlesea and Wycheproof; the Borough of Port Fairy; the Towns of Bairnsdale and Kyabram; and the Cities of Berwick, Hamilton, Kew, Moe, Oakleigh, Prahran, Richmond, Shepparton, Wangaratta and Warrnambool.



Eureka Street, Ballaarat City, reconstructed with financial assistance from the Board.

The Board also visited —

Ballaarat City to discuss with the Council the Ballarat Transportation and Traffic Management Studies, and

Mildura for talks with both Mildura City Council and Mildura Shire Council about the location of the proposed new bridge over the Murray River at Mildura.

The Board places on record its appreciation of the assistance given by all councillors and municipal officers during these visits, and extends its thanks to the councils for the hospitality extended.

### **DEPUTATIONS**

Every year the Board is requested to receive deputations, mainly from municipal councils but occasionally from local groups or organizations. The Board is always prepared to discuss matters of common interest with councils or other official bodies. These discussions provide a useful channel of communication between the Board and local administration.

During the year the Board received 31 deputations of which 28 were from municipal councils.

The principal subjects raised were the general inadequancy of road grants to meet the State's road needs, the allocation of road funds to municipal councils by the Board, road developments in provincial cities, and the development of freeways.

The Board appreciates being kept informed of matters of local importance through the discussions with council representatives.

# NATIONAL ASSOCIATION OF AUSTRALIAN STATE ROAD AUTHORITIES

The National Association of Australian State Road Authorities (N.A.A.S.R.A.) is an organization consisting of the Heads of the road authorities of the six States and the Commonwealth Department of Housing and Construction which is the road constructing authority for the territories administered by the Commonwealth Government.

The aims of N.A.A.S.R.A. may be briefly stated as providing uniformity of practice in road design and operation, improved road construction methods, and the production of technical manuals to publish the results of N.A.A.S.R.A. findings.

The Association also collects and disseminates information relating to traffic, the types and standards of roads, and road finance. The information collected is used in the formulation of national road policies.

Meetings of the Authority are held at six monthly intervals.

There are a number of specialist committees within N.A.A.S.R.A. Eight of these assist the Principal Technical Committee, which plans and organizes the technical work of the Association. The Board's representative on the P.T.C. is Dr K. G. E. Moody, the Engineer-in-Chief.

The financial and administrative areas of the functions of the State Road Authorities are covered by the Secretarial and Accounts Committee, the Board's representatives on this Committee being Mr N. L. Allanson, Secretary and Mr R. G. Cooper, Chief Accountant.

Additional specialist committees are formed to perform specific tasks. For example a N.A.A.S.R.A. Sub-committee is studying community and environmental problems associated with urban highway proposals and another Sub-committee is studying land acquisition procedures.

Other committees cover a wide field of study, including legal matters, training, transportation planning, programme budgeting, roadside development, pavement testing, national and inter-regional routes and the preparation of technical and general information.

The joint work of the State Road Authorities through these Committees ensures co-ordination of effort, uniformity of approach and a pooling of experience in road and bridge planning, design, construction and maintenance.

During the past year two meetings of N.A.A.S.R.A. were held, namely:

52nd (Annual) Meeting in Townsville (Queensland) on 11th and 12th November 1974, attended by Mr R. E. V. Donaldson, the Board's Chairman.

53rd (Intermediate) Meeting, at the office of the Commonwealth Department of Housing and Construction, Hawthorn (Victoria), attended by the Chairman and Board Members.

### AUSTRALIAN ROAD RESEARCH BOARD

The Australian Road Research Board was established in 1960 and is registered as a public company limited by guarantee.

The Board of Directors includes the Heads of the State Road Authorities, the Secretary, Commonwealth Department of Housing and Construction, and the Secretary, Commonwealth Department of Transport.

Up to 10% of the A.R.R.B.'s annual expenditure is borne by the Commonwealth Department of Housing and Construction and the remainder is shared by the six State Road Authorities on the percentage basis adopted by the Commonwealth Government in making grants to the States under the Commonwealth Roads Grants Act 1974.

The major objective of the Board is to co-ordinate, encourage and arrange continuing research into problems associated with roads and traffic in Australia.

Projects being undertaken either by or with assistance from the A.R.R.B. include research into cheaper and improved road surfaces, road making materials, traffic management and control, road safety, and the economics of road transport. Grants are made to Universities for specific projects where particular facilities and specially skilled research staff are available.

The members of the Australian Road Research Board meet twice a year to consider management and policy matters, and to review the progress of research projects. Meetings were held in Brisbane on 13th and 14th November 1974 and in Melbourne on 14th and 15th May 1975.

At the May 1975 meeting held in Melbourne, the Chairman of the Country Roads Board, Victoria, Mr R. E. V. Donaldson, was elected Chairman of the Australian Road Research Board. Mr Donaldson had previously been that Board's Deputy Chairman.

With the growing pressures on resources, both financial and physical, the Australian Road Research Board will have an increasingly important role to play in developing low cost road construction techniques and in making the optimum use of scarce road making materials.

Mr D. F. Glynn, Director of A.R.R.B. since its inception in 1960, is due to retire in August 1975. Dr M. G. Lay, formerly Engineering Research Manager of the Broken Hill Proprietary Company Limited, has been appointed Executive Director.

### CO-OPERATION WITH ARMY RESERVE (C.M.F.)

The Board continued its sponsorship of the Headquarters 22 Construction Regiment, Royal Australian Engineers, and 107 Plant Squadron and 104 Construction Squadron. The Commanding Officer is Lt. Col. G. W. Marshallsea, E. D., the Board's Divisional Engineer, Geelong.

The 1974 camp was held at the School of Military Engineering, Liverpool, New South Wales in November and 160 personnel in the Board's service attended.

The activities at the camp included the training of recruits, and rifle and sub-machine gun range practices, together with training in mine warfare, booby traps and floating equipment bridging.

### **PERSONNEL**

The Board's personnel numbers as at 30th June 1975, were as follows:

Technological Staff (Professional) Technical Staff Administrative Staff	637 533 774
Supervisory Staff — Field	184
Depct	83
Clerks of Works	99
Construction and Maintenance Personnel	1,80 <b>6</b>
Workshop and Depot Personnel	628
Regional Employment Development Scheme	89
	4,833

### Transfer of M.M.B.W. Personnel

Following the proclamation of the Metropolitan Bridges Highways and Foreshores Act 1974, 213 personnel transferred from the Melbourne and Metropolitan Board of Works to the Board's service on the 1st July 1974. These personnel represented a wide variety of occupations and their assimilation into the Board's service under the terms of the Act presented a number of problems in relation to differing salary structures, leave conditions, superannuation and other administrative matters. These problems have now been largely overcome.

#### Staffing

The prevailing economic conditions were reflected in the Board's recruiting activities throughout the year. With the exception of licensed surveyors and experienced draftsmen large numbers of applications were received for all positions advertised by the Board. Applicants of a high standard were available for appointment.

Although staff numbers were increased with the transfer of personnel from the Melbourne and Metropolitan Board of Works at the commencement of the year, the final staff figure was only 38 above that of the previous year. The reduction during the latter part of the year was a result of the Board's critical financial position and was achieved in two ways. Firstly, despite a reluctance to do so, the Board found it necessary to retrench approximately 360 employees. Secondly, in other areas the Board adopted a deliberate policy of not replacing officers who retired or resigned, unless the situation made it unavoidable. In order to maintain the efficiency of the organization this policy has resulted in some minor re-deployment of staff.

