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## Captions

## Front cover

These towering piers will carry the F3 - SydneyNewcastle Freeway 70 m above Mooney Mooney
Creek, 70 km north of Sydney.

## Facing page

1. A pedestrian footbridge is to be built at the intersection of Pennant Hills Road and Osborn Road, Normanhurst.
2. Leading hand signwriter Peter Buckingham applies the new DMR logo to one of the Department's vehicles.
3. This 300 m long bridge over Duck River forms part of the F4 - Western Freeway between Auburn and Granville.
4. Just north of Bellata, this is one of many sections of the busy Newell Highway now being upgraded.

## Charter

The Commissioner for Main Roads is responsible for the administration of the Main Roads Act, 1924 which provides for the construction and maintenance of those roads throughout the State which have been classified under the Main Roads Act, both in country and urban areas.

The Commissioner is also responsible to the New South Wales Government for the implementation of traffic management measures throughout the State, and for the disbursement of Commonwealth Government grants for local roads.

The Department of Main Roads carries out the work arising from the Commissioner's responsibilities under the Act.

The charter inherent in the Department's statutory obligations entails the pursuit of a road system throughout New South Wales which will meet the reasonable needs of the community for the safe and efficient movement of people and goods.

## Objectives

## For the Road System

- to plan, provide and maintain a comprehensive road system which is safe, economical and efficient to use;
- to have regard for the environment;
- to enhance compatibility of the various transport modes, in accordance with the policies of the New South Wales Government.

For Interaction with the Community and Government

- to respond to community needs in a positive, effective, timely and helpful manner;
- to inform the public on road matters;
- to respond to Government policies and directions in an efficient and effective manner;
- to co-operate with other Government Organisations in a positive way.

For the Organisation and its People

- to operate throughout the State in an efficient and effective manner;
- to provide fulfilling and challenging work opportunities;
- to ensure just, non-discriminatory and healthy working conditions.


Sydney, New South Wales October 1984


The Hon. L.J. Brereton, M.P., Minister for Public Works and Ports, and Minister for Roads, Sydney

As required by Section 6 of the Main Roads Act, 1924, I submit to you for presentation to Parliament an annual report and statement of accounts for the year ended 30 June 1984. Some references to happenings after that date have been included, where appropriate, to complete the record.

In September 1983, the Premier, Hon. Neville Wran, Q.C., M.P., announced a $\$ 5$ Billion Five-Year Road Program which incorporated a wide range of State and Federally funded road development projects thoughout New South Wales.

This exciting Program (which incorporates the Federal Government's initiative of Australian Bicentennial Road Development Projects) has revitalised activities within the Department. The challenge to 'deliver the goods' - in terms of much improved roads and bridges, better traffic management and safer road travelling conditions - has been grasped by Departmental personnel at all levels and a fresh spirit of enthusiasm and endeavour is evident throughout the workforce.

The concept of a balanced total program of roadworks encompassing large scale new construction, restoration works, minor improvements, traffic management and essential maintenance activities is a major step forward in the administration of the State's road system. The size of the Program has provided a major stimulus to road improvement throughout the State.

This Report seeks to convey some appreciation of the resultant increase in field activities and their consequent effects
on major segments of the Department's operations.

The Program has also produced significant benefits of a more subtle nature:

- It has enabled works to be scheduled as part of an ongoing program rather than as individual projects. This elicits returns through greater economy in deploying scarce resources, provides added benefits through economy of scale and ultimately yields earlier returns to the roaduser through the more orderly provision of better roads.
- It provides a sound basis on which to decide appropriate action when addressing individual problems. Knowledge of future construction proposals is essential if efficient and economic maintenance of the road system is to be achieved and the correct choice made between intensive maintenance, reconstruction and total realignment.
- Planning and design can proceed on a logical basis.
- Motor transport shares the road reserves with a variety of other uses - water reticulation, energy supply, storm water and waste drainage, and electronic communications. The Program enables better co-ordination to be achieved between the activities of the multiplicity of authorities concerned.
- Probably most important of all it provides the Department with firm guidance in implementing Government objectives, the Minister for Roads with a measure by which to gauge Departmental performance and the public with specific information relating to the investigation of a significant proportion of the State's works budget.

The Program bas also drawn attention to the magnitude of the task of adapting the State's road system to meet current community needs. In this respect, there is a new awareness within the Department of the need to concentrate effort on obtaining the best possible results from the existing system by implementing interim measures until longer term solutions to problems can be provided.

In this I acknowledge your guidance, Minister, and the special role you have played in focusing, within the Department, a more customer-oriented approach.

This change is manifested in a number of special programs recently introduced. One
of these relates to the identification of 'trouble spots' with a view to developing immediate short term and longer term proposals to secure relief.

Another special program aims at establishing safe overtaking opportunities on rural roads at regular intervals. To this end a special works program has been developed to construct overtaking lanes in locations complementary to other programmed improvements.

While the increased activity arising from the Program has provided a great stimulus in work satisfaction for all, meeting its challenge has entailed a special effort by the whole workforce sustained throughout the entire year. The Department's organisation was reduced by $12 \%$ in 1981-82 and by almost an additional 3\% in 1982-83. It was in this lean condition that the Department embarked upon the task imposed by a 38\% increase in total budget.

It is with considerable pleasure that I report that the task set for the Department in 1983-84 was accomplished in full. This achievement was a consequence of the dedication and skill of the nine and a half thousand people who comprise the Department's workforce.

In completing the works program the Department achieved increased expenditure over 1982-83 levels both with its own forces and by contract. Consistent with Government objectives of stimulating employment, the Department's expenditure on major contracts rose from $\$ 45$ million in 1982-83 to $\$ 122$ million in 1983-84. Ongoing commitments will impose a need for extraordinary care in works management and budgetary control during 1984-85.

In recent years there has been a progressive fall in the percentage of the Department's budget devoted towards road and bridge construction. In 1983-84 this decline was arrested when the percentage rose to $56.3 \%$ from $49.2 \%$ the previous year. This level had not been reached since 1978-79. This is most heartening. However, one must not allow the more satisfying and highly visible results of road improvement to detract from the importance of proper maintenance.

In fact the benefits accruing from maintenance are generally as high as those derived from well planned and economically sound improvement works. Almost invariably, the cost of maintenance operations increases if not undertaken at the appropriate time. However, as the cost

he new bridge under construction to carry the turt Highway over the Murray River at Mildura. It ill be 330 m long and cost more than $\$ 4$ million.
f deferment is much higher to the user tan to the road maintaining authority, there frequently pressure to increase onstruction by deferring maintenance. This false economy. It is true that the ommunity pays for good roads whether or ot it enjoys their use.

On 16 December 1983 a bypass of Vyong was opened to traffic. The work was cclaimed by residents of Wyong who rranged special celebrations to mark the vent. This is in sharp contrast to earlier xperiences where local business people in articular had resisted proposals to deviate rrough traffic away from the central usiness districts of various country towns.

There were favourable responses during e year from the residents of both Kiama nd Maitland where the construction of ypasses was commenced. The changed ommunity attitude reflects experiences of pwns such as Gundagai and Nambucca leads where significant local benefits have owed from construction of traffic bypasses. is a consequence of progressive changes the nature and volume of road transport nd a recognition that conflict between local affic and through traffic disadvantages veryone.

The increase in size and numbers of eavy vehicles continues to extract a toll om inadequate road pavements and from mber structures. While the use of timber ridges once provided the appropriate olution, timber as a material is now hadequate to withstand the loadings
imposed by the massive high speed road transports operating today.

Of even greater concern is the road accident toll and the incidence in this of heavy vehicles. While in the ultimate all 'accidents' are the result of human error, due regard must be paid to human capabilities when seeking to provide a safer environment.

Some of the State's more important highways have sealed pavements only 4.9 metres in width. On many others the pavement is less than six metres. This means that in former cases vehicles with a relative speed of, say, $200 \mathrm{~km} / \mathrm{h}$ need to move off the sealed strip in order to pass. In the latter case they have at best less than one metre clearance. Under those circumstances the penalty for minor lapses of concentration can be horrific.

Just as the application of technology by the roaduser is imposing greater demands on the road system, so too the application of technology is helping the road builder to meet those demands. There has been a continual improvement in the performance of road building machinery. Some of this has resulted from increase in size and power but much benefit has come from fundamental changes in design as applied with the track system and final drive of crawier tractors. As a result excavation which once required costly drilling and blasting can now be removed by ripping.

Machines to facilitate laying of concrete pavements are now readily available. The resultant reduction in cost of heavy duty road pavement has assisted in combating the problem imposed by greater vehicle loadings. New materials have also been
introduced with consequent savings in road construction. During the year a geotextile fabric was used to speed up pavement construction over swampy ground.
Additional techniques have been developed to improve the quality of both naturally occurring and manufactured road pavement materials by the addition of lime.

Local Government continues to provide a primary source of advice as to community expectations in satisfying road needs. One area of concern expressed by a majority of country Councils in discussions with me during the year was the standard of access provided on lightly trafficked Main Roads in remote areas. In the past priorities accorded to road improvement have been determined by need as assessed by conventional economic criteria. As a result almost all centres with a population more than about one thousand people have at least one sealed road link to the State Highway system. On other outlets stubs of improved road radiate out from those centres providing benefit for the greatest possible number of road users. There appears now to be a community expectation of a minimum standard of allweather road access on all Main Roads irrespective of the traffic demand.

Satisfying this expectation would entail expenditure of a vast sum of money. This cannot be justified on the basis of those conventional economic criteria. The question may need to be addressed on a broader basis, taking cognizance of social factors and economic considerations transcending those normally applied in making transport-related assessments.

In conclusion I thank each and every one of the Department's personnel as well as all those Council and other Government employees, contractors and consultants who, in one capacity or another, directed their labour and expertise during 1983-84 to improving the State's road network. In particular, I thank you, Minister, for the new impetus you have given to the Department's work and for your initiatives in establishing the Ministerial Committee on Main Road Traffic Flow and regular Strategy Meetings with senior officers of the Department. Both of these have already resulted in benefits through the promotion of new policies and proposals in the development of short term objectives and in a more sensitive response to existing road network needs. I assure you that the Department will continue to respond to the State Government's emphasis on improving the roads of New South Wales. The surge in funds is being matched by a surge in effort throughout the whole Department.

B.N. Loder COMMISSIONER FOR MAIN ROADS

## iunctional Organisation Chart




# SEPTEMBER 1983 - $\$ 5$ Billion Five-Year Road Program 

On 18 September 1983, Premier Neville Wran announced the largest road development program ever undertaken in New South Wales. From 1983 to 1988 a massive $\$ 5$ billion will be poured into improving the State's major urban and rural traffic routes. This money, from both State and Federal Government sources, will benefit all roadusers, help to reduce the accident toll and provide thousands of jobs. The $\$ 5$ billion will provide for:

- $\$ 3.4$ billion on new construction
- $\$ 1.5$ billion on maintaining the $40,000 \mathrm{~km}$ of classified arterial roads in New South Wales
- $\$ 0.4$ billion to Councils for works on local roads.


## SEPTEMBER 1983 - New Program for Blue Mountains Road Improvements

During an official visit to the Blue Mountains in September 1983, Premier Neville Wran announced a proposed program of important new roadworks in the region. These proposals were subsequently detailed in the brochure Blue Mountains Road Improvement Program 1984-1989 published in March 1984, and are illustrated in the map on pages 18/19 of this Report. Together these works will augment the Sydney Western Region Road Program, previously announced by the State Government and now well in hand.

## NOVEMBER 1983 - First Stage of Tumblong Deviation Opened

On 21 November 1983, 11 km of high-grade four-lane dual carriageway was brought into use on the Hume Highway, south of Gundagai. This was Stage 1 of the 17.6 km Tumblong Deviation, a $\$ 27$ million job which will eliminate the narrow winding route through Sylvias Gap, and shorten the driving distance by 2 km . Now that the first stage is complete, thousands of daily roadusers are appreciating the sweeping curves, easy grades, extra lanes and improved safety of the new route. The remaining 6.3 km section will be completed by mid1985.

## DECEMBER 1983 - Wyong Bypass Opened to Traffic

On 16 December 1983, the Ourimbah Creek to Wallarah section of the F3 - Sydney-Newcastle Freeway was made available to traffic, together with an 8 km motorway link to Doyalson. In spite of a potential landslip which delayed completion of a section of the second carriageway, this important bypass of the busy shopping centre of Wyong was opened in time to benefit Christmas holiday traffic. Now the thousands of heavy vehicles travelling this route on their way between Sydney and Brisbane can enjoy a faster, safer journey without bringing congestion, pollution and danger to the centre of Wyong, where conditions have vastly improved for residents, shoppers and local traffic.

## FEBRUARY 1984 - Commencement of Maitland Inner City Bypass

Construction of the eastern section of this major work began in February 1984. A special ceremony marked the turning of the first sod on this $\$ 27$ million project. The bypass is planned for completion in late 1987 and will fulfil a long-felt need for better traffic conditions in the Maitland central business area.

## MAY 1984 - Pacific Highway Upgrading

More than $\$ 60$ million will be spent on improving the Pacific Highway north of Newcastle, announced the Minister for Roads, Mr Laurie Brereton, on 20 May 1984. Together with the existing and proposed sections of the F3 - Sydney-Newcastle Freeway, the upgraded highway will provide much improved driving conditions for motorists on this important Sydney-Brisbane route, with road safety being a major consideration. Some of the proposed works are shown on the map on page 22, illustrating the wide range of improvements being undertaken.

## JUNE 1984 - Focus on the Hume Highway

In a joint statement issued in June 1984, State Minister for Roads, Mr Laurie Brereton, and the Federal Minister for Transport, Mr Peter Morris, announced that the Hume Highway would be upgraded to four lanes between Sydney and Albury by 1988. One of the country's busiest highways, the Hume has long been a source of frustration for motorists travelling between Sydney and Melbourne. Excellent driving conditions now exist between Liverpool and Mittagong where the F5 - South Western Freeway has superseded the old highway route, at Tumblong south of Gundagai, and at many other locations. Under the $\$ 5$ Billion Five-Year Road Program, more than $\$ 300$ million will be spent to bring the rest of the Highway to a high standard by the Bicentenary. (See map on page 16.)

1. The widening of narrow winding sections of the Great Western Highway to four lanes is a priority of the Blue Mountains Road Improvement Program.
2. The sweeping curves and easy grades of the Tumblong Deviation are a far cry from the tortuous route the Hume Highway used to take through Sylvias Gap.
3. A section of the newly-opened Wyong Bypass, looking south from Cobbs Road.
4. The first stage of the $\$ 27$ million Maitland Inner City Bypass began in February 1984.
5. The Pacific Highway between Doyalson and

Swansea, which is being progressively upgraded to provide four lanes.
6. Rehabilitation work underway on the Hume Highway, south of Berrima.

$3$

## Performance Indicators

External Factors
Fig. 1 Traffic Growth on Main Roads
Index: $1974=100$


Road Transport System Performance
Fig. 3 Sydney Travel Speeds
$\mathrm{km} / \mathrm{h}$. average for major routes to CBD

$\mathrm{km} / \mathrm{h}$. selected major routes to CBD - am peak


Fig. 5 Road Safety
Crashes per million vehicle kilometres
Fatal, injury and tow-away crashes


Fatal Crashes


Fig. 2 Funding of Main Roads
\$ million. 1983-84 Prices


Fig. 4 Country Travel Speeds
$\mathrm{km} / \mathrm{h}$. average for all Highway routes to Sydney - weekda


Fig. 6 Pavement Roughness
\% of Main Roads rougher than NAASRA standards Metropolitan Sydney


Country


State Highways


## Use of Resources

Fig. 7 Expenditure by Activity
\% of direct works expenditure


## Construction Completed

Fig. 9 Roads
Kilometres of construction works completed

| Capacity Expansion | Reconstruction |
| :--- | :--- |
| ■ Lane Additions | Widen/strengthen |
| New Roads | Realign/regrade |



## Industrial Performance

Fig. 11 Industrial Relations
Working days lost through disputes (000)


Fig. 8 Expenditure by

Production Method
\% of direct works expenditure
Direct Control [Eng Services Direct Exp Other Plant \& Haulage Materials
Labour


Fig. 10 Bridges
Lane kilometres completed


Fig. 12 Industrial Safety
Number


## Performance Indicators

A series of 12 performance indicators was first published in the Department's Annual Report for the 1982-83 financial year. They are continued in this Report together with their most recent values.

The indicators shown are not the ultimate quantitative measures of achievement. They do, however, provide some indication of the results achieved from the course pursued over the past few years in accommodating traffic growth with available funding levels.

Over the decade to December 1983, traffic volumes increased almost linearly by $5 \%$ per annum in rural areas and nearly 3\% per annum in the urban areas of Sydney, Newcastle and Wollongong. Traffic growth is shown in Figure 1 which also indicates a slight reduction in the rate of growth of traffic since the end of 1981.

Over the ten year period to June 1983, total funds decreased in real terms by $90 \%$. Over the same period the amount of loan funding increased with a consequent increase in loan servicing charges from 6\% to $14 \%$ of total funds.

The decline in funding in real terms was arrested and reversed in 1983-84 following the introduction of funding under the Australian Bicentennial Road Development Trust Fund Act in the second half of 1982 83. The significant increase in funding is illustrated in Figure 2.

Contrary to what might have been expected with falling funding and increasing traffic, some indicators have continued to show improved levels of service. The prolonged dry weather experienced up to mid-1983, together with new works carried out under the accelerated Australian Bicentennial Road Development (ABRD) program funding commencing in 1982-83, has no doubt contributed to the improved road conditions illustrated in particular in Figures 4, 5 and 6. There was, however, an increase in congestion on some roads in Sydney during 1982-83 as reflected in Figure 3 which shows deterioration in travel speeds on the Pacific Highway and during the p.m. peak hour periods in Sydney.

As a result of the increased provision of ABRD funds, the emphasis on pavement rehabilitation under construction programs and improved maintenance management, there has been a noticeable change in the proportion of maintenance expenditure compared with construction expenditure. The proportion of funds applied to maintenance during 1983-84 was reduced from the previous five year average of 29 cents in each dollar spent on roadworks, to about 27 cents; while the proportion applied to construction increased from the previous five year average of 62 cents in the dollar to nearly 67 cents. These changes were accompanied by a reduction in the proportion of administrative expenses, including debt charges, from a five year average of 33 cents for each dollar spent on roadworks, to 31 cents. The overall position is illustrated in Figure 7.

The influence of the ABRD program also reflects in Figure 8 which portrays the

methods by which works are carried out.
The proportion of work carried out by direct control continued to reduce with an increasing proportion of work being carried out by contract. However, the amount of work carried out by the Department's own forces did not drop.

Of funds allocated to construction in 1983-84, 81\% was spent on roads, $14 \%$ on bridges and $5 \%$ on property acquisition. There is accordingly at least a short term movement from the average allocation of construction funds during the previous decade of $75 \%$ to roads, $17 \%$ to bridges and $8 \%$ to property acquisition.

In addition there was a discernible change in the nature of road construction works carried out (Figure 9). In 1983-84, 368 km of roads were constructed or reconstructed. Of these, $16 \%$ were works adding to the capacity of the system by either the addition of lanes or the construction of new roads, and 84\% involved the replacement and/or improvement of substandard sections of road. Comparable figures for the previous decade were $11 \%$ and $89 \%$ respectively.

The increase in overall capacity is partly attributable to the opening in 1983 of the substantial section of the SydneyNewcastle Freeway between Ourimbah and Doyalson (see 'Major Route Development', page 11), but also retlects an awareness of the need to cater for increasing traffic volumes. Wherever conditions and funding have permitted, the Department has taken the opportunity to increase the capacity of the existing system by providing extra

Some $\$ 36$ million will be spent widening Pennan Hills Road to six lanes between Beecrott Road and Pearces Corner.
passing lanes on sections of road where delays were occurring.

Of those roads replaced or improved, $59 \%$ involved strengthening and, in some cases, widening of existing pavements and $41 \%$ involved replacement of the roads on improved grades and alignment. Comparable figures for the previous decad were $64 \%$ and $36 \%$ respectively.

The length of bridgeworks completed in the year was less than for the previous financial year, as shown in Figure 10. However, the length of both road and bridge works completed annually fluctuates considerably, reflecting variations in projec size, construction period and levels of funding. The reduction in bridge works completed in 1983-84 is thus not of significance in itself.

There were no major or prolonged industrial disputes during 1983-84. As a consequence, working days lost through disputes in 1983-84 are comparable with the losses in 1982-83 and substantially les than the peak losses shown in Figure 11 fo 1981-82 (due principally to industry-wide campaigns in that year).

Industrial safety statistics show slight improvements over the past two years. These improvements, however, have not conclusively reversed the slight general upward trends evident in Figure 12.

## Major Route Development

The following report lists improvements arried out on the more important routes uring the year. In addition to these, work as proceeded on many other State ighways and Main Roads throughout New outh Wales - these will be listed in detail a supplement to this Report. In many ases, particularly on the ordinary Main oads, the works have been under the ontrol of local Councils using funds rovided by the Department.
The recent increase in construction funds ver the levels of previous years has ssisted in maintaining the general level of ervice on State Highways and some of the tore important Main Roads in spite of the eavier rainfall experienced in all areas of he State during the year.
A feature of the year has been the creasing volume of work carried out by ontract to the Department. Tenders must e invited for construction works carried out ith Commonwealth funding, including ustralian Bicentennial Road Development BRD) program works on National Roads nd for ABRD works on arterial roads. The epartment is eligible to submit bids for ese works and has been successful in inning a number of contracts. Works being carried out under the ABRD rogram are identified in accordance with e ABRD Act by the erection of blue and old signs which are to be displayed until e end of the program in 1988. A considerable proportion of work ndertaken during the past year has been irected towards restoring the road to a ondition equivalent to that which existed hen it was first constructed. Where traffic onditions have warranted it, this work has ften been associated with the addition of a assing lane to improve the safety and onvenience of roadusers.

## Freeways

$=3$ - Sydney-Newcastle reeway

Four lanes are being constructed etween Sydney and Newcastle to provide safe, speedy and economical route for the arge volume of commercial and private affic travelling daily between the State's wo largest cities. At June 1983 dual twoane carriageways were in use for pproximately 25 km between Berowra and alga. During 1983-84 another 20 km of ual carriageways further north were pened to traffic, plus a two-lane motorway nk between Wallarah Creek and Doyalson.

## Nahroonga to Berowra In May 1984 the State Government pproved the route of the F3 from



Wahroonga, in Sydney's northern suburbs, to Berowra. This 15 km section will be built between the junction of the Pacific Highway and Pennant Hills Road and the existing start of the F3 at Berowra, running generally on the eastern side of the Great Northern Railway. In bypassing Hornsby shopping centre, the new route will achieve one of the Department's objectives of eliminating a notorious bottleneck, and will relieve congestion and reduce travelling time north of Sydney by more than half an hour in peak periods. More importantly, its completion is expected to reduce accidents in the area by as much as two-thirds.
The freeway will take a narrow strip (totalling 100 hectares) off the western edge of Ku-ring-gai Chase National Park. An Environmental Impact Statement (EIS) was placed on public exhibition in May 1982 and extensive measures will be undertaken to ensure that construction will have minimum adverse effects on the environment. Erosion and sedimentation control, landscaping, noise and air quality are all considerations of the Department, which will also utilise the expertise of the Soil Conservation Service, Forestry Commission and National Parks and Wildlife Service during construction. This section of freeway will cost $\$ 95$ million and is expected to be completed in December 1988.

## Calga to Somersby

Work continued on the section north of Calga via Kariong to Somersby. This 12 km

An aerial view of the twin bridges now being built over Mooney Mooney Creek on the CalgaSomersby section of the F3.
section, which will be opened to traffic towards the end of 1986 , will cost approximately $\$ 52.25$ million including $\$ 19.5$ million for the construction of twin bridges over Mooney Mooney Creek. Each bridge will provide for three lanes of traffic and will consist of three continuous spans of post-tensioned concrete with an overall length of 485 m . The deck level of the bridges will be approximately 70 m above normal water level. The bridges were designed to have a minimum effect on the natural environment of the area and the creek, particular care being taken with pier locations.
To enable the construction of the section of F3 between Mooney Mooney Creek and Kariong to proceed, a 4 km deviation of the Pacific Highway and a 1.5 km deviation of Main Road No. 225 near Kariong were required.

## Somersby to Ourimbah Creek

 During 1983-84, 6.2 km of dual carriageway between the proposed interchanges at Somersby and Ourimbah were completed and opened to traffic. This section includes two bridges to carry Dog Trap Road over the freeway and a bridge over Ourimbah Creek. The total cost of this section was $\$ 26.34$ million.
## Freeway Construction



A section of the F3 - Sydney Newcastle Freeway. looking south from Cobbs Road towards. Kangy Angy cutting

The F4 - Western Freeway vaduct between Wentworth Street, Granville and Church Street. Parramatla will cost \$3.32 millon Iths vew fo the west show. he construction passing over James Ruse Drive


## Ourimbah Creek to Wallarah Creek

 A 14.2 km section between Ourimbah Creek and Wallarah Creek was opened in December 1983, in time for holiday traffic to penefit from this bypass of Wyong. The potential for a landslip at Hue Hue Road Main Road No. 217) next to the freeway construction delayed completion of the northbound lane and provision was made or both north and southbound traffic to use he southbound carriageway for 8 km , from Nyong River to Wallarah Creek. (Full reeway conditions were made available in July 1984.)The opening of the Wyong Bypass was a ong standing goal of the Department and nas been acclaimed by locals and through ravellers alike. Not only is a faster, safer ourney now possible through the area, but raffic congestion has been relieved in Wyong, reducing the accident potential and mproving conditions for residents and ousiness people generally.

## Wallarah Creek to Doyalson

 At the same time as the foregoing section was opened, an 8 km two-lane motorway was opened to link the freeway at Wallarah Creek to the Pacific Highway at Doyalson. Proposals to provide an additional two anes are in train.In all, nearly 30 km of new road were opened between Somersby and Doyalson at an estimated cost of $\$ 110$ million.

## F4 - Western Freeway

This freeway is planned to extend from Concord to the lower Blue Mountains. It will run parallel to, and north of, Parramatta Road as far as Church Street, Harris Park, then parallel to, and south of, the Great Western Highway, providing a vital supplement to these two heavily traficked roads. Sections of the freeway in use at June 1983 were from Young Street, Concord to Melton Street, Auburn ( 5.7 km ); from Church Street, Harris Park to the Great Western Highway at Frances Street, Mays Hill ( 3 km ); and from Prospect to Emu Plains ( 23.4 km ). Work progressed during the year on two sections that will connect Auburn and Harris Park.

## Auburn to Granville

Construction continued on the section of the F4 from Melton Street, Auburn to James Ruse Drive, Granville and is expected to be completed by September 1984. This work includes a 300 m bridge over Duck River and bridges to carry the freeway over Deniehy Street and Wentworth Street (including on and off loading ramps at Wentworth Street). An overbridge will carry Stubbs Street over the freeway and there will be a footbridge at Melton Street.
Once this section is open, the Melton Street access will be closed, thereby eliminating the temporary arrangement which has been unsatisfactory for both motorists and local residents. Extensive landscaping, including the planting of more than 4000 trees and shrubs, took place between Melton Street and Duck Creek.

## Granville to Harris Park

This section between James Ruse Drive and Church Street, Harris Park will be a 1.8 km viaduct of four lanes, with the capacity to be increased to six lanes should the future need arise. Work started on the construction of piles for the viaduct between Wentworth Street and Good Street. The viaduct will be completed in 1986 at a cost of $\$ 32$ million.

## Other Improvements

Strengthening of older sections of pavement was carried out between 35.6 km and 56.3 km west of Sydney at a cost of $\$ 4.4$ million. It is proposed to progressively carry out similar strengthening over the entire length of the freeway in future years.
Work commenced on the construction of access ramps at Roper Road, Colyton. These will allow the freeway to be used by motorists travelling between adjacent developing residential areas and in localities to the east, enabling a speedier, safer journey as well as relieving traffic on the Great Western Highway. The ramps are estimated to cost $\$ 1.1$ million and are planned for completion early in 1985.
Access ramps are also being built at Mamre Road, St Marys. These will enable commercial and private traffic to use the freeway between St Marys and locations to the west, such as the residential areas of the Blue Mountains, thus avoiding the Great Western Highway and the busy central business area of Penrith. This will permit faster, safer journeys and greater economy in running costs. The estimated cost of the work, due for completion in September 1984, is $\$ 1.8$ million.
Work began during 1983-84 on the duplication of the bridge over the Nepean River at Regentville. This 320 m long bridge will become the eastbound carriageway of the F4, providing two lanes at a cost of $\$ 2.9$ million. When the freeway is extended
to Lapstone to link up with the Great Western Highway, which has already been provided with four lanes westward to the railway line at East Blaxland, many more motorists will be encouraged to use the freeway route to and from the Blue Mountains, and thereby avoid congestion in the Penrith business area and ease the volume of traffic currently using the old narrow Victoria Bridge on the Great Western Highway west of Penrith.

## F5 - South Western Freeway

Planned eventually to extend from the proposed F6 - Southern Freeway at Tempe (in Sydney's inner south west) to south of Berrima, the F5 now runs for 64 km from The Cross Roads, near Liverpool to Aylmerton, near Mittagong. This length of the freeway supersedes the Hume Highway as a through traffic route, shortens the distance by 13 km and provides first class driving conditions.

The Department is now concentrating on extending the Sydney end of the F5 between Casula and Beverly Hills, and proposes to construct the freeway south from Aylmerton towards Berrima in the near future.

## Casula to Moorebank

Work was completed on another crossing of the Georges River with a new 290 m long, seven-span bridge at Casula. The bridge will provide four lanes for traffic and will be opened at the end of 1984 when associated roadworks from the Hume Highway at Casula to Heathcote Road,

Erosion control along the F3 - SydneyNewcastle Freeway using the Reno-Mattress method.



Construction of the F6 - Southern Freeway is continuing from Dapto to Yallah.

Moorebank are completed. Delays which occurred on this work made it necessary for the Department to take over the contract.
When opened, this route will bring considerable relief from the congestion regularly experienced at Liverpool Bridge and Heathcote Road. The new bridge will also provide an alternative crossing to a nearby causeway at Cambridge Avenue, Glenfield, which is subject to flooding.
The cost of this work, including the bridge, is $\$ 5.5$ million, excluding acquisition costs and other overheads.
It is expected that the next stage of the freeway to be built will be between Fairford Road, Padstow and King Georges Road, Beverly Hills, followed by the section between Heathcote Road and Fairford Road.

## F6 - Southern Freeway

The F6 will eventually provide four lanes between Sydney and Wollongong and then proceed south to Yallah. The route will generally parallel the Princes Highway and at present consists of the 23 km WaterfallBulli Pass Tollway and a 15.5 km length from Mt Ousley Road to Fowlers Road, Dapto, which bypasses the busy commercial centre of Wollongong.

During 1983-84 nearly $\$ 2.4$ million worth of rehabilitation work to restore riding qualities was completed from Masters

Road, Coniston to Northcliffe Drive, Berkeley.

Work also continued on the extension of the freeway south from Dapto to Yallah, where it will join the Princes Highway. A second bridge over Byamee Street was constructed as part of the work to allow the completion of both carriageways as far as Fowlers Road. Initially, only one carriageway is being constructed south from Fowlers Road to Yallah.

The section from Fowlers Road to Dapto will be opened during 1985 , having cost more than $\$ 13$ million. Later, dual carriageways will be provided along this section. This is seen as a major need in the next five years, along with the construction of an interchange with the Wollongong Northern Suburbs Distributor at Gwynneville.

## Wollongong Northern Suburbs Distributor

This route is planned to run north from the F6 - Southern Freeway at Gwynneville, generally parallel to the Princes Highway, with its purpose being to provide easier access to Wollongong's northern suburbs and improve traffic flow from Wollongong to Bulli.

During the year construction continued on the 2.9 km section from the Princes Highway to Towradgi Road and on the interchange between the distributor and the Princes Highway, including approaches to new bridges over the distributor and the South Coast railway line. The total cost of these works is expected to be $\$ 14$ million and the first stage of the interchange is planned to be opened in 1985.

## Arterial Routes

## Princes Highway <br> State Highway No. 1

This important southern route links Sydney and Melbourne via the coast. It is supplemented between Waterfall and Bulli Pass and in the Wollongong region by sections of the F6 - Southern Freeway (see this page). The main deficiencies on the Princes Highway exist between Kiama and Batemans Bay. With the South Coast Railway terminating at Bomaderry, the number of heavy vehicles increases. This leads to delays, particularly during busy holiday seasons. The Department propose to widen the pavement and shoulders alon this length and provide overtaking lanes at more regular intervals.

A major project begun during the year was the duplication of the bridge over the Georges River at Tom Uglys Point, details of which are given under the Southern Suburbs section of the Sydney Region (page 27).

Upgrading of the highway between Waterfall and Helensburgh included shoulder widening, increased sight distance on a number of tight curves, and passing lanes at the intersections of Parke Street and Lawrence Hargrave Drive, Helensburgh.

Two bridges were completed in North Wollongong during the year at an estimatec cost of $\$ 1.5$ million each. One is a 76 m long, two-span, prestressed concrete girde bridge to carry the Princes Highway over the Wollongong Northern Suburbs
Distributor. This bridge will form part of an interchange between the highway and the distributor, providing six lanes plus an additional storage lane for northbound vehicles turning right to the distributor loading ramp. It will also provide two pedestrian footways. The second bridge is a 67 m long, three-span structure carrying the highway over the South Coast Railway This will also provide six lanes for traffic an two pedestrian footways.

At Yallah, the Southern Freeway will join the Princes Highway. Work continued during the year on the connection which includes a new railway overbridge. The connection and the overbridge will cost about $\$ 1.7 \mathrm{~m}$.

Further south, in Albion Park Rail, the junction between the highway and Tongarr Road is being reconstructed. The work includes provision of traffic signals which will reduce delays and improve safety at the junction.

Construction began in December 1983 on the $\$ 20$ million Kiama Bypass. This 5.3 km bypass will extend south from North Kiama Drive to rejoin the present highway at Kiama Heights, avoiding the main business and shopping centres of Kiama where long traffic delays often occur during peak holiday periods. The diversion of through traffic will improve conditions in Kiama streets, and increase safety for both through and local road users as well as pedestrians. The work is expected to take
our years to complete and includes oridges to carry the bypass over a railway siding, Spring Creek, Terralong Street and Bland Street and another bridge to take Saddleback Mountain Road over the bypass.
Improvements to a 4 km stretch of narrow, winding road further south at Kiama Bends continued. This work is expected to ee completed during 1985 at a cost of $\$ 4.6$ million.
Work continued to convert the footway of he Shoalhaven River bridge at Nowra to a cycleway, while south of Nowra, where the condition of the highway has been the cause of local concern, some $\$ 3$ million is oeing spent rehabilitating 6.7 km of oavement between Falls Creek and Tomerong.
Construction of approaches to a new culvert over Luncheon Creek, 43 km south of Nowra, is due to be completed at the end of 1984 and will eliminate an old narrow bridge on poor alignment.
Pavement restoration and shoulder sealing just north of Batemans Bay, including improvements to four intersections, were delayed by rain and problems with the supply and quality of materials. This work is now expected to be finished by November 1984.
Because of the nature of the terrain on the southern coastal areas of the highway, substantial improvements to alignment are needed to provide safer travelling conditions. As an interim measure the Department is concentrating on rehabilitation work to ensure adequate road shoulders and improved linemarking. Work was carried out on approximately 10 km during the year, and will continue on further lengths during 1984-85, especially between Moruya and Bodalla.

## Hume Highway

State Highway No. 2
This National Highway is the main Sydney-Melbourne route and now incorporates 64 km of the F5 - South Western Freeway from The Cross Roads, near Liverpool to Aylmerton, near Mittagong (see page 13). In June 1984 the Federal and State Governments announced the injection of $\$ 300$ million to provide for a minimum of four lanes between Sydney and Albury (see map on page 16).
Dual carriageways or four lanes are now provided along 172 km of the highway in New South Wales. To achieve the goal of providing four lanes by 1988, the existing road will be retained wherever practicable and two additional lanes constructed.
Work was completed during the year on 4 km of dual carriageway from Black Bobs Creek north to Cherry Tree Hill and construction began on a further 4.3 km north to Medway Rivulet. Both sections are ABRD projects and, with associated bridgeworks, will cost an estimated \$13 million.
North of Medway Rivulet, major deviations around Berrima and Mittagong are planned to link with the existing dual
carriageway at Aylmerton. These deviations will total 24 km and cost an estimated $\$ 75$ million. Work on the first stage of the Berrima deviation is scheduled to begin in 1984-85. Work will also commence next year on an interchange at the junction with the Illawarra Highway.

Construction of a new bridge over Uringalla Creek, 46 km south of Mittagong, began in February 1984 to replace a narrow bridge with a poor accident record. A narrow two-lane section of road through Marulan will be bypassed by 1986 with the construction of 7.3 km of dual carriageway. Work began in April 1984 and will cost an estimated $\$ 13$ million of ABRD funds.

Pavement strengthening and widening are being carried out on ageing sections of the highway north and south of Goulburn and construction has continued on the ultimate northbound carriageway between 13.3 km and 20.5 km south of Goulburn. This is an ABRD project due for completion early in 1985 at a cost of $\$ 6$ million.

Nearly $\$ 3$ million was spent improving the alignment of a poor section of road 33 km to 35 km south of Yass, between Bookham and Connors Creek. This work was completed at the end of 1983 and eliminates a length of road with a poor accident record.

Work began in February 1984 to provide dual carriageways from 47.6 km to 57 km south of Yass at an estimated cost of $\$ 9.4$ million. A new bridge was opened to traffic at Cooneys Creek, replacing a narrow structure that has been the scene of a number of accidents.

Dual carriageways are being constructed from 71 km to 78 km south of Yass. Work began in April this year and is expected to take two years to complete and cost $\$ 10$ million. The up-graded length will replace a sub-standard section of road with
poor alignment and grades. A similar project 12 km further south began in February. This will provide nearly 10 km of dual carriageway at a cost of $\$ 7$ million. Both projects are being funded under the ABRD program, as is construction of dual carriageway to provide a flood-free route south from Gundagai to Big Ben Creek, Tumblong. This 10.7 km stretch includes four bridges and will cost an estimated \$14.2 million.

A major improvement to the Hume Highway came in November 1983 with the opening of 11.5 km of the $\$ 27$ million Tumblong Deviation, south of Gundagai. This new section eliminates the infamous Sylvias Gap and its narrow, winding approaches. Driving conditions are now much safer and vastly improved with dual carriageways, sweeping curves and easy grades, and the new route is 2 km shorter than the old. Another 5.8 km of the deviation is due for completion by Easter 1985 and work on this section includes twin 76 m long bridges over Hillas Creek. These were completed during 1983-84 at a cost of more than $\$ 1$ million.

Further south, the first earthworks contract for the construction of 9 km of dual carriageway over Kyeamba Range, 80 km south of Gundagai, was completed, and others will be let by the end of 1984 to meet the anticipated completion date of 1986. This work will eliminate a steep, narrow, winding section of the highway with poor accident record.

A major improvement to the Princes Highway began with the construction of another bridge over the Georges River at Tom Uglys Point. When completed, the new bridge will carry southbound traffic and the old bridge will cater for northbound.


## National Highway Major Route Development

## South of Sydney

## Major projects in progress or planned for early commencement

## F5 - South Western Freeway

(1) Mittagong Bypass ( 9 km ). Construction of dual carriageways including bridges.
(2) Berrima Bypass $(15 \mathrm{~km})$. Construction of dual carriageways including bridges.

## Hume Highway

(3) Medway Rivulet to Black Bobs Creek ( 7.6 km ). Construction of northbound carriageway including new bridges; rehabilitation of existing carriageway.
(4) Hoddles Crossroads. Construction of intersection with Illawarra Highway, and approaches.
(5) Uringalla Creek. Construction of new bridge and approaches for southbound traffic.
(6) Marulan Bypass $(7.5 \mathrm{~km})$. Construction of dual carriageways including bridges.
(7) Goulburn Bypass ( 15 km ). Construction of dual carriageways including bridges.
(8) Yarra to Breadalbane Hill $(7.2 \mathrm{~km})$. Construction to provide dual carriageways and new bridge over Wollogorang Creek.
(9) Cullerin Range Deviation $(27 \mathrm{~km})$. Construction of dual carriageways.
(10) Yass Bypass ( 32 km ). Construction of dual carriageways including bridges.
(11) Two Mile Creek to Dunderalligo Creek ( 3.7 km ). Construction of northbound carriageway.
(12) Reedy Creek to Jugiong Creek ( 10 km ). Construction of dual carriageways.
(13) Jugiong Bypass ( 9 km ). Construction of dual carriageways.
(14) Cooneys Creek to Mooney Mooney Hill ( 11.9 km ). Construction of dual carriageways.
(15) Muttama Creek to North Gundagai $(9.5 \mathrm{~km})$. Construction of southbound carriageway.
(16) South Gundagai to Tumblong $(9 \mathrm{~km})$. Construction of dual carriageways including bridges.
(17) Tumblong Deviation: Stage $2(6.3 \mathrm{~km})$. Construction of dual carriageways.
 Construction of dual carriageways including bridges.
(19) Kyeamba Range $(9.8 \mathrm{~km})$. Construction of dual carriageways.
(20) Tabletop to Eight Mile Creek ( 4 km ). Reconstruction of northbound carriageway.
(21) City of Albury. Rehabilitation of pavement.

