

A photograph of a green truck with a white canopy driving on a multi-lane highway. The truck is carrying several cars on its flatbed. A dark green sedan is on the top level, and a white car is on the bottom level. In the background, other vehicles and a concrete bridge are visible against a clear sky.

Issued by The Country Roads Board
60 Denmark Street, Kew, Victoria 3101

Special school project

page 12

Other features:

Roads – cash crisis

page 7

Royal treatment for the Princes

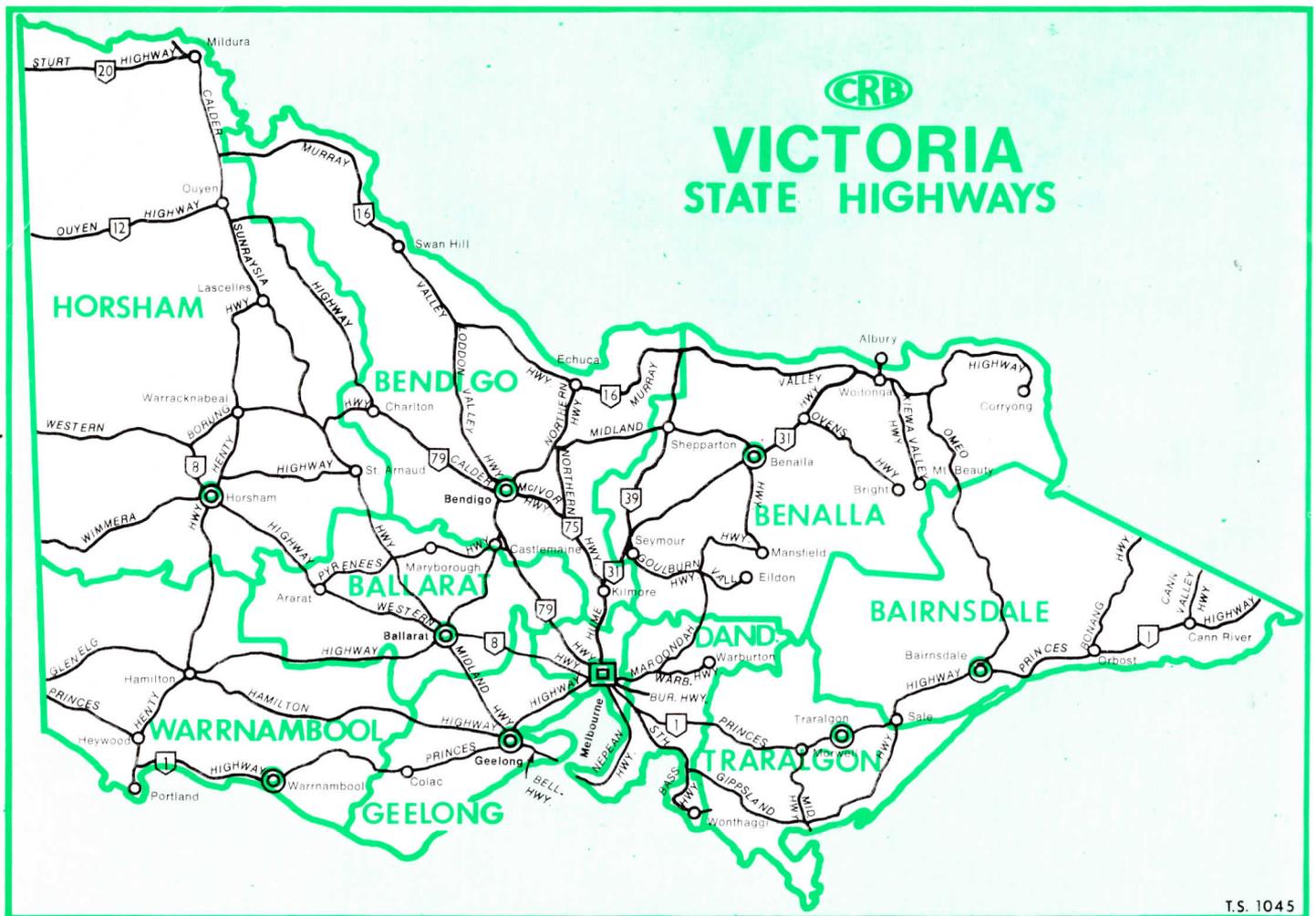
page 10

The ecology of transportation

page 16

Hume Freeway – Victoria's latest and best

page 3-6



THE CRB

The CRB is the State Road Authority of Victoria. There are about 160,000 kilometres of public roads in Victoria, of which 23,700 km comprise the CRB's network of the State's principal roads.

The lengths of roads declared or proclaimed under the Country Roads Act are State Highways 7056 km,

freeways 206 km, main roads 14,605 km, tourists' roads 801 km, forest roads 1039 km.

The CRB's aim is to create an efficient road system within the context of the overall transportation needs of the community.

DIRECTORY

CRB HEAD OFFICE:

60 Denmark Street
Kew 3101
Tel.: 86 5321

BAIRNSDALE DIVISION

75 Nicholson Street
PO Box 484
3875
Tel.: 52 3344

BALLARAT DIVISION

1315 Sturt Street
3350
Tel.: 32 7361

BENALLA DIVISION

50-52 Clarke Street
PO Box 135
3672
Tel.: 62 2288

BENDIGO DIVISION

57 Queen Street
PO Box 204
3550
Tel.: 43 9133

DANDENONG DIVISION

360 Whitehorse Road
Nunawading
PO Box 78
3131
Tel.: 878 0555

GEELONG DIVISION

63 McKillop Street
PO Box 576
3220
Tel.: 21 4744

HORSHAM DIVISION

138 Fibrace Street
PO Box 441
3400
Tel.: 82 0121

METROPOLITAN DIVISION

Head Office
60 Denmark Street
Kew 3101
Tel.: 86 5321

TRARALGON DIVISION

120 Kay Street
PO Box 158
3844
Tel.: 74 3311

WARRNAMBOOL DIVISION

54-56 Kepler Street
PO Box 21
3280
Tel.: 62 8057

Contents

REGULAR FEATURES

"Speaking Of..."	
The Ecology of Transportation	16
Research	15
Publications directory	15
Letters	12
Towards Better Roads	18

SPECIAL FEATURES

School project	12
Royal treatment for the Princes	11
Wallan-Broadford opening	3-6

OTHER ARTICLES

Road Cash crisis	7
Outer Ring Road Study	8
Westgate's "Little Brother"	9
The CRB and State Government policies	14

Personnel

BOARD MEMBERS

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

SENIOR OFFICERS

K. G. E. Moody
Engineer in Chief
N. L. Allanson
Secretary
R. G. Cooper
Chief Accountant

DIVISIONAL ENGINEERS

A. N. Jephcott
Bairnsdale
E. T. Oppy
Ballarat
R. R. Patterson
Benalla
T. M. Glazebrook
Bendigo
S. H. Hodgson
Dandenong
G. W. Marshallsea
Geelong
J. W. Heid
Horsham
L. M. Jones
Metropolitan
D. T. Currie
Traralgon
F. G. Lodge
Warrnambool

FREEWAYS AN ASSET

Freeways were a community asset and an environmental benefit in both rural and urban situations.

The Chairman of the CRB, Mr. R. E. V. Donaldson, said this during his address at the opening ceremony for the Wallan to Broadford Section of the Hume Freeway.

The \$35 million, 34 kilometre freeway, the longest section of new road ever opened by the CRB, was officially opened by the Premier, the Hon. R. J. Hamer, on 3rd May.

Mr. Donaldson said the CRB was a very strong advocate of freeways in both rural and urban situations.

Freeways, or dual carriage-way roads, "are being built in the metropolitan area and will continue to be built because they draw traffic away from local roads," Mr. Donaldson said.

"They act like vacuum cleaners leaving local roads free to carry out their normal function of serving residential and business communities."