During the year two cadetships were awarded to students undertaking full-time surveying courses at the University of Melbourne and the Royal Melbourne Institute of Technology. As in the previous year, no cadetships were awarded to students in other disciplines because of the ready availability of graduates. There are currently 18 students undertaking their studies under C.R.B. cadetships.

#### **Apprenticeships**

During the year, the Board engaged 22 new apprentices and took over the indentures of a further 7 who had been retrenched from other organizations. Of the new apprentices, 14 represented the Board's usual annual intake and the remaining 8 were engaged with the assistance of a grant from the Commonwealth Government.



 $\label{thm:constructed} \textit{The Goulburn Valley Highway in Yea township} \underline{\hspace{0.5cm}} \textit{the west bound carriageway was reconstructed during the year.}$ 

The funds required to finance the training of the apprentices whose indentures were taken over from other organizations were also supplied by the Commonwealth Government.

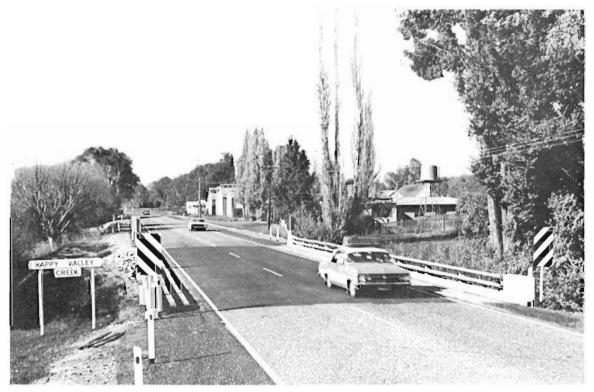
As at 30th June 1975, the total number of apprentices in training was:

Trade	Apprentices
Motor Mechanics	48
Structural Steel (Fabrication)	4
Carpentry and Joinery	9
Painting and Decorating	2
Cooking	2
Electrical Mechanics	2
Automotive Electrics	1
Lithographic Printing	1
Plumbing and Gasfitting	1
TOTAL	70

### **Industrial Relations**

The Board's wages and salaries costs increased considerably throughout the financial year, showing an increase of \$11,452,000 or 34.1% over the previous year. The main reasons were the general community increases of \$15 a week in the April-May 1974 period and \$9 a week in the September-November 1974 period.

During the year the Board was involved in many arbitration cases, the highlight being the successful attempt in the face of strong opposition to become a respondent party to the National Building Trades Construction Award. This will ensure that the Board has the opportunity to put its views whenever this vital award is subject to possible change.



New reinforced concrete bridge on the Ovens Highway at Happy Valley Creek.

Of interest also was the creation of an award to cover the Board's senior administrative officers. All Board's salaried staff and wages employees are now covered by awards.

### **Training**

The highlights of the Board's training programme during the year were metrication courses and the introduction of in-service management training.

Approximately 80 metrication courses were conducted for staff of all classifications to provide a basic appreciation of the metric system as affecting the Board in general and specialist areas.

To satisfy a growing need, the Board this year introduced its own in-service management training. Fifteen officers attended the first residential course of one week's duration at Jumbunna Lodge, Launching Place. The officers who attended meet at two-monthly intervals to develop suggestions made at the course and to review conclusions.

The Board sponsored certain officers to attend the Australian Administrative Staff College, the Government Administrative Staff Course at the University of New South Wales, the Traffic Planning and Control Course at the University of New South Wales and the Summer School of Business Administration at the University of Melbourne.

### Retirements

During the year the following personnel retired after substantial service with the Board:

		,	Years of Service
——————————————————————————————————————	Deputy Chairman	Board	49
Thomas, A. R.	Engineering Assistant	Bendigo Division	39
Steel, W. S.	Principal Traffic	Traffic Section	38
3(00), **. 0.	Officer		
Turnbull, J. E.	Senior Engineering	Plans and Surveys Division	36
ramban, s. E.	Surveyor	,	
Clarkson, R. H.	Photographic	Advance Planning Division	35
erarkson, re. i i	Administration Officer	3 - · · · · · · · · · · · · · · · · · ·	
Langham, G. M.	Chief Mechanical	Mechanical Sub-branch	35
Larigitatii, G. 711.	Engineer		
Predl, L. F.	Overseer	Major Projects Division	34
Cooper, E. A.	Leading Hand Fitter	Mechanical Sub-branch	31
Murphy, G. J.	Patrolman in Charge	Bairnsdale Division	30
Burch, R. S.	Load Checker	Bendigo Division	28
	Overseer	Ballarat Division	28
Howe, E. L.		Warrnambool Division	28
McElgunn, J. T.	Load Checker	Bairnsdale Division	28
Miles, W. E.	Traffic Officer	Warrnambool Division	28
O'Neill, J. P.	Plant Operator		28
Poulter, W.	Patrolman Gr. 2	Bendigo Division	
Smith, T. D.	Clerk of Works	Major Projects Division	28
Lucas, W. J.	Reimbursement Clerk	Chief Accountant's Branch	27
Roe, É. T.	Superintendent of Works	Benalla Division	27
McLachlan, E. L.	Overseer	Geelong Division	26
Ferguson, R. C.	Painter (Depot)	Benalla Division	25
Healy, J. M.	Truck Driver	Horsham Division	25 25 25
Mathews, K. M. (Miss)	Senior Typist	Personnel Section	25
Potter, L. L.	Patrolman in Charge	Geelong Division	25
Cain, E. V. (Miss)	Senior Clerical Assistant	Correspondence Registry	24
White, J. L.	Cost Accountant	Chief Accountant's Branch	24
Kaljee, G. J.	Senior Draftsman	Plans & Surveys Division	
Mills, R. A.	Patrolman Gr. 2	Traralgon Division	23
Plant, E. M.	Patrolman in Charge	Benalla Division	23
Raftopoulos, B.	Fitter	Mechanical Sub-branch	23
Sanguinetti, M. J.	Administrative Officer	Asphalt Division	23
Spicer, A. L.	Officer in Charge	Correspondence Registry	23
Wilson, R.	Patrolman in Charge	Dandenong Division	23
Postov A I	Instructor Driver	Warrnambool Division	22
Beasley, A. J.		Benalla Division	22
Briggs, G. H.	Patrolman in Charge	Horsham Division	22
Chequer, C. R.	Fitter		22
Urban, S.	Powder Monkey	Traralgon Division	
Alsop, J. R.	Patrolman Gr. 2	Geelong Division	21
Butler, C. F.	Articulated Vehicle Driver	Mechanical Sub-branch	21
Monaghan <u>,</u> PT.	Patrolman in Charge	Horsham Division	21
Newsome, R. E.	Truck Driver	Dandenong Division	21
Tasker, C. L.	Patrol Assistant	Bairnsdale Division	21
Gullifer, N. T.	Plant Operator	Dandenong Division	20
Hill, R. G.	Storeman	Bairnsdale Division	20
McClure, R. G.	Ganger	Ballarat Division	20
Riekhoff, G.	Welder	Traralgon Division	20
Sammut, S.	Laboratory Assistant	Materials Research Division	
Turner, A. J.	Overseer	Urban Projects Sub-branch	

<sup>\*</sup>Deceased.

