



# annual report

## 1969-70

*Inside front cover: Map of New South Wales  
showing Classification of Main Roads*

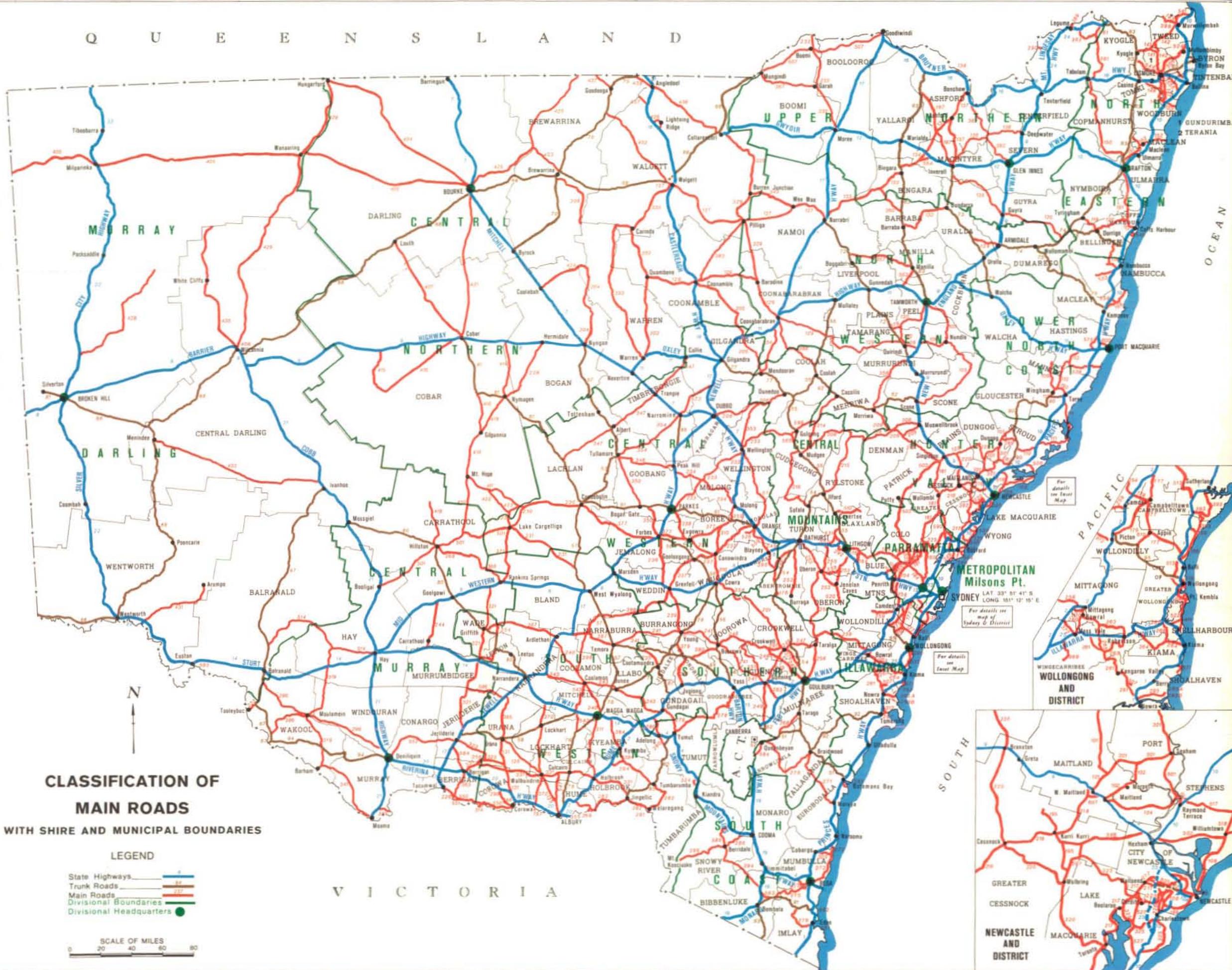
### contents

- 1 SUBMISSION
- 2 PRINCIPAL OFFICERS
- 3 GENERAL REVIEW
- 6 FINANCE
- 8 STATEMENT OF RECEIPTS AND PAYMENTS
- 10 EXPRESSWAY CONSTRUCTION
- 13 ROAD CONSTRUCTION
- 16 THE YEAR IN BRIEF
- 18 BRIDGE CONSTRUCTION
- 20 ROAD CLASSIFICATIONS AND MILEAGES
- 21 BITUMINOUS SURFACING
- 21 MAINTENANCE OF ROADS
- 22 TRAFFIC SERVICE
- 23 ELIMINATION OF RAILWAY LEVEL CROSSINGS
- 23 LAND SURVEY AND PROPERTY ACQUISITION
- 24 ADVANCE PLANNING
- 24 RESEARCH AND MATERIALS TESTING
- 26 INDUSTRIAL RELATIONS AND TRAINING
- 27 DIVISIONAL ADMINISTRATION
- 27 PLANT AND MOTOR VEHICLES
- 29 ROAD PLANNING AND LOCATION
- 29 WEIGHTS OF LOADS ON MAIN ROADS
- 29 LEGISLATION
- 30 PUBLIC RELATIONS
- 31 LIBRARY SERVICE
- 31 MISSIONS ABROAD
- 31 NATIONAL ASSOCIATION OF AUSTRALIAN STATE ROAD AUTHORITIES
- 31 AUSTRALIAN ROAD RESEARCH BOARD
- 32 ACKNOWLEDGEMENTS

department of main roads  
new south wales

Q U E E N S L A N D

S O U T H A U S T R A L I A

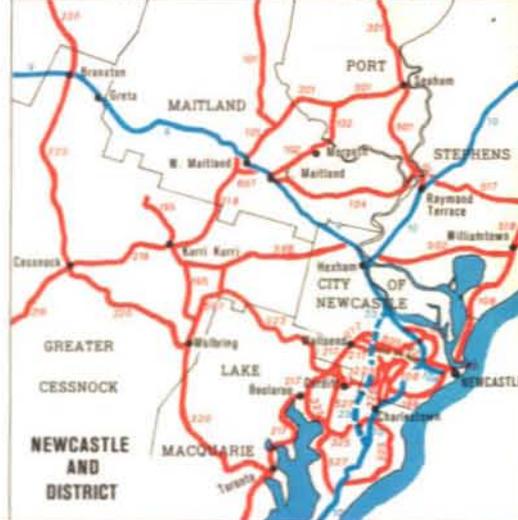


**CLASSIFICATION OF  
MAIN ROADS  
WITH SHIRE AND MUNICIPAL BOUNDARIES**

- LEGEND**
- State Highways —
  - Trunk Roads —
  - Main Roads —
  - Divisional Boundaries
  - Divisional Headquarters ●

SCALE OF MILES  
0 20 40 60 80

V I C T O R I A



For details see  
map of  
Sydney & District



O C E A N

P A C I F I C

S O U T H

S O U T H

S O U T H

METROPOLITAN  
Milsons Pt.  
SYDNEY  
LAT. 33° 51' 41" S  
LONG. 151° 12' 15" E

WOLLONGONG  
AND  
DISTRICT

NEWCASTLE  
AND  
DISTRICT

GREATER  
CESSNOCK

LAKE  
MACQUARIE

NEWCASTLE  
AND  
DISTRICT

NEWCASTLE  
AND  
DISTRICT

---

DEPARTMENT OF MAIN ROADS  
NEW SOUTH WALES  
SYDNEY, NOVEMBER, 1970

---

THE HONOURABLE  
THE MINISTER FOR HIGHWAYS  
SYDNEY

*Section 6 of the Main Roads Act, 1924  
requires that the Commissioner for Main Roads  
shall present an annual report and statement  
of accounts to Parliament through the Minister.*

*I now have pleasure in submitting through  
you the Forty-fifth Annual Report, including  
statement of accounts.*

*The report covers the period from 1st July, 1969  
to 30th June, 1970, though a few matters  
referred to are carried beyond the latter date for  
convenience and completeness of record.*



R. J. S. THOMAS

COMMISSIONER FOR MAIN ROADS



Pacific Highway, ten miles north of Coffs Harbour.

COMMISSIONER FOR MAIN ROADS  
R. J. S. THOMAS

ASSISTANT COMMISSIONER FOR MAIN ROADS  
A. F. SCHMIDT

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES

PRINCIPAL OFFICERS  
HEAD OFFICE

Engineer-in-Chief  
G. V. FAWKNER

Deputy Engineer-in-Chief  
R. E. JOHNSTON

Chief Engineer (Bridges)  
F. C. COOK

Chief Engineer (Rural)  
N. F. HATCHER

Chief Engineer (Roadworks)  
W. J. C. ORR

Chief Engineer (Urban)  
E. F. MULLIN

Rural Investigations Engineer  
R. E. PLAYFORD

Road Design Engineer  
L. R. DERRIN

Mechanical Engineer  
L. A. S. FLACK

Highways Engineer  
G. B. CRANNA

Field Inspecting Engineer  
R. FITZHARDINGE

Urban Investigations Engineer  
E. R. JEFFERAY

Advance Planning Engineer  
H. JAMES

Engineer for Country Councils Works  
B. H. BUTCHER

Traffic Service Engineer  
M. B. FAIRLIE

Executive Engineer  
V. R. MINUS

Engineer for Standard Specifications  
and Technical Instructions  
J. C. RUDD

Materials and Research Engineer  
A. LEASK

Engineer for Programmes  
and Budgets  
T. S. HOPE

Principal Surveyor and  
Property Officer  
A. T. LENEHAN

Assistant Secretary  
C. A. GITTOES

Secretary  
C. W. MANSFIELD

Assistant Secretary  
J. D. O'CONNELL

Assistant Chief Accountant  
E. L. MARLIN

Chief Accountant  
R. G. BARTON

Assistant Chief Accountant  
N. D. MOLONEY

Principal Legal Officer  
G. C. SHELDON

## general review

Each year in the history of the Department of Main Roads has brought a new challenge and its passing has been a milestone of achievement.

For the year being recorded this has been particularly so, for it has been a year marked with progress but, more importantly, one that has set a pattern for future improvement to the Main Roads System of New South Wales. In the years ahead dynamic progress will flow from the programmes that have been planned.

The finance now becoming available and likely to accrue in the future will ensure the fulfilment of these plans.

The Department's involvement in the provision of a first class Main Roads System throughout the State is total. It serves the man in the country and the man in the city. It serves the private motorist as it also serves the large commercial and industrial road-users. The needs of all are considered thoughtfully and thoroughly.

During the year, work continued in the provision of expressways to cater for the large volumes of traffic in urban areas. Extension of the Southern Expressway near Wollongong proceeded and work was commenced on the first section of the Western Distributor, the South Western Expressway between Liverpool and Campbelltown and a section of the Western Expressway near Penrith.

At the same time, plans for major works on other expressways were being prepared for early commencement. These include sections of the Sydney-Newcastle Expressway, Western, Southern and North Western Expressways.

Highway improvements such as pavement widening, reconstruction and bituminous surfacing and the provision of climbing lanes for slow-moving traffic, have continued and many major works are being currently undertaken on sections of important rural arterial roads.

## GENERAL REVIEW — CONTINUED

However, the current programme of rural highway improvement is in its final stages and consideration must now be given to a programme of further improvements on some selected routes, in view of the large volumes of traffic they are carrying. This applies particularly to the Prince's, Hume, Federal, Great Western, New England, Pacific and sections of the Mitchell and Oxley Highways on which the traffic volumes include a considerable percentage of heavy commercial vehicles. On these highways, pavements not already widened will be increased in width to not less than 22 or 24 feet, with wide shoulders. In addition, further deviations will be constructed to improve road alignment, sight distance and to pass around large townships rather than through them.

On the major highways it is evident that many sections now should be dual carriageways and while all the desirable works cannot be done at once, all construction work has been planned and designed for later incorporation as one carriageway of a dual carriageway highway.

On Main Roads in urban areas, considerable improvements have already been achieved by the provision of dual carriageways, pavement widening and channelised intersections. These have resulted in easing some of the traffic conditions and improving traffic flow. This work is continuing as fast as the Department's resources will permit.

The ability to first obtain land for roadworks in highly developed urban areas is a significant factor in improving existing roads and constructing new roads, such as expressways. Therefore, the rate at which these works can be undertaken is primarily governed by the rate at which the necessary property is acquired. In this respect the Department's ability to acquire properties at Kings Cross, and for sections of the Warringah, North Western, Western and Southern Expressways, i.e. works of an immediate nature, is limited to the extent of available specialist staff.

This State is traversed by a widespread system of rivers and waterways which is a challenge in maintaining road communications and which presents an immense task in bridge building.

Throughout the year, the high rate of bridge construction, which has been the pattern in recent years, has continued. Many new bridges have been completed, the construction of others has been continued and many more have been commenced.

In conjunction with the plans to further improve the major rural State Highways, new bridges required on those roads will have a carriageway width of not less than 28 feet.

The close co-operation that has existed between the Department and the Shire and Municipal Councils in the provision of improved Trunk and Ordinary Main Roads has been maintained. In this partnership with Councils, the Department provides much technical assistance as well as considerable financial aid and the high standard of these Council-maintained roads is the result of this partnership.

In recent years the Department, together with other authorities, has co-operated in the provision of roadside rest areas at specific locations. More recently it has provided additional facilities of this nature on many major routes. Rest areas, constructed in specially selected sites, not only provide attractive picnic areas for tourists but also serve the interests of road safety by providing convenient stopping places, adjacent to major routes, where motorists may rest during long journeys and relax in pleasant surroundings.

The care and attention needed to present a clean, tidy roadside is expensive. The careless, thoughtless and sometimes wilful depositing of litter and rubbish within road reserves has always been a major problem and adds greatly to the cost of road maintenance. All too often motorists drop unwanted waste on the roadside, creating not only an unsightly appearance but very often causing health hazards. During the year, the Department embarked upon an intensified campaign to educate and encourage the motoring public to keep the roads clean and free of litter. Signs and litter bins have been installed at numerous locations. The Department's campaign in this direction has been designed to seek public co-operation and it is gratifying to note the response to these appeals. Far less litter is evident on the roadsides and the litter bins provided by the Department are being used. It is unfortunate that some road-users have not co-operated and have had to be prosecuted for irresponsible disposal of litter and rubbish.

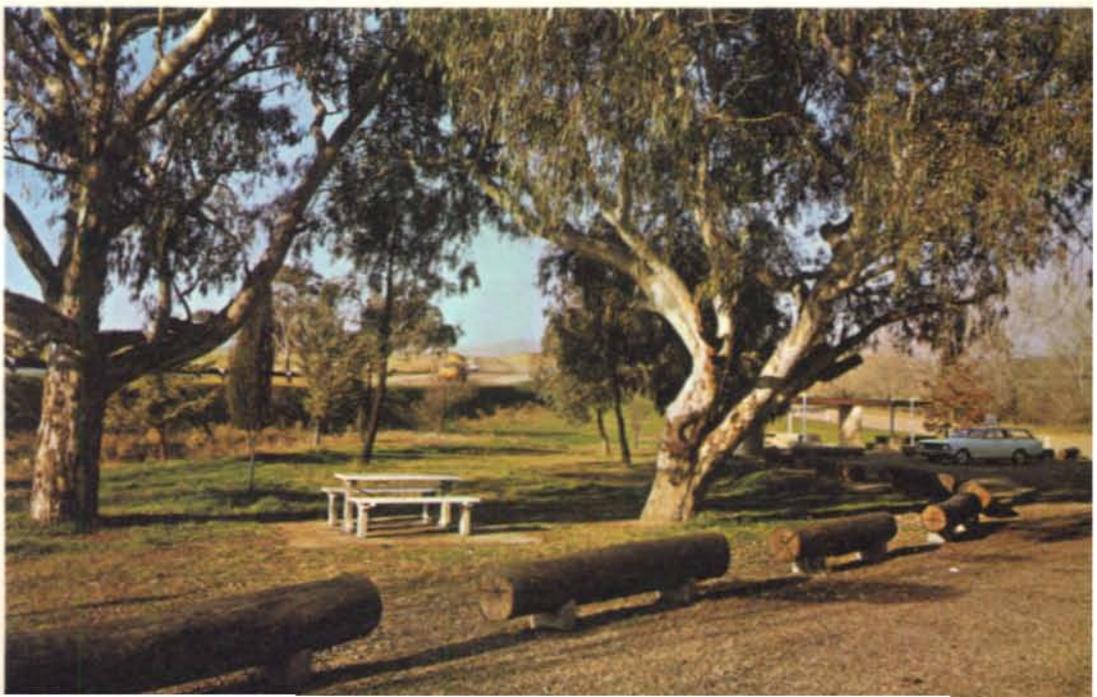
The Department's staff consists of people engaged in an extensive range of occupations. To meet the large programme of works which is planned for the future, the Department will require the services of additional staff in many vocations. Together with most other major organisations, the Department is experiencing increasing difficulties in the recruitment of suitable staff. This is a pressing problem and is particularly evident in the professional field and in the skilled trades.

It is hoped that adequate trained staff will become available in the near future to ensure that the Department's programme of proposed works can be carried out confidently and its many important services to the motoring public maintained.

Pedestrian footbridge over Warringah Road at Frenchs Forest.



Aerial view of Southern Cross Drive showing overbridge at Gardeners Road Eastlakes.



Roadside rest area beside Hume Highway at Bogolong Creek, 20 miles west of Yass.

# finance

## RECEIPTS

The amount received from State Sources, viz., Motor Vehicle Taxation and Charges, the levy under Section 11 of the Main Roads Act and miscellaneous items was \$63,737,876. The amount received under the Commonwealth Aid Roads Act, 1969 was \$40,206,880, making a total of \$103,944,756 for 1969-70, which was \$16,267,373 more than in 1968-69.

In addition, funds totalling \$11,463,445 were provided for special works or for works that could not normally be undertaken from ordinary revenue.

The total funds received for 1969-70 were thus \$115,408,201.

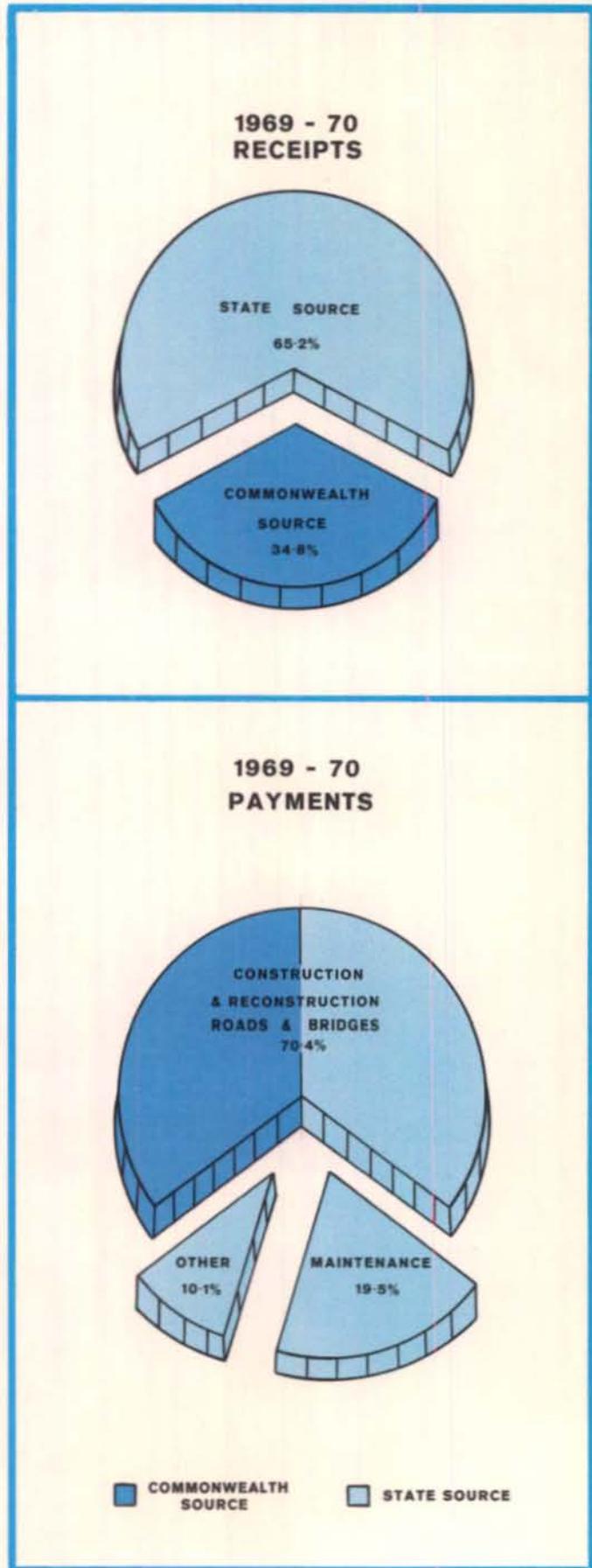
A total of \$40,206,880 was received under the new Commonwealth Aid Roads Act, 1969, which came into effect from 1st July, 1969. This was \$9,538,495 more than was received last year under the former Commonwealth Aid Roads Act, 1964. The Commonwealth Aid Roads grant was equal to half the total expenditure by the Department on construction and reconstruction of roads and bridges.

Receipts from State Motor Vehicle Taxation amounted to \$35,646,833 and exceeded the previous year's level by \$1,810,068, which was an increase of 5%.

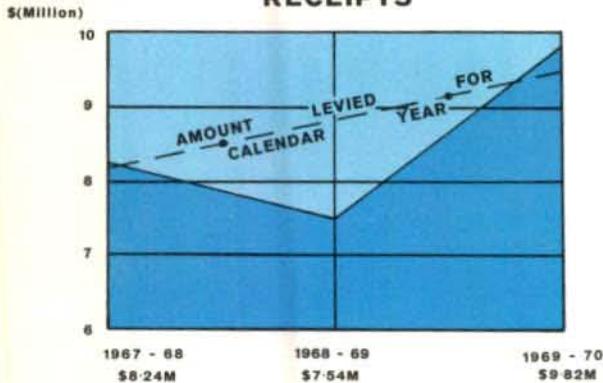
Charges for heavy commercial vehicles under the Road Maintenance (Contribution) Act, 1958, yielded \$15,872,005 and this was \$1,072,584 more than in the previous year.

Under Section 11 of the Main Roads Act, 1924, the Department issues annually a requisition on each Council in the County of Cumberland to rate on its behalf all property-owners within Council's area at 5/24ths of a cent in the dollar on the unimproved capital value of rateable land. Alternatively, a Council may pay the Department 12% of the income from rates if the amount that would be payable is less than at the rate of 5/24ths of a cent in the dollar on the unimproved capital value. The amount received by the Department in 1969-70 from this source totalled \$9,819,528.

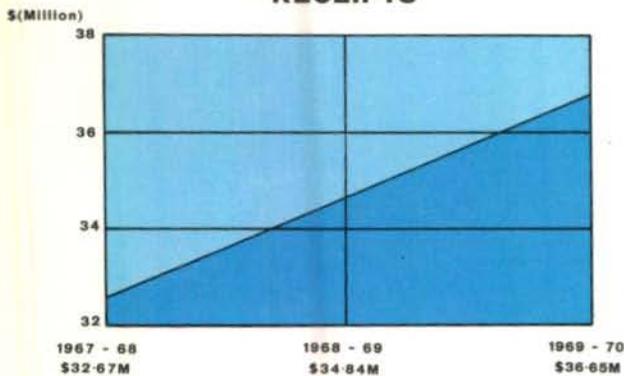
Borrowing amounted to \$8,600,000 during 1969-70, which was \$500,000 more than in the previous year.



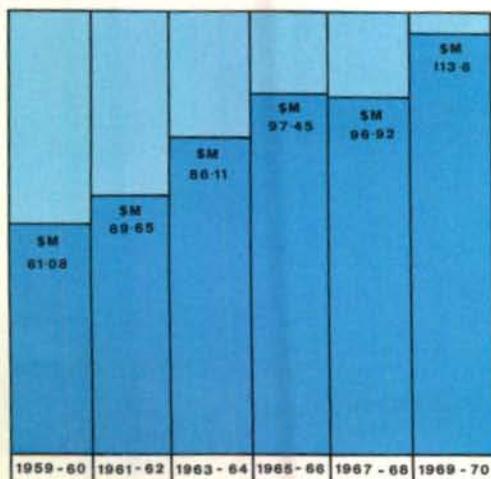
## SECTION II OF THE MAIN ROADS ACT RECEIPTS



## MOTOR VEHICLE TAXATION RECEIPTS



## MAIN ROADS EXPENDITURE AT 1968 - 69 MONETARY VALUES



Loan receipts were used to assist in financing the cost of constructing—

Access Road to Sydney (Kingsford Smith)	
Airport, Mascot	\$1,393,237
Major road and bridge construction works on —	
Hume Highway	\$1,035,220
Snowy Mountains Highway	163,781
Great Western Highway	1,117,958
Barrier Highway	1,009,396
New England Highway	120,005
Pacific Highway	437,287
Oxley Highway	942,286
Bruxner Highway	186,272
Newell Highway	330,971
Castlereagh Highway	724,257
Monaro Highway	102,124

A total of \$2,000,000 was provided from State loan funds to finance major bridge construction works, including the Hawkesbury River Bridge on the Sydney-Newcastle Expressway.

## PAYMENTS

Total payments from the Roads Funds amounted to \$113,624,102 and this was \$15,921,657 greater than for the previous year.

Maintenance and minor improvement of roads and bridges cost \$22,113,515 which was 19.5% of the total expenditure.

Construction, reconstruction and the acquisition of property for roadworks accounted for the major portion of the Department's expenditure and the amount expended on these works was \$79,999,116. This was 70.4% of the total expenditure during 1969-70 and compared with \$67,949,885 in 1968-69.

Loan charges, administrative expenses and other costs amounted to \$11,511,471.

In the case of the country area of the State, Councils' share of the cost of Main Roads works do not pass through the Department's accounts and therefore are not included in the amounts stated above.

# statement of receipts and payments

## for the year ended 30th june, 1970

### RECEIPTS

Motor vehicle taxation in accordance with the Main Roads Act, 1924 .. .. .	.. .. .
Charges on commercial vehicles under the Road Maintenance (Contribution) Act, 1958 .. .. .	.. .. .
Levy upon Councils in accordance with Section 11 of the Main Roads Act, 1924 .. .. .	.. .. .
State Government Loans — Repayable .. .. .	.. .. .
Loan borrowings under Section 42A of the Main Roads Act, 1924 .. .. .	.. .. .
Contributions by Councils towards maintenance and construction of Main and Secondary Roads .. .. .	.. .. .
Contributions by other departments and bodies towards maintenance and construction of Main and Secondary Roads .. .. .	.. .. .
Sydney Harbour Bridge Account for expressway approaches .. .. .	.. .. .
Commonwealth Aid Roads Act, 1964 .. .. .	.. .. .
Commonwealth Aid Roads Act, 1969 —	
Urban arterial roads — Schedule 2 .. .. .	.. .. .
Rural arterial roads — Schedule 3 .. .. .	.. .. .
Other rural roads — Schedule 4 .. .. .	.. .. .
Planning & research — Schedule 5 .. .. .	.. .. .
Other .. .. .	.. .. .
	<b>Total Receipts</b>
Balance brought forward from last year .. .. .	.. .. .

### PAYMENTS

Maintenance and minor improvements of roads and bridges .. .. .	.. .. .
Construction and reconstruction of roads and bridges .. .. .	.. .. .
Maintenance and construction of unclassified roads in the Western Division .. .. .	.. .. .
Land acquisition .. .. .	.. .. .
Planning and research .. .. .	.. .. .
Administrative expenses .. .. .	.. .. .
Purchase of land and buildings for administration and operation .. .. .	.. .. .
State Government Loans —	
Sinking fund payments .. .. .	.. .. .
Interest, exchange, management and flotation expenses .. .. .	.. .. .
State Treasury — Repayment of temporary advance .. .. .	.. .. .
Loan borrowings under Section 42A of the Main Roads Act, 1924 —	
Repayment of principal .. .. .	.. .. .
Interest .. .. .	.. .. .
Other .. .. .	.. .. .
	<b>Total Payments</b>
Transfers to reserve for loan repayments .. .. .	.. .. .
Net transactions of operating and suspense accounts .. .. .	.. .. .
Balance carried forward .. .. .	.. .. .

\*Credit

County of Cumberland Fund \$	Country Fund \$	Commonwealth Fund \$	Total \$	1968-69 \$
7,329,367	29,317,466	—	36,646,833	34,836,765
3,174,401	12,697,604	—	15,872,005	14,799,421
9,819,528	—	—	9,819,528	7,538,001
300,000	1,700,000	—	2,000,000	4,800,000
—	8,600,000	—	8,600,000	8,100,000
30,028	38,805	—	68,833	262,061
320,805	873,600	—	1,194,405	349,768
223,762	—	—	223,762	900,000
—	—	—	—	30,668,385
		26,070,000		
		10,260,000		
		3,016,880		
		860,000	40,206,880	—
530,410	245,545	—	775,955	858,919
21,728,301	53,473,020	40,206,880	115,408,201	103,113,320
9,194,889	8,427,086	506,015	18,127,990	14,787,488
30,923,190	61,900,106	40,712,895	133,536,191	117,900,808
4,910,576	17,202,939	—	22,113,515	19,719,364
6,128,124	25,951,348	33,546,068	65,625,540	62,284,490
—	—	202,567	202,567	373,341
7,553,172	849,494	5,768,343	14,171,009	5,292,054
—	—	314,854	314,854	—
2,330,307	3,802,341	—	6,132,648	5,379,080
871,229	1,055,331	—	1,926,560	1,078,177
13,130	153,345	—	166,475	156,022
166,630	865,245	—	1,031,875	971,107
100,000	100,000	—	200,000	200,000
159,784	54,597	—	214,381	161,086
594,334	333,384	—	927,718	550,610
182,498	414,462	—	596,960	1,537,114
23,009,784	50,782,486	39,831,832	113,624,102	97,702,445
128,550	96,915	—	225,465	137,026
17,820*	16,024*	—	33,844*	1,933,347
23,120,514	50,863,377	39,831,832	113,815,723	99,772,818
7,802,676	11,036,729	881,063	19,720,468	18,127,990
30,923,190	61,900,106	40,712,895	133,536,191	117,900,808

## **expressway construction**

The Department's planning proposals provide for a network of expressways along the urban coastal corridor from Newcastle to Wollongong, in which about 73% of the population of the State reside and about 66% of the State's motor vehicles are registered. These proposals are under constant review in the light of known needs and likely future population and traffic trends.

In the past, progress on expressway construction could only be undertaken on a minor scale in relation to the planned system and then only at specific locations where there was an urgent need to provide immediate relief to a traffic problem.

As a result of increased funds now becoming available for the construction of urban arterial roads, the provision of this expressway system will be accelerated as far as possible, within the bounds of the technical and financial resources available.

During the year, a number of new expressway projects has been commenced and plans announced for further extensions to the system.

### **WESTERN DISTRIBUTOR**

The Western Distributor will extend from Sydney Harbour Bridge to Ultimo, where, by an interchange, it will connect with the Southern and Western Expressways. The Distributor will also connect with the North Western Expressway leading towards the Gladesville Bridge.

The Department, in the previous financial year, invited tenders for the construction of the first section of the Distributor from Sydney Harbour Bridge to Day Street, between Erskine and King Streets. In October, 1969 the tender submitted by Dillingham Constructions Pty. Ltd. for the sum of \$4,253,253 was accepted for this work. The first section is 3,150 feet in length and includes the construction of a reinforced concrete box girder viaduct, 1,870 feet long. It will also involve modifications to the layout of the existing street system and to the southern toll plaza of Sydney Harbour Bridge.

This section is expected to be completed in the latter part of 1972.

A separate Divisional organisation, known as the Inner Expressway Construction Division, is attached to Head Office and is responsible for the construction of the Distributor.

### **WESTERN EXPRESSWAY**

The planned Western Expressway will extend from the City to the lower Blue Mountains.

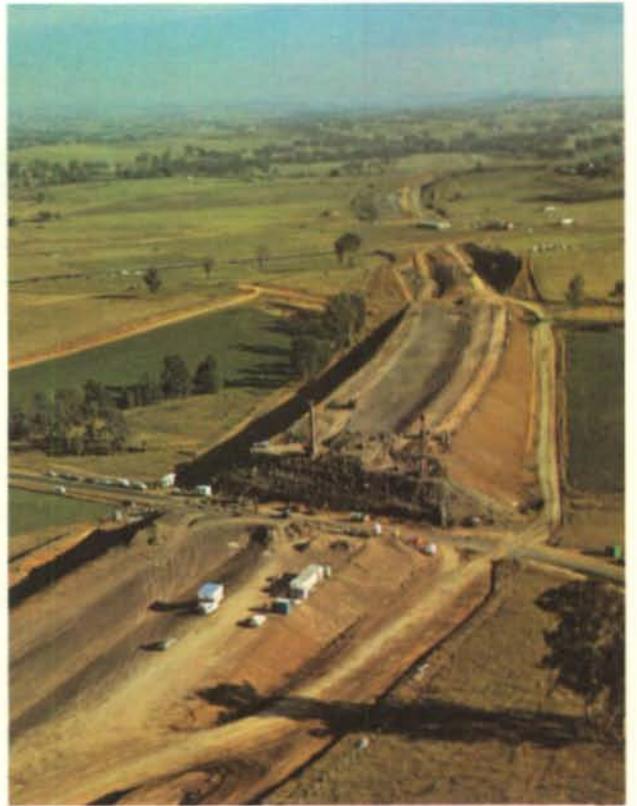
The construction of the bridge over the Nepean River at Regentville, approximately two miles upstream from the existing Victoria Bridge on the Great Western Highway, was continued throughout the year. It is expected to be completed by mid-1971.

Concurrently with the construction of the bridge, the Department has continued expressway construction easterly to provide a bypass around the commercial and shopping centres of Penrith and St. Marys. The



Earthworks in progress during construction of the South Western Expressway, between Cross Roads, near Liverpool and the Campbelltown-Camden Road.

Construction of a new bridge, over the Nepean River at Regentville, which will form part of the Western Expressway between St. Marys and Emu Plains.



Earthworks nearing completion at the same location, where twin bridges will be built to carry the South Western Expressway over Aero Road, Ingleburn.



## EXPRESSWAY CONSTRUCTION — CONTINUED

completion of this section will coincide with the completion of the bridge at Regentville. The estimated cost of the bridge and associated roadworks is in the order of \$11.5 million.

The expressway will be progressively extended easterly towards Prospect. Widening of the Great Western Highway, between Prospect and Penrith will be continued and, thus, greatly improved conditions will be available for traffic between Penrith and the City by the middle of 1971.

Work on a further section of the Western Expressway, between Homebush and Clyde, is planned for early commencement. On this four-mile section there are eleven sites where bridges will be required. In the latter part of the financial year, tenders were invited for the construction of bridges at two of these sites. It is expected that work on this section of expressway will commence early in 1971 and, including all bridgeworks, will cost approximately \$19 million. When completed it will provide considerable relief for traffic in this highly industrialised area and will also serve to meet the needs of traffic generated by the City Markets when they are relocated into this area.

### SOUTH WESTERN EXPRESSWAY

During the year, the Department commenced the construction of a nine-mile section of the South Western Expressway from the Cross Roads near Liverpool, to the Campbelltown-Camden Road.

The work is being undertaken by the Department's own forces and considerable progress is being made. Bridging is required at eleven locations and construction has already commenced on bridges at two of these sites.

This section of expressway is planned for completion in mid-1972. The estimated cost of the work is \$10 million.

### SOUTHERN EXPRESSWAY

Work on the Southern Expressway, to provide a bypass around the commercial and industrial areas of Wollongong and Port Kembla, has been continued during the year. The Department is currently constructing the section between Gladstone Avenue, Fig Tree and Five Islands Road, Unanderra. Bridges are required at five sites along this section and, during the year, the Department accepted tenders for bridges at three of these sites and invited tenders for the remaining two.

During the year, plans were prepared for the construction of a fourteen-mile section of the Southern Expressway, between Waterfall and the top of Bulli Pass which, when completed, will operate as a Tollwork. At Waterfall this Tollwork will link with the widened Prince's Highway, while at its southern end motorists will have the choice of using either the Prince's Highway via Bulli Pass or the Mount Ousley Road.

The Department invited qualified contractors to register for tendering for this work and all those who registered were invited to submit tenders for the construction of the earthworks, drainage, etc., on the 7.5 mile section at the northern end, extending from Waterfall to near Darkes Forest Road. The contract for this part of the

work was awarded to G. Abignano Pty. Ltd. and the value of the contract was \$3,411,295. On this section, four bridgeworks will be required for which the Department will invite separate tenders.

In the meantime, the Department is completing the design for the southern section on which a further six bridgeworks will be required.

The Department expects that construction of the Tollwork between Waterfall and the top of Bulli Pass will be completed by the end of 1972.

### SYDNEY-NEWCASTLE EXPRESSWAY

Approximately sixteen miles of this expressway have been constructed and operate as two separate tollworks; ten miles north of the Hawkesbury River and six miles south of the River.

The Department has arranged for the construction of a new six-lane bridge across the Hawkesbury River to link these two sections and to make them fully effective. The construction of the foundations for this bridge was commenced during the year after a contract was awarded to John Holland (Constructions) Pty. Ltd. for the sum of \$1,330,629. The design for the superstructure is being prepared and tenders for its construction will be invited later in 1970. It is aimed to have the new bridge completed by the end of 1971. Until then the existing three-lane bridge over the Hawkesbury River will serve both Expressway and Pacific Highway traffic.

In July, 1969, plans for two further extensive works on the Sydney-Newcastle Expressway were announced.

The first will be a fourteen mile section extending from Ourimbah to Doyalson, providing a bypass to the west of Wyong. The design for this section is being prepared with a view to commencement as soon as possible. When completed it will also operate as a tollwork.

The second work will involve the construction of a new bridge over the entrance to Lake Macquarie and a section of expressway approaches north and south of the bridge to link with the Pacific Highway. This will provide a route for through traffic around the busy Swansea shopping centre. The design for this bridge is being prepared with a view to calling tenders for construction in the latter part of 1970.

### WARRINGAH EXPRESSWAY

The first section of the Warringah Expressway extends from the northern end of Sydney Harbour Bridge to Miller Street, Cammeray and was opened to traffic on 18th June, 1968. Considerable relief was thus provided for traffic in the street systems in the North Sydney area. To meet the future needs of traffic north of the Harbour, a ten year construction programme for the completion of the Warringah Expressway was announced in April, 1970. Various segments of this expressway, including a major bridge over Middle Harbour between Castlecrag and Seaforth, and expressway links to Gore Hill and Balgowlah, will be undertaken in six separate stages and are estimated to cost about \$70 million. The first section to be undertaken in this programme will be a short extension of the existing work from Cammeray to Naremburn.

# road construction

## COUNTY OF CUMBERLAND

The progressive improvement of State Highways and Main Roads throughout the County of Cumberland was continued during the year. Principal works carried out included:—

- *Southern Cross Drive*

An expressway-type road from South Dowling Street, Kensington to Wentworth Avenue, Mascot, was completed during the year as part of a new high standard access route to Sydney (Kingsford Smith) Airport. This new road together with the improvement of existing roads (including the widening of South Dowling Street, south of O'Dea Avenue; Wentworth Avenue, Mascot; and Botany Road, Robey Street and Amelia Street in the vicinity of the Airport) was undertaken by the Department at a cost of approximately \$9 million.

The new expressway-type road has been named "Southern Cross Drive" and was opened to traffic on 13th October, 1969.

During the year, the Department continued the widening of South Dowling Street northerly to Flinders Street, Darlinghurst as part of the improved access to the Airport.

- *Prince's Highway*

Reconstruction between Cardiff Street, Engadine and Whitton Street, Heathcote was substantially completed. The widening of this highway is being continued southwards to link with the Waterfall-Bulli Pass Tollwork now under construction.

- *Great Western Highway*

Widening, to provide dual carriageways, was continued for a further three miles from the western end of the Prospect Deviation. This work is being continued westerly to Bennett Road, St. Marys. The highway was also widened to provide a four-lane carriageway over Quarry Hill near Kingswood and this is being continued easterly towards St. Marys.

- *Hume Highway*

Kerbside lanes and associated drainage works were constructed on sections of the highway at Landsdowne and Warwick Farm.

- *Woodville Road (State Highway No. 13)*

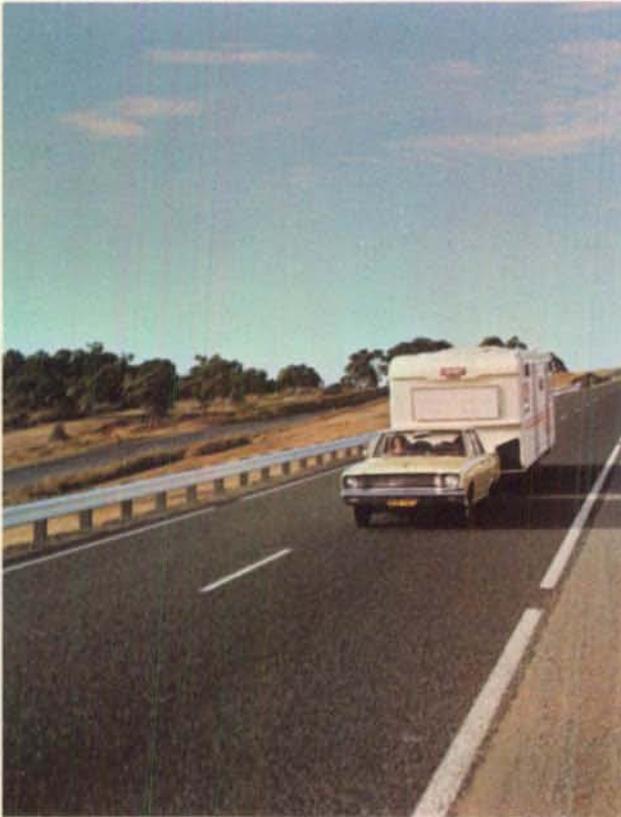
Dual carriageway approaches for the new railway overbridge at Villawood were completed and an interchange to serve Christina Avenue and River Road, Villawood was nearing completion at the end of the year.

- *Eastern Valley Way*

Reconstruction and widening to provide four traffic lanes between Boundary Road, Roseville and Megalong Avenue, Middle Cove were completed. This work is being continued towards Sailors Bay Road, Northbridge.

- *Stacey Street, Bankstown*

Construction of the road approaches associated with the new railway overbridge at Bankstown was completed.



Recently constructed second carriageway, for southbound traffic, on the Hume Highway, five miles north of Goulburn.



Widening in progress to provide a section of climbing lanes on the Illawarra Highway at Macquarie Pass.



Reconstruction of the Monaro Highway, at the approaches to a new bridge over Michelago Creek near Michelago.

## ROAD CONSTRUCTION — CONTINUED COUNTRY

Major works completed on State Highways in the country included:—

### ● *Prince's Highway*

Reconstruction of the approaches to the railway overbridge at North Wollongong on improved alignment and grading.

Reconstruction and widening between 1.7 miles north and 0.6 miles south of Narooma. This work included improvement to the alignment and grading between the Water Tower and Cemetery Road, Narooma.

### ● *Hume Highway*

Construction of a deviation on an improved alignment and grading on the southern approach to Whitehorse Railway Overbridge between 14.0 and 14.8 miles south of Picton.

Reconstruction between 11.3 and 18.9 miles north of Goulburn, including the provision of a climbing lane for northbound traffic.

Construction of a second carriageway for southbound traffic between 2.9 and 5.1 miles north of Goulburn. Reconstruction and bituminous surfacing, including three lengths of climbing lanes, between Conroy's Gap at 12.7 miles and Bogolong Creek at 20.0 miles west of Yass.

Reconstruction between 8.1 and 19.3 miles north of Holbrook. This work included three bridges over Billabong and Little Billabong Creeks and the provision of dual carriageways between 9.2 and 12.4 miles.

### ● *Snowy Mountains Highway*

Reconstruction and bituminous surfacing between 1.5 and 4.0 miles west of Kiandra.

Construction of a deviation at Gilmore between 3.6 and 5.1 miles west of Tumut in conjunction with the construction of a new bridge over Gilmore Creek.

### ● *Mitchell Highway*

Reconstruction and bituminous surfacing between 2.3 and 6.3 miles east of Orange.

Reconstruction and pavement widening between 0.9 and 5.6 miles east of Dubbo.

Widening of the pavement from 10 feet 6 inches to 22 feet between 29.0 and 37.5 miles southeast of Nyngan.

Reconstruction and bituminous surfacing between 22.0 and 36.0 miles, between 59.3 and 59.9 miles and between 82.2 and 82.6 miles north of Bourke.

### ● *Barrier Highway*

Reconstruction and bituminous surfacing between 38.9 and 41.2 miles west of Nyngan by Bogan Shire Council, on behalf of the Department.

Reconstruction and bituminous surfacing between 84.2 and 98.0 miles west of Cobar.

Reconstruction and bituminous surfacing between 8.2 and 11.6 miles east of Wilcannia.

Reconstruction and bituminous surfacing of the Grassmere Deviation between 19.0 and 34.5 miles west of Wilcannia. There is now a bituminous surface for the full length of the highway between Wilcannia and Broken Hill.

### ● *Pacific Highway*

Reconstruction to provide dual carriageways from Ida Street, Charlestown to the Newcastle City boundary for a length of 1.1 miles.

Reconstruction and bituminous surfacing between 21.0 and 23.3 miles north of Newcastle.

Reconstruction and bituminous surfacing between 8.9 and 11.0 miles north of Coffs Harbour. This work replaced a section of road subject to flooding.

Construction of a deviation between 45.7 and 47.1 miles north of Grafton, including the construction of two bridges.

### ● *Oxley Highway*

Reconstruction of a section 1.1 miles in length through Wauchope by Hastings Shire Council, on behalf of the Department.

Reconstruction and bituminous surfacing between 35.9 and 38.9 miles west of Port Macquarie.

Reconstruction and bituminous surfacing between 10.0 and 12.0 miles east of Walcha.

### ● *Gwydir Highway*

Reconstruction and bituminous surfacing between 7.7 and 10.5 miles east of Moree by Boolooroo Shire Council, on behalf of the Department.

### ● *Bruxner Highway*

Construction of the approaches to a new bridge over Tomki Creek between 5.9 and 7.3 miles east of Casino by Tomki Shire Council, on behalf of the Department. Reconstruction and bituminous surfacing on an improved alignment between 2.2 and 3.7 miles east of Drake.

Reconstruction between 14.7 and 22.5 miles west of Tenterfield by Tenterfield Shire Council, on behalf of the Department.

### ● *Newell Highway*

Construction of the approaches to the new bridge over Lake Forbes by Forbes Municipal Council, on behalf of the Department.

Reconstruction between 1.4 and 3.4 miles north of Forbes by Jemalong Shire Council, on behalf of the Department.

Reconstruction of damaged pavement between 1.0 and 9.0 miles south of Gilgandra.

Reconstruction and bituminous surfacing between 16.5 and 20.6 miles north of Coonabarabran.

Reconstruction and bituminous surfacing between 38.1 and 43.0 miles north of Moree.

### ● *Castlereagh Highway*

Reconstruction and bituminous surfacing between 8.5 and 10.0 miles and between 17.5 and 30.0 miles north of Walgett.

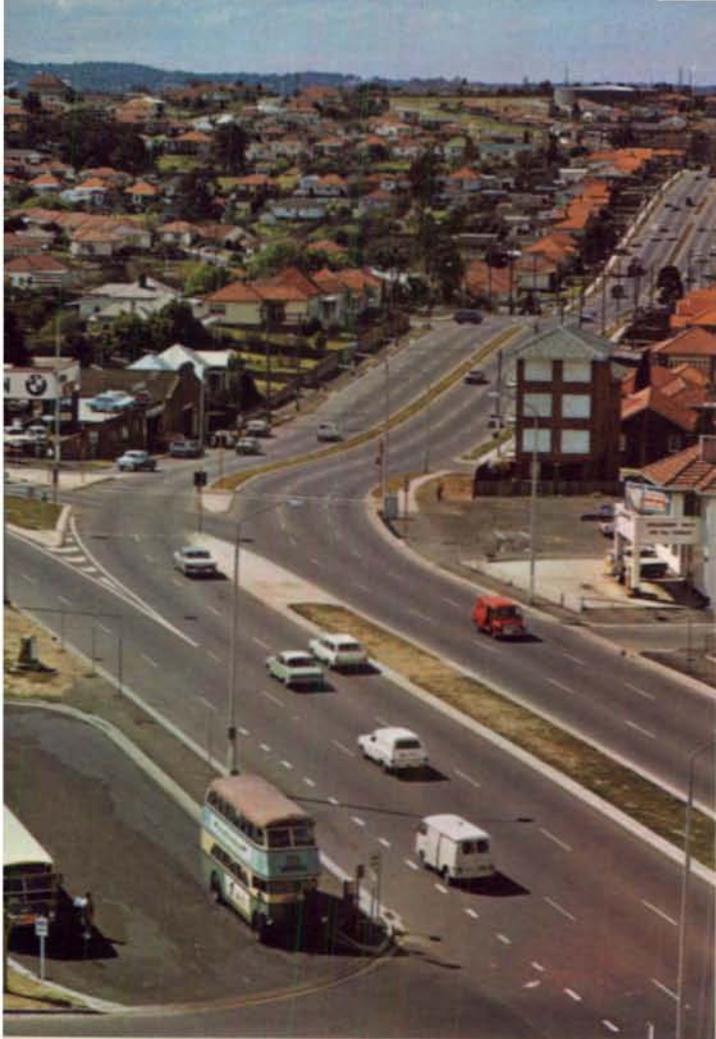
### ● *Monaro Highway*

Reconstruction and bituminous surfacing between 9.2 and 14.5 miles south of Nimmitabel and between 7.0 and 8.0 miles south of Bombala by Bibbenluke Shire Council, on behalf of the Department.

### ● *Cobb Highway*

Reconstruction and bituminous surfacing between 16.6 and 24.0 miles north of Moama.

Reconstruction and bituminous surfacing between 29.0 and 47.8 miles north of Hay.



- Reconstruction of Devlin Street, Top Ryde, included channelisation of this intersection with Lane Cove Road and Blaxland Road (on left).
- "Irrawang Bridge" over the Hunter River at Raymond Terrace eliminated a vehicular ferry service from the Main Roads System.

*During 1969-70...*

- ◆ *Bituminous surfacing was carried out on 1,271 miles of road, including 339 miles not previously sealed.*
- ◆ *The construction of 136 new bridge structures was completed and work was in progress at a further 144 sites.*
- ◆ *Seven railway level crossings were eliminated from the Main Roads System.*
- ◆ *A total of 18,580 miles of linemarking was undertaken on 10,480 miles of road.*
- ◆ *Channelised facilities for traffic were completed at 24 intersections and were under construction at a further 11 sites.*

# the year

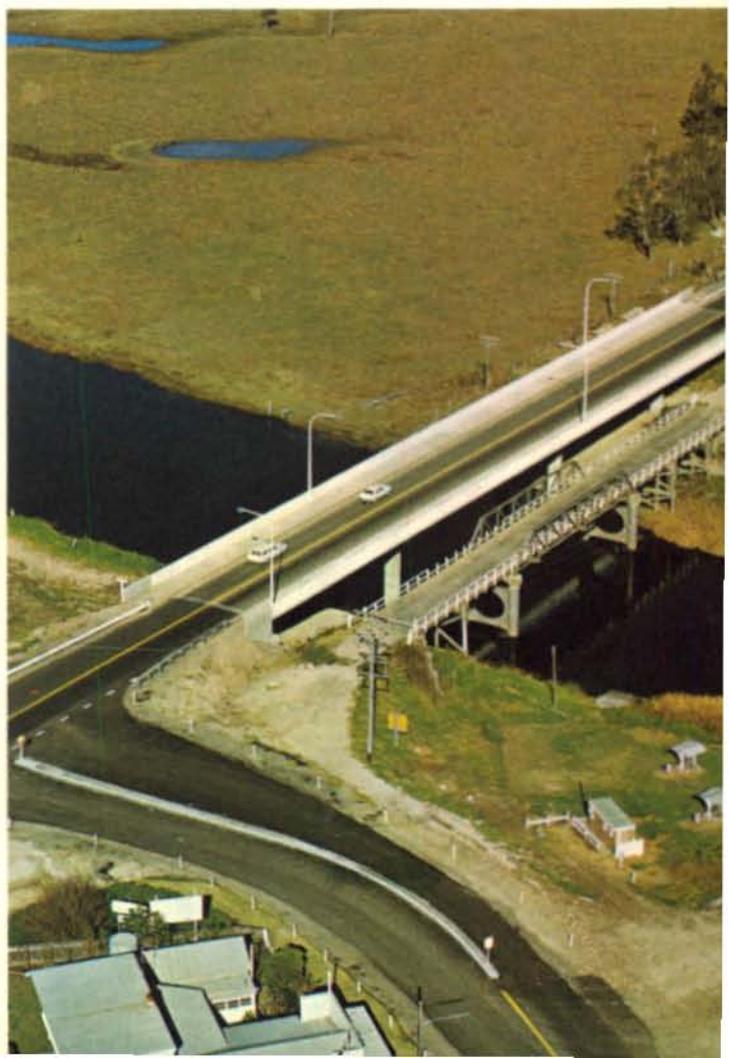




## in brief

- ◆ *Climbing lanes for slow-moving traffic were completed at 12 locations and were under construction at a further 3 sites.*
- ◆ *Three new roadside rest areas were completed, bringing the total in use to 39.*
- ◆ *Over 272,000 tests on materials, such as soils and gravels, were carried out at Departmental laboratories.*
- ◆ *A total of 13,800 road signs were manufactured at the Department's Central Workshop, Granville.*
- ◆ *Advisory speed surveys were carried out on 2,100 miles of roads.*
- ◆ *Traffic counters were installed at 22 new sites, bringing the total to 201 permanent and semi-permanent locations.*
- ◆ *Total expenditure amounted to over \$113.6 million.*

Reconstructed section of the Hume Highway, approximately fifteen miles west of Yass.   
 New concrete bridge over the Myall River at Bulahdelah on the Pacific Highway, with the old steel and timber structure on the right. 



## bridge construction

During the year, the Department and Councils completed the construction of 136 bridge structures on classified roads and at sites on unclassified roads where the Department is responsible for the construction of crossings. These structures consisted of 59 bridges and 77 box culverts of bridge size (i.e. with a waterway width of twenty feet or more). The total length of these structures was 16,176 feet. In addition, widening or the construction of footways was completed on five bridges.

The classifications of the roads on which the structures were built were as follows:—

Classification of Road	Bridge	Bridge-size Culvert	Total
Expressways	8	—	8
State Highways	21	28	49
Trunk Roads	6	17	23
Ordinary Main Roads	15	22	37
Developmental and Unclassified Roads	8	10	18
County Roads (Future Main Roads)	1	—	1
<b>Total</b>	<b>59</b>	<b>77</b>	<b>136</b>

Of the completed bridges, 34 were built by the Department (25 by contract) and 23 by Councils (14 by contract). The two remaining bridges were built by the Department of Railways (1) and the Council of the City of Sydney (1).

Thirty of the bridge-size culverts were built by the Department (5 by contract) and 47 by Councils (13 by contract).

Some of the large bridges completed during the year included:—

- Southern Cross Drive. A new six-lane single-span reinforced and prestressed concrete bridge, 224 feet long, to carry Gardeners Road (Main Road No. 183) over the new access route to Sydney (Kingsford Smith) Airport.
- Southern Cross Drive. A new four-lane two-span reinforced and prestressed concrete girder bridge to carry the new access route to Sydney Airport over Epsom Road, Rosebery.
- Billabong Creek, on the Hume Highway, 30.5 miles south of Tarcutta. A two-lane prestressed concrete bridge, 385 feet long, to replace a low-level concrete bridge which was subject to flooding.
- Castlereagh River at Binnaway on Developmental Road No. 1170. A two-lane six-span steel and reinforced concrete bridge, 360 feet long, to replace a low level bridge.
- Darling River Flood Channel at Two Mile Break, two miles north of Wentworth on the Silver City Highway. A new two-lane twenty-span reinforced and prestressed concrete bridge, 400 feet long, on a flood free deviation of the highway across the Darling River flood plain.
- Hunter River at Raymond Terrace on the Raymond Terrace-Millers Forest Road. A two-lane five-span reinforced and prestressed concrete bridge, 678 feet long, to replace a vehicular ferry service.
- King Creek on the Oxley Highway, 11 miles west of Port Macquarie. A two-lane seven-span reinforced and prestressed concrete bridge, 237 feet long, to replace an old narrow concrete bridge which was 166 feet long, on poor alignment and subject to flooding.

This new bridge, over the Macquarie River at Dubbo on the Mitchell Highway, is 2,013 feet long and is the fourth longest road bridge in New South Wales. This bridge was named "L. H. Ford Bridge" at the official opening ceremony on 26th September, 1969.





View showing the attractive V-shaped piers of the new bridge over Lake Forbes at Forbes on the Newell Highway.

- Lake Forbes at Forbes on the Newell Highway. A new two-lane nine-span prestressed concrete bridge, 470 feet long and with two footways, on a deviation of the highway.
  - Macquarie River at Dubbo on the Mitchell Highway. A two-lane 28-span prestressed concrete bridge, 2,013 feet long, to replace a steel and timber bridge, 502 feet long, the approaches of which were subject to flooding. At present, this bridge is the fourth longest road bridge in New South Wales.
  - Michelago Creek, near Michelago, 31 miles south of Canberra on the Monaro Highway. A two-lane seven-span continuous prestressed concrete bridge, 301 feet long, to replace a narrow timber structure, 113 feet long.
  - Myall Creek, 1.75 miles west of Bonshaw on the Bruxner Highway. A new two-lane six-span prestressed and reinforced concrete bridge, 210 feet long.
  - Myall River at Bulahdelah on the Pacific Highway. A two-lane four-span prestressed and reinforced concrete bridge, 395 feet long with two footways, to replace a steel truss and timber beam bridge, 248 feet long.
  - Six Mile Creek at Batten's Bight, 39 miles north of Grafton, on the Grafton-Casino Trunk Road. A two-lane 19-span prestressed and reinforced concrete bridge, 665 feet long, to replace a timber beam bridge which was 53 feet long and subject to flooding.
  - Tomki Creek, 7 miles east of Casino on the Bruxner Highway. A two-lane four-span prestressed and reinforced concrete bridge, 280 feet long, to replace a timber beam bridge, 123 feet long.
  - Warialda Creek on the Warialda-Yetman Trunk Road. A two-lane five-span steel and concrete bridge, 295 feet long, to replace an old timber structure, 266 feet long.
  - Railway Overbridge at Stacey Street, Bankstown. A new six-lane three-span prestressed concrete bridge, 295 feet long with two footways, to connect the northern and southern sections of Stacey Street, Bankstown and to provide a new route bypassing the business centre. The bridge provides a new crossing over the railway line and grade separations over an extension of North Terrace and over South Terrace with interchange facilities for local traffic.
  - Pedestrian Bridge over Warringah Road at Frenchs Forest. A new prestressed and reinforced concrete footbridge, 320 feet long, over Warringah Road near its intersection with Forest Way.
  - Pedestrian Bridge over the Southern Expressway at Byarong Avenue, Wollongong. A new six-span prestressed concrete footbridge, 315 feet long.
- At the close of the year, 80 bridges and 63 culverts of bridge size were being constructed on classified roads by the Department and Councils.
- These included the bridges over the Nepean River at Regentville on the Western Expressway; the Nepean River at Camden on a deviation of the Hume Highway; the north arm of the Hunter River at Stockton to replace the Stockton Ferry; the Hawkesbury River at Peats Ferry on the Sydney-Newcastle Expressway; Cook's River at Arncliffe, adjacent to the new International Airport Terminal; Lower Warrell Creek on the Pacific Highway near Macksville; and Lake Illawarra at Windang as well as a large number of bridges associated with the Department's extensive expressway works.

## road classifications and mileages

The total mileage of Expressways, State Highways, Trunk Roads, Main Roads, Secondary Roads, Tourist Roads, Developmental Roads and unclassified roads for which the Commissioner is responsible, in New South Wales, is 27,090 miles.

The mileages of roads within the various classifications, as at 30th June, 1970, are

Expressways	26 miles*
State Highways	6,539 miles
Trunk Roads	4,245 miles
Main Roads	11,572 miles
Secondary Roads	176 miles
Tourist Roads	219 miles
Developmental Roads	2,741 miles
Unclassified Roads	1,572 miles

\*This total excludes four miles of expressway standard road which is included in the mileage of Main Roads.

The lengths of the various types of surfaces on Main Roads throughout the State at 30th June, 1970 were:

Natural surface	237 miles
Formed only	5,209 miles
Gravel	7,628 miles
Prime	55 miles
Primer seal	134 miles
Sprayed seal	12,693 miles
Slurry seal	4 miles
Bituminous plant mix	994 miles
Cement concrete	136 miles
<b>Total</b>	<b>27,090 miles</b>

Southern Cross Drive, leading to and from Sydney Airport, has been provided with a deep asphalt pavement, up to eight inches thick. This was one of the first major uses of this type of construction in Australia.



## bituminous surfacing

The total length of dustless surface on the State's Main Roads System (together with some unclassified roads for which the Department is responsible, generally located in the unincorporated area of the State) is now 14,016 miles. This is an increase of 360 miles during the last twelve months.

During the year, bituminous surfacing work was carried out on:

- 556 miles of State Highways
- 196 miles of Trunk Roads
- 489 miles of Main Roads
- 12 miles of Secondary Roads
- 5 miles of Tourist Roads
- 10 miles of Developmental Roads, and
- 3 miles of Unclassified Roads.

The total length of 1,271 miles involved 2,652 lane miles or the equivalent of 1,326 miles of normal two-lane road. The Department was the constructing authority for 556 miles (1,205 lane miles) of bituminous surfacing of which 480 miles (1,051 lane miles) were done by direct control and 76 miles (154 lane miles) by contract. Councils were the constructing authority on behalf of the Department for 715 miles (1,447 lane miles) of bituminous surfacing of which 138 miles (292 lane miles) were done by direct control and 577 miles (1,155 lane miles) by contract.

The work comprised:

- |  |                    |
|--|--------------------|
| 74 miles of bituminous plant mix surfacing | (249 lane miles)   |
| 1,121 miles of sprayed seal                | (2,243 lane miles) |
| 36 miles of primer seal                    | (76 lane miles)    |
| 40 miles of prime                          | (84 lane miles)    |

The bituminous surfacing carried out during the year was in four categories:

- \**Initial Surfacing* of 339 miles (675 lane miles) of road not previously provided with a dustless surface;
- \**Heavier Treatments*, either sprayed seals or plant mix surfacing, provided on 116 miles (235 lane miles) of road pavement previously provided with a light treatment such as a prime or primer seal;
- \**Restoration* of bituminous surfaces following reconstruction
  - to widen and/or strengthen the pavement on 95 miles (212 lane miles),
  - to provide additional lanes or dual carriageways on 37 miles (108 lane miles), and
  - to improve alignment and/or grading on 95 miles (216 lane miles);
- \**Maintenance Resurfacing* of 589 miles (1,206 lane miles) of road pavement.

## maintenance of roads

During the year, Main Roads throughout the State were maintained in a satisfactory condition. The Department ensures that the standard of maintenance is commensurate with the type of road and the volumes of traffic carried.

In the County of Cumberland, the increasing lengths of multi-lane and expressway-type roads have created their own maintenance problems. These include the elimination of sheet flow of water across wide road pavements to prevent vehicles from aquaplaning, the treatment of road surfaces to provide them with adequate skid resistance under wet conditions, the maintenance of landscaped and grassed areas and the removal of litter from within road boundaries. Some older pavements are showing signs of wear and increasing traffic volumes are creating greater demands for maintenance of unsealed shoulders and pavement edges.

In the country, increasing traffic volumes have added to the difficulty of adequate maintenance, particularly on roads with narrow pavements and those which carry large numbers of heavy vehicles. This problem is being accentuated in some areas by the increasing use of large cattle floats and in the Newcastle and Wollongong areas by the continuing increase in the quantity of coal being transported by road.

Heavy rain on the South Coast in November, 1969 caused slips and minor flooding of some roads. A slip on the Hume Highway at Razorback Range closed the road to traffic from 14th November to 4th December, 1969. Traffic was detoured along other Main Roads while repairs to the damaged road were carried out.

Improvement to signposting was actively pursued during the year and new direction, warning and information signs were erected. Where necessary, existing signs were replaced by more appropriate signs.

Snow-clearing operations were carried out during the winter months. Maintenance and snow-clearing of selected unclassified roads in the Kosciusko National Park were undertaken on behalf of the National Parks and Wildlife Service.

Three new roadside rest areas were completed in 1969-70, two on the Hume Highway south of Goulburn and one on the Newell Highway between Forbes and Parkes. At the end of the year thirty-nine roadside rest areas were in use.

During the year, 10,480 miles of roadway were line-marked. With repeat marking of 6,047 miles of more heavily trafficked sections, lane marking of 1,006 miles and edge marking of 1,047 miles, a total of 18,580 miles of linemarking was undertaken.

## traffic service

During the year, 12.4 miles of median strip were constructed, mainly in the Sydney Metropolitan Area. The remainder was constructed in the Cities of Newcastle, Goulburn and Tamworth and the Shires of Scone and Lake Macquarie.

Channelised facilities for traffic were completed at 24 intersections and, at the end of the year, work was in progress at a further eleven sites. In addition, designs were prepared for future channelisation of traffic at 57 intersections.

Six special parking bays were provided on Main Roads to permit buses to stop clear of moving traffic. Two of these were in the Sydney Metropolitan Area, two in Broken Hill and two in the Shire of Lake Macquarie.

Climbing lanes for slow-moving traffic were constructed at twelve locations and those at two other sites were lengthened. In addition, work was commenced to provide climbing lanes at a further three sites.

The largest single signposting project undertaken during the year was on the new access route leading to the Sydney (Kingsford Smith) Airport, including South Dowling Street, Kensington, Southern Cross Drive and Wentworth Avenue, Mascot.

Following the completion of experiments with different types of background material for signs, the Department adopted a new type of spray-on, polyurethane plastic which reduces the adverse effects of background reflectance and is expected to increase the durability of sign backgrounds against weathering. At the same time the background colour of *advance direction signs* and important direction signs has, for aesthetic reasons, been changed from black to dark green.

The use of *reassurance direction signs* is being extended progressively throughout the State whenever new signs are erected at intersections or are renewed. These signs are located beyond intersections and at the outskirts of large towns to give the distances to the next four or five towns through which the road passes. As the name implies, their purpose is to reassure a driver that, having passed through an intersection or large town, he is on the correct road.

Following the successful use of raised reflective pavement markers on expressways in lieu of painted lane lines, the Department has extended the use of these markers to other roads. The principal uses have been to give added delineation to double yellow (no-overtaking) lines at night and for delineation of narrow median strips on sections of curved alignment. Experimental work in this regard is continuing.



Aerial view of the channelised intersection on the Pacific Highway at Tweed Heads at the border of New South Wales and Queensland, looking south.

The special investigation of the sites of fatal accidents on State Highways, which was commenced in 1966, was continued. An analysis has also been made of the accident rates per million miles of vehicle travel for all reported accidents on all rural State Highways and a listing prepared for each Departmental Divisional area showing the lengths of roads where the rates appear to be abnormally high. These lengths of road will be given special investigation to determine to what extent road conditions may have been a contributing cause and what remedial measures may be desirable.

The extension of absolute speed limits to many of the major roads throughout the State has necessitated an accelerated programme of advisory speed surveys, particularly on those roads where the speed limit has been raised from a *prima facie* 50 miles per hour to an absolute 60 miles per hour. During the year, 2,100 miles of road were surveyed, of which 1,010 miles required re-survey due to new speed limits.

Due to the accelerated programme of *advisory speed surveys*, work on travel-time surveys had to be restricted during the year. The surveys which were undertaken were confined mainly to "before and after" studies associated with new works, such as the opening of Southern Cross Drive and the construction of the new railway overbridge at Stacey Street, Bankstown. At the beginning of the year traffic counters were installed at 179 permanent and semi-permanent sites. This was increased to 201 during the year. The Department is undertaking a programme of research into traffic counting techniques to improve the accuracy of the methods used in estimating annual average daily traffic volumes from traffic counts of short duration.

## elimination of railway level crossings

Seven railway level crossings were eliminated from the Main Roads System during the year. Four of these were eliminated by the construction of overbridges and the closure of railway lines accounted for the other three. The overbridges to replace the level crossings were constructed at the following locations—

- Woodville Road (State Highway No. 13) at Villawood.
- Barrier Highway at Muriel Tank, 39.6 miles west of Nyngan.
- Silver City Highway at South Street, Broken Hill.
- Trunk Road No. 81 at Gypsum Street, Broken Hill.

The construction of the standard gauge railway line between Broken Hill and Adelaide resulted in the closure of part of the narrow gauge railway network in Broken Hill. In consequence, railway level crossings were eliminated from the Barrier Highway at Bromide and Argent Streets and on Trunk Road No. 66 at Menindee Road.

There remain 389 railway level crossings on Main Roads, comprising 333 on New South Wales Government Railways, 45 on privately-owned railways and 11 on Victorian Government Railways which extend into New South Wales.

During the year, safety conditions were improved at a number of level crossings by the provision of automatically operated flashing lights at six sites, the widening of crossings and their approaches, and the realignment of approaches at other locations.

This bridge carries Woodville Road (State Highway No. 13) over the railway line at Villawood and eliminated the level crossing shown in the background.



## land survey and property acquisition

The purchase of property required for roadworks is a major operation, especially in highly developed urban areas, where extensive roadworks are planned to meet traffic requirements.

When the right of way has been determined, action is taken to negotiate the purchase of affected properties. This involves land surveys, preparation of plans for registration at the Registrar General's Office, valuation of properties, negotiations to determine satisfactory settlements and conveyancing procedures.

Surveys are first carried out to establish the new boundaries of the land which has to be acquired to accommodate new and widened roads. To undertake the necessary valuations the Department employs 40 staff valuers and engages the services of 21 private valuers who work on a contract basis. In addition, 50 draftsmen, aided by drawing office assistants, are employed to complete plans from information supplied by the Department's surveyors.

In the year under review, 248 plans, involving 476 separate sheets, were completed and lodged at the Registrar General's Department to enable the Department's proposals to be implemented. Included in the lodged plans were those required in connection with nine realignment proposals affecting seven miles of roads within the County of Cumberland and 28 proposals affecting 49.75 miles in the country areas of the State.

During the year, the Department's operations have been concentrated upon acquiring property in connection with the construction of the Western Expressway in the Penrith area, the South Western Expressway in the Campbelltown area and the Waterfall-Bulli Pass Tollwork. In addition, the assessment of compensation has been undertaken in respect of resumptions for the Western Distributor, the Kings Cross Road project and the William Street Underpass on the Eastern Expressway. Activities in this regard have also been directed to sections of the Great Western Highway and the Princes Highway which are being reconstructed coincidentally with the construction of the Western Expressway and the Waterfall-Bulli Pass Tollwork.

The value of property acquired by the Department during the year amounted to approximately \$8.5 million in the County of Cumberland and approximately \$1.0 million elsewhere in the State. Compensation paid in respect of resumptions at Kings Cross amounted to another \$4.0 million.

This large expenditure on properties and the staff effort in consequent negotiations have meant that of necessity the Department is unable to meet the desires of all who would wish the Department to purchase their properties ahead of the time they are needed for current works programmes.

## advance planning

Planning, to determine the future needs of the State's Main Roads System is an essential part of the Department's activities. In this regard the Department, together with other State Road Authorities, has undertaken Road Needs Surveys on behalf of the National Association of Australian State Road Authorities.

