# ANNUAL REPORT 1968-69 

DEPARTMENT OF MAIN ROADS • NEW SOUTH WALES

$1 / 1$ mis

## CONTENTS

## 1 Submission

2 Principal Officers
3 General Review
6 Finance
14 Expressways
18 Highway Construction
21 Bridge Construction
21 Maintenance
23 Road Mileage and Bituminous Surfacing
23 Elimination of Railway Level Crossings
24 Traffic Service
25 Research
26 Industrial Relations
27 Public Relations
28 New Commonwealth Aid Roads Act
29 The State Highways of New South Wales
32 Acknowledgments


THE HONOURABLE
THE MINISTER FOR HIGHWAYS, SYDNEY

Section 6 of the Main Roads Act, 1924-1967 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-fourth Annual Report, including statement of accounts.
The report covers the period from 1st July, 1968 to 30th June, 1969, 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

```
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
T. M. Coulter

Deputy Engineer-in-Chief
G. V. Fawkner

Assistant Chief Engineer R. E. Johnston

Bridge Engineer
F. C. Cook

Assistant Secretary
C. A. Gittoes

Assistant Chief Accountant E. L. Marlin

Road Design Engineer
E. F. Mullin

Field Inspecting Engineer
R. Fitzhardinge

Engineer for Country Councils Works
J. L. Allan

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

Principal Land Surveyor and
Property Officer
J. S. Endean

Secretary
C. W. Mansfield

Assistant Chief Engineer
N. F. Hatcher

Assistant Chief Engineer
w. J. C. Orr

Mechanical Engineer
L. A. S. Flack

Urban Investigations Engineer
E. R. Jefferay

Traffic Service Engineer
M. B. Fairlie

Materials and Research Engineer
A. Leask

Assistant Secretary
H. W. Llewellyn

Chief Accountant
R. G. Barton

Assistant Chief Accountant
N. D. Moloney

Principal Legal Officer
G. C. Sheldon


## GENERAL REVIEW

During the year under review there has been considerable progress made in the continuing improvement to the Main Roads System of New South Wales.
Additional finance, accruing from increased vehicle registrations, taxation on heavy vehicles, contributions from Local Government and Commonwealth Government sources and loans, enabled many important road and bridge projects to proceed throughout the State.
Another six-mile section of the SydneyNewcastle Expressway was completed, tenders were invited for the construction of the first stage of the Western Distributor, a new improved road access to Sydney (Kingsford Smith) Airport was continued, many miles of State Highways were reconstructed and provided with a bituminous surface, numerous bridges were completed and others commenced, while Shire and Municipal Councils carried out considerable improvement works on the Trunk and Ordinary Main Roads, Secondary, Tourist and Developmental Roads. In addition, important proposals to improve conditions for road traffic at Kings Cross were announced.
Large sums of money are needed to provide and maintain satisfactory standards on Main Roads consistent with the needs of traffic. This is especially so along the heavily populated and highly industrialised corridor extending from Newcastle to Sydney and Wollongong. It also applies to the major rural arterial routes carrying large volumes of traffic, much of which consists of heavy commercial vehicles.
The Commonwealth Government has been persuaded to recognise the urgent needs of these vital road links and it has made provision for specific sums to be spent on these classes of roads under the terms of the Commonwealth Aid Roads Act which operates for the five-year period commencing from 1st July, 1969. The provision of designated funds for


Reconstructed section of the Snowy Mountains Highway between Bega and Bemboka.
selected classes of roads will call for an extensive programme of road and bridge construction. In the latter part of the 1968-69 financial year there has been much activity in planning for these works so that they may proceed as funds become available. The necessity to acquire the required land coupled with the ability to proceed with these acquisitions will be a significant factor in the prosecution of these vital works.
In the country the responsibility for State Highways rests wholly with the Commissioner for Main Roads. He shares the responsibility for all other classes of roads in the Main Roads System with the Shire and Municipal Councils.

The mutual interest of the Councils and the Commissioner in the provision of a first-class Main Roads System has developed, throughout the years, into a close partnership which has engendered a spirit of co-operation for the benefit of the community. This happy partnership has been maintained throughout the year.
The vital role of local government in Main Roads matters is well recognised and assistance is given and will continue to be given to Councils in all aspects affecting Main Roads administration. The Commissioner for Main Roads is
at all times cognisant of his responsibility for the safety of those who travel on and otherwise use Main Roads. Officers of the Department of Main Roads are constantly striving to improve road conditions consistent with traffic needs. Apart from many safety features designed and built into the roads, visual aids, such as warning, direction and information signs are provided to assist the traveller. These aids are constantly reviewed in the light of current needs.
It is alarming that so many road users ignore the safety aids provided and, in consequence, are involved in accidents resulting in injury and death, sometimes to themselves, but more regrettably to innocent victims. All too often this high accident rate is the result of human behaviour.

Throughout the year, surveys have been continued at the sites of fatal accidents on State Highways with a view to determining what, if any, improvements can be effected. In addition considerable research has been undertaken in an effort to develop a road system that incorporates every practical safety feature, whether it be in the design, the construction or the added necessary aids to suit particular locations.


## FINANCE

## Receipts:

The amount received from the regular sources of income totalled $\$ 87,677,383$ or $\$ 4,906,823$ more than the receipts for 1967-68.
Funds for special works or for works that could not normally be undertaken from ordinary revenue totalled $\$ 15,435,937$. The total funds received for 1968-69 were thus $\$ 103,113,320$.
Receipts from State Motor Vehicle Taxation, which is the largest single item of income, amounted to $\$ 34,836,865$ and exceeded the previous year's level by $\$ 2,164,078$. The increase represented the yield from the increase in motor vehicle registrations.
A total of $\$ 28,391,385$ was received under Section 5(1) of the Commonwealth Aid Roads Act, 1964. Of this amount $\$ 5,678,277$ was credited to the County of Cumberland Main Roads Fund, equivalent to $16 \cdot 1 \%$ of that Fund's total receipts. The balance of $\$ 22,713,108$, credited to the Country Main Roads Fund, was $34.3 \%$ of that Fund's total receipts. The Commonwealth Aid Roads grant amounted to less than half of the expenditure by the Department on the construction and reconstruction of roads and bridges. $\$ 2,277,000$ was received under Section 5(2) of the Act for expenditure on Developmental Roads ( $\$ 1,724,118$ ), unclassified roads in the unincorporated area of the State ( $\$ 374,231$ ) and Tourist Roads in National Parks ( $\$ 178,651$ ).
Charges for heavy commercial vehicles under the Road Maintenance (Contribution) Act, 1958, as amended, yielded $\$ 14,799,421$ or $\$ 2,233,877$ more than the previous year. The Department under Section 11 of the Main Roads Act, 1924-1967 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 $5 / 24$ th cent in the dollar on the Unimproved Capital Value on 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 $5 / 24$ th cent in the dollar on the Unimproved Capital Value. The amount received by the Department in



SECTION II OF THE MAIN ROADS ACT RECEIPTS


LOAN MONEYS BORROWED BY DEPARTMENT


$\square$ COMMONWEALTH SOUACE
$\square$ STATE SOURCE

MAIN ROADS EXPENDITURE
AT 1968/69

1968-69 from the levy under Section 11 totalled $\$ 7,538,001$.
Loan moneys totalling $\$ 8,100,000$ were borrowed during $1968-69$, or $\$ 450,000$ more than in the previous year. Loan receipts were used to assist in financing the cost of constructing-

- Access Road to Sydney (Kingsford Smith) Airport, Mascot $\$ 3,350,000$
- Berowra-Hawkesbury River Section of the SydneyNewcastle Expressway
\$950,000
- Great Western HighwayProspect Deviation
- Western ExpresswayRegentville Bridge
\$500,000
$\$ 400,000$
- Western Distributor
- Bridge over Macquarie River at Dubbo
\$200,000
- Bridge over Edward River at Deniliquin
\$250,000
- Bridge over Myall River at Bulahdelah
- Bridge over Hunter River at Raymond Terrace
A total of $\$ 4,800,000$ was provided from loan funds to finance the BerowraHawkesbury River Section of the Sydney-Newcastle Expressway and the access road to Sydney (Kingsford Smith) Airport, Mascot. Amounts provided by the State Government are repayable by the Department.


## Payments:

Total payments from the County of Cumberland, Country and Developmental Roads Funds amounted to $\$ 97,702,445$ or $\$ 7,047,845$ greater than for the previous year. Maintenance and minor improvement of roads and bridges cost $\$ 19,719,364$ or $20 \cdot 2 \%$ of the total expenditure.
Construction, reconstruction and the acquisition of property for roadworks accounted for the major portion of the Department's expenditure. The amount expended on these works was $\$ 67,949,885$ or $69 \cdot 5 \%$ of the total expenditure compared with $\$ 64,533,767$ in 1967-68.
Loan charges, administrative expenses and other costs amounted to $\$ 10,033,196$. In the case of the country area of the State, contributions made by Councils towards the cost of Main Roads works do not pass through the Department's accounts, and are therefore not included in the amounts stated above.

## (A) COUNTY OF CUMBERLAND MAIN ROADS FUND

Statements of Receipts and Payments for the year ended 30th June, 1969
(i) General Purposes


## (ii) Special Purposes

## RECEIPTS

State Government Loans - Repayable
Loan borrowings under Section 42A of the Main Roads Act, 1924-1967
Sydney Harbour Bridge Account for
Warringah Expressway ApproachConstruction including Land Acquisitions
Eastern Distributor (Cahill Expressway Construction)
Commonwealth Aid Roads Act, 1964 - portion of grant for expenditure on Main Roads
Commonwealth Aid Roads Act, 1964 -portion of grant for expenditure on rural roads Contributions by other departments and bodies

TOTAL RECEIPTS:
Net transactions of Operating Accounts, Suspense Accounts and transfers to and from the General Purposes Account in respect of finance for Reserve Accounts and investigations, etc., City Expressways
Balance brought forward from last year

PAYMENTS
Construction and reconstruction of roads and bridges-
Main RoadsWork by Department .... ............. ....
Other than on Main RoadsWork by Councils

|  |  |  |
| :--- | :--- | ---: | ---: |
| $\ldots .$. | 271,529 |  |
| $\ldots \ldots$. | $\ldots,$. | $6,318,911$ |


(signed) R. J. S. THOMAS
Commissioner for Main Roads

| $\begin{gathered} 1968 / 69 \\ \$ \end{gathered}$ | $\begin{gathered} 1967 / 68 \\ S \end{gathered}$ |
| :---: | :---: |
| 4,800,000 | 4,700,000 |
| 5,400,000 | 3,750,000 |
| 900,000 | 4,765,000 |
| - | 10,000 |
| 59,733 | 56,891 |
| 178,652 | 103,553 |
| 41,908 | - |
| 11,380,293 | 13,385,444 |
| 764,584 | 3,255,298 |
| 12,144,877 | 16,640,742 |
| 7,351,186 | 3,671,097 |
| 19,496,063 | 20,311,839 |
| 4,633,286 | 1.057.909 |
|  | $\begin{array}{r} 2,941 \\ 11,717,416 \end{array}$ |
| 6,590,440 |  |
| 8,706 | 20,334 |
| 59,167 | 56,891 |
| 566 | - |
| 10,820 | 9,620 |
| 128,518 | 95,542 |
| 11,431,503 | 12.960,653 |
| 8,064,560 | 7,351,186 |
| 19,496,063 | 20,311,839 |
|  | 69,300 |
|  | 42,300 |
| $\begin{aligned} & 171,151 \\ & 136,715 \end{aligned}$ | 37,528 |
| 307,866 | 149,128 |
|  | $\begin{array}{r} 235,300 \\ 70,045 \end{array}$ |
| 454,473 |  |
| 762,339 | 454,473 |
|  | $\begin{array}{r} 385,300 \\ 69,173 \end{array}$ |
| 762,339 |  |
| 762,339 | 454,473 |

(signed) R. G. BARTON
Chief Accountant

The accounts of the Department of Main Roads have been audited in accordance with the provisions of the Audit Act, 1902. The above statement, in my opinion, is a correct record of receipts and payments of the County of Cumberland Main Roads Fund during the year ended 30th June, 1969.

## (B) COUNTRY MAIN ROADS FUND

Statement of Receipts and Payments for the year ended 30th June, 1969
(i) General Purposes

## RECEIPTS

Motor vehicle taxation in accordance with the Main Roads Act, 1924-1967 ....
Charges on commercial vehicles under the Road Maintenance (Contribution) Act, 1958
Transfer from the Road Transport and Traffic Fund under the Transport Act, 1930 Contributions by Councils towards maintenance and construction of Main Roads ....
Contributions by other departments and bodies towards maintenance and construction of Main Roads
Grant under Commonwealth Aid Roads Act, 1964 .... ... ..........
Other

TOTAL RECEIPTS:
Balance brought forward from last year .... .... .... .... .... .... ....

## PAYMENTS

Maintenance and minor improvements of roads and bridges-


1968/69
\$

| $27,869,412$ | $26,138,150$ |
| ---: | ---: |
| $11,839,537$ | $10,052,435$ |
| - | 10,108 |
| 182,310 | 192,923 |
| 107,852 | 288,021 |
| $21,918,175$ | $20,561,636$ |
| 218,511 | 168,025 |
|  |  |
| $62,135,797$ | $57,411,298$ |
| $\mathbf{2 , 0 0 9 , 4 7 0}$ | $2,038,294$ |
| $\mathbf{6 4 , 1 4 5 , 2 6 7}$ |  |

## 1967/68

\$
6,138,150

0,108
192,923

288,021
.561,636

57,411,298
2,038,294
$9,449,592$

Construction and reconstruction of roads and bridges-


| $15,479,836$ | $7,921,801$ |
| ---: | ---: |
|  | $9,955,593$ |
| $37,821,718$ | $25,045,656$ |
| 602,508 | 641,974 |
| $3,678,322$ | $3,342,109$ |
| 857,123 | 511,044 |

State Treasury Loans-
Interest, exchange, management and flotation expenses

| 817,177 | 845,718 |
| ---: | ---: |
| 100,000 | 100,000 |
| 96,358 |  |
| 522,426 | - |
| $59,975,468$ <br> 26,250 | $54,696,727$ <br> 3,113 <br> $2,327,930$ <br> $62,329,648$ <br> $1,815,619$ |
| $2,743,020$ <br> $64,145,267$ | $59,440,122$ |

## (ii) Special Purposes

## RECEIPTS

I oan Borrowings under Section 42A of the Main Roads Act, 1924-1967
Commonwealth Aid Roads Act, 1964 -portion of grant for expenditure on Main Roads
Commonwealth Aid Roads Act, 1964 -portion of grant for expenditure on rural roads
Contributions by other departments and bodies
TOTAL RECEIPTS
Net transactions of Operating Accounts, Suspense Accounts and transfers to and from the General Purposes Accounts in respect of finance for Reserve Accounts
\$

| 1968/69 | 1967/8 |
| :---: | :---: |
| \$ | \$ |
| 2,700,000 | 300,000 |
| 794,933 | 782.565 |
| 374,231 | 180,774 |
| 186,480 | - |
| 4,055,644 | 1.263 .339 |
| 1,039,616 | 242.470 |
| 5,095,260 | 1505.809 |
| 4,080,392 | $4,020.2 \mathrm{s8}$ |
| 9,175,652 | 5.526 .097 |
| 92,996 | 11.774 | Work by Department

11.774

92,996
-
30,000
300,000

11,097
-
169.677

227,565
-
555,000
140.592
-
$1.445,705$
4.080.392

5,526,097

375
19,647
200
20.222
4.500
24.722
-

20,000
4,722

24,722
(signed) R. J. S. THOMAS
Commissioner for Main Roads
The accounts of the Department of Main Roads have been audited in accordance with the provisions of the Audit Act, 1902 , The above statement, in my opinion, is a correct record of receipts and payments of the Country Main Roads Fund during the year ended 30th June, 1969.
(signed) D. FAIRLIE
SYDNEY
30th September, 1969

## (C) DEVELOPMENTAL ROADS FUND

Statement of Receipts and Payments for the year ended 30th June, 1969

(signed) R. J. S. THOMAS
Commissioner for Main Roads
(signed) R. G. BARTON Chief Accountant

The accounts of the Department of Main Roads have been audited in accordance with the provisions of the Audit Act, 1902. The above statement, in my opinion, is a correct record of receipts and payments of the Developmental Roads Fund during the year ended 30th June, 1969.

SYDNEY
30th September, 1969.

## (D) SYDNEY HARBOUR BRIDGE ACCOUNT

Income and Expenditure Account for the year ended 30th June, 1969



The accounts of the Sydney Harbour Bridge have been audited in accordance with the provisions of the Audit Act, 1902.
In my opinion the balance sheet as at 30 th June, 1969, and supporting income and expenditure, appropriation and reserve accounts for the year then ended set out a true and fair view of the financial position of the Sydney Harbour Bridge Account and operations for the year.

## EXPRESSWAYS

Within the County of Cumberland the road planning proposals of the Department of Main Roads provide for 185 miles of expressways and it is considered a brief report should be made of the present position.

Beyond the boundaries of the County of Cumberland, it is planned that the expressways radiating out from Sydney will extend southerly to Wollongong and Kiama, southwesterly to Mittagong and northerly to Newcastle.

In the case of expressways included in the Department's planning proposals, there will be complete denial of access from abutting property and there will be grade separation of all intersections, that is, all cross traffic will be carried under or over the expressway. Vehicular access between the expressway and the normal street system will be at predetermined points called "interchanges" where traffic joining the expressway merges with the expressway traffic while departing traffic diverges from the expressway without any conflicting traffic movement.

## Warringah Expressway

Towards the close of the 1967-68 financial year the first section of the Warringah Expressway, one and one-half miles in length, extending from the northern end of the Sydney Harbour Bridge to Miller Street, Cammeray, was opened to traffic.

At the time of its opening a considerable amount of work remained to be done, including some points of entrance and exit and landscape treatment. During this year these works were completed whilst the expressway was being fully used by traffic.

Throughout the year this important facility operated very satisfactorily. Motorists travelling to and from

the City have been afforded significant savings in travelling time and considerable relief has been given to the local street system in North Sydney.

## Western Distributor

The full length of the Western Distributor, when constructed, will extend from the southern end of the Sydney Harbour Bridge to an interchange at Ultimo from which the proposed Southern and Western Expressways will commence.

There will also be a connection from the Distributor to the proposed North Western Expressway leading to Gladesville Bridge.

In the first place it is proposed to build the Distributor as far as Day Street, near King Street. From Day Street, traffic will be able to proceed to and from Pyrmont Bridge, the new railway overbridge at William Henry Street and to other parts of the City.

During this year tenders were invited for the construction of this stage of the work. It is expected that construction will commence in the latter part of 1969. The properties required for this work are being purchased.

There will be a separate Divisional organisation responsible for the construction of the Distributor.

## Sydney-Newcastle Expressway

The first section of the Sydney-Newcastle Expressway from the Hawkesbury River to Mount White, a distance of 5.8 miles, was opened to traffic on 15th December, 1965, as a tollway. The second section of the expressway from Mount White to Calga, a distance of 3.4 miles, was opened to traffic on 28th October, 1966 and an additional mile of improved road towards Peat's Ridge was also constructed to ensure safe transition from expressway to normal highway conditions.

The third section of the expressway, from the Hawkesbury River to an interchange at approximately one mile north of Berowra, was completed and opened to traffic on 12th December, 1968.

Because of the need to use the existing Hawkesbury River Bridge for both highway and expressway traffic, pending the construction of a new bridge, southbound traffic is required to use the Pacific Highway for the first part of the ascent from the River.

Thus, this section of expressway is 6.3 miles in length northbound and $6 \cdot 1$ miles in length southbound. It has been constructed to the same high standards as the previous sections and cost $\$ 13 \cdot 2$ million.

The grades on this section were maintained within the limits of $6 \%$ ascending and $6 \frac{1}{2} \%$ descending and therefore the design provided for deeper cuts and higher fills than any experienced elsewhere on the expressway. The total earthworks involved the removal and placing of approximately $5 \cdot 3$ million cubic yards, mostly sandstone. Cuts were up to 150 feet deep and one fill was about 215 feet high. This particular fill required about 1.7 million cubic yards of material.

Concurrently with the construction of this section of expressway, the Pacific Highway, between Mt. Kuring-gai and the interchange north of Berowra, was widened to provide for four lanes of traffic and this was completed just prior to the opening of the expressway section.

Motorists are now able to drive a distance of 58 miles from Sydney to Ourimbah in greatly improved conditions.

- From Sydney to the interchange between Cowan and Berowra the entire length of the Pacific Highway is at least four lanes wide.
- From this interchange to Calga motorists can use the tollway or the existing highway.
- From Calga to Ourimbah motorists can travel on the route through Peat's Ridge on a high standard highway.

Southern end of the Warringah Expressway, showing completed work at the junction with the Bradfield Highway.

The next segment of work in the construction of the Sydney-Newcastle Expressway will be the construction of a second road bridge across the Hawkesbury River. A design for this bridge, which will be six lanes in width, is currently being prepared. It will be constructed immediately upstream from the existing structure. The new bridge, when completed, will carry the expressway only and allow the existing bridge to revert to its planned function of carrying the Pacific Highway. It is programmed for completion before the end of 1971. Proposals for the construction of further sections of the expressway in the vicinity of Wyong and Swansea, to provide improved traffic conditions in those areas, are being investigated.

## Southern Expressway

During the year the construction of the North South Arterial Road, the by-pass route around Wollongong, between Ghost's Creek and Gladstone Avenue, Fig Tree was continued. This work will be extended south towards Kembla Grange. The design for the section between Fig Tree and Five Islands Road is being prepared, but because of the complex structural requirements, which may cause some little delay in the design, it is proposed to proceed immediately with the construction of the section between Five Islands Road and Kembla Grange where structural needs will not restrict progress. This section will provide a new route which will allow through traffic to avoid the business centre and the railway level crossings at Unanderra. At the same time the extension of the expressway northward from North Wollongong towards Bulli will proceed.

## South Western Expressway

In recognition of the rapid rate at which the population in the Campbelltown area is increasing, the Department of Main Roads will commence, in the latter part of 1969 , the construction
of a section of the South Western Expressway from the Cross Roads, Liverpool to the Campbelltown-Camden Road, a distance of nine miles. During the year the design for this section of expressway has been proceeding and negotiations for the acquisition of the necessary properties have been under way.
The construction of this section is programmed for completion before 30th June, 1972.

## Western Expressway

The planned Western Expressway is designed to provide a fast through-route from the City to the lower Blue Mountains. At the present time a bridge over the Nepean River at Regentville is being constructed as the first step in the construction of this expressway. The western approaches to this bridge, built to expressway standards, will link with the Great Western Highway at Emu Plains. The eastern approaches will be constructed as far as St. Marys to provide a by-pass around the Penrith shopping and commercial centre.
This work will be progressively extended easterly to link with the Great Western Highway near Wallgrove. A separate Divisional organisation responsible for expressway construction has been established to supervise this work.

## Access Road to Sydney (Kingsford Smith) Airport

An expressway-type road from South Dowling Street, Kensington to Wentworth Avenue, Mascot is being constructed to provide a new high standard access road to Sydney (Kingsford Smith) Airport. This new road, built generally along the western boundaries of The Australian and The Lakes Golf Courses, is two miles in length. In conjunction with this work, sections of South Dowling Street and Wentworth Avenue are also being widened.
This work will be completed later in 1969.

## HIGHWAY CONSTRUCTION

## County of Cumberland

Throughout the year there has been continued improvement to the Main Roads within the County of Cumberland.
Principal works carried out included:

- Prince's Highway-Engadine and Waterfall
The construction of a deviation at Engadine was completed and opened to traffic on 23rd April, 1969. This work is being extended both northwards towards Loftus and southwards towards Waterfall A short deviation at Waterfall to eliminate several sharp bends was constructed.
- Hume Highway-Liverpool The by-pass road at Liverpool was completed during the year. This work included the provision of a channelised intersection at the junction of the highway and Hoxton Park Road.
- Great Western Highway-Prospect The construction of a deviation near Prospect, between 19.5 and 22.0 miles from Sydney, was completed. This deviation has dual carriageways and has eliminated a section of highway which had low standard alignment. The widening of this highway is being continued westerly towards Penrith.
- Pacific Highway-Mt. Kuring-gaiBerowra
Reconstruction and widening of the highway to provide four traffic lanes from Mt. Kuring-gai to Berowra and the construction of dual carriageways from Berowra to the Sydney-Newcastle Expressway interchange, were completed during the year.


## Country

Major works completed on State Highways in the country included:

- Prince's Highway

Reconstruction between Collaery Road and Collins Creek, Woonona, between 3.9 and 5.0 miles north of Wollongong, to provide improved alignment and grading. This work was undertaken in conjunction with the Council of the City of Greater Wollongong,



Laying aggregate on bitumen during the construction of a deviation of the New England Highway near Beresfield.

Widening and relocation of the Hume Highway on Razorback Range, to provide improved alignment and climbing lanes.
which also contributed towards the cost.

- Snowy Mountains Highway Construction of a deviation between 32.4 miles west of Bega and the new intersection with the Monaro Highway, $40 \cdot 0$ miles west of Bega, was opened to traffic on 20th December, 1968. This work, which included two bridge-size culverts, has reduced the length of the highway between Bega and Nimmitabel by two miles. Construction of the deviation around the Blowering and Jounama Dams was completed.
- Barrier Highway

Reconstruction and bituminous surfacing between $72 \cdot 6$ and $79 \cdot 0$ miles and between $80 \cdot 2$ and $84 \cdot 2$ miles west of Cobar.
Reconstruction and bituminous surfacing between 9.0 and 13.6 miles west
of Wilcannia.
Reconstruction and provision of a sand-seal surface between $14 \cdot 8$ and $19 \cdot 0$ miles west of Wilcannia.
Reconstruction and bituminous surfacing between 49.0 and 55.8 miles east of Broken Hill.

- New England Highway

Reconstruction and bituminous surfacing between $22 \cdot 5$ and $24 \cdot 2$ miles west of Singleton, immediately north of the deviation built around the Liddell Power Station.
Construction of a deviation between Kankool and Willow Tree, $6 \cdot 1$ to 11.4 miles north of Murrurundi. This deviation replaced a winding section of road and eliminated two railway level crossings from the route of the highway.

- Pacific Highway

Reconstruction and bituminous surfacing between 7.8 and 8.9 miles and between $14 \cdot 1$ and $14 \cdot 8$ miles north of Coffs Harbour.
Reconstruction and bituminous surfacing between 53.7 and $55 \cdot 0$ miles north of Grafton, including the raising of a section of pavement to alleviate flooding.
Reconstruction and bituminous surfacing between 1.2 and 2.6 miles and between $4 \cdot 1$ and $5 \cdot 6$ miles north of Murwillumbah.

- Gwydir Highway

Widening and partial reconstruction between $3 \cdot 0$ and 4.9 miles east of Warialda.
Reconstruction and bituminous surfacing between 33.4 and 37.0 miles west of Moree.

- Sturt Highway

Reconstruction and bituminous surfacing between $32 \cdot 0$ and 36.9 miles and between $39 \cdot 0$ and $43 \cdot 6$ miles west of Wagga Wagga.

- Newell Highway

Reconstruction between $15 \cdot 0$ and $24 \cdot 0$ miles north of Ardlethan providing a dustless surface from the Victorian border to Coonabarabran.

- Silver City Highway

Reconstruction and sand-seal between $1 \cdot 0$ and $11 \cdot 0$ miles and the provision of a sand-seal between 31.9 and $42 \cdot 0$ miles north of Wentworth, thus providing a bituminous surfaced road between Wentworth and Broken Hill.


New bridge over the Tweed River at Murwillumbah. New bridge over Warrah Creek, near Quirindi. New bridge over the Darling River at Wentworth on the Silver City Highway, showing the lift span in operation.

## BRIDGE CONSTRUCTION

New bridges are being constructed to replace existing inadequate and worn-out structures, to replace vehicular ferry services, to eliminate railway level crossings and to provide structures where none at present exist. The extensive programme of bridge building was continued during the year and 140 bridges and box culverts of bridge size were constructed by the Department and Councils on classified roads and at sites on unclassified roads where the Department is responsible for the construction of crossings. The total length of completed bridges was 17,037 feet.
At the close of the year 75 bridges and and 70 culverts of bridge size were being built on classified roads. Some of the larger bridges completed during the year included:

- Tuggerah Lake at The Entranceto replace a narrow timber bridge.
- Sydney-Newcastle Expressway-to carry the Pacific Highway over the Expressway near the Berowra Interchange-a new facility.
- Porter Street Bridge over the North South Arterial Road, Wollongonga new facility.
- Upper Warrell Creek, Nambucca Shire -extension of existing bridge.
- Camden Haven River at Kendallto replace a timber bridge.
- Barrington River, Gloucester Shireto replace an open causeway.
- Tweed River at Murwillumbahto replace a narrow steel and timber bridge.
- Chilcott's Creek on Kankool-Willow Tree deviation-a new facility.
- Warrah Creek, Tamarang Shireto replace a timber beam bridge.
- Darling River at Wentworth-to replace a narrow timber truss bridge.
- Edward River at Deniliquin-to replace an old timber beam and truss bridge.
- Mullanjandra Creek, south of Holbrook -to replace an old timber bridge.
- Gilmore Creek, near Tumut-to replace a narrow timber beam bridge and a railway level crossing.
- Barmedman Creek, near Barmedmanto replace a causeway.
- Yaven Yaven Creek on the Snowy Mountains Highway, east of the Hume Highway - to replace a low level timber bridge.


## MAINTENANCE

Weather conditions have an important influence on the maintenance operations on Main Roads. In the northern and northwestern areas of the State, generally dry conditions lasting for most of the year caused accelerated wear on shoulders and gravel pavements. In the southern and southwestern areas of the State, rainfall was generally above average, particularly in the latter half of the year.
In the County of Cumberland, Main Roads were maintained in a satisfactory condition during the year. However, the increasing volume of traffic necessitated a greater amount of maintenance than was formerly required. Sections of pavement, which were initially constructed to meet less demanding circumstances, were severely tested by the volumes of traffic they were required to carry.
With increasing traffic speeds, resulting partly from improved standards of road alignment and grading, the problem of providing pavement surfaces with adequate skid resistance under wet conditions has been accentuated. Attention has been given to this problem by the development and trial use in particular locations of special asphaltic mixes and other bituminous treatments designed to allow rapid dispersion of surface water film and to give better skid resistance.
Because of increased traffic volumes particularly in the County of Cumberland, it has been necessary to give particular attention to the maintenance of pavement edges and shoulders.
Roadside furnishings have been regularly maintained and renewed as necessary. On a number of sections damaged painted steel guardrail was replaced with galvanised rail. The bushfires which occurred during the summer months caused extensive damage to roadside furnishings particularly in the Blue Mountains area, necessitating the replacement of many guide posts,


Grading of shoulders on Wakehurst Parkway, French's Forest.
road signs, etc.
In conformity with a recommendation by the National Association of Australian State Road Authorities, the Department adopted a guide post of smaller dimension than that previously used. Rectangular posts, 4 inches by 2 inches, are now being erected on new works, etc. A prototype of a self-propelled device for the mechanical cleaning of guardrails was developed by the Department during the year. The machine proved satisfactory and the Department is proceeding with the full-scale development of this equipment.
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. The use of asphaltic concrete for
resheeting on the more densely trafficked sections of road has resulted in improved riding qualities, while minor improvements to alignment and grading have improved conditions at a number of locations.
Snow-clearing operations were satisfactory during the winter of 1968. Maintenance and snow-clearing of selected unclassified roads in the Kosciusko National Park were undertaken on behalf of the National Parks and Wildlife Service. During the year 10,279 miles of roadway were linemarked which, with repeat markings of 5,559 miles of more heavily trafficked sections, lane marking of 956 miles and edge marking of 351 miles, made a total of 17,145 miles of linemarking.
Major repairs were carried out to 43 bridges and ferry vessels during the year.

## ROAD MILEAGE AND BITUMINOUS SURFACING

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, in
New South Wales is 26,993 miles. Mileages of roads within the various classifications are:

| Expressways | 24 miles* |
| :--- | ---: |
| State Highways | 6,535 miles |
| Trunk Roads | 4,210 miles |
| Ordinary Main Roads | 11,550 miles |
| Secondary Roads | 164 miles |
| Tourist Roads | 219 miles |
| Developmental Roads | 2,719 miles |
| Unclassified Roads | 1,572 miles |

*Excludes four miles of expressway which are proclaimed Main Roads.
The total length of dustless surface on these roads is now 13,656 miles, an increase of 471 miles during the last year. During the year bituminous surfacing was carried out on ten miles of Expressways, 1,343 miles of Main and Secondary Roads, nine miles of Tourist Roads, ten miles of Developmental Roads and five miles of unclassified roads (generally located in the unincorporated areas of the State).
This represented 2,899 lane miles or the equivalent of 1,450 miles of normal two-lane road.
The work comprised 97 miles ( 345 lane miles) of bituminous plant mix surfacing, 1,103 miles ( 2,196 lane miles) of sprayed seal, 174 miles ( 348 lane miles) of prime or primer seal and four miles (ten lane miles) of slurry seal. Bituminous surfacing carried out during the year was in four categories:

1. Initial surfacing of 384 miles (776 lane miles) of road pavement not previously provided with a dust-free surface.
2. Provision of heavier treatments, either sprayed seal or plant mix surface on 96 miles ( 195 lane miles) of road pavement previously provided with a light treatment such as a prime or primer seal.
3. Restoration of bituminous surfaces-
a. on 31 miles ( 79 lane miles) following reconstruction to widen and/or strengthen the pavement.
b. on 32 miles ( 103 lane miles) following reconstruction to provide additional lanes or dual carriageways.
c. on 124 miles ( 280 lane miles) following reconstruction to improve alignment and/or grading.
4. Maintenance resurfacing of 711 miles (1,466 lane miles) of road pavement. The types of surface on Main Roads throughout the State at 30th June, 1969 are shown on the map on the inside back cover of this report.

## ELIMINATION OF RAILWAY LEVEL CROSSINGS

During the year, four railway level crossings were eliminated from the Main Roads System.
A road deviation between Kankool and Willow Tree eliminated two level crossings from the route of the New England Highway. The level crossing at Kankool was closed while that at Willow Tree is now on the route of the Willow Tree-Merriwa Road (Main Road No. 358).
Two level crossings on the TrundleTullamore Main Road (Main Road No. 350) were eliminated from the Main Roads System by the construction of a deviation.
The level crossing on the Snowy Mountains Highway at Gilmore was eliminated from the route of the highway by the construction of a bridge which spans both Gilmore Creek and the Tumut-Batlow railway line. Since the Main Roads Act came into effect in 1925, a total of 169 level crossings have been eliminated from Main Roads. There remain 396 crossings on Main Roads comprising 335 on New South Wales Government Railways, 50 on privately-owned railways and 11 on Victorian Government Railways which extend into New South Wales. With a view to improving safety conditions at existing railway level crossings, improvements were carried out at a
number of locations by the installation of six sets of automatically operated flashing lights, increasing sight distance at various locations and the provision of warning signs on road pavements in approach to the crossings.

## TRAFFIC SERVICE

The provision of median strips on heavily trafficked Main Roads was continued and an additional 8.6 miles were constructed mainly in the Sydney Metropolitan Area and the City of Newcastle.
Channelised facilities for traffic were completed at 26 intersections.
At the close of the year construction was in progress at a further 13 sites. Special bays, providing an area for buses to stop clear of moving traffic on Main Roads, were provided at seven new locations. Three of these bays were in the Sydney Metropolitan Area and the remaining four were in the Shire of Lake Macquarie.
Climbing lanes for slow-moving vehicles were provided at 16 additional locations, while those existing at four other sites were lengthened.
The completion of the Berowra-Hawkesbury River section of the Sydney-Newcastle Expressway involved a large signposting project, including the construction of four overhead sign structures.
In the Sydney Metropolitan Area a number of painted finger-board type signs have been replaced with retro-reflective signs, whilst in all areas greater use is being made of reassurance direction signs which are located beyond intersections. Experimental investigations have been made into the development of a new type of reflectorised milepost, whilst laboratory and field tests have been conducted on existing and new types of materials for sign backgrounds, with a view to improving the durability of signs and reducing the adverse effects of background reflectance. Advisory speed surveys were conducted on approximately 570 miles of road Top:
Channelised intersection of the Hume Highway with Copeland Street (foreground) and Hoxton Park Road (right) at Liverpool. Bottom:
Climbing lane provided on the Hume Highway south of Yass.
principally in the northeastern sector of the State. A number of roads where there were existing advisory speed signs were re-surveyed as a result of changes in speed limits. Where absolute speed limits have been introduced which are higher than the general 50 miles per hour prima facie limit, the use of advisory speed signs has been extended to include a greater range of curves, e.g. where the speed limit is 60 miles per hour absolute, signs have been erected on all curves with advisory speeds of 55 miles per hour or less.

The special investigation of fatal accident sites on State Highways, which was commenced in 1966, was continued through the current year. An analysis has been made of all fatal accidents which occurred on rural State Highways over the three years ending 31st December, 1968. In this period there were 750 accidents in which 922 persons were killed and 1,029 persons injured. In the few cases where road conditions might have been a contributory cause, remedial action was taken.

Travel time surveys were intensified throughout the year in the Sydney Metropolitan Area, particularly in the northern suburbs, where the effects of the opening of the Warringah Expressway were measured. These studies showed that in the morning peak period the greatest time-savings resulting from the Expressway occurred in Eastern Valley Way, Willoughby Road and Pacific Highway where journeys to the City were reduced by approximately 8 minutes, $8 \frac{1}{2}$ minutes and 11 minutes respectively. Similar but slightly lower time-savings were recorded in the evening peak period.

An analysis was also made of changes in travel times on all principal radial routes leading to and from the City, comparing February, 1967 with October, 1968. It is of interest to note that improvements in travel times were recorded over many roads, mainly as a result of the introduction of Clearways. There were very few areas in which travel times increased by more than five minutes.

## RESEARCH

The Department of Main Roads is vitally involved in research into many aspects of road engineering. Because of this involvement it is able to keep abreast of modern techniques and developments and at the same time contribute towards the advancement of this technology. During the year, 81 items were included in the research programme and the more important of these are detailed below. An investigation into the performance of flexible pavements, to verify the validity of the design criteria used, is of major importance. As a part of this research a number of lengths of pavements in the western area of the State have been examined thoroughly. The serviceability of these pavements was rated, both visually and by means of a roughness measuring instrument attached to a vehicle, and these ratings were related to the results of in situ strength tests and tests carried out on samples taken from the pavements and underlying surfaces. Environmental effects, such as the average rainfall and the amount of traffic, were also taken into account. The analysis of these results and factors is still proceeding. An investigation was carried out to determine the effectiveness of P.V.C. sub-soil drainage pipes in comparison with earthenware and other types. The measurement of skid resistance and prediction of susceptibility of some aggregates to polish under traffic were continued. This work was extended to deal with the development of skid resistant surfacings. Trial sections of bituminous plant mixes with tar additives, open graded mixes, Trinidad asphalt and special aggregates were being studied. In recent years the use of tar in roadworks has been largely confined to priming and precoating. However, a wide range of processed coke oven tars became available during the year for use as binders in sealing and plant mix work. As previous experience with tar binders indicated a lack of durability and hardening caused by loss of volatile oils, oxidation changes and loss of oils by absorption, an investigation into these aspects was commenced. In conjunction with the laboratory work, field trials were carried out using tar binders for seals and densely graded plant mixes.

## INDUSTRIAL RELATIONS

The Department is a major employer of manpower. It places considerable reliance on its staff and employees in carrying out its function as a public authority.
At the close of the year, a total of 14,192 persons were employed on Main Roads works. They comprised 10,173 direct employees of the Department and its contractors, together with 4,019 persons employed by Shire and Municipal Councils and contractors thereto.
The fact that there were no major industrial disputes during the year is evidence of the generally harmonious relations that exist between employer and employee. Constantly improved facilities for field employees engaged on roadworks have removed many of the hardships that previously existed in these occupations. This naturally influences the Department's ability to effectively carry out its work.

## Service Training

The Department again sponsored three senior officers to attend Administrative Staff Courses at the Administrative Staff College at Mt. Eliza, Victoria and at the University of New South Wales. A total of 46 Departmental officers has now been sponsored to such courses. It has always been the Department's policy to encourage its officers to attain recognised external tertiary qualifications to fit them for more responsible duties and this was maintained during the year.
Details of the studies undertaken were:
Full-time students-
94 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-
607 officers undertook courses at
educational institutions in Arts,
Economics, Commerce, Law, Accounting,
Local Government, Transport
Administration, Personnel Administration,
Management and Drafting.
Apprentices-
82 employees were indentured to the
Department in 10 trades.

In addition to the external studies undertaken, in-service training courses were conducted at the Training Centre, Head Office. A total of 197 persons comprised of clerks, typists, machine operators and plant foremen attended courses during the year. A further 107 newly appointed officers received instruction in accordance with the Department's Formal Staff Induction Programme. The Department's Training Officers also visited field offices to provide "follow-up" training to that provided at the Training Centre.

## Non-Service Training

The Department continued to sponsor junior male and female staff and employees to courses conducted by the Australian Outward Bound Memorial Foundation. Persons selected to attend are drawn from both the ranks of junior salaried officers and apprentices. To date, a total of 82 persons has been sponsored to attend these courses.
At present 40 officers and employees are attending National Service Training. During their training, National Service Trainees are maintained on a comparable career basis with their contemporaries and, on their return, special attention is given to their re-establishment in their chosen vocation.

## Credit Union

A Staff Credit Union, established in 1964, operates within the Department to encourage systematic saving and serve as a source of loans at equitable interest rates for provident purposes.
The Credit Union is a registered co-operative society and its services are available to staff officers. At 30th June, 1969 membership was 956 and loans totalling $\$ 599,407$ had been made, $\$ 224,952$ being loaned during the current year.

## Social and Recreation Club

The activities of the Main Roads Social and Recreation Club, membership of which is available to all staff and employees of the Department, continued with fervour throughout the year. The Club, which is actively encouraged in its objectives, publishes a house journal, provides sporting equipment and facilities, organises sporting activities and arranges social functions on behalf of members and their families. The Department provides the full-time service of one of its officers to attend to the affairs of the Club.

Scale models on display at the Department's Head Office.

## PUBLIC RELATIONS

The Department of Main Roads is a public authority with ultimate responsibility to the people of New South Wales. It is therefore recognised that the public should be kept fully informed of its activities.
The best form of public relations is the provision of a first-class system of Main Roads commensurate with the needs of the motoring public and, within the limits of finance and physical capacity, the Department tries to provide this facility.
The public relations service provides

the liaison between the Department and the public. It informs the public through the various news services of important works that are planned for the future, about to be commenced or to be tendered for, the progress of works currently under construction and works that are nearing completion and when they are to be opened to traffic. Apart from the normal information service, it arranges visual displays and exhibits of works at important locations throughout the State. This gives not only the city dweller but also those who reside in the country the opportunity of viewing these exhibits. Usually they are arranged in conjunction with the annual shows at major towns and cities or at school fetes and similar functions. Public interest is thereby stimulated with a resultant appreciation of the Department's work.
Many of the Department's construction projects are complex and, to aid both technical and aesthetic appreciation of the proposals, they are created in scale model form. These models play an important role in the acceptance of a project in visual form and best illustrate the Department's proposals to Councils, other authorities and the general public. A permanent display of scale models, supported by photographic and cartographic illustrations, is located in the Department's Head Office. Included as part of the public relations service is the Department's Journal, "Main Roads", which is published quarterly and describes current and projected works and matters pertaining to policy, administration and finance. This Journal is distributed widely throughout Australia and overseas.
Many organisations take advantage of the service which provides for the screening of films on road and bridge construction. In addition arrangements are made on request from organisations for officers to address them on matters relating to Main Roads.
As a general aid to publicity and for the education of the public, particularly the younger generation, brochures and road maps are issued without charge. The Department also publishes and issues to its staff and to Shire and Municipal Councils a number of bulletins, manuals and technical instructions.

## NEW <br> COMMONWEALTH AID ROADS ACT

The Commonwealth Government provides financial assistance to the States for roads, under the Commonwealth Aid Roads Act. The Commonwealth Aid Roads Act, 1964, provided for this financial assistance for the five-year period which ended on 30th June, 1969.
Under the provisions of this Act one-twentieth of the total amount made available under the basic grant was paid to Tasmania and the remainder was allocated to the other States, based on a formula which took into account three factors, namely population, area and number of registered vehicles. The total amount paid by the Commonwealth to the States during the currency of this Act was $\$ 750$ million, of which New South Wales received slightly in excess of $\$ 209$ million. For the year ended 30th June, 1969, the amount paid to New South Wales was $\$ 47.3$ million or $27.8 \%$ of the total amount distributed by the Commonwealth. This Act further provided that not less than $40 \%$ of the money allocated was required to be spent on rural roads other than State Highways, Trunk Roads and ordinary Main Roads. Of the $\$ 47.3$ million paid to New South Wales during the last year of the Act, the Department of Main Roads received $\$ 28.4$ million for expenditure on State Highways, Trunk Roads and ordinary Main Roads, the remaining $\$ 18.9$ million being paid to the Department of Public Works for distribution to Councils for unclassified rural roads. Under the provisions of the Main Roads Act the Department of Main Roads was required to allocate $80 \%$ of the amount it received to classified roads in the country.
A new Commonwealth Aid Roads Act will govern the allocation of money to the States for the five years commencing on 1st July, 1969.
Prior to the introduction of the Commonwealth Aid Roads Act 1969, the Commonwealth Bureau of Roads, in conjunction with the National Association of Australian State Road Authorities
conducted an Australia-wide survey of road needs. In New South Wales this survey was undertaken as a co-operative effort by Local Government Councils and the Department of Main Roads.
The new Act provides for fundamental changes in the basis of distribution of Commonwealth money to the States. It results from the findings of the Commonwealth Bureau of Roads in its road needs survey which identified the needs as being more closely allied to "people" than "area", two of the principal components of the previous formula, though then of equal value. The new distribution will result in New South Wales receiving $31.7 \%$ of the total allocation over the next five years, that is, it is to receive $\$ 380.4$ million out of a total of $\$ 1,200$ million. The Act also provides for supplementary grants totalling $\$ 52.05$ million for South Australia, Western Australia and Tasmania.
The new Act specifies that Commonwealth grants shall only be expended on certain categories of roads or works as defined in the Act and for the time being approved by the Minister of State for Shipping and Transport.
The various categories mentioned and the amounts allocated to each category for expenditure over the next five years, so far as New South Wales is concerned, are as follows:

- Urban arterial roads in the Sydney Statistical Division and the Urban Newcastle, Urban Wollongong and Urban Gold Coast areas (construction works only)
\$201,010,000
- Rural arterial roads (construction works only)
$63,870,000$
- Rural roads other than arterial roads (construction and maintenance works)

109,820,000

- Planning and Research

5,700,000
\$380,400,000
There is a specific requirement in the new Act for the State during the year, from its own resources, to expend or set aside for expenditure on road works an amount equal to the base amount set out in the Seventh Schedule to the Act as adjusted for each year of the Act, in order to qualify for the full amount of the Commonwealth grant in that year. The minimum amount required to be provided by New South Wales over the next five years in order to qualify for Commonwealth grants in full is estimated at $\$ 397.6$ million, which is about $\$ 65.6$ million more than is expected to be available from the sources of revenue at present applying to road works.


## THE <br> STATE HIGHWAYS OF <br> NEW SOUTH WALES

When the Main Roads Act came into effect on 1st January, 1925, the newly established Main Roads Board assumed responsibility for assisting local Councils, on a $50-50$ basis, with the 12,840 miles of proclaimed Main Roads. At that time the Main Roads were essentially those proclaimed under the Local Government Act of 1906 as being of most importance to the State.
The setting up of the Board was a recognition on the part of the Government that an overall authority was necessary to co-ordinate the planning, financing and technical research that were so obviously necessary if the State were to plan for roads to serve the era of the motor vehicle.
In 1910 there were 4,478 registered motor vehicles in New South Wales; by 1925 the number had increased
to 98,451 ! Yet at that time there were scarcely any dustless surfaces on Main Roads outside urban areas. Roads had been built basically to suit slow-moving horse-drawn vehicles. They could not withstand the ever-increasing volumes of fast motor traffic.
The Board at once set about implementing a programme of improvement, the primary aim being to ensure that the most suitable locations for routes were selected. This policy was adopted in order to ensure that, as far as practicable, costly construction and reconstruction works would not subsequently have to be abandoned in favour of more advantageous routes for the greater volumes of traffic expected in the future.
A vigorous campaign was also undertaken to improve the existing surfaces on major traffic arteries considered more permanently suitable.
After a few years, it soon became apparent that some distinction between the roads was necessary, since the main arteries leading to other States and to the most populous of the country towns were in a condition which made it impossible for local authorities to finance

the work which was obviously necessary. On 17th August, 1928 the Main Roads were divided into three classes comprising:

$$
\begin{array}{ll}
\text { State Highways } & 3,580 \text { miles } \\
\text { Trunk Roads } & 2,300 \text { miles } \\
\text { Ordinary Main Roads } & 7,540 \text { miles }
\end{array}
$$

The total mileage of the Main Roads System was increased under the classification system to 13,420 miles and the Government assumed full financial responsibility for all works on State Highways. State Highways were defined as:
"The primary avenues of road communication connecting the State of New South Wales with the neighbouring States, or the far interior with the Coast, especially where no railway communication exists."
The State Highways that were selected numbered thirteen and included:
Prince's, Hume, Federal, Sturt, Great Western, Mid Western, Mitchell, Barrier, New England, Pacific, Oxley, Gwydir and Sydney By-pass (Pennant Hills Road, Church Street, Woodville Road). Between 1929 and 1937 the total mileage of Main Roads increased by 1,864 miles.

However, there was little alteration to the highway system except for the addition of the Sturt Highway in 1933 and the Barton Highway in 1935. The expansion of the system was necessarily governed by monetary considerations and during the period of financial depression very little progress was made. In the County of Cumberland the Board, which became the Department of Main Roads in 1932, confined its activities to filling any missing links on stretches of improved roads and to extending others to a significant point of termination. This policy rapidly increased the effectiveness of Main Roads in the County. In addition, highways were widened where practicable, bitumen surfacing extended, and maintenance was organised on a systematic basis.
Owing to the inability of the Department to meet increased liabilities in respect of new Main Roads, additions to the mileage during the depression were made only in cases where exceptional circumstances rendered them specially desirable or necessary.
The return of more prosperous conditions in primary and secondary industry was reflected in the volume of traffic, and the sustained increase in the number of motor vehicles using the roads gave rise to a demand for more and better facilities for intercommunication throughout the State. The Department undertook a comprehensive survey of the road system to determine the most satisfactory layout and classification of Main Road routes. Consideration was given to the planning of the State Highway routes as the principal avenues of road communication throughout the State and with other States, and as the foundations upon which the whole structure of road communication must depend. The roads were selected with due regard to the distribution of population and the trends of traffic within the State, taking into account the layout of the more important traffic arteries in adjoining States.
The selection of the State Highway routes was influenced also by the likely future developments in primary and secondary industry.
Major additions made to the Main Roads System in 1938 included the proclamation
of the Bruxner, Newell, Castlereagh, Monaro, Riverina and Cobb Highways. The length of the new roads proclaimed as State Highways amounted to 1,379 miles, an increase of $36 \%$ over the previous year.
Considerable lengths of the roads included in the additional State Highways were substandard, requiring reconstruction or improvement involving major works. To some extent the additions to the highway system were made in anticipation of future growth, which was largely arrested during the period of the 1939-45 war, as was also the intended road improvement. During the war years reconstruction and improvement works were generally restricted to Main Roads strategic to national defence. One of these was the Silver City Highway which was proclaimed in February, 1945. Immediately after the war, the Department carried out a further general review of the Main Roads System.
The growth in the number of motor vehicles was beginning to reach phenomenal proportions. For example, from the figure of 98,451 in 1925, registrations had increased to 510,504 by 1950. Included in this new figure was an increasing number of heavy commercial vehicles which put a great burden on pavements not designed to carry them. The review indicated that the Main Roads System was generally satisfactory but increasing emphasis was placed on the distribution of population and on topography as an indication of possible future trends. Two new State Highways were proclaimed shortly after the war, the Newcastle By-pass in 1946 and the Mount Lindesay Highway in 1950 (formerly part of the route of the New England Highway). Subsequently, two additional State Highways have been proclaimed, the Illawarra Highway in 1962 and the Calga-Peat's Ridge-Ourimbah Road in 1967. Important changes in the Main Roads and particularly in the State Highways have been the ultimate result of the general review and subsequent reviews which the Department carries out at regular intervals.
When the Main Roads Board was established there were numerous ferry services provided at river crossings on State Highways. These obstructions to the free flow of traffic have been progressively reduced over the years,
and the last ferry on a State Highway was removed with the opening of the bridge over the Clarence River at Harwood on the Pacific Highway in 1966. The Main Roads Act provides that the carrying out of works on a country State Highway may be placed in the hands of the Council of the local government area involved. Until the late 1950's extensive use had been made of this provision and approximately half the mileage of country State Highways was under the control of Councils which carried out the necessary works with funds provided for this purpose.
However, during more recent years a number of factors have influenced the Commissioner to assume direct responsibility for a larger mileage of State Highways than in the past. These include the great growth of traffic volume and weight of vehicles occurring on interstate routes and the consequent need for more extensive reconstruction and maintenance; the extension of large-scale construction and bitumen surfacing especially in inland areas; and the need for the extension of higher standards of pavement requiring the use of specialised plant. It was also recognised that when major construction or reconstruction works were required on a State Highway, a Council was not often equipped to carry out the work at a rate sufficient to meet the Department's requirements. The Department was in a better position to deploy its staff and facilities on these works and it would have been unrealistic to expect Councils to increase their staff and equipment to meet large construction requirements which were purely short term. The Department made rapid progress in reconstruction and bituminous surfacing of the lengths of unsealed State Highways, particularly in the western areas of the State.
Nowadays, works carried out on country State Highways usually involve one of the following:

- Reconstruction to provide for pavement strengthening or widening.
- Construction of climbing lanes.
- The construction of divided carriageways where practicable.
- Deviations on improved alignments and grades.
On heavily trafficked roads, such as the Pacific, Great Western and Hume

Highways, the Department's standards call for a minimum pavement width of 24 feet. Other State Highways which carry substantially less traffic are provided with a minimum width of 22 feet. In order to provide these standards, the Department has been carrying out a progressive programme of reconstruction and widening of the surfaces of State Highways for many years. The construction of climbing lanes has been and will continue to be an important feature. These extra lanes for slowmoving traffic help to promote the free passage of faster-moving vehicles and have a very important part to play in reducing congestion and traffic accidents. A considerable number of climbing lanes have been provided on the Hume and Pacific Highways in particular. Although divided carriageways have been constructed mostly on Main Roads in the County of Cumberland, the Department has found it desirable to extend this facility to some very heavily trafficked rural highways.
In the County of Cumberland all highways are now bitumen surfaced and works such as reconstruction and widening to provide for six lanes of traffic, divided carriageways and channelised intersections, have been undertaken recently.
Concurrent with an extensive road building programme has been the progressive replacement of old bridges with modern structures of concrete and steel. Today, bridges on most State Highways are built to a minimum standard width of 24 feet between kerbs while on the more important highways a width of 28 feet is provided. During the past financial year a total of sixty bridges and culverts of bridge size were completed on the highways throughout the State. Currently, large-scale construction and reconstruction works are being undertaken at numerous locations and on many State Highways including the Barrier, Mitchell, Castlereagh, Bruxner and Oxley Highways. The sealed surfaces have extended to many far-flung towns and otherwise remote areas. By 1974, apart from sections in the western area and other isolated sections, it is expected that the State Highway System will be a fully surfaced network of roads.