# LENGTHS OF STATE HIGHWAYS, FREEWAYS, FOREST ROADS AND TOURISTS' ROADS

As at 30th June, 1975

### STATE HIGHWAYS

NAME	ROUTE	LENGT (kilometres)	H (miles)
BASS BELLARINE BONANG	Lang Lang-Inverloch Geelong-Queenscliff Orbost-N.S.W. border near Delegate	61.6 31.8 115.9 123.4	38.3 19.8 72.0 76.6
BORUNG BURWOOD CALDER	Dimboola-Charlton Burwood-Ferntree Gully Melbourne-Mildura	20.4 554.1	12.7 344.3
CANN VALLEY GLENELG GOULBURN VALLEY	Cann River-N.S.W. border Ballarat-S.A. border near Mt. Gambier Eildon-Strathmerton	46.4 283.1 223.2 232.2	28.9 175.9 138.7
HAMILTON HENTY HUME KIEWA VALLEY	Geelong-Hamilton Portland-Lascelles Melbourne-N.S.W. border near Albury Bandiana-Mt. Beauty	232.2 337.3 246.6 78.7	144.3 209.6 153.2 48.9
LODDON VALLEY MAROONDAH McIVOR	Bendigo-Kerang Melbourne-Mansfield Heathcote-Bendigo	123.7 184.6 44.2	76.8 114.7 27.5
MIDLAND  MURRAY VALLEY	Geelong-Ballarat-Bendigo-Shepparton- Benalla-Mansfield Morwell-Port Welshpool Corryong-Hattah	416.0 78.9 742.3	258.5 49.0 461.2
NEPEÁN NORTHERN OMEO	Melbourne-Portsea Kilmore-Echuca Bairnsdale-Tallangatta	88.8 142.5 285.1	55.2 88.5 177.1
OUYEN OVENS PRINCES (EAST) PRINCES (WEST)	Ouyen-S.A. border near Pinnaroo Wangaratta-Bright Melbourne-N.S.W. border near Genoa Melbourne-S.A. border near Mt. Gambi	130.2 76.2 487.5 er 398.1	80.9 47.3 302.9 247.4
PYRENEES SOUTH GIPPSLAND STURT SUNRAYSIA WARBURTON	Elphinstone-Ararat Dandenong-Yarram-Sale Mildura-S.A. border near Renmark Ballarat-Calder Highway Lilydale-Warburton	148.0 254.2 114.5 341.1 34.6	91.9 157.9 71.1 212.0 21.5
WESTERN WIMMERA	Melbourne-Serviceton Apsley-St. Arnaud	390.3 220.1	242.5 136.8
FREEWAYS		 LENGT	
NAME		(kilometres)	(miles)
CALDER FRANKSTON	Keilor Elphinstone Seaford Road to Beach Street	2.8 2.7 5.4	1.7 1.7 3.4
HUME	Craigieburn to Kalkallo Beveridge Broadford to Tallarook	8.3 3.2 15.4	5.4 5.2 2.0 9.6
LOWER YARRA	Chiltern Bertie Street to Graham Street Williamstown Road to Princes Freeway	21.3 0.3 5.1	13.3 0.2 3.2
MIDLAND MORNINGTON PENINSULA	Yinnar Dromana to Rosebud	9.6 8.4	6.0 5.2
PRINCES	Mulgrave Moe to Haunted Hills Laverton Lara Dartmoor	12.4 16.2 31.4 16.0	7.7 10.0 19.5 9.9
SOUTH EASTERN SOUTH GIPPSLAND	Anderson Street to Tooronga Road Whitelaw Princes Freeway to Princes Highway	3.0 6.8 3.8 1.4	1.9 4.2 <b>2</b> .3 0.9
TULLAMARINE WESTERN	Flemington Bridge to Melbourne Airpor Rockbank Bacchus Marsh Pykes Creek Gordon		12.1 8.3 5.2 3.6 6.8

### FOREST ROADS

NAME	MUNICIPALITIES	LENGT (kilometres)	
BAIRNSDALE-DARGO BEALIBA-MOLIAGUL BEECH FOREST-	Avon and Bairnsdale Shires Bet Bet Shire	20.8 9.0	12.9 5.6
MT. SABINE BENAMBRA-CORRYONG	Otway Shire Omeo, Tallangatta, and Upper Murray	12.6	7.8
BENAMBRA-LIMESTONE BENDOC-ORBOST BROOKVILLE BRUTHEN-BUCHAN BUCHAN-ENSAY BULLUMWAAL-	Shires Omeo Shire Orbost Shire Omeo Shire Tambo Shire Tambo Shire	76.5 14.3 20.9 15.8 36.5 19.8	47.5 8.9 13.0 9.8 22.7 12.3
TABBERABBERA CARRAJUNG-WOODSIDE DARGO DEAN MARSH-LORNE DRUMMOND-VAUGHAN	Bairnsdale Shire Alberton Shire Avon Shire Winchelsea Shire Daylesford and Glenlyon and Newstead	30.3 17.7 74.8 24.0	18.8 11.0 46.5 14.9
EPSOM-FOSTERVILLE FORREST-APOLLO BAY GREENDALE-TRENTHAM HEYFIELD-JAMIESON INGLEWOOD-RHEOLA KIMBOLTON LAVERS HILL-COBDEN MEREDITH-STEIGLITZ-	Shires Huntly Shire Otway Shire Ballan and Kyneton Shires Mansfield and Maffra Shires Korong Shire Strathfieldsaye Shire Heytesbury and Otway Shires	20.9 21.2 22.4 23.8 145.5 17.3 13.5 46.7	13.0 13.2 13.9 14.8 90.4 10.7 8.4 29.0
MAUDE MURRUNGOWER PORTLAND-NELSON RED KNOB TATONG-TOLMIE WALHALLA	Bannockburn Shire Orbost Shire Portland Shire Tambo Shire Benalla Shire Narracan, Mansfield and Upper Yarra	20.7 21.3 38.6 6.7 36.3	12.9 13.2 24.0 4.2 22.6
WARBURTON-WOODS POINT WARROWITUE	Shires Healesville, Upper Yarra ond Mansfield Shires McIvor Shire	110.7 d 103.4 16.5	68.8 64.2 10.2

### TOURISTS' ROADS

NAME	MUNICIPALITIES	LENGT (kilometres)	
ACHERON WAY	Healesville and Upper Yarra Shires	35.4	22.0
ALPINE	Bright and Omeo Shires	83.0	51.6
ARTHUR'S SEAT	Flinders Shire	8.1	5.0
BOGONG HIGH PLAINS	Bright and Omeo Shires	67.1	41.7
CAMERON DRIVE	Gisborne and Newham and Woodend		
	Shires	4.3	2.7
DONNA BUANG	Healesville and Upper Yarra Shires	34.0	21.1
GIPSY POINT	Orbost Shire	2.4	1.5
GRAMPIANS	Ararat, Dundas and Stawell Shires		
	and Stawell Town	69.5	43.2
GREAT OCEAN ROAD	Barrabool, Winchelsea, Otway, Heytes		
	Warrnambool Shires	212.8	132.2
MALLACOOTA	Orbost Shire	22.5	14.0
MOUNT ABRUPT	Ararat and Mount Rouse Shires	24.8	15.4
MOUNT BUFFALO	Bright Shire	39.0	24.2
MOUNT BULLER	Mansfield Shire	25.5	15.8
MOUNT DANDENONG	Sherbrooke and Lillydale Shires	21.8	13.6
MOUNT VICTORY	Arapiles, Stawell and Wimmera Shires	30.7	19.0
MARYSVILLE-		100	
WOODS POINT	Healesville Shire	18.9	11.7
OTWAY LIGHTHOUSE	Otway Shire	12.9	8.0
PHILLIP ISLAND	Bass and Phillip Island Shires	23.4	14.5
SILVERBAND	Stawell Shire	9.1	5.7
SYDENHAM INLET	Orbost Shire	21.6	13.4
WARTOOK WILSON'S	Wimmera Shire	3.5	2.2
PROMONTORY	South Gippsland Shire	31.0	19.2

### STATE HIGHWAYS AND FREEWAYS

Significant Works Completed During Financial Year 1974/75

**BASS HIGHWAY** 

Reconstruction and widening of 4.0 km from Bass to Anderson to provide a sealed pavement 7.4 m wide. BASS SHIRE

**BELLARINE HIGHWAY** 

Construction of 1.9 km of dual carriageways each BELLARINE SHIRE

10.4 m wide through Leopold.