## Barton Highway

(22) South of Yass $(1.3 \mathrm{~km})$. Construction of northbound carriageway.

## Federal Highway

(23) Collector Bypass $(8.5 \mathrm{~km})$. Construction of dual carriageway including bridges.
(24) Bungendore Road to Sutton Road ( 11.6 km ). Construction of dual carriageways and grade separated interchange with Sutton Road.


At Table Top, 15 km north of Albury, a 4 km section of the northbound carriageway is being reconstructed while North Street, Albury has been reconstructed in line with plans to provide four lanes on the highway's route through this border city.

## Federal Highway <br> State Highway No. 3

This highway links Canberra with the Hume Highway south of Goulburn and the Department plans to provide dual carriageways along the entire 67 km length to the border of the Australian Capital Territory. There are now 16 km of dual carriageway from the Hume Highway to Willow Tree Creek and it is planned to provide another 27 km of dual carriageway by 1988
During 1983-84 work was virtually completed on the approaches to a new 51 m long prestressed concrete bridge over Willow Tree Creek, 29.1 km south of Goulburn. This work, which consisted of one carriageway of the ultimate dual carriageway between approximately 21.8 km and 30.5 km south of Goulburn, will eliminate a section of the highway subject to flooding and will improve safety for roadusers. The estimated total cost will be $\$ 10.3$ million.
Contracts totalling $\$ 18.5$ million were let for construction of the dual carriageway Collector Bypass ( 30.5 km to 37 km south of Goulburn) and for dual carriageways 62.7 km to 72.5 km south of Goulburn. Both projects will eliminate poor sections of the highway with bad accident records and, in the case of the Collector Bypass, eliminate a 2 km flood-prone section.
Pavement strengthening continued where required to ensure the road was safe for traffic, and a contract was let for asphaltic concrete surfacing of the ultimate northbound carriageway from 22 km to 30.3 km south of Goulburn.

Pavement rehabilitation will continue next year along the Lake George foreshore and preparations will be made to call tenders for the construction of a bridge and approaches on the southbound carriageway over Willow Tree Creek. Contracts will also be let for the extension of the Collector Bypass from 37 km to 39 km south of Goulburn, and for the construction of a grade-separated interchange with Sutton Road.

## Great Western Highway <br> State Highway No. 5

The Great Western Highway is the principal road access between Sydney and western New South Wales, running across the Blue Mountains to Bathurst where it joins the Mitchell and Mid-Western Highways. In the Sydney region the highway is supplemented by sections of the F4 - Western Freeway (see page 13). In March this year the State Government released details of a program of road improvements in the Blue Mountains, under which the Department will carry out some

25 major projects on the Great Western Highway over the next five years (see map on pages 18/19).
The largest single project will be the extension of the F4 - Western Freeway from the Nepean River at Regentville to join the Great Western Highway at Lapstone, including duplication of the Regentville Bridge at a cost of $\$ 14.9$ million. Work on the bridge commenced this year (see page 13). Other works will involve widening the highway to four lanes with priority being given to replacing narrow or winding sections.
West of Parramatta, a \$6 million project to widen the highway at Prospect from four to six lanes between Church Lane and Reservoir Road began in January. This will provide much needed additional capacity on a heavily trafficked section. Similar work between O'Connell Street, Kingswood and Parker Street, Penrith is nearing completion. When both sections are finished there will be a six-lane divided carriageway between Toongabbie Road, Prospect and Parker Street, Penrith, with the exception of two four-lane sections from the F4 turn-off at Prospect to Chatsworth Road, Mount Druitt, and between Glossop Street, St Marys and O'Connell Street, Kingswood.

Widening to six lanes between Glossop Street and Charles Hackett Drive, St Marys commenced at an estimated cost of $\$ 4.1$ million, including duplication of the bridge over South Creek at St Marys. In future programs it is proposed to continue this widening to Water Street, St Marys to provide necessary relief in this heavily trafficked area.

Widening was completed at Glenbrook during the year, providing four lanes
between Lapstone and East Blaxland. Similar work commenced at Blaxland and Valley Heights. At Blaxland Railway Station construction began on a pedestrian bridge to span the widened highway. This $\$ 180,000$ bridge will connect with the existing pedestrian bridge over the railway line.

At Faulconbridge, Wentworth Falls and Mount Victoria work continued on a number of passing lanes and junction improvements, and major pavement rehabilitation works are underway at Springwood and Linden at a cost of $\$ 4.2$ million.

During the year the westbound carriageway of the 1.2 km Farmers Creek deviation at Bowenfels was opened to twoway traffic, eliminating an old substandard section of road which was subject to flooding and which contained a low clearance railway bridge. Work on this deviation is estimated to cost $\$ 2.5$ million, including twin bridges over Farmers Creek and the Western Railway Line. The eastbound carriageway will be open to traffic in September 1984.

Work continued on the adjacent 1.9 km section of dual carriageway west of the Farmers Creek deviation at an estimated cost of $\$ 2.4$ million. These works provide for the large volume of traffic using the highway between Lithgow and Wallerawang and eliminate a section of old concrete pavement in poor condition

On the Great Western Highway, the westbound carriageway of the Farmers Creek deviation at Bowentels was opened to two-way tratic. The eastbound carriageway will be open to traffic in September 1984.


## Blue Mountains Road Improvement Program



(15) Explorers Tree to Hargraves St, Blackheath including Cants Corner ( 8.9 km ).
(16) West of Lithgow over Railway Line and Farmers Creek ( 1.9 km ).

## Intersection Improvements

(17) Evans Lookout Rd, Blackheath.
(18) Station St and Ridgewell Rd, Blackheath.

## Climbing and Overtaking Lanes

19) Soldiers Pinch between Mt Victoria and Mt Boyce including two-lane deviation $(2.5 \mathrm{~km})$.

## Pedestrian Grade Separation

(20) Overbridge at Faulconbridge Railway Station.
(21) Overbridge at Hazelbrook.
(22) Underpass at Lawson Station.

## Bells Line of Road

(23) Climbing and overtaking lane at Mt Banks.
(24) Climbing and overtaking lanes at east side of Mt Tomah, both sides of road.

Work started on improving the road alignment at an accident blackspot at Goodluck Hollow at a cost of $\$ 600,000$ and on a 1.6 km climbing lane at Hartley on the eastern side of River Lett. Work to improve the alignment between Marrangaroo and Meadow Flat is expected to begin in the coming year and design is underway for a new bridge and approaches over the Macquarie River at Bathurst.

## Barrier Highway

State Highway No. 8
The Barrier Highway leaves the Mitchell Highway at Nyngan and proceeds west through Cobar, Wilcannia and Broken Hill to the South Australian border at Cockburn, The highway is sealed along its entire length, although various sections require pavement and shoulder widening to bring them up to adequate standard. Work of this nature is currently underway at two locations between Cobar and Wilcannia and will continue on other sections where necessary in the future.
During 1983-84 two of the six prestressed concrete bridges over the Talyawalka Creek flood plain, at 9.2 km and 10.8 km east of Wilcannia, were opened to traffic.
Construction commenced on the approaches to the four other bridges between 11.6 km and 13.1 km east of Wilcannia. These six bridges, ranging in length from 48 m to 120 m , will eliminate the last source of sustained flooding on the highway. The new structures replace two open causeways and four old timber bridges.
West of Broken Hill, the reconstruction and widening of more than 3 km of highway were completed at a cost of nearly $\$ 2$ million. Pavement rehabilitation and widening and elimination of narrow causeways continued at a cost of approximately $\$ 800,000$. Elimination of these hazards will improve traffic safety in the area.

## New England Highway <br> State Highway No. 9

The New England Highway extends from the Pacific Highway at Hexham via Tamworth and Glen Innes to Wallangarra on the Queensland border. It is a busy National Route which has long lengths of narrow pavement. Considerable effort is being made to improve the riding quality and to provide extra passing lanes. The Department is also concentrating on replacing sub-standard bridges and approaches, and easing traffic congestion in towns by widening the highway or constructing bypasses.

South of Muswellbrook, for example, effort is being concentrated on improving the road pavement and widening to provide overtaking lanes to cater for the increasing coal and general transport haulage of recent years. This work will improve the safety and capacity of the highway.

During the year, work continued on the approaches to the new bridge at Hexham. (This work is described under the Pacific Highway entry on page 21.) Extensive rehabilitation of deteriorating pavement is being carried out between Hexham and Maitland (from 16.4 km to 28.4 km north of Newcastle and in George Street and Grant Street, East Maitland) at a cost of $\$ 1.75$ million.
In January 1984 work began on the first stage of the \$27 million Maitland Inner City Bypass. This entails 1.7 km of four-lane divided carriageway from the New England Highway near Melbourne Street, East Maitland to Parallel Street, near Anzac Street, Maitland, and a bridge over Wallis Creek. The project will be carried out in three stages and is expected to be finished in 1987. This new route will eliminate through traffic, including a growing proportion of heavy vehicles, from the busy shopping centre of Maitland.
North of Maitland major rehabilitation work took place at Rutherford ( $\$ 1.1$ million) and passing lanes were provided from Redpost to Harpers Hill (\$1 million) and from Jump Up Creek to Three Sisters ( $\$ 1.9$ million). These works provide for improved traffic flow and overtaking in greater safety.
Construction of another important deviation began at Singleton during the year when work started on a new bridge over the Hunter River. The seven-span, 268 m long bridge will provide two traffic lanes and a footway. Together with a deviation of the highway for nearly 2 km this project will cost about $\$ 6$ million. When finished in 1986 it will replace the existing river crossing at Dunolly Bridge, which is not suitable to cope with the volume of heavy vehicles using the highway.
The first stage of the $\$ 9$ million rehabilitation and widening of the Liddell
deviation was begun and work commenced on rehabilitation and widening for an overtaking lane north of Greta.
Reconstruction of the highway at Scone will be completed in November 1984 at a cost of $\$ 1.4$ million; and a new $\$ 3$ million bridge over the railway at Wingen comprising two northbound lanes and one southbound has been started.
Pavement strengthening and widening are in progress along a number of sections of the highway, including a $\$ 4.6$ million project to upgrade 17 km of road from Willow Tree to Wallabadah and provide 12 km of climbing lanes. Another $\$ 4.2$ million is being spent restoring damaged pavement on four sections between Tamworth and Armidale.
Work continued on the $\$ 3.2$ million bypass of Bendemeer, including new bridges over the MacDonald River and Perrys Creek. Between 18 km and 23 km north of Armidale work costing nearly $\$ 4$ million is nearing completion to correct a poorly aligned, narrow section of road. Included is a new bridge over Tilbuster Ponds.
Between 50 km north of Armidale and 14 km north of Tenterfield, extensive pavement rehabilitation works at selected locations are in progress or nearing completion at a total estimated cost of $\$ 5$ million. Widening commenced at the bridge over Redbank Creek ( 92 km north of Armidale) and at Pyes Creek ( 59.5 km north of Glen Innes), while work also began on a new bridge over Sandy Creek, 62.6 km north of Glen Innes.

A sign that is becoming a common sight on New South Wales roads.


During 1984-85 work is expected to commence on the building of dual carriageway deviations at Belford and Ravensworth. Work will also continue on the central and western sections of the Maitland Inner City Bypass and on the rehabilitation and widening between Harvey Road, Rutherford and Robert Road, Lochinvar and between Orient Street and Devon Street at Greta.
At Singleton, pavement rehabilitation will continue between Kelso Street and Dunolly Bridge and contracts will be let for the construction of approaches to the new bridge, as well as for dual carriagways at Rixs Creek, between 51 km and 53.8 km north of Maitland. Major rehabilitation work will continue at the Liddell deviation and planning is proceeding to begin a 1.4 km extension of the dual carriageway south of Muswellbrook.

## Pacific Highway

State Highway No. 10
One of the country's busiest highways and the principal link between Sydney and Brisbane, the Pacific Highway is being upgraded by a number of major projects. Particular emphasis is being placed on eliminating sections of the highway with poor accident records, providing additional capacity on busier sections and strengthening older pavements in heavier rainfall areas in the north of the State.

From the Hawkesbury River to Doyalson the highway is basically bypassed by the F3 - Sydney-Newcastle Freeway. The main requirements here in the next few years will be to improve the capacity of the two-lane sections between Kariong, Gosford and Ourimbah, together with the reconstruction of the highway through Wyong.

During 1983-84 construction began on the approaches to the bridge over Cut Rock Creek and $\$ 1.3$ million was spent constructing a roundabout at the intersection with Cobbs Road (Main Road No. 335) which connects with the F3 -Sydney-Newcastle Freeway at Tuggerah. Pavement resealing was carried out between Mt White and Kariong and pavement and shoulder rehabilitation took place on the southern and northern approaches to Wyong.

While traffic conditions between Kangy Angy and Doyalson have improved since the opening of the F3 - Wyong bypass, delays have occurred on the F3 Doyalson link where initial construction was limited to one carriageway. Construction of the other carriageway is proposed in the 1984-85 program.

Widening to four lanes was completed on 6.8 km between the southern and northern junctions to Catherine Hill Bay. Work will begin next year on the rehabilitation of the southbound carriageway between Chain Valley Road and Kanangra Drive and on the construction of dual carriageway on the remaining 7 km of two-lane highway to Swansea.


North of Newcastle work continued on an important new crossing of the Hunter River at Hexham, near the junction of the New England Highway. The 15 -span, 576 m long concrete box girder bridge will provide three traffic lanes for northbound traffic while the existing 31 -year-old, 383 m long steel and concrete bridge will then carry southbound traffic only.
The northbound lanes of the new bridge will carry two lanes of traffic from the Pacific Highway approaches and one lane from an on-loading ramp for New England Highway traffic from Maitland. This ABRD project is planned for completion in 1985 and will greatly ease congestion at this junction, particularly during holiday periods.
A new bridge over Stewarts River, 37.8 km north of Taree, was completed at a cost of $\$ 2.3$ million. The 289 m long, prestressed box girder construction will provide two traffic lanes, replacing a narrow flood-prone bridge on poor alignment. The new bridge was built in conjunction with a deviation which will eliminate a winding section of road 36 km to 39 km north of Taree.

A railway overbridge, replacing an old narrow bridge with a poor accident record, was completed at Rossglen where construction also began on a $\$ 3.1$ million bridge over the Camden Haven River.
A contract was let for the reconstruction of 5 km of highway south of Kempsey, between Smiths Creek and Maria State Forest, which has been the scene of many accidents.

A new 578 m long bridge over the Hunter River at Hexham is being built to carry northbound traffic, while the old Pacific Highway crossing will take southbound traffic.

Completion of the Deep Creek Deviation, which takes in the previously completed sections at Bellwood and Cow Creek, finalised the bypassing of Nambucca Heads. This $\$ 4.7$ million project has eliminated one railway level crossing and several narrow timber bridges on winding sections of road, and has shortened the highway by 3 km .
Widening of two bridges and the reconstruction of 2.7 km of road immediately north of Woolgoolga have replaced an extremely poor alignment and provided footways and cycleways for the safety of local school children.

Further north, an ABRD project is underway to replace a flood-prone section of highway with poor alignment and weak pavement at Wedding Bells State Forest. Two other ABRD projects are in progress between Maclean and Woodburn. The first is at Chatsworth Island where a deviation of the highway will shorten its length by 1.9 km as well as improving alignment and providing overtaking opportunities in both directions. At Tabbimoble Creek. approaches are being built to two new bridges which will eliminate flooding that periodically closes the highway.

## North of Sydney

Major projects in progress or planned for early commencement.


## F3 - Sydney-Newcastle Freeway

Hornsby Bypass ( 14.9 km ). Construction of bridge and approaches at Edgeworth David Avenue.(2) Calga to Mooney Mooney Creek ( 3.7 km ). Construction.
(3) Mooney Mooney Creek. Construction of twin bridges.Mooney Mooney Creek to Somersby $(10.8 \mathrm{~km})$. Construction
(5) Wyong to Wyee $(18 \mathrm{~km})$. Construction, including Wallarah Creek Interchange.
(6) Wyee Creek. Construction of twin bridges.
(7) Wyee to Dora Creek ( 10 km ). Construction.
(8)

Dora Creek. Construction of twin bridges.

## Pacific Highway

(9)

Lake Munmorah. Construction of pedestrian crossing at public school.
(10)

Southern Lake Macquarie Boundary to Northern Catherine Hill Bay Junction. (2 sections- 3.2 km and 1.5 km ).

Gateshead to Warners Bay Road, Cains Hill $(1.2 \mathrm{~km})$. Construction of divided carriageway.
(12)

Hunter River at Hexham. Construction of bridge and approaches.

## New England Highway

(13) Maitland Inner City Bypass $(1.7 \mathrm{~km})$. Construction.
(14) Harpers Hill to Redpost Hill $(1.6 \mathrm{~km})$. Construction of dual carriageways.
(15) Hunter River at Singleton. Construction of bridge.
(16) Kelly Street, Scone ( 0.7 km ). Construction of concrete pavement.
(17) Wingen. Construction of bridge over railway.
(18) Bendemeer. Construction of bridge over MacDonald River.
(19) North of Armidale $(2.48 \mathrm{~km})$. Reconstruction of carriageways.
(20)

Stonehenge to Redbank Creek ( 1.1 km ). Construction of dual carriageway and widening of bridge over creek.
(21)

Pyes Creek. Widening of bridge.
(22)

Sandy Creek. Construction of bridge.
(23)

Tarban Creek. Construction of bridge.

At Tweed Heads work is progressing on a new Boyds Bay Bridge over Terranora Creek. This bridge will alleviate major traffic delays by replacing a narrow two-lane structure which carries up to 38,000 vehicles a day. It will provide two lanes for southbound traffic and three for northbound, including one lane for access to Kennedy Drive. The new bridge and associated roadworks will cost about $\$ 4.5$ million.

South from the bridge, dual three-lane carriageways are being constructed for 3 km at a cost of $\$ 4$ million. This work will replace a heavily trafficked two-lane section of highway, resulting in greatly improved traffic flow. A raised median will improve traffic safety and, with turning bays at fewer intersections, the new road will further reduce potential hazards. When this work is completed, a dual carriageway will run from Barneys Point Bridge over the Tweed River to the Queensland border, a distance of 9 km.

## Gwydir Highway

State Highway No. 12
This highway runs from the Pacific Highway at South Grafton to Glen Innes, Inverell, Moree and Collarenebri. It is sealed from South Grafton as far as 80 km west of Moree, although much of the sealed length is narrow. Pavement rehabilitation and widening are underway or completed at a number of locations, including the replacement of the last section of single lane bitumen 44 km to 49.3 km west of Inverell.

A tender has been accepted for the replacement of two substandard timber bridges with prestressed concrete structures at Burradoon Waters, west of Moree, and work is expected to begin in September 1984 on a new 127 m long, twolane bridge over the Barwon River at Collarenebri. This will replace an old, narrow timber bridge at a cost of $\$ 1.8$ million.

## Barton Highway <br> State Highway No. 15

The Barton Highway runs from the Hume Highway near Yass, via Murrumbateman to the Australian Capital Territory boundary.

Work began on a new box culvert at Jeir Creek to replace a narrow bridge on poor alignment. The bridge and its approaches will cost about $\$ 1.2$ million.

Pavement rehabilitation and widening were completed over a length of 1.5 km as part of a progressive project to upgrade the existing pavement either for use as one interim carriageway of a future dual carriageway, or to cater adequately for traffic until the route is deviated. An important aim in selecting sections for treatment on this road is to improve or eliminate locations with poor accident histories.

Other rehabilitation work required was held over owing to more urgent needs on the Hume Highway. There are still several
kilometres requiring rehabilitation as soon as funds permit, including three sections with bad accident records.

## Bruxner Highway <br> State Highway No. 16

The State's northernmost east-west highway extends from the Pacific Highway near Ballina, via Lismore and Tenterfield, to the Queensland border near Goondiwindi.

The reconstruction of a winding 5 km section of the highway from the coastal escarpment to Alstonville has been delayed owing to lengthy negotiations for land acquisition, but when completed it will provide an improved alignment and a climbing lane.

Increased funding enabled the construction of dual three-lane carriageways in Lismore to be accelerated. Reconstruction of the highway from Kellas Street to Dawson Street was finished. Work began to replace the narrow, two-lane section from Dawson Street to Molesworth Street. This work will greatly improve traffic flow through Lismore and the roundabouts planned for the intersections at Dawson and Molesworth Streets will improve their capacity and reduce potential hazards.

Construction began on two new bridges 105.3 km and 105.7 km west of Casino. These will replace two timber structures at a cost of about $\$ 450,000$. Work continued 15 km further west on upgrading a poorly aligned 5 km stretch of road.

Two bridges over the Dumaresq River overflow channel, 50 km and 74 km west of Tenterfield, were completed. This section of the highway will be flood-free when the approaches are completed later this year. A third bridge, over the Beardy River 80 km west of Tenterfield, was also completed. The total cost of these three bridges was approximately $\$ 460,000$.

Work is continuing on a 48 km deviation of the highway from Yetman to Boggabilla. This less flood-prone route has been open since December 1982 and is now sealed for approximately 21 km . Another 11 km of sealed road will be available next year as this $\$ 6.25$ million project continues.

## Newell Highway <br> State Highway No. 17

The State's main north-south inland route, the Newell Highway, runs from Tocumwal on the Victorian border to Boggabilla on the Queensland border, via Parkes, Dubbo and Moree.

The Newell Highway is used by heavy vehicles travelling from Adelaide and Melbourne to Brisbane with these vehicles comprising as much as 46 per cent of the traffic on some sections of the highway. As a result, pavement edge failures are a major problem of this route.
Throughout the highway's length a series of works were undertaken during the year to improve safety and riding conditions by rehabilitation and widening, including the provision of passing lanes and bridge widening. At the southern end of the highway, a timber bridge at Jerilderie was replaced and plans are well underway to replace the old single-lane bridge over the Murray River at Tocumwal, as well as constructing a deviation around the town.
Nearly 15 km of highway were rehabilitated in two sections south of Narrandera during the year. Further rehabilitation will continue on other sections next year, along with the replacement of

This $\$ 3.5$ million bridge over Terranora Creek at Boyds Bay, near Tweed Heads, will greatly ease traffic congestion on this section of the Pacific Highway.



A new bridge over the Numeralla River (in the foreground) and another over the flood plain will provide a flood-free route for the Monaro Highway ine and level of a grader blade fitted with sensors and is aimed at increasing accuracy on straight lengths of road with a constant grade


The Department has carried out preliminary tests on the use of a laser beacon to control the level and crosstall of grader blades The heacon controls the
bridges and approaches at Bundigerry Creek, the Murrumbidgee Irrigation Area Main Canal and the railway overbridge at Narrandera, as well as improvements near the level crossing at Alleena.

Improvements were carried out at seven locations from south of Forbes to Gilgandra, including pavement strengthening and widening, improving the northern approach to the level crossing at Parkes and approaches to a new bridge over Marthaguy Creek No.1, near Gilgandra. These works will upgrade 15 km of highway at a cost of $\$ 3.6$ million.

North of Narrabri, the Mulgate Deviation was opened to traffic in May 1984. This $\$ 4$ million route bypasses the Mulgate Creek floodway and eliminates a level crossing with a railway overbridge.

Some 5 km of deteriorating pavement between Narrabri and Bellata were upgraded during the year and rehabilitation work will continue along this length of highway next year. Major works scheduled for commencement in the next five years include the construction of a new bridge over the Castlereagh River at
Coonabarabran and widening of narrow concrete bridges between Narrabri and Narrabri West, including the provision of a railway overbridge that will eliminate two level crossings.

## Monaro Highway <br> State Highway No. 19

Beginning at Canberra, the Monaro Highway extends southwards via Cooma and Bombala to the Victorian border.

Work continued on the reconstruction of 10.6 km of the highway southward from the border of the Australian Capital Territory to Lenanes Creek at a cost of nearly $\$ 5$ million. Coupled with work being done in the ACT, this project will provide 14 km of reconstructed highway by June 1985. The reconstruction and widening of the section between 18.2 km and 23.4 km south of the ACT is also expected to be completed by June 1985 at a cost just over $\$ 1$ million.

During 1983-84 construction began on two bridges over the Numeralla River and its flood plain. This $\$ 5$ million ABRD project will replace an old timber bridge with a flood-free route on an improved alignment. The bridge over the river will be an eightspan, 223 m long structure, while the one over the flood plain will have 11 spans over its 303 m length. Both bridges have broad flange girders founded on driven steel ' H ' piles and will provide two lanes for traffic.

During 1984-85 it is expected that work will begin on replacing the old timber railway overbridge and its approaches at Ingelara, approximately 63 km south of Canberra.

## State Highway No. 23

A vital link in Newcastle's arterial road network, State Highway No. 23 runs from the Pacific Highway at Charlestown, through


Lambton and Birmingham Gardens, to the Pacific Highway at Sandgate. Ultimately it will provide a bypass of inner Newcastle from Windale to Sandgate.

The highway now uses residential streets between Newcastle Road, Jesmond and Sandgate Road, Shortland, but increased traffic in recent years has accentuated the deficiencies in this route.

In January 1984 plans for a proposed deviation were exhibited for public comment, and preliminary earthworks have since begun on the construction of dual carriageways between Newcastle Road and Sandgate Road. This 3.2 km project includes overbridges at Janet Street and Rankin Drive and a pedestrian/cycle overbridge near Michael Street. It is expected that this project will take four years to complete at a cost of $\$ 22$ million.

When finished, the new work will divert as many as 3000 vehicles from local streets during peak periods, thereby greatly improving traffic flow and providing considerable noise relief for residents in streets where through traffic now passes.

During 1983-84 Newcastle City Council continued the construction of dual carriageways between 2.27 km and 3.56 km north of Charlestown, due for completion in December 1985 at a cost of $\$ 4$ million.

## Wollongong-Picton Road <br> Trunk Road No. 95

Running from the Princes Highway at North Wollongong via Wilton and Maldon to the Hume Highway at Picton, Trunk Road No. 95 is a major coal haulage route.

Work began in 1983-84 to provide channelisation at the junction with the link road to the F6 - Southern Freeway at Mt

The 3.5 km Mulgate Deviation of the Newell Highway just north of Narrabri was opened to traffic in May 1984. The $\$ 4$ million project eliminated a railway level crossing and will be free of all but major floods.

Ousley and to reconstruct deteriorated pavement between 24.6 km and 27.6 km northwest of Wollongong.
Pavement and shoulder rehabilitation also took place between 9.2 km and 13 km and between 27.6 km and 33.75 km northwest of Wollongong.

Improvements to the road will continue next year with the completion of the foregoing works and the construction of a passing lane for eastbound traffic 8 km to 14.25 km west of Mt Ousley Road (Main Road No. 513).
Major needs in the next five years are to construct deviations at Wilton and from Mt Ousley Road (Main Road No.513) to The Cuttings, as well as to construct an interchange at the junction with Mt Ousley Road.

## Putty Road

## Main Road No. 503

The road runs from Wilberforce north of Windsor via Howes Valley and Bulga to the New England Highway at Singleton and its major needs include the provision of extra overtaking lanes, curve improvements, installation of guard-rail fencing and the replacement of narrow timber bridges. Some work was accomplished in all these areas during the year.

Pavement strengthening and widening are being carried out at a number of locations, including the provision of
overtaking lanes between 33.4 km and 35.1 km north of Windsor for northbound traffic and between 56.8 km and 59.1 km north of Windsor for southbound traffic.

A narrow timber bridge at Howes Swamp, 71 km north of Windsor has been replaced, while substantial improvements, resulting in safer travelling conditions, were made with the rehabilitation of pavement and the improvement of poor crossfall conditions at various locations between 25.2 km and 93.2 km south of Singleton.

Pavement rehabilitation, including shoulder and drainage improvements, took place from 26 km to 27 km and from 29 km to 34 km south of Singleton. Mesh wire fencing was replaced with guardrail from 33.9 km to 44 km south of Singleton and approaches were built to a new bridge over Terrys Creek. Work also began on pavement rehabilitation including construction of an overtaking lane at Bobs Rock, 61.5 km to 62.8 km south of Singleton.

Work will continue next year and include a major improvement in widening the road at Staircase Hill, between 87.2 and 89 km south of Singleton. Further planned improvements include the replacement of a number of old timber bridges over the next five years.

## Bridgeworks

Principal bridge construction projects have been described under the appropriate route headings in the preceding pages of improvements to the road system. Other significant bridges completed and opened to traffic during 1983-84 included:

Two 150 m long, 10-span, prestressed concrete plank bridges over the Talbragar River and flood channel, 1.5 km east of Craboon on Trunk Road No. 55. These bridges replaced an old timber bridge at a total cost of $\$ 1.1$ million.

A five-span, 11 m long, prestressed trough girder bridge over Wollondilly River (Marsden Bridge) 3.2 km north of Goulburn on Trunk Road No. 54. This replaced a narrow, timber truss bridge at an estimated cost of $\$ 800,000$.

A four-span, prestressed concrete girder bridge over Fish River at O'Connell, 26.4 km north of Oberon on Main Road No. 253. This replaced a timber truss bridge (built in 1879) at a cost of $\$ 570,000$.

A summary of bridgeworks undertaken during 1983-84 is shown in Table 1. Full details will be published in a separate supplement at a later date.

1. This new bridge over Cooneys Creek, south of Jugiong, replaces a narrow structure that was the scene of many accidents on the Hume Highway. The 'quilted' concrete controls erosion.
2. More than 100 years separates the building of these two bridges over Fish River at O'Connell, north of Oberon. The new bridge was opened during the year, the one on the left in 1879.

Table 1. Bridgeworks on Classified Roads, 1982-83 and 1983-84

| Road Classification | Completed and opened to traffic |  | Completed but not opened to traffic |  | In Progress |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \mathrm{At} \\ 30 / 6 / 83 \end{gathered}$ | $\begin{gathered} \text { At } \\ 30 / 6 / 84 \end{gathered}$ | $\begin{gathered} \hline \text { At } \\ 30 / 6 / 83 \end{gathered}$ | $\begin{gathered} \hline \mathrm{At} \\ 30 / 6 / 84 \end{gathered}$ | $\begin{gathered} \hline \mathrm{At} \\ 30 / 6 / 83 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { At } \\ & 30 / 6 / 84 \\ & \hline \end{aligned}$ |
| Freeways | 18 | 20 | 18 | 11 | 23 | 20 |
| State Highways | 45 | 25 | 18 | 27 | 41 | 47 |
| Trunk Roads | 10 | 8 | 3 | 1 | 11 | 12 |
| Main Roads | 19 | 17 | 3 | 5 | 17 | 26 |
| Secondary Roads | - | 2 | - | 2 | - | 5 |
| Tourist Roads | - | - | - | - | - | - |
| County Roads | - | - | - | - | - | - |
| Developmental and Unclassified Roads | 2 | 1 | 1 | 1 | 4 | 3 |
| Totals | 94 | 73 | 43 | 47 | 96 | 113 |



## Sydney Region

Major road projects in the Sydney region are planned to provide a balanced transport network. The area has a high level of car ownership and virtually all goods distribution is by road transport. A comprehensive road program benefits the whole community by reducing congestion, improving travelling times, lowering transport costs, reducing accidents, enhancing the environment and providing employment.

In specific terms, road proposals can be seen as providing direct benefits by:

- reducing the constraints on the present road network (e.g. by constructing a new bridge over the Georges River at Tom Uglys Point);
- linking the National Highways to the urban road network (e.g. by extending the South Western Freeway from Liverpool to Beverly Hills);
- providing improved cross regional and ring road routes (e.g. by completing the new route from Liverpool to Wentworthville);
- bypassing commercial centres (e.g. by completing the bypass of Lidcombe, including a new railway underpass); and
- supporting the growth of major developing areas (e.g. through the implementation of the Western Region road program).


## Northern Suburbs

The major projects underway north of the city include construction of the WahroongaBerowra section of the F3 - SydneyNewcastle Freeway (see page 11) and the widening of Pennant Hills Road to six lanes between Beecroft Road and Pearces Corner. Work continued during the year on adjustments to properties and relocation of public utilities in preparation for widening the section between Beecroft Road and Yarrara Road, and improving intersections with Duffy Avenue, Dartford Road and Normanhurst Road with right turn bays.

At Balgowlah, the Burnt Bridge Creek Deviation is nearing completion. This is being built to alleviate traffic problems by providing motorway conditions for through traffic on a new route from Sydney Road to Condamine Street. The new road will have six lanes on a divided carriageway built at a cost of almost $\$ 12$ million, including a bridge over the new road to link Kitchener Road and Myrtle Street.

Reconstruction and widening to four lanes of Castle Hill Road for nearly 1 km west of Pennant Hills Road at Thompsons Corner was commenced.

Work also began on the duplication of the bridge over Lane Cove River in Epping Road. The new 31 m long bridge will provide another three lanes for traffic which will ease delays experienced in this area during peak periods.

Some other works in the northern suburbs are mentioned under State Route No. 33.

## Western Suburbs

Some of the many works underway in Sydney's rapidly growing western areas have been mentioned elsewhere in this report under sections dealing with F4 Western Freeway; Great Western Highway; and Parramatta Ring Route.

North of Parramatta River in Dundas work began on widening Kissing Point Road (Main Road No. 574) to six lanes between Spurway Street and Dundas Public School. Widening was completed from Station Street to Bettington Road at a cost of $\$ 3.25$ million. Kissing Point Road provides a link between the proposed Silverwater Road extension and the Parramatta Ring Route and will eventually provide relief for traffic in Victoria Road through Ermington and Rydalmere. A part of the proposed Silverwater Road extension from Kissing Point Road to Kingsford Street, Dundas, estimated to cost $\$ 3$ million, is nearing completion.

Old Windsor Road is being progressivley reconstructed and widened from two to six lanes to cater for the development of the Blacktown - Parklea area. Ultimately, this work will be extended from Wentworthville to Windsor Road, Kellyville. During the year, widening was completed between Hammers Road and Johnstons Bridge and is continuing to Pyes Crossing. A roundabout is also being constructed at the intersection with Seven Hills Road, Kings Langley. This will alleviate peak hour congestion and considerably reduce the accident potential at this busy intersection.

Improvements to Windsor Road during the year included the channelisation of the intersection with Brandon Road and Chapman Road, Vineyard; the provision of a right turn bay at the junction of Victoria Avenue, Castle Hill; and more than $\$ 5$ million worth of reconstruction between Whitehaven Road, Northmead and Showground Road, Kellyville to provide for the increasing volume of traffic in this rapidly developing area.

Development of the Liverpool to Wentworthville route is continuing on schedule to be finished to coincide with the completion of the Parramatta Ring Route southwards to Old Prospect Road, Wentworthville in 1988-89. This will provide an alternative to Woodville Road and the Hume Highway for traffic travelling between Parramatta and Liverpool. Work began on the construction of a new four-lane, 60 m long bridge over Cabramatta Creek in Orange Grove Road.

Also in the Liverpool area, widening and channelisation took place at a new junction of the Hume Highway and the South Western Freeway (see page 13), while $\$ 2.3$ million was spent widening Moorebank Avenue in conjunction with the upgrading of the intersection of Newbridge and Heathcote Roads and construction of
the South Western Freeway between the Hume Highway and Heathcote Road. The opening of this section of the freeway later this year will ease traffic congestion in Liverpool.

The widening of Elizabeth Drive (Main Road No. 515) to six lanes between Maxwell Avenue and Reservoir Road, Mt Pritchard, was completed and a roundabout is being constructed to relieve congestion at the intersection of The Horsley Drive and Wallgrove Road.

On the Alfords Point-Bankstown-Silverwater-Dundas Ring Route, traffic congestion will be eased at two locations in the next six months with the completion of the first stage of the Fairford Road extension betwen Arkley Street and Canterbury Road, Bankstown and the Bede Street deviation at Lidcombe. Over the next three years work will continue on constructing a grade separation over Canterbury Road and extending the route south to Bryant Road.

Bungarribee Road, Blacktown, is being extended from Blacktown Road to Lock Street, to provide a southern bypass of Blacktown shopping centre; while Richmond Road is being widenened to four lanes between Breakfast Road and Falmouth Road.

## Southern Suburbs

A major need on the Princes Highway is to improve the safety and capacity by channelisation of intersections and construction of right turn bays. Improvements were carried out at four intersections during the year at a cost of more than $\$ 3$ million. These included right turn bays at the intersection with Old Bush Road, Engadine, and between Formosa Street and Box Road, Sylvania.
Channelisation works were continued at Jubilee Avenue, Carlton, and completed at Forest Road, Arncliffe, at a cost of over $\$ 1.1$ million.
The duplication of the existing bridge over the Georges River at Tom Uglys Point commenced during the year. The new steel box girder bridge with a reinforced concrete deck will be 604 m long. The $\$ 17$ million project is due for completion in 1986, and to date some two-thirds of the foundation piles, which are up to 60 m long, have been constructed. Southbound traffic will be diverted on to the new bridge and the existing bridge will carry northbound traffic only, thus providing a six-lane capacity. This will eliminate long delays now experienced during weekday peak periods, weekends and holiday periods, and provide safer and quicker access to the southern region of Sydney, the Illawarra area and the south coast resorts of New South Wales.
A pedestrian bridge over the Sutherland Bypass (Acacia Road) was opened during the year, providing safe access across this busy thoroughfare at a cost of $\$ 330,000$.

Preliminary work began on the construction of a link road between Wentworth Avenue and General Holmes

Drive, Mascot. This work, which involves grade separation at both Wentworth Avenue and the Sydenham-Botany railway line, will provide a direct connection for north-south traffic between Southern Cross Drive and General Holmes Drive, and remove its existing conflict with east-west traffic, particularly to Sydney Airport.

At Bondi Junction, north-south traffic movement and access to the shopping centre were improved by the extension of Carrington Road from Birrell Street, through Council Street, to Bondi Road.

The widening of Henry Lawson Drive to six lanes in Peakhurst continued, including the widening of the bridge over Salt Pan Creek. The existing 190 m long bridge will be widened from two to six lanes for traffic and will provide two pedestrian footways. Henry Lawson Drive forms part of State Route No. 55 which provides important access from Sydney Airport to the southwestern suburbs of Peakhurst, Moorebank and Liverpool and the western areas of Merrylands, Granville and Parramatta. It also provides a link with State Route No. 33 from Blakehurst to Mona Vale.

## State Route No. 33

This is Sydney's most important ring route, extending nearly 50 km from Mona Vale in the north via Pymble, Ryde, Homebush and Hurstville to the Princes Highway at Blakehurst. It is planned eventually to provide six lanes throughout most of the route and nearly half its length has been constructed to this standard. Widening is presently underway on another 5 km , leaving 20 km to be completed.

Work is continuing on the extension of dual three-lane carriageways along King Georges Road. The section between Beverly Hills and Lakemba was completed during the year and the section from Tavistock Road to the Princes Highway, Blakehurst is now in progress.

The link between King Georges Road and Roberts Road at Lakemba was completed, thereby considerably improving traffic conditions in the area, while in Roberts Road the construction of dual carriageways between Wilbur Street and Karuah Street, Greenacre began.

An important deviation is nearing completion in Strathfield from Pemberton Street to Arthur Street. Known as the Hudson Park Deviation, the work is expected to cost about $\$ 3$ million. As well as providing increased capacity, the deviation will remove traffic from residential streets and provide a more direct route.
Construction began during the year on the $\$ 13$ million Pymble Interchange at the intersection of the Pacific Highway with Mona Vale Road and Ryde Road. The first stage of this work is a new railway bridge over Mona Vale Road which is being built by the State Rail Authority. Ryde Road/Mona Vale Road approaches will be lowered to pass under the Pacific Highway and ramps will be provided between these roads to form a diamond-type grade separation. Completion of this work will

eliminate excessive delays to traffic during peak periods and improve safety.

A major effort has been made to rehabilitate failing sections of pavement on Lane Cove Road between North Ryde and De Burghs Bridge. The section from Allengrove Crescent to Goulding Road has been completed and work is well advanced on the section from Epping Road to De Burghs Bridge.