## ACKNOWLEDGMENTS

In concluding this report of the activities of the Department of Main Roads for the financial year ended 30th June, 1969, I desire to extend thanks to the Hon. P. H. Morton, M.L.A., Minister for Local Government and Minister for Highways, for his continued consideration and support.

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

For their assistance in publicising 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 of the Department in the building of the State's Main Roads System, its improvement and maintenance in the service of the motoring public.

## R. J. S. THOMAS

Commissioner for Main Roads

NEXT YEAR'S MAJOR WORKS

## Roads

Kings Cross Road Tunnel
Western Distributor
Western Expressway
Sydney-Newcastle Expressway
Southern Expressway
South Western Expressway

## Bridges

Brisbane Water at the Rip
Hawkesbury River
Lake Illawarra at Windang
Macquarie Rivulet
Nepean River at Camden
Georges River at Alfords Point



## SUPPLEMIENT

## TO THE ANNUAL REPORT

NEW SOUPTH WALES SHOWING
MAIN ROAD SYSTEM
OVERLEAF


## SUPPLEMENT

to
REPORT
of the

## COMMISSIONER FOR MAIN ROADS

for the

Year ended 30th June, 1969

# DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES SUPPLEMENT 

to

# FORTY-FOURTH ANNUAL REPORT 

of the

COMMISSIONER FOR MAIN ROADS
Year ended 30th June, 1969

## CONTENTS

Page
Divisional Administration ..... 5
County of Cumberland Road Construction- State Highways ..... 6
Ordinary Main Roads ..... 7
Secondary Roads ..... 10
Tourist Roads ..... 11
Roads other than Main Roads ..... 11
Country Road Construction-
State Highways ..... 11
Trunk Roads ..... 17
Ordinary Main Roads ..... 20
Developmental Roads and Developmental Works ..... 25
Tourist Roads ..... 25
Bridge Construction-
General ..... 25
Principal Bridgeworks Completed During the Year ..... 26
Principal Bridgeworks in Progress at the Beginning of the Year and Not Completed ..... 27
Principal Bridgeworks Commenced During the Year and Not Completed ..... 28
Maintenance of Bridges and Ferries ..... 30
Elimination of Railway Level Crossings on Main Roads ..... 33
Traffic Service-
Median Strips ..... 34
Channelisation of Intersections ..... 34
Bus Bays ..... 35
Climbing Lanes on Hills ..... 35
Signposting . ..... 36
Advisory Speed Signs ..... 36
Accident Analysis and Investigation ..... 36
Travel Time Surveys ..... 36
Bituminous Surfacing--
Bituminous Surfacing completed during the Year
Scheduled according to Road Classifications ..... 37
Scheduled according to Work by Department and Councils ..... 40
Types of Surfaces as at 30th June, 1969
Scheduled according to Road Classifications ..... 42
Scheduled according to Department's Divisions ..... 43
Plant and Motor Vehicles ..... 44
Central Workshop ..... 44
Field Workshops ..... 45
Instruction in Plant Maintenance and Operation ..... 45

Appendix
No. Page
2 (C) Developmental Roads Fund-Statement of Receipts and Payments for the Five Years ended 30th June, 1969 ..... 68
2 (D) Total All Roads Funds-Statement of Receipts and Payments for the Five Years ended 30th June, 1969-
(i) General Purposes ..... 69
(ii) Special Purposes ..... 69
2 (E) Sydney Harbour Bridge Account-Statement of Income and Expenditure for the Five Years ended 30th June, 1969. ..... 70
3 Summary of Loan Liabilities-Liabilities to the State Treasury ..... 70
4 Summary of Loan Liabilities-Loan Borrowings under Section 42A of the Main Roads Act ..... 71
5 Details of Loans Raised During the Year ended 30th June, 1969—Loan Borrowings under Section 42A of the Main Roads Act ..... 71
6 Details of Outstanding Loans as at 30th June, 1969-Loan Borrowings under Section 42A of the Main Roads Act ..... 72
6A Details of Investments of Loan Reserve Funds as at 30th June, 1969-Loan Borrowings under Section 42A of the Main Roads Act. . ..... 73
7 County of Cumberland Main Roads Fund-General Purposes-Summary of Expenditure on Construction and Reconstruction Works ..... 74
7A County of Cumberland Main Roads Fund-Special Purposes-Summary of Expenditure on Construction and Reconstruction Works ..... 81
8 Country Main Roads Fund-General Purposes-Summary of Expenditure on Construction and Reconstruction Works . . ..... 82
8A Country Main Roads Fund-Special Purposes-Summary of Expenditure on Construction and Reconstruction Works ..... 108
9 Developmental Roads Fund-Summary of Expenditure on Construction and Reconstruction Works ..... 109
10 County of Cumberland Main Roads Fund_-Payments for Maintenance and Minor Improvement of Main Roads, Bridges and Ferries-Work by Councils ..... 112
10A County of Cumberland Main Roads Fund-Maintenance and Minor Improvement of Main Roads, Bridges and Ferries-Work by Department ..... 113
11 Country Main Roads Fund-Payments for Maintenance and Minor Improvement of Main Roads, Bridges and Ferries-Work by Councils ..... 115
11A Country Main Roads Fund-Maintenance and Minor Improvement of Main Roads, Bridges and Ferries-Work by Department ..... 118
12 Proclamation of Main Roads ..... 122
13 Proclamation of Tourist Roads ..... 123
14 Declaration of Secondary Roads ..... 123
15 Proclamation of Developmental Roads ..... 123
15A Deproclamation of Developmental Roads ..... 124
16 Proclamation of Developmental Works ..... 124
16A Deproclamation of Developmental Works ..... 124
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, 1969 ..... 125
18 Distribution between the Department and Councils of Responsibility for Care and Control of Roads at 30th June, 1969. . ..... 125

## 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. Fourteen have their Divisional headquarters in country centres and two are located in the Sydney Metropolitan Area. The remaining two, referred to earlier in this report, 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.

The Divisional Engineer is vested with considerable authority which allows him to act over a wide field. Each Divisional Office includes a drawing office, testing laboratory, a clerical officer, a technical reference library and facilities for plan reproduction. Each is staffed by suitably qualified personnel.

Field works undertaken by the Department are controlled from Works Offices, the Works Engineer at each office being responsible to the Divisional Engineer concerned.

Because of the nature of its operations, the locality of these Works Offices, especially those engaged mainly on construction, is changed from time to time depending upon the areas where major works are undertaken.

The Divisional Engineers and the headquarters of the Divisions as at 30th June, 1969 were as follows:-

Division
Metropolitan
Parramatta
Central Mountains
Illawarra
Hunter Valley
Lower North Coast
North Eastern
Upper Northern
North Western
Central Western
Central Northern
Murray Darling
Central Murray
South Western
South Coast
Southern

Headquarters
Milson's Point
Parramatta
Lithgow
Wollongong
Newcastle
Port Macquarie
Grafton
Glen Innes
Tamworth
Parkes
Bourke
Broken Hill
Deniliquin
Wagga Wagga
Bega
Goulburn

Divisional Engineer
B. J. Sexton
L. R. Browne
K. J. Paynter
G. A. Thompson
T. S. Hope
T. P. Desmarchelier
H. B. Korff
W. J. Brecht
E. M. Brown
N. A. Waslin
K. W. Dobinson
R. A. Dunstan
K. Edgar
C. N. Penney
E. K. Twartz
J. B. Anderson

## COUNTY OF CUMBERLAND ROAD CONSTRUCTION

Details of road construction expenditure in the County of Cumberland in the past twelve months are listed in Appendix No. 7.

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

## State Highways

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

The Department continued construction of a deviation of the highway between Anzac Parade and Numantia Road, Engadine. The deviation, via Railway Parade, was opened to traffic on 23rd April, 1969. The work was extended to Porter Road, Engadine and Oliver Street, Heathcote.

To eliminate several sharp curves on the previous route of the highway, the Department completed construction of a deviation between 26.8 and 27.6 miles south of Sydney, near Waterfall. The work included the provision of a climbing lane 0.5 miles in length for southbound traffic.

Conditions for traffic were improved between 34.1 and 34.5 miles south of Sydney by providing improvements to the alignment and lowering a crest.

At the top of Bulli Pass, work was commenced on the provision of a climbing lane between the junctions of the highway with the Campbelltown-Bulli Road (Main Road No. 177) and Mt. Ousley Road (Main Road No. 513).

## State Highway No. 2-Hume Highway

The Department completed kerbing and guttering and laid asphaltic concrete sheeting on the shoulders of the highway between Prospect Creek and Cabramatta Creek, Lansvale.

Construction of shoulders, associated drainage works, kerbing and guttering were nearing completion between Cabramatta Creek and the railway overbridge at Warwick Farm.

The by-pass at Liverpool was completed with channelisation being provided at the intersection of the highway with Hoxton Park Road (Main Road No. 515) and Copeland Street (Secondary Road No. 2071), Liverpool.

## State Highway No. 5-Great Western Highway

The Department commenced reconstruction of the concrete pavement near King Avenue, Flemington.

Reconstruction was completed between Church and Steele Streets, Parramatta. The highway was widened to provide two three-lane carriageways, divided by a kerbed median strip, and the intersection of the highway with Church Street was reconstructed.

Between Bridge Road and Station Street, Wentworthville, pavement widening to provide dual carriageways each of three lanes was nearing completion. The work included construction of kerbing and guttering and the provision of drainage.

The Department completed construction of a deviation at Prospect, between 19.5 and 22.0 miles from Sydney. The deviation, which was opened to traffic on 19th December, 1969, has a dual carriageway and eliminated a section of the highway with poor alignment.

Work was commenced on the construction of the eastbound carriageway of the highway to provide dual carriageways from the Prospect deviation to St. Marys between 22.0 and 27.7 miles from Sydney.

Construction was in progress to provide a four-lane carriageway over Quarry Hill, near Kingswood, between 30.1 and 31.3 miles from Sydney.

Channelisation of the western intersection of the highway with Henry Street (Secondary Road No. 2082), Penrith was commenced.

The Department commenced the widening of Victoria Pass between 11.3 and 12.0 miles west of Katoomba to provide an additional two lanes for slow-
moving vehicles. When completed there will be lanes available for slow-moving traffic both uphill and downhill between the bottom of Victoria Pass and the entrance to Mitchell's Ridge Lookout, except for a short length at "Mitchell's Bridge".

## State Highway No. 10-Pacific Highway

The Department commenced reconstruction of the highway adjacent to the shopping centre at Asquith.

Widening of the highway to four lanes was completed between Mt. Kuringgai and the Berowra interchange of the Sydney-Newcastle Expressway. A divided carriageway was constructed between Berowra and the interchange.

State Highway No. 13-Woodville Road, Church Street and Pennant Hills Road
The railway level crossing on Woodville Road at Villawood was relocated to enable work to commence on the construction of the approaches to an overbridge. When completed, this bridge will carry highway traffic over the railway line and eliminate the level crossing.

On Woodville Road at Guildford the Department completed widening of the approaches to the bridge over the Sydney Water Supply line. The bridge was widened to provide two three-lane carriageways divided by a kerbed median strip.

Construction of the kerbside lanes on Pennant Hills Road between Tintern Avenue and Felton Road, Carlingford was nearing completion.

The Department completed channelisation at the intersection of Pennant Hills Road with Marsden Road (Main Road No. 158), Mobb's Hill.

## Ordinary Main Roads

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

The Department commenced the reconstruction of Devlin Street at Top Ryde, between Blaxland Road and Lane Cove Road (Main Road No. 162). The work will include channelisation of the intersection with Lane Cove Road.

## Main Road No. 159-Sydney Road, Belgrave Street and Pittwater Road

Warringah Shire Council commenced construction of the eastern kerbside lane and the provision of kerb and gutter in Pittwater Road, between Girard Road and Oliver Street (Main Road No. 530), North Manly.

Main Road No. 162-Lane Cove Road, Ryde Road and Mona Vale Road
The Department commenced reconstruction of Ryde Road, between Yanko Road and Kiparra Street South, West Pymble, with a view to providing a six-lane divided carriageway.

Reconstruction was completed to provide a six-lane divided carriageway along Mona Vale Road, from Putarri Avenue to Killeaton Street, St. Ives. Improvement works were in progress at the intersection of Mona Vale Road with Killeaton Street.

The Department completed the reconstruction and widening of Mona Vale Road between Emma Street and Pittwater Road (Main Road No. 164), Mona Vale.

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 commenced reconstruction and widening of Spit Road to provide a six-lane divided carriageway between Ourimbah Road (Secondary Road No. 2036) and Bickell Road, Mosman.

A commencement was also made on the reconstruction and widening of Barrenjoey Road between Seabeach Avenue and Cecil Road, Mona Vale.

Main Road No. 165-Union Street, Miller Street, Bank Street and Victoria Road The Department completed widening of Victoria Road between Clubb Street and Henley Marine Drive in conjunction with the construction of an additional traffic lane on Iron Cove Bridge.

Main Road No. 166-Bridge over Tarban Creek, Road between Tarban Creek and Lane Cove River, Fig Tree Bridge, Burns Bay Road and Centennial Avenue

Preliminary work was commenced in preparation for the reconstruction and widening of Centennial Avenue, between Burns Bay Road 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
The Department completed improvements at the intersection of Canterbury Road with Punchbowl Road (Secondary Road No. 2060), Punchbowl.

Channelisation at the intersection with Henry Lawson Drive (Main Road No. 508), Milperra and construction of a six-lane divided carriageway between Milperra Bridge and Epsom Road were also completed.

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

The Department completed reconstruction and widening to provide a sixlane divided carriageway in Botany Road between MacIntosh Street and McBurney Avenue, Mascot.

Main Road No. 177-From Hume Highway at Cross Roads, via Campbelltown and Appin to Prince's Highway
Reconstruction and widening were completed near the southern approach to the railway overbridge at Campbelltown between 8.6 and 8.7 miles from the Hume Highway.

Main Road No. 183-Canal Street, Ricketty Street, Kent Road and Gardener's Road The Department commenced reconstruction and widening of the approaches to the new bridge over the improved access road to Sydney (Kingsford Smith) Airport, between Racecourse Place, Eastlakes, and Aboud Avenue, Kingsford.

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
The approaches to the North Richmond Bridge over the Hawkesbury River were constructed to accommodate the widening of the bridge.

Main Road No. 185-From the Prince's Highway, near Helensburgh via Bald Hill, Stanwell Park, Clifton, Austinmer and Thirroul to the Prince's Highway at the foot of Bulli Pass
The Department completed widening the formation and pavement between Coalcliff and Clifton to improve traffic conditions.

Main Road No. 190-St. Hillier's Road, Rawson Street, Boorea Street, Olympic Drive, Bridge Street, Joseph Street, Rookwood Road and Chapel Road
Auburn Municipal Council completed the widening of Boorea Street, Lidcombe near the bridge over Haslam's Creek and reconstruction of the channelised junction with Olympic Drive.

Main Road No. 200-Concord Road, Church Street, and Devlin Street
Concord Municipal Council carried out adjustments to Concord Road, Rhodes, at Blaxland Road, to improve traffic conditions.

Main Road No. 227-Port Hacking Road, Kingsway, Cronulla Street, Waratah Street and Ewos Parade
Sutherland Shire Council completed reconstruction of Port Hacking Road between Box Road and Parraweena Road, Miranda.

Main Road No. 315-Concord Road, Cooper Street, Everton Road, Strathfield Railway Subway, Raw Square, Albert Road, Strathfield Square, The Boulevarde, Coronation Parade, Punchbowl Road and King George's Road
Hurstville Municipal Council completed reconstruction of King George's Road to provide four traffic lanes between Forest Road (Main Road No. 168) and Stoney Creek Road (Secondary Road No. 2041).

## Main Road No. 327-Alison Road, Belmore Road and Coogee Bay Road

Randwick Municipal Council completed work to improve the drainage and correct the crossfall of Alison Road between Cowper and Prince Streets, Randwick.

Main Road No. 328-Boundary Street, Babbage Road and Warringah Road
The Department completed the widening of Boundary Street and Babbage Road between Ferncourt Avenue, Chatswood and Duntroon Avenue, East Roseville to provide a six-lane divided carriageway.

## Main Road No. 344-Wentworth Avenue

The Department commenced reconstruction of Wentworth Avenue between Dransfield Avenue and Botany Road (Main Road No. 170), Mascot as part of a new access road to Sydney (Kingsford Smith) Airport.

Main Road No. 373--Carlingford Road, Epping Road and Longueville Road
Widening of Epping Road was completed by the Department to provide a six-lane divided carriageway between the Lane Cove River and Stringy Bark Creek.

## Main Road No. 508—Henry Lawson Drive

The junction of Henry Lawson Drive with Carinya Road, Picnic Point was reconstructed.

Main Road No. 515-Hoxton Park Road, Flowerdale Road, Elizabeth Drive and Wallgrove Road
Construction of a climbing lane, 0.49 miles in length, was completed on Elizabeth Drive, between Maxwell's Avenue, Green Valley and Reservoir Road, Mt. Pritchard.

Main Road No. 530-Oliver Street, Bennett Street, Adams Street, Griffin Road,
The Strand and Howard Avenue
Warringah Shire Council provided kerb and gutter and constructed the kerbside lane on the western side of Griffin Road between Abbott Road and Pitt Road, Curl Curl.

Main Road No. 537-Rooty Hill Road, Windsor Road, Richmond Road, Blacktown Road, Lennox Street and East Market Street
Blacktown Municipal Council commenced reconstruction on Rooty Hill Road South, Rooty Hill between Penfold Street, Eastern Creek and Mavis Street, Rooty Hill. Kerb and gutter and underground drainage are to be provided and the pavement is to be widened.

Reconstruction by the Department in Lennox Street, Richmond was nearing completion. Kerb and gutter and underground drainage were provided and the pavement was widened.

Hornsby Shire Council commenced reconstruction which will include a deviation to the new bridge over Colah Creek.

Main Road No. 587-George Street, Bridge Street and Jersey Street
The Department commenced reconstruction of Jersey Street between Bridge Road, Hornsby and the Pacific Highway (State Highway No. 10) at Asquith to provide a four-lane carriageway.

Main Road No. 599-Miller Street, Strathallen Avenue, Sailor's Bay Road, Eastern Valley Way, Clive Street and Boundary Street
The Department continued reconstruction and widening of Eastern Valley Way between Greenfield Avenue, Middle Cove and Boundary Street, East Roseville.

## Secondary Roads

Secondary Road No. 2025-West Esplanade, Commonwealth Parade, The Crescent, Lauderdale Avenue, Rosedale Avenue and Hill Street
Manly Municipal Council completed reconstruction and widening of Lauderdale Avenue between Margaret Street and Woods Parade, Manly.

Secondary Road No. 2043-Archbold Road, Eastern Arterial Road, Birdwood Avenue, Horace Street, Killeaton Street, Burns Road, Eastern Road, Junction Road and Edgeworth David Avenue
Ku-ring-gai Municipal Council continued reconstruction and improvement work in Archbold Road, East Lindfield.

Construction of a deviation of Eastern Arterial Road, between Burraneer Avenue and a point just north of Rocky Creek, Barra Brui was completed by contract with the Department of Lands.

Secondary Road No. 2049—Junction Street, Parkes Street and Ethel Street
Parramatta City Council commenced reconstruction of Junction and Parkes Streets. The work includes improvements at the intersection of Junction Street and the Great Western Highway (State Highway No. 5) with Church Street (State Highway No. 13), Parramatta.

Secondary Road No. 2056-Darling Street, Balmain Road, Perry Street, Mary Street, Lilyfield Road, Dobroyd Parade and Wattle Street
The Department completed reconstruction of Dobroyd Parade and Wattle Street between Crane Avenue and Parramatta Road (State Highway No. 5), Haberfield including a short deviation near Martin Street.

Secondary Road No. 2057-Albert Road, Elva Street, Beresford Road, Broughton Road, Arthur Street and Church Street
Strathfield Municipal Council completed reconstruction of Arthur Street between Fraser Street and Henley Road, Flemington.

Secondary Road No. 2070-Shirley Road, River Road, Northwood Road, River Road West, Bridge Street and Penrose Street
Lane Cove Municipal Council commenced reconstruction and widening between Gore Creek and Northwood Road, Northwood and between William Edward Street, Northwood and Warraroon Road, Lane Cove. The Council completed reconstruction work in Bridge Street.

Secondary Road No. 2074-Anzac Parade
Randwick Municipal Council completed reconstruction at the intersection of Anzac Parade with Franklin Street, Malabar.

Secondary Road No. 2080—Sandringham Street and The Grand Parade
Rockdale Municipal Council completed reconstruction of Sandringham Street between The Grand Parade and Rocky Point Road (Main Road No. 199), Sans Souci.

Secondary Road No. 2082-Henry Street
Penrith City Council completed reconstruction of Henry Street, between Station Street and Doonmore Street, Penrith.

Secondary Road No. 2083-Elizabeth Street
South Sydney Municipal Council completed reconstruction of Elizabeth Street between Cooper Street, Redfern and Phillip Street, Waterloo.

## Tourist Roads

Tourist Road No. 4018—Sublime Point Road
Blue Mountains City Council commenced reconstruction of the full length of the road between Willoughby Street, Leura and the Lookout parking area.

## Roads other than Main Roads

New Access Road to Sydney (Kingsford Smith) Airport (See also Main Road No. 344-Wentworth Avenue)
The Department continued construction between South Dowling Street at O'Dea Avenue, Zetland and Wentworth Avenue, Mascot, generally along the western boundaries of the Australian and The Lakes Golf Courses. The work includes the construction of eight bridges, two of which have been completed. The widened section of South Dowling Street between O'Dea Avenue and Epsom Road, Zetland has been made available to traffic.

The Department continued reconstruction of Robey and Amelia Streets between Botany Road (Main Road No. 170) and Duguid Street, Mascot including channelisation at O'Riordan Street (Secondary Road No. 2008), Mascot.

Warringah Expressway-Auxiliary Works
The Department completed reconstruction and widening of Alpha Road between French's Road and Edinburgh Road, Willoughby.

## COUNTRY ROAD CONSTRUCTION

Details of country road construction expenditure in the past twelve months are listed in Appendices Nos. 8 and 8A.

The principal construction works undertaken during the year were:-
State Highways
State Highway No. 1-Prince's Highway
Reconstruction of the highway was completed between Collaery Road and Collins Creek, Woonona, 3.9 to 5.0 miles north of Wollongong, to provide improved alignment and grading. The work was undertaken in conjunction with the Council of the City of Greater Wollongong, which also contributed to the cost.

The Department commenced reconstruction of the approaches to the railway overbridge at North Wollongong to provide improved alignment and grading.

Greater Wollongong City Council completed construction of kerbside lanes to provide a carriageway 42 feet wide between Mt. Keira Road (Main Road No. 186) and Highway Avenue, including channelisation of the intersection of the highway with Mt. Keira Road.

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

The Department completed widening of the pavement and improvement of the grade between Bomaderry Creek and Shoalhaven River on the northern approach to Nowra.

Work was continued on pavement and shoulder widening and improvement of the alignment of the highway between 1.7 miles north and 0.6 miles south of Narooma.

Bega Municipal Council commenced ancillary works along Carp Street, Bega preparatory to the Department commencing reconstruction and lowering of the pavement in the business section of the town.

The Department commenced construction of the Kiah deviation, which will extend from the Boydtown turn-off to the northern approach to the Towamba River Bridge at Kiah, between 4.9 and 8.2 miles south of Eden.

At the junction of the highway with Edrom Road, 16.5 miles south of Eden, the Department commenced pavement widening to provide 1,000 feet of passing lane for northbound traffic and 4,000 feet of climbing lane for southbound traffic. When completed, this widening will facilitate the overtaking of heavy timber trucks which are prevalent in this area.

## State Highway No. 2-Hume Highway

Between 43.0 and 51.0 miles south of Sydney, widening of the pavement and formation was continued by the Department on the northern and southern sides of Razorback Range to improve alignment and provide climbing lanes.

A commencement was made on the construction of a deviation on the southern approach to the Whitehorse railway overbridge, between 14.0 and 14.8 miles south of Picton. The deviation will improve the alignment and grade of this section of the highway.

Reconstruction, which will include the provision of a climbing lane for northbound traffic, proceeded to the prime seal stage between 39.1 and 41.7 miles south of Mittagong.

Construction of a second carriageway for southbound traffic was commenced between 2.9 and 5.8 miles north of Goulburn.

Between 0.1 and 1.2 miles east of Gunning the Department commenced construction of the approaches to a new bridge being built over Meadow Creek. The work will include the provision of a climbing lane.

Reconstruction and bituminous surfacing were completed from 1.5 to 2.0 miles west of Yass. The work forms the approaches to a new bridge constructed over Bango Creek at 1.6 miles west of Yass and includes a climbing lane for southbound traffic.

Reconstruction and bituminous surfacing were continued between Conroy's Gap and Bogolong Creek, 12.7 to 19.0 miles west of Yass. A prime seal was applied to the section between 12.7 and 17.4 miles and work was continued on the remaining section. The whole section will include three lengths of climbing lane.

Improvements to the junction of the Hume Highway and the Sturt Highway (State Highway No. 14), including the provision of median strips and traffic islands, were in progress. Pavement works were completed and opened to traffic, although a final seal was still to be provided.

Reconstruction proceeded on the section between 30.6 and 34.9 miles south of Tarcutta. The gravel pavement was primed and opened to traffic. Improvements to the old carriageway were commenced between 30.6 and 33.8 miles to enable it to be used as a duplicate carriageway.

Between 20.0 and 20.7 miles south of Holbrook, reconstruction was in progress to extend and improve the approaches to a new bridge over Mullanjandra Creek.

## State Highway No. 4-Snowy Mountains Highway

The Department continued reconstruction of the highway between Bega and Nimmitabel, the whole length of which has now been provided with either a prime or final bituminous surface. The provision of guide posts, safety fencing and guardrails was in progress.

The deviation between 32.4 miles west of Bega and the new intersection with the Monaro Highway, 40.0 miles west of Bega, was completed and opened to traffic on 20th December, 1968. The work included the provision of two bridgesize culverts, located at 35.5 and 37.0 miles west of Bega. The deviation has reduced the length of the highway between Bega and Nimmitabel by two miles.

Earthworks were in progress between 0.0 and 1.3 miles west of Kiandra. This section will form the approaches to a new bridge which was being constructed over Bullock Head Creek. The existing corrective gravel course between 1.3 and 4.0 miles was extended a further two miles to a point 6.0 miles west of Kiandra.

Reconstruction was in progress between 29.6 and 40.7 miles southeast of Tumut. A length of 1.5 miles was provided with a gravel surface and opened to traffic.

Construction of the deviation around Blowering and Jounama Dams was completed, with a final bituminous surface being provided on a short length at the Tumut end.

Between 26.2 and 27.8 miles west of Tumut, reconstruction and bituminous surfacing were continued. This work will form the approaches to a new bridge which was constructed over Yaven Yaven Creek at Mt. Adrah.

## State Highway No. 5-Great Western Highway

At the junction of the highway with Trunk Road No. 55, 5.0 miles west of Lithgow, reconstruction was in progress to provide for grade separation.

Work was continued on the construction of a deviation at Yetholme, between 24.4 and 27.7 miles west of Lithgow.

## State Highway No. 7-Mitchell Highway

The Department continued reconstruction preparatory to providing a bituminous surface on the section between 26.7 and 31.7 miles west of Bathurst.

Reconstruction and widening of the bituminous pavement were commenced between 24.4 and 29.1 miles west of Wellington.

In the City of Dubbo the Department commenced work on construction of the approaches to a new bridge being built over the Macquarie River.

Widening of the pavement was completed between 0.2 and 2.3 miles west of Trangie:

The Department completed bituminous surfacing between 18.5 and 29.0 miles southeast of Nyngan and between 59.9 and 71.2 miles north of Bourke.

Reconstruction, preparatory to applying a bituminous surface, was in progress between 29.0 and 37.5 miles southeast of Nyngan and between 21.0 and 40.0 miles and between 82.2 and 82.6 miles north of Bourke.

## State Highway No. 8-Barrier Highway

Bogan Shire Council commenced reconstruction of the highway between 38.9 and 41.2 miles west of Nyngan, preparatory to applying a bituminous surface. The work, when completed, will provide a dustless surface between Nyngan and Cobar and will eliminate a railway level crossing at Muriel Tank.

The Department completed bituminous surfacing between 72.6 and 79.0 miles and between 80.2 and 84.2 miles west of Cobar. Reconstruction, preparatory to applying a bituminous surface, was in progress between 79.0 and 80.2 miles and between 84.2 and 102.0 miles west of Cobar.

Reconstruction was continued westerly from Wilcannia. A final bituminous surface was applied between 9.0 and 13.6 miles west of Wilcannia. The section between 14.8 and 19.0 miles was provided with a bitumen-sand seal.

Work was well advanced on the deviation between 19.0 and 34.5 miles west of Wilcannia and a bitumen-sand seal was applied to the length between 19.0 and 22.0 miles. The deviation will replace low-lying sections of the highway, which are subject to flooding from Grassmere Creek and Dolo Creek.

Reconstruction was approaching completion between 49.0 and 73.0 miles east of Broken Hill. A bitumen-sand seal was applied throughout the whole length and a final bituminous surface was provided on the section between 49.0 and 55.8 miles.

## State Highway No. 9-New England Highway

Work was continued on the construction of a deviation, 3.2 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, Mayfield to the ThorntonMinmi Road intersections, a distance of 9.4 miles.

A section of the highway, 0.7 miles in length, was widened to provide four traffic lanes between Porter and Melbourne Streets, East Maitland.

The widening of two large box culverts and reconstruction of the highway were completed, 3.0 miles west of Maitland at the Gosforth turn-off.

The Department completed reconstruction between 22.5 and 24.2 miles west of Singleton, immediately north of the deviation around Liddell Power Station.

At Scone, reconstruction of the highway was commenced in order to improve the alignment on a section 0.2 miles long. The work will include channelisation of two junctions of the highway with side streets and the construction of a median strip.

Construction of the deviation between Kankool and Willow Tree, between 6.1 and 11.4 miles north of Murrurundi, was completed. The deviation replaced a winding section of the highway and eliminated two railway level crossings.

Reconstruction was continued at Devil's Elbow, between 24.1 and 25.8 miles north of Murrurundi to improve alignment. A climbing lane will be constructed to connect with the climbing lane on the adjacent section.

Construction of the approaches to Kentucky Creek Bridge, between 47.3 and 48.1 miles north of Tamworth was well advanced and reconstruction was in progress between 48.1 and 50.1 miles. Preliminary works were commenced towards the reconstruction of the section between 50.1 and 53.2 miles north of Tamworth, past "Thunderbolt's Rock".

Armidale City Council completed reconstruction of the highway between 1.0 and 1.4 miles north of Armidale.

Work was commenced on a deviation between 2.5 miles south of Guyra to Llangothlin, 6.5 miles north of Guyra. Earthworks were nearing completion on the section between 0.2 and 6.0 miles north of Guyra.

## State Highway No. 10-Pacific Highway

Provision of a section of divided carriageway, 0.9 miles long, between South Street, Bennett's Green and Oakdale Road, Gateshead was completed and provision of a further section, 1.1 miles long, between Ida Street, Charlestown and the Newcastle City boundary was commenced.

Construction of a dual carriageway to provide six traffic lanes for a length of 0.3 miles was completed by Newcastle City Council from the southern boundary of the City to Lake Macquarie Road (Main Road No. 108).

Reconstruction of the highway between Main Road No. 517 and Grahamstown Deviation, a length of 1.6 miles, was completed during the year and reconstruction of a further section, 2.5 miles long, between Grahamstown Deviation and Balickera Channel was commenced.

The Department commenced widening the formation to 44 feet, between Main Road No. 506 and Bulahdelah, to provide shoulders 10 feet wide for a distance of 18.2 miles.

Work was commenced on widening the highway and strengthening the pavement in the Coolongolook area, between 15.5 and 19.0 miles north of Bulahdelah.

Kempsey Municipal Council commenced work on the provision of traffic islands at the intersection of the highway with Belgrave Street, Kempsey.

Construction of a deviation between 3.1 and 4.8 miles north of Coff's Harbour at Kororo was commenced.

Reconstruction and bituminous surfacing were completed between 7.8 and 8.9 miles and between 14.1 and 14.8 miles north of Coff's Harbour and reconstruction was commenced between 8.9 and 11.0 miles.

Construction of the deviation between 45.7 and 47.1 miles north of Grafton, including two new bridges, was continued. Work was commenced on the continuation of the deviation northwards to 50.1 miles and a new bridge was under construction at 49.2 miles from Grafton. The works, when completed, will eliminate two sections of the highway which are subject to frequent flooding.

Between 53.7 and 55.0 miles north of Grafton, reconstruction and bituminous surfacing were completed and a section of pavement subject to flooding was raised.

Construction was commenced of a climbing lane on the Burringbar Range between 6.2 and 7.0 miles south of Murwillumbah.

Reconstruction and bituminous surfacing were completed between 1.2 and 2.6 miles and between 4.1 and 5.6 miles north of Murwillumbah.

Work was commenced on the channelisation of an intersection at the Queensland border.

## State Highway No. 10A--Parry and King Streets, Newcastle

Newcastle City Council completed construction of a second carriageway for a length of 0.4 miles between Lauer's Lane and Cottage Creek, to provide six traffic lanes.

## State Highway No. 11-Oxley Highway

Port Macquarie Municipal Council commenced reconstruction of Gordon Street, Port Macquarie and the provision of a median strip for a distance of 0.5 miles at the entrance to the town.

Hastings Shire Council commenced reconstruction of the highway through Wauchope, between 12.9 and 14.0 miles west of Port Macquarie.

The Department continued its programme of bituminous surfacing between Wauchope and Walcha. A dustless surface has now been provided between 0.0 and 35.8 miles and between 47.1 and 68.6 miles west of Port Macquarie, to the boundary of Hastings and Walcha Shires. A dustless surface has also been provided between 10.0 miles east of Walcha and the New England Highway (State Highway No. 9) at Bendemeer.

The Department commenced reconstruction and widening of the pavement between Nevertire and Warren.

## State Highway No. 12-Gwydir Highway

Yallaroi Shire Council completed widening and partial reconstruction of the section between 3.0 and 4.9 miles east of Warialda, including construction of a climbing lane between 3.0 and 3.8 miles.

Reconstruction and realignment of the highway were commenced by Boolooroo Shire Council between 7.7 and 10.9 miles east of Moree.

Boomi Shire Council completed reconstruction of the section between 33.4 and 37.0 miles west of Moree.

## State Highway No. 14—Sturt Highway

Work was commenced on construction of the Guy's Hill deviation, between 13.8 and 17.7 miles west of the Hume Highway (State Highway No. 2).

Reconstruction and bituminous surfacing were completed between 32.0 and 36.9 miles west of Wagga Wagga, near Galore. The work included raising and widening of the pavement. Similar work was completed between 39.0 and 43.6 miles west of Wagga Wagga, near Kywong.

Approaches to the bridge over Poisoned Waterholes Creek, between 54.7 and 55.8 miles west of Wagga Wagga, were constructed on a new alignment and provided with a bituminous surface.

Reconstruction, widening and bituminous surfacing were completed by Hay Shire Council between 4.8 and 5.9 miles, between 27.7 and 29.0 miles and between 29.7 and 30.4 miles west of Hay.

Wakool Shire Council substantially completed similar work between 71.4 and 74.8 miles west of Hay.

Work was continued on widening the formation and pavement of the highway on a section between 0.0 and 5.5 miles west of Euston.

## State Highway No. 16-Bruxner Highway

Reconstruction, preparatory to bituminous surfacing was commenced by Tintenbar Shire Council between 12.6 and 12.9 miles west of Ballina. The work will improve the alignment of this section of the highway and will include the replacement of two narrow culverts by new pipe and box culverts.

Gundurimba Shire Council completed reconstruction and bituminous surfacing between 2.7 and 4.0 miles west of Lismore and continued similar work between 5.0 and 5.7 miles, to raise the level of a section which is subject to flooding.

Reconstruction and bituminous surfacing were also completed by Gundurimba Shire Council between 7.6 and 8.4 miles and between 10.1 and 10.7 miles west of Lismore.

Between 12.7 and 14.1 miles west of Lismore, reconstruction, prior to bituminous surfacing, was continued by Tomki Shire Council, to provide approaches to a new bridge which is being built over Tomki Creek and to eliminate a section of narrow pavement.

Pavement strengthening and improvement were completed between 8.0 and 9.1 miles west of Casino.

Reconstruction was continued on the section between Tabulam and Drake, to improve the alignment and provide a bituminous surface over the full length.

Tenterfield Shire Council reconstructed and applied a prime seal to the section between 14.7 and 21.5 miles west of Tenterfield. Earthworks were in progress between 21.5 and 26.0 miles west of Tenterfield.

The Department completed reconstruction and bituminous surfacing on the section between 0.5 miles and 8.0 miles east of Bonshaw and completed earthworks for a further length of 6.0 miles to a point 14.0 miles east of Bonshaw, at Beardy River.

A commencement was made on a deviation of the highway between Bonshaw Weir, 5.0 miles west of Bonshaw, and Sandy Creek, 18.0 miles west of Bonshaw. Earthworks were in progress between 5.0 and 9.5 miles.

Ashford Shire Council applied a bituminous surface on the approaches to the culvert over Greenhills Creek at 28.6 miles west of Bonshaw. The Council also completed reconstruction and sealing to prime stage between Camp Creek at 23.5 miles and Middle Creek at 31.0 miles west of Bonshaw, with the exception of the approaches to the bridge over Brown's Creek between 27.5 and 28.0 miles. Earthworks were in progress between 32.0 and 35.0 miles west of Bonshaw.

## State Highway No. 17-Newell Highway

Between 15.0 and 24.0 miles north of Ardlethan, reconstruction and sealing to prime stage was completed. A dustless surface has now been provided between the Victorian border and Coonabarabran.

Jemalong Shire Council completed reconstruction and bituminous surfacing between 3.4 and 5.6 miles north of Forbes.

Between 1.9 and 9.5 miles south of Gilgandra the Department commenced pavement widening and strengthening, preparatory to bituminous surfacing.

Reconstruction and bituminous surfacing were continued between Coonabarabran and Narrabri and only 18.6 miles of gravel surface remained to be sealed. Work was in progress on the section between 11.5 and 16.5 miles north of Coonabarabran. A bituminous surface has now been provided between 20.6 miles north of Coonabarabran and Narrabri, except between 23.4 and 24.9 miles, where work on the approaches to the bridge over Billy Creek was in progress.

Short gaps in the bituminous surfacing which had existed at Mallallee Creek, Tooley Gully and Box Flat Gully were eliminated following the construction of reinforced concrete box culverts at these locations.

All open crossings between Coonabarabran and Narrabri have been eliminated and a flood-free route now exists between these towns.

The Department continued reconstruction and bituminous surfacing of the highway north of Moree. Work on the section between 28.4 and 32.8 miles north of Moree was completed. Between 32.8 and 38.1 miles sealing to prime stage was completed and between 38.1 and 45.0 miles earthworks were in progress.

State Highway No. 18-Castlereagh Highway
The Department completed bituminous surfacing between 10.0 and 17.5 miles north of Walgett.

Reconstruction, preparatory to bituminous surfacing, was in progress between 8.5 and 10.0 miles and between 17.5 and 32.0 miles north of Walgett.

## State Highway No. 19-Monaro Highway

The Department completed bituminous surfacing of the deviation between Nimmitabel and 7.4 miles south of Nimmitabel. Work, including the installation of a bridge-size culvert at Helmer's Creek, was continued between 7.4 and 10.0 miles south of Nimmitabel to the boundary of Monaro and Bibbenluke Shires.

Bibbenluke Shire Council continued 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. Gravelling was almost completed, preparatory to applying a bituminous surface.

State Highway No. 21—Cobb Highway
Reconstruction and bituminous surfacing were commenced between 4.7 and 8.2 miles north of Moama and similar works were continued between 16.5 and 24.0 miles.

Windouran Shire Council commenced construction of a deviation between 5.7 and 6.2 miles north of Deniliquin and completed construction and bituminous surfacing of a deviation at Booroorban, 46.4 miles north of Deniliquin. The latter deviation included the provision of a new bridge over Coleambally outfall drain by the Water Conservation and Irrigation Commission.

Bituminous surfacing was completed by the Department between 25.0 and 29.0 miles north of Hay and work, preparatory to bituminous surfacing, was in progress between 29.0 and 48.0 miles.

## State Highway No. 22-Silver City Highway

The Department completed bituminous surfacing of all sections of previously unsealed pavement between Wentworth and Broken Hill.

Bitumen-sand seals were applied to the sections between 1.0 and 11.0 miles and between 31.9 and 42.0 miles north of Wentworth (the "Watara" deviation). Bituminous surfacing was completed between 21.2 and 31.9 miles north of Wentworth (the "Bulpunga" deviation) and between 52.0 and 64.0 miles south of Broken Hill.

State Highway No. 24—Mount Lindesay Highway
Reconstruction and widening, preparatory to bituminous surfacing, were commenced by Kyogle Shire Council between 2.9 and 3.6 miles north of Woodenbong.

## State Highway No. 25-Illawarra Highway

Reconstruction and pavement widening were completed between 3.4 and 5.0 miles east of Moss Vale and similar works were commenced between 5.0 and 7.0 miles, including improvement of the intersection of the highway with Main Road No. 265.

Work was also commenced on the provision of a climbing lane on Macquarie Pass, between 11.1 and 11.6 miles west of the Prince's Highway (State Highway No. 1) at Albion Park.

## Trunk Roads

Trunk Road No. 54-Goulburn-Ilford
Crookwell Shire Council completed reconstruction, preparatory to bituminous surfacing, between 32.5 and 34.3 miles north of Goulburn and commenced similar work between 34.3 and 36.7 miles.

Rylstone Shire Council completed reconstruction and bituminous surfacing between 1.0 and 2.8 miles south of Ilford and commenced work on a further section between 2.8 and 4.5 miles.

## Trunk Road No. 55-Marrangaroo-Mullaley

Reconstruction and bituminous surfacing between Coolah and Mullaley were continued during the year.

Coolah Shire Council completed reconstruction and bituminous surfacing between 3.6 and 4.2 miles north of Coolah and commenced similar work between 4.2 and 5.0 miles. Reconstruction was commenced by Coonabarabran Shire Council between 31.1 and 32.7 miles south of Mullaley. Liverpool Plains Shire Council completed reconstruction between 0.0 and 1.4 miles south of Mullaley.

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

Boorowa Shire Council continued reconstruction north of Boorowa, completing the section between 15.9 and 17.1 miles to gravel surface stage and commencing a further section between 18.3 and 19.0 miles.

Reconstruction and bituminous surfacing were completed by Goodradigbee Shire Council between 17.2 and 18.9 miles north of Yass.

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

Bogan Shire Council completed reconstruction and bituminous surfacing between 10.1 and 11.9 miles south of Nyngan.

Reconstruction and bituminous surfacing were completed by Lachlan Shire Council between 10.1 and 13.3 miles south of Condobolin and was in progress between 13.3 and 16.4 miles.

Between 0.1 and 1.7 miles north of Tullamore, reconstruction and bituminous surfacing were completed by Goobang Shire Council.

Formation and pavement widening were completed by Bland Shire Council between 22.1 and 22.8 miles north of Temora.

## Trunk Road No. 61-Orange-Cobar

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

## Trunk Road No. 62-Scone-Coolah

The section between 16.0 and 20.0 miles west of Scone was reconstructed and primed by Scone Shire Council. A large box culvert was installed at Tommy's Gully, 22.5 miles west of Scone, prior to a commencement being made on reconstruction of the section between 21.7 and 25.2 miles.

Merriwa Shire Council completed reconstruction between 7.9 and 10.1 miles east of Merriwa and provided a gravel pavement. The Council also completed pavement improvement and widening between 2.0 and 2.8 miles west of Merriwa and earthworks were in progress between 18.0 and 20.0 miles. On the latter section, a large box culvert was installed at Willy Wally Gully, 19.1 miles west of Merriwa.

## Trunk Road No. 63-Tamworth-Yetman

Cockburn Shire Council completed reconstruction between 4.0 and 6.0 miles north of Tamworth, thus providing a 22 feet wide bituminous pavement in lieu of the old 16 feet wide pavement, between Tamworth and Attunga, a distance of 13 miles.

Manilla Shire Council carried out improvements to the grading of a crest at a point 3.0 miles south of Manilla.

Widening of the bituminous surfaced pavement was completed by Barraba Shire Council between 1.6 and 3.4 miles south of Barraba.

North of Warialda, Yallaroi Shire Council continued reconstruction between 26.5 and 28.0 miles and work was completed to the base course stage.

## Trunk Road No. 65-Ewingsdale-Lismore

Reconstruction and bituminous surfacing were completed by Byron Shire Council between 18.3 and 18.7 miles and between 13.6 and 15.0 miles east of Lismore.

Construction of a deviation was continued by Terania Shire Council between 6.9 and 11.1 miles northeast of Lismore. The Council also commenced reconstruction, preparatory to bituminous surfacing, between 4.7 and 5.0 miles.

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

Reconstruction by Balranald Shire Council was in progress between 60.0 and 62.3 miles and between 17.1 and 19.9 miles north of Balranald. Reconstruction and bituminous surfacing were completed between 13.1 and 17.1 miles north of Balranald.

## 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 and a gravel pavement is being provided.

Darling Shire Council commenced reconstruction, preparatory to bituminous surfacing, on the section 0.0 to 3.0 miles east of Bourke.

## Trunk Road No. 70-Byrock-Queensland Border near Hebel

Brewarrina Shire Council completed reconstruction and bituminous surfacing between 17.4 and 27.8 miles south of Brewarrina and commenced reconstruction, preparatory to bituminous surfacing, between 5.1 and 26.0 miles north of Brewarrina.

## Trunk Road No. 72-Willow Tree-Narrabri West

Between 3.7 and 5.3 miles south of Quirindi, Tamarang Shire Council completed reconstruction and widening of the bituminous pavement from 16 feet to 22 feet.

## Trunk Road No. 73-Inverell-Walcha

Uralla Shire Council completed bituminous surfacing of the reconstructed section between 35.3 and 40.4 miles north of Uralla, including the approaches to the bridge over Laura Creek. The Council commenced reconstruction between 15.7 and 16.7 miles north of Uralla, with a view to extending the bituminous surface beyond the intersection with the Yarrowyck-Armidale Road (Main Road No. 124) at Yarrowyck.

## Trunk Road No. 74-Armidale-South Grafton

Armidale City Council completed reconstruction and bituminous surfacing between 0.0 and 2.0 miles east of Armidale.

A bituminous surface has now been provided between 0.0 and 41.3 miles east of Armidale with the exception of the approaches to Oakey Creek Bridge, between 39.2 and 39.8 miles east of Armidale.

Reconstruction was completed by Dumaresq Shire Council between 41.3 and 43.6 miles east of Armidale.

Nymbodia Shire Council completed reconstruction and bituminous surfacing between 68.5 and 70.1 miles south of Grafton and commenced similar work between 58.1 and 59.0 miles. The Council also continued reconstruction, preparatory to bituminous surfacing, of the section between 30.4 and 31.6 miles south of Grafton.

## Trunk Road No. 75-Wollomombi-Kempsey

Macleay Shire Council completed reconstruction and bituminous surfacing between 22.9 and 24.2 miles west of Kempsey. Similar work was commenced by the Council between 24.2 and 26.6 miles west of Kempsey.

## Trunk Road No. 76-Raleigh-Ebor

Improvements to the alignment of the road were continued by Bellingen Shire Council between 18.0 and 18.4 miles west of Raleigh on Dorrigo Mountain.

## Trunk Road No. 77-Gilgandra-Craboon

Gilgandra Shire Council completed reconstruction and bituminous surfacing between 4.3 and 10.4 miles east of Gilgandra.

Trunk Road No. 78-Cowra-Hume Highway near Ettamogah
Culcairn Shire Council reconstructed a damaged section of road between 4.0 and 4.7 miles north of Culcairn.

Trunk Road No. 80—Narrandera-Cobb Highway near Mossgiel
Carrathool Shire Council commenced reconstruction and bituminous surfacing between 17.5 and 25.4 miles south of Hillston.

Trunk Road No. 83-South Grafton-Mount Lindesay Highway near Woodenbong
Reconstruction and bituminous surfacing were completed by Tomki Shire Council between 7.0 and 8.0 miles north of Casino and by Kyogle Shire Council between 14.5 and 15.4 miles. Kyogle Shire Council commenced reconstruction and bituminous surfacing between 13.0 and 13.7 miles north of Casino.

## Trunk Road No. 84-Bowning-Temora

Reconstruction and bituminous surfacing were completed by Demondrille Shire Council between 2.6 and 3.6 miles east of Murrumburrah and by Jindalee Shire Council between 24.7 and 28.7 miles west of Murrumburrah.

## Trunk Road No. 89—Tomingley-Narromine

Timbrebongie Shire Council completed reconstruction and bituminous surfacing between 10.1 and 14.1 miles south of Narromine.

## Trunk Road No. 90--Pacific Highway-Gloucester-Purfleet

Port Stephens Shire Council completed reconstruction between 12 Mile Creek, 0.2 miles north of the Pacific Highway and the Stroud Shire boundary at the junction of Main Road No. 567, 2.0 miles north of the Pacific Highway.

Manning Shire Council commenced reconstruction and bituminous surfacing between 2.6 and 3.9 miles west of Krambach.

Trunk Road No. 91—Prince's Highway near Pambula-Bombala
Imlay Shire Council completed bituminous surfacing between 16.5 and 19.7 miles west of the Prince's Highway, through the village of Wyndham.

## Ordinary Main Roads

## Main Road No. 105-Scone-Nemingha

Scone Shire Council completed construction of the approaches to a new bridge over the Hunter River at Shallow Crossing, 40.0 miles east of Scone.

Nundle Shire Council continued construction of a deviation between Bowling Alley Point, 28.5 miles southeast of Tamworth, and Nundle, 35.9 miles southeast of Tamworth.

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

Reconstruction and bituminous surfacing were completed by Stroud Shire Council on a deviation between 3.0 and 4.2 miles east of the Pacific Highway near Bulahdelah. The work was carried out in conjunction with the construction of replacement bridges over Boolambayte Creek and Branch Creek. The Council continued reconstruction of the section between 21.4 and 24.8 miles east of the Pacific Highway near Bulahdelah.

Main Road No. 112-Trunk Road No. 90-Oxley Highway
Hastings Shire Council completed reconstruction and bituminous surfacing between 4.0 and 5.0 miles south of the Oxley Highway towards Comboyne. The Council commenced work on the approaches to a recently completed bridge over Gannon's Creek, 0.8 miles south of the Oxley Highway. When this work is completed, there will be a dustless surface for a distance of five miles south of the highway.

## Main Road No. 124—Yarrowyck-Armidale

Bituminous surfacing was completed by Uralla Shire Council between 5.4 and 6.3 miles west of Armidale and work was commenced, between 5.0 and 5.4 miles, on the approaches to the bridge over Saumarez Creek at the boundary of Dumaresq and Uralla Shires. These works will link up with the existing bituminous surface in Dumaresq Shire.

Main Road No. 127-Narrabri-Trunk Road No. 68 near Walgett
Namoi Shire Council completed bituminous surfacing between 4.7 and 7.0 miles (Spring Creek deviation), between 15.0 and 17.0 miles and between 19.0 and 21.3 miles west of Narrabri. The Council also completed reconstruction and bituminous surfacing between 17.0 and 19.0 miles west of Narrabri (Myall Vale deviation), including the installation of multicell box culverts at Myall Vale. A bituminous surface has now been provided between Narrabri and Wee Waa.

## Main Road No. 129-Quirindi-Quambone

Between 14.2 and 15.7 miles west of Quirindi, Tamarang Shire Council completed construction and bituminous surfacing of the approaches to a new bridge at Warrah Creek. Work was proceeding on the section between 16.4 and 19.0 miles, where formation and gravelling were completed.

Coonabarabran Shire Council completed reconstruction and bituminous surfacing between 4.9 and 6.0 miles northwest of Coonabarabran together with improvements to the approaches to the railway level crossing at 5.0 miles and the railway underpass at 6.0 miles.

## Main Road No. 132-Barraba-Bundarra

Barraba Shire Council installed a large box culvert and completed the approaches between 23.1 and 24.2 miles northeast of Barraba, thus eliminating a number of open creek crossings.

## Main Road No. 134-Bingara-Ashford

Bingara Shire Council completed reconstruction and bituminous surfacing between 4.4 and 6.0 miles north of Bingara.

Reconstruction to the prime stage was carried out by Macintyre Shire Council between 7.0 and 9.8 miles south of Delungra.

## Main Road No. 135-Gilgai-Ebor

Guyra Shire Council completed bituminous surfacing between 5.8 and 7.5 miles west of Guyra and completed the earthworks and provided a running course on the section between 7.5 and 9.0 miles.

## Main Road No. 136-Inverell-Deepwater

Severn Shire Council completed reconstruction and bituminous surfacing to the prime stage between 9.4 and 13.0 miles west of Deepwater, to provide a dustless surface between Emmaville and Deepwater.

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

Reconstruction and bituminous surfacing were completed by Greater Cessnock City Council between 0.0 and 2.0 miles south of Wollombi and between 0.0 and 0.6 miles north of Bucketty. Work on the former section included the construction of approaches to a replacement bridge over the south arm of Wollombi Brook. Council also commenced work on the section 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 2.4 and 4.6 miles west of Dunedoo and continued similar work between 4.6 and 6.3 miles.

Main Road No. 213-Mount Thorley-Main Road No. 209 near Denman
Patrick Plains Shire Council completed reconstruction between 0.9 and 2.4 miles west of the Wilberforce-Singleton Road (Main Road No. 503).

Denman Shire Council commenced reconstruction and bituminous surfacing between 1.0 and 3.5 miles west of Main Road No. 209.

Main Road No. 214—Cassilis—Main Road No. 208 near Mudgee.
Merriwa Shire Council completed reconstruction and basecourse gravelling between 0.3 and 2.5 miles south of Cassilis including the approaches to a new bridge over Four Mile Creek at 2.2 miles south of Cassilis.

## Main Road No. 215-Ilford—Main Road No. 208 near Bylong

Rylstone Shire Council completed reconstruction and bituminous surfacing between 6.0 and 6.5 miles north of Rylstone and commenced work on the section between 6.5 and 7.0 miles.

## Main Road No. 217—Birmingham Gardens-Wyong

Newcastle City Council completed construction of a second carriageway between State Highway No. 23 and Drury Street, Jesmond.

Lake Macquarie Shire Council completed reconstruction and bituminous surfacing between Cross Roads, Glendale and Cockle Creek Railway Station.

Main Road No. 232-Moree-Boonangar
Boomi Shire Council completed reconstruction between 36.2 and 41.0 miles north of Moree.

Main Road No. 233-Gulgong-Parkes
Cudgegong Shire Council completed reconstruction and bituminous surfacing between 15.9 and 18.2 miles west of Gulgong and commenced work on further sections between 18.2 and 19.2 miles.

## Main Road No. 240—Wagga Wagga-Newell Highway near Ardlethan

Coolamon Shire Council completed reconstruction and bituminous surfacing between 13.6 and 21.0 miles north of Coolamon and, except for a short section at Cowabbie Creek, has completed reconstruction and bituminous surfacing of the whole length of the road within the Shire.

## Main Road No. 241-Temora-Gunning

Narraburra Shire Council completed bituminous surfacing between 10.1 and 12.1 miles east of Temora.

Burrangong Shire Council applied a bituminous surface to the reconstructed pavement between 28.5 and 30.5 miles west of Young and carried out reconstruction to basecourse gravel stage between 15.2 and 19.0 miles.