It is proposed that a further survey, designated as the Australian Roads Survey 1969-74, be carried out to provide information relating to the effects of the implementation of the Commonwealth Aid Roads Act, 1969 and to assess road needs for a period beyond 30th June, 1974, when the current Act terminates. Planning for the survey was commenced by the National Association of Australian State Road Authorities, in conjunction with the Commonwealth Bureau of Roads, in the early part of 1970 and the Department is taking part in this planning phase.

Work has continued in connection with the statistical investigation of road construction costs, with the object

of compiling a road construction price index. Further examination of the economic evaluation of road improvements has been made during the year.

Computing and data processing for technical purposes is carried out on a computer located in the Department's Advance Planning Section. In July, 1969 additional core storage was provided to increase computing speed and to simplify programming. This has enabled the Department to make greater use of the computer within normal working hours. An Automatic Drafting System, coupled to the computer, was installed in May, 1970 and, by the end of June, this was being used for survey plan drafting.

In order to expedite the survey computations required in connection with urban expressway construction, a computer terminal was installed in the site office for the construction of the Western Distributor in the City of Sydney.

Technical data processing throughout the year was principally in the fields of bridge design, traffic analysis, cadastral and photogrammetric survey, road inventory, road investigation and library records.

## research and materials testing

The construction of modern roads requires constructing authorities to undertake considerable and continuing research into new techniques and developments, and to carry out tests on materials used, in order to ensure that the highest possible standard of road pavement is provided for the high performance cars and heavy commercial vehicles now using them. This is a very important phase of the Department's operations.

The Materials and Research Laboratory is situated at Milson's Point and in addition there are 25 field laboratories operating at sixteen Divisional and nine Works Offices.

During the year, a new laboratory was erected at Wagga Wagga and another formed the major part of extensions to the Divisional Office at Newcastle. Three new laboratories were established for the testing involved in expressway construction and were located at St. Marys, Campbelltown and adjacent to the Western Distributor construction site in the City of Sydney.

The number of tests carried out at the Material and Research Laboratory, during the year, was 53,350. The main materials processed were soils, gravels, aggregates, concrete, bitumen, bituminous mixes, paints, steel and rubber bearings. The number of samples processed at Divisional and Works Office laboratories was 50,959. This involved about 219,460 tests, the majority of which were on soils and gravels.

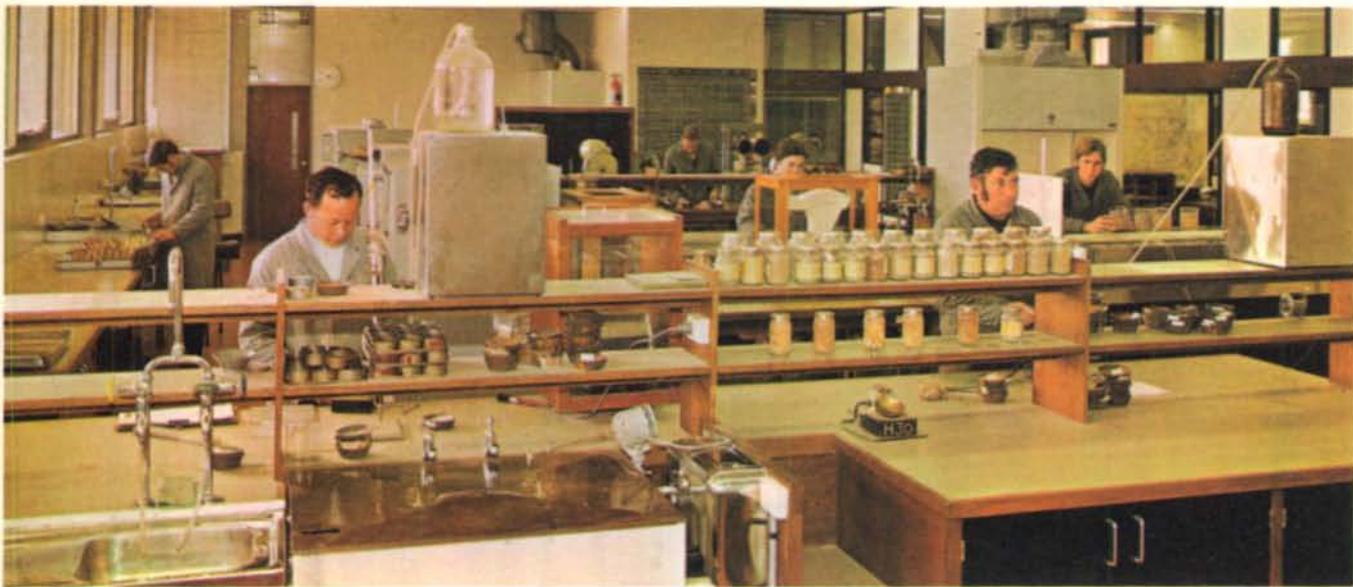
Apart from this testing of the many types of materials used in road engineering, an extensive programme of research is being carried out continuously. During the year, investigation was continued into the performance of flexible pavements to verify the validity of the design criteria. As a result of these investigations, new interim

standards were introduced for gravels to be surfaced with bitumen in arid regions. These standards allow for a progressive relaxation of *plasticity indices* and *particle size distribution* west of the 20 inch isohyet, that is, in the western half of the State. The new criteria are applied only where drainage conditions are good and it is modified to suit locations where there are abnormal influences on moisture conditions (e.g. in the vicinity of irrigation channels).

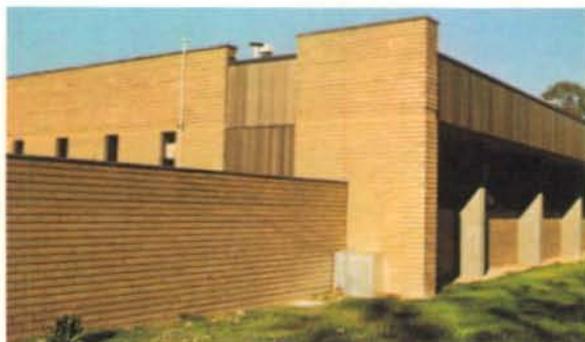
Research into the properties of fine crushed rock materials, used for pavement construction in Sydney and nearby areas, was also continued with the object of developing test procedures to discriminate between materials expected to perform satisfactorily and those prone to deteriorate rapidly in service, and to devise ways of stabilising such materials. A related subject, predicting the performance of shales for use in pavements, was also studied and six Divisional laboratories were equipped to do *methylene blue absorption* testing to investigate the correlation with performance. Experiments so far carried out verified the effect of a number of organic compounds on the compaction characteristics of soils and gravels, and indicated the possibility of achieving a significant reduction in the amount of water required for compaction purposes. Further testing is being undertaken.

Investigations into the properties of binders, aggregates and mixes for special purposes (e.g. skid resistant surfacings) were continued, as well as various processes, such as the use of foamed bitumen for producing a surfacing material for lightly trafficked roads and for stabilising base materials.

The results of research into problems associated with the crystallisation of soluble salts under primer seals were documented and these have been submitted together with a number of other papers, for presentation at the Fifth Biennial Conference of the Australian Road Research Board.



*Above and right;* The physical and chemical testing of materials, such as soils, gravel, aggregate and concrete, is carried out at a number of country centres, including the Department's new laboratory at Wagga Wagga. The laboratory is of contemporary architectural design and modern testing equipment and facilities are provided.



*Below;* An increasing amount of the Department's accounting and commercial procedures is being undertaken at this computer centre, which is being linked to all Divisional and Works Offices.



# industrial relations and training

The Department's operations are carried out on a state-wide basis and it employs a considerable work force.

At the close of the year, a total of 14,975 persons was employed on Main Roads works. They comprised 9,442 direct employees of the Department, 1,718 employed by contractors to the Department, and 3,815 employed by Shire and Municipal Councils and by contractors to Councils.

Throughout the year harmonious relations continued between the Department and its employees and no major industrial dispute occurred.

## Service Training

Four senior officers of the Department were sponsored to attend Administrative Staff Courses at the Australian Administrative Staff College at Mt. Eliza, Victoria, and at the Institute of Administration, University of New South Wales. A total of 50 Departmental officers has now been sponsored to such courses.

The Department's policy of encouraging its officers to attain recognised external tertiary qualifications to fit them for more responsible duties was maintained during the year.

Details of the studies undertaken were:

*Full-time Students:* 117 trainees were sponsored at the Universities of Sydney, New South Wales and Newcastle undertaking degree courses in Arts, Engineering, Surveying and Science.

*Part-time Students:* 749 officers undertook study at various educational institutions in 28 different courses.

*Scholarships:* Five scholarships were awarded to clerical officers to complete their part-time studies in Commerce, Arts, Public Administration and Information Processing.

*Apprentices:* 94 employees were indentured in the Department in ten trades.

In addition, the Department conducted in-service training courses at its Training Centre, Head Office. A total of 403 persons comprising clerical officers, typists, machine operators and foremen attended courses during the year. In addition two officers attended courses in shorthand conducted by the Public Service Board. A further 303 newly appointed officers received instruction in accordance with the Department's Formal Induction Programme. The Department's Training Officers visited field offices to provide instruction on the introduction of the Computerised Payroll and Stock Control Systems and to provide "follow-up" training to that provided in the Training Centre.

## School for Technical Training

Five separate courses were conducted by the School for Technical Training during 1969-70. Details of these courses are as follows:—

*Divisional Seminars:* A programme of ten technical and administrative subjects was produced and seminars were held at the following centres throughout the State — Sydney, Newcastle, Tamworth, Grafton, Goulburn, Parkes, Wagga Wagga, Bourke and Broken Hill. Two weeks before these seminars, lecture notes were despatched to participating engineers attached to Divisional Offices. The Engineer for Technical Training, together with the Asphalt Engineer and the Assistant Industrial Officer attended each seminar and directed the group discussions.

*Residential Course for Field Engineers:* A two-week residential technical training course for 30 field engineers was held at the Residential Centre of the University of New South Wales at Little Bay in December, 1969.

*Induction Course for Graduands:* An induction course for the Department's graduand engineers, surveyors and analysts was held in Head Office on 9th December, 1969. During the day the graduands were addressed by the Department's senior officers on the functions of the Department.

*In-service Training for Road Foremen:* The first in-service training for road foremen was commenced in 1970. Twenty-eight senior road foremen were selected and three months before the commencement of formal lectures these foremen commenced a correspondence course of about twenty papers. Three one-week sessions of face-to-face lectures were held later, supplemented by group exercises and site visits. Three more such courses will be required to cover the Department's present staff of road foremen.

*In-service Training for Bridge Foremen:* Early in 1970, twenty-four senior bridge foremen participated in the Department's first in-service training programme for this type of work. Two more such courses will be required to cover the Department's present staff of bridge foremen.

## Training of Plant Operators

The training of plant operators has been carried on as in previous years by an establishment of six foremen, who are based at the Department's Central Workshop, Granville, and make instruction trips of up to three weeks duration to Works Offices throughout the State. The policy of training potential plant operators, to be available as relief operators when required, has been continued.

At least two visits were made to each Works Office during the year, and instruction given to a total of 835 operators, some operators being instructed more than once, or on more than one type of machine. The standard of plant operation is improving and operators are staying longer with the Department.

## divisional administration

The Department's responsibilities in the field are exercised by Divisional Engineers, who supervise all works on Main Roads throughout the State, including those under the Department's direct control and those carried out by Councils.

At present, there are eighteen Divisional Engineers within the Department. Fourteen have their Divisional headquarters in country centres and two are located in the Sydney Metropolitan Area. The remaining two are responsible for expressway construction.

This decentralised administration, established in 1928, facilitates close co-operation with Shire and Municipal Councils and ensures that local needs and conditions are constantly under observation.

Field works undertaken by the Department are controlled from Works Offices, the Works Engineer at each office being responsible to the Divisional Engineer concerned. The locality of these Works Offices, especially those engaged mainly on construction, is changed from time to time as major works are undertaken in different areas.

The Divisional Engineers and the headquarters of the Divisions as at 30th June, 1970 were as follows:-

<i>Division</i>	<i>Headquarters</i>	<i>Divisional Engineer</i>
Metropolitan	Milson's Point	B. J. Sexton
Parramatta	Parramatta	L. R. Browne
Central Mountains	Lithgow	J. H. Dearden
Illawarra	Wollongong	G. A. Thompson
Hunter Valley	Newcastle	E. M. Brown
Lower North Coast	Port Macquarie	T. P. Desmarchelier
North Eastern	Grafton	W. J. Brecht
Upper Northern	Glen Innes	B. Moon
North Western	Tamworth	K. Edgar
Central Western	Parkes	N. A. Waslin
Central Northern	Bourke	R. A. Dubedat
Murray Darling	Broken Hill	D. H. Francis
Central Murray	Deniliquin	L. R. James
South Western	Wagga Wagga	C. N. Penney
South Coast	Bega	E. K. Twartz
Southern	Goulburn	J. B. Anderson
Inner Expressway Construction	Head Office	H. B. Korff
Outer Expressway Construction	Head Office	E. King

## plant and motor vehicles

The Department is a major constructing organisation and, consequently, the use of a wide variety of mechanical equipment plays a major role in its operations.

Plant to the value of more than \$3.7 million and motor vehicles to the value of more than \$1 million were purchased by the Department during the year to replace existing items and to provide for additional needs.

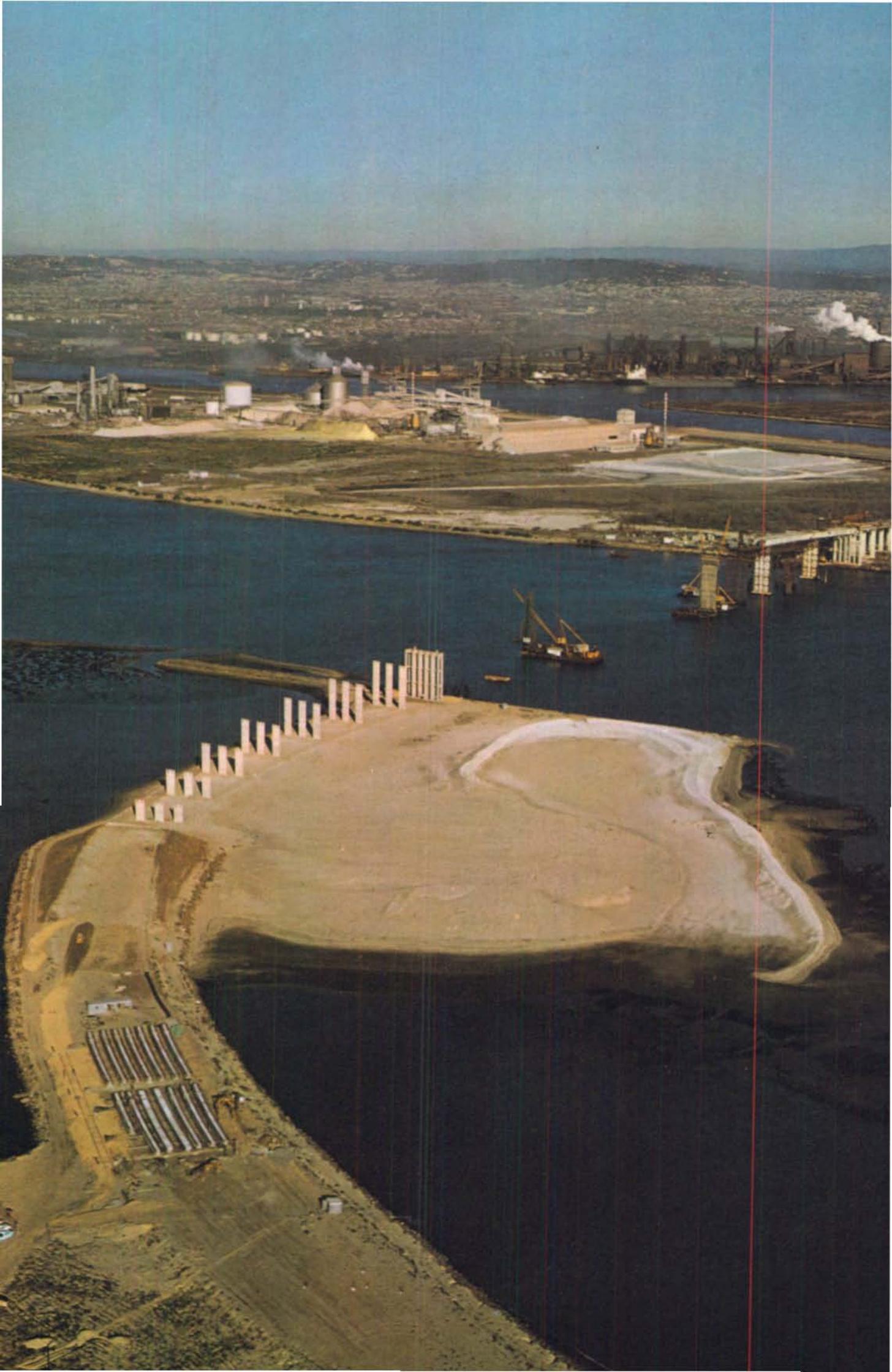
Following detailed investigations overseas, the Department ordered a Dual Lane Automatic Trimmer Spreader from the United States of America. This machine is capable of trimming sub-grades, spreading and trimming road base material and paving with asphalt up to three miles per day to a width of 24 feet. With additional equipment and spare parts, the machine cost approximately \$201,000. The Department proposes to use this equipment on its extensive expressway construction programme.



This linemarking machine was designed by the Department and manufactured at its Central Workshop, Granville.

The Department's Central Workshop, located at Granville, continued its activities in plant repairs, ferry overhauls, manufacture of signs, property repairs and building work, plumbing, electrical and transport services as well as extensive structural steelwork for use in bridge construction. A total of 6,381 jobs were completed by the Workshop during the year at a cost of \$2,737,485. A project of special significance was the design, manufacture and erection of movable toll cabins required for the introduction of one-way toll collection on the Sydney Harbour Bridge.

During the year, new workshops were established at Cooma and Wilcannia and there are now 41 workshops located throughout the State where field repairs and services are carried out.



## road planning and location

The review of outline designs for new expressways and surface roads contained in the Main Roads Development Plan, within the County of Cumberland, was continued during the year. Included in this review were the Eastern Distributor and Eastern Expressway and segments of the Castlereagh, Warringah, North Western, South Western and Southern Expressways.

Similarly, road location studies and the fixing or revision of road boundaries was continued in the Newcastle and Wollongong-Port Kembla areas.

In the country, 458 miles of road location proposals were developed or examined, including 175 bridge sites. The location for 191 miles of road and 85 bridge sites was finalised. The locations of rural expressways completed included the South Western Expressway between Menangle and Bargo and the Sydney-Newcastle Expressway between Somersby and Doyalson.

The location of State Highways around or through major towns and cities is one aspect of special significance being considered by the Department. Consideration is given to town planning and land use proposals, as well as future traffic desire lines and road engineering requirements. In some instances, it is apparent that the future route of the highway should pass around the urban area, with special access routes provided into it. In other cases, the highway could pass through the urban area with grade-separated intersections to provide access to the local street system.

The Department's helicopter is used extensively for the field examination of road proposals and has proved to be invaluable in this aspect of the Department's work.

During the year, written enquiries regarding the effect of the Department's road proposals on property were dealt with at an average rate of 8,000 per month. This service was provided free of cost to the applicants.

## weights of loads on main roads

Overladen vehicles are the cause of serious damage to road pavements. Ordinance No. 30C of the Local Government Act, 1919 limits the gross load and individual axle loads for vehicles using Main Roads. The Department employs a number of Field Inspectors to check vehicles for overloading under this Ordinance. The Department's main concern in this regard is the protection of the pavements of Main Roads from damage.

During the year, a total of 43,729 vehicles were stopped and 7,960 vehicles, or 18.2%, were found to be loaded in excess of the limits. Prosecutions were undertaken in the majority of these cases; 5,613 convictions were recorded and appropriate penalties were imposed.

In cases where it is necessary to move excessively heavy freight of an indivisible nature, special permits are issued to cover these movements and during the year 5,866 permits of this nature were issued. This particular phase of the work is done with the close co-operation of the New South Wales Police Traffic Branch.

The Department offers advice to the motor industry by means of forms which set out the requirements of Ordinance No. 30C and allow assessment of the weight that may be permitted to be carried on a particular vehicle. It also assists Councils who desire to enforce Ordinance limits within their areas.

During the years that the Department has been operating under these regulations, there has been a marked drop in weight of loads offences. There has also been evidence of a resultant decrease in the cost of maintenance of road pavements and bridges from damage through overloaded vehicles. However, the present percentage of overloaded vehicles still reflects a regrettable lack of co-operation from some owners and drivers.

## legislation

The Main Roads and Sydney Harbour Bridge (Administration) Amendment Act, 1970, was assented to on 26th March, 1970.

This Act amended the Main Roads Act, 1924, to authorise the proclamation of a work designed to facilitate the movement of motor traffic between Sydney and Wollongong as a toll work. On the proclamation of a toll work the provisions of the Main Roads Act provide for its construction and maintenance, the payment of the cost of this work and the levying of tolls to be applied towards those costs.

The Main Roads Act, 1924, was further amended by deleting references to the expired Commonwealth Aid Roads Act, 1964, and by inserting appropriate provisions to give effect to the Commonwealth Aid Roads Act, 1969, which replaced it. In particular, provision was made for the creation of a Commonwealth Aid

Roads Fund for the receipt of moneys made available to the Department under the Commonwealth Act and for its expenditure on Main Roads in accordance with the specific requirements of the Commonwealth Act.

The Main Roads and Sydney Harbour Bridge (Administration) Amendment Act, 1970, also amended the Sydney Harbour Bridge (Administration) Act, 1932, to authorise the making of regulations which would provide for the payment of tolls only by drivers of vehicles crossing the Sydney Harbour Bridge in a prescribed direction.

The amendments to the Sydney Harbour Bridge (Administration) Act, 1932, were brought into effect by proclamation on 3rd July, 1970, and on that day also the Regulations made under that Act were amended to provide for the payment of toll only by drivers of vehicles crossing the bridge in a southerly direction. A further amendment to the Regulations authorised the use of automatic toll collection machines on the Sydney Harbour Bridge.

## public relations

As a public authority, the Department has a responsibility to keep the people of New South Wales fully informed of its work.

The public relations activities undertaken by the Department are aimed to provide information to as many members of the community as possible. Therefore, in order to appeal to the different interests of the public and to stimulate appreciation of the Department's achievements as well as of the extent of the tasks facing the Department, the public relations service uses a variety of means of expression suitable for a variety of situations. These include visual displays, incorporating both still and movie photographic records and scale models, special functions, such as official opening ceremonies and many forms of printed material.

Regular news releases are made to press, broadcasting and television stations concerning important works that are proposed, about to be commenced or to be tendered for, the progress of works under construction, and when works will be completed and opened to traffic. During the year, approximately fifty such releases were made. The Department also provides information to the Police Department, National Roads and Motorists Association, and members of the public whenever reports are received that sections of the Main Roads System are cut by flood waters, snowfalls, etc.

A photographic record is kept at the Department's Head Office of the major road and bridge works which are undertaken throughout the State. An increasing amount of this work is now recorded on colour as well as on black and white film. These photographs are made available on request to the press and publishers of technical magazines.

Suitably enlarged, these photographs and colour transparencies form the nucleus of most of the Department's displays and exhibits. They are generally supplemented by artist's impressions and scale models of future works. These displays are usually arranged in conjunction with the annual shows at major towns and cities and at school fetes or similar functions. During 1969-70, the Department provided exhibits at the Royal Easter Show, Sydney, Careers Exhibitions at Sydney and Newcastle, and at Annual Shows at Wollongong, Bega, Parkes and Wagga Wagga. In addition, a decorated float was entered in the 1969 Waratah Festival procession.

Many of the Department's construction projects are complex and, to aid both technical and aesthetic appreciation of the proposals, they are reproduced in scale model form. These models graphically illustrate the Department's proposals to Councils, other authorities and the general public, and play an important role in their acceptance. A permanent display of scale models,

supported by photographic and cartographic illustrations, is located on the third floor of the Department's Head Office. This display room is open to the public during office hours. Models currently on display include the first section of the Western Distributor, tentative layout of the Eastern Distributor between the Art Gallery and Moore Park, section of the Lane Cove Valley Expressway from Fig Tree Bridge to Epping Road, proposed traffic relief route to north and east of Orange, proposed new bridge over Bega River and approaches, proposed new bridge over Murrumbidgee River at Gundagai and approaches, and proposed new bridge over Brisbane Water at the Rip.

The Department has a library of over seventy 16mm movie films, dating from a number made by the Main Roads Board in 1928 to those produced recently by the Department on the Sydney-Newcastle and Warringah Expressways. A 20-page catalogue of these films is available. New films are at present being produced on the first section of the Western Distributor, the new bridge to link Stockton Peninsula and Kooragang Island at Newcastle and on the general activities of the Department. Many organisations take advantage of the service which the Department provides for the screenings of these films. In addition, arrangements are made on request for Departmental officers to address interested organisations and groups on matters relating to Main Roads.

During the year, special ceremonies were held for the official opening to traffic of the following new bridges:

- "L. H. Ford Bridge" over Macquarie River at Dubbo — 26th September, 1969
- Bridge over Myall River at Bulahdelah — 24th November, 1969
- "Irrawang Bridge" over Hunter River at Raymond Terrace — 20th March, 1970
- Bridge over Lake Forbes at Forbes — 20th April, 1970.

A number of new publications were printed during the last twelve months and included a leaflet entitled "Keep Your Highways Clean", revised "Careers" and "Apprenticeships" brochures, a 32-page brochure entitled "All About Roads", a sketch map showing "Planned Expressways in the County of Cumberland" and four maps of New South Wales printed together and showing "Classifications of Main Roads", "Types of Surface", "Travel Times" and "Mileages" on Main Roads. New editions of "A Schedule of Descriptions of Classified Roads and Works" and "General Conditions of Assistance to Councils" were also printed.

The Department's Journal "Main Roads" continued to be published quarterly and a special issue was produced in June, 1970 for the Captain Cook Bi-Centenary Celebrations. The Journal is distributed widely throughout Australia and overseas and is available to the public on an annual subscription basis.

## library service

The Department's library service comprises the Head Office Library and seventeen branch libraries in Divisional Offices located throughout the State and in the Materials and Research Laboratory at Milson's Point.

It is essentially a technical library relating to all aspects of highway engineering and associated subjects. For several years the library service has been operating on a punched card system.

During the year, 2,566 books, pamphlets and standards were added to the library service, bringing the total holdings to 31,867 publications. Subscriptions were placed for an additional 21 periodical titles and this brought the total number of periodical titles received to 408.

The library circulated 19,743 new periodicals to the staff, lent 9,658 items from stock, and issued five library bulletins during 1969-70.

## national association of australian state road authorities

The National Association of Australian State Road Authorities is an organisation of the central road authorities in the six States together with the Commonwealth Department of Works, which is the road constructing authority for the Commonwealth Territories.

The Association, established in 1934, serves to provide a means of pooling technical and administrative experiences; of inaugurating, co-ordinating and rationalising road research projects; of harmonising and co-ordinating standards; of ascertaining and publishing facts about Australia's principal roads and their financing; and of developing an informed outlook on Australia's road problems.

Several publications were issued during the year giving results of experiences and advising standards for adoption as opportunity permits.

Three meetings of the Association were held during the year and were attended by the heads of the State Road Authorities of the six States and the head of the Commonwealth Department of Works. The Secretary of the Commonwealth Department of Shipping and Transport and the Chairman of the Commonwealth Bureau of Roads also attended sessions of these meetings.

The Principal Technical Committee comprising the senior technical officers of the several authorities and the Secretarial and Accounts Committee each met twice during the year and they were assisted by meetings of the several technical committees dealing with specialist activities. Representatives from the Commonwealth Department of Shipping and Transport, the Commonwealth Bureau of Roads, the Commonwealth Scientific and Industrial Research Organisation also attended a number of these meetings.

## missions abroad

During August and September 1969, the Assistant Commissioner for Main Roads, Mr. A. F. Schmidt, accompanied by an Administrative Officer, Mr. C. W. Mathews, travelled overseas to study and observe road and bridge construction procedures in the United States of America, United Kingdom, Europe and the East. During their visit to the United States they attended the Western Summer Meeting on Highway Safety at Salt Lake City. In the latter part of 1969 the Commissioner for Main Roads, Mr. R. J. S. Thomas, accompanied by the then Deputy Engineer-in-Chief, Mr. G. V. Fawkner, undertook a tour of Japan to study recent developments in expressway construction including administrative procedures for construction projects.

In April, 1970 Mr. W. D. Smith, a Mechanical Engineer and Mr. A. G. Kennedy, a Civil Engineer, visited the United States of America for a period of four weeks to inspect and to report upon dual-lane automatic trimmer spreaders. Subsequent to their evaluation the Department placed an order for one of these machines for use on its expressway projects.

## australian road research board

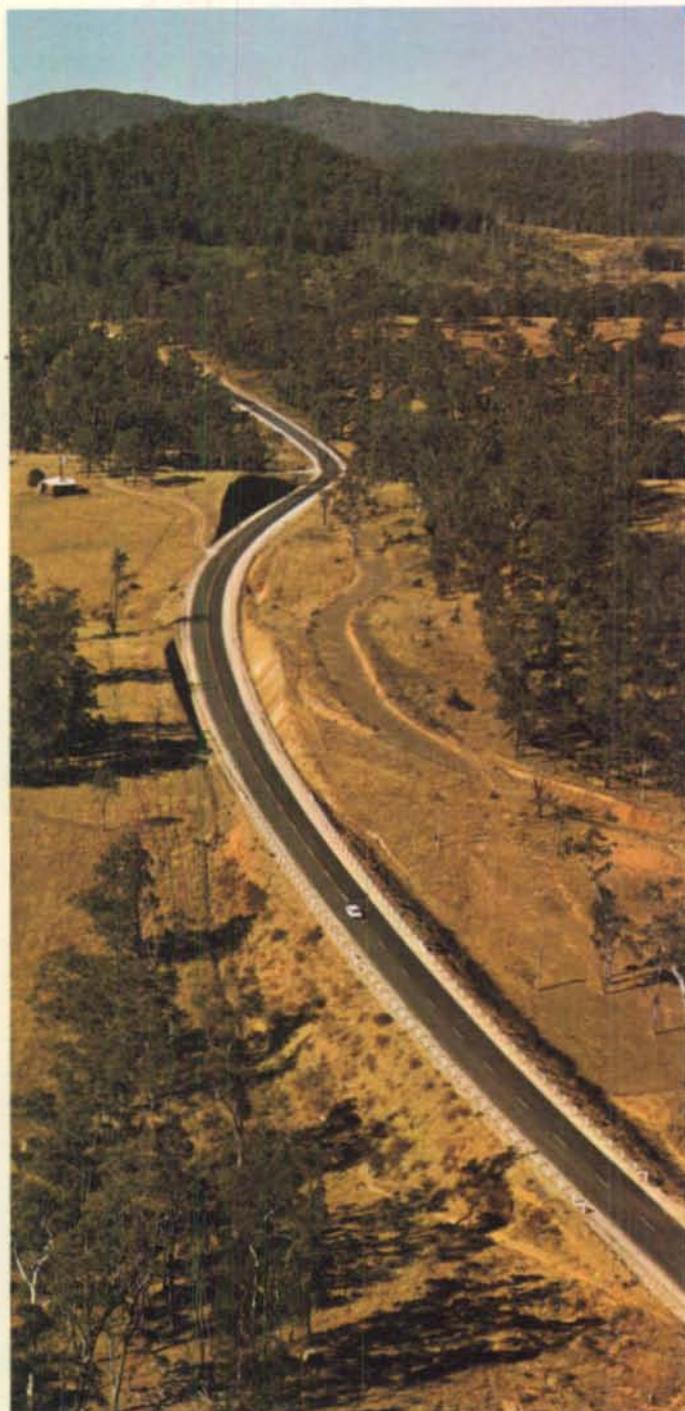
The Australian Road Research Board was established in 1960 by the National Association of Australian State Road Authorities. In 1965 it was registered as a public company, the members and directors being the executive heads of the six State Road Authorities and the Commonwealth Department of Works.

An advisory council and various specialist committees have been formed to assist in the operation of the Board's research activities. A Local Government Engineers Committee was recently established to advise on avenues of research which are of interest to local government.

Research is carried out directly by the Board as well as sponsored at universities and other institutions. Work has continued during the year on Traffic Flow Analysis, Traffic Control Division, Human Factors, Accident Analysis and Driver Characteristics, Transport Surveys (including Economic Studies) and Analysis of Materials for Road Structures.

The Sixteenth Meeting of the Board of Directors was held in Melbourne in May, 1970 and at this meeting Mr. I. J. O'Donnell, Chairman of the Country Roads Board, Victoria was appointed Chairman and Mr. A. S. Reiher, Director-General of the Commonwealth Department of Works was appointed Deputy Chairman of the Board for the year 1970-71.

The headquarters of the Board are at present located in the offices of the Country Roads Board, Victoria but arrangements are in hand for the construction of its own permanent headquarters.



Oxley Highway, near Ellenborough, approximately 34 miles west of Port Macquarie.

## acknowledgements

*In concluding this report of the activities of the Department of Main Roads for the financial year ended 30th June, 1970, I extend appreciation to the Hon. P. H. Morton, M.L.A., Minister for Local Government and Minister for Highways, for his consideration and support.*

*I wish to recognise the co-operation of Municipal and Shire Councils throughout the State. I desire also to record appreciation for the co-operation and assistance of Government Departments, State Instrumentalities, the Executive Committees of the Local Government and Shires Associations, and the Road Authorities of other States.*

*For their assistance in reporting the work being carried out by Councils and by the Department in improving the Main Roads of the State, I again thank the press, broadcasting and television organisations and other media throughout the State.*

*In conclusion, I desire to express appreciation of the loyalty and able assistance which has been given so willingly by officers and employees in the Department, in service to the people of New South Wales through the extension, improvement and maintenance of the State's Main Roads System. It would be ungenerous not to mention the retirement of several officers over the past year. It is now forty five years since the Main Roads Board was established in 1925 and the stage has been reached whereat many dedicated officers and employees who have given their whole working life to the Service are retiring due to age limitations. To their efforts we all owe much both in actual work and inspiration for the future.*

**R. J. S. THOMAS**  
COMMISSIONER FOR MAIN ROADS

Q U E E N S L A N D

S O U T H A U S T R A L I A

OCEAN

PACIFIC

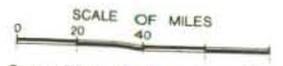
SOUTH



### TYPES OF SURFACE ON MAIN ROADS

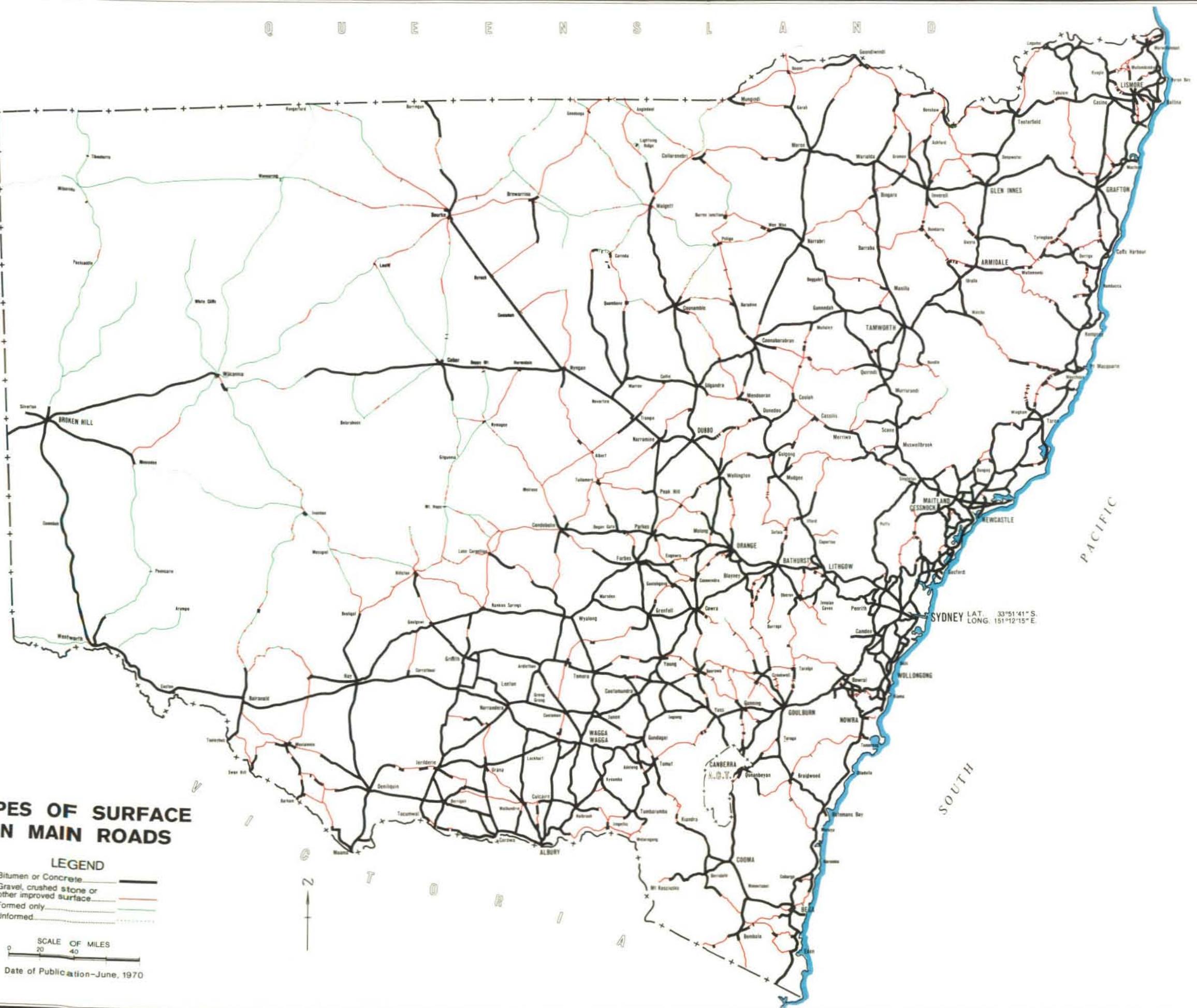
#### LEGEND

- Bitumen or Concrete
- Gravel, crushed stone or other improved surface
- Formed only
- Unformed



Date of Publication—June, 1970

SYDNEY LAT. 33°51'41" S.  
LONG. 151°12'15" E.



# annual report

## 1969-70



### next year's major works

#### *ROADS*

NORTH WESTERN EXPRESSWAY  
SOUTH WESTERN EXPRESSWAY  
SOUTHERN EXPRESSWAY  
SYDNEY-NEWCASTLE EXPRESSWAY  
WARRINGAH EXPRESSWAY  
WESTERN DISTRIBUTOR  
WESTERN EXPRESSWAY  
KINGS CROSS ROAD PROJECT  
BARRIER HIGHWAY  
GREAT WESTERN HIGHWAY  
MITCHELL HIGHWAY  
OXLEY HIGHWAY

#### *BRIDGES*

BEGA RIVER AT BEGA  
BELLINGER RIVER (SOUTH ARM) AT URUNGA  
BRISBANE WATER AT THE RIP  
COOK'S RIVER AT ARNCLIFFE  
GEORGE'S RIVER AT ALFORD'S POINT  
HAWKESBURY RIVER AT MOONEY MOONEY  
HUNTER RIVER (NORTH ARM) AT STOCKTON  
LAKE ILLAWARRA AT WINDANG  
MACQUARIE RIVULET  
MURRUMBIDGEE RIVER AT BALRANALD  
MURRUMBIDGEE RIVER AT HAY  
MURRAY RIVER AT ECHUCA  
NEPEAN RIVER AT CAMDEN  
NEPEAN RIVER AT REGENTVILLE  
WILSON RIVER AT TELEGRAPH POINT



# **SUPPLEMENT**

to

# **REPORT**

of the

**COMMISSIONER FOR MAIN ROADS**

for the

**Year ended 30th June, 1970**

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES  
SUPPLEMENT

to

**FORTY-FIFTH ANNUAL REPORT**

of the

COMMISSIONER FOR MAIN ROADS

Year ended 30th June, 1970

CONTENTS

	Page
Classification of Roads .....	6
County of Cumberland Road Construction—	
State Highways .....	6
Ordinary Main Roads .....	7
Secondary Roads .....	9
Tourist Roads .....	10
Roads other than Main Roads .....	10
Country Road Construction—	
State Highways .....	11
Trunk Roads .....	16
Ordinary Main Roads .....	18
Developmental Roads and Developmental Works .....	23
Tourist Roads .....	24
Bridge Construction—	
General .....	24
Principal Bridgeworks Completed During the Year .....	24
Principal Bridgeworks in Progress at the Beginning of the Year and Not Completed .....	26
Principal Bridgeworks Commenced During the Year and Not Completed .....	26
Maintenance of Bridges and Ferries .....	28
Elimination of Railway Level Crossings on Main Roads .....	30
Traffic Service—	
Median Strips .....	31
Channelisation of Intersections .....	31
Bus Bays .....	32
Climbing Lanes on Hills .....	32
Signposting and Roadside Furnishings .....	33
Advisory Speed Signs .....	33
Accident Analysis and Investigation .....	33
Travel-Time Surveys .....	33
Plant and Motor Vehicles .....	33
Central Workshop .....	34
Field Workshops .....	34
Bituminous Surfacing—	
Bituminous Surfacing completed during the Year	
Scheduled according to Road Classifications .....	35
Scheduled according to Work by Department and Councils .....	38
Types of Surfaces as at 30th June, 1970	
Scheduled according to Road Classifications .....	40
Scheduled according to Department's Divisions .....	41

	Page
Instruction in Plant Maintenance and Operation .....	42
Research and Materials Testing .....	42
Widening of Metropolitan Main Roads .....	43
Widening of Rural Road Reserves .....	44
Advance Planning .....	44
Planning for Development of the Main Roads System in Sydney, Newcastle and Wollongong .....	44
Country Road Location, Investigation and Aerial Photography .....	45
Road Traffic Surveys .....	45
Employment and Industrial .....	51
Office Premises and Housing for Staff .....	51
Sydney Harbour Bridge—	
Financial Position .....	52
Traffic .....	52
Maintenance .....	53
Regulation of Weights of Loads on Main Roads .....	53
National Association of Australian State Road Authorities .....	54
Australian Road Research Board .....	55
Miscellaneous—	
Visitors from Overseas .....	56
Army Supplementary Reserve Unit .....	56

## APPENDICES

Appendix No.	Page
1 (A) Commonwealth Aid Roads Fund—Statement of Receipts and Payments for the year ended 30th June, 1970 .....	57
(B) County of Cumberland Main Roads Fund—Statement of Receipts and Payments for the year ended 30th June, 1970—	
(i) General Purposes .....	57
(ii) Special Purposes .....	57
(iii) Reserve for Loan Repayments .....	58
(C) Country Main Roads Fund—Statement of Receipts and Payments for the year ended 30th June, 1970—	
(i) General Purposes .....	58
(ii) Special Purposes .....	58
(iii) Reserve for Loan Repayments .....	59
(D) Developmental Roads Fund—Statement of Receipts and Payments for the year ended 30th June, 1970 .....	59
(E) Sydney Harbour Bridge Account—	
(i) Income and Expenditure Account .....	59
(ii) Appropriation Account .....	59
(iii) Reserve Account .....	59
(iv) Balance Sheet .....	60
2 (A) Commonwealth Aid Roads Fund—Statement of Receipts and Payments for the Five Years ended 30th June, 1970 .....	60

Appendix No.		Page
2	(B) County of Cumberland Main Roads Fund—Statement of Receipts and Payments for the Five Years ended 30th June, 1970—	
	(i) General Purposes .....	60
	(ii) Special Purposes .....	61
	(C) Country Main Roads Fund—Statement of Receipts and Payments for the Five Years ended 30th June, 1970—	
	(i) General Purposes .....	61
	(ii) Special Purposes .....	61
	(D) Developmental Roads Fund—Statement of Receipts and Payments for the Five Years ended 30th June, 1970 .....	62
	(E) Total All Roads Funds—Statement of Receipts and Payments for the Five Years ended 30th June, 1970—	
	(i) General Purposes .....	62
	(ii) Special Purposes .....	62
	(F) Sydney Harbour Bridge Account—Statement of Income and Expenditure for the Five Years ended 30th June, 1970 .....	63
3	Summary of Loan Liabilities—Liabilities to the State Treasury .....	63
4	Summary of Loan Liabilities—Loan Borrowings under Section 42A of the Main Roads Act .....	64
5	Details of Loans Raised during the year ended 30th June, 1970—Loan Borrowings under Section 42A of the Main Roads Act .....	64
6	Details of Outstanding Loans as at 30th June, 1970—Loan Borrowings under Section 42A of the Main Roads Act .....	64
6A	Details of Investments of Loan Reserve Funds as at 30th June, 1970—Loan Borrowings under Section 42A of the Main Roads Act .....	66
7	Commonwealth Aid Roads Fund—Summary of Expenditure from Department's Funds on Construction and Reconstruction Works	
	(A) County of Cumberland Area—	
	(i) Expressways .....	67
	(ii) State Highways .....	67
	(iii) Ordinary Main Roads .....	68
	(iv) Secondary Roads .....	70
	(v) Roads other than Main Roads .....	70
	(B) Country Urban Areas—	
	(i) Expressways .....	70
	(ii) State Highways .....	70
	(iii) Trunk and Ordinary Main Roads .....	71
	(C) Country Rural Areas—	
	(i) State Highways .....	71
	(ii) Trunk and Ordinary Main Roads .....	73
	(iii) Developmental Roads .....	74
8	County of Cumberland Main Roads Fund—General Purposes—Summary of Expenditure from Department's Funds on Construction and Reconstruction Works—	
	(i) Expressways .....	75
	(ii) State Highways .....	75
	(iii) Ordinary Main Roads .....	76
	(iv) Secondary Roads .....	78
	(v) Tourist Roads .....	79
	(vi) Roads other than Main Roads .....	79

8A	County of Cumberland Main Roads Fund—Special Purposes—Summary of Expenditure from Department's Funds on Construction and Reconstruction Works—	
	(i) Expressways .....	80
	(ii) Ordinary Main Roads .....	80
	(iii) Roads other than Main Roads .....	80
9	Country Main Roads Fund—General Purposes—Summary of Expenditure from Department's Funds on Construction and Reconstruction Works—	
	(i) Expressways .....	81
	(ii) State Highways .....	81
	(iii) Trunk and Ordinary Main Roads .....	89
	(iv) Tourist Roads .....	99
	(v) Roads other than Main Roads .....	99
9A	Country Main Roads Fund—Special Purposes — Summary of Expenditure from Department's Funds on Construction and Reconstruction Works—	
	(i) Expressways .....	100
	(ii) State Highways .....	100
	(iii) Trunk and Ordinary Main Roads .....	103
10	Developmental Roads Fund—Summary of Expenditure from Department's Funds on Construction and Reconstruction Works .....	104
11	County of Cumberland Main Roads Fund—Payments for Maintenance and Minor Improvement of Main Roads, Bridges and Ferries—Work by Councils .....	107
11A	County of Cumberland Main Roads Fund — Maintenance and Minor Improvement of Main Roads, Bridges and Ferries — Work by Department .....	107
12	Country Main Roads Fund—Payments for Maintenance and Minor improvement of Main Roads, Bridges and Ferries—Work by Councils .....	109
12A	Country Main Roads Fund—Maintenance and Minor Improvement of Main Roads, Bridges and Ferries — Work by Department .....	111
13	Proclamation of Main Roads .....	115
14	Declaration of Secondary Roads .....	115
15	Proclamation of Developmental Roads .....	115
15A	Deproclamation of Developmental Roads .....	116
16	Proclamation of Developmental Works .....	116
16A	Deproclamation of Developmental Works .....	116
17	Mileages of Expressways, State Highways, Trunk Roads, Ordinary Main Roads, Secondary Roads, Tourist Roads, and Developmental Roads in New South Wales—for the Five Years ended 30th June, 1970 .....	116
18	Distribution between the Department and Councils of Responsibility for Care and Control of Roads at 30th June, 1970 .....	117

## CLASSIFICATION OF ROADS

The mileage of proclaimed Main Roads (State Highways, Trunk Roads and Ordinary Main Roads) in the State at 30th June, 1970, totalled 22,356.

The total mileage of Expressways, Main Roads (State Highways, Trunk Roads and Ordinary Main Roads), Secondary Roads, Tourist Roads, Developmental Roads and unclassified roads for which the Department of Main Roads is responsible was 27,090.

Mileages of roads within the various classifications were:

Expressways	26 miles*
State Highways	6,539 miles
Trunk Roads	4,245 miles
Ordinary Main Roads	11,572 miles
Secondary Roads	176 miles
Tourist Roads	219 miles
Developmental Roads	2,741 miles
Unclassified Roads	1,572 miles

\*Excludes four miles of Expressway which are proclaimed Main Roads.

During the year three additional Main Roads were proclaimed, one existing Main Road was extended and the proclamations of four Main Roads were altered.

In addition, one road was proclaimed as a Trunk Road, four Secondary Roads were proclaimed and two existing Secondary Roads were extended, one road was proclaimed as a Developmental Road and one Developmental Work was proclaimed.

During the year, nine Developmental Roads and four Developmental Works were deproclaimed.

Details of these proclamations, deproclamations, extensions and alterations are listed in Appendices Nos. 13, 14, 15, 15A, 16 and 16A.

The system of Main Roads at 30th June, 1970, and the boundaries of the Department's Divisions are shown on the map on the inside of the front cover of the Department's Annual Report.

## COUNTY OF CUMBERLAND ROAD CONSTRUCTION

Details of road construction expenditure in the County of Cumberland in the past twelve months are listed in Appendix Nos. 7A, 8 and 8A.

The principal works undertaken in the County of Cumberland during the year were:—

### State Highways

#### *State Highway No. 1—Prince's Highway*

Reconstruction was completed between Bay Street (Main Road No. 169) and Catherine Street, Rockdale, together with the intersection of Harrow Road and the intersection known as Seven Ways.

Reconstruction between Cardiff Street, Engadine and Whitton Street, Heathcote, was substantially completed. A major intersection is planned for the junction of Heathcote Road and Prince's Highway.

Construction of a climbing lane was completed at the top of Bulli Pass between the junctions with the Campbelltown-Bulli Road (Main Road No. 177) and Mt. Ousley Road (Main Road No. 513).

#### *State Highway No. 2—Hume Highway*

Construction of kerbside lanes and associated drainage was completed between Johnston Road and Woodville Road (State Highway No. 13), Lansdowne together with similar work between Cabramatta Creek and Warwick Farm Overbridge.

Construction of shoulders for southbound traffic was completed between Marsh Parade and Casula Road, Casula.

#### *State Highway No. 5—Great Western Highway*

Reconstruction of the concrete pavement and subsidiary work was completed between Railway Underpass and King Avenue, Flemington.

Construction of kerbside lanes and associated drainage was completed between Bridge Road and Station Street, Wentworthville.

Construction continued of the eastbound carriageway to provide dual carriageways between Prospect Deviation and St. Marys. A section of the eastbound carriageway was open to traffic between 21.9 and 24.6 miles west of Sydney.

Reconstruction was commenced to provide a six-lane divided carriageway between Chatsworth Road, Colyton and Bennett Road, St. Marys.

Construction of a four-lane carriageway was completed over Quarry Hill, near Kingswood, between 30.1 and 31.3 miles from Sydney. Work was commenced on the extension of the four lanes across Bound Creek between 29.9 and 30.1 miles from Sydney.

Work was commenced on the eastern intersection with Henry Street (Secondary Road No. 2082), Penrith, following the completion of the western channelised intersection with Henry Street. This work will complete the construction of a by-pass around Penrith shopping centre.

Widening of Victoria Pass was completed between 11.3 and 12.0 miles west of Katoomba. There are now lanes available for slow moving traffic both uphill and downhill between the bottom of Victoria Pass and the entrance to Mitchells Ridge Lookout, except for a short length at "Mitchells Bridge".

#### *State Highway No. 10—Pacific Highway*

Reconstruction and widening to a six-lane divided carriageway between Leonard Street and Edgeworth David Avenue (Secondary Road No. 2043) was completed at Hornsby.

Pavement reconstruction was completed within the shopping centre at Asquith.

#### *State Highway No. 13—Woodville Road, Church Street and Pennant Hills Road*

Construction of the divided six-lane carriageway was completed from Hume Highway (State Highway No. 2) to Chiltern Road including the railway overbridge at Villawood. Construction was nearing completion of the interchange at the overbridge to Christina Road and River Avenue.

Drainage works, together with associated pavement, kerb, gutter and footpath construction were completed between Macquarie Street and Lennox Bridge, Parramatta.

Construction of kerbside lanes on Pennant Hills Road (State Highway No. 13) was completed between Tintern Avenue and Evans Road, Carlingford.

Work was commenced on the construction of kerbside lanes between Carlingford Road (Main Road No. 373) and Murray Farm Road, Carlingford to provide a four-lane carriageway.

### **Ordinary Main Roads**

#### *Main Road No. 139—Blaxland Road, Devlin Street and Beecroft Road*

Reconstruction of Devlin Street (Main Road No. 200) was completed at Top Ryde between Blaxland Road and Lane Cove Road (Main Road No. 162). This work included channelisation of the intersection with Blaxland Road North and Lane Cove Road (Main Road No. 162) and Blaxland Road South.

Ryde Municipal Council completed the channelisation of the intersection with Ryedale Road and Rowe Street, Eastwood.

Work was commenced on construction of the approaches to the railway overbridge at Epping. Included in this work are improvements to the intersections with Carlingford Road (Main Road No. 373) and Beecroft Road (Main Road No. 139) and reconstruction of the median strip in the shopping centre at Epping.

#### *Main Road No. 154—From the Hume Highway (State Highway No. 2) at Narellan, via Bringelly, Luddenham, Kingswood, Londonderry and Macquarie Street, Windsor to Main Road No. 184 at Forbes Street, Windsor*

Reconstruction of dual carriageways in Parker Street, Penrith, was completed between the Great Western Highway (State Highway No. 5) and Jamison Street.

#### *Main Road No. 160—Old Northern Road*

Baulkham Hills Shire Council commenced reconstruction and widening from Rogans Hill to Crego Road between 3.1 and 4.8 miles from Baulkham Hills.

#### *Main Road No. 162—Lane Cove Road, Ryde Road and Mona Vale Road*

Construction was commenced between Fontenoy Road and Waterloo Road, North Ryde, to provide a six-lane dual carriageway.

Reconstruction of Ryde Road to provide a six-lane divided carriageway was completed between Yanko Road and Shaddock Avenue, West Pymble. Work is at present proceeding to Minnamurra Avenue.

#### *Main Road No. 164—Miller Street, Falcon Street, Military Road, Spit Road, Manly Road, Sydney Road, Condamine Street, Pittwater Road and Barrenjoey Road*

The Department completed a six-lane section on Military Road at Cremorne Junction between Cabramatta Road and Spofforth Street (Secondary Road No. 2019).

Reconstruction of Spit Road was completed between Punch Street and Bickell Road, Mosman, and reconstruction was commenced between Bickell Road and Pearl Bay Avenue.

Reconstruction of Pittwater Road was completed between Jacksons Road and Turimetta Street, Warriewood. Construction was proceeding on Barrenjoey Road between Grandview Parade and Bardo Road, Newport.

*Main Road No. 166—Huntleys Point interchange via Tarban Creek and Fig Tree Bridges, Burns Bay Road, and Centennial Avenue to Epping Road (Main Road No. 373)*

The reconstruction and widening of Centennial Avenue was commenced between Best Street and Epping Road (Main Road No. 373), Lane Cove.

*Main Road No. 167—Enmore Road, Stanmore Road, New Canterbury Road, Canterbury Road, Milperra Road, Newbridge Road and Epsom Road*

Marrickville Council commenced reconstruction of the concrete pavement prior to resurfacing with asphaltic concrete between Enmore Road, Enmore and Livingstone Road, Petersham.

Construction of an asphaltic concrete pavement was completed between The River Road (Secondary Road No. 2068) and Henry Lawson Drive (Main Road No. 508).

*Main Road No. 168—Forest Road*

Hurstville Municipal Council commenced kerb and gutter and drainage work between Belmore Road and Lime Kiln Road, Lugarno.

*Main Road No. 170—Regent Street and Botany Road*

Improvements were completed to the intersection of Chelmsford Avenue and Botany Road, Botany. Work was commenced on reconstruction of Botany Road between Beauchamp Road and Bunnerong Road (Main Road No. 171), Banksmeadow.

*Main Road No. 173—William Street, Bayswater Road, New South Head Road, Hopetoun Avenue, Robertson Place and Military Road*

Woollahra Municipal Council commenced reconstruction of the western road shoulder northerly from Sassafras Lane, Watson's Bay.

*Main Road No. 183—Canal Street, Ricketty Street, Kent Road and Gardeners Road*

Reconstruction and widening of the approaches to the new bridge over the Southern Cross Drive (Main Road No. 593) were completed between Racecourse Place and Tunstall Avenue, Rosebery.

*Main Road No. 184—Church Street, Windsor Road, Bridge Street, Macquarie Street, Richmond Road, Windsor Road, Windsor Street, East Market Street, March Street and Bell's Line of Road*

Reconstruction of Church Street, North Parramatta between By Street and North Rocks Road was commenced to provide a six-lane divided carriageway. This will form part of the scheme to relieve traffic congestion between Pennant Hills Road (State Highway No. 13) and Briens Road, North Parramatta.

Widening of Windsor Road to four lanes was completed from Coronation Street to Palace Road at Baulkham Hills and from President Road to Acres Road through Kellyville.

The intersection of Bridge Street (Main Road No. 182) and Macquarie Street, Windsor was widened and channelised.

Widening was commenced of a section on Mt. Tomah between 28.7 and 29.8 miles west of Windsor to provide an additional lane for slow moving vehicles.

Near Bell, strengthening and widening were commenced between 40.4 and 41.4 miles west of Windsor. The work provides for additional lanes for slow moving vehicles at several locations.

*Main Road No. 277—Port Hacking Road, Kingsway, Cronulla Street, Waratah Street and Ewos Parade*

Sutherland Shire Council completed reconstruction of the southern kerbside lane from Wandella Road to University Street, Miranda.

*Main Road No. 327—Allison Road, Belmore Road and Coogee Bay Road*

Randwick Municipal Council completed reconstruction of Coogee Bay Road from Judge Street to St. Luke Street, Randwick.

*Main Road No. 328—Boundary Street, Babbage Street and Warringah Road*

Reconstruction and widening of Warringah Road were commenced from the Wakehurst Parkway (Main Road No. 397) to Oxford Falls Road, Beacon Hill.

*Main Road No. 344—Wentworth Avenue*

Reconstruction was completed between Dransfield Avenue and Botany Road (Main Road No. 170), Mascot, as part of the new access road to Sydney (Kingsford Smith) Airport.

Reconstruction was commenced between Bay Street and Corish Circle, Botany East.

*Main Road No. 373—Carlingford Road, Epping Road and Longueville Road*

Hornsby Shire Council commenced reconstruction of Carlingford Road between Midson Road and Ray Road, Epping.

Construction of a six-lane divided carriageway was nearing completion between Shrimptons Creek and Vimiera Road, Marsfield.

*Main Road No. 393—Farnell Avenue, Audley Road, Stevens Drive and Garie Road to the Upper Causeway, thence to Bald Hill via Otford*

Reconstruction of Audley Road to lift it above flood level at the Upper Causeway over the Port Hacking River (Near Waterfall) was completed.

*Main Road No. 530—Oliver Street, Bennett Street, Adams Street, Griffin Road, The Strand and Howard Avenue*

Warringah Council commenced reconstruction of the unsealed shoulders to provide a four-lane sealed pavement between Lawrence Street and Brighton Street, Curl Curl.

*Main Road No. 534—Cabramatta Road*

The Department of Railways commenced construction of a new overbridge across the main southern railway line at Cabramatta. Fairfield Council will construct the approaches.

*Main Road No. 537—Rooty Hill Road, Windsor Road, Richmond Road, Blacktown Road, Lennox Street and East Market Street*

Blacktown Municipal Council almost completed construction of kerb and gutter and underground drainage together with pavement widening between Penfold Street and Barber Street, Rooty Hill.

Reconstruction was completed in Lennox Street, Richmond. Kerb and gutter and underground drainage were provided together with pavement widening.

*Main Road No. 548—Mid Dural Road*

Hornsby Shire Council continued reconstruction including a deviation leading to the planned new bridge over Colah Creek.

*Main Road No. 587—George Street, Bridge Street and Jersey Street North*

Reconstruction and widening to four lanes were completed between George Street and the Pacific Highway (State Highway No. 10) at Asquith.

*Main Road No. 593—Neild Avenue, Boundary Street, Barcom Avenue, South Dowling Street and Southern Cross Drive*

Reconstruction and widening of South Dowling Street, were completed between Flinders Street (Main Road No. 171) and Todman Avenue as well as construction of Southern Cross Drive from Todman Avenue to Wentworth Avenue (Main Road No. 344) as part of a new access road to Sydney (Kingsford Smith) Airport.

*Main Road No. 599—Miller Street, Strathallen Avenue, Sailors Bay Road, Eastern Valley Way, Clive Street and Boundary Street*

Reconstruction and amplification of the culvert at Scotts Creek and the four-lane widening from Boundary Street (Main Road No. 328) to Megalong Avenue, Willoughby, were completed. Work is proceeding on widening between Sailors Bay Road, Northbridge, and Megalong Avenue.

## **Secondary Roads**

*Secondary Road No. 2008—Bourke Street, O'Riordan Street, Robey Street and Joyce Drive*

Reconstruction and widening of Robey Street and Amelia Street were completed between Botany Road (Main Road No. 170) and Qantas Drive as part of the access road to the Overseas Terminal at Sydney (Kingsford Smith) Airport.

*Secondary Road No. 2019—High Street*

North Sydney Municipal Council commenced reconstruction from Broughton Street to High Street Overbridge, North Sydney.

*Secondary Road No. 2033—Monash Road and Ryde Road*

Hunters Hill Municipal Council commenced reconstruction of the intersection of Pittwater Road (Secondary Road No. 2052) and Ryde Road, Boronia Park.

*Secondary Road No. 2043—Archbold Road, Arterial Road, Birdwood Avenue, Horace Street, Killeaton Street, Burns Road, Eastern Road, Junction Road and Edgeworth David Avenue.*

Reconstruction between Bancroft Avenue and Tryon Road, East Lindfield was completed and widening to four lanes was commenced between Grosvenor Street and Coonanbarra Avenue, Wahroonga.

*Secondary Road No. 2049—Junction Street, Parkes Street and Ethel Street*

Reconstruction and bituminous surfacing were completed by Parramatta City Council between Church Street (State Highway No. 5) and Parkes Street, Parramatta.

*Secondary Road No. 2056—Darling Street, Balmain Road, Perry Street, Mary Street, Lilyfield Road, Dobroyd Parade and Wattle Street*

Reconstruction was completed of the intersection of Parramatta Road (State Highway No. 5), Wattle Street and Frederick Street (Secondary Road No. 2014).

*Secondary Road No. 2059—Patterson Street, Gipps Street, Queens Road and Fairlight Street*

Drummoyne Municipal Council completed reconstruction of Queens Road, Fivedock between Great North Road (Main Road No. 395) and Harris Road.

Reconstruction of the westbound carriageway in Patterson Street between Concord Road (Main Road No. 200) and Bell Street, Concord was completed by Concord Municipal Council.

*Secondary Road No. 2060—Punchbowl Road*

Canterbury Municipal Council continued reconstruction and widening to four lanes of Punchbowl Road between King Georges Road (Main Road No. 315) and Punchbowl Railway Station.

*Secondary Road No. 2068—The River Road*

Bankstown Municipal Council commenced reconstruction and widening between the Railway overbridge and Tower Street, Revesby.

*Secondary Road No. 2070—Shirley Road, River Road, Northwood Road, River Road West, Bridge Street and Penrose Street*

Lane Cove Municipal Council completed reconstruction and widening to four lanes between Canberra Avenue and Greenwich Road, Northwood Road and Gore Creek, Longueville Road and William Edward Street, and Bridge Street and Burns Bay Road (Main Road No. 166). Similar work was commenced between Wangalla Road and Bridge Street, Lane Cove.

*Secondary Road No. 2079—President Avenue*

Rockdale Municipal Council completed reconstruction of the southern kerbside lane from Lachal Avenue to Prince's Highway (State Highway No. 1), Kogarah.

*Secondary Road No. 2084—Blacktown Road, Wall Park Avenue and Seven Hills Road*

Baulkham Hills Shire Council completed reconstruction of a section of Seven Hills Road (Secondary Road No. 2084) extending 0.6 miles west of Katherin Road, Baulkham Hills.

## **Tourist Roads**

*Tourist Road No. 4006—The River Road*

Baulkham Hills Shire Council completed a total of 1.27 miles of reconstruction and bituminous surfacing on The River Road between 3.15 and 13.35 miles from Webbs Creek Ferry.

*Tourist Road No. 4018—Sublime Point Road*

Blue Mountains City Council completed reconstruction and bituminous surfacing of the full length between Willoughby Street, Leura, and the Lookout parking area.

## **Roads other than Main Roads**

*County Road No. 5016—Alfords Point Road*

Construction was commenced of the northern and southern approaches to the bridge over Georges River at Alfords Point.

Construction was completed of Stacey Street Railway Overbridge and approaches at Bankstown.

*County Road No. 5011 and County Road No. 5058*

Construction on new roads was commenced between Prince's Highway (State Highway No. 1) at Wickham Street and between General Holmes Drive (Main Road No. 194) at Tancred Avenue to give access to the Overseas Terminal at Sydney (Kingsford Smith) Airport.

## COUNTRY ROAD CONSTRUCTION

Details of road construction expenditure are listed in Appendix Nos. 7B, 7C, 9 and 9A.

The principal construction works undertaken during the year were:

### State Highways

#### *State Highway No. 1—Prince's Highway*

Greater Wollongong City Council commenced construction of retaining walls and associated works at Black Cutting Hill, north of Rothery Street, Bellambi.

Reconstruction of the approaches to the railway overbridge at North Wollongong was completed to improve alignment and grading.

Greater Wollongong City Council completed construction of kerbside lanes to provide a carriageway 42 feet wide between McCabe Street and Avondale Road, Dapto.

Reconstruction was commenced of the southern approach to the bridge at Abernethys Creek between 97.0 and 97.5 miles south of Sydney to improve alignment and grading.

Construction of a climbing lane for northbound traffic on Mortons Hill was commenced to the north of the junction with Main Road No. 293 at Bomaderry.

The last section of pavement and shoulder widening through Narooma (between 1.7 miles north and 0.6 miles south) was completed, including improvement to alignment and grading between the Water Tower and Cemetery Road.

Bega Municipal Council completed replacement and construction of kerb and gutter, footpaths and drainage and relocation of utilities in Carp Street, Bega. The Department completed reconstruction of the pavement.

Work continued on the construction of the Kiah deviation, between 4.9 miles south of Eden at the Boydtown turn-off and the Towamba River Bridge at Kiah, 8.2 miles south of Eden. A short section of the new work is open to traffic.

Pavement widening was completed at the junction with Edrom Road. The work provides additional lanes to facilitate turning movements by heavy timber traffic.

#### *State Highway No. 2—Hume Highway*

Widening of the formation and pavement was continued on the southern side of Razorback Range to improve alignment and provide climbing lanes.

Construction was completed of the deviation of the southern approach to the Whitehorse railway overbridge between 14.0 and 14.8 miles south of Picton to improve alignment and grading.

Reconstruction was completed between 39.1 and 41.7 miles south of Mittagong, including provision of a climbing lane for northbound traffic.

A second carriageway for southbound traffic between 2.9 and 5.1 miles north of Goulburn was completed to a stage where it could be used by traffic.

Goulburn City Council commenced reconstruction and channelisation between 0.5 and 0.9 miles south of Goulburn.

Construction was commenced of a second carriageway between 2.3 and 7.25 miles south of Goulburn. This work requires the duplication of two bridges and provision of two structures over the Main Southern Railway Line.

Construction of a grade separated intersection between 7.25 and 9.0 miles south of Goulburn was commenced at the junction with the Federal Highway (State Highway No. 3). Work was commenced on all lanes and on the overpass bridge and one new lane was in operation.

The approaches to the new bridge over Meadow Creek between 0.1 and 1.2 miles east of Gunning and the climbing lane for northbound traffic were completed. In the town of Gunning the Shire Council carried out drainage works associated with these improvements.

Reconstruction and bituminous surfacing were completed between Conroys Gap and Bogolong Creek 12.7 and 20.0 miles west of Yass. The section includes three lengths of climbing lanes.

Improvements to the junction with Sturt Highway (State Highway No. 14), were completed including provision of median strips and traffic islands.

Reconstruction between 30.6 and 34.9 miles south of Tarcutta was completed including the provision of a dual carriageway between 30.6 and 33.8 miles.

Reconstruction was completed between 20.0 and 20.7 miles south of Holbrook.

Work was commenced on reconstruction between Table Top 30.6 miles south of Holbrook and Main Road No. 125, 38.7 miles south of Holbrook at North Albury.

#### *State Highway No. 4—Snowy Mountains Highway*

Reconstruction and realignment were commenced between 8.1 and 9.4 miles west of Tathra, in conjunction with construction of Parbery Creek Bridge, and the culvert over Warragaburra Creek. The new work will provide a flood-free section.

Reconstruction of the Brown Mountain deviation between Bega and Nimmitabel was completed except for two miles of final seal.

Completion of earthworks was extended to 8.4 miles west of Kiandra, and the pavement, including the approaches to Bullock Head Creek Bridge was completed to a stage where it was being used by traffic.

Reconstruction was in progress between 29.6 and 40.7 miles south east of Tumut. The whole length has now been provided with a gravel surface and opened to traffic.

Reconstruction was completed between 54.65 and 55.1 miles north west of Kiandra at Springfield.

Construction was completed of the deviation at Gilmore between 3.6 and 5.1 miles west of Tumut to provide approaches to the new Gilmore Creek Bridge.

Reconstruction and bituminous surfacing were completed between 26.2 and 27.8 miles west of Tumut.

#### *State Highway No. 5—Great Western Highway*

Reconstruction continued of the junction with Trunk Road No. 55 at 5.0 miles west of Lithgow to provide for grade separation.

Construction was continued of a deviation at Yetholme, between 24.4 and 27.7 miles west of Lithgow.

#### *State Highway No. 6—Mid-Western Highway*

Reconstruction west of Blayney was commenced and earthworks were completed on Red Hill between 0.9 and 3.9 miles west of Blayney.

#### *State Highway No. 7—Mitchell Highway*

Reconstruction was commenced between 23.1 and 26.7 miles west of Bathurst. Reconstruction and bituminous surfacing were completed between 26.7 and 30.7 miles west of Bathurst.

Reconstruction was commenced between 19.0 and 24.4 miles west of Wellington and was completed between 24.4 and 29.1 miles.

In the City of Dubbo, construction of approaches to the new bridge over the Macquarie River was completed and construction of approaches to Willandra Creek Bridge was commenced between 6.0 and 8.0 miles west of Dubbo.

The 22 feet wide bituminous surface was extended from 29.0 miles to 37.5 miles south-east of Nyngan and a 22 feet wide bituminous surface was provided north of Bourke between 22.0 and 36.0, 59.3 and 59.9, and between 82.2 and 82.6 miles.

Reconstruction preparatory to applying a bituminous surface was in progress between 36.0 and 47.0 miles north of Bourke.

#### *State Highway No. 8—Barrier Highway*

Bogan Shire Council completed bituminous surfacing between 38.9 and 41.2 miles west of Nyngan.

Bituminous surfacing was completed between 84.2 and 98.0 miles west of Cobar. Reconstruction, preparatory to applying a bituminous surface, was in progress between 98.0 and 111.4 miles west of Cobar.