Construction of a dual carriageway was completed between Forest Way and Cooyong Road, Terrey Hills and extension of this work is proceeding to Kimbriki Road. This will improve safety at the junction of McCarrs Creek Road.

## The Parramatta Ring Route

Eventually this route will extend around the north of Parramatta from the Great Western Highway at James Ruse Drive, Granville and rejoin the highway at Emert Street, Wentworthville. When completed in 1987, the Granville-Mays Hill section of the F4 - Western Freeway will form the southern portion of the ring route.

Work continued during the year on a 10 span steel trough and prestressed concrete

An artist's impression of the $\$ 24$ million expressway link to the airport and Sydney's southern suburbs. To be completed in 1988, the project will provide a direct connection between Southern Cross Drive and General Holmes Drive, Botany.
girder bridge over the Carlingford Railway and A'Becketts Creek at Rosehill. The erection of girders and the construction of the deck commenced during the year. This 252 m long bridge will provide four lanes for traffic and will be completed in September 1984 at a cost of $\$ 4.5$ million.
A major section of the Parramatta Ring Route began recently, involving a 1 km stretch of dual, three-lane carriageway between Old Windsor Road and Wentworth Avenue, Wentworthville. Following the acquisition of properties, work began in March 1984 on a large, single cell reinforced concrete culvert at Coopers Creek. The link will vastly improve the eastwest traffic flow around the congested centre of Parramatta. It will cost more than $\$ 2$ million and will be completed in 1985. This section will extend to Old Prospect Road, Wentworthville by 1988-89, where it will connect with the new route to Liverpool, described on page 27.

## Maintenance and Surfacing

## Maintenance

After several years of drought which temporarily eased the rate of deterioration of bitumen road pavements generally, most areas of the State experienced periods of prolonged wet weather, and in some cases flooding, which required extra effort on pavement maintenance and patching and on remedial drainage works.

The total expenditure on road and bridge maintenance throughout the State was \$164,411,000 - an increase in real terms of 11.8\% over 1982-83. In addition, the Department has received 97 claims from local Councils for flood damage restoration following heavy rains throughout the State in January and February, 1984. By 30 June 1984, 73 grants totalling $\$ 5,129,320$ for local roads, and $\$ 1,174,794$ for classified roads, had been approved.

## Roads

In the County of Cumberland (Sydney and environs) the maintenance of classified roads is carried out by the Department and by local Councils. The Department is responsible generally for the State Highways and many of the more important Main Roads. The remaining Main Roads and Secondary Roads are maintained by Councils.

Maintenance was affected by the abnormally high rainfall of 1983-84. Pavements and subgrades which had dried out during the previous dry period became saturated. Heavy patching and, in more acute cases, permanent strengthening were required to maintain acceptable surface conditions. Ageing sections of concrete pavement (some over 50 years old) on heavily trafficked routes needed continuous attention and an extensive program of slab replacement and stabilisation was carried out.

Increasing use was made of asphaltic concrete with rhyolite aggregate to improve skid resistance and safety for road users at critical locations, such as the approaches to traffic signals, on isolated sharp curves and on sections of heavily trafficked road such as the Cahill Expressway, Pacific Highway and Iron Cove Bridge.

There is a growing problem in undertaking maintenance on heavily trafficked routes, because of both the increased traffic volume during normal working hours and the need to protect employees from hazard while working close to moving vehicles. Some works need to be carried out at night or at other times (not necessarily at weekends) when less inconvenience to the public is likely to result.

Work continued to maintain the

appearance of landscaped areas on many of the more important routes. In areas such as the Western Freeway, additional tree planting was carried out under the Youth Employment Scheme.

In spite of the wet weather in the earlier part of the year, the roads in the County of Cumberland were generally maintained in a satisfactory condition. Maintenance standards were improved as a consequence of significant construction and reconstruction works under current construction programs. On such works the pavements being built are adequate for the heavy vehicle loadings they will be required to carry.

The increasing use of concrete in subbase and base will reduce maintenance requirements on these sections in future years.

Outside the County of Cumberland, the Department is generally responsible for the maintenance of State Highways, although some sections of country State Highways are maintained by local Councils. Councils are also generally responsible for the maintenance of Trunk and ordinary Main Roads, although for various local reasons some of these are maintained by the Department.

The whole State was subject to wet weather. Flooding occurred in the New England and Northern Tablelands, and the western and south-western areas of the State. Highways affected by flooding include the Mitchell, Barrier, Castlereagh, New England, Snowy Mountains and Sturt.

Other Main Roads (generally under the care and control of local Councils) were extensively affected by flooding and some

One of the Department's dual lane, automotive trimmer-spreaders at work on the Hume Highway. By an electronic sensor working to a string line, this machine provides accurate spreading of base course materials and precision trimming.
had to be closed repeatedly for periods ranging from a few hours to many weeks.

The effects of this were evident in both surfaced and unsurfaced roads. Many sealed roads under the care and control of Councils require extensive rehabilitation or resurfacing to avoid costly and less effective day-to-day patching of failing sections. However, recent emphasis on achieving planned lengths of resurfacing, and the provision of additional funds for rehabilitation and reconstruction works on State Highways, have helped mitigate the adverse effects of the prolonged wet weather.

Unsurfaced roads are very susceptible to damage under extreme weather conditions. On many lengths of gravelled roads the natural surface or subgrade material has been exposed as a result of traffic wear and wind loss during the recent dry years. Under wet conditions further gravel is lost as traffic ploughs it into the subgrade. It has generally not been possible to provide the funds which would be necessary to restore a gravel surface. Even under favourable conditions such a backlog will take years to overhaul.

A most important aspect of maintenance operations is to preserve the value and use of existing assets for motorists. As indicated on page 30 , a significant length of resurfacing of bituminous pavement has
been carried out. Increasing use is being made of rubber bitumen mixtures for the binder. This material provides greater flexibility for the new seal over older pavements where movement is likely over poor subgrades.

Snow clearing operations in the Mt Kosciusko area were of limited duration during 1983-84 as the 1983 snow season was shorter than usual.

Generally, State Highways are in much the same condition or slightly improved from the end of 1982-83. This is not only the result of necessary increased maintenance activity to overcome the results of the wet weather, but also reflects the effects of greater effort on rehabilitation and reconstruction.

Surfaced lengths of ordinary Main Roads were generally maintained in satisfactory condition, although in certain areas, particularly in the north eastern part of the State, some deterioration in road conditions did occur. Such deterioration, which will require increased effort on heavy patching and pavement edge repair, may be expected to continue until funds are available to allow greater effort to be directed to rehabilitation or reconstruction.

## Pavement Management System

The Department has engaged the University of New South Wales as a consultant to conduct a feasibility study into the adaption of the Texas (USA)
Rehabilitation and Maintenance System to New South Wales conditions.

Initial studies show that the Department's road condition rating system is consistent with the Texas method of rating pavement conditions and that the system appears applicable to New South Wales conditions

In the next stage of the study, road maintenance experience in New South Wales will be used instead of the Texas experience. This involves quantifying the survival characteristics of different road maintenance strategies on the various

Newly-laid concrete on a section of the Burnt Bridge Creek Deviation at Balgowlah.
types of pavement distress experienced by our roads.
The results of the study are expected to determine the most cost-eflective method of applying maintenance funds.

## Bridges

There are now 6,200 bridges on the State's classified road system with a combined length of 221 km . A significant proportion of these are timber bridges. After allowing for the 11 timber truss bridges now being replaced, 99 remain in service, many of which were built at the turn of the century. The replacement of another nine timber truss bridges is due to begin in 1984-85. There are also 1,243 timber beam bridges, most of which have been in service since before 1939. Until these bridges are replaced their continued inspection and maintenance are necessary activities for the Department.

Bridge maintenance during the year was carried out by the Department and Councils, with the Department generally undertaking work on State Highways, National and ex-National bridges, and special subsidy works.
Generally, work on timber bridges consisted of the replacement of worn-out decking and longitudinal sheeting, together with repair or replacement of damaged or deteriorated truss members, piles, girders, capwales, corbels and braces.

Work on concrete bridges consisted mainly of repair or replacement of expansion joints, repair of cracks and repair or replacement of damaged traffic barriers and pedestrian railings.

Repainting of steel structures, timber trusses, traffic barriers and pedestrian railings was carried out as required, and regular inspections of all bridges continued.

## Ferries

There are 10 vehicular ferry services operating throughout the State, in which the Department is financially involved. Most are extensively used, with annual traffic volumes ranging from 310,000 on Wisemans Ferry over the Hawkesbury River to 5,300 at Wymah on the Murray River.

Two large vehicular ferries were overhauled at the Mortlake slipway during

the year, while Central Workshop personnel assisted and supervised the major overhaul of two ferries and the routine overhaul of another two on the north coast.

## Surfacing

The year's road surfacing statistics reflect the substantial increase of funds available for roadworks during the year.

Table 2 shows that $2,665 \mathrm{~km}$ of road were surfaced during 1983-84, 411 km more than the previous year. The Department was the constructing authority for $1,371 \mathrm{~km}$, while Councils arranged for $1,294 \mathrm{~km}$ of surfacing. As illustrated in Table 3, most of this work involved maintenance resurfacing, with the remainder being surfacing after construction or surfacing of an unsealed road. The $2,665 \mathrm{~km}$ surfaced during the year comprised 5,760 lane km , which is the equivalent of $2,881 \mathrm{~km}$ of normal two-lane road. This represents more than $10 \%$ of the $25,852 \mathrm{~km}$ of surfaced road in New South Wales for which the Department is responsible.
The majority of pavements constructed and maintained by the Department are surfaced with sprayed bituminous seals. The types of surface and road lengths laid during the last two years are shown in Table 4.

## Concrete

A feature of the Department's activities in recent years has been an upsurge in the construction of concrete road pavements. The increasing cost of bituminous materials, and the development of equipment and techniques which allow large scale production and placing of concrete pavements, have led to a resurgence of interest in this material throughout Australia.
Previous disadvantages with concrete pavement stemmed mainly from relative movements between adjacent slabs, producing discomfort when travelling over transverse joints. Cumbersome methods of producing, transporting and laying concrete further detracted from its widespread use. However, modern design and construction techniques have largely overcome these problems.

The operation of slip form paving machines has revolutionised construction. Using guide-wires set to correct line and level, these machines form, compact and texture concrete pavements automatically at rates of up to 1,500 cubic metres per day.

Concrete pavement performance has also been improved by the provision of concrete shoulders to prevent edge failures and the development of texturing techniques which provide skid resistance without undue increases in traffic noise.

Given these advancements, the trend towards concrete pavements is likely to continue, particularly in the construction of major roads. Projections for 1984-85 indicate the Department will increase its use of concrete for pavements to more than 400,000 cubic metres, double the rate of the past two years.

Table 2. Road Lengths Surfaced with Bituminous or Cement Concrete Materials, 1982-83 and 1983-84

| Classification | $1982-83$ <br> km | $1983-84$ <br> km |
| :--- | ---: | ---: |
| Freeway | 3 | 70 |
| State Highway | 829 | 1,269 |
| Trunk Road | 403 | 396 |
| Main Road | 984 | 903 |
| Secondary Road | 14 | 16 |
| Tourist Road | 13 | 10 |
| Developmental Road | 6 | 1 |
| Unclassified Road | 2 | 0 |
| Totals | 2,254 | 2,665 |

## Table 3. Types of Surfacing Work and Lengths, 1982-83 and 1983-84

| Type of Work | Road length |  | Lane length |  | Equivalent two-lane road length |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 82-83 \\ \mathrm{~km} \end{gathered}$ | $\begin{gathered} 83-84 \\ \mathrm{~km} \end{gathered}$ | $\begin{gathered} 82-83 \\ \mathrm{~km} \end{gathered}$ | $\begin{gathered} 83-84 \\ \mathrm{~km} \end{gathered}$ | $\begin{gathered} 82-83 \\ \mathrm{~km} \end{gathered}$ | $\begin{gathered} 83-84 \\ \mathrm{~km} \end{gathered}$ |
| Bituminous Surfacing <br> 1. Initial treatment - of previously unsealed road. | 120 | 121 | 241 | 246 | 120 | 123 |
| 2. Heavier treatment - of primed or primer-sealed road. | 57 | 87 | 117 | 175 | 59 | 88 |
| 3. New surface/restoration following construction/reconstruction. | 309 | 336 | 691 | 807 | 346 | 404 |
| 4. Maintenance resurfacing. | 1,768 | 2.099 | 3,636 | 4,442 | 1,818 | 2,221 |
| Cement Concrete |  |  |  |  |  |  |
| 5. Surfacing. | NR | 22 | NR | 90 | NR | 45 |
| Totals | 2,254 | 2,665 | 4,685 | 5,760 | 2,343 | 2,881 |

Table 4. Types of Surfacing, 1982-83 and 1983-84

|  | $1982-83$ <br> km | $1983-84$ <br> km |
| :--- | ---: | ---: |
| Concrete | Not <br> recorded | 22 |
| Asphalt surfacing | 102 | 221 |
| Sprayed seal | 2,004 | 2,113 |
| Bitumen enrichment | 101 | 186 |
| Primer seal | 44 | 101 |
| Prime | 3 | 22 |
| Totals | 2,254 | 2,665 |

## Bituminous Materials

Despite the resurgence of concrete pavements for new roads, most roads in New South Wales have flexible pavement structures consisting of granular bases and bituminous surfaces. Bituminous surfacing is used to provide a high quality, allweather riding surface and to prevent moisture entering the granular base.

The two main types of bituminous surfacing are asphaltic concrete, which is used on urban roads and on freeways or highways carrying heavy traffic volumes in
rural areas; and sprayed bituminous seals, used on other rural highways and main roads.

## Asphaltic Concrete Production

A record 650,838 tonnes of asphalt were spread during the year, a $100 \%$ increase over the previous year and 148,126 tonnes more than the previous peak usage in 197980. This figure is another reflection of the extra funds available for roadworks during 1983-84.
The Department's Central Asphalt Depot
at Granville continued to produce the bulk of its requirements for roadworks within a 100 km radius, with the smaller Bellambi plant supplying the lllawarra area.

Of the total asphalt laid, the Department's plants produced 377,379 tonnes, an increase of 43\% over 1982-83, while commercial plants supplied 273,459 tonnes, a huge 343\% increase over the previous year.

The recycling of aphaltic concrete is now a routine process at the Granville plant. When pavements have deteriorated through age and cracking, they are generally removed by cold milling. The re-use of valuable materials in reclaimed asphalt pavements leads to savings in energy and costs. Most asphalt mixes now contain about 20\% of reclaimed material, a percentage which is expected to rise as the process is further refined. Some 12,730 tonnes of reclaimed asphalt pavement were recycled at Granville during the year.

## Sprayed Bitumen

The Department operates 12 bitumen sprayer units throughout the State, with capacities of 8,500 or 5,000 litres. Thirteen smaller sprayers work on priming, sealing and patching in country Divisions. Contractors supplement the Department's forces where necessary. During the year, $13,141,486$ litres of bitumen were sprayed, a 2\% decrease from the previous year.

## Rubber Bitumen Seals

Since it was first tried by the Department in 1978, the use of rubber bitumen seals to extend the life of minimally cracked pavements has been refined and improved to the extent where it is now a reliable and routine maintenance treatment. Improved equipment and methods for mixing and digestion of scrap rubber in bitumen are continually being developed to further enhance its effectiveness.

During the year 5,257,511 litres of rubber bitumen were sprayed, an increase of 125\% over the previous year.

## Stabilising Plant

The recent purchase of a Roadbase Stabilising Plant has introduced a new era in the cement/lime stabilising of road base materials. Local road materials often require the addition of lime or cement during construction to ensure satisfactory performance. To date this has been done by spreading the lime or cement over the prepared roadbase surface and using scarifiers or rotary hoes and water sprays. This makes it difficult to achieve accuracy and uniformity of spreading and mixing; traffic must be diverted; and dust and steam from the heat generated in the process are often a nuisance.

The new stabilising plant operates next to the work site where materials can be mixed accurately in a pugmill before being spread on the roadbase. The mobile unit is a more efficient method of mixing roadbase materials and should result in more durable pavements, without the disadvantages of on-site mixing.

## Planning and Design

To ensure that all roads constructed by or for the Department are correctly planned and designed, many in-depth studies are carried out on a continuing basis.

In the City of Sydney, and in centres such as Newcastle and Wollongong, major transport studies to assess and predict the needs for the movement of people and goods are continuously being undertaken. In the rural areas and smaller urban centres, route location studies are similarly being carried out and periodically reassessed.

Naturally, these studies and the determinations from them must be coordinated with State, Regional and Town Planning generally, and so the Department maintains close liaison with the Department of Environment and Planning and the planning officers within local Councils.

The Department has always examined social and environmental factors in its planning. Over recent years, this work has been co-ordinated and reported under the 1979 Planning and Environment Act.

The design of roads and bridges is a technical exercise which must be conditioned by judgement and artistic appreciation. The project that is welldesigned will also have a pleasing appearance. Road design is carried out in all the Department's Divisional Offices, and a Design Section is retained in Head Office for research, development, design quality control and some freeway design. Bridge design may be undertaken by consultants or by the Department's own team of bridge designers in Head Office.

People are becoming increasingly interested in road location and appearance. The Department holds many public meetings each year, either through local Councils or by using its own resources. At these meetings, residents can express their feelings and wishes and the Department is often able to accommodate design changes accordingly.

## Urban Road Planning

A particular planning concern at present is the definition of long-range strategies for Main Road development in areas of proposed or potential urban growth. Although a continuing task, this strategic planning has special current relevance because the Department of Environment and Planning is presently updating its Sydney Region Outline Plan. The Department's work, which is being done in conjunction with the Department of Environment and Planning, and the Transport Advisory Committee, will shortly lead into specific corridor studies of future Main Road needs in developing areas.

Reviews must also be undertaken of specific planning proposals formulated in earlier years. During the past year two such proposals for new roads, dating from 1951, were re-evaluated. The first was for a route from Summer Hill to Redfern, known as the Bedford Street route. The second was for a deviation of the Concord Road route between Strathfield Station and Parramatta Road. In both cases it was decided to abandon the proposal. Other proposals in the inner suburban areas will be examined in the coming year, including the planned widening of Cleveland Street, South Sydney, and Tebbutt Street, Leichhardt.

Corridor investigations have continued with a view to making firm proposals for future main roads in the southern part of Sydney, as well as for the 'Werrington' and 'Greystanes' routes in the western area of the city. A planning scheme reservation has been requested for a section of the Werrington route, which is planned eventually to form a link between the Western and Castlereagh Freeways. Investigations for the Greystanes route, to run from Prospect to Wetherill Park, are at an advanced stage.

## Town Planning

As well as assessing the need for, and best locations of, future roadworks in urban areas, the Department must monitor and react to policies and plans prepared by other organisations in order to safeguard the Department's interests.
Much of this work in the past year was
connected with the examination of draft or gazetted Local Environmental Plans. This included ensuring that reservations were correctly provided for future Main Road construction, and that content of the plan documents was consistent with Departmental policies. Draft guidelines for examining such plans are currently being finalised. When published, these will enable more of this work to be undertaken in Divisional Offices.
A second major area of work was in connection with the rezoning of surplus land to be disposed of by the Department (see also 'Residue Properties', page 60).

## Country Road Investigations

Investigation of the need for new rural freeways and roads, and the requirements to relocate some roads, are continuing Departmental activities. Aerial photography and photogrammetry are important aids in these exercises. Last year all external photogrammetric plotting for the Department was carried out by the New South Wales Central Mapping Authority in Bathurst. The Department works closely with the Lands Department, the Water Resources Commission and the Department of Mineral Resources in considering road locations and levels.

An artist's impression of the completed viaducts across Darling Harbour. This $\$ 63$ million project will provide expressway conditions from the city to White Bay and Victoria Road by 1988.



This aerial view of Singleton has a superimposed artist's impression of the new bridge (on the right) which will carry the New England Highway over the Hunter River

The past year saw the completion of investigations into the proposed route of a major deviation of the Hume Highway over Cullerin Range, near Gunning. Investigations for updating the route of the Sydney-Brisbane National Highway (the Pacific and New England Highways) are continuing in areas extending from south of Newcastle to beyond Newcastle to the west.

Analysis of the traffic surveys conducted at Orange and in the Branxton-NewcastleWyong areas during 1982-83 has been completed. The resulting statistics will contribute to benefit/cost analysis of future road planning options in these areas.

The construction of rural freeways results in changes in the function of other roads in the vicinity, sometimes warranting their reclassification. Such is the case with the old Hume Highway between Liverpool and Mittagong, where the majority of traffic now uses the new route of the F5 - South Western Freeway. Changes in classification to accommodate this will be announced in due course. Similarly, reviews will be made in the Wyong and Gosford areas where sections of the F3 - Sydney-Newcastle Freeway are now taking traffic from the Peats Ridge and Pacific Highway routes.

Consideration is being given to the functions of, and responsibility for, roads
raversing State National Parks
A study was carried out during the year of the economic and planning implications of the replacement of 18 vehicular ferries by bridges, with the assessed cost of new ferries and their lifetime maintenance being compared with the cost of bridge construction in each case

Of particular concern to many country towns is the question of bypasses. The advantages of removing heavy through traffic from town centres are obvious, but such new routes are highly expensive to construct, and there may be objections from local shopkeepers who feel that a bypass also removes potential trade. The development of other existing routes within towns is being considered as an alternative to completely separate bypass construction. However, any such proposal presents its own problems, and each case must be assessed independently.

## Environmental Assessments

An awareness of environmental issues and of related legislation is vital to an engineering organisation such as the Department. All construction operations must meet the requirements of the 1979 Environmental Planning and Assessment Act. As well as preparing Environmental Impact Statements for major construction proposals and undertaking reviews of environmental factors for other projects, the Department also examines and comments on Statements from other organisations.

Highlights of the past year's work included the following:

- The exhibition of the completed Environmental Impact Statement for a 35 km length of the F5 - South Western Freeway/Hume Highway route between Aylmerton and Hoddles Cross Roads, bypassing Mittagong and Berrima. (See 'Major Route Development', page 15.)

Also in regard to this project, studies have been carried out to identify and thereby minimise possible ill effects caused to wild life in the area during and after construction, and there will be continuing monitoring of the situation

- The completion of an assessment report and subsequent determination (by decision of Cabinet) on the Wahroonga-Berowra section of the F3 - Sydney-Newcastle Freeway. (See 'Major Route Development', page 11.)
- The preparation of an assessment report on the F3 - Sydney-Newcastle Freeway between Wallarah Creek and Wallsend. A determination by the Commissioner was made for the section between Wallarah Creek and Freemans Waterholes.
- The preparation (still in progress) of environmental impact statements for the East Charlestown Bypass (near Newcastle), the Glebe Island Arterial Route (Pyrmont), and the Moorebank to Beverly Hills section of the F5 - South Western Freeway.
- The continuation of environmental studies relating to the Federal Highway between Collector and the ACT Border, and particularly to the section beside Lake George.
- The preparation of interim guidelines for erosion and sedimentation control on new roadworks.

Work has continued on the study of traffic noise.

There has been a continuing use of consultants' services to undertake archaeological studies in areas where aboriginal rock carvings may be affected by road proposals, In such cases, the treatment appropriate in each instance is worked out with the National Parks and Wildlife Service

## Planning Data

The Department continues to develop and contribute to various road data information systems. The availability of accurate and comprehensive statistics will lead to more effective management of the road system and to improved efficiency and economy in maintenance and construction programs.

In February 1984 the NAASRA Roads Study, being a comprehensive assessment of the Australian road network, was completed after almost four years of effort. The Department contributed throughout. The Study eventuated in separate reports on rural arterial, urban arterial and local roads, as well as providing a national
overview and summary reports for the total network. Each report analyses the findings for each of the States and Territories. Separate technical reports were produced on funding and expenditure, road travel, employment effects, the use of the computer suite of programs known as NIMPAC (NAASRA Improved Model for Project Assessment and Costing), and other topics.

Meanwhile, updating of the NAASRA Data Bank continues progressively. The Data Bank will be used in future studies, including the 1984-85 Review of Road Vehicle Limits.

The Department is establishing its own road data management systems, and significant progress has been made in developing ROADLOC, a Road Data Location Reference System. This will provide a standard reference system for all the Department's road related information. Documentation is almost complete and ROADLOC should soon be in use.

Work began during the year on the Department's Road Data Systems (ROADATA) Study, aimed at establishing a database to facilitate the management of road-related information. This study follows on from a consultant's review of the Department's various road data systems.

An artist's impression of the new bridge to be built alongside the existing bridge over the Parramatta River between Ryde and Concord. The new bridge will provide three southbound lanes, while the existing bridge will carry three lanes of northbound traffic.

## Landscape Design

An important early part of planning a new route is the evaluation of its likely visual impact on the environment, followed by landscape design input. Direct consultation is often maintained with community interest groups, local Councils and other Government organisations.

During the year, 38 landscape plans were prepared for routes throughout the State, including the F4 - Western Freeway at Homebush, the Parramatta Bypass, the Berrima and Marulan Bypasses on the F5/Hume Highway route, and the F6 - Southern Freeway at Wollongong. These landscape designs call for tree planting and revegetation using native seeding to create low maintenance forested corridors along available freeway reserves.

## Road Design

The upsurge in road construction resulting from the Commonwealth Government's Australian Bicentennial Road Development Program and the State Government's increased funding for roads has required the Department to increase its design output. Design work content has increased because of the need to show greater detail on plans so that they become suitable for contract specifications.

To meet these needs, the use of computer-aided design and drafting techniques is expanding and the services of consulting engineers were obtained for certain jobs.


Major road designs completed during the year included:

- F3 - Sydney-Newcastle Freeway - one length at Ourimbah and two lengths north of Morisset;
- F5 - South Western Freeway southern section of Berrima Bypass;
- Hume Highway - the Marulan Bypass.

Major designs nearing completion or well in hand include:

- F3 - Sydney-Newcastle Freeway - the section between Wahroonga and Berowra;
- F4 - Western Freeway - two sections at Parramatta;
- F5 - South Western Freeway northern section of Berrima Bypass;
- F6 - Southern Freeway - first stage work and part interchange at Yallah.

Among other designs in progress are:

- F2 - Gore Hill Freeway;
- F5 - South Western Freeway Moorebank to Beverly Hills section and Mittagong Bypass;
- Hume Highway - Goulburn Bypass;
- State Highway No. 23 - first section of Wallsend to Sandgate Deviation at Newcastle.


## Bridge Design

## The demands of the Australian

 Bicentennial Road Development and National Roads Construction Programs, as well as the need to replace or rehabilitate an increasing number of old bridges, have had a marked effect on bridge design output during 1983-84. Designs for 132 new, or widened and rehabilitated, bridges were completed, more than double the number produced in the previous year.This marked increase in design production was achieved at little extra cost by an overall increase in efficiency, and also by:

- using standard bridge components and adapting previous bridge designs to suit new sites;
- engaging outside contract drafting organisations to assist in the preparation of final drawings; and
- employing consulting engineers more effectively to assist in various phases of design work.

Major designs completed in 1983-84 were for the first sections of the 1.8 km viaduct of the F4 - Western Freeway between Granville and Parramatta, and for 26 new bridges on various sections of the F3 - Sydney-Newcastle Freeway.

Still in hand are designs for the duplication of Ryde Bridge over the Parramatta River and the duplication of the bridge over the entrance to Lake Macquarie at Swansea.

The Department continued to examine bridge design proposals put forward by Councils and other Government or private organisations. Most of these bridges will be built on classified main roads but a number are sited on local roads which are eligible for a subsidy from Commonwealth Grants for Local Roads.

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## Year in Brief

1983-84


## Statement of Receipts and Payments for All Funds for the Ye



## ed 30 June 1984

| County of Cumberland Fund \$ | Country Fund | Commonwealth Fund <br> \$ | Traffic Facilities (Note 1) | Sydney Harbour Bridge Accounts | $\begin{gathered} \text { Total } \\ \text { 1983-84 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |


| 76,549,932 | 198,770,661 |  | 30,000,000 | 1,600,000 | 306,920,593 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 10,631,090 |  | 10,631,090 |
| 20,212,323 | 10,106,161 |  |  |  | 30,318,484 |
| 26,000,000 | 26,000,000 |  |  |  | 52,000,000 |
|  | 15,000,000 |  |  |  | 15,000,000 |
|  | 10,000,000 |  |  |  | 10,000,000 |
| 5,370,747 |  |  |  |  | 5,370,747 |
| 6,673,901 |  |  | 2,713,040 | 1,621,761 | 11,008,702 |
| 5,923,556 | 1,818,649 |  |  | 1,024,910 | 8,767,115 |
| 618,968 | 928,357 |  |  |  | 1,547,325 |
| 988,313 | 6,094,326 |  | 1,356,099 | 544,238 | 8,982,976 |
|  | 12,400,000 |  |  |  | 12,400,000 |
| 2,996,436 | 285,886 |  |  | 793,812 | 4,076,134 |
| 983,771 | 2,641,051 |  |  |  | 3,624,822 |
| 46,317,947 | 284,045,091 |  | 44,700,229 | 5,584,721 | 480,647,988 |
|  |  |  |  |  |  |
|  |  | 114,897,511 | 2,745,489 |  | 117,643,000 |
| 40,200,000 | 33,052,000 |  |  |  | 73,252,000 |
|  |  | 52,549,000 |  |  | 52,549,000 |
|  |  | 64,573,000 |  |  | 64,573,000 |
| 24,062,000 | 10,000,000 |  |  |  | 34,062,000 |
|  | 24,743,000 |  |  |  | 24,743,000 |
|  |  | 22,519,000 |  |  | 22,519,000 |
| 323,345 | 6,641,490 |  |  |  | 6,964,835 |
| 64,585,345 | 74,436,490 | 254,538,511 | 2,745,489 |  | 396,305,835 |
| 210,903,292 | 358,481,581 | 254,538,511 | 47,445,718 | 5,584,721 | 876,953,823 |
| 6,136,174 | 5,341,589 | 17,602,931 |  | 898,121 | 29,978,815 |
| 217,039,466 | 363,823,170 | 272,141,442 | 47,445,718 | 6,482,842 | 906,932,638 |


| 84,045,216 | 134,572,323 | 99,662,737 |  |  | 318,280,276 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20,850,685 | 32,037,108 | 62,938,220 |  |  | 115,826,013 |
| 13,948,765 | 4,504,512 | 6,093,903 |  |  | 24,547,180 |
| 33,279,302 | 108,395,472 | 16,736,331 |  | 3,188,374 | 161,599,479 |
|  | 595,513 | 54,401,467 |  |  | 54,996,980 |
|  |  | 20,035,145 |  |  | 20,035,145 |
|  | 8,298,941 |  |  |  | 8,298,941 |
|  |  |  | 11,308,773 |  | 11,308,773 |
|  |  |  | 34,234,750 |  | 34,234,750 |
| 1,489,086 | 1,323,380 |  |  |  | 2,812,466 |
| 85,206 | 736,039 |  |  |  | 821,245 |
| $3,038,581 \mathrm{Cr}$. | $4,392,486 \mathrm{Cr}$. |  | 465,974 |  | 7,897,041Cr. |
| 7,797,966 | 13,824,840 | 4,899,719 | 2,368,169 | 240,000 | 29,130,694 |
| 1,754,475 | 2,631,713 |  |  |  | 4,386,188 |
| 548,699 | 470,313 |  |  |  | 1,019,012 |
| 9,037,050 | 4,441,914 |  |  | 978,000 | 14,456,964 |
| 22,605,376 | 37,862,488 |  |  | 812,037 | 61,279,901 |
| 12,299 |  |  |  |  | 12,299 |
|  | 1,112,116 |  |  |  | 1,112,116 |
| 92,415,544 | 346,414,186 | 264,767,522 | 47,445,718 | 5,218,411 | 856,261,381 |
| 328,563 | 281,625 |  |  |  | 610,188 |
| 1,005,400 | 597,245 |  |  | 107,000 | 1,709,645 |
| 2,288,149 | 1,158,460 |  |  | 33,487 | 3,480,096 |
|  | 620,250 |  |  |  | 620,250 |
| 8,644,149 | 3,205,961 |  |  | 1,021,211 | 12,871,321 |
| 204,681,805 | 352,277,727 | 264,767,522 | 47,445,718 | 6,380,109 | 875,552,881 |
| $844,050 \mathrm{Cr}$. | $262,096 \mathrm{Cr}$. |  |  |  | 1,106,146Cr. |
| 8,555,605 | 10,985,604 | 7,373,920 |  | 102.733 | 27,017,862 |
| 4,646,106 | 821,935 |  |  |  | 5,468,041 |
| 217,039,466 | 363,823,170 | 272,141,442 | 47,445,718 | 6,482,842 | 906,932,638 |

# Supplementary Information and Notes to the Statement of Receipts and Payments 

## 1. Presentation of Receipts and Payments

The Statement of Receipts and Payments summarises all the transactions of the Department of Main Roads under the five main headings shown below:

- County of Cumberland Main Roads Fund - covers the County of Cumberland area (as defined under the Main Roads Act) which is generally the Sydney Region bounded by the Hawkesbury River in the north, Bulli Pass in the south and including the Blue Mountains in the west.
- Country Fund - covers that area of the State outside the County of Cumberland.
- Commonwealth Fund - used to record expenditure of Commonwealth grants for National Roads (excluding funds transferred to the Traffic Facilities Fund) and Local Roads. Commonwealth grants for works on other classified Main Roads are recorded under the County of Cumberland and Country Main Roads Funds.
- Traffic Facilities - shows receipts and payments relating to the activities of the Department on traffic facility works. These amounts are included in the Annual Report of the Traffic Authority of New South Wales.
- Sydney Harbour Bridge Account covers transactions for the maintenance of the Bridge and the Cahill Expressway and Warringah Freeway approaches, toll collection and loan charges. Transactions relating to traffic facility work are included under the heading 'Traffic Facilities'.

While there were no material changes (compared to the previous year) in the method of classifying items of receipts and payments during 1983-84, provision has been made within the Department's accounting system to provide for accruals of leave entitlements, salaries and wages and other current or contingent liabilities. These transactions have been used in preparing the Statement of Financial Operations and Statement of Balances in this Report.

## 2. Operating and Suspense Accounts

So that the Department can provide up-to-date costs for individual works within the general framework of a receipts and payments accounting system, suspense or operating accounts have been established for selected areas of its operations.

All transactions for the purchase of stores and materials and their issues to individual works are processed through stock suspense accounts. Operating accounts are also maintained for the Department's

Central Workshop at Granville, Central Asphalt Manufacturing Plant at Granville and Traffic Signal Workshop at Rhodes.

The costs of the purchase and operation of road plant and motor vehicles are processed through operating accounts and a hire charge made to works on which the items are used. During 1983-84, purchases of plant and motor vehicles totalled $\$ 15,725,887$ of which $\$ 10,503,866$ was provided from the internal hire system and $\$ 5,222,021$ from trade-in and auction of used plant and vehicles.

The net increase or decrease in the operating and suspense accounts is shown in the receipts and payments statement under the item 'Net Transactions of Operating and Suspense Accounts'.

## 3. Cost of Individual Projects

The Department issues a separate publication titled 'Financial Appendices to the Annual Report of the Commissioner for Main Roads' which provides details of individual works of construction and maintenance carried out by the Department and Local Government bodies.

## 4. Road Cost Index

The Department's Road Cost Index, which was used to adjust money values in a number of tables and graphs in the financial section and in the section dealing with Performance Indicators, is shown in the table 'Department of Main Roads Road Cost Index'.

The index, designed to reflect cost changes in the road industry, is one specially developed by the Department.
The index is based upon the changes in the prices of 52 samples within the broad elements of wages, materials, plant, haulage and miscellaneous charges. Each sample has been allocated a predetermined weighting which is adjusted annually in line with changes in the use of the element in the works. The index is widely accepted as a measure of changes in the cost of roadworks.

The increase in the Road Cost Index for 1983-84 was less than the increase for the previous financial year due to a slowing down in the rise of cost components used in the index. The items whose rate of increase declined during the year include Wages, Workers Compensation Premiums, Materials and Plant charges.

## 5. Payments to Councils

Payments to Councils during 1983-84 were as follows:

Classified Main Roads

- Construction 60.259
- Maintenance 58.574

Local Roads

- Roads Grants Act $\quad 50.603$
- ABRD Trust Fund $\quad 19.434$
- State Funds

Total Payments
to Councils
197.087

## Department of Main Roads Road Cost Index

(Base Year - 1969-70)

| Year | Index | \% Increase Over <br> Previous Year |
| :--- | :--- | :--- |
| $1969-70$ | 100 | - |
| $1970-71$ | 108.93 | 8.93 |
| $1971-72$ | 117.10 | 7.50 |
| $1972-73$ | 128.40 | 9.65 |
| $1973-74$ | 146.22 | 13.88 |
| $1974-75$ | 187.41 | 28.17 |
| $1975-76$ | 216.87 | 15.72 |
| $1976-77$ | 243.33 | 12.20 |
| $1977-78$ | 264.43 | 8.67 |
| $1978-79$ | 281.25 | 6.36 |
| $1979-80$ | 323.18 | 14.91 |
| $1980-81$ | 373.24 | 15.49 |
| $1981-82$ | 426.69 | 14.32 |
| $1982-83$ | 496.62 | 16.39 |
| $1983-84$ | 537.89 | 8.31 |

## 6. Property Acquisitions

During the year the Department paid $\$ 33.75$ million to acquire properties for works. In the same period, sales of residue land or properties no longer required for roadworks realised $\$ 8,505,473$ in the County of Cumberland Fund and \$697,992 in the Country Fund.

## 7. Cash Balance at Treasury

The Cash Balances as at 30 June 1984 comprised:

| State Funds for Working Cash | 8.29 |
| :--- | ---: |
| Advance for Flood Damage Works | 3.13 |
| Advance from ABRD Trust Fund - |  |
| National Roads | 4.89 |
| Local Roads | 2.48 |
| Arterial Roads | 8.09 |
| Reserve for Loan Repayments | $\underline{0.14}$ |
|  | $\underline{27.02}$ |

Trust funds amounting to $\$ 5.47$ million at 30 June 1984 in the County of Cumberland and Country Funds consist mainly of group tax PAYE deductions and contractors' deposits.

## 8. Road Tolls

Gross toll receipts and collection costs are shown in the detailed statements for the Berowra to Calga and Waterfall to Bulli Pass Toll Works and the Sydney Harbour Bridge.

That proportion of tolls appropriated to tow truck services, driver aid and other traffic facilities is shown under the heading 'Traffic Facilities' in the Receipts and Payments Statements.

## 9. Contributions for Specified Works

Contributions received during 1983-84 for specified works are as follows:

State Government Departments \$M Commonwealth Government Departments 2.831

Other State Road Authorities
Councils 1.157

Private Firms and Individuals

## 10. Diesel Fuel Levy

The Business Franchise Licences (Petroleum Products) Act, 1982 from 1 August 1982 introduced licence fees for the sale of motor spirit and also for diesel fuel used, or capable of use, in propelling a diesel engined road vehicle.

The Act prescribes a fee of $8.4 \%$ to be paid on the wholesale value of motor spirit and $14 \%$ on the wholesale value of diesel fuel. The wholesale values for this purpose are determined by the Treasurer.

The fee for diesel fuel was originally equivalent to 5 cents per litre but was subsequently reduced to the equivalent of
3.57 cents per litre from 1 October 1982 and has remained unchanged from that date. The fee for super motor spirit was originally equivalent to 3 cents per litre but this was increased to the equivalent of 3.53 cents per litre from 1 November 1983.
In 1983-84 the total amount of $\$ 30.3$ million raised from fees for diesel fuel was received by the Department.
Revenue from fees for motor spirit is credited to the Consolidated Fund at the Treasury, New South Wales.

## 11. Motor Vehicle Taxation

## (i) Weight Tax and Tax Levy

Motor vehicle registration weight tax and tax levy are levied under the Motor Vehicles (Taxation) Act. These charges are collected by the Department of Motor Transport when vehicles are registered. The proceeds are paid firstly to a Treasury Statutory Trust Fund titled 'Main Roads Account (Main Roads Act, 1924)' and then distributed to the Department's County of Cumberland Main Roads Fund and Country Main Roads Fund in the following proportions in accordance with the terms of the Main Roads Act, 1924.

|  | County of <br> Cumberland <br>  <br> Main Roads | Country <br> Main |
| :--- | :---: | :---: |
|  | Roads |  |
|  | Fund | Fund |
| Weight Tax | $20 \%$ | $80 \%$ |
| Tax Levy | $50 \%$ | $50 \%$ |

This apportionment results in about 28\% of these taxes being available for the County of Cumberland Area and $72 \%$ for the Country Area.
In 1983-84, receipts from motor vehicle
taxation paid into Main Roads Funds totalled $\$ 306.9$ million compared with $\$ 265.8$ million in the previous year.