Reconstruction to basecourse gravel stage was completed by Boorowa Shire Council between 2.8 and 4.9 miles west of Boorowa.

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

Crookwell Shire Council completed reconstruction and bituminous surfacing between 1.9 and 7.9 miles south of Crookwell.

Main Road No. 271-Braidwood-Moruya
Eurobodalla Shire Council completed construction of a deviation in the approach to the culvert over Cooper's Creek, 17.5 miles west of Moruya. The Council also applied a final bituminous seal to the section between 1.0 and 2.4 miles west of Moruya.

## Main Road No. 282-Tumbarumba-Hume Highway near Mullengandra

Reconstruction was continued by Tumbarumba Shire Council between 11.2 and 19.2 miles southeast of Tumbarumba. The work involves realignment of the existing road.

Between 3.1 and 4.1 miles northwest of Jingellic, Holbrook Shire Council raised the formation of the road and installed a large culvert to overcome flooding.

## Main Road No. 286-Mount Kosciusko Road

Strengthening of the pavement surface by bitumen reseal was carried out between 13.0 and 20.0 miles west of Jindabyne. Reconstruction of road shoulders to improve surface course drainage was undertaken at selected locations.

Reconstruction continued beyond Perisher Valley to 24.0 miles west of Jindabyne, bringing into use the culvert over Betts Creek, which had been constructed during the previous year on a minor deviation of the road.

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

Dungog Shire Council completed construction of a deviation on Clarencetown Hill between 9.0 and 9.8 miles south of Wiragulla.

Main Road No. 319—Main Road No. 514 near Maude-Barham
Hay Shire Council commenced reconstruction and bituminous surfacing between 22.4 and 26.0 miles north of Windouran Shire boundary.

Wakool Shire Council completed reconstruction and bituminous surfacing between 24.5 and 28.7 miles north of Barham and commenced similar work between 20.5 and 24.5 miles.

Main Road No. 326-Adamstown Heights-Mayfield North
The construction of a second carriageway in Turton Road from Kahibah Road to Young Road was completed by Newcastle City Council.

Main Road No. 329—Baradine-Gwydir Highway near Grawan Bridge
Coonabarabran Shire Council completed bituminous surfacing between 1.5 and 6.0 miles north of Baradine and reconstruction and bituminous surfacing were completed between 6.0 and 6.9 miles.

Main Road No. 331-Berrigan-Trunk Road No. 85 near Jingellic
Corowa Shire Council continued reconstruction and bituminous surfacing between 0.0 and 0.3 miles west of Daysdale.

Culcairn Shire Council continued reconstruction and bituminous surfacing between 24.8 and 30.0 miles west of Holbrook and provided a bituminous seal on the section between 12.3 and 13.1 miles west of Walbundrie.

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

## Main Road No. 357-Boggabri-Manilla

Manilla Shire Council completed reconstruction and priming of the section between 3.3 and 5.6 miles west of Manilla. Formation and basecourse gravelling were completed on the section between 5.6 and 8.1 miles.

Main Road No. 367-Garah-Mungindi
Boomi Shire Council completed reconstruction and bituminous surfacing of the section between 7.1 and 10.4 miles south of Mungindi.

## Main Road No. 380-Trunk Road No. 56 near Boorowa-Cunningar

Reconstruction and bituminous surfacing were completed by Demondrille Shire Council on the section between 7.8 and 9.6 miles east of Trunk Road No. 84 at Cunningar. A further section between 9.6 and 10.3 miles was completed to gravel pavement stage.

Main Road No. 384-Alfred Town-Main Road No. 284
Reconstruction and bituminous surfacing between Alfred Town and Ladysmith were commenced by Kyeamba Shire Council. Two sections of reconstruction were completed between 15.3 and 16.1 miles and between 16.8 and 17.3 miles south of Wagga Wagga.

Main Road No. 394-Berridale-Monaro Highway near Bibbenluke
Snowy River Shire Council completed reconstruction and bituminous surfacing of the section between 11.0 and 17.6 miles south of Berridale.

Monaro Shire Council completed work to prime seal stage on the section between 25.4 and 26.5 miles south of Berridale.

The complete length of this road in Snowy River Shire and Monaro Shire has now been provided with a dustless surface.

Main Road No. 502-Top of Bulli Pass-Main Road No. 179 near Wilton
The Department commenced widening of the formation between 2.3 and 4.3 miles west of Mt. Ousley Road (Main Road No. 513).

Main Road No. 503-Wilberforce-Singleton
The Department completed reconstruction and bituminous surfacing between 7.6 and 9.0 miles north of Windsor.

## Main Road No. 507-Mungindi-Bruxner Highway near Goondiwindi

Reconstruction and bituminous surfacing of the section between 22.1 and 25.6 miles southwest of Goondiwindi were completed by Boolooroo Shire Council.

Main Road No. 514-Hay-Oxley-Penarie
Between 20.0 and 28.3 miles west of Hay, bituminous surfacing was completed by Hay Shire Council. Reconstruction and bituminous surfacing were commenced on a further section between 28.3 and 29.8 miles west of Hay.

## Main Road No. 522-Port Kembla-Shellharbour

Shellharbour Municipal Council commenced construction of dual carriageways on Shellharbour Road between Woodford Avenue and William Avenue, Warilla, 6.4 to 6.8 miles from Darcy Road (Main Road No. 295), Port Kembla.

Main Road No. 531 -Cullen Bullen-Great Western Highway near Marrangaroo
Blaxland Shire Council completed reconstruction and bituminous surfacing between 3.3 and 4.9 miles north of the Great Western Highway near Marrangaroo.

## Main Road No. 533-Macksville-Taylor's Arm

Nambucca Shire Council completed construction of a deviation and provided a dustless surface between 4.1 and 5.8 miles west of Macksville, at Mogford's Hill.

## Main Road No. 550-Corowa-Tocumwal

Between 0.0 and 6.2 miles from the Corowa Shire boundary reconstruction and bituminous surfacing were completed by Berrigan Shire Council. A dustless surface has now been provided between Barooga and Corowa.

Main Road No. 596-Newell Highway near Morundah-Main Road No. 321 near Colleambally
Murrumbidgee Shire Council completed reconstruction and bituminous surfacing between 11.2 and 12.5 miles east of Main Road No. 321 and commenced reconstruction and bituminous surfacing between 8.0 and 11.2 miles.

## Developmental Roads and Developmental Works

Details of expenditure on Developmental Roads and Works are listed in Appendix No. 9.

## Tourist Roads

Details of expenditure on Tourist Roads are given in Appendix No. 8. Details of proclamations of Tourist Roads are given in Appendix No. 12A.

The following substantial works were completed on Tourist Roads during the year.

## Tourist Road No. 4032-Kinchela-Hat Head

Macleay Shire Council completed reconstruction and bituminous surfacing between 4.5 and 6.2 miles east of Main Road No. 198 at Kinchela. A dustless surface has now been provided between Kempsey and Hat Head.

Tourist Road No. 4037-Prince's Highway near Narrabarba-Womboyn Lake
Imlay Shire Council completed reconstruction between 0.0 and 2.0 miles east of the Prince's Highway.

## BRIDGE CONSTRUCTION

During the year sixty new bridges and eighty bridge-size concrete box culverts, i.e. with a water-way width of twenty feet or more, were made available for traffic. In addition, major widening works or construction of footways were completed on four bridges.

The 140 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, seventy-five bridges and seventy 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- <br> ways | State <br> High- <br> ways | Trunk <br> Roads | Ordinary <br> Main <br> Roads | Develop- <br>  | Unclassi- <br> fied <br> Roads | Second- <br> ary <br> Roads |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bridges _....... <br> Bridge-size <br> Culverts $\ldots . .$. | - | 20 | 4 | 27 | 5 | - | 60 |
| Total $\ldots . .$. | 4 | 60 | 13 | 49 | 14 | - | 140 |

Of the completed bridges, twenty-five were built by the Department (eleven by contract) and thirty-one by Councils (twenty-three by contract). The four remaining bridges were constructed by the Water Conservation and Irrigation Commission of New South Wales (3) and the Department of Railways, New South Wales (1).

Thirty-eight of the culverts were built by the Department (sixteen by contract) and forty-two by Councils (sixteen by contract).

## Principal Bridgeworks Completed During the Year

## Berowra Railway Bridge-Sydney-Newcastle Expressway

The Department completed the construction of a two-span prestressed concrete bridge, 162 feet long and 33 feet wide to carry the Main Northern Railway Line over the Expressway.

## Porter Street—North South Arterial Road, Wollongong

The Department completed the construction by contract of a three-span prestressed and reinforced concrete bridge over the North South Arterial Road at Porter Street, North Wollongong. The new structure is 252 feet long and provides two traffic lanes.

## Mullanjandra Creek-State Highway No. 2-Hume Highway

The Department completed the construction of a five-span two lane steel and reinforced concrete bridge, 200 feet long over Mullanjandra Creek 22 miles south of Holbrook. The new bridge replaced a timber beam structure, 123 feet long.

## Gilmore Creek-State Highway No. 4-Snowy Mountains Highway

The Department completed the construction by contract of a five-span steel and reinforced concrete bridge, 283 feet long, over Gilmore Creek 4.9 miles southwest of Tumut. The new bridge provides two traffic lanes and replaced a narrow timber beam bridge 57 feet long. The bridge also spans the Tumut-Batlow railway line and eliminated the railway level crossing at Gilmore.

## Yaven Yaven Creek—State Highway No. 4-Snowy Mountains Highway

The Department completed the construction by contract of a seven-span two-lane prestressed and reinforced concrete bridge over Yaven Yaven Creek 2.8 miles east of the Hume Highway. The new 354 feet long structure replaced a low level timber beam bridge 160 feet long.

## Chilcott's Creek—State Highway No. 9-New England Highway

The Department completed the construction of a four-span steel and concrete bridge over Chilcott's Creek, 8.6 miles north of Murrurundi. The new bridge, which is on the route of the Kankool-Willow Tree Deviation, is 205 feet long and provides two traffic lanes.

## Berowra Interchange—State Highway No. 10-Pacific Highway

The Department completed the construction of a two-span prestressed concrete bridge, 213 feet long and 22 feet wide between kerbs, to carry southbound highway traffic over the Sydney-Newcastle Expressway at the Berowra Interchange.

## Upper Warrell Creek-State Highway No. 10-Pacific Highway

The Department completed extensions to the bridge over Upper Warrell Creek 6.2 miles south of Macksville. The bridge was extended southerly by four 39 feet spans and northerly by two 39 feet spans. The additional spans have steel girders and a reinforced concrete deck.

## Edward River at Deniliquin-State Highway No. 21-Cobb Highway

The Department completed the construction by contract of a five-span twolane prestressed and reinforced concrete bridge over the Edward River at Deniliquin. The bridge is 570 feet long and replaced an old timber beam and truss bridge, 546 feet long.

Darling River at Wentworth-State Highway No. 22-Silver City Highway
The Department completed the construction by contract of a steel and concrete bridge over the Darling River at Wentworth. The new structure has six steel girder spans and one steel girder vertical lift span, an overall length of 532 feet, two footways, and two traffic lanes. It replaced a narrow timber truss and steel vertical lift span bridge.

Warrah Creek—Main Road No. 129
Tamarang Shire Council completed the construction by contract of a sixteenspan prestressed and reinforced concrete bridge over Warrah Creek 15.5 miles west of Quirindi. The new bridge is 320 feet long, has two traffic lanes, and replaced a timber beam bridge 164 feet long.

## Tweed River at Murwillumbah-Main Road No. 142

The Department completed the construction by contract of a five-span two-lane reinforced and prestressed concrete bridge over the Tweed River at Murwillumbah. The new structure is 513 feet long and replaced a narrow timber truss and steel vertical lift span bridge 524 feet long.

Tuggerah Lake at The Entrance-Main Road No. 335
The Department completed the construction by contract of an eighteen-span reinforced concrete bridge, 1,532 feet long, over Tuggerah Lake at The Entrance. The bridge provides two traffic lanes and two footways and replaced a narrow timber beam bridge, 1,224 feet long.

## Barmedman Creek-Main Road No. 398

Bland Shire Council completed the construction by contract of a seven-span prestressed and reinforced concrete bridge over Barmedman Creek, 3 miles east of Barmedman. The new structure is 245 feet long with two traffic lanes and replaced a causeway.

## Camden Haven River at Kendall-Main Road No. 538

Hastings Shire Council completed the construction by contract of a five-span reinforced concrete girder bridge over the Camden Haven River at Kendall. The structure is 342 feet long with two traffic lanes and replaced an old timber beam bridge 252 feet long.

## Wyangala Dam—Main Road No. 576

The Water Conservation and Irrigation Commission completed the construction of a prestressed and reinforced concrete bridge over Wyangala Dam. The new structure is 457 feet long and provides two traffic lanes.

Barrington River—Developmental Work No. 3188
Gloucester Shire Council completed the construction by contract of a fivespan prestressed and reinforced concrete bridge over the Barrington River. The new structure is 300 feet long and 12 feet wide between kerbs with provision for extension to 24 feet. It eliminated an open crossing.

## Principal Bridgeworks in Progress at the Beginning of the Year and Not Completed

## Macquarie River at Dubbo-State Highway No. 7-Mitchell Highway

The Department continued the construction by contract of a twenty-eight span prestressed concrete bridge over the Macquarie River at Dubbo. The new structure will be 2,013 feet long and the two-lane carriageway will be flanked by a footway on one side and a cycleway on the other. It will replace a timber beam and truss bridge 502 feet long.

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

The Department continued the construction by contract of a four-span prestressed and reinforced concrete bridge over the Myall River at Bulahdelah. The new bridge will be 395 feet long and will replace a steel truss and timber beam bridge 248 feet long. It will have two traffic lanes and a footway on each side.

## Tomki Creek-State Highway No. 16-Bruxner Highway

Tomki Shire Council continued the construction by contract of a four-span prestressed and reinforced concrete bridge over Tomki Creek 34.3 miles west of Ballina. The new bridge will be 280 feet long with two traffic lanes and will replace a timber beam bridge 123 feet long.

## Six Mile Creek-Trunk Road No. 83

The Department continued the construction by contract of a nineteen-span prestressed and reinforced concrete bridge over Six Mile Creek at Batten's Bight, 39 miles north of Grafton. The new bridge will be 665 feet long with two traffic lanes and will replace a timber beam bridge 53 feet long.

## Hunter River at Raymond Terrace—Main Road No. 104

The Department continued the construction by contract of a five-span reinforced and prestressed concrete bridge over the Hunter River at Raymond Terrace. The new bridge will be 678 feet long with two traffic lanes and will eliminate the vehicular ferry service over the Hunter River at Raymond Terrace.

Bridge over Airport Access Road-Main Road No. 183
The Department continued the construction of a single-span reinforced and prestressed concrete bridge on Gardener's Road (Main Road No. 183) over the improved access road to Sydney (Kingsford Smith) Airport. The new structure will be 224 feet long and will have six traffic lanes.

## Castlereagh River-Developmental Road No. 1170

Coonabarabran Shire Council continued the construction by contract of a steel and reinforced concrete bridge over the Castlereagh River at Binnaway. The new bridge will be 360 feet long, have two traffic lanes, and will replace a low level concrete slab bridge 130 feet long.

## North Arm of the Hunter River at Stockton

The Department continued the construction by contract of a twenty-three span reinforced and prestressed concrete bridge over the North Arm of the Hunter River between Kooragang Island and the Stockton Peninsula. The Department constructed bored-pile foundations for sixteen approach spans. The new bridge will be 3,357 feet long and will have four traffic lanes and a central footway. It will eliminate the Newcastle-Stockton vehicular ferry service.

## Principal Bridgeworks Commenced During the Year and Not Completed

## Nepean River at Regentville-Western Expressway

The Department commenced the construction by contract of a five-span, 1,045 feet long prestressed concrete bridge over the Nepean River at Regentville. Initially the bridge will have two traffic lanes and two footways. At a later stage, when warranted by traffic conditions, the bridge will be widened to provide dual three-lane carriageways separated by a median and flanked by two footways.

## Railway Overbridge at Stacey Street, Bankstown

The Department commenced the construction by contract of a prestressed concrete bridge which will connect the northern and southern sections of Stacey Street, Bankstown and provide a new through route to by-pass the business centre of Bankstown. The bridge will provide a new crossing of the railway line, grade separation for the extensions of North Terrace and South Terrace, and interchange facilities for local traffic. It will consist of three spans, two each of 86 feet and one of 123 feet, and will have a six-lane divided carriageway with two footways.

## Bridge over Epsom Road-Airport Access Road

The Department commenced the construction, partly with its own forces and partly by contract, of a two-span prestressed and reinforced concrete girder bridge to carry the improved access road to Sydney (Kingsford Smith) Airport over Epsom Road, Zetland. The new structure will be 202 feet long and have four traffic lanes.

Nepean River at Camden-State Highway No. 2-Hume Highway
The Department commenced the construction of a steel and concrete bridge, 3,380 feet long over the Nepean River at Camden. The new structure, which is being built partly by contract, is about one mile upstream from the present crossing. It will consist of twenty-six spans each 130 feet long and will have two traffic lanes and one footway.

## Billabong Creek-State Highway No. 2-Hume Highway

The Department commenced the construction by contract of an eleven-span prestressed concrete bridge, 385 feet long, over Billabong Creek 30.5 miles south of Tarcutta. The new two-lane structure will replace a low level concrete bridge which is 70 feet long and subject to flooding.

## Unnamed Creek—State Highway No. 10—Pacific Highway

The Department commenced the construction of a six-span reinforced and prestressed concrete bridge, 211 feet long at Tabbimoble, 49.5 miles north of Grafton. The two-lane structure will replace a causeway and a relief pipe culvert.

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

The Department commenced the construction of a seven-span reinforced and prestressed concrete bridge, 237 feet long, over King Creek on the Oxley Highway, 3.2 miles west of Port Macquarie. The new two-lane structure will replace a 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 commenced the construction by contract of a prestressed concrete bridge which will eliminate the railway level crossing at Villawood. The bridge will have five spans each 40 feet long, a six-lane divided carriageway and a footway on each side.

## Black Creek-State Highway No. 16-Bruxner Highway

The Department commenced the construction by contract of a two-lane, 240 feet long reinforced and prestressed concrete bridge over Black Creek, 44.1 miles east of Tenterfield. The new bridge is being constructed on a deviation of the highway but the existing four-span timber beam bridge, 143 feet long, will be maintained for use of local traffic.

## Myall Creek-State Highway No. 16-Bruxner Highway

The Department commenced the construction by contract of a prestressed and reinforced concrete bridge over Myall Creek, 1.75 miles west of Bonshaw. The new structure will be 210 feet long and will have two traffic lanes.

## Lake Forbes—State Highway No. 17—Newell Highway

The Department commenced the construction by contract of a nine-span prestressed concrete bridge, 470 feet long, over Lake Forbes at Forbes. The new structure will have two traffic lanes and a footway on each side.

## Michelago Creek--State Highway No. 19-Monaro Highway

The Department commenced the construction by contract of a seven-span continuous prestressed concrete bridge, 301 feet long, over Michelago Creek, 32 miles south of Canberra. The new two-lane bridge will replace a narrow timber beam structure, 114 feet long.

## Two Mile Break-State Highway No. 22—Silver City Highway

The Department commenced the construction by contract of a twenty-span reinforced and prestressed concrete bridge, 400 feet long, at Two Mile Break just north of Wentworth. The two-lane bridge 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-Trunk Road No. 63
The Department commenced the construction by contract of a five-span steel and concrete bridge, 295 feet long, over Warialda Creek at Warialda. The new bridge will have two traffic lanes and will replace an old timber beam structure 266 feet long, built about 1900.

Murray River-Main Road No. 281
The Department commenced the construction by contract of extensions to the existing bridge over the Murray River at Tintaldra. Five spans, each 40 feet long and similar in design to the main bridge, are being constructed to provide a greater waterway area. These spans consist of steel girders with a concrete deck supported by concrete piled piers. One lane of the extension has been opened to traffic and construction of the second lane is proceeding.

## Edward River-Main Road No. 319

Wakool Shire Council commenced the construction by contract of a six-span reinforced concrete and steel bridge over the Edward River at Moulamein. The bridge, which will be 316 feet long, will have two traffic lanes and one footway. It will replace a narrow timber beam bridge, 356 feet long, built in 1925 by the Department of Public Works.

Pedestrian Bridge over Warringah Road—Main Road No. 328
The Department commenced the construction by contract of a prestressed and reinforced concrete footbridge over Warringah Road near its intersection with Forest Way (Main Road No. 529). The new pedestrian bridge will be 320 feet long.

## MAINTENANCE OF BRIDGES AND FERRIES

During the year the following major maintenance and repair works to bridges and ferries were carried out:-

Bridge over Merimbula Lake at Merimbula-State Highway No. 1—Prince's Highway This five-span timber beam bridge is 153 feet long. The deck was renewed.

Denison Bridge over Macquarie River at Bathurst-State Highway No. 5-Great Western Highway
This structure is 474 feet long and has three 110 -feet steel truss spans and six timber beam spans. General repairs to the timber spans and repainting of the steelwork were carried out.

Timber Beam Bridges between 21 miles and 29 miles west of Broken Hill-State Highway No. 8-Barrier Highway
Ten single lane timber beam bridges and culverts, having a combined length of 456 feet, were widened to 24 feet between kerbs.

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 and nine timber beam spans. Replacement of the timber decking was continued.

Bridge over Muscle Creek at Muswellbrook—State Highway No. 9—New England Highway
This timber beam bridge is 93 feet long. The deck was replaced.
Bridge over the Macdonald River at Bendemeer-State Highway No. 9—New England Highway
This bridge is 302 feet long and has one composite Howe truss span and six timber beam spans. Extensive repairs to girders and decking were completed.

Swansea Bridge over Entrance to Lake Macquarie—State Highway No. 10—Pacific Highway
This bridge is 570 feet long and has one 89 -feet bascule span and twelve 40 -feet steel beam spans. Extensive repainting of the steelwork was completed.

Hexham Bridge over the Hunter River—State Highway No. 10—Pacific Highway
This bridge is 1,253 feet long and has five 120 -feet steel truss spans, one 124 feet lift span, and thirteen 40 -feet steel beam approach spans. The bridge was repainted and the timber dolphins and fenders were repaired.

## 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. Repainting of the steelwork was commenced during the year.

Two Bridges over Swan Creek, north of Grafton-State Highway No. 10—Pacific Highway
These timber beam bridges are 303 feet and 93 feet long. Replacement of decking and improvement to the riding quality of the decks were commenced.

Four Approach Bridges to the Bridge over the Murray River at Mildura—State Highway No. 14-Sturt Highway
These four timber beam bridges have a combined length of 1,330 feet. Repairs to the decks of the bridges were completed.

Bridge over Namoi River at Narrabri-State Highway No. 17—Newell Highway
This bridge is 214 feet long and has one truss span and four timber beam spans. Undertrussing of the truss cross girders to strengthen the structure was carried out.

Bridge over Narrabri Creek at Narrabri-State Highway No. 17—Newell Highway
This bridge is 397 feet long and has two truss spans and seven timber beam spans. Undertrussing of the cross girders on both truss spans to strengthen the structure was carried out during the year and guardrail protection fencing was installed on the truss spans.

## Boolooroo Bridge over the Gwydir River north of Moree-State Highway No. 17Newell Highway

This bridge is 325 feet long and has three 90 -feet timber truss spans and two 25 -feet timber beam spans. Extensive repairs were carried out to the superstructure and northern abutment.

Bridge over the Murrumbidgee River at Hay-State Highway No. 21—Cobb Highway
This bridge is 786 feet long and has twenty-one timber beam spans, two fixed steel spans, and a steel swing span. Replacement of 95 per cent of the decking was completed.

Bridge over the Anabranch of the Darling River, 10 miles west of WentworthTrunk Road No. 68
This timber beam bridge is 308 feet long and has nine spans. Replacement of girders was carried out.

No. 1 Approach Bridge to the Bridge over the Murray River at Corowa-Trunk Road No. 86
This timber beam bridge is 178 feet long and has twelve spans. Extensive reconstruction of the bridge was commenced and almost completed during the year.

Bridge over Richmond River at Coraki-Main Road No. 148
This composite steel and timber bridge is 362 feet long and has a lift span. Extensive repairs to the lift span and substructure were completed during the year.

Bridge over Middle Harbour at The Spit-Main Road No. 164
This steel bridge is 745 feet long and has six 100 -feet spans and one 90 -feet bascule opening span. Repairs to the machinery for the bascule opening span were carried out and repainting of the bridge was commenced.

Glebe Island Bridge, Blackwattle 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. Reconstruction of the fencing on the long approach embankments was completed and replacement of a number of piles in the timber protection platform for the swing spans was commenced.

Bridge over Iron Cove, Sydney-Main Road No. 165
This steel bridge is 1,536 feet long and has seven steel truss spans and four steel plate girder spans. Installation of new lighting on the bridge was commenced.

Ferry Service over the Hawkesbury River at Webb's Creek—Main Road No. 181
The hull and engine of the steel ferry vessel were given a major overhaul.
Endeavour Bridge over Cook's River at Kyeemagh, Sydney_Main Road No. 194
This reinforced concrete bridge is 566 feet long and has eight 60 -feet spans. Repairs to the deck beams were commenced.

Bridges over the Murray River and Flood Channels at Howlong—Main Road No. 197
The bridge over the Murray River is 306 feet long and has six timber beam spans and one 100 -feet timber truss span. The four approach timber beam bridges have a combined length of 667 feet. Extensive repairs were carried out, including the replacement of piles, girders and decking on each bridge and the replacement of some truss members on the main bridge.

Bridge over the Murray River at Cobram--Main Road No. 226
This bridge is 606 feet long and has ten timber beam spans, two De Burghtype truss spans, and a steel lift span. Replacement of one pier and 60 per cent of the deck was commenced.

Hampden Bridge over the Kangaroo River at Kangaroo Valley-Main Road No. 261
This suspension bridge has one 253 feet span and was built in 1898. Extensive repairs to the stiffening trusses and the deck system were completed.

Dunmore Bridge over Paterson River at Woodville—Main Road No. 301
This bridge is 428 feet long and has three 112-feet timber truss spans, one 30 -feet timber beam span and one 58 -feet steel lift span. Extensive repairs to the trusses were completed.

Ferry Service over the Macleay River at Smithtown-Main Road No. 556
The steel ferry vessel was docked, repaired and painted, and its machinery was overhauled.

Bridge over the Murray River at Euston-Main Road No. 583
This bridge is 2,180 feet long and has sixty-seven timber beam spans, six steel girder spans and one steel girder lift span. Repairs to the deck of the lift span were completed.

Bridge over Darling Harbour at Pyrmont, Sydney
This bridge is 1,215 feet long and has two 110 -feet steel swing spans and twelve 82 -feet timber truss spans. Repairs to timber truss members were carried out and replacement of a number of piles in the timber protection platform for the swing spans was commenced.

Ferry Service over the Parramatta River between Mortlake and Putney, Sydney
The hull, deck and engine of the steel ferry vessel were given a major overhaul.

## Grahame Bridge over Throsby Creek at Tighe's Hill, Newcastle

This reinforced concrete bridge is 286 feet long and has seven 40 -feet spans. Extensive repairs to the concrete girders and piers were completed.

## Bridge over Towamba River at New Buildings

This bridge is 332 feet long and has three 90 -feet composite steel and timber truss spans and two timber beam spans. Extensive repairs to piles and cross girders were completed.

## ELIMINATION OF RAILWAY LEVEL CROSSINGS ON MAIN ROADS

During the year four (4) railway level crossings were eliminated from the Main Roads System:-

State Highway No. 4-Snowy Mountains Highway
The bridge constructed over Gilmore Creek also spans the Tumut-Batlow railway line and has eliminated the level crossing on the highway at Gilmore. The level crossing is still available for local traffic.

## State Highway No. 9—New England Highway

The construction of a deviation between Kankool and Willow Tree eliminated two level crossings from the route of the New England Highway. The level crossing at Kankool has been closed and the level crossing at Willow Tree is now on the route of the Merriwa-Willow Tree Road (Main Road No. 358).

## Main Road No. 350-Trundle-Tullamore

The construction of a deviation north of Trundle eliminated two level crossings from the Main Roads System.

The total of four crossings eliminated, reduced the number of level crossings on Main Roads to 396 comprising 335 on New South Wales Government Railways, 50 on privately-owned railways and 11 on Victorian Government Railways which extend into New South Wales.

A total of 169 level crossings has been eliminated from the Main Roads System since the Main Roads Act came into effect in 1925.

With a view to improving safety conditions at existing railway level crossings, improvements were carried out at a number of locations by the installation of six sets of automatically operated flashing lights, increasing sight distance at various locations and the provision of warning signs on road pavements in approach to the crossings.

## TRAFFIC SERVICE

## Median Strips

During the year a total length of 8.6 miles of median strip was constructed, of which approximately 80 per cent was in the Sydney Metropolitan Area and most of the remainder in the City of Newcastle.

## Channelisation of Intersections

Channelisation was completed at 26 intersections and work was in progress at a further 13 sites. During the year, designs were completed for future channelisation at 30 intersections. Some of the sites at which construction of channelisation was completed were:-

| State Highway No. 1 | Prince's Highway, City of Greater Wollon- <br> gong. Intersection with Main Road No. 186- <br> Mt. Keira Road, West Wollongong. |
| :--- | :--- |
| State Highway No. 1 | Prince's Highway, Shire of Sutherland. Inter- <br> section with Railway Parade (south), Enga- <br> dine. |
| State Highway No. 2 | Hume Highway, City of Liverpool. Inter- <br> section with Main Road No. 515-Hoxton <br> Park Road and Secondary Road No. 2071- <br> Copeland Street, Liverpool. |
| State Highway No. 5 | Great Western Highway, Municipalities of <br> Holroyd and Blacktown. Intersections of the <br> deviation at Prospect with the existing route <br> of State Highway No. 5, with Flushcombe <br> Road and with Reservoir Road. |
| State Highway No. 7 | Mitchell Highway, Shire of Molong. Inter- <br> section with Wellington Street, Molong. |
| State Highway No. 9 | New England Highway, Municipality of Mus- <br> wellbrook. Intersection with Brook Street, |
| State Highway No. 10 | Muswellbrook. <br> Pacific Highway, Shire of Hornsby. Inter- <br> sections (temporary connections) with Sydney- |
| Newcastle Expressway at the Berowra Inter- |  |
| change and at Brooklyn. |  |

Main Road No. 199

Main Road No. 223

Main Road No. 328

Main Road No. 328

Main Road No. 328

Main Road No. 373

Taren Point Road, Shire of Sutherland. Intersection with Main Road No. 227-the Kingsway.
Main Road, Shire of Lake Macquarie. Intersection with Main Road No. 217-Lake Road at Cross Roads, Glendale.
Boundary Street, Municipality of Ku-ring-gai. Intersection with Babbage Road, East Roseville.
Boundary Street, Municipality of Ku-ring-gai. Intersection with Secondary Road No. 2043Archbold Road, Roseville.
Boundary Street, Municipality of Willoughby. Intersection with Penshurst Street, East Willoughby.
Epping Road, Municipality of Willoughby. Intersection with Mowbray Road, Lane Cove.

## Bus Bays

Seven bus bays were established to permit buses on Main Roads to stop clear of moving traffic. Three of the bays were in the Sydney Metropolitan Area and the remaining four in the Shire of Lake Macquarie.

## Climbing Lanes on Hills

During the year, the construction of sixteen climbing lanes for slow-moving vehicles was completed. In addition, four existing climbing lanes were lengthened and work was commenced at two sites. Some of the locations at which climbing lanes were completed are listed below:-

State Highway No. 1
State Highway No. 2
State Highway No. 4 Snowy Mountains Highway-on Brown Mountain near Devil's Elbow.
State Highway No. 9 New England Highway-
(i) 8 miles north of Murrurundi near Chilcott's Creek Bridge.
(ii) 48.1 miles north of Tamworth on the approaches to Kentucky Creek Bridge.
(iii) 5.7 miles south of Tenterfield at Gardener's Gully.
State Highway No. 12 Gwydir Highway-
(i) 7.6 miles west of Glen Innes.
(ii) 9.1 miles west of Glen Innes.
(iii) 3.0 miles east of Warialda.

State Highway No. 14 Sturt Highway-two climbing lanes in conjunction with improvements to the junction with State Highway No. 2-Hume Highway.
Main Road No. $217 \quad$ Birmingham Gardens-Wyong.
(i) South of Toronto.
(ii) Near junction of road to Arcadia Vale.

Main Road No. 503 Putty Road- 7.4 miles north of Windsor at Howes Creek.

## Signposting

The largest single signposting project undertaken during the year was on the Berowra to Hawkesbury River section of the Sydney-Newcastle Expressway. This project included the construction of four tubular sign bridges.

In the Sydney Metropolitan Area a number of painted fingerboard type signs were replaced by retro-reflective signs. In all areas more extensive use was made of reassurance direction signs which were located beyond intersections.

Experimental investigations were made into the development of a new type of reflectorised milepost. Laboratory and field tests were conducted on existing and new types of materials for sign backgrounds, with a view to improving the durability of signs and reducing the adverse effects of background reflectance.

## Advisory Speed Signs

Advisory speed surveys were conducted on approximately 570 miles of road, principally in the northeastern sector of the State. A number of roads where there are existing advisory speed signs were resurveyed as a result of changes in speed limits. On these roads, where absolute speed limits have been introduced which are higher than the general $50 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. prima facie limit, the Department has extended its advisory signs to a greater range of curves, e.g. where the speed limit is $60 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. absolute, the Department has signposted all curves with advisory speeds of 55 m.p.h. or less.

## Accident Analysis and Investigation

The investigation of fatal accident sites on rural State Highways, which was commenced in 1966, was continued through the year. During the three years ending 31st December, 1968 there were 750 fatal accidents on rural State Highways, in which 922 persons were killed and 1,029 persons injured. Following analysis of all of these accidents, appropriate action was taken in cases where road conditions might have been a contributory cause.

## Travel Time Surveys

Travel time surveys were intensified throughout the year in the Sydney Metropolitan Area, particularly in the northern suburbs where the effects of the opening of the first section of the Warringah Expressway were measured. These studies showed that in the morning peak period the greatest time-savings resulting from the Expressway occurred in Eastern Valley Way, Willoughby Road and Pacific Highway where journeys to the City were reduced by approximately 8 minutes, $8 \frac{1}{2}$ minutes and 11 minutes respectively. Similar, but slightly lower timesavings were recorded in the evening peak period.

An analysis was also made of changes in travel times on all principal radial routes leading to and from the City, comparing those recorded in February, 1967 with those of October, 1968. This analysis showed that improvements in travel times were recorded over many roads, mainly as a result of the introduction of clearways, and that there were very few areas in which travel times increased by more than five minutes.

## Scheduled according to Road Classifications

TABLE 1-ROAD MILES

| Nature of Work |  | Expressways | State Highways | Trunk <br> Roads | Ordinary Main Roads | Secondary <br> Roads | Tourist Roads | Developmental Roads | Unclassified Roads | All Roads Sub Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Initial Surfacing- |  |  |  |  |  |  |  |  |  |  |
| A. Prime ..... |  | - | 30.48 | - | 21.47 | - | 0.57 | - | - | 52.52 |
| B. Primer Seal |  | - | 47.58 | 12.58 | 2.85 | - | - | - | - | 63.01 |
| C. Sprayed Seal |  | - | 54.29 | 35.38 | 155.05 | - | 4.05 | 9.97 | - | 258.74 |
| D. Slurry Seal |  | - | - | - | -76 | -- | - | - | - | - |
| E. Plant Mix |  | 6.23 | 0.62 | - | 1.76 | - | 0.92 | - | - | 9.53 |
|  | Sub Total | 6.23 | 132.97 | 47.96 | 181.13 | - | 5.54 | 9.97 | - | 383.80 |
| 2. Surfacing Lengths Primed Before This Year- |  |  |  |  |  |  |  |  |  |  |
| B. Primer Seal |  | - | 1.28 | 0.26 | 12.46 | - | - | - | - | 14.00 |
| C. Sprayed Seal |  | - | 56.35 | 7.11 | 13.74 | - | - | - | - | 77.20 |
| D. Slurry Seal |  | - | - | - | - | - | - | - | - | - |
| E. Plant Mix |  | - | - | - | - | - | - | - | - | - |
|  | Sub Total | - | 58.61 | 7.37 | 30.10 | - | - | - | - | 96.08 |
| 3. Restoration after Widening and/or Strengthening- |  |  |  |  |  |  |  |  |  |  |
| B. Primer Seal |  | - | 2.08 | 0.30 | 1.00 | - | - | - | - | 3.38 |
| C. Sprayed Seal |  | - | 12.87 | 3.43 | 4.37 | - | - | - | - | 20.67 |
| D. Slurry Seal |  | - | - | - | - |  | - | - |  | $\bigcirc$ |
| E. Plant Mix |  | - | 0.31 | - | 6.13 | 0.18 | - | - | 0.54 | 7.16 |
|  | Sub Total | - | 15.35 | 3.73 | 11.50 | 0.18 | - | - | 0.54 | 31.30 |
| 4. Restoration after Adding Lanes- |  |  |  |  |  |  |  |  |  |  |
| A. Prime ... |  | - | - | - | - | - | - | - | - | - |
| B. Primer Seal |  | - | 0.65 | - | 2.13 | - | - | - | - | 2.78 |
| C. Sprayed Seal |  | - | 11.70 | 0.60 | 0.75 | - | - | - | - | 13.05 |
| D. Slurry Seal |  | - 0 | - | - | - |  | - | - | - | - |
| E. Plant Mix |  | 0.56 | 8.41 | 0.38 | 3.70 | 3.29 | - | - | - | 16.34 |
|  | Sub Total | 0.56 | 20.76 | 0.98 | 6.58 | 3.29 | - | - | - | 32.17 |
| 5. Restoration after New Alignment and/or Grade- |  |  |  |  |  |  |  |  |  |  |
| A. Prime |  | - | 5.29 | - | 2.11 | - | - | - | - | 7.40 |
| B. Primer Seal |  | - | 7.30 | - | 0.97 | - | - | - | -- | 8.27 |
| C. Sprayed Seal |  | - | 57.78 | 13.82 | 24.17 | - | 1.50 | - | 0.32 | 97.59 |
| D. Slurry Seal |  | - | - | - | - | - | -- | - |  | - |
| E. Plant Mix |  | - | 3.30 | - | 2.62 | 1.96 | - | - | 2.39 | 10.27 |
|  | Sub Total | - | 73.67 | 13.82 | 29.87 | 1.96 | 1.50 | - | 2.71 | 123.53 |

TABLE 1—ROAD MILES-(continued)


TABLE 2-LANE MILES

| 1. Initial Surfacing- |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. Prime . |  | - | 62.00 | - | 42.94 | 一 | 1.14 | - | - | 106.08 |
| B. Primer Seal |  | - | 95.16 | 25.16 | 5.70 | - | - | - | - | 126.02 |
| C. Sprayed Seal |  | - | 108.57 | 70.76 | 302.10 | - | 6.39 | 19.94 | - | 507.76 |
| D. Slurry Seal |  | - | - | - | - | - | - | - | - | - 36. |
| E. Plant Mix . |  | 29.99 | 0.88 | - | 3.35 | - | 1.84 | - | - | 36.06 |
|  | Sub Total | 29.99 | 266.61 | 95.92 | 354.09 | - | 9.37 | 19.94 | - | 775.92 |
| 2. Surfacing Lengths Primed Before This Year- |  |  |  |  |  |  |  |  |  |  |
|  |  | - | 2.36 | - 52 | 7.80 | - | - | - | - | 28.16 |
| B. Primer Seal |  | - | 2.56 | 0.52 | 24.92 | - | - | - | - | 28.00 |
| C. Sprayed Seal |  | - | 115.06 | 14.22 | 27.48 | - | - | - | - | 156.76 |
| D. Slurry Seal |  | - | - | - | - | - | - | - | - | - |
| E. Plant Mix |  | - | - | - | - | - | - | - | - | - |
|  | Sub Total | - | 119.98 | 14.74 | 60.20 | - | - | - | - | 194.92 |

3. Restoration after Widening and/or Strengthening-
$\begin{array}{ll}\text { A. } & \text { Prime } \\ \text { B. } & \text { Primer Seal } \\ \text { C. } & \text { Sprayed Seal } \\ \text { D. } & \text { Slurry Seal }\end{array}$
D. Slurry Sea $\qquad$
4. Restoration after Adding Lanes-
A. Prime...
B.
B. Primer Seal
D. Slurry Seal
E. Plant Mix
$\qquad$
dening and/or Strengthening
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
E. Plant Mix
5. Restoration after New Alignment and/or Grade-
A. Prime

Total
$\begin{array}{ll}\text { A. } & \text { Prime } \ldots \\ \text { B. } & \text { Primer Seal }\end{array}$
C. Sprayed Seal
D. Slurry Seal
E. Plant Mix
6. Maintenance Resurfacing-
$\begin{array}{ll}\text { A. } & \text { Prime } \\ \text { B. } & \text { Primer Seal } \\ \text { C. } & \text { Sprayed Sea } \\ \text { D. } & \text { Slurry Seal }\end{array}$
Seal
D. Slurry Seal
E. Plant Mix

Summary of 1 to 6-
$\begin{array}{lll}\text { A. } & \text { Prime } \ldots . . \\ \text { B. } & \text { Primer Seal } \\ \text { C. } & \text { Sprayed Seal }\end{array}$
C. Sprayed Sea
E. Plant Mix

TOTAL


BITUMINOUS SURFACING COMPLETED DURING THE YEAR ENDED 30th JUNE, 1969
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 ....... | 19.73 | - | 1.62 | 31.17 |
| B. Primer Seal | 42.15 | - |  | 20.86 |
| C. Sprayed Seal | 53.42 | 0.43 | 25.68 | 179.21 |
| D. Slurry Seal | - |  |  | - |
| E. Plant Mix | 7.53 | 0.15 | 1.71 | 0.14 |
| Sub Total | 122.83 | 0.58 | 29.01 | 231.38 |
| 2. Surfacing Lengths Primed Before This Year- |  |  |  |  |
| ${ }_{\text {A }}$ B. Prime $\ldots$.... | 0.98 | $\overline{0} 50$ | - | 3.90 |
| ${ }^{\text {B. Primer Seal }}$ | - | 0.50 |  | 13.50 |
| C. Sprayed Seal | 49.36 | - | 4.78 | 23.06 |
| D. Slurry Seal | - | - | - |  |
| E. Plant Mix | - | - | - | - |
| Sub Total | 50.34 | 0.50 | 4.78 | 40.46 |
| 3. Restoration after Widening and/or Strengthening-- |  |  |  |  |
| B. Primer Seal | 2.08 | - | 0.30 | 1.00 |
| C. Sprayed Seal | 5.56 | 6.96 | 1.84 | 6.31 |
| D. Slurry Seal . | - | - |  |  |
| E. Plant Mix | 4.49 | 0.60 | 0.77 | 1.30 |
| Sub Total | 12.22 | 7.56 | 2.91 | 8.61 |
| 4. Restoration after Adding Lanes- |  |  |  |  |
| B. Primer Seal | 0.65 | - |  | 213 |
| ${ }_{\text {C. }}$ S. Sprayed Seal | 9.25 | 2.45 | $\overline{1.35}$ |  |
| D. Slurry Seal | - | - |  |  |
| E. Plant Mix | 5.42 | 2.66 | 5.32 | 2.94 |
| Sub Total | 15.32 | 5.11 | 6.67 | 5.07 |
| 5. Restoration after New Alignment and/or Grade- |  |  |  |  |
| B. Primer Seal | 7.30 | - |  | 0.97 |
| C. Sprayed Seal | 48.22 | 9.13 | 14.02 | 26.22 |
| D. Slurry Seal | 7 |  |  |  |
| E. Plant Mix | 7.12 | 0.28 | 1.14 | 1.73 |
| Sub Total | 66.43 | 9.41 | 15.16 | 32.53 |
| 6. Maintenance Resurfacing- |  |  |  |  |
| A. Prime $\ldots$..... | $\overline{7}$ | - | - | - |
| B. Primer Seal | 17.53 | - |  |  |
| C. Sprayed Seal | 233.97 | 74.82 | 29.61 | 297.78 |
| D. Slurry Seal | 1.49 | 0.46 | 1.00 | 1.26 |
| E. Plant Mix | 26.95 | 2.54 | 10.09 | 13.66 |
| Sub Total | 279.94 | 77.82 | 40.70 | 312.70 |
| Summary of 1 to 6- |  |  |  |  |
| A. Prime .... | 24.59 |  | 1.62 | 38.68 |
| B. Primer Seal | 69.71 | 0.50 | 0.30 | 38.46 |
| C. Sprayed Seal | 399.78 | 93.79 | 77.28 | 532.58 |
| E. Plant Mix $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$, | 1.49 | 0.46 | 1.00 | 1.26 |
|  | 51.51 | 6.23 | 19.03 | 19.77 |
|  | 547.08 | 100.98 | 99.23 | 630.75 |
|  | SUMMARY |  |  |  |
|  | by by | partment uncils |  | $96 \text { miles } 98 \text { miles }$ |
|  |  | TOTAL $\overline{1,378.04}$ miles |  |  |

TABLE 2-LANE MILES

| Nature of Work | By Department |  | By Councils |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Direct | Contract | Direct | Contract |
|  |  |  |  |  |
| A. Prime ..... | 39.46 | - | 3.24 | 63.38 |
| B. Primer Seal | 84.30 | - | - | 41.72 |
| C. Sprayed Seal | 106.84 | 1.29 | 53.34 | 346.29 |
| D. Slurry Seal . | - | - | 2 | - |
| E. Plant Mix | 32.29 | 0.60 | 2.89 | 0.28 |
| Sub Total | 262.89 | 1.89 | 59.47 | 451.67 |
| 2. Surfacing Lengths Primed Before This Year- |  |  |  |  |
| B. Primer Seal | - | 1.00 | - | 27.00 |
| C. Sprayed Seal | 98.72 | - | 11.92 | 46.12 |
| D. Slurry Seal | - | - | - | - |
| E. Plant Mix | - | - | - | - |
| Sub Total | 101.08 | 1.00 | 11.92 | 80.92 |
| 3. Restoration after Widening and/or Strengthening- |  |  |  |  |
| B. Primer Seal | 3.77 | - | 0.60 | 2.00 |
| C. Sprayed Seal | 12.33 | 13.92 | 3.68 | 14.02 |
| D. Slurry Seal . | - | - | - | - |
| E. Plant Mix | 20.65 | 2.40 | 2.45 | 2.57 |
| Sub Total | 36.93 | 16.32 | 6.73 | 18.59 |
| 4. Restoration after Adding Lanes- |  |  |  |  |
| B. Primer Seal | 1.95 | - | - | 4.26 |
| C. Sprayed Seal | 20.06 | 7.67 | 2.61 | - |
| D. Slurry Seal | - 27 | - | - | $\square$ |
| E. Plant Mix | 27.25 | 10.64 | 21.12 | 7.62 |
| Sub Total | 49.26 | 18.31 | 23.73 | 11.88 |
| 5. Restoration after New Alignment and/or Grade- |  |  |  |  |
| B. Primer Seal | 13.15 | - | - | 1.94 |
| C. Sprayed Seal | 102.35 | 18.56 | 28.39 | 52.74 |
| D. Slurry Seal | - | - | - | 7 |
| E. Plant Mix | 36.59 | 0.56 | 3.56 | 7.76 |
| Sub Total | 159.67 | 19.12 | 31.95 | 69.66 |
| 6. Maintenance Resurfacing- |  |  |  |  |
| B. Primer Seal | 35.06 | - | -- | - |
| C. Sprayed Seal | 470.17 | 149.91 | 62.82 | 572.27 |
| D. Slurry Seal | 3.32 | 0.92 | 2.00 | 3.56 |
| E. Plant Mix | 92.36 | 8.40 | 26.87 | 37.93 |
| Sub Total | 600.91 | 159.23 | 91.69 | 613.76 |
| Summary of 1 to 6- |  |  |  |  |
| A. Prime ....... | 138.23 | $\overline{1.00}$ | 3.24 0.60 | 76.92 |
| C. Sprayed Seal | 810.47 | 191.35 | 162.76 | 1,031.44 |
| D. Slurry Seal . | 3.32 | 0.92 | 2.00 | 3.56 |
| E. Plant Mix ............................ | 209.14 | 22.60 | 56.89 | 56.16 |
|  | 1,210.74 | 215.87 | 225.49 | 1,246.48 |
|  | SUMMARY |  |  |  |
|  |  | Departm Councils TO | L $\begin{array}{r}1,42 \\ 1,47 \\ \hline 2,89\end{array}$ | 1 miles 7 miles <br> 5 miles |

TYPES OF ROAD SURFACES AS AT 30th JUNE, 1969
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 |  | 31.52 | 128.00 | 33.90 | - | - | - | 193.42 |
| Ordinary Main Roads |  | 49.95 | 341.36 | 268.56 | 1.66 | - | 0.35 | 661.88 |
| Secondary Roads |  | 11.06 | 116.81 | 34.65 | 0.52 | - | 1.35 | 164.39 |
| Tourist Roads . |  | , | 4.95 | 34.78 | 2.26 | 0.53 | 8.50 | 51.02 |
| Developmental Roads |  | - | - | 5.00 | 3.72 | 0.60 | 4.28 | 13.60 |
| Unclassified Roads . |  | - | 4.54 | 0.32 | - | - | 0.52 | 5.38 |
|  | Sub Total | 92.53 | 605.54 | 377.21 | 8.16 | 1.13 | 15.00 | 1,099.57 |
| COUNTRY |  |  |  |  |  |  |  |  |
| Expressways |  | - | 13.82 | - | - | - | - | 13.82 |
| State Highways |  | 28.97 | 197.93 | 5,126.57 | 510.68 | 477.87 | - | 6,342.02 |
| Trunk Roads . . . . . |  | 6.43 | 4.48 | 2,338.42 | 1,232.47 | 627.94 | - | 4,209.74 |
| Ordinary Main Roads |  | 13.22 | 114.41 | 4,557.56 | 4,235.10 | 1,929.88 | 38.20 | 10,888.37 |
| Tourist Roads . . . . |  | - | 0.92 | 86.16 | 55.46 | 7.98 | 17.18 | 167.70 |
| Developmental Roads |  | - | 0.92 | 69.85 | 1,714.75 | 719.73 527.27 | 200.74 | 2,705.07 |
| Unclassified Roads |  | - | - | 20.84 | 19.08 | 1,527.27 | - | 1,567.19 |
|  | Sub Total | 48.62 | 331.56 | 12,199.40 | 7,767.54 | 5,290.67 | 256.12 | 25,893.91 |

TOTAL FOR STATE OF NEW SOUTH WALES
(County of Cumberland and Country)


TYPES OF ROAD SURFACES AS AT 30th JUNE, 1969
Scheduled according to Department's Divisions

| Division | Natural Surface | Formed Only | Gravel | Primed Only | Primer Sealed | Sprayed Seal | Slurry Seal | Plant <br> Mix | Cement Concrete | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Metropolitan | 1.37 | - | - | - | - | 16.72 | - | 337.39 | 49.28 | 404.76 |
| Parramatta County of Cumberland | 0.85 | - | 2.18 | - | - | 246.63 | - | 210.28 | 37.20 | 497.14 |
| Country ........... | 13.50 | 2.18 | 31.34 | - | - | 147.30 | - | 60.49 | 37.2 | 254.81 |
| Sub Total | 14.35 | 2.18 | 33.52 | - | - | 393.93 | - | 270.77 | 37.20 | 751.95 |
| County of Cumberland | 12.78 | 1.13 | 5.98 | - | - | 68.30 | - | 14.83 | - | 103.02 |
| Country | 2.65 | 3.60 | 450.18 | - | - | 548.68 | 0.11 | 3.27 | 17.87 | 1,026.36 |
| Sub Total | 15.43 | 4.73 | 456.16 | - | - | 616.98 | 0.11 | 18.10 | 17.87 | 1,129.38 |
| County of Cumberland | - | - | $\bar{T}$ | - | - | 45.56 | - | 43.04 | 6.05 | 94.65 |
| Country | - | - | 117.52 | 2.60 | - | 319.85 | - | 148.91 | 1.87 | 590.75 |
| Sub Total | - | - | 117.52 | 2.60 | - | 365.41 | - | 191.95 | 7.92 | 685.40 |
| Hunter Valley | 3.75 | - | 152.47 | - | 0.65 | 801.46 | 3.47 | 100.51 | 11.17 | 1,073.48 |
| Lower North Coast | 10.20 | 108.10 | 274.83 | - | - | 487.32 | - | - | - | 880.45 |
| North Eastern | 13.11 | - | 404.90 | - | - | 958.72 | - | - | 15.64 | 1,392.37 |
| Upper Northern | 73.98 | - | 867.09 | 27.50 | 29.44 | 868.73 | - | - | 0.29 | 1,867.03 |
| North Western | 24.90 | 51.34 | 797.53 | 1.62 | - | 1,065.07 | - | 0.20 | 0.13 | 1,940.79 |
| Central Western | 19.80 | 35.78 | 1,164.31 | 19.17 | - 17 | 1,337.07 | - | - | 0.30 | 2,576.43 |
| Central Northern | 56.64 | 1,779.21 | 888.54 | - | 40.17 | 805.68 | - | - | - | 3,570.24 |
| Murray Darling. | - | 3,107.85 | 303.05 | - | 61.49 | 536.44 | - | - | - | 4,008.83 |
| Central Murray | 15.13 | 139.99 | 780.87 | 1.17 | -- | 999.02 | 0.63 | 0.28 | - | 1,937.09 |
| South Western | 21.72 | 50.64 | 616.24 | 1.62 | - | 1,690.06 | - | 4.20 | - | 2,384.48 |
| South Coast | 0.74 | 11.98 | 341.02 | 26.40 | - | 557.25 | - | 0.17 | 0.35 | 937.91 |
| Southern | - | - | 577.65 | - | 24.98 | 835.73 | - | 13.53 | 1.00 | 1,452.89 |
| TOTAL | 271.12 | 5,291.80 | 7,775.70 | 80.08 | 156.73 | 12,335.59 | 4.21 | 937.10 | 141.15 | 26,993.48 |

## PLANT AND MOTOR VEHICLES

Plant, to the value of $\$ 2,989,000$, was purchased for the replacement of existing plant and to provide for some additional requirements. For the first time, the Department purchased 3,000 -gallon water tankers for road construction in western areas and suction road sweepers for removing loose aggregate and debris from roads. The Department's helicopter was replaced by a larger machine powered by a gas turbine.

The value of motor vehicles of all types purchased during the year was $\$ 746,559$.

The total value of payments made to private owners for hire of plant was $\$ 6,005,873$, a decrease of approximately three per cent 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 6,209 jobs was completed by the workshop, to a total value of \$2,692,878.

The workshop's activities during the year were as follows:-
Property repairs and general building work ... ... ... $30 \%$
Sign manufacture ... ... ... ... ... ... ... $19 \%$
Manufacture and repair of plant and overhaul of ferries ... $18 \%$
Plumbing and electrical services to Metropolitan and
Parramatta Divisions and general transport services ... ... $12 \%$
Structural steelwork and concrete reinforcing steel
for bridges, etc. ......$\quad \ldots$
$\ldots$$\ldots$... ... $11 \%$
Other miscellaneous work ... ... ... ... ... ... $10 \%$
Building work included the construction of toll booths, as well as office and amenities buildings at Berowra for the Sydney-Newcastle Expressway, erection of amenities buildings at Wentworth Park and Werrington, major alterations to the Materials and Research Laboratory at Milson's Point and extensions to the toll offices at Mooney Mooney and 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 13,600 road signs were manufactured.
All plant and motor vehicle repairs for the Metropolitan Construction Works Office and a number of large plant repair jobs for other Works Offices were carried out.

Three 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.

A heavy duty centre-articulated linemarker was designed and manufactured. The manufacture of three additional truck-mounted linemarkers was well advanced.