**GEELONG CITY** Reconstruction of 0.2 km between Bellarine Street and

Swanston Street to provide dual carriageways each

9.7 m wide.

**BONANG HIGHWAY** 

Reconstruction of  $0.8\,\mathrm{km}$  in Orbost to provide dual carriageways each  $7.4\,\mathrm{m}$  wide. ORBOST SHIRE

CALDER FREEWAY

KEILOR CITY Construction of 1.9 km of four lane freeway between

The Avenue and Erebus Street to provide dual carriageways each 7.4 m wide.

**CALDER HIGHWAY** 

BENDIGO CITY Reconstruction of 0.3 km from View Street to

Eaglehawk Road to provide dual carriageways each

6.8 m wide.

Reconstruction and widening of 3.5 km to make provision for a climbing lane at Corkscrew Hill. KEILOR CITY AND

MELTON SHIRE

Reconstruction of 4.8 km at Kurting to provide a sealed pavement 7.4 m wide. KORONG SHIRE

Realignment of 1.3 km and removal of crest at Ravenswood South to provide a sealed pavement MALDON SHIRE

7.4 m wide.

Realignment of 0.8 km and removal of crest and dip MARONG SHIRE

at Ravenswood to provide a sealed pavement 7.4 m

wide.

**MELTON SHIRE** Reconstruction of the intersection with Vineyard Road

north of Diggers Rest.

FRANKSTON FREEWAY

FRANKSTON CITY Construction of 1.4 km of four lane freeway from Eel

Race Road to Armstrongs Road to provide dual

carriageways each 7.4 m wide.

**GLENELG HIGHWAY** 

Reconstruction of 4.3 km east of Cawkers Creek to provide a sealed pavement 7.4 m wide. **GLENELG SHIRE** 

Reconstruction and realignment of 3.0 km between Smythesdale and Scarsdale to provide a sealed pavement 7.4 m wide. **GRENVILLE SHIRE** 

**GOULBURN VALLEY HIGHWAY** 

BROADFORD SHIRE AND Reconstruction and realignment of 2.2 km between SEYMOUR SHIRE

Trawool and Kerrisdale to provide a sealed pavement

7.4 m wide.

**GOULBURN SHIRE** Widening of 6.1 km south of Murchison East to

provide a sealed pavement 7.4 m wide.

Reconstruction of  $0.5\,\mathrm{km}$  of the west-bound carriageway in Yea township to provide a sealed pavement 7.4 m wide. YEA SHIRE

### **HAMILTON HIGHWAY**

GEELONG WEST CITY AND Reconstruction of 0.6 km between Pakington Street

and Shannon Avenue to provide a sealed pavement NEWTOWN CITY

12.8 m wide.

HAMPDEN SHIRE Reconstruction of 7.0 km west of and through

Derrinallum to provide a sealed pavement 7.4 m wide.

Reconstruction of 5.6 km near Cressy to provide a sealed pavement 7.4 m wide. LEIGH SHIRE

MORTLAKE SHIRE Reconstruction of 5.0 km between Darlington and

Mortlake to provide a sealed pavement 7.4 m wide.

**HENTY HIGHWAY** 

Widening and resurfacing of 3.7 km south of Rosebery KARKAROOK SHIRE

to provide a sealed pavement 7.4 m wide.

WARRACKNABEAL SHIRE Widening and resurfacing 4.3 km between Lah and

Brim to provide a sealed pavement 7.4 m wide.

Resurfacing 3.6 km at Byrneville to provide a sealed pavement 7.4 m wide. WIMMERA SHIRE

**HUME HIGHWAY** 

Reconstruction of 0.4 km of dual carriageways between Faithfull Street and Clarke Street to provide BENALLA CITY

sealed pavements each 7.4 m wide.

WANGARATTA CITY Reconstruction of 2.4 km of the southern approach to Wangaratta to provide dual carriageways each

7.4 m wide.

MAROONDAH HIGHWAY

**HEALESVILLE SHIRE** Reconstruction of the intersection with Crowley Road,

Healesville.

Widening 1.1 km at Woodfield to provide a sealed pavement 7.4 m wide. MANSFIELD SHIRE

MIDLAND HIGHWAY

CASTLEMAINE CITY Reconstruction of 2.2 km between the railway overpass

and Forest Creek Bridge to provide dual carriageways

each 7.4 m wide.

**MURRAY VALLEY HIGHWAY** 

Resurfacing of 1.6 km east of McCoys Bridge to provide a sealed pavement 7.4 m wide. NATHALIA SHIRE

Reconstruction of 2.6 km between Strathmerton and NUMURKAH SHIRE

Rockliffs Road to provide a sealed pavement 7.4 m

Reconstruction of 4.2 km west of Rutherglen to provide a sealed pavement 7.4 m wide. **RUTHERGLEN SHIRE** 

RUTHERGLEN SHIRE AND YARRAWONGA SHIRE

Reconstruction and realignment of  $2.4\,\mathrm{km}$  of approaches to a new bridge over the Ovens River to provide a sealed pavement  $7.4\,\mathrm{m}$  wide.

SWAN HILL SHIRE Reconstruction of 2.0 km at Tyntynder to provide a

sealed pavement 7.4 m wide.

**NEPEAN HIGHWAY** 

Widening 1.3 km between Weeroona Street and Dundas Street, Rye, to provide a sealed pavement **FLINDERS SHIRE** 

16.5 m wide.

**NORTHERN HIGHWAY** 

Reconstruction of the intersection with the Seymour-Tooborac Road at Tooborac. McIVOR SHIRE

### **OMEO HIGHWAY**

**BAIRNSDALE SHIRE** Reconstruction of 0.9 km between Bairnsdale and

Sarsfield to provide a sealed pavement 7.4 m wide.

TOWONG SHIRE Reconstruction of sections totalling 1.9 km between

Noorongong and Tallangatta East to provide a sealed pavement 6.8 m wide.

**OVENS HIGHWAY** 

MYRTLEFORD SHIRE Reconstruction of 1.4 km at Panlooks to provide a

sealed pavement 7.4 m wide.

Construction of a reinforced concrete bridge 32 m long and 8.5 m wide over Happy Valley Creek at Ovens together with realignment of 1.1 km of approaches to provide a sealed pavement 7.4 m wide.

**PRINCES FREEWAY** 

ALTONA CITY Widening 3.5 km between the Lower Yarra Freeway

and Kororoit Creek Road to provide dual carriageways

each 11.0 m wide.

Widening 3.5 km between Kororoit Creek Road and Point Cook Road to provide dual carriageways each WERRIBEE SHIRE

11.0 m wide including reconstruction and widening of four bridges over the railway line and the adjacent

local road.

PRINCES HIGHWAY EAST

**BERWICK CITY** Reconstruction of the intersection with the Belgrave-

Hallam Road.

**OAKLEIGH CITY** Reconstruction of the intersections with Blackburn

Road and McNaughton Road.

PRINCES HIGHWAY WEST

BAIRNSDALE SHIRE AND Widening of the bridge over the Nicholson River east TAMBO SHIRE

of Bairnsdale by 1.8 m and replacement of a timber approach span with a steel and concrete span.

Construction of a new bridge 43 m long and 8.5 m PORTLAND SHIRE

wide over the Fitzroy River.