The graph titled 'Average Receipts per Vehicle from Motor Vehicle Taxation' shows that the level of tax per vehicle in 1983-84 terms has fallen from $\$ 110$ in $1974-75$ to $\$ 107$ in 1983-84. The reversal of the decline in 1975-76 and in 1979-80 was caused by a $331 / 3 \%$ increase in motor vehicle taxation rates from 1 November 1976 and $30 \%$ from 21 November 1980.
The level is now being maintained by annual adjustments of motor vehicle taxation rates to cover increases in the cost of roadworks. The formula used to determine the annual percentage adjustment is based on four relevant labour and material price indexes published by the Australian Statistician. The cost rises determined by this formula since 1980 are as follows:

| from 21.11.81 | $13.6 \%$ |
| :--- | ---: |
| from 1. 7.82 | $11.8 \%$ |
| from 1. 7.83 | $13.2 \%$ |
| from 1. 7.84 | $7.2 \%$ |

## (ii) Driver's Licence Fee and Vehicle Registration Fee

Driver's licence fees (\$15) and vehicle registration fees $(\$ 15)$ are paid into the Road Transport and Traffic Fund administered by the Department of Motor Transport. The revenue from these fees is mainly used to meet administration costs of the Department of Motor Transport and Police services in supervising and controlling traffic.

Funds from this source amounting to $\$ 10.63$ million were expended by the Department of Main Roads on traffic facility works during 1983-84.


| Number of Registered Motor Vehicles in NSW |  |  |  |
| :--- | :---: | :---: | :---: |
| Year | Number of Motor <br> Vehicles Registered | \% Increase Over <br> Previous Year | Index |
| $1969-70$ | $1,715,222$ | - | 100.0 |
| $1970-71$ | $1,821,185$ | 6.2 | 106.2 |
| $1971-72$ | $1,912,739$ | 5.0 | 111.5 |
| $1972-73$ | $2,009,238$ | 5.1 | 117.2 |
| $1973-74$ | $2,080,112$ | 3.5 | 121.3 |
| $1974-75$ | $2,186,187$ | 5.1 | 127.5 |
| $1975-76$ | $2,236,812$ | 2.3 | 130.4 |
| $1976-77$ | $2,296,203$ | 2.7 | 133.9 |
| $1977-78$ | $2,375,927$ | 3.5 | 138.6 |
| $1978-79$ | $2,246,544$ | 4.2 | 144.4 |
| $1979-80$ | $2,573,574$ | 3.9 | 150.1 |
| $1980-81$ | $2,676,911$ | 4.0 | 156.1 |
| $1981-82$ | $2,773,780$ | 3.6 | 161.7 |
| $1982-83$ | $2,825,441$ | 1.9 | 164.8 |
| $1983-84$ | $2,876,661$ | 1.8 | 167.8 |
| Excluding plant, tractors, trailers and caravans. |  |  |  |

## 12. Financial Accommodation

## (i) Semi-Government Loan Program

The Commissioner for Main Roads is empowered to borrow funds under Schedules 4,6 and 7 of the Public Authorities (Financial Accommodation) Act, 1981. The Department's borrowing allocation under the Semi-Government Loan Program for 1983-84 was $\$ 52$ million.

Contributions to a sinking fund during 1983-84 to provide for repayment of SemiGovernment term loans amounted to $\$ 2.1$ million; this together with interest received on investments provided a total of $\$ 12.871$ million for 1983-84 in the Sinking Fund to provide for loan repayment. A total of $\$ 41.6$ million from the sinking fund, made up of $\$ 15$ million in 1980-81, $\$ 9$ million in 1981-82, \$2.6 million in 1982-83 and
\$15 million in 1983-84, has been invested in inscribed stock of the Department of Main Roads and applied to construction works.

The outstanding liability in respect of loans is shown in the table titled 'Summary of Loan Liabilities as at 30 June 1984: At 30 June 1984 the Department owed the following amounts:

## Outstanding Loan Liability

| State loans | 131.44 |
| :--- | ---: |
| Treasury advances | 20.44 |
| Loans raised by Commissioner | 463.18 |
| Special internal loans | 41.60 |
| Loans outstanding | 656.66 |
| Less reserve for repayments | 74.92 |
| Net loan liability as at 30 June, | $\$ 581.74$ |
| 1984 |  |

## (ii) Treasury Advance

During 1983-84 a repayable Treasury advance of $\$ 10$ million was provided by the State Government. This advance will be repaid in 1984-85.

## (iii) Deferred Payments Contracts

Financial accommodation amounting to $\$ 5.371$ million was obtained under the New South Wales Government Deferred Payments Contracts Scheme.

Under this scheme the Department is required to make repayments in three equa annual instalments following completion of each work.

## Summary of Loan Maturities for Loans Raised by Commissioner under the Semi-Government Program

|  | Private Treaty <br> Loans <br> SM | Public Loans <br> SM | Total |
| :--- | :---: | :---: | ---: |
| $1984-85$ | 7.899 | 18.769 | SM |
| $1985-86$ | 7.924 | 86.368 | 26.668 |
| $1986-87$ | 20.526 | 14.340 | 94.292 |
| $1987-88$ | 28.275 | 2.235 | 34.866 |
| $1988-89$ | 18.963 | 3.466 | 30.510 |
| Beyond 1988-89 | 195.667 | 58.746 | 22.429 |
| Total | $\mathbf{2 7 9 . 2 5 4}$ | $\mathbf{1 8 3 . 9 2 4}$ | $\mathbf{4 6 3 . 1 7 8}$ |



This artist's impression shows how the F4 Western Freeway extension to Lapstone and the duplicate bridge at Regentville will look when completed. The bridge is being financed under the State Government's Deferred Payments Contracts Scheme.

## Summary of Loan Liabilities as at 30 June 1984

| Details | County of Cumberland Fund \$M | Country Fund \$M | Waterfall to Bulli Pass Toll Work $\$ M$ | Berowra to Calga Toll Work \$M | $\begin{gathered} \hline \text { Sydney } \\ \text { Harbour } \\ \text { Bridge } \\ \$ M \end{gathered}$ | Total \$M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. General Loan Account (State Loans) |  |  |  |  |  |  |
| State loans outstanding prior to 1 July 1983 | 56.058 | 40.954 | 2.992 | 24.643 | 8.882 | 133.529 |
| Add - loans 1983-84 | - | - | - | - | - | - |
| Less - repayments of principal and sinking funds during 1983-84 | 0.837 | 0.714 | 0.044 | 0.361 | 0.132 | 2.088 |
| State loans outstanding at 30 June 1984 | 55.221 | 40.240 | 2.948 | 24.282 | 8.750 | 131.441 |

## B. Repayable Treasury Advances

| Advances outstanding prior to 1 July 1983 | 5.948 | 5.099 | - | - | - |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Add - Advance 1983-84 | - | 10.000 | - | - | - |
| Less - principal repaid in 1983-84 | 0.328 | 0.282 | - | - | - |
| Advance outstanding at 30 June 1984 | $\mathbf{5 . 6 2 0}$ | $\mathbf{1 4 . 8 1 7}$ | - | - | - |

## C. Loans Raised by Commissioner (Semi-Govt. Loan Program)

| 1 July 1983 | 122.779 | 259.138 | 21.003 | 4.581 | 7.157 | 414.658 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Add - loans 1983-84 | 26.000 | 26.000 | - | - | - | 52.000 |
|  | 148.779 | 285.138 | 21.003 | 4.581 | 7.157 | 466.658 |
| Less - principal repaid in 1983-84 | 1.340 | 1.158 | 0.806 | 0.142 | 0.034 | 3.480 |
| Semi-Govt. loans outstanding at 30 June 1984 | 147.439 | 283.980 | 20.197 | 4.439 | 7.123 | 463.178 |
| Less - Sinking Fund <br> - Long term securities | 3.397 | 5.956 | 3.396 | 2.040 | 2.799 | 17.588 |
| - Short term securities | 2.088 | 2.952 | 0.741 | - | 0.625 | 6.406 |
| - Cash on hand | 0.013 | 0.008 | - | - | 0.013 | 0.034 |
| - Main Roads Non-Negotiable Inscribed Stock | 7.325 | 6.950 | 7.325 | 2.300 | 3.553 | 27.453 |
| Sub-total Sinking Fund | 12.823 | 15.866 | 11.462 | 4.340 | 6.990 | 51.481 |
| Net liability at 30 June 1984 - loans raised under Semi-Govt. Program | 34.616 | 68.114 | 8.735 | 0.099 | 0.133 | 41.697 |


| D. Internal Loans from Reserves for Loan |
| :--- |
| Repayments |
| Internal loans outstanding prior to 1 July 1983 |
| Add - loans 1983-84 |

## LESS

E. Toll Funds Set Aside for Loan

Repayments

| - Short term securities | - | - | - | (9.290) | - | (9.290) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Main Roads Non-Negotiable Inscribed Stock |  |  | - | (12.250) | (1.897) | (14.147) |
| Total Toll funds set aside | - | - | - | (21.540) | (1.897) | (23.437) |
| Net Loan Liability as at $\mathbf{3 0}$ June 1984 | 205.957 | 354.271 | 11.683 | 2.841 | 6.986 | 581.738 |

## Summary of Leveraged Leases as at 30 June 1984

| Lease negotiated 1981-82 | - | 7.800 | - | - | - |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Less - principal repaid in 1983-84 | - | 0.620 | - | - | - |
| Net Liability at $\mathbf{3 0}$ June $\mathbf{1 9 8 4}$ | - | $\mathbf{7 . 1 8 0}$ | - | - | - |

## Summary of Deferred Payments Contracts as at 30 June 1984

## 13. Commonwealth Grants

## (i) Roads Grants Act

The Roads Grants Act, 1981 provides for the allocation from Consolidated Revenue of specific purpose grants for roads over a five year period from 1980-81 to 1984-85 Grants are provided for the construction and maintenance of national roads, construction of arterial roads and for local roads.

The classification of roads is determined by the Commonwealth Minister in consultation with the States. The legislation requires that all construction projects on National Roads be approved by the Commonwealth Minister and be carried out by contract.

Grants totalling $\$ 243$ million were provided in 1983-84 for NSW under the Roads Grants Act. This was an increase of $6 \%$ over the grants of $\$ 229.7$ million in 1982-83.

The increases provided in Commonwealth road grants since 1974-75 have not been sufficient to provide for the cost rises in the road industry and for the increased demand for road improvements caused by the growth in the number of registered motor vehicles.
A comparison of the Commonwealth grants in constant dollar (1983-84) terms for the various road categories over the ten year period 1974-84 is provided in the bar chart titled 'Commonwealth Road Grants'

This chart shows that the cut back in grants in real terms has been directed mainly at the Arterial Road category where the grants have fallen in real terms from $\$ 175$ million in 1974-75 to $\$ 74$ million in 1983-84.

The graph titled 'Commonwealth Grants per Registered Vehicle' shows that the Commonwealth grants have failed to provide for the increased traffic needs. The graph shows the grants per vehicle in real terms falling from \$152 per vehicle in 1974-75 to $\$ 85$ per vehicle in 1983-84.

## (ii) Australian Bicentennial Road Development Trust Fund Act

The Australian Bicentennial Road Development (ABRD) Trust Fund Act, 1982 introduced a surcharge on the excise of motor spirit and diesel fuel to provide funds for a special program of road improvement works to be completed by 1988 , to coincide with the Australian Bicentenary

The Act provided for a 1 cent per litre surcharge to be applied from 17 August 1982, and a fixed rate of 2 cents per litre from 1 July 1983 until 31 December 1988. Provision has been made for unspent funds in one year to be carried over into future years. Surplus funds are invested and the interest is credited to the Fund.

No provision has been made under the Act for the ABRD Program to receive additional funds arising from indexation of fuel excise which is deposited wholly into the Federal Consolidated Revenue Fund. During 1983-84 the cash receipts and expenditure by the Department in respect of the ABRD Program were as shown in the accompanying table.


## Commonwealth Grants per Registered Vehicle

Constant Dollar (1983-84) Terms


ABRD Program Cash Receipts and Expenditure 1983-84

|  | National <br> Roads <br> SM | Urban Arterial Rural Arterial <br> Rooads <br> SM | Local <br> RM | Roads <br> SM | Total <br> SM |
| :--- | ---: | :---: | ---: | :---: | ---: |
| Advance for 1982-83 | 3.255 | 1.404 | 0.759 | - | 5.418 |
| Cash Received in 1983-84 | 64.573 | 34.062 | 24.743 | 22.519 | 145.897 |
| Total Cash | 67.828 | 35.466 | 25.502 | 22.519 | 151.315 |
| Less Advance for 1984-85 | 4.890 | 4.581 | 3.499 | 2.484 | 15.454 |
| Expenditure 1983-84 | $\mathbf{6 2 . 9 3 8}$ | $\mathbf{3 0 . 8 8 5}$ | $\mathbf{2 2 . 0 0 3}$ | $\mathbf{2 0 . 0 3 5}$ | $\mathbf{1 3 5 . 8 6 1}$ |

## (iii) Employment Generating Programs

The Department received a grant of $\$ 5.1$ million under the Wage Pause Employment Program early in 1983. Funds received under this program during the
financial years 1982-83 and 1983-84 amounted to $\$ 0.843$ million and $\$ 4.665$ million respectively.
Funds received under the Steel Region Assistance Program in 1983-84 amounted to $\$ 2.3$ million.

Amount Spent per Registered Vehicle of Total Funds Applied as shown in Accompanying Statement of Receipts \& Payments Constant Dollar (1983-84) Terms


## Receipts and Payments Summary for all Funds 1969-70 to 1983-84 in Constant Dollar (1983-84) Terms

|  | 5 Year Average 1969-74 <br> (a) \$M | 5 Year Average 1974-79 <br> (a) \$M | $\begin{gathered} 1979-80 \\ \$ M \end{gathered}$ | $\begin{gathered} 1980-81 \\ \$ M \end{gathered}$ | $\begin{gathered} 1981-82 \\ \$ M \end{gathered}$ | $\begin{gathered} 1982-83 \\ \$ M \end{gathered}$ | $\begin{gathered} 1983-84 \\ \$ M \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Receipts: |  |  |  |  |  |  |  |
| State Sources |  |  |  |  |  |  |  |
| Motor vehicle registration tax | 249.653 | 237.255 | 238.748 | 262.847 | 285.548 | 287.819 | 306.921 |
| Road maintenance contribution | 79.792 | 45.959 | 2.035 | 0.033 |  |  |  |
| Motor vehicle registration fee | 17.664 | 24.386 | 31.829 | 26.664 | 23.170 | 9.098 | 10.631 |
| Diesel fuel levy |  |  |  |  |  | 32.612 | 30.318 |
| Tolls | 27.668 | 20.743 | 16.984 | 15.731 | 13.824 | 11.369 | 11.009 |
| Deferred payments contracts |  |  |  |  |  |  | 5.371 |
| Other | 22.954 | 48.584 | 26.028 | 22.576 | 21.468 | 22.343 | 39.398 |
| Contributions |  |  |  |  |  |  |  |
| - County of Cumberland Council | 27.624 | 0.170 |  |  |  |  |  |
| - Country Councils (est.) | 19.673 |  |  |  |  |  |  |
| Sub-Total (State Revenue) | 445.028 | 377.097 | 315.624 | 327.851 | 344.010 | 363.241 | 403.648 |
| Loan Funds | 42.565 | 56.240 | 178.090 | 158.690 | 122.443 | 65.413 | 77.000 |
| Leveraged lease finance |  |  |  |  | 9.836 |  |  |
| Total - State Sources | 487.593 | 433.337 | 493.714 | 486.541 | 476.289 | 428.654 | 480.648 |
| Commonwealth Sources |  |  |  |  |  |  |  |
| Classified roads and research | 238.841 | 263.184 | 232.722 | 223.191 | 211.935 | 195.047 | 190.895 |
| Local roads | 99.169 | 58.264 | 63.502 | 61.123 | 58.343 | 53.691 | 52.549 |
| ABRD program |  |  |  |  |  | 36.497 | 145.897 |
| Employment generating programs |  |  |  |  |  | 0.912 | 6.965 |
| Total - Commonwealth Sources | 338.010 | 321.448 | 296.224 | 284.314 | 270.278 | 286.147 | 396.306 |
| From cash balance |  | 7.312 | 10.567 | 26.524 |  |  |  |
| Add to cash balance | 26.523 |  |  |  | 5.395 | 16.932 | 1.401 |
| Total Receipts | 799.080 | 762.097 | 800.505 | 797.379 | 741.172 | 697.869 | 875.553 |
| Payments: |  |  |  |  |  |  |  |
| Construction | 452.682 | 382.821 | 404.449 | 401.197 | 356.231 | 336.563 | 458.654 |
| Maintenance | 146.955 | 177.141 | 166.736 | 162.084 | 152.155 | 146.931 | 164.411 |
| Traffic facilities | 17.663 | 39.675 | 54.434 | 50.980 | 46.706 | 42.333 | 45.078 |
| Operating and suspense accounts | 3.793 | 9.722 | 14.102 | 10.192 | 3.914 | 8.584 Cr . | 7.431 Cr . |
| General administration and research | 47.769 | 42.482 | 36.653 | 37.668 | 37.346 | 34.434 | 34.338 |
| Sub-Total (Works Expenditure) | 668.862 | 651.841 | 676.374 | 662.121 | 596.352 | 551.677 | 695.050 |
| Loan charges and repayments | 41.292 | 41.244 | 59.709 | 72.706 | 85.534 | 91.701 | 97.172 |
| Sub-Total | 710.154 | 693.085 | 736.083 | 734.827 | 681.886 | 643.378 | 792.222 |
| Local roads | 88.926 | 69.012 | 64.422 | 62.552 | 59.286 | 54.491 | 83.331 |
| Total Payments | 799.080 | 762.097 | 800.505 | 797.379 | 741.172 | 697.869 | 875.553 |

[^0]
## Sydney Harbour Bridge

## Statement of Receipts and Payments for 1983-84

|  | \$ | $\begin{gathered} 1983-84 \\ \$ \end{gathered}$ | $\begin{gathered} 1982-83 \\ \mathrm{~s} \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Receipts |  |  |  |
| Transfer of motor vehicle registration tax from Main Roads Funds | [ Note (a)] | 1,600,000 | - |
| Tolls | 6,017,955 |  | 5,917,799 |
| Less cost of collection | 2,237,889 |  | 2,179,297 |
| Net tolls received |  | 3,780,066 | 3,738,502 |
| Contribution by Urban Transit Authority and State Rail Authority |  | 544,238 | 522,951 |
| Rent from properties |  | 793,812 | 683,984 |
| Interest on Sydney Harbour Bridge reserve account |  | - | 327,116 |
| Interest received on sinking fund investments |  | 1,024,910 | 845,513 |
| Total Receipts |  | 7,743,026 | 6,118,066 |
| Cash balance at 1 July 1983 |  | 898,121 | 1,940,226 |
|  |  | 8,641,147 | 8,058,292 |
| Payments |  |  |  |
| Maintenance and lighting |  | 3,188,375 | 2,183,693 |
| Provision of new driver aid facilities |  | 321,064 | 312,420 |
| Tow truck service and driver aid operations |  | 1,837,240 | 1,792,583 |
| General administration |  | 240,000 | 200,000 |
| State loan charges paid to Treasury |  | 1,085,000 | 1,074,000 |
| Interest on loans raised by Commissioner |  | 812,037 | 722,999 |
| Sinking fund and principal on loans raised by Commissioner |  | 1,054,699 | 874,476 |
| Total Payments |  | 8,538,415 | 7,160,171 |
| Cash balance at 30 June 1984 |  | 102,732 | 898,121 |
|  |  | 8,641,147 | 8,058,292 |

## Dissection of Construction and Improvement Works at Cost and their Source of Finance Position as at 30 June 1984

|  | Source of Finance |  |  |  | Total Cost \$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { State } \\ \text { Loans } \\ \$ \end{gathered}$ | $\begin{gathered} \text { Semi-Govt. } \\ \text { Loans } \\ \$ \end{gathered}$ | Toll Revenue $\$$ | $\begin{aligned} & \hline \text { Other } \\ & \text { Sources } \\ & \$ \end{aligned}$ |  |
| Bridge and original approaches | 15,708,559 |  |  | 3,352,226 | 19,060,785 |
| Removal of tram tracks and miscellaneous works |  |  | 2,375,408 |  | 2,375,408 |
| Cahill Expressway to Sir John Young Crescent | 4,512,943 |  | 4,464,327 |  | 8,977,270 |
| Warringah Freeway to Miller Street, Cammeray | 300,000 | 9,320,000 | 16,843,303 |  | $26,463,303$ |
| Driver Aid Faclities |  |  | 3,365,670 |  | 3,365,670 |
| Total | 20,521,502 | 9,320,000 | 27,048,708 | 3,352,226 | 60,242,436 |
| Total loans | 20,521,502 | 9,320,000 |  |  |  |
| Less repayments of loans to 30 June 1984 | 11,771,777 | 2,196,775 |  |  |  |
| Outstanding Loans as at 30 June 1984 | 8,749,725 | 7,123,225 |  |  |  |

[^1]
## Sydney Harbour Bridge

## Statement of Funds Employed as at 30 June 1984

|  | \$ | \$ | $\begin{gathered} 1983-84 \\ \$ \end{gathered}$ | $\begin{gathered} 1982-83 \\ \$ \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Funds Employed |  |  |  |  |
| Loans Raised to Finance Works: |  |  |  |  |
| State Loans |  |  |  |  |
| - Repaid from tolls | 9,895,345 |  |  | 9,788,345 |
| - Repaid by Commonwealth Government | 1,876,432 |  |  | 1,850,937 |
| - Amount outstanding | 8,749,725 | 20,521,502 |  | 8,882,220 |
| Loans Raised by Commissioner |  |  |  |  |
| - Repaid from tolls | 2,196,775 |  |  | 2,163,287 |
| - Amount outstanding | 7,123,225 | 9,320,000 |  | 7,156,713 |
|  |  |  | 29,841,502 | 29,841,502 |
| Works financed from Other Sources: |  |  |  |  |
| - Capital works financed from tolls |  | 27,048,708 |  | 26,727,644 |
| - Contributions by Councils and miscellaneous |  | 3,352,226 |  | 3,352,226 |
|  |  |  | 30,400,934 | 30,079,870 |
| Total Cost of Works |  |  | 60,242,436 | 59,921,372 |
| Accumulated Funds: |  |  |  |  |
| - Sinking Fund for loan repayments |  | 6,989,500 |  | 6,989,500 |
| - Reserve for loan repayments |  | 1,897,273 |  | 872,363 |
| - Working funds |  | 90,044 |  | 889,131 |
|  |  |  | 8,976,817 | 8,750,994 |
|  |  |  | 69,219,253 | 68,672,366 |

## Represented by

| Works at Cost: |  |  |  |
| :---: | :---: | :---: | :---: |
| - Bridge and original approaches | 19,060,785 |  | 19,060,785 |
| - Removal of tram tracks and miscellaneous adjustment | 2,375,408 |  | 2,375,408 |
| - Cahill Expressway to Sir John Young Crescent | 8,977,270 |  | 8,977,270 |
| - Warringah Freeway to Miller Street | 26,463,303 |  | 26,463,303 |
| - Driver aid facilities | 3,365,670 |  | 3,044,606 |
|  |  | 60,242,436 | 59,921,372 |
| Securities and Cash: |  |  |  |
| - Long term securities | 2,799,000 |  | 2,410,000 |
| - Main Roads inscribed stock | 5,450,000 |  | 2,900,000 |
| - Short term securities | 625,085 |  | 2,542,873 |
| - Cash at Treasury | 102,732 |  | 898,121 |
|  |  | 8,976,817 | 8,750,994 |
|  |  | 69,219,253 | 68,672,366 |

## Berowra to Calga Toll Work

## Statement of Receipts and Payments for 1983-84

|  | $\$$ | $1983-84$ |
| :--- | ---: | ---: | ---: |

Statement of Funds Employed as at 30 June 1984

|  | \$ | $\begin{gathered} 1983-84 \\ \$ \end{gathered}$ | $\underset{\$}{1982-83}$ |
| :---: | :---: | :---: | :---: |
| Funds Employed |  |  |  |
| Loans Raised to Finance Works: |  |  |  |
| State Loans |  |  |  |
| - Repaid from tolls | 3,500,520 |  | 3,209,020 |
| - Repaid by Commonwealth Government | 1,167,871 |  | 1,098,153 |
| - Amount outstanding | 24,281,609 |  | 24,642,827 |
| Loans raised by Commissioner |  |  |  |
| - Repaid from tolls | 1,560,586 |  | 1,418,657 |
| - Amount outstanding | 4,439,414 |  | 4,581,343 |
| Treasury advance repaid from tolls | 800,000 |  | 800,000 |
|  |  | 35,750,000 | 35,750,000 |
| Accumulated Funds: |  |  |  |
| - Sinking Fund for repayment of loans raised by Commissioner | 4,339,700 |  | 4,339,700 |
| - Reserve for loan repayments | 21,540,323 |  | 16,863,843 |
|  |  | 25,880,023 | 21,203,543 |
|  |  | 61,630,023 | 56,953,543 |

Represented by

| Works at Cost: |  |  |  |
| :--- | ---: | ---: | ---: |
| - Roads and bridges | $35,109,836$ | $35,109,836$ |  |
| - Toll office land and buildings | 640,164 | 64,164 |  |
| Investments: |  | $\mathbf{3 5 , 7 5 0 , 0 0 0}$ | $\mathbf{3 5 , 7 5 0 , 0 0 0}$ |
| - Long term securities | $2,039,700$ |  |  |
| - Main Roads inscribed stock | $14,550,000$ | $2,039,700$ |  |
| - Short term securities | $9,290,323$ | $10,500,000$ |  |
|  |  | $\mathbf{2 5 , 8 8 0 , 0 2 3}$ | $\mathbf{2 1 , 2 0 3 , 8 4 3}$ |
|  | $\mathbf{6 1 , 6 3 0 , 0 2 3}$ | $\mathbf{5 6 , 9 5 3 , 5 4 3}$ |  |

[^2]
## Waterfall to Bulli Pass Toll Work

## Statement of Receipts and Payments for 1983-84

|  | \$ | $\begin{gathered} 1983-84 \\ \$ \end{gathered}$ | $\begin{gathered} 1982-83 \\ \$ \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Receipts |  |  |  |
| Tolls | 1,962,802 |  | 1,842,451 |
| Less cost of collection | 885,775 |  | 881,361 |
| Net tolls received |  | 1,077,027 | 961,090 |
| Interest received on sinking fund investments |  | 1,333,775 | 1,302,388 |
| Transfer of motor vehicle registration tax from County of Cumberland Fund | [Note (a)] | 2,816,804 | 3,043,606 |
| Total Receipts |  | 5,227,606 | 5,307,084 |
| Cash balance at 1 July 1983 |  | - | - |
|  |  | 5,227,606 | 5,307,084 |
| Payments |  |  |  |
| Maintenance and lighting |  | 545,056 | 497,587 |
| Tow truck service and driver aid operations |  | 263,506 | 212,715 |
| General administration |  | 50,000 | 55,000 |
| State loan charges paid to Treasury |  | 359,010 | 354,830 |
| Interest on loans raised by Commissioner |  | 1,796,696 | 1,810,972 |
| Sinking fund and principal on loans raised by Commissioner |  | 2,213,338 | 2,375,980 |
| Total Payments |  | 5,227,606 | 5,307,084 |
| Cash balance at 30 June 1984 |  | - | - |
|  |  | 5,227,606 | 5,307,084 |

## Statement of Funds Employed as at 30 June 1984

|  | s | $\begin{gathered} 1983-84 \\ \$ \end{gathered}$ | $\begin{gathered} 1982-83 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Funds Employed |  |  |  |
| Loans Raised to Finance Works: |  |  |  |
| State Loans |  |  |  |
| - Repaid from tolls | 356,130 |  | 320,430 |
| - Repaid by Commonwealth Government | 95,424 |  | 86,898 |
| - Amount outstanding | 2,948,446 |  | 2,992,672 |
| Loans raised by Commissioner |  |  |  |
| - Repaid from tolls | 7,403,398 |  | 6,597,153 |
| - Amount outstanding | 20,196,602 |  | 21,002,847 |
|  |  | 31,000,000 | 31,000,000 |
| Accumulated Funds: |  |  |  |
| - Sinking Fund for repayment of loans raised by Commissioner |  | 11,461,657 | 10,054,564 |
|  |  | 42,461,657 | 41,054,564 |
| Represented by |  |  |  |
| Works at Cost: |  |  |  |
| - Roads and bridges including debt charges up to time of opening | 30,338,486 |  | 30,338,486 |
| - Toll office land and buildings | 661,514 |  | 661.514 |
|  |  | 31,000,000 | 31,000,000 |
| Investments: |  |  |  |
| - Long term securities | 3,396,000 |  | 1,836,000 |
| - Main Roads inscribed stock | 7,325,000 |  | 3,900,000 |
| - Short term securities | 740,657 |  | 4,318,564 |
|  |  | 11,461,657 | 10,054,564 |
|  |  | 42,461,657 | 41,054,564 |

The above receipts and payments are included in the statement shown on pages 36 and 37 under the headings 'County of Cumberland Fund and 'Traffic Facilities'.
Note (a). The funds for the construction of the Waterfall to Bulli Pass Toll Work were provided from loans on the basis that a major portion of the loan charge: would be met from general revenue in the County of Cumberland Fund.

## Statement of Financial Operations for the Year ended 30 June 1984 excluding Traffic Facilities Work

| $1982-83$ $\$ 000$ | Source of Funds |  | \$ 000 | \$ 000 |
| :---: | :---: | :---: | :---: | :---: |
| Grants and Taxes |  |  |  |  |
| Commonwealth |  |  |  |  |
| 227,527 | - Roads Grants Act |  | 240,698 |  |
| 33,700 | - Australian Bicentennial Road Development Trust Fund Act |  | 145,897 |  |
| 843 | - Employment Generating Programs |  | 6,965 |  |
| 262,070 |  |  | 393,560 |  |
| State |  |  |  |  |
| 238,661 | - Motor Vehicle Registration Tax | (Note 3)* | 276,921 |  |
| 30,113 | - Diesel Fuel Levy |  | 30,318 |  |
| - | - Flood Restoration Grant |  | 12,400 |  |
| 4,116 | - Contributions for Specified Works |  | 7,627 |  |
| 272,890 |  |  | 327,266 |  |
| 534,960 | Total Grants and Taxes |  |  | 720,826 |
| Operations |  |  |  |  |
| 14,721 | - Sydney Harbour Bridge and Toll Works |  | 15,302 |  |
| 7,852 | - Rents from Properties for Works |  | 9,015 |  |
| 2,994 | - Miscellaneous |  | 3,625 |  |
| 25,567 | Total Operations |  |  | 27,942 |
| Other |  |  |  |  |
| 5,182 | - Interest | (Note 6)* | 6,505 |  |
| 57,800 | - Loans - Semi-Government Program <br> - Repayable Treasury Advance |  | $\begin{aligned} & 52,000 \\ & 10,000 \end{aligned}$ |  |
| - | - Deferred Payments Contracts | (Note 2)* | 5,371 |  |
| 5,149 | - Sale of Properties No Longer Required |  | 9,203 |  |
| 68,131 | Total Other |  |  | 83,079 |
| 628,658 |  |  |  | 831,847 |

[^3]| $1982-83$ $\$ 000$ | Application of Funds |  | \$'000 | \$ 000 |
| :---: | :---: | :---: | :---: | :---: |
| Construction and Maintenance of Roads |  |  |  |  |
| State Roads |  |  |  |  |
| 285,610 | - Construction and Rehabilitation |  | 431,629 |  |
| 28,426 | - Property for Roadworks |  | 33,751 |  |
| 132,724 | - Maintenance |  | 160,026 |  |
| 446,760 |  |  | 625,406 |  |
| 50,315 | Local Roads |  | 83,331 |  |
| 497,075 | Total Construction and Maintenance |  |  | 708,737 |
| Operations |  |  |  |  |
| 29,004 | - Administration and Research | 31,673 |  |  |
|  | - Sydney Harbour Bridge and Toll Works | (Note 4)* | 7,006 |  |
| 4,223 | - Collection Costs 4,293 |  |  |  |
| 2.762 | - Traffic Facilities |  |  |  |
|  |  | 7,006 |  |  |
| 2,329 | - Property for Works Administration |  | 3,634 |  |
| 3,717 | - Rental Property Expenses |  | 4,664 |  |
| 42,035 | Total Operations |  |  | 46,977 |
|  | Other |  |  |  |
| 64,712 | - Interest and Loan Expenses | (Note 6)* | 72,946 |  |
| 5,805 | - Capital Debt Repayments |  | 5,801 |  |
| - | - Leveraged Lease Instaiment | (Note 5)* | 1,732 |  |
|  | - Deferred Payments Contracts | (Note 2)* |  |  |
| - | - Interest and Other Charges |  | 12 |  |
| 70,517 | Total Other |  | 80,491 |  |
| 609,627 |  |  | 836,205 |  |
| 18,862 | Net Increase (Decrease) in Monetary Assets | (Note 7)* |  | $(3,252)$ |
| 169 | Variation in Trust Accounts |  |  | $(1,106)$ |
| 628,658 |  |  |  | 831,847 |

## Statement of Balances as at 30 June 1984

| $1982-83$ <br> $\$ 000$ |  | $\$ \prime 000$ |
| ---: | :--- | ---: |
|  | Capital Debt - | $\$ 983-84$ |
| 144,577 | Loans provided from State Loan Allocation | $\$ 000$ |
|  | Loans raised under Semi-Government Program: |  |
| 412,807 | - Stock held by Outside Bodies | 151,878 |
| 1,851 | - Stock held by Department | 457,069 |
| 26,600 | Loans provided from Reserves for Loan Repayments | 6,109 |
| $\mathbf{5 8 5 , 8 3 5}$ |  | 41,600 |



Current Assets -

| Cash at Treasury: |  |  |
| :---: | :--- | :---: |
| 4,853 | - General Purposes | 7,792 |
| 5,360 | - Trust Accounts (mainly PAYE Tax) | 5,468 |
|  | - Advances for 1984-85 Works: | 15,454 |
| 5,418 | • Commonwealth (ABRD) | 3,772 |
| - | - State (Local Roads) | - |
| 14,348 | - Roads Grants Act | 32,486 |
| 29,979 |  | 4,618 |
| 3,687 | Debtors | 18,419 |
| 19,729 | Stores (at Cost) |  |
| $\mathbf{5 3 , 3 9 5}$ |  | $\mathbf{5 5 , 5 2 3}$ |
| $\mathbf{3 6 6 , 2 9 6}$ |  | $\mathbf{4 0 2 , 2 1 2}$ |


|  | Less Current Liabilities - |  |  |
| ---: | :--- | ---: | ---: |
| 4,980 | Creditors | (Note 9) | 9,541 |
| 5,360 | Trust Accounts (mainly PAYE Tax) | 5,468 |  |
| 53,200 | Leave Entitlements | (Note 10) | 56,332 |
| $\mathbf{6 3 , 5 4 0}$ |  | $\mathbf{7 1 , 3 4 1}$ |  |
| $\mathbf{3 0 2 , 7 5 6}$ |  | $\mathbf{3 3 0 , 8 7 1}$ |  |
| $\mathbf{2 8 3 , 0 7 9}$ | Net Monetary Liability | $\mathbf{3 2 5 , 7 8 5}$ |  |
| B. N. Loder |  | E. J. Hanion |  |
| COMMISSIONER FOR MAIN ROADS |  | CHIEF ACCOUNTANT |  |
| $\mathbf{1 2}$ September 1984 | $\mathbf{1 2}$ September 1984 |  |  |

The accounts of the Department of Main Roads for the year ended 30 June 1984 have been audited in accordance with Section 34 of the Public Finance and Audit Act, 1983
In my opinion, the statement of financial operations, the statement of balances and the accompanying summary of loan liabilities, read in conjunction with the notes thereto, comply with Section 41(4) of the Act and exhibit a true and fair view of the financial position at 30 June 1984 and transactions for the year then ended.

## Notes to Statement of Financial Operations and Statement of Balances

## 1. Format of Accounts

During 1983-84 the Public Finance and Audit Act, 1983, was introduced with particular provisions relating to the form of accounts to be kept by statutory bodies.

Section 41 of the Act provides that a statutory body shall keep accounts and records in relation to all of its operations and that the statement of accounts shall be in a form approved by the Auditor-General (having regard to current accounting standards and industry practices relating to a statutory body).

Following an experimental format in the presentation of the accounts by the AuditorGeneral in his report for 1982-83, statements for 1983-84 have been prepared on the basis of the accrual of significant items. Owing to the nature of some items, the accruals have been assessed on the latest information available.

With the exception of the costs of tow truck operations and other driver aid works on the Sydney Harbour Bridge and the Toll Works, transactions on the Traffic Facilities Fund have been excluded from this statement as they are included in the Annual Report of the Traffic Authority of New South Wales.

The Statement of Balances has been prepared to show significant items of Assets and Liabilities of the Department as at 30 June 1984.

## 2. Deferred Payments Contracts Scheme

Financial accommodation amounting to $\$ 5.371$ million was provided for construction work in the year 1983-84 under the New South Wales Government Deferred Payments Contracts Scheme

Revenue funds to meet the accommodation will be required in three equal annual instalments following completion of each work. There were no capital repayments under this scheme in 1983-84.

## 3. Motor Vehicle Taxation

This item excludes $\$ 30$ million Motor Vehicle Taxation allocated to the Traffic Facilities Fund.

## 4. Toll Works

The cost of toll operations represents the cost of collections ( $\$ 4.293$ million) and a contribution of $\$ 2.713$ million to the Traffic Facilities Fund to cover charges in respect of tow truck services, driver aid and other traffic facility works.

Maintenance and lighting costs of the Toll Works and Sydney Harbour Bridge are shown under maintenance of state roads in the Statement of Financial Operations.

## 5. Leveraged Lease Instalment

During 1981-82 the Department entered into a leveraged lease arrangement over plant and trucks for $\$ 7.8$ million and is liable for rental and expenses totalling $\$ 13.520$ million payable in eight annual instalments which commenced 1 October 1983.

In addition, the Department is committed to a payment of about $\$ 1.4$ million being the residual value of the equipment ( $17.55 \%$ of equipment cost) at the end of the lease term.

Under the lease agreement, the Department is to have no title to the equipment at the expiration of the term of the lease but does have an option of renewal for a further term of eight years at a rental to be determined.

## 6. Interest

Amounts shown in the Statements for interest include $\$ 0.562$ million in respect of the Department's holdings of negotiable securities issued for Department of Main Roads Public Loans.

## 7. Movement in Monetary Assets

The decrease in monetary assets of $\$ 3.252$ million is represented by:

| Increase in cash | $\$ \mathrm{M}$ |
| :--- | :--- |
| Decrease in sinking fund <br> investments | 2.507 |
| Increase in debtors | 2.129 Cr |
| Total Debits | 0.931 |
| Less | 1.309 |
| Increase in creditors | 4.561 |
| Net Decrease in monetary <br> assets | 3.252 |

## 8. Fixed Assets - Land and Buildings

## (i) Land and Buildings Used for Administration Purposes

Properties under this category are currently valued at $\$ 47.431$ million based on information contained within the Department's records. A physical inspection of properties has not been carried out.

## (ii) Staff Housing

These properties have been assessed on a similar basis to land and buildings used for administration purposes and have a current value of $\$ 14.173$ million.

## (iii) Rented Properties

Other than staff housing, the Department owned 2,096 income-producing properties, which have a book value total of $\$ 82.652$ million.

## (iv) Properties Acquired for Roadworks No Longer Required

The book value of residues being the land surplus to current requirements for roadworks is $\$ 35.666$ million.
Because of the very large number of individual residues involved, mostly small in size, the valuation of each property would involve considerable time and effort, but the Department will progressively update valuations to ensure they are representative of current market values.
Properties not required for roadworks sold in 1983-84 realised $\$ 9.2$ million.

## 9. Creditors

The amount of $\$ 9.541$ million comprises: \$M
Sundry creditors for stores and materials 8.02

Payroll \& other cyclic expenditures 1.52

Total
9.54

## 10. Leave Entitlements

The amount of $\$ 56.332$ million included in the Statement of Balances comprises:

Accrued annual leave 13.1
Assessed long service leave 43.2
Total Leave Entitlement 56.3
The amounts are based on salary and wage rates applicable at 30 June 1984.
The long service leave calculation is based on entitlement for those employees who have the basic 10 years qualifying service.