A proto-type guardrail cleaning machine was designed and manufactured.
Steel handrails, totalling 1,800 feet in length, were fabricated for eight bridges and structural steelwork was fabricated for two bridges. Seventy sign structures were manufactured for the Sydney-Newcastle Expressway, including five of a major nature.

Approximately 1,150 tons of steel reinforcement were cut and bent to shape for use in concrete bridges and culverts.

Fifty-six bitumen sprayers, owned by contractors, Councils and the Department, were tested during the year for the purpose of issuing or renewing Sprayer Certificates.

An exhibit was constructed for the Royal Easter Show and a float for the Waratah Festival.

## Field Workshops

The Department's field workshops throughout the State numbered forty, including three established during the year at Bonshaw, Tumut and Walcha. An additional workshop was under construction at Wilcannia.

The third 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 welding, turbochargers, crawler tracks and air cleaners.

Plant inspectors carried out regular inspections and assisted workshop personnel with plant repair problems. With the assistance of a movie projector, a strip film projector and a tape recorder, 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 four to thirty-two apprentices.

## INSTRUCTION IN PLANT MAINTENANCE AND OPERATION

The activities of the School of Plant Instruction were continued throughout the year.

The standards of plant operation and maintenance were improved and the scheme was extended to provide for the training of potential and existing operators in respect of a wider variety of plant. In addition, training facilities were made available to a limited number of operators employed by Councils.

Instructions were given to Departmental operators of the following numbers and types of plant:-

| Graders $\quad \ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 203 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| Rollers $\quad \ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 147 |
| Tractors (crawler) | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 106 |
| Tractors (rubber-tyred) | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 126 |  |
| Loaders (all types) | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 108 |
| Vehicles $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 33 |
| Miscellaneous | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 112 |
| Total | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 835 |

## TESTING OF MATERIALS AND RESEARCH

The Materials and Research Section, located in Head Office, was composed of the Materials and Research Engineer, four other engineers, the Principal Scientific Officer and five clerical officers.

All Divisions are now equipped to do their own routine testing. Following the establishment of separate soil testing facilities for the Metropolitan Division, the Central Testing Laboratory became free from routine divisional testing, except for materials such as bitumen, and was renamed the Materials and Research Laboratory.

The Materials and Research Laboratory was staffed by an EngineerManager, two supervising engineering analysts, seven other engineering analysts, thirty-two testing operators, twelve laboratory labourers as well as five laboratory equipment officers, a sampling officer and eight clerical officers.

At the end of the year the Divisional and Works Office Laboratories throughout the State employed fifteen engineering analysts, eighty-five testing operators and forty-six labourers.

## Divisional and Field Testing

Apart from the main laboratory at Milson's Point the Department had operating at the end of the year sixteen Divisional laboratories, seven Works Office
laboratories, three mobile units and a number of vehicles fitted for limited field control testing.

The new Central Mountains Divisional laboratory was established in an existing building at Bowenfels and commenced operating in March, 1969.

The Warringah Expressway laboratory at Milson's Point ceased functioning in November, 1968 and following completion of the Berowra-Hawkesbury River section of the Sydney-Newcastle Expressway the laboratory at Mooney Mooney was closed. The equipment from these laboratories was used to fit new laboratories established at Wilcannia and Moree and arrangements were made to move the laboratory building from Mooney Mooney to Ballina.

A new fog room for curing concrete samples was constructed at Waratah in conjunction with other facilities provided for the testing work involved in the erection of the new bridge over the North Arm of the Hunter River at Stockton.

During the year the Divisional and field laboratories processed 54,496 samples of road and bridge making materials, involving approximately 207,789 tests. The bulk of these were on soils and gravels, including stabilisation with additives such as lime, cement and bitumen emulsion. In addition, approximately 1,300 precast concrete culvert and bridge units and girders were load tested.

Field control work included 10,449 density-in-situ and 2,717 moisture content tests carried out during the construction of formations and pavements.

## Materials and Research Laboratory

Restoration work relating to the construction of the Warringah Expressway, renovations and extension of facilities at the Materials and Research Laboratory continued throughout the year. The new administrative section, store and combined lecture and recreation room were completed and occupied.

Testing equipment acquired during the year included vane boring apparatus and a 60 -ton capacity compression testing machine for aggregate and cement tests. A new four-wheel drive vehicle was obtained for geological inspections, seismic surveys and foundation exploration work.

The work carried out at the Materials and Research Laboratory involved 46,611 tests on a wide range of materials. Apart from the usual samples of soils, gravels, aggregates, concrete, lime, cement, bituminous materials, paints, steel reinforcement, neoprene rubber bearings and joint fillers, a variety of other tests were done. These involved such materials as epoxy resins, concrete additives, plastic subsoil drain pipes, retro-reflective materials and batteries.

Field services provided included seismic and geological surveys, skid resistance and benkelman beam tests and instrumentation for bridge foundation loading tests. In addition, the Laboratory Equipment Officers supplied a maintenance and calibration service throughout the State.

## Research

The research programme included 81 items grouped as follows:-
Soils and flexible pavements.
Stabilisation.
Compaction and consolidation.
Surfacing materials and methods.
Asphaltic concrete technology.
Portland cement concrete pavements.
Portland cement concrete technology.
Paints, coatings and road-marking materials.
Test equipment and procedures.
Miscellaneous materials, methods and investigations.
Bridges.
The analysis of the results of the field investigation of the performance of flexible pavements in the western area of the State proceeded during the year. Correlations between the existing pavement condition assessed by visual ratings,

- road roughness measured by a P.C.A. meter and various pavement material properties such as plasticity indices and gradings were studied, as well as the relationship between the strengths of subgrades, the various soil parameters and the pavement thickness requirements.

An investigation was carried out to determine the effectiveness of P.V.C. subsoil drainage pipes in comparison with earthenware and other types of pipe.

Work was continued on the measurement of skid resistance and the prediction of susceptibility to polishing. This research was extended to deal with the development of skid resistant surfacings. Trial sections of bituminous plant mixes with tar additives, open graded mixes, Trinidad asphalt and special aggregates were studied.

In recent years the use of tar in roadworks has been largely confined to priming and precoating. However, a wide range of processed coke oven tars became available during the year for use as binders in sealing and plant mix work. As previous experience with tar binders indicated a lack of durability and hardening caused by loss of volatile oils, oxidation changes and loss of oils by adsorption, an investigation into these aspects was commenced. In conjunction with the laboratory work, field trials were carried out using tar binders for seals and densely graded plant mixes.

## CLASSIFICATION OF ROADS

The mileage of proclaimed Main Roads (State Highways, Trunk Roads and Ordinary Main Roads) in the State at the 30th June, 1969, totalled 22,295 miles.

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 26,993 miles.

Mileages of roads within the various classifications were:

| Expressways | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 24 miles* |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| State Highways | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 6,535 miles |
| Trunk Roads | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 4,210 miles |
| Ordinary Main Roads | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 11,550 miles |  |
| Secondary Roads $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 164 miles |  |
| Tourist Roads | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 219 miles |
| Developmental Roads | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 2,719 miles |  |
| Unclassified Roads | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 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 three Main Roads were altered.

In addition, one road was proclaimed as a Tourist Road, five roads were proclaimed as Developmental Roads and three Developmental Works were proclaimed.

During the year, four Developmental Roads and five Developmental Works were deproclaimed. Details of these proclamations, deproclamations, extensions and alterations are listed in Appendices Nos. 12, 12A, 13, 14 and 15.

The system of Main Roads at the 30th June, 1969 and the boundaries of the Department's Divisions are shown on the map on the inside of the front cover of this Supplement.

## WIDENING OF METROPOLITAN MAIN ROADS

During the year land was acquired for the widening of the following roads in the County of Cumberland:-

Prince's Highway (State Highway No. 1), Railway Parade, Engadine, (Engadine By-pass), in the Shire of Sutherland.
Great Western Highway (State Highway No. 5), at Wattle Street (Secondary Road No. 2056), Haberfield, in the Municipality of Ashfield.

Great Western Highway (State Highway No. 5), between Blacktown Road . (Secondary Road No. 2085), Prospect and Castlereagh Road (Main Road No. 155), Penrith, in the Municipalities of Holroyd and Blacktown and the City of Penrith.
Pacific Highway (State Highway No. 10), between Hornsby and Berowra, in the Shire of Hornsby.
Pennant Hills Road (State Highway No. 13), at Mobb's Hill, in the Shires of Baulkham Hills and Hornsby.
Lane Cove Road (Main Road No. 162), between Epping Road (Main Road No. 373) and De Burgh's Bridge, in the Municipality of Ryde.
Mona Vale Road (Main Road No. 162), in the Municipality of Ku-ring-gai and the Shire of Warringah.
Miller Street (Main Road No. 164), between Falcon Street (Main Road No. 164) and Rosalind Street, in the Municipality of North Sydney.

Military Road and Spit Road (Main Road No. 164), in the Municipality of Mosman.
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) and Gardener's Road (Main Road No. 183), in the Municipality of South Sydney.
Botany Road (Main Road No. 170), at the Mascot Shopping Centre, in the Municipality of Botany.
Gardener's Road (Main Road No. 183), at Florence Avenue, Eastlakes, in the Municipality of Randwick.
Church Street (Main Road No. 184), between Barney Street and North Rocks Road, Parramatta North, in the City of Parramatta.
King George's Road (Main Road No. 315), Beverly Hills, in the Municipality of Hurstville.
Boundary Street and Babbage Road (Main Road No. 328), in the Municipalities of Willoughby and Ku-ring-gai.
Wentworth Avenue (Main Road No. 344), between The Lakes Golf Club and Botany Road (Main Road No. 170), in the Municipality of Botany.
Henry Lawson Drive (Main Road No. 508), Padstow Heights, in the Municipality of Bankstown.
South Dowling Street, between Dacey Avenue (Main Road No. 528) and Lenthall Street, Kensington, in the City of Sydney and the Municipalities of South Sydney and Randwick.
Stacey Street, Bankstown, in the Municipality of Bankstown.

## WIDENING OF RURAL ROAD RESERVES

The work in this field continued to be concerned mainly with reviewing earlier proposals and approved schemes. The reviews resulted from the need for superior design standards to those on which the previously approved schemes were based.

The general policy for widths remains unchanged and approved widths are as follows:-

Classified roads (other than Tourist Roads)-

In western areas
In rural areas (other than above)
In built-up areas
Tourist Roads-
In rural areas 2 chains
In built-up areas
$1 \frac{1}{2}$ chains

These widths are exceeded in special cases and where dictated by physical conditions.

The aim is to provide a road reserve width adequate for future requirements.
An additional length of 8.2 miles of widening on classified roads was approved during the year.

## ADVANCE PLANNING

The Road Needs Survey for the ten-year period 1969 to 1979, as arranged by the Commonwealth Bureau of Roads in conjunction with the National Association of Australian State Road Authorities, proceeded to completion in New South Wales under the Department's direction. Processing of the survey data was carried out by the Department and summaries of the results and other data were supplied to the Commonwealth Bureau of Roads for use by the Bureau in advising the Commonwealth Government in regard to the provision of financial aid to the States for roads.

Further progress was made during the year in connection with a statistical investigation of road construction costs and compilation of a price index series for use in the adjustment of estimates of construction costs in accordance with economic trends.

The Department continued to contribute to the investigation of road economics by providing an engineer to work on a research project relating to the determination of road-user costs. The initial project proceeded continuously for a period of three years, 1965 to 1968, at the School of Traffic Engineering, University of New South Wales, under the auspices of the Australian Road Research Board. Further supplementary investigations were carried out during the past year and a detailed report on the whole project is being completed.

Staff and equipment for electronic data processing for technical purposes are located in the Department's Advance Planning Section.

Usage of the small technical computer continued to increase so that towards the end of the year computer time used was about 140 hours per month, representing an increase of approximately forty per cent in twelve months. This substantial increase in computer usage was achieved without increase in the number of personnel engaged on data processing work. The computer is used in the fields of bridge design, traffic analysis and assignment, cadastral and photogrammetric survey, road needs data processing, pavement research, road design, construction scheduling, and library records.

At the end of the year, arrangements had been made for the provision of additional core storage for the computer and the attachment of an automatic drafting machine to the computer was under consideration.

## PLANNING FOR DEVELOPMENT OF THE MAIN ROADS SYSTEM IN SYDNEY, NEWCASTLE AND WOLLONGONG

Sydney
The State Planning Authority recently issued an Outline Plan for the Sydney Region, which provides for an anticipated five million people by the year 2000 A.D., or double the population capacity of the prescribed County of Cumberland Planning Scheme. The effect of these latest proposals upon the Main Roads Development Plan was studied and resulted in a considerable growth in the Department's urban planning activities during the year.

Outline designs for a number of expressways and surface roads were reviewed in the light of increased traffic requirements and the need for some important additional routes, such as a ring road between Ingleburn and Galston, was investigated. These investigations are still proceeding.

Plans and reports were prepared for altering the location of Main and County Roads in the vicinity of Oxford Falls, Lane Cove Valley, Sydney (Kingsford Smith) Airport and at Ashfield, King's Cross, Edgecliff, Paddington, Darlinghurst, Newtown and Chullora.

Frequent consultations were held with Councils and the State Planning Authority in the preparation of local planning schemes in the County of Cumberland. The Department made representations concerning road proposals provided in seventeen of the schemes that were exhibited during the year.

The Department assisted the State Planning Authority in planning roads for the proposed new satellite towns to be located at Mount Druitt, Campbelltown and the Penrith-St. Marys area.

The volume of written enquiries regarding the effect of proposed County Roads upon private properties increased by thirteen per cent during the year and were answered at an average rate of 8,000 per month.

The Department was represented on various interdepartmental committees dealing with such urban planning matters as port development, decentralisation, containerisation, environment and the Eastern Suburbs Railway.

Considerable activity took place in the preparation of road needs information which was furnished to the Commonwealth Bureau of Roads and resulted in changes being made in the basis for Commonwealth Aid Roads (CAR) grants. Some of this information was assembled by Councils and collated by the Department.

## Newcastle

Planning of the Main Roads System in the Northumberland County District was under continuing review to assess the need for modifications to take account of the growth and development of the region.

The Department is responsible for the fixing in this area of the boundaries of approximately 113 miles of the Main Roads System and of this approximately 46 miles are proposed new routes. These new routes include the northern end of the Sydney-Newcastle Expressway between Swansea and Adamstown Heights, State Highway No. 23 between Bennett's Green and Sandgate, a new location for the New England Highway (State Highway No. 9) to avoid the built-up area of Maitland and a route across Kooragang Island.

To date the location and boundaries have been fixed over approximately 58 miles and investigation is proceeding on the remaining 55 miles.

## Wollongong

The planned Main Roads System for the Wollongong-Port Kembla area was under continuing review. During the year consideration was given to the inclusion in the system of additional routes but there was insufficient justification for any additions at that stage. Review of boundaries for the proposed expressway system, over a length of about 12 miles, was continued.

## COUNTRY ROAD LOCATION, INVESTIGATION AND AERIAL PHOTOGRAPHY

Road location proposals developed or examined during the year totalled 415 route miles, and involved 141 bridge sites. Of this length, location was finalised over 187 route miles, including 68 bridge sites. Expressway location investigation was carried out over an increased mileage including lengths between Sydney and Mittagong, Sydney and Newcastle and northerly from Brunswick Heads.

The expenditure on photogrammetry from outside sources during the year was $\$ 66,929$ which is about twenty per cent lower than the previous year.

The Zeiss Stereometrograph which was placed in service during the previous year was in steady use, both for checking work carried out for the Department by outside bodies and for preparing contour plans of specific works. Equipment for recording terrain data in digital form was added to it, and trial use was made of this digital data for drawing contour plans by means of the Department's computer and hired time on a flat bed plotter. The Department is continuing investigations into this method.

Aerial photography was undertaken over a route mileage of 520 miles during the year. This photography was over areas previously photographed and was taken
to give greater accuracy and larger scale and to bring existing photography up to date.

The Department's helicopter was used to a considerable extent in field examination of various proposals.

## ROAD TRAFFIC SURVEYS

## Permanent and Semi-Permanent Stations

At the beginning of the year, traffic was being counted mechanically at 140 locations and, in addition, returns of traffic volumes at 15 ferry sites were being received. During the year the number of permanent and semi-permanent stations was increased to 164 while the number of ferry stations remained unchanged.

Following the opening of the section of the Sydney-Newcastle Expressway between Berowra and Hawkesbury River in December, 1968 a permanent counting station to record hourly volumes by directions was established on this section of the tollway.

## Divisional Traffic Volume Surveys

Detailed traffic volume surveys were completed in the County of Cumberland and the Southern Division, and were commenced in the Central Western, Upper Northern and South Western Divisions.

## Classification Surveys

In conjunction with divisional area traffic surveys, twelve-hour classification counts carried out at major intersections in the North Western Division were completed.

## Special Purpose Traffic Counts

Origin and Destination Surveys were carried out at Tamworth, in the North Western Division, and in the Hunter's Hill, Drummoyne, Gladesville and Rozelle areas in the County of Cumberland, in order to assist investigations for planned road systems in these areas. In addition special counts were undertaken at the entry and exit points of the Warringah Expressway to assess future demands in connection with the planning of the extension of the Warringah Expressway.

## Publication of Data

Data collected from the 1966 traffic volume surveys in the Southern, South Western and Central Murray Divisions, and from the 1967 traffic volume surveys in the Murray Darling and Central Northern Divisions were published in four separate volumes.

Preparation of traffic volume publications for five other Divisions is nearing completion.

## Annual Average Daily Traffic Volumes

Annual Average Daily Traffic Volumes obtained from permanent and semipermanent stations for the calendar year 1968 are listed below. The corresponding volume for 1967 and the percentage changes in volume, where available, are also shown.

| Local Government Area | Location |  | Annual Average Daily Traffic Volume |  | Percentage Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1967 | 1968 |  |
| Sydney-Newcastle Expressway |  |  |  |  |  |
| Gosford | Hawkesbury River-Calga | Tollway south of Mt. White | 10,270 | 11,290 | $+10$ |
| North South Arteri | Road (West Wollongong Se |  |  |  |  |
| Wollongong | Gipps Street Overbridge |  | 13,580 | 16,820 | + 24 |
| Bradfield Highway Sydney | Sydney Harbour Bridge |  | 109,760 | 116,200 | + 6 |


| LocalGovernmentArea | Location | Annual Average Daily Traffic Volume |  | Percentage Change |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1967 | 1968 |  |
| State Highway No. 1-Prince's Highway |  |  |  |  |
| Rockdale | Tempe-Bridge over Cook's River | 48,230 | 49,960 |  |
| Sutherland | Sylvania-Bridge over George's River | 46,710 | 48,450 | + 4 |
| Sutherland | Loftus-Railway Overbridge | 18,210 | 19,570 | + 7 |
| Wollongong | North of Main Road No. 513-(Mount Ousley Road) | 10,180 | 10,890 | + 7 |
| Wollongong | South of Smith Street............................. | 20,470 | 20,990 | + 3 |
| Kiama | 1 mile south of Post Office | 4,750 | 5,100 | 7 $+\quad 7$ |
| Eurobodalla | Bateman's Bay-Bridge over Clyde River | 2,490 | 2,630 |  |
| Mumbulla | 1 mile north of State Highway No. 4 (Snowy Mountains Highway) | 920 | 960 | + |
| Imlay | Eden-2 miles north of Post Office .................... | 980 | 1,080 | + 10 |
| State Highway No. 2-Hume Highway |  |  |  |  |
|  | East of Bruce Street | 20,480 | 20,440 |  |
| Bankstown | Lansdowne - east of State Highway No. 13 (Woodville Road) | 32,030 | 32,980 | + 3 |
| Liverpool | Cross Roads--east of York Street | 25,890 | 26,220 |  |
| Mittagong | Mittagong-2 miles northeast of Post Office | 5,970 | 6,270 | + 5 |
| Mulwaree | Yarra-west of State Highway No. 3 (Federal Highway) | 2,630 | 2,780 | + 6 |
| Goodradigbee | Yass-4 miles west of Post Office | 3,670 | 3,860 | + 5 |
| Holbrook | Holbrook-2 miles north of Post Office | 1,880 | 1,820 |  |
| State Highway No. 3-Federal Highway |  |  |  |  |
|  | Yarra--south of State Highway No. 2 (Hume Highway) | 2,350 | 2,460 | + 5 |
| State Highway No. 4-Snowy Mountains Highway |  |  |  |  |
| Mumbulla | West of State Highway No. 1 (Prince's Highway) | 510 | 570 | +12 |
| Snowy River | East of Main Road No. 286 (Cooma-Berridale Road) | 2,070 | 1,920 | - 7 |
| Snowy River | Adaminaby- 0.8 miles west of Rosedale Road .... | 680 | 630 | - |
| State Highway No. 5-Great Western Highway |  |  |  |  |
|  |  |  |  |  |  |  |
| Parramatta | Clyde-Railway Level Crossing | 43,780 | 46,200 | + 6 |
| Blacktown | Wallgrove-Bridge over Eastern Creek | 19,760 | 21,430 | + 8 |
| Penrith | Bridge over Nepean River | 12,920 | 14,260 | + 10 |
| Turon | West of Blaxland Shire Boundary | 2,670 | 2,770 |  |
| State Highway No. 6-Mid Western Highway |  |  |  |  |
| Waugoola | Cowra-Bridge over Waugoola Creek | 1,730 | 1,700 |  |
| Weddin | Marsden-East of State Highway No. 17 (Newell Highway) | 260 | 270 | + 4 |
| Bland | Wyalong-East of Trunk Road No. 57 (Temora Road) | 1,080 | 1,240 | +15 |
| Hay | Hay-20 miles east of Post Office ................... | 420 | 480 | +14 |
| State Highway No. 7-Mitchell Highway |  |  |  |  |
| Canobolas | Orange-1.5 miles east of Main Road No. 245 (Piesle Street) | 3,190 | 3,150 |  |
| Canobolas | Orange--3 miles north of Post Office | 1,640 | 1,640 |  |
| Talbragar | Dubbo-1.2 miles east of East Dubbo level crossing | 1,560 | 1,600 | +3 +7 |
| Darling | Bourke-5 miles south of Post Office | 140 | 150 |  |
| State Highway No. Cobar | -Barrier Highway <br> East of Trunk Road No. 61 (Orange-Cobar Road) | 300 | 310 |  |
| State Highway No. 9-New England Highway |  |  |  |  |
| Patrick Plains | 2.9 miles east of Main Road No. 128 (Singleton-Gostwyck Road) | 3,090 | 3,430 | + 11 |
|  | Tamworth- 3.4 miles south of Post Office | 1,500 | 1,550 | + 3 |
| Cockburn | Tamworth- 0.6 miles north of Main Road No. 105 (Nem-ingha-Scone Road) | 2,790 | 3,090 | +11 |
| Severn | Glen Innes-south of Glen Innes Municipal Boundary | 1,780 | 2,260 | $+27$ |
| State Highway No. 10-Pacific Highway |  |  |  |  |
|  |  |  |  |  |  |  |
| Hornsby | Waitara-north of State Highway No. 13 (Pennant Hills | 24,880 | 26,470 |  |
| Hornsby | Brooklyn-Bridge over Hawkesbury River | 12,330 | 13,470 | +9 |
| Gosford | Mount White | 1,840 | 1,870 | + |
| Lake Macquarie | Swansea-2 miles south of bridge over entrance to Lake Macquarie | 7,590 | 7,960 | + 5 |
| Lake Macquarie | Charlestown-south of Smart Street | 30,110 | 31,390 | + 4 |
| Newcastle | Hexham-Bridge over Hunter River | 9,200 | 10,190 | +11 |
| Port Stephens | Karuah-Bridge over Karuah River . | 3,090 | 3,370 | $+\quad 9$ |
| Manning | Nabiac-Bridge over Wollomba River | 2,530 | 2,700 | 7 $+\quad 7$ |
| Hastings | Bridge over Hastings River ........ | 2,230 | 2,320 | $+$ |
| Ulmarra | South Grafton-South of Developmental Road No. 1253 (Grafton By-Pass Road) | 2,030 | 2,080 |  |
| Maclean | Harwood-Bridge over Clarence River | 2,280 | 2,280 | + 0 |
| Tintenbar | Ballina-South of State Highway No. 16 (Bruxner Highway) | 1,850 | 1,960 | $+\quad 6$ |
| Tweed | Boyd's Point-South of Drydock Road ................ | 7,710 | 8,680 | +13 |
| State Highway No. 11-Oxley Highway |  |  |  |  |
| Hastings - | Wauchope-1.6 miles west of Beechwood Road . 3 ........ | 740 | 770 | + |
| Peel | Tamworth- 5 miles west of Main Road No. 130 (TamworthWerris Creek Road) | 1,210 | 1,270 | + 5 |
| State Highway No. 12-Gwydir Highway |  |  |  |  |
| Severn | Gibraltar Range Tick Gate | 330 | 350 |  |
| Boolooroo | Moree-2 miles east of Post Office | 900 | 910 |  |


| Local  <br> Government  <br> Area Location | Annual Average Daily Traffic Volume |  | Percentage Change |
| :---: | :---: | :---: | :---: |
|  | 1967 | 1968 |  |
| State Highway No. 13-Woodville Road, Church Street and Pennant Hills Road |  |  |  |
| Fairfield Villawood-North of State Highway No. 2 (Hume Highway) | 21,540 | 23,060 | + |
| Hornsby West Pennant Hills--South of Copeland Road .......... |  | 18,800 |  |
| State Highway No. 14-Sturt Highway |  |  |  |
| $\begin{array}{ll}\text { Kyeamba } & 0.3 \text { miles east of Main Road No. } 384 \text { (Alfred Town-Kyeamba } \\ & \text { Road) } \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~\end{array}$ | 1,020 | 1,050 | + 3 |
| Hay Hay-2 miles west of Post Office . . . . . . . . . . . . . . . . . | 750 | 840 | +12 |
|  | 850 | 790 | $-7$ |
| State Highway No. 15-Barton Highway Goodradigbee $\quad$ Yass-South of State Highway No. 2 (Hume Highway) | 1,640 | 1,820 | $+11$ |
| State Highway No. 16-Bruxner Highway <br> Tintenbar Ballina-2 miles west of State Highway No. 10 (Pacific |  |  |  |
|  |  |  |  |  |
| Gundurimba McKee's Hill Post Office ................................. | 1,580 | 1,730 | + 9 |
| Tenterfield West of State Highway No. 9 (New England Highway) | 210 | 220 | + 5 |
| State Highway No. 17-Newell Highway |  |  |  |
| Boolooroo Camurra-Railway level crossing No. 209 | 730 | 590 | -19 |
| Talbragar Dubbo-2 miles north of Post Office | 2,390 | 2,680 | +12 |
| Parkes $\quad 2.1$ miles north of Post Office | 1,110 | 1,380 | + 24 |
| Narrandera 2 miles east of Post Office | 940 | 1,040 | $+11$ |
| Berrigan Finley-2 miles south of Post Office | 1,140 | 1,210 | +6 |
| State Highway No. 18-Castlereagh Highway Coonamble $\quad 2$ miles south of Post Office | 460 | 560 | +22 |
| State Highway No. 19-Monaro Highway |  |  |  |
| Monaro Bunyan-Bridge over Cooma Creek | 1,270 | 1,330 | + 5 |
| Bombala $\quad 0.5$ miles north of Iris Street | 450 | 480 |  |
| Monaro $\begin{gathered}\text { Nimmitabel--0.8 miles south of State Highway No. } 4 \text { (Snowy } \\ \text { Mountains Highway) ..................................... }\end{gathered}$ | 690 | 730 | $+6$ |
| State Highway No. 20-Riverina Highway |  |  |  |
| Hume Albury-4 miles west of Post Office | 820 | 870 | + 6 |
| Deniliquin 1 mile east of Main Road No. 552 (Deniliquin-Jerilderie Road) | 930 | 920 | - |
| State Highway No. 21—Cobb Highway Murray Deniliquin- 2 miles south of Post Office | 860 | 830 | - 3 |
| State Highway No. 22-Silver City Highway Broken Hill 8 miles south of Post Office | 180 | 200 | +11 |
| State Highway No. 25-Illawarra Highway Shellharbour Macquarie Pass . | 1,280 | 1,350 | $+5$ |
| State Highway No. 26-Calga-Peat's Ridge-Ourimbah Gosford Peat's Ridge-At Post Office | 8,510 | 8,420 | $-1$ |
| Trunk Road No. 51-Bateman's Bay-Canberra <br> Eurobodalla Nelligen-Bridge over Clyde River | 1,020 | 970 | - 5 |
| Trunk Road No. 55-Marrangaroo-Mullaley <br> Cudgegong Mudgee--0.5 miles south of railway level crossing | 1,160 | 1,150 | - 1 |
| Trunk Road No. 61-Orange-Cobar <br> Canobolas Orange-At Canobolas Shire Boundary | 1,450 | 1,490 | $+3$ |
| Trunk Road No. 65-Ewingsdale-Lismore |  |  |  |
|  | 1,290 | 1,310 | + 2 |
| Trunk Road No. 74-Armidale-South Grafton <br>  | 420 | 450 | $+7$ |
| Trunk Road No. 76-Raleigh-Ebor |  |  |  |
|  | 1,200 | 1,270 | $+6$ |
| Trunk Road No. 78-Olympic Way |  |  |  |
| Mitchell $\begin{array}{r}\text { Wagga Wagga-1 mile north of Main Road No. } 240 \text { (Coola- } \\ \text { mon Road) } \ldots . . . \text {. . . . . . . . . . . . . . . . . . . . . . . . . . . }\end{array}$ | 1,620 | 1,640 | + 1 |
| Trunk Road No. 83-Grafton-Casino-Woodenbong |  |  |  |
| Grafton Bridge over Clarence River | 10,560 | 11,970 | $+13$ |
| Copmanhurst $\begin{gathered}\text { Koolkhan- } 0.3 \text { miles south of Main Road No. } 150 \text { (Kool- } \\ \text { khan-Woodenbong Road) }\end{gathered}$ | 750 | 810 | + 8 |
| Kyogle Kyogle-0.5 miles south of Highfield Road | 1,440 | 1,400 | - 3 |
| Main Road No. 101—West Maitland_-Weismantels <br> Port Stephens Paterson-Bridge over Paterson River ....................... | 320 | 300 | - 6 |


| LocalGovernmentArea Loc | Annual Average Daily Traffic Volume |  | Percentage Change |
| :---: | :---: | :---: | :---: |
|  | 1967 | 1968 |  |
| Main Road No. 104-East Maitland--Raymond Terrace <br> Port Stephens Raymond Terrace-Ferry over Hunter River | 280 | 269 |  |
|  | 26,720 3,818 | 28,030 3,910 | $+\quad 5$ $+\quad 2$ |
| $\begin{aligned} & \text { Main Road No. 139-Beecroft Road } \\ & \begin{array}{l} \text { Epping } \end{array} \quad \text { North of Main Road No. } 373 \text { (Carlingford Road) ......... } \end{aligned}$ |  | 17,820 |  |
| $\begin{aligned} & \text { Main Road No. 147-Woodburn-Lismore } \\ & \text { Woodburn } \end{aligned}$ | 180 | 197 | + 9 |
| Main Road No. 149-Casino-Coraki-Buckendoon Woodburn Coraki-Ferry over Richmond River . . . . . . . . . . . . . . . . . . . | 137 | 158 | $+15$ |
| Main Road No. 152-Lawrence_-Maclean_Yamba Maclean Bluff Point-Ferry over Clarence River | 90 | 96 | + 7 |
|  | 15,100 | 15,390 20,830 | + 2 |
| Main Road No. 164 -Spit Road Manly The Spit-Bridge over Middle Harbour ................. | 43,150 | 44,110 | + 2 |
| Main Road No. 165-Commercial Road-Victoria Road |  |  |  |
| Leichhardt $\quad$ Glebe Island--Bridge over Johnston's Bay | 42,470 59 | 43,560 62,610 | +3 $+\quad 4$ |
| Drummoyne Parramatta $\quad \begin{aligned} & \text { Gladesville-Bridge over Parramatta River } \\ & \text { Parramatta-East of State Highway No. } 13\end{aligned}$ | 59,980 | 62,610 18,560 | + 4 |
| $\begin{array}{cc}\text { Main Road No. } & \text { 166-Huntley's Point-Lane Cove } \\ \text { Hunter's Hill } & \text { Bridge over Tarban Creek } \ldots . . . . . \\ \text { Lane Cove } & \text { Figtree Bridge over Lane Cove River }\end{array}$ | 29,840 30,050 | 31,960 31,320 | $+\quad 7$ $+\quad 4$ |
| Main Road No. 167-Canterbury Road-Newbridge Road Bankstown Milperra-Bridge over George’s River Canterbury Wiley Park--East of Canary Road . . | 25,740 33,120 | 28,810 33,770 | +12 $+\quad 2$ |
| Main Road No. 168-Forest Road <br> Sutherland Lugarno-Ferry over George's River . . . . . . . . . . . ........... | 1,464 | 1,468 | + 0 |
| Main Road No. 170—Botany Road Botany Rosebery—North of Main Road No. 183 (Rolfe Street) .. |  | 23,960 |  |
|  |  | 51,760 |  |
| $\begin{aligned} & \text { Main Road No. 172-Oxford Street } \\ & \text { Woollahra } \\ & \text { Woollahra-West of Ocean Street } \end{aligned}$ | 34,930 | 37,080 | + 6 |
| Main Road No. 173-New South Head Road Woollahra Edgecliff—West of Ocean Street .......................... |  | 42,300 |  |
| Main Road No. 177-Appin Road <br> Campbelltown Campbelltown- 0.5 miles north of Post Office ............. | 8,560 | 9,040 | $+6$ |
| Main Road No. 179-Menangle Road Wollondilly Maldon-railway level crossing | 1,190 | 1,150 | - 3 |
| Main Road No. 181-McGraths Hill-Singleton Baulkham Hills Webb's Creek—Ferry over Hawkesbury River . . . . . . . . . . . . | 156 | 151 | - 3 |
| Main Road No. 182—Windsor—Sackville Reach <br> Baulkham Hills Sackville Reach—Ferry over Hawkesbury River ........... | 181 | 214 | $+18$ |
| Main Road No. 184-Windsor Road <br> Baulkham Hills Kellyville-North of Main Road No. 157 (Showground <br> Road) |  | 12,420 |  |
| Main Road No. 186-Mount Keira Road Wollongong West Wollongong-East of Robson's Road .............. | 8,230 | 10,930 | $+33$ |
|  |  | 20,630 |  |
| Main Road No. 194-General Holmes Drive Botany $\quad 1.3$ miles east of Bridge over Cook's River ................ | 50,180 | 52,520 | $+5$ |
| Main Road No. 199—Rocky Point Road_Taren Point Road Sutherland Captain Cook Bridge over George's River | 32,460 | 34,920 | + 8 |
| Main Road No. 200-Concord Road Ryde Uhrs Point—Bridge over Parramatta River ................. | 37,180 | 37,700 | + 1 |


| LocalGovernmentArea Location | Annual Average Daily Traffic Volume |  | Percentage Change |
| :---: | :---: | :---: | :---: |
|  | 1967 | 1968 |  |
| Main Road No. 217-Birmingham Gardens-W yong <br> Lake Macquarie Boolaroo-North of First Street . . . . . . . . . . . . . . . . . . . . . . . . . | 11,530 | 11,940 | + 4 |
| Main Road No. 220-Glendon Brook-Cessnock—Brunkerville-Toronto Cessnock Brunkerville-Post Office | 2,180 | 2,460 | $+12$ |
| $\begin{array}{cc} \text { Main Road No. } 223-\text { West Wallsend-Kurri Kurri } \\ \text { Newcastle } & \text { New Lambton Heights-North of Ridgeway Road . . . . . . . } \end{array}$ | 16,900 | 16,110 | - 5 |
| Main Road No. 225-Wiseman's Ferry-Spencer-Central Mangrove <br> Baulkham Hills Wiseman's Ferry-Ferry over Hawkesbury River........... . . | 351 | 369 | + 5 |
| Main Road No. 227-Port Hacking Road Sutherland Sylvania-North of Box Road |  | 18,840 |  |
| Main Road No. 261-Moss Vale-Bomaderry <br> Wingecarribee Fitzroy Falls—North of Post Office | 540 | 560 | + 4 |
| $\begin{aligned} & \text { Main Road No. 286-Mount Kosciusko Road } \\ & \text { Snowy River } \quad \text { Jindabyne- } 10 \text { miles northwest of Post Office } \end{aligned}$ | 1,120 | 790 | -29 |
| Main Road No. 295-Five Islands Road Wollongong $\quad$ Cringilla-East of Main Road No. 568 (Springhill Road) .. | 27,800 | 29,770 | + 7 |
| Main Road No. 309-Aston Street Parramatta Camellia-South of River Road | 14,610 | 16,900 | +16 |
|  |  | 31,900 17,070 30,770 |  |
| Main Road No. 328-Warringah Road <br> Warringah Forestville--West of Melwood Avenue . <br> ..................... | 33,780 | 37,150 | $+10$ |
| Main Road No. 332—Berowra Waters Road Hornsby Berowra Waters-Ferry over Berowra Creek | 179 | 195 | $+9$ |
|  | 10,730 | 11,740 | + 9 |
| Main Road No. 366- Bobbin Head Road Ku-ring-gai North Turramurra-South of Milton Street |  | 4,070 |  |
| Main Road No. 369-Wymah Ferry Road Hume Wymah-Ferry over Murray River | 12 | 9 | - 15 |
| Main Road No. 373-Epping Road <br> Hornsby Epping-Bridge over Terry's Creek .......................... | 18,170 | 20,720 | + 14 |
| Main Road No. 503-Wilberforce-Singleton Patrick Plains Howes Valley- 3.5 miles north of Post Office .............. | 990 | 1,070 | $+8$ |
| Main Road No. 508-Henry Lawson Drive <br> Hurstville Peakhurst-Bridge over Salt Pan Creek .................... |  | 18,530 |  |
| Main Road No. Parramatta $\underset{\text { Silverwater-Bridge over Parramatta River ................ }}{\text { Silverwater }}$ Road | 23,060 | 25,530 | + 11 |
| Main Road No. 556-Gladstone-Smithtown-Seven Oaks <br> Macleay Smithtown-Ferry over Macleay River | 395 | 417 | $+6$ |
|  | 1,100 | 1,450 | $+32$ |
| Main Road No. 581-North Wollongong-Coniston <br> Wollongong North of Main Road No. 582 (Crown Street) .............. | 10,850 | 11,320 | + 4 |
| Main Road No. 582—Crown Street Wollongong West of Main Road No. 581 (Corrimal Street) | 12,120 | 15,810 | $+30$ |
| Other Than Main Roads |  |  |  |
| Concord Mortlake-Ferry over Parramatta River | 210 | 229 | + 9 |
| Sydney Pyrmont-Bridge over Darling Harbour | 50,530 | 51,290 | + 2 |
| Wakool Speewa-Ferry over Murray River | 57 | 52 | - 9 |
| Ulmarra Ulmarra-Ferry over Clarence River | 38 | 36 | - 5 |

## EMPLOYMENT AND INDUSTRIAL

The number of wages employees (including contractors' employees and contract lorry owner-drivers) engaged on maintenance and construction of all Main Roads and construction of Developmental Roads by the Department of Main Roads and Councils at 30th June, 1969, was 11,428, compared with 11,431 at 30th June, 1968.

No major industrial dispute occurred during the year.

## OFFICE PREMISES AND HOUSING FOR STAFF

Some remodelling of the existing Head Office space was carried out to provide for increased staff by a more efficient space allocation. The preparation of plans was commenced for the renovation and remodelling of a Pitt Street property, which adjoins Head Office at the rear and was recently purchased to provide additional office space. A temporary office was established at 165 Darlinghurst Road, King's Cross in order to deal with enquiries from property owners and tenants affected by the King's Cross Road Project.

Contracts were let for the construction of a testing laboratory at Wagga Wagga and extensions to the Divisional Office at Newcastle. Plans and specifications were completed for alterations and extensions to the Grafton Divisional Office.

The construction of a Snow Clearing Depot at Wilson's Valley was completed and new Works Offices at Bonshaw and Tumut were nearing completion. Contracts were let for new Works Offices at Wilcannia and Bowenfels. The preparation of plans was commenced for new Works Offices at Thornleigh, Yagoona, Singleton and Murwillumbah.

Accommodation was provided for toll collectors at Berowra and extensions were carried out to the Toll Office at the southern end of the Sydney Harbour Bridge.

The preparation of plans was commenced for extensive remodelling to provide modern facilities at the Materials and Research Laboratory, Milson's Point.

Five transportable houses were erected at Wilcannia and one at Tibooburra for staff accommodation. One brick veneer house was completed at Lithgow and contracts for the erection of a further two were nearing completion. A contract was let for the erection of a Divisional Engineer's residence at Bega.

Sketch proposals and plans for one-man hut and mobile camp accommodation of an improved standard were prepared and a contract was let for the supply of 125 one-man huts.

## LIBRARY SERVICE

During the year the Department's Technical Library added 1,929 books, pamphlets and standards to the Head Office and Divisional Office Libraries bringing the total holdings to 28,310 publications.

Subscriptions were placed for an additional 10 periodical titles bringing the total number of periodical titles received to 387.

The library circulated 22,385 new periodicals to the staff, lent 9,284 items from stock, and issued five library bulletins.

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

## SYDNEY HARBOUR BRIDGE

## Financial Position

The toll income of the bridge exceeded the previous year's level by $\$ 289,939$. Expenditure at $\$ 3,541,515$ was $\$ 218,778$ more than the expenditure for $1967 / 68$. The increased expenditure was mainly due to rises in toll collection expenses,
alterations to archways for occupation by tenants, interest charges and the provision 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. $\$ 900,000$ was appropriated from the Sydney Harbour Bridge Account for construction of the Warringah Expressway approach to the Sydney Harbour Bridge.

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 1968/69 totalled 44,093,000 including 601,000 crossing 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 | Toll <br> Collections <br> $\$$ | Percentage <br> of Total Toll <br> Collection <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| Road vehicles (excluding omnibus <br> and exempt vehicles) <br> Railway passengers $\ldots \ldots$. <br> Omnibus passengers $\ldots \ldots \ldots .$. | $42,558,984$ |  |  |  |

The annual average daily traffic volume on the Sydney Harbour Bridge increased by six per cent to 116,200 vehicles per day. The highest volume recorded on any one day was 153,620 vehicles on 3rd April, 1969.

Peak-hour flows in the direction of major flow have also increased, due mainly to the effect of improved approaches to the bridge on the north side brought about by the construction of the first section of the Warringah Expressway. The southbound flow in six lanes in the morning peak period frequently exceeded 11,000 vehicles per hour. In the evening peak period, flows in the order of 9,800 vehicles per hour were recorded. The increase in the morning peak-hour flow was approximately eleven per cent above 1967/68 figures and the evening peak-hour flow increased by approximately nine per cent.

During the year, 2,932 vehicles were removed from the Sydney Harbour Bridge, Cahill Expressway and the Warringah Expressway by the Department's tow-truck organisation. This was an increase of 589 vehicles above the number removed in the previous year and would have been due, in part, to an extension of the tow-truck service to the Warringah Expressway.

Details of breakdowns are shown in the following table:-
Breakdowns on Sydney Harbour Bridge, Cahill Expressway and Warringah Expressway, between $6.30 \mathrm{a} . \mathrm{m}$. and $6.30 \mathrm{p} . \mathrm{m}$. 1st July, 1968 to 30th June, 1969

| Cause of Breakdown | Week Days | Weekends and Public Holidays | Total | Percentage |
| :---: | :---: | :---: | :---: | :---: |
| Lack of Petrol | 879 | 159 | 1,038 | 35 |
| Mechanical Breakdown | 1,226 | 179 | 1,405 | 48 |
| Flat Tyres | 267 | 74 | 341 | 12 |
| Accidents | 125 | 10 | 135 | 5 |
| Abandoned | 10 | 3 | 13 | 0 |
|  | 2,507 | 425 | 2,932 | 100 |

## Maintenance

The fourth repainting of the Sydney Harbour Bridge was continued, a total of about 495,221 square yards of steelwork or approximately 83 per cent being completed by the end of the year.

An area of 71,300 square yards of steelwork was painted during the year, all of which was normal two-coat work.

Maintenance and inspection of steelwork, cranes, lifts, expansion joints, etc., were carried out during the year, and replacement of pipe handrail with flat bar to simplify and decrease the cost of maintenance was continued during the year. Reconstruction of the catwalks on the northern approach spans was completed.

All mercury vapour lamps were changed and fittings cleaned on the bridge and its approach roadways. On the Cahill Expressway all fluorescent tubes were changed and fittings cleaned. Routine electrical maintenance was continued on flood lighting, cranes, toll barriers, stairways, etc., and wiring was installed for a new security system.

## LEGISLATION

There were no amendments to the Main Roads Act, 1924/67 during the year.

## 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, 1968 are also shown.

|  |  |  | $1967 / 68$ | $1968 / 69$ |  |  |
| :--- | :---: | :--- | :--- | :--- | ---: | ---: |
| Vehicles stopped for checking | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 45,974 | 44,847 |
| Vehicles reported as overloaded | $\ldots$ | $\ldots$ | $\ldots$ | 7,516 | 7,491 |  |
| Drivers prosecuted for failure to obey lawful |  |  |  |  |  |  |
| direction | 91 | 78 |  |  |  |  |
| Notices of overloading issued | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 621 | 732 |

Prosecutions authorised ... ... ... ... ... 4,723 6,751

Number of cases heard by courts ... ... ... 6,029 6,954
Number of convictions recorded ... ... ... 4,679 5,202
Total penalties imposed ... ... ... ... ... \$216,918 \$243,444.40
Maximum penalty (\$400) ... ... ... ... 4
Average penalty, including all costs required to be met by the defendant per case ... ... ... ... $\$ 46.36$
$\$ 46.80$
Of the total number of vehicles stopped, 7,491 or approximately 16.7 per cent were found to be loaded in excess of Ordinance limits.

The following table summarises the extent of overloading found in these 7,491 vehicles:-

| Percentage Overloaded | $\begin{aligned} & 0-10 \\ & \text { Cwt. } \end{aligned}$ | $\begin{aligned} & 10-20 \\ & \text { Cwt. } \end{aligned}$ | Over 20 Cwt. | Over 40 Cwt. | Over 60 Cwt. | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of vehicles reported- |  |  |  |  |  |  |
| (i) Vehicles travelling interstate. | 488 | 987 | 837 | 269 | 226 | 2,807 |
| (ii) Vehicles travelling within the State.. | 538 | 1,591 | 1,588 | 537 | 430 | 4,684 |
|  | 1,026 | 2,578 | 2,425 | 806 | 656 | 7,491 |

The installation of new plant for heavy industry and the movement of large plant items resulted in many problems in the movement of such equipment and this led to a continuing increase in applications for permits to transport nondivisible 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, 5,271 such permits were issued involving the movement of 256,785 tons, compared with the issue of 4,994 permits involving 219,271 tons during the previous year.

Included in the Special Permits issued this year were 121 loads in excess of 75 tons each, the heaviest of these being the transportation of a 207 -ton boiler in a gross load of 257 tons. This boiler was transported by road from Garden Island to Cook's 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. Period 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 30 to 50 miles of a given point. During the year 344 Period Permits were issued compared with 228 issued during the previous year. The gross tonnage carried under Period Permits exceeded that carried under Special Permits.
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 of owners.

## 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 respective Executive Heads of these authorities comprise the membership of the Association.

The Association, which was 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 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, Bituminous Pavements, Plant and Equipment, Computers, Road Design and Construction and Maintenance Practice.

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 at the Department of Main Roads, New South Wales, and each of the Member Authorities contribute towards the cost of its operation.

Two meetings of the Association were held during the year. The Thirtyseventh Meeting was held in November, 1968 at Brisbane and the Thirty-eighth Meeting was held in Sydney and Wellington, New Zealand in conjunction with the Annual Meeting of the Australian Road Research Board in New Zealand in May, 1969.

During the year there have been eight meetings of the specialist committees and two meetings of the Principal Technical Committee at the various capital cities.

Representatives from other organisations including the Commonwealth Department of Shipping and Transport, the Commonwealth Bureau of Roads, the Commonwealth Scientific and Industrial Research Organisation and the Australian Road Research Board have attended some meetings of the committees where items of mutual interest were being considered.

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 completion of the Road Needs Survey for Ten Year Period 1969-79; the conduct of study courses in Australia for African and Asian Engineers; reference of items to the Standards Association of Australia for the preparation or revision of Standards; and the progress made with the preparation of the following publications:-
"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"

During the year the following technical manuals and bulletins were published:-

> "Australian Roads"-1968 edition. A bulletin on the activities of the Association and its Member Authorities
"Road Legislation and Practice"- 1968 edition. A bulletin giving a brief account of the principal road legislation in Australia as at June, 1968
"Technical Road Notes No. 12"

# Amendments to 1968 edition of "Vehicle Limits for Road Safety and Road Protection" <br> "Guide for the Design of Driveway Entrances on Major Roads in Urban Areas" <br> "Principles and Practice of Bituminous Surfacing-Vol. I-Sprayed WorkAmendment No. 1" <br> "Highway Bridge Design Specification-Amendment No. 3" <br> "NAASRA Publications, Policies and Guides"-1969 edition 

During the year the Department of Main Roads, New South Wales was host Authority to the Thirty-eighth Meeting of the Association in May, 1969 and to a meeting of the Computer Committee in December, 1968.

## AUSTRALIAN ROAD RESEARCH BOARD

The Australian Road Research Board was established in 1960 by the National Association of Australian State Road Authorities as a national centre for road research and development. In 1965 the Board was registered as a public company, the Members and Directors of the Company being the Executive Heads of the six State Road Authorities and the Commonwealth Department of Works.

At the Tenth Meeting of the Board of Directors held during May, 1968 in Melbourne, Mr. C. N. Barton, O.B.E., Commissioner of Main Roads, Queensland, was appointed as Chairman and Mr. I. J. O'Donnell, O.B.E., Chairman of the Country Roads Board, Victoria, was re-appointed as Deputy Chairman, for the year 1968/69.

The Eleventh Meeting of the Board of Directors was held in Melbourne on 21st August, 1968 and the Twelfth Meeting was held in Brisbane on 13th November, 1968.

In January, 1969 the Chairman, Mr. C. N. Barton, was appointed Co-ordinator-General of Public Works in Queensland and resigned from his position on the Board and as Commissioner of Main Roads, Queensland. His successor as Commissioner of Main Roads, Queensland, Mr. H. A. Lowe, was appointed as a Member of the Australian Road Research Board.

During the year, Mr. A. K. Johinke, Commissioner of Highways, South Australia, was appointed as a Member of the Board on the retirement in March, 1969 of Mr. J. N. Yeates, formerly Commissioner of Highways, South Australia.

The Thirteenth Meeting of the Australian Road Research Board and a joint meeting with the National Roads Board were held in New Zealand during May, 1969 at the invitation of the National Roads Board, New Zealand, with a view to promoting mutual understanding and co-operation and the exchange of ideas and information.

At the Thirteenth Meeting of the Board of Directors, Mr. D. H. Aitken, Commissioner of Main Roads, Western Australia, was appointed Chairman and Mr. I. J. O'Donnell, Chairman, Country Roads Board, Victoria, was re-appointed Deputy Chairman for the financial year 1969/70.

During the year, the Fourth Biennial Conference was held in Melbourne from 18th-23rd August, 1968. The Conference was opened by Senator the Hon. R. C. Wright, Minister of State for Works, and the guest speaker was Mr. P. F. Stott, Traffic Commissioner and Director of Transportation, Greater London Council. Over 500 overseas and Australian delegates attended the Conference where over 100 papers were presented. Members of the staff of the Department of Main Roads, New South Wales, presented papers on subjects dealing with traffic research, transport economics, materials research and road construction. Sections of the Conference which attracted particular attention were the Symposia on Terrain Evaluation, Compaction Equipment and Local Government Engineering Problems.

To better assist in the operation of the Board's research activities, adjustments were made in some specialist committees and a number of new committees established. Existing Pavement Design Project Committees were disbanded and
two other committees, "Pavements-Structural Analysis and Design" and "Pave-ments-Materials and Construction", were approved to replace them. In addition, the existing Compaction Sub-committees in Melbourne and Adelaide were disbanded and a Compaction Specialist Committee and an Adelaide Compaction Project Committee were constituted instead. New committees approved included the Road Structures Specialist Committee and the Local Government Engineers Committee.

A comprehensive review of progress was undertaken during the year on projects in the Research and Development Programme with a view to identifying profitable and unprofitable projects to assist management overall. Increasing emphasis was placed on the need for research projects to be more closely associated with problems faced in practice.

The Board continued to sponsor research at universities and other authorities and grants to outside bodies for research during 1968/69 approximated $\$ 230,000$ from the Board's total estimated expenditure for $1968 / 69$ of $\$ 860,000$.

Direct research carried out by the Board and sponsored at universities and other institutions included work in the fields of human factors, traffic flow and operations, road transport economics, bituminous materials, pavement design and compaction, road structures and brittle fracture.

## MISCELLANEOUS

## 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. Suresh Chander BHANDARI
Mr. Nitayauibool TERAPOL
Mr. Shafrin MANTI
Mr. Pow Pah YAP
Mr. Don Ronald Tudor COLONNE

Special Commonwealth African Assistance Plan Fellow from Tanzania
Colombo Plan Fellow from Thailand
Colombo Plan Fellow from Indonesia
Colombo Plan Fellow from Malaysia
Colombo Plan Fellow from Ceylon

Mr. Bhandari spent one month with the Department observing field and laboratory procedures in locating, sampling, and testing road-making materials and in assessing and interpreting the results of field investigations.

Mr. Terapol spent three days with the Department inspecting and discussing bitumen surfacing, urban road construction, expressway construction and Departmental administration.

Mr. Manti was with the Department for eleven days, inspecting road and bridge construction works and discussing methods of road and bridge location and design, traffic matters and advance planning.

Mr. Yap received instruction for a period of one week in the administration and organisation of plant repair workshops.

Mr. Colonne spent eleven days observing the administration and organisation of the Department's Plant School and on field inspections of plant maintenance, servicing and repair methods.

## Training Course for Asian and African Engineers

The National Association of Australian State Road Authorities made an offer to the Department of External Affairs to conduct a series of training courses for Intermediate and Senior Engineers from Asia and Africa.

The Department conducted the first course between 17th March, 1969 and 13th June, 1969. This course was for Intermediate Engineers. Those who attended were:-

| U Aye PE | Assistant Command Engineer | Burma |
| :--- | :--- | :--- |
| P. B. PETHIYAGODA | Executive Engineer | Ceylon |
| Hassan JENG | Assistant Resident Engineer | Gambia |
| PEOTRANTO K. | Technical Engineer | Indonesia |

V. D. CHHATRE
R. G. KRISHNAN
QUEK. T. H.
BIRA. S.
YUT. S.

| Executive Engineer | India |
| :--- | :--- |
| Executive Engineer | India |
| Engineer (Design and Planning) | Singapore |
| Field Engineer | Thailand |
| Field Engineer | Thailand |

The course included:-
1 week Induction
4 weeks Formal lectures
6 weeks Attached to Divisions for field experience.
2 weeks Attached to Head Office for observation and training in specialist sections.
The course was conducted by the Department's School for Technical Training. In the four-week lecture session 56 lectures were given by 35 of the Department's senior staff. Each student was issued with a set of printed lecture notes ( 750 pages), Departmental specifications and standards ( 53 separate publications), Manuals and Policy guides printed by N.A.A.S.R.A. ( 15 separate books), Standards Association of Australia and other publications (5 books), and "Main Roads" Journals (4 issues).

## Army Supplementary Reserve Unit

The seventeenth Annual Camp of 21 Construction Regiment RAE (SR) was held from 15th February, 1969 to 28th March, 1969 at Singleton. This camp was different from the majority of previous camps in that the Regiment undertook the task of constructing a classification range in the Singleton Camp Training Area.