Reconstruction of 5.5 km at Lyons to provide a sealed pavement 7.4 m wide.

WARRNAMBOOL SHIRE Construction of 2.4 km of deviation at Allansford to

provide a sealed pavement 7.4 m wide and the construction of a new bridge 91.5 m long and 8.5 m

wide over the Hopkins River.

Reconstruction of 2.4 km at Cudgee to provide a sealed

pavement 7.4 m wide.

**PYRENEES HIGHWAY** 

**AVOCA SHIRE** TALBOT AND CLUNES SHIRE AND TULLAROOP

Reconstruction and realignment of 1.6 km at Bung Bong to provide a sealed pavement 7.4 m wide.

CASTLEMAINE CITY

SHIRE

Widening by 1.7 m and redecking Pattersons Bridge over Forest Creek.

SOUTH GIPPSLAND HIGHWAY

Reconstruction of 8.3 km between Cairns Road, Hampton Park and Brunt Street, Cranbourne to CRANBOURNE SHIRE

provide dual carriageways each 7.4 m wide.

Construction of an overpass bridge 88 m long and 8.5 m wide and reconstruction of the intersection with

the Bass Highway.

SUNRAYSIA HIGHWAY

Reconstruction of 1.1 km at Lamplough to provide a **AVOCA SHIRE** 

sealed pavement 7.4 m wide.

BIRCHIP SHIRE AND DONALD SHIRE Widening and resurfacing of 6.5 km north of Watchem to provide a sealed payement 7.4 m wide.

DONALD SHIRE AND KARA KARA SHIRE Widening and resurfacing 2.7 km at Cope Cope to provide a sealed pavement 7.4 m wide.

### WESTERN HIGHWAY

**BALLAARAT CITY** 

Reconstruction of 0.5 km at Ballarat West to provide dual carriageways each 7.4 m wide, including the reconstruction of the Gillies Street intersection.

KANIVA SHIRE AND LOWAN SHIRE Reconstruction and realignment of 5.6 km through the Lawloit Ranges to provide a sealed pavement 7.4 m wide.

### WIMMERA HIGHWAY

**DUNMUNKLE SHIRE** 

Reconstruction of 11.0 km between Murtoa and Rupanyup to provide a sealed pavement 7.4 m wide.

**KOWREE SHIRE** 

Reconstruction and widening of 7.1 km between Edenhope and Apsley to provide a sealed pavement 7.4 m wide.

### APPENDIX 3

### TOURISTS' ROADS AND FOREST ROADS

Significant Works Completed During Financial Year 1974/5

### **TOURISTS' ROADS**

ALPINE ROAD

Widening 4.2 km between Harrietville and "The Meg"

to provide a sealed pavement 6.2 m wide.

**BOGONG HIGH PLAINS** 

ROAD

Widening 3.2 km north of Crankie Charlie to provide

a sealed pavement 7.4 m wide.

Widening 1.8 km between Turnback Creek and Howmans Gap to provide a sealed pavement 7.4 m

wide

GREAT OCEAN ROAD

Reconstruction and realignment of 3.2 km between Torquay and Bellbrae to provide a sealed pavement

7.4 m wide.

### **FOREST ROADS**

DEANS MARSH — LORNE

Reconstruction and realignment of 3.9 km near Benwerrin to provide a pavement 6.8 m wide.

LAVERS HILL --- COBDEN

Reconstruction and realignment of 2.1 km south of Simpson to provide a pavement 6.8 m wide.

### MAIN ROADS

### Significant Works Completed During Financial Year 1974/75

#### BAIRNSDALE DIVISION

TAMBO SHIRE Gelantipy Road -- Construction of a new bridge

15.9 m long and 7.4 m wide between kerbs over Wattle Tree Creek north of Murrindal.

BALLARAT DIVISION

ARARAT SHIRE Ararat-Warrnambool Road — Reconstruction of

2.6 km south of Ararat to provide a sealed pavement

7.4 m wide.

Ballan-Daylesford Road — Reconstruction and realignment of 2.0 km south of Spargo Creek to provide a sealed pavement 6.8 m wide. **BALLAN SHIRE** 

Buninyong-Mt. Mercer Road — Reconstruction and realignment of  $2.1\ km$  south of Garibaldi to provide a **BUNINYONG SHIRE** 

sealed pavement 6.2 m wide.

**NEWHAM AND** Mt. Macedon Road — Reconstruction and realignment

of 1.0 km at Mt. Macedon to provide a sealed pave-

ment 6.8 m wide.

ROMSEY SHIRE Melbourne-Lancefield Road — Reconstruction of

3.3 km at Bolinda Vale to provide a sealed pavement

7.4 m wide.

**BENALLA DIVISION** 

WOODEND SHIRE

BEECHWORTH SHIRE Beechworth Road — Reconstruction of junction with

the Yackandandah-Wodonga Road.

**COBRAM SHIRE** Benalla-Tocumwal Road — Reconstruction of two

sections totalling 4 km north of Cobram South Road to provide a sealed pavement 6.2 m wide.

Cobram South Road — Reconstruction of 5.2km to

provide a sealed pavement 7.4 m wide.

MANSFIELD SHIRE

Mansfield Road — Construction of reinforced concrete bridge 22.8 m long and 8.5 m wide between kerbs near

Mansfield

Mansfield-Whitfield Road—Reconstruction of 2.4 km at Tolmie to provide a sealed pavement 6.2 m wide.

Mansfield-Woods Point Road

1.6km between Jamieson and Kevington to provide a sealed pavement 6.2 m wide.

Widening  $3.3\,\mathrm{km}$  near Knockwood to provide a pavement  $7.4\,\mathrm{m}$  wide.

TALLANGATTA SHIRE

Yabba Road — Reconstruction and realignment of 2.3 km in the Parish of Yabba to provide a sealed pavement 5.6 m wide.

**UPPER MURRAY SHIRE** Tallangatta-Corryong Road — Reconstruction and

realignment of 2.0 km at Berringama to provide a

sealed pavement 6.8 m wide.

WODONGA CITY Beechworth-Wodonga Road — Reconstruction includ-

ing construction of 1.6 km of service roads.

YACKANDANDAH SHIRE Dederang Road — Reconstruction and realignment of

3.2 km east of Glen Creek to provide a sealed pavement 6.8 m wide.

Whittlesea-Yea Road — Reconstruction including realignment of 2.1 km at Junction Hill to provide a YEA SHIRE

sealed pavement 6.8 m wide.

### **BENDIGO DIVISION**

BENDIGO CITY Mandurang Road — Reconstruction and duplication between Hallam Street and Spring Gully Road to pro-

vide dual carriageways each 9.8 m wide.

EAST LODDON SHIRE

Mitiamo-Boort Road — Reconstruction of 4.9km west of Mitiamo to provide a sealed payement 6.8 m wide.

METCALFE SHIRE

Bendigo-Sutton Grange Road — Reconstruction and realignment of 2.4 km north of Elphinstone to provide a sealed pavement 6.8 m wide.

ROCHESTER SHIRE

Echuca-Mitiamo Road — Widening of 3.7 km west of

Kotta to provide a sealed pavement 6.2 m wide.

**RODNEY SHIRE** 

Mooroopna-Wyuna Road — Reconstruction of 3.3 km east of Undera to provide a sealed pavement 7.4 m wide.

**SWAN HILL SHIRE** 

Nyah-Ouyen Road — Reconstruction of 1.8 km west of Murray Valley Highway at Nyah to provide a sealed pavement 7.4 m wide.