He said the CRB was constantly being asked to provide dual carriage-way roads both rural and urban. "Most people definitely realise the great benefits in safety and ease of travel on these high standard roads."

Mr. Donaldson referred to pressure from the municipal councils of Frankston, Whittlesea, Doncaster - Templestowe, within the space of a week to press on with construction of road improvements in these areas.

Referring to the Wallan-Broadford project, Mr. Donaldson said that in the future the freeway could well be termed a "parkway," and would develop into an environmental asset of the State.

"In the CRB we regard ourselves as a conservation authority and our planting of native trees and shrubs will

create parkways of our roads in rural and urban situations."

"Apart from the Forests Commission we are the biggest planter of native trees and shrubs in the State and in the Wallan-Broadford project alone we have planted 40,000 trees and shrubs," Mr. Donaldson said.



Mr. R.E.V. Donaldson

***OUR COVER:** The first trucks roll on the new section of the Hume Freeway, from Wallan to Broadford. The new freeway, forming a by-pass of Wallan, Kilmore and Broadford, is expected to carry 1100 trucks per day, trucks that were formerly clogging the shopping areas of the towns.

FOR FURTHER information relating to articles in this publication, or other matters concerning the CRB, contact the Public Relations Section, tel. 860-2160 or 860-2584.

David E. Webb, Public Relations Officer.

**Steve J. Parsons
Peter J. Carey**

• The Victorian Premier, the Hon. R.J. Hamer, officially opened the Wallan to Broadford Section of the Hume Freeway on 3rd May 1976. Below are highlights from the Premier's comments at the opening ceremony.

What the Premier said...

This is the longest, and in some ways, the most important stretch of freeway yet opened in Victoria.

It is a vital link on the most important national highway in Australia — between its two principal cities.

With the opening of this section, we will have dual carriageways from Coburg to Seymour, and by the early 1980s Victoria will have a duplicated freeway from Melbourne to Wodonga so that eventually we will be able to drive from Melbourne to Sydney without going through a set of lights.

It has cost something more than a million dollars per kilometre — 34 kilometres for \$35 million — contributed by the State with assistance from the Commonwealth.

But to think of it only in those terms is to look only at one side of the balance sheet.

Think of it, first of all, in terms of life and death. By avoiding Pretty Sally — which is one of the steepest gradients in Victoria, and one of the most notorious — the Country Roads Board reckons on a saving of 10 lives and 40 persons injured every year. In community costs alone, to cover Hospital fees, legal fees, vehicle damage, third party and all the costs involved in accidents, this represents a saving of \$1.2 million a year.

Instead of going over a peak of the Great Divide, we now have a road four kilometres shorter, more comfortably graded and set 120 metres closer to sea level. In the first year that will represent a saving of \$1.7 million in wear and tear on vehicles and in excessive fuel consumption caused by stopping and starting.

But, regardless of the savings, we could hardly have designed a road more economically because it was designed by computer. Indeed, it is the first computer-designed freeway in Victoria. Into the computer were fed the necessary safety factors, the lay of the land and the requirements of the environment. This is the result and this is the way it will be in future.

No road will ever again sheer through Victoria, regardless of the landscape, but rather will be built into its environment.

Here it is particularly necessary because this is the most important inter-capital link on the Australian continent and it has been since first it was forged by the explorers and miners, settlers, bushrangers, convicts and troopers who settled the land. Hume and Hovell passed this way. Thousands more came by in their search for gold. And hereabouts, too, lurked Ned Kelly and Co. Not far to the north the memory of him still lingers.

So the Hume links not only Sydney and Melbourne, it also links us with our past. And it doesn't end there because the Hume, as a Freeway, is a road to our future.

We substantially reduced our freeway network three years ago, chiefly in the inner

suburbs of Melbourne, because of its possible sociological and environmental effects and overall costs. We could see that it was going to cause loss of established housing and disruption of the community.

But we reaffirmed, at that time, our intention to build freeways in outer suburban and country areas where forward planning was still possible and communities would not be disturbed so that traffic could be moved with greater safety and convenience and be removed from local streets.

Freeways are a specialist provision for a specialist task. By separating traffic going each way and separating vehicles from pedestrians they dramatically reduce the accident rate by a third while being capable of carrying three times the capacity of an ordinary arterial road.

Vehicles function most efficiently somewhere between 80 and 100 kilometres an hour. Therefore freeways make possible the most efficient vehicle function. Through this efficiency, and particularly through the elimination of so much stopping and starting, pollution is reduced by up to 80 per cent.

People benefit, the environment benefits and, through increased capacity, smoother flow, less wear and tear and lower fuel consumption, commerce and industry find operating costs are lower.

But what about the adjacent communities? It is accepted as a matter of principle and has been proved as a matter of fact that raising the standard of access promotes the growth of adjacent towns.

You have only to look at the growth of Weribee as a result of the Maltby by-pass or the development of Keilor, Airport West and Niddrie, because of the improved access provided by the Tullamarine Freeway.

In the long term the development of the Hume will give a considerable boost to the development of Albury-Wodonga which is already growing faster proportionately than Melbourne.



Members of the Board, the Transport Minister and the Premier at the official opening. From left CRB Chairman Mr. R.E.V. Donaldson, Transport Minister the Hon. J.A. Rafferty, the Hon. R.J. Hamer, CRB Deputy Chairman Mr. T.H. Russell, and Board Member Mr. W.S. Brake.



TOP: Traffic stopped momentarily before the actual opening of the new freeway. **BELOW:** The Premier cuts the traditional ribbon. **RIGHT:** A truckie meets the premier.



WHAT'S NEXT FOR THE HUME...

The Hume Highway is the most important inter-capital route on the Australian Continent.

The CRB is progressing with plans to construct a divided road suitable for development as a freeway from Melbourne to Wodonga to form part of an inter-capital national highways route system. This is being done in close consultation with local government bodies along the Hume corridor.

In May, 1976, the CRB opened a 34 kilometre section of the Hume Freeway, bypassing the towns of Wallan, Kilmore and Broadford. This newly opened section forms part of an 80 kilometre divided highway between Melbourne and Seymour.

To the north work is under way on various sections of the eventual Hume Freeway from Melbourne to Wodonga.

Seymour to Avenel

The CRB has received council agreement on the route of a 26 kilometre freeway bypassing the towns of Seymour and Avenel and a statement of environmental consideration has been exhibited by the Ministry of Conservation.

Work is expected to begin next summer.

Avenel to Euroa

Design for the duplication of the highway north from Avenel to Euroa is progressing and construction work on a 12 kilometre section between Avenel and Tubbs Hill is expected to start in a few months.

The CRB is currently investigating alternatives for a 10 kilometre freeway bypass of the township of Euroa.

The alternative plans are expected to be forwarded to the Euroa Shire Council for comment late in 1976.

Violet Town to Benalla

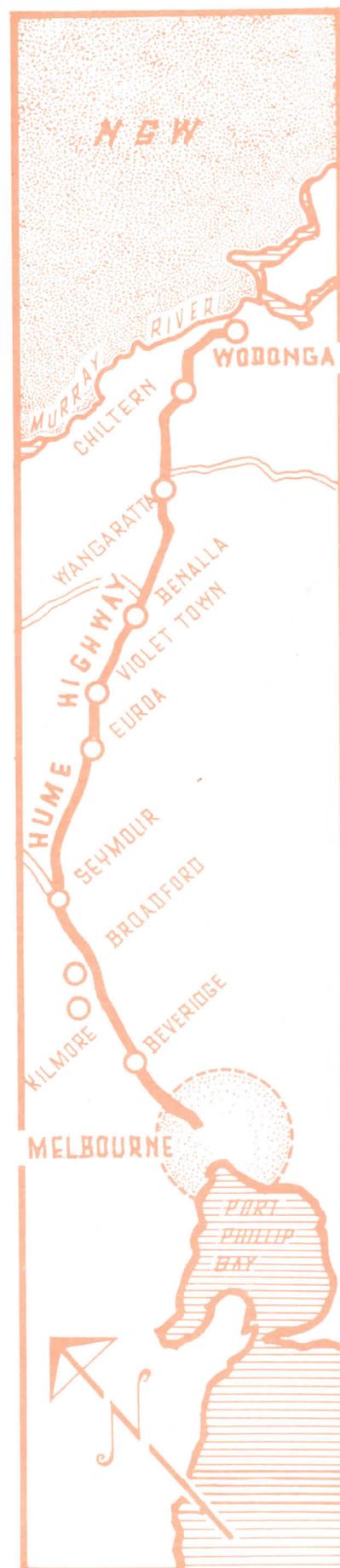
Work has begun on the duplication of the Hume Highway between Violet Town and Badginnie. This work will eventually connect to a bypass of Violet Town and a divided highway north towards Benalla.