The Regiment was asked in July, 1968 whether it would be willing to undertake the design and construction of the range at Singleton, similar but larger to that recently completed at Holsworthy. The task, which was accepted, involved heavy earthworks, concrete work, drainage work, erection of buildings, a water supply system, an irrigation system and roadworks.

The design work was divided between the squadrons according to each squadron's experience. The Water Board Squadron designed the water supply system, the Public Works Squadron designed the buildings and the Main Roads Squadrons designed the earthworks, drainage, roadworks and concrete works. All design work was carried out at the Regiment's Training Depot at Marrickville. The correlation, checking, liaison and completion of the design were carried out by the officers of the Regimental Headquarters.

The design was accepted in November, 1968 and the Regiment prepared a works programme based on a critical path analysis of the project. It was then confirmed that the Regiment should be phased into its camps over a six-week period consisting of three fortnightly camps.

Unfortunately, circumstances beyond the control of the Regiment made the task of completing the project within the six weeks impossible. However by the end of the camp the Regiment had carried out the following work:-the laying of approximately 24,000 feet of 4 -inch galvanised iron water supply pipe line and two 10,000 gallon tanks; all the range earthworks and the drainage works; the range access roads and much of the concrete work. A revision of the works programme enabled the Regiment to carry out the construction to final gravelling stage of approximately 12 miles of roadworks, which provided a circumferential road around the Singleton Range Area.

The total attendance at the Annual Camp was 25 officers and 386 other ranks, of which 11 officers and 180 other ranks were members from the Department of Main Roads.

During the training year preceding the camp, an Officers' Promotion Coaching Course and an N.C.O. Promotion Course were conducted and approximately 30 members of the unit attended specialist courses such as the Minewarfare Instructors Course at the School of Military Engineering, Casula. In addition regular voluntary night and weekend parades were undertaken by members of the unit living in the Sydney Metropolitan Area.

## APPENDICES

## Appendix No. 1

## (A) COUNTY OF CUMBERLAND MAIN ROADS FUND

## Statement of Receipts and Payments for the Year ended 30th June, 1969

(i) General Purposes

| Receipts | $\underset{\$}{1968 / 69}$ | $\underset{\$}{1967 / 68}$ | Payments | \$ | $\underset{\$}{1968 / 69}$ | $\underset{\$}{1967 / 68}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Motor vehicle taxation in accordance with the Main Roads Act, 1924 <br> Charges on commercial vehicles under the Road Main- <br> tenance (Contribution) Act, 1958 | 6,967,353 | 6,534,537 | Maintenance and minor improvements of roads and bridges - |  |  |  |
|  | 2,959,884 | 2,513,109 | Work by Councils ... <br> Work by Department | $\begin{array}{r} 814,991^{*} \\ 3,331,541 \dagger \end{array}$ |  | $\begin{array}{r} 866,543 \\ 2,780,138 \end{array}$ |
| Main Roads Act, 1924 ................................ | $7,538,001$ |  |  |  | 4,146,532 |  |
| Contributions by Councils towards maintenance and |  |  | and bridges- |  |  |  |
| Contributions by other departments and bodies towards maintenance and construction of Main and Secondary |  |  | Work by Department | 10,236,284 | 10,794,051 $\ddagger$ | $\begin{aligned} & 1,029,171 \\ & 8,326,037 \end{aligned}$ |
| Roads ............................... | 13,528 | 227,926 | Land acquisition |  | 4,680,840 ${ }^{\text {a }}$ | 4,400,652 |
| Grant under the Commonwealth Aid Roads Act, 1964 | 5,618,544 | 5,279,159 | Administrative expense |  | 1,700,758 | 1,474,188 |
| Other........................................... | 640,408 | - 483,850 | Purchase of land and buildings for administration and operation |  | 221,054 | 174,848 |
|  |  |  | State Treasury-Loans- Interest, exchange, management and flotat | on expenses | 153,930 |  |
|  |  |  | State Treasury-repayment of temporary a | vance | 100,000 | 100,000 |
|  |  |  | Interest <br> Other. |  | $\begin{aligned} & 454,252 \\ & 160,022 \end{aligned}$ | $\begin{aligned} & 305,983 \\ & 146,255 \end{aligned}$ |
| Total Receipts | 23,817,469 | 23,471,588 | Total Payments <br> Transfer to County of Cumberland Reserve for Loan Repayments <br> Transfers to and refunds from Special Purposes Accounts in respect of finance for Operating Accounts, Suspense Accounts and Reserve Accounts |  | 22,411,439 | 19,726,205 |
|  |  |  |  |  | 110,776 | 69,300 |
|  |  |  |  |  | 1,409,617 | 3,317,476 |
| Balance brought forward from last year | 1,244,692 | 886,085 | Balance carried forward |  | $\begin{array}{r} 23,931,832 \\ 1,130,329 \end{array}$ | $\begin{array}{r} 23,112,981 \\ 1,244,692 \end{array}$ |
|  | \$25,062,161 | \$24,357,673 |  |  | \$25,062,161 | \$24,357,673 |

* For details see Appendix No. 10.
$\dagger$ For details see Appendix No. 10A.
$\ddagger$ For details see Appendix No. 7.
(ii) Special Purposes

| Receipts |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |

* For details see Appendix No. 7A.
(iii) Reserve for Loan Repayments



# Appendix No. 1-continued <br> (B) COUNTRY MAIN ROADS FUND 

## Statement of Receipts and Payments for the Year ended 30th June, 1969

(i) General Purposes

| Receipts | $\underset{\$}{1968 / 69}$ | $\underset{\$}{1967 / 68}$ | Payments | $\underset{\$}{1968 / 69}$ | $\underset{\$}{1967 / 68}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Motor vehicle taxation in accordance with the Main Roads Act, 1924 | 27,869,412 | 26,138,150 | Maintenance and minor improvements of roads and bridges- |  |  |
| Charges on commercial vehicles under the Road Main- |  |  |  |  | 5,771,719 |
| Transfer from the Road Transport and Traffic Fund | 11,839,537 | 10,052,435 | Work by Department ............. 9,284,276 | 15,479,836 |  |
| under the Transport Act, 1930 ............. | - | 10,108 | Construction and reconstruction of roads |  |  |
| Contributions by Councils towards maintenance and construction of Main Roads | 182,310 | 192,923 | Work by Councils ................ 9, 9,684,771 |  | 9,955,593 |
| Contributions by other departments and bodies towards maintenance and construction of Main Roads | 107,852 | 288,021 | Work by Department ............ 28,136,947 | 37,821,718 $\ddagger$ | 25,045,656 |
| Grant under Commonwealth Aid Roads Act, $1964 . .$. . Other ................................... | 21,918,175 | 20,561,636 | Land acquisition | 602,508 | 641,974 |
| Other. | 218,511 | 168,025 | Administrative Expenses | 3,678,322 | 3,342,109 |
| Total Receipts | 62,135,797 | 57,411,298 | operation <br> State Treasury-Loans- | 857,123 | 511,044 |
|  |  |  | Interest, exchange, management and flotation expenses | 817,177 | 845,718 |
|  |  |  | Loans under Section 42A of the Main Roads Act, 1924 | 96,358 100,00 | 100,000 |
|  |  |  | Other. | 522,426 | 561,113 |
|  |  |  |  | $\begin{array}{r} 59,975,468 \\ 26,250 \end{array}$ | 54,696,727 |
|  |  |  | Add: Transfers to and refunds from Special Purposes Accounts in respect of finance for Operation Accounts, Suspense Accounts and Reserve Accounts | 2,327,930 | 2,743,020 |
| Balance brought forward from last year | 2,009,470 | 2,038,294 | Balance carried forward. | $\begin{aligned} & 62,329,648 \\ & 1,815619 \end{aligned}$ | 57,440,122 <br> 2,009,470 |
|  | \$64,145,267 | \$59,449,592 |  | \$64,145,267 | \$59,449,592 |

* For details see Appendix No. 11.
$\dagger$ For details see Appendix No. IIA.
$\ddagger$ For details see Appendix No. 8
(ii) Special Purposes

* For details see Appendix No. 8A.
(iii) Reserve for Loan Repayments

(C) DEVELOPMENTAL ROADS FUND

Statement of Receipts and Payments for the Year ended 30th June, 1969

| Receipts |  |  | Payments |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\$}{1968 / 69}$ | $\underset{\$}{1967 / 68}$ |  | \$ | $\underset{\$}{1968 / 69}$ | $\underset{\$}{1967 / 68}$ |
| Grant under Section 5 (2) of the Commonwealth Aid Roads Act, 1964 | 1,724,117 | 1.887,674 | Construction and reconstruction of Developmental Roads and Works- <br> Work by Councils <br> Work by Department | 1,319,850 |  | 1,825,310 |
|  |  |  |  |  | 1,319,850* |  |
| Total Receipts Balance brought forward from last year | $\begin{array}{r} 1,724,117 \\ 101,748 \end{array}$ | $1,887,674$ 39,384 | Total Payments Balance carried forward..... |  | $\begin{array}{r} 1,319,850 \\ 506,015 \end{array}$ | $1,825,310$ 101,748 |
|  | $\overline{\$ 1,825,865}$ | \$1,927,058 |  |  | \$1,825,865 | \$1,927,058 |

## Appendix No. 1-continued

## (D) SYDNEY HARBOUR BRIDGE ACCOUNT

(Section 7 (1) of the Sydney Harbour Bridge (Administration) Act, 1932)
Income and Expenditure Account for the Year ended 30th June, 1969

| Income |  |  | Expenditure $1968 / 69$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1968/69 | 1967/68 |  |  |  |
| Road tolls | 4,302,533 | 4,010,747 | Maintenance, lighting and cleaning bridge and ap- |  |  |
| Railway tolls | 4,284,416 | 4,287,216 | proaches .................................... | 577,746 | 570,742 |
| Omnibus tolls .. | 27,730 | 26,777 | Provision of traffic facilities | 132,184 | 136,103 |
| Net rents from propertiesOther.................. | 125,640 | 119,172 | Cost of collecting road tolls . | 584,275 | 535,097 |
|  |  | 76 | Improvements to toll gates and alterations to archways | 72,694 | 4,537 |
|  |  |  | Loan charges--State loans ................... | 1,175,450 | 1,195,430 |
|  |  |  | Loan charges-Borrowings under Section 42A of the Main Roads Act, 1924 |  |  |
|  |  |  | Administrative expenses. | 101,214 | 55,416 |
|  |  |  | Total Expenditure | 3,541,515 | 3,322,737 |
|  |  |  | ferred to Appropriation Account | 1,198,804 | 1,121,251 |
| Total Income | \$4,740,319 | \$4,443,988 |  | \$4,740,319 | \$4,443,988 |

Appropriation Account


* Deficiency for year.


## SYDNEY HARBOUR BRIDGE ACCOUNT—RESERVE FOR LOAN REPAYMENT

(Section 42C of the Main Roads Act, 1924)
(Section 7 (5) of the Sydney Harbour Bridge (Administration) Act, 1932)

| Income |  |  | EXPENDITURE 1968/69 1967/68 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1968/69 | 1967/68 $\$$ 207 |  | $\begin{gathered} 1968 / 69 \\ \$ \end{gathered}$ | $\underset{\$}{1967 / 68}$ |
| Transfer from Sydney Harbour Bridge Account Interest on investments | $\begin{array}{r} 226,487 \\ 23,231 \end{array}$ | $\begin{array}{r} 227,209 \\ 46,771 \end{array}$ |  |  |  |
| Total Income Balance brought forward from last year | $\begin{aligned} & 249,718 \\ & 351,305 \end{aligned}$ | $\begin{array}{r} 273,980 \\ 77,325 \end{array}$ |  |  |  |
|  | \$601,023 | \$351,305 | Balance carried forward.. | \$601,023 | \$351,305 |

## SYDNEY HARBOUR BRIDGE ACCOUNT

(Section 7 (1) of the Sydney Harbour Bridge (Administration) Act, 1932)
Balance Sheet as at 30th June, 1969 (Excluding Capital Cost Transactions)


## Appendix No. 2

## (A) COUNTY OF CUMBERLAND MAIN ROADS FUND

Statement of Receipts and Payments for the Five Years ended 30th June, 1969
(i) General Purposes

| Heading | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| Receipis |  |  |  |  |  |
| Motor vehicle taxation and fees (State) . . . . . . . . . . . . . . . . . . . . . . . . . . | 5,740,316 | 5,975,888 | 6,230,662 | 6,534,537 | 6,967,353 |
| Charge on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act (State) | 2,049,128 | 2,207,023 | 2,281,026 | 2,513,109 | 2,959,884 |
| Commonwealth Aid Roads Acts . . | 4,310,890 | 4,649,532 | 4,954,583 | 5,279,159 | 5,618,544 |
| Levy upon Councils under Section 11 of the Main Roads Act | 5,767,636 | 6,418,388 | 7,600,200 | 8,240,912 | 7,538,001 |
| Contribution by Councils . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | -7,648 | 82,814 | 128,878 | 192,095 | 79,751 |
| Other.................... | 340,884 | 541,050 | 490,776 | 711,776 | 653,936 |
| Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$$ | 18,216,502 | 19,874,695 | 21,686,125 | 23,471,588 | 23,817,469 |
| Payments |  |  |  |  |  |
| Maintenance and minor improvement of roads and bridges | 2,898,296 | 2,928,964 | 3,349,295 | 3,646,681 | 4,146,532 |
| Construction and reconstruction of roads and bridges. . . . . | 11,375,842 | 10,989,989 | 11,065,727 | 9,355,208 | 10,794,051 |
| Land acquisition . . . . . . . . . . . . . . . . . . . . . . . . . . . | 2,549,432 | 3,407,598 | 3,868,100 | 4,400,652 | 4,680,840 |
| Administrative expenses. . . . . . . . . . . . . . . . . . . . . . . . . . . . | 1,145,080 | 772,977 | 1,166,933 | 1,474,188 | 1,700,758 |
| Purchase of land and buildings for administration and operation .. | 134,252 | 199,720 | 263,344 | 174,848 | 221.054 |
| Interest, exchange, management and flotation expenses on State loans | 117.120 97 | 121,090 | 122,860 | 122,390 | 153.930 454.252 |
| Interest on loans raised under Section 42A of the Main Roads Act . . | +97,374 | 248,537 | 289,372 | 305,983 | 454.252 |
| Other. . . . . . . . . . . . . . . . . . . . . . . . . . | 130,580 700,000 | 133,719 | 168,269 | 146,255 100,000 | 160,022 100,000 |
| Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$$ | 19,147,976 | 18,802,594 | 20,293,900 | 19,726,205 | 22,411,439 |

(ii) Special Purposes

| Heading | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| Receipts |  |  |  |  |  |
| Loan Funds-State Government ............................... |  |  | 800,000 | 4,700,000 | 4,800,000 |
| Loan Funds-Borrowings under Section 42A of the Main Roads Act | 3,500,000 | 1,005,000 | 700,000 | 3,750,000 | 5,400,000 |
|  | 10,000 |  |  |  |  |
| Expressways-Construction from Sydney Harbour Bridge Account | 2,360,000 | 4,750,000 | 3,743,241 | 4,775,000 | 900,000 |
| Commonwealth Aid Roads Acts . . . . . . . . . . . . . . . . . . . . . . . . . | 281,288 | 430,351 | 208,169 | 160,444 | 238,385 |
| Contributions from other departments and bodies |  |  | 480,000 |  | 41,908 |
| Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$$ | 6,151,288 | 6,185,351 | 5,931,410 | 13,385,444 | 11,380,293 |


| Payments |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Construction and reconstruction- |  |  |  |  |  |
| Main Roads (and bridges). | 3,664,992 | 1,457,672 | 236,052 | 1,057,909 | 4,633,286 |
| Roads (and bridges) other than Main Roads |  |  | 27,063 |  | 272,937 |
| Construction of expressways . | 2,044,032 | 4,569,979 | 7,290,796 | 11,740,691 | 6,326,209 |
| Department of Motor Transport-for Public Vehicles Fund | 50,576 | 52,599 | 54,703 | 56,891 | 59,167 |
| Department of Public Works-for research . . . . . . . . . . . |  | 800 |  |  | 566 |
| Payments of Sinking Fund-State Government Loans $\ldots \ldots \ldots \ldots \ldots$ | 7,700 | 8,270 | 8,940 | 9,620 | 10,820 |
| Repayment of Principal-Loans raised under Section 42A of the Main Roads Act | 40,126 | 89,516 | 92,448 | 95,542 | 128,518 |
| Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$$ | 5,807,426 | 6,178,836 | 7,710,002 | 12,960,653 | 11,431,503 |

# Appendix No. 2-continued <br> (B) COUNTRY MAIN ROADS FUND 

Statement of Receipts and Payments for the Five Years ended 30th June, 1969
(i) General Purposes

| Heading | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| Receipts |  |  |  |  |  |
| Motor Vehicle taxation and fees (State) | 22,961,264 | 23,903,553 | 24,922,646 | 26,138,150 | 27,869,412 |
| Transfer from the Road Transport and Traffic Fund | 2,111,380 | 1,556,733 | 338,148 | 10,108 |  |
| Charge on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act (State) | 8,196,512 | 8,828,091 | 9,124,104 | 10,052,435 | 11,839,537 |
| Commonwealth Aid Roads Acts . | 16,685,562 | 18,040,129 | 19,262,334 | 20,561,636 | 21,918,175 |
| Contributions by Councils | 83,030 | 74,293 | 120,662 | 192,923 | 182,310 |
| Other.................... | 286,276 | 240,955 | 460,896 | 456,046 | 326,363 |
|  | 50,324,024 | 52,643,754 | 54,288,790 | 57,411,298 | 62,135,797 |
| Payments |  |  |  |  |  |
| Maintenance and minor improvements of roads and bridges | 13,615,458 | 12,884,237 | 14,319,468 | 13,693,520 | 15,479,836 |
| Construction and reconstruction of roads and bridges. | 29,218,620 | 32,756,664 | 34,315,885 | 35,001,249 | 37,821,718 |
| Land acquisition | 799,304 | 610,697 | 779,231 | 641,974 | 602,508 |
| Administrative expenses | 2,280,272 | 2,984,387 | 3,128,768 | 3,342,109 | 3,678,322 |
| Purchase of land and buildings for administration and operation | 519,364 | 631,016 | 656,341 | 511,044 | 857,123 |
| Interest, exchange, management and flotation expenses on State loans | 1,022,690 | 556,394 | 828,960 | 845,718 | 817,177 |
| Interest on loans raised under Section 42A of the Main Roads Act . | 340,306 | 413,531 | 434,378 | 561,113 | 522,426 |
| Repayment of advances from State Treasury | 200,000 | 200,000 | 200,000 | 100,000 | 100,000 |
|  | 47,996,014 | 51,036,926 | 54,663,031 | 54,696,727 | 59,975,468 |

(ii) Special Purposes

| Heading | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| Receipts |  |  |  |  |  |
| Repayable advance-State Government |  |  | 800,000 |  |  |
| Loan Funds-State Government ......... | 4,000,000 | 4,000,000 | 3,200,000 |  |  |
| Loan Funds-Borrowings under Section 42A of the Main Roads Act |  |  | 1,000,000 | 300,000 | 2,700,000 |
| State and/or Commonwealth Government Grants ................ | 30,000 1,196396 |  | 62,505 900,597 |  |  |
| Commonwealth Aid Roads Acts .............. | 1,196,396 | 957,747 133,446 | 900,597 25,640 | 963,339 | $1,169,164$ 186,480 |
|  | 5,226,396 | 5,126,493 | 5,988,742 | 1,263,339 | 4,055,644 |
| Payments |  |  |  |  |  |
| Maintenance of roads, bridges and ferries-other than Main Roads |  |  | 8,420 | 11,774 | 92,996 |
| Construction and reconstructionMain Roads (and bridges). . | 184,486 | 42,759 | 81,215 | 330,000 | 1,124,255 |
| Roads (and bridges) other than Main Roads. | 4,972,194 | 6,438,311 | 3,010,449 | 11,097 | 7,890 |
| Maintenance and construction-Unclassified roads in Western Division | 69,456 | 59,366 | -112,167 | 169,677 | 373,341 |
| Department of Motor Transport-for Public Vehicles Fund ............... | 202,304 | 210,397 | 218,813 | 227,565 | 236,667 |
| Department of Public Works-for works connected with transport by water and for research ...................................................................... | 558,000 | 561,200 | 556,000 | 555,000 | 558,266 |
| Repayment of principal and payment of Sinking Fund-State Government | 129,580 | 115,276 | 133,713 | 140,592 | 145,202 |
| Repayment of principai-Loans raised under Section $42 A$ of the Main Roads |  |  |  |  | 32,568 |
|  | 6,116,020 | 7,427,309 | 4,120,777 | 1,445,705 | 2,564,185 |

## (C) DEVELOPMENTAL ROADS FUND

Statement of Receipts and Payments for the Five Years ended 30th June, 1969


Appendix No. 2-continued

## (D) TOTAL ALL ROADS FUNDS

Statement of Receipts and Payments for the Five Years ended 30th June, 1969
(i) General Purposes

| Heading | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| Receipts |  |  |  |  |  |
| Motor vehicle taxation and fees (State) | 28,701,580 | 29,879,441 | 31,153,308 | 32,672,687 | 34,836,765 |
|  | 2,111,380 | 1,556,733 | 338,148 | 10,108 |  |
| Charge on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act (State) | 10,245,640 | 11,035,114 | 11,405,130 | 12,565,544 | 14,799,421 |
| Commonwealth Aid Roads Acts . . . . . . . . . . . . . . . | 22,267,650 | 24,084,559 | 26,033,667 | 27,728,469 | 29,260,836 |
| Levy upon Councils under Section 11 of the Main Roads Act | 5,767,636 | 6,418,388 | 7,600,200 | 8,240,912 | 7,538,001 |
| Contributions by Councils | 950,678 | 157,107 | 249,540 | 385,018 | 262,061 |
| Other.. | 657,160 | 782,155 | 951,672 | 1,167,822 | 980,299 |
|  | 69,841,724 | 73,913,497 | 77,731,665 | 82,770,560 | 87,677,383 |
| Payments |  |  |  |  |  |
| Maintenance and minor improvement of roads and bridges | 16,513,754 | 15,813,201 | 17,668,763 | 17,340,201 | 19,626,368 |
| Construction and reconstruction of roads and bridges.. | 41,869,460 | 45,127,889 | 47,184,602 |  | 49,935,619 |
| Land acquisition .... | 3,348,736 | $4,018,295$ $3,757,364$ | $4,647,331$ $4,295,701$ | $5,042,626$ $4,816,297$ | 5,283,348 $\mathbf{5 , 3 7 9 , 0 8 0}$ |
| Administrative expenses $11 . \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | $\begin{array}{r}3,425,352 \\ \hline 653,616\end{array}$ | $3,757,364$ 830 | 4,295,701 | 4,885,892 | 1,078,177 |
| Interest, exchange, management and flotation expenses on State loans | 1,139,810 | 677,484 | 951,820 | 968,108 | 971,107 |
| Interest on loans raised under Section 42A of the Main Roads Act | 97,374 | 248,537 | 289,372 | 305,983 | 550,610 |
| Other. | 470,886 | 547,250 | 602,647 | 707,368 | 682,448 |
| Repayment of advances from State Treasury | 1,020,000 | 200,000 | 200,000 | 200,000 | 200,000 |
|  | 68,538,988 | 71,220,756 | 76,759,921 | 76,248,242 | 83,706,757 |

(ii) Special Purposes

| Heading | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| Receipts |  |  |  |  |  |
| Repayable advance-State Government. |  |  | 800,000 |  |  |
| Loan Funds-State Government . . . . . . . | 4,000,000 | 4,000,000 | 4,000,000 | 4,700,000 | 4,800,000 |
| Loan Funds-Borrowings under Section 42A of the Main Roads Act | 3,500,000 | 1,005,000 | 1,700,000 | 4,050,000 | 8,100,000 |
| State and/or Commonwealth Government Grants . . . . . . . . . . . . | 40,000 $2,360,000$ | 35,300 $4,750,000$ | 62,505 $3,743,241$ |  |  |
| Expressways-Contribution from Sydney Harbour Bridge Account | $2,360,000$ $1,477,684$ | $4,750,000$ $1,388,098$ | 3,743,241 $1,108,766$ | $4,775,000$ $1,123,783$ | $\begin{array}{r} 900,000 \\ 1.407,549 \end{array}$ |
| Commonwealth Aid Roads Acts . . . . . . . . . . . . . | 1,477,684 | $1,388,098$ 133,446 | $1,108,766$ 505,640 | 1,123,783 | $\begin{array}{r} 1,407,549 \\ 228,388 \end{array}$ |
| Total . .................................................. \$ $^{\text {d }}$ | 11,377,684 | 11,311,844 | 11,920,152 | 14,648,783 | 15,435,937 |
| Payments |  |  |  |  |  |
| Maintenance of roads, bridges and ferries-other than Main Roads ........... Construction and reconstruction- |  |  | 8,420 | 11,774 | 92,996 |
| Construction Main Roads (and bridges). | 3,849,478 | 1,500,431 | 317,267 | 1,387,909 | 5,757,541 |
| Roads (and bridges) other than Main Roads | 4,972,194 | 6,438,311 | 3,037,512 | 11,097 | 273,827 |
| Construction of expressways ... | 2,044,032 | 4,569,979 | 7,290,796 | 11,740,691 | 6,326,209 |
| Maintenance and construction-Unclassified roads in the Western Division .. | 69,456 | 59,366 | 112,167 | 169,677 | 373,341 |
| Department of Motor Transport-for Public Vehicles Fund ................ | 252,880 | 262,996 | 273,516 | 284,456 | 295,834 |
| Department of Public Works-for works connected with transport by water and for research | 558,000 | 562,000 | 556,000 | 555,000 | 558,832 |
| Repayment of principal and payment of Sinking Fund-State Government Loans | 137,280 | 123,546 | 142,653 | 150,212 | 156,022 |
| Repayment of principal-Loans raised under Section 42 A of the Main Roads Act | 40,126 | 89,516 | 92,448 | 95,542 | 161,086 |
|  | 11,923,446 | 13,606,145 | 11,830,779 | 14,406,358 | 13,995,688 |

Statement of Income and Expenditure for the Five Years ended 30th June, 1969

| Heading | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| Income |  |  |  |  |  |
| Road tolls on vehicles | 3,795,585 | 3,858,700 | 3,878,326 | 4,010,747 | 4,302,533 |
| Railway passenger tolls (net) | 281,901 | 281,355 | 280,250 | 287, 216 | 284,416 |
| Omnibus passenger tolls | 29,979 | 29,254 | 29,252 | 26,777 | 27,730 |
| Rents... | 58,479 | 130,510 | 107,176 | 119,172 | 125,640 |
|  | 869 | 1,302 | 352 |  |  |
| Total Income ......................................... ${ }^{\text {a }}$ | 4,166,813 | 4,301,121 | 4,295,356 | 4,443,988 | 4,740,319 |
| Expenditure |  |  |  |  |  |
| Loan charges-State loans |  |  |  |  |  |
| Interest | 765,000 | 775,150 | 777,150 | 767,400 | 755,970 |
| Exchange . ${ }_{\text {Sinking }}$ | 36,040 307,840 | 36,780 323,180 | 31,890 338700 | 22,490 357350 | 12,570 |
| Management expenses | 2,380 | 2,910 | 2,630 | 3,200 | 2,430 |
| Flotation expenses. | 50,740 | 43,930 | 44,650 | 44,990 | 37,120 |
| Loan charges-borrowings under Section 42A of the Main Roads Act, 1924 Interest <br> Repayment of principal <br> Transfer to reserve for loan repayment | 1,162,000 | 1,181,950 | 1,195,020 | 1,195,430 | 1,175,450 |
|  |  | 83,145 | 269,947 | 471,768 | 517,747 |
|  |  | 35,434 | 79,901 | 126,435 | 153,718 |
|  |  | 20,523 | 56,563 | 227,209 | 226,487 |
|  |  | 139,102 | 406,411 | 825,412 | 897,952 |
| Maintenance, lighting and cleaning bridge and approaches <br> Construction of additional roadway-conversion of area previously used by tramways <br> Provision of traffic facilities | 567,311 | 567,977 | 584,015 | 570,742 | 577,746 |
|  |  | 34,010 |  |  |  |
|  | 70,225 | 78,063 | 116,592 | 136,103 | 132,184 |
| Provision of traffic facilities <br> Cost of collecting road tolls <br> Alterations to archways for occupation by tenants <br> Other | 409,535 | 424,825 | 542,742 | 539,634 | 584,275 |
|  | 15,483 38,549 | 35,424 42,401 |  |  | 72,694 |
|  | 38,549 | 42,401 | 47,422 | 55,416 | 101,214 |
|  | 2,263,103 | 2,503,752 | 2,892,202 | 3,322,737 | 3,541,515 |
|  | 1,903,710 | 1,797,369 | 1,403,154 | 1,121,251 | 1,198,804 |

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, 1924-67 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Section 13 (4C) of Main Roads Act, 1924-67 | Sydney-Newcastle Expressway | Section 21 (3, 3A and 3B) of Main Roads Act, 1924-6 | Sydney-Newcastle Expressway |  |  |
| Gross Liability AssumedPrior to 1st July, 1968 During 1968/69 <br> Total to 30th June, 1969 | \$ | \$ | \$ | \$ | \$ | \$ |
|  | 2,600,000.00 | 5,500,000.00 | 13,785,304.52 | 13,700,000.00 | 3,449,038.99 | 39,034,343.51 |
|  | 1,000,000.00 | 3,800,000.00 |  |  |  | 4,800,000.00 |
|  | \$3,600,000.00 | \$9,300,000.00 | \$13,785,304.52 | \$13,700,000.00 | \$3,449,038.99 | \$43,834,343.51 |
| Repayment of Principal and Sinking <br> Fund Contribution- <br> Prior to 1st July, 1968- <br> By Department <br> By Commonwealth Government under Financial Agreement and Federal Aid Roads and Works Agreement Agreement |  |  |  |  |  |  |
|  | 51,330.00 | 5,940.00 | 3,824,093.77 | 101,140.00 | 47,001.08* | 4,029,504.85 |
|  | 40,181.87 | 5,449.92 | 1,321,689.66 | 65,256.86 | 328,700.72 | 1,761,279.03 |
| Total prior to 1st July, 1968 <br> During 1968/69- <br> By Department <br> By Commonwealth Government under Financial Agreement | \$91,511.87. | \$11,389.92 | \$5,145,783.43 | \$166,396.86 | \$375,701.80 | \$5,790,783.88 |
|  | 10,820.00 | 16,110.00 | 145,202.50 | 41,420.00 | .... | 213,552.50 |
|  | 6,904.16 | 16,158.38 | 25,805.11 | 33,419.18 | 8,450.33 | 90,737.16 |
| Total during 1968/69 | \$17,724.16 | \$32,268.38 | \$171,007.61 | \$74,839.18 | \$8,450.33 | \$304,289.66 |
| To 30th June, 1969- <br> By Department <br> By Commonwealth Government under Financial Agreement and Federal Aid Roads and Works Agreement | 62,150.00 | 22,050.00 | 3,969,296.27 | 142,560.00 | 47,001.08 | 4,243,057.35 |
|  | 47,086.03 | 21,608.30 | 1,347,494.77 | 98,676.04 | 337,151.05 | 1,852,016.19 |
| Total to 30th June, 1969 <br> Net Liability at 30th June, 1969 | \$109,236.03 | \$43,658.30 | \$5,316,791.04 | \$241,236.04 | \$384,152.13 | \$6,095,073.54 |
|  | \$3,490,763.97 | \$9,256,341.70 | \$8,468,513.48 | \$13,458,763.96 | \$3,064,886.86 | \$37,739,269.97 |

[^0]Appendix No. 4

## SUMMARY OF LOAN LIABILITIES

Loan Borrowings under Section 42A of the Main Roads Act

| Particulars | County of Cumberland Fund | Sydney-Newcastle Expressway |  | Country Main Roads Fund | Sydney Harbour Bridqe Account | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | County of Cumberland | Country |  | Warringah Expressway |  |
| Gross Liablility ASSUMED-Prior to 1 st July, $1968 \ldots . . .$.During 1968/69 $\ldots \ldots \ldots . .$. | \$ | \$ | \$ | \$ | \$ | \$ |
|  | $\begin{aligned} & 6,355,000 \\ & 4.450,000 \end{aligned}$ | $\begin{aligned} & 3,600,000 \\ & 950,000 \end{aligned}$ | 1,000,000 | $\begin{array}{r} 300,000 \\ 2,700,000 \end{array}$ | 9,320,000 | $\begin{array}{r} 20,575,000 \\ 8,100,000 \end{array}$ |
|  | \$10,805,000 | \$4,550,000 | \$1,000,000 | \$3,000,000 | \$9,320,000 | \$28,675,000 |
| Repayment of Principal and Sinking Fund Contribution- |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Principal ............. | 317,632 |  | 17,236 |  | 241,771 | 576,639 |
|  | 406,923 | 47,550 | 24,347 | 375 | 344,024 | 823,219 |
| Principal ... | 128,518 | 10,000 | 18,263 | 26, 32,568 | $226,487 \quad 153,718$ | 343,067 |
| Net Interest on Investments | 110,776 136,715 | 60,375 |  | $\begin{aligned} & 26,250 \\ & 55,440 \end{aligned}$ | $\begin{array}{r} 226,487 \\ 20,687 \end{array}$ | $\begin{aligned} & 443,535 \\ & 212,842 \end{aligned}$ |
|  | - 247,491 | 60,375 | 19,647 | 81,690 | - 247,174 | 656,377 |
| Total to 30th June, 1969 | \$1,100,564 | \$117,925 | \$79,493 | \$114,633 | \$986,687 | \$2,399,302 |
| Net Liablitty at 30th June, 1969 | \$9,704,436 | \$4,432,075 | \$920,507 | \$2,885,367 | \$8,333,313 | \$26,275,698 |

Appendix No. 5
DETAILS OF LOANS RAISED DURING THE YEAR ENDED 30Th JUNE, 1969
Loan Borrowings under Section 42a of the Main Roads Act

| $\begin{aligned} & \text { Loan } \\ & \text { No. } \end{aligned}$ | $\underset{\%}{\text { Rate }}$ | County of Cumberland Main Roads Fund |  | Country Main Roads Fund | $\begin{aligned} & \text { Term } \\ & \text { (Years) } \end{aligned}$ | Date of Maturity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | General Purposes | Special Purposes | General Purposes |  |  |
|  |  | \$ | \$ | ${ }^{\$} 5000$ |  |  |
| 108 109 | 5.875 5.875 |  | . | 250,000 500,000 | 40 15 | 16th July, 2008 |
| 110 | 5.875 | 100,000 |  |  | 15 | 31 st October, 1983 |
| 111 | 5.875 5 5 | 40,000 500 | ...... | $\ldots .$. | 25 | 31 st October, 1993 |
| 112 | 5.875 5.75 | 500,000 20,000 |  |  | 10 | ${ }_{8}^{\text {6th Suly }}$ September, 1988 |
| 114 | 5.875 |  | ...... | 300,000 | 45 | 26 th July, 2013 |
| 115 | 5.875 | 150,000 | ....... |  | 45 | 26th July, 2013 |
| 1116 | ${ }_{5}^{5.875}$ | 28,000 200000 | ...... | ..... | 15 10 | 3rd December, 1983 |
| 117 | 5.75 | 200,000 100,000 |  | .. | 10 10 | ${ }^{\text {6th September, }} 1978$ |
| 119 | 5.875 |  |  | 400,000 | 15 | 1 lst November, 1983 |
| 120 | 5.875 | 400,000 | $\ldots$ | ....... | 15 | 14th October, 1983 |
| 121 122 | 5.875 5.875 | 100,000 200,000 |  | .. | 15 | ${ }_{7}$ 8th November, 1983 |
| 123 | 5.875 5.875 | 200,000 | 300,000 | . | 45 | 7th November, 1983 |
| 112 | 5.875 5 5 | 400,000 |  |  | 45 | 3 3rd January, 2014 |
| 125 126 | 5.875 5 |  | ....... | 1,000,000 | 20 | 29th November, 1988 |
| 126 127 | 5.875 5.75 | 92,100 |  | 250,000 | 40 10 | 20th November, 2008 |
| 128 | 5.75 | 92,100 | $\underline{200,000}$ | ....... | 10 | 6th December, 1978 |
| 129 | 5.875 | 1,000,000 |  | ....... | 40 | 28th November, 2008 |
| 130 131 | 5.5 5.875 | 100,000 | 400,000 | ........ | 4 | 6th December, 1972 |
| 132 | 5.875 | 1000000 |  | …… | 15 | 22nd January, 1984 |
| 133 | 5.875 | 12,000 |  | ....... | 15 | 3rd January, 1984 |
| 134 | 5.875 5 5 | 800,000 90 |  | ...... | 15 | 3rd January, 1984 |
| 136 | 5.875 5.875 |  | 50,000 |  | 15 | 28th February, 1984 |
| 137 | 5.75 | 17,900 |  |  | 10 | 27th March, 1979 |
|  | Total | \$4,450,000 | \$950,000 | \$2,700,000 |  |  |

Appendix No. 6
DETAILS OF OUTSTANDING LOANS AS AT 30тн JUNE, 1969
Loan Borrowings under Section 42a of the Main Roads Act

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow{3}{*}{\[
\begin{aligned}
\& \text { Loan } \\
\& \text { No. }
\end{aligned}
\]} \& \multirow{3}{*}{\[
\begin{aligned}
\& \text { Rate } \\
\& \%
\end{aligned}
\]} \& \multicolumn{5}{|c|}{Balance of Loan} \& \multirow{3}{*}{\[
\begin{aligned}
\& \text { Term } \\
\& \text { (Years) }
\end{aligned}
\]} \& \multirow{3}{*}{Date of Maturity} \& \multirow[b]{3}{*}{Annual charge for interest} \\
\hline \& \& \multicolumn{2}{|l|}{County of Cumberland Main Roads Fund} \& \multicolumn{2}{|l|}{Country Main Roads Fund} \& \multirow[t]{2}{*}{\begin{tabular}{l}
Sydney \\
Harbour \\
Bridge
Account
\end{tabular}} \& \& \& \\
\hline \& \& General Purposes \& Special Purposes \& General Purposes \& Special Purposes \& \& \& \& \\
\hline \& \& \multirow[t]{2}{*}{\[
\begin{gathered}
\$ \\
900,000 \\
644,000
\end{gathered}
\]} \& \[
\$
\] \& \[
\$
\] \& \[
\$
\] \& \& \& \multirow[t]{2}{*}{23rd March, 1979} \& [ \({ }_{45,000}^{\text {\$ }}\) \\
\hline 2 \& 5.0
5.125 \& \& \& \multirow[t]{2}{*}{.
\(\cdots \cdots\)
\(\cdots \cdots\)} \& . \(\ldots \ldots\) \& \multirow[t]{2}{*}{} \& 15 \& \& ¢

42,000
32.646 <br>

\hline 3 \& 5.125 \& \multirow[t]{2}{*}{$$
\begin{array}{r}
200,000 \\
85,889
\end{array}
$$} \& \multirow[t]{2}{*}{........} \& \& \multirow[t]{2}{*}{¢ $\ldots \ldots$} \& \& 10 \& 7th September, 1979 \& \multirow[t]{3}{*}{32,646

10,250
4,675
21} <br>
\hline 4 \& 5.5 \& \& \& \multirow[t]{2}{*}{. $\ldots \ldots$} \& \& …... \& \multirow[t]{2}{*}{20
15} \& \multirow[t]{2}{*}{6th October, 1984
27th October, 1979} \& <br>
\hline 5
6 \& 5.5

5.125 \& $$
\begin{aligned}
& 389,962 \\
& 122,354
\end{aligned}
$$ \& ..... \& \& \multirow[t]{2}{*}{......} \& $\ldots$ \& \& \& <br>

\hline 7 \& 5.375 \& $$
\begin{aligned}
& 122,354 \\
& 100,000
\end{aligned}
$$ \& \multirow[t]{2}{*}{$\ldots .$.} \& ( $\ldots \ldots$ \& \& \multirow[t]{2}{*}{$\ldots$} \& 10

10 \& 28th October, 1974 \& 21,064
6,020 <br>
\hline 8 \& 5.5 \& 100,000 \& \& $\ldots$ \&  \& \& \multirow[t]{2}{*}{15
10} \& 1st October, 1974
25th February, 1980 \& 6,020
5,375
5,500 <br>

\hline 9 \& 5.375 \& \multirow[t]{2}{*}{$$
\begin{aligned}
& 200,000 \\
& 100,000
\end{aligned}
$$} \& \multirow[t]{2}{*}{} \& \multirow[t]{2}{*}{........} \& \& …... \& \& \& \multirow[t]{2}{*}{$\begin{array}{r}5,50 \\ 10,750 \\ 5 \\ \hline\end{array}$} <br>

\hline 10 \& 5.5 \& \& \& \& $\cdots$ \&  \& 18 \& 3rd March, 1983 \& <br>

\hline 12 \& 5.5 \& $$
87,632
$$ \& \multirow[t]{2}{*}{} \& \multirow[b]{2}{*}{$\ldots$} \& \multirow[t]{2}{*}{$\ldots$} \& \multirow[t]{2}{*}{100,000} \& \multirow[t]{2}{*}{15

15} \& \& 5,500
4,772 <br>

\hline 13 \& 5.5 \& 1000000 \& \& \& \& \& \& | 4th June, 1980 |
| :--- |
| 11th March, 1985 | \& S,500

5,500 <br>
\hline 14 \& ${ }_{5}^{5.375}$ \& 80711 \& \& $\ldots .$. \& \multirow[b]{2}{*}{$\ldots$} \& $\underline{264,874}$ \& 20 \& \multirow[t]{2}{*}{13th May, 1975
28th April, 1980} \& 13,726
4,364 <br>
\hline 16 \& 5.75 \& 100,000 \& $\ldots .$. \& \multirow[t]{2}{*}{…...} \& \& …... \& 15 \& \& 4,364
5,750 <br>
\hline 17 \& 5.75 \& 200,000 \& \multirow[t]{2}{*}{.......} \& \& \multirow[t]{2}{*}{$\cdots$} \& \multirow[t]{2}{*}{$\ldots$} \& 15 \& 31st May, 1985
16th June, 1980 \& \multirow[t]{2}{*}{11,500
23,000} <br>
\hline 18 \& 5.75 \& \& \& ....... \& \& \& \multirow[t]{2}{*}{30
15} \& 17th June, 1980 \& <br>
\hline 19 \& 5.75
5.625 \& 400,000
92000 \& \&  \& .... \& ...... \& \& \multirow[t]{2}{*}{22nd June, 1980 16th June, 1975} \& 23,000
5,290 <br>
\hline 21 \& 5.75 \& 81,011 \& \& ...... \& ..... \& ........ \& 15
10
15 \& \& 1,125
4,571 <br>
\hline 22 \& 5.75 \& \multirow[t]{2}{*}{} \& \multirow[t]{2}{*}{} \& \multirow[t]{2}{*}{....} \& \multirow[t]{2}{*}{} \& \multirow[t]{2}{*}{+1...} \& 15 \& \multirow[t]{2}{*}{25th June, 1980 ${ }_{\text {21st January, }} 1981$} \& 4,571
4,600 <br>

\hline 23 \& 5.75 \& \& \& \& \& \& \multirow[t]{2}{*}{$$
\begin{aligned}
& 15 \\
& 15
\end{aligned}
$$} \& \& \multirow[t]{2}{*}{11,500

9,467} <br>
\hline 25 \& 5.75

5.75 \& 200,000 \& .... \& ..... \& .... \& $$
167,254
$$ \& \& \& <br>

\hline 26 \& 5.625 \& \multirow[b]{2}{*}{140,000} \& ... \& ....... \& $\ldots$ \& \multirow[t]{2}{*}{376,000} \& 10
10 \& 30th July, 2005 \& 11,500
20,925 <br>
\hline 27
28 \& 5.75
5.625 \& \& \multirow[t]{2}{*}{......
$\ldots \ldots$.} \& \multirow{2}{*}{$\ldots .$.} \& \multirow[t]{2}{*}{.....} \& \& 20 \& 1st December, 1985 \& 8,050 <br>
\hline 29 \& 5.75 \& \multirow[t]{2}{*}{100,000
50,000} \& \& \& \& 100,000 \& 10 \& 22nd December, 1975 \& 5,750 <br>
\hline 30 \& 5.75 \& \& $\ldots$ \& \& ..... \& …… \& 30 \& 16th December, 1995 \& 2,875 <br>
\hline 31 \& 5.75
5 \& \& \& \& \& 60,000 \& 15 \& 17th January, 1981 \& 3,450 <br>
\hline 33 \& 5.75 \& 1000000 \& \& \& \& 200,000 \& 10
25 \& 25th January, 1976 \& 11,250 <br>
\hline 34 \& 5.625 \& \& \& \& \& 20,000 \& 10 \& 7th March, 1976 \& 1,125 <br>
\hline 35 \& ${ }_{5}^{5.75}$ \& 100,000 \& \& . \& \& \& 50 \& 21st March, 2016 \& 5,750 <br>
\hline 37 \& 5.75
5.75 \& $\ldots$ \& ....... \& \& \& 100,000
100,000 \& 15
15 \& Sth April, 1981 \& 5,750
5 <br>
\hline 38 \& 5.625 \& \& \& \& \& 50,000 \& 10 \& 1st April, 1976 \& 2,812 <br>
\hline 39 \& 5.75
5
5 \& 100000 \& \& \& \& 200,000 \& 15 \& 18th May, 1981 \& 11,500 <br>
\hline 41 \& 5.75 \& 10,00 \& \& \& \& 344,679 \& 30
15 \& 12th May, 1996
19th May, 1981 \& 5,750 <br>
\hline 42 \& 5.75 \& \& \& ....... \& \& 100,000 \& 15 \& 12th May, 1981 \& 5,750 <br>
\hline 43 \& 5.625 \& \& \& \& \& 80,000 \& 10 \& 7th June, 1976 \& 4,500 <br>
\hline 44 \& 5.75
5.75 \& 10,000
15000 \& \& $\ldots$ \& ...... \& \& 16 \& 31st May, 1982 \& 575 <br>
\hline 46 \& 5.75
5.75 \& 150,000 \& \& ... \& \& 188,000 \& 40
15 \& 21st June, 2006
20th June, 1981 \& 8,625
10810 <br>
\hline 47 \& 5.75 \& 50,000 \& \& \& \& \& 30 \& 15 th June, 1996 \& 2,875 <br>
\hline 48 \& 5.75 \& 5,000 \& \& \& \& \& 16 \& 31st May, 1982 \& 288 <br>
\hline 49 \& 5.75 \& \& \& \& \& 172,339 \& 15 \& 21st June, 1981 \& 9,763 <br>
\hline 50 \& 5.625 \& ...... \& \& ....... \& ...... \& 80,000 \& 10 \& 23 rd June, 1976 \& 4,500 <br>
\hline 51 \& 5.625
5.625 \& $\ldots .$. \& \& \& \& 30,000 \& 10 \& 28th June, 1976 \& 1,688 <br>
\hline 53 \& 5.75 \& \& ....... \& $\ldots$ \& ... \& 200,000
2000 \& 15 \& 28 th June, 19768 \& 11,250 <br>
\hline 54 \& 5.75 \& \& \& \& \& 500,000 \& 20 \& 10th August, 1986 \& 28,750 <br>
\hline 55 \& 5.75 \& ...... \& ...... \& ....... \& ..... \& 100,000 \& 15 \& 5th August, 1981 \& 5,750 <br>
\hline 56
57 \& 5.75
5.875 \& $\ldots .$. \& \& $\ldots$ \& 364.501 \& 10,000 \& 16 \& 31st May, 1982 \& 575 <br>
\hline 58 \& 5.75 \& \& \& \& 364,501 \& 15,000 \& 15 \& 276th April, 19828 \& 21,134 <br>
\hline 59 \& 5.75 \& \& \& \& \& 192,000 \& 15 \& 1st November, 1981 \& 10,925 <br>
\hline 60 \& ${ }_{5}^{5.75}$ \& \& ...... \& . \& , \& 105,000 \& 15 \& 22nd November, 1981 \& 5,750 <br>
\hline 61
62 \& 5.625
5.625 \& \& \& . \& ...... \& 250,000
110,000 \& 10
10 \& 19th December, 1976 \& 14,063 <br>
\hline 63 \& 5.75 \& \& \& \& \& 100,000 \& 15 \& 28th December, 1981 \& 5,750 <br>
\hline 64 \& 5.75 \& ....... \& \& ....... \& ..... \& 288,000 \& 15 \& 1st February, 1982 \& 16,560 <br>
\hline 65 \& 5.75
5.75 \& \& \& ..... \& $\ldots$ \& 100,000 \& 15 \& 14th February, 1982 \& 5,750 <br>
\hline 67 \& 5.7625 \& \& \& \& \& 150,461 \& 15 \& 31st May, 1982, ${ }_{\text {21st }}$ \& 345
7,901 <br>
\hline 68 \& 5.75 \& \& \& \& \& 15,000 \& 15 \& 1st February, 1982 \& , 863 <br>
\hline 69 \& 5.875 \& ...... \& \& ....... \& 200,000 \& \& 15 \& 2nd March, 1982 \& 11,750 <br>

\hline 71 \& | 5.875 |
| :--- |
| 5.875 | \& \& 300,000 \& $\ldots$ \& 200,000 \& $\cdots$ \& 20 \& 1st April, 1987 \& 11,750 <br>

\hline 72 \& 5.875 \& \& 400,000 \& \& \& \& 25 \& 15th March, 1992 \& 23,500 <br>
\hline 73 \& 5.875 \& \& \& \& 200,000 \& \& 15 \& 1st June, 1982 \& 11,750 <br>
\hline 74 \& 5.5 \& \& \& . \& ...... \& 75,000 \& 6 \& 1 st May, 1973 \& 4,125 <br>
\hline 75
76 \& 5.75
5.875 \& $\ldots .$. \& $\ldots .$. \& ...... \& ....... \& 19,000
600,000 \& 10
15 \& 11th April, 1977 \& -1,093 <br>
\hline 77 \& 5.875 \& \& \& \& \& 100,000 \& 20 \& 1st August, 1987 \& 5,875 <br>
\hline 78 \& 5.75 \& \& \& ....... \& ...... \& 50,000 \& 10 \& 6th September, 1977 \& 2,875 <br>
\hline 79 \& 5.875 \& \& \& ... \& \& 479,224 \& 20 \& 13th July, 1987 \& 27,939 <br>
\hline 81 \& 5.875
5.875 \& \& $\bigcirc$ \& \& ...... \& 500,000 \& 30 \& 21st July, 2012,1997 \& 29,375
5875 <br>
\hline 82 \& 5.875 \& 300,000 \& \& ....... \& \& \& 15 \& 15th August, 1982 \& 17,096 <br>
\hline 83 \& 5.875 \& \& ....... \& . \& $\ldots$ \& 20,000 \& 15 \& 16th August, 1982 \& 1,175 <br>
\hline 84
85 \& ${ }_{5}^{5.875}$ \& ....... \&  \& ...... \& ...... \& 50,000
50 \& 24 \& 31st August, 1991 \& 2,937 <br>
\hline 86 \& 5.75 \& \& \& \& \& 17,673 \& 10 \& 18th September, 1977 \& 2,875 <br>
\hline 87 \& 5.875 \& 400,000 \& ....... \& ...... \& \& \& 15 \& 6th October, 1982 \& 23,500 <br>
\hline 88 \& 5.875
5.875 \& . \& ....... \& .... \&  \& 100,000
100,000 \& 16
30 \& 1st October, 1983197 \& 5,875
5 <br>
\hline \& 5.375 \& \& \& \& \& \& 7 \& 1st December, 1974 \& 5,875 <br>
\hline 90 \& $5.625\}$ \& \& 1,250,000 \& \& \& \& 10 \& 1st December, 1977 \} \& 69,269 <br>
\hline \& 5.625 \& \& \& ...... \& . \& \& 15 \& 1st December, 1982 \& <br>
\hline 91 \& 5.875 \& \& \& \& \& 50,000 \& 15 \& 26th October, 1982 \& 2,938 <br>
\hline 93 \& 5.875 \& \& \& , \& \& 70,000 \& 15 \& 1st November, 1982 \& 4,112 <br>
\hline 94 \& 5.75 \& \& \& \& \& 237,500 \& 10 \& 17th November, 1977 \& 13,297 <br>
\hline 95 \& 5.875 \& ...... \& \& ...... \& ...... \& 150,000 \& 15 \& 21st November, 1982 \& 8,813 <br>
\hline 96 \& 5.875 \& \& 196,000 \& \& \& \& 15 \& 21st November, 1982 \& 11,397 <br>
\hline 97
98 \& 5.75 \& \& \& \& \& 26,509 \& 10 \& \& 1,489 <br>
\hline 98
98 \& 5.875 \& \& \& ...... \& \& 400,000 \& 25 \& 16th February, 1993 \& 23,500 <br>
\hline 100 \& 5.875
5.875 \& \& 750,000 \& \& \& 500,000 \& 45 \& 8th December, 2012
19th January, 2013 \& 29,375
44,062 <br>
\hline 101 \& 5.75 \& \& \& \& \& 40,000 \& 10 \& 16th January, 1978 \& 2,300 <br>
\hline 102 \& 5.875
5
5 \& \& 294,000 \& \& \& \& 15 \& 1 1st March, 1983 \& 17,272 <br>
\hline 104 \& 5.875
5.75 \& ........ \& 300,000 \& 250,000 \& $\ldots$ \& ........ \& 15
10 \& 15th March, 1983
15th March, 1978 \& 17,625
12.989 <br>
\hline \& \& \& \& \& \& \& \& Ith March, 1978 \& <br>
\hline
\end{tabular}

## Appendix No. 6-continued

DETAILS OF OUTSTANDING LOANS AS AT 30Th JUNE, 1969-continued
Loan Borrowings under Section 42a of the Main Roads Act-continued

| Loan No. | $\begin{gathered} \text { Rate } \\ \% \end{gathered}$ | Balance of Loan |  |  |  |  | $\begin{aligned} & \text { Term } \\ & \text { (Years) } \end{aligned}$ | 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 |  |  |  |  |
| 105 | 5.875 | $\begin{gathered} \$ \\ 150,000 \end{gathered}$ | S | \$ | \$ | \$ |  |  | $\$$ 8,812 |
| 106 | 5.875 |  |  | 30,000 | ...... |  | 25 | 1st April, 1993 | 8,812 |
| 107 | 5.75 |  |  | 20,000 |  |  | 10 | 8th May, 1978 | 1,150 |
| 108 | 5.875 |  |  | 250,000 |  |  | 40 | 16 th July, 2008 | 14,688 |
| 109 | 5,875 |  |  | 500,000 |  |  | 15 | 26th July, 1983 | 29,375 |
| 110 | 5.875 5875 | 100,000 |  | , |  |  | 15 | 31st October, 1983 | 5,875 |
| 111 | 5.875 | 40,000 |  |  |  |  | 25 | 31st October, 1993 | 2,350 |
| 112 | ${ }_{5}^{5.875}$ | 493,274 20,000 |  |  | ..... |  | 20 | 6th Septermber, 1988 | 28,776 |
| 113 114 | 5.75 5.875 | 20,000 |  | 300,000 | .... |  | 10 | 8th July, 1978 | 1,150 |
| 115 | 5.875 | 150,000 |  | 300,000 |  |  | 45 | 26th July, 2013 | 17,625 8,813 |
| 116 | 5.875 | 28,000 | ...... |  | . .... |  | 15 | 3rd December, 1983 | 1,645 |
| 117 | 5.75 | 200,000 | . . . . . |  | . . . . |  | 10 | 6th September, 1978 | 11,212 |
| 118 | 5.75 | 100,000 |  |  | ..... |  | 10 | 4th October, 1978 | 5,750 |
| 119 | 5.875 |  |  | 400,000 | ..... | . . . . ${ }^{\text {a }}$ | 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 | 29 th November, 2013 | 17,625 |
| 124 | 5.875 | 400,000 |  |  |  |  | 45 | 3rd January, 2014 | 23,500 |
| 125 | 5.875 5.875 |  |  | 986,549 |  |  | 20 | 29th November, 1988 | 57,553 |
| 126 | 5.875 5.75 | 92,100 |  | 250,000 | . . . . . | . . . . . | 40 | 20th November, 2008 | 14,688 |
| 127 128 | 5.75 5.75 | 92,100 | 200,000 | . . . . | $\ldots$ | ...... | 10 10 | 29th Novernber, 1978 | 5,286 11,213 |
| 129 | 5.875 | 1,000,000 | 200,000 |  |  |  | 40 | 28th November, 2008 | 11,2150 |
| 130 | 5.5 | 100,000 |  |  |  |  | 4 | 6th December, 1972 | 5,500 |
| 131 | 5.875 5.875 |  | 400,000 | ..... |  |  | 15 | 3rd February, 1984 | 23,500 |
| 132 133 | 5.875 5.875 | 100,000 |  |  |  |  | 15 | 22nd January, 1984 | 5,875 |
| 134 | 5.875 | 800,000 |  | . $\cdot .$. |  |  | 15 | 3rd January, 1984 | 705 46.501 |
| 135 | 5.875 | 90,000 |  |  |  |  | 15 | 28th February, 1984 | 5,287 |
| 136 | ${ }_{5}^{5.875}$ |  | 50,000 |  |  |  | 15 | 18th February, 1984 | 2,937 |
| 137 | 5.75 | 17,900 |  |  |  |  | 10 | 27th March, 1979 | 1,029 |
|  | Total | \$10,381,833 | \$4,540,000 | \$2,986,549 | \$964,501 | \$8,924,513 |  |  | \$1,586,128 |

## Appendix No. 6A

DETAILS OF INVESTMENTS OF LOAN RESERVE FUNDS AS AT 30Th JUNE, 1969
Loan Borrowings under Section 42a of the Main Roads Act

| InvestmentNo. | 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 ln- | \$ | \$ | \$ | \% |  |
| 702 | scribed Stock | 50,000 |  |  | 5.00 | 15th November, 1975 |
| 703 | Commonwealth Government Inscribed Stock | 50,000 |  |  | 5.25 | 15th July, 1988 |
| 704 | Department of Main Roads N.S.W. | 50,000 |  |  | 5.25 | 15th July, 1988 |
|  | lnscribed 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. lnscribed Stock |  |  | 50,000 | 5.75 | 6th September, 1977 |
| 707 | Department of Main Roads N.S.W. Inscribed Stock |  |  |  | 5.725 | 1st December 1974 |
| 708 | Inscribed Stock ${ }_{\text {Metropolitan Water Sewerage and }}$ |  |  | 150,000 | 5.325 | 1st December, 1974 |
|  | Drainage Board Inscribed Stock | 100,000 | 20,000 | 80,000 | 5.75 | 1st April, 1978 |
| 709 | Department of Main Roads N.S.W. lnscribed 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 |  |  |  | 5.75 | 27th February, 1979 |
|  | 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 scribed Stock Government $\quad$ ln- | 25,000 | 75,000 | 50,000 | 5.3 | 15th April, 1976 |

Appendix No. 7

## COUNTY OF CUMBERLAND MAIN ROADS FUND-GENERAL PURPOSES

Summary of Expenditure on Construction and Reconstruction Works

| City, Municipal or Shire Area | $\begin{aligned} & \text { Road } \\ & \text { No. } \end{aligned}$ | Location of Work | Class of Construction | Constructing Authority |  | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | To 30th June. 1968 | 1968-69 | To 30th June. 1969 |
|  |  |  |  |  |  | \$ | S | \$ |
| STATE HIGHWAYS <br> Prince's Highway |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Greater Wollongong ........ |  |  | ${ }_{\text {Climbing lane }}^{\text {Bitumen surfacing }}$. | Department do |  |  | 10,109 2,510 | 10.109 29.480 |
| $\begin{array}{lll}\text { Do } \\ \text { Do } & \text { do } \\ \text { do } & \ldots \ldots \ldots \\ \text { do }\end{array}$ | 1 | 32.16m. to 33.57 m . south of Sydney $\ldots \ldots \ldots \ldots \ldots \ldots \ldots .$. | ( ${ }^{\text {Bitumen surfacing }}$ Realignment ..... | do | $\ldots$ | 26,970 9.710 | 2,510 | 29,480 9,720 |
| Do do Do |  | 33.57 m . to 34.49 m . south of Sydney $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots . .$. | Realignment do... | do | $\cdots$ | 20.039 | 28,926 | 48,965 |
| ${ }_{\text {Do }}^{\text {Do }}$ do | 1 | 42.42 m . to 03.85 mm . south of Sydney | Realignment and widening | do | $\cdots$ | 203,142 | S, 3 387 | 208,529 |
| Rockdale Do | 1 | The Seven Ways ${ }_{\text {Catherine Street to President Alvenue }}$ | Kerb and gutter Widening | do | $\cdots$ | 267,599 | 41,311 | 308,910 |
| Do |  | Intersection with K yle Street | Improvement | do |  |  | 5,002 | 5,002 |
| Sutherland and Greater | 1 | 26.8 m . to 27.74 m . south of Sydney | Realignment | do | $\ldots$ | 46,049 | 129,883 | 175,932 |
| Wollongong |  | Harley Strest, Albert Avenue and Rocklea Crescent | Closure of medians | do |  |  | 894 | 894 |
| Do : |  | Anzac Avenue, Engadine to Veno Street, Heathcote ........ | Dual carriageway and deviation | do | $\cdots$ | - 29,287 | 533,757 48,632 | 563,044 296,216 |
| Do ${ }_{\text {Do }}$ | 1 | Auburn Road to Hotham Road.......................... Holt Road to Acacia Road | Reconstruction and widening Dual carriageway.......... |  | $\ldots$ |  |  | 296,216 546,55 |
| Do Do ${ }_{\text {Do }}$ | 1 | Holt Road to Acacia Road Grafton Street to Pitt Street, Lofut.... | ( Dual carriageway ............ | do | $\cdots$ | 514,687 503,112 | $\begin{array}{r}31,868 \\ 2,441 \\ \hline 53\end{array}$ | 546,553 |
| $\begin{aligned} & \text { Sydney } \\ & \text { Do } \end{aligned}$ | 1 | Intersection with Codrington Street ntersection with Cleveland Street and Darlington Road | Improvement do | Councildo |  |  | 235 1,034 | 17,013 |
|  | 1 | Intersection with Cleveland Street and Darlington Road, Darlington | do |  |  | 15,979 |  |  |
|  |  |  |  |  |  |  | \$845,472 |  |
| Hume Highway |  |  |  |  |  |  |  |  |
| Bankstown Burwood | $\frac{2}{2}$ | Johnson Road to S.H. No. 13 <br> Emu Street to Mintaro Avenue and Intersection with M.R. No. 315 |  | $\begin{aligned} & \text { Department } \\ & \text { do } \end{aligned}$ | $\cdots$ | 101,0393.670 | 3,45567 | 101,106 |
|  |  |  |  |  |  |  |  |  |
| Burwood and StrathfieldBurwood........... | 2222222222222222222 |  |  | do |  |  | 6,439 ${ }^{\text {a }}$ | 10,109 |
|  |  |  |  |  |  | 5.29584,472 | 415** | 4,880 |
| Camden ... |  |  |  | do |  |  | 53,747* | 83,328 53,737 |
| Do |  |  | Reinforced concrete substructure Deviation and northern approach | do |  | $\cdots$ | 54,773 | 53,773 |
| Fairfield $\ldots \ldots \ldots \ldots \ldots \ldots$ |  |  |  | do |  | 19,787 | $3,637^{*}$ 18,613 2, | 16.150 |
|  |  |  |  |  |  |  | 18,613 2,972 | 18,613 1958 |
| $\underset{\text { Lo }}{\text { Liverpool }}$ |  | Railway Overbridge at Warwick Farm .................... |  | do |  | 152.346 2517 11764 | , 805 | 253,151 |
|  |  |  | Approaches | do |  | 117,644 | 5.557 51.161 | ${ }^{123,201}$ |
| Do ................... |  | Warwick Farm Overbridge to Cabramatta Creek ........... |  | dododo |  | 21,428 | 2.645 | 24,073 |
| Do ${ }_{\text {Do }}$ |  | Pedestrian Subway at Warwick Farm | Reconstruction and widening Drainage | do  <br> do $\cdots \cdots$ <br> do.  |  |  | -979 | -9799 |
| Do |  |  | Channelisation Kerb and guter | Council |  | $\begin{array}{r}68,793 \\ \hline 500\end{array}$ | $\begin{array}{r}59.054 \\ \hline 1.153\end{array}$ | 127,847 |
| Strathfield................ |  | enue Cook's River to S.R. No. 2087 | Kerbside lane . | Department. | $\ldots$ | 5,355 | 1,110 | 6,465 |
|  |  |  |  |  |  |  | \$206,524 |  |
| Great Western Highway |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Auburn } \\ & \text { Do } \end{aligned}$ | 5 | Day Avenue to Haslam's Bridge Intersection with M.R. No. 532 | Drainage improvement Improvement | $\underset{\substack{\text { Department } \\ \text { do }}}{ }$ |  | 19,163 | 1,885 39.940 | 1,885 59,103 |

## County of Cumberland Main Roads Fund-General Purposes-continued

Summary of Expenditure on Construction and Reconstruction Works--continued


Appendix No. 7-continued
County of Cumberland Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | Road No. | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |

Parramatta, Bankstown and
Fairfield
Parramatta $\ldots \ldots \ldots \ldots \ldots$
Parramatta, Bankstown and
Fairfield
Parramatta $\ldots \ldots \ldots \ldots \ldots .$.