Work was commenced on a deviation over McCullochs Range between 12.4 and 51.0 miles east of Wilcannia, to avoid low-lying areas traversed by the existing highway.

A final bituminous surface was applied between 8.2 and 11.6 miles east of Wilcannia.

Reconstruction prior to provision of a bituminous surface was being carried out between 0.0 and 8.2 miles east of Wilcannia, over the Darling River flood plain and the Talyawalka Creek flood plain.

A dust free surface was provided for the whole length between Wilcannia and Broken Hill with the completion of the "Grassmere" Deviation between 19.0 and 34.5 miles west of Wilcannia. This replaced low-lying sections subject to flooding from Grassmere Creek and Dolo Creek.

Final bituminous surface was carried out between 4.3 and 9.0 miles west of Wilcannia, between 17.7 and 33.5 miles west of Wilcannia, (excluding a detour approximately 0.4 miles long at the proposed bridge at Grassmere Creek) and between 55.8 and 73.0 miles east of Broken Hill.

#### *State Highway No. 9—New England Highway*

Construction continued of a deviation 3.29 miles long extending from Tarro overbridge, 1.5 miles west of Hexham Bridge to the Thornton-Minmi Road intersections, west of Beresfield. When the work is completed dual carriageways will extend from Maud Street (Main Road No. 605), Mayfield to the Thornton-Minmi Road intersections, a distance of 9.4 miles.

Reconstruction was commenced of a narrow section between 3.5 and 5.0 miles west of Maitland.

Reconstruction of a narrow winding section of bituminous pavement was commenced between 19.7 and 21.1 miles west of Maitland near Belford.

At Scone, reconstruction was completed between 15.4 and 15.6 miles north of Muswellbrook. The work included channelisation of two junctions with side streets and construction of a median strip.

With the exception of the final seal, construction of the former "Devil's Elbow" section was completed between 24.1 and 25.8 miles north of Murrurundi. Improvements included an extra lane for slow moving vehicles.

Reconstruction was commenced between 29.0 and 30.3 miles north of Murrurundi.

Construction of approaches to Kentucky Creek Bridge was completed between 47.33 and 48.1 miles north of Tamworth and reconstruction and bituminous surfacing were nearing completion between 48.1 and 50.1 miles north of Tamworth.

Reconstruction and bituminous surfacing were continued between 50.1 and 53.2 miles north of Tamworth. Construction of a four cell, 8 feet by 8 feet, reinforced concrete box culvert was completed at 50.4 miles. Earthworks were in hand to 51.8 miles north of Tamworth.

Construction of the deviation between 1.0 and 2.5 miles south of Guyra was completed and work commenced between 1.0 miles south and 0.35 miles north of Guyra.

Construction of the deviation between 0.35 and 6.5 miles north of Guyra was nearing completion and will be opened to traffic when the railway overbridge is completed.

#### *State Highway No. 10—Pacific Highway*

Reconstruction to provide dual carriageways from Ida Street, Charlestown, to the Newcastle City Boundary, a distance of 1.1 miles, was nearing completion and has been opened to traffic. Dual carriageways have been provided between 5.0 miles and 7.2 miles south of Newcastle.

Reconstruction was completed for a distance of 2.3 miles from Grahamstown Lake Deviation to Balickera Channel.

Widening of the formation to 44 feet was continued between Main Road No. 506 and Bulahdelah to provide 10 feet shoulders for a distance of 18.2 miles. Approximately seven miles of this work has been completed.

Regrading of a crest and provision of a climbing lane were commenced one mile north of Bulahdelah.

Reconstruction and strengthening of the road to a 44 feet formation with 24 feet sealed pavement, was continued in the Coolongolook area between 15.5 and 19.0 miles north of Bulahdelah.

Kempsey Municipal Council completed traffic islands at the intersection with Belgrave Street, Kempsey.

Construction of a deviation was commenced between 1.5 and 3.3 miles south of Macksville to provide approaches to a new concrete bridge being constructed over Lower Warrell Creek. The work will form part of a future motorway.

Construction of a deviation was commenced north of Macksville from the bridge over the Nambucca River for approximately 2.0 miles. The work will involve a new crossing over Newee Creek and form part of a future motorway.

Construction was continued during the year of a deviation between 3.1 and 4.8 miles north of Coffs Harbour.

Reconstruction and bituminous surfacing were completed between 8.9 and 11.0 miles north of Coffs Harbour.

Construction was completed on a deviation between 45.7 and 47.1 miles north of Grafton including two new concrete bridges. Construction continued on the deviation northwards to 50.1 miles and a new bridge was completed at 49.2 miles. Completion of these works will eliminate two locations where frequent flood blockages occurred.

Construction of a climbing lane was recommenced between 0.2 and 0.9 miles north of Brunswick Heads.

Construction was continued of a climbing lane on the Burringbar Range. The climbing lane was completed between 6.2 and 7.0 miles south of Murwillumbah and work was continued between 7.0 and 8.5 miles and between 4.7 and 6.2 miles.

Reconstruction and bituminous surfacing were commenced from Alma Street to Condong Creek, 0.0 to 0.7 miles north of Murwillumbah.

Construction of a deviation was commenced at Condong between 2.6 and 4.1 miles north of Murwillumbah.

The Tweed Shire Council in conjunction with the Department continued reconstruction between Boyds Bay Bridge and the Queensland Border and work was completed between 18.0 and 18.2 miles north of Murwillumbah.

Construction of a channelised intersection was completed at the New South Wales/Queensland Border.

#### *State Highway No. 11—Oxley Highway*

Port Macquarie Municipal Council completed reconstruction and provision of a median strip in Gordon Street, providing two 33 feet carriageways separated by a median strip for a distance of 0.5 miles at the entrance to the town.

Hastings Shire Council completed reconstruction between 12.9 and 14.0 miles west of Port Macquarie, at Wauchope.

Bituminous surfacing was continued between Wauchope and Walcha. A dustless surface has now been provided between 0.0 and 38.9 miles and between 47.1 and 68.6 miles west of Port Macquarie. A dustless surface has also been provided between 12.0 miles east of Walcha and the New England Highway (State Highway No. 9) at Bendemeer.

Reconstruction was completed between 0.0 miles at Nevertire and 1.34 miles towards Warren. Reconstruction was continued between 1.34 and 4.0 miles from Nevertire towards Warren.

Reconstruction was completed between 2.4 and 3.45 miles south of Coonabarabran.

#### *State Highway No. 12—Gwydir Highway*

Inverell Municipal Council completed reconstruction and bituminous surfacing between 1.0 and 1.6 miles east of Inverell.

Yallaroi Shire Council completed reconstruction and widening between 4.6 and 6.0 miles east of Warialda to the prime seal stage.

Booloroo Shire Council completed reconstruction and bituminous surfacing between 7.7 and 10.5 miles east of Moree.

Boomi Shire Council commenced construction of culverts and approaches over Cowbail Creek and Browns Creek between 28.0 and 33.4 miles west of Moree.

#### *State Highway No. 14—Sturt Highway*

Work continued on the Guys Hill Deviation between 13.8 and 17.4 miles from Hume Highway (State Highway No. 2).

The section between 17.4 and 18.5 miles (Coxs Folly) was reconstructed, including climbing lanes, and provided with a dust free surface.

Reconstruction, widening and bituminous surfacing of the pavement and formation were substantially completed between 19.5 and 22.0 miles west of Hay.

Widening of the formation was commenced between 12.0 and 19.5 miles and 22.0 and 27.0 miles west of Hay.

Reconstruction and widening of the pavement and formation were commenced between 12.6 and 13.9 miles east of Euston.

Reconstruction was completed between 0.0 and 5.5 miles west of Euston.

#### *State Highway No. 15—Barton Highway*

Reconstruction was commenced between 7.2 and 9.2 miles south of Yass.

#### *State Highway No. 16—Bruxner Highway*

Tintenbar Shire Council completed reconstruction between 12.6 and 12.9 miles west of Ballina. The work included the replacement of two narrow culverts with new pipe and box culverts.

Gundurimba Shire Council commenced reconstruction between 1.72 and 2.75 miles west of Lismore.

Gundurimba Shire Council completed reconstruction between 5.0 and 5.7 miles west of Lismore. This work raised the level of a section which was subject to flooding.

Tomki Shire Council completed reconstruction between 12.7 and 14.1 miles west of Lismore to provide approaches to the new bridge over Tomki Creek.

Construction continued between Tabulam and Drake to improve alignment and provide a bituminous surface over the full length. The section between 86.3 and 90.1 miles west of Ballina was completed and opened to traffic.

Tenterfield Shire Council completed to the prime seal stage the length between 31.6 and 32.6 miles east of Tenterfield at Drake.

Reconstruction and bituminous surfacing between 14.7 and 23.0 miles west of Tenterfield were completed by Tenterfield Shire Council and work was continued on the section between 23.0 and 29.0 miles.

Construction was completed to the primed stage between 8.0 and 14.0 miles east of Bonshaw and bridgeworks were in progress.

Construction continued of the deviation between 5.0 and 17.9 miles west of Bonshaw.

Ashford Shire Council continued reconstruction between 32.0 and 37.0 miles west of Bonshaw.

#### *State Highway No. 17—Newell Highway*

Forbes Municipal Council constructed approaches totalling 1.2 miles to the new bridge over Lake Forbes. Together with the new bridge the approaches form the first stage of a deviation through Forbes.

Jemalong Shire Council completed reconstruction between 1.4 and 3.4 miles north of Forbes.

Reconstruction of damaged pavement was completed between 1.0 and 9.0 miles south of Gilgandra.

Reconstruction was commenced between 6.6 and 7.2 miles north of Coonabarabran and reconstruction between 12.6 and 16.5 miles was well advanced.

Bituminous surfacing was extended for a further 2.1 miles between 16.5 and 18.6 miles north of Coonabarabran.

Reconstruction and bituminous surfacing between 38.1 and 43.0 miles north of Moree were completed and reconstruction was continued between 43.0 and 47.0 miles.

Reconstruction was commenced between 60.5 and 72.0 miles north of Moree.

*State Highway No. 18—Castlereagh Highway*

Bituminous surfacing between 8.3 and 10.0 miles and between 17.5 and 30.0 miles north of Walgett was completed and reconstruction preparatory to bituminous surfacing was in progress between 30.0 and 44.0 miles north of Walgett.

*State Highway No. 19—Monaro Highway*

Reconstruction was commenced between 30.2 and 31.2 miles south of Canberra.

Approaches to the bridge over Michelago Creek were completed to prime seal stage.

Reconstruction was completed between 57.5 and 58.0 miles south of Canberra, including provision of a climbing lane.

Cooma Municipal Council completed to prime stage construction of approaches to the railway overbridge at Cooma.

Reconstruction was commenced between 2.0 and 6.0 miles south of Cooma.

Construction was completed to prime stage from Tea Gardens Creek and 7.4 miles south of Nimmitabel to the Bibbenluke Shire Boundary at 10.0 miles.

Bibbenluke Shire Council completed reconstruction and bituminous surfacing between 10.0 and 14.5 miles south of Nimmitabel and between 7.0 and 8.0 miles south of Bombala.

Reconstruction was commenced between 8.0 and 10.0 miles south of Bombala.

*State Highway No. 21—Cobb Highway*

Reconstruction and bituminous surfacing were continued between 4.7 and 8.2 miles north of Moama.

Reconstruction and bituminous surfacing were completed between 16.7 and 24.0 miles north of Moama.

Deniliquin Municipal Council commenced reconstruction and channelisation of the intersection with the Riverina Highway (State Highway No. 20) and the Deniliquin-Jerilderie Road (Main Road No. 552).

Windouran Shire Council continued construction of a deviation to improve alignment between 5.7 and 6.2 miles north of Deniliquin.

Bituminous surfacing was completed between 29.0 and 48.0 miles north of Hay.

*State Highway No. 22—Silver City Highway*

Bitumen sand seals were applied to sections between 4.2 and 4.7, between 5.3 and 5.4, and between 7.1 and 7.2 miles east of Wentworth.

Approaches were completed to a new bridge at Two Mile Break between 1.3 and 1.9 miles north of Wentworth.

A final bituminous seal was applied to sections between 9.8 and 11.1 and between 31.9 and 39.3 miles north of Wentworth.

Pavement widening to 22 feet was carried out in conjunction with bituminous reseal work between 38.0 and 42.1 and 30.6 and 31.1 miles south of Broken Hill.

Realignment and construction of approaches to a new railway overpass were substantially completed over a length of 1 mile within the City of Broken Hill, in connection with the standardisation of rail gauge. Earthworks were constructed by the Department and pavement, bituminous surfacing and furnishings by Broken Hill City Council.

*State Highway No. 24—Mt. Lindesay Highway*

Kyogle Shire Council completed reconstruction and bituminous surfacing between 2.9 and 3.6 miles north of Woodenbong.

*State Highway No. 25—Illawarra Highway*

Reconstruction and pavement widening were continued between 5.0 and 7.0 miles east of Moss Vale (including improvement of the intersection with Main Road No. 265).

Work was continued on provision of a climbing lane for heavy vehicles on Macquarie Pass between 11.1 and 11.6 miles west of Prince's Highway (State Highway No. 1) at Albion Park.

*State Highway No. 26*

Construction of an additional southbound lane was completed at 2.5 miles north of Calga.

## Trunk Roads

### *Trunk Road No. 51—Batemans Bay-Queanbeyan*

Tallaganda Shire Council completed improvements to two crests between 2.6 and 3.06 miles west of Braidwood.

### *Trunk Road No. 54—Goulburn-Ilford*

Goulburn City Council commenced reconstruction and sealing between 0.8 and 1.5 miles north of Goulburn. Crookwell Shire Council completed reconstruction and sealing between 34.3 and 36.7 miles north of Goulburn.

Abercrombie Shire Council commenced reconstruction and bituminous surfacing between 19.4 and 23.8 miles south of Bathurst.

Turon Shire Council commenced reconstruction and bituminous surfacing between 25.8 and 27.5 miles north of Bathurst.

Rylstone Shire Council completed reconstruction and bituminous surfacing between 3.2 and 4.5 miles south of Ilford and continued work on the section between 2.8 and 3.2 miles.

### *Trunk Road No. 55—Marrangaroo-Mullaley*

Reconstruction and widening were commenced between 15.7 and 19.6 miles north of Lithgow.

Coolah Shire Council completed reconstruction and bituminous surfacing from 4.2 to 6.3 miles north of Coolah.

Coonabarabran Shire Council completed reconstruction between 31.1 and 32.7 miles south of Mullaley.

Liverpool Plains Shire Council commenced reconstruction between 11.4 and 13.9 miles south of Mullaley.

### *Trunk Road No. 56—Forbes-Hume Highway, near Yass*

Boorowa Shire Council commenced reconstruction between 19.0 and 20.5 miles north of Boorowa and continued with the work between 18.3 and 19.0 miles.

Boorowa Shire Council completed reconstruction between 15.9 and 17.1 miles north of Boorowa.

Goodradigbee Shire Council commenced reconstruction between 15.2 and 17.2 miles north of Yass.

### *Trunk Road No. 57—Nyngan-Old Junee*

Lachlan Shire Council completed reconstruction and bituminous surfacing between 13.3 and 16.9 miles south of Condobolin and commenced work between 16.9 and 20.0 miles.

### *Trunk Road No. 61—Orange-Cobar*

Cobar Shire Council continued reconstruction preparatory to bituminous surfacing between 26.0 and 36.0 miles south of Cobar.

### *Trunk Road No. 62—Scone-Coolah*

Scone Shire Council completed reconstruction between 16.0 and 20.0 miles west of Scone and commenced reconstruction between 21.7 and 23.1 miles.

Reconstruction was continued between 18.0 and 20.0 miles west of Merriwa and work was commenced between 20.0 and 21.1 miles.

### *Trunk Road No. 63—Tamworth-Yetman*

Cockburn Shire Council commenced reconstruction between 14.0 and 15.25 miles north of Tamworth.

Manilla Shire Council carried out regrading of a sharp crest at its boundary with Cockburn Shire to improve riding qualities and increase sight distance.

Yallaroi Shire Council completed reconstruction and bituminous surfacing between 24.7 and 28.0 miles north of Warialda.

Ashford Shire Council commenced reconstruction and bituminous surfacing between 13.7 and 14.4 miles south of Yetman.

### *Trunk Road No. 65—Ewingsdale-Lismore*

Terania Shire Council continued the construction of a deviation between 6.9 and 11.1 miles east of Lismore and bituminous surfacing was completed between 4.7 and 5.0 miles.

### *Trunk Road No. 67—Ivanhoe-Swan Hill*

Balranald Shire Council completed reconstruction and bituminous surfacing between 60.0 and 62.3 miles north of Balranald and reconstruction was continued between 17.1 and 19.9 miles.

*Trunk Road No. 68—Wentworth-Queensland Border near Mungindi*

Reconstruction between 53.5 and 55.5 miles north of Trunk Road No. 66 was continued by Central Darling Shire Council to provide a gravel pavement.

Wentworth Shire Council commenced reconstruction and bituminous surfacing between 21.2 and 35.0 miles north of Wentworth.

Darling Shire Council continued reconstruction preparatory to applying a bituminous surface between 0.0 and 3.0 miles east of Bourke.

*Trunk Road No. 70—Byrock-Queensland Border near Hebel*

Brewarrina Shire Council continued reconstruction preparatory to bituminous surfacing between 5.3 and 12.0 miles north of Brewarrina.

*Trunk Road No. 72—Willow Tree-Narrabri*

Tamarang Shire Council continued widening of the pavement to 22 feet between 5.3 and 7.2 miles south of Quirindi.

*Trunk Road No. 73—Inverell-Walcha*

Macintyre Shire Council completed reconstruction and bituminous surfacing through Gilgai between 5.94 and 6.25 miles south of Inverell at the junction with Main Road No. 135.

Uralla Shire Council commenced reconstruction between 31.4 and 34.2 miles north of Uralla and completed bituminous surfacing between 15.7 and 16.7 miles.

*Trunk Road No. 74—Armidale-South Grafton*

Dumaresq Shire Council completed bituminous surfacing between 41.2 and 43.1 miles east of Armidale and reconstruction was commenced between 43.1 and 45.7 miles. This work included construction of two reinforced concrete box culverts.

Nymboida Shire Council continued reconstruction prior to bituminous surfacing between 58.1 and 59.0 miles south of Grafton and reconstruction was continued between 30.4 and 31.6 miles.

*Trunk Road No. 75—Wollombi-Kempsey*

Macleay Shire Council completed reconstruction and bituminous surfacing between 24.2 and 26.5 miles west of Kempsey. Reconstruction and bituminous surfacing were commenced between 26.5 and 29.5 miles.

*Trunk Road No. 76—Raleigh-Ebor*

Bellingen Shire Council continued improvements to the alignment on Dorrigo Mountain between 17.7 and 18.0 miles west of Raleigh.

*Trunk Road No. 78—Cowra-Hume Highway near Ettamogah*

Illabo Shire Council commenced reconstruction and bituminous surfacing between 15.65 and 17.95 miles north of Wagga Wagga.

Mitchell Shire Council reconstructed and widened the pavement between 5.8 and 6.3 miles north of Wagga Wagga.

*Trunk Road No. 80—Narrandera-Cobb Highway near Mossgiel*

Wade Shire Council completed reconstruction between 1.6 and 2.3 miles and between 2.55 and 2.8 miles east of Griffith, raising the formation above the influence of irrigation canals.

Carrathool Shire Council commenced reconstruction between 25.4 and 37.7 miles south of Hillston and continued reconstruction and bituminous surfacing between 17.5 and 25.4 miles south of Hillston.

*Trunk Road No. 81—Broken Hill-Silverton*

In conjunction with the standardisation of rail gauge, Broken Hill City Council substantially completed earthworks, drainage, bituminous surfacing and furnishings on the approaches to a new railway overpass over a length of 0.3 miles in Gypsum Street, Broken Hill.

*Trunk Road No. 82—Newcastle-Jesmond*

Newcastle City Council commenced construction of dual carriageways between Turton and Broadmeadow Roads (Main Road No. 326), Newcastle.

*Trunk Road No. 83—South Grafton-Mt. Lindesay Highway near Woodenbong*

Kyogle Shire Council completed reconstruction and bituminous surfacing between 13.0 and 13.7 miles north of Casino.

Kyogle Shire Council commenced reconstruction prior to applying a bituminous surface between 6.2 and 7.3 miles north of Kyogle.

Kyogle Shire Council completed reconstruction of the junction with Mt. Lindesay Highway (State Highway No. 24).

*Trunk Road No. 84—Bowning-Temora*

Murrumburrah Municipal Council completed reconstruction and bituminous surfacing between 0.1 and 1.2 miles west of Murrumburrah.

Demondrille Shire Council and Murrumburrah Municipal Council commenced construction between 1.2 and 2.0 miles west of Murrumburrah. The work includes provision of a climbing lane.

Jindalee Shire Council completed reconstruction and bituminous surfacing between 19.3 and 22.1 miles west of Murrumburrah.

*Trunk Road No. 85—Gilmore-Jingellic*

Tumut Shire Council completed reconstruction between 2.7 and 3.2 miles south of Batlow.

*Trunk Road No. 89—Tomingley-Narromine*

Timbreebongie Shire Council commenced reconstruction between 14.1 and 18.7 miles south of Narromine.

*Trunk Road No. 90—Pacific Highway-Gloucester-Purfleet*

Gloucester Shire Council completed reconstruction and bituminous surfacing between 10.5 and 12.0 miles south of Gloucester, raising a section of failed pavement on low-lying formation.

Manning Shire Council completed reconstruction and bituminous surfacing between 2.6 and 5.7 miles west of Krumbach.

*Trunk Road No. 91—Prince's Highway near Pambula-Bombala*

Imlay Shire Council commenced reconstruction between 13.0 and 15.0 miles west of Prince's Highway (State Highway No. 1) near Pambula. Earthworks were completed and opened to traffic on a running course of gravel.

Bibbenluke Shire Council completed reconstruction and bituminous surfacing between 4.5 and 6.5 miles east of Bombala and commenced reconstruction between 6.5 and 8.2 miles.

## Ordinary Main Roads

*Main Road No. 104—East Maitland-Raymond Terrace*

Maitland City Council and Port Stephens Shire Council completed construction of a deviation totalling 1.9 miles which included Irrawang Bridge over the Hunter River and eliminated the ferry crossing between Raymond Terrace and Millers Forest.

*Main Road No. 105—Scone-Nemingha*

Scone Shire Council completed gravelling and priming of the pavement between 22.1 and 22.6 miles east of Scone.

Nundle Shire Council completed construction of a deviation between Bowling Alley Point, 28.5 miles south east of Tamworth and Nundle, 35.9 miles south east of Tamworth. A sealed road has now been provided between Tamworth and Nundle.

*Main Road No. 111—Pacific Highway-Forster-Bulahdelah*

Manning Shire Council completed construction of a deviation approximately 0.9 miles long at McCanns Corner.

Stroud Shire Council completed reconstruction and bituminous surfacing between Smiths Lake and Pacific Palms, between 21.4 and 24.8 miles from the Pacific Highway near Bulahdelah.

*Main Road No. 124—Yarrowyck-Armidale*

Uralla Shire Council completed bituminous sealing of the approaches to the Saumarez Creek Bridge between 5.0 and 5.4 miles west of Armidale.

*Main Road No. 127—Narrabri—Trunk Road No. 68 near Walgett*

Namoi Shire Council commenced reconstruction between 43.0 and 49.0 miles west of Narrabri to provide a road less susceptible to flooding.

*Main Road No. 128—Singleton-Gostwyck*

Dungog Shire Council completed bituminous surfacing of a length 0.76 miles long and is proceeding with reconstruction of a length 2.0 miles long to the south west of Gresford towards Patrick Plains Shire Boundary.

*Main Road No. 129—Quirindi-Quambone*

Tamarang Shire Council completed bituminous surfacing between 16.4 and 19.1 miles west of Quirindi, across the Mooki River flood plain.

Coonabarabran Shire Council commenced construction of approaches to the new railway overbridge between 4.5 and 5.0 miles north of Coonabarabran.

*Main Road No. 132—Barraba-Bundarra*

Barraba Shire Council commenced construction of a large box culvert at Ironbark Creek, 34.3 miles north east of Barraba.

*Main Road No. 133—Narrabri-Bingara*

Bingara Shire Council commenced realignment and reconstruction between 19.8 and 21.0 miles west of Bingara.

*Main Road No. 134—Bingara-Ashford*

Macintyre Shire Council constructed to basecourse level between 9.8 and 11.5 miles south of Delungra and completed strengthening and bituminous surfacing of isolated sections between 0.7 and 6.1 miles.

*Main Road No. 135—Gilgai-Ebor*

Guyra Shire Council continued reconstruction between 7.5 and 11.0 miles west of Guyra, preparatory to bituminous surfacing.

*Main Road No. 137—Inverell-Bonshaw*

Inverell Municipal Council completed widening, strengthening and bituminous surfacing between 1.0 and 2.6 miles north of Inverell.

Macintyre Shire Council commenced widening and strengthening preparatory to bituminous surfacing between 2.6 and 3.6 miles north of Inverell.

Ashford Shire Council completed reconstruction and bituminous surfacing between 2.7 and 5.3 miles north of Ashford.

*Main Road No. 138—Texas*

An extension of 1.9 miles was completed to the south to provide a link with the deviation of the Bruxner Highway (State Highway No. 16).

*Main Road No. 181—McGraths Hill—Main Road No. 503 near Singleton*

Greater Cessnock City Council completed reconstruction between 2.0 and 3.0 miles south of Wollombi.

*Main Road No. 206—Dubbo-Dunedoo*

Coolah Shire Council completed reconstruction and bituminous surfacing between 4.6 and 7.4 miles west of Dunedoo and commenced similar work between 7.4 and 13.5 miles.

*Main Road No. 208—Muswellbrook-Mudgee*

Cudgegong Shire Council commenced reconstruction and bituminous surfacing between 11.4 and 12.4 miles north-east of Mudgee.

*Main Road No. 211—Wagga Wagga-Holbrook*

Kyeamba Shire Council completed reconstruction and bituminous surfacing between 15.0 and 15.9 miles south of Wagga Wagga.

*Main Road No. 213—Mount Thorley—Main Road No. 209 near Denman*

Patrick Plains Shire Council completed reconstruction and bituminous surfacing between 2.4 and 4.1 miles from Main Road No. 503 towards Jerrys Plains, and Denman Shire Council did similar work between 11.6 and 14.1 miles from Jerrys Plains.

*Main Road No. 214—Cassilis—Main Road No. 208 near Mudgee*

Merriwa Shire Council completed priming between 0.3 and 2.5 miles south of Trunk Road No. 62 including approaches to the new bridge over Four Mile Creek at 2.2 miles south of Cassilis.

Merriwa Shire Council completed bituminous surfacing between 1.3 and 3.0 miles north of Ulan.

Cudgegong Shire Council completed reconstruction and bituminous surfacing between 15.5 and 16.5 miles from Mudgee.

*Main Road No. 223—Broadmeadow Junction-Kurri Kurri*

Lake Macquarie Shire Council commenced reconstruction from Neilson Street to Park Street, Edgeworth to provide a 33 feet carriageway. At the junction with Main Road No. 527 at Cardiff, two 33 feet carriageways were provided.

This work included construction of a full width bridge over Winding Creek on Main Road No. 527.

*Main Road No. 231—Lake Cargelligo-Girral*

Bland Shire Council continued reconstruction and bituminous surfacing from Ungarie towards Weja extending the bituminous surface to 11.1 miles from Ungarie.

*Main Road No. 232—Moree-Boonangar*

Boomi Shire Council completed reconstruction, strengthening and bituminous surfacing through Garah between 30.8 and 31.6 miles north of Moree.

*Main Road No. 233—Gulgong-Parkes*

Cudgong Shire Council completed reconstruction and bituminous surfacing between 18.2 and 20.2 miles and commenced work between 20.2 and 22.0 miles west of Gulgong.

*Main Road No. 241—Temora-Gunning*

Burrangong Shire Council completed reconstruction and priming between 15.2 and 21.0 miles west of Young.

Boorowa Shire Council completed bituminous surfacing between 2.8 and 4.9 miles west of Boorowa.

*Main Road No. 243—Grong Grong-Gundagai*

Coolamon Shire Council commenced reconstruction and bituminous surfacing between 9.0 and 9.5 miles east of Coolamon at Marrar.

*Main Road No. 249—Federal Highway near Sutton-Laggan*

Gunning Shire Council completed reconstruction and bituminous surfacing between 3.0 and 6.0 miles south of Gunning.

*Main Road No. 256—Goulburn-Oberon*

Oberon Shire Council completed reconstruction between 17.6 and 21.2 miles south of Oberon and completed reconstruction and bituminous surfacing between 14.6 and 17.6 miles south.

*Main Road No. 258—Mittagong-Richlands*

Mittagong Shire Council completed reconstruction on improved alignment between 6.0 and 7.8 miles from the Hume Highway (State Highway No. 2).

*Main Road No. 263—Bowral-Fitzroy Falls*

Mittagong Shire Council completed widening of the pavement from 16 feet to 20 feet between 2.0 and 3.5 miles from Main Road No. 260.

*Main Road No. 264—Robertson-Kiama*

Kiama Municipal Council completed reconstruction to gravel pavement standard between 8.8 and 9.2 miles from the Prince's Highway (State Highway No. 1) at Kings Creek. The work included construction of a new structure at Kings Creek.

*Main Road No. 271—Braidwood-Moruya*

Eurobodalla Shire Council completed construction of a pipe culvert at 23.7 miles west of Moruya and commenced construction of a deviation at Simpsons Farm, 7 miles west of Moruya.

*Main Road No. 272—Tilba-Bega*

Mumbulla Shire Council completed, to prime stage, reconstruction between 4.7 and 5.7 miles south of Bermagui towards Bega.

*Main Road No. 279—Tumut-Gundagai*

Tumut Shire Council continued reconstruction and bituminous surfacing between 6.5 and 9.1 miles north of Tumut.

*Main Road No. 280—Wondalga-Tumblong*

Tumut Shire Council continued reconstruction and bituminous surfacing between 6.2 and 8.5 miles south of Adelong.

*Main Road No. 282—Tumbarumba-Mullengandra*

Tumbarumba Shire Council continued reconstruction and bituminous surfacing between 11.0 and 19.2 miles south east of Tumbarumba and provided a dust free primed surface between 11.0 and 14.0 miles.

*Main Road No. 286—Mount Kosciusko Road*

Strengthening of pavement and provision of subsoil drains were completed between 8.0 and 20.0 miles west of Jindabyne.

Construction of a turning circle at Spoonars Inn and reconstruction and widening between Perisher Valley and Betts Creek were completed. A short length of pavement widening was carried out near Charlotte Pass.

*Main Road No. 291—Winduella-Crookwell*

Crookwell Shire Council commenced reconstruction and bituminous surfacing between 6.6 and 9.5 miles from Crookwell.

*Main Road No. 296—Pretty Pine-Yanga Tank*

Windouran Shire Council continued reconstruction and bituminous surfacing between 45.8 and 56.5 miles west of Deniliquin.

*Main Road No. 301—Main Road No. 101 near Maitland-Wiragulla*

Dungog Shire Council completed construction of a short deviation south of Wiragulla.

*Main Road No. 316—State Highway No. 10 at the intersection of Stewart Avenue and Parry Street, Newcastle, to Mayfield*

Newcastle City Council continued construction of dual carriageways and channelisation of intersections along the Industrial Route from George Street to Bull Street, Mayfield.

*Main Road No. 319—Main Road No. 514 near Maude-Barham*

Hay Shire Council completed reconstruction and bituminous surfacing between 22.5 and 26.0 miles north of Windouran Shire Boundary.

Wakool Shire Council completed reconstruction and bituminous surfacing between 20.5 and 24.5 miles north of Barham and commenced reconstruction between 15.7 and 20.5 miles.

*Main Road No. 323—Jerilderie-Daysdale*

Jerilderie Shire Council completed reconstruction and bituminous surfacing between 5.6 and 12.1 miles east of the Newell Highway (State Highway No. 17).

*Main Road No. 326—Adamstown Heights-Mayfield North*

Construction by Newcastle City Council in Hanbury and Vine Streets, Mayfield, between Highfield and Bull Streets was nearing completion and will provide 42 feet between kerbs.

*Main Road No. 329—Baradine-Gwydir Highway near Grawan Bridge*

Coonabarabran Shire Council commenced reconstruction between 6.9 and 11.4 miles north of Baradine including relocation of a level crossing on improved alignment south of Kenebri.

*Main Road No. 331—Berrigan—Trunk Road No. 85 near Jingellic*

Corowa Shire Council completed reconstruction and bituminous surfacing between 0.0 and 3.0 miles west of Daysdale and commenced reconstruction between 0.0 and 6.0 miles east of Daysdale.

Culcairn Shire Council completed reconstruction and bituminous surfacing between Culcairn and the intersection with Main Road No. 547 near Walla Walla.

Holbrook Shire Council completed reconstruction and bituminous surfacing between 0.0 and 2.5 miles west of Trunk Road No. 85 near Jingellic.

*Main Road No. 334—Mendooran-Belar Creek*

Coolah Shire Council commenced reconstruction and bituminous surfacing between 5.8 and 10.3 miles north of Mendooran. The completion of this section will provide a dustless surface between Mendooran and Coonabarabran.

*Main Road No. 336—Gosford-The Entrance*

Gosford Shire Council completed reconstruction and bituminous surfacing of sections totalling 1.1 miles between 4.8 and 6.2 miles east of Erina Creek.

*Main Road No. 341—Moama—Main Road No. 319 near Barham*

Murray Shire Council commenced reconstruction and bituminous surfacing of the existing gravel section between 46.0 and 50.1 miles from the Cobb Highway (State Highway No. 21) at Moama.

*Main Road No. 343—Wee Waa-Burren Junction*

Namoi Shire Council completed bituminous surfacing between 0.8 and 6.3 miles west of Wee Waa excluding the Tulladunna Bridge approaches and has commenced reconstruction between 6.3 and 10.5 miles west of Wee Waa.

*Main Road No. 349—West Gosford-Patonga*

Gosford Shire Council completed reconstruction and bituminous surfacing between 1.1 and 1.5 miles south from the Pacific Highway.

*Main Road No. 357—Boggabri-Manilla*

Manilla Shire Council continued with gravel pavement construction between 5.6 and 8.1 miles west of Manilla.

*Main Road No. 358—Merriwa-Willow Tree*

Murrurundi Shire Council completed to base course stage, the approaches, 0.7 miles long, to the new bridge over Millers Creek, 17.0 miles south west of Willow Tree.

*Main Road No. 367—Garah-Mungindi*

Boomi Shire Council completed construction of the approaches to Miltonville Creek culvert, 50 miles north west of Moree.

*Main Road No. 380—Trunk Road No. 56 near Boorowa-Cunningar*

Demondrille Shire Council completed reconstruction and bituminous surfacing between 9.6 and 10.3 miles east of Trunk Road No. 84 and Cunningar. A further section between 10.3 and 13.2 miles was commenced and completed to basecourse stage.

*Main Road No. 382—Bonshaw-Glen Innes*

Severn Shire Council continued reconstruction between 11.3 and 15.5 miles north west of Glen Innes preparatory to bituminous surfacing.

*Main Road No. 383—Coonamble-Pilliga*

Namoi Shire Council completed reconstruction and bituminous surfacing between 0.0 and 0.4 miles from Pilliga.

*Main Road No. 384—Alfred Town—Main Road No. 284*

Kyeamba Shire Council completed reconstruction and bituminous surfacing between Alfred Town and Ladysmith and commenced reconstruction between 22.0 and 25.4 miles south of Wagga Wagga.

*Main Road No. 385—Morundah-Urana*

Urana Shire Council completed reconstruction and bituminous surfacing between 1.5 and 6.5 miles from Urana.

*Main Road No. 388—Beremegad Tank-Deniliquin*

Wakool Shire Council completed reconstruction and bituminous surfacing between 42.0 and 44.0 miles west of Deniliquin.

*Main Road No. 394—Berridale-Monaro Highway near Bibbenluke*

Monaro Shire Council completed bituminous surfacing between 25.4 and 26.5 miles from Berridale.

*Main Road No. 398—Grenfell-Dullah*

Narraburra Shire Council continued reconstruction and bituminous surfacing between 2.5 and 4.5 miles south of Aria Park.

*Main Road No. 433—Menindee-Ivanhoe*

Central Darling Shire Council completed reconstruction of an earth-type formation between 19.6 and 30.0 miles west of Darnick.

*Main Road No. 502—Top of Bulli Pass—Main Road No. 179 near Wilton*

The Department completed widening of the formation between 2.3 and 4.3 miles west of Mount Ousley Road (Main Road No. 513).

*Main Road No. 503—Wilberforce-Singleton*

Reconstruction was commenced between 9.0 and 9.6 miles north of Windsor.

*Main Road No. 505—Erina-Terrigal*

Gosford Shire Council completed reconstruction and bituminous surfacing between 2.4 and 3.1 miles east of Erina.

*Main Road No. 513—Mount Ousley Road*

Improvements were completed to the junction with Main Road No. 503 including provision of climbing lanes.

*Main Road No. 514—Hay-Oxley-Penari*

Hay Shire Council continued reconstruction and bituminous surfacing between 28.3 and 29.8 miles west of Hay.

*Main Road No. 517—Raymond Terrace-Salt Ash*

Port Stephens Shire Council completed construction and bituminous surfacing of 1.5 miles of gravel road at Salt Ash.

*Main Road No. 519—Bell's Line of Road—Wilberforce to Singleton Road*

Colo Shire Council completed reconstruction and prime sealing between 9.1 and 10.5 miles from Bell's Line of Road (Main Road No. 184).

*Main Road No. 522—Port Kembla-Shellharbour*

Shellharbour Municipal Council completed reconstruction of dual carriageways between Woodford Avenue and Lake Entrance Road, Warilla. This work included enlargement and lengthening of the reinforced concrete box culvert at Bensons Creek.

*Main Road No. 539—Trunk Road No. 80—Main Road No. 321 near Darlington Point*

Leeton Shire Council completed bituminous surfacing between 1.2 and 4.9 miles south of Trunk Road No. 80.

*Main Road No. 543—The Rock-Coolamon*

Mitchell Shire Council commenced reconstruction and bituminous surfacing between 25.6 and 27.3 miles north of The Rock.

Coolamon Shire Council commenced reconstruction and bituminous surfacing between 0.0 and 5.1 miles south of Coolamon.

*Main Road No. 547—Jindera-Walla Park*

Hume Shire Council completed reconstruction and bituminous surfacing between 0.0 and 3.5 miles north of Jindera. The work included reconstruction of the intersection with Main Road No. 125 at Jindera.

*Main Road No. 550—Corowa-Tocumwal*

Berrigan Shire Council commenced reconstruction between 4.9 and 9.9 miles east of Tocumwal and completed reconstruction and bituminous surfacing between 3.4 and 4.9 miles.

*Main Road No. 552—Deniliquin-Jerilderie*

Conargo Shire Council continued reconstruction and bituminous surfacing between 27.0 and 42.1 miles east of Deniliquin, including completion between 32.0 and 35.0 miles.

Jerilderie Shire Council completed reconstruction and bituminous surfacing between 5.5 and 12.3 miles west of Jerilderie and continued reconstruction between 1.9 and 5.5 miles.

*Main Road No. 560—Batemans Bay-Batehaven*

Eurobodalla Shire Council completed construction and bituminous surfacing of approaches to Joes Creek Bridge near Batemans Bay.

*Main Road No. 579—Werris Creek-Trunk Road No. 72*

Peel Shire Council completed reconstruction and bituminous surfacing between 2.1 and 2.7 miles from Main Road No. 130.

*Main Road No. 596—Newell Highway near Morundah—Main Road No. 321 near Coleambally*

Murrumbidgee Shire Council continued reconstruction and bituminous surfacing between 8.2 and 11.2 miles east of Main Road No. 321.

*Main Road No. 603 (County Route No. 12)*

Newcastle City Council completed construction of a 33 feet carriageway from Carnley Avenue to State Highway No. 23 at New Lambton.

## **Developmental Roads and Developmental Works**

Details of expenditure on Developmental Roads and Works are listed in Appendix No. 10. Some of the more substantial works carried out during the year were:

*Developmental Road No. 1170—Binnaway-Mollyann*

Coonabarabran Shire Council completed construction of a high-level bridge 360 feet long and approaches over the Castlereagh River at Binnaway.

*Developmental Road No. 1304—Uarbry Road*

Merriwa Shire Council completed gravelling over most of the section from Curryall to the Coolah Shire Boundary, 2.9 to 6.7 miles west of Main Road No. 214, and completed priming on three sections totalling 1.9 miles in length.

Coolah Shire Council continued reconstruction and bituminous surfacing from Trunk Road No. 55 towards Cassilis, completing the section between 10.0 and 15.3 miles east of Trunk Road No. 55.

## Tourist Roads

Details of expenditure on Tourist Roads are given in Appendix No. 9.

One substantial work completed during the year was:

### *Tourist Road No. 4035—Bungwahl-Seal Rocks*

Stroud Shire Council completed reconstruction and bituminous surfacing of a section 1.5 miles long from Main Road No. 111 near Bungwahl towards Seal Rocks.

## General

### BRIDGE CONSTRUCTION

During the year fifty-nine bridges and seventy-seven bridge-size box culverts, i.e. with a waterway width of twenty feet or more, were made available for traffic. In addition, widening works or construction of footways were completed on five bridges.

The 136 structures are situated generally on Main and Developmental Roads, but a few are on unclassified roads at locations where the Department is responsible for bridging.

At the end of the year, eighty-one bridges and sixty-three bridge-size culverts were under construction on classified roads.

A table showing the number of structures completed on each road classification is set out below:

	Express-ways	State High-ways	Trunk Roads	Ordinary Main Roads	Developmental & Unclassified Roads	County Roads (Future Main Roads)	Total
Bridges .....	8	21	6	15	8	1	59
Bridge-size Culverts .....	—	28	17	22	10	—	77
<b>Total .....</b>	<b>8</b>	<b>49</b>	<b>23</b>	<b>37</b>	<b>18</b>	<b>1</b>	<b>136</b>

Of the completed bridges, thirty-four were built by the Department (twenty-five by contract) and twenty-three by Councils (fourteen by contract). The two remaining bridges were built by the New South Wales Department of Railways (1) and the Sydney City Council (1).

Thirty of the culverts were built by the Department (five by contract), and forty-seven by Councils (thirteen by contract).

### Principal Bridgeworks Completed During the Year

#### *Pedestrian Bridge over the Southern Expressway at Byarong Avenue, Wollongong*

The Department completed construction by contract of a six-span prestressed concrete footbridge 315 feet long, over the Southern Expressway at Wollongong.

#### *Railway Overbridge at Ultimo*

The New South Wales Department of Railways and Sydney City Council completed construction of a seven-span prestressed and reinforced concrete bridge over the railway at William Henry Street, Ultimo. The new structure is 650 feet long and provides four traffic lanes. It replaced a narrow steel bridge in poor condition.

#### *Railway Overbridge at Stacey Street, Bankstown*

The Department completed construction by contract of a three-span prestressed concrete bridge to connect the northern and southern sections of Stacey Street, Bankstown and thereby provide a new route to bypass the business centre. The bridge is 295 feet long and provides a six-lane divided carriageway with two footways. The bridge affords a new crossing over the railway line, grade separations over an extension of North Terrace and over South Terrace, and interchange facilities for local traffic.

#### *Billabong Creek—State Highway No. 2—Hume Highway*

The Department completed construction by contract of a two-lane prestressed concrete bridge 30.5 miles south of Tarcutta. The new bridge is 385 feet long and will eliminate a section of the Highway subject to flooding.

#### *Macquarie River at Dubbo—State Highway No. 7—Mitchell Highway*

The Department completed construction by contract of a 28-span prestressed concrete bridge 2,013 feet long and providing two traffic lanes. It replaced a timber beam bridge 502 feet long, the approaches of which were subject to flooding.

*Myall River at Bulahdelah—State Highway No. 10—Pacific Highway*

The Department completed construction by contract of a four-span prestressed and reinforced concrete bridge 395 feet long and providing two traffic lanes. It replaced a steel truss and timber beam bridge 248 feet long.

*King Creek—State Highway No. 11—Oxley Highway*

The Department completed construction of a seven-span reinforced and prestressed concrete bridge 11 miles west of Port Macquarie. The new bridge is 237 feet long, provides two traffic lanes and replaced an old narrow concrete bridge, 166 feet long, on poor alignment and subject to flooding.

*Railway Overbridge at Villawood—State Highway No. 13—Woodville Road*

The Department completed construction by contract of a five-span prestressed concrete bridge to eliminate the railway level crossing at Villawood. The new bridge is 200 feet long and provides a six-lane divided carriageway with two footways.

*Tomki Creek—State Highway No. 16—Bruxner Highway*

Tomki Shire Council completed construction by contract of a four-span prestressed and reinforced concrete bridge approximately 6.7 miles east of Casino. The bridge, 280 feet long, provides two traffic lanes, and replaced a timber beam bridge 123 feet long.

*Myall Creek—State Highway No. 16—Bruxner Highway*

The Department completed construction by contract of a prestressed and reinforced concrete bridge 1.75 miles west of Bonshaw. The new bridge is 210 feet long and provides two traffic lanes.

*Lake Forbes at Forbes—State Highway No. 17—Newell Highway*

The Department completed construction by contract of a nine-span prestressed concrete bridge, 470 feet long and providing two traffic lanes and two footways. The existing narrow timber bridge which is subject to flooding will be retained for local traffic.

*Michelago Creek—State Highway No. 19—Monaro Highway*

The Department completed construction by contract of a two-lane continuous prestressed concrete bridge 32 miles south of Canberra. The new bridge is 301 feet long and replaced a narrow timber structure, 113 feet long.

*Two Mile Break—State Highway No. 22—Silver City Highway*

The Department completed construction by contract of a reinforced and prestressed concrete bridge, two miles from Wentworth. The new bridge is 400 feet long, and provides two traffic lanes. It is on a flood free deviation of the highway across the Darling River flood plain and spans a flood channel which carries water from the Darling River to the Murray River downstream from Wentworth.

*Warialda Creek at Warialda—Trunk Road No. 63*

The Department completed construction by contract of a five-span steel and concrete bridge 295 feet long and provides two traffic lanes. It replaced an old timber structure, 270 feet long.

*Batterns Bight Bridge over Six Mile Creek—Trunk Road No. 83*

The Department completed construction by contract of a nineteen-span prestressed and reinforced concrete bridge approximately 39 miles north of Grafton. The bridge is 665 feet long, provides two traffic lanes, and replaced a timber beam bridge 53 feet long, which was subject to flooding.

*Hunter River at Raymond Terrace—Main Road No. 104*

The Department completed construction by contract of a five-span reinforced and prestressed concrete bridge. The new bridge is 678 feet long, provides two traffic lanes and eliminated a vehicular ferry service.

*Sydney (Kingsford Smith) Airport Access Road—Main Road No. 183*

The Department completed construction, partly by contract and partly by its own forces, of a single span reinforced and prestressed concrete bridge on Gardeners Road (Main Road No. 183) over the Airport Access Road. The new structure is 224 feet long and carries six traffic lanes.

*Murray River at Tintalra—Main Road No. 281*

The Department completed extensions by contract to the existing two-lane bridge. Five spans each 40 feet long, and comprising steel girders with a concrete deck supported by concrete piled piers, were provided for the greater waterway area.

*Pedestrian Bridge over Warringah Road—Main Road No. 328*

The Department completed construction by contract of a prestressed and reinforced concrete footbridge over Warringah Road near its intersection with Main Road No. 529 (Forest Way). The new pedestrian bridge is 320 feet long.

*Epsom Road, Rosebery—Main Road No. 593*

The Department completed construction, partly by contract and partly by its own forces, of a two-span prestressed and reinforced concrete girder bridge 202 feet long and providing four traffic lanes.

*Castlereagh River at Binnaway—Developmental Road No. 1170*

Coonabarabran Shire Council completed construction by contract of a six-span, steel and reinforced concrete bridge 360 feet long and providing two traffic lanes.

## **Principal Bridgeworks in Progress at the Beginning of the Year and Not Completed**

*Nepean River at Regentville—Western Expressway*

The Department continued construction by contract of a five-span prestressed concrete bridge which will be 1,045 feet long and will initially provide two traffic lanes and two footways, with provision for future widening.

*Nepean River at Camden—State Highway No. 2—Hume Highway*

The Department continued construction, partly by contract and partly by its own forces, of a new twenty-six span steel and concrete bridge approximately one mile upstream from the present crossing. The new bridge will be 3,380 feet long and will carry two traffic lanes and one footway.

*Unnamed Creek at Tabbimobile—State Highway No. 10—Pacific Highway*

The Department continued construction of a six-span reinforced and prestressed concrete bridge 49.5 miles north of Grafton. The new bridge will be 211 feet long, will provide two traffic lanes and will replace a causeway.

*Black Creek—State Highway No. 16—Bruxner Highway*

The Department continued construction by contract of a reinforced and prestressed concrete bridge, 80 miles west of Ballina. The new bridge will be 240 feet long, will provide two traffic lanes and is situated on a deviation of the Highway. The existing timber bridge will remain open for local traffic.

*North Arm of the Hunter River at Stockton—Main Road No. 108*

The Department continued construction by contract of a 23-span reinforced and prestressed concrete bridge. Bored pile foundations for 16 approach spans were constructed by the Department. The new bridge will be 3,357 feet long with four traffic lanes and a footway. It will eliminate the Newcastle-Stockton vehicular ferry service.

*Edward River at Moulamein—Main Road No. 319*

Wakool Shire Council continued construction by contract of a six-span reinforced concrete and steel bridge which will be 316 feet long and provide two traffic lanes and a footway. It will replace a narrow timber bridge, 356 feet long.

## **Principal Bridgeworks Commenced During the Year and Not Completed**

*Hawkesbury River at Peats Ferry—Sydney-Newcastle Expressway*

The Department commenced construction, partly by contract and partly by its own forces, of a twelve-span steel and reinforced concrete bridge which will be 1,994 feet long and provide six traffic lanes.

*Viaduct Structure—Western Distributor*

The Department commenced construction of the first stage of the Western Distributor south of Sydney Harbour Bridge. This stage consists of a viaduct which will be 2,040 feet long and will provide four traffic lanes. The viaduct is a reinforced concrete box girder structure supported on reinforced concrete columns up to 74 feet high.

*South Creek—Western Expressway*

The Department commenced construction, partly by its own forces and partly by contract, of twin three-span prestressed concrete bridges to carry the Western Expressway over South Creek at St. Marys. The new bridges will be 210 feet long and provide four traffic lanes.

*Bringelly Road Overbridge—Western Expressway*

The Department commenced construction, partly by its own forces and partly by contract, of a three-span prestressed concrete girder bridge to carry Bringelly Road (Main Road No. 154) over the Western Expressway approximately 32.5 miles from Sydney. The new bridge will be 290 feet long and provide six traffic lanes.

*Mulgoa Road Underpass—Western Expressway*

The Department commenced construction, partly by its own forces and partly by contract, of a three-span prestressed concrete girder bridge to carry the Western Expressway over Mulgoa Road (Main Road No. 155) approximately 34.8 miles from Sydney. The new bridge will be 211 feet long and provide two traffic lanes.

*Brooks Road Overbridge—South Western Expressway*

The Department commenced construction, partly by its own forces and partly by contract, of a four-span steel and concrete bridge to carry Brooks Road over the South Western Expressway. The new bridge will be 280 feet long and provide two traffic lanes.

*The Avenue—Southern Expressway*

The Department commenced construction by contract of a single span reinforced and prestressed concrete bridge at "The Avenue" approximately 53 miles from Sydney. The new bridge will be 227 feet long and provide five traffic lanes.

*Masters Road—Southern Expressway*

The Department commenced construction by contract of a reinforced and prestressed concrete bridge to carry the future route of Masters Road over the Expressway, approximately 53 miles from Sydney. The new bridge will be 262 feet long and provide two traffic lanes.

*Five Islands Road—Southern Expressway*

The Department commenced construction by contract of twin three-span prestressed concrete bridges to carry the Southern Expressway over the proposed deviated route of Five Islands Road approximately 54 miles from Sydney. The new bridges will be 230 feet long and have two lanes for southbound traffic and three lanes for northbound traffic.

*Macquarie Rivulet—State Highway No. 1—Princes's Highway*

The Department commenced construction by contract of a five-span reinforced and prestressed concrete bridge 13.5 miles south of Wollongong. The new bridge will be 375 feet long and provide two traffic lanes.

*Black Bobs Creek—State Highway No. 2—Hume Highway*

The Department commenced construction by contract of a four-span reinforced and prestressed concrete bridge 93.8 miles from Sydney. The new bridge will be 280 feet long and provide two traffic lanes. It will replace an existing 20 feet span stone arch bridge.

*Overbridge at the Intersection of State Highway Nos. 2 (Hume Highway) and 3 (Federal Highway)*

The Department commenced construction of a three-span prestressed concrete bridge 285 feet long. It will provide two traffic lanes and eliminate the existing hazardous junction of the two highways.

*Lower Warrell Creek—State Highway No. 10—Pacific Highway*

The Department commenced construction by contract of a six-span prestressed concrete bridge 752 feet long, 2 miles south of Macksville. The bridge will provide two traffic lanes and replace an old timber bridge 144 feet long.

*Ti-Tree Creek—State Highway No. 16—Bruxner Highway*

The Department commenced construction by contract of a three-span steel and concrete bridge 85.4 miles from Ballina. The new bridge will be 224 feet long and provide two traffic lanes. The bridge is on a deviation of the highway and the existing timber bridge, 113 feet long, will be retained for local traffic following completion of the deviation.

*Tuckers Creek at Wentworth—State Highway No. 22—Silver City Highway*

The Department commenced construction by contract of a five-span steel and concrete bridge 362 feet long. It will provide two traffic lanes and replace a timber bridge, 301 feet long.

*Jerrawa Creek—Main Road No. 251*

Gunning Shire Council commenced construction by contract of a five-span reinforced and prestressed concrete bridge 260 feet long, 9 miles north of Gunning. The new bridge will provide two traffic lanes and replace a timber beam bridge, 113 feet long.

*Lake Illawarra at Windang—Main Road No. 522*

The Department commenced construction by contract of a widened bridge over Lake Illawarra at Windang. The existing bridge consists of 33 spans (each 30 feet) of timber beam superstructure on concrete piers, and provides two traffic lanes. The new structure will be of concrete construction and will provide four traffic lanes.

*Billabong Creek—Main Road No. 547*

Culcairn Shire Council commenced construction by contract of a seven-span reinforced concrete bridge 390 feet long, 5 miles north of Walla Walla. The new bridge will provide two traffic lanes and replace an old timber bridge, 110 feet long.

*Nowendoc River at Nowendoc—Developmental Road No. 1282*

Walcha Shire Council commenced construction by contract of a three-span prestressed concrete girder bridge 210 feet long. It will provide two traffic lanes and replace a timber bridge, 115 feet long.

*Jacobs River—Developmental Road No. 1297*

Snowy River Shire Council commenced construction by contract of a three-span concrete and steel girder bridge, 40 miles from Jindabyne. The new bridge will be 240 feet long, provide two traffic lanes and replace two existing timber structures, each 40 feet long.

*Cooks River—Near International Airport Terminal, Mascot*

The Department commenced construction by contract of a six-span prestressed and reinforced concrete girder bridge which will be 691 feet long and provide six traffic lanes.

## MAINTENANCE OF BRIDGES AND FERRIES

During the year the following major maintenance and repair works to bridges and ferries were carried out:

*Bridge over Shoalhaven River at Nowra—State Highway No. 1—Prince's Highway*

This bridge is 1,638 feet long and has eight steel truss spans and one 50 feet plate girder span. The underside of the deck was repainted, the lattice handrailing on each side of the carriage-way was repaired and repainted, and timber kerbs were provided between the handrailing and the traffic lanes.

*Bridge over Clyde River at Batemans Bay—State Highway No. 1—Prince's Highway*

This bridge is 950 feet long with five 120 feet steel truss spans, one 95 feet steel lift span, and four steel girder spans. The steelwork of the bridge was repainted.

*Bridge over the Wagonga River at Narooma—State Highway No. 1—Prince's Highway*

This bridge has two 160 feet steel truss spans and one 63 feet steel girder bascule span. The steelwork of the structure was repainted.

*Prince Alfred Bridge over the Murrumbidgee River at Gundagai—State Highway No. 2—Hume Highway*

This bridge is 3,040 feet long and has seventy-eight timber beam spans and three iron truss spans. Major repairs to timber structural members and deck repairs continued throughout the year.

*Dunolly Bridge over the Hunter River at Singleton—State Highway No. 9—New England Highway*

This bridge is 608 feet long and has two 154 feet steel truss spans with a timber deck and nine timber beam spans. Replacement of the timber decking was completed.

*Bridge over Hawkesbury River—State Highway No. 10—Pacific Highway*

This steel and concrete bridge is 1,975 feet between abutments and has two 440 feet steel truss spans. Painting of the steelwork below deck level was commenced.

*Martin Bridge over the Manning River at Taree—State Highway No. 10—Pacific Highway*

This bridge is 1,558 feet long and has eleven 120 feet steel truss spans, three 40 feet steel beam spans and a 63 feet lift span. The operating ropes on the lift span were renewed and repainting of the bridge was completed.

*Bridge over the Richmond River at Wardell—State Highway No. 10—Pacific Highway*

This bridge is 736 feet long with seven 70 feet concrete beam spans and an 84 feet steel truss lift span. The existing timber fendering system is being replaced by stronger fenders and dolphins with steel piles. The work is being carried out by contract.

*Bridge over the Tweed River at Barneys Point—State Highway No. 10—Pacific Highway*

This bridge is 626 feet long with eight 35 feet steel beam spans, two 140 feet steel truss spans, and one steel girder bascule span.

Extensive repairs to the substructure are in progress and the steelwork has been painted.

*Bridge over Terranora Inlet at Boyds Bay—State Highway No. 10—Pacific Highway*

This bridge is 477 feet long and has one 54 feet steel girder lift span and twelve 35 feet steel beam spans. Major repairs are being carried out to the substructure, and the bridge steelwork was painted.

*Bridge over Uargon Creek—State Highway No. 11—Oxley Highway*

This bridge is 82 feet long and has three timber beam spans. During the year the bridge was widened from 17 feet to 24 feet between kerbs.

*Ross Hill Bridge over Macintyre River at Inverell—State Highway No. 12—Gwydir Highway*

This bridge is 440 feet long, with three 110 feet timber truss spans and four timber beam spans. Repairs were carried out to the girders and truss members.

*Four Approach Bridges to the Bridge over the Murray River at Mildura—State Highway No. 14—Sturt Highway*

These timber beam bridges have a combined length of 1,330 feet. Replacement of a number of girders and piles, and extensive repairs to the decking were carried out.

*Bridge over Sandy Hills Creek—State Highway No. 16—Bruxner Highway*

This bridge is 268 feet long and has one 90 feet truss span and six timber beam spans. New decking has been provided.

*Bridge over Little Oaky Creek—State Highway No. 24—Mount Lindesay Highway*

This timber beam bridge has three 30 feet spans. Extensive repairs to piles, girders and decking were carried out.

*Bridge over Myall Creek—Trunk Road No. 63*

This bridge is 477 feet long and has three 90 feet timber truss spans and six timber beam spans. Girders damaged by a heavy load were replaced, and worn decking renewed.

*Bridge over Lower Creek—Trunk Road No. 75*

This bridge is 185 feet long and has two 90 feet timber truss spans. The structure was strengthened with a Bailey truss in preparation for extensive repairs in the following year.

*Hampden Bridge over Murrumbidgee River at Wagga Wagga—Trunk Road No. 78*

This bridge is 645 feet long and has three 110 feet timber truss spans and nine timber beam spans. Major repairs to the trusses, girders, and decking, were commenced.

*No. 3 Approach Bridge to the Bridge over the Murray River at Corowa—Trunk Road No. 86*

This timber beam bridge is 220 feet long and has eleven spans. Complete re-decking was completed during the year.

*John Foord Bridge over Murray River at Corowa—Trunk Road No. 86*

This bridge is 499 feet long and has one 140 feet span and two 112 feet iron spans, with four 30 feet timber beam spans. Full replacement of the decking was almost completed during the year.

*Bridge over the Hunter River at Morpeth—Main Road No. 102*

This bridge is 924 feet long and has three 110 feet timber truss spans and seventeen timber beam spans. Major repairs to truss members and substructure were completed and the decking on the timber beam spans was replaced.

*Ferry Service over the Hunter River at Stockton—Main Road No. 108*

Each of the three free running ferry vessels in this service received its annual overhaul. In addition, the vessels were docked for regular hull inspections between overhauls.

*Redbourneberry Bridge over the Hunter River at Singleton—Main Road No. 128*

This bridge is 1,230 feet long and has two 91 feet and one 119 feet lattice-type truss spans and twenty-six timber beam spans. The trusses, and the buckle plates under the deck on the lattice truss spans, were sandblasted and repainted. Replacement of the decking on the timber beam spans was commenced.

*Ferry Service over the Richmond River at Coraki—Main Road No. 149*

The eight-vehicle ferry vessel, replaced by a bridge over the Hunter River at Raymond Terrace, has been transferred to the Richmond River for overhaul before it replaces the six-vehicle ferry vessel now operating at Coraki.

*Bridge over Middle Harbour at The Spit, Sydney—Main Road No. 164*

This steel bridge is 745 feet long and has six 100 feet plate girder spans and one single leaf 90 feet bascule opening span. Repairs to the machinery for the opening span and repainting of the bridge were completed.

*Glebe Island Bridge, Johnstons Bay, Sydney—Main Road No. 165*

This steel bridge is 355 feet long and has two 96 feet swing spans and two 80 feet truss spans. Twenty timber piles in the swing span protection platform were replaced during the year.

*Bridge over Tarban Creek, Sydney—Main Road No. 166*

This concrete bridge is 749 feet long and has eight 57 feet spans and a central span of 289 feet. Repairs to the prestressing system in the portal leg joints of the central span were completed.

*Bridge over the Nepean River at Maldon—Main Road No. 179*

This structure is 457 feet long with one 226 feet suspension span and seven timber beam spans.

The existing diagonal decking on the suspension span was replaced by transverse decking, new longitudinal sheeting installed, and steel sway bracing provided under the deck.

*Bridge over the Murray River at Cobram—Main Road No. 226*

The bridge has two 104 feet timber and steel truss spans, a 58 feet lift span, and ten timber beam spans. Replacement of one pier, one abutment, and 60 per cent of the deck was completed during the year.

*Bridge over the Murrumbidgee River at Darlington Point—Main Road No. 321*

This bridge is 676 feet long and has fifteen timber beam spans, one timber and steel truss span, and a bascule lift span. Replacement of 60 per cent of the decking was completed.

*Bridge over the Murray River at Euston—Main Road No. 583*

This steel bridge is 2,180 feet long, has six girder spans, one 63 feet girder lift span, and sixty-seven beam spans.

Work commenced on the replacement of the timber decking and kerbs on the sixty-seven steel beam spans.

*Bridge over the Barrington River, north of Gloucester—Developmental Road No. 1150*

This bridge is 275 feet long, has two 90 feet timber truss spans and three 30 feet timber beam spans. Extensive replacement of truss members was carried out and the two truss spans were strengthened by undertrussing.

*Bridge over Wyaldra Creek at Beryl, eight miles west of Gulgong*

This bridge is 235 feet long and has two 71 feet timber truss spans and three 30 feet timber beam spans. Extensive repairs were effected to the substructure and the decking, and the bridge was repainted.

*Thalgarah Bridge over the Gara River near Armidale*

This bridge is 135 feet long and has two 30 feet timber beam spans and a 75 feet span supported by Bailey trusses. Extensive repairs to the decking were carried out and the Bailey truss was painted.

*Rankins Bridge over Macquarie River at Eglinton*

This bridge is 570 feet long and has two 90 feet timber truss spans and thirteen 30 feet timber beam spans. General repairs and repainting were carried out.

## **ELIMINATION OF RAILWAY LEVEL CROSSINGS ON MAIN ROADS**

During the year seven (7) railway level crossings were eliminated from the Main Roads System.

This reduced the number of level crossings on Main Roads to 389, comprising 333 on New South Wales Government Railways, 45 on privately-owned railways and 11 on Victorian Government Railways which extend into New South Wales.

Since the Main Roads Act came into effect in 1925, 176 level crossings have been eliminated from the Main Roads System.

During the year the following crossings were eliminated:

*State Highway No. 8—Barrier Highway*

The construction of an overbridge 39.6 miles west of Nyngan at Muriel Tank eliminated one level crossing. The construction of the standard gauge railway line between Broken Hill and Adelaide has involved the closing of part of the narrow gauge railway network in Broken Hill. This has resulted in the closing of an additional two level crossings on the Barrier Highway, at Bromide Street and Argent Street.

### *State Highway No. 13—Woodville Road*

The construction of an overbridge at Villawood eliminated one level crossing.

### *State Highway No. 22—Silver City Highway*

The construction of an overbridge eliminated the level crossing at South Street, Broken Hill.

### *Trunk Road No. 66*

The closure of part of the narrow gauge railway network in Broken Hill resulted in the elimination of the level crossing on Trunk Road No. 66 at Menindee Road.

### *Trunk Road No. 81*

The construction of an overbridge eliminated one level crossing from Trunk Road No. 81 at Gypsum Street, Broken Hill.

To improve safety conditions at existing level crossings, improvements were carried out at a number of locations by the installation of six sets of automatic flashing lights, the widening of level crossings and the realignment and widening of the approaches.

The improvements to, or elimination of, a number of level crossings during the year, were recommended by the Inter-Departmental Level Crossing Committee of which the Department of Main Roads is a member. This Committee met on four occasions during the year.

## **TRAFFIC SERVICE**

### **Median Strips**

During the year a total length of 12.4 miles of median strip was constructed, of which approximately 80 per cent was in the Sydney Metropolitan Area. The balance was constructed in the Cities of Newcastle, Goulburn and Tamworth and the Shires of Scone and Lake Macquarie.

### **Channelisation of Intersections**

Channelisation was completed at 24 intersections and work was in progress at a further 11 sites. During the year, designs were completed for future channelisation at 57 intersections. Some of the sites at which construction of channelisation was completed, were:

State Highway No. 2	Hume Highway, Shire of Kyeamba. Intersection with Sturt Highway (State Highway No. 14) near Tarcutta.
State Highway No. 5	Great Western Highway, Municipality of Holroyd. Intersection with Old Prospect Road, Wentworthville.
State Highway No. 5	Great Western Highway, City of Penrith. Western intersection with Secondary Road No. 2082 — Henry Street, Penrith.
State Highway No. 7	Mitchell Highway, City of Dubbo. Intersection with Newell Highway (State Highway No. 17) on approaches to the L.H. Ford Bridge.
State Highway No. 9	New England Highway, Shire of Scone. Intersection with Surman and Main Streets, Scone.
State Highway No. 9	New England Highway, City of Newcastle. Intersection with Main Road No. 588 on Beresfield Deviation.
State Highway No. 10	Pacific Highway, City of Newcastle. Intersection at Kahibah Road.
State Highway No. 10	Pacific Highway, Shire of Tweed. Intersection at the New South Wales/Queensland Border.
State Highway No. 13	Woodville Road, Municipality of Bankstown. Intersection at the Villawood railway overbridge with <ol style="list-style-type: none"><li>1. River Avenue</li><li>2. Christina Road</li><li>3. Llewellyn Avenue</li></ol>
State Highway No. 14	Sturt Highway — Dobrey Avenue, City of Wagga Wagga. Intersection with Chaston, Pearson and Urana Streets.
State Highway No. 14	Sturt Highway, City of Wagga Wagga. Intersection with Trunk Road No. 78 (Olympic Way) — Edward and Baylis Streets, Wagga Wagga.
State Highway No. 22	Silver City Highway, Shire of Wentworth. Intersection with Trunk Road No. 68 — Pooncarie Road and Armstrong Avenue, Wentworth.

State Highway No. 22	Silver City Highway, Shire of Wentworth. Intersection with Darling Street, Wentworth.
Main Road No. 167	Canterbury Road, Municipality of Bankstown. Intersection with Secondary Road No. 2068 — River Road.
Main Road No. 184	Windsor Road, Municipality of Windsor. Intersection with Main Road No. 182 — Bridge Street, Windsor.
Main Road No. 200	Devlin Street, Municipality of Ryde. Intersections with Blaxland Road (south) and with Main Road No. 139 — Blaxland Road (north) and Main Road No. 162 Lane Cove Road, Top Ryde.
Main Road No. 227	The Kingsway, Shire of Sutherland. Intersection with Port Hacking Road North and Kareena Road. Interim Layout.
Main Road No. 139	Beecroft Road, City of Parramatta. Intersection with Main Road No. 373 — Carlingford Road.
Main Road No. 522	Municipality of Shellharbour. Intersection with Lake Entrance Road.
Stacey Street	Stacey Street, Municipality of Bankstown. Intersection with the extension of North Terrace at the railway overbridge.
Secondary Road 2033/2052	Ryde Road, Municipalities of Ryde and Hunters Hill. Intersection with Pittwater Road (in conjunction with traffic signals).
Secondary Road 2074	Anzac Parade, Municipality of Randwick. Intersection with Franklin Street, Malabar.

### Bus Bays

Six bus bays were established to permit buses on Main Roads to stop clear of moving traffic. Two of the bays were in the Sydney Metropolitan Area, two in the City of Broken Hill and the remaining two in the Shire of Lake Macquarie.

### Climbing Lanes on Hills

During the year, the construction of twelve climbing lanes for slow-moving vehicles was completed. In addition, two existing climbing lanes were lengthened and work was commenced at three sites. Some of the locations at which climbing lanes were completed are listed below:

State Highway No. 1	Prince's Highway — Shire of Imlay. Northbound traffic at Edrom Road Junction, 16.5 miles south of Eden.
State Highway No. 2	Hume Highway — Shire of Gunning. Northbound traffic between 30.2 and 31.4 miles south of Goulburn.
State Highway No. 2	Hume Highway — Shire of Goodradigbee. Northbound traffic between 18.1 and 19.5 miles south of Yass.
State Highway No. 5	Great Western Highway — City of Blue Mountains. Victoria Pass 11.3 to 12.0 miles, westbound lane; 11.6 to 12.0 miles, eastbound lane.
State Highway No. 10	Pacific Highway — Shire of Stroud. One mile north of Bulahdelah.
State Highway No. 14	Sturt Highway — Shire of Kyeamba. Between 17.45 and 18.55 miles from Hume Highway, State Highway No. 2 at Coxs Folly.
State Highway No. 19	Monaro Highway — Shire of Monaro. Northbound traffic at Driscolls Hill, 57.5 miles south of Canberra.
Trunk Road No. 74	Shire of Dumaresq. Between 41.3 miles and 41.6 miles east of Armidale.
Main Road No. 178	Camden-Campbelltown Road. Eastbound traffic at Kennys Hill.
Main Road No. 513	Mt. Ousley Road — City of Wollongong. Southbound traffic between junctions of Main Road No. 186 and Main Road No. 502.
Main Road No. 603	City of Newcastle. Carnley Avenue to State Highway No. 23. at New Lambton.

## **Signposting and Roadside Furnishings**

The largest single signposting project undertaken during the year was on South Dowling Street, Southern Cross Drive and the roads leading to Sydney (Kingsford Smith) Airport, Mascot.

Following the completion of experiments with different types of background material for signs, the Department adopted a new type of spray-on, polyurethane plastic which is expected to increase the durability of sign backgrounds against weathering and reduce the adverse effects of background reflectance. At the same time the background colour of advance direction signs and important direction signs has, for aesthetic reasons, been changed from black to a dark green. In conjunction with these changes the Department has extended the use of lower-case lettering for the destination legends of all advance direction and major direction signs to improve their legibility.