## 11. Outstanding Commitments

The outstanding commitment is represented by:

Executory contracts 160
(The value of work to be completed on contracts let as at 30 June 1984)
Purchase of road plant, equipment and motor vehicles

9
(The face value of unfulfilled orders placed as at 30 June 1984)

| Total Outstanding Commitment | 169 |
| :--- | :--- |

Deferred superannuation contribution 256
(contingent liability)
Total 425

The amount calculated as the Department's deferred superannuation contribution (\$256M) to the State Superannuation Fund and the New South Wales Retirement Fund is an internal assessment only. The assessment is based on an actuarial review of the liability of a similar sized State Authority.

## Budget for 1984-85

The Year Ahead



## Traffic Management and Safety Measures

## Traffic Authority of New South Wales

Under the Traffic Authority Act, the Department is responsible for the implementation of a program of specific traffic works, financed from the Traffic Facilities Fund. The 1983-84 expenditure on traffic facilities such as intersection improvements, traffic signals, roundabouts, emergency services, driver aid schemes, signs and roadmarking was $\$ 47.5$ million.

As the operating arm of the Traffic Authority of New South Wales, the Department undertakes the installation of traffic control devices on Main Roads. Local Councils have a similar responsibility for local roads. The Department liaises with Councils through their Traffic Committees, which continue to provide close cooperation between authorities involved with traffic control.

## New Traffic Flow Committee

At the instigation of the Minister for Roads, the Hon. L.J. Brereton, a Ministerial Committee on Main Road Traffic Flow has been established to ensure that the work of major Departments concerned with roads and road transport is effectively coordinated to improve traffic flow. The Committee consists of the Minister for Roads, the Minister for Transport, the Minister for Police and the Minister for Local Government, as well as representatives of the four Departments.

## Accident Blackspots

Priority continued to be given to corrective treatment at intersections identified as having the worst accident record.

These locations have been identified as blackspots by their accident record over a two-year period. The majority of sites now listed have recorded 27 or more accidents involving fatal or serious injury, or extensive vehicle damage.

The Department has been taking corrective action at blackspots for a number of years and each of the sites treated is monitored to ensure that the accident rate has been effectively reduced, thereby warranting deletion of the site from the blackspot list.

During 1983-84 the accident potential at 37 of these intersections was reduced by the installation of new traffic signals, the reconstruction or rephasing of existing signals, skid resistant surfacing, median closures, or channelisation and the construction of a roundabout.

## Routine Maintenance and Operations

The Department undertook all routine operation, maintenance and emergency repair work of traffic facilities, including traffic signals, in the Sydney, Wollongong and Newcastle areas. Elsewhere, signal maintenance was carried out by the local electricity supply authority for the Department, while other traffic facilities were maintained by the Department or by the local Council, as mutually convenient.

## Intersection Control

The program of State-wide intersection control, involving the establishment of a road hierarchy plan in all Council areas and relevant signposting of all road junctions, is expected to be completed by the end of 1984.

## Motorways

Proclamation as a Motorway under the Main Roads Act enables the Department to limit access to a road from abutting property. This improves safety by eliminating unnecessary traffic conflict. During the year 23 motorway proclamations were approved, covering a total length of 67.5 km .

## Clearways

New clearways were established at:

- Pittwater Road - Hawkesbury Avenue, Dee Why to Garden Street, North Narrabeen;
- Marion Street - Olympic Parade,

Bankstown to Owen Road, Georges Hall;

- Sackville Street - Polding Street,

Fairfield to Bartley Street, Cabramatta;

- Corrimal Street - Bourke Street, North

Wollongong to Keira Street, Coniston;

- Princes Highway - Moss Vale level crossing, Unanderra to Keira Street, Wollongong;
- Princes Highway - Bellambi Lane,

Russell Vale to Crown Street, Wollongong:

- Five Islands Road - Princes Highway,

Figtree to King Street, Warrawong;

- Springhill Road - Five Islands Road,

Cringila to Keira Street, Coniston.

## Speed Zoning

New speed zones and the extension of existing speed zones during the year increased the lengths of $60 \mathrm{~km} / \mathrm{h}$ and 80 $\mathrm{km} / \mathrm{h}$ zones by 94 km and 140 km respectively.

Intersection realignment work underway at a blackspot in Fairfield where Polding Street and The Horsley Drive intersect.


## Traffic Signals

Sixty-one new sets of traffic signals were brought into service during the year, and two sets were removed, bringing the total number in service at 30 June 1984 to 2,005, distributed as shown in Table 5.

Seventy-four sets of traffic signals were reconstructed because of changing traffic factors or road reconstruction. Temporary signals were installed at three locations to assist in the safe movement of traffic at the site of roadworks.

## Computer Linking of Traffic Signals

The connection of signalised intersections to the Sydney Co-ordinated Adaptive Traffic System (SCATS) and to similar systems in the Wollongong and Newcastle urban areas continued during the year.

A total of 1,104 intersections are now connected to SCATS under computer control. The system includes a central supervisory computer at the Department's Traffic Control and Emergency Centre, 12 regional computers at key locations in the metropolitan area, and at Newcastle and Wollongong.

Through this system, the operating cycles of connected traffic signals are controlled and co-ordinated in response to traffic flows and conditions. Travel time surveys (see page 56 ) indicate that SCATS is contributing significantly to keeping traffic flowing on urban arterial roads. As well as monitoring and adjusting to traffic flows, the system provides a direct means of checking the effective operation of signal equipment.

## Intersection Improvements

Twenty-seven intersections were reconstructed and improved during the year, while permanent channelisation was carried out at another 44 intersections, including:

- Hume Highway/Bass Hill Shopping

Centre access road, Bass Hill;

- George Street/Howick Street, Bathurst;
- Williams Street/Buck Street, Broken Hill;
- Pacific Highway/Tourist Road 2048,

Chinderah;

- Crispe Street/Ochertyre Street,

Deniliquin;

- Bruxner Highway/Wyrallah Road,

Lismore;

- Great Western Highway/Lee Street, Lithgow;
- Great Western Highway/Pitt Street,

Parramatta;

- O'Connell Street/Macquarie Street,

Parramatta;

- Pitt Street/Argyle Street, Parramatta;
- River Road/Panonia Street, Wyong.


## Roundabouts

Roundabouts are being constructed to advantage in appropriate locations,

Table 5. Traffic Signals in Service, 1983 and 1984

| Area | Vehicle Actuated |  | Pedestrian Actuated |  | Inner City |  | Totals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \mathrm{At} \\ 30 / 6 / 83 \end{gathered}$ | $\begin{gathered} \mathrm{At} \\ 30 / 6 / 84 \end{gathered}$ | $\begin{gathered} \mathrm{At} \\ 30 / 6 / 83 \end{gathered}$ | $\frac{\mathrm{At}}{30 / 6 / 84}$ | $\begin{gathered} \hline \mathrm{At} \\ 30 / 6 / 83 \end{gathered}$ | $\begin{gathered} \mathrm{At} \\ 30 / 6 / 84 \end{gathered}$ | $\begin{gathered} \hline \mathrm{At} \\ 30 / 6 / 83 \end{gathered}$ | $\begin{aligned} & \text { At } \\ & 30 / 6 / 84 \end{aligned}$ |
| Blacktown | 166 | 172 | 21 | 22 | - | - | 187 | 194 |
| Parramatta | 279 | 294 | 38 | 37 | - | - | 317 | 331 |
| Sydney | 915 | 938 | 116 | 118 | 120 | 120 | 1,151 | 1,176 |
| Newcastle | 110 | 113 | 25 | 26 | - | - | 135 | 139 |
| Wollongong | 78 | 80 | 9 | 9 | - | - | 87 | 89 |
| Country Centres | 56 | 62 | 13 | 14 | - | - | 69 | 76 |
| Totals | 1,604 | 1,659 | 222 | 226 | 120 | 120 | 1,946 | 2,005 |

particularly local streets where they are proving more successful than traffic signals in providing necessary control.
Roundabouts not only cost less in the first place but they are cheaper to maintain.

During the year roundabouts were installed at 45 sites, including:

- Bentinck Street/Russell Street, Bathurst;
- Walters Road/Newton Road, Blacktown;
- John Street/Hill Street, Cabramatta;
- Murray Farm Road/Oaks Road,

Carlingford;

- Polding Street/The Boulevard, Fairfield;
- Banna Avenue/Crossing Street, Griffith;
- Hoxton Park Road/Fifteenth Ave, Hoxton

Park;

- Hawkesview Road/Fowler Road,

Merrylands:

- Park Road/Carlingford Street, Regents

Park:

- Keira Street/Swan Street, Wollongong.


## Cycleways

The Department administers grants under the Bicycle Facilities Program on behalf of the Minister for Transport. Grants for cycleway construction are provided to Councils on a $50 / 50$ basis. During the year cycleways came into service in Armidale, Ballina, Bathurst, Bellingen, Canterbury, Coffs Harbour, Lake Macquarie, Manly, Newcastle, Penrith, Port Stephens, Shellharbour, Shoalhaven, Warringah, Wollongong and Wyong.

Roundabouts like this one at the intersection of Smithfield Road and Polding Street, Smithfield are effective in reducing accidents.


## Improvements for Pedestrians

Four mid-block traffic signals were installed specifically for pedestrian use, and pedestrian push-buttons were incorporated in the majority of new or reconstructed intersection traffic signals.

Audio-tactile push-button boxes were installed at eight locations in metropolitan and country centres after consultation with the Royal Blind Society of NSW, bringing the total to 82 . The main need for this program has now been met, but audiotactile boxes will continue to be installed as further needs arise.

## Miscellaneous Projects

Eighty-four other traffic management and safety projects were completed during the year, including skid resistance improvements and provision of additional lanes and bus bays.

A one-way traffic management scheme was introduced in the western section of the Parramatta Central Business District, incorporating sections of O'Connell, Pitt and Macquarie Streets. This will improve traffic flow and access to the Central Business District and is the first stage of adjustments necessary for the proposed Church Street Mall.

A solution was found for the problem of high vehicles travelling along Church Street, Parramatta colliding with the low railway bridge at Argyle Street. After various arrangements of warning signs had failed to solve the problem, the Department installed photo-electric equipment which detects high vehicles approaching the bridge and activates warning signs with flashing lights. A high vehicle detour of Parramatta Central Business District was introduced in conjunction with this work, and has been operating successfully since November 1983.

## Traffic Volumes

The Department carries out systematic data collection of traffic volumes at about 6,000 sites throughout the State. Urban and rural surveys are undertaken in alternate years. There is a four year cycle with urban areas being surveyed in the first and third years; while for rural surveys, half the State is surveyed in the second year and the other half in the fourth.

1. A new pedestrian bridge over the Sutherland Bypass (Acacia Road) was opened during the year.
2. Existing pedestrian push-buttons for traffic signals are gradually being replaced. The new design has a larger, improved button, a visualtactile arrow and provision for an audio-tactile facility where required.
3. Electronic sensors activate flashing lights on this warning sign when high vehicles approach a low railway overbridge in Church Street, Parramatta.


Traffic volume data are of prime importance to the Department's planners and are widely used by other organisations and the general public.

Survey results are published regularly on a Divisional basis and can be purchased from the Department's Plan Room, telephone (02) 2186824 . During the year results were published for North Eastern, Lower North Coast, Illawarra, South Coast, Central Murray, Central Northern and Murray Darling Divisions and for the urban areas of Newcastle. Survey results for the South Western Division and the County of Cumberland are being printed.

Information relating to truck movements in rural areas is now collected with automatic vehicle classifiers. Additional information, such as axle arrangement, type and weight of load, origins and destinations will be collected by Weight of Load Inspectors at Heavy Vehicle Checking Stations and on mobile patrol in the course of their normal duties.

At 30 June 1984 there were 172 continuous Permanent Counting Stations in operation at strategic locations throughout the State. Data recorded at these sites give a very good indication of the over-all trend in traffic activity. The growth rate from 1982 to 1983 was $1.6 \%$ on rural roads and $1.4 \%$ on urban roads, giving an average growth of $1.5 \%$. Figure 1 of 'Performance Indicators' on page 8 shows the declining rate of increase in traffic volumes over the last two years.

## Travel Times

Travel time measurement in the Sydney metropolitan area involves surveying approximately 600 km of arterial roads in the morning and afternoon peak traffic periods. Surveys are carried out three times a year (in March, July and November), amounting to nearly 1,000 individual surveys a year.

In 1983, the Traffic Authority adopted an objective of maintaining average traffic speeds of $40 \mathrm{~km} / \mathrm{h}$, or above, on the urban arterial road system in peak periods. Table 6 shows the position for the calendar year 1983, for morning and evening peak period travel to and from Parramatta and the Sydney Central Business District (CBD). The distances surveyed refer to a combined total of various routes to and from Parramatta and the Sydney CBD respectively. This is an attempt to give an overview of the current performance of the greater Sydney road network. The table shows that more than half the arterial road network already operates at above $40 \mathrm{~km} / \mathrm{h}$ in peak periods.

Looking at the network performance in more detail, the accompanying bar chart '1983 Annual Journey Time Study' shows the proportion of traffic travelling above certain speeds on the seven main radial routes to the Sydney CBD. Examination of previous surveys indicates some improvement on most major routes, despite a steadily growing rate of traffic demand of

Table 6. Arterial Road Speeds in Sydney, 1983

| Peak Period | Route | Total <br> Distance <br> Surveyed. | Median <br> Speed | Proportion of <br> Route Travelled <br> at $40 \mathrm{~km} / \mathrm{h}$ or Above |
| :--- | :--- | :---: | :---: | ---: |
| Morning | To Parramatta | km | $\mathrm{km} / \mathrm{h}$ <br> 421 | 73 |
|  | To Sydney CBD | 315 | 34 | 56 |
|  | Average for both routes | $(636)$ <br> $($ total) | 39 | 64 |
| Evening | From Parramatta | 322 | 44 | 74 |
|  | From Sydney CBD | 314 | 38 | 68 |
|  | Average for both routes | $(636)$ <br> $($ total) | 41 | 71 |

*Aggregate of various routes.

between 3\% and 4\% per annum over the last two decades. This general improvement is illustrated in Figure 3 of 'Performance Indicators' on page 8.

All routes are examined for changes in travel time since the preceding year. This examination has indicated that during the past 12 months no route has had a statistically significant change in travel time except in areas of new construction such as the F4 - Western Freeway.

Continuous travel time monitoring has only recently been introduced in the expectation that the information will provide a reliable measure of performance for the Sydney road system.

## Control of Overloaded Vehicles

Weight limits for heavy vehicles are imposed to reduce damage to the community's road asset and to improve road safety. In addition to reducing the life of road pavements, an overloaded vehicle may also become a potential hazard by placing undue strain on brakes and other mechanical components.

Overloading can substantially reduce the life of road pavements (designed to last 20
to 30 years) and is estimated to cost the State \$24 million a year in pavement restoration. This is money that must be diverted from other worthwhile road and bridge construction projects.

The Department's 100 Weight of Load Inspectors man heavy vehicle checking stations at Berowra, Marulan, Mt Boyce and Kankool, as well as operating mobile patrols throughout the State. A fifth station at Bell is due to be opened shortly. The recruitment of an extra 18 inspectors during the year accounts for the large increase in the number of vehicles checked during 1983-84 from the 1982-83 figure (Table 7).

Load limits for heavy vehicles (that is, over four tonnes) are enforced by means of Ordinance No. 30C of the Local Government Act, 1919. This provides for maximum fines of $\$ 1,000$ for a first offence and $\$ 2,000$ for a second and subsequent offences. In some cases the Department prosecutes the owners as well as the drivers. As can be seen from Table 7, more than $\$ 3.5$ million in penalties was imposed during the year. However, fine levels fail to keep pace with inflation.

Of the 12,141 vehicles reported for overloading during the year, 86 were impounded and the owners or drivers

Table 7. Control of Overloaded Vehicles, 1979-80 to 1983-84

| Weight Checks and Penalties | $1979-80$ | $1980-81$ | $1981-82$ | $1982-83$ | $1983-84$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Vehicles stopped and checked | 66,329 | 71,546 | 75,760 | 638,527 | $1,451,512$ |
| Vehicles reported overloaded | 7,026 | 6,602 | 8,104 | 9,561 | 12,141 |
| Drivers prosecuted for failing to obey a lawful direction | 72 | 58 | 90 | 84 | 60 |
| Prosecutions authorised | 8,183 | 6,942 | 8,130 | 9,229 | 12,672 |
| Number of convictions recorded | 5,514 | 7,353 | 6,437 | 6,069 | 11,325 |
| Total penalties imposed (including Court Costs) | $\$ 1,398,997$ | $\$ 2,153,144$ | $\$ 1,840,992$ | $\$ 1,972,023$ | $\$ 3,667,368$ |
| Average penalty imposed (including Court Costs) | $\$ 254$ | $\$ 293$ | $\$ 286$ | $\$ 325$ | $\$ 324$ |
| Number of maximum penalties imposed | 1 | 3 | 2 | 5 | 9 |

required to reduce their loads before proceeding. The heaviest load encountered was 66 tonnes, compared to the legal limit of 38 tonnes.

Special permits for indivisible loads totalled 10,907, and 1,646 periodical permits were issued. These special trips moved a total of 821,374 tonnes.

To satisfy requirements of the Department of Consumer Affairs, several of the Department's weighbridges were upgraded by electronic conversion. The electronic outputs, connected with a minicomputer, will facilitate the collection of data for the Review of Mass and Dimension Limits to be undertaken by the National Association of Australian State Road Authorities.

During the year the Department held its first 'Weigh Day' when Weight of Loads Inspectors were available to give advice about regulations to wheat hauliers at Tullamore and Gobonderry (northwest of Parkes) and to assist them in developing better load patterns where necessary.

## Railway Level Crossing Improvements

The Department is represented on the Inter-Departmental Level Crossing Committee, which sets priorities for improvement to, or elimination of, level crossings throughout the State. Other bodies represented are the State Rail Authority, Police Traffic Branch, Department of Local Government, Traffic Authority, Treasury and the Australian Federated Union of Locomotive Enginemen. The Committee recommends to the Minister for Transport works appropriate for cost sharing through the Special Level Crossing Fund.

The Department is undertaking a review of safety aspects of level crossings throughout the State, following the Traffic Authority's concern 'at the apparent trend towards deteriorating safety at level crossings'. This review follows an inspection last year of level crossings not equipped with automatic warning devices on the route of the XPT services, where trains are permitted to exceed 115 kph . It was found that many other crossings, where the train speed allowed was less than 115 kph , needed improvements for the safety of road users.

Two level crossings were eliminated from the classified road system during the year, bringing the number remaining to 334 . (However, another level crossing will be added on Main Road No. 598, near Ulan, when the Ulan-Gulgong railway line is built.)
One of the crossings eliminated was on the Newell Highway (State Highway No. 17) where a bridge was built over the NarrabriMoree line as part of the Mulgate Creek Deviation, 0.8 km to 4.3 km north of Narrabri. The other was in John Street, Singleton (Main Road No. 503), where approaches to a new bridge over the Main Northern Railway Line were completed.

Work is in progress to eliminate four other level crossings at Katoomba (Great Western Highway), Burbong (Trunk Road No. 51), Millthorpe (Main Road No. 245), and Rosehill (Main Road No. 309).

Flashing lights and warning bells were installed by the State Rail Authority at Old Junee (Trunk Road No. 57), Junee (Main Road No. 243), Jeerabung (Trunk Road No. 61), The Rock (Main Road No. 543), and at 12 other locations on local roads. Eight of
the latter were installed on local rural roads between Albury and Junee, in conjunction with the State Rail Authority's Centralised Traffic Control System.
In 1984-85 the State Rail Authority's target is to install flashing lights and warning bells at another 20 sites, in addition to those installed in conjunction with the Centralised Traffic Control System. As usual, the Department will be arranging for the roadworks required in conjunction with each installation.

Three other level crossings on classified roads were improved with the installation of new or additional street lighting. These were at Goolgowi (State Highway No. 6), Mirrool (State Highway No. 7) and Gulgong (Main Road No. 598).

Construction of a bridge to carry the Great Western Highway over the Main Western Railway at Katoomba is part of the Blue Mountains Road Improvement Program.


## Research and Development

The Research and Development Section co-ordinates activities aimed at improving the methods and materials used in road and bridge construction and traffic management.

## Pavement Testing

The highlight of research and development in 1983-84 was the commissioning of a machine to assist research into road pavements. The machine (known as ALF) is a relocatable Accelerated Loading Facility. It is designed to simulate actual truck traffic and can apply the equivalent of repeated applications of a dual tyred wheel load of up to 10 tonnes, running over a 10 metre section of pavement.

A survey of research pavement needs, conducted through the National Association of Australian State Road Authorities' Principal Technical Committee Working Group for ARRB/SRA Pavement Research, found that research was needed on the relative ability of different materials to distribute the wheel loading and the damaging effects of overloading, as well as the design of the thickness of additional pavement required, over an existing pavement in a deformed or cracked condition.
The data which will be generated by the ALF are needed for predicting the performance and life of various types and configurations of pavements, and new materials, and consequentially for refinement of pavement design and maintenance procedures. The results of the

Known as an Accelerated Loading Facility (ALF), this machine tests road pavements by simulating many years' traffic in a few months. It is pictured testing a new section of the F3 - SydneyNewcastle Freeway.
testing program will lead to more efficient and more economical methods of pavement construction.
The ALF was designed and manufactured by the Department on behalf of NAASRA and, following the commissioning trials, was transferred to the Australian Road Research Board (ARRB), which is now responsible for its operation and management.
The first full scale test is scheduled to commence in July 1984 on a section of the Sydney-Newcastle Freeway near Somersby, about 70 km north of Sydney.

The ALF is the first machine of its type in Australia. It is patented by the Department, both here and in a number of other countries, and it is hoped to licence overseas manufacturers to build further machines for use in other parts of the world.

## Road Pavement Developments

Also in the area of road pavement, pavement thickness design procedures have been refined, particularly with regard to the temperature susceptibility of asphalt pavements, while rolled concrete sub-base has been developed as a material directly laid by paver or grader for either rigid or flexible pavements. This has the potential for utilising supplies of marginal local aggregates of lower cost and existing transport and construction equipment.
Rubber-bitumen sealing techniques have now been refined to the point where they are included in the normal range of operations. This type of seal is able to absorb minor strains and more effectively prevent water penetration into pavements, thus prolonging pavement life.
A technique for forming the markers used to delineate lane lines has proved successful on flexible pavements. Placed in the hot plastic state by travelling
applicators, the process represents savings over the previous labour intensive methods required for placing preformed markers.

## Other Achievements

Other research has resulted in a comprehensive system for evaluating the performance of vehicle detector sensors at traffic signals, and methods for accelerating the settlement of embankment on soft foundations have been documented. Designs have been further developed for arrestor beds which will safely decelerate out-of-control heavy vehicles, and research has been carried out into couch grass varieties for low maintenance roadside planting.

## Continuing Projects

Continuing research projects include the design of a mobile laboratory to measure and record pavement deflections under a travelling load. This device, known as 'Deflectolab', will be designed as an improvement on the 'Deflectograph', an imported machine. The 'Deflectolab' will have inboard data logging equipment and be capable of faster mechanical operation. The data obtained will be used to refine pavement designs.
The Department is using computer modelling in the design of traffic management systems to improve travel times and fuel efficiency for motorists in urban areas.
Research involving ground engaging tools, such as tynes and cutting edges is also continuing, to determine the most cost effective combinations for various types of plant. Tyres and crawler tracks are being assessed in field performance tests with the same objective.


## Sydney Harbour Bridge

## Maintenance

Repainting on the Bridge last year covered 24,134 square metres of steelwork, out of a total area of 485,000 square metres.

As well as routine maintenance of the bridge, several projects to improve security, productivity and access were completed or begun, including replacement of cycleway lights.

## Driver Aid Scheme

The Sydney Harbour Bridge Driver Aid Scheme is designed to provide a better means of lane changing and traffic control on the Bridge, to the benefit of the user.

When the scheme is fully operational, cameras will monitor traffic flow, which will be controlled by an automatic lanechanging system including movable medians and overhead lights. Power cables and cameras were installed during the year and installation of the remote controlled movable medians is expected to begin towards the end of 1984.

Table 8. Breakdowns on Sydney Harbour Bridge and Approaches

| Cause of | Number of Breakdowns |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Breakdown | $1980-81$ | $1981-82$ | $1982-83$ | $1983-84$ |
| Mechanical breakdown | 2,167 | 1,905 | 1,814 | 1,886 |
| Lack of petrol | 1,204 | 988 | 1,273 | 1,153 |
| Flat tyre | 351 | 338 | 322 | 302 |
| Accident | 404 | 294 | 178 | 182 |
| Abandoned | 158 | 113 | 72 | 113 |
| Totals | 4,284 | 3,638 | 3,659 | 3,636 |

## Emergency and Patrol Service

Emergency telephones and a patrol service are provided on the Bridge and its approaches, to help motorists in difficulties. Table 8 compares the number of vehicles assisted by the Traftic Patrol Service over the last four years and the causes of breakdown. Nearly $32 \%$ of motorists assisted during 1983-84 had run out of petrol. The cost of providing the service during the year was approximately $\$ 1.6$ million. However, the benefits to the community through quick removal of disabled vehicles have been assessed at between $\$ 2.5$ million and $\$ 3$ million.

## Traffic Volumes

Table 9 shows traffic volumes over the Sydney Harbour Bridge at selected intervals over the years. It should be noted that these figures are for the calendar year shown, and that directional peak hour volumes were selected during the hour of the highest combined volume.

The highest daily volume for the year was 211,460 vehicles, recorded on Friday, 16 December 1983. The substantial increase of $11.7 \%$ in the average evening peak hour volume of the minor flow resulted from new arrangements providing three lanes in this direction.

Table 9. Sydney Harbour Bridge Traffic Volumes, 1973 to 1983.

|  | 1973 | 1976 | 1979 | 1982 | 1983 | 1982-83 <br> Increase/ decrease |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Annual Totals |  |  |  |  |  | \% |
| Annual total northbound | 26,345,700 | 27,375,000 | 29,882,550 | 31,338,900 | 32,102,800 | + 2.4 |
| Annual total southbound | 24,546,250 | 25,929,600 | 28,251,000 | 30,054,100 | 30,834,400 | + 0.2 |
| Annual total road vehicle crossings | 50,891,950 | 53,304,600 | 58,133,550 | 61,393,000 | 62,937,200 | + 2.5 |
| Daily Traffic Volumes |  |  |  |  |  |  |
| Annual average northbound traffic | 72,180 | 75,000 | 81,870 | 85,860 | 88,020 | $+2.5$ |
| Annual average southbound traffic | 67,250 | 71,040 | 77,400 | 82,340 | 84,550 | + 2.7 |
| Annual average daily traffic | 139,430 | 146,040 | 159,270 | 168,200 | 172,570 | + 2.6 |
| Maximum daily traffic | 175,100 | 179,070 | 198,240 | 208,710 | 211,460 | + 1.3 |

Average Peak Hour Volume
In direction of major flow

| Morning | 10,030 | 9,850 | 10,220 | 10,320 | 10,290 | $-\quad 0.3$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Evening | 9,940 | 9,160 | 9,760 | 9,380 | 9,440 | $+\quad 0.6$ |
| In direction of minor flow |  |  |  |  |  |  |
| Morning | 3,800 | 3,410 | 3,810 | 3,790 | 3,860 | +1.8 |
| Evening | 4,220 | 3,680 | 4,060 | 4,620 | 5,160 | +11.7 |

Maximum Hourly Volume
In direction of major flow

| Morning | 10,740 | 10,920 | 10,790 | 11,140 | 11,350 | +1.9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Evening | 10,430 | 10,350 | 10,430 | 10,720 | 10,610 | -1.0 |

In direction of minor flow

| Morning | 4,730 | 3,740 | 4,320 | 4,610 | 4,540 | -1.5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Evening | 5,540 | 4,380 | 5,100 | 5,730 | 5,870 | $+\quad 2.4$ |

## Support Functions

## Survey and Acquisition of Land and Property

## Surveys

Last year's surveys for the purpose of land acquisition totalled 155 and covered a distance of 206 km . This compared with the 1982-83 figure of 131 surveys, also covering 206 km.

Control surveys were carried out on 295 km of State Highways and Main Roads based on the State Geodetic Network, 67 km less than for the previous year. These surveys establish an accurate basis for control of other surveys, land acquisition, road design and construction.

Departmental surveyors continued their appraisal of new equipment and methods for application in various types of surveys for Departmental purposes. Arrangements are in hand to acquire a computer system for processing surveys undertaken to check construction of contract roadworks.

## Acquisition of Land and Property

The acquisition of real estate is an integral part of the Department's activities. During 1983-84 the Department made 869 formal offers to acquire property for proposed roadworks and associated activities. Of these, 42 offers were made on the grounds of hardship being experienced by the owners; 64 were for resumed properties, where the Valuer-General has assessed compensation; and 51 were for land vested under the realignment provisions of the Main Roads Act. The remaining 712 offers were made for properties required for programmed roadworks. Upon settlement, the total expenditure on these acquisitions will be $\$ 33.75$ million, an increase from the previous year's total of $\$ 28.43$ million for 580 properties.

## Residue Properties

The sale of 81 surplus properties no longer required for roadworks produced a return of $\$ 9.2$ million, which will be redirected to roadworks. Sales the previous year were for $\$ 5.15$ million, and involved 45 properties.

The Department has an on-going program to dispose of surplus property assets. Many of these areas are small and of irregular shape, making them unsaleable except to the owners of adjoining land. Consequently, the Department has reviewed its policy in relation to road boundaries so that in future many such areas will be included in the road reserve.

At present, the main register of the Department's real estate assets is in

pictorial form, and comprises about 2,600 plans. However, the Parliamentary Public Accounts Committee now requires that these records also be kept in written form. To date, this has been accomplished for administrative properties and staff houses, which at the end of 1983-84 had a total value of $\$ 61.5$ million. The Department has investigated the problems associated with translating remaining real estate assets into written form and is now developing a computer-based system to provide the necessary information.

## Tenanted Properties

Properties acquired for future roadworks are made available for tenancy at market rental until required for road construction. The income derived is applied to current road programs. At 30 June 1984, the Department owned 2,096 such properties and net income from rents for 1983-84 was $\$ 4.5$ million.

Residential properties available for rental are usually offered firstly to the Emergency Accommodation Unit of the Housing Commission of NSW. At present the Commission rents 337 of the Department's properties. If emergency accommodation is not required, and if no suitable tenant can be located by the Department, dwellings are placed in the hands of local estate agents to arrange and maintain a tenancy.

Commercial and industrial properties which become available are offered initially to the Property Management Unit of the Premier's Department. If not required by the Unit, such properties are normally leased by public tender.

In keeping with the Government's

A Departmental Surveyor using an electronic recording tacheometer on Old South Head Road, North Bondi:
initiatives to reduce unemployment, the Department last year made available to the Housing Commission six residential properties which were considered uneconomical to repair. These properties will be restored by Building Apprentices Limited, an organisation to provide work for unemployed apprentices, and will ultimately be used for emergency accommodation by the Housing Commission.
Because of the growing importance of the Department's tenanted properties operations, a review of the management system was recently carried out with the aim of improving efficiency. Among its other recommendations, the review proposed that a computer-based system be introduced to provide more effective control. Design of the system has commenced and it is expected to be in operation by mid-1985.

## Communication and Information Services

The Department's Communication and Information Services include telecommunications, data processing and an information systems consultancy.

Since the early 1960s, several major systems have been developed which are continuously maintained and processed on behalf of the user areas.
The foregoing include systems for calculation of salaries and wages; maintenance of superannuation and leave records; processing of infringements of
vehicle weight regulations; accounting for stores and materials; calculation of payments for contract haulage; accounting and financial reports; recording road related data and statistics; processing surveyors' field data; analyses for design of roads and bridges; recording and modelling traffic flows in road networks; processing laboratory test results; tracking movement of Departmental papers; and preparing five year construction plans.
The computing equipment available for the provision of these services includes a Sperry 1100/71, a CDC Cyber 172, three Honeywell minicomputers (DPS 6/74, Level 6/57 and Level 6/47) and several microcomputers. Additional equipment is on order to expand the capabilities of the Sperry mainframe and the Honeywell minicomputers, and consideration is being given to upgrading the Cyber.
At present, the Sperry computer primarily supports managerial and administrative users on 60 terminals in Head Office Sections, and an interface to the Telex Network permits all field offices to have access for data transmission. Specification of microcomputer equipment has been completed which, by providing field offices with local processing, will replace the need for data transmission by telex. As an interim measure, several microcomputers have already been installed in Divisional Offices for word processing and miscellaneous applications.

The Cyber computer principally supports engineering and other technical users through a network of 60 terminals in Head Office Sections and in ten of the Department's Divisional Offices.
The Honeywell minicomputers provide word processing facilities to 17 Head Office Sections and to the NAASRA Secretariat through a network of 35 terminals. In addition, they process a cataloguing system for the Library, a registration system for political correspondence, an interim rents system for Tenanted Properties Section, and the stock system at Central Workshop, Granville.

Development staff was engaged on tasks associated with the conversion from the Honeywell 2060A to the Sperry 1100, maintenance and enhancement of production systems, and with the development of the Personnel Data Base, a Treasury reporting system, a tenanted property control and information system and a re-designed wages system. Studies were also carried out on a road data base, a computing strategy for the next five years, a strategy for the future development of accounting systems and a comprehensive road design system.

Data preparation services were provided for users of the Sperry and Cyber computers and excess data preparation loads were sent out to commercial bureaux. Consultants were engaged to carry out a number of specific tasks in the systems design and programming area and further relief was provided by the attachment of four industrial trainees from the NSW Institute of Technology.

## Materials Testing

The testing of materials is essential for many aspects of the Department's work, and increased construction activity is resulting in a greater demand for quality control testing. This is carried out at the Department's Materials and Research Laboratory, at Divisional Laboratories in major country centres, and in field laboratories at the site of major construction works.

The Materials and Research Laboratory has been registered by the National Association of Testing Authorities (NATA) for the testing of bituminous materials and mixtures, concrete and aggregate, and for the calibration of testing machines. Several Departmental officers have been appointed as assessors, providing an expert service to industry and the community.

Inferior or unsuitable materials must be identified at an early stage to avoid major failures or heavy maintenance costs in future years. Much of this type of testing is carried out on natural gravels for road pavements, as the depletion of reserves of good quality natural gravels has increased the need for non-standard gravels stabilised with cement or lime.

The evaluation of new construction materials and techniques continued during the year. An electro-hydraulic fatigue testing machine was acquired and commissioned to provide information on the durability of asphalt mixes. Specifications were developed for materials used in concrete pavement construction such as curing compounds, neoprene seals and debonding agents.

Formed-in-situ pavement markers and associated equipment were developed, and the Accelerated Loading Facility (ALF) machine was commissioned to provide information on the long-term capacity of road pavements to carry traffic (see 'Research and Development', page 58).

In the location of routes and the design of roads and bridges, information is required on the underlying rock and soil strata. Significant advances in this area have been made over the past year with the use of resistivity meters, which measure the electrical resistance of underlying strata, and seismographs which measure the velocity of sound waves passing through the strata.

Existing road pavements are monitored using equipment which measures such characteristics as skid resistance, surface roughness and deflection under load. Further development has taken place in the use of electronic processes to capture, store and analyse the data produced by road monitoring equipment, and an improved deflection measuring device is currently being designed.

Other tasks carried out in the past year include two major investigations into the causes of failures in road construction and the identification of appropriate remedial measures; foundation and slope stability tests involving the design of specialised equipment for use in swamp areas,
landslide zones and mine subsidence areas; and evaluation of acoustic emission to assess the stability of rock and soil slopes.

## Energy Management

The energy management program within the Department has been broadly directed at conserving all forms of energy by eliminating waste and by encouraging the efficient use of energy. The main components of this program are:

- maintaining a target of total energy consumption at the 1978-79 level for at least five years;
- purchase of light, fuel-efficient passenger vehicles, and associated emphasis on motor vehicle fleet management; - application of energy conservation concepts in design and construction and use of solar energy wherever justified.

The Department's total energy use for the past year shows an increase over previous years, but this reflects increased Departmental activity in field operations.

As a significant user of petroleum products, the Department continued to establish strategic stockpiles of liquid fuels and storage facilities with a capacity for forty days normal usage. The program within the County of Cumberland is virtually completed and will continue in rural districts as funds permit. Further savings in liquid fuel are being made by replacing oil fired boilers with gas fired module units.

As the electricity supply situation improved due to increased generating capacity and reliability during 1983-84, efforts in the Department have been directed primarily to continued monitoring, and general measures to improve efficient use of electricity and oil in building management. An example of this is the current replacement of the two manually operated DC lifts in Head Office with two automatic AC lifts. This upgrading coincides with the withdrawal of DC power in the city area and will produce a major saving in operating costs.

## Library Service

The Library Service supports the research and information needs of the Department's staff. In practice, this means undertaking literature searches on both Australian and overseas data bases, circulating current books and journals, answering general and technical enquiries and providing information from worldwide resources. At 30 June 1984, the total holdings of Head Office and Divisional Office Branch Libraries stood at 83,218 publications.

In addition to serving Departmental staff Statewide, the service is also available for use by other libraries through the interlibrary loan network and is open to the public; for example, Departmental Environmental Impact Statement studies are displayed and a general reference service for students and others is provided.

## Legislation

## Motor Vehicles (Pensioners Taxation and Registration) Amendment Act, 1984

The Motor Vehicles (Pensioner Taxation and Registration) Amendment Act, 1984 was assented to on 13 June 1984. This Act exempts 'eligible pensioners' who apply for registration of a motor vehicle from paying motor vehicle taxation and registration fees.
'Eligible pensioners' are persons who hold a Pensioner Health Benefits Card issued on behalf of the Commonwealth Department of Health by either the Department of Social Security or the Department of Veterans' Affairs, and hold a licence for which no prescribed fee was paid. If a pensioner does not hold a current 'no fee' driver's licence and seeks the exemption, the pensioner must produce a current certificate by a doctor certifying that he or she is not medically fit to drive a car, or must show to the satisfaction of the Commissioner for Motor Transport that for some reason the pensioner should be granted the exemption.

The scheme, which is administered by the Department of Motor Transport, is generally designed to allow the exemption on vehicles weighing less than two tonnes which are used for domestic purposes and solely or principally by pensioners. However, the Commissioner for Motor Transport may determine which other vehicles should receive the concession. The scheme applied to vehicles where the registration had effect on or after 1 July 1984.

## Campbelltown Presbyterian Cemetery Act, 1984

The Campbelltown Presbyterian Cemetery Act, 1984 came into force on 6 June 1984. This piece of legislation was enacted to enable the construction of a road through part of the Campbelltown Presbyterian Cemetery after part of the cemetery land has been resumed and appropriated under the Main Roads Act, 1924. The road will form part of a traffic relief route around the commercial and retail centre of Campbelltown.
The legislation also ensures that, prior to construction of the road, the opportunity is given to relatives or descendants of any person buried in the relevant cemetery land to require that the remains of that person and any associated monument be transferred to another part of the cemetery.


## Ordinance No. 30C (Local Government Act, 1919)

Ordinance No. 30C, which prescribes the load limits for vehicles using Main Roads, was amended by proclamation in the Government Gazette dated 2 November 1983.

The amendment provides for the payment of a fee to the Department for the issue of a permit exempting any vehicle specified in the permit from the operation of any provisions of the Ordinance.
The fees payable are:

- in respect of an exemption for
$\$ 20.00$
a single specified journey
- in respect of any other exemption $\$ 50.00$

The Moore-Oxley Bypass of Campbelltown (top of picture) is to be extended southwards by widening of the existing roadway. This will affect a small portion of Campbelltown Presbyterian Cemetery (centre).

## Personnel and Administration

## Personnel Branch

The Department's Personnel Branch was established in May 1983, and Miss Colleen Slattery was appointed as its Chief in January 1984.
The Branch comprises a number of Sections which were previously responsible to different Branch Heads. Now all related personnel functions, including industrial relations, recruitment, promotion and deployment, and fixation of salaries and wages have been consolidated and coordinated, with resulting management benefits.
An essential need of the integrated Branch is a comprehensive information system which could provide statistical data, as well as maintain personnel records on an individual basis.
To this end, a firm of consultants has been engaged to investigate available computer systems and to develop a data base which will readily supply information on positions and establishments, and on other principal issues in personnel administration. The data base is to be operational in the areas of workforce planning and statistical reporting by December 1984. Integration with existing systems, such as wages and salaries payroll systems, will follow.
An immediate task confronting the new Branch is a review of existing personnel policies, particularly in the areas of recruitment, promotion and conditions of service, to ensure that these reflect sound modern personnel practice and current Government initiatives. In this regard, the Department has already adopted the practice of advertising all promotional positions in the clerical and administrative classification, and increased advertising of positions is occurring for other classifications. Appointments are reflecting the greater emphasis being placed on fitness in the selection process.
Another concern is the development of an appraisal system that takes into account the multi-disciplinary nature of the Department. Its aim will be to match people with jobs in such a way as to improve performance, and enhance job satisfaction and career development. Personnel from the Australian Graduate School of Management will work with groups of Departmental staff on the design and initial implementation of a suitable program.