STATE HIGHWAYS--continued
State Highway No. 13-continued

| Approaches | Department |
| :---: | :---: |
| Landscaping ................ Widening and reconstruction | $\begin{aligned} & \text { do } \\ & \text { do } \end{aligned}$ |
| Dual carriageway | do |


| $\ldots \ldots$ | 16 |
| :---: | ---: |
| 841,992 | 3,182 |
| 567,287 | 31,062 |
|  | 47,560 |
| $\ldots \ldots \ldots$ | $\$ 390,184$ |

16


Total-State Highways
\$3,576,042
ORDINARY MAIN ROADS


| Kerr's Road to Victoria Street <br> Stormwater Channel Haslam's Creek |  |
| :---: | :---: |
| Clyde Streee to Adderly Street |  |
|  |  |
|  |  |
|  | George's River at Milperra |
| Intersection with Clements Avenue |  |
| Victoria Street to Henry Lawson Drive |  |
| Victoria Street to M.R. No. |  |
|  |  |
| Intersection with M.R. No. 508 |  |
| Intersection withMargaret Street to Walsh Avenue, South Enfield |  |
| River Road to Salt Pan Creek .. |  |
| River Road to Maclauren Avenue |  |
|  |  |
| Number 50, Showground Road |  |
| Intersection with Excelsior Avenue . |  |
| indersection |  |
|  |  |
|  |  |
| M. Mavis Street to Great Western Railway Li |  |
| Mavis Street to Great Wester Intersection with Rooty Hill Road North Intersection with Rooty 53 |  |
|  |  |
| 0.3 m . from M.R. No. 537 <br> West from Halcyon Avenue |  |
| Beauchamp Road to municipal boundary |  |
| ear Florence Avenue . ${ }^{\text {a }}$ |  |
|  |  |
|  |  |
| Intersection with Botany Road and Mill Pond Road, Mascot |  |
|  |  |
|  |  |
|  |  |
| Internal access under M.R.Bridge at Curran's Crossing |  |
|  |  |
|  | 2m. from Campbellow |


| Drainage................ | Council .. | 1,228 | 2,726 | 3,954 |
| :---: | :---: | :---: | :---: | :---: |
| Reinforced concrete bridge | do | 58,900 | 685 | 59,585 |
| Reconstruction | do ... |  | 901 | 901 |
| Reconstruction and widening | Department | 789,050 | 37,292 | 826,342 |
| Drainage.......... ${ }^{\text {Prestressed }}$ concrete | Council ... | 544,279 | 937 3,235 | 547, 9374 |
| Prestressed concrete bridge | Council ... |  | -229 | 547,514 |
| Dual carriageway | Department |  | 194 | 194 |
| Reconstruction and widening | do | 846,541 | 66,130 | 912,671 |
| Drainage extension | do |  | 10,174 | 10,174 |
| Channelisation do | do | 16,167 | 15,143 816 | 31,310 816 |
| Kerb and gutter | do | 15,810 | 1,176 | 16,986 |
| Construction ............ | Council | 356,334 | 3,405 | 359,739 |
| Widening and reconstruction | Department | 13,930 |  | 13,985 |
| Reconstruction | do |  | 4,163 | 4,163 |
| Kerb and gutter and drainage | Council .. |  | 1,129 | 1,129 |
| Drainage works | do do .. |  | ${ }^{800}{ }^{*}{ }^{*}$ | ${ }^{800}$ |
| Kerbside lanes | Department | 146,568 | 1,372 | 147,940 |
| Reconstruction and bitumen surfacing | Council . |  | 9,000 | 9,000 |
| Improvement | do .. | 7,854 | 3,271 | 11,125 |
| Reconstruction ${ }_{\text {Reinforced }}$ | do .. | 1,222 40 | -9,549 | 10,771 5185 |
| Reinforced concrete bridge and approaches Kerb and gutter | do do . | 40,000 | 11,185 116 | 51,185 116 |
| Kerb and gutter do | do do |  | ${ }_{412}^{116}$ | 116 412 |
| Pedestrian underpass | Department |  | 33,596 | 33,596 |
| Reinforced concrete overbridge | do | 21,720 | 101,445**** | 123,165 |
| Reconstruction | do | 17,455 | 17,455* |  |
| Re-channelisation | do |  | 5,588 | 5,588 |
| Widening . . . . . . | do | $\ldots .$. | 14,844 | 14,844 |
| Reinforced concrete bridge | do | ...... | 52,054 39 | 52,054 39 |
| Reinforced concrete subway | do | 25,929 | 8,276 | 34,205 |
| Climbing lane |  |  | 3,000 | 3,000 |
| Reinforced concrete box culvert | Council |  | 1,401 | 1,401 |

County of Cumberland Main Roads Fund-General Purposes--continued
Summary of Expenditure on Construction and Reconstruction Works-continued


Appendix No. 7-continued
County of Cumberland Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | Road | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | S | \$ | \$ |
| ORDINARY MAIN ROADS-continued |  |  |  |  |  |  |  |
| Marrickville Mosman | 167 | Enmore Road to Livingstone Road Ida Street to Pearl Bay Road | Reconstruction and bitumen surfacing Restoration of collapsed roadway .... |  |  | 8,000 160,554 | $\begin{array}{r} 8,000 \\ 324,100 \end{array}$ |
| Mosman | 164 <br> 164 | Ida Street to Pearl Bay Road | Restoration of collapsed roadway .... Reconstruction and widening | Department do | 163,546 | 160,554 99,156 | $\begin{array}{r} 324,100 \\ 99,156 \end{array}$ |
| North Sydney | 599 | Ernest Street, Cammeray ... | Reconstruction . . . . . . . . . . . . . . | Council ... |  | 2,342 | 9, 2,342 |
| Do | 599 | Near Pine Street, Cammeray | Improvement | do .. | 4,450 | 6,947 | 5,397 |
| ${ }_{\text {Do }}{ }^{\text {Dramata }}$ | 599 | Rosalind Street to Ernest Street, Cammeray | Widening |  | 18,200 1,558 | 6,700 10,338 | 24,900 11,896 |
| $\underset{\text { Parramatta }}{\text { Do }}$ | 165 | Intersection with Rydalmere Avenue.... Vineyard Creek to Grandview Street. . | $\xrightarrow{\text { Improvement }}$ - | Department | - 19.598 | 10,338 10,484 | 11,896 $\mathbf{2 9 , 6 2 8}$ |
| Do | 309 | Intersection with Aston Street at railway level crossing | Improvement | do | 30,961 | 8,438 | 39,399 |
| Do | 574 |  | Reconstruction and pavement widening | do |  | 563 | 563 |
| Penrith. | 154 | Parker Street near St. Dominic's College | Kerb and gutter . ${ }_{\text {Improvement }}$ | Council do |  | 315 1,822 | 13,822 |
| Do ${ }_{\text {Do }}$ | 154 |  | $\xrightarrow{\text { Improvement to culvert }}$ Prestressed concrete bridge and approaches | do $\begin{aligned} & \text { do } \\ & \text { do }\end{aligned}$ | 12,000 | 1,822 | 13,822 |
| Do | 155 | 5.2 m to 11.6 m . north of S.H. No. 5 .... | Reconstruction, widening and surfacing ... | do | 1,700 | 2,713 | 4,413 |
| Do | 155 |  | Reconstruction, widening and bitumen surfa Kerb and gutter | do | 263,625 | 10,000 194 | $\begin{array}{r}273,625 \\ \hline 194\end{array}$ |
| Randwick | 327 | Judge Street to St. Lukes Street | Reconstruction | do |  | 5,000 | 5,000 |
| Rockdale | 194 | Intersection with Bestic Street | Right-turn lane | Department |  | 5,351 | 5,351 |
| Do | 194 | Teralba Road to President Avenue | Widening ${ }_{\text {Recon }}$ |  |  |  |  |
| Ryde | 139 | Blaxland Road to Lane Cove Road | Reconstruction Widening | Council |  |  |  |
| Do | 139 139 | Church Street to Devlin Street Blaxland Road and Rowe Street | Widening ${ }_{\text {Channelisation }}$ | $\begin{gathered} \text { Council } \\ \text { do } \end{gathered}$ | 600 | 2,883 | 3,483 |
| Ryde and Ku-ring-gai | 162 | Andrew Avenue to Fontenoy Road | Reconstruction, widening and deviation | Department | 527,247 | 69,587 | 596,834 |
| Kyde .............. | 162 | Intersection with Cox's Road, North Ryde | Construction and installation of drainage | Council ... |  | 400 | 400 |
| Do | 162 | Blaxland Road to Quarry Road | Reconstruction and widening Traffic islands |  |  |  |  |
| Do | 200 373 | Intersection with Devlin Street | Traffic islands Widening ................ | $\underset{\text { do }}{\text { do }}$ Dentment | 8,550 6,825 | 621* $6,825 *$ | 7,929 |
| Do | 373 | Secondary Road No. 2052 to Lane Cove River | Reconstruction and widening | do |  | 969 | 969 |
| Do | 373 | Approaches to bridge over Lane Cove River ... | Widening ............... | do | 4,648 | 4,648* |  |
| Do | 373 | Intersection with Vimiera Road, Marsfield Adjacent to Nos. $61-63$ Epping Road, North Ryde | Drainage | do |  | -4,581 | 13,581 |
| Do | 373 373 3 | Adjacent to Nos. $61-63$ Epping Road, North Ryde Pittwater Road to Lane Cove River .......... | ${ }_{\text {Dral cage }}$ Dranageways | do | 461,1is | 4,314 | - 465,429 |
| Strathfield. | 315 | Opposite Llandilo Avenue | Extension of watermain | Council |  | , 86 | , 86 |
| Sutherland | 199 | Intersection M.R. No. 227, The Kingsway | Channelisation | do |  | 2,250 | 2,250 |
| Do | 227 | Bellingara Road to Parraweena Road | Widening and reconstruction | do | 37,500 | 17,594 | 17.594 |
| Sydney | 227 165 | Box Road to Parraweena Road Opposite Miller Street, Pyrmont | Reconstruction |  | 37,500 | 94,500 | 132,000 |
| Do | 170 | Intersection with O'Riordan Street and Bourke Street | Reconstruction | do | 10,905 | 12,219 | 23,124 |
| Do | 170 | Intersection with O'Riordan Street and Wyndham Street | Channelisation |  | 36,000 | 8,610 | 44,610 |
| Do | 170 | Gardener's Road to Boundary Street, Botany | Kerbside lanes | do | 24,500 | 3,628 | 28,128 |
| Do | 170 | Intersection with Henderson Road, Alexandria | Channelisation | do | 1,590 | 295* | 1,295 |
| Do | 171 | Intersection with Moore Park Road . .......... Darlinghurst Road to Kellett Avenue | Improvement Reconstruction | do | 2,101 |  | 1,200 2,110 |
| Do | 193 | Mitchell Road to Fox Avenue .... | Resurfacing . | do | ,900 | 2,712* | 3,612 |
| Do | 330 330 | Chalmers Street to Dowling Street | Reconstruction | do | 11,910 | 2,140* | 9,770* |
| Do | 330 330 | Crown Street to Dowling Street, Surry Hills . ${ }^{\text {a }}$ Hiils | do |  | 17,336 | 120 3,027 | 17,456 3,027 |
| Do | 330 330 | Elizabeth Street to High Holborn Street, Surry Hills South Dowling Street to Anzac Parade | $\underset{\text { Reconstruction and bitumen surfacing }}{\text { do. }}$ | do | 4,000 | 9,868 |  |
| Do | 593 | Napier Street to Oxford Street | Reconstruction | do | 7,000 | 3,000 | 10,000 |
| Warringah | 159 | Hillcrest Place to Harbord Road, Brookvale | Widening | do | 12,124 | 8,412 15,000 | 20,536 |
| Do | 159 | Riverview Parade to Oliver Street, Queenscliff Alan Street to Pittwater Road. Mona Vale | $\xrightarrow[\text { do }]{\text { do }}$ Reconstruction | $\underset{\text { Department }}{\text { do }}$ | 190,013 | 15,000 118,417 | 15,000 308,430 |
| Do | 162 | Antersection with M.R. No. 529 ........ | Improvement |  | 10,709 | 280 | 10,989 |

## Appendix No. 7-continued

County of Cumberland Main Roads Fund—General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | RoadNo. | Location of Work | Class of Construction | Constructing Authority |  | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  |  | \$ | \$ | S |
| ORDINARY MAIN ROADS-continued |  |  |  |  |  |  |  |  |
| Warringah | 164 | Bassett Street to Waterview Street, Mona Vale | Excavate and widen footpath | Department |  | ${ }^{61,054}$ | 7,742 73 | $\begin{array}{r} 68,796 \\ 315.716 \end{array}$ |
| Do | 164 | Intersection with Main Road No. 397 at Narrabeen | Improvement ${ }_{\text {Reconstruction }}$ | do |  | 241,408 71,683 | 73,708 15 1506 | $\begin{array}{r} 315,116 \\ 86,789 \end{array}$ |
| Do | 164 | Elimata Road to Rowan Street, Mona Vale ....... | Reconstruction and widening do do do | do |  | 71,683 6,256 | 179,919 17 | 186, 175 |
| Do | 164 | Bassett Stret to Bardo Road, Newport ...... | Kerbside lane ${ }^{\text {do }}$......... | do |  |  | 3,859 | 3,859 641845 |
| Do | 328 | Fitzpatrick Avenue to Bantry Bay Road | Dual carriageway | do |  | 580,835 | 61,010 | 641,845 |
| Do | 328 | Intersection with Forest Way, French's Forest | Pedestrian overbridge ...... Widening and channelisation | do |  |  | 270 13 | 1270 211,673 |
| Do | 328 530 | Intersection with M.R. No. 397 Harbord Lagoon to Pacific Parade | Widening and channelisation Widening | $\xrightarrow[\text { Council }]{\text { do }}$ |  | 211,660 | 2,742 | 21,673 |
| Do | 530 | Western side, Pitt Road to Abbott Road, Curl Curl | Drainage kerb and gutter | do |  | 6,000 | 4,203 | 10,203 |
| Do | 530 | Lawrence Street to Brighton Street, Harbord ...... | Reconstruction ......... | do |  |  | 5,000 4.500 | 5,000 10800 |
| Waverley | 172 340 | Intersection with Sandridge Street, Bondi Lugor Street to Leichhardt Street, Waverley | Channelisation | do |  | 6,300 | 4,500 4,358 | 10,800 4,358 |
| Willoughby | 191 | Anglo Street to Maclean Avenue, Chatswood | Widening and improvement | do |  |  | 7,034 | 7,034 |
| Do | 599 | Sailor's Bay Road to Babbage Road ..... | Reconstruction and widening | Department |  | 19,722 | 226,947 | 246,669 15.580 |
| Windsor and Colo | 182 | Bridge over Hawkesbury River at Windsor | Footway Reconstruction, widening and kerb and gutter | do |  | 22,072 | 5,994** | 12,636 |
| Do | 184 |  |  | do |  |  | 12,806 | 12,806 |
| Woollahra | 537 339 | Bourke Street to East Market Street, Richmond Clarendon Street, Vaucluse | Reconstruction do | do |  | 9,200 | 107,308 1,049 | 16,508 1,049 |
| Total-Ordinary Main Roads |  |  |  |  |  |  | \$3,706,939 |  |
| SECONDARY ROADS |  |  |  |  |  |  |  |  |
| Ashfield | 2056 | S.H. No. 5 to Dobroyd Parade | Reconstruction and widening | Department |  | 164,458 | 98,622 | 263,080 |
| ${ }^{\text {Do }}$ o | 2056 | Intersection with Timbrell Drive, Five Dock | Improvement | Council do |  | 1,079 | 46 308 | 1,125 |
| Bankstown Do | ${ }_{2068}^{2068}$ | Thorn Street to railway underpass, Revesby Canterbury Road to Thorn Street, Revesby. | Reconstruction do | do |  | 31,863 | 1,441 | 33,304 |
| Blacktown | 2084 | Intersection with Abbott Road, Seven Hills... | do |  |  |  | 223 | 223 |
| Canterbury | 2014 | Albert Road to Cook's River Bridge.... | do |  |  | 960 | 526 | 528 |
| Do | 2060 | King Georges Road to Canterbury Road King Georges Road to Waratah Street, Punchbowl | do |  |  | 23,632 | 5,000 | 28,632 |
| Drummoyne | 2059 | St Lukes Park to M.R. No. 395 ................ | do | do |  | 1,029 | 3,081 | 4,110 |
| Hunter's Hill | 2033 | Luke Street to Mary Street | Strengthening kerbside lanes | do |  |  | 2,500 | 2,500 |
| $\underset{\substack{\text { Ku-ring-gai } \\ \text { Do }}}{\text { ded }}$ | 2043 | Springdale Avenue to Koola Avenue, Killara Eastern Road to Municipal Boundary | Reconstruction do | do |  |  | 1,789 1,82 | $\begin{array}{r}\text { 189 } \\ 1,782 \\ \hline\end{array}$ |
| Do | 2043 | Grosvenor Road to Municipal Boundary | do | do |  |  | 4,000 | 4,000 |
| Do | 2043 |  | do | do |  | 27,323 | 10,244 1,122 | 37,567 1,122 |
| Lane Cove | 2070 2070 | Penrose Street to River Road west River Road to Best Street | Widening and realignment | do |  | 14,000 | 8,122 | 22,814 |
| Do | 2070 | Warraroon Road to William Edward Street, Northwood | Reconstruction . . ${ }^{\text {a }}$. ${ }^{\text {a }}$. | do |  | 6,031 | 68* | 5,963 |
| Do | 2070 | Gore Creek to Northwood Road, Northwood ........ | Widening and realignment |  |  |  |  | 8,250 |
| Leichhardt | 2056 | Charles Street to James Street ${ }_{\text {a }}^{\text {Intersection with Elizabeth Drive }}$ | Reconstruction do | do |  |  | 8, 263 | 8,364 |
| Diverpoor | 2071 | Campbell Street to Hoxton Park Road | do | do |  | 58,000 | 429 | 58,429 |
| Manly Marrickvili | 2025 | Woods Parade to Margaret Street, Fairlight ........ | Widening ${ }_{\text {Chanelisation }}$ | do |  | 3,800 | 3,533 | 7,333 1,390 |
| Marrickville | 2007 | Intersection with Sydenham Road and Buckley Street Stanmore Road to Addison Road, Petersham | Channelisation . ${ }_{\text {Reconstruction }{ }^{\text {and }} \text { bitumen surfacing }}$ |  |  |  | 7,250 | 7,250 |
| Do | 2021 | Intersection with 111 warra Road and Marrickville Road | Channelisation .................... | do |  | 973 | - 3 35* | 1935 1.550 |
| Do | 2028 | Junction with Gordon Street, Petersham | do |  |  |  | 1,550 | 1,550 |

Appendix No. 7-continued
County of Cumberland Main Roads Fund--General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued


* Credit $\quad \dagger$ For additional expenditure see Appendix No. 7A.


## Appendix No. 7A

COUNTY OF CUMBERLAND MAIN ROADS FUND--SPECIAL PURPOSES
Summary of Expenditure on Construction and Reconstruction Works


## Appendix No. 8

COUNTRY MAIN ROADS FUND-GENERAL PURPOSES
Summary of Expenditure on Construction and Reconstruction Works

| City, Municipal or Shire Area | Road No. | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |



|  | 2,094 |
| :---: | :---: |
| 113,376 9,000 | 6.558 9.000 |
| 4,285 | 4.716 |
| 9,000 | 11.000 250 |
| ...... | 6,500 |
| ...... | 2,421 4,000 |
| 167,7i7 | 3,968 |
| 76,439 | 5,648 $\mathbf{2 9 , 4 9 4}$ |
|  | 80,699 |
| 121,381 | 63,388 5 5444 |
| $\ldots$ | 13,337 |
|  | 3,982 |
| 30,795 | 11,025 1,089 |
|  | 7,478 |
| 19,207 | 76,887 |
|  | \$348,978 |



hume Highway
Princes hinays


Approaches
Reconstruction and bitumen surfacing

| Department | $\ldots$ |
| :---: | :---: |
| do | $\ldots$ |
| do |  |
| do |  |
| do |  |
| do | $\ldots$ |
| do | $\ldots$ |
| do | $\ldots$ |
| do | $\cdots$ |
| do | . |
| do | $\cdots$ |
| do | $\cdots$ |
| do | $\cdots$ |
| do | $\ldots$ |
| do | $\ldots$. |
| do |  |
| do | $\ldots$ |
| do |  |


| 59,195 | 3,780 54.298 | 62,975 54,298 |
| :---: | :---: | :---: |
| $\cdots 6,832$ | 5,094 | 11,926 |
| 28,178 | 6.775 | 34,953 |
| 10,568 645,648 | 15.906 45.989 | 26,474 691 |
| 645,648 | 145,989 142,359 | 691,637 142,359 |
|  | 134,002 | 134,002 |
|  | 27,369 | 27,369 |
| ${ }_{133,101}^{1,106}$ | 120,674 | 121,775 |
|  | 65,341 | 133,651 65,341 |
|  | 8,757 | 8,757 |
| 15,780 | 15,652 | 31,432 |
| 8,652 | 40,446 | 49,098 |
|  | 39,503 | 39,503 |
|  | 76,399 | 76,399 |
| 49,253 | 207,764 | 257,017 |
| 479,058 | 2,118 | 481,176 |
| 599,788 |  | 599,824 |
| 24,058 | 24,058* |  |
| 109,954 | 15,074 | 125.028 |
| 75,472 | - | 76,666 127,992 |
|  |  | 127,992 |

## Appendix No. 8-continued

Country Main Roads Fund-General Purposes-continued

## Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | Road No. | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
| STATE HIGHWAYS—continued Hume Highway-continued |  |  |  |  |  |  |  |  |
| Kyeamba |  | Tarcutta Creek at Tarcutta | Prestressed concrete bridge ......... | Department |  |  | 24,454 | 24,454 51 |
| Do | 2 | Through village of Tarcutta | Reconstruction and bitumen surfacing Improvement | do |  | 49,3680 | 77,371 | 81,962 |
| Mittagong | 2 | Pioneer Street to Gibbergunyah Crreek | Reconstruction | do |  | 149,452 | 15,691 | 165,143 |
| Do | 2 | Cutaway Hill, 4.2m. to 5.5 m . south of Mittagong | Deviation ${ }^{\text {Co.. }}$ | do |  | 746,520 20,596 | 48,327 | 794,847 21,821 |
| Do | 2 |  | Climbing lane $\begin{aligned} & \text { Improvement to } \\ & \text { a }\end{aligned}$ | do |  | 20,596 | 93,881 | 21,821 93,881 |
| Mulwaree | 2 |  |  | Council |  |  | 5,100 | 5,100 |
|  | 2 | Bridge over Run-O-Waters Creek 3m, south of Goulburn |  | Department |  | 32,514 25,418 | \% $\begin{array}{r}2,899 * \\ 329,369\end{array}$ | 29,615 584,787 |
| Do Do | 2 | 39.3m. to 41.9 mm , south of Mittagong $\ldots \ldots \ldots \ldots \ldots \ldots$ | Reconstruction and bitumen surfacing | do |  | 255,418 | 329,369 24,704 | 584,787 24,704 |
| Mulwaree and Gouiburn | 2 | Uringalla Creek to 7 m . south of Goulburn | Widening and bitumen surfacing | do |  | 376,380 | 2,246 | 378,626 |
|  |  | 33.9 m . to 38.9 m . south of Nowra ........ | Reconstruction and bitumen surfacing | do |  | 185,662 | 1,900* | 183,762 |
| Mulwaree | 2 | 46.7 m , to 48.7 m . south of Mittagong ... | do do do do | do |  | 414,568 | 2,506 | 417,074 3,879 |
| Wingecarribee Do | 2 | Northern approach to bridge over Uringalla Creek 3.25 m. to 3.6 m. south of Berrima | Bitumen surfacing Improvement to crests | do |  | 3.537 79,031 | 7,181******* | 3,879 71,850 |
| $\xrightarrow{\text { Do }}$ | 2 | Intersection with S.H. No. 25 | Improvement to $\ldots$.... | do |  | 153.945 | 57,312 | 211.257 |
| Wollondilly | 2 | Racecourse Creek 11.22. South of Camden | Reinforced concrete bridge |  |  | 54,972 | ${ }_{\substack{1,352 * \\ 1,473}}$ | 53,620 26208 |
| Do | 2 | Bridge over Bargo River at Tahmoor ..... | $\underset{\text { Approaches }}{\text { do }}$ ( $\ldots \ldots \ldots \ldots \ldots .$. | do |  | 260,935 64,524 | 1,473 | 262,408 |
| Do | 2 | Bridge over Racecourse Creek 11.2m. south of Camden | do | do |  | 140,052 | ${ }^{1,965}$ | 142,017 |
| Do | 2 | 4.2 m. to 5 m . south of Camden Intersection with Finns Road | Asphaltic concrete surfacing |  |  | 7,589 125,281 | - $10,475^{*}$ | 6,114 165,762 |
| Do | 2 | Intersection with Finns Road 9 m. to 9.6 m . south of Camden | Improvement ${ }_{\text {Reconstruction . }}$ | do |  | 125,281 | 40,481 80,702 | 165,762 80,702 |
| Do | 2 | 3.25 m . to 4.13 m . south of Camden | Reconstruction | do |  | 127, 752 | 28,930 | 156,482 |
| Do | 2 | 1.5 m . south of Picton $\ldots \ldots . .$. | Extension of reinforced concrete box culvert | do |  | 287 | 10,360 | 10,647 |
| Do | 2 | 4.6m. to 7.16 m . south of Camden | Realignment and climbing lanes.......... | do |  | 234,798 16,828 | 148,421 $1,441 *$ | 383,219 15,387 |
| YassDo | 2 | Bridge over Bango Creek, 1.6 m . south of Yass | Approaches ................... | do |  | 5,356 | 96,738 | 102,094 |
|  | 2 | Bango Creek, 1.6 m . south of Yass ......... | Reinforced concrete bridge | do |  | 16,927 | 43,366 | 60,293 |
|  |  |  |  |  |  |  | \$2,254,944 |  |
| Snowy Mountains Highway |  |  |  |  |  |  |  |  |
| Gundagai $\qquad$ | 4 | Bridge over Yaven Yaven Creek, 2.8m. east of S.H. No. 2 Yaven Yaven Creek, 2.8 m east of S.H. | Approaches Prestressed concrete bridge | $\underset{\text { do }}{\text { Department }}$ |  | 17,199 32,913 | 137,303 89,696 | 154,502 122,609 |
| Monaro | 4 | 35.5m. west of Bega | Reinforced concrete box culvert | do |  | 23,048 | 3,369 | 126,417 |
| Do | 4 | 37.04 m . west of Bega $3 . .$. | do do do d ${ }^{\text {d }}$ | do |  | 9,838 | 11,640 46634 | $\begin{array}{r}21,478 \\ \hline 100866\end{array}$ |
| $\underset{\text { Mumbulla }}{\text { Do }}$ | 4 | 35m. to 40 m . west of Bega .3. | Reconstruction and bitumen surfacing do do do do do | do |  | 542,532 714,974 | 461,334 26,969 | 1,741,943 |
| Mumbulla and Monaro | 4 | 33 mm to 35 m , west of S.H. No. ${ }^{\text {a }}$. | do do do do | do |  | 378,381 | 454,748 | 833,129 |
| Mumbulla $\ldots . . . . . . . . . .$. | 4 | 21.3 m . to 25.5 m . west of S. H . No. 1 | do do do do | do |  | 417.871 | -88,024 | 505, 895 |
| $\xrightarrow[\text { Snowy River }]{\text { Do }}$ | 4 | 28.3m. to 33 m . west of $\mathrm{S} . \mathrm{H}$. No. $1 . . .$. Bullock Head Creek 0.5 m . west of Kiandra | $\underset{\text { Reinforced concrete bridge }}{\text { do }}$ do ${ }_{\text {do }}^{\text {do }}$ do |  |  | 497,001 | 1371,150 11768 | 634,151 11,768 |
| Do | 4 | 4.3 m . to 6 m . west of Kiandra | Reconstruction and bitumen surfacing | do |  |  | 201,487 | 201,487 |
| Do | 4 | 22.8 m . west of Adaminaby to 1.3 m . west of Kiandra | do do do do | do |  |  | ${ }^{102,710}{ }_{18}$ | 102,710 |
| ${ }_{\text {Tumut }}^{\text {Do }}$ | 4 | 2m. to 4.3 m . West of Kiandra | Improvement do do........... | Council |  | 241,943 |  | 22, 6,999 |
| Do | 4 | Bridge over Gilmore Creek. 0.25 m . from Cilmore | Approaches . ....... | Department |  | 18,075 | 272.764 | 290.839 |
| Do | 4 | Gilmore Creek 0.25 m . from Gilmore ......... | Steel and concrete bridge. | do |  | 15,055 | 74,035 | 89,090 |

## Appendix No. 8-continued

Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued


Appendix No. 8-continued

## Country Main Roads Fund-General Purposes-continued

Summary of Expenditure on Construction and Reconstruction Works-continued


## Appendix No. 8-continued

Country Main Roads Fund-General Purposes--continued
Summary of Expenditure on Construction and Reconstruction Works-continued


## Appendix No. 8-continued

Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued


## Appendix No. 8-continued

Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | $\begin{aligned} & \text { Road } \\ & \text { No. } \end{aligned}$ | Location of Work | Class of Construction | ConstructingAuthority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |



| Improvement to level crossing | Department |  |
| :---: | :---: | :---: |
| Reconstruction and bitumen surfacing | do |  |
| Reinforced concrete box culvert and approaches | Council |  |
| Reconstruction and bitumen surfacing | Department |  |
| do do do do | do |  |
| Reconstruction and bitumen surfacing | do |  |
| do do do do | do |  |
| Approaches | do |  |
| Reinforced concrete bridge and approaches | do |  |
| Prestressed concrete bridge | do |  |
| Reinforced concrete bridge | do |  |
| Reconstruction and bitumen surfacing do do do do | Council |  |
| Improvement ......... |  |  |
| Raising of approaches | do |  |
| Reconstruction and bitumen surfacin | Department |  |
| $\begin{array}{llll}\text { do } \\ \text { do } & \text { do } \\ \text { do } & \text { do } \\ \text { do } & \text { do } \\ \text { do }\end{array}$ |  |  |
| Elimination of crest ............. | do |  |
| Reconstruction and bitumen surfacing | do |  |
| do do do do | do |  |
|  | do |  |
| Prestressec concrete bridge Reinforced concrete bridge | do |  |
| Reconstruction and bitumen surfacing | Council |  |
| do do do do | Department |  |
| do do do do |  |  |
| do do do do | do |  |
| Reconstruction and widening | do |  |


| 3,000 | 536* |
| :---: | :---: |
| 124,698 | 801 |
| 20,477 | 23,975 |
| 123,528 | 178,537 |
|  | 271,494 |
| 280,577 | 169,994 |
| 245,870 | 7,976 |
| 35,412 | 1,252 |
| $\ldots . .$. | 34,036 |
| 33,544 | 1,630 |
|  | 40,000 |
| 12,846 | $\stackrel{5,000}{2,007}$ |
|  | 4,874 |
|  | 10,275 |
| 324,450 | 82,061 |
| 7,237 | 179,928 |
| 5,134 | 67,639 |
|  | 71,795 |
| 188,757 | 78,799* |
| 105,396 | 78,882 |
| 35,230 50 2085 | 44,778 |
| 20,858 133,179 | ${ }_{8,533}{ }^{6,775}$ |
| 135,218 | 25,937 |
| 184,899 | 4,693 |
| 151,559 | 12,266 |
| 99,566 | 7,915 65 |
|  | \$1,318,047 |

2,464
125,499
44,452
302,065
271,494
321
450,571
253,846
36,664
34,036
23
35,174
40,000
50,000
10,839
4,874
10,275
406,511
187,165
72,773
71,795
184,958
184,278
80,008
27,633
124,646
161,155
189,592
163,825
7,915
99,631


| 12 | $\begin{array}{l}6 \mathrm{~m} . \text { to } 10 \mathrm{~m} . \text { east of Moree } \\ 12\end{array}$ |
| :--- | :--- |
| 4.38 m. |  |
| to 5.66 m. |  |

26.18 m . to 32 m . West of More
33.4 m . to 37 m . west of Moree
1 m . to 1.6 m . east of Inverell
Bridge over Cowan's Creek, 3.6 m . west of South Grafton
Cowar's Creek 3.6 m . west of South Grafton
$7.5 \mathrm{~m} . \operatorname{to} 8.5 \mathrm{~m}$. west of Glen Innes
7.5 m. to 8.5 m . west of Glen Innes
Various locations east of Glen Innes
Aarious locations east of Glen Innes
At Gibraltar Range, 45 m . to 46 m . east of Glien Innes
5.38 m to 10.98 m east of Collarenebri
wydir Highway

| $\underset{\text { Reconstruction and bitumen surfacing }}{\text { Widening }}$ | Council do | 56,500 | 64,000 7 \% | 64,000 49,142 |
| :---: | :---: | :---: | :---: | :---: |
| Reconstruction and bitumen surfacing | do | 58,000 | 3,000 | 61,000 |
| do do do do do do do do | do | 30,000 | 60,400 | 90,400 |
| Approaches ................ | Department | 65,869 | 19,583* | 38,117 46,286 |
| Reinforced concrete bridge | do |  | 19,583 | 19,583 |
| Climbing lane | Council | 31,199 | 30,000 | 61,199 |
| Batter protection | Department |  | 5,129 |  |
| Drainage. .......................... Reconstruction and bitumen surfacin | $\xrightarrow{\text { do }}$ Council | 180,000 | 7,881 $8,666 *$ | ${ }_{\text {\% }}^{71,881}$ |
|  |  |  | \$188,503 |  |

## Appendix No. 8--continued

## Country Main Roads Fund-_General Purposes-continued

Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | $\underset{\substack{\text { Road } \\ \text { No. }}}{ }$ | Location of Work | Class of Construction | Constructing Authority | Expenditure from Depariment's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |
| STATE HIGHWAYS-continued |  |  |  |  |  |  |  |
| Sturt Highway |  |  |  |  |  |  |  |
| Balranald................. ${ }^{\text {a }}$. $14 \mid 0 \mathrm{~m}$. to 5.5 m . west of Euston |  |  | Reconstruction .................................... ${ }^{\text {d }}$ Department |  | 25,588 | 51,168 | 76,756 |
|  |  |  | Reconstruction and widening Widening | Council ... | 2,000 36,800 | 13,037 | ${ }_{58,651}^{15,037}$ |
| $\underset{\text { Kyeambä }}{\text { Do }}$ | 14 |  | Widening Deviation and............... | $\underset{\text { Department }}{\text { do }}$ | 36,800 689 | 21,851 15.582 | 58,651 |
| DoDoDoco. | 14 | 17.26 m . to 18.48 m . west of S.H. No. ${ }^{\text {a }}$ |  | - do do |  | 3,839 | 3,839 |
|  | 14 | 14.18 m . west of S. S . No. 2 . $\ldots \ldots .$. | Reinforced concrete box culvert | do |  | 16.462 | 16,462 |
|  | 14 |  | Reconstruction and bitumen surfacing <br> Approaches | do | 263,988 | 21,285 51,576 | 285,273 52,475 |
| $\underset{\text { Narrandera }}{\text { Do }}$, $\ldots \ldots \ldots \ldots \ldots \ldots$ | 14 |  | Approaches ${ }_{\text {Reconstruction }}$ and bitumen surfacing | do | 53,585 | 246.171 | 299,756 |
| Wakool | 14 | 8 m. to 12 m e east of Narrandera ${ }^{\text {a }}$. ${ }^{\text {a }}$...................... | Improvement to shouldersPrestressed concrete bridge and cuiverts | $\xrightarrow{\text { do }}$ |  | $\stackrel{4,630}{ }$ | +4,630 |
|  | 14 |  |  | Council do | 141,413 | $10,000 *$ 10,000 | 131,413 10,000 |
| $\xrightarrow{\text { Do }}$ Do | 14 | Bridge over ranga Creek Sm. east of Balranald | Bitumen surfacing Widening ..... | do |  | 100000 60,607 | 60,237 |
|  | 14 | 50.4 m . to 77.3 m . west of S.H. No. 21 |  |  | $\because 80600$ | 1,637 |  |
|  |  |  |  |  |  | \$507,838 |  |
| Goodradigbee ............. | 15 |  | barton Highway | Department | I 23,814 |  |  |
|  |  | \| 25.0 m , to 27.7 m . from Canberra | Reconstruction and bitumen surfacin |  |  | 11,499* | 12,315 |
|  |  |  |  |  |  | \$11,499* |  |
| Bruxner Highway |  |  |  |  |  |  |  |
| Ashford ................. | 16 | 31 m . to 35 m . west of Bonshaw | Reconstruction and bitumen surfacing | Council | $\ldots .$. | 47,000 83,415 | 47,000 83,415 |
| Do | 16 16 | 28m. to 31 m . west of Bonshaw. ... | $\begin{array}{llll}\text { do } \\ \text { do } & \text { do } \\ \text { do } & \text { do } \\ \text { do } & \text { do } \\ \text { do }\end{array}$ | do do $\quad$. |  | 83,415 51,332 | -146,332 |
| Do | 16 | 23.6m. to 87. m. west of Bonshaw | $\begin{array}{llll}\text { do } \\ \text { do } & \text { do do do } & \text { do do } \\ \text { do }\end{array}$ | do do $\ldots$ | 70,779 | +14,221 | 855,000 |
| Do | 16 | Muller's Lagoon, 8.5m. east of Bonshaw | Reinforced box culvert ........ | Department |  | 7,877 5,967 | $\begin{array}{r}7,877 \\ 12,857 \\ \hline\end{array}$ |
| Do | 16 | Little Sandy Creek .............. | Reinforced concrete box culvert Reinforced concrete bridges. |  | 6,890 | 53,635 | [ ${ }^{12,6537}$ |
| Do | 16 | 23 m . and 23.2 m . west of Bonshaw | Reinforced concrete box culverts ${ }^{\text {R }}$ | Council ... | 21,000 | 296* | 20,704 |
| Do | 16 | Greenhills Creek 28.6 m . west of Bonshaw | Reinforced concrete bridge and approaches |  | 23,250 | ${ }^{1.383} \mathbf{9 1 , 0 4 2}$ | 24,633 91042 |
| Do | 16 | (10m. to 14 m . east of Bonhsaw $\ldots .$. | Reconstruction and bitumen surfacing do do do do do | Department |  | 91.042 28,756 | 91,042 320,026 |
| Do | 16 | 0.5 m . to 4 mm . east of Bonshaw | do do do do | do | 48,265 | 84.781 | 133,046 |
| Do | 16 | 4m. to 10 m . east of Bonshaw | Deviation do do do | do |  | $2,31,910$ 120,888 | 231,910 120,888 |
| Go Gundurimba | 16 16 |  | $\xrightarrow{\text { Deviation }}$ Reconstruction and bitumen surfacing | $\xrightarrow{\text { Council }}$ | 14,500 | 120,888 <br> 75,60 | 120,88 89760 |
| Do | 16 | 24.11 m . to 24.97 m . west of Ballina $\ldots . . . . . . . . . . . . . . . .$. |  | do .. | 28,679 | 18.922 | 47,601 |
| Do | 16 | 24.97m. to 25.5 mm . west of Ballina. | Reconstruction and bitumen surfacing | do do | 27,500 | 66.528 12.067 | 94,028 12.067 |
| Do | 16 16 | 22.7 m . to 23.8 m . West of Bailina 29.08 m . west of Ballina . ${ }^{\text {a }}$. . | $\underset{\text { Reinforced concrete box culvert }}{\text { do }}$ do | do do | 8,000 | 32,000 | 12,000 |
| Do | 16 | Pelican Creek 6.56 m . from Lismore | Prestressed and reinforced concrete bridge | do | 29,500 | 370* | 29,130 |
| Tenterfield | 16 | 23m. to 27 m . west of Tenterfield | Reconstruction and bitumen surfacing do do do | do do |  | 5,000 | 5,500 |
| Do | 16 | 20.36m. to 23 m . west of Tenterfield | do do do do | do $\quad$. |  | 142,500 | 142,500 |
| Do | 16 | 14.7m. to 17 m . west of Tenterfield. |  | $\underset{\text { Department }}{\text { do }}$ | 274,750 49,024 | 45,000 31,909 | 319,750 80,933 |
| $\xrightarrow{\text { Do }}$ Do | 16 | Yellow Creek, 8.4 m . east of Drake Little Yellow Crek, 8.1 m . east of Drake | Prestressed concrete bridge Reinforced concrete bridge | Department | 49,024 | 31,909 42,401 | 80,933 43,026 |

Appendix No. 8-continued

## Country Main Roads Fund-General Purposes--continued

Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | Road No. | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |


| Tenterfield |  |
| :---: | :---: |
| Do |  |
| Do |  |
| Do |  |
| Tintenbar |  |
| Tomki |  |
| Do |  |


| 16 | 40 m . west of Casino |
| :---: | :---: |
| 16 | 87 m . to 91.3 m . west of Ballina |
| 16 | 77.23 m . to 80 m . west of Ballina |
| 16 | 80 m . to 85 m . west of Ballina |
| 16 | 85 m . to 87 m . west of Ballina |
| 16 | 12.6 m . to 12.9 m . from Ballina |
| 16 | Tomki Creek 6.7 m . east of Casino |
| 16 | Selected lengths 8 m . to 12 m . west of Casino . |

STATE HIGHWAYS-continued
Bruxner Highway-continued


|  | 48,112 |
| :---: | :---: |
| 206,801 | 41,740 |
| 129,017 | 15,509 |
| 195,611 269865 | 220,805 57,080 |
| 269,865 | 57,800 |
| ....... | 107,020 |
| ....... | $\begin{array}{r} 46,014 \\ 137,290 \end{array}$ |
|  | \$1,974,998 |

48,112
248,541
144,526
416,416
326,945
5,800
107,020
46,014
137,290

Newell Highway

| Bland | 17 | 28 m . to 31 m . north of Ardlethan |
| :---: | :---: | :---: |
| Do | 17 | 24 m . to 28 m . north of Ardlethan |
| Do | 17 | 20 m . to 24 m . north of Ardlethan |
| Do | 17 | 15.15 m. to 20 m . north of Ardlethan |
| Do | 17 | Railway level crossing at Wirrool |
| Do | 17 | Mandamah Creek 17.4m. north of Ardlethan |
| Do | 17 | Scott's Creek, 16.9m. north of Ardlethan |
| Boolooroo | 17 | Nee Nee Creek, 29 m . north of Moree |
| Do | 17 | Mungle Back Creek, 51.9 m . north of Moree |
| Do | 17 | Mungle Creek, 50.3 m . north of Moree |
| Do | 17 | Tackinbri Creek, 46.7 m . north of Moree |
| Do | 17 | 13 m . to 24 m . north of Moree |
| Do | 17 | 19 m . to 29.6 m . north of Moree |
| Do | 17 | 29.6 m . to 39.6 mm . north of Moree |
| Do | 17 | 6 m . to 6.9 mm . north of Moree |
| Coolamon | 17 | 39 m . to 47 m . north of Moree |
| Coolamon | 17 | 4.94 m . east to 0.69 m . south of Ardlethan |
| Do | 17 | Mirrool Creek, near Ardlethan |
| $\xrightarrow{\text { Do }}$ Coonabarabran | 17 17 | South from Ardlethan to S.H. N |
| Do | 17 | 58.5 m . to 6.53 m . south of Narrabri |
| Do | 17 | 56.23 m . south of Narrabri . ..... |
| Do | 17 | Bridge over Billy Creek, 50.13 m , to 51.56 m . south of Narrabri |
| Forbes | 17 | Lake Forbes at Forbes.. |
|  | 17 | Approach to bridge over Lake Forbes |
| Goobang | 17 |  |
| Jemalong and Goobang | 17 | Curve, 10 m . north of Forbes |
| Jemalong | 17 | 16.8 m . to 18.3 m . south of Parkes |
| Jerilderie | 17 17 | Bridge over Algudgerie Creek, 0.95 m . south of Jerilderie Andy's Creek, 44.3 m . south of Narrabri |
| Namoi | 17 |  |
| Do | 17 | Bridge over Spring Creek, 8.1 m . south of Narrabri |
| Do | 17 | Box Flat Creek, 29.4 m . south of Narrabri |
| Do | 17 | Tooley Gully, 32.3 m . south of Narrabri |
| Do | 17 | Bohena Creek, 8.75 m . south of Narrabri |
| Do | 17 | Mallallee Creek, 39.89 m . south of Narrabri |


| Reconstruction and bitumen surfacing | Department | $\ldots$ | 135,871 | 1,124 | 136,995 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| do do do do | do |  | 208,477 | , 754 | 209,231 |
| do do do do do do do do do do | do |  | 142,949 | 51,277 | 194,226 |
| Improvement | do |  |  | 321 | 21321 |
| Reinforced concrete bridge | do |  | ...... | 6,218 | 6,218 |
|  |  |  |  | 6,565 | 6,565 |
| Steel and reinforced concrete bridge | do |  | 41,360 | 8,523 | 49,883 |
| Reinforced concrete bridge | do | $\cdots$ |  | 5,865 20.516 | 5,865 |
| do do do | do |  |  | 20,221 | 20,516 20,221 |
| Treatment of edge failures | do |  |  | 10,625 | 10,625 |
| Reconstruction and bitumen surfacing | do |  | 515,101 | 39,874 | 554,975 |
| do do do do | do |  | 167,864 | 406,990 | 574,854 |
| Construction | do |  |  |  |  |
| Steel and reinforced concrete bridge | do | ... | 69,858 | 7,699 | 397,557 |
| Gravelling and sealing ..... | Council |  |  | 2,093 | 2,093 |
| Reconstruction and bitumen surfacing | Department |  | 71,783 | 155,805 | 227,588 |
| do do do do |  |  |  | 7,144 | 7,144 |
| Culvert extension | do | $\cdots$ | ....... | 6,057 | 6,057 |
| Approaches .............. | do |  |  | 112,748 | 112,748 |
| Deviation including bitumen surfacing | Council |  |  | 25,000 | 25,000 |
| Reconstruction | Department |  | 3,039 | 152,235 | 155,274 |
| Associated roadworks | do |  |  |  | 84 |
| Reconstruction and bitumen surfacing | ${ }_{\text {do }}^{\text {do }}$ |  | 11,561 | 241* | 11,320 |
| Wio do do do | Council |  | 68,443 | 6,097 | 74,540 |
| Widening Reinforced concrete box culvert | Department |  | 13,953 | 12,983 | 12,983 |
| Approaches ................ |  |  |  | 124 | 23,616 |
| Approaches do | do |  | 10,835 | 52 | 10,887 |
| Reinforced concrete box culvert | do |  |  | 26,395 | 26,395 |
| $\underset{\text { Reinforced }}{\text { do }}$ concrete bridge ${ }_{\text {do }}^{\text {do }}$ | do |  |  | 21,546 | 21,546 |
| Reinforced concrete bridge | do do |  | 140,269 | - 23,763 | 142,030 |
| Reinforced concrete box culvert | do |  |  | 23,534 | 23,534 |

Appendix No. 8-continued
Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | Road No. | Location of Work | Class of Construction | Constructing Authority |  | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  |  | \$ | 5 | \$ |
| STATE HIGHWAYS-continued |  |  |  |  |  |  |  |  |
| Newell Highway-continued |  |  |  |  |  |  |  |  |
| Namoi and Coonabarabran <br> Namoi <br> Do | 17171717 | 37.7 m . to 47 m . south of Narrabri <br> 27.5 m . to 37.7 m . south of Narrabri <br> 1.5 m . to 2.72 m . north of Narrabri <br> 54.22 m , to 58.26 m . south of Narrabri | Reconstruction and bitumen dorfacing  <br> do do do do <br> do do do do <br> do do do do <br> do    | $\begin{gathered} \text { Department } \\ \text { do } \\ \text { do } \\ \text { do } \end{gathered}$ | $\begin{gathered} \ldots \\ \cdots \\ \cdots \\ \cdots \end{gathered}$ | $\begin{array}{r} 324,237 \\ 359,589 \\ 22,987 \end{array}$ | 35,079 | $\begin{array}{\|r} 359,316 \\ 38,747 \\ 24,236 \\ 153,099 \end{array}$ |
|  |  |  |  |  |  |  | 27,458 |  |
|  |  |  |  |  |  |  | 153,099 |  |
|  |  |  |  |  |  |  | \$1,711,581 |  |
| Castlereagh Highway |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { Coonamble } \ldots \ldots \ldots \ldots \ldots \\ \left.\begin{array}{c} \text { Gilgandra } \\ \text { Walgett } \\ \text { Wo } \\ \text { Do } \\ \text { Do } \\ \text { Do. } \\ \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \end{array} \right\rvert\, \end{gathered}$ | $\begin{aligned} & 18 \\ & 18 \\ & 18 \\ & 18 \\ & 18 \end{aligned}$ | 2 m . to 9 m . north of Coonamble <br> 0.2 m . to 2.1 m . north of Gilgandra. <br> 8 m . to 20 m . north of Walgett <br> 20 m . to 32 m . north of Walgett <br> 12.67 m . north of Walgett | Reconstruction of damaged bitumen pavement Widening and bitumen surfacing Reconstruction and bitumen surfacing Reconstruction and bitumen sealing <br> Reinforced concrete box culvert | Departmentdodododo |  | $\begin{array}{r}200,553 \\ \hdashline 9,174\end{array}$ | 59,080 | $\begin{array}{r} 59,080 \\ 38 \\ 606,681 \\ 82,876 \\ 31,861 \end{array}$ |
|  |  |  |  |  |  |  | [ $\begin{array}{r}38 \\ 406,128\end{array}$ |  |
|  |  |  |  |  |  |  | 406,128 82,876 |  |
|  |  |  |  |  |  |  | 22,687 |  |
|  |  |  |  |  |  |  | \$570,809 |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Do | 19 | 7 m . to 8.17 m . south of Bombala <br> 9.4 m . to 11.26 m . south of Nimmitabel 8 m . to 10 m . south of Bombala 5 m . to 6 m . south of Bombala <br> 13.8 m. to 17 m . south of Nimmitabel 11.26 m . to 13.8 m . south of Nimmitabel Railway overbridge 0.9 m . South of Cooma 57.5 m . to 58 m . south of Canberra <br> Gungoandra Creek, 46.2 m . south of Canberra <br> Tea Gardens Creek 7.4m. south of Nimmitabel <br> Bridge over Gungoandra Creek, 45.9 m . to 46.5 m . south of Canberra <br> 7.8 m . to 10 m . south of Nimmitabel 3.6 m . to 7.8 m . south of Nimmitabel $0 \mathrm{~m} . \operatorname{to} 3.6 \mathrm{~m}$. south of Nimmitabel. Michelago Creek, 1 m . from Michelago |  |  |  | 38,00049,000$\cdots$ | 45,000 4,000 | 94,000 4,000 |
| $\xrightarrow{\text { Do }}$ Do | 19 |  |  |  |  | 4,000 183 | 41,587 |  |
|  | 19 |  |  |  |  | 156,000 | 18,685 | 174,685 |
| Do Cooma $\ldots \ldots \ldots \ldots$ | 19 |  |  |  |  | 100,000 | 66,000 2,300 | 166,000 2,300 |
| Monaro ..................... | 19 |  | Temporary detour................ | $\underset{\text { Department }}{\text { do }} \ldots \ldots$. |  |  |  | 1,470 | 1,470 |
| Do | 19 |  | Reconstruction and bitumen surfacingReinforced concrete bridgeReinforced concrete box culvert | Departmentdodo |  |  | 49,445 | 49,445 |
| Do | 19 |  |  |  |  | 20,161 | -1,260 | 21,421 27,072 |
|  | 19 |  | Reinforced concrete box culvert Approaches | do |  |  |  |  |
|  | 19 |  | $\begin{array}{ccc}\text { Reconstruction and } \\ \text { do } & \text { do } & \text { do } \\ \text { do } & \text { do } & \text { do } \\ \text { do } & \text { do } & \text { do } \\ \text { do } & \text { do } & \text { do }\end{array}$ | $\underbrace{}_{\substack{\text { do } \\ \text { do } \\ \text { do } \\ \text { Council } \\ \text { Department }}}$ |  | 153,536 576,787 | 137,954 21,999 | 291,490 598,786 |
| Do ${ }_{\text {Do }}$ Do................ | 19 |  |  |  |  | 35s,160 | 22,162 | 377,322 |
| $\underset{\text { Yarrowlumia }}{\text { D }}$ | $\begin{aligned} & 19 \\ & 19 \end{aligned}$ |  | Reconstruction Prestressed concrete bridge |  |  | 5,000 | 12,206 150,658 | 17,206 150,658 |
|  |  |  |  |  |  |  | \$582,212 |  |
| Riverina Highway |  |  |  |  |  |  |  |  |
| Berrigan .................. 1 | 20 | 3.1 m . to 3.8 m . east of Finley | Reconstruction and widening | Department | $\ldots$... | 38,773 | 706 | 39,479 |
|  |  |  |  |  |  |  | \$706 |  |
| Cobb Highway |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & 21 \\ & 21 \\ & 21 \\ & 21 \end{aligned}$ | Flood Channel of Edward River at Deniliquin <br> Bridge over Edward River at Deniliquin <br> 24 m . to 46 m . north of Hay <br> 46 m . to 48 m . north of Hay | Prestressed concrete bridge <br> Approaches <br> Reconstruction and bitumen surfacing <br> do do do do | $\begin{gathered} \text { Department } \\ \text { do } \\ \text { do } \\ \text { do } \end{gathered}$ | ....$\cdots \cdots$$\cdots \cdots$ | $\begin{array}{r} 37,643 \\ 20,695 \\ 332,006 \end{array}$ | $\begin{array}{\|r} 19,531 \\ 87,056 \\ 27,039 \\ 21,047 \end{array}$ | $\begin{array}{r} 57,174 \\ 107,751 \\ 610,045 \\ 11,047 \end{array}$ |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