The use of Reassurance Direction Signs is being extended progressively throughout the State where new signs are being erected at intersections or are being renewed. These signs are located beyond intersections and at the outskirts of large towns to give the distances to the next four or five towns through which the road passes. As the name implies, their purpose is to reassure a driver that, having passed through an intersection or large town, he is on the correct road.

Following the successful use of raised pavement markers on expressways in lieu of painted lane lines, the Department has extended the use of raised reflective pavement markers to other roads. The principal uses have been to give added delineation to double lines (No-overtaking) at night and for delineation of narrow median strips on sections of curved alignment. Experimental work in this regard is continuing.

### **Advisory Speed Signs**

The extension of absolute speed limits to many of the major roads throughout the State has necessitated an accelerated programme of advisory speed surveys, particularly on those roads where the speed limit has been raised from a prime facie 50 m.p.h. to an absolute 60 m.p.h.

During the year, 2,100 miles of road were surveyed, of which 1,010 miles involved re-survey due to new speed limits.

The new surveys included State Highway No. 11 (Oxley Highway) from Tamworth westward to the western Coonabarabran Shire Boundary. Trunk Road No. 63 from Tamworth to the Southern Boundary of Bingara Shire, and Main Road No. 130 south of Tamworth to State Highway No. 9 (New England Highway). Surveys were also conducted in the Snowy Mountains Area, on State Highway No. 4 (Snowy Mountains Highway) from State Highway No. 2 (Hume Highway) to Talbingo, and on Trunk Road No. 85 from Tumut to Tumbarumba.

Included in the roads re-surveyed were the whole length of State Highway No. 2 (Hume Highway), 260 miles of State Highway No. 9 (New England Highway) and State Highway No. 5 (Great Western Highway) from Parramatta to Bathurst.

### **Accident Analysis and Investigation**

The special investigation of fatal accident sites of State Highways, which was commenced in 1966, was continued throughout the year. An analysis has also been made of the accident rates per million miles of vehicle travel for all reported accidents on all rural State Highways and a listing prepared for each Divisional Area showing the lengths of roads where the rates appear to be abnormally high. These lengths of road will be given special investigation to determine to what extent road conditions may have been a contributing cause and what remedial measures may be desirable.

### **Travel-Time Surveys**

Due to the acceleration programme of Advisory Speed Surveys, work on travel-time surveys had to be restricted throughout the year. The surveys which were undertaken were confined mainly to "before and after" studies associated with new works such as the opening of Southern Cross Drive and the construction of the new railway overbridge at Stacey Street, Bankstown.

## **PLANT AND MOTOR VEHICLES**

Plant to the value of \$3,774,412 was purchased for the replacement of existing plant and to provide for some additional requirements.

A Supervising Engineer from the Mechanical Engineer's Section investigated automatic trimmer-spreaders in the United States of America and subsequently a machine was ordered capable of trimming sub-grades, spreading and trimming road base material and paving with asphalt. It is a dual lane (24 feet wide) machine capable of trimming, spreading or paving one to three miles per day. Automatic controls working to preset stringlines give accurate control of grade and crossfall. The machine should increase the quality and rate of expressway pavement construction and at the same time lower costs.

An hydraulic wedge device was purchased for the safe and silent splitting of rock in the Sydney Metropolitan Area.

The value of motor vehicles of all types purchased for replacement or new requirements was \$1,080,180.

The total value of payments made to private owners for hire of plant was \$4,866,000 a decrease of approximately 19% on the previous year.

Facilities were provided for the maintenance of plant and vehicles, and for general mechanical and electrical engineering services.

### Central Workshop

A total of 6,381 jobs were completed by the workshop, at a total value of \$2,737,485.

Activities for the year were as follows:

Property repairs and general building work	31%
Sign manufacture	14%
Manufacture and repair of plant and overhaul of ferries	15%
Plumbing and electrical services to Metropolitan and Parramatta Divisions and general transport services	14%
Structural steelwork and concrete reinforcing steel for bridges, etc.	13%
Special projects and Miscellaneous work	13%

Building work included the construction of office, laboratory and amenities buildings at St. Marys and Campbelltown and the commencement of similar work at Waterfall; extensive modifications to buildings at Cooma to establish office, workshop, and amenities facilities; a laboratory for the construction work on the Western Distributor; major alterations and extensions to the Materials and Research Laboratory at Milsons Point; and modifications to the Metropolitan Divisional office and the toll office at the Sydney Harbour Bridge.

Maintenance was carried out on Departmental properties in the Sydney Metropolitan Area, including tenanted houses acquired for future road construction. Inspections were carried out on country residences.

Approximately 13,800 road signs were manufactured.

All plant and motor vehicle repairs for the Metropolitan Construction Works Office and the Western Expressway Construction Office at St. Marys together with a number of large plant repair jobs for other Works Offices were carried out.

Two large vehicular ferries were overhauled at Mortlake Slipway, and Central Workshop personnel assisted and supervised the overhaul of a further nine ferries throughout the State.

The manufacture of three truck-mounted linemarkers was completed.

A control box was developed for Linemarking Machines to enable adjustment of the length of line and length of gap whilst the machine is in operation. This facility is of advantage when remarking existing lines.

Steel handrails, totalling 2,480 feet in length, were fabricated for a number of bridges.

Approximately 1,100 tons of steel reinforcement were cut and bent to shape for use in concrete bridges and culverts.

Fifty-eight bitumen sprayers, owned by contractors, Councils and the Department, were tested during the year for the purpose of issuing or renewing Sprayer Certificates.

Special projects included the design, manufacture, and erection of a special moveable toll cabin system associated with the introduction of one-way toll on the Sydney Harbour Bridge.

### Field Workshops

The Department's field workshops throughout the State numbered forty-one, including two established during the year at Cooma and Wilcannia.

The fourth stage of a Workshop Supervisors' Training Course was conducted at Granville for all foremen in charge of field workshops. The purpose of the course is to keep foremen informed of modern developments. The subjects included in this stage of the course were diesel fuel systems, cooling systems, tyres, two-way radio and apprentices.

Plant Inspectors carried out regular inspections and assisted workshop personnel with plant repair problems. With the assistance of teaching aids, Inspectors gave instruction to field personnel on new types of plant.

A successful campaign was carried on to increase the number of apprentices in the country and this resulted in an increase from thirty-two to forty-two apprentices.

**BITUMINOUS SURFACING**

BITUMINOUS SURFACING COMPLETED DURING THE YEAR ENDED 30th JUNE, 1970

**Scheduled according to Road Classifications**

TABLE 1—ROAD MILES

Nature of Work	Express-ways	State Highways	Trunk Roads	Ordinary Main Roads	Secondary Roads	Tourist Roads	Developmental Roads	Unclassified Roads	All Roads Sub Total
1. Initial Surfacing—									
A. Prime .....	—	14.86	2.57	2.70	—	—	—	—	20.13
B. Primer Seal .....	—	10.08	3.42	2.44	—	—	—	—	15.94
C. Sprayed Seal .....	—	104.41	44.39	139.52	—	3.08	8.44	1.60	301.44
D. Slurry Seal .....	—	—	—	—	—	—	—	—	—
E. Plant Mix .....	—	—	—	1.07	—	—	—	—	1.07
Sub Total	—	129.35	50.38	145.73	—	3.08	8.44	1.60	338.58
2. Surfacing Lengths Primed before this Year—									
A. Prime .....	—	—	—	—	—	—	—	—	—
B. Primer Seal .....	—	5.13	—	—	—	—	—	—	5.13
C. Sprayed Seal .....	—	84.88	0.68	25.76	—	—	—	—	111.32
D. Slurry Seal .....	—	—	—	—	—	—	—	—	—
E. Plant Mix .....	—	—	—	—	—	—	—	—	—
Sub Total	—	90.01	0.68	25.76	—	—	—	—	116.45
3. Restoration after Widening and/or Strengthening—									
A. Prime .....	—	2.76	—	0.11	—	—	—	—	2.87
B. Primer Seal .....	—	3.14	—	—	—	—	—	—	3.14
C. Sprayed Seal .....	—	45.90	6.95	25.09	—	—	—	—	77.94
D. Slurry Seal .....	—	—	—	—	—	—	—	—	—
E. Plant Mix .....	—	5.03	—	5.52	0.58	—	—	—	11.13
Sub Total	—	56.83	6.95	30.72	0.58	—	—	—	95.08
4. Restoration after Adding Lanes—									
A. Prime .....	—	3.46	—	0.17	—	—	—	—	3.63
B. Primer Seal .....	—	1.36	—	—	—	—	—	—	1.36
C. Sprayed Seal .....	—	15.22	—	0.52	—	—	—	—	15.74
D. Slurry Seal .....	—	—	—	—	—	—	—	—	—
E. Plant Mix .....	—	7.34	—	4.94	3.78	—	—	0.65	16.71
Sub Total	—	27.38	—	5.63	3.78	—	—	0.65	37.44



C. Sprayed Seal	—	169.76	1.36	51.52	—	—	—	—	222.64
D. Slurry Seal	—	—	—	—	—	—	—	—	—
E. Plant Mix	—	—	—	—	—	—	—	—	—
Sub Total	—	182.18	1.36	51.52	—	—	—	—	235.06
3. Restoration after Widening and/or Strengthening—									
A. Prime	—	5.52	—	0.44	—	—	—	—	5.96
B. Primer Seal	—	6.28	—	—	—	—	—	—	6.28
C. Sprayed Seal	—	91.90	13.90	52.00	—	—	—	—	157.80
D. Slurry Seal	—	—	—	—	—	—	—	—	—
E. Plant Mix	—	16.48	—	23.89	1.90	—	—	—	42.27
Sub Total	—	120.18	13.90	76.33	1.90	—	—	—	212.31
4. Restoration after Adding Lanes—									
A. Prime	—	10.20	—	0.68	—	—	—	—	10.88
B. Primer Seal	—	4.08	—	—	—	—	—	—	4.08
C. Sprayed Seal	—	32.98	—	1.38	—	—	—	—	34.36
D. Slurry Seal	—	—	—	—	—	—	—	—	—
E. Plant Mix	—	25.03	—	17.95	12.58	—	—	2.98	58.54
Sub Total	—	72.29	—	20.01	12.58	—	—	2.98	107.86
5. Restoration after New Alignment and/or Grade—									
A. Prime	—	21.86	—	4.40	—	—	—	—	26.26
B. Primer Seal	—	15.78	—	5.96	—	—	—	—	21.74
C. Sprayed Seal	—	78.42	11.80	44.71	—	—	—	—	134.93
D. Slurry Seal	—	—	—	—	—	—	—	—	—
E. Plant Mix	—	17.44	—	9.08	3.81	—	—	3.12	33.45
Sub Total	—	133.50	11.80	64.15	3.81	—	—	3.12	216.38
6. Maintenance Resurfacing—									
A. Prime	—	—	—	0.28	—	—	—	—	0.28
B. Primer Seal	—	—	—	—	—	—	—	—	—
C. Sprayed Seal	—	366.02	266.20	451.04	3.98	4.80	1.63	—	1,093.67
D. Slurry Seal	—	—	—	—	—	—	—	—	—
E. Plant Mix	—	41.63	1.56	58.12	10.26	—	—	—	111.57
Sub Total	—	407.65	267.76	509.44	14.24	4.80	1.63	—	1,205.52
Summary of 1 to 6—									
A. Prime	—	67.30	5.14	11.20	—	—	—	—	83.64
B. Primer Seal	—	58.72	6.84	10.84	—	—	—	—	76.40
C. Sprayed Seal	—	947.90	382.04	876.52	3.98	10.96	18.40	3.20	2,243.00
D. Slurry Seal	—	—	—	—	—	—	—	—	—
E. Plant Mix	—	100.58	1.56	112.25	28.55	—	—	6.10	249.04
TOTAL	—	1,174.50	395.58	1,010.81	32.53	10.96	18.40	9.30	2,652.08

BITUMINOUS SURFACING COMPLETED DURING THE YEAR ENDED 30th JUNE, 1970

Scheduled according to work by Department and Councils

TABLE 1—ROAD MILES

Nature of Work	By Department		By Councils	
	Direct	Contract	Direct	Contract
1. Initial Surfacing—				
A. Prime .....	14.36	2.40	—	3.37
B. Primer Seal .....	10.08	—	—	5.86
C. Sprayed Seal .....	89.91	6.05	52.29	153.19
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	—	—	1.07	—
Sub Total	114.35	8.45	53.36	162.42
2. Surfacing Lengths Primed Before this Year—				
A. Prime .....	—	—	—	—
B. Primer Seal .....	5.13	—	—	—
C. Sprayed Seal .....	73.86	—	—	37.46
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	—	—	—	—
Sub Total	78.99	—	—	37.46
3. Restoration after Widening and/or Strengthening				
A. Prime .....	2.76	—	—	0.11
B. Primer Seal .....	1.23	1.91	—	—
C. Sprayed Seal .....	28.21	17.08	4.97	27.68
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	10.23	—	—	0.90
Sub Total	42.43	18.99	4.97	28.69
4. Restoration after Adding Lanes—				
A. Prime .....	2.28	—	—	1.35
B. Primer Seal .....	1.36	—	—	—
C. Sprayed Seal .....	14.90	0.16	0.41	0.27
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	10.38	—	1.44	4.89
Sub Total	28.92	0.16	1.85	6.51
5. Restoration after New Alignment and/or Grade				
A. Prime .....	8.21	1.50	—	2.88
B. Primer Seal .....	4.74	—	0.60	5.38
C. Sprayed Seal .....	21.10	11.11	8.09	22.52
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	7.21	0.51	—	0.76
Sub Total	41.26	13.12	8.69	31.54
6. Maintenance Resurfacing—				
A. Prime .....	—	—	—	0.07
B. Primer Seal .....	—	—	—	—
C. Sprayed Seal .....	149.86	35.86	64.59	301.56
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	23.90	—	4.17	8.60
Sub Total	173.76	35.86	68.76	310.23
Summary of 1 to 6—				
A. Prime .....	27.61	3.90	—	7.78
B. Primer Seal .....	22.54	1.91	0.60	11.24
C. Sprayed Seal .....	377.84	70.26	130.35	542.68
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	51.72	0.51	6.68	15.15
TOTAL	479.71	76.58	137.63	576.85
SUMMARY				
by Department			556.29 miles	
by Councils			714.48 miles	
TOTAL			1,270.77 miles	

TABLE 2—LANE MILES

Nature of Work	By Department		By Councils	
	Direct	Contract	Direct	Contract
1. Initial Surfacing—				
A. Prime .....	28.72	4.80	—	6.74
B. Primer Seal .....	20.16	—	—	11.72
C. Sprayed Seal .....	179.82	12.10	104.58	303.10
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	—	—	3.21	—
Sub Total	228.70	16.90	107.79	321.56
2. Surfacing Lengths Primed Before this Year—				
A. Prime .....	—	—	—	—
B. Primer Seal .....	12.42	—	—	—
C. Sprayed Seal .....	147.72	—	—	74.92
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	—	—	—	—
Sub Total	160.14	—	—	74.92
3. Restoration after Widening and/or Strengthening				
A. Prime .....	5.52	—	—	0.44
B. Primer Seal .....	2.46	3.82	—	—
C. Sprayed Seal .....	57.34	34.26	9.94	56.26
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	39.57	—	—	2.70
Sub Total	104.89	38.08	9.94	59.40
4. Restoration after Adding Lanes—				
A. Prime .....	5.48	—	—	5.40
B. Primer Seal .....	4.08	—	—	—
C. Sprayed Seal .....	29.96	0.48	1.76	2.16
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	35.66	—	7.24	15.64
Sub Total	75.18	0.48	9.00	23.20
5. Restoration after New Alignment and/or Grade				
A. Prime .....	17.30	3.20	—	5.76
B. Primer Seal .....	9.78	—	1.20	10.76
C. Sprayed Seal .....	49.92	23.30	16.37	45.34
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	29.64	1.02	—	2.79
Sub Total	106.64	27.52	17.57	64.65
6. Maintenance Resurfacing—				
A. Prime .....	—	—	—	0.28
B. Primer Seal .....	—	—	—	—
C. Sprayed Seal .....	302.38	71.72	132.34	587.23
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	72.91	—	15.39	23.27
Sub Total	375.29	71.72	147.73	610.78
Summary of 1 to 6—				
A. Prime .....	57.02	8.00	—	18.62
B. Primer Seal .....	48.90	3.82	1.20	22.48
C. Sprayed Seal .....	767.14	141.86	264.99	1,069.01
D. Slurry Seal .....	—	—	—	—
E. Plant Mix .....	177.78	1.02	25.84	44.40
TOTAL	1,050.84	154.70	292.03	1,154.51
<b>SUMMARY</b>				
By Department			1,205.54 miles	
By Councils			1,446.54 miles	
TOTAL			2,652.08 miles	

TYPES OF ROAD SURFACES AS AT 30th JUNE, 1970

Scheduled according to Road Classifications

	Cement Concrete	Bitumen Concrete	Bitumen Other	Gravel	Formed Only	Natural Surface	Total
COUNTY OF CUMBERLAND							
Expressways .....	—	9.88	—	—	—	—	9.88
State Highways .....	30.19	135.37	28.16	—	—	—	193.72
Trunk Roads .....	—	—	—	—	—	—	—
Main Roads .....	46.94	353.70	270.78	1.66	—	0.35	673.43
Secondary Roads .....	10.85	124.16	38.43	0.52	—	2.23	176.19
Tourist Roads .....	—	4.95	35.31	2.26	—	8.50	51.02
Developmental Roads .....	—	—	5.40	3.72	0.20	4.28	13.60
Unclassified Roads .....	—	5.71	1.30	—	—	—	7.01
Sub Total	87.98	633.77	379.38	8.16	0.20	15.36	1,124.85
COUNTRY							
Expressways .....	—	13.82	—	—	—	—	13.82
State Highways .....	27.86	208.41	5,235.11	415.65	457.78	—	6,344.81
Trunk Roads .....	6.43	8.30	2,419.02	1,183.07	627.94	—	4,244.76
Main Roads .....	13.11	128.62	4,641.90	4,186.63	1,895.69	32.88	10,898.83
Secondary Roads .....	—	—	—	—	—	—	—
Tourist Roads .....	—	0.92	100.85	41.07	7.98	17.18	168.00
Developmental Roads .....	—	—	88.14	1,776.13	691.86	171.62	2,727.75
Unclassified Roads .....	—	—	22.44	17.48	1,527.27	—	1,567.19
Sub Total	47.40	360.07	12,507.46	7,620.03	5,208.52	221.68	25,965.16
TOTAL FOR STATE OF NEW SOUTH WALES (County of Cumberland and Country)							
Expressways .....	—	26.04	—	—	—	—	26.04
State Highways .....	58.05	343.78	5,263.27	415.65	457.78	—	6,538.53
Trunk Roads .....	6.43	8.30	2,419.02	1,183.07	627.94	—	4,244.76
Main Roads .....	60.05	482.32	4,912.68	4,188.29	1,895.69	33.23	11,572.26
Secondary Roads .....	10.85	124.16	38.43	0.52	—	2.23	176.19
Tourist Roads .....	—	5.87	136.16	43.33	7.98	25.68	219.02
Developmental Roads .....	—	—	93.54	1,779.85	692.06	175.90	2,741.35
Unclassified Roads .....	—	3.37	23.74	17.48	1,527.27	—	1,571.86
TOTAL	135.38	993.84	12,886.84	7,628.19	5,208.72	237.04	27,090.01

TYPES OF ROAD SURFACES AS AT 30th JUNE, 1970

Scheduled according to Department's Divisions

Division	Natural Surface	Formed Only	Gravel	Primed Only	Primer Sealed	Sprayed Seal	Slurry Seal	Plant Mix	Cement Concrete	Total
Metropolitan .....	0.75	—	—	—	—	16.48	—	347.76	47.83	412.82
Parramatta										
County of Cumberland	1.83	—	2.18	—	—	253.46	—	222.79	34.10	514.36
Country .....	13.50	2.18	24.82	—	—	154.06	—	61.35	—	255.91
Sub Total	15.33	2.18	27.00	—	—	407.52	—	284.14	34.10	770.27
Central Mountains										
County of Cumberland	12.78	0.20	5.98	—	—	64.34	—	19.72	—	103.02
Country .....	2.65	3.60	436.79	—	—	561.66	0.52	3.27	17.87	1,026.36
Sub Total	15.43	3.80	442.77	—	—	626.00	0.52	22.99	17.87	1,129.38
Illawarra										
County of Cumberland	—	—	—	—	—	45.10	—	43.50	6.05	94.65
Country .....	—	—	105.32	4.13	—	312.68	—	166.86	1.76	590.75
Sub Total	—	—	105.32	4.13	—	357.78	—	210.36	7.81	685.40
Hunter Valley .....	3.75	—	149.72	—	2.56	797.10	3.47	108.25	10.06	1,074.91
Lower North Coast .....	10.20	106.05	275.12	—	0.60	503.58	—	—	—	895.55
North Eastern .....	13.11	—	384.56	—	—	974.32	—	—	15.64	1,387.63
Upper Northern .....	71.65	—	855.40	29.67	34.85	867.88	—	—	0.29	1,859.74
North Western .....	8.48	38.08	870.92	4.20	0.54	1,094.80	—	0.20	0.13	2,017.35
Central Western .....	19.80	35.78	1,125.45	2.07	—	1,385.97	—	0.75	0.30	2,570.12
Central Northern .....	57.09	1,732.52	888.40	—	40.17	852.51	—	—	—	3,570.69
Murray Darling .....	—	3,102.31	284.82	—	19.33	602.37	—	—	—	4,008.83
Central Murray .....	8.33	129.51	752.48	1.35	8.50	1,035.19	0.63	0.28	—	1,936.27
South Western .....	12.12	40.51	580.30	—	—	1,736.48	—	4.20	—	2,373.61
South Coast .....	—	11.98	326.64	11.42	—	586.50	—	0.23	0.35	937.12
Southern .....	1.00	6.00	559.29	2.30	27.80	848.25	—	14.68	1.00	1,460.32
TOTAL	237.04	5,208.72	7,628.19	55.14	134.35	12,692.73	4.62	993.84	135.38	27,090.01

## INSTRUCTION IN PLANT MAINTENANCE AND OPERATION

The training of plant operators has been continued by six Foremen who are based at the Department's Workshop at Granville, and make instruction trips of up to three weeks' duration to Works Offices throughout the State.

At least two visits were made to each Works Office during the year, and instruction was given to a total of 835 potential and existing operators, although some operators were instructed more than once or on more than one type of machine. The standard of operation is improving and operators are staying longer with the Department.

Total cost of operating the Training School for the year was \$41,132.53.

A summary showing the number of employees trained on the various types of plant is given below:

<i>Type of Plant</i>	<i>Operators Instructed</i>
Graders ....	232
Rollers ....	194
Tractors (crawler) ....	86
Tractors (rubber-tyred) ..	223
Loaders (all types) ....	109
Vehicles ....	26
Miscellaneous ....	115
<i>Total</i> ....	985

## RESEARCH AND MATERIALS TESTING

The Materials and Research Section, nominally composed of the Materials and Research Engineer, four other engineers, the Principal Scientific Officer and five clerical officers, experienced a succession of staff changes throughout the year.

The Materials and Research Laboratory, located at Milsons Point, was at the end of the year staffed by an Engineer-Manager, two supervising engineering analysts, five other engineering analysts, a metallurgist, thirty-five testing operators, five laboratory equipment officers, a testing laboratory assistant, eight clerical officers and twelve labourers. The metallurgist was appointed during the year, the number of engineering analysts diminished, and although the establishment of testing operators was increased by six to thirty-eight, the full complement was not maintained and about one third were new recruits. This was mainly due to the need to supply testing staff to Divisions and to the new expressway works commenced during the year.

The sixteen Divisional and nine Works Office Laboratories operating throughout the State were staffed by fourteen engineering analysts, ninety-seven testing operators and about fifty labourers.

### Divisional and Field Testing

Three new laboratories were established during the year for the testing involved in expressway construction. These were located at St. Marys, at Campbelltown and adjacent to the Western Distributor in the City of Sydney.

The building at Mooney Mooney used previously as the laboratory for the construction of the Sydney-Newcastle Expressway was transported to Ballina and reconditioned to replace the existing makeshift arrangement.

A modern well-equipped laboratory was erected at Wagga Wagga to replace the existing inadequate facility. The new building is of contemporary design and is positioned to blend with the proposed new Divisional Office redevelopment.

Also, a new laboratory formed a major part of the extensions to the Divisional Office at Newcastle. The testing was transferred from the Waratah Laboratory, with the exception of the concrete curing and testing facilities, which are expected to remain until the completion of the new bridge over the North Arm of the Hunter River at Stockton.

The number of samples processed at Divisional and Works Office laboratories during the year was 50,959. This involved about 219,460 tests, the bulk of which were on soils and gravels, although other materials such as bitumen and concrete were tested also. Approximately 1,500 pre-cast concrete culvert and bridge units were load tested and field control operations necessitated approximately 10,940 density-in-situ and 1,884 moisture content tests.

Several Divisions increased their use of the Benkelman beam as a non-destructive means of determining the relative stability of pavements, particularly those where surfacing with bituminous plant mix was being considered.

## Materials and Research Laboratory

The renovation and extension of facilities at Milsons Point continued throughout the year and was mainly concerned with the reconstruction of the bitumen testing section, the installation of fire protection equipment and a new test room with controlled temperature and humidity conditions.

A part of the building formerly used by the Warringah Expressway Construction Organisation was allocated for the establishment of the Soil Mechanics Section and work was started on the alterations. Equipment purchased for this laboratory included a five ton triaxial machine for determining the shear strength of soils under the various loading conditions, three hydraulic oedometers for consolidation tests, direct shear apparatus and permeability measuring equipment. The field testing gear included a four-wheel drive vehicle, a power auger, a crank drill driver, vane shear apparatus and undisturbed sampling equipment.

Following the appointment of a metallurgist, a universal camera microscope was installed and arrangements were made to obtain other equipment needed to extend the scope of the steel section. Other major items of equipment obtained during the year included a linear model laboratory recorder for use with the microvescometer, an infra-red spectrophotometer and a vibrating wire strain gauge comparator.

The number of tests carried out at the Materials and Research Laboratory during the year was 53,350. The main materials processed were soils, gravels, aggregates, concrete, bitumen, bituminous mixes, paints, steel and rubber bearings, although there were many other products tested such as glass beads, adhesives, oils, water, bitumen additives and pre-coating materials, joint fillers and retro-reflective materials for signs.

Field services provided included the installation, maintenance and calibration of equipment throughout the State, skid resistance tests, geological and seismic surveys, foundation exploration work, instrumentation for loading tests on structures and Benkelman beam deflection tests.

## Research

As a result of the investigation into the performance of flexible pavements in the Western area of the State new interim standards were introduced for gravels to be surfaced with bitumen in arid areas. The new requirements allow for a progressive relaxation of Plasticity Indices and particle size distribution west of the 20 inch isohyet, that is in about a half of the State. The new criteria should be applied only where drainage conditions are good and should be modified where there are abnormal influences on moisture conditions (e.g. irrigation channels).

Research into the properties of fine crushed rock materials used for pavement construction in Sydney and nearby areas was continued with the object of developing test procedures to discriminate between materials expected to perform satisfactorily and those prone to deteriorate rapidly in service, and to devise ways of stabilising such materials. A related subject, that of predicting the performance of shales for use in pavements was being studied also and six Divisional Laboratories were equipped to do Methylene Blue Absorption testing to investigate the correlation with performance.

Experiments carried out verified the effect of a number of organic compounds on the compaction characteristics of soils and gravels and indicated the possibility of achieving a significant reduction in the amount of water required for compaction purposes. Further testing was arranged.

Investigations into the properties of binders, aggregates and mixes for special purposes (e.g. skid resistant surfacings) were continued, as well as various processes, such as the use of foamed bitumen for producing a surfacing material for lightly trafficked roads and for stabilising base materials.

The results of research into problems associated with the crystallisation of soluble salts under primer seals were documented and submitted with a number of other papers for presentation at the Fifth Biennial Conference of the Australian Road Research Board.

## WIDENING OF METROPOLITAN MAIN ROADS

During the year, land was acquired for the widening of the following roads in the County of Cumberland:

*Great Western Highway* (State Highway No. 5) between Prospect and St. Marys in the Municipality of Blacktown and the City of Penrith.

*Macquarie Street* (Main Road No. 154), Windsor, in the Municipality of Windsor.

*Lane Cove Road* (Main Road No. 162), North Ryde, in the Municipality of Ryde and Ryde Road (Main Road No. 162), Pymble, in the Municipality of Ku-ring-gai.

*Military Road* (Main Road No. 164) and Spit Road (Main Road No. 164) from Neutral Bay to The Spit in the Municipalities of North Sydney and Mosman.

*Pittwater Road* (Main Road No. 164), between Narrabeen and Mona Vale in the Shire of Warringah.

*Barrenjoey Road* (Main Road No. 164), between Mona Vale and Newport Beach in the Shire of Warringah.

*Botany Road* (Main Road No. 170), between Bourke Street (Secondary Road No. 2008), Zetland and Harcourt Avenue, Rosebery in the Municipality of South Sydney.

*King Georges Road* (Main Road No. 315), Beverly Hills, in the Municipality of Hurstville.

*Wentworth Avenue* (Main Road No. 344), Pagewood, in the Municipality of Botany.

Approval was given during the year to the widening of 1.47 miles of proclaimed Main Roads or future Main Roads within the County of Cumberland.

Realignments gazetted totalled 7 miles of which the principal ones were:

*Cowpasture Road* (a future Main Road) between Hoxton Park Road (Main Road No. 515), and Mount Street, within the City of Liverpool and the Municipality of Fairfield (3.25 miles).

*Campbelltown Road* (Main Road No. 177), from 13.7 miles to 16.2 miles south of the Hume Highway (State Highway No. 2) near Appin, within the City of Campbelltown (2.5 miles).

## WIDENING OF RURAL ROAD RESERVES

During the year, only a few miles of ordinary road widening was approved on classified rural roads. Due to the developments in modern road design standards, many miles of main roads were approved for reconstruction on altered alignment, as reported elsewhere in this report. The opportunity was taken in these cases to obtain an adequate road reserve width.

Another development resulting from increasing traffic speed and density is the need for greater width in road reserves. To accommodate future dual carriageways, where the desirable distance between centre lines is not less than 100 feet, land acquisitions commonly are of widths of 250 feet and 300 feet.

Protection for traffic is being provided to an increasing extent by limiting the number of direct vehicular accesses to main roads. Councils are assisting in this by zoning against ribbon development in their Town Planning Schemes and Interim Development Orders. Where it is reasonable to do so, the Department is taking action resulting in lengths of new construction being proclaimed "Motorways" with consequent restriction on the development of further accesses.

## ADVANCE PLANNING

It is proposed that a further survey, designated the Australian Roads Survey 1969-74, be carried out to provide information relating to the effects of implementation of the Commonwealth Aid Roads Act 1969, and an assessment of road needs for a period beyond 30th June, 1974, when the current Act terminates. Planning for the survey was commenced by the National Association of Australian State Road Authorities in conjunction with the Commonwealth Bureau of Roads in early 1970, and the Department is taking part in this planning phase.

Action has continued during the year in connection with the statistical investigation of road construction costs, with the objective of compiling a road construction price index. Some further examination has been made of the economic evaluation of road improvements.

The Department's computing and data processing for technical purposes continued to be centred on the IBM 1130 computer located in the Department's Advance Planning Section. In July, 1969, additional core storage was provided for the computer in order to increase computing speed and simplify programming. This addition has permitted increased use of the computer without resort to second shift operation. An Automatic Drafting System was installed in May, 1970, and at the close of the year under review was being used for survey plan drafting.

In order to expedite the survey computations required in connection with urban expressway construction, a computer terminal was installed in the office on the site of the Western Distributor construction work in the City of Sydney.

Late in 1969 the technical systems analysis and programming staff was increased from two to four officers, to carry out the additional programming required for the automatic drafting system and for analysis of traffic counting methods.

Technical data processing throughout the year was principally in the fields of bridge design, traffic analysis, cadastral and photogrammetric survey, road inventory, road investigation and library records.

## PLANNING FOR DEVELOPMENT OF THE MAIN ROADS SYSTEM IN SYDNEY, NEWCASTLE AND WOLLONGONG

### *Sydney*

The review of the outline designs for new expressways and surface roads contained in the Main Roads Development Plan, was carried out on segments of the Castlereagh, Warringah, North Western, South Western and Southern Expressways and on the Eastern Distributor and Eastern Expressway. Location and preliminary design was commenced on the proposed route from St. Ives to Belrose.

Widening schemes were investigated for a number of roads that will ultimately be incorporated in the Main Roads system in the vicinity of Heathcote, Ryde, St. Ives, Mona Vale, Eastwood, Narrabeen and Blacktown.

Scale models of parts of the Warringah and North Western Expressways and of the Western Distributor were prepared to assist in design and location studies.

Representations involving road proposals were made to the appropriate authorities for two metropolitan planning schemes exhibited during the year.

The volume of written enquiries regarding the effect of the Department's road proposals on property averaged 8,000 per month.

The Department was represented on interdepartmental committees dealing with Port Development, Environment, Airport access and the Eastern Suburbs Railway.

#### *Newcastle*

The Department is responsible for the fixing of the boundaries for about 113 miles of the Main Roads System in the Northumberland County District. Of this length approximately 46 miles are proposed new routes. Location has been determined and boundaries fixed over approximately 61 miles and investigation is proceeding for the remaining lengths.

#### *Wollongong*

Road location studies involving 13 miles of expressway were continued during the year. Revision of planning boundaries on a further five miles was commenced. As a result of increasing development it was decided that additional lengths of local roads should be added into the Main Roads system involving a net increase of 6.7 miles.

## **COUNTRY ROAD LOCATION, INVESTIGATION AND AERIAL PHOTOGRAPHY**

Road location proposals which were developed or examined during the year involved 175 bridge sites and totalled 458 route miles. Of this length, location was finalised over 191 route miles, including 85 bridge sites. Rural expressway location was dominant during the year with location being fixed for the South Western Expressway between Menangle and Bargo and the Sydney-Newcastle Expressway between Somersby and Doyalson.

An aspect now receiving considerable attention is the finalisation of highway location around or through major towns and cities. In these instances town planning considerations, land use proposals, and future traffic desire lines, are factors requiring detailed consideration as well as consideration of the most suitable location from a road engineering view point. In some instances, such as at Orange, Parkes, Armidale, Gundagai and Bega, it has become apparent that the highway should pass around the urban area with specially constructed traffic access routes into it. In other instances where it has been found that only a small percentage of traffic would not be stopping in the city or town, the future through route will be a motorway through the urban area with grade separated intersections to provide access to the local street system.

The Zeiss Stereometrograph continues to give steady service, both in checking photogrammetry work carried out for the Department by outside bodies and in preparing contour plans for specific works. There has been development in its use for aerial triangulation and in this work a digital recorder is used to produce punch cards for computer calculation of the co-ordinates of photogrammetric control points. Some use was made during the year of the Point Transfer Device at the Department of Lands. Because the use of such an instrument is expected to grow, the Department intends to purchase one of its own. It is anticipated that there will be considerable use of the flat bed plotter now being installed in conjunction with the computer and the Stereometrograph.

The expenditure on photogrammetry from outside sources during the year was \$48,939, a fall of 27% on the previous year. This reduction has been due, at least in part, to further development and use by the Department of aerial triangulation, thus reducing the amount of work placed with outside bodies.

Aerial photography was undertaken over a route-mileage of 460 miles during the year. This photography was over areas previously photographed and was taken to give greater accuracy and larger scales and to bring existing photography up to date.

The Department's helicopter, besides being used in field examination of various proposals, also served to provide the facilities for undertaking aerial photography to up-date existing mosaics.

## **ROAD TRAFFIC SURVEYS**

#### *Permanent and Semi-Permanent Stations*

At the beginning of the year, traffic was counted at 179 permanent and semi-permanent stations, including 15 ferry sites. This number increased to 201 during the year.

The installation and removal of counters at semi-permanent stations used in Divisional traffic volume surveys continued. Counters in Upper Northern, North Western, South Western, Central Western, Southern, Central Mountains and Central Murray Divisions were removed and re-installed in Central Northern, Murray, Darling, Illawarra, Hunter Valley, North Eastern, Lower North Coast and South Coast Divisions.

Following the opening of the Southern Cross Drive in October, 1969, a permanent counting station to record hourly volumes by directions was established near the Gardeners Road overpass.

### Divisional Traffic Volume Surveys

Detailed traffic volume surveys, including vehicle classification counts at major intersections, were completed in the Upper Northern, North Western, South Western, Central Western, Central Mountains and Central Murray Divisions.

### Research on Traffic Counts

The Department is carrying out research on traffic counting techniques to improve the accuracy of the methods used in estimating annual average daily traffic volumes from traffic counts of short duration. To this end, computer programmes have been and are being developed to study the variations in traffic volume patterns at permanent and semi-permanent counting stations.

### Special Purpose Traffic Surveys

Origin and Destination surveys were carried out at Gosford and Wyong to assist investigations for the planned road systems in these areas.

A large number of traffic volume counts for special purposes were undertaken to record hourly as well as daily traffic volumes in various parts of County of Cumberland.

### Publication of Data

Data collected from the 1967 Divisional traffic volume surveys in the Hunter Valley, Illawarra, Lower North Coast, North Eastern and South Coast Divisions were published in five separate volumes.

Part of the data collected from the 1968 County of Cumberland traffic volume survey was published in "Traffic Volumes and Supplementary Data, 1968, County of Cumberland Vol. 2". The remainder of the data showing traffic flow maps and schedules of traffic volumes is expected to be available in August, 1970.

Publication of the traffic volume data collected from the seven Divisions surveyed in 1969 is being prepared.

### Annual Average Daily Traffic Volumes

Annual Average Daily Traffic Volumes obtained from permanent and semi-permanent counting stations for the calendar year 1969 are listed below. The corresponding volumes for 1968 and the percentage changes in volume, where available, are also shown.

Local Government Area	Location	Annual Average Daily Traffic Volume		Percentage Change
		1968	1969	
<i>Sydney-Newcastle Expressway</i>				
Gosford	Hawkesbury River—Calga Tollway south of Mt. White	11,290	12,950	+ 10
Hornsby	Berowra—Hawkesbury River Tollway		12,070	
<i>North-South Arterial Road (West Wollongong Section)</i>				
Wollongong	Gipps Street Overbridge	16,820	18,690	+ 11
<i>Bradfield Highway</i>				
Sydney	Sydney Harbour Bridge	116,200	125,180	+ 8
<i>State Highway No. 1—Prince's Highway</i>				
Rockdale	Tempe—Bridge over Cooks River	49,960	51,030	+ 2
Sutherland	Sylvania—Bridge over Georges River	48,450	50,180	+ 4
Sutherland	Loftus—Railway Overbridge	19,570	21,640	+ 11
Wollongong	North of Main Road No. 513 (Mount Ousley Road)	10,890	11,560	+ 6
Wollongong	South of Smith Street	20,990	21,770	+ 4
Kiama	1 mile south of Post Office	5,100	5,450	+ 7
Eurobadalla	Batemans Bay—Bridge over Clyde River	2,630	2,760	+ 5
Mumbulla	1 mile north of State Highway No. 4 (Snowy Mountains Highway)	960	1,000	+ 4
Imlay	Eden—2 miles north of Post Office	1,080	1,150	+ 6
Imlay	Eden—At old Road Creek		490	
<i>State Highway No. 2—Hume Highway</i>				
Ashfield	East of Bruce Street	20,440	23,280	+ 14
Bankstown	Lansdowne—East of State Highway No. 13 (Woodville Road)	32,980	35,200	+ 7
Liverpool	Cross Roads—East of York Street	26,220	29,760	+ 14
Mittagong	Mittagong—2 miles north east of Post Office	6,270	6,780	+ 8
Mulwaree	Goulburn—4 miles east of Post Office		5,840	
Mulwaree	Yarra—West of State Highway No. 3 (Federal Highway)	2,780	3,020	+ 9
Goodradigbee	Yass—4 miles west of Post Office	3,860	4,220	+ 9
Holbrook	Holbrook—2 miles north of Post Office	1,820	2,240	+ 23
Albury	At Murray River Bridge		17,830	
<i>State Highway No. 3—Federal Highway</i>				
Mulwaree	Yarra—South of State Highway No. 2 (Hume Highway)	2,460	2,780	+ 13
<i>State Highway No. 4—Snowy Mountains Highway</i>				
Mumbulla	West of State Highway No. 1 (Prince's Highway)	570	720	+ 26
Snowy River	East of Main Road No. 286 (Cooma—Berridale Road)	1,920	1,880	- 2
Snowy River	Adaminy—0.8 miles west of Rosedale Road	630	640	+ 2

Local Government Area	Location	Annual Average Daily Traffic Volume		Percentage Change
		1968	1969	
<i>State Highway No. 5—Great Western Highway</i>				
Ashfield	East of Dalhousie Street	37,920	38,990	+ 3
Parramatta	Clyde—Railway Level Crossing	46,200	47,270	+ 2
Blacktown	Wallgrove—Bridge over Eastern Creek	21,430	23,730	+ 11
Penrith	Bridge over Nepean River	14,260	15,880	+ 11
Turon	West of Blaxland Shire Boundary	2,770	3,020	+ 9
<i>State Highway No. 6—Mid Western Highway</i>				
Waugoola	Cowra—Bridge over Waugoola Creek	1,700	1,670	— 2
Weddin	Marsden—East of State Highway No. 17 (Newell Highway)	270	290	+ 7
Bland	Wyalong—East of Trunk Road No. 57 (Temora Road)	1,240	1,250	+ 1
Hay	Hay—20 miles east of Post Office	480	540	+ 13
<i>State Highway No. 7—Mitchell Highway</i>				
Canobolas	Orange—1.5 miles east of Main Road No. 245 (Piesle Street)	3,150	3,520	+ 12
Canobolas	Orange—3 miles north of Post Office	1,640	1,660	+ 1
Talbragar	Dubbo—1.2 miles east of East Dubbo level crossing	1,600	2,380	+ 49
Darling	Bourke—5 miles south of Post Office	150	220	+ 47
Talbragar	Dubbo—1.5 miles west of Post Office		2,000	
<i>State Highway No. 8—Barrier Highway</i>				
Cobar	East of Trunk Road No. 61 (Orange—Cobar Road)	310	360	+ 16
<i>State Highway No. 9—New England Highway</i>				
Patrick Plains	2.9 miles east of Main Road No. 128 (Singleton-Gostwyck Road)	3,430	3,840	+ 12
Peel	Tamworth—3.4 miles south of Post Office	1,550	1,740	+ 5
Cockburn	Tamworth—0.6 miles north of Main Road No. 105 (Nemingha—Scone Road)	3,090	3,400	+ 10
Severn	Glen Innes—South of Glen Innes Municipal Boundary	2,260	2,570	+ 14
Tenterfield	Tenterfield—1.5 miles south of Post Office		1,330	
<i>State Highway No. 10—Pacific Highway</i>				
Hornsby	Waitara—North of State Highway No. 13 (Pennant Hills Road)	26,470	27,070	+ 2
Hornsby	Berowra—North of Tollway Gates		4,360	
Hornsby	Brooklyn—Bridge over Hawkesbury River	13,470	15,820	+ 17
Gosford	Mount White	1,870	2,100	+ 12
Lake Macquarie	Swansea—2 miles south of bridge over entrance to Lake Macquarie	7,960	8,690	+ 9
Lake Macquarie	Charlestown—South of Smart Street	31,390	32,550	+ 4
Newcastle	Hexham—Bridge over Hunter River	10,190	11,360	+ 11
Port Stephens	Karuah—Bridge over Karuah River	3,370	3,700	+ 10
Manning	Nabiac—Bridge over Woolomba River	2,700	3,000	+ 11
Hastings	Bridge over Hastings River	2,320	2,600	+ 12
Ulmarra	South Grafton—South of Developmental Road No. 1253 (Grafton By-Pass Road)	2,080	2,320	+ 12
Nambucca	Macksville—1 mile north of Scotts Road		2,910	
Maclean	Harwood—Bridge over Clarence River	2,280	2,570	+ 13
Tintenbar	Ballina—South of State Highway No. 16 (Bruxner Highway)	1,960	2,360	+ 20
Tweed	Boyd's Point—South of Drydock Road	8,680	9,620	+ 11
<i>State Highway No. 11—Oxley Highway</i>				
Hastings	Wauchope—1.6 miles west of Beechwood Road	770	780	+ 1
Peel	Tamworth—5 miles west of Main Road No. 130 (Tamworth—Werris Creek Road)	1,270	1,430	+ 13
<i>State Highway No. 12—Gwydir Highway</i>				
Severn	Gibraltar Range Tick Gate	350	370	+ 6
Severn	Glen Innes, at Turracabad Creek Bridge		850	
Booolooroo	Moree—2 miles east of Post Office	910	1,000	+ 10
Boomi	Moree—2.5 miles west of Post Office		510	
<i>State Highway No. 13—Woodville Road, Church Street and Pennant Hills Road</i>				
Fairfield	Villawood—North of State Highway No. 2 (Hume Highway)	23,060	23,460	+ 2
<i>State Highway No. 14—Sturt Highway</i>				
Kyeamba	0.3 miles east of Main Road No. 384 (Alfred Town—Kyeamba Road)	1,050	1,140	+ 9
Hay	Hay at Bungah Creek Bridge	840	880	+ 5
Hay	Hay—East of Boon Street		470	
Wentworth	Buronga—12 miles east of State Highway No. 22 (Silver City Highway)	790	960	+ 22
<i>State Highway No. 15—Barton Highway</i>				
Goodradigbee	Yass—South of State Highway No. 2 (Hume Highway)	1,820	1,840	+ 1
<i>State Highway No. 16—Bruxner Highway</i>				
Tintenbar	Ballina—2 miles west of State Highway No. 10 (Pacific Highway)	1,770	1,790	+ 1
Gundurimba	McKees Hill Post Office	1,730	1,840	+ 6
Tenterfield	West of State Highway No. 9 (New England Highway)	220	220	0
Tenterfield	Tenterfield—1 mile east of Post Office		520	

Local Government Area	Location	Annual Average Daily Traffic Volume		Percentage Change
		1968	1969	
<i>State Highway No. 17—Newell Highway</i>				
Booloroo	Camurra—Railway level crossing No. 209 .....	590	700	+ 19
Talbragar	Dubbo—2 miles north of Post Office .....	2,680	2,960	+ 10
Goobang	2.1 miles north of Post Office .....	1,380	1,360	— 1
Narrandera	2 miles east of Post Office .....	1,040	1,120	+ 8
Berrigan	Finley—2 miles south of Post Office .....	1,210	1,290	+ 7
<i>State Highway No. 18—Castlereagh Highway</i>				
Coonamble	2 miles south of Post Office .....	560	570	+ 2
<i>State Highway No. 19—Monaro Highway</i>				
Monaro	Bunyan—Bridge over Cooma Creek .....	1,330	1,340	+ 1
Bombala	0.5 miles north of Iris Street .....	480	440	— 8
Monaro	Nimmitabel—0.8 miles south of State Highway No. 4 (Snowy Mountains Highway) .....	730	770	+ 5
<i>State Highway No. 20—Riverina Highway</i>				
Hume	Albury—4 miles west of Post Office .....	870	930	+ 7
Deniliquin	1 mile east of Main Road No. 552 (Deniliquin—Jerilderie Road) .....	920	970	+ 5
<i>State Highway No. 21—Cobb Highway</i>				
Murray	Deniliquin—2 miles south of Post Office .....	830	830	0
Windouran	Pretty Pine, north of Main Road No. 296 (Moulamein Road) .....		320	
Hay	Hay—2 miles north of Post Office .....		160	
<i>State Highway No. 22—Silver City Highway</i>				
Broken Hill	8 miles south of Post Office .....	200	220	+ 10
<i>State Highway No. 24—Mount Lindesay Highway</i>				
Tenterfield	2.4 miles north of State Highway No. 9 (New England Highway) .....		220	
<i>State Highway No. 25—Illawarra Highway</i>				
Shellharbour	Macquarie Pass .....	1,350	1,480	+ 10
<i>State Highway No. 26—Calga—Peats Ridge—Ourimbah</i>				
Gosord	Peats Ridge—At Post Office .....	8,420	9,920	+ 18
<i>Trunk Road No. 51—Batemans Bay—Queanbeyan</i>				
Eurobodalla	Nelligen—Bridge over Clyde River .....	970	930	— 4
<i>Trunk Road No. 54—Goulburn—Ilford</i>				
Mulwaree	Goulburn—2 miles north of Post Office .....		740	
<i>Trunk Road No. 55—Marrangaroo—Mullaley</i>				
Cudgong	Mudgee—0.5 miles south of railway level crossing .....	1,150	1,230	+ 7
<i>Trunk Road No. 56—Forbes—Yass</i>				
Jemalong	Forbes—1 mile east of Main Road No. 377 (Orange Road) .....		1,400	
<i>Trunk Road No. 57—Ivanhoe—Swan Hill</i>				
Lachlan	Condobolin at Nerathong Creek Bridge .....		290	
<i>Trunk Road No. 59—Jerilderie—Collingullie</i>				
Urana	Urana—9 miles west of Post Office .....		200	
<i>Trunk Road No. 61—Orange—Cobar</i>				
Canobolas	Orange—At Canobolas Shire Boundary .....	1,490	1,550	+ 4
Goobang	Parkes—At Billabong Creek Bridge .....		1,120	
<i>Trunk Road No. 63—Tamworth—Yetman</i>				
Cockburn	Tamworth—4 miles north of Post Office .....		1,410	
<i>Trunk Road No. 65—Ewingsdale—Lismore</i>				
Bangalow	0.3 miles west of State Highway No. 10 (Pacific Highway) .....	1,310	1,400	+ 7
<i>Trunk Road No. 72—Willowtree—Narrabri</i>				
Murrurundi	Willowtree—0.5 miles north of State Highway No. 9 (New England Highway) .....		1,360	
<i>Trunk Road No. 74—Armidale—South Grafton</i>				
Ulmarra	South Grafton—South of Main Road No. 151 (Grafton—Coffs Harbour Road) .....	450	460	+ 2
<i>Trunk Road No. 76—Raleigh—Ebor</i>				
Fernmoung	3.8 miles west of State Highway No. 10 (Pacific Highway) .....	1,270	1,390	+ 9
<i>Trunk Road No. 78—Olympic Way</i>				
Mitchell	Wagga Wagga—1 mile north of Main Road No. 240 (Coolamon Road) .....	1,640	1,660	+ 1
<i>Trunk Road No. 79—Goulburn—Doughboy</i>				
Mulwaree	Goulburn—3 miles south of Post Office .....		750	
<i>Trunk Road No. 80—Narrandera—Mossgiel</i>				
Wade	Widgelli, west of level crossing .....		1,180	

Local Government Area	Location	Annual Average Daily Traffic Volume		Percentage Change
		1968	1969	
<i>Trunk Road No. 83—Grafton—Casino—Woodenbong</i>				
Grafton	Bridge over Clarence River .....	11,970	12,370	+ 3
Copmanhurst	Koolkhan—0.3 miles south of Main Road No. 150 (Koolkhan—Woodenbong Road) .....	810	940	+ 16
Kyogle	Kyogle—0.5 miles south of Highfield Road .....	1,400	1,390	— 1
<i>Trunk Road No. 84—Bowning—Temora</i>				
Goodradigbee	Bowning—0.5 miles north of State Highway No. 2 (Hume Highway) .....		1,050	
<i>Trunk Road No. 85—Gilmore—Jingellic</i>				
Tumut	Batlow—4 miles north of Post Office .....		590	
<i>Main Road No. 104—East Maitland—Raymond Terrace</i>				
Port Stephens	Raymond Terrace—Ferry over Hunter River .....	269	267	— 1
<i>Main Road No. 105—Scone—Nemingha</i>				
Peel	Tamworth—1 mile east of State Highway No. 9 (New England Highway) .....		710	
<i>Main Road No. 108—Adamstown—Newcastle—Stockton—Nelson Bay</i>				
Newcastle	Broadmeadow—Southwest of Samdon Street .....	28,030	28,210	+ 1
Newcastle	Stockton—Ferry over Hunter River .....	3,910	3,939	+ 1
<i>Main Road No. 147—Woodburn—Lismore</i>				
Woodburn	Woodburn—Ferry over Richmond River .....	197	202	+ 3
<i>Main Road No. 149—Casino—Coraki—Buckendoon</i>				
Woodburn	Coraki—Ferry over Richmond River .....	158	161	+ 2
<i>Main Road No. 152—Lawrence—Maclean—Yamba</i>				
Maclean	Bluff Point—Ferry over Clarence River .....	96	120	+ 25
<i>Main Road No. 162—Mona Vale Road</i>				
Ku-ring-gai	Pymble—North of Orana Avenue .....	15,390	15,600	+ 1
Ryde	North Ryde—De Burghs Bridge over Lane Cove River .....	20,830	23,720	+ 14
<i>Main Road No. 164—Spit Road</i>				
Manly	The Spit—Bridge over Middle Harbour .....	44,110	46,290	+ 5
<i>Main Road No. 165—Commercial Road—Victoria Road</i>				
Leichhardt	Glebe Island—Bridge over Johnstons Bay .....	43,560	45,570	+ 5
Drummoyne	Gladesville—Bridge over Parramatta River .....	62,610	64,290	+ 3
<i>Main Road No. 166—Huntleys Point—Lane Cove</i>				
Hunters Hill	Bridge over Tarban Creek .....	31,960	34,750	+ 9
Lane Cove	Figtree Bridge over Lane Cove River .....	31,320	33,640	+ 7
<i>Main Road No. 167—Canterbury Road—Newbridge Road</i>				
Bankstown	Milperra—Bridge over Georges River .....	28,810	32,260	+ 12
Canterbury	Wiley Park—East of Canarys Road .....	33,770	33,540	— 1
<i>Main Road No. 168—Forest Road</i>				
Sutherland	Lugarno—Ferry over Georges River .....	1,468	1,539	+ 5
<i>Main Road No. 172—Oxford Street</i>				
Woollahra	Woollahra—West of Ocean Street .....	37,080	37,840	+ 2
<i>Main Road No. 177—Appin Road</i>				
Campbelltown	Campbelltown—0.5 miles north of Post Office .....	9,040	9,090	+ 1
<i>Main Road No. 179—Menangle Road</i>				
Wollondilly	Maldon—Railway level crossing .....	1,150	1,490	+ 30
<i>Main Road No. 181—McGraths Hill—Singleton</i>				
Baulkham Hills	Webbs Creek—Ferry over Hawkesbury River .....	151	140	— 7
<i>Main Road No. 182—Windsor—Sackville Reach</i>				
Baulkham Hills	Sackville Reach—Ferry over Hawkesbury River .....	214	223	+ 4
<i>Main Road No. 184—Windsor Road</i>				
Blue Mountains	Bell—East of Main Road No. 516 (Mount Victoria Road) .....		2,380	
<i>Main Road No. 186—Mount Keira Road</i>				
Wollongong	West Wollongong—East of Robsons Road .....	10,930	9,975	— 9
<i>Main Road No. 194—General Holmes Drive</i>				
Botany	1.3 miles east of Bridge over Cooks River .....	52,520	56,510	+ 8
<i>Main Road No. 199—Rocky Point Road—Taren Point Road</i>				
Sutherland	Captain Cook Bridge over Georges River .....	34,920	37,070	+ 6
<i>Main Road No. 200—Concord Road</i>				
Ryde	Uhrs Point—Bridge over Parramatta River .....	37,700	38,920	+ 3
<i>Main Road No. 206—Dubbo—Dunnedoo</i>				
Talbragar	Dubbo—2 miles east of Dubbo .....		430	
<i>Main Road No. 211—Wagga Wagga—Holbrook</i>				
Kyeamba	Wagga Wagga—3 miles south of Post Office .....		500	

Local Government Area	Location	Annual Average Daily Traffic Volume		Percentage Change
		1968	1969	
<i>Main Road No. 217—Birmingham Gardens—Wyong</i> Lake Macquarie Boolaroo—North of First Street .....		11,940	12,460	+ 4
<i>Main Road No. 220—Glendon Brook—Cessnock—Brunkerville—Toronto</i> Cessnock Brunkerville—Post Office .....		2,460	2,730	+ 11
<i>Main Road No. 223—West Wallsend—Kurri Kurri</i> Newcastle New Lambton Heights—North of Ridgeway Road .....		16,110	17,560	+ 9
<i>Main Road No. 225—Wisemans Ferry—Spencer—Central Mangrove</i> Baulkham Hills Wisemans Ferry—Ferry over Hawkesbury River .....		369	376	+ 2
<i>Main Road No. 240—Wagga Wagga—Ardlethan</i> Coolamon 5 miles north of Main Road No. 243 Wade Street .....			660	
<i>Main Road No. 253—Hartley—Bathurst</i> Oberon 1 mile north of Scotia Avenue .....			4,950	
<i>Main Road No. 256—Goulburn—Oberon</i> Mulwaree Kenmore—0.5 miles north of Post Office .....			480	
<i>Main Road No. 260—Moss Vale—Mittagong</i> Bowral Bowral—South of Kangaloon Road .....			4,840	
<i>Main Road No. 261—Moss Vale—Bomaderry</i> Wingecarribee Fitzroy Falls—North of Post Office .....		560	590	+ 5
<i>Main Road No. 286—Mount Kosciusko Road</i> Snowy River Jindabyne—10 miles northwest of Post Office .....		790	730	— 8
<i>Main Road No. 295—Five Islands Road</i> Wollongong Cringilla—East of Main Road No. 568 (Springhill Road) .....		29,770	33,160	+ 11
<i>Main Road No. 296—Pretty Pine—Moulamein</i> Windouran Pretty Pine—West of State Highway No. 21 (Cobb Highway) .....			240	
<i>Main Road No. 309—Aston Street</i> Parramatta Camellia—South of River Road .....		16,900	18,810	+ 11
<i>Main Road No. 328—Warringah Road</i> Warringah Forestville—West of Melwood Avenue .....		37,150	40,490	+ 9
<i>Main Road No. 332—Berowra Waters Road</i> Hornsby Berowra Waters—Ferry over Berowra Creek .....		195	206	+ 6
<i>Main Road No. 336—Gosford—The Entrance</i> Gosford 0.2 miles east of Russell Street .....		11,740	13,200	+ 12
<i>Main Road No. 357—Boggabri—Manilla</i> Manilla 2 miles west of Post Office .....			220	
<i>Main Road No. 366—Bobbin Head Road</i> Ku-ring-gai North Turrumurra—South of Milton Street .....		4,070	4,090	+ 1
<i>Main Road No. 369—Wymah Ferry Road</i> Hume Wymah—Ferry over Murray River .....		9	10	+ 11
<i>Main Road No. 373—Epping Road</i> Hornsby Epping—Bridge over Terry's Creek .....		20,720	22,650	+ 9
<i>Main Road No. 382—Bonshaw—Glen Innes</i> Severn Glen Innes—3 miles north of Post Office .....			210	
<i>Main Road No. 387—Temora—Yenda</i> Narrandera Barellan—1 mile west of Post Office .....			340	
<i>Main Road No. 503—Wilberforce—Singleton</i> Patrick Plains Howes Valley—3.5 miles north of Post Office .....		1,070	990	— 7
<i>Main Road No. 532—Silverwater Road</i> Parramatta Silverwater—Bridge over Parramatta River .....		25,530	26,960	+ 6
<i>Main Road No. 556—Gladstone—Smithtown—Seven Oaks</i> Macleay Smithtown—Ferry over Macleay River .....		417	447	+ 7
<i>Main Road No. 571—Gerrington—Gerroa</i> Kiama Gerrington—0.5 miles south of Post Office .....		1,450	1,570	+ 8
<i>Main Road No. 581—North Wollongong—Coniston</i> Wollongong North of Main Road No. 582 (Crown Street) .....		11,320	11,070	— 2
<i>Main Road No. 582—Crown Street</i> Wollongong West of Main Road No. 581 (Corrimal Street) .....		15,810	12,140	— 23
<i>Other Than Main Roads</i>				
Concord	Mortlake—Ferry over Parramatta River .....	229	253	+ 10
Sydney	Pymont—Bridge over Darling Harbour .....	51,290	47,890	— 7
Wakool	Speewa—Ferry over Murray River .....	52	51	— 2
Ulmarra	Ulmarra—Ferry over Clarence River .....	36	38	+ 6
Hornsby	Brooklyn—Brooklyn Road, east of State Highway No. 10 (Pacific Highway) .....		1,140	

## EMPLOYMENT AND INDUSTRIAL

The number of wages employees (including contractors' employees and contract lorry owner-drivers) engaged on maintenance and construction of Main Roads and construction of Developmental Roads by the Department of Main Roads and Councils at 30th June, 1970, was 11,651, compared with 11,428 at 30th June, 1969. In addition, there were 3,324 salaried officers of the Department. The following table provides a detailed analysis of these figures.

### *Departmental Employees*

Salaried Officers	....	....	....	—	Male	2,801	
					Female	523	
						3,324	
Wages Employees	....	....	....	—	Male	6,067	
					Female	51	
						6,118	
Total	..	....	....	....		9,442	

### *Departmental Contracts*

Contractors' employees engaged on contracts under direct supervision by Department (other than haulage and minor contracts)	....	255	
Haulage Contracts — Trucks	....	936	
Minor Contracts — Plant, etc.	....	527	
		1,718	
<i>Council Employees</i> engaged on Subsidised Roadworks	..	....	2,863
<i>Council Owned and Contract Trucks</i> engaged on Subsidised Roadworks	....	....	952
Total	....	....	14,975

No major industrial dispute occurred during the year.

## OFFICE PREMISES AND HOUSING FOR STAFF

Re-modelling and renovation was nearing completion of a recently acquired Pitt Street property adjoining the Head Office building and two floors of the building were occupied by Head Office staff. As a result of the planned Western Distributor, a building was acquired in Day Street, Sydney, and is being used temporarily for the garaging of Departmental vehicles from Head Office.

Extensive alterations and additions to the Divisional Office in Newcastle have been completed. Additions to the Divisional Office in Grafton were nearing completion and renovations and alterations to the existing building were commenced.

Sites have been acquired in Glen Innes and Lithgow for the erection of new Divisional Office buildings and the preparation of preliminary design proposals was commenced.

Construction of a Testing Laboratory at the Divisional Office in Wagga Wagga was completed. Plans were prepared for the extension of the Laboratory at Tamworth Divisional Office and for alterations to the Metropolitan Divisional Office.

Two residences to provide accommodation for staff were completed at Lithgow, as well as a Divisional Engineer's residence at Bega.

Works Offices were completed at Coonabarabran and Wilcannia. A temporary Works Office was erected at Murwillumbah and a new permanent Office Block and Main Store were erected at Bowenfels Works Office. A contract was also let for the construction of a new Workshop at Windsor Works Office.

A Works Office was established at Cooma in buildings on a property purchased from the Snowy Mountains Authority to replace the former Works Offices at Jindabyne and Nimmitabel.

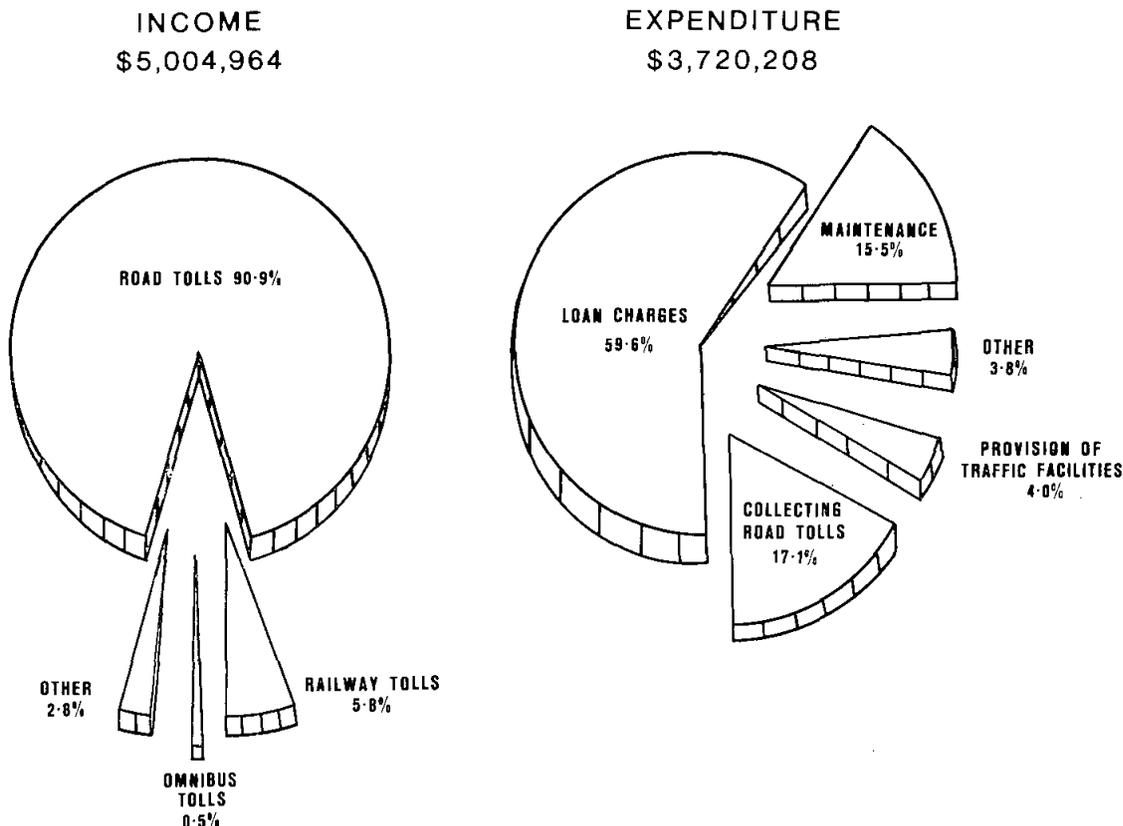
Construction has commenced on the erection of a new Works Office at Thornleigh and plans are being prepared for a Works Office at Yennora. Plans are also nearing finalisation for the erection of a new Works Office at Singleton.

# SYDNEY HARBOUR BRIDGE

## Financial Position

The toll income of the bridge exceeded the previous year's level by \$264,645. Expenditure at \$3,720,208 was \$178,693 more than the expenditure for 1968-69. The increased expenditure was mainly due to rises in toll collection expenses, interest charges and the provisions for repayment of loan moneys borrowed for construction of the first section of the Warringah Expressway from the Sydney Harbour Bridge to Miller Street, Cammeray. \$149,994 was appropriated from the Sydney Harbour Bridge Account for construction of the Warringah Expressway approach to the Sydney Harbour Bridge and \$73,768 was appropriated for the Cahill Expressway.

The sources of income and the main items of expenditure are shown in the diagrams below.



### Traffic

The road vehicle crossings of the bridge during 1969-70 totalled 46,955,000 including 583,000 crossings by omnibuses. The approximate number of rail and omnibus passengers and the revenue received from the users of each class of transport were as follows:

Particulars	Vehicles	Passengers	Collections \$	Percentage of Total Toll Collection %
Road vehicles (excluding omnibus and exempt vehicles) .....	45,460,808		4,549,136	93.50
Railway passengers .....		26,228,422	289,630	5.95
Omnibus passengers .....		12,033,025	26,851	0.55

The annual average daily traffic volume on the Sydney Harbour Bridge increased by 8% over the volume for the previous year, to 125,180 vehicles per day. The highest volume recorded on any one day was 158,860 vehicles on 26th March, 1970, the eve of the Easter Public Holidays.

Peak-hour flows in the direction of major flow remained much the same as those recorded during 1968-69. In the morning peak periods, the highest flow recorded in the six southbound lanes was 11,050 vehicles per hour on Wednesday, 4th March, 1970. In the evening peak periods, the highest flow recorded in the six northbound lanes was 9,840 vehicles per hour on Tuesday, 5th May, 1970. The average peak-hour flows in the direction of major flow were 10,750 vehicles per hour in the morning peak periods and 9,120 for the evening peak.

Average peak-hour flows in the direction of minor flow increased in the morning peak periods by 13.6% to 2,910 vehicles per hour. The highest flow recorded in the morning peak periods in the two northbound traffic lanes was 3,690 vehicles per hour on 7th May, 1970, and in the evening peak periods on the two southbound traffic lanes was 3,650 vehicles per hour on 27th February, 1970.

During the year, 3,619 vehicles were removed from the Sydney Harbour Bridge, the Cahill Expressway and the Warringah Expressway by the Department's tow truck organization. This was an increase of 687 vehicles above the number removed in the previous year.

Details of breakdowns are shown in the following table:

*Breakdowns on Sydney Harbour Bridge,  
Cahill Expressway and Warringah Expressway  
between 6.30 a.m. and 6.30 p.m.  
1st July, 1969, to 30th June, 1970*

Cause of Breakdown	Week Days	Weekends and Public Holidays	Total	Percentage
Lack of Petrol .....	1,065	183	1,247	35
Mechanical Breakdown .....	1,501	243	1,744	48
Flat Tyres .....	349	89	438	12
Accidents .....	158	19	177	5
Abandoned .....	11	2	13	0
	3,084	536	3,619	100

### Maintenance

The fourth repainting of the Sydney Harbour Bridge was continued, a total of approximately 564,000 square yards of steelwork or approximately 97 per cent being completed by the end of the year.

An area of approximately 68,000 square yards of steelwork was painted during the year, all of which was two-coat work. A large amount of patch painting was also carried out.

Maintenance and inspection of steelwork, cranes, lifts, etc., was continued, with rivet testing on the eastern truss of the main arch.

In addition to the normal maintenance of lighting, floodlighting, toll barrier electrical installations, etc., electrical circuits were relocated and power for temporary street lighting was provided for construction work on the first stage of the Western Distributor.

### REGULATION OF WEIGHTS OF LOADS ON MAIN ROADS

Ordinance No. 30C of the Local Government Act, 1919, prescribes limits for the gross loads and individual axle loads imposed on road pavements and structures and on ferry vessels by vehicles using Main Roads.

The following statement summarises action taken during the year in the administration of the Ordinance. Figures for the year ended 30th June, 1969, are also shown.

	1968-69	1969-70
Vehicles stopped for checking .....	44,847	43,729
Vehicles reported as overloaded .....	7,491	7,960
Drivers prosecuted for failure to obey lawful direction .....	78	89
Notices of overloading issued (Notices of overloading represent the number of cases in which warning notices only are sent to both the owner and driver but no prosecution action taken) .....	732	834
Prosecutions authorised .....	6,751	6,242
Number of cases heard by Courts .....	6,954	7,772
Number of Convictions recorded .....	5,202	5,613
Total penalties imposed .....	\$243,444.40	\$251,700.17
Maximum Penalty (\$400) .....	1	1
Average penalty, including all costs required to be met by the defendant per case .....	\$46.80	\$44.48

Of the total number of vehicles stopped, 7,960, or approximately 18.2 per cent were found to be loaded in excess of Ordinance limits.

The following table summarises the extent of overloading found in these 7,960 vehicles:

Percentage Overloaded	0-10 Cwt.	10-20 Cwt.	Over 20 Cwt.	Over 40 Cwt.	Over 60 Cwt.	Total
Number of vehicles reported—						
(i) Vehicles travelling Interstate .....	603	797	732	229	171	2,532
(ii) Vehicles travelling within the State .....	928	1,791	1,664	630	415	5,428
	1,531	2,588	2,396	859	586	7,960

The installation of new plant for heavy industry and the movement of large plant items resulted in many problems and this led to a continuing increase in applications for permits to transport non-divisible loads with axle and gross weights in excess of Ordinance limits.