Benalla to Wodonga

A progress report on the CRB's preliminary investigations for a 65 kilometre freeway bypassing the Cities of Benalla and Wangaratta is expected to be forwarded to councils later in the year.

Preliminary planning is well advanced for the duplication of the highway northwards from Wangaratta. Planning of the section approaching Wodonga has been deferred until the future planned development of the Hume Highway at Wodonga is determined, including final decisions that would meet the needs of an interstate Hume Highway and the future expansion of the Albury-Wodonga area.

In July, 1976, the CRB completed the widening of the Lincoln Causeway, between Wodonga and the State border, to provide two lanes for traffic in each direction.



Two-thirds cut in roadwork

Camberwell councillors had learned that, apparently, it took more than a growing traffic problem and deteriorating road system to attract State Government assistance, said the mayor, Cr Peter Woodhouse.

They had been considering a report by City Engineer, Mr Ross MacKenzie, on Country Roads Board grants for 1976-77.

All were prepared for some restraint by the state despite council's

Burke Rd and Camberwell Rd, has been the scene of a recent accident which killed a five year old boy.

Costs necessary to repair the road were estimated at \$100,000.

LESS CRB MONEY ON STREETS

The Country Roads Board has decreased road funds in the Shire.

These figures were revealed by the engineer, Mr R. C. ...

Road funds are inadequate

CONSTRUCTION AND RECONSTRUCTION allocation for main roads the coming year by \$9,000,000

Road and particulars	C.R.B. Fund	S.G.	Total
Maintenance (excluding patrol maintenance)	15,000	15,000	30,000
Falls, const. of culvert 1.5 k.m.	6,000	3,000	9,000
Fish Creek-Foster, reconst.	1,320	660	1,980
Fish Creek-Foster, I.T.P.&S. for seal, 1.5 km.	660	330	990
Hazel Park, reconst. 2 k.m. kilometres	18,000	12,000	30,000
Port Franklin, I.T.P.&S. 2.8 seal, 2.8 km.	6,000	2,000	8,000
Toora Gunyah, widen seal 4 kilometres	3,000	1,000	4,000
	6,660	3,330	9,990
	56,640	37,320	93,960
		6,500	100,460

Roads cash crisis:

The allocations made to councils for fresh works on urban roads and unclassified roads are:

	Applications 1975/76	Comparable Allocations 1975/76	Applications 1976/77	Allocations 1976/77
Main Roads	\$ 56,416,000	\$ 23,369,000	\$ 61,109,000	\$ 24,032,000
Unclass. Roads	89,567,000	21,210,000	102,369,000	21,425,000
Total	\$145,983,000	\$44,579,000	\$163,478,000	\$45,457,000

PROJECTS UNDER THREAT

Although the CRB's 1976/77 allocations to councils for fresh works on main roads and unclassified roads are slightly higher than in financial year 1975/76, inflation has had such a sharp effect on roading costs that the actual volume of work carried out in 1976/77 is likely to be less than in 1975/76.

In announcing the allocations to councils in April the CRB drew attention to cost increases of 20% for construction and 16% for maintenance and the lack of funds currently being made available for roads.

Since the announcement there has been much dissatisfaction expressed by both rural and urban councils on the inadequacy of the allocations. Most rural councils rely heavily on these allocations from the CRB to maintain and improve roads in the municipality and indirectly

this helps to maintain employment levels.

The Secretary of the Municipal Association of Victoria, Mr. J. D. Fagan, has warned against allowing our roads to degenerate.

"If we allow our roads to degenerate — as they are doing now — the cost to the community must be reckoned in hundreds of millions of dollars lost through increased fuel consumption, greater vehicle maintenance, the dust menace and a high accident rate, plus lower worker productivity caused by delays and bottlenecks," Mr. Fagan said.

In commenting on the allocations the CRB Chairman, Mr. R. E. V. Donaldson, said that as the State Road Authority the CRB recognised that there is a cash crisis developing in roads "and the momentum of this crisis is accelerated with each day that passes".

"To patch and reseal a road costs \$4000 a kilometre. To reconstruct after the pavement fails costs \$30,000 a kilometre. That is what the cash crisis means in terms of maintenance", Mr. Donaldson said.

"We see the need for new facilities and are under increasing pressure from councils for funds to get them started. But in cash reality we just have not got the funds to begin these vital projects."

"What people forget is that our roads are a huge, State-wide, mass transit system, carrying people and the things they need — emergency services, mail, food, clothing, medicine and other essentials."

"If the road system is not adequately maintained and improved the costs to the community in the long term will be enormous," Mr. Donaldson said.

THE OUTER RING ROAD

Study looks at strategic significance

A study has begun into the strategic significance of a new transport route around the main built-up area of Melbourne. The findings of the study, into what is known as the Outer Ring Road, should be known later this year.

The consulting firm of P G Pak Poy and Associates Pty Ltd and a number of sub-consultants have been retained for this study. The consultants are being supervised by the Road Planning Liaison Committee consisting of representatives of the CRB, the Ministry of Transport and the Melbourne and Metropolitan Board of Works. Other transport authorities are also being consulted.

In the Melbourne Metropolitan Planning Scheme a main road reservation has existed for a number of years, connecting the Princes Highway at Brooklyn with the Greensborough Road at Diamond Creek via a circular route passing through Sunshine, Broadmeadows and Thomastown, and a similar reservation exists connecting the Maroondah Highway west of Ringwood, southwards through Scoresby and Springvale to Frankston.

These reservations provide the opportunity for a circular route around the built up area of Melbourne except for a section between Diamond Creek and Ringwood. A preliminary examination has been made of the desirability of connecting these reservations — such a connection would mean the crossing of the Yarra

Valley and the location of a route through an area of environmental significance. The first step has been to study the strategic implications of the construction of an outer ring transportation facility on the future growth of Melbourne.

The study has therefore been expanded to examine the strategic effects of constructing alternative types of transport facilities such as a freeway, an arterial road and/or public transport facilities in the outer ring corridor.

The following tasks are under way:

- The development of alternative land use patterns for future Melbourne to assess the relationship between an outer ring and these future urban patterns;
- The preparation of alternative transportation proposals around the ring for assessment, for example, a freeway, an arterial road, or public transport facilities, or a combination of these, over the whole or parts of the ring;
- The identification of critical issues, mainly of a regional or strategic nature, but recognising local problems;
- The development of an evaluation framework, using the latest techniques, so that present day and future implications can be identified.

When these tasks are complete the evaluation of alternative courses of action will be carried out.

Westgate's "Little Brother"

Westgate's "little brother", the Johnson Street Bridge, will provide a dramatic improvement to traffic conditions at the Spencer Street-Flinders Street corner of the Central Business District.

The bridge will form an alternative route from Footscray Road over the Yarra River 750 metres west of Spencer Street Bridge. Construction is well under way.

Lorimer Street in South Melbourne is being upgraded and the Footscray Road-Pigott Street intersection is undergoing reconstruction to allow for the diversion of large volumes of traffic away from the CBD.