## Employment Figures

The number of personnel directly employed by the Department at 30 June 1984 was 9,630 . This represents an increase of 722 (or $8.11 \%$ ) over the total at

## Table 10. The Department's Workforce, 1983 to 1984

|  | $\begin{gathered} \hline \text { At } 30 \text { June } \\ 1983 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { At } 30 \text { June } \\ 1984 \\ \hline \end{gathered}$ | Increase/Decrease |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Number | \% |
| Salaried Officers* |  |  |  |  |
| Professional | 1,384 | 1,482 | + 98 | $+7.08$ |
| Clerical | 1,237 | 1,251 | + 14 | $+1.13$ |
| General | 1,053 | 1,091 | + 38 | + 3.61 |
| Traffic Signals Technicians | 112 | 113 | + 1 | + 0.89 |
| Sub-total | 3,786 | 3,937 | + 151 | +3.99 |
| Direct Wages Employees* |  |  |  |  |
| Skilled Tradesmen | 736 | 806 | + 70 | + 9.51 |
| Apprentices | 221 | 209 | - 12 | $-5.43$ |
| Labourers | 2,163 | 2,604 | $+441$ | $+20.39$ |
| Plant Operators | 743 | 780 | $+\quad 37$ | + 4.98 |
| Gangers | 347 | 373 | + 26 | + 7.49 |
| Survey Field Hands | 130 | 142 | + 12 | + 9.23 |
| Lorry Drivers | 388 | 405 | + 17 | + 4.38 |
| Tolls | 85 | 92 | + 7 | + 8.24 |
| Others | 309 | 282 | - 27 | -8.74 |
| Sub-total | 5,122 | 5,693 | + 571 | +11.15 |
| Totais | 8,908 | 9,630 | + 722 | + 8.11 |

* Includes 101 part-time and casual personnel.

30 June 1983 and provides a partial indication of the extent to which the short term objective of stimulating employment was met. The figure 9,630 comprises 3,937 salaried officers and 5,693 wages employees. These figures are analysed in the accompanying table. They include all part-time and casual staff, but do not include a total of 30 people who were employed on special work schemes. (See 'Job Creation Schemes', page 64.)
In addition, 4,150 Council employees and 3,330 contractors' employees, including truck owner-drivers, were engaged on the
construction and maintenance of the Main Road network. Altogether, this gives a total workforce of approximately 17,100 for 1983-84.

## Equal Employment Opportunity

Activities designed to promote Equal Employment Opportunity (EEO) continued to be an integral part of the Department's Training and Development program. Special EEO courses have been developed and, where appropriate, the topic is included in the content of other courses.

Table 11. Male/Female Distribution in Workforce, 1983 to 1984

|  | At 30 June 1983 |  |  | At 30 June 1984 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Males | Females |  |  | Males |
|  | Females |  |  |  |  |
| Full-time |  |  |  |  |  |
| Salaried Officers | 3,073 | 691 |  | 3,195 | 716 |
| Direct Wages Employees | 5,025 | 21 | 5,599 | 19 |  |
| Part-Time* |  |  |  |  |  |
| (20 hours per week and over) | 2 | 11 | 8 | 29 |  |
| (Less than 20 hours per week) | 4 | 28 | 3 | 12 |  |
| Totals | 8,104 | 751 | 8,805 | 776 |  |

[^4]In response to EEO Management Plan initiatives, the Department conducted its first residential management course for women during the year. Fifteen officers attended the course, held at Glenavon Lodge, Vaucluse. Participants were given the opportunity to discuss and review management functions and techniques and to consider the effects of external influences on Departmental functions. Courses with similar objectives are scheduled for next year's Training and Development program.

The Equal Employment Opportunity grievance service continued to offer independent and confidential counselling by trained officers to personnel requiring guidance. This is a valuable support service, and the data obtained will be useful in establishing a basis for formulating possible policy changes.

In line with EEO Management Plan objectives, all vacancies for promotional Administrative and Clerical positions within the Department are now advertised internally.

Recognizing the role of the Women's Information Officer, the Department is expanding the scope of this position by encouraging regional appointments. Nominations are being sought, with a view to having a Women's Information Officer in each Division. This will provide a more effective network for the distribution of information about women's issues within the Department.

## Industrial Relations

There were 13 industrial disputes during the year which resulted in work stoppages. These were local in nature and effect and involved 920 employees with a combined loss of 1,404 working days. This figure is 509 working days less than for the previous year. Causes of dispute included objection to working under a particular ganger and concern that retrenchment would follow the completion of certain works. All matters were resolved amicably.

Work stoppages were avoided in another 14 disputes which were settled either by negotiation or with the assistance of an Industrial Tribunal.

Other items of significance that occurred during the year were as follows:

- Agreements for a 38 hour week for Truck Owner-Drivers and for Departmental employees engaged under the Transport (State) Award were ratified by the Industrial Commission of New South Wales in October 1983.
- In December 1983, air conditioning units were installed in all caravans used by employees camped in the Murray Darling Division, following recommendation by a Conciliation Commissioner.
- All wages and salaries and associated allowances were increased by 4.3\% from October 1983 and by $4.1 \%$ from April 1984, in accordance with National and State Wage Case decisions. Most other allowances were also adjusted by 4.3\% from October 1983. Negotiations are
proceeding on allowances generally with regard to the April 1984 adjustment. - In accordance with Memoranda of Agreement negotiated early in 1983 for an across the board 38 hour working week, consultative procedures at Works Offices were extended as they have been helpful in settling local issues.
- The Department has been applying the wage-fixing principles handed down by the Industrial Commission in October 1983, thereby demonstrating firm commitment to the principles.


## Work Experience Programs

The Department continued its involvement in work experience programs for secondary school students throughout the State.
Almost 180 students in both city and country areas were attached to the Department for a period of up to one week, which allowed them to become acquainted with the duties of engineers, surveyors, drafting officers, clerks, typists, tracers, foremen, testing operators, plant operators and mechanics.
This first hand experience of the working environment often helps young people in their choice of a career, and the Department is pleased to assist them in this way.

## Job Creation Schemes

The Department participated in a number of Government-sponsored job creation schemes to provide work experience for unemployed young people and other disadvantaged groups.

- The State Youth Corps Scheme made available a grant of $\$ 350,000$ in January 1983 to employ young people for one day per week over a 13 week period. The scheme had disadvantages for some participants as payment affected their
unemployment benefits and health cover cards. There was also a reluctance to become involved for just one day per week. For these reasons, the grant had not been fully expended by 30 June 1983. The Department requested that the conditions of the Scheme be varied and the remaining funds carried on into 1983-84. The Government subsequently approved the variation, resulting in 16 young people being employed for a period of 13 weeks full-time tree planting and landscaping.
- The Youth Employment Scheme, administered by the New South Wales Office of Special Employment, began in March 1984. A sum of $\$ 69,930$ was allocated for tree planting and environmental works. Upon referral by the Commonwealth Employment Service, the Department engaged 10 young people (who had not previously been employed) for a period of 17 weeks.
- The State Government Youth Training Program provided $\$ 45,400$ for the full-time employment of 12 trainees over a 17 week period. Duties were allocated in both clerical and field work to give trainees broad employment experience for either the public or private sector.
- The National Employment Strategy for Aborigines is conducted in cooperation with the Department of Employment and Youth Affairs. Nine aboriginal trainees were employed in the first quarter of the year. However, nominations from the Commonwealth Employment Service dwindled during the year and there is at present only one trainee, engaged in office duties.

Debbie Williams, employed at Wilcannia Works Office under the National Employment Strategy for Aborigines.

The Wage Pause Program commenced in March 1983 with a Commonwealth allocation to the Department of $\$ 5.1$ million. The funds were nade available for the employment of longerm unemployed people and other disadvantaged groups on labour intensive oadworks. The grant had not been fully expended by 30 June 1983, and was carried on into 1983-84. Up to 95 people were engaged at any one time on 15 separate projects throughout the State. Arrangements were made with the Government to continue employment until oarticular projects were completed, and this entailed additional expenditure of $\$ 0.6$ million.

## Training and Development

The Department's Steering Committee on Training continued to plan and direct a orogram of training and development activities designed to equip officers with the skills, knowledge and attitudes necessary or effective performance. Technological advances and changed working procedures required the development of new training nitiatives and extensive revision of many continuing courses.
Some 50 different types of courses were made available during the year, each designed to meet specific needs. Emphasis was placed on making maximum use of available resources in the pursuit of greater effectiveness. In technical courses the importance of adopting modern technology was stressed. Courses in the supervision and management of personnel emphasised the techniques of objective-setting and worker participation.
In the 1983-84 program, 1,439 staff attended 97 formal training courses conducted on a residential, full-time or parttime basis. Courses and attendance are summarised in Table 12.


The Department's internal training and development program was supplemented by courses of instruction provided by external educational and training institutions. Thirteen personnel attended courses at the Australian Administrative Staff College and the Institute of Administration, University of New South Wales. A further 294 personnel attended seminars, workshops and courses related to a variety of Departmental activities. Sixty officers were sponsored to full-time degree courses in Civil, Electrical and Mechanical Engineering, Business Studies and Commerce. Assistance was provided to an additional 300 officers undertaking part-time studies in certificate, diploma and degree courses.

## Technical Training Activities

Extensive on-the-job instruction is constantly undertaken within the Department. The School of Plant Instruction

The Department's Training Section provides courses in many areas, including this one in industrial relations for engineering staff.
gave 956 operators practical training in the field operation and maintenance of 18 different types of plant, machinery and motor vehicles. The four Plant Instructors also assisted with the preparation of charts for the servicing and maintenance of newly purchased plant items. Asphalt Section staff presented lectures on asphalt and sprayed bituminous sealing at in-service training courses for Engineers, Scientific Officers, Testing Laboratory Operators and Foremen. In addition, preparation began on a regional seminar entitled 'Asphalt Work - Field Procedures and Supervision', which will be conducted throughout Divisions during 1984-85.

Table 12. Training Courses and Attendance

| Category | Description | Number of Courses Held |  | Personnel Attending |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1982-83 | 1983-84 | 1982-83 |  |  | 1983-84 |  |  |
|  |  |  |  | Males | Females | Total | Males | Females | Total |
| Induction | For new staff, i.e. personnel induction and introduction to Departmental procedures. | 1 | 4 | 2 | 6 | 8 | 54 | 30 | 84 |
| Equal Employment <br> Opportunity (EEO) | EEO related, e.g. EEO responsibilities for supervisors, EEO regional seminars. | 23 | 15 | 196 | 146 | 342 | 144 | 58 | 202 |
| Technical | Specialist, e.g. bridge construction, pavement design, computer usage. | 47 | 43 | 789 | 32 | 821 | 691 | 28 | 719 |
| Administrative | Departmental administration and procedures. | 2 | 3 | 37 | 0 | 37 | 41 | 3 | 44 |
| Personal Skills | e.g. correspondence preparation, dictation techniques, interviewing skills. | 26 | 17 | 226 | 35 | 261 | 131 | 45 | 176 |
| Management | Supervisory and managerial skills. | 13 | 15 | 170 | 11 | 181 | 182 | 32 | 214 |
| Totals |  | 112 | 97 | 1,420 | 230 | 1,650 | 1,243 | 196 | 1,439 |

## Apprentices

The Department indentured 51 apprentices in the last intake (compared to 47 last year), bringing the total number employed in 16 different trades to 211 . Fiftysix apprentices completed their training at the end of 1983 and, although the Department trains well in excess of its needs, more than $60 \%$ were retained in employment.

Departmental apprentices won a number of awards during the year, including a Leading Apprentice in New South Wales Award in the craft of Plant Mechanics, and Technical College Awards in the crafts of Plant Mechanics, Carpentry and Joinery, Sheet Metal Working, Bricklaying, Electrical Fitting/Mechanics, Plumbing, Gas Fitting and Draining, and Signwriting. Peter Crapp, apprentice Carpenter and Joiner, won the Department's Brian Sexton Apprentice of the Year Award.

## Health and Safety

Proclamation of the Occupational Health and Safety Act in May 1983 has resulted in the establishment of Health and Safety Committees throughout the Department's various organisations. This is expected to lead to an increase in the number of suspected hazard areas being brought to notice and, consequently, an increase in the number of investigations required. Steps are being taken by the Occupational Health Service and the Executive Safety Committee to monitor and meet these needs.

## Occupational Health Service

The Occupational Health Service aims to promote and maintain a high degree of physical and mental well-being among the Department's personnel. It is headed by an Occupational Health Nurse who works in close liaison with a Safety Officer and a First Aid Instructor.

During the year, a total of 684 staff attended or contacted the Occupational Health Centre in the Department's Head Office for consultation or treatment of injury or illness. Many availed themselves of the counselling service for problems such as stress which may affect health and performance of duties.

Generally, patients requiring further advice or treatment were referred to their own medical advisers or to a specialist, according to their specific needs.

[^5] trains apprentices.
2. Watched by his instructor, Phil Mason, apprentice Plant Mechanic David Harris finishes his first Perkins engine overhaul.
3. Traffic safety equipment in use during construction work on King Georges Road at Wiley Park.


Training programs on health education are an important aspect of the service, with 178 officers of different classifications attending sessions throughout the year. Several programs on health education and on specific problems such as back injuries were held in field locations. In addition, films and seminars given by representatives of various health organisations proved to be a popular lunch-hour activity at Head Office.
First aid attendants in offices and on work sites throughout the State continued to receive initial training and retraining to ensure a high standard of first aid knowledge. The Department received recognition from the St John Ambulance Association on the occasion of the onethousandth employee receiving a new or renewed certificate.
The Occupational Health Nurse, in cooperation with the Safety Officer, continued investigation into workplace hazards resulting from the use of suspected dangerous materials. These include toxic chemicals, laser equipment and nuclear moisture density meters. With the proliferation of visual display units in the organisation, increasing numbers of users are taking advantage of vision tests provided by the Service.
To assist in the implementation of the Occupational Health and Safety Act, the Occupational Health Service has been placed within the Engineer-in-Chief's Branch to shift the accent towards Departmental field operations and so that activities can be better co-ordinated with those of the Safety Officer and First Aid Instructor. An additional Occupational Health Nurse will be appointed in the near future to assist with the anticipated increase in workplace inspections and other activities.

## Safety and Accident Prevention

In pursuing the objectives of the Occupational Health Act, the Department strives to ensure the health, safety and welfare of all its workers. The industrial safety statistics shown in Figure 12 on page 9, show a slight improvement in recent years, although not enough to conclusively reverse the slight general upward trend. However, this is believed to be more a result of a heightened awareness of industrial safety (leading to increased reporting of accidents) than to lower industrial safety.
Accidents in the workplace during 198283 (the last full year for which statistics are available) resulted in a total of 821 lost-time injuries. This represents a lost-time frequency rate of 65.72 injuries per million working hours. None of the accidents was fatal, but injuries resulted in a loss of 15,194 working days. Twelve serious worksite accidents were investigated and reports were submitted for discussion and action where necessary. The 1981-82 figures were 1,060 lost-time injuries representing 62 injuries per million working hours.
The Safety Officer and Safety Inspectors conducted 500 worksite inspections throughout the State to ensure that safe
working practice and statutory requirements are being adhered to. This represents about two-thirds of the number of desirable annual inspections. However, one position of Safety Inspector was vacant for part of the year, which meant that field activities were somewhat curtailed. That position has now been filled and activities are expected to be at full strength during 1984-85.

The hearing protection program was presented to 1000 wages employees during the year, and it is expected that all wages employees will have attended the lectures by the end of 1984. At the same time, noise assessment of plant items continued, with 30 types of plant being tested for operator noise levels.
The office safety program was presented to over 250 employees, and a safety segment was included in 10 in-service training courses involving 185 employees. The Department is encouraging the formulation of safety committees in all Works Offices and Divisional Offices.
The Department's Executive Safety Committee is continuing to monitor the new Occupational Health and Safety Act and will take appropriate action accordingly. The Committee has proposed the inauguration of safety incentive awards for Departmental personnel and this idea is under consideration.

## Management Reviews and Services

## Review Teams

The purpose of the Review Teams is to improve operational effectiveness and efficiency within the Department through a study of its systems, methods, working relationships and organisational structures.

During the year, the method of review has been altered to encourage greater participation by officers in the areas being reviewed and there has been a greater involvement of the Review Teams in implementation of recommendations.
Areas which have been reviewed recently and where improvements are being introduced include:

- microfilming and computer indexing of vouchers, plans and other documents, which has enhanced retrieval systems, reduced storage areas, and led to a reorganisation of the Plan Room;
- changes to the 1985 annual contract plant hiring system will cut costs for the Department. The new system will also save time for both the Department and contractors, and provide a system for checking that plant supplied is safe and in sound working condition:
- tree planting schemes where improved planting and maintenance methods have reduced high loss rates.


## Management Liaison

The role of the Management Liaison Section is to research and resolve administrative problems, and act as a specialist aide to the Secretary.
Various administrative areas were
examined during 1983-84 with the following results:

- clerical and keyboard staffing levels in field offices have been adjusted to match existing workloads;
- rationalisation of telephone equipment in Head Office and the field has brought savings in time and money;
- more efficient mail and courier systems have been introduced;
- Departmental publications have been more realistically priced;
- insurance requirements will be centralised to increase efficiency and reduce costs;
- the establishment of an Administrative Services Section in Head Office has provided a more effective and efficient unit at line management level;
- centralising word processor management
is increasing the efficiency of operators.


## New Branch Heads

Two new Branch Heads were appointed during the year.

## Chief Accountant

Mr E.J. Hanlon, F.A.S.A.
A Fellow of the Australian Society of Accountants, Mr Ted Hanlon was appointed Chief Accountant in January 1984, following the retirement of Mr E.C. Cooper. Mr Hanlon began his Departmental career in 1943 as a clerk in the Accounts Branch. Following service in the R.A.N.R. from 1945 to 1947, he resumed his former duties, and then completed an accountancy course at Sydney Technical College. Mr Hanlon served in various field office and head office locations and later held senior positions in the Accounts Branch, while undertaking cost accounting studies. He was appointed Cost Accountant in March 1974, Accountant (Funds) in March 1976 and Deputy Chief Accountant in April 1977. Later in 1977 he attended an advanced management course at the Australian Administrative Staff College, Mount Eliza.

## Chief, Personnel Branch

Miss C.J. Slattery, B.A., M.Ed.Admin.
Miss Colleen Slattery joined the Department in January 1984 as Chief of the recently formed Personnel Branch. She has had extensive experience in the field of secondary education, both as teacher and administrator. In 1977 Miss Slattery was appointed Staff Development Officer in the Housing Commission of New South Wales and subsequently became the Manager of the Commission's Allocation Branch. In 1981 she joined the Department of Motor Transport and established a Personnel Branch within that organisation. Miss Slattery holds Bachelor of Arts and Master of Educational Administration degrees from the University of New England, and recently completed a diploma course in counselling. She is a member ot the Employment Relations Course Advisory Committee for the New South Wales Institute of Technology and of the Royal Institute of Public Administration.

Commissioners and Branch Heads

Commissioner
Mr B.N. Loder, B.E.,
Dip.T.C.P., F.I.E.Aust., F.C.I.T.


Deputy Commissioner
Mr J.G. Crowe, B.E.,
M.Eng.Sc., M.I.E.Aust., M.C.I.T.


Engineer-in-Chief
Mr L.R. Browne, B.E.,
M.Eng.Sc., L.G.E.
M.I.E.Aust., M.A.I.T.P.M.

Secretary
Mr W.McL. Cable, LL.B.,
A.A.S.A.



Chief Accountant
Mr E.J. Hanlon
F.A.S.A., C.P.A.


Chief, Personnel Branch
Miss C.J. Slattery
B.A., M.Ed.Admin.

Chief Legal Officer
Mr K.B. Ford



## Engineer-in-Chief's Branch

Deputy Engineer-in-Chief (Planning \& Design)
Deputy Engineer-in-Chief (Operations)
Chief Engineer (Bridges)
Chief Engineer (Services)
Chief Engineer (Traffic \& Design)
Engineer for Programmes and Budgets
Highways Engineer
Principal Mechanical Engineer
Research and Development Engineer
Bridge Engineer (Design)
Bridge Engineer (Operations)
Road Design Engineer
Traffic Engineer
Advance Planning Engineer
Engineer for Country Councils' Works
Materials Engineer
Rural Investigations Engineer
Urban Investigations Engineer
Asphatt Engineer
Contract Administration Engineer
Graphic Services Manager
Principal Surveyor and Property Officer
Principal Architect
Principal Planner

## Secretarial Branch

Deputy Secretary
Assistant Secretary
Assistant Secretary

## Accounts Branch

Deputy Chief Accountant (Finance)
Deputy Chief Accountant (Operations)
Group Accountant (Operations)
Group Accountant (Funds)
Auditor
Administrative Officer (Tollworks)

## Personnel Branch

Assistant Chief, Personnel Branch (E\&T)
Assistant Chief, Personnel Branch (A\&C)

## Legal Branch

Deputy Chief Legal Officer

## Policy \& Economics Unit

Chief, Policy \& Economics Unit
Communication \& Information Services
Communication \& Information Services Manager

* positions vacant as at 30 June 1984.


## Divisional Engineers

Sydney Division
Parramatta Division
Blacktown Division
Central Mountains Division
Illawarra Division
Hunter Valley Division
Lower North Coast Division
North Eastern Division
Upper Northern Division
North Western Division
Central Western Division
Central Northern Division
Murray Darling Division
Central Murray Division
South Western Division
South Coast Division
Southern Division
Outer Freeway Construction Division
V.P. O'Grady
E.W. King
B.J. Pearson
K.W. Dobinson
B.H. Butcher
P. Moore
C.N. Penney
S.P. Scrivener
A. Leask
A.R. Smith
P.G.L. Wolfe
R.A. Dunstan
D.F. Watson
D.H.L. Francis
J.H. Dearden
G.S. Donald
W.L. Gordon
K.M. Anderson
J.A. Walker
R.L. Jones
A.W. Emery
A.J.R.M. Watson
R.G. Hobday
B.J. Watters
K.D. Hadiey
J.H. Tarleton

* (K.B. Kerr appointed 4.7.84)
- (D.R. Williams appointed 4.7.84)
R.S.J. Price
N. Hunziker
N.P. Drumgold
J. Kelly
D.P.B. Jones
* (T.J. Hagan appointed 10.7.84)
P.J. O'Neill
T.M. Liptak
L.R. James
R.A. Dubedat
G.A. Cruickshank
G.J. Vidler
P.B. Sheil
L.J. Bonnefin
F.E. D'Adam
N.W. Russell
W. Choy
J.R. Jordan
J.R. Gowing
R.L. Smythe
D.L. Pook
J.R.M. MacBride
A.G. Kennedy
G.J. Ross
A. Tinni
M.R. Foster


## Other Activities

## Community Relations

The Department seeks to maintain good community relations and to provide an efficient information service about its proposals and operations. Members of the public who are interested in or concerned about road matters are invited to telephone or call at the Public Relations Section. The public is also welcome to use the Department's Library for reference purposes. There are also reception counters on other floors dealing with special matters such as property enquiries or requests to view approved plans (see inside back cover of this Report for locations and telephone numbers).

During next year a new public relations 'shop-front' will be opened, adjacent to the main Head Office entrance foyer.
Publications, displays, scale models and an enquiry centre will be provided to make it easier to obtain details of what the Department is doing or planning to do.

Written requests for detailed information about the Department's activities, or for guest speakers, should be addressed to the Secretary of the Department, or to the local Divisional Engineer (see addresses on inside back cover of this Report and on the enclosed map).
The Department produces an interesting range of maps and publications dealing with both present and past roadbuilding projects, and most are free of charge. As well as the 1982-83 Annual Report (which won a bronze award from the Australian Institute of Management), the year's publications included issues of Main Roads (the Department's quarterly journal), the 1984 edition of Main Road Maps of New South Wales, and brochures on the Blue Mountains Road Improvement Program, the Tumblong Deviation of the Hume Highway south of Gundagai, the F3 - SydneyNewcastle Freeway and the
\$5 Billion Five- Year Road Program for New South Wales.

The Public Relations Section maintains an extensive collection of colour transparencies and black and white photographs of roads and bridges, and copies of these can purchased. There is also a library of 16 mm films which are available for loan to interested groups, and a film catalogue is obtainable on request.

Displays are another helpful way of letting the community know what is happening in the roads area. The Department's stand at this year's Royal Easter Show in Sydney was particularly successful, with a theme of 'Roads of the Future', based on the State Government's \$5 Billion Five-Year Road Program. Displays were also mounted during the year at three country shows
(Broken Hill, Wollongong and Gien Innes), various other Sydney venues and a number of media conferences. There is a growing use of artist's impressions, based on aerial photographs, to show clearly how future projects will look when completed.

## International Interchange

A valuable exchange of specialised knowledge and skills continued with other nations during the year.
In August 1983, the Department was represented by Deputy Engineer-in-Chief (Operations) Mr Eric King at the 'New Zealand Roading Symposium 1983' in Wellington. At the request of the Organising Committee, Mr King presented a paper on the construction and quality control of concrete pavements. Very little work of this nature has been done in New Zealand.
Also in August, Departmental engineer Mr John Brett (Engineer-Manager, Materials and Research Laboratory) attended the 4th International Conference of the Road Engineering Association of Asia and Australasia in Jakarta, Indonesia. Two papers of which Mr Brett was co-author were selected for presentation and publication at the conference: 'Pavement Crack Evaluating Using Photo Type Techniques', and 'Optimisation of Equipment for Testing Road Materials, Construction and Condition'.
Technical discussion of traffic control was the purpose of a visit to Hong Kong in May 1984. Departmental engineers Mr Arthur Sims (Traffic Systems Manager) and Mr Alan Finlay attended talks between Philips Industries Limited and the Hong Kong Government regarding the supply and installation of an area traffic control system in Hong Kong. Mr Sims and Mr Finlay were
involved in the development of the Sydney Co-ordinated Adaptive Traffic System (SCATS), on which a tender by Philips Industries Limited for the Hong Kong system was based.
During the year, the Department was pleased to act as host to 13 overseas visitors who stayed for periods ranging from 10 days to three months. Among the visitors were nine Burmese engineers who were attached to Mechanical Section, Materials Engineering Section, Goulburn Works Office and Outer Freeways Construction Division, to learn methods and procedures in their areas of specialisation. Four Indonesian engineers made an inspection of bridge construction and maintenance works at various locations in New South Wales.

## National Association of Australian State Road Authorities

The Association, usually known as NAASRA, comprises the authorities responsible for roads in the six States and the Northern Territory, and the Australian Capital Territory. It provides a central organisation with the aim of achieving a uniform approach to the development and improvement of the Australian road network. Through its publications and through the meetings of its various committees, NAASRA is able to co-ordinate road and bridge design standards in both maintenance and construction.

The Department's display at the 1984 Royal Easter Show drew thousands of interested onlookers.


Three meetings of the Association were neld during the year, attended by the heads of the member authorities. The Principal Cechnical Committee also met and was assisted by meetings of various specialist echnical committees. Subjects dealt with ncluded bridge engineering, computers, naterials engineering, plant and equipment, oad design, traffic engineering, and road zonstruction and maintenance practices. There was also a meeting of the Secretarial and Accounts Committee which s concerned with the development of mproved administrative and management practices.
Publications issued during the year nclude Explosives in Roadworks, Road Signs and Markings, Australian Roads 1983, Prestressed Concrete Inspection Practice and Grade Separated interchanges. A full list and the publications hemselves are obtainable from the Department's Head Office.
The NAASRA Roads Study, covering all classes of roads in Australia, was completed in early 1984 (see 'Planning Data', page 33).
The cost of NAASRA's operations during $1983-84$ was $\$ 995,400$, of which the Department contributed approximately $\$ 172,000$. The NAASRA Secretariat is on the 5th loor of the Legal and General Building. 2 Dind Street (P.O. Box 489), Milsons Point, NSW 2061. Telephone (02)957 6188. Written enquiries should be addressed to the Engineer-Secretary.

## Australian Road Research Board

The Australian Road Research Board ARRB) is the country's national road esearch centre. Its information services publish and disseminate papers and articles to appropriate organisations and specialists involved in the design, naintenance and construction of roads. Chief among the publications are the 4ustralian Road Index and Australian Road Research in Progress. The Board also provides on-line access to the International Road Research Documentation facility hrough its computer-based information system. Thus research and investigative efforts are co-ordinated and optimum use made of available funds.
The Board's policy is guided and eviewed by a board of directors comprising the executive heads of the sponsoring road authorities, including Mr Bruce Loder, Commissioner for Main Roads, New South Wales. The 1983-84 annual budget was $\$ 4.57$ million, of which an amount of $\$ 702,200$ was contributed by he Department.
During the year, the Board provided electronic load measuring and data ecording equipment for use with the accelerated loading facility (ALF), built by he Department (see 'Research and Development', page 58). ARRB will be esponsible for the operation of the facility and its use in pavement testing throughout Australia.


Through the efforts of ARRB and the various State road authorities, a strategy for pavement research has been drawn up, including the development by the Board of highway speed axle load measuring equipment known as the Electronic Mass Unit (EMU). This equipment will assist in the analysis of loads actually being applied to road pavements.

Various workshops and symposia were conducted during 1983-84. The Board also continued to assist with projects in developing countries, and to play a significant role in the Road Engineering Association of Asia and Australasia. By June, planning was well advanced for the 12th ARRB Conference to be held in Hobart during August 1984.

Requests for information about any of ARRB's activities should be addressed to The Executive Director, Australian Road Research Board, P.O. Box 156 (Bag 4), Nunawading, Victoria 3131. Telephone (03)233 1211.

## Permanent International Association of Road Congresses

The XVII World Road Congress of the Permanent International Association of Road Congresses (PIARC) was held at the Sydney Opera House from 8 to 15 October 1983. It was the first World Road Congress ever hosted by Australia and was only the second time in over 70 years that the Congress had been held in the Southern Hemisphere.

Proceedings began with the official opening by the Governor-General of Australia, Sir Ninian Stephen. In attendance were almost 1400 delegates and over 400 accompanying persons from 82 countries, representing the world's foremost road engineers, administrators and economists.

Discussion centred on technical reports submitted under five nominated areas: earthworks, drainage and subgrade; construction and maintenance of pavements; inter-urban roads and motorways; roads in urban areas; and roads in developing regions. Delegates could also participate in a workshop on surface water drainage and two special discussion groups concerned with energy

The opening session of the XVII World Road Congress took place at the Sydney Opera House on Monday, 10 October 1983.
savings and the impact of roads on economic and social life. In addition, 11 ongoing technical committees continued their investigations in the broad areas of construction, improvement, maintenance, use and economic development of roads.

Conclusions of technical discussions and committees were presented at the closing session of the Congress by Mr Donald Aitken, Congress General Reporter and Commissioner of Main Roads, Western Australia.

Among highlights of the week was ROAD '83, the International Trade Fair and exhibition of road equipment at the Royal Agricultural Society's Showground in Sydney. The Fair was opened by the Hon. Peter Morris, M.H.R., Commonwealth Minister for Transport and President of the Australian Organising Committee of PIARC. Also popular with delegates were inspections of works in progress outside Sydney - in particular, the Mooney Mooney Creek Bridge on the route of the F3 - Sydney-Newcastle Freeway.

After the Congress, many participants embarked on one of four study tours which provided the opportunity of inspecting a variety of Australian road and bridge works in areas of widely differing climate and terrain.

## Army Reserve

The Department continued to sponsor 21 Construction Regiment RAE(SR), in conjunction with several other Government departments and authorities. Over 200 Departmental personnel are associated with the Regiment, in particular the 101 Construction Squadron and 108 Plant Squadron.
The annual camp was held at Cataract Park, near Appin, where the two squadrons undertook military training in conjunction with construction of facilities at the site of the World Scout Jamboree, to be held in 1988 as part of the Bicentennial Celebrations.

## The Classified Road System

There are approximately $205,000 \mathrm{~km}$ of public road in New South Wales. The total length for which the Commissioner for Main Roads had full or partial financial responsibility at 30 June 1984 was 42,637 km , including 6,200 bridges.
The remaining $162,300 \mathrm{~km}$ of public road are the responsibility of the local Councils in whose areas they are situated.

The accompanying tables show lengths of road types in general, freeways, types of surface and sealed single and dual carriageway as at 30 June 1984.

## Types of Road Referred to in this Report

Freeways are roads which are primarily for through traffic and which have a divided carriageway and grade separation at all intersections, with no access for traffic between interchanges. These roads, including those lengths proclaimed as tollworks, are under the direct control of the Commissioner, who meets the full cost of all road and bridge works, including maintenance.

State Highways are the principal means of road communication throughout the State, in many cases connecting with similar roads in other States. The Commissioner is directly responsible for State Highways and meets the full cost of road and bridge works on them.

Trunk Roads are the secondary avenues of road communication which connect with the State Highways to link the main regions of the State. Trunk Roads are the responsibility of the local Councils through whose areas they pass and grants are made by the Commissioner to Councils to meet the full cost of approved works on these roads.

Ordinary Main Roads mainly join towns and important centres of population with each other, and, in conjunction with State Highways and Trunk Roads, effectively link all districts in the State to the overall road network. In country areas, ordinary Main Roads are the responsibility of the Councils through whose areas they pass and grants are made by the Commissioner to Councils to meet the full cost of approved works on these roads. Ordinary Main Roads in the County of Cumberland are the full financial responsibility of the Commissioner.

Secondary Roads - certain roads within the County of Cumberland (Sydney and environs), which carry a substantial volume of through traffic and relieve neighbouring

Main Roads, may be declared by the Commissioner to be Secondary Roads. Works on Secondary Roads are the responsibility of the local Councils through whose areas they pass, although usually half the cost of construction and maintenance is met by the Commissioner with the balance being met by the Council.

Tourist Roads specially serve the tourist industry by providing access to particular scenic and holiday attractions, such as lookouts, beaches, etc. They are usually under the care and control of local Councils, which may be assisted financially by the Commissioner through grants of up to half the cost of construction and maintenance.

Developmental Roads are roads which, if constructed or improved, would help develop a district or any area of Crown or private land, by providing access to a railway station, shipping wharf, or to a road leading to them. There is also provision for individual works in the nature of missing links, such as a new bridge or an isolated unconstructed length of road, to be proclaimed as Developmental Works. The full cost of Developmental Roads and Works is usually met by the Commissioner, while maintenance after construction is the responsibility of the local Council.

Unclassified Roads - the Commissioner also maintains a number of unclassified roads, most of which are within the unincorporated area of the Western Division of New South Wales.

## Road Lengths

Table 13. Lengths of Freeway at 30 June 1984
km

| F1 - Warringah Freeway, Cahill |  |
| :--- | ---: |
| Expressway and Sydney Harbour |  |
| Bridge | 7 |
| F3 - North Western Freeway and |  |
| Sydney-Newcastle Freeway | 56 |
| F4 - Western Distributor and |  |
| Western Freeway | 34 |
| F5 - South Western Freeway | 64 |
| F6 - Southern Freeway | 39 |
| F8 - Wollongong Northern |  |
| Suburbs Distributor | 1 |

Total

Table 14. Types of Road and Lengths at 30 June 1984

|  | km |
| :--- | ---: |
| Freeway | 201 |
| State Highway | 10,264 |
| Trunk Road | 7,098 |
| Main Road | 18,352 |
| Secondary Road | 292 |
| Tourist Road | 445 |
| Developmental Road | 3,474 |
| Unclassified road in the |  |
| unincorporated area of the | 2,489 |
| Western Division | 22 |
| Unclassified road in the |  |
| incorporated area of |  |
| New South Wales | 42,637 |
| Total |  |

Table 15. Types of Surface at 30 June 1984

|  | km |
| :--- | ---: |
| Natural surface | 954 |
| Formed only | 6,293 |
| Gravel | 9,538 |
| (Total Unsealed) | $(16,785$ |
| Primed/primer seal | 323 |
| Sprayed seal | 22,321 |
| Enrichment reseal | 795 |
| Asphaltic concrete | 2,258 |
| Cement concrete | 155 |
| Total Sealed) | $(25,852$ |
| Total | 42,637 |

Table 16. Lengths of Sealed Road at 30 June 1984

|  | km |
| :--- | ---: |
| Single Carriageway | 24,985 |
| Dual Carriageway | 867 |
| Total | 25,852 |

[^6]


## ROADSIDE REST AREAS

The roadside rest areas listed here are those on principal rural main roads in New South Wales. Most of them have been established by the Department of Main Roads, in cooperation with various authorities, including the Department of Local Government, Department of Lands, Forestry Commission, National Parks and Wildlife Service, and Shire and Municipal Councils.
Also included are some rest areas constructed and/or maintained by these organisations and others (such as service clubs).
Many rest areas have been located to take advantage of local beauty spots or outstanding viewpoints, as well as shade and shelter. In some cases landscaping has been carried out to enhance the site. Most have been supplied with shelters, tables, seats, fireplaces, firewood, drinking water and litter bins. All rest areas have safe entrance and exit facilities and are sign-posted to encourage drivers to break their journey in pleasant and non-hazardous surroundings.
The rest areas are numbered in series along each road with listed locations related to the closest well known towns.

## LOCATIONS

434 km north of Karuah and 39 km to Bulahdelah.
446 km north of Karuah at Yalimba Creek and 37 km to Bulahdelah
452 km north of Bulahdelah at O'Sullivans Gap and 64 km to Taree.
4612 km north of Taree at Blackbutt Forest and 38 km to Kew.
4718 km north of Taree at Breakneck Forest and 32 km to Kew
4819 km north of Taree at Breakneck Forest and 31 km to Kew.
4933 km north of Taree at Moorland and 17 km to Kew.
508 km north of Kew at Bago Road and 62 km to Kempsey.
5162 km north of Kew at Maria River and 8 km to Kempsey
5240 km north of Kempsey at Allgomera and 14 km to Macksville.
536 km north of Raleigh and 16 km to Coffs Harbour.
5481 km north of Coffs Harbour and 3 km to Grafton
5545 km north of Grafton near Maclean turnoff and 51 km to Woodburn.
5686 km north of Grafton near New Italy turnoff and 47 km to Ballina.
OXLEY HIGHWAY
5781 km west of Wauchope at Stockyard Creek and 92 km to Walcha.
5827 km west of Somerton and 13 km to Gunnedah.
5937 km west of Mullaley near Rocky Glen and 32 km to Coonabarabran




|  |
| :--- |



## DISTANCES AND TRAVELLING TIMES

The figures in the squares where horizontal and vertica columns meet show the distance in kilometres (blue) and the travelling time (brown) between the indicated towns

Distances shown on this chart represent commonly used 'preferred' routes. These may, in some cases, use roads other than State Highways, which accounts for the differences between the chart and the following five tables showing interstate distances. Similarly, a 'preferred' route need not necessarily be the shortest distance between centres.

Times quoted are based on those obtained in mediumweight cars driven by experienced drivers familiar with the road conditions. The times refer to week-day travel in daylight, excluding stops, and in favourable weather. They may vary where the route passes through major urban areas.