Permits to exceed Ordinance limits are issued only for non-divisible loads and then only if transportation by rail or sea is not practicable. These permits are divided into two categories:

“A” Class or Special Permits, which are issued as a result of an individual application for a single journey on a specified date. During the year, 5,441 such permits were issued involving the movement of 291,353 tons, compared with the issue of 5,271 permits involving 256,785 tons in the previous year.

Included in the permits issued this year were 125 loads in excess of 75 tons each, the heaviest of these being the transportation of a 207 ton boiler, gross load 257 tons; this boiler travelled from Garden Island to Cooks River, then, after rail movement, from Ravensworth to Liddell.

“B” Class or Period Permits, which are issued for a specified period varying from three to twelve months. Such permits provide for lesser weights than those allowed by Special Permits, and the majority apply to travel by mobile cranes. These permits are issued for travel within a restricted area, generally within 30 to 50 miles of a given point. The gross tonnage carried under such permits exceeded that carried under Special Permits.

Motor vehicles used for the transport of these loads must be fitted with axle arrangements especially designed to spread the weight of the load. Other factors taken into consideration are the route to be traversed and the ability of structures to support the weight of the load.

The Department continued to supply information regarding application of the Ordinance limits to particular types of vehicles, and many vehicle operators, transport interests, manufacturers and importers availed themselves of this service during the year. Numerous copies of a “Guide to Load Limits under Ordinance No. 30C” were distributed, while assessments of the carrying capacity of vehicles were issued on the application by owners.

## **NATIONAL ASSOCIATION OF AUSTRALIAN STATE ROAD AUTHORITIES**

The National Association of Australian State Road Authorities is an organization of the Central Road Authorities in the six States together with the Commonwealth Department of Works which is the road constructing authority for the Commonwealth Territories.

The Association, which was established in 1934, serves to provide a means of pooling technical and administrative experiences; of inaugurating, co-ordinating and rationalizing road research projects; of harmonizing and co-ordinating standards; of ascertaining and publishing the facts about Australia's principal roads and their financing; and of developing an informed outlook on Australia's road problems.

The technical work of the Association is developed by the Principal Technical Committee, comprising the Chief Engineers of the various Authorities. The Principal Technical Committee is assisted by specialist committees of officers from the State Road Authorities experienced in Materials Research, Traffic Engineering, Bridge Engineering, Advance Planning, Plant and Equipment, Computers, Geometric Road Design, and Construction and Maintenance Practices.

A Secretarial and Accounts Committee comprising the Secretaries and Accountants of the various State Road Authorities and the Commonwealth Department of Works assists the Association in administrative and management practices.

The Engineer-Secretary, assisted by a small staff carries out the secretarial work of the Association. The Secretariat, for the time being, is located in the offices of the Department of Main Roads, New South Wales and each of the Member Authorities contributes toward the cost of its operation.

Three meetings of the Association were held during the year. The Fortieth Meeting was held in November, 1969, at Perth in conjunction with a meeting of State Ministers concerned with the Construction of Highways and the Thirty-Ninth and Forty-First meetings were held in Melbourne.

Meetings of the Association were attended by the Heads of the State Road Authorities of the six States and the Head of the Commonwealth Department of Works. The Secretary of the Commonwealth Department of Shipping and Transport and the Chairman of the Commonwealth Bureau of Roads also attended sessions of these meetings.

There were nine specialist committee meetings held during the year and two meetings of the Principal Technical Committee at various capital cities. Representatives from the Commonwealth Department of Shipping and Transport, the Commonwealth Bureau of Roads, the Commonwealth Scientific and Industrial Research Organization also attended a number of these meetings.

The Association at its meetings dealt with matters which had come forward during the year from its Principal Technical Committee and arranged for further action to be taken by the Specialist Committees on additional aspects of road and bridge works and planning. Important matters considered included the reference of items to the Standards Association of Australia for the preparation or revision of standards; the conduct of further study courses for African and Asian Engineers; the planning and conduct of the Fourth Australian Roads Survey; and the progress made with the preparation of the following publications:

“Glossary of Computer Terms”

“Guide to Traffic Engineering Practice”—Revised Edition

“Policy for Geometric Design for Rural Roads” — Revised Edition

“Highway Bridge Design Specification” — Revised Edition

“Manual on Maintenance of Bituminous Surfacing”

During the year the following technical manuals and bulletins were published:

“Principles and Practice of Bituminous Surfacing — Vol. II — Plant Mix”

“Specification for Performance Requirements of Mechanical Sprayers of Bituminous Materials” — Revised Edition

“Recommended Acceptance Requirements for Precast Pretensioned Prestressed Concrete Bridge Units” — Revised Edition

“Duties and Responsibilities of Superintending Officers — Vol. II — Bridgeworks”

“Technical Road Notes No. 13”

“Guide to the Publications and Policies of NAASRA” — 1970 Edition

Amendments to 1968 edition of “Vehicle Limits for Road Safety and Road Protection”, current as at 1st January, 1970.

The Department of Main Roads, New South Wales was host to the Association’s Advance Planning Committee in February, 1970.

## **AUSTRALIAN ROAD RESEARCH BOARD**

Since its establishment in 1960 by the National Association of Australian State Road Authorities the activities of the Australian Road Research Board had grown to such an extent that in 1965 the Board was registered as a Public company, with the Executive Heads of the six State Road Authorities and the Commonwealth Department of Works as the members and Directors of the Company.

At the Sixteenth meeting of the Board of Directors, held in Melbourne in May, 1970, Mr. I. J. O’Donnell, Chairman of the Country Roads Board, Victoria, was appointed Chairman and Mr. A. S. Reiher, Director-General of the Commonwealth Department of Works, Deputy Chairman for the year 1970-71.

To assist in the operation of the Board’s research activities, an Advisory Council and various specialist committees have been established. A new committee, the Local Government Engineers Committee, was recently established to advise on areas of research of interest to Local Government. Some changes were also made to the terms of reference of some committees, with the emphasis on research projects closely associated with problems faced in practice.

Direct research, whether carried out by the Board or sponsored at universities and other institutions, continued in such areas as Traffic Flow Analysis, Traffic Control Division, Human Factors Research, Accident Analysis and Driver Characteristics, Transport Surveys including Economic Studies, Foundations and Analysis of Materials for Road Structures.

The planning of the Research Centre for the Board’s permanent headquarters advanced a further step with the issue of a planning permit by the local authority in Melbourne. Sketch plans have now been approved with a view to the building being erected at an early date.

During the year a Symposium on Compaction was held in Wagga Wagga. About 250 delegates attended from State Road Authorities, Local Government Authorities and Private Industry. Members of the staff of the Department of Main Roads took part in the discussion which followed presentation of the papers at the Symposium. These papers and the discussion were printed in the December, 1969, issue of “Australian Road Research”.

The report “Roading in the National Economy” was again amended to keep the information current. This report contains tables detailing the physical and financial impact on the community, and on the individual, of roading and road transport in Australia.

## VISITORS FROM OVERSEAS

The Department continued its co-operation with Commonwealth Authorities in providing study facilities for Fellows nominated to visit Australia.

The visiting Fellows were:

Mr. Poomarinpong PRAPAT — Colombo Plan Fellow from Thailand

Mr. Phromsaka Na Sagolnakorn WIWAKE — Colombo Plan Fellow from Thailand

Mr. Andrew George DIBBLE — ANZAC Fellow from New Zealand

Messrs. Prapat and Wiwake spent three weeks with the Department and were given opportunities to observe road construction techniques.

Mr. Dibble spent two weeks studying the forward planning of new traffic routes, traffic service facilities and the Department's overall organization, including the financing and programming of road and bridge works.

Other visitors from overseas who spent time observing the Department's activities and procedures were Mr. T. H. Tan, a Civil Engineer from Singapore, Mr. W. R. Drager, Senior Design Officer (Roads and Airports) of the Auckland Regional Authority, New Zealand, and Mr. A. T. Harcourt, a Draftsman from the Ministry of Works, New Zealand. Mr. Harcourt is spending ten weeks with the Department on "in-service" training in road design.

## ARMY SUPPLEMENTARY RESERVE UNIT

The Twentieth Annual Camp of 21 Construction Regiment RAE(SR) was held at Singleton from 14th to 27th February, 1970.

The camp this year was a full Regimental Camp in which squadrons from all sponsoring Government Departments attended at the same time. The training undertaken comprised basic military skills, basic field engineering (including demolitions, mine warfare, water supply), range practices for SLR, OMC and pistol, and a three day deployment field exercise at squadron level for each sub-unit. A Communications Zone Recruit Course was run in conjunction with the camp; the majority of the instructors were drawn from the Regiment and in much of the Course administration was carried out by the Regimental Headquarters.

During the field deployment exercise, considerable use was made of Iroquois Helicopters by Regimental personnel on aerial reconnaissance, movement by air, etc. The squadron sponsored by the Snowy Mountains Hydro Electric Authority — 109 Construction Squadron — was flown to camp and returned to Cooma in Caribou aircraft.

Of the 414 members attending camp 212 were Departmental employees.

Visitors to the Regiment in camp included the Commissioner, Assistant Commissioner and Secretary of the Department of Main Roads, the President of the Metropolitan Water Sewerage and Drainage Board, the Newcastle District Engineer of the Public Works Department, the G.O.C. Eastern Command, the Commander Communications Zone, the CMF Military Board Member, the Chief Engineer Eastern Command, the Chief Engineer 11CE(WKS) and several other senior officers.

During the training year prior to the camp, an Officer Promotion Coaching Course and an NCO Promotion Course were conducted. Members also participated in regular evening and weekend training parades at the Regiment's Depot at Marrickville.



**Appendix No. 1—continued**

**(B) COUNTY OF CUMBERLAND MAIN ROADS FUND—continued**

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30th JUNE, 1970—continued

**(iii) Reserve for Loan Repayments**

RECEIPTS			PAYMENTS			
	\$	1969/70 \$	1968/69 \$		1969/70 \$	1968/69 \$
Transfer from —				Balance carried forward —		
General Purposes Account .....	128,550		110,776	Investments .....	948,200	678,200
Special Purposes Account .....	52,125		60,375	Cash .....	35,130	84,139
Interest on investments .....		180,675	136,715		983,330	
		40,316				
<b>Total Receipts .....</b>		<b>220,991</b>	<b>307,866</b>			
Balance brought forward from last year —						
Investments .....	678,200		385,300			
Cash .....	84,139		69,173			
		762,339				
		<b>\$983,330</b>	<b>\$762,339</b>	<b>Total Payments .....</b>	<b>\$983,330</b>	<b>\$762,339</b>

**(C) COUNTRY MAIN ROADS FUND**

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30th JUNE, 1970

**(i) General Purposes**

RECEIPTS			PAYMENTS			
		1969/70 \$	1968/69 \$		1969/70 \$	1968/69 \$
Motor vehicle taxation in accordance with the Main Roads Act, 1924 .....	29,317,466	27,869,412		Maintenance and minor improvements of roads and bridges —		
Charges on commercial vehicles under the Road Maintenance (Contribution) Act, 1958 .....	12,697,604	11,839,537		Work by Councils .....	5,711,943*	5,695,560
Contributions by Councils towards maintenance and construction of Main Roads .....	38,805	182,310		Work by Department .....	11,345,920†	9,784,276
Contributions by other departments and bodies towards maintenance and construction of Main Roads .....	233,917	107,852		Construction and reconstruction of roads and bridges —		
Grant under Commonwealth Aid Roads Act, 1964 ..	—	21,918,175		Work by Councils .....	6,557,268	9,684,771
Other .....	245,545	218,511		Work by Department .....	10,020,983	28,136,947
				Land acquisition .....	16,578,251‡	602,508
<b>Total Receipts .....</b>	<b>42,533,337</b>	<b>62,135,797</b>		Administrative Expenses .....	849,494	3,678,322
				Purchase of land and buildings for administration and operation .....	3,802,341	857,123
Balance brought forward from last year .....	1,815,619	2,009,470		State Treasury — Loans —		
	\$44,348,956	\$64,145,267		Interest, exchange, management and flotation expenses .....	865,245	817,177
				Loans under Section 42A of the Main Roads Act, 1924 —		
				Interest .....	333,384	96,358
				State Treasury — Repayment of temporary advance .....	100,000	100,000
				Other .....	414,462	522,426
				<b>Total Payments .....</b>	<b>41,056,371</b>	<b>59,975,468</b>
				Transfer to Country Reserve for Loan Repayments .....	96,915	26,250
				Transfers to and refunds from Special Purposes Accounts in respect of finance for Operating Accounts, Suspense Accounts and Reserve Accounts .....	1,944,203	2,327,930
				Balance carried forward .....	43,097,489	62,329,648
					1,251,467	1,815,619
					\$44,348,956	\$64,145,267

\* For details see Appendix No. 12.

† For details see Appendix No. 12A.

‡ For details see Appendix No. 9.

**(ii) Special Purposes**

RECEIPTS			PAYMENTS			
		1969/70 \$	1968/69 \$		1969/70 \$	1968/69 \$
State Government Loans — Repayable .....	1,700,000	—		Maintenance and minor improvement of roads and bridges —		
Loan borrowings under Section 42A of the Main Roads Act, 1924 .....	8,600,000	2,700,000		Other than Main Roads —		
Commonwealth Aid Roads Act, 1964 — portion of grant for expenditure on Main Roads .....	—	794,933		Work by Department .....	145,076	92,996
Commonwealth Aid Roads Act, 1964 — portion of grant for expenditure on rural roads .....	—	374,231		Construction and reconstruction of roads and bridges —		
Contributions by other departments and bodies .....	639,683	186,480		Work by Councils .....	63,740	110,719
				Work by Department .....	9,309,357	1,014,426
<b>Total Receipts .....</b>	<b>10,939,683</b>	<b>4,055,644</b>		Maintenance and construction of unclassified roads —		
				Western Division .....	—	373,341
Net transactions of Operating Accounts, Suspense Accounts and transfers to and from the General Purposes Accounts in respect of finance for Reserve Accounts .....	1,960,227	1,039,616		Department of Motor Transport —	—	236,667
	12,899,910	5,095,260		Public Vehicles Fund .....	—	2,266
	6,611,467	4,080,392		Department of Public Works — for Drainage Research .....	—	556,000
	\$19,511,377	\$9,175,652		Department of Public Works — Expenditure on works connected with transport by water and on research work .....	—	145,202
				State Treasury — Loans —		
				Sinking fund payment .....	153,345	32,568
				Loans under Section 42A of the Main Roads Act, 1924 —		
				Repayment of principal .....	54,597	2,564,185
				<b>Total Payments .....</b>	<b>9,726,115</b>	<b>6,611,467</b>
				Balance carried forward .....	9,785,262	9,175,652
					\$19,511,377	\$9,175,652

\* For details see Appendix No. 9A.

**Appendix No. 1—continued**

**(C) COUNTRY MAIN ROADS FUND—continued**

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30th JUNE, 1970—continued

**(iii) Reserve for Loan Repayments**

RECEIPTS			PAYMENTS		
	1969/70	1968/69		1969/70	1968/69
	\$	\$		\$	\$
Transfer from —			Balance carried forward —		
General Purposes .....	96,915	26,250	Investments .....	395,000	95,000
Special Purposes .....	19,647	19,647	Cash .....	12,874	31,059
Interest on investments .....	116,562	55,440		407,874	
	165,253				
<b>Total Receipts .....</b>	<b>281,815</b>	<b>101,337</b>	<b>Total Payments .....</b>	<b>407,874</b>	<b>126,059</b>
Balance brought forward from last year —					
Investments .....	95,000	—			
Cash .....	31,059	24,722			
	126,059				
	\$407,874	\$126,059			

**(D) DEVELOPMENTAL ROADS FUND**

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30th JUNE, 1970

RECEIPTS			PAYMENTS		
	1969/70	1968/69		1969/70	1968/69
	\$	\$		\$	\$
Grant under Section 5 (2) of the Commonwealth Aid Roads Act, 1964 .....	—	1,724,117	Construction and reconstruction of Developmental Roads and Works —		
			Work by Councils .....	506,015*	1,319,850
<b>Total Receipts .....</b>	<b>—</b>	<b>1,724,117</b>	<b>Total Payments .....</b>	<b>506,015</b>	<b>1,319,850</b>
Balance brought forward from last year .....	506,015	101,748	Balance carried forward .....	—	506,015
	\$506,015	\$1,825,865		\$506,015	\$1,825,865

\* For details see Appendix No. 10.

**(E) SYDNEY HARBOUR BRIDGE ACCOUNT**

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 30th JUNE, 1970

INCOME			EXPENDITURE		
	1969/70	1968/69		1969/70	1968/69
	\$	\$		\$	\$
Road Tolls .....	4,549,136	4,302,533	Maintenance, lighting and clearing bridge and approaches .....	576,936	577,746
Railway Tolls .....	289,630	284,416	Traffic facilities .....	149,018	132,184
Omnibus Tolls .....	26,851	27,730	Cost of collecting road tolls .....	635,340	584,275
Net rent from Properties .....	139,347	125,640	Improvements and alterations to toll gates and archways .....	70,046	72,694
			Administrative Expenses .....	71,223	101,214
			Loan Charges — State Loans .....	1,194,310	1,175,450
			Loan Charges — Borrowings under Section 42A of the Main Roads Act .....	1,023,335	897,952
<b>Total Income .....</b>	<b>\$5,004,964</b>	<b>\$4,740,319</b>	<b>Total Expenditure .....</b>	<b>3,720,208</b>	<b>3,541,515</b>
			Excess of income over expenditure transferred to appropriation account .....	1,284,756	1,198,804
				\$5,004,964	\$4,740,319

**APPROPRIATION ACCOUNT**

	1969/70	1968/69
	\$	\$
Excess of income over expenditure transferred from Income and Expenditure Account .....	1,284,756	1,198,804
Less Transfers to County of Cumberland Main Roads Fund (Special Purposes Account) for:—		
Cahill Expressway construction .....	73,768	—
Warringah Expressway approach .....	149,994	900,000
Surplus for year .....	1,060,994	298,804
Deficiency brought forward from last year .....	1,645,019	1,943,823
Accumulated Deficiency carried forward .....	\$584,025	\$1,645,019

**SYDNEY HARBOUR BRIDGE LOAN RESERVE ACCOUNT**

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 30th JUNE, 1970

INCOME			EXPENDITURE		
	1969/70	1968/69		1969/70	1968/69
	\$	\$		\$	\$
Transfers from Sydney Harbour Bridge Account .....	353,878	226,487			
Interest on Investments .....	38,994	23,231			
<b>Total Income .....</b>	<b>392,872</b>	<b>249,718</b>	<b>Balance carried forward .....</b>	<b>\$993,895</b>	<b>\$601,023</b>
Balance brought forward from last year .....	601,023	351,305			
	\$993,895	\$601,023			

**Appendix No. 1—continued**

**SYDNEY HARBOUR BRIDGE ACCOUNT**

BALANCE SHEET AS AT 30th JUNE, 1970 (EXCLUDING CAPITAL COST TRANSACTIONS)

ASSETS			LIABILITIES		
	1969/70	1968/69		1969/70	1968/69
	\$	\$		\$	\$
Furniture, fittings and equipment .....	256,072	225,264	Reserve — Repayment of Loans raised by		
Less Depreciation .....	83,379	60,533	Commissioner .....	993,895	601,023
Stock on hand .....	37,913	40,622	Creditors —		
Debtors .....	61,488	67,146	State Treasury for Sinking Fund payments .....	1,944,160	1,944,160
Cash at State Treasury and on hand .....	1,379,487	294,029	Other .....	254,551	235,364
Investments .....	957,000	569,000			
Total Assets .....	2,608,581	1,135,528			
Accumulated Deficiency .....	584,025	1,645,019			
	\$3,192,606	\$2,780,547	Total Liabilities .....	\$3,192,606	\$2,780,547

**Appendix No. 2**

**(A) COMMONWEALTH AID ROADS FUND**

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30th JUNE, 1970

Heading	1965-66	1966-67	1967-68	1968-69	1969-70
	\$	\$	\$	\$	\$
<b>RECEIPTS</b>					
Grants under the Commonwealth Aid Roads Act, 1969 —					
Urban Arterial Roads — Schedule 2 .....	—	—	—	—	26,070,000
Rural Arterial Roads — Schedule 3 .....	—	—	—	—	10,260,000
Rural Roads other than Arterial Roads — Schedule 4 .....	—	—	—	—	3,016,880
Planning & Research — Schedule 5 .....	—	—	—	—	860,000
Total .....	\$ —	\$ —	\$ —	\$ —	\$ 40,206,880
<b>PAYMENTS</b>					
Construction and reconstruction of roads and bridges —					
Urban Arterial Roads — Schedule 2 .....	—	—	—	—	20,301,657
Rural Arterial Roads — Schedule 3 .....	—	—	—	—	10,181,993
Other Rural Roads — Schedule 4 .....	—	—	—	—	2,758,970
Land Acquisitions — Schedule 2 .....	—	—	—	—	5,768,343
Planning & Research — Schedule 5 .....	—	—	—	—	314,854
Total .....	\$ —	\$ —	\$ —	\$ —	\$ 39,325,817

**(B) COUNTY OF CUMBERLAND MAIN ROADS FUND**

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30th JUNE, 1970

**(i) General Purposes**

Heading	1965-66	1966-67	1967-68	1968-69	1969-70
	\$	\$	\$	\$	\$
<b>RECEIPTS</b>					
Motor vehicle taxation and fees (State) .....	5,975,888	6,230,662	6,534,537	6,967,353	7,329,367
Charge on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act (State) .....	2,207,023	2,281,026	2,513,109	2,959,884	3,174,401
Commonwealth Aid Roads Acts .....	4,649,532	4,954,583	5,279,159	5,618,544	5,618,544
Levy upon Councils under Section 11 of the Main Roads Act .....	6,418,388	7,600,200	8,240,912	7,538,001	9,819,528
Contribution by Councils .....	82,814	128,878	192,095	79,751	30,028
Other .....	541,050	490,776	711,776	653,936	851,215
Total .....	\$ 19,874,695	\$ 21,686,125	\$ 23,471,588	\$ 23,817,469	\$ 21,204,539
<b>PAYMENTS</b>					
Maintenance and minor improvement of roads and bridges .....	2,928,964	3,349,295	3,646,681	4,146,532	4,910,576
Construction and reconstruction of roads and bridges .....	10,989,989	11,065,727	9,355,208	10,794,051	4,140,466
Land acquisition .....	3,407,598	3,868,100	4,400,652	4,680,840	7,510,084
Administrative expenses .....	772,977	1,166,933	1,474,188	1,700,758	2,330,307
Purchase of land and buildings for administration and operation .....	199,720	263,344	174,848	221,054	871,229
Interest, exchange, management and flotation expenses on State Loans .....	121,090	122,860	122,390	153,930	166,630
Interest loans raised under Section 42A of the Main Roads Act .....	248,537	289,372	305,983	454,252	594,334
Other .....	133,719	186,269	146,255	160,022	182,498
Repayment of Advances from State Treasury .....	—	—	100,000	100,000	100,000
Total .....	\$ 18,802,594	\$ 20,293,900	\$ 19,726,205	\$ 22,411,439	\$ 20,806,124

**Appendix No. 2—continued**

**(B) COUNTY OF CUMBERLAND MAIN ROADS FUND—continued**

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30th JUNE, 1970—continued

**(ii) Special Purposes**

Heading	1965-66	1966-67	1967-68	1968-69	1969-70
	\$	\$	\$	\$	\$
<b>RECEIPTS</b>					
Loan Funds — State Government .....	—	800,000	4,700,000	4,800,000	300,000
Loan Funds — Borrowings under Section 42A of the Main Roads Act .....	1,005,000	700,000	3,750,000	5,400,000	—
Expressways — Construction from Sydney Harbour Bridge Account .....	4,750,000	3,743,241	4,775,000	900,000	223,762
Commonwealth Aid Roads Act .....	430,351	208,169	160,444	238,385	—
Contributions from other departments and bodies .....	—	480,000	—	41,908	—
<b>Total .....</b>	<b>\$ 6,185,351</b>	<b>5,931,410</b>	<b>13,385,444</b>	<b>11,380,293</b>	<b>523,762</b>
<b>PAYMENTS</b>					
Construction and reconstruction —					
Main Roads (and bridges) .....	1,457,672	236,052	1,057,909	4,633,286	1,393,237
Roads (and bridges) other than Main Roads .....	—	27,063	—	272,937	—
Construction of Expressways .....	4,569,979	7,290,796	11,740,691	6,326,209	637,509
Department of Motor Transport — for Public Vehicles Fund .....	52,599	54,703	56,891	59,167	—
Department of Public Works — for research .....	800	—	—	566	—
Payments of Sinking Fund — State Government Loans .....	8,270	8,940	9,620	10,820	13,130
Repayment of Principal — Loans raised under Section 42A of the Main Roads Act .....	89,516	92,448	95,542	128,518	159,784
<b>Total .....</b>	<b>\$ 6,178,836</b>	<b>7,710,002</b>	<b>12,960,653</b>	<b>11,431,503</b>	<b>2,203,660</b>

**(C) COUNTRY MAIN ROADS FUND**

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30th JUNE, 1970

**(i) General Purposes**

Heading	1965-66	1966-67	1967-68	1968-69	1969-70
	\$	\$	\$	\$	\$
<b>RECEIPTS</b>					
Motor Vehicle taxation and fees (State) .....	23,903,553	24,922,646	26,138,150	27,869,412	29,317,466
Transfer from the Road Transport and Traffic Fund .....	1,556,733	338,148	10,108	—	—
Charge on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act (State) .....	8,828,091	9,124,104	10,052,435	11,839,537	12,697,604
Commonwealth Aid Roads Acts .....	18,040,129	19,262,334	20,561,636	21,918,175	—
Contributions by Councils .....	74,293	120,662	192,923	182,310	38,805
Other .....	240,955	460,896	456,046	326,363	479,462
<b>Total .....</b>	<b>\$ 52,643,754</b>	<b>54,288,790</b>	<b>57,411,298</b>	<b>62,135,797</b>	<b>42,533,337</b>
<b>PAYMENTS</b>					
Maintenance and minor improvements of roads and bridges .....	12,884,237	14,319,468	13,693,520	15,479,836	17,057,863
Construction and reconstruction of roads and bridges .....	32,756,664	34,315,885	35,001,249	37,821,718	16,578,251
Land acquisition .....	610,697	779,231	641,974	602,508	849,494
Administrative expenses .....	2,984,387	3,128,768	3,342,109	3,678,322	3,802,341
Purchase of land and buildings for administration and operation .....	631,016	656,341	511,044	857,123	1,055,331
Interest, exchange, management and flotation expenses on State Loans .....	556,394	828,960	845,718	817,177	865,245
Interest on Loans raised under Section 42A of the Main Roads Act .....	—	—	—	96,358	333,384
Other .....	413,531	434,378	561,113	522,426	414,462
Repayment of Advances from State Treasury .....	200,000	200,000	100,000	100,000	100,000
<b>Total .....</b>	<b>\$ 51,036,926</b>	<b>54,663,031</b>	<b>54,696,727</b>	<b>59,975,468</b>	<b>41,056,371</b>

**(ii) Special Purposes**

Heading	1965-66	1966-67	1967-68	1968-69	1969-70
	\$	\$	\$	\$	\$
<b>RECEIPTS</b>					
Repayable advance — State Government .....	—	800,000	—	—	—
Loan Funds — State Government .....	4,000,000	3,200,000	—	—	1,700,000
Loan Funds — Borrowings under Section 42A of the Main Roads Act .....	—	1,000,000	300,000	2,700,000	8,600,000
State and/or Commonwealth Government Grants .....	35,300	62,505	—	—	—
Commonwealth Aid Roads Acts .....	957,747	900,597	963,339	1,169,164	—
Contributions from other departments and bodies .....	133,446	25,640	—	186,480	639,683
<b>Total .....</b>	<b>\$ 5,126,493</b>	<b>5,988,742</b>	<b>1,263,339</b>	<b>4,055,644</b>	<b>10,939,683</b>
<b>PAYMENTS</b>					
Maintenance of roads, bridges and ferries — other than Main Roads .....	—	8,420	11,774	92,996	145,076
Construction and reconstruction —					
Main Roads (and bridges) .....	42,759	81,215	330,000	1,124,255	8,984,356
Roads (and bridges) other than Main Roads .....	6,438,311	3,010,449	11,097	890	388,741
Maintenance and construction — Unclassified roads in the Western Division .....	59,366	112,167	169,677	373,341	—
Department of Motor Transport — for Public Vehicles Fund .....	210,397	218,813	227,565	236,667	—
Department of Public Works — for works connected with transport by water and for research .....	561,200	556,000	555,000	558,266	—
Repayment of Principal and Payment of Sinking Fund — State Government Loans .....	115,276	133,713	140,592	145,202	153,345
Repayment of Principal — Loans raised under Section 42A of the Main Roads Act .....	—	—	—	32,568	54,597
<b>Total .....</b>	<b>\$ 7,427,309</b>	<b>4,120,777</b>	<b>1,445,705</b>	<b>2,564,185</b>	<b>9,726,115</b>

**Appendix No. 2—continued**

**(D) DEVELOPMENTAL ROADS FUND**

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30th JUNE, 1970

Heading	1965-66	1966-67	1967-68	1968-69	1969-70
	\$	\$	\$	\$	\$
<b>RECEIPTS</b>					
Commonwealth Aid Roads Acts .....	1,394,898	1,816,750	1,887,674	1,724,117	—
Other .....	150	—	—	—	—
<b>Total .....</b>	<b>\$ 1,395,048</b>	<b>1,816,750</b>	<b>1,887,674</b>	<b>1,724,117</b>	<b>—</b>
<b>PAYMENTS</b>					
Construction and reconstruction of Developmental Roads and Works .....	1,381,236	1,802,990	1,825,310	1,319,850	506,015
<b>Total .....</b>	<b>\$ 1,381,236</b>	<b>1,802,990</b>	<b>1,825,310</b>	<b>1,319,850</b>	<b>506,015</b>

**(E) TOTAL ALL ROADS FUNDS**

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30th JUNE, 1970

**(i) General Purposes**

Heading	1965-66	1966-67	1967-68	1968-69	1969-70
	\$	\$	\$	\$	\$
<b>RECEIPTS</b>					
Motor Vehicle taxation and fees (State) .....	29,879,441	31,153,308	32,672,687	34,836,765	36,646,833
Transfer from the Road Transport and Traffic Fund .....	1,556,733	338,148	10,108	—	—
Charge on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act (State) .....	11,035,114	11,405,130	12,565,544	14,799,421	15,872,005
Commonwealth Aid Roads Acts .....	24,084,559	26,033,667	27,728,469	29,260,836	40,206,880
Levy upon Councils under Section 11 of the Main Roads Act .....	6,418,388	7,600,200	8,240,912	7,538,001	9,819,528
Contributions by Councils .....	157,107	249,540	385,018	262,061	29,878
Other .....	782,155	951,672	1,167,822	980,299	1,369,632
<b>Total .....</b>	<b>\$ 73,913,497</b>	<b>77,731,665</b>	<b>82,770,560</b>	<b>87,677,383</b>	<b>103,944,756</b>
<b>PAYMENTS</b>					
Maintenance and minor improvement of roads and bridges .....	15,813,201	17,668,763	17,340,201	19,626,368	21,968,439
Construction and reconstruction of roads and bridges .....	45,127,889	47,184,602	46,181,767	49,935,619	54,467,352
Land acquisition .....	4,018,295	4,647,331	5,042,626	5,283,348	14,127,921
Administrative expenses .....	3,757,364	4,295,701	4,816,297	5,379,080	6,132,648
Planning and Research .....	—	—	—	—	314,854
Purchase of land and buildings for administration and operation .....	830,736	919,685	685,892	1,078,177	1,926,560
Interest, exchange, management and flotation expenses on State Loans .....	677,484	951,820	968,108	971,107	1,031,875
Interest on Loans raised under Section 42A of the Main Roads Act .....	248,537	289,372	305,983	550,610	927,718
Other .....	547,250	602,647	707,368	682,448	596,960
Repayment of Advances from State Treasury .....	200,000	200,000	200,000	200,000	200,000
<b>Total .....</b>	<b>\$ 71,220,756</b>	<b>76,759,921</b>	<b>76,248,242</b>	<b>83,706,757</b>	<b>101,694,327</b>

**(ii) Special Purposes**

Heading	1965-66	1966-67	1967-68	1968-69	1969-70
	\$	\$	\$	\$	\$
<b>RECEIPTS</b>					
Repayable advance — State Government .....	—	800,000	—	—	—
Loan Funds — State Government .....	4,000,000	4,000,000	4,700,000	4,800,000	2,000,000
Loan Funds — Borrowings under Section 42A of the Main Roads Act .....	1,005,000	1,700,000	4,050,000	8,100,000	8,600,000
State and/or Commonwealth Government Grants .....	35,300	62,505	—	—	—
Expressways — Contribution from Sydney Harbour Bridge Account .....	4,750,000	3,743,241	4,775,000	900,000	223,762
Commonwealth Aid Roads Acts .....	1,388,098	1,108,766	1,123,783	1,407,549	—
Contributions from other departments and bodies .....	133,446	505,640	—	228,388	639,683
<b>Total .....</b>	<b>\$ 11,311,844</b>	<b>11,920,152</b>	<b>14,648,783</b>	<b>15,435,937</b>	<b>11,463,445</b>
<b>PAYMENTS</b>					
Maintenance of roads, bridges and ferries — other than Main Roads .....	—	8,420	11,774	92,996	145,076
Construction and reconstruction —					
Main Roads (and bridges) .....	1,500,431	317,267	1,387,909	5,757,541	10,377,593
Roads (and bridges) other than Main Roads .....	6,438,311	3,037,512	11,097	273,827	388,741
Construction of Expressways .....	4,569,979	7,290,796	11,740,691	6,326,209	637,509
Maintenance and construction — Unclassified roads in the Western Division .....	59,366	112,167	169,677	373,341	—
Department of Motor Transport — for Public Vehicles Fund .....	262,996	273,516	284,456	295,834	—
Department of Public Works — for works connected with transport by water and for research .....	562,000	556,000	555,000	558,832	—
Repayment of Principal and Payment of Sinking Fund — State Government Loans .....	123,546	142,653	150,212	156,022	166,475
Repayment of Principal — Loans raised under Section 42A of the Main Roads Act .....	89,516	92,448	95,542	161,086	214,381
<b>Total .....</b>	<b>\$ 13,606,145</b>	<b>11,830,779</b>	<b>14,406,358</b>	<b>13,995,688</b>	<b>11,929,775</b>

**Appendix No. 2—continued**

**(F) SYDNEY HARBOUR BRIDGE ACCOUNT**

**STATEMENT OF INCOME AND EXPENDITURE FOR THE FIVE YEARS ENDED 30th JUNE, 1970**

Heading	1965-66	1966-67	1967-68	1968-69	1969-70
	\$	\$	\$	\$	\$
<b>INCOME</b>					
Road tolls on vehicles .....	3,858,700	3,878,326	4,010,747	4,302,533	4,549,136
Railway passenger tolls (net) .....	281,355	280,250	287,216	284,416	289,630
Omnibus passenger tolls .....	29,254	29,252	26,777	27,730	26,851
Rents .....	130,510	107,176	119,172	125,640	139,347
Other .....	1,302	352	76	—	—
<b>Total .....</b>	<b>\$ 4,301,121</b>	<b>4,295,356</b>	<b>4,443,988</b>	<b>4,740,319</b>	<b>5,004,964</b>
<b>EXPENDITURE</b>					
Loan Charges — State Loans					
Interest .....	775,150	777,150	767,400	755,970	751,830
Exchange .....	36,780	31,890	22,490	12,570	13,250
Sinking Fund .....	323,180	338,700	357,350	367,360	385,170
Management expenses .....	2,910	2,630	3,200	2,430	2,610
Flotation expenses .....	43,930	44,650	44,990	37,120	41,450
	1,181,950	1,195,020	1,195,430	1,175,450	1,194,310
Loan Charges — borrowings under Section 42A of the Main Roads Act, 1924					
Interest .....	83,145	269,947	471,768	517,747	508,958
Repayment of Principal .....	35,434	79,901	126,435	153,718	160,499
Transfer to Reserve for loan repayment .....	20,523	56,563	227,209	226,487	353,878
	139,102	406,411	825,412	897,952	1,023,335
Maintenance, lighting and cleaning bridge and approaches .....	567,977	584,015	570,742	577,746	576,936
Construction of additional roadway — conversion of area previously used by tramways .....	34,010	—	—	—	—
Provision of traffic facilities .....	78,063	116,592	136,103	132,184	149,018
Cost of collecting road tolls .....	424,825	542,742	539,634	584,275	635,340
Alterations to archways for occupation by tenants .....	35,424	—	—	72,694	70,046
Other .....	42,401	47,422	55,416	101,214	71,223
<b>Total .....</b>	<b>\$ 2,503,752</b>	<b>2,892,202</b>	<b>3,322,737</b>	<b>3,541,515</b>	<b>3,720,208</b>
<b>Surplus for the year .....</b>	<b>\$ 1,797,369</b>	<b>1,403,154</b>	<b>1,121,251</b>	<b>1,198,804</b>	<b>1,284,756</b>

**Appendix No. 3**

**SUMMARY OF LOAN LIABILITIES**

**LIABILITIES TO THE STATE TREASURY**

Particulars	County of Cumberland Main Roads Fund		Country Main Roads Fund		Developmental Roads Fund Section 21 (8) of Main Roads Act, 1924	Total
	Section 13 (4C) of Main Roads Act, 1924	Sydney-Newcastle Expressway	Section 21 (3, 3A and 3B) of Main Roads Act, 1924	Sydney-Newcastle Expressway		
	\$	\$	\$	\$	\$	\$
<b>GROSS LIABILITY ASSUMED —</b>						
Prior to 1st July, 1969 .....	3,600,000.00	9,300,000.00	13,785,304.52	13,700,000.00	3,449,038.99	43,834,343.51
During 1969/70 .....	—	300,000.00	1,400,000.00	300,000.00	—	2,000,000.00
<b>Total to 30th June, 1970 .....</b>	<b>3,600,000.00</b>	<b>9,600,000.00</b>	<b>15,185,304.52</b>	<b>14,000,000.00</b>	<b>3,449,038.99</b>	<b>45,834,343.51</b>
<b>REPAYMENT OF PRINCIPAL AND SINKING FUND CONTRIBUTION —</b>						
Prior to 1st July, 1969 —						
By Department .....	62,150.00	22,050.00	3,969,296.27	142,560.00	47,001.08*	4,243,057.35
By Commonwealth Government under Financial Agreement and Federal Aid Roads and Works Agreement .....	47,086.03	21,608.30	1,347,494.77	98,676.04	337,151.05	1,852,016.19
<b>Total prior to 1st July, 1969 .....</b>	<b>109,236.03</b>	<b>43,658.30</b>	<b>5,316,791.04</b>	<b>241,236.04</b>	<b>384,152.13</b>	<b>6,095,073.54</b>
During 1969/70 —						
By Department .....	13,130.00	25,880.00	153,345.21	44,660.00	—	237,015.21
By Commonwealth Government under Financial Agreement .....	8,784.62	23,491.88	26,681.33	33,606.94	8,450.33	101,015.10
<b>Total during 1969/70 .....</b>	<b>21,914.62</b>	<b>49,371.88</b>	<b>180,026.54</b>	<b>78,266.94</b>	<b>8,450.33</b>	<b>338,030.31</b>
<b>To 30th June, 1970 —</b>						
By Department .....	75,280.00	47,930.00	4,122,641.48	187,220.00	47,001.08	4,480,072.56
By Commonwealth Government under Financial Agreement and Federal Aid Roads and Works Agreement .....	55,870.65	45,100.18	1,374,176.10	132,282.98	345,601.38	1,953,031.29
<b>Total to 30th June, 1970 .....</b>	<b>131,150.65</b>	<b>93,030.18</b>	<b>5,496,817.58</b>	<b>319,502.98</b>	<b>392,602.46</b>	<b>6,433,103.85</b>
<b>NET LIABILITY AT 30th JUNE, 1970</b>	<b>3,468,849.35</b>	<b>9,506,969.82</b>	<b>9,688,486.94</b>	<b>13,680,497.02</b>	<b>3,056,436.53</b>	<b>39,401,239.66</b>

\* State Treasury has paid \$1,374,865.46 to 30th June, 1970 in connection with the Sinking Fund liability.

### Appendix No. 4

#### SUMMARY OF LOAN LIABILITIES

##### LOAN BORROWINGS UNDER SECTION 42A OF THE MAIN ROADS ACT

Particulars	County of Cumberland Main Roads Fund	Sydney-Newcastle Tollway		Country Main Roads Fund	Sydney Harbour Bridge Account		Total
		County of Cumberland	Country		Warringah Expressway		
	\$	\$	\$	\$	\$	\$	\$
GROSS LIABILITY ASSUMED —							
Prior to 1st July, 1969 .....	10,805,000	4,550,000	1,000,000	3,000,000	9,320,000		28,675,000
During 1969/70 .....	550,000	550,000Dr.	—	8,600,000	—		8,600,000
	\$11,355,000	\$4,000,000	\$1,000,000	\$11,600,000	\$9,320,000		\$37,275,000
REPAYMENT OF PRINCIPAL AND SINKING FUND CONTRIBUTION —							
Prior to 1st July, 1969 —							
Principal .....	446,150	10,000	35,499	32,568	395,489		919,706
Sinking Fund .....	654,414	107,925	43,994	82,065	591,198		1,479,596
During 1969/70 —							
Principal .....	159,784	10,000	19,352	54,597	160,499		404,232
Sinking Fund .....	128,550	52,125	19,647	96,915	353,878	651,115	247,804
Net Interest on Investments ..	40,316	—	—	165,252	42,236	247,804	
	168,866	52,125	19,647	262,167	396,114		898,919
Total to 30th June, 1970 .....	\$1,429,214	\$180,050	\$118,492	\$431,397	\$1,543,300		\$3,702,453
NET LIABILITY AT 30th JUNE, 1970	\$9,925,786	\$3,819,950	\$881,508	\$11,168,603	\$7,776,700		\$33,572,547

### Appendix No. 5

#### DETAILS OF LOANS RAISED DURING THE YEAR ENDED 30th JUNE, 1970

##### LOAN BORROWINGS UNDER SECTION 42A OF THE MAIN ROADS ACT

Loan No.	Rate %	Country Main Roads Fund		Term (Years)	Date of Maturity
		General Purposes			
		\$			
138	6.4	150,000		15	12th August, 1984
139	6.4	150,000		45	15th August, 2014
140	6.4	500,000		45	15th August, 2014
141	6.4	500,000		15	1st September, 1984
142	6.3	150,000		10	22nd August, 1979
143	6.4	750,000		25	26th September, 1994
144	6.3	500,000		10	10th October, 1979
145	6.3	100,000		10	26th September, 1979
146	6.4	300,000		15	3rd November, 1984
147	6.4	87,000		40	3rd November, 2009
148	6.3	100,000		10	17th October, 1979
149	6.3	100,000		10	7th November, 1979
150	6.1	200,000		4	2nd February, 1974
151	6.4	300,000		15	1st December, 1984
152	6.4	1,000,000		40	31st December, 2009
153	6.3	50,000		10	16th January, 1980
154	6.4	200,000		15	2nd March, 1985
155	6.4	250,000		15	13th March, 1985
156	6.4	250,000		20	20th February, 1990
157	6.1	175,000		4	31st March, 1974
158	7.15	200,000		7	8th June, 1977
159	7.4	1,000,000		20	3rd June, 1990
160	6.0	700,000		7	1st June, 1977
	6.2			10	1st June, 1980
	6.25			15	1st June, 1985
161	7.3	888,000		10	26th June, 1980
Total		\$8,600,000			

### Appendix No. 6

#### DETAILS OF OUTSTANDING LOANS AS AT 30th JUNE, 1970

##### LOAN BORROWINGS UNDER SECTION 42A OF THE MAIN ROADS ACT

Loan No.	Rate %	Balance of Loan					Term (Years)	Date of Maturity	Annual charge for interest
		County of Cumberland Main Roads Fund		Country Main Roads Fund		Sydney Harbour Bridge Account			
		General Purposes	Special Purposes	General Purposes	Special Purposes				
		\$	\$	\$	\$	\$		\$	
1	5.0	880,000	—	—	—	—	15	23rd March, 1979	44,000
2	5.125	630,000	—	—	—	—	10	8th September, 1974	31,929
3	5.125	200,000	—	—	—	—	15	7th September, 1979	10,250
4	5.5	82,258	—	—	—	—	20	6th October, 1984	4,472
5	5.5	361,642	—	—	—	—	15	27th October, 1979	19,485
6	5.125	102,564	—	—	—	—	10	28th October, 1974	4,993
7	5.375	100,000	—	—	—	—	10	1st October, 1974	5,375
8	5.5	100,000	—	—	—	—	15	25th February, 1980	5,500
9	5.375	200,000	—	—	—	—	10	26th February, 1975	10,750
10	5.5	100,000	—	—	—	—	18	3rd March, 1983	5,500
11	5.5	84,098	—	—	—	—	20	5th March, 1985	4,575
12	5.5	—	—	—	—	100,000	15	4th June, 1980	5,500
13	5.5	100,000	—	—	—	—	20	11th March, 1985	5,500

Appendix No. 6—continued

DETAILS OF OUTSTANDING LOANS AS AT 30th JUNE, 1970—continued

LOAN BORROWINGS UNDER SECTION 42A OF THE MAIN ROADS ACT—continued

Loan No.	Rate %	Balance of Loan				Sydney Harbour Bridge Account	Term (Years)	Date of Maturity	Annual charge for interest
		County of Cumberland Main Roads Fund		Country Main Roads Fund					
		General Purposes	Special Purposes	General Purposes	Special Purposes				
		\$	\$	\$	\$			\$	
14	5.375	—	—	—	—	226,366	10	13th May, 1975	11,629
15	5.5	75,199	—	—	—	—	15	28th April, 1980	4,057
16	5.75	100,000	—	—	—	—	20	31st May, 1985	5,750
17	5.75	200,000	—	—	—	—	15	16th June, 1980	11,500
18	5.75	400,000	—	—	—	—	30	17th June, 1985	23,000
19	5.75	90,000	—	—	—	—	15	22nd June, 1980	5,175
20	5.625	20,000	—	—	—	—	10	16th June, 1975	1,125
21	5.75	75,553	—	—	—	—	15	24th June, 1980	4,262
22	5.75	80,000	—	—	—	—	15	25th June, 1980	4,600
23	5.75	—	—	—	—	200,000	15	21st January, 1981	11,500
24	5.75	—	—	—	—	156,642	15	4th August, 1980	8,848
25	5.75	200,000	—	—	—	—	40	30th July, 2005	11,500
26	5.625	—	—	—	—	368,000	10	18th August, 1975	20,475
27	5.75	140,000	—	—	—	—	20	1st December, 1985	8,050
28	5.625	—	—	—	—	100,000	10	22nd December, 1975	5,625
29	5.75	100,000	—	—	—	—	20	1st February, 1986	5,750
30	5.75	50,000	—	—	—	—	30	16th December, 1995	2,875
31	5.75	—	—	—	—	60,000	15	17th January, 1981	3,450
32	5.625	—	—	—	—	200,000	10	25th January, 1976	11,250
33	5.75	100,000	—	—	—	—	25	1st February, 1991	5,750
34	5.625	—	—	—	—	20,000	10	7th March, 1976	1,125
35	5.75	100,000	—	—	—	—	50	21st March, 2016	5,750
36	5.75	—	—	—	—	100,000	15	5th April, 1981	5,750
37	5.75	—	—	—	—	100,000	15	4th April, 1981	5,750
38	5.625	—	—	—	—	50,000	10	1st April, 1976	2,812
39	5.75	—	—	—	—	200,000	15	18th May, 1981	11,500
40	5.75	100,000	—	—	—	—	30	12th May, 1996	5,750
41	5.75	—	—	—	—	324,047	15	19th May, 1981	18,323
42	5.75	—	—	—	—	100,000	15	12th May, 1981	5,750
43	5.625	—	—	—	—	80,000	10	7th June, 1976	4,500
44	5.75	10,000	—	—	—	—	16	31st May, 1982	575
45	5.75	150,000	—	—	—	—	40	21st June, 2006	8,625
46	5.75	—	—	—	—	184,000	15	20th June, 1981	10,580
47	5.75	50,000	—	—	—	—	30	15th June, 1996	2,875
48	5.75	5,000	—	—	—	—	16	31st May, 1982	288
49	5.75	—	—	—	—	162,024	15	21st June, 1981	9,162
50	5.625	—	—	—	—	80,000	10	23rd June, 1976	4,500
51	5.625	—	—	—	—	30,000	10	28th June, 1976	1,688
52	5.625	—	—	—	—	200,000	10	28th June, 1976	11,250
53	5.75	—	—	—	—	200,000	15	19th August, 1981	11,500
54	5.75	—	—	—	—	500,000	20	10th August, 1986	28,750
55	5.75	—	—	—	—	100,000	15	5th August, 1981	5,750
56	5.75	—	—	—	—	10,000	16	31st May, 1982	575
57	5.875	—	—	345,149	—	—	15	27th April, 1982	19,981
58	5.75	—	—	—	—	15,000	15	16th August, 1981	862
59	5.75	—	—	—	—	188,000	15	1st November, 1981	10,695
60	5.75	—	—	—	—	100,000	15	22nd November, 1981	5,750
61	5.625	—	—	—	—	250,000	10	19th December, 1976	14,062
62	5.625	—	—	—	—	110,000	10	1st February, 1977	6,187
63	5.75	—	—	—	—	100,000	15	28th December, 1981	5,750
64	5.75	—	—	—	—	282,000	15	1st February, 1982	16,215
65	5.75	—	—	—	—	100,000	15	14th February, 1982	5,750
66	5.75	—	—	—	—	6,000	15	31st May, 1982	345
67	5.625	—	—	—	—	129,577	7	21st February, 1974	6,484
68	5.75	—	—	—	—	15,000	15	1st February, 1982	863
69	5.875	—	—	—	200,000	—	15	2nd March, 1982	11,750
70	5.875	—	—	—	200,000	—	20	1st April, 1987	11,750
71	5.875	—	300,000	—	—	—	15	17th March, 1982	17,625
72	5.875	—	400,000	—	—	—	25	15th March, 1992	23,500
73	5.875	—	—	—	—	—	15	1st June, 1982	11,750
74	5.5	—	—	—	200,000	—	6	1st May, 1973	4,125
75	5.75	—	—	—	—	75,000	10	11th April, 1977	1,092
76	5.875	—	—	—	—	19,000	15	3rd August, 1982	35,250
77	5.875	—	—	—	—	600,000	20	1st August, 1987	5,875
78	5.75	—	—	—	—	50,000	10	6th September, 1977	2,875
79	5.875	—	—	—	—	464,337	20	13th July, 1987	27,051
80	5.875	—	—	—	—	500,000	45	21st July, 2012	29,375
81	5.875	—	100,000	—	—	—	30	1st December, 1997	5,875
82	5.875	288,000	—	—	—	—	15	15th August, 1982	16,744
83	5.875	—	—	—	—	20,000	15	16th August, 1982	1,175
84	5.875	—	—	—	—	50,000	24	31st August, 1991	2,938
85	5.75	—	—	—	—	50,000	10	6th September, 1977	2,875
86	5.75	—	—	—	—	16,008	10	18th September, 1977	895
87	5.875	400,000	—	—	—	—	15	6th October, 1982	23,500
88	5.875	—	—	—	—	100,000	16	1st October, 1983	5,875
89	5.875	—	—	—	—	100,000	30	27th November, 1997	5,875
90	5.375	—	417,200	—	—	—	7	1st December, 1974	—
	5.625	—	803,900	—	—	—	10	1st December, 1977	—
	5.625	—	28,900	—	—	—	15	1st December, 1982	69,479
91	5.875	—	—	—	—	50,000	15	26th October, 1982	2,938
92	5.75	—	—	—	—	20,000	10	16th October, 1977	1,150
93	5.875	—	—	—	—	70,000	15	1st November, 1982	4,112
94	5.75	—	—	—	—	225,000	10	17th November, 1977	12,578
95	5.875	—	—	—	—	150,000	15	21st November, 1982	8,812
96	5.875	—	192,000	—	—	—	15	21st November, 1982	11,162
97	5.75	—	—	—	—	24,012	10	22nd November, 1977	1,343
98	5.875	—	—	—	—	400,000	25	16th February, 1993	23,500
99	5.875	—	—	—	—	500,000	45	8th December, 2012	29,375
100	5.875	—	750,000	—	—	—	45	19th January, 2013	44,062
101	5.75	—	—	—	—	40,000	10	16th January, 1978	2,300
102	5.875	—	288,000	—	—	—	15	1st March, 1983	16,920
103	5.875	—	300,000	—	—	—	15	15th March, 1983	17,625
104	5.75	—	—	210,652	—	—	10	15th March, 1978	11,809
105	5.875	150,000	—	—	—	—	15	15th March, 1983	8,812
106	5.875	—	—	30,000	—	—	25	1st April, 1993	1,762
107	5.75	—	—	20,000	—	—	10	8th May, 1978	1,150
108	5.875	—	—	250,000	—	—	40	16th July, 2008	14,688
109	5.875	—	—	500,000	—	—	15	26th July, 1983	29,375
110	5.875	100,000	—	—	—	—	15	31st October, 1983	5,875
111	5.875	40,000	—	—	—	—	25	31st October, 1993	2,350
112	5.875	479,224	—	—	—	—	20	6th September, 1988	27,939
113	5.75	20,000	—	—	—	—	10	8th July, 1978	1,150

**Appendix No. 6—continued**

**DETAILS OF OUTSTANDING LOANS AS AT 30th JUNE, 1970—continued**

**LOAN BORROWINGS UNDER SECTION 42A OF THE MAIN ROADS ACT—continued**

Loan No.	Rate %	Balance of Loan					Term (Years)	Date of Maturity	Annual charge for interest
		County of Cumberland Main Roads Fund		Country Main Roads Fund		Sydney Harbour Bridge Account			
		General Purposes	Special Purposes	General Purposes	Special Purposes				
		\$	\$	\$	\$	\$		\$	
114	5.875	—	—	300,000	—	—	45	26th July, 2013	17,625
115	5.875	150,000	—	—	—	—	45	26th July, 2013	8,813
116	5.875	28,000	—	—	—	—	15	3rd December, 1983	1,645
117	5.75	190,000	—	—	—	—	10	6th September, 1978	10,638
118	5.75	100,000	—	—	—	—	10	4th October, 1978	5,750
119	5.875	—	—	400,000	—	—	15	1st November, 1983	23,500
120	5.875	400,000	—	—	—	—	15	14th October, 1983	23,500
121	5.875	100,000	—	—	—	—	15	8th November, 1983	5,875
122	5.875	200,000	—	—	—	—	15	7th November, 1983	11,750
123	5.875	300,000	—	—	—	—	45	29th November, 2013	17,625
124	5.875	400,000	—	—	—	—	45	3rd January, 2014	23,500
125	5.875	—	—	958,449	—	—	20	29th November, 1988	55,878
126	5.875	—	—	250,000	—	—	40	20th November, 2008	14,688
127	5.75	92,100	—	—	—	—	10	29th November, 1978	5,296
128	5.75	190,000	—	—	—	—	10	6th December, 1978	10,637
129	5.875	1,000,000	—	—	—	—	40	28th November, 2008	58,750
130	5.5	100,000	—	—	—	—	4	6th December, 1972	5,500
131	5.875	—	400,000	—	—	—	15	3rd February, 1984	23,500
132	5.875	100,000	—	—	—	—	15	22nd January, 1984	5,875
133	5.875	12,000	—	—	—	—	15	3rd January, 1984	705
134	5.875	765,528	—	—	—	—	15	3rd January, 1984	44,446
135	5.875	90,000	—	—	—	—	15	28th February, 1984	5,287
136	5.875	50,000	—	—	—	—	15	18th February, 1984	2,937
137	5.75	17,900	—	—	—	—	10	27th March, 1979	1,029
138	6.4	—	—	150,000	—	—	15	12th August 1984	9,600
139	6.4	—	—	150,000	—	—	45	15th August, 2014	9,600
140	6.4	—	—	500,000	—	—	45	15th August, 2014	32,000
141	6.4	—	—	500,000	—	—	15	1st September, 1984	32,000
142	6.3	—	—	150,000	—	—	10	22nd August, 1979	9,214
143	6.4	—	—	743,734	—	—	25	26th September, 1994	47,392
144	6.3	—	—	500,000	—	—	10	10th October, 1979	31,500
145	6.3	—	—	100,000	—	—	10	26th September, 1979	6,143
146	6.4	—	—	300,000	—	—	15	3rd November, 1984	19,200
147	6.4	—	—	87,000	—	—	40	3rd November, 2009	5,568
148	6.3	—	—	100,000	—	—	10	17th October, 1979	6,300
149	6.3	—	—	100,000	—	—	10	7th November, 1979	6,143
150	6.1	—	—	200,000	—	—	4	2nd February, 1974	12,200
151	6.4	—	—	300,000	—	—	15	1st December, 1984	19,200
152	6.4	—	—	1,000,000	—	—	40	31st December, 2009	64,000
153	6.3	—	—	50,000	—	—	10	16th January, 1980	3,150
154	6.4	—	—	200,000	—	—	15	2nd March, 1985	12,800
155	6.4	—	—	250,000	—	—	15	13th March, 1985	16,000
156	6.4	—	—	250,000	—	—	20	20th February, 1990	15,899
157	6.1	—	—	175,000	—	—	4	31st March, 1974	10,997
158	7.15	—	—	200,000	—	—	7	8th June, 1977	14,300
159	7.4	—	—	1,000,000	—	—	20	3rd June, 1990	70,754
160	6.0	—	—	458,200	—	—	7	1st June, 1977	42,490
160	6.2	—	—	229,500	—	—	10	1st June, 1980	42,490
160	6.25	—	—	12,300	—	—	15	1st June, 1985	42,490
161	7.3	—	—	888,000	—	—	10	26th June, 1980	64,824
<b>Total</b>		<b>\$10,749,066</b>	<b>\$3,980,000</b>	<b>\$11,512,835</b>	<b>\$945,149</b>	<b>\$8,764,013</b>			<b>\$2,124,131</b>

**Appendix No. 6A**

**DETAILS OF INVESTMENTS OF LOAN RESERVE FUNDS AS AT 30th JUNE, 1970**

**LOAN BORROWINGS UNDER SECTION 42A OF THE MAIN ROADS ACT**

Investment No.	Nature of Investment	Amount			Rate of Interest	Date of Maturity
		County of Cumberland Fund	Country Main Roads Fund	Sydney Harbour Bridge Loan Reserve Account		
702	Commonwealth Government Inscribed Stock	\$ 50,000	\$ —	\$ —	% 5.0	15th November, 1975
703	Commonwealth Government Inscribed Stock	50,000	—	—	5.25	15th July, 1988
704	Department of Main Roads N.S.W. Inscribed Stock	—	—	19,000	5.75	11th April, 1977
705	Department of Main Roads N.S.W. Inscribed Stock	50,000	—	—	5.75	6th September, 1977
706	Department of Main Roads N.S.W. Inscribed Stock	—	—	50,000	5.75	6th September, 1977
707	Department of Main Roads N.S.W. Inscribed Stock	—	—	150,000	5.325	1st December, 1974
708	Metropolitan Water Sewerage and Drainage Board Inscribed Stock	100,000	20,000	80,000	5.75	1st April, 1978
709	Department of Main Roads N.S.W. Inscribed Stock	—	—	20,000	5.75	8th May, 1978
710	Metropolitan Water Sewerage and Drainage Board Inscribed Stock	250,000	—	—	5.75	27th February, 1979
711	Metropolitan Water Sewerage and Drainage Board Inscribed Stock	135,300	—	—	5.75	1st February, 1979
712	Department of Main Roads N.S.W. Inscribed Stock	17,900	—	—	5.75	27th March, 1979
713	Metropolitan Water Sewerage and Drainage Board Inscribed Stock	—	—	200,000	5.75	28th April, 1979
714	Commonwealth Government Inscribed Stock	25,000	75,000	50,000	5.3	15th April, 1976
715	Department of Main Roads N.S.W. Inscribed Stock	20,000	50,000	—	6.0	1st June, 1977
716	Department of Main Roads N.S.W. Inscribed Stock	250,000	250,000	388,000	7.3	26th June, 1980

**Appendix No. 7**

**COMMONWEALTH AID ROADS FUND**

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS

**(A) COUNTY OF CUMBERLAND AREA**

**(i) Expressways**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
		<b>NORTH WESTERN EXPRESSWAY</b>			
Hunters Hill	X3	Bridge over Tarban Creek	Repairs to portal leg joints	Department	142,515
					\$142,515
		<b>WESTERN EXPRESSWAY</b>			
Auburn	X4	King Avenue, Auburn	Prestressed concrete bridge	Department	2,066
Do	X4	Hill Road, Auburn	do	do	6,228
Holroyd	X4	Clay Cliff Creek	Piping	do	11,478
Penrith	X4	Mulgoa Road, 15.97m. from Penrith	Overpass	do	182,032
Do	X4	Bringelly Road, 13.47m. from Penrith	Underpass	do	18,309
Do	X4	Nepean River at Regentville	Prestressed concrete bridge	do	558,963
Do	X4	Regentville to St. Marys	Construction	do	1,806,336
Do	X4	South Creek, 9.57m. from Penrith	Box culvert	do	202,190
Do	X4	South Creek, 9.89m. from Penrith	Twin bridges	do	161,598
Do	X4	Bridge over Nepean River at Regentville	Western approach	do	5,835
					\$2,955,035
		<b>SOUTH WESTERN EXPRESSWAY</b>			
Campbelltown	X5	Brooks Road, Ingleburn	Overbridge	Department	61,968
Do	X5	Aero Road, Ingleburn	Twin overbridges	do	28,837
Do	X5	Cross Roads to Campbelltown	Construction	do	971,783
Do	X5	Cottage Creek, 4.18m. from S.H. No. 2	Prestressed concrete bridge	do	2,553
					\$1,065,141
		<b>WESTERN DISTRIBUTOR</b>			
Sydney	X6	Western Distributor	Construction 1st stage	Department	954,719
					\$954,719
					Total — Expressways
					\$5,117,410

**(ii) State Highways**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
		<b>PRINCE'S HIGHWAY</b>			
Rockdale	1	Bay Street to Catherine Street	Widening and reconstruction	Department	193,396
Sutherland	1	Auburn Road to Hotham Road	Reconstruction and widening	do	12,402
Do	1	Anzac Avenue, Engadine to Veno Street, Heathcote	Dual carriageway and deviation	do	525,243
					\$731,041
		<b>HUME HIGHWAY</b>			
Bankstown	2	Johnson Road to S.H. No. 13	Kerbside lanes	Department	316,835
Burwood	2	Intersection with Burwood Road	Widening and realignment	do	42,550
Camden	2	Bridge over Nepean River at Camden	Reinforced concrete substructure	do	72,554†
Liverpool	2	Warwick Farm Overbridge to Cabramatta Creek	Kerb and gutter	do	32,882
Do	2	Water Board Pipe-line to Camden	Resheeting	do	9,775
					\$474,596

† For additional expenditure see Appendix No. 9A.

**Appendix No. 7—continued**

**COMMONWEALTH AID ROADS FUND—continued**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued**

**(A) COUNTY OF CUMBERLAND AREA—continued**

**(ii) State Highways—continued**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
<b>GREAT WESTERN HIGHWAY</b>					
Blacktown	5	19.98m. to 21.75m. west of Sydney	Deviation	Department	80,891
Do	5	21.57m. to 23.3m. west of Sydney	Reconstruction	do	475,420
Do	5	Eastern Creek Bridge to Chatsworth Road	do	do	416,822
Do	5	Eastern Creek	Steel and concrete bridge	do	80,125
Penrith	5	Intersection with Henry Street East, Penrith	Reconstruction	do	50,920
Do	5	Bound Creek, 30.1m. west of Sydney	Widening to four lanes	do	62,797
Do	5	Evans Street to Henry Street West	Asphaltic concrete surfacing	do	21,584
Do	5	Intersection with Henry Street, Penrith	Reconstruction	do	140,081
Do	5	Quarry Hill, 31m. west of Sydney	Dual carriageway	do	316,777
Do	5	Chatsworth Road to Bennett Road	Reconstruction	do	232,366
Do	5	Ropes Creek, 27.4m. west of Sydney	Prestressed concrete bridge	do	18,529
					\$1,896,312
<b>PACIFIC HIGHWAY</b>					
Hornsby	10	Leonard Street to Edgeworth David Avenue	Widening	Department	23,479
					\$23,479
<b>STATE HIGHWAY No. 13</b>					
Bankstown and Fairfield	13	Railway Overbridge at Villawood	Approaches	Department	403,977
Bankstown	13	Villawood	Railway overbridge	do	140,934
Baulkham Hills	13	Carlingford Road Overbridge to Felton Road	Reconstruction	do	34,438
Hornsby	13	Thompson Corner to Beecroft Road	Asphaltic concreting	do	38,840
Do	13	Carlingford Road to Murray Farm Road	Kerbside lanes	do	181,303
Parramatta	13	Macquarie Street to Lennox Bridge	Drainage	do	44,730
Do	13	Evans Road to Carlingford Overbridge	Reconstruction	do	47,295
					\$891,517
Total — State Highways					\$4,016,945

**(iii) Ordinary Main Roads**

Bankstown	167	Victoria Street to M.R. No. 508	Reconstruction and widening	Department	38,676
Bankstown, Strathfield and Canterbury	315 and 549	Margaret Street to Waish Avenue, South Enfield	Ke:b and gutter	do	9,973
Baulkham Hills	160	3.1m. to 4.74m. north of Rogans Hill	Reconstruction and widening	Council	30,680
Baulkham Hills and Parramatta	184	Barney Street to Briens Road	Widening of carriageway	Department	161,789
Baulkham Hills	184	Intersection with Annangrove Road	Improvement	do	6,660
Do	184	Coronation Street to Palace Road	Four lanes	do	57,856
Do	184	President Avenue to Acres Road, Kellyville	Reconstruction and widening	do	98,322
Do	184	M.R. No. 160 to Coronation Street	Kerbside lanes	do	6,227
Botany	170	Over Mill Pond Creek	Reinforced concrete bridge	do	19,944
Do	170	McIntosh Street to Mill Pond Road	Widening	do	51,470†
Do	170	McFadyen Street to Cranbrook Street	Reconstruction	do	35,113
Botany and Randwick	593	Dowling Street to Dransfield Avenue	do	do	1,085,377†
Randwick and South Sydney	593	Over Epsom Road	Reinforced concrete bridge	do	12,726†

† For additional expenditure see Appendix No. 8A.

Appendix No. 7—continued

COMMONWEALTH AID ROADS FUND—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(A) COUNTY OF CUMBERLAND AREA—continued

(iii) Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Botany	593	Access to the Lakes Golf Club	Reinforced concrete subway	Department	70,775
Do	344	South Dowling Street extension to Cornish Circle	Dual carriageway	do	40,572
Do	344	Botany Road to Dransfield Avenue	Reconstruction	do	58,716†
Do	344	Page Street to Baker Street	do	Council	5,788
Do	593	South Bound Carriageway over Mill Pond Creek	Reinforced concrete bridge	Department	2,776†
Campbelltown	177	Spring Creek, 11.6m. south of S.H. No. 2	Box culvert and approaches	do	29,492
Concord	589	M.R. No. 200 to M.R. No. 315	Reconstruction	Council	20,706
Drummoyno and Hunters Hill	165	Parramatta River at Gladesville	Prestressed concrete arch bridge	Department	98,330
Drummoyno and Leichhardt	165	Bridge over Iron Cove	Widening	do	33,550
Fairfield	515	Intersection of Meadows Road	Widening and drainage	do	7,493
Do	534	Hume Highway to Cabramatta Shopping Centre	Widening and strengthening	Council	10,000
Do	534	Cabramatta	Overbridge	Department	66,407
Hornsby	139	Epping Railway Station	Pedestrian overbridge	do	8,860
Do	139	Epping Railway Overbridge	Widening of approaches	do	107,127
Do	587	Bridge Road to Asquith	Reconstruction	do	232,800
Hurstville	315	Stoney Creek Road to Forest Road	Widening and reconstruction	Council	11,997
Ku-ring-gai	162	Yanko Road to Kendall Street, Pymble	Reconstruction and widening	Department	374,521
Do	162	Putarri Avenue to Killeaton Street	Reconstruction and widening	do	197,584
Do	328	Ferncourt Avenue to Rowe Street, Roseville	Dual carriageway	do	25,048
Lane Cove	166	Burns Bay Road to Epping Road	Reconstruction	do	138,932
Do	373	Near Cumberland Avenue	Restoration of slip	do	20,377
Do	373	Lane Cove River to Moore Street	Widening	do	30,312
Liverpool	167	0m. to 1.8m. from Milperra Bridge	Dual carriageway	do	10,572
Mosman	164	Glover Street to Palling Street	Widening	do	15,071
Do	164	Clifford Street to Bickell Road	Reconstruction and widening	do	271,583
Parramatta	139	Epping	Overbridge	do	64,490
Parramatta and Ryde	158	Victoria Road to Pennant Hills Road	Reconstruction, bitumen surfacing and surface drainage	do	21,978
Parramatta	165	Grandview Street, Rydalmere.	Improvement of drainage	do	13,023
Do	574	Kirby Street, Dundas	Reconstruction and pavement widening	do	102,340
Penrith	154	Jamison Street to Barber Avenue	Reconstruction	do	273,603
Ryde	139	Blaxland Road and Rowe Street	Channelisation	Council	11,342
Do	162	Epping Road to Fontenoy Road	Dual carriageway	Department	3,003
Ryde and Ku-ring-gai	162	Andrew Avenue to Fontenoy Road	Reconstruction, widening and deviation	do	7,868
Ryde	200	Junction Street to Victoria Road	Asphaltic concreting	do	14,635
Do	373	Intersection with M.R. No. 191	Channelisation	do	3,454
Do	373	Bridge over Shrimptons Creek at Marsfield	Widening	do	94,693
Do	373	Paul Street to Vimiera Road	Reconstruction	do	377,385
Sutherland	227	Bellingara Road to Parraweena Road	Widening and reconstruction	Council	7,792
South Sydney	170	Intersection with O'Riordan Street and Wyndham Street	Channelisation	do	3,756
Sydney and South Sydney	593	Flinders Street to Todman Avenue	Widening	Department	732,968
Sydney	593	Napier & South Dowling Streets, Paddington	Reconstruction	Council	4,045
Warringah	162	Alan Street to Pittwater Road, Mona Vale	do	Department	14,998
Do	164	Bassett Street to Bardo Road, Newport	Reconstruction and widening	do	192,188
Do	164	Namona Street to Elimatta Road, Mona Vale	Reconstruction	do	413,034
Do	328	Over Forest Way	Pedestrian overbridge	do	40,629
Do	530	Surfers Parade to Wyuna Avenue, Harbord	Construction	Council	7,000
Do	530	Western Side Pitt Road to Abbott Road, Curl Curl	Drainage, kerb and gutter	do	2,499
Do	530	Lawrence Street to Surfers Parade	Reconstruction and sealing of side strips	do	5,000
Willoughby	599	Sailors Bay Road to Babbage Road	Reconstruction and widening	Department	660,333
Windsor	184	Intersection with Macquarie and Bridge Streets	do	do	83,502
Woollahra	172	Northern Side Queen Street to Grosvenor Street, Bondi Junction	Construction	Council	3,000
Do	173	North from Sassafras Lane on western side	Reconstruction of road shoulders	do	3,850
Total — Ordinary Main Roads					\$6,669,610

† For additional expenditure see Appendix No. 8.