At present, Spencer Street Bridge is heavily congested, carrying 52,300 vehicles per day, 9700 of which are commercial. A large proportion of this traffic will be diverted across the Johnson Street Bridge when completed towards the end of next year.

\$19 million Compensation

The total estimated cost of the bridge is \$29 million, as at 1976 prices, including \$10 million for construction and \$19 million for compensation costs. The compensation costs included relocation of the Union Steam Ship wharf to Victoria Dock, loss of wharfage and the purchase of a floating dock to replace the old Duke's and Orr's dry dock.

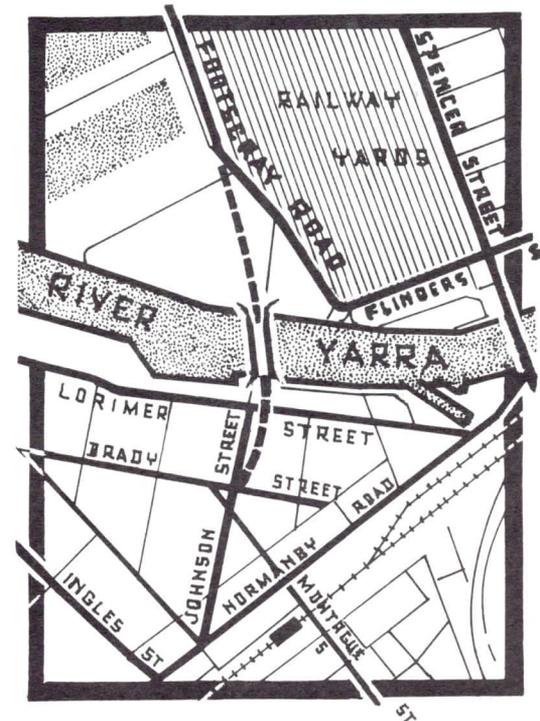
Loss of wharfage compensation was made because ships will no longer be able to use the wharves east of the new bridge. This area will be renovated into a permanent maritime museum, which already is seeing the restoration of the clipper, Polly Woodside.

The Johnson Street Bridge is part of an integrated, long term plan, to channel through traffic away from the CBD. It will link with the southern bypass of the CBD and the F9 extension from Westgate Bridge to Kings Way and St. Kilda Road.

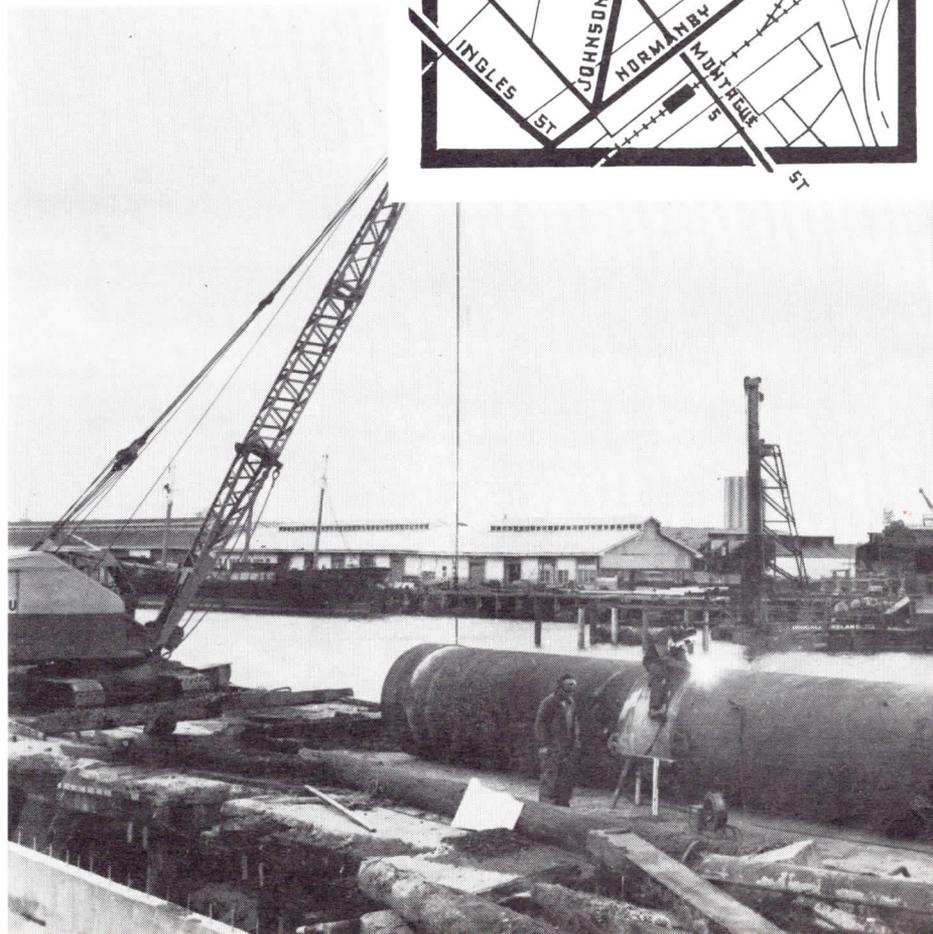
There has been considerable council and community support for both the Johnson Street Bridge project and the extension of the F9 freeway and the CRB regards the projects of high priority.



TOP: Heavy vehicles thunder through the intersection of Flinders and Spencer Streets, City.



BELOW: Work proceeds on the new Footscray Road extension and Johnson Street Bridge.



Royal treatment for the Princes...



LEFT: The Cann River bridge across the flood prone river course of the Cann River, 470 kilometres east of Melbourne. The new bridge replaces a structure which had been damaged by flood waters in recent years.

BELOW: Work nearing completion on the Gunn's Gully interchange, on the Princes Freeway, to provide access to Moe, Yallourn and Newborough.

In search of the yellow Gum tree

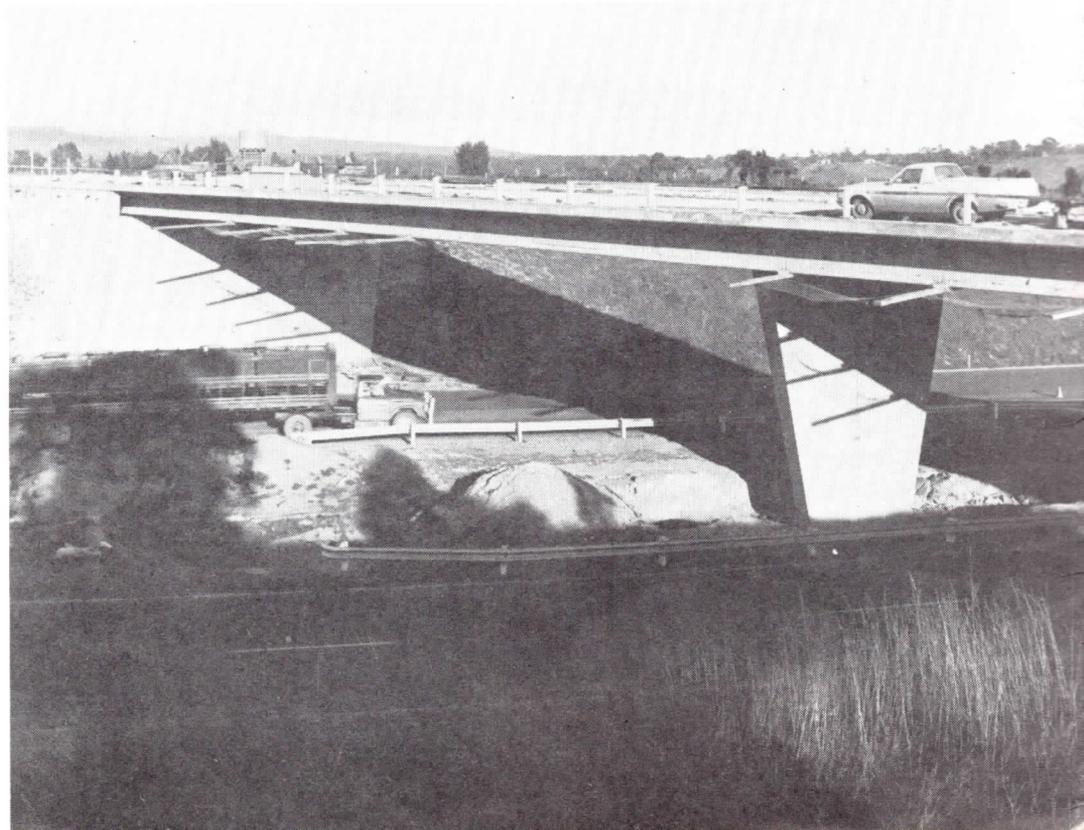
While taking this photographic survey of major works on the Princes Highway the CRB's intrepid photographic team were told of a remarkable yellow gum tree alongside the highway, past Cann River.