## Appendix No. 8-continued

Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued


## Moun Lindasar Hionwar

Improvement
Reconstruction and bitumen surfacing


Improverement


Appendix No. 8--continued
Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued


## Appendix No. 8-continued

Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued


[^1]Appendix No. 8-continued
Country Main Roads Fund-General Purposes--continued
Summary of Expenditure on Construction and Reconstruction Works-continueā

| City, Municipal or Shire Area | $\begin{aligned} & \text { Road } \\ & \text { No. } \end{aligned}$ | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1969 | 1968-69 | To 30th Sune, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |
| TRUNK AND ORDINARY MAIN ROADS-continued |  |  |  |  |  |  |  |
| Canobolas | 237 | 11.4m. to 12.28 mm . from Orange |  | Council $\begin{gathered}\text { do }\end{gathered}$ | 20,780 |  | 21,109 6,714 |
| $\begin{aligned} & \text { Do } \\ & \text { Do } \end{aligned}$ | 245 245 |  | Installation of flashing lights ......... Realignment | do $\begin{aligned} & \text { do } \\ & \text { do } \\ & \text { a }\end{aligned}$ | $\because$ | 6,714 3,014 | $\begin{array}{r} 6,714 \\ 15,014 \end{array}$ |
| Do | 559 | 0 m to 2.62 m . from S. H. No. 7 at Whiley's Junction |  | do $\quad .$. | 19,800 | 4,279 | 24,079 |
| Do | 573 | Kerr's Creek 19 m . from Orange. | Reinforced concrete box culvert .... | do |  | 20,000 | 20,000 |
| ${ }_{\text {Carrathool }}^{\text {Do }}$ | 573 80 |  | Reconstruction and bitumen surfacing Bitumen surfacing | do | 1,474 | 22,986 39 | 22,986 1,513 |
| Carrathool | 88 | Extension to Lachlan River near Hillston | Bitumen surfacing Reconstruction and bitumen surfacing | do | 34,760 | 6,599 | 41,359 |
| Do | 80 | 12.57 m . to 17.68 m . south of Hillston | Rec do do do do | do | 23,000 | 12,000 | 35,000 |
| Do | 321 | 10.3 m . to 17.35 m . south of S. H. No. 6 | Reconstruction ............ | do |  | 16,367 | - 16,367 |
| Do | ${ }_{321}^{321}$ |  | Reconstruction and bitumen surfacing do do do do | do | 10,010 | 2,321 6,624 | 2,321 16,634 |
| Do | ${ }_{368} 321$ |  | $\underset{\text { Bitumen surfacing }}{\text { do }}$ do $\ldots$ do......... | do | 10,010 4,416 | 6,624 ${ }^{\text {64* }}$ | 16,634 3,950 |
| Do | 501 | 0.25 m . southwest of Hillston. | Bo do | do | 1,310 | 46* | 1,264 |
| Casino. | 149 | 28.52 m . to 28.80 m. from Woodburn $\ldots \ldots \ldots \ldots \ldots \ldots$. | Widening and bitumen surfacing | do | ,668 | 3.032 | 3,700 |
| Central Darling | 68 | 8 m . west of Wilcannia on S.H. No. 8 to 32.25 m . south of Wilcannia | Deviation .................... |  |  | 10,000 | 10,000 |
| Do | 433 | 19.6 m. west of Darnick wil......................... | Construction | do |  | 4,500 | 4.500 |
| ${ }_{\text {Cobar }}^{\text {Do }}$ | 435 61 | 58.5m. to 69 m . north of Wilcannia .. ..................................... | Reconstruction and bitumen surfacing Bitumen surfacing | do | 19,841 46,000 | 18,037 | 19,911 64,037 |
| Do | 61 | 31 m . to 36 m . south of Cobar | Reinforced concrete culverts | do |  | 10,000 | 10,000 |
| Cockburn | 61 |  | Reconstruction and bitumen surfacing | do . | 10,000 | 12,079 | 22,079 34933 |
| Cockburn | 63 | 4.2m. to 6.12m. north of Tamworth $\ldots \ldots \ldots \ldots \ldots \ldots \ldots . .$. | Reconstruction . Realignment | do .. | 28,608 8,000 | 6,7325* | 34,933 7,225 |
| Coft's Harbour | 105 120 |  |  | do do | 8,000 24,836 | ${ }^{775 *}$ | -25,514 |
| Do | 151 | 32.12 m . to 33.12 m . south of Grafton | Reco do do do do | do | 7,220. | 223 | 7,443 |
| Do | 540 | Boambee Creek, 6.35m. from S.H. No. $10 \ldots \ldots . .$. | Concrete bridge ......... | do |  | -250 | 250 400 |
| Colo Do | 181 <br> 181 <br> 1 | Bridge at 7.7 mm . from Webb's Creek Ferry $\ldots \ldots . . . . . . . . .$. Bridge at 9.7 m from Webb's Creek Ferry | Approaches do | do |  | 4,400 1,800 | 4.400 1.800 |
| Do | 503 | ${ }_{41.5} \mathrm{~mm}$. to 49.5 m . north of Windsor (selected sections) $\ldots \ldots$. | Asphaltic concrete surfacing | Department | 51,357 | 3,396 | 54,753 |
| Do | 503 | Intersection with Creek Ridge, Stannix Park and Carrs Roads | Reconstruction ........ | do |  | 4,026 8671 | 4,026 18671 |
| Do | 503 519 519 | 7.42m. to 7.8 m . north of Howes Creek Bridge 9.1 m . to 10.1 m from M.R. No. $184 . . . .$. | Improvement and widening Reconstruction |  |  | 186,371 10,000 | 186,37 10,000 |
| Conargo | 552 |  | Prestressed concrete bridge | Cound | 3,750 | 3,492 | 7,242 |
| Do | 552 | 31 m. to 35 m , from Deniliquin .... | Reconstruction and bitumen surfacing ........... | do .. |  | 21,200 5,900 | 21,200 5,900 |
| Do | 552 552 5 | 36m. to 42.1 m . from Deniliquin | Reconstruction, realignment and bitumen surfacing | do |  | 5,900 | 23,732 |
| $\xrightarrow{\text { Do }}$ | 552 552 5 | 23.1m. to 27.6 m . from Deniliquin 27.6 m . to 32 m . from Deniliquin | Reconstruction and bitumen surfacing do do do do do | do | 23,561 11,600 | 8,380 | 29,980 |
| Coolah | 55 | 4.2 m . to 5 m . north of Coolah | do do do do | do |  | 37,150 | 37.150 |
| Do | 55 | 3.6 m . to 4.2 m . north of Coolah | $\xrightarrow[\text { do do do do }]{ }$ | do .. | 18,700 | 30,306 | 49,006 |
| Do | 55 <br> 55 | 2.3m. to 3.6 m . north of Coolah | Bitumen surfacing Reconstruction | do | 13,810 30,375 | 9,442 | 23,252 30,766 |
| Do | 77 | 13.21 m . 7.16 .07 m west of Dunedoo | Reconstruction and bitumen surfacing | do | 50,210 | 382* | 49,828 |
| Do | 206 | 4m. to 7.38 m . west of Dunedoo - | do do do do do do do do | do do |  | 48,000 | 48,000 13 |
| $\xrightarrow{\text { Do }}$ | 206 | 0.3m. to 2.3 m . west of Dunedoo | $\begin{array}{llll}\text { do } \\ \text { do } & \text { do } & \text { do } & \text { do } \\ \text { do } & \text { do } \\ \text { do }\end{array}$ |  | 12,195 | 1,481 | 13,606 42,000 |
| Do | 206 | 7.4 m . to 10 m . west of Dunedoo .... | do do do do | do |  | 8,250 | 8,250 |
| Do | 206 | Limestone Creek, 2.5 m . west of Dunedoo 772 m west of Dunedoo | Prestressed concrete bridge and approaches | do do |  | 40.125 3,500 | 40,125 3,500 |
| Do | 3206 | 7.72m. west of Dunedoo . . . 3.5 m . 06 m . north of Mendooran | Reinforced concrete box culvert Reconstruction and bitumen surfacing | do do | 30,000 | 1,308 | 31,308 |
| Coolamon Do | 240 | 13.6 m. to 16 m . north of Coolamon $\ldots \ldots \ldots \ldots \ldots \ldots .$. | do do do do | do | 4.500 | 51,900 | 56,400 |
| Do | 387 | 0.41 m . south of Ardlethan to Deviation of S.H. No. $17 \ldots$ | Bitumen surfacing ............. | Department | 26,124 | 2,430 | 28,554 |

Appendix No. 8-continued
Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued


Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued


Appendix No. 8-continued
Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued


Appendix No. 8-continued
Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | Road | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |
| TRUNK AND ORDINARY MAIN ROADS-continued |  |  |  |  |  |  |  |
| ${ }_{\text {Imlay }}^{\text {Inverell }}$ | 1376 | 6m. to 11 m . from S.H. No. 1.1 1 m. to 2.9 m. north of Inverell | $\xrightarrow[\text { Improvements }]{\text { Widening and strengthening pavement }}$ | Council do |  | 4,400 | 4,400 2.500 |
| Jemalong | 137 236 3 | Ooma Creek. 13 m . south of Forbes | Wteel and concrete bridge........... | do | 38,573 | 1,151 | 39,724 |
| Do | 350 |  | Reconstruction and bitumen surfacing | do |  | 15,000 | 15,000 |
| Do | 377 <br> 377 |  | Reinforced concrete box culvert $\ldots$...................... Reconstruction and bitumen surfacing ............... | do |  | 4,303 49,000 | 4,303 68,068 |
| Do | 377 <br> 377 |  |  | do | 19,068 | 49,000 24,834 | 68,068 |
| Jerilderie | 323 | 5.6 m . to 13.2 m . from S.H. No. 17 | do do do do | do | 24,203 | 13,991 | 38,194 |
| Do | 552 552 50 | 8.3 m , to 1.3 .3 m . west of Jeritderie | do do do do | do |  | 4,000 8800 | 4,000 13800 |
| Jindalee | $\begin{array}{r}552 \\ 78 \\ \hline\end{array}$ | 2m. to 8.3 m . west of Jerilderie $\ldots$....................... | Climbing lane ${ }^{\text {do }} \ldots \ldots \ldots \ldots \ldots$. do | do | 5,000 $\mathbf{1 5 , 6 0 0}$ | ${ }_{3,231} 8$ | 13,800 18,831 |
| Do | 84 | 21m. to 25.49 m . from Murrumburrah | Reconstruction and bitumen surfacing including box culverts | do | 21,240 | 36,735 | 57,975 |
| ${ }_{\substack{\text { Do } \\ \text { Do }}}$ | 84 |  | Reconstruction and bitumen surfacing do do do do | do |  | 18.000 3,554 | 18,000 7,500 |
| ${ }_{\text {Kempsey }}^{\text {Do }}$ | 8 | 28.46 m. to ${ }^{28.7 \mathrm{~m} . \text { west of Murrumburrah }}$ Thomas Hennessy Crescent to Park Avenue |  | do | 3,946 3,000 | 3.554 10,000 | 7,500 13,000 |
| Kiama | 264 | Bridge over Hyams Creek | Widening footway | do |  | 3,432 | 3,432 |
| Kyeamba | 211 | 15 m . to 15.85 m . south of Wagga | Reconstruction .. | do |  | 11,666 | 11,666 |
| Do | 384 | 15.4 m . southeast of Wagga Wagga | Reinforced concrete box culvert | do | 12,500 | ${ }_{7}^{8,532}$ | 21,032 7 |
| $\underset{\text { Kyogle }}{ }$ | 384 83 | 10.5sm. to 12.26 m . from Wagga | Reconstruction Reinforced concrete box culvert and approaches | do | 11,200 | 32.940 | 7,000 44,140 |
| Do | 83 | Fairymount Creek, 17.9 m . north of Casino | Prestressed concrete bridge and approaches ... | do | 11,20 | 5,964 | 5,964 |
| Do | 83 | 75.28 m . to 90.83 m . north of Grafton | Reconstruction and bitumen surfacing .................. | do | 13,420 1,240 | 14,580 3,780 | 28,000 |
| Do | 361 | 34.90m. south of Woodenbong ... | Reinforced concrete box culvert do do do | do | 1,240 | 3,780 4,800 | 5,020 4,800 |
| Do | 361 | 30.1 m . from 30.00 andenbong 33.05 m . south of Woodenbong | Reconstruction and bitumen surfacing | do | 10,400 | 2,337 | 12,737 |
| Do | 544 | Railway level crossing at Cedar Point ..... | Relocation and installation of $F$ type flashing lights | do | 7,831 | -1,256 | 9,087 |
| Lachlan. | 57 | 18.5 mm . south of Tottenham ....... |  | do |  | -5,000 | 5,000 11,944 |
| Do | 57 57 | (12.5m. to 14.5 m . south of Condotolin . ${ }^{\text {a }}$ ( |  | do | 15,000 | 6,056 | 11,094 |
| Do | 231 | $0 \mathrm{~m}, \mathrm{to} 2 \mathrm{~m}$, and 4 m . to 9 m . southeast of Lake Cargelligo | do do do do | do | 75,000 | 5,542 | 80,542 |
| Do | 231 | 16.0m. to 23.0 m . from Lake Cargelligo | do do do do do do do do do | do | 10,000 | 40,000 | 750.000 |
| Lake Macquarie | 217 | Winding Creek at Glendale..... | Reinforced concrete bridge | do |  | 4,050 | 4,050 |
| Do | 217 | Sandy Creek ................ |  | do $\ldots$ | 40,446 | 3,824** | 36,622 |
| Do |  | Fennell's Bay, north of Toronto | Prestressed concrete bridge | Department | 419,029 | 8, | 427,624 15,461 |
| Do | 217, 223 | Cross Roads at Glendale Bridge over Fennell's Bay, | ${ }_{\text {Approachent }}^{\text {Imp }}$.... | $\begin{gathered} \text { Council } \\ \text { do } \end{gathered}$ | 75,500 | 15,461 2,01 | 15,461 |
| Do | 217 | Cross Roads to Cockle Creek Railway Station | Reconstruction and bitumen surfacing | do | 20,000 | 3.824 | 23,824 |
| Do | 223 | Nelson Street to Callon Street ............. | do do do do | do |  | 8,019 | $\begin{array}{r}8,019 \\ \hline 2970\end{array}$ |
| Do | 223 325 | Cross Roads at Glendale to Edgeworth Chilcott Street, Warners Bay ........ | do do do do | do | 30,168 | 3,000** | 29,770 4,000 |
| Do | 325 |  | Deviation ${ }_{\text {Reconstruction and bitumen surfacing }}$ | do | 177,982 | ${ }_{1,613}+$ | 16,369 |
| Do | 325 <br> 527 | Cowlishaw Street via Collier Street to Dudiey Road, Redhead | Deviation ..................... | do | 17,828 | 1,557 | 19,385 |
| $\underset{\text { Leeton }}{\text { Do }}$ | 527 539 |  | Access road ..................... | do | 3,922 | (10,000 | 3,714 10,000 |
| Leeton | 539 65 |  | Reconstruction and bitumen surfacing do do do do | do |  | 10,225 | 10,225 |
| Do | 65 | 1.388. to 3.0 m . from Lismore | Reconstruction ............ | do |  | 12,419 | 12,419 1883 |
| $\xrightarrow[\text { Do }]{\text { Dithgow }}$ | 555 516 | 1.70m. from Lismore ${ }^{1.07 \mathrm{~m} \text {. to } 2.06 \mathrm{~m} \text { east of Lithgow }}$ | Reinforced concrete box culvert Climbing lanes ............ | do | 52,700 | $\begin{array}{r}1,883 \\ \hline 350\end{array}$ | 1,883 53,050 |
| $\xrightarrow{\text { Liverpool Plains }}$ | 515 |  | Reinforced concrete box culvert | do |  | 48,000 | 48,000 |
| Do | 55 <br> 55 | 0 m. to 20.6 m . south of S.H. No. 11 | Reconstruction and bitumen surfacing | do | 21,902 46,509 | 20,000* | 1,902 |
| Do Do | 55 55 | Om. to 1.4 m . south of Mullaley ${ }^{\text {a }}$. |  |  | 46,509 53,480 | 4,154 33,842 | 50,663 87,322 |

Appendix No. 8-continued
Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | $\begin{gathered} \text { Road } \\ \text { No, } \end{gathered}$ | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |
| TRUNK AND ORDINARY MAIN ROADS-continued |  |  |  |  |  |  |  |
| Liverpool Plains | 72 | Mooki River at Breeza ..................... | Steel and concrete bridge and approaches ... | Council | 220,000 35000 | 43,212 | 263,212 41,230 |
| Do <br> Lockhart | 357 59 | Sandy Creek, 6.25 m . from Namoi Shire boundary . . | Reinforced concrete bridge and approaches .. Widening and strengthening | do | 35,000 12,500 | 37,700 | 41,230 50,200 |
| Lockhart. . . | 249 | 53.5m. to 56 m . west of Wagga Wagga .......... | Widening and strengthening ......... | $\begin{aligned} & \text { do } \\ & \text { do } \end{aligned}$ | 15,000 | 37,700 7,700 | 22,700 |
| Macintyre | 73 | Intersection with M.R. No. 135 at Gilgai |  | do | 8,900 | 4,204 | 13,104 |
| Do | 134 | Reedy Creek, 7.5 m . north of Delungra | Prestressed concrete bridge ........ | do | 12,000 | 27,676 40,000 | 39,676 40,000 |
| Do | 134 | 6.95m. to 9.8 m . south of Delungra | Reconstruction and bitumen surfacing Bitumen surfacing | do |  | 40,000 14,305 | 40,000 14,305 |
| Do | 134 137 | 0.75m. to 6.95 mm . south of Delungra | Bitumen surfacing Widening and strengthening pavement | do |  | 14,453 | 14,305 4,453 |
| Maclean | 151 | 22.8. ${ }^{\text {a }}$. to to 2.8 .8 m . north of Grafton | Reconstruction and bitumen surfacing | do |  | 8 8,650 | 8,650 |
| Do | 151 | 21.95 m . to 29 mm . north of Grafton | do do do do | do | 23,619 | 5,433 | 29,052 |
| Do | 152 | Coldstream Street, Yamba ................. | Relocation and construction ......... | do |  | 7,000 5,280 | 7,000 6,000 |
| $\xrightarrow{\text { Macteay }}$ | 152 | Western approach to Palmer's Channel bridge 24.19 m . west of Kempsey to Bellbrook...... |  | do | 720 | 61,759 | 6,000 61,759 |
| Ma ${ }^{\text {Do }}$ | 75 | 23 m. to 24.4 m . west of Kempsey. | do do do do | do | $\bigcirc 00000$ | 20,000 | 80,000 |
| Do | 75 | 20.47 m. to 22.93 m. west of Kempsey $\ldots \ldots \ldots \ldots \ldots \ldots .$. | ${ }_{\text {do }}$ do do do do | do | 70,833 134616 | $6,759 *$ 4897 | 64,074 |
| Do | 75 75 | Pee Dee and Sheepstation Creeks, 41.25 m . west of Kempsey Pee Dee and Sheepstation Creek bridges, 41.25 m . west of | Two reinforced concrete bridges |  |  |  | 139,513 17,662 |
| Do | 75 | Pee Dee and Sheepstation Creek bridges, 41.25 m . west of Kempsey |  | do | 25,000 | 7,338* | 17,662 |
| Maitland | 101 | Hunter River, 0.1m. from S.H. No. 9 |  | do | 1,250 | 5,441 | 6,691 |
| Do | 101 | Hunter River at West Maitland | Steel and concrete bridge.. | Department | 609,094 | 1,794 | 610,888 |
| $\xrightarrow{\text { Do }}$ Do | 104 104 |  | Prestressed concrete bridge | do | 213,499 58,765 | 4,862 | 217,737 61,627 |
| Do | 104 | - ${ }^{\text {Bridge }}$ Hunter River at Raymond Terrace | Apprinforced concrete bridge | do |  | $951 \dagger$ | 6,951 |
| Do | 104 | Bridge over Hunter River at Raymond Terrace | Western approach | Council |  | 22,030 | 22,030 |
| Do | 218 | 1.68 m . to 2.5 m . south of S.H. No. 9 ........ | Reconstruction and bitumen surfacing | do | 11,000 | 1,500 | 12,500 |
| Manilla Do | 357 357 |  | do do do do do | do | 29,780 3,432 | 1,573** | 28,207 2,944 |
| Do | 357 | Railway level crossing 0.8 m . to 1.0 m . west of Trunk Road No. 63 | Approaches |  |  |  |  |
| Do | 357 357 | 5.6m. to 11 m . west of Manilla | Reconstruction and bitumen surfacing do do do do do do | do |  | 32,061 5,162 | 32,061 37,362 |
| Manning | 357 90 |  | $\begin{array}{lll}\text { do } \\ \text { do } & \text { do do do do do do } \\ \text { do }\end{array}$ | do | 48,000 | ,199* | 37,301 47,801 |
| Do | 90 | 25.8 m . to 32.05 m . from S. H . No. 10 | do do do do | do |  | 60,000 | 60,000 |
| Do | 109 | Wherrol Flat, turnoff to Marlee School | $\stackrel{\text { do }}{\text { Curve elimination }}$ do do | do | 58,934 | (1,866 | 60,800 5 5 |
| Do | 111 | McCann's Corner, 6.5m. from S.H. No. 10 | Curve elimination Realignment and extension to culvert |  |  | 5,000 6,300 | 6,300 |
| Do | 112 | Bridge over Bo Bo Creek |  | do | 40,000 | 35,000 | 75.000 |
| Merriwa | 62 | 2.04m. to 2.35m. west of Merriwa |  |  | 7,000 | ¢ 5 5, 1207 | 12,122 68,000 |
| Do | 62 62 | $\underset{\text { Murdering Hut Gully }}{6.5 \mathrm{~m} \text { east of Merriwa }}$. ${ }^{\text {a }}$. . | Reinforced concrete box culverts and approaches | do | 25,393 21,694 | ${ }^{42,607}{ }^{1,512}$ | 68,182 20,18 |
| Do | 62 | 6.5m. east of Merriwa ${ }^{\text {Willy Wally Guly, } 19.15 \mathrm{~m} \text {. west of Merriwa }}$ | Reinforced concrete box culvert | do | 21,694 | 16,812* | 20,182 |
| Do | 62 | 15.13 m .1018 m . west of Merriwa | Reconstruction and bitumen surfacing | do | 100000 | 15,440 | 115,440 |
| Do | 62 | 18m. west of Merriwa to Borambil Creek | do do do do do do do do do do do | do |  | 25,000 11,175 | 25,000 119748 |
| Do |  | 10.66 m . to 15.13 m . west of Merriwa $\ldots \ldots . . . . . . . . . . . . . ~$ | $\underset{\text { do }}{\text { deconstruction }}$ do do do......... |  | 108,573 | 11,175 20,000 | 119,748 20,000 |
| Do | 209 | Wappinguy Creek, 5.6 m . east of Merriwa ................ | Reinforced concrete bridge and approaches | do | 39,826 | 3,494* | 36,332 |
| Do | 214 | 19 m. south of Cassilis | Reinforced concrete box culvert $\ldots \ldots \ldots$ | do | 14,035 | $\begin{array}{r}1,042 \\ 100 \\ \hline\end{array}$ | 15,077 100000 |
| Do | 214 | Four Mile Creek, 2.2m. south of Cassilis | Reinforced concrete bridge | do |  | 100,000 8,200 | 100,000 8,200 |
| Do | 214 | 1.35m. to 2.95 m . north of Ulan ${ }^{\text {a }}$ | Reconstruction and bitumen surfacing | do |  | 20,000 | 20,000 |
| Mittagong | 258 | 33.0m. to 33.5 m . from S.H. No. 2 . | Widening | do |  | 1,000 | 1,000 |
| Do | 258 258 | Wollondilly River at Goodman's Ford | Reinforced concrete bridge and approaches Reconstruction and bitumen surfacing ..... | do | 98,938 | 15,000 7,000 | 113,938 7,000 |
| Do | 258 | 6.05 m . to 7.5 m . from S.H. No. $2 \ldots$. | Reconstruction and bitumen surfacing .... |  |  | 7,000 | 7,000 |

$\dagger$ For additional expenditure see Appendix No. 8A

Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued


Appendix No. 8-continued
Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | Road | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |
| TRUNK AND ORDINARY MAIN ROADS-continued |  |  |  |  |  |  |  |
| Newcastle $\ldots$............. | 217 | Bluegum Road to Thomas Street .... | Reconstruction do | Council do | 21,410 | 21,410* 26,300 |  |
|  |  | Illoura Street to Drury Street, Jesmond . |  |  |  |  | 26,300 44.445 |
| Do | 223 |  | do | do do | 43,000 8,200 | 27,000 | 44,445 35,200 |
| Do | 316 | Rankin Park hospital to Ridgeway Road Williams Street to Elizabeth Street | do | do | 59,820 | 6,288 | 35,200 66,108 |
| Do | 316 | Tourle Street to Woodstock Street | Industrial Route | do | 55,000 | 4,883* | 50,117 |
| Do | 316 | George Street to Bull Street ..... | $\xrightarrow{\text { do }}$ do do | do |  | 43,400 | 43,400 |
| Do | 3326 | Kahibah Road to Young Street | Reconstruction do | do | 67,130 26756 | 4,000 1,729 | 71,130 28,485 |
| Nundle | 326 105 | Christo Road to Turton Road Selected sections 28.5 m . to 33.3 m . southeast of Tamworth ... | do | do | 37,000 | 24,241 | 61,241 |
| Do | 105 | 33.8 m . to 35.9 m . southeast of Tamworth - | Reconstruction and bitumen surfacing | do | 28,000 | 13,154 | 41,154 |
| Nymboida | 74 | ${ }^{23 \mathrm{~m}}$. to 24.3 m . south of Grafton. . | do do do do do do do | do | 3,750 15,583 | $\stackrel{1,958}{1,500^{*}}$ | 5,708 14,083 |
| Do | 74 | Bridge over Nymboida River ....... | Redecking truss spans | Department | 65,743 | , 48 | - 65,791 |
| Do | 74 | 58.05 m . to 59.02 m . south of Grafton | Reconstruction and bitumen surfacing | Council | 5,000 | 34,820 | 39,820 |
| Do | 74 | 44.3 m . to 45.3 m . south of Grafton | Improvement and bitumen surfacing | do |  | -6,487 | 26,487 |
| Do | 74 <br> 74 | Nymboida to Horton's Creek ${ }^{\text {a }}$. 3 m . to 70.1 m . south of Grafton | Reconstruction and bitumen surfacing do do do | do | 3,550 | 45,200 | 48,300 22.350 |
| Oberon | 253 | 5.4 m . to 6.3 mm from Oberon.... | Deviation .................. | do | 24,000 | ${ }_{440}$ | 24,440 |
| Do | 253 | 3.0 m . to 4.5 mm . south of Oberon | Reconstruction and bitumen surfacing | do |  | 80,000 | 88000 |
| Do | 253 253 | Wiseman's Creek, 6.2m. north of Oberon | Reinforced concrete bridge Raise and strengthen approaches | do | 44,000 6,600 | 8,713 | 52,713 7,133 |
| Do | 256 | brime to 6.3 m . north of Oberon | Reconstruction and bitumen surfacing | do | 88,600 | 3,164 | 91,764 |
| Do | 256 | 15.6 m . to 17.6 m . and 14.6 m . to 17.6 mm . south of Oberon | do do do do | do |  | 56,350 | 56,350 |
| Do | 256 | Om. to 1 m. south of Black Springs 33.87 m. to 34.63 m . south of Oberon |  | do | 9,000 | 1,877 4,265 | 10,877 4,265 |
| Orange | 245 <br> 73 | Gardener Road to Huntley Street, Orange | do | do | 2,543 | 4,329 | 6,872 |
| Do | 573 | Intersection with S. H. No. 7 |  | do | 6,428 | + 81742 | 7,234 |
| Patrick Plains | 128 | Drinan's Gully, 18.85 m . from Singleton | Reinforced concrete box culvert ${ }_{\text {Recole }}$ | do |  | 17,472 | 17,472 28,000 |
| Do | 128 | 19.4m. to 20.5 m . east of Singleton | Reconstruction and bitumen surfacing Reconstruction .............. | do | 29,000 | 11,642* | 28,000 17,358 |
| Do | 213 |  | Reconstruction and bitumen surfacing | do |  | 28,971 | 28,971 |
| Do | 503 503 | Macdonald River, 39m. south of Singleton | Reinforced concrete bridge | Department | 113,282 39 | ${ }_{599}^{972}$ | 114,254 |
| Do | 503 503 |  | do do do do | do | 39,669 138,209 | ${ }_{900}$ | 40,268 137,309 |
| Do | 503 | Long Weeney and Little Weeney Creeks, 55.6 m . south of | Concrete culverts | do | ...... | 14,194 | 1314,194 |
|  |  |  | Reconstruction and bitumen surfacing | Council | 566 | 16,983 |  |
| Peel | 130 | Level Crossing, 2 m . south of Werris Creek | Installation of " $F$ " type signals | do | 6,936 | 149 | 7,085 |
| Port Stephens | 90 | 12 Mile Creek to Stroud Shire boundary. | Reconstruction and bitumen surfacing | do | 15,000 | 22,000 | 37,000 |
| Do | 90 | 2 m . to 3.39 m . from S.H. No. 10 | do do do do | do |  | 9,299 | 9,299 |
| Do | 104 108 | New bridge over Hunter River at Raymond Terrace ${ }_{6} .54 \mathrm{~m}$ to 7.30 m . north of Newcastle City boundary ...... | Eastern approach | do |  | 20,970 7,197 | 20,970 21837 |
| Do | 108 | 6.64m. to 9.3 m . from Newcastle City boundary .... | Reconstruction and bitumen surfacing | do | 12,112 | 1,509* | 10,603 |
| Do | 108 | Newcastle Golf Club to Stanley Park ......... | do do do do | do |  | 9,795 | 9,795 |
| Do | 301 |  | Taylor's Bridge . | do |  | 7,134 | 7,134 5 5 |
| Do | 301 302 | Taylor's Bridge, 0.2 m . from Woodvile |  | do | 10,000 | 36,432 | -46,432 |
| Do | 517 | M.R. No. 108 to 6.8 mm . east of S. H . No. 10 | Reconstruction and bitumen surfacing | do | 10,00 | 36,332 10 | 10,333 |
| Queanbeyan | 51 | 0 m . to 0.53 m . west of Queanbeyan | Widening and median strip | do | 40,517 | 13,385 | 53,902 |
| Quirindi | 72 54 | 0.5m. to 0.75 m . north of southern boundary | Reconstruction and do do do do | do | 21,000 | 1,395* | 19,605 |
| Ryo | 54 | 0.97 m . to 2.79 m . south of $11 / \mathrm{ord}$ | do do do do | do | 82,500 | 22,497 | 104,997 |

Appendix No. 8-continued
Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | Road | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |
| TRUNK AND ORDINARY MAIN ROADS-continued |  |  |  |  |  |  |  |
| Rylstone | 54 | 2.8 mm . to 4.5 m . south of Ifford | Reconstruction and bitumen surfacing do do do do | Council |  | 44,250 ${ }_{\text {2 }}$ | 44,250 73,657 |
| Do | 54 |  |  |  | 76,000 12,800 | ${ }_{5}^{2,343 *}$ | 73,657 66,200 |
| Do | 55 | Bridge at 31.5m. south of Mudgee........................................... | Approaches ............. | $\underset{\text { Department }}{\text { do }}$ | 12,800 | 53,400 13,638 | 66,200 39,482 |
| Do | 215 |  | Reconstruction and bitumen surfacing | Council ... | 17,850 | 10,000 | 27.850 |
| Scone | 62 | Sophia Creek, 12.35 m . west of Scone | Reinforced concrete bridge and approaches | do | 33,473 37,946 | ${ }_{4}^{2} .1 .748$ | 35,637 <br> 42 <br> 1594 |
| Do | 62 | 14.5 m . to 16 mm . west of Scone | Reconstruction and bitumen surfacing do do do do do do | do | 37,946 55,000 | 4,748 20,144 | 42,694 75,144 |
| Do | 62 62 |  | do do do do do do do do do do | do | 55,000 | 27,876 | - 75,144 |
| Do | 105 | Shallow Crossing, 40.5 m . east of Scone | Reinforced concrete bridge ...... | do | 60,000 | 1,329 | 61,329 |
| Severn | 136 | Tent Hill Creek, 12.5 mm . from Deepwater | Prestressed concrete superstructure ..... | do | 7,125 85,000 | ${ }^{732}{ }^{\text {82 }}$ | 6,390 85 8 8 |
| Do | 382 382 | Wellingrove Creek, 16 m . northwest of Glen Innes | Reinforced concrete bridge and approaches Reconstruction and bitumen surfacing ..... | do | 85,000 | 7,500 | 85,826 7,500 |
| Do | 382 <br> 382 | 11.3m. to 14.5 m . West of Glen Innes . ${ }^{\text {a }}$. | Reconstruction and ditumen surfacing ${ }_{\text {do }}^{\text {do }}$ do.... | do |  | 2,225 | 2,225 |
| Shellharbour | 522 | Windang Bridge to Shellharbour ... | Reconstruction ................. | do | 21,454 | 22,248 | 43,702 |
| Shoalhaven | 267 | Tiangara Creek, 24m. from Huskisson | Reinforced concrete bridge ........ | do |  | 6,000 61,548 | 6,000 63,000 |
| Do | ${ }_{503}^{293}$ | Black Forest Bridge to Shoalhaven Heads | Reconstruction and bitumen surfacing | do | 1,452 | 61,548 4.122 | 63,000 4,122 |
| Singleton.... | 503 <br> 286 | Through town of Singleton ${ }^{\text {a }}$.... | Reconstruction an bitumen surfacing | Department | 739,12i | 20,280* | 738,841 |
| Snowy River | 286 | 10m. 0 \% 13.8 m . west of Jindabyne | Reconstruction do do do |  | 673,539 | 15,807* | 657,732 |
| Do | 286 | 13.8 m . to 14.43 m . west of Jindabyne | $\xrightarrow{\text { do }}$ do do do | do | 307,970 | 627 | 308,597 |
| Do |  | 15.5 m . west of Jindabyne $\ldots . .$. | Turning circle ...... | do |  | 11,724 | 139415 |
| Do | 286 286 286 |  | Pavement restoration Reconstruction and bitumen surfacing | do | 348,2i8 | 106,595 | 454,813 |
| Do | 286 | 22.3m. to 29.8 . west west of Jindabyne | do do do do | do |  | 7,472* | 16,146 |
| Do | 286 | 22.14 mm . west of Jindabyne | Reinforced concrete bridge |  | 11,307 | 3,725 | 15.032 |
| Do | 394 | 11.87 m . to 12.75 mm . from Berridale | Reconstruction and bitumen surfacing | Council do | 6,000 | 2,093 | 2,093 6,056 |
| Do | 394 <br> 394 | 17 m . to 17.67 m . south of Berridale <br> 13.5 m. to i <br> 1 m . from Berridale | Reconstruction ... bit............... | do |  | 1,027 | 1.027 |
| Do | 394 | 16 m. to 17 mm . south of Berridale. | Reconstruction | do | 90000 | ${ }^{\text {5 } 545}$ | 8.949 |
| Do | 394 | 11.4 m . to 16 m . south of Berridale $\ldots \ldots . .$. | Gravelling and bitumen surfacing | do | 40,000 38,000 | - 74,545 | 47,545 |
| $\xrightarrow[\substack{\text { Stroud } \\ \text { Do }}]{\text { do }}$ | 111 | Bridge over Boolambayte Creek, 4.1 m . from S.H. No. $10 . .$. | Approaches ..........i... | do | 39,296 |  | 39,846 |
| Do | 111 | 21.4m. to 24.8 mm from S. H . No. 10 ........ | Reconstruction and bitumen surfacing | do |  | 51,320 | 51,320 |
| Do | 111 | 18.6 m . to 21.4 m . from S.H. No. 10 | Gravelling and bitumen surfacing .... | do | 10,700 | 1,046 | 11,746 |
| Talbragar | 206 | Fitzell's Creek . .................................... | Reinforced concrete box culvert | do | 10,000 10,599 | 37,726 25,901 | 47,726 36,500 |
| Do | ${ }_{5} 20$ | 22.9 m . to 25.4 m . from Dubbo and Bridge over Spicer's Creek Bridge over Mongarlowe Creek, 10 m . east of Braidwood |  |  |  |  |  |
| $\underset{\substack{\text { Tallaganda } \\ \text { Do }}}{\text { des }}$ | 51 | Bridge over Mongarlowe Creek, 10m. east of Braidwood ... 2 m. west of Braidwood | Asphatic concrete | Council ... |  | 10,465 | 10,465 |
| Do | 51 | Two Mile Creek, 2.6 m . north of Braidwood | Reinforced concrete box cuivert and approaches | do | 16,720 | $8{ }_{7} 8.273$ | 24,993 |
| Do | 51 | Crest at 2 m . west of Braidwood | Improvement | do | 7,613 | 7,613* |  |
| Do | 92 | 2.46m. 10 4m. from Braidwood | Reconstruction and bitumen surfacing | do | 16,000 | 20,704* | 15,296 |
| $\xrightarrow[\text { Tamarang }]{ }$ | 72 | T.R. No. 51 to Euradux Road Braefield | Installation of "F\%" type do signals do. | do | 16,000 | 1,534 | 1,534 1 |
| Tamarang | 72 | Quirindi Creek, 6.5 m . north of Quirindi | Reinforced concrete bridge .. | do |  | 1,779 | 1,779 |
| Do | 72 | Bridge over Quirindi Creek, 6.5 mm . north of Quirindi | Approaches . .................. | do |  | 5,051 | 5,051 |
| Do | 72 | 8.2m. to 9.2 m . south of Quirindi $\ldots \ldots \ldots \ldots$ | Reconstruction and bitumen surfacing Reconstruction and widening | do | 23,100 | - ${ }_{24,000}$ | $\begin{array}{r}18,000 \\ \hline 2.020\end{array}$ |
| Do | 72 126 | 3.7 m. to 9.14 m east of l . south of Quirindi Quirindi | Reconstruction and widening | do | $9,2 i 2$ | 2,991** | 6,221 |
| Do | 129 | Warrah Creek, 15.15 m . west of Quirindi | Prestressed concrete bridge and approaches | do | 36,531 | 34,746 | 71,277 |
| Do | 129 | 16.5m. to 19.05 m . west of Quirindi | Reconstruction and bitumen surfacing do do do do | do |  | $\stackrel{20,517{ }^{*}}{ }$ | 20,000 41,920 |
| Taree | 192 | Rmilway overbridge to municipal boundary | do do do do | do | 879 | 879* |  |

Appendix No. 8-continued
Country Main Roads Fund—General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | Road | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |
| TRUNK AND ORDINARY MAIN ROADS-continued |  |  |  |  |  |  |  |
|  | 192 | Cornwall Street to Old Wingham Road, Taree | Reconstruction and bitumen surfacing i............. | Council |  | 879 1.500 | 879 1.500 |
|  | 57 | Railway level crossing at June Road ................ | Installation of " $F$ " type signals and half arm barriers .. | do |  | 1,500 4.600 | $\begin{aligned} & 1,500 \\ & 4600 \end{aligned}$ |
| Do | 590 |  | Reconstruction ...................... | do | 30,000 | + 4,600 | 4,600 32,566 |
| Tenterfield ${ }_{\text {Do }}$ So. | 361 | Ruby Creek, 3 m . west of State Highway No. 24. | Steel and concrete bribge and approaches Reinforced concrete bridge | do | 73,750 | 1,073 | 74,823 |
| Do | 362 | 4 m . to 6.2 m . south of Urbenville | Reconstruction and bitumen surfacing | do |  | 16,666 | 16,666 |
| Terania | 65 | Boatharbour Bridge, 4.75 m . north of Lismore | Improvement to alignment on northern approach | do |  | 5,880 | S,880 |
| Do | 65 | Bexhill to Clunes $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | Realignment and bitumen surfacing ........... | do | 13,500 | 54,100 8,000 | 67,600 8,000 |
| Do | 141 | 2.75m. to 3.55 m . from M.R. No. 142 | Reconstruction and bitumen surfacing do do do do | do | 20,000 | 8,000 | 81,000 21,648 |
| Timbrebongie | 89 | 14.9 m . south of Narromine | Reinforced concrete box culvert | do | 7,000 | 5,074 | 12,074 |
| Do .... | 89 | Yellow Creek, 9m. south of Narromine | do do do do | do | 10,000 | 1,475* | 8,525 |
| Do | 89 | 5.5 m . to 10 m . south of Narromine | Reconstruction and bitumen surfacing do do do do |  | 30,000 |  | 30,054 28,000 |
| Do | 89 89 | 10.0 m . to 15.0 m . from Narromine 14.1 m . to 18.7 m . south of Narromine | $\begin{array}{llll}\text { do do } \\ \text { do } & \text { do } & \text { do } \\ \text { do } & \text { do } \\ \text { do }\end{array}$ | $\begin{aligned} & \text { do } \\ & \text { do } \end{aligned}$ |  | 28,000 3,000 | 28,000 3,000 |
| $\xrightarrow{\text { Do }}$ | $\begin{array}{r}89 \\ 347 \\ \hline\end{array}$ | 俍 14.1 m . to 18.7 m . South of Narromine | $\begin{array}{llll}\text { do } \\ \text { do } & \text { do do } & \text { do } \\ \text { do } & \text { do } \\ \text { do }\end{array}$ | do |  | 2, 2,000 | 22,000 |
| Do | 354 | 5 m . to 10 m . west of Narromine ... | do do do do | do | 26,000 | 3,363 | 29,363 |
| Do | 572 <br> 555 <br> 55 | 3.3 m . to 9 m . north of Narromine $\ldots \ldots .$. | do do do do do do do do do do | do | 27,500 14,350 | 12,500 | 40,000 |
| Tintenba | 555 555 | 7.84 m. to 9.05 m . from State Highway No. 10 6.5 m . to 7.84 m . from State Highway No. 10 | $\begin{array}{llll}\text { do } \\ \text { do } & \text { do do do } \\ \text { do } & \text { do } \\ \text { do }\end{array}$ do do | do | 14,350 | 6,950 17,350 | 21,300 17,350 |
| $\underset{\text { Tomki }}{\text { Do }}$ | 555 83 | 6.5m. to 7.84 m . from State Highway No. 10 | $\xrightarrow[\text { Reinforced concrete box culverts }]{ }{ }^{\text {do }}$ do | do |  | 17,350 1,670 | 17,350 1,670 |
| Do | 83 | 7.03 m . south of Casino | Reinforced concrete box culvert | do | 4,717 | , 333 | 5,050 |
| Do | 83 | 4.56 m . to 6.08 m . north of Casino ............ | Reconstruction and bitumen surfacing | do |  | 2,979 13,763 | 2,979 30913 |
| Do | $\begin{array}{r}83 \\ 544 \\ \hline\end{array}$ | 6.95 m. to 7.95 m. and 9 m. to 9.7 m . north of Casino 10.36 m. west of Lismore | Reinforced concrete box do culvert ${ }^{\text {do }}$ do | do | 17,150 10,000 | 13,763 1,886 | 30,913 11,886 |
| Do | 544 | 9.5 m . to 11.7 m . west of Lismore | Reconstruction and bitumen surfacing | do | 39,736 | 2,156 | 41,892 |
| Tumbarumba | 281 | Murray River at Tintaldra | Extension of reinforced concrete bridge | Department | 233,848 | 38,334 | 272,182 |
| Do | 282 | 11.2 m . to 14 m . from Tumbarumba | Reconstruction and bitumen surfacing | Council | 33,000 5 | 11,617 | $\begin{array}{r}44,617 \\ 45 \\ \hline\end{array}$ |
| Do | 282 | 142m. to 19.2 m . from Tumbarumba | $\underset{\text { Realignment of curve }{ }_{\text {do }}^{\text {do }} \text { do do }}{ }$ | do |  | 40,000 2,300 | 45,700 2 2,300 |
| Tumut | 85 279 |  | Realignment of curve . ............... | do | 14,500 | 2,300 | 15,444 |
| Do | 279 | 6.4m. to 6.5 m. to 9.15 m . from Tumut | Reconstruction and bitumen surfacing do do do | do | 14,500 | 6,000 | +6,000 |
| Do | 279 | 4.4 m . to 5.3 m . from Tumut $\ldots \ldots \ldots$. | $\xrightarrow{\text { do }}$ do do do do....... | do | 4,500 | 15,910 4980 | 20,410 |
| Do | 280 | Rogers Creek, 7.5m. south of Adelong | Reinforced concrete box culvert and approaches | do | 195 | 4,980 20000 | 5,175 |
| $\underset{\text { Turon }}{\text { Do }}$ | 280 54 | 7 m . to 9.51 m . south of Adelong...... 21.8 m. to 25 m . from Wiagdon Mounta | Reconstruction and bitumen surfacing do do do do | do |  | 20,000 1,957 | 20,000 31,457 |
| Tweed | 142 | Bridge over Tweed River at Murwillumbah | Approaches .................. | do | 6,400 | 61,350 | 67,750 |
| Do | 142 | 36.39 m . to 38.1 m . north of Lismore . . | Strengthening and bitumen surfacing | $\stackrel{\text { do }}{ }$ | 29,999 | 258* | 29,741 |
| Do | 142 | Tweed River at Murwillumbah | Prestressed concrete bridge | Department | 121,583 | 120,699 10 | 242,282 |
| Do | 143 |  | Reconstruction and bitumen surfacing | Council do |  | 10,000 | 10,000 26.500 |
| ${ }_{\text {Ulmarra }}^{\text {Do }}$ | 399 151 1 | 11.69. to 12.17 m . and 15.76 m. to 16.65 m . from Murwillumbah | do do do do do do do do | do | 13,800 12,800 | 12,700 | 26,500 13 |
| Urala . | 73 | Bridge over Laura Creek …… | Northern approach .... | do | 13,600 | 1,152* | 12,448 |
| Do | 73 73 | Scrubby Gully, 10.25 m . north of Uralla | Reinforced concrete box culvert $\begin{aligned} & \text { Reconstruction and bitumen surfacing }\end{aligned}$ |  |  |  |  |
| Do | 73 73 | 12.21m. to 13.41 m . north of Uralla $\ldots$ | Reconstruction and bitumen surfacing do do do do do | do | 20,731 53,850 | ${ }_{4}^{2,2742^{*}}$ | 18,459 49,506 |
| Do | 73 | 15.7 m . to 16.7 m . north of Uralla | do do do do | do |  | 10,000 | 10,000 |
| Do | 73 | 35.35m. to 39.66 m . north of Uralla ${ }^{\text {a }}$ Saumarez Creek, 5.5 m . west of Armidale |  | do | 32,293 | - 25,7681 | 75,060 |
| $\xrightarrow{\text { Do }}$ | 124 | Saumarez Creek, 5.5 m . west of Armidale |  | do |  | 3,923 | - ${ }^{\mathbf{3}, 923}$ |
| ${ }_{\text {Do }}^{\text {Do }}$ | 124 | 5.4 m . to 6.2 m . west of Armidale |  | do | 5,200 | +1,300 | 6,500 37,202 |
| Urana Do | 59 125 |  | Prestressed and reinforced concrete bridge and approaches Reconstruction and bitumen surfacing | $\begin{aligned} & \text { do } \\ & \text { do } \end{aligned}$ | 11,500 | 37,202 9,950 | 37,202 21,450 |

Appendix No. 8-continued
Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued


## Appendix No. 8-continued

Country Main Roads Fund-General Purposes-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | RoadNo. | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |
| TRUNK AND ORDINARY MAIN ROADS-continued |  |  |  |  |  |  |  |
| Wingecarribee | 569 | 0 m. to 6.9 m . south of S.H. No. 25 1.78 m . to 3 m . south of S.H. No. 25 | Reconstruction and widening do do do | Council do | 13,167 18,000 | 1,000 19,833 | 14,167 37,833 |
| Woodburn . | 145 | Bridge over Bungawalbyn Creek, 6.7 m . from Woodburn | Approaches . . . ............... | do | 186,080 | 19,83 1,540 | 88,400 |
| Do | 145 | 7.68m. to 8.76 m . northwest of Wooddurn ........... | Reconstruction and bitumen surfacing | do | 27,850 | 1,337* | 26, 513 |
| Wyong | 1435 |  | Approaches do............... | do |  | - 55,975 | 55,975 |
| Dyong | 335 | Railway level crossing at Tuggerah ......... | ${ }_{\text {Approaches }}$ Improve.... | Department | 12,060 | 9,964 | 22,024 |
| Do | $\begin{array}{r}335 \\ 335 \\ \hline\end{array}$ | The Entrance to Tuggerah Lakes | Reinforced concrete bridge ........ | do | 394,463 | 453,096 | 847,559 3 3 |
|  | 335 <br> 336 | Through town of Entrance North . . . . . | Strengthening and bitumen surfacing Reconstruction .................. | Council do | 3,000 10,388 | 20,036 | 3,036 30,424 |
| Do Do Do............... | 336 | 1 m . south of M.R. 335 to Gosford Shire boundary |  | do |  | 6,000 | 6,000 |
| Yo ${ }_{\text {Da }}$ | 509 | Budgewoi Creek at Budgewoi ................. | Steel and concrete bridge........ | Department | 199,075 4,000 | 13 8.000 | 199,088 12000 |
| $\underset{\text { Yo }}{\text { Yallaroi }}$ : | 63 63 | 26.5m. north of Warialda ${ }^{\text {Warialda Creek at Warialda }}$ | Reinforced concrete box culvert | Council ${ }_{\text {Department }}$ | 4,000 | 8,000 29,249 | 12,000 29,249 |
| Do | 63 | Bridge over Warialda Creek at Warialda |  | Council ... | 20000 | 6,012 | 8,012 |
| Do ... | 63 | 26.5m. to 40.28 m . north of Warialda ${ }_{\text {O }}$ O............... | Reconstruction and bitumen surfacing Approaches | do | 6,000 10,760 | 14,000 | 20,000 11,376 |
| $\xrightarrow[\substack{\text { Yarrowlumla } \\ \text { Do }}]{\text { den }}$ | 52 | Overbridge at Letchworth $\ldots \ldots \ldots \ldots . . . . . . . . .$. | Approaches Reinforced concrete bridge and approaches | do | 10,760 | $\begin{array}{r}\text { 20,000 } \\ \hline 16\end{array}$ | 11,376 20,000 3 |
| Do | 52 | 10.4 m . to 13.2 m . north of Queanbeyan....... | Reconstruction and bitumen surfacing.... | do | 39,200 | $\bigcirc$ | 39,918 |
| Do | 249 249 | 14.48m. to 15.67 m . north of Queanbeyan....... Charter's Creek, 15.12 m . north of Queanbeyan |  | do | 14,482 6,451 | 1,302** | 13,180 6,122 |
| Do | 268 | 18.48 m . to 20.48 mm . from Queanbeyan ........ | Reconstruction and bitumen surfacing ......... |  |  | 20,458 | 20,458 |
| Do | 268 | 16.22 m . to 18.48 m . from Queanbeyan | $\underset{\text { do do do do do }}{\text { do }}$ | do | 17,260 20,000 | 1,354** | 15,905 |
| Do | 584 <br> 584 | 3.3 m. to 0.27 m . from Queanbeyan 5.29 m , to 7.86 m . from Queanbeyan | Reconstruction and surfacing ${ }_{\text {a }}$ (...... |  | 20,000 |  | 19,651 10,000 |
| Do | 584 | 4.3m. to 6 m . south of Queanbeyan | do do do do | do | 20,000 | 2,122* | 17,878 |
|  | Total-Trunk and Ordinary Main Roads |  |  |  |  | \$10,148,230 |  |
| TOURIST ROADS |  |  |  |  |  |  |  |
| Dumaresq. | 4002 | 7.6m. to 9.3m. from T.R. No. 74 | Bitumen surfacing ........ | Council | 13,000 |  |  |
| Guyra . |  |  | Reconstruction and gravelling Widening | do do |  | 4,000 13,000 | 4,000 13,000 |
| Imlay... | 4037 4011 |  | Wrdening ${ }_{\text {Wravelling and bitumen surfacing }}$ | do do | 1,500 | 13,000 1,218 | 13,000 2,718 |
| Do | 4048 | Main Street to Brown's Gap Road | Construction .................. |  |  | 5,000 | 5,000 |
| Macleay | 4032 | 4.46 m . to 6.21 m . from Kinchela. | Reconstruction and bitumen surfacing | do |  | 18,000 ${ }^{*}$ | 18,000 |
| Do | 4032 |  | $\begin{array}{llll}\text { do do do } \\ \text { do } & \text { do } \\ \text { do } & \text { do } \\ \text { do }\end{array}$ | do | 18,500 19,500 |  | 18,498 19,165 |
| Snowy River | ${ }_{4043}^{4032}$ | 6.3m. to 8.5 m from M.R. No. $286 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | Reconstruction ............... | do | 23,000 | 3,885 | 26,885 |
| Stroud.. | 4035 |  | Reconstruction and bitumen surfacing | do | 14,000 10 | 20,272 | 34,272 |
| Tweed | 4113 | 0m. to 0.84 m . and 3.4 m . to 3.8 m . from M.R. No. 142 | Reconstruction |  | 10,756 | 1,667 1,500 | 12,423 |
| Do | 4028 4028 | Pottsville to billinudgel. within the Shire 0 m. to 0.64 m . from S.H. | Construction . ${ }_{\text {Strengthening and bitumen surfacing }}$ | do |  | 1,500 | 15500 |
| Waugoola | 4047 | Within Wyangala National Park | Construction ................... | do | 5,000 | 10,000 | 15,000 |
| Wingecarribee | 4038 | Carrington Falls . | Drainage........ | do |  | 1,450 | 1,450 |
| Do | 4044 4044 | 0.18 m. to 0.8 m . south of M.R. No. 569 0.18 m .10 | Clearing, forming and gravelling, |  | 1,600 | 148 3,000 | 1,748 3,000 |
| $\xrightarrow{\text { Do }}$ Do | 4044 4044 | 0.18 m. to 0.8 m . south of M.R. No. 569 0.38 m. to 0.8 m. from M.R. No. 569 | Reconstruction and bitumen surfaci do do do do | do | 1,000 | 3,000 | 1, 1 , 734 |
| Wollondilly | 4001 | Om. to 0.85 m . from M.R. No. 259. | do do do do | do | 6,226 | 434* | 5,792 |