WARANGA SHIRE

Rushworth-Stanhope Road — Reconstruction of 1.7 km north of Stanhope to provide a sealed pavement 6.8 m wide

### DANDENONG DIVISION

CRANBOURNE SHIRE

Baxter-Tooradin Road — Reconstruction of 3.2 km west of Pearcedale Road to provide a sealed pavement 7.4 m wide.

FLINDERS SHIRE

Rosebud-Flinders Road — Reconstruction of intersection with Eastbourne Road.

LILLYDALE SHIRE

Lilydale-Monbulk Road — Reconstruction of 1.2 km south of Mt. Evelyn to provide a sealed pavement 7.4 m wide.

#### **GEELONG DIVISION**

BELLARINE SHIRE

Geelong-Portarlington Road — Duplication of 1.8 km near Point Henry Road to provide a sealed pavement 7.4 m wide.

### HORSHAM DIVISION

WYCHEPROOF SHIRE

Birchip-Wycheproof Road — Reconstruction of various sections totalling 3.8 km to provide a sealed pavement 6.8 m wide.

### METROPOLITAN DIVISION

WHITTLESEA SHIRE

Whittlesea Road — Reconstruction from Grants Road to Laurel Street to provide a sealed pavement 7.4 m wide.

### TRARALGON DIVISION

KORUMBURRA SHIRE

Korumburra-Drouin Road — Reconstruction and realignment of 2.4 km south from Shire boundary to provide a sealed pavement 6.8 m wide.

MORWELL SHIRE AND TRARALGON SHIRE

Tyers Road — Construction of a reinforced concrete bridge 39 m long and  $8.5\,\mathrm{m}$  wide between kerbs over the Tyers River.

rosedale shire and maffra shire Maffra-Rosedale Road — Construction of a reinforced concrete bridge (Gibson Knox Bridge) 73.2 m long and 8.5 m wide between kerbs over the Thompson River.

TRARALGON SHIRE

Yarram-Traralgon Road — Reconstruction of 1.5 km north of South Gippsland Highway to provide a sealed pavement 7.4 m wide.

WARRAGUL SHIRE

Darnum-Allambee Road — Reconstruction and realignment of 1.8 km south of Darnum to provide a sealed pavement 6.2 m wide.

Warragul-Lardner Road — Reconstruction of 0.8 km west of Warragul to provide a sealed pavement  $7.4\,\mathrm{m}$  wide.

### WARRNAMBOOL DIVISION

Dartmoor-Hamilton Road — Construction of 0.9 km of bridge approaches at Violet Creek to provide a **DUNDAS SHIRE** 

sealed pavement 6.2 m wide.

Construction of reinforced concrete bridge 19.2 m long and 8.5 m wide between kerbs over Violet Creek.

Macarthur-Penshurst Road — Reconstruction of 2.8 km north of Macarthur to provide a sealed pavement 6.2 m wide.

Woolsthorpe-Heywood Road — Reconstruction of 2.9 km north of Orford to provide a sealed pavement MINHAMITE SHIRE

6.2 m wide.

WANNON SHIRE Harrow-Balmoral Road — Construction of new bridge

18.9 m long and 7.4 m wide between kerbs over rail-way line at Balmoral.

### UNCLASSIFIED ROADS

### Significant Works Completed During Financial Year 1974/75

#### **BAIRNSDALE DIVISION**

Bonang-Gelantipy Road — Reconstruction and realignment of  $2.5\,\mathrm{km}$  south of Craigneish Creek to provide a sealed pavement  $6.2\,\mathrm{m}$  wide. **TAMBO SHIRE** 

**BALLARAT DIVISION** 

Tatyoon Road — Reconstruction and realignment of 3.8 km to provide a sealed pavement 6.8 m wide. ARARAT SHIRE

Ballan-Egerton Road — Construction of reinforced concrete bridge over Eastern Moorabool River, 32 m **BALLAN SHIRE** 

long and 7.4 m wide between kerbs.

BALLAARAT CITY

Eureka Street — Reconstruction and realignment of 1.3 km east from Fussell Street to provide a sealed pavement between 12 m and 7.4 m wide.

Peel Street -- Reconstruction of 0.8 km between Scott Parade and Napier Street to provide a sealed pavement

12.2 m wide.

**NEWHAM AND** WOODEND SHIRE Kyneton-Lancefield Road — Installation of a 3.7 m corrugated multiplate pipe culvert at Dry Creek

Crossing.

**ROMSEY SHIRE** Mt. Eliza-Mullays Road — Reconstruction of 3.2 km

south-east of Monegeetta to provide a sealed pave-

ment 3.7 m wide.

**BENALLA DIVISION** 

Kurrajong Gap Road — Reconstruction and realignment of 3.1 km at Bethanga to provide a pavement 5.8 m wide. TALLANGATTA SHIRE

Briggs Gap Road — Reconstruction including realignment of 2.3 km to provide a sealed pavement UPPER MURRAY SHIRE

5.6 m wide.

WANGARATTA CITY Sisely Avenue — Reconstruction of 0.5 km to provide

a sealed pavement 18.2 m wide.

WANGARATTA SHIRE Three Chain Road — Reconstruction of 5.7 km to

provide a pavement 6.2 m wide.

Warby Range Road — Reconstruction of 1.5 km to

provide a sealed pavement 5.6 m wide.

Brockley Street — Construction of a bridge 31.5 m long and 8.5 m wide between kerbs over House Creek. WODONGA CITY

Ghin Ghin Road — Reconstruction and realignment of 1.7 km to provide a sealed pavement between 3.7 m and 5.6 m wide. YEA SHIRE

BENDIGO DIVISION

Nolan Street — Reconstruction between Midland Highway and Hargreaves Street to provide a sealed **BENDIGO CITY** 

pavement 15 m wide.

Finlay Road — Reconstruction of 3.7 km east of DEAKIN SHIRE

Tongala to provide a sealed pavement 6.8 m wide.

Simmle Road — Reconstruction of 3.7 km north of Echuca-Kyabram Road to provide a sealed pavement

5.6 m wide.

EAST LODDON SHIRE Dunn's Road — Reconstruction of 3.2 km east of

Dingee to provide a sealed pavement 3.7 m wide.

Echuca-Serpentine Road — Reconstruction of 5.8 km north of Serpentine to provide a sealed pavement

3.7 m wide.

**HUNTLY SHIRE** Old Murray Road — Construction of a reinforced

concrete bridge 24.4 m long and 7.4 m between kerbs

over Bendigo Creek at Bagshot North.

KERANG SHIRE

Lalbert-Kerang Road — Reconstruction of 2.8 km east of Lalbert to provide a sealed pavement 3.7 m

wide.

**PYALONG SHIRE** Pyalong-Lancefield Road — Widening of 3.5 km

south of Pyalong to provide a sealed pavement 6.2 m

Toolamba Road — Reconstruction of 2.0 km south of Toolamba to provide a sealed pavement 7.4 m **RODNEY SHIRE** 

STRATHFIELDSAYE SHIRE Strathfieldsaye-Eppalock Road — Reconstruction of

3.2 km south of Eppalock to provide a pavement

6.8 m wide.

### DANDENONG DIVISION

CRANBOURNE SHIRE Robinson's Road — Reconstruction of 1.8 km from

West Boundary Road to Warrandyte Road to provide

a sealed pavement 6.2 m wide.

Eastfield Road — Reconstruction of 0.3 km from The Pass to Pleasant Rise to provide a sealed pavement 13.4 m wide. CROYDON CITY

New Cemetery Road — Reconstruction of 1.6 km from Bayview Road to Cemetery Road to provide a HASTINGS SHIRE

sealed pavement 7.4 m wide.