The leaves on this unusual tree, near the 475 kilometre post, evidently turn bright yellow at a particular time of the year. Local CRB personnel and Forest Commission officers can find no reason to explain this change.

Gum trees just don't turn yellow!

Unfortunately the tree changes colour in the Spring, and not in Autumn when the photographers arrived.

Or maybe the Melbournians were being had by the locals!



The Princes Highway East is the main highway leading to the east of Victoria.

In addition to commercial and recreational traffic it carries high volumes of commuter traffic within the Latrobe Valley.

To meet this demand the CRB constructed the Moe to Morwell section of the Princes Highway, and has recently begun work on the Drouin to Warragul section.

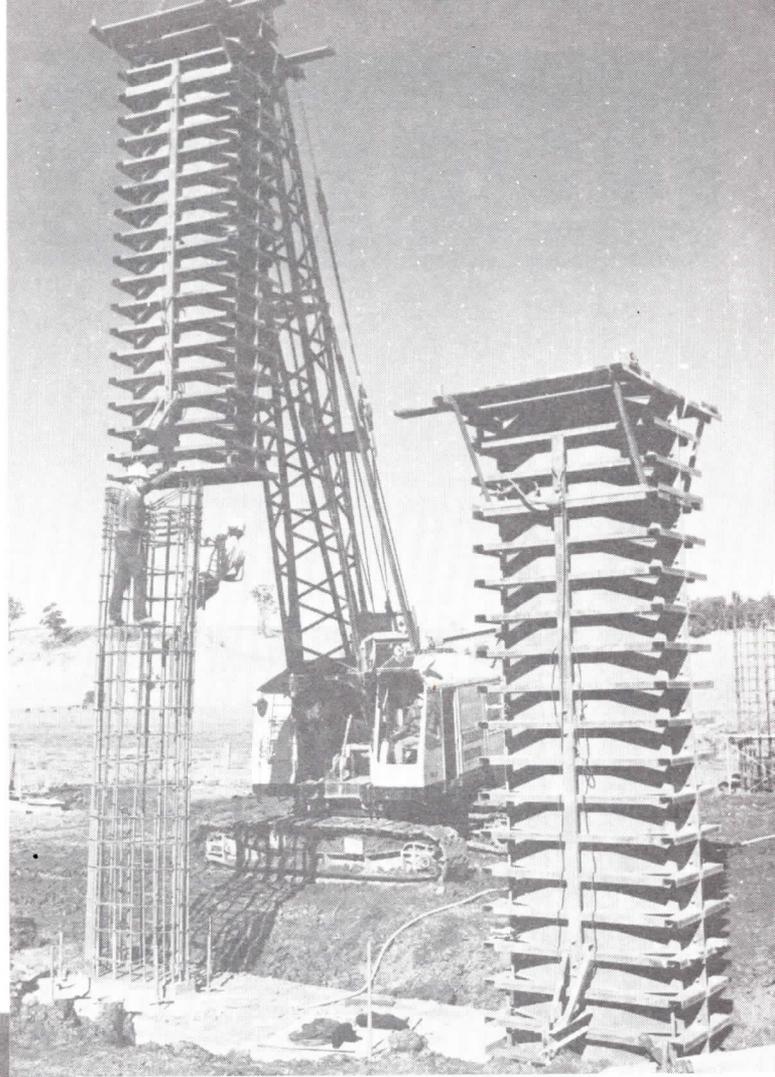
Nearer to Melbourne, design for a freeway bypass of Berwick has commenced. The Princes Highway is currently being duplicated between Beaconsfield and Pakenham.

At the eastern end of the Latrobe Valley the CRB is constructing the second carriageway of a divided highway between Morwell and Traralgon.

In the far east of the State the Princes Highway has regularly been subject to flooding caused by high rainfall and melting snow in the Alps.

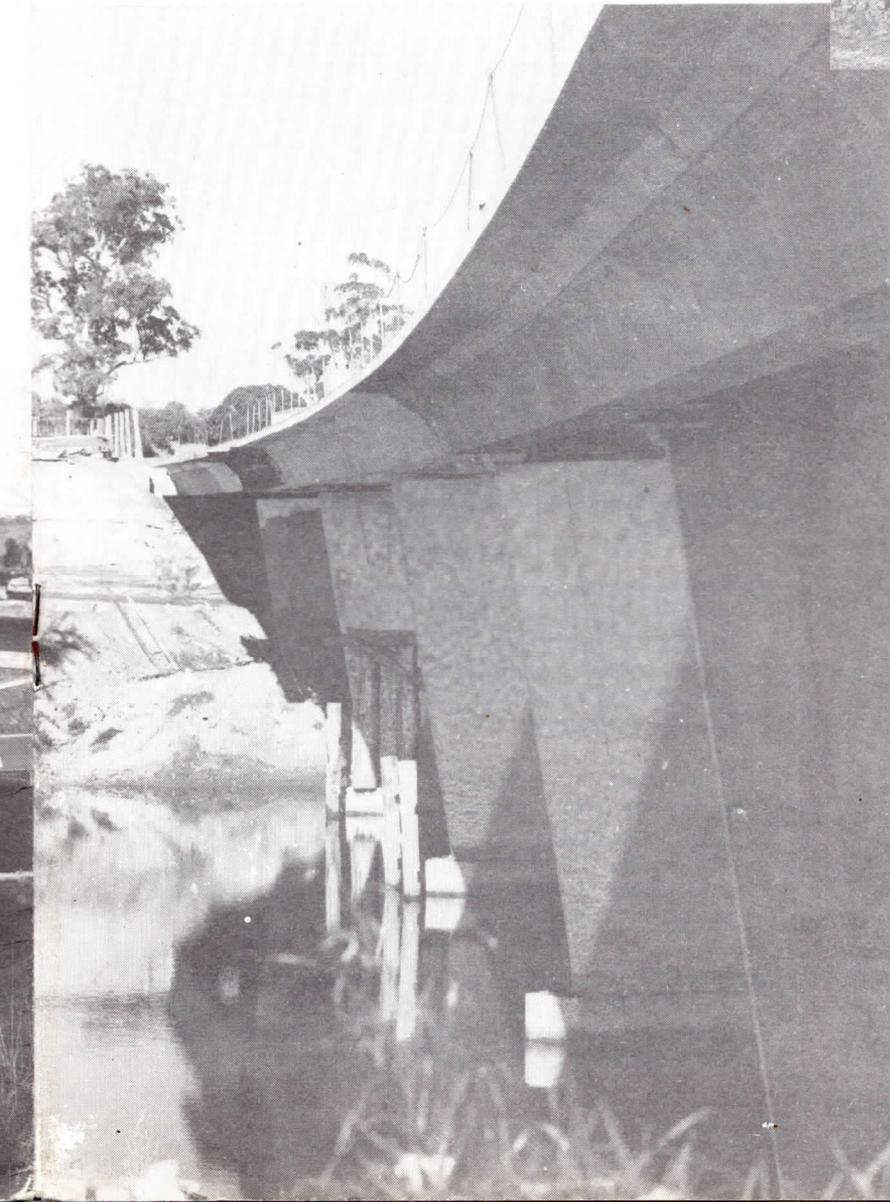
At Orbost the CRB is constructing three bridges and raising the level of the highway where it crosses the Snowy River flood plain. The main bridge across the Snowy River is expected to be opened to traffic in the spring of 1976.