|  | Total-Tourist Roads |  |  |  |  | \$88,753 |  |

Appendix No. 8-continued

## Country Main Roads Fund-General Purposes-continued

Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | $\begin{aligned} & \text { Road } \\ & \text { No. } \end{aligned}$ | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |
| ROADS OTHER THAN MAIN ROADS |  |  |  |  |  |  |  |
| Gosford |  | 17.17m. to 19.7 m . north of Calga | Construction ............. | Department | 954,518 20.168 | 1.758* | 954,414 21,926 |
| Corer woilongong ......... |  | Calga to Ourimbah York Road between | Street lighting at intersections. Reinforced concrete culverts | $\stackrel{\text { do }}{\text { douncil }}$... | 20,168 | 1.758 6,500 | 21,926 6,500 |
| Do |  | Porter Street extension .....1 ................ | Dual carriageway ......... | Department | 202,297 | 330,561 | 532,858 |
| Do |  | Byarong Avenue, 2.5 m . south of Wollongong | Temporary pedestrian overbridge | do .. |  | 12,264 | 12,264 1,249416 |
| Do Do O |  | Mt. Keira Road Bridge to Gladstone Avenue Gipps Road to Mt. Keira Road............ | Dual carriageway ............ | do do | 1,020,388 | 229,028 | 1,249.416 |
| Do |  |  | Aspanatic concrete surfacing | Council |  | 1,000 | 1,000 |
| Do |  | Gladstone Avenue to M.R. No. 295 | Dual carriageway..... | Department | 71,258 | 8.561 | 79,819 |
| Do ${ }_{\text {Do }}$ |  | Allan Creek at Unanderra ........ | Reinforced concrete box culvert | do | 100.731 | 55,534 | 156,265 |
| $\begin{array}{ll}\text { Do } \\ \text { Do } & \cdots \cdots \ldots . . \\ \end{array}$ |  | $\xrightarrow{\text { Porter Street extension }}$ Jenkins Creek at Unanderra | Prestressed concrete overbridge Reinforced concrete box culvert | do do | 77,204 41,848 | 289 513 | 77,493 42,361 |
| Do |  | Porter Street . ......... | Prestressed concrete overbridge | do | 80,089 | 37.858 | 117,947 |
| $\underset{\text { Hastings }}{\text { Do }}$ |  | High Street to S.H. No. 1 | Strengthening....... | Council |  |  | 7.388 24.936 |
| Hastings <br> Lismore |  | Wauchope to Heron's Creek ......... | Improvement do | $\underset{\text { department }}{\text { do }}$.... | 24,800 | $\begin{array}{r}136 \\ 2,963 \\ \hline\end{array}$ | 24,936 2,963 |
| ${ }_{\text {Lismore }}^{\text {Do }}$ - |  | Union Street, South Lismore . ${ }^{\text {Railway }}$ level crossing at Union Street | ${ }_{\text {do }}$ | Council ${ }^{\text {Dent }}$. . . | 4,328 |  | - 2,445 |
| Macleay |  | Christmas Creek ........ | Reinforced concrete bridge | do ... | 26,000 | 383** | 25,617 |
| Manning, |  | 3.4m. to 6.5 m . from Nabiac Within the shire | Reconstruction ...... | do do $\ldots$. | 40,000 | 3,654 4.454 | 43,654 4,454 |
| Nambucca |  |  | Repair of flood damage Restoration | do ${ }^{\text {do }}$. $\quad .$. |  | 2, 0.00 | 2,000 |
| Newcastle |  | Bridge over north arm of Hunter River ... | Reinforced concrete sub-structure | Department | 685,879 | 35,322 | 721,201 |
| $\stackrel{\text { Do }}{ }$ |  | Aldyth Street to Charlestown Road | Reconstruction ......i. | Council .... |  | 105,920 | 105,920 |
| $\underset{\substack{\text { Talbragar } \\ \text { Do }}}{\text { den }}$ |  |  | Reinforced concrete culvert $\ldots \ldots \ldots \ldots$ Reconstruction and bitumen surfacing | do do do |  | 5,425 | 9,473 |
| Do |  | 17.36 m . to 18.5 m . east of Dubbo | Recto do do do |  | 19,372 | 4,403 | 23,775 |
|  |  |  | Total-Roads oth |  |  | \$863.151 |  |

Total-Roads other than Main Roads

| SUMMARY |  |  |
| :---: | :---: | :---: |
| State Highways | $\stackrel{\$}{\mathbf{S}} \mathbf{2 2 , 6 9 1 , 7 4 4}$ | \$ |
| Trunk and Ordinary Main Roads | 10,148,230 |  |
| Tourist Roads | 88,753 |  |
| Roads other than Main Roads | 863,151 | 33,791,878 |
| Survey, design, supervision and planning etc. |  | 4,029,840 |
| Total as shown in Receipts and Payments Statement-Appendix No. 1 (8) (i) |  | \$37,821,718 |

[^2]
## Appendix No. 8A

COUNTRY MAIN ROADS FUND-SPECIAL PURPOSES
Summary of Expenditure on Construction and Reconstruction Works

| City, Municipal or Shire Area | Road No. | Location of Work | Class of Construction | Constructing Authority | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  | \$ | \$ | \$ |
| State highways |  |  |  |  |  |  |  |
| Dubbo $\ldots \ldots \ldots \ldots \ldots \ldots$$\begin{aligned} & \text { Stroud } \\ & \text { Deniliquin }\end{aligned} . \ldots \ldots \ldots \ldots \ldots \ldots$ | 71021 | Macquarie River at Dubbo <br> Myall River at Bulahdelah <br> Edward's River at Deniliquin | Reinforced <br> do <br> do concrete bridge <br> do <br> do do <br> do <br> do $\ldots \ldots \ldots \ldots \ldots \ldots$ | $\begin{aligned} & \text { Department } \\ & \text { do } \\ & \text { do } \end{aligned}$ |  | $\begin{aligned} & 250,000 \dagger \\ & 250,000 \dagger \\ & 188,036 \end{aligned}$ | $\begin{aligned} & 250,000 \\ & 250,000 \\ & 188,036 \end{aligned}$ |
|  |  |  |  |  |  | \$688,036 |  |

TRUNK AND ORDINARY MAIN ROADS


[^3]Appendix No. 9
DEVELOPMENTAL ROADS FUND
Summary of Expenditure on Construction and Reconstrucion Works


* Credit

Appendix No. 9-continued
Developmental Roads Fund-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | $\begin{aligned} & \text { Road } \\ & \text { No. } \end{aligned}$ | Location of Work | Class of Construction | Constructing Authority |  | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
|  |  |  |  |  |  |  |  | $\stackrel{\$}{\$}$ |
| Gloucester | 1150 1150 | 23.7m. and 24.7 m . north of Gloucester. | Deviation | Council do |  | $\begin{aligned} & 10,000 \\ & 59,658 \end{aligned}$ |  | 26,198 43,460 |
| Do | 1150 3188 | 17.5 m. to Barrington River, 3 m . north of | Bridge | do |  | 26,500 | 16,36 | 26,536 |
| Grafton City | 1290 | 0.93 m . to 1.68 m . southeast of T.R. No. 74 | Construction and bitumen surfacing | do |  | 43,055 | 7,065 | 50,120 |
| Guyra ..... | 3185 | 12.4 mm to 13.5 m . east of T.R. No. 73 | Construction | do |  | 18,000 | 3,000 | 21,000 55,600 |
| Hestings ${ }_{\text {Jerilderie }}$ | 3189 <br> 1314 | Selected lengths on Kindee-Long Flat Brombin Road Om. to 11.25 m . southwest of M.R. No. $596 \quad$...... | Reshaping and graveliling | do |  | 44,600 | 1,000 | 55,600 3,000 |
| Jeriderie : | 3204 |  | Reshaping and aproaches... | do |  |  | 15,000 | 15,000 |
| Do | 3204 | 6.5 m . to 7.5 m . west of T.R. No. 87 | Construction | do |  | 10,000 | 15,000 | 25,000 |
| Kyogle | 1129 | Lowes and Snows Creek ........ | Reinforced concrete bridges | do |  | 20,029 | ${ }_{373}{ }^{\text {* }}$ | 20,000 |
| Lachlan | 1006 | 29.2m. to 35.2 m . north of M.R. No. 231 Weia to Washpool Tank | Gravelling an ${ }_{\text {Graveling }}$ and...... | do |  | 10,031 | 3,856 | 10,573 26887 |
| Do | 1139 1151 | Weja to Washpool Tank 3.6 m . to 6 m. northeast of Fiefield | Gravelling and causeways | do |  | 23,800 4,800 | 3,797 | 26,887 5,597 |
| Do | 1187 | 5.52 m . to 10.52 m . northwest of T.R. No. 61 | do | do |  |  | 76 | , 76 |
| Do | 1187 | 10.52 m . to 15.52 m . northwest of T.R. No. $61 \quad \cdots \cdots$. |  | do |  |  | 6,490 3,000 | 6,490 |
| $\underset{\substack{\text { Do } \\ \text { Leton }}}{\text { do }}$ | 3115 |  | Gravelling and box culverts | do |  | 15,0000 | 3,000 | 3,000 15,987 |
| $\xrightarrow{\text { Leeton }}$ Liverpool Plains | 3206 1298 | $0.2 \mathrm{~m}, 0.42 \mathrm{~m}$. and Within the shire a .03 m . south of Euroley bridge | Concrete causeways Construction | do |  | 10,000 | 16,802 | 26,802 |
| Maclean ...... | 1245 | Esk River to Woody Head | Construction and approaches | do |  | 21,401 9,165 | ${ }_{2}^{2,235 *}$ | 19,166 |
| Do | 12845 | 8.4 m . to 10.94 m . east of S.H. No. 10 | Construction do | do |  | 9,165 | 2,3,30 | 11,400 3,340 |
| Macleay | 1048 | 2 m . to 3.7 m . north of T.R. No. 75 | do | do |  | 25,134 | 9,257 | 34,391 |
|  | 1048 | 3.7m. to 5.28 m . north of T.R. No. 75 |  |  |  | 46,000 | 28,000 3,936 | 74,000 3,936 |
| Manning . | $\begin{gathered} 1150 \\ \text { and } 3195 \end{gathered}$ | Within the shire | Restoration of flood damage |  |  |  |  | 3,936 |
| Do | 1209 3194 3 | Ward's Creek to Manning shire boundary | Construction do | do |  |  | 1,124** | $\begin{array}{r}19,386 \\ \hline 186\end{array}$ |
| Do | 3194 3195 | $\begin{aligned} & 34.75 \mathrm{~m} . \text { to } \\ & 41 \mathrm{~m} . \text { to } 41.3 \mathrm{~mm} . \text { northwest of Taree }\end{aligned} . .$. | Deviation | do |  | 12,000 | 3,428* | 15,428 |
| Merriwa | 1304 | Curryall to Coolah shire boundary | Construction | do |  | 140,000 | 73,330 | 213,330 |
| Molong | 1174 | 0.64m. to 1.9 m . west of Obley | do | do |  | 12,000 13,000 | 15,072 | 12,094 28,072 |
| Do | 1174 1176 1 |  | do | do |  | 23,989 | 15,072* | 23,800 |
| Monaro | 1268 1290 | Jinden Creek to Big Badja M............ | Clearing ........ | do |  | 37,500 13 | 20,110 41,000 | 57,610 54,000 |
| ${ }_{\text {Mor }}^{\text {Do }}$ ( ${ }^{\text {della }}$ | 3190 1214 | Big Badja River, 23m. east of Cooma | Single lane bridge Construction | do |  | 13,000 | 41,000 34 | 54,000 |
| Do | 1214 | 2 m . to 3.1 m . northwest of S.H. No. 4 | do | do |  | 936 | 936* |  |
| Do | 1214 |  | $\stackrel{\text { do }}{\text { don }}$. | do |  | 10,000 | 14,000 | 24,000 |
| Murrurundi ${ }_{\text {Muswellbrook }}$ Shire | 3104 3173 3 | Pump Station Creek west of M.R. No. 358 | Concrete culvert |  |  | $\because 23,869$ | 68,496 | 27,365 |
| ${ }_{\text {Do }}^{\text {Muswellbrook Shire }}$ | 3173 <br> 3173 <br> 175 | 2 m . to 3.1 m . west of Jerry's Plains 1.42 m. to 2 m . west of Jerry's Plains | Construc do | do |  | 24,000 | 1,001** | 22,999 |
| Nambucca | 1075 | Within the shire ................. | Restoration of flood damage | do |  | 6,580 | 1,043* | 5,537 |
| Do | ${ }_{1075}^{\text {and } 1078}$ | 12.10 m . to 13.20 m . northwest of M.R. No. 533 | Reconstruction and drainage | do |  |  | ${ }^{941}$ | 931 |
| ${ }^{\text {Do }}$ | 1078 | 16 m . to 17.5 m . west of Bowraville ${ }^{\text {a }}$, ${ }^{\text {a }}$ | Improvement and strengthening | do |  | 14,149 24,000 | 19,000 1,739 |  |
| $\xrightarrow{\text { Nundle }}$ Patrick Plains | 3175 3173 | Sugar Loaf Creek 17.2m. from Nundle | Reinforced concrete bridge Construction ......... | do |  | 38,593 | 1,685 | 40,278 |
| Peel ......... | 1298 | 4.42 m . to 4.51 m . northwest of M.R. No. 130 | do | do |  | 6,000 | , 329 | 6,399 |
| Rylstone | 3187 180 109 | Capertee River, 15m. south of Rylstone | Prestressed concrete bridge Construction ............. | do |  | $\ldots .$. | $\begin{array}{r}1,271 \\ \hline 86\end{array}$ | 1,271 |
| Scone Do do | 1109 1243 | 10.01 m . to 10.7 m . east of M.R. 0 m. to 3.1 m . from Page's Creek Road | Construction... | do |  |  | 8,000 | 8,000 |
| Do | 3183 | Gibbergunyah Creek, 1.5 m west of Owen's Gap | Reinforced concrete bridge ............ | do |  | 20,000 32,250 | - 388 | 20,388 |
| Severn | 1207 <br> 3192 | Maid's Valley Creek, 2.5 m . north of S.H. No. 12 | Reinforced concrete bridge and approaches Construction | do |  | 32,250 | 2,591 11,250 | 34,841 11,250 |
| Do | $\begin{array}{r}3192 \\ 3193 \\ \hline 1\end{array}$ | 1.25m. to 30 3.75 m . south of Mt. Slow |  | do |  |  | 10,000 | 10,000 |
| Shoalhaven | 1246 | 6.55 m . to 7.77 m . south of Burrill Creek $\ldots . . . . . . . . .$. | do | do |  |  | 5,885 | 5,885 |

## Appendix No. 9-continued

Developmental Roads Fund-continued
Summary of Expenditure on Construction and Reconstruction Works-continued

| City, Municipal or Shire Area | RoadNo. | Location of Work | Class of Construction | Constructing |  | Expenditure from Department's Funds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | To 30th June, 1968 | 1968-69 | To 30th June, 1969 |
| Snowy River | 1297 |  | Reinforced concrete bridge Construction |  | Council | \$ | $\stackrel{\text { s }}{60,000}$ | $\stackrel{5}{60,000}$ |
| $\mathrm{Talbagar}_{\text {Do }}$ | 1297 |  | Construction | dododododo |  | 74,869 <br> 16,000 | ${ }^{4,670} 8{ }^{812 *}$ | 79,539 |
| Tallaganda | 11268 1268 126 |  | do |  |  |  |  | (10, |
| Tamarang | ${ }^{1268}$ |  | $\stackrel{\text { do }}{\text { do }}$ Concrete culveri | do |  | -76,974 |  | S4, ${ }^{50,000}$ |
| Tomki Tumbarumba |  |  | Prestressed concrete bridge Construction | do |  | 6.000 | 10,000 | ${ }^{16,000}$ |
| Do | 1171 | Spring Creek south of M.R. No. 281 | Reinforred concrete box cuivert | do |  | cio.000 24,198 | 14,26 | 24,224 |
| Ulmarra | ${ }^{1171} 1$ | 10.14m. to 14.4m. south of M.R. No. 281 | Gravelling | do |  |  | - 14,573 | 89,40133,327 |
| Uralla | 1290 | 2.12 m . to 3.46 m . through Bom Bom State Forest | do | do |  | ${ }_{43,362}^{30,380}$ | 2,777* |  |
| Wakool | 1186 <br> 1106 | Edward River to Murgal | Formation and graveliling | do |  |  | 14,773 | 14,773 16,000 |
| Walcha | 1282 | Nowendoc River, 0.7 m . south of Nowendoc | Reinforced concrete bridge | do |  |  | - 85,000 | +10,000 |
| $\underset{\text { Warretit }}{\text { Waren }}$ | 3207 <br> 3205 | Pun Creek, 10 m. north of Bugibone Bulgeraga Crek, east of M.R. No. 333 |  | do |  |  | ${ }_{3,514}$ | - ${ }^{20,514} \mathbf{2 9 , 3 9 1}$ |
| Wellington | 1007 | Gundy Creek, north of M.R. No. 233 . | Bridge and approaches. | do |  |  |  |  |
| Do | ${ }^{1057}$ | Mitchell's Creek, east of M.R. No. 353 | Reinforced concrete bridge and approaches |  |  | 29,424 32,000 | ${ }^{9} 9.0936$ | 41,0736,936 |
| Wingecarribee | 3214 <br> 129 <br> 1 |  | Low level bridge and appro | do |  |  |  |  |
| Do | 1299 | Om. to 3m. north of Canyonleigh Road |  | do |  | 24,000 <br> 38,500 | - $\begin{aligned} & 6.500 \\ & 11,311 \\ & 1,311\end{aligned}$ | $\begin{aligned} & 30,500 \\ & 49,811 \end{aligned}$ |
| Do | [1299 | 8.5m. to 12 m . north of Canyonleigh Road | do Reconstr |  |  |  |  |  |
| Wollondilly | 1302 | 5.6 m to to 7.15 mm south of M.R. No. 259 .................... | Reconstruction and bitumen surfacing | do |  | $\begin{array}{r}45,500 \\ 1.000 \\ \hline 1.6000\end{array}$ | 29,115 | 254,615 |
| ${ }^{\text {Woodburn }}$ | 1203 3120 |  | Restoration of flood damage Reinforced concrete bridge and approacie |  |  |  | $\begin{array}{r}984 \\ \hline 16\end{array}$ |  |
| Yallaroi | 1270 |  | Construction ..................... |  |  |  | 7,000 | $\begin{gathered} 11,750 \\ \substack{1750 \\ 5 \\ \hline \\ \hline \\ \hline} 500 \end{gathered}$ |  |
| Do | (1290 |  | do |  |  | $\begin{aligned} & \substack{7,750 \\ 4,50} \end{aligned}$ |  |  |
|  |  | Total Expenditure on road and bridge construction |  |  |  |  |  | 1,318,973 |
|  |  |  |  |  |  |  |  |  |
|  |  | Total-as shown in Receipts and Payments Statements-Appendix No. 1 (C) |  |  |  |  |  | \$1,319,850 |  |

* Credit


## Appendix No. 10

COUNTY OF CUMBERLAND MAIN ROADS FUND
Payments for Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69

Work by Councils


## Appendix No. 10A

## COUNTY OF CUMBERLAND MAIN ROADS FUND

## Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69

Work by Department


## ORDINARY MAIN ROADS

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)

Main Road No. 184 to Richmond Air Station
Narrabeen Lagoon to Beach Road, Palm Bcach, including Narrabeen bridges

## Appendix No. 10A-continued

## COUNTY OF CUMBERLAND MAIN ROADS FUND—continued

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69-continued

Work by Department-continued

| Road No. | Location of Work | Amount | Total |
| :---: | :---: | :---: | :---: |
|  | ORDINARY MAIN ROADS- continued | \$ | \$ |
| 172 | Northern side from Jersey Road, Woollahra, to Queen Street and thence full width to Main Road No. 340 (Bronte Road), Bondi Junction | 3,773 |  |
| 174 | Main Road No. 162 (Mona Vale Road), Terry Hills, to the western end of General San Martin Drive near McCarr's Creek | 5,832 |  |
| 175 | Main Road No. 171 (Bunnerong Road), Matraville to Prince Henry Hospital | 1,596 |  |
| 177 | 0 m . at State Highway No. 2 (Hume Highway) to 1.40 m . at the southern boundary of the City of Liverpool. <br> Cross Roads to the southern boundary of Campbelltown Municipality at 16.91 m . and from 26 m . to State Highway No. 1 (Prince's Highway) at 29.98 m . | 3,128 53,825 |  |
| 178 | Main Road No. 177 Campbelltown to State Highway No. 2 (Hume Highway) at Narellan | 12,293 |  |
| 181 | Main Road No. 184 at McGrath's Hill to Webb's Creek Ferry ........ | 13,240 |  |
| 182 | Main Road No. 184 at Windsor to the Hawkesbury River including Hawkesbury River Bridge | 596 |  |
| 183 | Anzac Parade, Kingsford to State Highway No. 1 (Prince's Highway), Sydenham | 49,328 |  |
| 184 | State Highway No. 13 (Pennant Hills Road) Parramatta to State Highway No. 5 (Great Western Highway) at Mount Victoria | 108,063 |  |
| 185 | State Highway No. 1 (Prince's Highway) at Helensburgh to State Highway No. 1 at Thirroul | 108,989 |  |
| 190 | Bankstown municipal boundary to Main Road No. $167 . . . . . . . . . . . .$. | 4,379 |  |
| 194 | Botany Road, Mascot to Cook's River, Kyeemagh, including Cook's River Bridge <br> Major bridges on council controlled lengths | 113,714 16,320 |  |
| 199 | Ramsgate Road, Ramsgate to Taren Point including Captain Cook Bridge Major bridges on concil controlled lengths | 5,200 15,264 |  |
| 200 | Ryde Bridge to Victoria Road | 5,092 |  |
| 225 | Main Road No. 181 at Wiseman's Ferry Village to Wiseman's Ferry | 116 |  |
| 309 | State Highway No. 5 (Great Western Highway) to Kissing Point Road (Main Road No. 574) | 11,918 |  |
| 315 | State Highway No. 2 (Hume Highway), Enfield to Broadarrow Road, Beverly Hills | 24,150 |  |
| 317 | Main Road No. 171 (Bunnerong Road), Matraville to Marine Parade, Maroubra | 2,276 |  |
| 327 | Anzac Parade, Moore Park to Belmore Road, Randwick | 2,391 |  |
| 328 | Bridge over Middle Harbour at Roseville to Main Road No. 164 (Pittwater Road), Brookvale including Roseville Bridge | 46,676 |  |
| 344 | Main Road No. 171 (Bunnerong Road), Matraville to Frogmore Street, Mascot | 6,852 |  |
| 366 | Entrance to Ku-ring-gai Chase at 4 m . north of State Highway No. 10 (Pacific Highway) at Turramurra to Mount Colah Lodge Gates | 5,879 |  |
| 373 | Terry's Creek, Epping to Lane Cove River, including Lane Cove River Bridge | 26,770 16,305 |  |
| 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 | 16,505 41,584 |  |
| 397 | Montauban Avenue to Main Road No. 164 at Narrabeen | 26,542 |  |
| 508 | State Highway No. 2 (Hume Highway) to Salt Pan Creek . . . . . . . . . . . | 65,087 |  |
| 512 | State Highway No. 1 (Prince's Highway) at Heathcote to Deadman's Creek at the boundary of Liverpool City <br> Deadman's Creek to State Highway No. 2 (Hume Highway) at Liverpool | $\begin{aligned} & 16,910 \\ & 14,029 \end{aligned}$ |  |
| 515 | State Highway No. 2 (Hume Highway) at Liverpool to State Highway No. 5 (Great Western Highway) at Eastern Creek | 41,689 |  |
| 516 | Main Road No. 184 at Bell to the eastern boundary of Blaxland Shire .: | 706 |  |
| 525 | Main Road No. 174 (McCarr's Creek Road) at McCarr's Creek to Main Road No. 174 near Terrey Hills, including McCarr's Creek Bridge | 11,061 |  |
| 532 | Main Road No. 165 to State Highway No. 5, Auburn | 6,837 |  |
| 535 |  | 5,915 |  |
| 536 | Main Road No. 535 to State Highway No. 5 (Great Western Highway) at St. Marys | 10,440 |  |
| 537 | South Creek Bridge to Main Road No. 184 at Richmond . . . . . . . . . . | 29,801 |  |
| 570 | Main Road No. 155 at Agnes Banks to the eastern boundary of the City of Blue Mountains | 10,392 |  |
| 574 | Main Road No. 165 (Victoria Road), Rydalmere to Main Road No. 158 (Marsden Road), Dundas | 18,956 |  |
| 587 | State Highway No. 10 (Pacific Highway) at Hornsby to State Highway No. 10 at Asquith | 11,993 |  |
| 592 | Cahill Expressway from Macquarie Street to Sir John Young Crescent . . | 81,035 |  |
| 599 | From Suspension Bridge to Babbage Road including link to Boundary Street | 16,230 |  |

## Appendix No. 10A-continued <br> COUNTY OF CUMBERLAND MAIN ROADS FUND-continued

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69-continued

Work by Department-continued


Appendix No. 11

## COUNTRY MAIN ROADS FUND

Payments for Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69

Work by Councils


Appendix No. 11-continued

## Country Main Roads Fund-continued

Payments for Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69-continued

Work by Councils-continued


## Appendix No. 11-continued

## Country Main Roads Fund-continued

Payments for Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69-continued

Work by Councils-continued

|  | City, Municipal or Shire Area | State Highways | Trunk, Tourist and Ordinary Main Roads | Total |
| :---: | :---: | :---: | :---: | :---: |
| Lockhart |  | \$ | 32,125 | $\begin{gathered} \$ \\ 32,125 \end{gathered}$ |
| Lyndhurst. |  |  | 7,557 | 7,557 |
| Macintyre |  | 39,529 | 29,682 | 69,211 |
| Maclean |  |  | 16,571 | 16,571 |
| Macleay |  |  | 22,216 | 22,216 |
| Maitland |  | 2,460 | 11,757 | 14,217 |
| Manilla |  |  | 6,478 | 6,478 |
| Manning |  |  | 59,791 | 59,791 |
| Merriwa |  |  | 22,464 | 22,464 |
| Mitchell |  |  | 25,500 | 25,500 |
| Mittagong |  |  | 32,166 | 32,166 |
| Molong . |  |  | 25,976 | 25,976 |
| Monaro |  |  | 1,268 | 1,268 |
| Moree |  | 5,500 | 1,507 | 7,007 |
| Mudgee. |  |  | 1,853 | 1,853 |
| Mullumbimby |  |  | 3,150 | 3,150 |
| Mulwaree |  |  | 55,736 | 55,736 |
| Mumbulla. |  |  | 28,353 | 28,353 |
| Murray |  |  | 17,352 | 17,352 |
| Murrumbidgee. |  |  | 17,300 | 17,300 |
| Murrumburrah |  |  | 3,065 | 3,065 |
| Murrurundi |  |  | 541 | 541 |
| Muswellbrook |  | 1,195 | 1,300 | 2,495 |
| Nambucca |  |  | 14,965 | 14,965 |
| Namoi |  |  | 82,397 | 82,397 |
| Narrabri |  | 1,532 | 1,625 | 3,157 |
| Narraburra |  |  | 35,803 | 35,803 |
| Narrandera . |  |  | 16,166 $68{ }^{*}$ | 16,166 $68{ }^{*}$ |
| Narromine |  | 24,277 | 51,414 | 75,691 |
| Nundle |  |  | 5,904 | 5,904 |
| Nymboida |  |  | 31,268 | 31,268 |
| Nyngan |  | 543 | ${ }_{2} 518$ | 1,061 |
| Oberon |  |  | 28,445 | 28,445 |
| Orange . |  | 750 | 510 | 1,260 |
| Parkes Patrick plains |  |  | 500 34,260 | 500 34,260 |
| Patrick Plains Peak Hill |  |  | 34,260 161 | 34,260 |
| Peak Hill Peel |  |  | 161 9,119 | 161 38,201 |
| Peel ${ }^{\text {Port Macquarie }}$ |  | 29,082 | 9,119 | 38,201 |
| Port Macquarie |  | 1,013 | 5,186 | 6,199 |
| Port Stephens |  |  | 48,139 | 48,139 |
| Queanbeyan |  |  | 7,000 | 7,000 |
| Quirindi Rylstone |  |  | 7,000 37,357 | 5,000 37,357 |
| Rylstone Scone |  |  | 37,357 41,117 | 37,357 41,117 |
| Scone |  | 14,822 | 41,177 | 41,117 23,207 |
| Shellharbour |  |  | 12,703 | 12,703 |
| Shoalhaven |  |  | 13,903 | 13,903 |
| Singleton |  | 200 | 1,586 | 1,786 |
| Snowy River |  |  | 29,947 | 29,947 |
| Stroud . . . . . | . . . . . . . . . . . . . . |  | 56,767 6,800 | 56,767 6,800 |
| Talbragar |  |  | 6,800 86,736 | 86,800 |
| Tallaganda |  |  | 86,736 28,517 | 86,736 |
| Tamworth |  | 9,016 | 1,815 | 10,831 |
| Taree |  | 5,700 | 2,298 | 7,998 |
| Temora |  |  | 3,672 | 3,672 |
| Tenterfield Mu | nicipality | 3,345 |  | 3,345 63,197 |
| Tenterfield Shir |  | 46,399 | 16,798 38,411 | 63,197 38,411 |
| Terania ... |  |  | 38,411 25,672 | 38,411 25,672 |
| Tintenbar . |  | 6,149 | 11,614 | 17,763 |
| Tomki |  | 14,954 | 35,509 | 50,463 |
| Tumbarumba |  |  | 23,965 | 23,965 |
| Tumut |  | 6,930 | 30,985 33,505 | 37,915 33,505 |
| Turon | . $\cdot$....... |  | 33,505 41,799 | 33,505 41,799 |
| Tweed Ulmarra |  |  | 41,799 12,324 | 41,799 12,324 |
| Uralla |  |  | 12,353 | 32,353 |
| Urana |  |  | 31,106 | 31,106 |
| Wade. . . . . . . |  |  | 38,696 | 38,696 |
| Wagga Wagga |  | 6,805 30,174 | 9,542 102,145 | 16,347 132,319 |
| Wakool $\quad$ Walcha |  | 30,174 | 102,145 3,099 | 132,319 3,099 |
| Walgett |  | 5,501 | 90,000 | 95,501 |

Appendix No. 11-continued
Country Main Roads Fund-continued
Payments for Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69-continued

Work by Councils-continued


* Credit


## Appendix No. 11A

## COUNTRY MAIN ROADS FUND

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69

Work by Department


# Appendix No. 11A-continued 

Country Main Roads Fund-continued

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69-continued

## Work by Department-continued



## Appendix No. 11A-continued

## Country Main Roads Fund-continued

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69-continued

## Work by Department-continued

| Road No. | Location of Work | Amount | Total |
| :--- | :---: | :---: | :---: |



# Appendix No. 11A-continued <br> <br> Country Main Roads Fund-continued 

 <br> <br> Country Main Roads Fund-continued}

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1968-69-continued

Work by Department-continued

| Road No. | Location of Work | Amount | Total |
| :---: | :---: | :---: | :---: |
| Trunk Roads-continued \$ \$ |  |  |  |
|  | Major bridges on council controlled length . . . . . . . . . . . . . . . . . . . . . . ${ }_{\text {I }} 967$ |  |  |
| 67 | Do do do do | 79,322 |  |
| 68 | Do do do do | 3,021 |  |
| 74 | Do do do do | 7,271 |  |
| 75 | Do do do do | 5,965 |  |
| 78 | Do do do do | 4,794 |  |
| 79 | From Broken Hill City boundary 3.71 m . west to 15.83 m . west of Broken Hill | 354 |  |
| 81 |  | 3,217 |  |
| 83 | Major bridges on council controlled length Do do do do | 7,498 50 |  |
| 86 |  | 50,572 |  |
|  |  |  | \$212,162 |

## ORDINARY MAIN ROADS

| 101 | Major bridges on council controlled length | 16,507 |
| :---: | :---: | :---: |
| 102 | Do do do do | 15,188 |
| 104 | Major ferries on council controlled length | 27,010 |
| 108 | Do do do do | 661,288 |
| 112 | Major bridges on council controlled length | 38 |
| 127 | Do do do do | 7,893 |
| 128 | Do do do do | 2,157 |
| 143 | Do do do do | 590 |
| 145 | Do do do do | 2,925 |
| 147 | Major ferries on council controlled length | 35,451 |
| 148 | Major bridges on council controlled length | 19,832 |
| 149 | Major ferries on council controlled length | 26,860 |
| 151 | Major bridges on council controlled length | 17,107 |
| 152 | Do do do do | 2,059 |
| 179 | Do do do do | 12,151 |
| 181 | Do do do do | 228 |
| 182 | Hawkesbury River at Windsor to Main Road No. 503 at Wilberforce including Windsor Bridge | 9,636 |
| 197 | Major bridges on council controlled length | 6,394 |
| 198 | Do do do do | 131 |
| 208 | Do do do do | 9,776 |
| 209 | Do do do do | 84 |
| 217 | Do do do do | 2,144 |
| 218 | Do do do do | 5,751 |
| 220 | Do do do do | 6 |
| 222 | Do do do do | 4,140 |
| 226 | Do do do do | 35,198 |
| 232 | Do do do do | 5,487 |
| 249 | Do do do do | 283 |
| 253 | State Highway No. 5 at Hartley to Main Road No. 520 | 27,787 |
| 256 | Major bridges on council controlled length | 6,620 |
| 259 | Southern boundary of Camden Municipality at 2.65 m . to 20.05 m . west of State Highway No. 2 at Camden | 65,896 |
| 261 | State Highway No. 1 near Bomaderry to the northern boundary of Shoalhaven Shire | 68,485 |
| 272 | Major bridges on council controlled length | 150 |
| 286 | From 0.94 m . west of New Jindabyne to 31.13 m . at Mount Kosciusko | 115,643 |
| 293 | State Highway No. 1 to Bomaderry railway station and branch road to railway goods yard | 173 |
| 307 | Main Road No. 261 to Cambewarra Lookout | 807 |
| 319 | Major bridges on council controlled length | 943 |
| 321 | Do do do do | 4.218 |
| 324 | Do do do do | 1,357 |
| 367 | Do do do do | 741 |
| 369 | Major ferries on council controlled length | 9,304 |
| 386 | Major bridges on council controlled length | 1,543 |
| 399 |  | 944 |
| 405 | Main Road No. 429 at Wanaaring to the border of South Australia at Hawker Gate | 23,752 |
| 428 | State Highway No. 22 at 35 m . north of Broken Hill to Kayrunnera ... | 10,384 |
| 429 | Northern boundary of Central Darling Shire to the western boundary of Darling Shire at Willara Crossing (Paroo River) | 6,237 |
| 435 | From Central Darling Shire boundary north of Wilcannia to Willaroy via White Cliffs | 703 |
| 501 | Major bridges on council controlled length | 8,114 |
| 502 | Main Road No. 513 at Wollongong to Main Road No. 179 near Wilton | 45,088 |
| 503 | Main Road No. 182 at Wilberforce to the southern boundary of Patrick Plains Shire | 75,822 |

# Appendix No. 11A-continued 

Country Main Roads Fund-continued<br>Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year<br>1968-1969-continued

Work by Department-continued

| Road No. | Location of Work | Amount | Total |
| :---: | :---: | :---: | :---: |
|  | Ordinary Main Roads-continued | \$ | \$ |
| 503 | Southern boundary of Patrick Plains Shire to Parson's Creek at 16 m . south of Singleton, including Parson's Creek Bridge | 61,218 |  |
| 513 | State Highway No. 1 at the top of Bulli Pass to State Highway No. 1 at North Wollongong | 56,470 |  |
| 516 | Eastern boundary of Blaxland Shire to the eastern boundary of the City of Lithgow | 5,306 |  |
| 522 | Major bridges on council controlled length | 5,178 |  |
| 544 | Do do do do | 15,747 |  |
| 556 | Major ferries on council controlled length ............................. | 75,883 |  |
| 567 583 | Major bridges on council controlled length . . . . . . . . . . . . . . . . . . . . . . . | 21 |  |
| 583 | Do do do do | 7,147 |  |
|  | Total-Ordinary Main Roads |  | \$1,627,995 |
| TOURIST ROADS |  |  |  |
| 4016 | From Smiggins Holes at 0 m . to Island Bend/Guthega Road at 3.08m. .. |  | \$3,467 |

SUMMARY


## Appendix No. 12

## PROCLAMATION OF MAIN ROADS 1968-69

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 |
| :---: | :---: | :---: | :---: | :---: |
| Greater Wollongong. | 2-8-68 | 602 | From the junction of Gladstone Avenue and Prince's Highway (State Highway No. 1), Figtree, via Gladstone Avenue and Masters Road to Spring Hill Road (Main Road No. 568). | 1.25 |
| Greater Newcastle | 6-12-68 | 605 | From the junction of Wilkinson Avenue and Sandgate Road (Main Road No. 217), Wallsend, via Wilkinson Avenue, Moore Street, Rankin Drive, Queen Street and Lorna Street to the junction of Maud Street and Lorna Street (Main Road No. 188), Waratah West, thence via Maud Street to Maitland Road (Pacific Highway-State Highway No. 10), Mayfield West. | 2.95 |
| Maitland. | 9-5-69 | 607 | From the junction of Parallel Street and New England Highway (State Highway No. 9) westerly via Parallel Street to Regent Street (Main Road No. 218) at West Maitland. | 1.32 |

By Government Gazette of 6th December, 1968 that part of Main Road No. 188 between Lorna Street and Pacific Highway (State Highway No. 10) was deproclaimed and proclaimed as part of Main Road No. 605.

By Government Gazette of 6th December, 1968 the proclamation of Main Road No. 217 was altered. The new route is from State Highway No. 23 at Birmingham Gardens, via Sandgate Road, Longworth Avenue, Thomas Street and Lake Road to Cross Roads, Glendale, thence via Cockle Creek, Teralba, Toronto, Morisset and Wyee to the Pacific Highway (State Highway No. 10) at Wyong (with branch from the intersection of Thomas Street and Newcastle Road, Wallsend, via Newcastle Road to State Highway No. 23 at Jesmond), and also with branch from a point half a mile northeast of the intersection with Main Road No. 223 (Cross Roads, Glendale) via Glendale Drive (formerly Workshop Road) to Main Road No. 223, Cardiff West.

That part of Lake Road north of Thomas Street, Cowper Street, Roberts Street and the part of Sandgate Road North to a point just south of Milgate Street and that part of Newcastle Road west of Longworth Avenue are no longer part of the Main Roads System.

By Government Gazetfe of 6th December, 1968 the proclamation of the description of Main Road No. 326 was extended to junction with the Pacific Highway (State Highway No. 10) at Adamstown Heights via Bridges Road, Northcott Drive and Ellerslie Road.

## Appendix No. 12-continued

## PROCLAMATION OF MAIN ROADS 1968-69—continued

By Government Gazette of 16th May, 1969 the proclamation of Main Road No. 437 was altered. The new route is from the Castlereagh Highway (State Highway No. 18) near Weetaliba Waterholes generally northwesterly to the Walgett-Brewarrina Shire boundary within the Shire of Walgett, and from Trunk Road No. 70 at Goodooga generally northwesterly to the Queensland border near Brenda within the Shire of Brewarrina.

The road from Trunk Road No. 70 at Goodooga generally southeasterly to the Walgett-Brewarrina Shire boundary ceases to be part of the Main Roads System.

Appendix No. 13
PROCLAMATION OF TOURIST ROADS 1968-69
During the year the following Tourist Road was proclaimed

| City, Municipal or Shire Area | Date of Proclamation | Road No. | Description | Mileage |
| :---: | :---: | :---: | :---: | :---: |
| Wagga Wagga | 8-11-68 | 4050 | Willan's Hill Road from the junction of Coleman Street and Beauty Point Avenue, generally southerly to the southern boundary of Willan's Hill Reserve, a length of 1.35 miles. | 1.35 |

## Appendix No. 14

## DECLARATION OF SECONDARY ROADS 1968-69

During the year the following Secondary Roads were declared or existing Secondary Roads extended

| City, Municipal or <br> Shire Area | Date of <br> Declaration | Road <br> No. | Description | Mileage |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bankstown and Strathfield | $8-11-68$ | 2090 | From the junction of the Hume Highway (State Highway No. 2) <br> and Boronia Road, Bankstown, easterly via Boronia Road and <br> Juno Parade to Punchbowl Road (Main Road No. 315). | 1.93 |

By Government Gazette of 13th September, 1968 the declaration of Secondary Road No. 2008 was extended to include a branch between O'Riordan Street and the Kingsford Smith Airport boundary linking Qantas Road with O'Riordan Street, opposite Robey Street, Mascot.

By Government Gazette of 28th March, 1969, the declaration of Secondary Road No. 2066 was altered and extended to Church Street (Main Road No. 184) via O'Connell'Street and Board Street, Barney Street no longer forming part of the Secondary Road.

## Appendix No. 15

## PROCLAMATION OF DEVELOPMENTAL ROADS 1968-69

During the year the following new Developmental Roads were proclaimed or proclamation of existing roads amended

| Shire Area | Date of Proclamation | Road No. | Description | Mileage |
| :---: | :---: | :---: | :---: | :---: |
| Jerilderie | 23-8-68 | 1314 | The road from Main Road No. 596 near the boundary of Blocks 118 and 119, Coleambally Irrigation Area, generally southwesterly to the western boundary of Block 519 , a length of 11.25 miles. | 11.25 |
| Scone and Gloucester | 11-10-68 | 1313 | The road from Developmental Road No. 1109 approximately 1 mile east of Hunter Springs, generally easterly via Gummi Plains to Viggers' Forestry Road near Geales Ridge, a length of approximately 14.2 miles. | 14.00 |
| Goodradigbee | 8-11-68 | 1315 | The road from Dick's Creek Road at a point 11.5 miles from Murrumbateman generally northerly, westerly and southwesterly to the eastern boundary of Portion 146, Parish of Murrumbateman, a length of approximately 5 miles. | 5.00 |
| Darling | 21-2-69 | 1316 | The road along the eastern side of the Paroo River from Main Road No. 405 near Wanaaring, northeasterly and northerly, to Main Road No. 429 near Willara Crossing. | 41.25 |
| Severn | 16-5-69 | 1318 | The road from State Highway No. 12 at Glen Innes, two miles west of State Highway No. 9, northerly to Main Road No. 382, a length of 1.25 miles. | 1.25 |

## DEPROCLAMATION OF DEVELOPMENTAL ROADS 1968-69

During the year the following Developmental Roads were deproclaimed or partly deproclaimed

| City, Municipal or Shire Area | Date of Proclamation | Road No. | Description | Mileage |
| :---: | :---: | :---: | :---: | :---: |
| Goobang | 18-10-68 | 1162 | From and including Bulgandramine Bridge over the Bogan River generally northwesterly along the southern side of the Bogan River to Narromine-Tullamore Road (Main Road No. 354) near the Oaks Bridge. | 13.72 |
| Jemalong | 8-11-68 | 1104 | The Eugowra-Grenfell Road from a point 5.1 miles south of Payten's Bridge over the Lachlan River to the Forbes-Grenfell Road near the 18 mile post from Forbes. | 7.71 |
| Goobang | 22-11-68 | 1158 | From the Tullamore-Bogan Gate Road (Main Road No. 350) near Trundle, easterly to the southeast corner of Portion 22, Parish of Plevna, County of Cunningham, thence generally northerly to the Tullamore-Peak Hill Road (Main Road No. 348) at the northwestern corner of Portion 10, Parish of Euchabil, County of Kennedy. | 22.26 |
| Ashford | 6-12-68 | 1193 | The road from Bruxner Highway (State Highway No. 16) at Camp Creek generally northerly for a distance of 12 miles adjacent to the southern bank of the Dumaresq River. | 12.00 |

## Appendix No. 16

PROCLAMATION OF DEVELOPMENTAL WORKS 1968-69
During the year the following Developmental Works were proclaimed

| Shire Area | Date of Proclamation | Work No. | Description |
| :---: | :---: | :---: | :---: |
| Murrurundi and Tamarang | 16-8-68 | 3213 | The construction of two-lane bridges over Yarramanbah, Phillips, and Black Creeks on the Blackville Road, being the road from Main Road No. 358 generally westerly to Main Road No. 129 at Yarraman. |
| Wellington and Coolah .. | 24-1-69 | 3214 | The construction of a low level concrete bridge 20 feet wide between kerbs, and approaches, at O'Leary's Crossing of the Talbragar River, approximately 3.25 miles northeast of Elong Elong. |
| Central Darling ....... | 7-2-69 | 3215 | The construction of the following works on the Purnawilla-Norma Downs road- <br> 1. The Paroo Channel crossing on the unclassified road between Purnawilla and Norma Downs at approximately 8.0 miles from its commencement at Main Road No. 429 near Purnawilla and approximately 21 miles from Wilcannia. <br> 2. The Rosedale Channel crossing on the unclassified road between Purnawilla and Norma Downs at approximately 55.6 miles from its commencement at Main Road No. 429 near Purnawilla and approximately 68.7 miles from Wilcannia. |

Appendix No. 16A
DEPROCLAMATION OF DEVELOPMENTAL WORKS 1968-69
During the year the following Developmental Works were deproclaimed

| Shire Area | Date of Proclamation | Work No. | Description |
| :---: | :---: | :---: | :---: |
| Severn | 22-11-68 | 3182 | The work of forming, draining and gravelling the central 3 miles of the DundeeBald Knob Road from approximately $2 \frac{1}{2}$ miles to $5 \frac{1}{2}$ miles from Dundee and the replacement of the bridge at Five Mile Creek. |
| Woodburn | 22-11-68 | 3030 | The construction of a 4-mile section from Ellangowan Public School of the road from the Grafton-Casino Road (Trunk Road No. 53) via Tatham to the Bruxner Highway at 8 miles from Casino known as the Emu Park Road. |
| Peel | 31-1-69 | 3124 | The construction of a bridge over Spring Gully Creek on the road from Currabubula to Piallaway. |
| Copmanhurst | 31-1-69 | 3059 | The construction of additional bridge work and road in approach to bridge over Dulgigin Creek on the road from Ewingar via Alice to Rappville at approximately 1 mile west of the Grafton-Tabulam Road (Main Road No. 150). |
| Mitchell | 28-2-69 | 3067 | The construction of the following causeways, culverts and gravelling on the road from Wagga Wagga generally westerly via the northern side of the Murrumbidgee River and Currawarna to Narrandera, all mileages measured from Wagga Wagga Post Office. <br> (a) Seven causeways and/or culverts at approximately 16.45 miles, 17.85 miles, 27.35 miles, 32.35 miles, 33.45 miles, 35.25 miles, 37.05 miles. <br> (b) Reforming and gravelling a length of 1.55 miles of road between 25.9 miles and 27.45 miles within the Shire of MitcheII. |

## 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 1969

|  | At 30th June |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1965 | 1966 | 1967 | 1968 | 1969 |
| County of Cumberland Area- |  |  |  |  |  |
| Expressways |  |  |  | 7 | 10 |
| State Highways | 196 | 196 | 195 | 192 | 193 |
| Ordinary Main Roads | 664 | 665 | 668 | 665 | 662 |
| Total all Main Roads and Expressways | 860 | 861 | 863 | 864 | 865 |
| Secondary Roads | 138 | 144 | 157 | 159 | 164 |
| Tourist Roads . | 50 | 51 | 51 | 55 | 51 |
| Developmental Roads | 13 | 14 | 14 | 14 | 14 |
| Total all Classified Roads | 1,061 | 1,070 | 1,085 | 1,092 | 1,094 |
| Country AreaExpressways |  |  |  |  |  |
| $\xrightarrow[\text { Expressways }]{\text { State Highways }}$ | 6,335 | 6,334 | 6,353 | 6,349 | 14 6,342 |
| Trunk Roads | 4,153 | 4,159 | 4,232 | 4,228 | 4,210 |
| Ordinary Main Roads | 10,963 | 10,996 | 10,961 | 10,929 | 10,888 |
| Total all Main Roads and Expressways | 21,451 | 21,489 | 21,546 | 21,520 | 21,454 |
| Tourist Roads | 130 | 155 | 145 | 163 | 168 |
| Developmental Roads | 3,008 | 2,875 | 2,722 | 2,733 | 2,705 |
| Total all Classified Roads | 24,589 | 24,519 | 24,413 | 24,416 | 24,327 |
| Total for whole State- |  |  |  |  |  |
| Expressways |  |  |  | 21 | 24* |
| State Highways | 6,531 | 6,530 |  | 6,542 | 6,535 |
| Trunk Roads | 4,153 | 4,159 | 4,232 | 4,228 | 4,210 |
| Ordinary Main Roads | 11,627 | 11,661 | 11,629 | 11,593 | 11,550 |
| Total all Main Roads and Expressways | 22,311 | 22,350 | 22,409 | 22,384 | 22,319 |
| Secondary Roads | 138 | 144 | 157 | 159 | 164 |
| Tourist Roads | 180 | 206 | 196 | 218 | 219 |
| Developmental Roads | 3,021 | 2,889 | 2,736 | 2,747 | 2,719 |
| Total all Classified Roads | 25,650 | 25,589 | 25,498 | 25,508 | 25,421 $\dagger$ |

* Excludes four miles of expressway which are proclaimed Main Roads.
$\dagger$ 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, 1969, IN ACCORDANCE WITH THE PROVISIONS OF THE MAIN ROADS ACT, 1924

1. Roads which are the responsibility of the Department of Main Roads-
(a) Where work was carried out by the Department-

Expressways
State Highways
Trunk and Ordinary Main Roads in the Eastern and Central Divisions, other than the Country of Cumberland Ordinary Main Roads in the County of Cumberland
Unincorporated area of the Western Division-
Trunk and Ordinary Main Roads
Unclassified roads
(b) Where work was carrjed out for the Department by Councils-

State Highways
Ordinary Main Roads in the County of Cumberland
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

Total

| County of Cumberland* | Country | Total |
| :---: | :---: | :---: |
| miles | miles | miles |
| $\begin{array}{r} 10 \\ 190 \end{array}$ | $\begin{array}{r} 14 \\ 5,196 \end{array}$ | 24 5,386 |
| 385 | 253 | 253 |
|  | $\begin{array}{r} 470 \\ 1,542 \end{array}$ | $\begin{array}{r} 470 \\ 1,542 \end{array}$ |
| 3 277 | 1,146 | $\begin{array}{r} 1,149 \\ 277 \end{array}$ |
|  | 14,375 | 14,375 |
| 865 | 22,996 | 23,861 |

[^4]NEW SOUTH WALES showing
TRAMELLING TIMES BY 2○ィAD

- OVERLEAF



[^0]:    * State Treasury has paid $\$ 1,288,915.46$ to 30 th June, 1969 in connection with the Sinking Fund liability.

[^1]:    * Credit

[^2]:    * Credit

[^3]:    $\dagger$ For additional expenditure see Appendix No. 8

[^4]:    * County of Cumberland refers to the area defined in Part IV, Section 9 of the Main Roads Act, 1924.