**Appendix No. 7—continued**

**COMMONWEALTH AID ROADS FUND—continued**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued**

**(A) COUNTY OF CUMBERLAND AREA—continued**

**(iv) Secondary Roads**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Ashfield .....	2056	S.H. No. 5 to Dobroyd Parade .....	Reconstruction and widening .....	Department .....	119,936
Bankstown .....	2068	Railway Underpass to Tower Street .....	Reconstruction .....	Council .....	5,142†
Baulkham Hills .....	2084	0.64m. west of Katherin Street .....	Reconstruction of pavement .....	do .....	15,000
Drummoyne .....	2013	Great North Road to Henley Marine Drive .....	Reconstruction and bitumen surfacing .....	do .....	7,000
Hunters Hill .....	2033	Luke Street to Mary Street .....	Strengthening kerbside lanes .....	do .....	6,495
Lane Cove .....	2070	Between William Edward Street and Warraroon Road, stage 2 .....	Reconstruction and widening .....	do .....	16,983
Do .....	2070	Gore Creek to Northwood Road, Northwood .....	Widening and realignment .....	do .....	10,845
Do .....	2070	North Side between Canberra Avenue and Anglo Lane .....	Reconstruction .....	do .....	4,552
Do .....	2070	Between Burns Bay Road and Bridge Street .....	Reconstruction and widening .....	do .....	16,576
North Sydney .....	2070	River Road. From Baronia Street to Canberra Avenue .....	do .....	do .....	6,000
Randwick .....	2074	Malabar Junction .....	Improvement .....	do .....	10,000
<b>Total — Secondary Roads .....</b>					<b>\$218,529</b>

**(v) Roads other than Main Roads**

Bankstown .....		Railway Overbridge, Stacey Street, Bankstown .....	Approaches .....	Department .....	477,844
Do .....		Stacey Street, Bankstown .....	Railway overbridge .....	do .....	292,278
Bankstown and Sutherland .....		Bridge over Georges River at Alford's Point .....	Approaches .....	do .....	312,124
Botany .....		Amelia Street Underpass to Botany Road .....	Reconstruction and widening .....	do .....	106,037‡
Hunters Hill .....		Nemba Street to Church Street .....	Access Road .....	do .....	60,200
Rockdale .....		Cooks River at Marsh Street .....	Prestressed concrete bridge .....	do .....	256,777†
<b>Total — Roads other than Main Roads .....</b>					<b>\$1,505,260</b>

**(B) COUNTRY URBAN AREAS**

**(i) Expressways**

SOUTHERN EXPRESSWAY

Wollongong .....	X6	0.19m. to 0.59m. south of M.R. No. 513 .....	Additional lane .....	Department .....	18,737
Do .....	X6	Byarong Avenue, 2.5m. south of Wollongong .....	Temporary pedestrian overbridge .....	do .....	4,981
Do .....	X6	Gladstone Avenue to M.R. No. 295 .....	Dual carriageway .....	do .....	10,482
Do .....	X6	Mt. Keira Bridge to Gladstone Avenue .....	do .....	do .....	62,947
Do .....	X6	Five Islands Road to Northcliffe Drive .....	Construction .....	do .....	194,956
Do .....	X6	Porter Street .....	Prestressed concrete bridge .....	do .....	4,462
Do .....	X6	Porter Street extension .....	Dual carriageway .....	do .....	4,029*
<b>Total — Expressways .....</b>					<b>\$300,594</b>
<b>Total — Expressways .....</b>					<b>\$300,594</b>

**(ii) State Highways**

PRINCE'S HIGHWAY

Wollongong .....	1	1.65m. to 1.8m. south of Wollongong .....	Kerbside lanes .....	Council .....	4,000
Do .....	1	1.29m. north of Wollongong .....	improvement .....	Department .....	94,851
<b>Total .....</b>					<b>\$98,851</b>

PACIFIC HIGHWAY

Lake Macquarie .....	10	Robert Street to Ada Street, South Belmont .....	Dual carriageway including approaches to Cold Tea Creek .....	Department .....	34,263
Do .....	10	South Street to Oakdale Road, South Gateshead .....	Dual carriageway .....	do .....	40,425
Do .....	10	5.92m. to 6.93m. south of Newcastle .....	Reconstruction and bitumen surfacing .....	do .....	548,641

\* For additional expenditure see Appendix No. 9.

† For additional expenditure see Appendix No. 8.

‡ For additional expenditure see Appendix No. 8A.

**Appendix No. 7—continued**

**COMMONWEALTH AID ROADS FUND—continued**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued**

**(B) COUNTRY URBAN AREAS—continued**

**(ii) State Highways—continued**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
		<b>PACIFIC HIGHWAY—continued</b>			
Newcastle .....	10	Cottage Creek .....	Reinforced concrete bridge .....	Council .....	9,078
Do .....	10	Mund Street to Wallsend Road .....	Reconstruction .....	do .....	140,000
Tweed .....	10	Intersection with Boundary Street, Tweed Heads .....	Channelisation .....	Department .....	50,437
					\$822,844
				<b>Total — State Highways .....</b>	
					\$921,695

**(iii) Trunk and Ordinary Main Roads**

Camden .....	259	1.24m. from S.H. No. 2 .....	Improvement and strengthening .....	Council .....	1,000
Wollongong .....	295	Springhill Road to Glastonbury Avenue .....	Widening .....	do .....	9,000
Do .....	295	Intersection with M.R. No. 568 .....	Channelisation .....	do .....	3,454
Do .....	295	Glastonbury Avenue to M.R. No. 568, Cringilla .....	Reconstruction .....	do .....	18,000
Do .....	522	Intersection with Northcliffe Drive .....	Improvement .....	do .....	11,794
Do .....	522	Lake Illawarra at Windang .....	Duplication of bridge .....	Department .....	183
Do .....	582	Church Street to Corrimal Street .....	Reconstruction .....	Council .....	10,970
Lake Macquarie .....	217	Cross Roads to Cockle Creek Railway Station .....	Reconstruction and bitumen surfacing .....	do .....	19,582
Do .....	217	Cross Roads at Glendale .....	Improvement .....	do .....	7,000
Do .....	and 223				
Do .....	217	Bridge over Fennells Bay, north of Toronto .....	Approaches .....	do .....	37,193
Do .....	527	Winding Creek, Cardiff .....	Reinforced concrete bridge .....	do .....	7,383
Newcastle .....	82	Turton Road to Broadmeadow Road .....	Reconstruction .....	do .....	16,560
Do .....	316	Selwyn Street .....	Railway overbridge .....	do .....	19,061
Do .....	316	George Street to Bull Street .....	Industrial route .....	do .....	255,285
Do .....	326	Highfields Street to Bull Street .....	Reconstruction .....	do .....	41,362
Shellharbour .....	522	Woodford Avenue to Williams Avenue .....	Dual carriageways .....	do .....	19,734
				<b>Total — Trunk and Ordinary Main Roads .....</b>	
					\$477,561

**(C) COUNTRY RURAL AREAS**

**(i) State Highways**

		<b>PRINCE'S HIGHWAY</b>			
Imlay .....	1	4.91m. to 8.21m. south of Eden .....	Construction .....	Department .....	392,514
					\$392,514
		<b>HUME HIGHWAY</b>			
Goodradigbee .....	2	17.8m. to 20m. south west of Yass .....	Reconstruction .....	Department .....	288,935
Mittagong .....	2	White Horse Bridge, 13.88m. to 14.96m. south of Picton .....	Improvement to southern approach .....	do .....	309,431
Mulwaree .....	2	48.7m. to 50.4m. south of Mittagong .....	Reconstruction .....	do .....	414,547
Wollondilly .....	2	46m. to 47m. south of Sydney .....	do .....	do .....	495,122
					\$1,508,035
		<b>SNOWY MOUNTAINS HIGHWAY</b>			
Snowy River .....	4	6m. to 8.4m. west of Kiandra .....	Reconstruction and bitumen surfacing .....	Department .....	286,097
Do .....	4	22.8m. west of Adaminaby to 1.3m. west of Kiandra .....	do .....	do .....	160,133
Tumut .....	4	32.9m. to 39.4m. east of Tumut .....	do .....	do .....	238,748

Appendix No. 7—continued

COMMONWEALTH AID ROADS FUND—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(C) COUNTRY RURAL AREAS—continued

(i) State Highways—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
SNOWY MOUNTAINS HIGHWAY—continued					
Tumut .....	4	27.1m. to 39.4m. east of Tumut .....	Reconstruction and bitumen surfacing .....	Department .....	380,681
Do .....	4	Blowering Dam .....	Deviation .....	do .....	150,000
					\$1,215,659
GREAT WESTERN HIGHWAY					
Turon .....	5	24.4m. to 27.7m. west of Lithgow .....	Deviation .....	Department .....	342,564
					\$342,564
MID WESTERN HIGHWAY					
Lyndhurst .....	6	2.5m. to 8m. west of Blayney .....	Reconstruction and bitumen surfacing .....	Department .....	232,224
					\$232,224
MITCHELL HIGHWAY					
Canobolas .....	7	28.8m. to 31.4m. west of Bathurst .....	Reconstruction and bitumen surfacing .....	Department .....	166,122
Do .....	7	26.7m. to 31.6m. west of Bathurst .....	Reconstruction .....	do .....	146,235
Talbragar .....	7	19m. to 24.4m. west of Wellington .....	Reconstruction and pavement widening .....	do .....	139,477
					\$451,834
BARRIER HIGHWAY					
Central Darling .....	8	0m. to 7m. east of Wilcannia .....	Reconstruction and bitumen surfacing .....	Department .....	193,533
Cobar .....	8	80m. to 92.8m. west of Cobar .....	do .....	do .....	94,900†
					\$288,433
NEW ENGLAND HIGHWAY					
Guyra .....	9	1m. to 6.5m. north of Guyra to Llangothlin .....	Deviation on eastern side of railway .....	Department .....	280,965
Newcastle .....	9	11.18m. to 13.93m. north of Newcastle .....	Deviation .....	do .....	345,718
Tamarang .....	9	24.1m. to 25.75m. north of Murrurundi .....	Reconstruction and bitumen surfacing .....	do .....	154,778
					\$781,461
PACIFIC HIGHWAY					
Coffs Harbour .....	10	3.4m. to 4.8m. north of Coffs Harbour .....	Reconstruction .....	Department .....	143,648
Do .....	10	9.2m. to 12.2m. north of Coffs Harbour .....	Reconstruction, widening and bitumen surfacing .....	do .....	201,135
Tweed .....	10	5.97m. to 6.98m. south of Murwillumbah .....	Climbing lanes .....	do .....	145,796
Woodburn .....	10	10.5m. to 13.5m. south of Woodburn .....	Reconstruction and bitumen surfacing .....	do .....	177,101
					\$667,680
OXLEY HIGHWAY					
Hastings .....	11	38.5m. to 43.38m. west of Port Macquarie .....	Reconstruction and bitumen surfacing .....	Department .....	360,854
					\$360,854

† For additional expenditure see Appendix No. 9.

**Appendix No. 7—continued**

**COMMONWEALTH AID ROADS FUND—continued**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued**

**(C) COUNTRY RURAL AREAS—continued**

**(i) State Highways—continued**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
<b>STURT HIGHWAY</b>					
Kyeamba .....	14	17.26m. to 18.48m. west of S.H. No. 2 .....	Reconstruction and bitumen surfacing .....	Department .....	193,262
Do .....	14	13.8m. to 17.55m. west of S.H. No. 2 .....	Deviation .....	do .....	179,038
					<b>\$372,300</b>
<b>BRUXNER HIGHWAY</b>					
Ashford .....	16	5m. to 17.9m. west of Bonshaw .....	Deviation .....	Department .....	323,403
Tenterfield Shire .....	16	80m. to 85m. west of Ballina .....	Reconstruction and bitumen surfacing .....	do .....	234,199
Do .....	16	77.23m. to 80m. west of Ballina .....	do .....	do .....	116,250
					<b>\$673,852</b>
<b>NEWELL HIGHWAY</b>					
Boolooroo .....	17	39m. to 47m. north of Moree .....	Reconstruction and bitumen surfacing .....	Department .....	301,297
Gilgandra .....	17	32m. to 39m. north of Dubbo .....	Reconstruction .....	do .....	151,132
					<b>\$452,429</b>
<b>COBB HIGHWAY</b>					
Hay .....	21	24m. to 46m. north of Hay .....	Reconstruction and bitumen surfacing .....	Department .....	206,425
Murray .....	21	4.7m. to 8.2m. north of Moama .....	Reconstruction, widening and bitumen surfacing .....	do .....	189,785
					<b>\$396,210</b>
<b>ILLAWARRA HIGHWAY</b>					
Shellharbour .....	25	7.5m. to 12.5m. west of S.H. No. 1 .....	Improvement and provision of climbing lane .....	Department .....	168,809
Wingecarribee .....	25	Intersection with M.R. No. 265, 5m. to 6.5m. east of Moss Vale .....	Reconstruction, bitumen surfacing and improvement .....	do .....	455,142
					<b>\$623,951</b>
					<b>Total — State Highways .....</b>
					<b>\$8,760,000</b>

**(ii) Trunk and Ordinary Main Roads**

Bibbenluke .....	91	6.55m. to 8.41m. east of Bombala .....	Reconstruction and bitumen surfacing .....	Council .....	9,486†
Carrathool .....	80	17.68m. to 22.5m. south of Hillston .....	do .....	do .....	99,400
Copmanhurst .....	151	Alumny Creek, 8.05m. from Grafton .....	Prestressed concrete bridge .....	do .....	50,330
Cudgong .....	233	Goolina Creek, 11.9m. to 18.9m. west of Gulgong .....	Reinforced concrete bridge and approaches .....	do .....	51,000
Denman .....	213	11.6m. to 14.1m. from Jerry's Plains .....	Reconstruction and pavement widening .....	do .....	57,423
Dumaresq .....	74	43.6m. to 45.7m. east of Armidale .....	do .....	do .....	95,250
Greater Cessnock .....	181	2m. south of Wollambi to M.R. No. 223 .....	do .....	do .....	55,250
Kyogle .....	83	Fairymount Creek, 17.9m. north of Casino .....	Prestressed concrete bridge and approaches .....	do .....	85,638
Maitland .....	104	Bridge over Hunter River at Raymond Terrace .....	Western approaches .....	do .....	68,000
Manning .....	75	26.53m. to 29.57m. west of Kempsey .....	Reconstruction and bitumen surfacing .....	do .....	66,000
Namol .....	343	0.8m. to 6.4m. west of Wee Waa .....	do .....	do .....	92,023
Narraburra .....	398	Duck Creek, 11m. east of Barmedman .....	Reinforced concrete bridge .....	do .....	47,800
Newcastle .....	108	North Arm of Hunter River .....	do .....	Department .....	1,421,993
Port Stephens .....	104	New Bridge over Hunter River at Raymond Terrace .....	Eastern approaches .....	Council .....	55,000
Do .....	517	M.R. No. 108 to 6.8m. east of S.H. No. 10 .....	Reconstruction and bitumen surfacing .....	do .....	49,667
Rylstone .....	54	2.8m. to 4.5m. south of Ilford .....	Reconstruction, gravelling and bitumen .....	do .....	50,000

† For additional expenditure see Appendix No. 9.

**Appendix No. 7—continued**

**COMMONWEALTH AID ROADS FUND—continued**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued**

**(C) COUNTRY RURAL AREAS—continued**

**(ii) Trunk and Ordinary Main Roads—continued**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Stroud .....	111	21.4m. to 24.8m. from S.H. No. 10 .....	Reconstruction and bitumen surfacing .....	Council .....	86,680
Terania .....	65	Bexhill to Clunes .....	Realignment and bitumen surfacing .....	do .....	90,460
Tumut .....	280	7m. to 9.51m. south of Adelong .....	do .....	do .....	60,700
Turon .....	54	26.5m. to 29.75m. north of Bathurst .....	Reconstruction and bitumen surfacing .....	do .....	109,000
Wakool .....	319	Edward River at Moulamein .....	Reinforced concrete bridge .....	do .....	79,200
Waugoola .....	56	Bridge over Back Creek .....	Approaches .....	do .....	51,695
			Total — Trunk and Ordinary Main Roads .....		\$2,831,993

**(iii) Developmental Roads**

Blue Mountains .....	1195	Pulpit Hill Creek, 5.4m. from Blackheath .....	Reinforced concrete bridge .....	Council .....	32,000
Central Darling .....	3215	New Bridge Crossings at Paroo and Rosedale Channels .....	Construction .....	do .....	30,000
Cockburn .....	1032	14.6m. to 15.8m. from Limbri .....	do .....	do .....	58,000
Coolah .....	1304	4.5m. to 10m. east of T.R. No. 55 .....	Reconstruction and bitumen surfacing .....	do .....	113,500
Do .....	1304	15.3m. to 18m. east of T.R. No. 55 .....	do .....	do .....	146,000
Do .....	1304	10m. to 15m. east of T.R. No. 55 .....	Reconstruction .....	do .....	22,664†
Do .....	1304	Cainbil Creek, 12.2m. east of T.R. No. 55 .....	Reinforced concrete bridge .....	do .....	31,667
Do .....	1304	10m. to 15.3m. east of T.R. No. 55 .....	Gravelling and bitumen surfacing .....	do .....	97,707
Coonamble .....	1269	Selected lengths within the Shire .....	Construction .....	do .....	30,854
Copmanhurst .....	1179	16.66m. to 18.69m. north of M.R. No. 150 .....	do .....	do .....	59,200
Dungog .....	3163	8m. to 9m. north of Dungog G.P.O. .....	do .....	do .....	56,288
Gloucester .....	1150	21m. to 21.8m. north of Gloucester .....	Deviation .....	do .....	28,991
Gundurimba .....	1312	From Tuckean Island to Cedar Island .....	Construction .....	do .....	23,636
Manilla .....	3208	7.4m. to 9.2m. from Barraba Shire Boundary .....	do .....	do .....	40,000
Monaro .....	1268	Jinden Crk. to Big Badja, Sect. 27m. to 28m. from Kybeyan River .....	do .....	do .....	31,701
Tallaganda .....	1268	47m. to 48.5m. from Braidwood .....	do .....	do .....	65,000
Tamarang .....	3210	Quirindi Creek, 0.5m. north of M.R. No. 126 .....	Concrete culvert .....	do .....	22,000
Tenterfield Shire .....	3093	Hootons Road .....	Construction .....	do .....	37,700
Tumbarumba .....	1171	Spring Creek, south of M.R. No. 281 .....	Reinforced concrete box culvert .....	do .....	42,654
Tweed .....	3172	Tyalgum and Hopping Dicks Creeks .....	Construction of bridge .....	do .....	31,621
Ulmara .....	1274	5.5m. to 7m. south of Tucabia .....	Construction .....	do .....	25,000
Walcha .....	1317	13.5m. south of Walcha, towards Topdale .....	do .....	do .....	55,590
Wentworth .....	1296	Pooncarie, Central Darling Shire Boundary .....	Clearing, forming and gravelling .....	do .....	40,000
Yallaroo .....	1270	13.3m. to 15.4m. north west of Warialda .....	Construction .....	do .....	24,630
			Total — Developmental Roads .....		\$1,146,403

**SUMMARY**

Expressways .....	\$	\$
State Highways .....	5,418,004	
Trunk and Ordinary Main Roads .....	13,698,640	
Secondary Roads .....	9,979,164	
Roads other than Main Roads .....	218,529	
Developmental Roads .....	1,505,260	
	1,146,403	
		31,966,000
Survey, Design, Supervision, Planning, etc. ....		1,074,053
Maintenance and Construction of Unclassified Roads in the Western Division .....		202,567
Total as shown in Receipts and Payments Statements — Appendix No. 1 .....		\$33,242,620

† For additional expenditure see Appendix No. 10.

**Appendix No. 8**

**COUNTY OF CUMBERLAND MAIN ROADS FUND—GENERAL PURPOSES**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS**

**(i) Expressways**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
		<b>WESTERN EXPRESSWAY</b>			
Penrith	X4	Bridge over Nepean River at Regentville	Eastern approach	Department	12,867*
					\$12,867*
			<b>Total — Expressways</b>		\$12,867*

**(ii) State Highways**

**PRINCE'S HIGHWAY**

Wollongong	1	28.57m. to 28.85m. south of Sydney	Extension of climbing lane	Department	240
Do	1	33.57m. to 34.49m. south of Sydney	Realignment	do	79
Do	1	Waterfall Deviation, 27.27m. to 30m. south of Sydney	Resheeting asphaltic concrete	do	12,837
Do	1	33.5m. to 33.7m. south of Sydney	Reconstruction	do	3,580
Do	1	Bulli Pass to M.R. No. 177	Climbing lane	do	25,529
Do	1	32.16m. to 33.57m. south of Sydney	Bitumen surfacing	do	81*
Rockdale	1	Intersection with Kyle Street	Improvement	do	3,747
Sutherland and Wollongong	1	26.8m. to 27.74m. south of Sydney	Realignment	do	349
Sutherland	1	Holt Road to Acacia Road	Dual carriageway	do	16,497
					\$62,777

**HUME HIGHWAY**

Ashfield	2	Greenhills Street to Wetherill Street	Reconstruction	Department	2,239
Bankstown	2	Intersection with Chester Hill Road	Kerb and gutter and sidestrips	do	829
Fairfield	2	Prospect Creek to Cabramatta Creek	Kerbside lanes	do	1,015*
Do	2	Knight Street to Cabramatta Road	Widening	do	1,301*
Live:pool	2	Scott Street to Pine Street	Reconstruction and widening	do	22
Do	2	Marsh Parade to Casula Road	Construction of sidestrips	do	5,537
Do	2	Pedestrian Subway at Warwick Farm	Drainage	do	1,261
Do	2	Scott Street to Elizabeth Drive	Resheeting	do	3,036
Do	2	Intersection with M.R. No. 515 and S.R. No. 2071	Channelisation	do	29,957
Do	2	Railway Overbridge at Warwick Farm	Approaches	do	58
Strathfield	2	Cooks River to S.R. No. 2087	Kerbside lane	do	3,841
					\$44,464

**GREAT WESTERN HIGHWAY**

Auburn	5	Railway Overbridge to King Avenue	Drainage and pavement reconstruction	Department	36,012
Do	5	King Avenue to Haslams Creek	Reconstruction and drainage of failed pavement	do	85,688
Do	5	Intersection with Birnie Avenue	Improvement	Council	15*
Blacktown	5	Eastern Creek, 23.6m. west of Sydney	Drainage improvement	Department	7,128
Do	5	Intersection of Mt. Druitt Road	Passing lane	do	788
Blue Mountains	5	Level Crossing at Katoomba	Improvement	do	20,694
Do	5	Springwood	Deviation	do	9,107
Do	5	Bullaburra, Blaxland, Lawson and Hazelbrook	Kerbside lanes in built-up areas	do	512*
Do	5	2m. to 2.5m. west of Katoomba	Climbing lane	do	7,962
Do	5	3.46m. to 3.70m. west of Katoomba	Reconstruction and bitumen surfacing	do	23,113
Do	5	Blaxland Railway Station	Filling of cutting	do	27
Do	5	11.3m. to 12m. west of Katoomba	Climbing lane	do	80,526
Do	5	17.4m. to 30.5m. west of Penrith—3.8m. to 8.7m. west of Katoomba	Reshaping and strengthening of selected sections	do	45,633
Holroyd	5	Bridge Street to Station Street, Wentworthville	Reconstruction	do	43,276
Do	5	Pendle Way to Hawkesbury Road	Median adjustment	do	7*
Do	5	No. 559 S.H. No. 5 to Culvert near Hackney Street, Pendle Hill	Piping of open drain	do	3,173

\* Credit.

**Appendix No. 8—continued**

**COUNTY OF CUMBERLAND MAIN ROADS FUND—GENERAL PURPOSES—continued**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued**

**(ii) State Highways—continued**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
<b>GREAT WESTERN HIGHWAY—continued</b>					
Parramatta .....	5	Intersection with S.R. No. 2049 .....	Reconstruction .....	Department .....	1,075
Do .....	5	Church Street to Steele Street, Parramatta .....	Reconstruction and widening .....	do .....	3,898
Penrith .....	5	Emu Plains .....	Kerb and guttering .....	Council .....	1,442
					<b>\$369,008</b>
<b>PACIFIC HIGHWAY</b>					
Hornsby .....	10	Asquith to Mt. Ku-ring-gai .....	Widening .....	Department .....	10,089
Do .....	10	Western kerbside lane near Judith Street, Mt. Colah .....	Bitumen surfacing .....	do .....	2,663
Do .....	10	Mt. Ku-ring-gai to Berowra .....	Reconstruction and widening .....	do .....	118,791
Do .....	10	Mt. Colah Railway Station .....	Kerb and gutter .....	do .....	1,606
Do .....	10	At Asquith .....	Reconstruction of failed pavement .....	do .....	12,728
Ku-ring-gai .....	10	Woodville Avenue to Coonanbarra Road, Wahroonga .....	Median strip .....	do .....	1,393
Do .....	10	Ryde Road to Livingstone Avenue, Pymble .....	Widening .....	do .....	2,279
Lane Cove .....	10	Intersection with Greenwich Road, St. Leonards .....	Channelisation .....	do .....	391
Willoughby .....	10	Intersection with Mowbray Road .....	do .....	do .....	34
					<b>\$149,974</b>
<b>STATE HIGHWAY No. 13</b>					
Hornsby and Baulkham Hills .....	13	Thompsons Corner to Carlingford Road .....	Widening .....	Department .....	1,857
Parramatta, Bankstown and Fairfield .....	13	Chiltern Avenue to Hume Highway .....	Widening and reconstruction .....	do .....	19,333
Parramatta .....	13	Railway Monument Park at Granville Subway .....	Landscaping .....	do .....	187
Do .....	13	Merrylands Road to Parramatta Road .....	Dual carriageway .....	do .....	25,295
Parramatta, Bankstown and Fairfield .....	13	Sydney Water Supply Main .....	Prestressed concrete bridge .....	do .....	74
Parramatta .....	13	Railway Overbridge at Carlingford to Tintern Avenue .....	Widening .....	do .....	23,979
Do .....	13	M.R. No. 158 at Mobbs Hill .....	Improvement .....	do .....	4,348
					<b>\$75,073</b>
Total — State Highways .....					<b>\$701,296</b>
<b>(iii) Ordinary Main Roads</b>					
Auburn .....	190	Bridge Street to Lewis Street .....	Reconstruction .....	Council .....	31
Do .....	190	Parramatta Road to Olympic Drive .....	do .....	do .....	53
Do .....	190	S.H. No. 5 to Wyatt Park .....	do .....	do .....	1,267
Do .....	190	Wyatt Park Deviation to Parramatta Road .....	Construction and widening .....	do .....	252
Do .....	532	Clyde Street to Adderly Street .....	Reconstruction and widening .....	Department .....	13,941
Bankstown and Liverpool .....	167	Georges River at Milperra .....	Prestressed concrete bridge .....	do .....	58
Bankstown .....	167	Intersection with The River Road and Turvey Street .....	Median adjustment .....	do .....	2,234
Do .....	167	Intersection with M.R. No. 508 .....	Channelisation .....	do .....	3,050*
Do .....	190	Opposite The Mall, Bankstown .....	Replacement of kerb and gutter .....	Council .....	14
Do .....	190	Eastern side from Rickard Road to The Mall, Bankstown .....	Improvement .....	do .....	14*
Do .....	508	Intersection with Carinya Road .....	Reconstruction .....	Department .....	189
Baulkham Hills .....	160	Intersection with Excelsior Avenue .....	Drainage works .....	Council .....	2,326
Do .....	160	Near Oakhill College .....	Drainage .....	do .....	293
Do .....	160	Excelsior Avenue, Castle Hill .....	Relocation of electric light pole .....	do .....	665
Blacktown .....	537	Spencer Street to Railway Level Crossing at Rooty Hill .....	Drainage .....	do .....	143*
Do .....	537	S.H. No. 5 to Mavis Street, Rooty Hill .....	Reconstruction and bitumen surfacing .....	do .....	28,675
Do .....	537	Mavis Street to Church Street .....	Reconstruction .....	do .....	1,031
Do .....	546	Riverstone Railway Level Crossing .....	Installation of F type signals .....	do .....	816
Do .....	546	Riverstone Railway Level Crossing .....	do .....	Department .....	30,742

\* Credit.

Appendix No. 8—continued

COUNTY OF CUMBERLAND MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(iii) Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Blue Mountains	184	28.7m. to 29.8m. west of Windsor	Construction of climbing lane	Department	43,891
Do	184	36m. to 41m. west of Windsor	Reconstruction and improvement to drainage	do	28,138*
Botany	183	Near Florence Avenue	Pedestrian underpass	do	12,016*
Botany and Randwick	183	Over M.R. No. 593	Reinforced concrete bridge	do	22,035*†
Botany	194	Intersection with Botany Road and Mill Pond Road, Mascot	Re-channelisation	do	1,121
Do	344	Bridge over Mill Pond Creek	Widening	do	29,828
Do	593	Over King Street	Reinforced concrete bridge	do	4,203*
Camden	178	Kenny Hill, 1.8m. to 2.17m. west of Campbelltown	Climbing lane	do	2,614*
Campbelltown	177	8.43m. to 8.55m. east of S.H. No. 2	Reconstruction and bitumen surfacing	do	584
Canterbury	167	Intersection with Punchbowl Road	Improvement	do	1,191
Coto and Windsor	184	Bridge over Hawkesbury River at North Richmond	Widening	do	34,750
Concord	200	Intersection with Cavell Avenue	do	Council	401
Do	200	Intersection with Killoola Street	Channelising	do	79
Drummoyne	165	Approaches to Iron Cove Bridge	Widening, including deviation of Henley Marine Drive	Department	11,840
Drummoyne and Hunters Hill	165	Old Bridge over Parramatta River at Gladesville	Demolition	do	2,183*
Hornsby	139	Albert Street	Drainage	Council	1,984
Do	548	0.3m. to 1.4m. west of Galston	Deviation and bitumen surfacing	do	52,882
Do	548	Mid Dural Road	Relocation of power poles	do	307
Hunters Hill	165	Mamba Street to Church Street	Kerbing and guttering	Department	765*
Kogarah	199	Intersection of Ritchie and Darley Streets	Extension of median	do	18
Ku-ring-gai	366	Intersection with S.R. No. 2043	Improvement	Council	2,804
Leichhardt	165	Hornsey Street to Quirk Street	Adjustments to median	Department	14
Do	165	Evans Street, Rozelle	Elimination of median	do	55*
Liverpool	512	Church Road to Artillery Crescent	Passing lanes	do	11,083
Liverpool and Fairfield	515	Mt. Pritchard	Climbing lane	do	16,201
Liverpool	515	Opposite Nos. 597-603 Elizabeth Drive	Reconstruction	Council	26
Manly	159	Parkview Road to Belgrave Street	Widening	do	1,350
Do	164	Near Spit Bridge	Bus starting bay	do	75
Do	164	Near Avona Crescent, Seaforth	Reconstruction	do	730*
Mosman	164	Ida Street to Pearl Bay Road	Restoration of collapsed roadway	Department	1,603*
Penrith	154	2m. to 4.6m. south of Maxwell Street, Kingswood	Reconstruction	do	272
Do	155	5.2m. to 11.8m. north of S.H. No. 5	Reconstruction, widening and bitumen surfacing	Council	3*
Do	155	11.6m. north of S.H. No. 5	Multi-cell R.C. pipe culvert	do	2,000
Do	536	Sansbury Street, St. Marys	Drainage	do	196
Do	536	Rutland Street to John Street	Ke'b and gutter	do	996
Randwick	593	Access to The Australian Golf Club	Reinforced concrete bridge	Department	12,744*†
Rockdale	168	Intersection with Harrow and Bexley Roads	Traffic signal installation adjustments	Council	1,000
Do	168	Intersection with Wollongong Road	Improvement	do	302
Do	194	Intersection with Bestic Street	Right-turn lane	Department	158
Ryde	139	Blaxland Road to Lane Cove Road	Reconstruction	do	172,696
Do	162	Epping Road to De Burghs Bridge approaches	do	Council	2*2
Do	165	Western Carriageway near Falconer Street	Restoration of failed pavement	Department	6,311
Do	165	Intersection with Cressy Road, Ryde	Median adjustment	do	468
Do	165	0.05m. to 0.25m. east of Marsden Road	Asphaltic concreting	do	9,219
Do	165	Arras Parade to Charles Street	Reconstruction of failed pavement	do	36,465
Do	165	Intersection with Pittwater Road, Gladesville	Median adjustment	do	670
Do	165	Ryedale Road to West Parade	Asphaltic concreting	do	3,210
South Sydney	170	Intersection with O'Riordan Street (S.R. No. 2008)	Adjustments to traffic signals	Council	569
Sutherland	199	Intersection M.R. No. 227, The Kingsway	Channelisation	do	4,415
Do	393	Causeway across Port Hacking River near Waterfall	Flood-free deviation	Department	30,030
Do	393	Opposite National Park Railway Station	Widening	do	7,505*
Sydney	165	Opposite Miller Street, Pyrmont	Ke'b and gutter	Council	23*
Do	165	Intersection with Bowin Street, Pyrmont	Improvement	do	440
South Sydney	170	Boundary Street, Redfern to Gardeners Road, Alexandria	Restoration of abandoned tramway area	do	5,157*
Sydney	173	Bayswater Road	Adjustments to traffic signals	do	699
Do	192	Cahill Expressway Control Switchboard	Alterations	do	45
Sydney and South Sydney	330	City Road to Chippen Street, Chippendale	Reconstruction and bitumen surfacing	do	446*
Sydney	592	Cahill Expressway at Art Gallery	Mass retaining wall	Department	14,235

\* C edit.

† For additional expenditure see Appendix No. 8A.

Appendix No. 8—continued

COUNTY OF CUMBERLAND MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(iii) Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Sydney	592	Unloading Ramp to Eastern Distributor	Excavation	Department	34,260
Warringah	153	Riverview Parade to Oliver Street, Queenscliff	Widening	Council	10,146
Do	164	Warringah Mall Frontage	Kerbside lane	Department	185*
Do	164	Elimatta Road to Rowan Street, Mona Vale	Reconstruction and widening	do	3,019*
Do	164	Bassett Street to Waterview Street, Mona Vale	Excavate and widen footpath	do	24
Do	174	McCarrs Creek Road	Provision of bus turning facilities	Council	2,140
Do	328	Intersection with Forest Way, Frenchs Forest	Pedestrian overbridge approaches	Department	1,191
Do	328	Intersection with Ferguson Street and Starkey Street	Channelisation	do	4,062
Do	328	Intersection with M.R. No. 397	Widening and channelisation	do	1,475
Do	328	Fitzpatrick Avenue to Bantry Bay Road	Dual carriageway	do	54*
Do	533	M.R. No. 159 to junction of Lawrence and Oliver Streets	Deviation	Council	1,032
Do	533	Lawrence Street to Brighton Street, Harbord	Reconstruction	do	5,000*
Willoughby	191	Opposite Davies Road	Widening, reconstruction and bitumen surfacing	do	2,000
Do	191	Anglo Street to Maclean Avenue, Chatswood	Widening and improvement	do	671*
Windsor	154	South Windsor	Easement	do	311
Do	184	North Richmond Bridge	Approaches	Department	1,364
Do	184	Moray Street to Paget Street, Richmond	Drainage	do	9,496
Do	184	Approaches to North Richmond Bridge	Protective treatment to levee banks	do	4,490
Do	537	Bourke Street to East Market Street, Richmond	Reconstruction	do	10,748
Woollahra	173	Intersection with Mona Road and Glenmore Road	Traffic signal adjustment	Council	615
Do	339	Cambridge Road to Salisbury Street	Reconstruction	do	1,120
Do	339	Intersection of Newcastle Street	Traffic island	do	350
Total — Ordinary Main Roads					\$621,467

(iv) Secondary Roads

Ashfield	2013	Ramsay Road, Intersection with Dobroyd Parade	Improvements	Council	1,365
Ashfield and Leichhardt	2056	Bridge over Hawthorne Canal	Approaches	Department	7,547
Ashfield	2064	Intersection with Bland Street	Improvement	Council	2,048
Bankstown	2068	Thorn Street to Railway Underpass, Revesby	Reconstruction	do	1,205
Do	2068	Canterbury Road to Thorn Street	do	do	500
Do	2068	Railway Underpass to Tower Street	do	do	2,510†
Canterbury	2014	Eastern Side, Queensborough Road to Georges River Road	Shoulder reconstruction and drainage	do	1,000
Do	2021	Jay Avenue to James Street	Widening	do	189
Drummoyne	2059	Great North Road to Harris Road	Reconstruction	do	28,000
Hunters Hill	2052	Intersection with S.R. No. 2033	do	do	3,000
Ku-ring-gai	2043	Springdale Road to Koola Avenue, Killara	do	do	3,751
Do	2043	Bancroft Avenue to Tivon Road	do	do	2,856
Lane Cove	2070	Tambourine Bay Road to Warraroon Road	do	do	1,099
Do	2070	Warraroon Road to William Edward Street	do	do	2,589
Do	2070	Penrose Street to River Road West	do	do	3,125
Do	2070	River Rd. West, between William Edward St. and Longueville Rd.	Reconstruction and widening	do	1,500
Manly	2025	Woods Parade to Margaret Street, Fairlight	Widening	do	829
Marrickville	2007	Crystal Street intersection with Douglas and Brighton Streets	Adjustment to traffic signals	do	776
Parramatta	2049	Church Street to Parkes Street	Construction and bitumen surfacing	do	5,064
Penrith	2082	Junction with S.H. No. 5	Reconstruction	do	310
Do	2082	King Georges Road to Waratah Street, Punchbowl	do	do	3,437
Rockdale	2080	Rocky Point Road to The Grand Parade	do	do	7,254
South Sydney	2083	Phillip Street to Cooper Street	do	do	5,237*
Strathfield	2057	Frazer Street to Mitchell Street	do	do	374
Sydney	2011	Regent Street to Gibbons Street, Redfern	do	do	739
Do	2073	Johnstons Creek to Crescent Street, Wigram Road to Ross Street	Construction	do	7,543*
Total — Secondary Roads					\$68,287

\* Credit.

† For additional expenditure see Appendix No. 7.

**Appendix No. 8—continued**

**COUNTY OF CUMBERLAND MAIN ROADS FUND—GENERAL PURPOSES—continued**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued**

**(v) Tourist Roads**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Baulkham Hills .....	4006	9.2m. to 10.7m. and 11.45m. to 13.35m. from Wisemans Ferry .....	Gravelling and bitumen surfacing .....	Council .....	7,135
Blue Mountains .....	4018	0.0m. to 0.5m. from Willoughby Street, Leura .....	do .....	do .....	3,250
Warringah .....	4055	Access road to West Head .....	Widening and bitumen surfacing .....	Department .....	332
<b>Total — Tourist Roads .....</b>					<b>\$10,717</b>

**(vi) Roads other than Main Roads**

Liverpool .....		Sydney Rd. & Copeland St., between S.H. No. 2 & Campbell St. ....	Reconstruction .....	Department .....	582
North Sydney .....		Extension of Broughton Street to High Street .....	Construction .....	Council .....	4,166
Parramatta .....		Intersection of Spurway Street and Bennetts Road .....	Reconstruction .....	Department .....	12,456
Rockdale .....		Cooks River at Marsh Street .....	Prestressed concrete bridge .....	do .....	157,379†
Sydney .....		Darling Harbour Goods Yard at William Henry Street, Ultimo .....	Railway overbridge .....	do .....	96,996
Willoughby .....		Frenchs Road to Edinburgh Road .....	Widening and resealing .....	do .....	4,994*
Do .....		Chandos Street, West Street to Brook Street .....	Reconstruction .....	do .....	14,344*
Do .....		Brook Street to Alpha Road .....	Construction .....	do .....	16,146
<b>Total — Roads other than Main Roads .....</b>					<b>\$268,387</b>

**SUMMARY**

Expressways .....	\$	\$
State Highways .....	12,867*	
Ordinary Main Roads .....	701,296	
Secondary Roads .....	621,467	
Tourist Roads .....	68,287	
Roads other than Main Roads .....	10,717	
	268,387	
		1,657,287
Survey, Design, Supervision, Planning, etc. ....		2,483,179
Total as shown in Receipts and Payments Statements — Appendix No. 1 (B) (i) .....		\$4,140,466

\* C.edit.

† For additional expenditure see Appendix No. 7.

## Appendix No. 8A

### COUNTY OF CUMBERLAND MAIN ROADS FUND—SPECIAL PURPOSES

#### SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS

##### (i) Expressways

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
<b>WARRINGAH EXPRESSWAY</b>					
North Sydney	X1	North end of Sydney Harbour Bridge to Miller Street	Construction	Department	209,335
					\$209,335
<b>SYDNEY TO NEWCASTLE EXPRESSWAY</b>					
Hornsby	X3	26.6m. to 30.4m. north of Sydney	Construction	Department	24,323
Do	X3	Hawkesbury River at Kangaroo Point	Reinforced concrete bridge	do	348,669†
					\$372,992
<b>SOUTHERN EXPRESSWAY</b>					
Wollongong	X6	Waterfall to Bulli Pass	Construction	Department	11,657
					\$11,657
<b>EASTERN DISTRIBUTOR</b>					
Sydney	X7	Conservatorium to Sir John Young Crescent	Construction	Council	436
					\$436
Total — Expressways					\$594,421

##### (ii) Ordinary Main Roads

Botany	170	McIntosh Street to Mill Pond Road	Widening	Department	75,001‡
Botany and Randwick	183	Over M.R. No. 593	Reinforced concrete bridge	do	288,677§
Botany	344	Duplicate Bridge over Mill Pond Creek	do	do	8,135
Do	344	Botany Road to Dransfield Avenue	Reconstruction	do	6,004‡
Do	593	Southbound Carriageway over Mill Pond Creek	Reinforced concrete bridge	do	34,057‡
Botany and Randwick	593	Dowling Street to Dransfield Avenue	Reconstruction	do	848,133‡
Randwick	593	Access to The Australian Golf Club	Reinforced concrete bridge	do	26,844*§
Randwick and South Sydney	593	Over Epsom Road	do	do	114,904‡
Total — Ordinary Main Roads					\$1,348,067

##### (iii) Roads other than Main Roads

Botany		Amelia Street Underpass to Botany Road	Reconstruction and widening	Department	45,170‡
Total — Roads other than Main Roads					\$45,170

##### SUMMARY

Expressways	\$ 594,421
Ordinary Main Roads	1,348,067
Roads other than Main Roads	45,170
Total as shown in Receipts and Payments Statements — Appendix No. 1 (B) (ii)	\$1,987,658

\* Credit

† For additional expenditure see Appendix No. 9A.

‡ For additional expenditure see Appendix No. 7.

§ For additional expenditure see Appendix No. 8.

Appendix No. 9

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS

(i) Expressways

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
SOUTHERN EXPRESSWAY					
Wollongong	X6	Porter Street extension	Dual carriageway	Department	488†
Do	X6	Gipps Road to Mt. Keira Overbridge	Asphaltic concrete surfacing	do	517*
Do	X6	Allan Creek at Unanderra	Reinforced concrete box culvert	do	3,211*
					\$3,240*
Total — Expressways					\$3,240*

(ii) State Highways

PRINCE'S HIGHWAY

Bega	1	Swan Street to Union Street	Reconstruction and bitumen surfacing	Council	27,323
Do	and 4	Swan Street to Union Street	Reconstruction	Department	28,468
Do	1	Bega By-pass	Construction	do	5,563
Eurobodalla	1	0.08m. to 9.85m. south of Narooma	Reconstruction	do	64,392
Wollongong	1	Ghosts Creek	Prestressed concrete superstructure	do	3
Do	1	McCabe Street to Avondale Road, Dapto	Kerbside lanes	Council	3,500
Do	1	1.65m. to 1.8m. south of Wollongong	do	do	650
Do	1	10m. to 12m. south of Unanderra	Reconstruction	Department	39
Do	1	Gray Street to Collaery Road	Deviation	do	32,449
Do	1	Intersection with North Cliff Drive, Berkley	Widening	do	2,740
Do	1	5.3m. north of Wollongong	Improvement to crest	do	2,494
Do	1	Bridge over Macquarie Rivulet	Approaches including intersection with S.H. No. 25	do	453
Imlay	1	Bridge over Wallagaraugh River at Timbillica	Batter protection of approaches	do	1,443
Do	1	Whelans Swamp, 7.15m. south of Eden	Reinforced concrete bridge	do	75
Do	1	0.95m. to 1.4m. from Brandy Creek	Restoration of damaged pavement	Council	25
Do	1	Junction with Edrom Road, 16.5m. south of Eden	Climbing lane	Department	20,679
Kiama	1	26.8m. to 28m. south of Wollongong	Bitumen surfacing	do	118*
Do	1	20.9m. to 30.2m. south of Wollongong	do	do	261*
Sheltharbour	1	13.09m. to 13.52m. south of Wollongong	Reconstruction and drainage	Council	1,007
Shoalhaven	1	Bomaderry Hill, 99.26m. to 99.51m. south of Sydney	Climbing lane	Department	9,798
Do	1	Abernethys Creek, 97m. to 97.5m. south of Sydney	Improvement to alignment	do	67,124
Do	1	0m. to 0.9m. north of Shoalhaven River Bridge	Improvement	do	8,092
Do	1	Drainage between Albert and McKay Sts., opposite Ernest St.	Reinforced concrete pipe culvert	Council	97
Do	1	Worrigea Street to Kalendar Street	Reconstruction	do	110
					\$276,148
HUME HIGHWAY					
Camden	2	2m. to 2.8m. south of Camden	Widening	Department	4
Do	2	Junction with Pank Street, Camden	Reconstruction	Council	1,030
Do	2	Broughton Street, Camden	Ke b and gutter	do	92
Goodradigbee	2	Stoney Creek Bridge, 19.19m. south of S.H. No. 15	Widening	Department	138
Do	2	16.5m. to 17.6m. south west of Yass	Reconstruction and realignment	do	20,261*
Do	2	15.57m. to 22.57m. south of S.H. No. 15	Realignment and reconstruction	do	63,759
Goulburn City	2	Goulburn to S.H. No. 3	Reconstruction	do	26,348*†
Gundagai	2	Daisy Bed Creek, 1.0m. south of Coolac	Approaches	do	3,726
Do	2	Gundagai and South Gundagai	Railway level crossing	do	20,616
Do	2	Mooney Mooney Hill, 49.8m. to 50.55m. south of Yass	Climbing lane	do	60,657
Gunning	2	Meadow Creek at Gunning	Temporary bridge and approaches	do	1,387
Do	2	30.2m. to 31.4m. south of Goulburn	Climbing lane	do	41,803
Holbrook	2	24.5m. south of Tarcutta	Reinforced concrete box culvert	do	321
Do	2	Little Billabong Creek, 24.2m. south of Tarcutta	Reinforced concrete bridge	do	2,823
Do	2	30.2m. to 34.9m. south of Tarcutta	Reconstruction and bitumen surfacing	do	88,549

\* Credit

† For additional expenditure see Appendix No. 7.

‡ For additional expenditure see Appendix No. 9A.

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(ii) State Highways—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
HUME HIGHWAY—continued					
Holbrook	2	24.7m. to 30.2m. south of Tarcutta	Reconstruction and bitumen surfacing	Department	9,995
Hume	2	31.4m. to 38.8m. south of Holbrook	do	do	84,315
Do	2	16.4m. to 18.3m. south of Holbrook and Sweetwater Crk. Bridge	Reconstruction, bitumen surfacing and approaches	do	855
Do	2	20m. to 20.7m. south of Holbrook	Reconstruction and bitumen surfacing	do	76,950
Kyeamba	2	Intersection with S.H. No. 14	Improvement	do	26,912
Mittagong	2	Pioneer Street to Gibbergunyah Creek	Reconstruction	do	4,545*
Do	2	Cutaway Hill, 4.2m. to 5.5m. south of Mittagong	Deviation	do	3,051
Mulwaree	2	Run-O-Waters Creek, 134.6m. from Sydney	Prestressed concrete bridge	do	4,992
Do	2	Run-O-Waters Creek, 138.2m. from Sydney	do	do	84
Do	2	39.3m. to 41.9m. south of Mittagong	Reconstruction and bitumen surfacing	do	23,347
Mulwaree and Goulburn	2	Uringalla Creek to 7m. south of Goulburn	Widening and bitumen surfacing	do	2,246*
Wingecarribee	2	Northern approach to bridge over Uringalla Creek	Bitumen surfacing	do	2
Do	2	Intersection with S.H. No. 25	Improvement	do	9,393
Wollondilly	2	Bridge over Bargo River at Tahmoor	Approaches	do	2,420
Do	2	3.25m. to 4.13m. south of Camden	Reconstruction	do	10,293
Do	2	Intersection with Finns Road	Improvement	do	1,982
Do	2	1.5m. south of Pictou	Extension of reinforced concrete box culvert	do	3,403
Do	2	9m. to 9.6m. south of Camden	Reconstruction	do	54,764
Do	2	4.6m. to 7.16m. south of Camden	Realignment and climbing lanes	do	54,993
Yass	2	Bridge over Bango Creek, 1.6m. south of Yass	Approaches	do	965*
					\$598,260
SNOWY MOUNTAINS HIGHWAY					
Imlay	4	8.1m. to 9.4m. west of Tathra	Reconstruction and bitumen surfacing	Department	20,642
Monaro	4	Between Big Bog and Nimitabel	Restoration and construction of new link road	Council	24,570
Do	4	35m. to 40m. west of Bega	Reconstruction and bitumen surfacing	Department	61,969
Mumbulla	4	21.3m. to 25.5m. west of S.H. No. 1	do	do	23,324
Do	4	15m. to 20.42m. west of S.H. No. 1	do	do	11,477
Do	4	28.3m. to 33m. west of S.H. No. 1	do	do	16,110
Mumbulla and Monaro	4	33m. to 35m. west of S.H. No. 1	do	do	24,889
Snowy River	4	4.3m. to 6m. west of Kiandra	do	do	124,187
Do	4	1.3m. to 2m. west of Kiandra	do	do	9,167
Do	4	2m. to 4.3m. west of Kiandra	do	do	45,665
Tumut	4	3.8m. to 4.23m. east of Tumut	do	do	10,372
Do	4	39.4m. to 48.85m. east of Tumut	do	do	178
Do	4	M.R. No. 278 to M.R. No. 279	Deviation	Council	499
Do	4	Gilmore Creek, 0.25m. from Gilmore	Steel and concrete bridge	Department	207
Do	4	Sandy Creek, 2m. west of Gilmore	Reinforced concrete bridge, box culvert and approaches	Council	4,285
					\$377,541
GREAT WESTERN HIGHWAY					
Bathurst	5	Intersection with S.H. Nos. 6 and 7	Improvement	Department	8,615
Blaxland	5	Intersection with T.R. No. 55	Reconstruction as partial grade separated section	do	24,917
Turon	5	21.7m. to 24.4m. west of Lithgow	Reconstruction and bitumen surfacing	do	5,791
					\$39,323
MID WESTERN HIGHWAY					
Abercrombie	6	Fitzgerald Mount, 13.0m. west of Bathurst	Guard rail	Department	1,400
Bland	6	Back Creek Bridge, 48.3m. west of Grenfell	Approaches	do	206
Do	6	46.05m. and 47.25m. west of Grenfell	Reinforced concrete box culverts	do	668

\* Credit

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(ii) State Highways—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
MID WESTERN HIGHWAY—continued					
Lyndhurst	6	21.4m. to 22.5m. west of Blayney	Reconstruction and bitumen surfacing	Department	1,865
Waugoola	6	31.3m. west of Blayney	Improvement	Council	1,079*
					\$3,080
MITCHELL HIGHWAY					
Abercrombie	7	11.5m. to 11.8m. west of Bathurst	Climbing lane	Department	7,576
Bogan	7	12m. to 25m. south of Nyngan	Reconstruction and bitumen surfacing	do	101*
Darling	7	62m. to 87.3m. north of Bourke	do	do	1,789
Molong	7	Bell River at Claremont, 9m. from Molong	Steel and concrete bridge	do	10
Orange	7	23.1m. to 26.7m. west of Bathurst	Reconstruction and bitumen surfacing	do	17,798
Talbragar	7	18.3m. west of Dubbo	Improvement of curve	do	2,352
Do	7	24.4m. to 29m. west of Wellington	Reconstruction and pavement widening	do	73,633
Do	7	7m. and 12.1m. west of Dubbo	Deviation	do	16,886
					\$119,953
BARRIER HIGHWAY					
Bogan	8	Muriel Tank, 39.7m. to 40.4m. west of Nyngan	Overbridge	Council	94,448
Do	8	Muriel Tank, 39.7m. to 40.4m. west of Nyngan	do	Department	22,212
Do	8	38.9m. to 41.2m. west of Nyngan	Deviation	Council	19,903
Central Darling	8	22.65m., 24.15m. and 25.9m. west of Wilcannia	Culverts	Department	746
Do	8	2m. to 9m. west of Wilcannia	Reconstruction and bitumen surfacing	do	23,248
Do	8	8m. to 13m. east of Wilcannia	do	do	43,917
Do	8	9m. to 19m. west of Wilcannia	do	do	65,465
Do	8	52m. to 72.3m. east of Wilcannia	do	do	2
Do	8	0m. to 2m. west of Wilcannia	do	do	11,230
Cobar	8	40m. to 50m. west of Cobar	do	do	258
Do	8	70m. to 80m. west of Cobar	do	do	13,243
Do	8	80m. to 92.8m. west of Cobar	do	do	44,888†
Murray Darling Div.	8	49.9m. to 65.5m. east of Broken Hill	do	do	33,671
Do	8	65.5m. to 73m. east of Broken Hill	do	do	42,089
					\$415,320
NEW ENGLAND HIGHWAY					
Armidale City	9	1.02m. to 1.73m. north of Armidale	Reconstruction	Council	4,022*
Do	9	1.3m. to 1.9m. south of Armidale	Reconstruction and bitumen surfacing	do	5,203*
Denman	9	22.4m. to 24.2m. north of Singleton	do	Department	1,290
Dumaresq and Uralla	9	Soumarez Creek, 5.6m. south of Armidale	Reinforced concrete bridge	Council	85*
Guyra	9	Railway Siding to Guyra Abattoir	Overbridge	Department	43,450
Do	9	1m. south to 0.34m. north of Guyra	Deviation	do	45,255
Do	9	1m. to 2.46m. south of Guyra	do	do	128,096
Maitland	9	Melbourne Street to Brunswick Street, East Maitland	Pavement widening and shoulder strengthening	do	7,676
Do	9	3.29m. to 5.19m. west of Maitland	Reconstruction	do	101,602
Do	9	2.87m. to 3.32m. west of Maitland	do	do	640
Do	9	Eastville turnoff, 18.02m. north of Newcastle	Bitumen surfacing	do	10,995*
Murrurundi	9	Chilcotts Creek Road and intersection with S.H. No. 9	Improvement to level crossing and approaches	Council	4,149
Do	9	6.7m. to 11.9m. north of Murrurundi	Deviation	Department	29,351
Muswellbrook Munic.	9	Junction with Thompson Street	Improvement	do	8,576
Do	9	Aberdeen Street, Muswellbrook	Service Road	do	8,850
Newcastle	9	Weakleys Flat Creek at Beresfield	Reinforced concrete bridge	do	8,920‡
Patrick Plains	9	19.7m. to 21.1m. west of Maitland	Reconstruction	do	29,890
Do	9	0.2m. west of Belford	Reconstruction and kerb improvement	do	6,898

\* Credit

† For additional expenditure see Appendix No. 7.

‡ For additional expenditure see Appendix No. 9A.

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(ii) State Highways—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
NEW ENGLAND HIGHWAY—continued					
Peel	9	Boiling Down Creek, 43.37m. north of Murrurundi	Culvert and approaches	Department	436
Scone	9	15.3m. to 15.6m. north of Muswellbrook	Reconstruction	do	26,509
Do	9	14.4m. to 15.4m. north of Muswellbrook	Reconstruction, bitumen surfacing and culvert widening	do	7,192
Tamarrang	9	Bridges over Spring and Kangaroo Creeks	Approaches	do	963
Do	9	29m. to 30.3m. north of Murrurundi	Reconstruction and bitumen surfacing	do	96,990
Do	9	23m. to 24.1m. north of Murrurundi	Reconstruction and widening	do	3,828
Do	9	30.3m. to 32.1m. north of Murrurundi	Reconstruction and bitumen surfacing	do	1,050
Tamworth	9	3.2m. south of Tamworth	Precast concrete box culvert	Council	10,122
Do	9	Peel River	Removal of bridge	do	4,400
Tenterfield Shire	9	Wallangarra	Relocation of tick gates	do	2,953
Uralla	9	Kentucky Creek, 47.5m. north of Tamworth	Reinforced concrete bridge	Department	1,285
Do	9	Church Gully, 50.4m. north of Tamworth	Reinforced concrete box culvert	do	18,445
Do	9	50.13m. to 53.29m. north of Tamworth	Reconstruction and bitumen surfacing	do	103,161
Do	9	48.1m. to 50.13m. north of Tamworth	do	do	125,761
Do	9	45.2m. to 47.32m. north of Tamworth	Reconstruction	do	3,578
					\$810,965
PACIFIC HIGHWAY					
Byron	10	0.25m. to 1m. north of Brunswick Heads	Climbing lane	Department	652
Coffs Harbour	10	4.8m. to 8m. north of Coffs Harbour	Reconstruction	do	1,522
Do	10	8m. to 9.49m. north of Coffs Harbour	do	do	83,097
Do	10	7.4m. to 9.2m. north of Coffs Harbour	Reconstruction and bitumen surfacing	do	277
Do	10	6.08m. to 8m. north of Coffs Harbour	Reconstruction	do	285
Gosford	10	Intersection with M.R. No. 349	Channelisation	do	1,450
Kempsey	10	Approaches to Bridge over Macleay River	Channelisation and medians	Council	6,000
Lake Macquarie	10	Murray Street to South Street, Bennetts Green	Dual carriageways	Department	39,135*
Maclean	10	Clarence River at Harwood	Steel and concrete bridge	do	240
Do	10	33m. to 37m. north of South Grafton	Reconstruction and bitumen surfacing	do	3,657
Nambucca	10	Lower Warrell Creek, 32.6m. to 34.4m. north of Kempsey	Deviation	do	137,531
Do	10	0m. to 2.2m. north of Macksville	Reconstruction and bitumen surfacing	do	8,688
Do	10	Bridge over Upper Warrell Creek, 6.8m. south of Macksville	Extension	do	4,070
Newcastle	10	Brunker Road to Scenic Road	Widening	Council	78*
Do	10	Selected lengths from Tudor Street to Baker Street	Reconstruction	do	2,259
Do	10	Wallsend Road to 2HD Radio Station	Dual carriageway	do	22,774
Port Stephens	10	5.4m. to 7.7m. north of Raymond Terrace	Reconstruction and bitumen surfacing	Department	79,294
Do	10	16.75m. to 18.5m. north of Newcastle	Reconstruction and widening	do	4,536
Do	10	14.6m. to 18.82m. north of Newcastle	Bitumen surfacing	do	472*
Stroud	10	Bridge over Coolongolook River, Coolongolook	Approaches	do	759
Do	10	Bacons Quarry, 10m. north of Bulahdelah	Deviation	do	29*
Do	10	4.36m. to 6.20m. north of M.R. No. 506	Widening of formation	do	8,668
Do	10	15.5m. to 19m. north of Bulahdelah	Reconstruction	do	109,097
Do	10	0m. to 2.38m. and 6.2m to 10.12m. north of M.R. No. 506	Widening of formation	do	7,912
Do	10	2.38m. to 4.36m. north of M.R. No. 506	do	do	7,401
Do	10	6.4m. to 9.2m. north of Bulahdelah	Climbing lane	do	22,228
Do	10	10.12m. to 12.85m. north of M.R. No. 506	Widening of shoulders	do	8,620
Do	10	1m. north of Bulahdelah	Improvement to crest	do	80,818
Do	10	0.12m. to 0.25m. north of Myall River	Improvement to curve	do	5,568
Taree	10	Pulteney Street to Macquarie Street, Taree	Median strip	Council	2,361*
Tintenbar	10	Selected lengths, 12.78m. to 19.34m. north of Woodburn	Restoration of damaged bitumen pavement	Department	236
Tweed	10	Bridge over Dinseys Creek, 5.05m. north of Murwillumbah	Widening	do	1,811
Do	10	River Terrace to Pacific Lane, North Murwillumbah	Reconstruction	Council	13,185
Do	10	14.52m. to 15.93m. north of Murwillumbah	do	do	7
Do	10	4.38m. to 5.97m. south of Murwillumbah	Climbing lanes	do	312
Do	10	6.98m. to 8.45m. south of Murwillumbah	do	do	39,721

\* Credit

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(ii) State Highways—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
PACIFIC HIGHWAY—continued					
Tweed	10	2.1m. north of Murwillumbah	Deviation	Department	53,296
Do	10	0m. to 1.3m. north of Murwillumbah	Reconstruction and bitumen surfacing	do	20,418
Do	10	3.71m. to 5.6m. north of Murwillumbah	Reconstruction	do	180
Do	10	1.3m. to 2.6m. north of Murwillumbah	do	do	87
Do	10	11.7m. to 13.6m. north of Murwillumbah	Reconstruction, widening and bitumen surfacing	do	1,093
Do	10	6m. to 8m. north of Murwillumbah	Deviation	do	105
Do	10	17.4m. to 18.6m. north of Murwillumbah	Reconstruction and widening	do	10,265
Woodburn	10	13.6m. and 13.8m. south of Woodburn	Reinforced concrete bridges	do	630*
Do	10	5m. to 5.75m. south of Woodburn	Strengthening and bitumen surfacing	do	484
Do	10	6.5m. to 7.4m. south of Woodburn	do	do	1,028*
Do	10	Bridges at 13.6m. and 13.8m. south of Woodburn	Approaches	do	28,858
Wyong	10	Bridge over Bangalow Creek, 6.15m. north of Gosford	Widening	do	1,946*
Do	10	7.6m. to 8.3m. north of Gosford	Reconstruction and widening	do	14,465
Do	10	Southern approach to Bangalow Creek culvert	Reconstruction and kerb improvement	do	3,891
Do	10	11.5m. to 12.5m. north of Gosford	Widening of culverts	do	2,602†
Do	10	Junction with M.R. No. 509	Bitumen surfacing	do	13,670*
Do	10	Bridge over Cut Rock Creek	Approaches	do	72,278
					\$811,348
OXLEY HIGHWAY					
Coonabarabran	11	0.6m. east of Coonabarabran	Improvement to level crossing	Department	57
Do	11	Railway Overbridge, 4.5m. north of Coonabarabran	Approaches	Council	5,000
Do	11	From Castlereagh River Bridge and 1.0m. east of Coonabarabran	Reconstruction and widening	do	6,000
Do	11	2.4m. to 3.4m. south of Coonabarabran	Reconstruction	Department	19,437
Do	11	30m. to 31m. east of Coonabarabran	do	do	79
Hastings	11	31m. to 35m. west of Port Macquarie	Reconstruction and bitumen surfacing	do	4,664
Do	11	47m. to 50.4m. west of Port Macquarie	do	do	22,267
Do	11	12.95m. to 14m. west of Port Macquarie	do	Council	36,984
Peel	11	23.7m. to 24.8m. west of Tamworth	do	do	6,569
Port Macquarie	11	Hollingworth Street to Hindman Street, Port Macquarie	do	do	15,000
Walcha	11	5m. to 7m. east of Walcha	do	Department	20,023
Do	11	2.5m. west of Walcha	Elimination of crest	do	39,001*
Do	11	6m. to 8m. west of Walcha	Reconstruction and bitumen surfacing	do	117,088
Do	11	7m. to 10m. east of Walcha	do	do	10,205
Do	11	2.76m. to 5m. east of Walcha	do	do	309
Do	11	10m. to 12.53m. east of Walcha	do	do	120,290
Do	11	Tia River, 22.2m. east of Walcha	Prestressed concrete bridge	do	1,371
Do	11	Maineys Creek, 5.4m. east of Walcha	do	do	55
					\$346,397
GWYDIR HIGHWAY					
Boooloeroo	12	6m. to 10m. east of Moree	Reconstruction and bitumen surfacing	Council	11,500
Boomi	12	Cowbail Creek, 28.6m. west of Moree	Prestressed concrete bridge and approaches	do	16,000
MacIntyre	12	5.83m. west of Inverell	Reinforced concrete box culvert	do	17,944
Severn	12	Climbing lane at Waterloo Range	Gravelling and sealing	do	30,000
Do	12	7.5m. to 8.5m. west of Glen Innes	Climbing lane	do	30,000*
Do	12	Various locations east of Glen Innes	Batter Protection	Department	905
Do	12	At Gibraltar Range, 45m. to 46m. east of Glen Innes	Drainage	do	5,286
Do	12	Bridge over Reddestone Creek, 6.5m. west of Glen Innes	Approaches	Council	1,626*
Yallaroi	12	4.6m. to 6m. east of Warialda	Reconstruction and widening	do	55,000
					\$105,009

\* Credit

† For additional expenditure see Appendix No. 9A.