A new bridge across the Cann River has been recently opened to traffic to replace an old structure which was damaged by flood waters.



New bridges under construction across the flood prone Snowy River flood plain. Left: the almost complete main bridge across the Snowy River. TOP: lowering a steel pier form, or cast, in preparation to pouring concrete for a bridge pier on the Ashby's Gulch Bridge on the Snowy flood plain. BELOW: the back-breaking job of placing reinforcing on the deck of the Snowy River bridge. The existing road bridge can be seen in the background.

11



LETTERS

I have travelled over 3000 kilometres in the last month on roads in Victoria, South Australia and New South Wales, and would like to take this opportunity of expressing the wonderful work done by the CRB. The roads in Victoria are so very well marked and the signs are clearly displayed and I am sure must be greatly appreciated by travellers.

My various trips have been made more enjoyable by the standard of roads in Victoria. This letter may not be usual practice, but it is in appreciation of some very good trips on Victorian roads.

**Mrs. R. Phelley,
Williamstown, Vic.**

It is farcical that nothing is being done to alleviate tremendous congestion from the South Eastern Freeway to Gardiner Station. Cars are banked up for 2 miles every day.

Anonymous.

CRB's note — The CRB and local councils are well aware of the problems in this area, and an investigation will soon be undertaken on this subject, including the desirability and feasibility of making a suitable road link between the South Eastern Freeway and the Mulgrave Freeway.

I have enjoyed many holidays in Victoria, travelling by car. I hope you will like my tribute to your organisation.

THEY twist, they run in long, straight lines,
They are the links that join the swollen city
To hills, to towns, to farms, to rolling surf
This little State, where once the horse's power
Pulled us through mud and dust, and then the train
Shouted its victory over miles is now
A web of many roads.

SO smooth they are
The speedsters race along, can hardly tell
Where they have been; but there are others
Who love to leave the car, walk among trees
Or feel the sweep of northern plain and sky,
Lunch by a laughing river, stand above
An angry sea or ramble through
A little town, noting an ancient church,
New school or sleeping dog or bright motel.

AND then the men who tend the roads, the boys
In orange coats who wield the big machines—
How they must wish the cars away! but yet
Are courteous, smile and wave in wind or heat or
driving rain.

SO, Mr. CRB, accept my thanks
For many happy days, and more, I hope,
To come; and where I'm going fairly soon,
If they have bumpy stretches, grades too steep
Or signs unclear, I'll mention you to them.

**Mrs. Nance Blackman,
Cheltenham, Vic.**

I would like to congratulate the CRB for the wonderful job made of the new freeway from Beveridge to Broadford.

It is pleasing aesthetically and functionally facilitates the ease of the journey to Melbourne.

**Mr. G. Webster,
Euroa, Vic.**

STUDENTS HAVE THEIR SAY ON ROADS....

A pilot study among Victorian school students has reinforced the findings of American surveys which indicate that teenagers have some very definite ideas on roads and the automobile.

Both surveys showed:

- An overwhelming majority of students will become licensed drivers as soon as they can;
- They will purchase a car as soon as they can;
- They expect to drive on good roads.

Both surveys showed that nine out of ten students would obtain their licence when turning eighteen and eight out of ten would purchase a car immediately.

The opposite page carries the survey form used in both studies and the CRB invites Victorian secondary schools to participate in a more comprehensive study, by duplicating or photostating the survey form, and carrying out the survey in the classroom as a school project.

Guidelines

For the complete study to be effective the following guidelines should be followed:

1. When completed, survey forms should be returned to the Public Relations Officer, CRB, 60 Denmark Street, Kew, 3101. All forms are needed — not just a precis of results.
2. Students should be in the age group 13 to 17 years.
3. For the study to be a success from the school project point of view, discussion sessions would be desirable. However, for the best results students should first complete the survey form and then develop discussion session from the class results.
4. It is most important to have students complete the first four general questions, as both road and public transport facilities vary over the State and within the metropolitan area, and these factors will be taken into account when compiling the final results.
5. Schools which do not have suitable duplicating facilities can obtain bulk copies of the form by telephoning the CRB, Public Relations Section on 860-2584.

QUESTIONNAIRE

Date 1976

Age years

Residence Suburb

School

Q 1. Do you plan to apply for a driver's licence when you reach eighteen? **Yes/No**

Q 2. Do you plan to have your own car when you get your licence? **Yes/No**

Q. 3. Is public transport available in your area? **Yes/No**

Q. 4. Does your family use public transport? **Frequently/Ocasionally
Seldom/Never**

Q. 5. Is the public transport adequate in your area? **Yes/No**

Q. 6. Are the main roads adequate in your area? **Yes/No**

Q. 7. Should additional roads be built? **Yes/No**

Q. 8. Do you believe roads are harmful to the environment? If yes, why? **Yes/No**

.....
.....
.....
.....
.....
.....
.....
.....

Q. 9. If I were building roads, I would

.....
.....
.....
.....
.....
.....
.....
.....
.....

CRB WORKING WITHIN GOVT. GUIDELINES

The Board is concerned with recent statements in the daily press that suggest it is pursuing policies on urban freeways that are at variance with Government policies and that it works independently of other planning authorities.

Such statements are completely inaccurate.

The Board works within all Government policies. Specifically, as far as urban freeways are concerned, the Board is carrying out no investigations, nor has it any future intentions, that are not in accordance with

the policies of the State Government.

In its planning investigations the Board works closely with its Minister and with municipal councils, planning, conservation, and other authorities and at the appropriate time seeks the views of the public either directly or through the municipal council.

The Board is, of course, bound by planning, environmental and other relevant legislation and procedures.

The Board has statutory responsibilities relating to roads. At the same time it recognises the potential effects of roads on the

environmental and social fabric and a significant part of its planning investigations is directed towards studies of the environmental and social consequences of its proposals.

The Board's aim is to arrive at solutions that give a proper balance between reasonable and safe mobility, environmental and social consequences, and which are acceptable to the community at large.

The Board maintains regular liaison with its Minister and with the Ministry of Transport and works at all times within Government policies.



Jenny lends a hand...

The biggest ever continuous concrete pour on a CRB site and CRB receptionist Jenny Nugent was there to lend a hand.

Jenny, from the CRB Mulgrave Freeway site office, tried her hand with the trowel, under the watchful eye of Charlie Diapemo, during a 700 cubic metre continuous pour on the Forster Road freeway overpass by project contractors, Mecho Constructions.

Mecho had one concrete truck arriving each 3-4 minutes during the pour, with concrete going onto the bridge deck at the rate of 80 cubic metres an hour.

The Forster Road overpass is being built as part of the Mulgrave Freeway extension from Springvale Road to Forster Road, expected to be completed early next year at a cost of about \$13 million.

RESEARCH

Noise checks help...

To provide information about existing noise level climates the CRB has purchased a Community Noise Analyser manufactured by General Radio Company.

Likely noise level from motor vehicles is a factor which is closely analysed by the CRB when evaluating the design of a road facility.

The battery operated machine automatically computes and stores noise levels and does not rely on separate tape recorders, calculators or computers.

Noise levels are monitored and recorded over three sequential time periods and after analysis a noise pattern for the test area can be established.

Some of the more recent locations where the Community Noise Analyser has been used are along the route of the future F9 Freeway in South Melbourne, the western approaches to the Eastern Freeway and on the Hume Highway at Glenrowan.