Boronia Road — Reconstruction of 0.7 km from Erica Avenue to Zeising Court to provide a sealed KNOX CITY

pavement 9.8 m wide.

MORNINGTON SHIRE Bungower Road — Reconstruction of 3.2 km from

Nepean Highway to Moorooduc Road to provide a sealed pavement 7.4 m wide.

SHERBROOKE SHIRE

Belgrave-Ferny Creek Road — Reconstruction and realignment of 1.1 km from Sandells Road to Ham

Road to provide a sealed pavement 6.4 m wide.

**WAVERLEY CITY** Road -- Reconstruction of 0.4 km from

Waverley Road to Wilga Street to provide a sealed pavement 16.8 m wide.

Reconstruction of 1.0 km from Lum Road Mackintosh Road to Ferntree Gully Road to provide a sealed pavement 12.8 m wide.

### **GEELONG DIVISION**

CORIO SHIRE Station Street — Reconstruction between Donnelly

Avenue and Tulip Street to provide dual carriageways

each 8.8 m wide.

Steiglitz Road — Construction of new bridge 24.4 m long and 7.4 m wide between kerbs over Sutherlands CORIO AND BANNOCKBURN

Creek

Barwon Heads-Torquay Road — Construction of 2.7 km north of Breamlea to provide a sealed SOUTH BARWON SHIRE

pavement 6.2 m wide.

WERRIBEE SHIRE Ballan Road—Reconstruction and widening of 2.8 km

north of Werribee to provide a sealed pavement 7.4 m

wide.

Werribee Street — Reconstruction between Watton Street and Deutgam Street to provide a sealed pavement 18.3 m wide.

### HORSHAM DIVISION

HORSHAM CITY Baillie Street — Reconstruction of 1.0 km from Henty

Highway to Menadue Street to provide a sealed pavement 12.2 m wide.

KARA KARA SHIRE Swanwater Road — Reconstruction of 2.2 km north of

Sunraysia Highway to provide a sealed pavement

**KOWREE SHIRE** Mitre Road — Construction of 6.1 km east of Nhill-

Gymbowen Road to provide a sealed pavement 3.7 m

wide

MILDURA SHIRE Red Cliffs-Colignan Road — Reconstruction and

widening of 5.8 km east of the Calder Highway to

provide a sealed pavement 6.2 m wide.

STAWELL SHIRE

Great Western-Red Bend Road — Construction of reinforced concrete bridge 31.9 m long and 8.5 m wide between kerbs, east of the Western Highway.

### METROPOLITAN DIVISION

**BOX HILL CITY** Station Street — Reconstruction between Lynden

Street and Piedmont Street to provide a sealed pavement 12.8 m wide.

**BROADMEADOWS CITY** Camp Road — Reconstruction of southern half from

the Upfield railway line to Pascoe Vale Road to provide a sealed pavement 14 m wide.

**CAULFIELD CITY** Booran Road -- Reconstruction between Woodville

Avenue and North Road to provide a sealed

payement 11.9 m wide.

HAWTHORN CITY Power Street-Riversdale Road and Wallen Road -

Reconstruction of intersection.

HEIDELBERG CITY Southern Road — Reconstruction between Waterdale

Road and Bamfield Road to provide a sealed pavement averaging 10 m wide.

KEILOR CITY Broadmeadows Road ---Reconstruction between

Sharps Road and Lancefield Road to provide a sealed

pavement 7.4 m wide.

Hopkins Road — Reconstruction of 2.6 km south of the Western Highway to provide a sealed pavement MELTON SHIRE

7.4 m wide.

MORDIALLOC CITY Governor Road — Reconstruction between Lamana

Road and Doncaster-Mordialloc Road to provide a

sealed pavement 12.5 m wide.

NORTHCOTE CITY High Street — Reconstruction of west side between

Beavers Road and Normanby Avenue to provide a

sealed pavement 5.8 m wide.

### TRARALGON DIVISION

Jeetho Road — Reconstruction and realignment of 1.8 km south from South Gippsland Highway to provide a sealed pavement 6.2 m wide. KORUMBURRA SHIRE

SOUTH GIPPSLAND SHIRE Foster-Promontory Road — Reconstruction of 1.5 km

south of Foster to provide a sealed pavement 6.8 m

wide.

Bull Swamp Road — Construction of a reinforced concrete bridge 18.3 m long and 7.4 m wide over WARRAGUL SHIRE

Bear Creek.

### WARRNAMBOOL DIVISION

Chatsworth Road — Reconstruction of 2.4 km east **DUNDAS SHIRE** 

of Hamilton to provide a sealed pavement 6.2 m wide. Gardeners Road — Reconstruction of 4.2 km east of Cavendish to provide a sealed pavement 3.7 m wide.

Coleraine-Nareen-Moree Road — Reconstruction of 3.3 km north-west of Coleraine to provide a sealed WANNON SHIRE

pavement 6.2 m wide.

Albert Street — Reconstruction and realignment of 3.6 km west of Warrnambool to provide a sealed WARRNAMBOOL CITY

pavement varying in width from 7.4 m to 12.2 m.

### SPECIAL PROJECTS

### Details of Special Projects on which work was carried out during the year

Project No.	Project	Progress of Work
17.	Hume Freeway—Construction of a four-lane freeway from south of Wallan to north of Broadford.	Work continued over the entire length of 34 km during the year.
20.	Mallacoota-Wingan Inlet Road—Construction of a new tourists' road.	A bridge over the Betka River and associated road works were constructed.
24.	Eastern Freeway—Construction of a multi-lane freeway from Alexandra Parade, Collingwood to Thompsons Road, Camberwell.	Work continued over the entire length of 9 km during the year.
25.	Yarra River Bridge, Johnson Street, South Melbourne.	Work commenced on the construction of the bridge and approach roads.
33.	Princes Highway East—Construction of a new bridge over the Snowy River at Orbost and realignment of approaches.	Work commenced on the construction of the bridge and approaches.
40.	Princes Freeway—Construction of a second carriage- way between Moe and Hernes Oak.	Work continued on the construction of the Hernes Oak interchange and work commenced on the construction of the Gunns Gully interchange.
41.	Princes Freeway/Princes Highway—Construction of dual carriageways between Morwell and Traralgon including a by-pass of Morwell.	A second carriageway was constructed between Traralgon and Airport Road, a distance of 3.2 km.
42.	Bass Highway—Improvements from South Gippsland Highway to Dalyston, including grade separation at the South Gippsland Highway intersection.	Grade separation at the South Gippsland Highway intersection and a deviation to the west of Bass township were completed.
44.	Tullamarine Freeway—Grade separation at the inter- section of Lancefield Road and English Street.	Drainage work commenced.

### **MOTOR REGISTRATIONS**

Registrations under the Motor Car Act during the year 1974/75 totalled 2,006,354, an increase of 5.1 % over the total for the previous year.

Vehicle	Financial Year 1973/74			ial Year 4/75	Increase	Decrease
Private New Secondhand:	126,282		138,210			-
Re-registered Renewed	46,957 1,222,661	1,395,900	44,048 1,289,832	1,472,090	76,190	
Commercial and Hire New Secondhand:	17,654	1,373,700	17,706	1,472,000	70,190	
Re-registered Renewed	5,679 121,734	145,067	4,653 127,079	140 429	<i>4</i> 271	
Primary Producers' Trucks and Tractors	4.661	145,007	3,000	149,438	4,371	
New Secondhand: Re-registered	4,661 4,349		3,969 2,912			
Renewed	79,136 ————	88,146+	80,736	87,617*		529
Licences under the Motor Omnibus Act Trailers Motor Cycles		764 232,616 45,706		826 251,630 44,753	62 19,014	953
TOTALS		1,908,199		2,006,354	99,637	1,482

<sup>+</sup> Includes 45,020 no-fee tractors. \* Includes 45,228 no-fee tractors.