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(ii) State Highways—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
STURT HIGHWAY					
Balrarnald	14	12.47m. to 13.85m. east of Euston	Reconstruction	Department	54,846
Do	14	0m. to 5.5m. west of Euston	do	do	129,194
Hay	14	12m. to 19m. and 21m. to 27m. west of Hay	Widening of existing formation	do	114,591
Do	14	19.5m. to 22m. west of Hay	Reconstruction of curves	do	49,233
Do	14	4.85m. to 5.9m. west of Hay	Reconstruction and widening	Council	5,152
Mitchell and Narrandera	14	31.96m. to 36.87m. west of Wagga Wagga	Reconstruction and bitumen surfacing	Department	16*
Mitchell	14	Various sections, 5.2m. to 44.6m. west of Wagga Wagga	Improvement to grading	do	24,827
Narrandera	14	38.98m. to 43.63m. west of Wagga Wagga	Reconstruction and bitumen surfacing	do	35,865
Do	14	8m. to 12m. east of Narrandera	Improvement to shoulders	do	14,499
Do	14	Bridge over Poisoned Waterholes Creek, 54.75m. west of Wagga Wagga	Approaches	do	1,139
Wakool	14	71.43m. to 74.43m. west of Hay	Bitumen surfacing	do	7,460
Do	14	50.4m. to 77.3m. west of S.H. No. 21	Widening	Council	5,981
Do	14	68.05m. to 74.05m. west of Hay	Bitumen surfacing	do	9,176
					\$451,947
BARTON HIGHWAY					
Goodradigbee	15	25m. to 27.7m. from Canberra	Reconstruction and bitumen surfacing	Department	115,244
					\$115,244
BRUXNER HIGHWAY					
Ashford	16	Mullers Lagoon, 8.5m. east of Bonshaw	Reinforced box culvert	Department	300
Do	16	35m. to 41m. west of Bonshaw at Yetman	Reconstruction and bitumen surfacing	Council	45,000
Do	16	31m. to 35m. west of Bonshaw	do	do	66,705
Do	16	4m. to 10m. east of Bonshaw	do	Department	37,024
Do	16	0.5m. to 5m. west of Bonshaw	do	do	14,022
Do	16	0.5m. to 4m. east of Bonshaw	do	do	2,567
Do	16	10m. to 14m. east of Bonshaw	do	do	72,684
Do	16	Greenhills Creek, 28.6m. west of Bonshaw	Reinforced concrete bridge and approaches	Council	393
Do	16	Campbells Creek, 33.4m. west of Bonshaw	Reinforced concrete box culvert	do	23,118
Do	16	Sandy Creek, 18.5m. west of Bonshaw	do	do	51
Casino	16	38.7m. to 40m. and 40.03m. to 40.9m. from Ballina	Strengthening	do	19,556
Gundurimba	16	24.97m. to 25.5m. west of Ballina	Reconstruction and bitumen surfacing	do	40,406
Do	16	22.7m. to 23.8m. west of Ballina	do	do	8,700
Do	16	25.34m. to 27.27m. west of Ballina	do	do	4,156
Do	16	29.08m. west of Ballina	Reinforced concrete box culvert	do	3,126
Kyogle	16	Deep Creek, 16.7m. west of Casino	Erosion protection	Department	5,324
Tenterfield Munic.	16	16.63m. to 16.9m. west of Casino	Reconstruction	do	59,195
Tenterfield Shire	16	Little Yellow Creek, 8.1m. east of Drake	Reinforced concrete bridge	do	4,356
Do	16	14.7m. to 17m. west of Tenterfield	Reconstruction and bitumen surfacing	Council	21,370
Do	16	23m. to 27m. west of Tenterfield	do	do	128,897
Do	16	13m. to 18m. east of Tenterfield	do	do	7,452
Do	16	31.6m. to 32.6m. east of Tenterfield	do	do	37,700
Do	16	20.36m. to 23m. west of Tenterfield	do	do	40,000
Do	16	Ti-Tree Creek, 5.2m. east of Drake	Steel and concrete bridge	Department	4,022
Do	16	14m. to 19.8m. east of Bonshaw	Reconstruction and bitumen surfacing	do	3,880
Do	16	87m. to 91.3m. west of Ballina	do	do	18,748
Do	16	85m. to 87m. west of Ballina	do	do	35,901
Tintenbar	16	12.6m. to 12.9m. from Ballina	Realignment	Council	43,360
Tomki	16	Bridge over Tomki Creek, 6.7m. east of Casino	Approaches	do	58,200
Do	16	Selected lengths, 8m. to 12m. west of Casino	Strengthening and resealing	Department	6,565
Do	16	Tomki Creek, 6.7m. east of Casino	Reinforced concrete bridge	Council	31,030

\* Credit

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(ii) State Highways—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
BRUXNER HIGHWAY—continued					
Yallaroi	16	9m. to 12m. east of Boggabilla	Reconstruction and bitumen surfacing	Council	18,250
Do	16	12.21m. west of Yetman at Spring Creek	Reinforced concrete box culvert	do	4,250
					\$865,608
NEWELL HIGHWAY					
Bland	17	20m. to 24m. north of Ardlethan	Reconstruction	Department	1,623
Do	17	Approaches to Scott and Mandamah Creek Bridges	Bitumen sealing	do	18,346
Do	17	20m. to 24m. north of Ardlethan	Reconstruction and bitumen surfacing	do	474
Do	17	15.15m. to 20m. north of Ardlethan	do	do	5,609
Booolooroo	17	Mungle Creek, 50.3m. north of Moree	Reinforced concrete bridge	do	3,682
Do	17	Tackinbri Creek, 46.7m. north of Moree	do	do	1,001*
Do	17	19m. to 29.6m. north of Moree	Reconstruction and bitumen surfacing	do	5,599
Do	17	13m. to 24m. north of Moree	Treatment of edge failures	do	18,046
Do	17	62m. to 72m. north of Moree	Reconstruction and bitumen surfacing	do	106,711
Do	17	47m. to 54m. north of Moree	do	do	131,123
Do	17	29.6m. to 39.6m. north of Moree	do	do	27,893
Do	17	6m. to 6.9m. north of Moree	Construction	do	237
Coonabarabran	17	56.23m. south of Narrabri	Culvert extension	do	7,921
Do	17	Bridge over Billy Creek, 50.13m. to 51.56m. south of Narrabri	Approaches	do	46,948
Do	17	47m. to 57m. south of Narrabri	Reconstruction and bitumen surfacing	do	647*
Do	17	63m. to 67m. south of Narrabri	do	do	31,672
Forbes	17	Approach to bridge over Lake Forbes	Deviation including bitumen surfacing	Council	168,871
Goobang	17	14.8m. north of Parkes	Elimination of causeway	Department	2,180
Do	17	Railway Level Crossing, 2m. south of Parkes	Associated roadworks	do	5,151
Do	17	Tichborne Level Crossing	Pavement raising	do	662
Do	17	Tichborne Level Crossing	Widening and pavement sealing	do	3,428
Jemalong	17	1.7m. to 3.6m. north of Forbes	Reconstruction and bitumen surfacing	Council	45,829
Do	17	Bundaburrah Creek, 7m. from Forbes	Widening	do	16,634
Namoi	17	Tooley Gully, 32.3m. south of Narrabri	Reinforced concrete box culvert	Department	2,938
Do	17	Box Flat Creek, 29.4m. south of Narrabri	do	do	121
Do	17	1.5m. to 2.72m. north of Narrabri	Reconstruction and bitumen surfacing	do	36
Do	17	54.22m. to 58.26m. south of Narrabri	do	do	84,666
Do	17	27.5m. to 37.7m. south of Narrabri	do	do	2,923
Namoi and Coonabarabran	17	37.7m. to 47m. south of Narrabri	do	do	8,251
Narrabri	17	Lloyd Street to Doctors Creek	Reconstruction	Council	459*
					\$745,467
CASTLEREAGH HIGHWAY					
Coonamble	18	2m. to 9m. north of Coonamble	Reconstruction of damaged bitumen pavement	Department	3,407
Gilgandra	18	0.2m. to 2.1m. north of Gilgandra	Widening and bitumen surfacing	do	33,956
Walgett	18	32m. to 44m. north of Walgett	Reconstruction and bitumen surfacing	do	92,482
Do	18	12.67m. north of Walgett	Reinforced concrete box culvert	do	297
					\$130,142
MONARO HIGHWAY					
Bibbenluke	19	9.4m. to 11.26m. south of Nimmitabel	Reconstruction and bitumen surfacing	Council	23,086
Do	19	11.26m. to 13.8m. south of Nimmitabel	do	do	17,284
Do	19	8m. to 10m. south of Bombala	do	do	58,793
Cooma	19	Railway Overbridge, 0.9m. south of Cooma	Sidetrack	do	12,000
Monaro	19	0m. to 3.6m. south of Nimmitabel	Reconstruction and bitumen surfacing	Department	8,607
Do	19	3.6m. to 7.8m. south of Nimmitabel	do	do	14,867

\* Credit

**Appendix No. 9—continued**

**COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued**

**(ii) State Highways—continued**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
<b>MONARO HIGHWAY—continued</b>					
Monaro .....	19	7.8m. to 10m. south of Nimmitabel .....	Reconstruction and bitumen surfacing .....	Department .....	91,005
Do .....	19	57.5m. to 58m. south of Canberra .....	do .....	do .....	44,394
Do .....	19	2m. to 5.5m. south of Cooma .....	do .....	do .....	22,001
Do .....	19	31m. and 35m. south of Canberra .....	do .....	do .....	4,515
Yarrowlumia .....	19	30.19m. to 31.19m. south of Canberra .....	do .....	do .....	37,744
Do .....	19	23.25m. to 27.26m. south of Canberra .....	Drainage and restoration of damaged bitumen pavement .....	Council .....	15,438
Do .....	19	Lenanes Creek, 2.5m. north of Michelago .....	Reinforced concrete bridge .....	do .....	10,018
					<b>\$359,752</b>
<b>RIVERINA HIGHWAY</b>					
Berrigan .....	20	1.4m. to 8.8m. west of Berrigan .....	Reconstruction and widening .....	Department .....	3,779
Deniliquin .....	20	Intersection with S.H. No. 21 at North Deniliquin .....	Improvements .....	Council .....	12,496
					<b>\$16,275</b>
<b>COBB HIGHWAY</b>					
Deniliquin .....	21	Flood Channel of Edward River at Deniliquin .....	Prestressed concrete bridge .....	Department .....	2,442
Hay .....	21	46m. to 48m. north of Hay .....	Reconstruction and bitumen surfacing .....	do .....	41,086
Murray .....	21	16.65m. to 24m. north of Moama .....	do .....	do .....	59,254
Windouran .....	21	Bridge over Billabong Creek at Wanganella .....	Approaches .....	Council .....	28,000
Do .....	21	Billabong Creek, 25.77m. north of Deniliquin .....	Steel and concrete bridge and approaches .....	do .....	58,300
					<b>\$189,082</b>
<b>SILVER CITY HIGHWAY</b>					
Broken Hill .....	22	2.3m. north of Broken Hill .....	Elimination of Floodway .....	Council .....	9,000
Wentworth .....	22	Approaches to Abbotsford Bridge at Curlwaa .....	Reconstruction .....	Department .....	383
Do .....	22	1m. to 11m. north of Wentworth .....	Reconstruction and bitumen surfacing .....	do .....	127,204
Do .....	22	21m. to 31m. north of Wentworth .....	do .....	do .....	15,958*
Do .....	22	11m. to 21.04m. north of Wentworth .....	Deviation .....	do .....	457*
Do .....	22	31.8m. to 41.8m. north of Wentworth .....	Reconstruction .....	do .....	40,239
					<b>\$160,411</b>
<b>MOUNT LINDESAY HIGHWAY</b>					
Kyogle .....	24	Junction with T.R. No. 83, near Woodenbong .....	Improvement .....	Council .....	6,900
					<b>\$6,900</b>
<b>ILLAWARRA HIGHWAY</b>					
Wingecarribee .....	25	2m. to 4m. east of Moss Vale .....	Reconstruction and widening .....	Department .....	30,084
					<b>\$30,084</b>
<b>STATE HIGHWAY No. 26</b>					
Gosford .....	26	2.32m. to 2.77m. north of Calga .....	Southbound lane .....	Department .....	36,028
Do .....	26	17.17m. to 19.7m. north of Calga .....	Construction .....	do .....	104*
Do .....	26	Calga to Ourimbah .....	Street lighting at intersections .....	do .....	1,793
					<b>\$37,717</b>
<b>Total — State Highways .....</b>					<b>\$7,011,953</b>

\* Credit

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(iii) Trunk and Ordinary Main Roads

68

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Abercrombie	54	Perthville Level Crossing	Installation of "F" type signals	Department	8,633
Do	54	Georges Plains Level Crossing	do	do	16,808
Do	54	21.4m. to 22m. and 23m. to 26.5m. south of Bathurst	Reconstruction and bitumen surfacing	Council	19,000
Do	54	19.4m. to 21.4m. south of Bathurst	do	do	30,000
Do	54	26.5m. to 29.8m. south of Bathurst	Deviation and culverts	do	3,105*
Do	54	Caloola Creek, 22.5m. south of Bathurst	Reinforced concrete box culvert	do	3,612
Do	252	21.48m. to 22.38m. south of Bathurst	Reconstruction and bitumen surfacing	do	1,467*
Do	252	19.5m. to 20.82m. south of Bathurst	do	do	4,860
Do	252	Thompsons Creek, 14m. from Bathurst	Reinforced concrete bridge	do	27,000
Albury	125	3.7m. to 5.2m. from Albury	Reconstruction and bitumen surfacing	do	2,255*
Armidale City	74	Marsh Street to Taylor Street, Armidale	do	do	1,032*
Ashford	63	20.25m. to 25.5m. and 31.3m. to 37.52m. north of Warialda	do	do	6,750
Do	137	4.6m. to 7m. north of Ashford	do	do	6,500
Do	137	2.7m. to 5.3m. north of Bonshaw	do	do	24,500
Do	138	0m. to 1.9m. north of S.H. No. 16	Construction and bitumen surfacing	Department	31,384
Do	187	Gramen Creek at Gramen	Prestressed concrete bridge	Council	27,500
Ballina	545	0.15m. to 0.45m. east of S.H. No. 10	Reconstruction	do	3,628
Balranald	67	60m. to 62.3m. north of Balranald	Reconstruction and bitumen surfacing	do	31,000
Do	67	17.2m. to 22m. north of Balranald	do	do	17,000
Do	583	Junction with S.H. No. 14	do	do	5,250
Do	583	No. 1 Approach Bridge, Murray River at Robinvale	Realignment of approaches	do	344
Barraba	63	1.63m. to 3.37m. south of Barraba	Widening	do	247
Do	63	18.26m. to 20.02m. north of Barraba	Reconstruction and bitumen surfacing	do	1,273*
Do	132	34.25m. north east of Barraba	Reinforced concrete box culvert and approaches	do	8,000
Do	132	16m. to 16.75m. from Barraba	Reinforced concrete box culverts and realignment	do	120*
Do	132	Saveall Creek, 21m. north of Barraba	Reinforced concrete bridge and deviation	do	1,273
Do	329	2.12m., 4.92m. and 11.03m. west of T.R. No. 63	Waterway structures and minor realignment	do	12,009
Bathurst	54	2.57m. to 3.02m. north of Bathurst	Reconstruction and bitumen surfacing	do	2,875
Bellingen	76	Dorrigo Mountain Pass, 1.9m. to 2.2m. from Thora	Improvement to alignment	do	460
Do	76	Dorrigo Mountain Pass	Improvement	do	20,725
Do	120	Dorrigo to Caramba	Realignment	do	6,210
Berrigan	363	0m. to 2m. south of Berrigan	Deviation	do	1,000
Do	550	17m. to 21.5m. west of Shire Boundary	Reconstruction and bitumen surfacing	do	19,200
Do	550	16m. to 19.3m. west of Carowa	do	do	6,000
Bibbenluke	91	6.55m. to 8.41m. east of Bombala	do	do	37,514†
Do	91	5m. to 6.55m. east of Bombala	do	do	17,475
Do	91	Archies Flat Creek, 6.93m. east of Bombala	Reinforced concrete box culvert	Department	1,406
Do	91	Yellow Waterhole Creek, 12.8m. from Bombala	Reinforced concrete bridge and approaches	Council	16,795
Do	91	Bridge over Gerathys Creek, 4.6m. east of Bombala	Approaches	do	475*
Bingara	133	19.8m. to 20.8m. west of Bingara	Realignment and reconstruction	do	6,331
Do	134	From 4.37m. north of Bingara	Reconstruction and bitumen surfacing	do	3,000
Do	134	Whitlow Creek, 3.6m. from Bingara	Prestressed concrete bridge	do	5,000
Bland	57	23.38m. to 23.81m. and 24.25m. to 24.42m. from Temora	Widening and strengthening	do	1,744*
Do	57	18.75m. to 20m., 23.2m. to 23.6m. and 24m. to 25.18m. north of Temora	Widening	do	4,647*
Do	57	22.45m. to 22.78m. north of Temora	Reconstruction	do	4,090
Do	231	15.48m. and 18.75m. from Ungarie	Drainage structures	do	1,776
Do	231	8.2m. to 19.52m. from T.R. No. 57	Reconstruction and bitumen surfacing	do	47,000
Do	231	4.36m. to 7.19m. north of Girral	do	do	3,492*
Do	231	9.26m. to 15.04m. north of Girral	Reconstruction and bitumen surfacing and drainage structures	do	13,593
Blaxland	55	16m. to 19.5m. west of Lithgow	Reconstruction and bitumen surfacing	Department	179,549
Do	55	Smalls Creek, 33.3m. north of Lithgow	Prestressed concrete bridge and approaches	Council	5,800
Do	55	19.8m. north of Lithgow	Reinforced concrete box culvert	do	2,749
Do	531	2m. to 6.3m. from Wallerawang	Widening, strengthening and sealing	do	886
Do	531	5.2m. to 6.4m. north of S.H. No. 5	Reconstruction and bitumen surfacing	do	8,000
Do	531	Wallerawang Level Crossing	Improvements	do	3,650
Bogan	57	10.1m. to 11.95m. south of Nyngan	Reconstruction and bitumen surfacing	do	527
Do	204	21m. to 25m. north of Warren	do	do	20,000

\* Credit

† For additional expenditure see Appendix No. 7.

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(iii) Trunk and Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Bogan	204	0.57m. to 2.19m. north of Nyngan	Reconstruction and bitumen surfacing	Council	43*
Do	228	0.11m. to 1.27m. from Hermidale	do	do	19,000
Do	424	Railway Level Crossing at Coolabah	Improvement	Department	509
Booolooroo	232	1.68m. to 3m. north of Moree	Widening and surfacing	Council	3,800
Do	507	25.55m. west of Goondiwindi	Reconstruction and bitumen surfacing	do	3,500
Boomi	232	40.04m. to 42m. north of Moree	do	do	7,750
Do	232	30.81m. to 31.63m. north of Moree	Reconstruction	do	7,850
Boorowa	56	19m. to 20m. north of Boorowa	Reconstruction and bitumen surfacing	do	27,000
Do	56	18.3m. to 19m. north of Boorowa	do	do	4,377
Do	56	16m. to 18.3m. north of Boorowa	do	do	2,327
Do	241	18.35m. to 20.55m. east of Boorowa	Reconstruction and gravelling	do	7,000
Do	241	Harrys Creek, 6.7m. east of Boorowa	Reinforced concrete bridge	do	20,000
Do	241	5.93m. to 6.40m. and 5.93m. to 7.13m.	Reconstruction and bitumen surfacing	do	5,000
Do	241	2.75m. to 5m. west of Boorowa	do	do	10,700
Do	380	0m. to 1.7m. west of T.R. No. 56	do	do	3,013
Boree	61	Level Crossing at Meeranburn, 2.15m. west of Manildra	Installation of flashing lights	do	2,906
Do	237	Paling Yards Creek, 15.2m. from Orange	Reinforced concrete box culvert	do	16,225
Do	237	38.53m. to 39.57m. from Orange	Reconstruction and bitumen surfacing	do	1,500
Do	237	20.1m. to 22.05m. from Orange	do	do	5,000
Do	238	14.2m. to 14.5m. from Canowindra	Reconstruction	do	581*
Do	238	4m. to 11m. from Canowindra	Reconstruction and bitumen surfacing	do	29,000
Do	310	Oakey Creek, 20m. north of Waugoola Shire Boundary	Reinforced concrete bridge	do	3,648
Do	310	16.42m. to 17.48m. north of Waugoola Shire Boundary	Bitumen surfacing	do	161*
Do	377	30m. to 33m. from Orange	Reconstruction and bitumen surfacing	do	1,314
Do	377	36.7m. to 37.9m. from Orange	Reconstruction and realignment	do	18,999
Brewarrina	68	Bridge over Billabong of Barwon River at Brewarrina	Construction of footway	do	5,260
Do	70	17.4m. to 28m. south of Brewarrina	Reconstruction	do	11,497
Do	70	5.3m. to 12m. north of Brewarrina	Reconstruction and bitumen surfacing	do	15,000
Burrangong	241	Burrangong Creek	Bridge and approaches	do	16,000
Do	241	19m. to 21m. west of Young	Reconstruction and pavement priming	do	25,423
Do	241	15.2m. to 24.5m. west of Young	Reconstruction and bitumen surfacing	do	13,040
Do	241	24.6m. to 30.54m. west of Young	do	do	423*
Byron	65	13.6m. to 14.6m. from Lismore	do	do	1,059
Camden	259	0.52m. and 0.9m. from S.H. No. 2	Two reinforced concrete box culverts	do	13,800
Canobolas	61	7.6m. to 8.23m. west of Orange	Reconstruction and bitumen surfacing	do	5,234
Do	245	Spring Hill Level Crossing	Installation of "F" type signals	do	65*
Do	245	Spring Hill Level Crossing	do	Department	10,325
Do	245	10.19m. to 11.77m. and 12.33m. to 13.58m. from Orange	Reconstruction and bitumen surfacing	Council	4,933
Do	245	2.1m. to 2.5m. from Orange	Realignment	do	727*
Do	559	0m. to 2.62m. from S.H. No. 7 at Whileys Junction	Reconstruction and bitumen surfacing	do	2,726*
Do	573	Kerrs Creek, 19m. from Orange	Reinforced concrete box culvert	do	2,809*
Do	573	Calula Creek, 17.8m. north of Orange	Reinforced concrete bridges and approaches	do	2,800
Do	573	9m. to 11.9m. north of Orange	Reconstruction and bitumen surfacing	do	646*
Do	573	15m. to 19m.	do	do	3,503
Do	573	11.9m. to 15m. from Orange	do	do	26,214
Carrathool	80	25.4m. to 29m. south of Hillston	do	do	23,400
Do	80	12.57m. to 17.68m. south of Hillston	do	do	24,959
Casino	149	28.52m. to 28.80m. from Woodburn	Widening and bitumen surfacing	do	162
Central Darling	68	37.6m. to 48.3m. west of Wilcannia	Reconstruction and bitumen surfacing	do	3,182
Do	68	8m. west of Wilcannia on S.H. No. 8 to 32.25m. south of Wilcannia	Deviation	do	5,674
Do	433	19.6m. west of Darnick	Construction	do	7,000
Cobar	61	31m. to 36m. south of Cobar	Reinforced concrete culverts	do	15,000
Cockburn	63	14.17m. to 16.87m. north of Tamworth	Reconstruction and widening	do	15,000
Coffs Harbour	151	37m. to 38m. south of Grafton	Reconstruction and bitumen surfacing	do	44,480
Colo	181	Bridge at 7.7m. from Webbs Creek Ferry	Approaches	do	1,141
Do	181	7.7m. from Webbs Creek Ferry	Reinforced concrete box culvert	do	2,711*
Do	181	Bridge at 9.7m. from Webbs Creek Ferry	Approaches	do	839
Do	181	9.7m. from Webbs Creek Ferry	Reinforced concrete box culvert	do	2,374

\* Credit

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(iii) Trunk and Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Colo	503	41.5m. to 49.5m. north of Windsor	Asphaltic concrete pavement	Department	19,347
Do	503	7.42m. to 7.8m. north of Howes Creek Bridge	Improvement and widening	do	10,840
Do	503	41.35m. to 48.25m. north of Windsor	Bitumen surfacing	do	81
Do	519	9.1m. to 10.1m. from M.R. No. 184	Reconstruction	Council	30,196
Conargo	552	31m. to 35m. from Deniliquin	Reconstruction and bitumen surfacing	do	13,894
Do	552	36m. to 42.1m. from Deniliquin	Reconstruction, realignment and bitumen surfacing	do	12,600
Do	552	39m. to 42.1m. from Deniliquin	Reconstruction and bitumen surfacing	do	5,000
Do	552	27.6m. to 32m. from Deniliquin	do	do	3,300
Condobolin	230	0m. to 2.43m. from T.R. No. 57	do	do	10,000
Do	377	1.12m. to 5.87m. from T.R. No. 57	do	do	2,860
Coolah	55	5m. to 6.3m. north of Coolah	do	do	40,705
Do	55	4.2m. to 5m. north of Coolah	do	do	5,500
Do	55	5.9m. north of Coolah	Reinforced concrete box culvert	do	11,501
Do	77	Ukebung Creek, 17m. west of Dunedoo	Reinforced concrete bridge and approaches	do	14,000
Do	334	0.2m. to 1.35m. north of Mendooran	Reconstruction and bitumen surfacing	do	6,597
Do	206	2.3m. to 4.5m. south west of Dunedoo	do	do	4,000
Do	206	7.4m. to 10m. west of Dunedoo	do	do	22,000
Do	206	4m. to 7.38m. west of Dunedoo	do	do	9,669
Do	206	7.72m. west of Dunedoo	Reinforced concrete box culvert	do	10,419
Do	334	5.8m. to 10.3m. north of Mendooran	Reconstruction	do	25,000
Coolamon	240	21m. to 28m. north of Coolamon	Reconstruction and bitumen surfacing	do	2,420*
Do	243	9m. to 9.5m. east of Coolamon	Reconstruction and realignment	do	4,420
Do	543	South of Coolamon to Mitchell Shire Boundary	Reconstruction and bitumen surfacing	do	10,500
Coonabarabran	55	18.5m. to 33.5m. north of Coolah	do	do	1,175
Do	129	1.5m. east of Coonabarabran	Replacement of old timber culvert	do	6,000
Do	329	6m. to 6.85m. north of Baradine	Reconstruction and bitumen surfacing	do	459
Do	329	6.9m. to 10.9m. north of Baradine	do	do	10,000
Do	334	26m. to 33.73m. south of Coonabarabran	do	do	459*
Coonamble	129	6.5m. to 13.5m. east of Coonamble	do	do	45,000
Do	129	From 11.35m. west of Coonamble	do	do	10,000
Do	205	Baronne Creek at Doorooombah	Reinforced concrete bridge	do	4,500
Do	383	0m. to 8m. north of Coonamble	Reconstruction and bitumen surfacing	do	466
Cootamundra	78	1.3m. to 1.7m. north of Cootamundra	Reconstruction	do	4,012
Cootamundra and Jindalee	78	Cootamundry Creek, 1.37m. south of Cootamundra	Steel and concrete bridge and approaches	do	85,785
Copmanhurst	83	At 36.55m., 36.59m. and 36.64m. north of Grafton	Reinforced concrete box culverts	do	2,500
Do	83	23.6m. to 27.9m. north of Grafton	Reconstruction and bitumen surfacing	Department	2,292
Do	83	Bridge over Six Mile Creek at Battens Bight	Approaches	Council	13,620
Do	83	13.54m. north of Grafton	Reinforced concrete bridge and approaches	do	6,700
Do	150	Pulganbar Creek	do	do	2,158
Do	150	22m. to 23.42m. north of Grafton	Reconstruction and bitumen surfacing	do	13,940
Do	151	13.1m. to 15.1m. north of Grafton	do	do	2,147
Do	151	14.93m. to 16.28m. north of Grafton	Deviation	do	12,935
Corowa	331	East of M.R. No. 131 at Daysdale Section 1	Reconstruction	do	5,000
Do	331	1m. to 15.15m. west of M.R. No. 131	Reconstruction and bitumen surfacing	do	16,000
Do	550	23.3m. to 28.3m. west of Corowa	do	do	2,456
Crookwell	54	34.31m. to 36.7m. from Goulburn	do	do	25,184*
Do	54	32.48m. to 34.31m. from Goulburn	Gravelling and bitumen surfacing	do	15,010*
Do	249	1.9m. to 4m. south of Crookwell	Reconstruction and bitumen surfacing	do	24,480
Do	291	6m. to 9.5m. south of Crookwell	do	do	12,000
Cudjiegong	55	Railway Level Crossing, 2m. south of Mudgee	do	do	819
Do	55	Redbank Creek, 1.5m. south of Mudgee	Reinforced concrete culvert	do	31,000
Do	208	10.68m. to 11.59m. from Mudgee	Reconstruction and bitumen surfacing	do	185
Do	208	11.8m. to 12.8m. from Mudgee	do	do	3,000
Do	216	9.33m. to 10.6m. south of Mudgee	do	do	11,681
Do	233	20.2m. to 22m. west of Gulgong	do	do	19,000
Do	233	24.08m. to 24.10m. and 24.3m. to 24.95m. west of Gulgong	Reconstruction and widening pipe culverts	do	8,638
Do	233	19.2m. to 20.2m. west of Gulgong	Reconstruction	do	78
Culcairn	78	4m. to 4.75m. north of Culcairn	Reconstruction and bitumen surfacing	do	1,128*

\* Credit

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(iii) Trunk and Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Culcairn	78	Billabong Creek at Culcairn	Steel and concrete bridge and approaches	Council	4,000
Do	331	25m. to 36.1m. from Culcairn	Reconstruction and bitumen surfacing	do	2,874
Do	331	48.4m. to 49.2m. from Holbrook	do	do	1,746*
Do	547	Billabong Creek, 1m. south of M.R. No. 331	Reinforced concrete bridge	do	34,500
Do	547	Billabong Creek, 5m. north of Walla Walla	do	do	4,000
Darling	68	S.H. No. 7 to Pokateroo	Reconstruction and bitumen surfacing	do	40,000
Do	405	Selected sections, 44m. to 51.1m. west of Bourke	Reconstruction	do	282
Do	425	35m. east of S.H. No. 7	Reinforced concrete box culvert	do	5,250
Demondrille	84	2.57m. to 3.63m. east of Murrumburrah	Reconstruction and bitumen surfacing	do	1,291
Do	84	1.8m. to 2m. west of Murrumburrah	Reconstruction of bitumen surfacing	do	19,500
Do	380	10.26m. to 13.2m. east of T.R. No. 84	Reconstruction and bitumen surfacing	do	19,352
Do	380	7.6m. to 10.6m. east of T.R. No. 84	do	do	6,648
Do	380	Railway Level Crossing at Cunnigar	Improvements	do	1,326
Deniliquin	388	0.33m. to 1.03m. from S.H. No. 21	Reconstruction and bitumen surfacing	do	1,000
Denman	208	33.34m. to 33.9m. from Muswellbrook	do	do	902
Do	209	3m. from Muswellbrook	Concrete causeway	do	3,288
Do	209	14.25m. to 17m. south of Muswellbrook	Reconstruction and bitumen surfacing	do	1,835
Dumaresq	74	39.76m. to 41.32m. east of Armidale	do	do	1,516
Do	74	41.3m. to 43.6m. east of Armidale	do	do	16,059
Do	124	3.8m. west of Armidale to Shire Boundary	do	do	5,646
Dungog	101	Railway Level Crossing at Dungog	Installation of "F" type signals	Department	14,740
Do	101	New Bridge over Myall Creek	Approaches	Council	22,600
Do	101	9.1m. to 9.7m., 18.2m. to 19m. and 21m. to 21.7m. south of Dungog	Reconstruction and bitumen surfacing	do	1,416*
Do	101	Myall Creek at Dungog	Reinforced concrete bridge and approaches	do	1,416
Do	301	1.35m. to 1.8m. from Wirragulla	Realignment and bitumen surfacing	do	17,010
Do	301	9m. to 9.83m. south of Wirragulla	Reconstruction and bitumen surfacing	do	1,840
Eurobodalla	271	7m. from Moruya	Improvement to alignment	do	10,000
Do	271	Coopers Creek, 17.5m. from Moruya	Reinforced concrete bridge	do	6,231
Do	271	1m. to 1.9m. west of Moruya	Reconstruction and bitumen surfacing	do	3,785
Do	560	Joes Creek, 1.24m. to 1.53m. from Batemans Bay	Reinforced concrete box culvert and approaches	do	11,000
Gilgandra	77	5.25m. to 9.75m. east of Gilgandra	Reconstruction and bitumen surfacing	do	10,000
Do	77	10.4m. to 15.5m. from Gilgandra	do	do	8,000
Gloucester	90	Through Town of Ganghat	Reconstruction	do	546
Do	90	10.5m. to 12m. south of Gloucester	Reconstruction and bitumen surfacing	do	2,853*
Do	90	Titaatee Creek, 11.4m. east of Gloucester	Steel and reinforced concrete bridge	do	2,272
Goobang	57	0.1m. to 1.7m. north of Tullamore	Reconstruction and bitumen surfacing	do	5,820
Do	233	7.1m. from Parkes	Reinforced concrete box culvert	do	5,000
Do	233	4.5m. to 8m. from Parkes	Reconstruction and bitumen surfacing	do	10,000
Do	348	40.4m. to 41.7m. from Peak Hill towards Tullamore	do	do	21,934
Do	350	1.15m. to 6m. north of Trundle	do	do	15,000
Goodradigbee	56	18.97m. to 22.1m. north of Yass	do	do	7,578
Do	56	14.6m. to 17.2m. north of Yass	do	do	31,000
Do	249	4.8m. to 5.8m. south of Gundaroo	do	do	9,667
Gosford	225	Piles Creek, 0.5m. from S.H. No. 10	Reinforced concrete pipe culvert	do	241
Do	336	4.82m. to 6.06m. east of Erina Creek	Reconstruction and bitumen surfacing	do	24,000
Do	349	1.04m. to 1.46m. from S.H. No. 10	do	do	1,700
Do	505	3.12m. to 3.42m. from M.R. No. 336	Reconstruction	do	291
Do	505	2.19m. to 3.19m. from M.R. No. 336	Reconstruction and bitumen surfacing	do	1,703
Goulburn City	54	0.98m. to 1.57m. west of Goulburn — Newton Street intersection	do	do	2,500
Do	79	Auburn Street to Sloane Street, Goulburn	Reconstruction and channelisation	do	13,000
Grafton City	74	2.42m. to 2.94m. south of Grafton	Reconstruction and bitumen surfacing	do	1,000
Do	74	3.81m. south of Grafton	Multi-cell pipe culvert	do	1,400
Greater Cessnock	181	0.45m. to 0.73m. south of Wollombi	Bitumen surfacing	do	30,000
Do	218	Bellbird, 2.95m. south of Cessnock	Reinforced concrete box culvert	do	2,566
Do	220	15.075m. south of Cessnock, 0.4m. north of Lake Macquarie Boundary	Curve improvement	do	1,314
Greater Wollongong	186	0m. to 1.08m. from S.H. No. 1	Reconstruction and widening	do	22,091
Do	295	Australian Iron and Steel	Reinforced concrete overbridges	do	313*

\* Credit

## Appendix No. 9—continued

## COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

## SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

## (iii) Trunk and Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Greater Wollongong	502	2.2m. to 4.2m. west of M.R. No. 513	Shoulder widening	Department	40,723
Do	513	7m. to 9m. west of S.H. No. 1	Climbing lane	do	8,671
Do	513	5.5m. to 6.15m. north of Wollongong	Provision of additional lane	do	97,940
Do	513	Climbing Lane, 0m to 5.8m. south of S.H. No. 1	Resheeting	do	188,106
Do	513	6.17m. to 6.57m. south of Northern Junction with S.H. No. 1	Climbing lane	do	17,667
Do	513	2.85m. to 4m. west of S.H. No. 1	do	do	1
Do	568				
Do	and 581	Masters Road to intersection with M.R. No. 295	Deviation	Council	1,347*
Gundagai	581	Crown Street to Banks Street	Drainage	do	3,300
Do	243	14.4m. to 15.0m. from Nangus	Reconstruction and bitumen surfacing	do	4*
Do	278	20.75m. to 21.7m. from Tumut	Realignment, gravelling and pipe culvert	do	1,877
Do	279	1.1m. to 3.3m. south of Gundagai	Reconstruction and bitumen surfacing	do	11,500
Do	279	3.42m. to 3.80m. south of Gundagai at Stoney Creek	Temporary sealing	do	1,000
Gundurimba	65	2.96m. to 4m. east of Lismore	Reconstruction and bitumen surfacing	do	6,191*
Do	147	17.43m. to 17.6m. north of Woodburn	Realignment	do	2,410
Do	147	18.3m. to 19.38m. from Woodburn	Reconstruction and bitumen surfacing including culvert	do	6,955
Do	544	Eleven Mile Creek, 7.43m. from Lismore	Reinforced concrete bridge	do	1,646
Do	544	2.32m. to 4.03m. from S.H. No. 16	Reconstruction and bitumen surfacing	do	21,755
Do	544	7.3m. to 8.65m. from Lismore Shire Boundary	do	do	14,290
Do	555	Tomki Creek, 14.67m. from Wardell	Reinforced concrete bridge	do	31,500
Gunning	249	4m. to 6m. south of Gunning	Reconstruction and bitumen surfacing	do	42,096
Do	251	6.5m. from Dalton	Realignment	do	66
Do	251	Jerrowa Creek, 2m. from Dalton	Reinforced concrete bridge and approaches	do	38,000
Guyra	135	Willis Creek, 10.9m. west of Guyra	Reinforced concrete box culvert	do	1,122
Do	135	Jones Swamp, 17.4m. east of Guyra	Prestressed concrete bridge and approaches	do	15,250
Do	135	7.4m. to 9m. west of Guyra	Reconstruction and bitumen surfacing	do	14,000
Do	135	5.76m. to 7.49m. west of Guyra	do	do	2,525
Do	135	3.4m. to 4.81m. west of Guyra	do	do	2,229
Hastings	112	Gannons Creek, 0.8m. from S.H. No. 11	Concrete bridge	do	5,000
Do	112	0m. to 0.51m., 1.15m. to 1.36m. and 1.67m. from S.H. No. 11	Reconstruction and culvert	do	54*
Do	112	3.9m. from S.H. No. 11, towards Comboyne	Reconstruction and bitumen surfacing	do	9,200
Do	112	5.0m. to 6.72m. from S.H. No. 11, towards Comboyne	do	do	9,175
Do	112	1.36m. to 3.94m. from S.H. No. 11, towards Comboyne	do	do	825*
Do	538	Camden Haven River at Kendall	Reinforced concrete bridge	do	8,880
Hay	319	25.25m. to 26m. north of Windouran Shire Boundary	Reconstruction and bitumen surfacing	do	11,284
Do	514	2m. to 9m. west of Hay	Regrading	do	4,130
Do	514	19m. to 23m. west of Hay	Reconstruction and bitumen surfacing	do	1,484*
Do	514	24m. to 28m. west of Hay	do	do	1,256*
Do	514	28.25m. to 32m. from Hay	do	do	10,698
Holbrook	331	17.7m. to 30.3m. east of Holbrook	do	do	24,200
Hume	370	13.3m. to 17.7m. north of Howlong	do	do	285*
Do	547	10.6m. to 22.3m. from Albury	do	do	32,000
Do	547	13.15m. to 13.62m. north of Albury	Improvement to curves	do	7,000*
Do	547	13.15m. to 13.63m. from Albury	Improvement	do	5,247
Illabo	57	Intersection with M.R. No. 243	do	do	829
Do	78	13.7m. to 19.85m. north of Wagga Wagga	Reconstruction	do	27,224*
Do	78	0.85m. to 4m. east of Junee	Reconstruction and bitumen surfacing	do	10,224*
Do	78	Billabong Creek near Illabo	Prestressed concrete bridge	do	3,146*
Imlay	91	2.6m. to 4.6m. west of S.H. No. 1	Reconstruction and bitumen surfacing	do	1,849*
Do	91	13m. to 15.10m. west of Pambula	do	do	32,000
Do	276	6m. to 11m. from S.H. No. 1	Improvements	do	15
Inverell	137	1m. to 2.9m. north of Inverell	Widening and strengthening pavement	do	7,834
Jemalong	61	Ootha, 18.5m. east of Condobolin	Railway overbridge	do	10,605
Do	61	Ootha, 18.5m. east of Condobolin	do	Department	83,220
Do	238	3.1m. to 9m. north of Eugowra	Reconstruction and bitumen surfacing	Council	7,000
Do	350	7.6m. to 10.7m. north of Forbes	do	do	10,333
Do	377	22.7m. to 29m. west of Forbes	do	do	9,544*
Do	377	29m. to 33.8m. west of Forbes	do	do	4,247*

\* Credit

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(iii) Trunk and Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Jerilderie	323	5.6m. to 13.2m. from S.H. No. 17	Reconstruction and bitumen surfacing	Council	12,341
Do	552	8.3m. to 12.3m. west of Jerilderie	do	do	24,349
Do	552	2m. to 8.3m. west of Jerilderie	do	do	27,752
Do	78	5.36m. to 6.36m. north of Cootamundra	Reconstruction and widening	do	5,625
Do	84	24.7m. west of Murrumburrah	Realignment	do	681*
Do	84	20m. to 22.1m. west of Murrumburrah	Reconstruction and bitumen surfacing	do	35,662
Do	84	12.23m. to 15.93m. west of Murrumburrah	Reconstruction and surfacing	do	12,000*
Do	84	15.9m. to 21m. west of Murrumburrah	Reconstruction and bitumen surfacing	do	12,000
Do	84	Noonan Creek, 26.97m. west of Murrumburrah	Reinforced concrete box culvert	do	1,796
Do	84	19.3m. to 22.1m. west of Murrumburrah	Reconstruction and bitumen surfacing	do	11,581*
Kempsey	75	1.65m. to 1.95m. from S.H. No. 10	do	do	2,329*
Do	75	Thomas Hennessy Crescent to Park Avenue	Reconstruction	do	618*
Kiama	264	9m. to 12.5m. from S.H. No. 1	Reconstruction and bitumen surfacing	do	35,000
Do	264	Bridge over Hyams Creek	Widening footway	do	205
Kyeamba	211	McCleods Creek, 19.95m. to 20.47m. south of Wagga Wagga	Reinforced concrete box culvert and approaches	do	1,891
Do	384	15.3m. to 16.1m. south east of Wagga Wagga	Reconstruction and bitumen surfacing	do	8,000*
Do	384	22.8m. to 25.6m. from Wagga Wagga	Reconstruction, bitumen surfacing and culverts	do	12,500
Do	384	10.55m. to 12.26m. from Wagga Wagga	Reconstruction	do	24,479
Do	384	Intersection, 4.42m. from S.H. No. 14	do	do	757*
Do	384	15.4m. south east of Wagga Wagga	Reinforced concrete box culvert	do	8,000
Do	384	16.8m. to 17.3m. south east of Wagga Wagga	Realignment	do	926*
Kyogle	83	13m. to 19.62m. north of Casino	Reconstruction and bitumen surfacing	do	284
Do	83	75.28m. to 90.83m. north of Grafton	do	do	7,750
Do	83	6.23m. to 9.1m. north of Kyogle	do	do	9,200
Do	361	34.90m. south of Woodenbong	Reinforced concrete box culvert	do	1,795
Do	544	Railway Level Crossing at Cedar Point	Relocation and installation of "F" type signals	do	1,159*
Lachlan	57	18.5m. south of Tottenham	Improvement	do	5,000
Do	57	16.9m. to 20m. south of Condobolin	Reconstruction and bitumen surfacing	do	25,000
Do	231	21m. to 24m. east of Lake Cargelligo	do	do	37,826
Do	231	21m. to 30m. east of Lake Cargelligo	do	do	16,956
Do	231	9m. to 16m. from Lake Cargelligo	do	do	11
Do	231	16m. to 23m. from Lake Cargelligo	do	do	3,318*
Do	371	0.4m. to 1.4m. from Lake Cargelligo, towards Rankin Springs	do	do	5,000
Lake Macquarie	217	1.5m. south of M.R. No. 509 to Shire Boundary	do	do	9,726
Do	217	Cockle Creek at Speers Point	Reinforced concrete bridge	Department	14
Do	325	Chilcott Street, Warners Bay	Deviation	Council	9,000
Do	509	Railway Overbridge at Wyee	Construction	do	4,100
Leeton	80	18.42m. to 20.95m. west of Leeton	Reconstruction and bitumen surfacing	do	13,000
Do	539	12.03m. to 1.4m. from T.R. No. 80	Strengthening and bitumen surfacing	do	11,180
Do	539	1.4m. to 4.88m. from T.R. No. 80	Reconstruction and bitumen surfacing	do	37,200
Lismore	555	1.70m. from Lismore	Reinforced concrete box culvert	do	11,117
Do	555	0.7m. to 2.2m. from S.H. No. 16	Widening, alignment and bitumen surfacing	do	1,172
Lithgow	516	1.07m. to 2.06m. east of Lithgow	Climbing lanes	do	1,851
Liverpool Plains	55	11.4m. to 13.9m. south of Mullaley	Reconstruction and bitumen surfacing	do	34,380
Do	55	0m. to 1.4m. south of Mullaley	Reconstruction	do	1,161*
Do	55	0m. to 20.6m. south of S.H. No. 11	Reconstruction and bitumen surfacing	do	1,902*
Macintyre	73	Intersection with M.R. No. 135 at Gilgai	Widening	do	1,708*
Do	73	Through Gilgai and junction with M.R. No. 135, Stage 3	Sealing improvement	do	1,845
Do	134	Reedy Creek, 7.5m. north of Delungra	Prestressed concrete bridge	do	1,297*
Do	134	6.95m. to 9.8m. south of Delungra	Reconstruction and bitumen surfacing	do	1,141
Do	134	9.80m. to 11.5m. south of Delungra	do	do	22,605
Do	137	2.9m. to 4m. north of Inverell	Widening and strengthening pavement	do	120*
Maclean	151	21.95m. to 29m. north of Grafton	Reconstruction and bitumen surfacing	do	249
Do	152	Coldstream Street, Yamba	Relocation and construction	do	1,000
Do	152	Western approach to Palmers Channel Bridge	Reconstruction and bitumen surfacing	do	367
Macleay	75	42m. west of Kempsey	Improvement and Widening	do	6,897
Do	75	From Thomas Hennessy Crescent to Wide Street	Reconstruction and bitumen surfacing	do	2,948
Do	75	23m. to 24.4m. west of Kempsey	do	do	1,186*

\* Credit

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(iii) Trunk and Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Macleay	75	29.57m. to 32m. west of Kempsey	Reconstruction and bitumen surfacing	Council	1,186
Do	75	24.19m. west of Kempsey to Bellbrook	do	do	38,241
Do	75	Pee Dee and Sheepstation Creek Bridges, 41.25m. west of Kempsey	Approaches	do	20,000
Do	75	Pee Dee and Sheepstation Creeks, 41.25m. west of Kempsey	Two reinforced concrete bridges	do	20,186*
Maitland	218	1.68m. to 2.5m. south of S.H. No. 9	Reconstruction and bitumen surfacing	do	338*
Do	218	2.5m. to 3.5m. south of S.H. No. 9	Realignment	do	1,735*
Manilla	357	8.1m. to 11m. west of Manilla	Reconstruction and bitumen surfacing	do	10,000
Do	357	5.6m. to 11m. west of Manilla	do	do	20,539
Do	357	Bridge over Manilla River at Manilla	Approaches	do	4,199
Manning	90	25.9m. and 28.9m. west of Purfleet	Reconstruction and bitumen surfacing	do	2,800
Do	90	Wards Creek, 25.8m. from S.H. No. 10 at Purfleet	Extension of culvert	do	28,000
Do	111	0.8m. from S.H. No. 10	Realignment and extension to culvert	do	57*
Do	111	McCanns Corner, 6.5m. from S.H. No. 10	Curve elimination	do	13,000
Merriwa	62	2.04m. to 2.35m. west of Merriwa	Realignment	do	6,020
Do	62	20m. to 23.6m. west of Merriwa	Reconstruction and bitumen surfacing	do	20,000
Do	62	18m. west of Merriwa to Borambil Creek	do	do	10,000
Do	214	1.55m. to 2.5m. south of T.R. No. 62	do	do	10,000
Mitchell	78	5.8m. to 6.3m. from Wagga Wagga	Reconstruction and widening	do	5,400
Mittagong	258	33m. to 33.5m. from S.H. No. 2	Widening	do	4,500
Do	258	6.05m. to 7.5m. from S.H. No. 2	Reconstruction and bitumen surfacing	do	15,000
Do	263	11.59m. to 12.48m. east of M.R. No. 260	do	do	1,600
Molong	233	26.8m. to 27.8m. from Wellington	do	do	610
Do	234	Castle Street Level Crossing, Molong	Improvement	do	1,500
Do	234	3.9m. to 6.5m. from S.H. No. 7	Reconstruction and bitumen surfacing	do	882
Do	359	9.2m. from Molong	Improvement of crest	do	2,000
Do	359	1.4m. to 4m. from Molong	Reconstruction and bitumen surfacing	do	25,000
Monaro	394	23.65m. to 26.8m. from Berridale	do	do	2,293
Mulwaree	248	7.65m. to 9m. from Goulburn	do	do	1,513*
Do	248	9.56m. to 10.83m. west of Goulburn	Partial reconstruction and surfacing	do	4,513
Do	248	Whiteheads Creek, 11.5m. from Goulburn	Reinforced concrete box culvert and approaches	do	7,342
Do	248	Dixons Creek, 10.5m. north of Goulburn	Prestressed concrete bridge and approaches	do	3,342*
Do	256	10.8m. to 11.75m. north of Goulburn	Reconstruction and bitumen surfacing	do	20,380
Do	256	12.6m. to 14m. from Goulburn	do	do	20,000
Do	256	9.9m. to 10.8m. from Goulburn	do	do	673
Do	258	18.35m. to 18.42m. from Taraiga	Improvement	do	7,305
Do	376	14.4m. to 15.4m. from Goulburn	Reconstruction and bitumen surfacing	do	26,752
Do	376	12.9m. to 14m. from Goulburn	do	do	2,906
Do	376	14.4m. to 15.4m. from Goulburn	do	do	11*
Mumbulla	272	1.95m. to 2.65m. south of Bermagui	Reconstruction	do	18,000
Do	272	4.7m. to 5.7m. south of Bermagui	Reconstruction and bitumen surfacing	do	8,800
Murray	341	47m. to 50m. west of S.H. No. 21	do	do	5,252
Do	388	18.8m. to 23.8m. west of Deniliquin	do	do	2,073
Murray Darling Div.	66	27m. to 30m. east of Broken Hill	Drainage	Department	
Murrumbidgee	596	8m. to 10.8m. east of M.R. No. 321	Reconstruction and bitumen surfacing	Council	15,400
Do	596	15.94m. to 18.57m. east of M.R. No. 321	do	do	1,274
Do	596	11.2m. to 15.9m. east of M.R. No. 321	do	do	3,000
Murrumburrah	84	1.8m. west of Murrumburrah	do	do	900
Do	84	1.17m. to 1.49m. west of Murrumburrah	do	do	8,860
Murrurundi	358	Millers Creek, 15m. from S.H. No. 9	Reinforced concrete bridge	do	20,000
Do	358	Little Jacks Creek	do	do	160
Do	358	5.09m. to 7m. from S.H. No. 9	Reconstruction and bitumen surfacing	do	3,000
Nambucca	533	5.1m. from Macksville	Concrete bridge	do	20,000
Do	533	15m. to 15.86m. west of Macksville	Strengthen and bitumen surfacing	do	767*
Do	533	5m. to 5.43m. from Macksville	Improvement	do	9,609
Namoi	127	Myall Vale, 18m. west of Narrabri	Reinforced concrete box culvert	do	1*
Do	127	17m. to 19m. west of Narrabri	Deviation	do	5,763*
Do	127	19m. to 21.7m. west of Narrabri	Reconstruction and bitumen surfacing	do	642
Do	127	21.7m. to 25m. west of Narrabri	do	do	5,519
Do	127	15m. to 17m. west of Narrabri	do	do	1,259*

\* Credit

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(iii) Trunk and Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Namoi	127	46m. to 51m. west of Narrabri	Reformation and gravel surfacing	Council	3,000
Narrabri	127	0.72m. to 1.47m. west of Narrabri	Reconstruction and bitumen surfacing	do	880
Narraburra	241	12.07m. to 15m. east of Temora	do	do	4,000
Do	398	2.5m. to 5m. south of Ariah Park	do	do	12,200
Newcastle	108	Bridge over north arm of Hunter River	Approaches (western side)	Department	2,793
Do	217	Connection of Newcastle Road with Robert Street	Construction	Council	4,770
Do	223	Russell Road to Chilcott Street	Reconstruction	do	10,700
Do	316	Williams Street to Elizabeth Street	do	do	6,205*
Do	316	Woodstock Street to Bull Street	Construction	do	2,259*
Nundle	105	33.8m. to 35.9m. south east of Tamworth	Reconstruction and bitumen surfacing	do	572*
Do	105	28.5m. to 33.6m. south of Tamworth	Gravelling and bitumen surfacing	do	33,000
Do	105	Selected sections, 28.5m. to 33.3m. south east of Tamworth	Reconstruction	do	10,572
Nymboida	74	62.3m. to 70.1m. south of Grafton	Reconstruction and bitumen surfacing	do	7,662
Do	74	Nymboida to Hortons Creek	do	do	400
Do	74	Goolang Creek, 20.4m. south of South Grafton	Prestressed concrete bridge and approaches	do	4,054
Do	74	58.05m. to 59.02m. south of Grafton	Reconstruction and bitumen surfacing	do	28,335
Oberon	255	1.95m. to 2.7m. south of Oberon	do	do	40,000
Do	256	17.6m. to 21.2m. south of Oberon	Reconstruction	do	46,000
Do	256	15.6m. to 17.6m. and 14.6m. to 17.6m. south of Oberon	Reconstruction and bitumen surfacing	do	26,975
Do	256	0m. to 1m. south of Black Springs	do	do	42
Orange	526	Pinnacle Road Overbridge	Approaches	do	950
Patrick Plains	128	Lamby Creek, 18.35m. from Singleton	Reinforced concrete bridge	do	15,793
Do	128	19.4m. to 20.5m. east of Singleton	Reconstruction and bitumen surfacing	do	730*
Do	213	Waterfall Gully	Reinforced concrete box culvert	do	841
Do	213	2.42m. to 4.2m. from M.R. No. 503, towards Jerry Plains	Reconstruction and bitumen surfacing	do	30,000
Do	503	6.8m. to 7.66m. south of Singleton	do	do	7,754
Do	503	3.44m. to 4.35m. south of Singleton	do	do	730
Do	503	Macdonald River, 39m. south of Singleton	Reinforced concrete bridge	Department	5,124*
Peel	130	Single Street, south of Werris Creek	Improvements to level crossing	do	7,248
Do	130	18.15m. to 19.29m. south of Tamworth	Reconstruction and bitumen surfacing	Council	8,680
Do	130	3.5m. to 6.4m. south of Tamworth	Widening box culverts	do	680*
Do	130	Werris Creek at Werris Creek	Prestressed concrete bridge	Department	2,549
Do	130	Timbumburi Creek, 7m. south of Tamworth	Reinforced concrete bridge	Council	7,542
Do	579	2.1m. to 2.7m. west of Werris Creek	Strengthening and surfacing	do	108
Port Stephens	90	2m. to 3.39m. from S.H. No. 10	Reconstruction and bitumen surfacing	do	28,000
Do	90	12 Mile Creek to Stroud Shire Boundary	do	do	1,984
Do	301	0.2m. from Woodville	Taylor's bridge	do	9,366
Do	301	Taylor's Bridge, 0.2m. from Woodville	Approaches	do	20,003
Queanbeyan	51	0m. to 0.53m. west of Queanbeyan	Widening and median strip	do	1,779
Rylstone	215	7.3m. to 8.4m. north of Rylstone	Reconstruction	do	20,000
Do	54	2.8m. to 4.5m. south of Ilford	Reconstruction and bitumen surfacing	do	3,500
Do	54	0.97m. to 2.79m. south of Ilford	do	do	1,390
Do	55	31.8m. south of Mudgee	Reinforced concrete bridge	Department	632
Do	215	6.05m. to 7.05m. north of Rylstone	Reconstruction and bitumen surfacing	Council	9,403
Scone	62	16m. to 18m. west of Scone	do	do	732
Do	62	21.66m. to 25.17m. west of Scone	do	do	13,213
Do	62	Sam Owens Gully, 8.47m. west of Scone	Reinforced concrete box culvert	do	17,000
Do	105	Hunter River at Ellerston	Reinforced concrete bridge and deviation	do	46,000
Severn	136	10m. to 12.5m. west of Deepwater	Reconstruction and bitumen surfacing	do	4,736
Do	382	11.3m. to 14.5m. west of Glen Innes	do	do	44,000
Shoalhaven	267	Tiagara Creek, 24m. from Huskisson	Reinforced concrete bridge	do	28,000
Do	293	Black Forest Bridge to Shoalhaven Heads	Reconstruction and bitumen surfacing	do	10,973
Do	293	2.47m. to 4.49m. from S.H. No. 1	Reconstruction and widening	do	2,936
Singleton	503	Through town of Singleton	Reconstruction	do	10,000
Snowy River	286	20m. to 22.3m. west of Jindabyne	Reconstruction and bitumen surfacing	Department	53,836
Do	286	22.3m. to 29.8m. west of Jindabyne	do	do	11,808
Do	286	7.9m. to 20m. west of Jindabyne	Pavement restoration	do	33,116
Do	286	15.5m. west of Jindabyne	Turning circle	do	994

\* Credit

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(iii) Trunk and Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Stroud	90	Wards River	Railway overbridge	Department	1,299
Do	111	Dunns Creek at 3.7m. and 4m. south of Forster	Reinforced concrete box culvert	Council	2,157
Do	289	Noaroo Level Crossing	Deviation	do	7,500
Talbragar	206	Bellimare Creek, 20.5m. from Dubbo	Reinforced concrete bridge	do	10,000
Do	206	22.9m. to 25.4m. from Dubbo and Bridge over Spicers Creek	Deviation and approaches	do	13,200
Tallaganda	51	3m. west of Braidwood	Improvement to crest	do	13,218
Do	51	Bridge over Mongarlowe Creek, 10m. east of Braidwood	Asphaltic concrete surfacing	Department	2,419
Do	92	2.46m. to 4m. from Braidwood	Reconstruction and bitumen surfacing	Council	28,880
Do	92	23.3m. to 24.7m. from Braidwood	Bitumen surfacing	do	2,203
Do	92	1.8m. to 3m. from Braidwood	Reconstruction and bitumen surfacing	do	365*
Do	271	11.9m. to 15m. from Braidwood	do	do	10,000
Tamarang	72	5.5m. to 7m. south of Quirindi	Reconstruction	do	10,000
Do	72	3.7m. to 7.2m. south of Quirindi	Reconstruction and widening	do	664*
Do	129	16.5m. to 19.05m. west of Quirindi	Reconstruction and bitumen surfacing	do	7,494
Taree	192	Cornwall Street to Old Wingham Road, Taree	do	do	5,121
Temora	57	Temora, Railway Level Crossing at Junee Road	Installation of "F" type signals	Department	15,134
Do	57	Temora, Railway Level Crossing at Junee Road	do	Council	34*
Do	57	Kitchener Street to Polaris Street, Temora	Reconstruction	do	244*
Tenterfield Shire	362	4m. to 6.2m. south of Urbenville	Reconstruction and bitumen surfacing	do	6,268
Terania	141	Hanging Rock Creek at Cawongla	Reinforced concrete bridge and approaches	do	4,930
Timbregongie	89	10m. to 15m. from Narromine	Reconstruction and bitumen surfacing	do	4,232
Do	89	14.1m. to 18.7m. south of Narromine	do	do	17,000
Do	347	7.6m. to 10.1m. south west of Trangie	do	do	14,000
Tintenbar	555	6.5m. to 7.84m. from S.H. No. 10	do	do	7,700
Tomki	83	7.03m. south of Casino	Reinforced concrete box culvert	do	6*
Do	83	1.25m. to 2.25m. south of Casino	Reinforced concrete box culverts	do	9,130
Do	544	13.17m. to 16.24m. from Lismore	Reconstruction and bitumen surfacing	do	10,615
Do	544	14.2m. from Lismore	Reinforced concrete box culvert	do	18,650
Tumbarumba	85	6.4m. to 14.5m. north of Tumbarumba	Preparation of pavement and bitumen surfacing	do	762*
Do	85	5.7m. to 10.7m. west of Tumbarumba	Reconstruction and bitumen surfacing	do	31*
Do	85	6.38m. to 8.38m. north of Tumbarumba	Reconstruction	do	827*
Do	85	6.38m. to 12.72m. north of Tumbarumba	do	do	731*
Do	281	M.R. No. 282 to Tintalra	Reconstruction and bitumen surfacing	do	19,000
Do	282	11.2m. to 14m. from Tumbarumba	do	do	12,523
Do	282	14m. to 19.2m. from Tumbarumba	do	do	39,500
Do	282	8.2m. to 11.3m. south of Tumbarumba and culvert at Stoney Creek	Reconstruction	do	607*
Do	282	Boggy Creek, 8m. south of Tumbarumba	Reinforced concrete box culvert	do	52*
Do	282	Clarke Hill, 14m. east of Tumbarumba	Reinforced concrete pipe culvert	do	200*
Do	282	2m. to 6.2m. and 2.3m. to 11.15m. east of Tumbarumba	Reconstruction and bitumen surfacing	do	1,417*
Do	282	Tumbarumba and Mannus Creeks	Steel and concrete bridges	do	262*
Tumut	85	3.11m. to 6.4m. from State Highway No. 4	Reconstruction and bitumen surfacing	do	26*
Do	85	Windowie Creek, near Rileys Gap	Steel and concrete bridge and approaches	do	167*
Do	279	4.4m. to 5.3m. from Tumut	Reconstruction and bitumen surfacing	do	1,257
Do	279	6.55m. to 9.1m. from Tumut	do	do	16,311
Do	279	6.4m. to 11.3m. from Tumut	do	do	61*
Do	279	5.3m. to 5.55m. north of Tumut	do	do	1,024*
Do	280	5.42m. to 6.38m. south of Adelong	do	do	422*
Do	280	Rogers Creek, 7.5m. south of Adelong	Reinforced concrete box culvert and approaches	do	5,175*
Tweed	142	Bridge over Tweed River at Murwillumbah	Approaches	do	14,094
Do	143	3.52m. to 4.28m. from Murwillumbah	Reconstruction and bitumen surfacing	do	3,333
Do	541	9.03m. to 10.11m. north of M.R. No. 143	do	do	19,585
Ullmarra	74	Ti-tree Creek, 6m. south of Grafton	Approaches and pipe culvert	do	3,321
Do	151	30.99m. to 31.85m. south of Grafton	Reconstruction and bitumen surfacing	do	821*
Do	151	Kremnos Creek, 23.5m. south of Grafton	Reinforced concrete bridge and approaches	do	370
Uralla	73	30.35m. to 35.35m. north of Uralla	Reconstruction and bitumen surfacing	do	15,000
Do	73	35.35m. to 39.66m. north of Uralla	do	do	4,088*
Do	73	15.7m. to 16.7m. north of Uralla	do	do	9,295
Do	124	Saumarez Creek, 5.5m. west of Armidale	Reinforced concrete bridge	do	7,347

\* Credit

Appendix No. 9—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(iii) Trunk and Ordinary Main Roads—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Uralla	124	17.9m. to 18.7m. west of Armidale	Strengthening and bitumen surfacing	Council	85*
Do	124	5.4m. to 6.2m. west of Armidale	do	do	207*
Urana	59	Level Crossing at Urana	Widening	Department	37
Do	59	0m. to 5.8m. east of Urana	Reconstruction and bitumen surfacing	Council	4,640
Do	59	Urana Creek, 0.3m. west of Urana	Prestressed and reinforced concrete bridge and approaches	do	1,704*
Do	125	1.2m. to 4m. south of Urana	Reconstruction and bitumen surfacing	do	1,548*
Do	131	Billabong Creek, 10.4m. south of Urana	Reinforced concrete bridge	do	311*
Do	385	28.8m. to 31.5m. from Urana	Reconstruction and bitumen surfacing	do	848
Do	385	1.5m. to 5.5m. north of Urana	do	do	34,300
Wade	80	1.5m. to 2.4m. and 4.2m. to 10m. east of Griffith	do	do	38,000
Do	321	0.2m. to 0.6m. from T.R. No. 80	do	do	1,770
Wagga Wagga	211	Docker Street Level Crossing	Installation of "F" type signals	do	9,839
Wakool	319	19.5m. to 24.5m. from Barham	Reconstruction and bitumen surfacing	do	17,083
Do	319	24m. to 28.69m. north of Barham	do	do	8,388
Do	319	15.5m. to 20.45m. north of Barham	do	do	20,100
Do	319	Murrain Yarrein Creek, 37m. north of Barham	Reinforced concrete bridge	do	12,000
Do	319	Bridge over Edward River at Moulamein	Approaches	do	9,400
Do	386	5m. to 8m. north of T.R. No. 67	Reconstruction and bitumen surfacing	do	4,778
Do	388	42.07m. to 45m. west of Deniliquin	do	do	334
Walgett	329	Level Crossing south of Pokataroo	Improvements	do	141
Do	329	0m. to 3.5m. south of Pokataroo	Reconstruction and bitumen surfacing	do	13,222
Do	343	0.3m. to 2.5m. east of Burren Junction	Deviation	do	7,112
Do	402	Grawin Creek, 42.4m. west of Walgett	Reinforced concrete box culvert	do	5,000
Warren	333	88m. to 99.2m. north of Warren	Reconstruction and bitumen surfacing	do	12,500
Do	333	80m. to 88m. north of Warren	do	do	10,000
Do	333	71m. to 79m. north of Warren	do	do	22*
Waugoola	56	Junction, 1.9m. south of Cowra	Reconstruction	do	744
Do	56	Kangaroo Creek, near Gooloogong	Prestressed concrete bridge	do	40,000
Do	56	Kangaroo Creek, near Gooloogong	Approaches	do	10,000
Do	576	Spring Creek, 6m. from Cowra	Steel and concrete bridge	do	5,000
Do	576	5.3m. to 9m. from Cowra	Reconstruction and bitumen surfacing	do	2,000
Do	576	8.1m. to 10.1m. from Cowra	do	do	30,000
Weddin	398	18.7m. to 21.7m. from Grenfell	do	do	10,000
Wellington	206	Four Mile Creek, 22m. from Dunedoo	Concrete bridge and approaches	do	10,000
Do	206	Spicers Creek and Baragonumble Creek	Steel and concrete bridges	do	16,178*
Do	206	Spicers Creek, 32m. from Dunedoo	Reinforced concrete bridge	do	26,663
Do	206	28.5m. to 32m. from Dunedoo	Reconstruction and bitumen surfacing	do	24,500
Do	206	19m. to 20m. from Dunedoo	do	do	1,587
Do	233	19.5m. to 20.9m. from Wellington, towards Gulgong	Reconstruction	do	11,653
Do	233	7.6m. to 9.7m. north of S.H. No. 7	Reconstruction and bitumen surfacing	do	4,000
Wentworth	68	21.3m. to 35m. north of Wentworth	do	do	35,000
Windouran	296	50m. to 54m. west of Deniliquin	do	do	20,500
Do	296	54.5m. to 58.5m. west of Deniliquin	do	do	5,700
Do	296	46m. to 50m. west of Deniliquin	do	do	7,300
Wingecarribee	264	2.2m. to 2.7m. from S.H. No. 25	Reconstruction	do	164
Do	264	0m. to 3.6m. south of S.H. No. 25	Reconstruction and bitumen surfacing	do	640*
Do	265	1m. to 3m. south of S.H. No. 25	do	do	1,724*
Do	265	3m. to 4.68m. south of S.H. No. 25	do	do	4,845*
Do	372	3.3m. north of Moss Vale	Reinforced concrete box culvert	do	1,643*
Do	569	1.78m. to 3m. south of S.H. No. 25	Reconstruction and widening	do	1,469
Wollondilly	179	Railway Level Crossing at Maldon	Improvements	do	6,888*
Do	179	Railway Level Crossing at Maldon	Installation of "F" type signals	Department	11,015
Do	179	5.49m. to 8.02m. from M.R. No. 178	Widening	Council	5,400
Woodburn	153	3.6m. and 5.0m. from S.H. No. 10 at Woodburn	Reconstruction and bitumen surfacing	do	18,455
Wyong	335	0.71m. to 1.64m. at North Entrance	Deviation	do	8,000
Do	335	The Entrance to Tuggerah Lakes	Reinforced concrete bridge	Department	3,385
Do	335	Tuggerah Lakes at The Entrance	Demolition of old wooden bridge	Council	2,500
Do	335	Bridge over Tuggerah Lakes at The Entrance	Approaches	do	13,956

**Appendix No. 9—continued**

**COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued**

**(iii) Trunk and Ordinary Main Roads—continued**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Wyong	336	1m. south of M.R. No. 335 to Shire Boundary	Reconstruction	Council	1,737
Do	509	Bridge over Budgewoi Creek, Budgewoi	Approaches	do	3,919*
Do	509	Dunleigh Street to Yarralla Road, Toukley	Reconstruction	do	3,592*
Do	509	Doyalson to Munmorah Power Station turnout	do	do	37*
Do	509	Gross Street to Wallarah Point Bridge	do	do	1,582
Yallaroi	63	26.5m. to 40.28m. north of Warialda	Reconstruction and bitumen surfacing	do	21,174
Do	63	26.5m. north of Warialda	Reinforced-concrete box culvert	do	1,066*
Do	63	Bridge over Warialda Creek at Warialda	Approaches	do	11,056
Yarrowlumla	52	Amungla Creek, 11.1m. north of Queanbeyan	Reinforced concrete bridge and approaches	do	20,000
Do	584	5.29m. to 7.86m. from Queanbeyan	Reconstruction and bitumen surfacing	do	3,000
<b>Total — Trunk and Ordinary Main Roads</b>					<b>\$5,543,159</b>

**(iv) Tourist Roads**

Dumaresq	4002	7.6m. to 9.3m. from T.R. No. 74	Bitumen surfacing	Council	11,457
Hastings	4022	3m. north of Port Macquarie	Reinforced concrete bridge	do	87,817
Imlay	4037	0m. to 2m. from S.H. No. 1	Widening	do	2,415
Lithgow	4011	0.1m. to 1m. from M.R. No. 516	Gravelling and bitumen surfacing	do	62
Do	4048	Main Street to Browns Gap Road	Construction	do	15,000
Macleay	4032	4.46m. to 6.21m. from Kinchela	Reconstruction and bitumen surfacing	do	1,418*
Snowy River	4043	M.R. No. 286 to Penderlea	do	do	1,325
Do	4013	0m. to 3.8m. west of M.R. No. 142	Widening and improvement	do	18,350
Do	4028	0m. to 0.64m. from S.H. No. 10	Strengthening and bitumen surfacing	do	2,650
Do	4028	Pottsville to Billinudgel, within the Shire	Construction	do	7,500
Do	4028	0.68m. to 2m. south of Pottsville	do	do	20,000
Ulmarra	4049	North from Woolli Road, towards Sandon River	do	do	7,495
Wade	4041	Airport Road to Beelbangera Road	Widening and gravelling	do	2,000
Wagga Wagga	4050	Williams Hill Scenic Road	Reconstruction and bitumen surfacing	do	2,000
Wingecarribee	4038	Carrington Falls	Drainage	do	31*
<b>Total — Tourist Roads</b>					<b>\$176,622</b>

**(v) Roads other than Main Roads**

Kempsey		Railway Overbridge over Macleay River at Kempsey	Provision of stairway	Department	4,963
Maitland		4.15m. north of Hexham	Improvement	Council	1,754*
Muswellbrook Munic.		Bell Street Overbridge	Widening	do	19,000
Newcastle		Aldyth Street to Charlestown Road	Reconstruction	do	30,000
Do		South arm of Hunter River at Tourle Street, Mayfield	Steel and concrete bridge	Department	23
Talbragar		21.4m. to 23.5m., Dubbo to Mendaran	Reconstruction and bitumen surfacing	Council	5,000
Do		19.4m. to 21m. from Dubbo	do	do	6,012
Wollongong		Cross Street, Corrimal	Reinforced concrete pipe culvert	do	186
Do		York Road, between Zerania Street and Alice Street	Reinforced concrete culverts	do	3,823
<b>Total — Roads other than Main Roads</b>					<b>\$67,253</b>

**SUMMARY**

Expressways	\$		\$
State Highways		3,240*	
Trunk and Ordinary Main Roads		7,011,953	
Tourist Roads		5,543,159	
Roads other than Main Roads		176,622	
		67,253	
Survey, Design, Supervision and Planning, etc.			12,795,747
			3,782,504
<b>Total as shown in Receipts and Payments Statements — Appendix No. 1 (C) (i)</b>			<b>\$16,578,251</b>

\* Credit

**Appendix No. 9A**

**COUNTRY MAIN ROADS FUND—SPECIAL PURPOSES**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS**

**(i) Expressways**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
<b>SYDNEY TO NEWCASTLE EXPRESSWAY</b>					
Gosford	X3	Hawkesbury River at Kangaroo Point	Reinforced concrete bridge	Department	348,675†
					\$348,675
<b>SOUTHERN EXPRESSWAY</b>					
Wollongong	X6	Byarong Avenue	Pedestrian overbridge	Department	40,066
					\$40,066
<b>Total — Expressways</b>					<b>\$388,741</b>

**(ii) State Highways**

**PRINCE'S HIGHWAY**

Imlay	1	Boydton Creek, 5.07m. south of Eden	Reinforced concrete bridge	Department	7,297
Shellharbour	1	Macquarie Rivulet, 13.3m. south of Wollongong	Prestressed concrete bridge	do	10,571
					\$17,868

**HUME HIGHWAY**

Camden	2	Bridge over Nepean River at Camden	Reinforced concrete substructure	Department	72,554§
Goulburn City	2	0.74m. to 7.93m. south of Goulburn	Construction of dual carriageway	do	130,111
Do	2	Goulburn to S.H. No. 3	Reconstruction	do	28,600‡
Gunning	2	Meadow Creek at Gunning	Prestressed concrete bridge and approaches	do	63,780
Holbrook	2	Bridge over Little Billabong Creek, 24.2m. south of Tarcutta	Approaches	do	78,602
Do	2	Bridge over Billabong Creek, 29.4m. south of Tarcutta	do	do	63,248
Do	2	Billabong Creek, 30.5m. south of Tarcutta	Reinforced concrete bridge	do	36,501
Hume	2	Table Top Creek, 4.5m. from Table Top	do	do	6,742
Kyeamba	2	Tarcutta Creek at Tarcutta	Prestressed concrete bridge	do	44,738
Mulwaree	2	Intersection with S.H. No. 3	Construction, including dual carriageway	do	428,668
Do	2	Boxers Creek, 5.5m. north of Goulburn	Reinforced concrete bridge	do	49,704
Do	2	Intersection with S.H. No. 3	Overpass	do	10,041
Wingecarribee	2	Black Bobs Creek, 7.75m. south of Berrima	Prestressed concrete bridge	do	21,931
					\$1,035,220

**SNOWY MOUNTAINS HIGHWAY**

Gundagai	4	Yaven Yaven Creek Bridge, 2.8m. east of S.H. No. 2	Approaches	Department	33,386
Do	4	Yaven Yaven Creek, 2.8m. east of S.H. No. 2	Prestressed concrete bridge	do	28,889
Imlay	4	Parbery Creek, 2m. east of Bega	Reinforced concrete bridge and approaches	do	22,222
Do	4	Warragaburra Creek, 2.5m. east of Bega	Reinforced concrete box culvert	do	6,712
Snowy River	4	Bullock Head Creek, 0.5m. west of Kiandra	Reinforced concrete bridge	do	51,478
Tumut	4	Bridge over Gilmore Creek, 0.25m. from Gilmore	Approaches	do	21,094
					\$163,781

**GREAT WESTERN HIGHWAY**

Turon	5	Williamsons Springs on Yetholme deviation	Prestressed concrete bridge	Department	9,208
Do	5	Frying Pan Creek, 26.4m. west of Lithgow	Reinforced concrete bridge	do	31,681
					\$40,889

† For additional expenditure see Appendix No. 8A.

‡ For additional expenditure see Appendix No. 9.

§ For additional expenditure see Appendix No. 7.

Appendix No. 9A—continued

COUNTRY MAIN ROADS FUND—SPECIAL PURPOSES—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

(ii) State Highways—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
MITCHELL HIGHWAY					
Bogan	7	28m. to 37m. south of Nyngan	Reconstruction	Department	276,905
Darling	7	21m. to 30m. north of Bourke	Reconstruction and bitumen surfacing	do	231,625
Do	7	30m. to 40m. north of Bourke	do	do	424,899
Do	7	40m. to 48.8m. north of Bourke	do	do	140,781
Do	7	50m. to 59m. north of Bourke	do	do	4,704
Do	7	59m. to 61.3m. north of Bourke	do	do	3,213
Do	7	Cuffs Creek, 82m. north of Bourke	Reinforced concrete bridge	do	27,752
Dubbo	7	Bridge over Macquarie River	Approaches	do	116,706
Do	7	Macquarie River at Dubbo	Reinforced concrete bridge	do	181,023
Molong	7	Bridge over Bell River at Claremont	Approaches	do	8,079
					\$1,415,687
BARRIER HIGHWAY					
Central Darling	8	13m. to 21m. east of Wilcannia	Reconstruction and bitumen surfacing	Department	262,219
Do	8	102m. to 111.28m. west of Cobar	do	do	88,394
Do	8	18.9m. to 27m. west of Wilcannia	do	do	274,689
Do	8	21m. to 52m. east of Wilcannia	do	do	23,305
Cobar	8	92.5m. to 102.5m. west of Cobar	do	do	360,789
					\$1,009,396
NEW ENGLAND HIGHWAY					
Murrurundi	9	Bridge over Pages River at Murrurundi	Approaches	Department	19,282
Do	9	Pages River at Murrurundi	Reinforced concrete bridge	do	92,430
Newcastle	9	Weakleys Flat Creek at Beresfield	do	do	114,975†
Uralla	9	Bridge over Kentucky Creek, 47.5m. north of Tamworth	Approaches	do	8,293
					\$234,980
PACIFIC HIGHWAY					
Bellingen	10	Bellingen River, south arm at Urunga	Approaches	Department	29,193
Coffs Harbour	10	Pine Bush Creek, 4.5m. north of Coffs Harbour	Reinforced concrete bridge	do	55,463
Do	10	Moonee Creek, No. 2, 9.3m. north of Coffs Harbour	Prestressed concrete bridge	do	9,725
Lake Macquarie	10	Cold Tea Creek at Belmont	do	do	35,414
Nambucca	10	Lower Warrell Creek, 2m. south of Macksville	do	do	298,117
Stroud	10	Myall River Bridge at Bulahdelah	Approaches	do	86,567
Do	10	Myall River at Bulahdelah	Prestressed concrete bridge	do	47,159
Tintenbar	10	Richmond River at Wardell	Reconstruction of Dolphin and Fender system	do	91,114
Ulmarra	10	Bank of Clarence River, north of Ulmarra	Erosion control	do	28,868
Woodburn	10	10.5m. south of Woodburn	Steel and concrete bridge	do	74,420
Wyong	10	11.5m. to 12.5m. north of Gosford	Widening of culverts	do	16,509†
Do	10	Bridge over Cut Rock Creek	Widening	do	49,422
					\$821,971
OXLEY HIGHWAY					
Gilgandra	11	Nargon Creek, 27m. from Gilgandra	Widening	Department	13,676
Hastings	11	34.61m. to 38.17m. west of Port Macquarie	Reconstruction and bitumen surfacing	do	195,460
Do	11	Yarras Creek, 42.78m. west of Port Macquarie	Reinforced concrete box culvert	do	5,360
Do	11	Kings Creek, 10.81m. west of Port Macquarie	Reinforced concrete bridge and approaches	do	174,896
Walcha	11	68m. to 78m. west of Port Macquarie	Reconstruction and bitumen surfacing	do	4,401
Do	11	24m. to 29m. east of Walcha	do	do	332

† For additional expenditure see Appendix No. 9.