ROAD PUBLICATIONS

The following publications can be obtained from the CRB by filling in the attached coupon and returning it to Public Relations Section, Country Roads Board, 60 Denmark Street, KEW, 3101.

CRB

- The Roadbuilders
- Traffic Noise - A Shared Responsibility
- Improving Melbourne's Road System
- Widening of Nepean Highway
- Snow Driving - It's An Art
- Roads With Built-in Safety
- Science in Road Development
- Some Answers on Urban Freeways

NAASRA

- Town Bypasses
- Roads and Traffic Noise
- Roads and Traffic Safety
- Roads and Pollution

Name

Organisation

Address

THE ECOLOGY OF TRANSPORTATION

Today the prophets of doom are swaying masses of well meaning citizens into emotional and irrational efforts in attempts to improve our environment, with questionable results.

Our transportation system has come under virulent attack by these Jeremiahs who seem totally unable to comprehend that, in the words of General Billy Mitchell, "Transportation is the essence of civilization."

We are today engaged in moderising and improving an already magnificent transportation system that some seem to take for granted as a natural phenomenon.

The average person's resistance to change makes the task of modernising a great city exceedingly difficult. In a study of the so-called "New Town" of Columbia, Maryland, it became evident that transportation must be considered at a very early stage in the planning and in particular prior to the completion of the land use plan.

The reverse process now being performed in our more viable and progressive cities naturally produces vast resistance and demands for maintenance of the status quo or a return to an obsolete system of a previous century. These difficulties are compounded by a growing segment of the population that wants to preserve the past at all costs.

Boris Pushkarev of the Regional Plan Association of New York City has pointed out that the parkways and expressways in New York City have made the city's two greatest visual assets, its skyline and its water, accessible to public view.

"They have linked together hitherto isolated open spaces into a continuous, interconnected system, eminently fitted to both the natural topography and to the man-made order of the street grid. They have articulated a previously incomprehensible urban mass into visually distinctive chunks and provided a set of magnificent gateways and landmarks in the form of new bridges."

The same transformation is taking place in San Diego and has been proposed in San Francisco. It is indeed ironic that the nearly identical programmes should be so lavishly praised in New York and so roundly condemned in San Francisco.

As Edmund Burke pointed out: "Those who would carry on the great public schemes must be proof against the most fatiguing delays, the most mortifying disappointments, the most shocking insults and worst of all, the presumptuous judgment of the ignorant upon their design."

These "ignorant" gloatingly quote statistics proving that the area devoted to transportation

By **JACOB DEKEMA**, District Engineer for the California Division of Highways in San Diego.

in downtown Los Angeles is over half the total ground area.

Little do they know that our own downtown San Diego, laid out before the automobile was even a dream, had 42 per cent. devoted to city streets. Pierre L'Enfant, in laying out Washington, D.C., proposed 59 per cent. of the total area in streets.

The Los Angeles and San Diego freeway systems will occupy about two per cent. of the land and carry about 60 per cent. of the traffic.

The only really meaningful statistic would be comparison of total floor space with transportation space. The truly astounding fact is that the astronomical increase in floor area by the construction of multi-storey buildings has required only a relatively small increase in the ground area devoted to transportation and terminal facilities.

The good old bad old days . . .

An additional benefit caused by our conversion to high speed mechanized transportation has been the elimination of the need for 90 million acres of pasture land to feed all the horses and mules that were necessary to serve our transport needs of the early 20th century.

This is twice the total area of all the rights of way of all the public roads in the United States including all the 3 million miles of roads that existed before World War 1.

The additional area occupied by the 700,000 miles added to the public road system since then is insignificant compared to the immense area that has been freed to grow food for people. Incidentally, the increase of about 25 per cent. road mileage was accompanied by a 100 per cent. increase in population. Even today, less than half the mileage is paved and, of course, nowhere near the total width of right of way is paved.

In addition, over 1.5 million trees and seedlings are being set out along highway rights of way each year. Look down from the high-rise office buildings in Los Angeles and San Diego, the wide green belts of open space that you see are the freeways.

Lately there has been a great hue and cry concerning smog damage to agriculture. Let us all realise that if it weren't for modern transportation there wouldn't be any modern agriculture with its vast productivity in which one farm worker feeds 30 to 40 people compared

to more backward areas where a one-to-one relation is more common.

Recent magazine articles have pointed out that the latest studies of the United Nations Food and Agriculture Organization show that the great problem of the future will not be starvation but the management of huge surpluses.

The problem will be one of distribution rather than production.

Much of the solution is already visible. An article in the December 15, 1970, issue of Forbes points to "The most efficient form of distribution yet devised, the Supermarket". This phenomenon, of course, depends entirely on modern transportation for its success.

Improvement of the environment comes about through economic growth, not through edict. Economic welfare in turn is largely based on efficiency in transportation.

The economic growth that has already occurred has obviously resulted in vastly improved conditions over those described by the renowned urban planner, Jane Jacobs: "Consider the great cities of the last century without electricity, with their high infant-death rates and their tremendous numbers of young orphans, with their immense number of dray animals, their stinking stables, their flies, their streets running with horse urine and manure . . ."

Obviously we have come far in reducing pollution, but the battle is not yet won. Certainly the reduction in deaths due to fly-borne diseases far exceeds the price we are paying in deaths in transportation.

But even here the picture is far more cheerful than is generally recognised.

In 1909 about 26 million horses travelled some 13 billion miles and 3850 people were killed in accidents involving horse-drawn vehicles.

This gives a mileage death rate of over 30 per 100 million vehicle miles, more than ten times as high as the rate on California's freeways, and further improvements are on the way.

Getting away from it all . . .

The "population explosion" has been accompanied by considerable public trauma, aided and abetted by professional forecasters of the imminent end of the world. As usual, however, the public by and large has not panicked but wisely has spread out to give itself breathing space in a search for privacy and personal identity.

The Stanford Research Institute has called it "a growing revolt of the individual against being treated as part of a herd". They move into garden apartments, low-density subdivisions, and vacation homes.

They get away from the masses by mass use of campers, boats and other means to privacy and convenience.

Transportation itself is a source of outdoor recreation. The Outdoor Recreation Resources

Review Commission reports that, as outdoor recreation, driving for pleasure is nearly as popular as swimming and walking. Public Health Service scientists report that recreational travel tends to reduce tension and thereby improves mental health.

In experimental runs of buses to aid people in Watts gain access to employment in other areas of the Los Angeles metropolitan region it was soon discovered that one of the first pay cheques went for a down-payment for an automobile.

In European cities, too, even with their fine public transportation systems people are purchasing automobiles for their personal transportation. These people are not fools, but have recognised a simple economic principle — transportation improvements increase mobility and the best transportation system gives the greatest freedom in choosing where to live, expands the area where they can sell their labour and gives them a greater choice in selecting shops, educational, religious, cultural and recreational facilities.

For the employer there is a greater ease in recruiting and retaining a suitable supply of labour. For the employee there is a greater likelihood that he will be able to find a job at a level corresponding to his maximum ability.

Gains in productivity and earnings, together with increased job satisfaction, accrue to the benefit of all.

The highly prized "open space" concept of modern city development is almost entirely dependent upon the automobile. It is not possible, even if it were desirable, to arrest this development by slowing the construction of roads, because the roads are already there.

If improvements are delayed they will merely become more inadequate and pose an ever-increasing problem whose solution will ultimately be demanded at great expense.

Cities have to choose between stagnation and transformation to take advantage of the versatility, mobility and accessibility, that modern transportation offers.

The purpose of transportation is not merely to achieve the most economical and efficient vehicles conceivable. The purpose of transportation is civilization itself.

Transportation is the most vital — the primary input to the ecology of human civilizations. If we jointly continue toward our goal of building a better world we will achieve the vision of one of the Hebrew prophets peering into the future. "Every man shall sit under his own vine and under his fig tree and none shall make them afraid."