### **COUNTRY ROADS BOARD**

## Statement of Receipts and Payments for Year Ended 30th June 1975 (Adjusted to Nearer Dollar)

	Country Roads Board Fund	Loan Funds	Roads (Special Projects) Fund	National Roads Act 1974	Roads Grants Act 1974	Transport (P&R) Act 1974 Sections 7 & 8	C'wealth Traffic & Road Safety Improve. Trust A/c	C'wealth Employment Scheme 1975	Regional Employment Dev. Scheme		Total
RECEIPTS	3 4 1 1 3 4 4 2 2 4 8	\$	\$ 	\$	\$	\$	\$	\$	\$	\$	\$ 831,610
Less Cost of Collection 6,423,34										41,984,641	
Municipalities Contributions— Permanent Works—Main Roads										2,047,269	
Commonwealth Grants— National Roads Act 1974 Roads Grants Act 1974 Transport (Planning and Research) Act 1974 Traffic and Road Safety Improvement Commonwealth Employment Scheme 1975	5,998 1,241,400 622,871	300,000	30,428,673	18,920,000	55,510,000	1,241,000	172,217	3,000,000	133,583	10,037,593 149,500 5,998 1,241,400 622,871 300,000 30,428,673 18,920,000 1,241,000 1,241,000 133,583	86,817,945 78,976,800
_	\$56,920,882	\$300,000	\$30,428,673	\$18,920,000	\$55,510,000	\$1,241,000	\$172,217	\$3,000,000	\$133,583		\$166,626,355
	9,712,080 4,174,676 4,294,743		2,889,399		5,368,715		59,241			18,029 435 4 174,676 4,294,743	26,498,854
State Highways— Construction and Reconstruction Maintenance Road Maintenance A/c—Act No. 6222	7,019,900 1,341,162 5,287,600	300,000	2,002,590	1,486,353 1,120,972	5,006,015	 	35,520	1,314,679 1,456,043	74,179	17,165,057 3,992,356 5,287,600	26,445,013
Freeways— Construction and Reconstruction Maintenance Road Maintenance A/c—Act No. 6222	282,546 614,022 455,250	 ::	16,257,671	12,673,647 299,028	18,708,836	 ::		39,386 	21,312	47,983,398 913,050 455,250	49,351,698
Tourists' Roads— Construction and Reconstruction	2,036 389,362	::			828,300 712,865		. 50	189,892	11,960	1,032,238 1,102,227	2,134,465
Forest Roads— Construction and Reconstruction	190,389				415,603 495,708		··			415,603 686,097	1,101,700
Unclassified Roads— Construction and Reconstruction Maintenance Contribution to Melbourne & Metropolitan Tramways Board—	674,069 3,708,062	::	7,379,013	···	16,038,160 430,798	::	77,406 	::	26,132	24,168,648 4,164,992	40.500.510
Tram Tracks Reconstruction  Metropolitan Bridges Metropolitan Intersection Control Programme Murray River Bridges and Punts Traffic Line Marking  Traffic Line Marking	122 005	···								200,000  	28,533,640 1,448 333,440 122,985 783,869
Statutory Payments         2,688,4           Interest and Sinking Fund         375,3           Traffic Authority Fund         750,7           Tourist Fund         621,5           Transport Regulation Fund         621,5	7.5 19										135,307,112 4,436,148
Planning and Research Capital Expenditure Plant Replacement and Additions 1,783,4				• •		1 ,215,377					2,204,749
Buildings, Workshops, etc	2,589,526 8,701,592		1,900,000	3,340,000	7,490,000						2,589,526 21,431,592
	0,701,392		1,700,000	3,3-10,000	.,.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						21,431,392
Management and Operating Expenditure	\$56,304,277	\$300,000	\$30,428,673	\$18,920,000	\$55,495,000	\$1,215,377	\$172,217	\$3,000,000	\$133,583		\$165,969,127

R. G. COOPER, Chief Accountant, 22nd October, 1975.

### AUDITOR GENERAL'S CERTIFICATE

The accounts of the Country Roads Board for the year ended 30th June, 1975, have been audited. In my opinion the above Statement of Receipts and Payments fairly presents in summary form the transactions during that period.

B. HAMILTON, Auditor-General, 27th October, 1975.

### **COUNTRY ROADS BOARD**

### Loan Liability as at 30th June, 1975

	Main Roads, etc.	Developmental Roads	TOTAL
Permanent Works			
Main Roads	16,730,322.16		16,730,322.16
State Highways	18,304,304.20		18,304,304.20
Freeways	3,000,000.00		3,000,000.00
Tourists' Roads	227,316.44		227,316.44
Forest Roads	2,167.89		2,167.89
Developmental Roads	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	12,851,515.09	12,851,515.09
Discount and Expenses	743,435.35	583,722.84	1,327,158.19
Total Amount Borrowed	\$39,007,546.04	\$13,435,237.93	\$52,442,783.97
ess Redemption of Loans			
Redemption Funds	170,438.11	1,292,772.73	1,463,210.84
Main Roads Sinking Fund	571.376.76	1,2,2,7,2.75	571,376,76
Developmental Roads Sinking Fund	371,370.70	110,166.02	110,166.02
State Loans Repayment Fund	3,407,266.34	110,100.02	3,407,266.34
National Debt Sinking Fund	7,827,517.46	7,486,187.52	15,313,704.98
Consolidated Fund	21,321.14	1,100,107.52	21,321.14
	\$11,997,919.81	\$8,889,126.27	\$20,887,046.08
Loan Liability at 30th June 1975	\$27,009,626.23	\$4,546,111.66	\$31,555,737.89

# Works Executed on Behalf of Commonwealth and State Government Authorities for the Year Ended 30th June 1975

(Adjusted to Nearer Dollar)

Departments	Description of Works	Expenditure		
Commonwealth— Department of Works	Access roads to various Commonwealth establishments		21,623	
Victoria—				
Housing Commission	Overpass at Riggall Street, Broadmeadows City	684,513		
Lands & Survey Department	Reconstruction of Dunmoor Road, Glenelg Shire	2,984		
Melbourne and Metropolitan Board of Works	Roadworks in connection with Cardenia Reservoir, maintenance of Marysville-Woods Point Road	311,230		
Ministry of Tourism	Additional snow clearing on the Alpine Road to Mt Hotham	20,874		
Ministry of Transport	Grade separated level crossing projects etc. charged to the Transport Fund	1,893,187		
	Grade separated pedestrian crossings charged to State Treasury, Municipalities and Transport Fund	168,468		
Premier's Department	Roadworks in connection with Wonderland and Sundial Roads, Stawell Shire	300		
Rural Finance & Settlement Commission	Roadworks in Commission land settlement areas throughout the State	13,408		
State Electricity Commission	Road and bridge works in connection with the extension of Morwell Open Cut, removal of tram tracks in Bendigo	449,385		
State Rivers & Water Supply Commission	Roadworks in connection with Dartmouth Dam Project	1,064	3,545,413	
State Treasury	Kings Bridge—sundry expenditure less proceeds of rental of properties acquired in connection with construction of Kings Bridge	7,036 Cr	3,343,413	
33	Improvements to various roads adjacent to State Forests to facilitate the extraction of timber and charged to Municipalities Forest Roads Improve- ment Fund	47,361		
" "	Restoration works on roads and bridges damaged by floods	8,660,803	8,701,128	
			\$12,268,164	