**Appendix No. 9A—continued**

**COUNTRY MAIN ROADS FUND—SPECIAL PURPOSES—continued**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued**

**(ii) State Highways—continued**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
<b>OXLEY HIGHWAY—continued</b>					
Walcha .....	11	12.53m. to 15m. east of Walcha .....	Reconstruction and bitumen surfacing .....	Department .....	203,069
Do .....	11	15m. to 23m. east of Walcha .....	do .....	do .....	374,713
Do .....	11	Stoney Creek, 13.3m. east of Walcha .....	Prestressed concrete bridge .....	do .....	25,635
Do .....	11	Tiara Creek, 18.2m. east of Walcha .....	Culvert .....	do .....	6,444
Warren .....	11	0m. to 4m. east of Nevertire .....	Reconstruction and widening .....	do .....	113,196
					<b>\$1,117,182</b>
<b>STURT HIGHWAY</b>					
Kyeamba .....	14	14.18m. west of S.H. No. 2 .....	Reinforced concrete box culvert .....	Department .....	13,095
					<b>\$13,095</b>
<b>BRUXNER HIGHWAY</b>					
Ashford .....	16	6.42m. west of Bonshaw .....	Reinforced concrete box culvert .....	Department .....	15,801
Do .....	16	Horse Gully, 13.9m. and 14.7m. west of Bonshaw .....	Reinforced concrete box culverts .....	do .....	9,010
Do .....	16	Towell Creek, 5.1m. east of Bonshaw .....	Box culvert .....	do .....	25,417
Do .....	16	Bentley Springs Creek, 6.25m. east of Bonshaw .....	Reinforced concrete box culvert .....	do .....	17,258
Do .....	16	Myall Creek, 1.8m. west of Bonshaw .....	Reinforced concrete bridges .....	do .....	19,130
Gundurimba .....	16	Loftville Creek, 3.1m. west of Lismore .....	Prestressed concrete bridge .....	do .....	17,529
Tenterfield Shire .....	16	40m. west of Casino .....	do .....	do .....	82,127
					<b>\$186,272</b>
<b>NEWELL HIGHWAY</b>					
Bland .....	17	Scotts Creek, 16.9m. north of Ardlethan .....	Reinforced concrete bridge .....	Department .....	23,076
Do .....	17	Mandamah Creek, 17.4m. north of Ardlethan .....	do .....	do .....	23,039
Booolooroo .....	17	Mungle Back Creek, 51.9m. north of Moree .....	do .....	do .....	18,840
Coonabarabran .....	17	58.5m. to 63.5m. south of Narrabri .....	Reconstruction and bitumen surfacing .....	do .....	213,446
Do .....	17	Billy Creek and Cusack Creek, 51m. and 56m. south of Narrabri .....	Reinforced concrete culverts .....	do .....	40,130
Forbes .....	17	Lake Forbes at Forbes .....	Reinforced concrete bridge .....	do .....	150,241
Gilgandra .....	17	Marthaguy Creek, 33.19m., 34.47m. and 37.88m. north of Dubbo ..	Widening .....	do .....	9,440
Namoi .....	17	Bobbiwaa Creek, 10.8m. north of Narrabri .....	Approaches .....	do .....	5,000
					<b>\$481,212</b>
<b>CASTLEREAGH HIGHWAY</b>					
Walgett .....	18	20m. to 32m. north of Walgett .....	Reconstruction and bitumen sealing .....	Department .....	574,900
Do .....	18	8.5m. to 20m. north of Walgett .....	Reconstruction and bitumen surfacing .....	do .....	149,357
					<b>\$724,257</b>
<b>MONARO HIGHWAY</b>					
Monaro .....	19	Bridge over Michelago Creek, 31.65m. south of Canberra .....	Approaches .....	Department .....	81,401
Do .....	19	Bridge over Gungoandra Crk., 45.9m. to 48.5m. south of Canberra ..	do .....	do .....	15,701
Do .....	19	Gungoandra Creek, 46.2m. south of Canberra .....	Reinforced concrete bridge .....	do .....	5,022
Yarrowlumla .....	19	Michelago Creek, 1m. from Michelago .....	Prestressed concrete bridge .....	do .....	9,694
					<b>\$111,818</b>
<b>RIVERINA HIGHWAY</b>					
Berrigan .....	20	Irrigation canals, 5m. to 31m. east of Deniliquin .....	Widening of bridges .....	Department .....	54,702
					<b>\$54,702</b>

102

**Appendix No. 9A—continued**

**COUNTRY MAIN ROADS FUND—SPECIAL PURPOSES—continued**

**SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued**

**(ii) State Highways—continued**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
<b>COBB HIGHWAY</b>					
Deniliquin .....	21	Bridge over Edwards River .....	Approaches .....	Department .....	22,419
Do .....	21	Edwards River at Deniliquin .....	Prestressed concrete bridge .....	do .....	7,809
Hay .....	21	Cabbage Creek, 41m. north of Hay .....	Reinforced concrete box culverts .....	do .....	14,714
					\$44,942
<b>SILVER CITY HIGHWAY</b>					
Broken Hill .....	22	South Road and Gypsum Street, Broken Hill .....	Pavement construction of approaches .....	Council .....	56,000
Do .....	22				
Do .....	and 81	South Road and Gypsum Street, Broken Hill .....	Approaches to overbridges .....	Department .....	283,955
Wentworth .....	22	South Road, Broken Hill .....	Railway overbridge .....	do .....	97,846
Do .....	22	2 mile break, 2m. north of Wentworth .....	Prestressed concrete bridge .....	do .....	95,106
Do .....	22	Tuckers Creek, 0.3m. east of Wentworth .....	Reinforced concrete bridge .....	do .....	154,627
Do .....	22	Bridge over Tuckers Creek .....	Approaches .....	do .....	6,869
Do .....	22	Darling River at Wentworth .....	Steel and concrete bridge .....	do .....	19,441
Do .....	22	Bridge over Darling River at Wentworth .....	Approaches .....	do .....	15,409
					\$729,253
Total — State Highways .....					\$8,202,525

103

**(iii) Trunk and Ordinary Main Roads**

Bibbultuke .....	91	Staffords Creek, 5.79m. east of Bombala .....	Reinforced concrete bridge and approaches .....	Department .....	28,394
Do .....	91	Yellow Waterhole Creek, 12.8m. east of Bombala .....	Reinforced concrete bridge .....	do .....	53,645
Blaxland .....	55	Over S.H. No. 5, 4.4m. west of Lithgow .....	Concrete bridge .....	do .....	90,443
Boorowa .....	576	Spillway at Wyangala Dam .....	Approaches .....	do .....	15,633
Broken Hill .....	81	Gypsum Street, Broken Hill .....	Railway overbridge .....	do .....	67,786
Copmanhurst .....	83	Six Mile Creek, at Battens Bight, 39m. north of Grafton .....	Prestressed concrete bridge .....	do .....	71,106
Maitland .....	104	Bridge over Hunter River at Raymond Terrace .....	Approaches .....	do .....	23,801
Do .....	104	Hunter River at Raymond Terrace .....	Reinforced concrete bridge .....	do .....	91,735
Newcastle .....	108	North arm of Hunter River .....	Eastern approaches .....	do .....	99,290
Patrick Plains .....	503	Long Weeney and Little Weeney Creeks, 55.6m. south of Singleton .....	Concrete culverts .....	do .....	22,965
Do .....	503	Bridge over Macdonald River .....	Strengthening by undertrussing .....	do .....	20,961
Do .....	503	Bridge over Macdonald River, 39m. south of Singleton .....	Approaches .....	do .....	5,124
Tumbarumba .....	281	Murray River at Tintalera .....	Extension of reinforced concrete bridge .....	do .....	17,041
Tweed .....	142	Tweed River at Murwillumbah .....	Prestressed concrete bridge .....	do .....	45,547
Yallaroi .....	63	Warialda Creek at Warialda .....	Steel and reinforced concrete bridge .....	do .....	120,620
Wollongong .....	295	Inner Harbour, Port Kembla .....	Land acquisitions .....	Council .....	7,962
Do .....	295	Bridge No. 6, over A.I.S. Line .....	Duplication .....	do .....	313
Do .....	295	A.I.S. Jetty Line at Port Kembla .....	Overbridge .....	do .....	535*
					\$781,831
Total — Trunk and Ordinary Main Roads .....					\$781,831

**SUMMARY**

Expressways .....	\$
State Highways .....	388,741
Trunk and Ordinary Main Roads .....	8,202,525
	781,831
Total as shown in Receipts and Payments Statements — Appendix No. 1 (c) (ii) .....	\$9,373,097

\* Credit

Appendix No. 10

DEVELOPMENTAL ROADS FUND

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Ashford	1257	5.61m. to 7m. west of M.R. No. 137	Construction	Council	10,000*
Do	1257	7m. to 8m. west of M.R. No. 137	do	do	15,000
Do	1257	8m. to 10m. west of M.R. No. 137	do	do	10,836
Do	3159	Macintyre River at Bedwell Downs Crossing	Reinforced concrete box culvert	do	4,500
Barraba	1208	Rockey Creek, 14.7m. from Barraba	Prestressed concrete bridge	do	3,400
Do	1208	20.87m. to 24.37m. east of Barraba	Deviation	do	20,000*
Do	1208	17.52m. to 18.07m. east of Barraba	Reconstruction	do	16,600
Do	1208	20.59m. to 20.87m. east of Barraba	Construction	do	8,300
Berrigan	1172	5.5m. and 9m. from S.H. No. 17	Concrete bridges	do	10,000
Bingara	3191	12.1m. to 15.1m. south of Elcombe	Drainage structures and approaches	do	7,780
Bland	1123	21.5m. to 22m. from Narriah Siding	Forming and gravelling	do	2,000
Do	1123	0m. to 2.5m. north of Narriah Railway Station	Forming, draining and gravelling	do	5,320
Do	1123	21m. to 21.2m. and 21.5m. to 22m. north of Narriah	Gravelling	do	7
Do	1123	15.38m. to 19.35m. north of Narriah	do	do	3,098
Do	1220	Junction with S.H. No. 6 to 17.9m. south	do	do	2,800
Blue Mountains	1195	6m. to 8m. south of Blackheath	Forming and gravelling	do	10,000*
Do	1195	5m. to 6m. south of Blackheath	Construction	do	3,901
Bogan	1163	44m. to 72m. south of Nyngan	Elimination of causeways	do	11,202
Do	1163	44m. to 72m. south of Nyngan, Darouble-Bobadah	do	do	20,000
Do	1178	3.5m. east of Girilambone	Reinforced concrete box culvert	do	2*
Booolooroo	1287	9.05m. to 12.5m. south of S.H. No. 12	Construction	do	1,855*
Boomi	3168	Browns Creek, 40.4m. from Moree	Concrete bridge and culvert	do	5,000
Canobolas	1219	8.5m. to 10m. from Clifton Grave	Construction	do	4,000
Coffs Harbour	1076	0.74m. to 1.02m., 1.82m. to 1.93m. and 2.8m. to 4.6m. east of Brookland	Reconstruction	do	4,760
Colo	3158	Wrights Creek and 0.6m. south of St. Albans	Reinforced concrete bridge and culvert	do	556
Coolah	1189	0m. to 11.85m. south of M.R. No. 396	Reconstruction	do	2,276
Do	1304	0m. to 10m. east of T.R. No. 55	Bitumen surfacing	do	140
Do	1304	0m. to 21.06m. east of T.R. No. 55	Reconstruction	do	7,994
Do	1304	10m. to 15m. east of T.R. No. 55	do	do	1,212†
Do	1304	4.57m. to 10m. from T.R. No. 55	Reconstruction and bitumen surfacing	do	113,500*
Coonabarabran	1232	2m. to 3m. south of S.H. No. 11, towards Garrawilla	Construction	do	6,300
Do	1309	M.R. No. 129 to Premier Estate Road	do	do	1,175*
Coonamble	1269	50m. to 54m. from Coonamble	do	do	18,221*
Do	1269	Burbie Creek, Spirey Creek and Wambelong Creek	Reinforced concrete box culverts and approaches	do	12,634*
Do	3181	Talaga Creek on road connecting Bombara and Taloon	Construction of causeways	do	14,000
Cudjiegong	3211	Goulburn River, 28m. south west of Merriwa	Reinforced concrete bridge	do	18,700
Darling	1306	Louth to M.R. No. 405	Drainage structures	do	20,000
Dungog	3163	7m. to 8m. north of Dungog	Construction	do	13,712
Eurobodalla	1206	4.62m. to 5m. from Batemans Bay	do	do	189*
Gloucester	1150	23.7m. and 24.7m. north of Gloucester	Deviation	do	8,991*
Do	1150	17.5m. to 19.2m. north of Gloucester	Improvement	do	4,883*
Do	3188	Barrington River, 3m. north of Gloucester	Reinforced concrete bridge	do	7,360*
Goobang	3137	Bullock Creek	Prestressed concrete bridge and approaches	do	11,379
Guyra	1291	M.R. No. 135 to Moreduh	Construction	do	13,900
Hastings	1261	7.7m. to 10.8m. from S.H. No. 10	Timber bridges	do	2,482*
Do	3189	Selected lengths on Kindee-Long Flat Brombin Road	Construction	do	14,910
Do	3189	Kindee Creek	Reinforced concrete bridge	do	21,590
Imlay	1045	0.45m. to 13m. from Kiah to Lower Towamba	Widening	do	3,000
Jerilderie	1314	0m. to 11.25m. south west of M.R. No. 596	Reshaping and gravelling	do	20,900
Jindalee	3204	Stoney Creek, 4.8m. west of T.R. No. 87	Reinforced concrete bridge and approaches	do	5,000
Do	3204	6.5m. to 7.5m. west of T.R. No. 87	Construction	do	19,080
Kempsey	3151	From S.H. No. 10 to Municipal Boundary	do	do	6,600
Kyeamba	3167	0.8m. north of S.H. No. 14	Culvert	do	2,000
Do	3167	Tarcutta Creek, 0.62m. to 0.87m. north of S.H. No. 14	Concrete bridge and approaches	do	16,500
Do	3167	Borambola Estate, 1.62m. south to 3.87m. north of S.H. No. 14	Construction	do	2,920
Do	3203	0m. to 2.2m. north of Holbrook Shire Boundary	do	do	1,070*

\* Credit

† For additional expenditure see Appendix No. 7.

Appendix No. 10—continued

DEVELOPMENTAL ROADS FUND—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Kyogle	3180	11m. to 11.96m. from T.R. No. 83	Timber beam bridges and concrete causeways	Council	6,875
Lachlan	1187	15.5m. to 20.5m. from T.R. No. 61	Gravelling	do	5,000
Do	1187	10.52m. to 15.52m. north west of T.R. No. 61	do	do	867
Do	1187	5.52m. to 10.52m. north west of T.R. No. 61	do	do	10,000
Do	1187	Selected sections, 0.5m. to 5.52m. from T.R. No. 61	do	do	10,000*
Do	3115	Low sections, 0m. to 12.5m. south east of M.R. No. 347	Gravelling and box culverts	do	1,154
Do	3115	10m. to 10.7m. from M.R. No. 347	Box culverts	do	6,000
Liverpool Plains	1298	Within the Shire	Construction	do	3,135
Maclean	1245	Esk River to Woody Head	Construction and approaches	do	766
Do	1245	5.8m. to 8.4m. from S.H. No. 10	Strengthening gravel pavement	do	766*
Do	1286	1.04m. to 1.99m. west of S.H. No. 10	Construction	do	16,660
Do	1286	0m. to 1.04m. west of S.H. No. 10	do	do	15,100
Manning	1150	Upper Tigröh to Lower Tigröh	do	do	5,000
Do	3195	41m. to 41.3m. north west of Taree	Deviation	do	18
Monaro	1268	Jinden Creek to Big Badja Sect., 28m. to 29m. from Kybeyan River	Construction	do	11,000
Do	1268	Jinden Creek to Big Badja	Clearing	do	4,000
Do	1268	Jinden Creek to Big Badja Sect., 29m. to 30m. from Kybeyan River	Construction	do	19,000
Do	3178	3.6m. to 5.8m., 9.4m. to 10.4m. and 11.3m. to 12.25m. from S.H. No. 4	do	do	294*
Mumbulla	1214	4.1m. north west of S.H. No. 4 to Yankee Gap	do	do	1,004*
Murray	1237	Cooley Hoo Creek	Concrete bridge and approaches	do	10,000
Do	1272	Colligen Creek	Prestressed concrete bridge	do	6,000
Do	1272	Tumudgery Creek	Prestressed concrete bridge and approaches	do	33*
Murrurundi	3104	Macdonalds Creek	do	do	1,149*
Do	3213	Yarramanbah Creek on Blackville Road	Reinforced concrete bridge	do	11,000
Nambucca	1075	2.4m. to 3.1m. from M.R. No. 533	Construction	do	5,511
Do	1078	16m. to 17.5m. west of Bowraville	Improvement and strengthening	do	3,500
Patrick Plains	3173	7.3m. to 8.3m. west of Jerrys Plains	Construction	do	2,832*
Peel	1233	Goonoo Creek, 0.3m. from S.H. No. 11	Reinforced concrete bridge and approaches	do	242
Port Macquarie	3145	1.2m. to 2m. from Lake Cathie Road	Construction	do	2,550*
Port Stephens	3209	0m. to 2.65m. from M.R. No. 294	Reconstruction	do	2,809*
Scone	1243	0m. to 3.1m. from Pages Creek Road	do	do	14,000
Do	1259	0m. to 1.3m. from Dartbrook Road	Construction	do	3,213*
Severn	1207	Maids Valley Creek, 2.5m. north of S.H. No. 12	Reinforced concrete bridge and approaches	do	317
Do	1311	11.35m. to 26.5m. north west of S.H. No. 12	Construction	do	20,000
Do	3192	1.25m. to 3.75m. south of Mt. Slow	do	do	13,323
Do	3193	0m. to 2m. east of Mt. Mitchell	do	do	9,890
Snowy River	1297	12.4m. to 14.6m., Jacobs Ladder to Willis at Victorian Border	Reconstruction	do	5,000
Do	1297	Jacobs River, 29.8m. south of Jindabyne	Reinforced concrete bridge	do	22,000
Talbragar	1165	Minor Railway Siding to S.H. No. 7	Construction	do	1,863
Tamarang	1309	0m. to 1.3m. south of M.R. No. 129	do	do	295*
Tenterfield Shire	1164	3m. south of S.H. No. 24	Forming and gravelling	do	723
Tomki	1125	Mongogarie Creek at Collisons	Prestressed concrete bridge	do	2,000
Tumbarumba	1117	14.4m. to 17.2m. north of Tumbarumba	Construction	do	934*
Do	1117	Schoolmasters Creek	Reinforced concrete box culvert and approaches	do	95*
Do	1171	10.14m. to 14.4m. south of M.R. No. 281	Gravelling	do	63*
Do	1171	10.14m. to 10.78m., 12.89m. to 13.91m. and 14.53m. to 16m. east of Welaregang	Construction	do	1,346*
Do	1171	8.38m. to 10.14m. from Welaregang	do	do	57*
Do	1171	10.78m. to 12.89m. from Welaregang	do	do	851*
Do	1191	Boggy Creek	Reinforced concrete bridge	do	5,400
Do	1226	Tarcutta Creek	Reinforced concrete bridge and approaches	do	18,150
Do	1265	M.R. No. 282 at Paddys Creek to 11.59m. at O'Hares Crossing	Construction	do	561*
Do	1265	M.R. No. 282 to Section 3 and 4m. to 4.7m.	do	do	1,178*
Do	3102	Murray River at Biggara	Timber and steel bridge	do	49*
Tumut	1215	22.52m. to 25m. south of S.H. No. 4	Construction	do	7,000
Do	1215	17.51m. to 19.51m. from S.H. No. 4	do	do	19,000

\* Credit.

Appendix No. 10—continued

DEVELOPMENTAL ROADS FUND—continued

SUMMARY OF EXPENDITURE FROM DEPARTMENT'S FUNDS ON CONSTRUCTION AND RECONSTRUCTION WORKS—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount
					\$
Tumut .....	1215	13.16m. to 17.51m. from S.H. No. 4 .....	Construction .....	Council .....	759*
Uralla .....	3185	12.4m. to 13.5m. from T.R. No. 73 .....	do .....	do .....	14,000
Wakool .....	1106	Edward River to Murgal .....	Formation and gravelling .....	do .....	6,000
Do .....	1240	Naeurrie to Gonn Crossing .....	do .....	do .....	5,400
Do .....	1293	T.R. No. 67 to M.R. No. 386 .....	Construction .....	do .....	14,700
Walcha .....	1227	13.74m. to 16m. east of Topdale .....	do .....	do .....	4,225*
Do .....	1282	0m. to 2m. north of Carsons Forrestry Road .....	do .....	do .....	4,624*
Do .....	1282	2m. to 4m. north of Carsons Forrestry Road .....	do .....	do .....	3,216*
Wellington .....	1310	0m. to 2m. from M.R. No. 573, near Euchareena .....	do .....	do .....	4,000
Do .....	3214	O'Learys Crossing .....	Low level bridge and approaches .....	do .....	9,754
Wingecarribee .....	1299	12m. to 15m. north of Canyonleigh Road .....	Reconstruction .....	do .....	13,500
Wollindilly .....	1302	5.6m. to 7.15m. south of M.R. No. 259 .....	Reconstruction and bitumen surfacing .....	do .....	12,534
Do .....	1302	3.6m. to 5.6m. from M.R. No. 259 .....	do .....	do .....	807
Woodburn .....	3120	Bungawalbyn Creek, approximately 8m. west of S.H. No. 10 .....	Reinforced concrete bridge and approaches .....	do .....	100
Yallaroi .....	1270	18.8m. to 22.3m. north west of Warialda .....	Construction .....	do .....	7,000
Do .....	1270	13.3m. to 18m. north west of T.R. No. 63 .....	do .....	do .....	15,818
Do .....	1290	0m. to 5.5m. from Yallaroi .....	do .....	do .....	914
Do .....	1290	4.8m. to 6.05m. east of Yallaroi .....	do .....	do .....	9,188
Do .....	1290	6.05m. to 6.84m. east of Yallaroi .....	do .....	do .....	5,648
		Total expenditure on road and bridge construction .....			504,765
		Payments to Councils for long service leave .....			1,250
		Total as shown in Receipts and Payments Statements — Appendix No. 1 (D) .....			\$506,015

\* Credit

## Appendix No. 11

### COUNTY OF CUMBERLAND MAIN ROADS FUND

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES  
DURING 1969-70

#### Work by Councils

Council Area	State Highways	Tourist and Ordinary Main Roads	Secondary Roads	Total
	\$	\$	\$	\$
Ashfield .....		629	7,256	7,885
Auburn .....		1,961*	11,527	9,566
Bankstown .....			5,473	5,473
Baulkham Hills .....		37,730	7,613	45,343
Blacktown .....		35,700		35,700
Blue Mountains .....	658	7,374	643*	7,389
Botany .....		1,327*	4,635	3,308
Burwood .....		1,098	2,740	3,838
Camden .....		7,000		7,000
Campbelltown .....		3,798		3,798
Canterbury .....			14,730	14,730
Colo .....		21,065		21,065
Concord .....		22,450		22,450
Drummoyne .....		3,460	386	3,846
Fairfield .....		12,200		12,200
Hornsby .....		45,335	5,721	51,056
Hunters Hill .....		929	131*	798
Hurstville .....		13,876	11,017	24,893
Kogarah .....		23,915		23,915
Ku-ring-gai .....		6,849	3,007	9,856
Lane Cove .....			689	689
Leichhardt .....		6,470*	12,024	5,554
Liverpool .....		12,488	1,159	13,647
Manly .....		2,149	572*	1,577
Marrickville .....		4,508*	2,519	1,989*
Mosman .....		4,492*	2,186	2,306*
North Sydney .....	515*	15,514	6,001	21,000
Parramatta .....			3,287	3,287
Penrith .....		8,924	6,768	15,692
Randwick .....		9,181	8,832	18,013
Rockdale .....		3,483*	22,859	19,376
Ryde .....		43,688		43,688
South Sydney .....		11,000		11,000
Strathfield .....		6,907		6,907
Sutherland .....		14,538	115,485	130,023
Sydney .....	401	101,065	2,628	104,094
Warringah .....		42,239		42,239
Waverley .....		42,306		42,306
Willoughby .....		2,800		2,800
Windsor .....			1,241	1,241
Wollondilly .....		13,500		13,500
Woollahra .....		9,000		9,000
	\$544	\$556,466	\$258,437	\$815,447
Allowances to Councils for supervision — long service leave, etc. ....				14,033
Total shown in Receipts and Payments Statements — Appendix No. 1 (B) (i) .....				\$829,480

\* Credit

## Appendix No. 11A

### COUNTY OF CUMBERLAND MAIN ROADS FUND

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES  
DURING 1969-70

#### Work by Department

Road No.	Location of Work	Amount	Total
	EXPRESSWAYS	\$	\$
X1	Warringah— From Sydney Harbour Bridge northwards including landscaped area over bridge, ramps, pavements, etc. ....	161,043	
X3	Lane Cove Valley— From Wolseley Street to Gladesville Hospital and from Gladesville Bridge to northern approaches Fig Tree Bridge including overpasses, loading and off-loading ramps .....	59,519	
X6	Southern— Fraters Avenue to Holt Road including surfaced footways of Captain Cook Bridge .....	19,084	
X9	Southern Cross Drive— From Epsom Road to Wentworth Avenue, including landscaped areas, pavements, etc. ....	19,109	
	Total — Expressways .....		\$258,755
	STATE HIGHWAYS		
1	Prince's Highway— May Street, St. Peters to the northern boundary of the City of Greater Wollongong at Waterfall .....	119,620	
	Northern boundary of the City of Greater Wollongong to Main Road No. 185 at Thirroul (boundary of County of Cumberland) .....	79,415	199,035
2	Hume Highway— State Highway No. 5 (Great Western Highway) to the western boundary of the City of Liverpool .....	123,813	
	Leppington Corner to the Nepean River at Camden including Camden Bridge (boundary of County of Cumberland) .....	59,493	183,306

**Appendix No. 11A—continued**

**COUNTY OF CUMBERLAND MAIN ROADS FUND—continued**

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES  
DURING 1969-70—continued

**Work by Department—continued**

Road No.	Location of Work	Amount	Total
STATE HIGHWAYS—continued			
		\$	\$
5	Great Western Highway— Johnstons Creek, Camperdown to the western boundary of the City of Penrith .....	183,587	
	Eastern boundary of the City of Blue Mountains to the eastern boundary of Blaxland Shire at Victoria Pass .....	79,341	
10	Pacific Highway— Alfred Street, North Sydney to Pearce's Corner at State Highway No. 13 (Pennant Hills Road) Wahroonga .....	34,125	
	State Highway No. 13 (Pennant Hills Road) Wahroonga at Pearce's Corner to the southern abutment of Peats Ferry Bridge .....	74,101	
13	State Highway No. 2 (Hume Highway) at Carramar to State Highway No. 10 (Pacific Highway), Wahroonga at Pearce's Corner .....	46,909	
	<b>Total — State Highways .....</b>		<b>262,928</b>
			<b>108,226</b>
			<b>46,909</b>
			<b>\$800,404</b>
ORDINARY MAIN ROADS			
139	Main Road No. 200 to Main Road No. 162 at Top Ryde and from Bridge over the railway line at Epping to Main Road No. 373 (Carlingford Road) .....	1,490	
154	Main Road No. 184 at Windsor to 9m. south of State Highway No. 5 (Great Western Highway) .....	38,708	
155	Main Road No. 184 at Richmond to Main Road No. 570 at Yarramundi .....	2,791	
158	Victoria Road, Ermington to Pennant Hills Road, Carlingford .....	10,559	
162	Pittwater Road, Mona Vale to First Rocks, St. Ives .....	53,940	
	Major bridges on council controlled length .....	4,540	
163	Main Road No. 184 to Richmond Air Station .....	909	
164	Narrabeen Lagoon to Beach Road, Palm Beach, including Narrabeen bridges .....	54,313	
	Major bridges on council controlled lengths .....	43,357	
165	Glebe Island Bridge to Church Street, Parramatta .....	296,307	
166	State Highway No. 10 (Pacific Highway), Lane Cove to Main Road No. 165 (Victoria Road, Gladesville) .....	34,165	
167	From Griffiths Street, Hurlstone Park to Salt Pan Creek .....	21,952	
	Salt Pan Creek, Bankstown to Main Road No. 512 at Liverpool .....	21,927	
170	Gardners Road to Bumborah Point Road, Bunnerong .....	16,177	
171	Allison Road, Randwick to La Perouse .....	23,775	
172	Northern side from Jersey Road, Woollahra, to Queen Street and thence full width to Main Road No. 340 (Bronte Road), Bondi Junction .....	4,887	
174	Main Road No. 162 (Mona Vale Road), Terrey Hills, to the western end of General San Martin Drive near McCarrs Creek .....	6,087	
175	Main Road No. 171 (Bunnerong Road), Matraville to Prince Henry Hospital 0m. at State Highway No. 2 (Hume Highway) to 1.40m. at the southern boundary of the City of Liverpool .....	1,311	
177	Cross Roads to the southern boundary of Campbelltown Municipality at 16.91m. and from 26m. to State Highway No. 1 (Prince's Highway) at 29.98m. .....	53,193	
178	Main Road No. 177 Campbelltown to State Highway No. 2 (Hume Highway) at Narellan .....	39,264	
181	Main Road No. 184 at McGraths Hill to Webbs Creek Ferry .....	16,645	
182	Main Road No. 184 at Windsor to the Hawkesbury River including Hawkesbury River Bridge .....	2,271	
183	Anzac Parade, Kingsford to State Highway No. 1 (Prince's Highway), Sydenham .....	7,310	
184	State Highway No. 13 (Pennant Hills Road) Parramatta to State Highway No. 5 (Great Western Highway) at Mount Victoria .....	149,985	
185	State Highway No. 1 (Prince's Highway) at Helensburgh to State Highway No. 1 at Thirroul .....	153,592	
190	Bankstown Municipal boundary to Main Road No. 167 .....	8,304	
194	Botany Road, Mascot to Cooks River, Kyeemagh, including Cooks River Bridge .....	78,893	
	Major bridges on council controlled lengths .....	10,222	
199	Ramsgate Road, Ramsgate to Taren Point including Captain Cook Bridge .....	6,751	
	Major bridges on council controlled lengths .....	23,944	
200	Ryde Bridge to Victoria Road .....	5,343	
225	Main Road No. 181 at Wisemans Ferry Village to Wisemans Ferry .....	1,602	
309	State Highway No. 5 (Great Western Highway) to Kissing Point Road (Main Road No. 574) .....	15,252	
315	State Highway No. 2 (Hume Highway), Enfield to Broad Arrow Road, Beverly Hills .....	18,018	
317	Main Road No. 171 (Bunnerong Road), Matraville to Marine Parade, Maroubra .....	7,412	
327	Anzac Parade, Moore Park to Belmore Road, Randwick .....	4,264	
328	Bridge over Middle Harbour at Roseville to Main Road No. 164 (Pittwater Road), Brookvale including Roseville Bridge .....	53,388	
344	Main Road No. 171 (Bunnerong Road) Matraville to Frogmore Street, Mascot .....	9,979	
366	Entrance to Ku-ring-gai Chase at 4m. north of State Highway No. 10 (Pacific Highway) at Turramurra to Mount Colah Lodge Gates .....	4,693	
373	Terry's Creek, Epping to Lane Cove River, including Lane Cove River Bridge .....	13,290	
	Pacific Highway to Lane Cove River, including Lane Cove River Bridge .....	10,520	
393	State Highway No. 1 (Prince's Highway) at Loftus to Main Road No. 185 at Bald Hill and from State Highway No. 1 at Waterfall to Main Road No. 393 at Upper Causeway .....	49,495	
397	Montauban Avenue to Main Road No. 164 at Narrabeen .....	43,931	
508	State Highway No. 2 (Hume Highway) to Salt Pan Creek .....	43,276	
512	State Highway No. 1 (Prince's Highway) at Heathcote to Deadmans Creek at the boundary of Liverpool City .....	15,312	
	Deadmans Creek to State Highway No. 2 (Hume Highway) at Liverpool .....	12,525	
515	State Highway No. 2 (Hume Highway) at Liverpool to State Highway No. 5 (Great Western Highway) at Eastern Creek .....	41,169	
516	Main Road No. 184 at Bell to the eastern boundary of Blaxland Shire .....	1,232	
525	Main Road No. 174 (McCarrs Creek Road) at McCarrs Creek to Main Road No. 174 near Terrey Hills, including McCarrs Creek Bridge .....	38,161	
532	Main Road No. 165 to State Highway No. 5 at Auburn .....	9,433	
535	Badgerys Creek to Main Road No. 154 .....	2,191	
536	Main Road No. 535 to State Highway No. 5 (Great Western Highway) at St. Marys .....	9,667	
537	South Creek Bridge to Main Road No. 184 at Richmond .....	16,939	

**Appendix No. 11A—continued**

**COUNTY OF CUMBERLAND MAIN ROADS FUND—continued**

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES  
DURING 1969-70—continued

**Work by Department—continued**

Road No.	Location of Work	Amount	Total
ORDINARY MAIN ROADS—continued		\$	\$
570	Main Road No. 155 at Agnes Banks to the eastern boundary of the City of Blue Mountains	29,183	
574	Main Road No. 165 (Victoria Road), Rydalmere to Main Road No. 158 (Marsden Road) Dundas	21,733	
587	State Highway No. 10 (Pacific Highway) at Hornsby to State Highway No. 10 at Asquith	726	
592	Cahill Expressway from Macquarie Street to Sir John Young Crescent	104,132	
599	From Suspension Bridge to Babbage Road including link to Boundary Street	14,799	
Total — Ordinary Main Roads			\$1,788,219
SECONDARY ROADS			
2034	Major bridges on council controlled length	796	
2071	Roadworks	104	
2076	Roadworks	58	
Total — Secondary Roads			\$958
TOURIST ROADS			
4005	Main Road No. 525 (General San Martin Drive) to West Head	20,266	
4020	Main Road No. 393 to Wattamolla Beach through Royal National Park	1,333	
4025	Main Road No. 393 to Garie Beach through Royal National Park	1,822	
4026	Main Road No. 162 to Main Road No. 191 through Lane Cove National Park	1,215	
4031	Captain Cook Drive to Cape Solander	3,197	
Total — Tourist Roads			\$27,833
SUMMARY			
Expressways		258,755	
State Highways		800,404	
Ordinary Main Roads		1,788,219	
			2,847,378
Secondary Roads			958
Tourist Roads			27,833
Bridges and ferries not on classified roads			53,076
Maintenance of median strips and minor road restorations			76,785
Supervision, testing laboratory working expenses (net), traffic striping, signposting, suspense and operating accounts, etc.			1,075,066
Total as shown in Receipts and Payments Statements — Appendix No. 1 (B) (i)			\$4,081,095

**Appendix No. 12**

**COUNTRY MAIN ROADS FUND**

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES  
DURING 1969-70

**Work by Councils**

Council Area	State Highways	Trunk, Tourist and Ordinary Main Roads	Total
	\$	\$	\$
Abercrombie		27,195	27,195
Albury		960	960
Armidale City	4,173	730	4,903
Ashford	8,500	31,664	40,164
Ballina	400	2,478	2,878
Balranald	354	30,230	30,584
Barraba		28,215	28,215
Bathurst City		4,178	4,178
Bega		574	574
Bellingen		31,887	31,887
Berrigan		31,600	31,600
Bibbenluke	10,673	14,000	24,673
Bingara		13,800	13,800
Bland		30,441	30,441
Blaxland		17,973	17,973
Bogan	8,306	43,531	51,837
Bombala	4,892	1,154	6,046
Booolooroo	11,292	14,015	25,307
Boomi	31,500	61,611	93,111
Boorowa		33,000	33,000
Boree		33,789	33,789
Bowral		2,800	2,800
Brewarrina		48,740	48,740
Broken Hill	17,120	16,386	33,506
Burrangong		25,247	25,247
Byron		32,915	32,915
Camden		6,442	6,442
Canobolas		22,760	22,760
Carrathool		84,549	84,549
Casino	3,194	5,650	8,844
Central Darling	713	61,705	62,418
Cobar	537	109,959	110,496
Cockburn		9,000	9,000

**Appendix No. 12—continued**

**COUNTRY MAIN ROADS FUND—continued**

**PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES  
DURING 1969-70—continued**

**Work by Councils—continued**

Council Area	State Highways	Trunk, Tourist and Ordinary Main Roads	Total
	\$	\$	\$
Coffs Harbour .....		36,288	36,288
Colo .....		118,650	118,650
Conargo .....		9,400	9,400
Condobolin .....		4,500	4,500
Coolah .....		55,735	55,735
Coolamon .....		15,300	15,300
Cooma .....	9,491	61	9,552
Coonabarabran .....		25,043	25,043
Coonamble .....		26,646	26,646
Cootamundra .....		4,387	4,387
Copmanhurst .....		45,035	45,035
Corowa .....		18,957	18,957
Cowra .....	6,800	1,775	8,575
Crookwell .....		64,827	64,827
Cudgegong .....		54,742	54,742
Culcairn .....		17,659	17,659
Darling .....		105,474	105,474
Demondrille .....		25,104	25,104
Deniliquin .....	5,373	3,900	9,273
Denman .....		39,760	39,760
Dubbo .....	2,601		2,601
Dumaresq .....		52,705	52,705
Dungog .....		57,016	57,016
Eurobodalla .....		32,952	32,952
Forbes .....	8,369	4,750	13,119
Gilgandra .....		12,308	12,308
Glen Innes .....	1,000	151	1,151
Gloucester .....		19,752	19,752
Goobang .....		49,264	49,264
Goodradigbee .....		52,640	52,640
Gosford .....	494	45,576	46,070
Goulburn City .....		5,167	5,167
Grafton City .....	306	6,411	6,717
Greater Cessnock .....		100,541	100,541
Greater Wollongong .....	1,000	30,000	31,000
Grenfell .....	500	1,376	1,876
Gundagai .....		16,418	16,418
Gundurimba .....	10,061	43,284	53,345
Gunnedah .....	2,500	1,142	3,642
Gunning .....		47,000	47,000
Guyra .....		22,000	22,000
Hastings .....		27,281	27,281
Hay .....	31,535	13,071	44,606
Holbrook .....		14,700	14,700
Hume .....		20,800	20,800
Illabo .....		25,200	25,200
Imlay .....		37,807	37,807
Inverell .....	4,418	807	5,225
Jemalong .....	15,000	21,646	36,646
Jerilderie .....		11,900	11,900
Jindalee .....		23,880	23,880
Junee .....		3,860	3,860
Kempsey .....	3,335	4,612	7,947
Kiama .....		36,689	36,689
Kyeamba .....		17,603	17,603
Kyogle .....	8,711	60,461	69,172
Lachlan .....		175,955	175,955
Lake Macquarie .....	2,000	83,581	85,581
Leeton .....		11,100	11,100
Lismore .....	10,269	18,337	28,606
Lithgow .....		3,907	3,907
Liverpool Plains .....	66,663	31,047	97,710
Lockhart .....		31,000	31,000
Lyndhurst .....		16,134	16,134
Macintyre .....	50,973	30,801	81,774
Maclean .....		17,285	17,285
Macleay .....		33,680	33,680
Maitland .....	1,000	23,505	24,505
Manilla .....		14,000	14,000
Manning .....		51,928	51,928
Merriwa .....		46,706	46,706
Mitchell .....		33,865	33,865
Mittagong .....		24,000	24,000
Molong .....		15,371	15,371
Monaro .....		928	928
Moree .....	8,755	580	9,335
Mudgee .....		1,541	1,541
Mullumbimby .....		660	660
Mulwaree .....		47,000	47,000
Mumbulla .....		16,645	16,645
Murray .....		30,745	30,745
Murrumbidgee .....		22,102	22,102
Murrumburrah .....		1,303	1,303
Murrurundi .....		7,514	7,514
Muswellbrook Munic. ....	370	689	1,059
Nambucca .....		21,299	21,299
Namoi .....		71,434	71,434
Narrabri .....	12,586	1,569	14,155
Narraburra .....		34,196	34,196
Narrandera .....		6,700	6,700
Narromine .....		500	500
Newcastle .....	16,445	31,549	47,994
Nundle .....		26,737	26,737
Nymboida .....		40,462	40,462
Nyngan .....	19	718	737
Oberon .....		27,648	27,648
Orange .....	3,430	3,069	6,499
Parke .....		2,000	2,000
Patrick Plains .....		30,832	30,832
Peak Hill .....		100	100
Peel .....	25,101	12,564	37,665

**Appendix No. 12—continued**

**COUNTRY MAIN ROADS FUND—continued**

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES  
DURING 1969-70—continued

**Work by Councils—continued**

Council Area	State Highways	Trunk, Tourist and Ordinary Main Roads	Total
Port Macquarie .....	\$ 978	\$ 6,156	\$ 7,134
Port Stephens .....		93,268	93,268
Queanbeyan .....		9,000	9,000
Quirindi .....		2,000	2,000
Rylstone .....		45,448	45,448
Scone .....		35,268	35,268
Severn .....	13,248	15,099	28,347
Shellharbour .....		10,000	10,000
Shoalhaven .....		31,216	31,216
Singleton .....	1,225	470	1,695
Snowy River .....		12,000	12,000
Stroud .....		72,757	72,757
Talbragar .....		2,365	2,365
Tallaganda .....		59,000	59,000
Tamranga .....		51,465	51,465
Tamworth .....	5,203	2,081	7,284
Taree .....	4,954	2,536	7,490
Temora .....		89*	89*
Tenterfield Munic. ....	5,171		5,171
Tenterfield Shire .....	74,049	14,119	88,168
Terania .....		52,973	52,973
Timbregongle .....		32,660	32,660
Tintenbar .....	7,044	17,557	24,601
Tomki .....	7,097	31,531	38,628
Tumbarumba .....		12,864	12,864
Tumut .....	302*	26,395	26,093
Turon .....		21,167	21,167
Tweed .....		22,600	22,600
Ulmarra .....		14,729	14,729
Uralla .....		34,148	34,148
Urana .....		28,500	28,500
Wade .....		74,485	74,485
Wagga Wagga .....	5,574	4,800	10,374
Wakool .....		75,053	75,053
Walcha .....		2,818	2,818
Walgett .....	1,200	71,760	72,960
Warren .....		33,722	33,722
Waugoola .....	21,003	27,188	48,188
Weddin .....	30,000	8,722	38,722
Wellington .....		36,854	36,854
Wentworth .....	200	32,664	32,864
Windouran .....	25,237	24,278	49,515
Wingham .....		2,381	2,381
Wingecarribee .....		23,959	23,959
Wollondilly .....		49,359	49,359
Woodburn .....		14,720	14,720
Wyong .....		27,073	27,073
Yallaroi .....	28,474	20,542	49,016
Yarrowlumla .....	2,063	51,232	53,295
Yass .....		279	279
Young .....		4,007	4,007
	\$643,174	\$4,921,656	\$5,564,830
Allowances to Councils for supervision — long service leave, etc. ....			147,113
Total shown in Receipts and Payments Statements — Appendix No. 1 (C) (i) .....			\$5,711,943

\* Credit

**Appendix No. 12A**

**COUNTRY MAIN ROADS FUND**

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES  
DURING 1969-70

**Work by Department**

Road No.	Location of Work	Amount	Total
<b>EXPRESSWAYS</b>			
		\$	\$
X6	Southern— From Main Road No. 513, 50.15m. south of Sydney to Gladstone Avenue at 2.7m. south of Wollongong, including loading and unloading ramps .....	59,733	
X8	Wollongong— From State Highway No. 1 at 1.3m. south of Wollongong to the intersection with Expressway No. X6, 0.67m. from the intersection with State Highway No. 1 at North Wollongong .....	11,596	
	Total — Expressways .....		\$71,329
<b>STATE HIGHWAYS</b>			
1	Prince's Highway— Main Road No. 185 at Thirroul to the southern boundary of Shoalhaven Shire, excluding the length of 2.1m. within the City of Greater Wollongong .....	432,018	
	Southern boundary of Shoalhaven Shire to the border of Victoria .....	228,117	
			660,135

**Appendix No. 12A—continued**

**COUNTRY MAIN ROADS FUND—continued**

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES  
DURING 1969-70—continued

**Work by Department—continued**

Road No.	Location of Work	Amount	Total
STATE HIGHWAYS—continued		\$	\$
2	Hume Highway— Nepean River at Camden to Uringalla Creek at the eastern boundary of Mulwaree Shire .....	282,360	
	Eastern boundary of Mulwaree Shire to the western boundary of Gunning Shire .....	180,819	
	Western boundary of Gunning Shire to the western boundary of Gundagai Shire at 6.39m. north of Tarcutta .....	293,751	
	Western boundary of Gundagai Shire to the border of Victoria at Albury .....	134,881	891,811
3	Federal Highway— Junction with State Highway No. 2 to the northern boundary of the Australian Capital Territory .....		69,370
4	Snowy Mountains Highway— Tathra Wharf to the Junction with State Highway No. 19 at Nimmitabel 1m. west of Cooma to the northern boundary of Snowy River Shire 9m. north of Kiandra .....	42,775	
	Northern boundary of Snowy River Shire to State Highway No. 2 approximately 12m. north of Tarcutta .....	93,821	
		122,836	259,432
5	Great Western Highway— Eastern boundary of Blaxland Shire to State Highways Nos. 6 and 7 at Bathurst .....		75,744
6	Mid Western Highway— State Highway No. 5 to the western boundary of the City of Bathurst Western boundary of the City of Bathurst to the eastern boundary of Waugoola Shire .....	380	
	State Highway No. 17 at Marsden to the western boundary of Bland Shire .....	157,861	
	Western boundary of Bland Shire to State Highway No. 21 at Hay .....	67,371	
	Major bridges on council controlled lengths .....	44,736	
		20,704	291,052
7	Mitchell Highway— State Highway No. 5 to the western boundary of the City of Bathurst ..	151	
	Western boundary of City of Bathurst to the eastern boundary of Warren Shire, excluding total length of 7.2m. within the City of Orange and the Municipality of Dubbo .....	236,925	
	Eastern boundary of Warren Shire to the border of Queensland, excluding the length within Nyngan Municipality .....	164,771	401,847
8	Barrier Highway— Eastern boundary of Cobar Shire to the eastern boundary of Central Darling Shire excluding 0.8m. within the town of Cobar .....	28,759	
	Eastern boundary of Central Darling Shire to the border of South Australia excluding 6.5m. through the City of Broken Hill and 0.4m. through the town of Wilcannia .....	86,628	115,387
9	New England Highway— Hunter River at Hexham to Wallis Creek including Wallis Creek Bridge Mount Pleasant Street, Maitland to the southern boundary of Scone Shire, excluding a total length of 1.9m. within the towns of Singleton and Muswellbrook .....	29,850	
	Southern boundary of Scone Shire to the northern boundary of Dumaresq Shire excluding the length of 5.73m. within the City of Tamworth and 4.69m. within the City of Armidale .....	167,056	
	44.6m. south of Glen Innes at southern boundary of Guyra Shire to 12.3m. north of Tenterfield, excluding the length of 4.08m. within the Municipality of Tenterfield .....	214,425	
		161,630	572,961
10	Pacific Highway— Hawkesbury River to the northern boundary of Gosford Shire .....	102,291	
	Northern boundary of Gosford Shire to Highfields Parade, Highfields ..	117,549	
	Southern abutment of Ironbark Creek Bridge to the junction of State Highway No. 10 and Trunk Road No. 90 .....	67,997	
	Junction of State Highway No. 10 and Trunk Road No. 90 to Wang Wauk River .....	116,451	
	Wang Wauk River to the northern boundary of Nambucca Shire excluding 3m. through the towns of Kempsey and Taree .....	346,896	
	Northern boundary of Nambucca Shire to Grant Street, Ballina and Tamar Street, Ballina to the border of Queensland. ....	705,109	1,456,293
11	Oxley Highway— 1.03m. south of Port Macquarie Post Office to the eastern boundary of Cockburn Shire .....	105,503	
	Eastern boundary of Cockburn Shire to State Highway No. 9 at Bendemeer .....	3,439	
	Eastern boundary of Coonabarabran Shire to the eastern boundary of Warren Shire at Collie .....	137,398	
	Eastern boundary of Warren Shire to State Highway No. 7 at Nevertire .....	49,085	295,425
12	Gwydir Highway— Western boundary of the City of Grafton to Camp Creek including Camp Creek Bridge .....	38,996	
	Camp Creek at 56.29m. east of Glen Innes to 3.24m. east of Glen Innes .....	52,186	
	Major bridges on council controlled length .....	2,069	93,251
14	Sturt Highway— State Highway No. 2 near Lower Tarcutta to eastern boundary of Murrumbidgee Shire excluding the length of 5.96m. within the City of Wagga Wagga .....	110,943	
	Eastern boundary of Murrumbidgee Shire to eastern boundary of Balranald Shire .....	131,895	
	Eastern boundary of Balranald Shire to the Murray River at 1m. south of Buronga, including Mildura Bridge but excluding 1.3m. through the town of Balranald .....	112,276	355,114

**Appendix No. 12A—continued**

**COUNTRY MAIN ROADS FUND—continued**

**PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES  
DURING 1969-70—continued**

**Work by Department—continued**

Road No.	Location of Work	Amount	Total
STATE HIGHWAYS—continued		\$	\$
15	Barton Highway— Northern boundary of the Australian Capital Territory to State Highway No. 2 near Yass .....		88,757
16	Bruxner Highway— From 0.95m. west of Casino to 49.05m. west of Casino ..... Boggabilla to the border of Queensland at Goondiwindi and from 14.16m. east of Bonshaw to 1m. west of Texas .....	83,216 31,091	114,307
17	Newell Highway— Murray River to the western boundary of Urana Shire ..... Western boundary of Urana Shire to the southern boundary of Jemalong Shire ..... Southern boundary of Goobang Shire at 8.9m. north of Forbes to Gilgandra excluding the length of 2.59m. within Dubbo Municipality Junction with State Highway No. 11 to the northern boundary of Namoi Shire, excluding the length of 3.24m. within the Narrabri Municipality ..... Southern boundary of Boolooroo Shire to Boggabilla excluding length in Moree Municipality ..... Major bridges on council controlled length .....	118,902 77,091 171,133 80,979 72,004 15,507	535,616
18	Castlereagh Highway— Gilgandra to the southern boundary of Coonamble Shire ..... Southern boundary of Coonamble Shire to the Queensland border, excluding approximately 1m. through the town of Walgett .....	19,732 151,245	170,977
19	Monaro Highway— From the northern boundary of Monaro Shire to the southern boundary of Monaro Shire excluding 4.60m. within the Municipality of Cooma ..		77,998
20	Riverina Highway— Murray River at and including Bethanga Bridge to Main Road No. 299 at 61.65m. west of Albury ..... Western boundary of Corowa Shire to the eastern boundary of Deniliquin Municipality .....	51,433 32,041	83,474
21	Cobb Highway— Murray River to the southern boundary of Deniliquin Municipality .... 4m. north of Hay to the boundary of Carrathool Shire near Mossiel .... Southern boundary of Central Darling Shire near Mossiel to State Highway No. 8 near Wilcannia excluding 0.20m. within the town of Ivanhoe .....	47,982 51,375 56,613	155,970
22	Silver City Highway— State Highway No. 14 at Buronga to Queensland border including spur to Abbotsford Bridge over the Murray River (0.12m.) but excluding the length between Wentworth Bridge and 1m. north and the full length of 7.01m. within the City of Broken Hill .....		248,366
25	State Highway No. 1 near Macquarie Rivulet at 63.43m. from Sydney to intersection with State Highway No. 2 at Cross Roads, 94.82m. from Sydney .....		82,767
26	State Highway No. 10 at Catga to State Highway No. 10 at Ourimbah .....		70,154
Total — State Highways .....			\$7,166,208
TRUNK ROADS			
51	Major bridges on council controlled length .....	1,117	
54	Do .....	4,206	
55	State Highway No. 5 at Marrangaroo to northern boundary of Blaxland Shire .....	33,933	
55	Major bridges on council controlled length .....	3,356	
57	Do .....	411	
63	Do .....	23,807	
66	Boundary of Central Darling Shire at 55.6m. to the boundary of Broken Hill City at 2.5m. east of Broken Hill .....	26,993	
67	Major bridges on council controlled length .....	29,701	
68	Do .....	5,828	
74	Do .....	250	
78	Do .....	10,712	
79	Do .....	3,104	
81	From 2.2m. to 14.3m. west of Broken Hill .....	2,896	
83	Major bridges on council controlled length .....	6,451	
86	Do .....	60,481	
Total — Trunk Roads .....			\$213,246
ORDINARY MAIN ROADS			
101	Major bridges on council controlled length .....	44,581	
102	Do .....	52,701	
104	Major ferries on council controlled length .....	20,290	
108	Do .....	730,217	
111	Major bridges on council controlled length .....	3,814	
112	Do .....	2,262	
128	Do .....	32,275	
137	Do .....	3,091	
147	Major ferries on council controlled length .....	35,518	
149	Do .....	40,518	
151	Major bridges on council controlled length .....	5,680	
152	Do .....	2,761	
179	Do .....	22,231	
181	Do .....	4,770	
182	Hawkesbury River at Windsor to Main Road No. 503 at Wilberforce including Windsor Bridge .....	4,065	
198	Major bridges on council controlled length .....	3,848	

**Appendix No. 12A—continued**

**COUNTRY MAIN ROADS FUND—continued**

**PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES  
DURING 1969-70—continued**

**Work by Department—continued**

Road No.	Location of Work	Amount	Total
ORDINARY MAIN ROADS—continued		\$	\$
208	Major bridges on council controlled length .....	75	
209	Do .....	135	
213	Do .....	2,539	
217	Do .....	2,044	
220	Do .....	893	
226	Do .....	39,012	
232	Do .....	736	
233	Do .....	599	
237	Do .....	1,245	
248	Do .....	1,166	
249	Do .....	3,090	
253	State Highway No. 5 at Hartley to Main Road No. 520 .....	24,282	
256	Major bridges on council controlled length .....	6,803	
259	Southern boundary of Camden Municipality at 2.65m. to 20.05m. west of State Highway No. 2 at Camden .....	73,637	
261	State Highway No. 1 near Bomaderry to the northern boundary of Shoal- haven Shire .....	46,482	
270	Major bridges on council controlled length .....	3,056	
272	Do .....	3,883	
278	Do .....	200	
286	From 0.94m. west of New Jindabyne to 30.80m. at Rawson Pass .....	100,417	
293	State Highway No. 1 to Bomaderry railway station and branch road to railway goods yard .....	146	
307	Main Road No. 261 to Cambewarra Lookout .....	2,736	
319	Major bridges on council controlled length .....	16,214	
321	Do .....	25,207	
324	From State Highway No. 4 south of Rules Point to State Highway No. 4 west of Rules Point .....	5,365	
336	Major bridges on council controlled length .....	123	
358	Do .....	505	
367	Do .....	417	
369	Do .....	7,444	
386	Do .....	3,764	
399	Do .....	64	
403	Do .....	267	
405	Main Road No. 429 at Wanaaring to the border of South Australia at Hawker Gate .....	30,521	
405	Major bridges on council controlled length .....	6,314	
411	Do .....	411	
423	Do .....	411	
428	State Highway No. 22 at 35m. north of Broken Hill to Kayrunnera .....	8,029	
429	Northern boundary of Central Darling Shire to the western boundary of Darling Shire at Willara Crossing (Paroo River) .....	7,359	
435	From Central Darling Shire boundary north of Wilcannia to Willaroo via White Cliffs .....	946	
437	Major bridges on council controlled length .....	168	
501	Do .....	2,323	
502	Main Road No. 513 at Wollongong to Main Road No. 179 near Wilton .....	70,343	
503	Main Road No. 182 at Wilberforce to the southern boundary of Patrick Plains Shire .....	88,407	
	Southern boundary of Patrick Plains Shire to Parsons Creek at 16m. south of Singleton, including Parsons Creek Bridge .....	91,486	
513	State Highway No. 1 at the top of Bulli Pass to State Highway No. 1 at North Wollongong .....	68,046	
514	Major bridges on council controlled length .....	147	
516	Eastern boundary of Blaxland Shire to the eastern boundary of the City of Lithgow .....	2,268	
522	Major bridges on council controlled length .....	3,925	
556	Major ferries on council controlled length .....	50,809	
567	Major bridges on council controlled length .....	4,856	
572	Do .....	1,265	
575	Do .....	1,438	
583	Do .....	18,445	
Total — Ordinary Main Roads .....			\$1,839,085
TOURIST ROAD			
4016	From Smiggins Holes at 0m. to Island Bend/Guthega Road at 3.08m. ....		\$1,944
SUMMARY			
	Expressways .....	71,329	
	State Highways .....	7,166,208	
	Trunk Roads .....	213,246	
	Ordinary Main Roads .....	1,839,085	
	Tourist Road .....	1,944	
	Bridges and ferries not on classified roads .....		161,485
	Supervision, testing laboratory working expenses (net), traffic striping, signposting, suspense and operating accounts, etc. ....		1,892,623
Total as shown in Receipts and Payments Statements — Appendix No. 1 (C) (i) .....			\$11,345,920

### Appendix No. 13

#### PROCLAMATION OF MAIN ROADS 1969-70

DURING THE YEAR THE FOLLOWING NEW MAIN ROADS AND EXTENSIONS OF EXISTING MAIN ROADS WERE PROCLAIMED

City, Municipal or Shire Area	Date of Proclamation	Road No.	Description	Mileage
Fairfield .....	24-4-70	609	The Horsley Drive from its junction with the Hume Highway (State Highway No. 2), Carramar via Fairfield to Liverpool Road, Smithfield.	3.19
Liverpool .....	8-5-70	608	From the intersection of Hoxton Park Road and the Hume Highway (State Highway No. 2), northerly, via Copeland Street and deviation to Sydney Road, thence via Sydney Road, to its junction with Macquarie Street (Hume Highway — State Highway No. 2).	1.31
Wollondilly .....	12-6-70	610	From the Campbelltown-Bulli Pass Road (Main Road No. 177) at Appin to the Picton-North Wollongong Road (Trunk Road No. 95) near Wilton.	4.88
Wollongong and Wollondilly ..	12-6-70	95	From the Hume Highway (State Highway No. 2) at Picton, via Maldon, Wilton and Mount Ousley to the Prince's Highway (State Highway No. 1) at North Wollongong.	30.48

By **Government Gazette** of 8th May, 1970 that part of Main Road No. 515 between Elizabeth Drive and the Hume Highway (State Highway No. 2) was deproclaimed and Elizabeth Drive proclaimed Main Road No. 515 to its junction with Copeland Street (Main Road No. 608).

By **Government Gazette** of 12th June, 1970 the proclamation of the route of Main Road No. 179 from Picton to Main Road No. 177 at Appin was deproclaimed and that section of Main Road No. 179 between Main Road No. 177 and Main Road No. 502 was proclaimed as Main Road No. 610 and the section between the Hume Highway (State Highway No. 2) and Main Road No. 502 was proclaimed as part of Trunk Road No. 95.

By **Government Gazette** of 12th June, 1970 that part of Main Road No. 502 from Main Road No. 179 to Main Road No. 513 was deproclaimed and proclaimed as part of Trunk Road No. 95.

By **Government Gazette** of 12th June, 1970 that part of Main Road No. 513 between the Prince's Highway (State Highway No. 1) and Main Road No. 502 was deproclaimed and proclaimed as part of Trunk Road No. 95.

By **Government Gazette** of 26th June, 1970 the proclamation of Main Road No. 601 was altered to exclude the section from 0.5 miles north west of Fitzgerald Bridge to Raymond Terrace which becomes part of Main Road No. 104.

### Appendix No. 14

#### DECLARATION OF SECONDARY ROADS 1969-70

DURING THE YEAR THE FOLLOWING SECONDARY ROADS WERE DECLARED OR EXISTING SECONDARY ROADS EXTENDED

City, Municipal or Shire Area	Date of Declaration	Road No.	Description	Mileage
Willoughby .....	24-4-70	2029	From the junction of Chandos Street (Secondary Road No. 2091) and Willoughby Road, generally northerly via Willoughby Road to its junction with Mowbray Road (Secondary Road No. 2092).	1.37
Liverpool, Fairfield and Holroyd .....	24-4-70	2071	From the intersection of The Horsley Drive and Liverpool Road, generally north easterly via Liverpool Road and deviation to Warren Road, thence via Warren Road and deviation to Betts Road, thence via Betts Road and deviation to Jersey Road, thence via Jersey Road and deviation to the Great Western Highway (State Highway No. 5), Wentworthville.	2.41
Fairfield .....	24-4-70	2088	The Horsley Drive from Mimosa Road, generally westerly to Wallgrove Road (Main Road No. 515), Horsley Park.	2.62
Willoughby and North Sydney	24-4-70	2091	From the junction of the Pacific Highway (State Highway No. 10) and Christie Street, St. Leonards, northerly via Christie Street to its junction with Chandos Street, thence easterly via Chandos Street to the Warringah Expressway, Cammeray.	0.78
Lane Cove and Willoughby ....	24-4-70	2092	From the junction of Epping Road (Main Road No. 373) and Centennial Avenue, Lane Cove, northerly via Centennial Avenue to its junction with Mowbray Road West, thence generally easterly via Mowbray Road West and Mowbray Road to its junction with Alpha Road, thence northerly via Alpha Road to its junction with Edinburgh Road and easterly via Edinburgh Road to the western building line of Eastern Valley Way (Main Road No. 599), Castlecrag.	2.05
Willoughby and North Sydney	24-4-70	2093	From the junction of Chandos Street (Secondary Road No. 2091) and Brook Street, generally northerly via Brook Street and Alpha Road to Mowbray Road (Secondary Road No. 2092), thence from that road northerly, via High Street to Victoria Avenue, westerly along Victoria Avenue to Penshurst Street and northerly along Penshurst Street to its junction with Boundary Street (Main Road No. 328), East Roseville.	2.93

### Appendix No. 15

#### PROCLAMATION OF DEVELOPMENTAL ROADS 1969-70

DURING THE YEAR THE FOLLOWING NEW DEVELOPMENTAL ROADS WERE PROCLAIMED OR PROCLAMATION OF EXISTING ROADS AMENDED

City, Municipal or Shire Area	Date of Proclamation	Road No.	Description	Mileage
Walcha .....	4-7-69	1317	The Flags Road, between the southern approach to the Cobrabad River Bridge at 13.5 miles south of Walcha and its junction with Developmental Road No. 1227 near Topdate, a distance of 15.5 miles.	15.50

### Appendix No. 15A

#### DEPROCLAMATION OF DEVELOPMENTAL ROADS 1969-70

DURING THE YEAR THE FOLLOWING DEVELOPMENTAL ROADS WERE DEPROCLAIMED OR PARTLY DEPROCLAIMED

City, Municipal or Shire Area	Date of Proclamation	Road No.	Description	Mileage
Peel .....	11-7-69	1034	Road from Winton District to Westdale Siding.	13.80
Tomki and Kyogle .....	11-7-69	1046	From the Casino-Woodenbong Road (Trunk Road No. 83) at approximately 10 miles north of Casino, generally westerly to and including the western abutment of the bridge over Eden Creek.	4.29
Boolooroo .....	5-9-69	1287	That part of the Biniguy-Terry Hie Hie Road from the Gwydir Highway (State Highway No. 12) near Biniguy, south for a distance of about 0.55 miles to Biniguy.	12.50
Nundle .....	31-10-69	1233	From the junction of the Lindsay's Gap Road and Middlebrook Road, approximately 11.1 miles east of Nundle, generally northerly and north westerly for a distance of approximately 10.25 miles to the boundary of Peel Shire.	5.84
Eurobodalla .....	24-4-70	1206	That part of the road from Batehaven to Rosedale, approximately 7.44 to 8.8 miles from the Prince's Highway (State Highway No. 1).	1.36
Abercrombie .....	24-4-70	1218	Ophir Road, from a point approximately 14 miles west of Bathurst to the Canobolas Shire boundary, being a length of approximately 5 miles.	4.90
Jemalong .....	22-5-70	1104	That part of the Eugowra-Grenfell Road from Main Road No. 238 at Eugowra, southerly and south westerly to Paytens Bridge over the Lachlan River, a length of 6.4 miles.	6.39
Manning .....	22-5-70	1292	Old Bar Road, from the Pacific Highway (State Highway No. 10) at Purfleet, generally easterly to the Bohnock turnoff a length of approximately 5.35 miles.	5.35
Bland .....	29-5-70	1029	From a point 10 miles south of Weethalle, generally southerly, towards Barellan terminating at the southern boundary of Bland Shire.	11.47

### Appendix No. 16

#### PROCLAMATION OF DEVELOPMENTAL WORKS 1969-70

DURING THE YEAR THE FOLLOWING DEVELOPMENTAL WORKS WERE PROCLAIMED

City, Municipal or Shire Area	Date of Proclamation	Work No.	Description
Cudgegong .....	19-9-69	3216	The construction of a high level reinforced concrete bridge, 20 feet wide between kerbs, and immediate approaches at Wialdra Creek on the Gulgong-Merotherie Road.

### Appendix No. 16A

#### DEPROCLAMATION OF DEVELOPMENTAL WORKS 1969-70

DURING THE YEAR THE FOLLOWING DEVELOPMENTAL WORKS WERE DEPROCLAIMED

City, Municipal or Shire Area	Date of Proclamation	Work No.	Description
Culcairn .....	11-7-69	3017	The work of construction of approximately 4 miles of the road from Culcairn to Walla Road, known as Cummings Road.
Culcairn .....	11-7-69	3024	The work of construction of the road from Jindera via Walla Walla to Alma Park, between 23.8 and 24.8 miles from Jindera.
Culcairn .....	11-7-69	3074	The work of construction of a reinforced concrete box culvert and immediate approaches over the Bucki Creek, approximately 8 miles from Henty, on the Henty-Cookardinia Road.
Denman and Patrick Plains ..	22-5-70	3173	The work of forming, gravelling and draining of that part of Jones Reserve Road, from the western end of Developmental Work No. 3098 at approximately 7.3 miles west of Jerrys Plains, generally north westerly for approximately 4 miles to the north eastern corner of portion 77, parish of Hunter, county of Hunter.

### Appendix No. 17

#### MILEAGES OF EXPRESSWAYS, STATE HIGHWAYS, TRUNK ROADS, ORDINARY MAIN ROADS, SECONDARY ROADS, TOURIST ROADS AND DEVELOPMENTAL ROADS IN NEW SOUTH WALES

FOR THE FIVE YEARS ENDED 30th JUNE, 1970

	At 30th June				
	1966	1967	1968	1969	1970
County of Cumberland Area—					
Expressways .....			7	10	12
State Highways .....	196	195	192	193	194
Ordinary Main Roads .....	665	668	665	662	673
Total all Main Roads and Expressways .....	861	863	864	865	879
Secondary Roads .....	144	157	159	164	176
Tourist Roads .....	51	51	55	51	51
Developmental Roads .....	14	14	14	14	14
Total all Classified Roads .....	1,070	1,085	1,092	1,094	1,120

### Appendix No. 17—continued

## MILEAGES OF EXPRESSWAYS, STATE HIGHWAYS, TRUNK ROADS, ORDINARY MAIN ROADS, SECONDARY ROADS, TOURIST ROADS AND DEVELOPMENTAL ROADS IN NEW SOUTH WALES—continued

FOR THE FIVE YEARS ENDED 30th JUNE, 1970—continued

Country Area—	At 30th June				
	1966	1967	1968	1969	1970
Expressways .....			14	14	14
State Highways .....	6,334	6,353	6,349	6,342	6,345
Trunk Roads .....	4,159	4,232	4,228	4,210	4,245
Ordinary Main Roads .....	10,996	10,961	10,929	10,888	10,899
Total all Main Roads and Expressways .....	21,489	21,546	21,520	21,454	21,503
Tourist Roads .....	155	145	163	168	168
Developmental Roads .....	2,875	2,722	2,733	2,705	2,728
Total all Classified Roads .....	24,519	24,413	24,416	24,327	24,399
<b>Total for whole State—</b>					
Expressways .....			21	24	26*
State Highways .....	6,530	6,548	6,542	6,535	6,539
Trunk Roads .....	4,159	4,232	4,228	4,210	4,245
Ordinary Main Roads .....	11,661	11,629	11,593	11,550	11,572
Total all Main Roads and Expressways .....	22,350	22,409	22,384	22,319	22,382
Secondary Roads .....	144	157	159	164	176
Tourist Roads .....	206	196	218	219	219
Developmental Roads .....	2,889	2,736	2,747	2,719	2,742
Total all Classified Roads .....	25,589	25,498	25,508	25,421	25,519†

\* Excludes a length of 3.75 miles of expressway standard road included in the total mileage of Main Roads.

† In addition, the Department is responsible for the full cost of works on unclassified roads in the unincorporated area in the western part of the State, totalling 1,542 miles and is also responsible for a length of 30 miles in the incorporated area.

### Appendix No. 18

## DISTRIBUTION BETWEEN THE DEPARTMENT AND COUNCILS OF RESPONSIBILITY FOR CARE AND CONTROL OF ROADS AT 30th JUNE, 1970, IN ACCORDANCE WITH THE PROVISIONS OF THE MAIN ROADS ACT, 1924

	County of Cumberland*	Country	Total
	miles	miles	miles
1. Roads which are the responsibility of the Department of Main Roads—			
(a) Where work was carried out by the Department—			
Expressways .....	12	14	26
State Highways .....	190	5,376	5,566
Trunk and Ordinary Main Roads in the Eastern and Central Divisions, other than the County of Cumberland .....		300	300
Ordinary Main Roads in the County of Cumberland .....	384		384
Unincorporated area of the Western Division—			
Trunk and Ordinary Main Roads .....		471	471
Unclassified Roads .....		1,542	1,542
(b) Where work was carried out for the Department by Councils—			
State Highways .....	4	969	973
Ordinary Main Roads in the County of Cumberland .....	289		289
2. Roads which are the responsibility of Councils assisted by the Department of Main Roads—			
Trunk and Ordinary Main Roads, other than in the County of Cumberland		14,373	14,373
Total .....	879	23,045	23,924

\* County of Cumberland refers to the area defined in Part IV, Section 9 of the Main Roads Act, 1924.