## INTERSTATE ROUTES

SYDNEY to MELBOURNE
via Princes Highway
(National Route 1)

| (National Route 1) |  |  |  |  |
| ---: | :---: | ---: | ---: | ---: |
|  |  | $\mathbf{k m}$ | $\mathbf{k m}$ |  |
| 0 | Sydney | 1048 | 0 |  |
| 80 | Wollongong | 968 | 24 |  |
| 117 | Kiama | 931 | 79 |  |
| 159 | Nowra | 889 | 106 |  |
| 220 | Milton | 828 | 121 |  |
| 226 | Ulladulla | 822 | 170 |  |
| 279 | Batemans Bay | 769 | 185 |  |
| 306 | Moruya | 742 | 203 |  |
| 348 | Narooma | 700 | 249 |  |
| 428 | Bega | 620 | 297 |  |
| 462 | Merimbula | 586 | 322 |  |
| 488 | Eden | 560 | 362 |  |
| 550 | Genoa | 498 | 400 |  |
| 597 | Cann River | 451 | 454 |  |
| 672 | Orbost | 376 | 495 |  |
| 733 | Lakes Entrance | 315 | 566 |  |
| 768 | Bairnsdale | 280 | 664 |  |
| 836 | Sale | 212 | 756 |  |
| 899 | Morwell | 149 | 872 |  |
| 1016 | Dandenong | 32 | 953 |  |
| 1048 | Melbourne | 0 | 993 |  |
|  |  |  |  |  |
|  |  |  |  |  |


|  | $\begin{aligned} & \text { 증 } \\ & \text { 울 } \\ & \text { nen } \end{aligned}$ |  | $\begin{gathered} \text { 山⿱山凵 } \\ \stackrel{y}{\Sigma} \end{gathered}$ | 岂 年 咅 | $\begin{aligned} & \text { 敩 } \\ & \text { N } \end{aligned}$ | $\begin{aligned} & \text { 嵲 } \\ & \text { 虎 } \end{aligned}$ | $\begin{aligned} & \stackrel{y}{2} \\ & \frac{\ddot{x}}{1} \\ & \hline \end{aligned}$ |  | $\underset{\substack{\text { 岕 }}}{\text { 2 }}$ | $\begin{aligned} & \text { 吉 } \\ & \sum_{i=1}^{O} \end{aligned}$ | $\begin{aligned} & \text { 茳 } \\ & \stackrel{\text { c/ }}{2} \end{aligned}$ |  |  | 0 20 0 0 合 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 715 | 700 | $12^{30}$ | $10^{35}$ | 650 | 635 | $5{ }^{30}$ | $14^{05}$ | 800 | $12^{15}$ | 125 | 2100 | 145 | 65 | ALBURY |
|  | 805 | $15^{40}$ | $3{ }^{50}$ | 530 | 930 | 745 | 720 | 330 | 740 | 130 | $4{ }^{20}$ | 625 | $11^{135}$ | $8^{40}$ | ARMIDALE |
|  | 725 | $12^{15}$ | $12^{50}$ | 915 | 400 | $6{ }^{50}$ | 700 | $12^{45}$ | 635 | $12^{00}$ | 1135 | 1950 | 530 | 505 | BEGA |
|  | 745 | $11^{30}$ | $6{ }^{05}$ | $10^{05}$ | $11^{10}$ | $6{ }^{15}$ | $5{ }^{15}$ | $12^{00}$ | $10^{15}$ | $8^{05}$ | $12^{50}$ | $13^{55}$ | 925 | $10^{20}$ | BOURKE |
|  | $12^{55}$ | 330 | $13^{30}$ | $15^{15}$ | $15^{30}$ | $11^{25}$ | $10^{25}$ | 1710 | $15^{25}$ | $13^{15}$ | 1800 | $21^{10}$ | $10^{05}$ | $15^{35}$ | BROKEN HILL |
|  | 505 | $10^{10}$ | 950 | 650 | $3{ }^{05}$ | 350 | 400 | $10^{20}$ | $4{ }^{15}$ | 935 | $9^{10}$ | 1715 | 325 | 310 | CANBERRA |
|  | $10^{30}$ | $18^{35}$ | 540 | 545 | $10^{50}$ | $10^{40}$ | $10^{15}$ | 225 | 830 | $4{ }^{25}$ | $3{ }^{15}$ | $4{ }^{50}$ | $14^{45}$ | $10^{10}$ | COFFS HARBOUR |
|  | 600 | $10^{40}$ | $11^{15}$ | 755 | $4{ }^{30}$ | 510 | 525 | $11^{45}$ | 540 | 1100 | $10^{35}$ | 1840 | 355 | $4{ }^{35}$ | COOMA |
|  | $8^{20}$ | $4^{15}$ | $12^{05}$ | $12^{25}$ | 840 | 735 | 600 | $16^{000}$ | 950 | $11^{50}$ | $14{ }^{50}$ | 1945 | $3{ }^{15}$ | 845 | DENILIQUIN |
|  | 320 | 945 | $4{ }^{40}$ | $5{ }^{40}$ | $6{ }^{25}$ | 150 | 125 | 820 | $5{ }^{50}$ | $4{ }^{25}$ | 740 | $12^{20}$ | 525 | 555 | DUBBO |
|  | $\mathrm{g}^{20}$ | $16^{55}$ | 235 | 645 | $10^{45}$ | 900 | 835 | $4{ }^{45}$ | 855 | 245 | 535 | $5{ }^{15}$ | $12^{50}$ | 955 | GLEN INNES |
|  | 345 | $10^{25}$ | $10^{05}$ | 530 | 145 | $4^{15}$ | $4^{15}$ | 900 | 255 | $8{ }^{15}$ | 700 | $15^{55}$ | 340 | 150 | GOULBURN |
|  | $10^{45}$ | $18^{20}$ | $4{ }^{35}$ | 650 | 115 | $10^{25}$ | 1000 | 330 | 935 | $4{ }^{10}$ | $44^{20}$ | 345 | $14^{15}$ | 1100 | GRAFTON |
|  | $6^{05}$ | 520 | 940 | 1100 | 655 | $44^{40}$ | $3^{35}$ | $14^{30}$ | 835 | 925 | $13^{20}$ | 1715 | $2{ }^{25}$ | 700 | GRIFFITH |
|  | $12^{25}$ | 2000 | $5{ }^{50}$ | 830 | $13^{35}$ | $12^{05}$ | $11^{40}$ | 510 | $11^{15}$ | $5{ }^{50}$ | 600 | 200 | $15^{55}$ | $12^{30}$ | LISMORE |
|  | $\bullet$ | $10^{50}$ | 65 | 455 | 325 | 130 | $2{ }^{50}$ | 825 | 230 | 635 | 715 | $14^{20}$ | 505 | $2^{35}$ | LITHGOW |
|  | 881 | $\bullet$ | $14^{25}$ | $15^{45}$ | $12^{10}$ | $10^{05}$ | 820 | $19^{15}$ | $14^{00}$ | $14^{10}$ | $18{ }^{05}$ | $22^{05}$ | 645 | $12^{15}$ | MILDURA |
|  | 526 | 1187 | $\bullet$ | 700 | 1100 | 630 | $6{ }^{05}$ | 655 | 910 | 325 | 745 | 820 | $10^{05}$ | $10^{10}$ | MOREE |
|  | 287 | 1168 | 503 | $\bullet$ | $5{ }^{15}$ | 525 | 645 | 340 | 255 | 400 | 230 | $10^{35}$ | 910 | $4{ }^{25}$ | NEWCASTLE |
|  | 256 | 981 | 800 | 327 | － | 600 | 600 | 845 | $2^{35}$ | 800 | 735 | $15^{40}$ | 525 | 105 | NOWRA |
|  | 117 | 822 | 528 | 404 | 380 | $\bullet$ | $1{ }^{20}$ | 85 | 400 | $6{ }^{15}$ | 745 | $14^{10}$ | $4{ }^{20}$ | $4{ }^{05}$ | ORANGE |
|  | 217 | 691 | 496 | 504 | 471 | 100 | $\bullet$ | 945 | 520 | 550 | gos | $13^{45}$ | 400 | 525 | PARKES |
|  | 525 | 1406 | 495 | 244 | 565 | 642 | 747 | $\bullet$ | $6{ }^{35}$ | 355 | $1{ }^{10}$ | 715 | $12^{40}$ | 755 | PORT MACQUARIE |
|  | 145 | 1081 | 647 | 170 | 159 | 262 | 362 | 408 | － | 625 | $5{ }^{15}$ | 1305 | 635 | 130 | SYDNEY |
|  | 468 | 1156 | 273 | 284 | 581 | 497 | 465 | 282 | 428 | － | $44^{45}$ | 755 | 950 | 710 | TAMWORTH |
|  | 441 | 1322 | 559 | 160 | 481 | 558 | 658 | 84 | 324 | 346 | $\bullet$ | $8^{05}$ | $11^{30}$ | 645 | TAREE |
|  | 000 | 1710 | 593 | 719 | 1040 | 1051 | 1019 | 495 | 883 | 554 | 559 | $\bullet$ | 1745 | 1445 | TWEED HEADS |
|  | 380 | 577 | 768 | 618 | 404 | 321 | 272 | 856 | 470 | 737 | 772 | 1291 | $\bullet$ | $5{ }^{30}$ | WAGGA WAGGA |
|  | 182 | 994 | 726 | 253 | 79 | 299 | 399 | 491 | 80 | 507 | 407 | 966 | 417 | $\bullet$ | WOLLONGONG |

## NEY to MELBOURNE via Hume Highway National Route 31）

SYDNEY to MELBOURNE via Olympic Way and Hume Highway （National Routes 32， 24 and 41）

| （National |  |  |
| ---: | :---: | ---: |
| $\mathbf{k m}$ |  | $\mathbf{k m}$ |
| 0 | Sydney | 959 |
| 145 | Lithgow | 814 |
| 207 | Bathurst | 752 |
| 244 | Blayney | 715 |
| 314 | Cowra | 645 |
| 385 | Young | 574 |
| 432 | Cootamundra | 527 |
| 485 | Junee | 474 |
| 524 | Wagga Wagga | 435 |
| 585 | Henty | 374 |
| 603 | Culcairn | 356 |
| 654 | Albury | 305 |
| 726 | Wangaratta | 233 |
| 766 | Benalla | 193 |
| 863 | Seymour | 96 |
| 916 | Kilmore | 43 |
| 959 | Melbourne | 0 |

SYDNEY to BRISBANE via Pacific Highway （National Route 1）

| $\mathbf{k m}$ |  |  |
| ---: | :---: | ---: |
| 0 | Sydney | $\mathbf{k m}$ |
| 24 | Hornsby | 993 |
| 79 | Peats Ridge | 969 |
| 106 | Wyong | 914 |
| 121 | Doyalson | 887 |
| 170 | Newcastle | 872 |
| 185 | Hexham | 823 |
| 264 | Bulahdelah | 808 |
| 330 | Taree | 729 |
| 404 | Oxley Highway Junction | 663 |
| 450 | Kempsey | 589 |
| 504 | Macksville | 543 |
| 517 | Nambucca Heads | 489 |
| 564 | Coffs Harbour | 476 |
| 648 | Grafton | 429 |
| 781 | Ballina | 345 |
| 807 | Bangalow | 212 |
| 860 | Murwillumbah | 186 |
| 889 | Tweed Heads | 133 |
| 914 | Southport | 104 |
| 993 | Brisbane | 79 |
|  |  | 0 |

Financial Appendices to the
Commissioner for Main Roads 1983-84 Annual Report

OEPARTMENT OF MAIN ROADS, NEW SOUTH WALES
FINANCIAL APPENDICES TO THE FIFTY-NINTH ANNUAL REPORT OF THE COMMISSIONER FOR MAIN ROADS
FOR THE YEAR ENDED 30 JUNE 1984

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[^7]Stattyent of recitits and pament for the five yens aned 30 June 1984

| RECEIPTS | 1979/80 | 1980/81 | 1981/82 | 1982/83 | 1983/84 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State. Sources | \$ | \$ | \$ | \$ | \$ |
| Motor Vehicle registration weight tax and tax levy | 38,283,291 | 47,205,405 | 58,760,558 | 66,135,549 | 76,549,932 |
| Charges for Heavy Commercial Vehicles for Maintenance of Roads | 244,577 | 4,691 | - | - | - |
| Diesel Fuel Levy | - | - | - | 20,208,565 | 20,212,323 |
| Financial Accommodation |  |  |  |  |  |
| - State General Loan Account | 24,000,000 | 10,000,000 | 4,000,000 | - ${ }^{-}$ | - |
| - Semi-Goverrment Loan Raising | 15,000,000 | 25,300,000 | 26,900,000 | 24,800,000 | 26,000,000 |
| - Repayable treasury Advance | - | - | - | - | - |
| - Deferred payments Contract | - ${ }^{-}$ | -5- | 7-173.214 | - | 5,370,747 |
| Road Tolls (less collection Costs) | 5,870,383 | 6,559,467 | 7,173,214 | 6,102,727 | 6,673,901 |
| Interest - On Sinking Fund Investments | 1,851,588 | 2,511,926 | 2,259,518 | 3,033,819 | 4,445,056 |
| - On Treasury fund Balances | 333,443 | 608,466 | 335,247 | 338,112 | 618,968 |
| Contributions for Specified Works <br> - from Other Departments <br> - fram Other Sources | $\begin{array}{r} 1,473,228 \\ 779,554 \end{array}$ | $\begin{aligned} & 492,935 \\ & 248,078 \end{aligned}$ | $\begin{array}{r} 92,633 \mathrm{Dr} \\ 1,524,047 \end{array}$ | $\begin{array}{r} 76,024 \\ 324,281 \end{array}$ | $\begin{aligned} & 274,972 \\ & 713,341 \end{aligned}$ |
| Natural Disaster Grant | 79,554 | 24, | 1,524,047 | 324,281 | 13,341 |
| Sale of properties (No longer require. ror Roadworks) | 1,635,763 | 2,062,600 | 1,836,549 | 4,836,698 | 8,505,474 |
| Rents fram properties Aoquired for Works (less Collection and Maintenance Costs) Miscellaneous | $\begin{array}{r} 1,807,369 \\ 348,949 \end{array}$ | $\begin{array}{r} 2,116,352 \\ 726,765 \end{array}$ | $1,109,198$ 675,973 | $\begin{array}{r} 2,940,676 \\ 749,993 \end{array}$ | $\begin{array}{r} 2,996,436 \\ 983,771 \end{array}$ |
| Total State Sources | 91,628,145 | 97,836,685 | 105,481,671 | 129,546,444 | 153,344,921 |

## Conmonwealth_Grants

Road Grants Act 1981

- National Roads
- Arterial Roa

Australian Bicentennial Road Develogment trust
Fund Act, 1982

- National Roads
- Arterial Roads - Urban
- Local Roads

Wage pause Employment Programme
Steel Regions Assistance Progranme

> Total Camorweal th Grants Total Receipts

Cash at Treasury as at list July
TOTAL FUNDS AVAILABLE

| 32,990,000 | 36,138,000 | 53,000,000 | $33,455,832$ | $40,200,000$ |
| :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - |
| - | - | - | 3,700,000 | 24,062,000 |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | 323,345 |
| - | - | - | - |  |
| - 32,990,000 | 36,138,000 | 53,000,000 | 37,155,832 | 64,585,345 |
| 124,618,145 | 133,974,685 | 158,481,671 | 166,702,276 | 217,930,266 |
| 6,170,714 | 6,855,413 | 3,730,320 | 5,003,388 | 6,136,174 |
| 130,788,859 | 140,830,098 | 162,211,991 | 171,705,664 | 224,066,440 |


| PAYMENTS. | 1979/80 | 1980/81 | 1981/82 | 1982/83 | 1983/84 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State Road System | \$ | \$918 ${ }^{\text {\$ }}$ | \$ | \$ | \$ |
| - Construction and Reconstruction | 59,150,479 | 69,818,460 | 67,508,904 | 70,488,953 | 84,045,216 |
| - Construction under A.B.R.D. Programme | - | , 8037 | -50, | 2,906,021 | 20,850,685 |
| - Property Aoquisitions | 15,472,693 | 18,837,896 | 28,590,253 | 18,575,857 | 22,454,239 |
| - Maintenance and Minor Improvements | 20,688,158 | 21,529,494 | 23,322,463 | 26,570,922 | 33,279,302 |
| Local Roads |  |  |  |  |  |
| - Construction and Maintenance | - | 5,307 | - | - | - |
| - Construction under A.B.R.D. Programme | - | - | - | - | - |
| Intersection Improvenents, Traffic Signals, Signs and Roadnarking |  |  |  |  |  |
| - Construction and Reconstruction | - | - | - | - | - |
| - Maintenance and Operations | - | - | - | - | - |
| Land and Buildings |  |  |  |  |  |
| - For Works Operations | 1,219,316 | 1,200,066 | 1,056,774 | 1,352,062 | 1,489,086 |
| - For Adninistration | 13,736 | 17,064 | 12,882 | 60,316 | 85,206 |
| Net Transactions of Operating and Suspense Accounts | 2,701,642 | 3,010,718 | 1,941,376 | 480,458 $\mathrm{\sim r}$ | 3,038,581 Or |
| General Administration | 4,626,491 | 5,523,585 | 6,969,666 | 7,200,547 | 7,797,966 |
| Research and Development | 1,231,291 | 1,797,579 | 2,150,661 | 2,135,086 | 1,754,475 |
| Financial Accammodation Charge- |  |  |  |  |  |
| - Repayable Treasury Advances - Interest | 649,293 | 627,479 | 603,579 | 577,392 | 548,699 |
| - State Loan Allocation - Interest and Managenent Expenses | 5,000,400 | 6,733,200 | 7,332,200 | 9,468,110 | 9,037,050 |
| - Semi-Goverment Loan Raising - Interest and Management Expenses | 6,578,510 | 8,495,373 | 11,873,384 | 15,823,189 | 21,126,876 |
| - Deferred payments - Interest and management Expenses | - | , | , | , | 12,299 |
| - Leveraged Lease Finance - Interest and Management Expenses | - | - | - | - | - |
| Sub-Total | 117,332,009 | 137,596,221 | 151,362,142 | 154,677,997 | 199,442,518 |
| Financial Acconmodation Repayments |  |  |  |  |  |
| - Repayable Treasury Advances - Principal | 227,968 | 249,782 | 273,682 | 299,870 | 328,563 |
| - State Loan Allocation - Sinking Fund | 521,800 | 873,300 | 982,000 | 1,017,800 | 1,005,400 |
| - Semi-Goverment Loan Raising - Principal <br> - Leveraged Lease Finance - Principal | 1,881,502 | 2,290,405 | 2,394,893 | 2,451,704 | 2,288,149 |
| Investments for Loan Repayments for Loans Raised by the commissioner | 3,714,700 | 335,700 Vr | 2,329,160 | 7,247,580 | 8,644,149 |
| Total Payments | 123,677,979 | 140,674,008 | 157,341,877 | 165,694,951 | 211,708,779 |
| Net Transaction of Trust Accounts | 255,466 | 3,574,230 $\because \mathrm{r}$ | 133,274 Cr | 125,461 jr | 844,050 Cr |
| Cash at Treasury as at 30th June |  |  |  |  |  |
| - for General purposes | 6,886,323 | 187,000 | 1,326,793 | $2,334,119$ | 8,555,605 |
| - for trust Accounts | 30,909 Ir | 3,543,320 | 3,676,595 | $3,802,055$ | 4,646,106 |
|  | 130,788,859 | 140,830,098 | 162,211,991 | 171,705,664 | 224,066,440 |

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30 JUNE 1984

| RECEIPTS | 1979/80 | 1980/81 | 1981/82 | 1982/83 | 1983/84 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State. Sources | \$ | \$ | \$ | \$ | \$ |
| Motor Vehicle registration weight tax and tax levy | 98,343,029 | 123,444,281 | 153,860,435 | 172,525,150 | 198,770,661 |
| Charges for Heavy Camercial Vehicles for maintenance of Roads | 978,308 | 18,763 | - | - | - |
| Motor Vehicle registration fee - allocation from the Road Transport and Traffic Fund | - | - | - | - | - |
| Diesel Fuel Levy | - | - | - | 9,904,283 | 10,106,161 |
| Financial Accommodation <br> - State General Loan Account | 12,850,000 | - | - | - | - |
| - Semi-Government Loan Raising | 55,174,960 | 59,825,040 | 56,000,000 | 33,000,000 | 26,000,000 |
| - Repayable Treasury Advance | , | - | - |  | 10,000,000 |
| - Leveraged lease finance | - | - | 7,800,000 | - | - |
| - Deferred Payments Contract |  |  | - |  |  |
| Road Tolls (less collection Costs) | - | 5,500 | 501,867.1r | - | - |
| Interest - On Sinking Fund Investments <br> - On Treasury Fund Balances | $\begin{array}{r} 611,173 \\ 1,126,414 \end{array}$ | $\begin{aligned} & 836,613 \\ & 971,037 \end{aligned}$ | $\begin{aligned} & 97,4530 \mathrm{r} \\ & 767,269 \end{aligned}$ | $\begin{aligned} & 671,149 \\ & 565,345 \end{aligned}$ | $\begin{aligned} & 512,811 \mathrm{Dr} \\ & 928,357 \end{aligned}$ |
| Contributions for Specified Works <br> - fran Other Departments <br> - fram Other Sources | $\begin{array}{r} 1,719,610 \\ 592,221 \end{array}$ | $1,009,819$ $779,7 \mathrm{Bl}$ | $\begin{array}{r} 1,908,136 \\ 326,796 \end{array}$ | $\begin{array}{r} 2,385,942 \\ 806,327 \end{array}$ | $\begin{aligned} & 4,888,711 \\ & 1,205,615 \end{aligned}$ |
| Natural Disaster Grant | 1,499,214 | 569,188 | - | - | 12,400,000 |
| Sale of properties (No longer required for Roadvorks) | 249,503 | 466,653 | 292,212 | 311,962 | 697,992 |
| Rents from properties Aqquired for Works (less collection and Maintenance Costs) Miscellaneous | $\begin{array}{r} 166,815 \\ 1,059,150 \end{array}$ | $\begin{array}{r} 190,824 \\ 1,556,653 \end{array}$ | $\begin{array}{r} 203,647 \\ 1,656,760 \end{array}$ | $\begin{array}{r} 331,364 \\ 2,243,986 \end{array}$ | $\begin{array}{r} 285,886 \\ 2,641,051 \end{array}$ |
| qotal State Sources | 174,370,397 | 189,674,152 | 222,215,935 | 222,745,508 | 267,411,623 |

## Commonwealth.Grants

Road Grants Act 1981

- National Roads
- Local Roads

20,691,000
$22,998,000$
11,503,000
$35,654,168$
$33,052,000$
Australian Bicentennial Road Developnent Trust
Fund Act, 1982

- National Roads
- Local Roads

Wage pause Employment Programme
Wage pause Employment Prograna
Steel Regions Assistance Programe
Total Conmorwealth Grants
Total Receipts
Cash at Treasury as at list July
TOTAL FUNDS AVAILABLE

| - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: |
| - | - | - | 2,000,000 | 10,000,000 |
| - | - | - | 4,000,000 | 24,743,000 |
| - | - | - | - | - |
| - | - | - | 842,625 | 4,341,490 |
| - | - | - | - | 2,300,000 |
| 20,691,000 | 22,998,000 | 11,503,000 | 42,496,793 | 74,436,490 |
| 195,061,397 | 212,672,152 | 233,718,935 | 265,242,301 | 341,848,113 |
| 20,050,447 | 12,585,332 | 1,953,875 | 4,308,425 | 5,341,589 |
| 215,111,844 | 225,257,484 | 235,672,810 | 269,550,726 | 347,189,702 |

STATEMENT OF RECEIPIS AND PAYMENIS FOR THE EIVE YEARS ENDED 30 JUNE 1984

| PAYMENTS | 1979/80 | 1980/81 | 1981/82 | 1982/83 | 1983/84 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State Road System <br> - Construction and Reconstruction <br> - Construction under A.B.R.D. Programe <br> - Property Aqquisitions <br> - Maintenance and Minor Improvenents | \$ | \$ | \$ | \$ | \$ |
|  | 98,431,975 | 109,857,826 | 100,166,375 | 113,800,403 | 134,572,323 |
|  | - | - |  | 4,630,815 | 32,037,108 |
|  | 3,979,747 | 3,885,738 | 4,470,356 | 3,819,403 | 5,202,504 |
|  | 67,360,748 | 76,055,093 | 80,478,593 | 91,903,073 | 108,395,472 |
| Local Roads |  |  |  |  |  |
| - Construction and Maintenance | 615,281 | 804,211 | 824,723 | 645,569 | 595,513 |
| - Construction under A. B. R.De Progr amme |  |  |  |  | - |
| - Natural Disasters - Restoration Works | 738,446 | 1,070,228 | 80,954 |  | 8,298,941 |
| Intersection Improvements, Traffic Signals, Signs and Roadnarking |  |  |  |  |  |
| - Construction and Reconstruction | - | - | - | - | - |
| - Maintenance and Operations | - | - | - | - | - |
| Land and Buildings |  |  |  |  |  |
| - For Works Operations | 719,418 | 1,245,463 | 1,132,546 | 708,447 | 1,323,380 |
| - For Administration | 256,970 | 88,090 | 267,380 | 208,564 | 736,039 |
| Net Transactions of Operating and Suspense Accounts | 5,121,010 | 4,062,075 | 1,162,036 | 7,445,450 Cr | 4,392,486 Cr |
| General Adninistration | 7,796,959 | 9,340,103 | 10,871,617 | 12,687,260 | 13,824,840 |
| Research and Develoment | 1,845,458 | 2,697,483 | 3,225,992 | 3,202,628 | 2,631,713 |
| Financial Accammodition Charges - 506537 |  |  |  |  |  |
| - Repayable Treasury Advances - Interest | 556,537 | 537,840 | 517,354 | 494,907 | 470,313 |
| Expenses | 3,062,600 | 3,706,800 | 4,020,350 | 4,386,870 | 4,441,914 |
| - Seni-Goverment Loan Raising - Interest and |  |  |  |  |  |
| - Deferred payments - Interest and management |  |  |  |  |  |
| Expenses <br> - Leveraged Lease Finance - Interest and |  |  | - | - | 1,112,116 |
| Sub-Total | 198,916,090 | 229,662,719 | 231,912,415 | 261,913,948 | 344,780,718 |
| Financial Acconmodation Repayments |  |  |  |  |  |
| - Repayable Treasury Advances - Principal | 195,402 | 214,098 | 234,585 | 257,031 | 281,625 |
| - State Loan Allocation - Sinking Fund | 467,200 | 615,700 | 614.700 | 608,310 | 597,245 |
| - Semi-Goverrment Loan Raising - Principal | 728,308 | 895,743 | 976,539 | 1,060,497 | 1,158,460 |
| - Leveraged Lease Finance - Principal | - | - | - |  | 620,250 |
| Investments for Loan Repayments for Loans Raised |  |  |  |  |  |
| Total payments | 201,979,800 | 223,520,660 | 230,922,239 | 263,915,175 | 335,644,259 |
| Net Transaction of Trust Accounts | 546,712 | 217,051 Cr | 442,147 | 293,961 | 262,096 Cr |
| Cash at Treasury as at 30th June |  |  |  |  |  |
| - for General purposes | 11,328,543 | 339,937 Cr | 2,456,759 | 3,783,885 | 10,985,604 |
| - for Trust Accounts | 1,256,789 | 2,293,812 | 1,851,665 | 1,557,705 | 821,935 |
|  | 215,111,844 | 225,257,484 | 235,672,810 | 269,550,726 | 347,189,702 |

## COMMONEEALIH FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FTVE YEARS ENDED 30 JUNE 1984

| RECEIPTS | 1979/80 | 1980/81 | 1981/82 | 1982/83 | 1983/84 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Carmonweal th. Grants | \$ | \$ | \$ | \$ | \$ |
| Road Grants Act 1981 |  |  |  |  |  |
| - National Roads | 79,435,124(A) | 92,509,303(A) | 101,616,862(A) | 108,841,119(A) | 114,897,511(A) |
| - Arterial Roads | (B) | (B) | (B) | (B) | (B) |
| - Local Roads | 38,162,000 | 42,417,000 | 46,267,000 | 49,576,000 | 52,549,000 |
| - Minor Traffic Engineering and Road Safety Improvements | (C) | - | - | - | 52,549,000 |
| Australian Bicentennial Road Develoment Trust |  |  |  |  |  |
|  |  |  |  |  |  |
| - National Roads | - | - | - | 24,000,000 | 64,573,000 |
| - Arterial Roads - Urban | - | - | - | - (D) | - (D) |
| - Rural | - | - | - | - (E) | - ${ }^{(E)}$ |
| - Local Roads | - | - | - | - | 22,519,000 |
| Research and Development | 1,229,986 | 801,601 | - | - | - |
| Total Receipts | 118,827,110 | 135,727,904 | 147,883,862 | 182,417,119 | 254,538,511 |
| Cash at Treasury as at 1 July | 946,242 | 1,357,593 | 1,788,275 | 3,259,844 | 17,602,931 |
| total funds available | 119,773,352 | 137,085,497 | 149,672,137 | 185,676,963 | 272,141,442 |

(A) Grant for National Roads included

Appendix 1.07
Arterial Roads included in
Appendices 1.01 and 1.03
Mp.T.E.R.S. included in
Appendix 1.07
Arterial Roads - Urban included in
Appendices 1.01 and 1.03
Arterial Roads - Rural included in

| $1,717,876$ | $2,438,697$ | $1,949,138$ | $2,147,881$ | $2,745,489$ |
| ---: | :---: | :---: | :---: | :---: |
| $53,681,000$ | $59,136,000$ | $64,503,000$ | $69,110,000$ | $73,252,000$ |
| $3,793,000$ | - | - | - | - |
| - | - | - | $5,790,000$ | $34,062,000$ |
| - | - | - | $4,000,000$ | $24,743,000$ |

Statement of receipts and payments for the five years ended 30 June 1984

| PAYMENTS | 1979/80 | 1980/81 | 1981/82 | 1982/83 | 1983/84 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State Road System | \$ | \$ | \$ | \$ | \$ |
| - Construction and Reconstruction | 66,352,578 | 73,602,252 | 76,951,246 | 74,921,080 | 99,662,737 |
| - Construction under A.B.R.D. Programme | - | - | - | 20,744,716 | 62,938,220 |
| - property Acquisitions | 1,555,547 | 4,943,129 | 6,941,081 | 6,030,321 | 6,093,903 |
| - Maintenance and Minor Improvements | 8,471,801 | 10,405,872 | 12,552,728 | 12,952,052 | 16,736,331 |
| Local Roads |  |  |  |  |  |
| - Construction and Maintenance | 37,361,214 | 41,529,652 | 46,109,435 | 49,669,373 | 54,401,467 |
| - Construction under A.B.R.D. Programme | - | - | - | - | 20,035,145 |
| General Administration | 3,460,044 | 4,019,308 | 3,857,802 | 3,756,490 | 4,899,719 |
| Research and Development | 1,214,575 | 797,009 | - | - | - |
| Total Payments | 118,415,759 | 135,297,222 | 146,412,292 | 168,074,032 | 264,767,522 |
| Cash at Treasury as at 30th June |  |  |  |  |  |
| - for General Purposes | 1,357,593 | 1,788,275 | 3,259,845 | 17,602,931 | 7,373,920 |
|  | 119,773,352 | 137,085,497 | 149,672,137 | 185,676,963 | 272,141,442 |

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE FIVE YEARS ENDED 30 JUNE 1984

| RECEIPTS | 1979/80 | 1980/81 | 1981/82 | 1982/83 | 1983/84 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State. Sources | \$ | \$ | \$ | \$ | \$ |
| Motor Vehicle registration weight tax and tax levy | 6,852,000 | 11,755,135 | 13,825,000 | 27,100,000 | 30,000,000 |
| motor Vehicle registration fee allocation from the Road Transport as Traffic Fund | 19,127,717 | 18,503,622 | 18,374,425 | 8,401,620 | 10,631,090 |
| Financial Accommodation <br> Loans - Raised by the Traffic Authoirty under Semi-Goverment Loan Allocation | - | - | 1,200,000 | - | -- |
| Road Tolls (less collection costs) | 1,971,193 | 2,737,967 | 2,667,891 | 2,761,534 | 2,713,040 |
| Contributions for Specified Works <br> - fram Other Departments <br> - fram Other Sources | $\begin{aligned} & 350,000 \\ & 344,230 \end{aligned}$ | $\begin{array}{r} 1,188,157 \\ 453,706 \end{array}$ | $\begin{array}{r} 460,019 \\ 653,261 \end{array}$ | $\begin{aligned} & 386,852 \\ & 635,535 \end{aligned}$ | $\begin{aligned} & 526,412 \\ & 829,687 \end{aligned}$ |
| Commopweal th. Grants |  |  |  |  |  |
| - National Roads | 1,717,876 | 2,438,697 | 1,949,138 | 2,147,881 | 2,745,489 |
| - Minor Itaffic Engineering and Road Safety Improvenents | 3,793,000 | - | - | - | - |
| Total Receipts | 34,156,016 | 37,077,284 | 39,129,734 | 41, 433,422 | 47,445,718 |

## PAYMENTS

## State Road System

Intersection Improvenents, Traffic Signals, Signs and Roadnarking

- Construction and Reconstruction
- Maintenance and Operations

Land and Buildings

- For Works Operations

Net Transactions of Operating and Suspense Accounts General Adninistration

Total Payments

| $\begin{array}{r} 9,779,070 \\ 21,345,662 \end{array}$ | $\begin{array}{r} 8,517,540 \\ 25,027,492 \end{array}$ | $\begin{array}{r} 8,588,889 \\ 27,225,559 \end{array}$ | $\begin{array}{r} 8,566,390 \\ 30,979,632 \end{array}$ | $\begin{aligned} & 11,308,773 \\ & 34,234,750 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 851,762 | 337,759 | - | - | - |
| 743,616 | 1,495,211 | 1,224,993 | 457,329 Cr | 465,974 Cr |
| 1,435,906 | 1,699,282 | 2,090,293 | 2,344,729 | 2,368,169 |
| 34,156,016 | 37,077,284 | 39,129,734 | 41,433,422 | 47,445,718 |

STATEMENI OF RECEIPTS AND PAMMENTS FOR THE FIVE YEARS ENDED 30 JUNE 1984

| RECEIPTS | 1979/80 | 1980/81 | 1981/82 | 1982/83 | 1983/84 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State.Sources | \$ | \$ | \$ | \$ | \$ |
| Motor Vehicle registration weight tax and tax levy | - | - | - | - | 1,600,000 |
| Road Tolls (less collection costs) | 2,365,225 | 1,613,956 | 1,624,111 | 1,633,499 | 1,621,761 |
| Interest - on Sinking Fund Investments | 480,281 | 595,247 | 376,651 | 442,613 | 1,024,910 |
| - on Treaury Fund Balances | 277,500 | 279,000 | 290,078 | 327,116 | - |
| Contributions for Specified Works <br> - from Other Departments | 549,521 | 263,732 | 637,735 | 522,951 | 544,238 |
| Rents fram Properties Aoquired for Works (less collection and maintenance costs) | 271,786 | 268,433 | 330,898 | 683,984 | 793,812 |
| Total State Sources | 3,944,313 | 3,020,368 | 3,259,473 | 3,610,163 | 5,584,721 |
| Cash at Treasury as at 1 July | 4,545,307 | 4,361,210 | 3,070,260 | 1,940,226 | 898,121 |
| TOTAL FUNDS AVAILABLE | 8,489,620 | 7,381,578 | 6,329,733 | 5,550,389 | 6,482,842 |
| PAYMENTS |  |  |  |  |  |
| State, Road.System |  |  |  |  |  |
| - Maintenance and Minor Improvements | 1,742,901 | 2,044,097 | 2,118,769 | 2,183,693 | 3,188,374 |
| General Administration | 190,000 | 160,000 | 170,000 | 200,000 | 240,000 |
| Financial Accommodation Charges |  |  |  |  |  |
| - State Loan Allocation - Interest and Management Expenses | 788,500 | 820,000 | 883,000 | 966,000 | 978,000 |
| - Semi-Goverrment Loan Raising - Interest and Management Expenses | 514,683 | 524,578 | 237,213 | 320,099 | 812,037 |
| Sub-Total | 3,236,084 | 3,548,675 | 3,408,982 | 3,669,792 | 5,218,411 |
| Financial Accommodation Repayments <br> - State Loan Allocation - Sinking Fund <br> - Semi-Government Loan Raising - Principal | $\begin{array}{r} 52,500 \\ 113,826 \end{array}$ | $\begin{aligned} & 112,000 \\ & 105,643 \end{aligned}$ | $\begin{array}{r} 109,000 \\ 29,825 \end{array}$ | $\begin{array}{r} 108,000 \\ 31,603 \end{array}$ | $\begin{array}{r} 107,000 \\ 33,487 \end{array}$ |
| Investments for Loan Repayments for Loans Raised by the Commissioner | 726,000 | 545,000 | 841,700 | 842,873 | 1,021,212 |
| Total payments | 4,128,410 | 4,311,318 | 4,389,507 | 4,652,268 | 6,380,110 |
| Cash at Treasury as at 30th June <br> - for General purposes | 4,361,210 | 3,070,260 | 1,940,226 | 898,121 | 102,732 |
|  | 8,489,620 7,381,578 |  | 6,329,733 | 5,550,389 | 6,482,842 |


| RECEIPTS | 1979/80 | 1980/81 | 1981/82 | 1982/83 | 1983/84 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State. Sources | \$ | \$ | \$ | \$ | \$ |
| Motor Vehicle registration weight tax and tax levy | 143,478,320 | 182,404,821 | 226,445,993 | 265,760,699 | 306,920,593 |
| Motor Vehicle registration fee - allocation fran the Road Transport and Traffic Fund | 19,127,717 | 18,503,622 | 18,374,425 | 8,401,620 | 10,631,090 |
| Charges for Heavy Comercial Vehicles for Maintenance of Roads | 1,222,885 | 23,454 | - | - | -- |
| Diesel Fuel Levy |  | - | - | 30,112,848 | 30,318,484 |
| Financial Acconmodation |  |  |  |  |  |
| - State Loan Account | 36,850,000 | $10,000,000$ | $4,000,000$ |  |  |
| - Semi-Goverrment Loan Raising ${ }^{\text {- Loans Raised by }}$ the Traffic Authority | 70,174,960 | $85,125,040$ | $82,900,000$ | 57,800,000 | $\text { 000, 000, } 52$ |
| under Semi-Goverrant Loan Allocation | - | - | 1,200,000 | - | - |
| - Repayable Treasury Advance | - | - | - | - | 10,000,000 |
| - Leveraged Lease finance | - | - | 7,800,000 | - | 10,000,000 |
| - Deferred payments Contract | 10,206, | 10,916 | - | 10,497.760 | 5,370,747 |
| Road Tolls (less Collection Costs) | 10,206,801 | 10,916,890 | 10,963,349 | 10,497,760 | 11,008,702 |
| Interest - On Sinking Fund Investments | 2,943,042 | 3,943,786 | 2,538,716 | 4,147,581 | 4,957,155 |
| - On Treasury Fund Balances | 1,737,357 | 1,858,503 | 1,392,594 | 1,230,573 | 1,547,325 |
| Contributions for Specified Works |  |  |  |  |  |
| - from Other Departments | 4,092,359 | 2,954,643 | 2,913,257 | 3,371,769 | 6,234,333 |
| - from Other Sources | 1,716,005 | 1,481,565 | 2,504,104 | 1,766,143 | 2,748,643 |
| $\begin{array}{lll}\text { Natural Disaster Grant } \\ \text { Sale of Properties (No longer required } & 1,499,214 & \\ \end{array}$ |  |  |  |  |  |
|  |  |  |  |  |  |
| Rents fram properties Acquired for Works (less Collection and Maintenance Costs) Miscellaneous | 2,245,970 | 2,575,609 | 2,643,743 | 3,956,024 | 4,076,134 |
|  | 1,408,099 | 2,283,418 | 2,332,733 | 2,993,979 | 3,624,822 |
| Total State Sources | 298,587,995 | 325,169,792 | 368,137,675 | 395,187,656 | 471,041,494 |
| Cormonvealth. Grants |  |  |  |  |  |
| Road Grants Act 1901. |  |  |  |  |  |
| - National Roads | 81,153,000 | 94,948,000 | 103,566,000 | 110,989,000 | 117,643,000 |
| - Arterial Roads | 53,681,000 | 59,136,000 | 64,503,000 | 69,110,000 | 73,252,000 |
| - Local Roads | 38,162,000 | 42,417,000 | 46,267,000 | 49,576,000 | 52,549,000 |
| - Minor Traffic Engineering and Road Safety mprovements | 3,793,000 | - | - | - | - |
| Australian Bicentennial Road Develoment Trust |  |  |  |  |  |
| Fund Act, 1982 |  |  |  |  |  |
| - National Roads | - | - | - | 24,000,000 | 64,573,000 |
| - Arterial Roads - Urban | - | - | - | 5,700,000 | 34,062,000 |
| - Local Roads - Rural | - | - | - | 4,000,000 | 24,743,000 |
|  |  |  |  |  |  |
| Wage pause employment progranme Steel Regions Assistance programe | - | - | - | 842,625 | 4,664,835 2,300,000 |
| Research and Develogment | 1,229,986 | 801,601 | - | - | 2,300,00 |
| Total Oammonweal th Grants | 178,018,986 | 197,302,601 | 214,336,000 | 264,217,625 | 396,305,835 |
| Total Receipts | 476,606,981 | 522,472,393 | 582,473,675 | 659,405,281 | 867,347,329 |
| Cash at Treasury as at lst July | 31,712,710 | 25,159,548 | 10,542,730 | 14,511,883 | 29,978,815 |
| TOTAL FUNDS mVAIIABLE | 508,319,691 | 547,631,941 | 593,016,405 | 673,917,164 | 897,326,144 |