"Speaking Of . . ." will become a regular feature of CRB News, where reprinted or discussion articles will be published on matters directly or indirectly relating to roads and transport in general. They need not necessarily represent the views of the CRB but are published as a matter of interest and discussion.

***TOWARDS Better Roads details progress on improvements by the CRB to the major road system in the State.**

The CRB is the authority responsible for the planning, design, construction and maintenance of State highways, freeways, main roads, tourists' roads and forest roads throughout Victoria, including the metropolitan area of Melbourne.

The major works currently under construction are summarised below.

Eastern Freeway— Collingwood to Doncaster

Bridgeworks are progressing on the Eastern Freeway between Collingwood and Bulleen, at the Boulevard, Columba Street and Bulleen Road bridges, the Chandler Highway interchange and the twin bridges over the Yarra River and Merri Creek.

Landscaping work is well advanced, particularly in the vicinity of Glass Creek, Kew, and the Yarra Bend Park.

The section of freeway between Collingwood and Bulleen is scheduled for completion late in 1977.

Further to the east, design is progressing on extending the Eastern Freeway to Doncaster Road, near High Street, Doncaster.

Mulgrave Freeway

Paving works between Springvale Road, Mulgrave, and Forster Road, Mount Waverley, are well advanced.

Bridges at Ferntree Gully Road and Blackburn Road have been completed and work at Forster Road is continuing. Work is nearing completion on the Ferntree Gully Road overpass which will provide access to the freeway for westbound traffic from Ferntree Gully Road.

The estimated completion date of the section to Forster Road is early 1977.

Mornington Peninsula Freeway

Bridges across Eelrace Drain are nearing completion and work on the approaches to the bridges is well underway. It is expected that the section south from Eelrace Drain to the existing Frankston Freeway, a distance of two kilometres, will be opened to traffic in the Spring of 1976.

Design is completed for the freeway north of the drain to Springvale Road and preliminary works have begun.

Princes Highway East, Beaconsfield to Officer

Work has been completed on the duplication of the Princes Highway through the township of Beaconsfield to provide two lanes for traffic in each direction.

Duplication works are continuing between Beaconsfield and Officer. This section is scheduled for completion by mid 1977.

Wellington Road, Rowville

Work is well advanced on the realignment and reconstruction of Wellington Road, east of Stud Road.

This work is scheduled for completion late in 1976.

Snowy River Bridges, Orbost

Work is continuing to schedule on three new bridges to carry the Princes Highway over the Snowy River and its flood plains at Orbost.

The bridge across the Snowy River is nearing completion and will be opened to traffic in the spring of 1976.

Pile driving is almost completed at the Ashby's Gulch and Watts' Gulch bridges. Some piers have been erected at Ashby's Gulch and beams have been placed in position. Associated roadworks are proceeding according to schedule.

The whole project is expected to be completed late in 1977.

Cann River Bridge

A new bridge across Cann River has been opened to traffic. Minor work is continuing on the road approaches to the bridge.

The new bridge replaces a structure which had been severely damaged by flood waters in recent years.

South Gippsland Freeway

Construction is well advanced on the southerly extension of the South Gippsland Freeway from the completed section of the Mulgrave Freeway at Princes Highway East, to the South Gippsland Highway at Hampton Park.

An interchange at Pound Road is under construction and earthworks are being placed for the interchange of the new freeway and the existing South Gippsland Highway near the Dandenong-Hastings Road.

The dual carriageways of the freeway between Princes Highway East and Pound Road will be opened to traffic by Christmas 1976 with a single southbound carriageway opened between Pound Road and the South Gippsland Highway.

Mahoneys Road, Thomastown

The construction of dual carriageways in Mahoneys Road between the Hume Highway, Campbellfield, and High Street, Thomastown, is well under way.

Two sections have been opened to traffic from the Hume Highway to Phillip Street, Reservoir, and from High Street to the Central Creek, Thomastown.

Work on the last section between Phillip Street and the Central Creek is scheduled for completion in early August, 1976.

Freeway F9, South Melbourne

Traffic figures derived from an extensive traffic survey carried out in South Melbourne and Port

Melbourne in February and March of this year are currently being analysed by computer.

Drilling rigs have commenced a geological survey of the route of the F9 freeway between the Lower Yarra Freeway and Grant Street, South Melbourne.

Greensborough Freeway

Work is continuing on the construction of road over rail overpasses at Watsonia Road and Grimshaw Street, Watsonia, to eliminate these railway level crossings.

In addition the Nell Street level crossing was closed to motor vehicles in March, 1976.

The construction of the overpasses is scheduled for completion in early 1978.

The new overpasses will form part of the future Greensborough Freeway project north from Watsonia, bypassing the Greensborough shopping centre.

Johnson Street Bridge, South Melbourne

Work is progressing on the Johnson Street Bridge to link the proposed Freeway F9 with Footscray Road.

Foundation construction is continuing and beams have been placed across the first span of the southern approaches to the bridge.

Roadworks at Lorimer Street, South Melbourne and Footscray Road, Melbourne, are well under way.

The project is expected to be completed late in 1978.

Lincoln Causeway, Wodonga

Work has been completed on the duplication of the Lincoln Causeway between High Street, Wodonga, and the Murray River at the State border.

Construction of four bridges and a second carriageway was involved. A fifth bridge was constructed at the High Street end of the causeway in 1972.

Tullamarine Freeway, Essendon

The CRB has opened pedestrian overpasses at Vaughan Street and Bristol Street to provide safe pedestrian access across Lancefield Road to the Essendon Airport.

Traffic signals were installed on Lancefield Road, at the intersection with Matthews Avenue, in the vicinity of Parer Road, Airport West.

These preliminary works form part of the proposed upgrading of Lancefield Road to freeway standard.

Western Freeway, Ballan Section

The CRB has begun construction of 8.4 kilometres of freeway bypassing the township of Ballan.

The formation of earthworks on the approaches to bridge structures is completed and work is progressing on the construction of twin freeway bridges across the Werribee River. Work on a further three bridges over the freeway is expected to commence during winter.

The project is estimated to cost \$8.2 million and will be completed in mid 1978.

Banksia Street, Heidelberg

Work is well advanced on the widening of Banksia Street and the flaring of the Banksia Street-Lower Heidelberg Road intersection, and the Banksia Street-Dora Street intersection.

This work includes the duplication of Banksia Street from Cape Street to the Banksia

Street bridge across the Yarra River.

Work on the Banksia Street-Lower Heidelberg Road intersection is scheduled for completion in November, 1976, and the Banksia Street-Dora Street intersection in mid 1977.

McIntyre Road, Sunshine

Bridgeworks are nearing completion on the construction of a road-over-rail overpass on McIntyre Road, Sunshine. The work is scheduled for completion late in 1976.

Princes Highway West, Brooklyn

Roadworks will be completed in August, 1976, on the widening of the highway to three lanes in each direction between Kororoit Creek and McDonalds Road, Brooklyn.

Camp Road, Broadmeadows

Work has begun on the construction of a road-over-rail overpass at Camp Road which will eliminate an existing railway level crossing and carry Camp Road over Pascoe Vale Road, Broadmeadows.

A side track and a temporary railway level crossing in Camp Road have been constructed for vehicles to use during the construction of the overpass.

Princes Freeway, Drouin and Warragul Sections

Preliminary works have begun on the construction of the Princes Freeway bypassing the towns of Drouin and Warragul.

A two kilometre section of the existing Princes Highway is being duplicated to form part of a freeway interchange two kilometres east of Drouin.



• The South Gippsland Freeway at Hampton Park will be partially open to traffic this summer to assist with holiday traffic to South Gippsland and the Hastings area. Site engineers David Anderson (standing) and Peter Ransom check on progress in our picture. The 5km South Gippsland Freeway links the Mulgrave Freeway at Doveton to the South Gippsland Highway and Dandenong-Hastings Road.