STATEMENT Of RECEIPTS AND PAYMENTS FOR THE FIVE yEARS ENDED 30 JUNE 1984

| PAYMENTS | 1979/80 | 1980/81 | 1981/82 | 1982/83 | 1983/84 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State Road System | \$ | \$ | \$ | \$ | § |
| - Construction and Reconstruction | 223,935,032 | 253,278,538 | 244,626,525 | 259,210,436 | 318,280,276 |
| - Construction under A.B.R.D. Programe | - |  |  | 28,281,552 | 115,826,013 |
| - Property Acquisitions | 21,007,987 | 27,666,763 | 40,001,690 | 28,425,581 | 33,750,646 |
| - Maintenance and Minor Improvements | 98,254,282 | 110,034,556 | 118,472,553 | 133,609,740 | 161,599,479 |
| Local Road |  |  |  |  |  |
| - Construction and Maintenance | 37,976,495 | 42,339,170 | 46,934,158 | 50,314,942 | 54,996,980 |
| - Construction under A.B.R.D. Programme |  |  |  |  | 20,035,145 |
| - Natural Disasters - Restoration Works | 747,772 | 1,070,228 | 80,954 | - | 8,298,941 |
| Intersection Improvements, Traffic Signals, Signs and Roadnarking |  |  |  |  |  |
| - Construction and Reconstruction | 9,779,070 | 8,517,540 | 8,588,889 | 8,566,390 | 11,308,773 |
| - Maintenance and Operations | 21,345,662 | 25,027,492 | 27,225,559 | 30,979,632 | 34,234,750 |
| Land and Buildings |  |  |  |  |  |
| - For Works Operations | 2,790,496 | 2,783,288 | 2,189,320 | 2,060,509 | 2,812,466 |
| - For Administration | 270,706 | 105,154 | 280,262 | 268,880 | 821,245 |
| Net Transactions of Operating and Suspense Accounts | 8,566,268 | 8,568,004 | 4,328,405 | 8,383,237 Cr | 7,897,041 Cr |
| General Adninistration | 17,509,400 | 20,742,278 | 23,959,378 | 26,189,026 | 29,130,694 |
| Research and Development | 4,291,324 | 5,292,071 | 5,376,653 | 5,337,714 | 4,386,188 |
| Financial Accamodation Charges |  |  |  |  |  |
| - Repayable Treasury Advances - Interest | 1,205,830 | 1,165,319 | 1,120,933 | 1,072,299 | 1,019,012 |
| Expenses <br> - Seni-Goverrment Loan Raising - Interest and Management Expenses | 8,851,500 | 11,260,000 | 12,235,550 | 14,820,980 | 14,456,964 |
|  | 15,524,134 | 25,331,720 | 36,804,736 | 49,014,747 | 57,469,941 |
| - Deferred payments - Interest and Management Expenses | - | - | - | , | 12,299 |
| - Leveraged Lease Finance - Interest anu Management Expenses |  | - | - | - | 1,112,116 |
| Sub-Total | 472,055,958 | 543,182,121 | 572,225,565 | 629,769,191 | 861,654,887 |
| Financial Accommodation Repayments |  |  |  |  |  |
| - Repayable Treasury Advances - Principal | 423,370 | 463,880 | 508,267 | 556,901 | 610,188 |
| - State Loan Allocation - Sinking Fund | 1,041,500 | 1,601,000 | 1,705,700 | 1,734,110 | 1,709,645 |
| - Semi-Government Loan Raising - Principal | 2,723,636 | 3,291,791 | 3,401,258 | 3,543,804 | 3,480,096 |
| - Leveraged Lease Finance - Principal | ,723 |  | - | , | 620,250 |
| Investments for Loan Repayments for Loans Raised by the Commissioner | 6,113,500 | 7,658,300 Cr | 354,860 | 8,165,842 | 2,128,678 Cr |
| Total Payments | 482,357,964 | 540,880,492 | 578,195,650 | 643,769,848 | 865,946,388 |
| Net Transaction of Trust Accounts | 802,178 | 3,791,281 Cr | 308,873 | 168,500 | 1,106,146 Cr |
| Cash at Treasury as at 30th June |  |  |  |  |  |
| - for General purposes | 23,933,669 | 4,705,598 | 8,983,622 | 24,619,056 | 27,017,861 |
| - for trust Accounts | 1,225,880 | 5,837,132 | 5,528,260 | 5,359,760 | 5,468,041 |
|  | 508,319,691 | 547,631,941 | 593,016,405 | 673,917,164 | 897,326,144 |


| Berowra te. Calga, Tollwork | $\frac{1979 / 80}{\$}$ | $\frac{1980 / 81}{\$}$ | $\frac{1981 / 82}{\$}$ | $\frac{1982 / 83}{\$}$ | $\frac{1983 / 84}{\$}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Receipts |  |  |  |  |  |
| Gross Tolls | 6,050,048 | 6,764,395 | 7,027,397 | 6,960,571 | 7,320,753 |
| Less Collection costs | 802,323 | 808,275 | 980,358 | 1,162,403 | 1,169,144 |
| Net Tolls | 5,247,725 | 5,956,120 | 6,047,039 | 5,798,168 | 6,151,609 |
| Interest on Sinking Fund Investments | 853,262 | 1,195,758 | 1,381,809 | 1,903,294 | 2,623,484 |
| motal Receipts | 6,100,987 | 7,151,878 | 7,428,848 | 7,701,462 | 8,775,093 |
| Payments |  |  |  |  |  |
| Tollway Lighting | 35,279 | 54,411 | 75,150 | 90,813 | 83,377 |
| Traffic Facllities | 148,388 | 170,000 | 240,709 | 443,815 | 291,229 |
| General Adninistration | 69,000 | 75,000 | 80,000 | 90,000 | 100,000 |
| Debt Charges:- General Loan Account - Interest and Management Expenses | 2,100,900 | 2,190,100 | 2,369,000 | 2,596,060 | 2,630,880 |
| - Sinking Fund | 275,300 | 303,100 | 298,900 | 295,000 | 291,500 |
| Loans raised by the commissioner - Interest and Management Expenses | - 390,811 | 373,415 | 395,557 | 448,289 | 544,820 |
| - Investments for loan repayments | 1,093,113 | 1,223,008 | 1,384,309 | 1,903,294 | 2,623,484 |
| - Repayment of Principal | 186,459 | 251,017 | 253,498 | 204,429 | 141,928 |
| Interest on Advance received from County of Cumberland fund | 76,584 | - |  |  |  |
| Repayment of Advance received from County of Cumberland Fund | 680,925 | - | - | - | - |
| Repayment of Advance received fram State Treasury - Principal |  | - | - | - |  |
| - Interest | - | - | - | - | - |
| Long Term Investments for Loan Repayments - Surplus Tolls | - | - | 1,400,000 | - | - |
| Total payments | 5,056,759 | 4,640,051 | 3,697,123 | 6,071,700 | 6,707,218 |
| Excess of Receipts over payments | 1,044,228 | 2,511,827 | 3,731,725 | 1,629,762 | 2,067,875 |
| Note: Surplus tolls for repayment of loans have been invested as follows - | 1,050,000 | 2,350,000 | 1,815,033 | 4,178,876 | 626,479 |
| Investment in Inter nal Loan |  |  | 5,600,000 | 2,600,000 | 4,050,000 |
| Maintenance of Tollwork fund by Commorwealth Grants (National Highway) | 748,183 | 796,951 | 770,046 | 776,197 | 973,490 |
| Waterfall to Bull Pass. Tollwork |  |  |  |  |  |
| Receipts |  |  |  |  |  |
| Gross Tolls | 1,514,904 | 1,642,177 | 1,812,126 | 1,842,451 | 1,962,802 |
| Less Collection Costs | 568,859 | 663,331 | 747,109 | 881,361 | 885,775 |
| Net Tolls | 946,045 | 978,846 | 1,065,017 | ,961,090 | 1,077,027 |
| Interest on Sinking Fund Investments | 588,905 | 764,478 | 1,113,569 | 1,302,388 | 1,333,775 |
| total Receipts | 1,534,950 | 1,743,324 | 2,178,586 | 2,263,478 | 2,410,802 |
| Payments |  |  |  |  |  |
| Tollway Lighting Traffic Facilities | 52,641 175,000 | 49,305 200,000 | 65,037 200,000 | 96,951 212,715 | 113,354 263,506 |
| Maintenance | 410,844 | 264,509 | 550,422 | 400,636 | 431,702 |
| General Administration | 39,000 | 40,000 | 50,000 | 55,000 | 50,000 |
| Debt Charges:- General Loan Account - Interest and Management Expenses | 256,800 | 268,100 | 290,300 | 318,730 | 323,310 |
| - Sinking Fund | 28,500 | 37,000 | 36,600 | 36,100 | 35,700 |
| Loans raised by the Camissioner - Interest and Management Expenses | 2,224,613 | 1,963,180 | 1,895,486 | 1,810,972 | 1,796,696 |
| - Investment for loan repayments | 851,990 | 851,797 | 1,186,887 | 1,375,706 | 1,407,093 |
| - Repayment of Principal | 828,308 | 960,455 | 980,564 | 1,000,274 | -806,245 |
| Total payments | 4,867,696 | 4,634,346 | 5,255,296 | 5,307,084 | 5,227,606 |
| Excess of Payments over Receipts | 3,332,746 | 2,891,022 | 3,076,710 | 3,043,606 | 2,816,804 |
| Note: Transfer of motor vehicle taxation to $f$ inance deficits have been made as follows - | 3,332,746 | 2,891,022 | 3,076,710 | 3,043,606 | 2,916,804 |

SUMMARY OF LOAN \& OTHER DEBT LIABILITIES AS AT 3OTH JUNE, 1984

|  | County of Cumberland Fund | Oountry Fund | Developnental Roads | Waterfall <br> to Bulli <br> Tollwork | Berowra to Calga Tollwork | Sydney Harbour Bridge | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| \#An. GENERAL, LOANACCOUNT (STATE, LOANSI |  |  |  |  |  |  |  |
| GROSS.LIABILITY |  |  |  |  |  |  |  |
| Loans prior to 1st July, 1983 Loans 1983/84 | 59,250,000.00 | 48,535,304.52 | 3,449,038.99 | 3,400,000.00 | 28,950,000.00 | 20,521,502.49 | 164,105,846.00 |
| Total to 30th Jure, 1984 | 59,250,000.00 | 48,535,304.52 | 3,449,038.99 | 3,400,000.00 | 28,950,000.00 | 20,521,502.49 | 164,105,846,00 |
| REPAYMENTS, OE PRINCIPAL AND SINKING, FUND CONIRIBUTION |  |  |  |  |  |  |  |
| PRICR TO 15T JULY, 1983 |  |  |  |  |  |  |  |
| By Department <br> By Canmorweal th | $\begin{array}{r} 2,534,380.00 \\ 657,617.98 \end{array}$ | $\begin{array}{r} 7,756,420.21 \\ 2,144,207.74 \end{array}$ | $\begin{array}{r} 675,451.08 \\ 454,509.59 \end{array}$ | $\begin{array}{r} 320,430.00 \\ 86,897.89 \end{array}$ | $\begin{aligned} & 3,209,020.00 \\ & 1,098,153.23 \end{aligned}$ | $\begin{aligned} & 9,788,345.09 \\ & 1,850,937.37 \end{aligned}$ | $\begin{array}{r} 24,284,046.38 \\ 6,292,323.80 \end{array}$ |
| Total to 1st July, 1983 | 3,191,997.98 | 9,900,627.95 | 1,129,960.67 | 407,327.89 | 4,307,173.23 | 11,639,282.46 | 30,576,370.18 |
| DURING 1983/84 |  |  |  |  |  |  |  |
| By Department <br> By Camorweal th | $\begin{aligned} & 678,200.00 \\ & 158,463.22 \end{aligned}$ | $\begin{aligned} & 469,544.98 \\ & 109,379.05 \end{aligned}$ | $\begin{array}{r} 127,700.00 \\ 6,656.19 \end{array}$ | $\begin{array}{r} 35,700.00 \\ 8,526.43 \end{array}$ | $\begin{array}{r} 291,500.00 \\ 69,717.84 \end{array}$ | $\begin{array}{r} 107,000.00 \\ 25,494.95 \end{array}$ | $\begin{array}{r} 1,709,644.98 \\ 378,237.68 \end{array}$ |
| Total during 1983/84 | 836,663.22 | 578,924.03 | 134,356.19 | 44,226.43 | 361,217.84 | 132,494.95 | 2,087,882.66 |
| TOTAL REPAYMENT OF PRIDCIPAL AND |  |  |  |  |  |  |  |
| By Department By Camonweal th | $\begin{array}{r} 3,212,580.00 \\ 816,081.20 \end{array}$ | $\begin{aligned} & 8,225,965.19 \\ & 2,253,586.79 \end{aligned}$ | $\begin{aligned} & 803,151.08 \\ & 461,165.78 \end{aligned}$ | $\begin{array}{r} 356,130.00 \\ 95,424.32 \end{array}$ | $\begin{aligned} & 3,500,520.00 \\ & 1,167,871.07 \end{aligned}$ | $\begin{aligned} & 9,895,345.09 \\ & 1,876,432.32 \end{aligned}$ | $\begin{array}{r} 25,993,691.36 \\ 6,670,561.48 \end{array}$ |
| Total to 30th Jure, 1984 | 4,028,661.20 | 10,479,551.98 | 1,264,316.86 | 451,554.32 | 4,668,391.07 | 11,771,777.41 | 32,664,252.84 |
| NET, LIABILITY, AT 30TH. JUNE._1984- |  |  |  |  |  |  |  |
| TB. LOANS. FROM STATE TIREASURY |  |  |  |  |  |  |  |
| GROSS.LIABILITY |  |  |  |  |  |  |  |
| Loans prior to lst July, 1983 Loans 1983/84 | 7,000,000.00 | $\begin{array}{r} 6,000,000.00 \\ 10,000,000.00 \end{array}$ | - | - | 800,000.00 | - | $\begin{aligned} & 13,800,000.00 \\ & 10,000,000.00 \end{aligned}$ |
| Total to 30th June, 1984 | 7,000,000.00 | 16,000,000.00 | - | - | 800,000.00 | - | 23,800,000.00 |
| REPAYMENTS.OE, PRINCIRAL |  |  |  |  |  |  |  |
| prior to 1st July, 1983 During 1983/84 | $\begin{array}{r} 1,051,302.11 \\ 328,562.88 \end{array}$ | $\begin{aligned} & 901,116.07 \\ & 281,625.33 \end{aligned}$ | - |  | $800,000.00$ | - | $\begin{array}{r} 2,752,418.18 \\ 610,188.21 \end{array}$ |
| Total to 30th June, 1984 | 1,379,864.99 | 1,182,741.40 | - | - | $800,000.00$ | - | 3,362,606.39 |


$5,620,135.01 \quad 14,817,258.60 \quad-$

Nil
20,437,393.61

SUMMARY OF LOAN \& OTHER DEBT LIABILITIES AS AT 3OIH JUNE, 1984 (CONTINUED)

|  | county of Cumberland fund | Country Fund | Developmental Roads | Waterfall <br> to Bulli <br> Tollwork | Berowra <br> to Calga <br> Tollwork | Syaney Harbour Bridge | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
|  |  |  |  |  |  |  |  |
| UNDER.SEMI-COVERNMENL LOAN PRROCRAMME |  |  |  |  |  |  |  |
| GROSS.LIABILITY |  |  |  |  |  |  |  |
| Loans prior to 1st July, 1983 Loans 1983/84 | 130,055,000.00 | 266,100,000.00 | - | 27,600,000.00 | 6,000,000.00 | 9,320,000.00 | 439,075,000.00 |
|  | 26,000,000.00 | 26,000,000.00 | - | - | - | , | 52,000,000.00 |
| Total to 30th June, 1984 | 156,055,000.00 | 292,100,000.00 | - | 27,600,000.00 | 6,000,000.00 | 9,320,000.00 | 491,075,000.00 |
| PAYMENT, OF. PRIMCIPAL, AND |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| FRICR TO 1ST JULY, 1983 |  |  |  |  |  |  |  |
| PrincipalSinking Fund | 7,275,931.73 | 6,962,102.80 | - | 6,597,152.94 | 1,418,657.19 | 2,163,287.62 | 24,417,132.28 |
|  | 10,250,850.06 | 12,658,773.40 | - | 10,054,563.69 | 4,339,700.00 | 6,989,500.00 | 44,293,387.15 |
| Total to 1st July, 1983 | 17,526,781.79 | 19,620,876.20 | - | 16,651,716.63 | 5,758,357.19 | 9,152,787.62 | 68,710,519.43 |
| DURING 1983/84 |  |  |  |  |  |  |  |
| Principal | 1,339,975.29 | 1,158,459.75 | - | 806,244.87 | 141,928.58 | 33,487.37 | 3,480,095.86 |
| Sinking Fund | 606,485.00 | 1,388,779.00 | - | 73,318.00 | , | , | 2,068,582.00 |
| Net Interest on Investment | 1,966,296.32 | 1,818,649.10 | - | 1,333,775.23 | - | - | 5,118,720.65 |
| Total during 1983/84 | 3,912,756,61 | 4,365,887.85 | - | 2,213,338.10 | 141,928.58 | 33,487.37 | 10,667,398.51 |
| Total to 30th June, 1984 | 21,439,538.40 | 23,986,764.05 | - | 18,865,054.73 | 5,900,285.77 | 9,186,274.99 | 79,377,917.94 |
| NET LIABILITY, AT, 30TH_JUNE, 1984, |  |  |  |  |  |  |  |
| LOANS,RASSED,UNER.SEMI-CONERNMENTLOAN,RROGRAME | 134,615,461.60 | 268,113,235.95 | - | 8,734,945.27 | 99,714.23 |  |  |
|  | 134,615,461.60 | 268,113,235.95 | - | 8,734,945.27 | 99,714.23 | 133,725.01 | 411,697,082.06 |
|  |  |  |  |  |  |  |  |
| GROSS.LIABILITY |  |  |  |  |  |  |  |
| Loans prior to lst July, 1983 Loans 1983/84 | 10,500,000.00 | $\begin{aligned} & 16,100,000.00 \\ & 15,000,000.00 \end{aligned}$ | - | - | - | - | $\begin{aligned} & 26,600,000.00 \\ & 15,000,000.00 \end{aligned}$ |
| Total to 30th June, 1984 | 10,500,000.00 | 31,100,000.00 | - | - | - | - | 41,600,000.00 |
| RERAYMENIS OF, PRINCIPAL |  |  |  |  |  |  |  |
| prior to 1st July, 1983 During 1983/84 | - | - | - | - | - | - | - |
|  | - | - | - | - | - | - | - |
| Total to 30th June, 1984 | - | - | - | - | - | - | - |
| NEET LIABILTTY, AT, 30TH, JUNE, 1984, - |  |  |  |  |  |  |  |
| INTERNAL LOANS | 10,500,000.00 | 31,100,000.00 | - | - | - | - | 41,600,000.00 |


| SUMMARY OF LOAN AND OTHER DEBT LIABLLTTIES AS AT 30TH JUNE, 1984 (CONTINUED) |  |  |  |  |  | APPENDIX 3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | County of Cumberland Fund | Oountry <br> Fund | Developmental Roads | Waterfall <br> to Bulli <br> Tollwork | Berowra <br> to Calga <br> Tollwork | Sydney <br> Harbour <br> Bridge | Total |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| ${ }^{\text {B }}$ E ${ }^{\text {n }}$, TOLL. FURDS. SET.ASIDE.FOR |  |  |  |  |  |  |  |
| REPAYMENK OFCLOANS |  |  |  |  |  |  |  |
| Prior to lst July, 1983 During 1983/84 | - | - | - | - | 16,863,843.46 | 872,363.09 | 17,736,206.55 |
| Funds set aside | - | - | - | - | 2,052,995.21 | - | 2,052,995.21 |
| Interest on Investment | - | - | - | - | 2,623,483.83 | 1,024,909.75 | 3,648,393.58 |
| Total during 1983/84 | - | - | - | - | 4,676,479.04 | 1,024,909.75 | 5,701,388.79 |
| TOTAL TOL L FINOS, SET ASIDE.T0 |  |  |  |  |  |  |  |
| 30TH JUNE 1984 | - | - | - | - | 21,540,322.50 | 1,897,272.84 | 23,437,595.34 |
| * NET LOAN LIABILITY ON BORROWINGS FROM GENERAL LOAN ACOOUNI LOANS RAISED UNDER SEMI-GOVERNMENT LOAN fROGRAMME AND INTERNAL LOANS |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| DEPARTMEN!'S.RLANM AND.TRUCKS |  |  |  |  |  |  |  |
| GROSS.LIABLLIT |  |  |  |  |  |  |  |
| Finance Prior to 1st July, 1983 | - | 7,800,000,00 | - | - | - | . - | 7,800,000.00 |
| Finance 1983/84 | - | - | - | - | - | - |  |
| Total to 30th June, 1984 | - | 7,800,000.00 | - | - | - | - | 7,800,000.00 |
| REPAYMENTS. OF, PRINCIPAL |  |  |  |  |  |  |  |
| Prior to 1st July, 1983 | - |  | - | - | - | - | - |
| During 1983/84 | - | 620,250,00 | - | - | - | - | 620,250.00 |
| Total to 30th June, 1984 | - | 620,250.00 | - | - | - | - | 620,250.00 |
| NET LIABLLTHY_AT 30TH. JUNE. 1984 <br> -LEVERACED.LEASE. EINANCE | - | 7,179,750.00 | - | - | - | - | 7,179,750.00 |
| "G". FINANCE, RAISED. UNDER.DEFERRED |  |  |  |  |  |  |  |
| PAYMENPS CONTRACT SCHEME |  |  |  |  |  |  |  |
| GROSS, LIABILIT |  |  |  |  |  |  |  |
| Finance Prior to lst July, 1983 | - | - | - | - | - | - | - |
| Finance 1983/84 | 5,370,747.37 | - | - | - | - | - | 5,370,747.37 |
| NET LITABILITY AT 30TH, JUNE. 1984.0 |  |  |  |  |  |  |  |
| DEFERRED.PAYMENI'S,CONTRACT, SCHEME | 5,370,747.37 | - | - | - | - | - | 5,370,747.37 |
| NET, LIABILTXX, QN, LOANS ANO, FINANCE |  |  |  |  |  |  |  |
| FRCM LEVERAGED LEASES, AND, DEFERRED |  |  |  |  |  |  |  |
| PAYMENIS, CONDIPACT, SCHEME | 211,327,682.78 | 359,265,997.09 | 2,184,722.13 | 11,683,390.95 | 2,841,000.66 | 6,986,177.25 | 594,288,970.86 |

SEMI-GOXERNMENT,LOANS, - SCHEDULE, OE MATURITIES, AS, AT 30 , JUNE, 1984







LOCAL GCVT AREA State highwars

$$
\begin{aligned}
& \text { SESA VALLEY SSGEKM TO SSGEE KM SOUTH OF EDEN } \\
& \text { TIDENING STRENGTHENING OF PAVEMEVT }
\end{aligned}
$$

LOCATION OF dORK DESCRIPTIOR OF dCRK

MERIMBULA LAKE, MERIMEULA
MEGA VALLEY MERIMBULA LAKE, MERIMEULA
THREE SPAN PRESTRESSED CONCRETE GIRDER 3RIDGE
: 7 RIDGE CVER MERIMBULA LAKE ? 4.3 KM SOUTH OF bega

$$
\begin{aligned}
& \text { VALLEY } \\
& \text { APPRDACHES }
\end{aligned}
$$

aEga Valley APDRDACHES
3EGA VALLEY i4proviment jf

PRINCES highway \& MARKET ST, MERIMBULA INTERSECTION EUROBODALLA
MJLII-CELL CULVERT R SIDE TRACK HIJLI-CELL CULVERT R SIDE TRACK

EUFOBODALLA DOOGA CREEK, 23.8 KM SOUTH OF BATEMANS BAY IIDENING OF SIVGLE SPAN REINFORCED CONCRETE GRIDGE MULLENDEREE CREEK 2.3 KM SOUTH Of gatemans gay
SIX CELL REIVFJRCED COMCRETE BOX CULVERT SIX CELL 71.7 kM TO 77 . KM SOUTH OF JATEMANS BAY dIOENING OF PAVEMENT $S$ BITUMINOUS SURFACING JF SHOULOERS
EURO.30DALLA 42.0 KM TO 45.0 KM SOUTH OF GATEMANS SAY IIDENING OF SHOULDERS

### 111.7 KM TO 118.9 KM SOUTH OF VOWRA

 UROGODALLA 111.7 KM TO 198.9 KY SOUTH OF VOWRAD303ALLA
HRIDGE OVER COILA CREEK 39.5 KY SOUTH OF BATEMAHS GAY
40.5 KM TO C?. 1 KM SOUTH OF NOLLONGONG RECONSTRUCTION
:8. 1 KM TO 4J. 5 KM SOUTH OF WOLLONGJNG IMPROVEMENT OF ALIGRMENT

DEPT 6

DEPT 2

## CONST NAASRA AUTH RD CL COM-WLTH

## SOURCE STATE $s$

16,793
116,182
DEPT
DEPT
EPT 2

43,849
11.380

3,650

36,045

266,651
61,438
19.654
19.770

9,191
(99,504

23,717

COAN
COANS
$s$

149,275
282.250

15 106,526 27.646 21.013

87,568 266.051
149.257
47.747

48,030
22.328

```
RO:O LJCAL GOVT AREA
```

    1 KOGAZAH MORIGGEGVER GEGRSES RIVER AT TJM UGLY'S POINT
        JJPLICKTIOV - PUELIC UTILITY ADJUSTMENTS
    

| ONST | NAASRA |
| :---: | :---: |
| AUTH | RD CL COP「dLTH |

CCUNCIL $6 \quad-206,4 \in C$

TOTAL TOTAL STATE LOANS . 8
$-89.737 \quad-229.502 \quad-615.699$
KOGAZAH GEORGES RIVER AT TJY UGLY'S POIMT, SYLVANIA
DUPLICATION JF NINE SPAN COMPOSITE STEEL GIRDER SRIDGE
DEPT 0 1,ERS, $3 \leq 0$

|  |  | $\begin{aligned} & 1,305,380 \\ & 3,042,225 \end{aligned}$ |
| :---: | :---: | :---: |
|  |  |  |
| 57,422 | 146,858 | 393.985 |
| 4.123 | 10,544 | 28,287 |
| 63.707 | 142.930 | 437.103 |
| 347,467 |  | 847.467 |
| 2,973 | 20.429 | 49.972 |
| 47.197 | 419.544 | 793.274 |

SHOALHAVEV GRIDGE CVER LUACHEZV CREEK 42.9 KY TO 4 S. 2 KM SOUTH OF NOUR326.5:3 NIOSNIHG OF APPROACHES

UEPT 2
15,032
2.173
19.31436,51935,19164.55848.258



| ROAD | LOCAL GOVT AREA LOCATION OF NORK <br> STATE HIGHWAYS (CONT  | CONST <br> AUTH | NAASRA RD Cl | $\mathrm{COM}_{\mathrm{S}}$ | $\begin{gathered} \text { SOURCE OF } \\ \text { STATE } \\ S \end{gathered}$ | $\begin{aligned} & \text { FUNDS } \\ & \text { LOANS } \\ & \text { S } \end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | GUNGAGAI $\quad 79.0 \mathrm{KM}$ TO 73.0 KM SOUTH OF YASS SIVGLE CARRIAGEWAY - PUBLIC UTILITY ACJUStMEyTS | DEPT | 1 | 70,178 |  |  | 70,178 |
| 2 | GUNDGGAI $\quad 90.0 \mathrm{KM}$ TO 99.5 KM SOUTH Of YASS SOUTH EOUND CARPIAGEWAY - PUGLIC UTILITY ADJUSIMENTS | DEPT | 1 | 298,518 |  |  | 298,518 |
| 2 | gUNOAGAI <br> 102.35 KY TC 1 CO. 35 KM SOUTH OF YASS SUPPLY \& LAYING OF ASPHALTIC OVERLAY | DEPT | 1 | 1,086,116 |  |  | 1,086.116 |
| 2 | GUVDAGAI 7.0 KM TJ 14.4 KM SOUTH OF YASS SUPDLY \& LAYIVG of asphaltic concrete - contract | DEPT | 1 | 1,504,915 |  |  | 1,504,915 |
| 2 | GUNLAGAI 86.66 KM TO 87.56 KY SOUTH OF SOULGURN PqUEMENT REHABILATION \& WIDENING | DEPT | 1 | 311.593 |  |  | 311,593 |
| 2 | GUNDAGAI 102.5 kM SOUTH OF YASS ALTERATION TJ SOUTHgOUND LOADING RAYP | DEPT | 1 | 38.507 | - |  | 38,507 |
| 2 | GUNDAGAI 13.5 KM TO 22.3 KM SOUTH OF GUNDAGAI - SECTION phovision of concrete pavemevt | $1_{\text {DEPT }}$ | 1 | $4,198,703$ |  |  | 4.198 .703 |
| 2 | ```GUVOAGAI 22.3 KM TO 23.6 KM SOUTH OF JUNDAGAI STAGE 1 - EARTHWORKS & DRAINAGE``` | DEPT | 1 | 2,638,295 |  |  | 2,638.295 |
| 2 | $\begin{aligned} & \text { GUNGAGAI } \\ & \text { HEAVY PATCHING } 99.9 \mathrm{KM} \text { SOUTH OF YASS } \end{aligned}$ | DEPT | 1 | 6,780 | . |  | 6.780 |
| 2 | $\qquad$ REHASILITATION OF PAVEMEVT | DEPT | 1 | 826,092 |  |  | 826,092 |
| 2 | gundagal <br> 28.0 kM TO 35.5 KM SOUTH OF GUNDAGAI <br> RECONSTRUCTIOV \& EITUMINJUS SURFACIVG | DEPT | 1 | 8,225 |  |  | 8.225 |
| 2 | guncagal <br> 71.0 KM TO 73.0 KM STH OF YASS Sivjle carriageway - property adjustments | DEPT | 1 | 155.067 |  |  | 155.667 |
| 2 | GUNDAGAI 99.0 KM TO 94.0 KM SOUTH CF YASS Strengthenivg of pavement | DEPT | 1 | 12.877 |  |  | 12,877 |
| 2 | GUNGAGAI $\quad 76 . C \mathrm{KM}$ TO 77.5 KM SOUTH OF YASS StRENGTHENING OF PAVEMENT | DEPT | 1 | 2,982 |  |  | 2,982 |
| 2 |  | DEPT | 1 | -1.116 |  |  | $-1.196$ |
| 2 | GUNDIGAI ADELONG CREEK ITOS KM SOUTH OF GUNDAGAI <br> FIVS SPAV PRESTRESSED COVCRETE GIRDER BRIDGE | DEPT | 1 | 40.740 |  |  | 40.740 |

LOCATIOH JF NORK
CONST NAASRA
ROAD LOCAL GOVT AREA
STATE HIGHNAYS

STATE HIGHAAYS (CONT ${ }^{\circ} \mathrm{D}$ )
2 GUNOAGAI 7.84 kM TO 9.50 KM SOUTH OF GUNOAGAI SIAGE ? - PRJVISION OF PQVEMENT

2 GUVDAGAL SAREIAG KM KO 7.24 KM SOUTH OF GUVOAGAI SIVGLE CARRIAGEWAY

GUNGAGAI OG. KM TO 7J.E KM SOUTH OF YASS GAGAI
SIVGLE CARRIAGEWAY
2.32 KM TO 5.75 KM SOUTH Of GUNDAGAI UNGAGAI
OVE LANE CARRIAGEWAY

KHTO DEPT AUTH RDCL COM-WLTH SOURCE OF FUNDS
STATE
SOANS
LOCATION OF NORK
-s
total
300.902
$1,224,080$
688.533
40.056
2.947
874.161
74.637
82.139
805.099
1.172 .387

CONST NAASRA
STATE HIGHWTYS (CORTCD)

fUNDS LOANS

Total
holuzajk 119.9 xM to 124.0 <n SJuTh OF GUNDAGAI QEHABILITATIJN OF PAVEMEVT DEPT 1991,511 HUMF 175.6 KM TO 177.4 KA SOUTH OF GUNDAGAI AT MATE ST, ALPURY PEHABILITATIJN OF PAVEMEVT DEPT

112,204 HITY: 167.05 KM TO 16.6 .09 KM SOUTH OF GUNDAGKI

FECONSTEUCTION OF NORTHEJUND CARRIAGEKAY
OEPT 1 316,359
153.0 KM TO 160.9 KM SOUTH OF SUNDAGA
pehagillitarion of pavemevt
Cross roads. Liverpool to bridge over fs VEPPJOL
PISALIC UIILITY ADJUSTMEVTS

COUNCIL 6
14,867
 ALTERYATE INGRESS \& EGRESS
RPOOL HUME HIGHWAY \& SOUTH LSSTERN FREEWAY, LIVERPJOL


GROVE 5T TO KUPRAJJVG RD, LIVEZPOOL

 MULWAREE 184.75 KY TO 188.65 KM SOUTH OF SYDNEY RESTORATION JF SHOULDER \& REPLACEMEVT OF GJARORAIL
GULAAREE 2.? KM TO 7.1 KM SOUTH OF GOULIURN
Strengthenivg of pavement on morthoound carriaceways
COUNCIL
9.426
DEPT $\quad 0 \quad 211,460$
2.? KM TO 7.1 KM SOUTH OF GOULJURN Strengthenivg of pavement on northgound carriaceways
2.n KM TO 7.1 KM SOUTH OF GOULBURN STPENGTHING OF PAVEMEVT ON SOUTHBOUND CAREIAGEWAY

FULWIREE 21.7 KM TO 24.2 KM SOUTH OF GOULBURN JVERLAY OF PAVEMENT \& IMPROVEMENT OF SHOULDERS

MAPULAN CHTCKING STATIDN $166: 6 \mathrm{KM}$ SOUTH OF SYDNFY MULWAREE MAPULAN CHECKING STATIDN $166: 6 \mathrm{KM}$ SOUTH OF SYDNFY aehabilitation of hoptheound entrance
MULWAREE $16 . .9 \mathrm{KM}$ TO 160.2 KM SOUTH OF SYONEY REHABILITATIJN OF HORTHEJUND SLOW LANG.


LOCAL govt area
state highays（cont ${ }^{\circ}$ ）
いつのごE
MARULAN BY－PASS 172.9 K． $10 \quad 180.4$
DIVIDEO CARRIAGEWAYS－PIYRLIC UTILITY ADSUSTMEVIS
MARULAN GY－PASS 172.9 KY TO 189.4 KY SOUTH OF SYONEY
$\begin{aligned} & \text { MARULAN GY－PASS } \\ & \text { WQEE }\end{aligned}$
30．0 KM TO 32．C K：NORTH OF GOULSURN
－ $2 \pi \leq 5$
strengtheving of pavement of climeidg ，Lare
14.7 KM TO $19 . \mathrm{C}_{\mathrm{KM}}$ KOUTH CF SOULSURN
RECONSTRUCTIJV \＆OVERLAY OF PAVEMEYT TO WIDTH JF 13.4 METRES
MULWAREE－TVERLAY OF PGM TO 177.2 KY SOUTH OF SYONEY
STAGE－ 2 JVERLAY OF PAVEMENT
BRIDGE CVER URIMGALLA CREEK 165．0XK TO 165.8 KM SOUTH OF SYDNEY
APPROAGHES－SOUTHBOUND CARRIAGENAY DEPT
CONST NAASRAAUTH RD CL COMFHLTH
YONEY
1418.315
SOURCE OF FUNDS State LOANS
total$1,490,759$
1.068680.196
62.994
$1,577,610$
284,67474.22585785.663
Local govt area
LOCATION OF NORK
state highays (CONT D)
WFGGA AAGGA $\quad 47.7$ K* TO 49.E KM SOUTH OF GUVDAGAI
WIDENING ? STRENGTHENING DF PAVCYEYT
CONST NAASRA CESCRIPTION OF NORK STATE HIGHAAYS (CONTCD)

AUTH A

CA JAGGA
47.7 K* TO 49.8 KM 50
GTHENING OF PAVCMEXT

DEPT 1
1,744
NiGCA AASEA
OIVIDCD
KYE:
WAYS
DEPT
1
$-? 9.8 \varepsilon 2$
WAGGA AGGEA CARRIAGEGAY $\quad$ KM TO EZ. KY SOUTH OF GUNDAGAI
HAGGA dagǴa 6こ. 1 KM TO o5.6 KM SOUTH OF GUVDAGAI २E:ABILITATIJN OF PAVEMEVT

DEPT
3.504 .695

HACGA AGGGA 67.3 KM TO 70.3 KM SOUTH OF GUNDAGAI PEHABILITATIJN CF PAVEMEVT

DEPT
315,455

- INGECARRIBEE
152.9 KN TO 154.3 KM SOUTH OF SYDHEY DIVIDED CARRIAGEWAYS ON IMPROVED ALIGNMENT
146.5 kM TO 15 C .3 KM SOUTH OF SYONEY WIMGECARRIEEE 146.5
TAO LANE CARRIAGEWAY
 - DIVIEER FOUR LANE CARRIAGFWAYS

DEPT 1 \&53,364
HINGECABRIGEE
FENCING PRELIMINARY KM TO 150.3 KY SOUTH OF SYDNEY FENCING \& PRELIMINARY HORK

DEFT 1
9:129

DEPT 1
476.737

WIMGECTRPIGEE GRIDGE GVER MEDWAY RIVULET IGL.C KM SOUTH JF SYDHEY dIOEMING \& DUPLICATION
FPT 1
296.311

2 WINGECARRIEEE 144.0 KM TO 148.0 KM SOUTH OF SYDNEY PUBLIC UTILIITY ADJUSTMENTS

DEPT 1
178,980
2 WIMGECARRIBEE 81.6 KM TO 169.4 KY SOUTH OF SYDNEY HEAVY PATCHING

DEPT
468,222
2 HINGECARRIBEE 154.3 KM TO 166.0 KM SOUTH OF SYONEY PEHABILITATION OF OIVIDED. CARRIAGEHAY

DEPT
1
176.968

2 WINGEGARRIGFE 146.5 KM TO $15 G .3$ KM SOUTH OF SYDNEY IdJ LANE CARRIAGEWAY

OEPT $1 \quad-232,540$
$-33.671$
$-298,778$
$-564.929$
2 NINGFCARRIGEE CHERRY TREE HILL 144.0 KM TO 148.0 KM SOUTH OF SYONEY NORTHEOUND CARRIAGEWAY

| ROAD | LOCAL GOVT AREA STATE HIGHEAYS (CONTDD) OESCRIPTION OF WORK | CONST aUth | naASra RD CL | $\mathrm{COPr}_{\mathrm{s}}$ | $\begin{gathered} \text { SOURCE } \\ \text { STATE } \\ \$ \end{gathered}$ | 0 F | $\begin{aligned} & \text { FUNDS } \\ & \text { LOANS } \\ & \text { S } \end{aligned}$ | $\begin{gathered} \text { Totat } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | WI:GECARPIGEE FEYCIVG $\quad 144.0 \mathrm{kM}$ RO 14 E .O KY SOUTH OF SYDNEY | DEPT | 1 | 19,453 |  |  |  | 19,453 |
| 2 | $\text { WOLLOVDILLY PICTON TO MITTAGONG LCOP LINE } 120.0 \mathrm{KM} \text { SOUTH OF }$ <br> WIDENING OF PAVEMENT | SYDNEY <br> DEPT | 1 | 4.286 |  |  |  | 4.286 |
| 2 | YGSS STREXGTHEVIVS OF PAV KMENTO 19.2 KM SOUTH OF YASS Strevithevivi of pavenevi \& aidenivg cf Culvert | DEPT | 1 | 215,766 |  |  |  | 215,766 |
| 2 | YASS 2J.2 KM TO 23.6 KM SOUTH CF YASS STRENSTHEUIVG OF PAVEMENT | DEPY | 1 | 13, 326 |  |  |  | 13,026 |
| 2 | YASS STRENOTHENING OF PAVEMENT 8.33 KM SOUTH OF YASS | DEPT | 1 | 15,501 |  |  |  | 15,501 |
| 2 | ```YASS STQENGTHENIMG OF 81.23 KM TO $1.50 KM SCUTH OF SOULBURN StrenGThenING of Pavement``` | DEPT | 1 | 56,063 |  |  |  | 56.063 |
| 2 | $\begin{aligned} & \text { YASS HEAVYPATCHING \& IMPROVEYENT OF DRAINAGE } \end{aligned}$ | DEPT | 1 | $54,5 \geq 7$ |  |  |  | 54,527 |
| 2 | YASE STRENSTHENIVS OF PAVEMENT \& IMPROVEMENT OF ORSAINAGE | DEPT | 1 | -450 |  |  |  | -450 |
| 2 | YASS PEHABILITATION OF PAVEMEVTO 25.0 KM SOUTH OF YASS | DEPT | 1 | 903.606 |  |  | . | 803.606 |
| 2 | yass 33 KM TO 34.3 KM SOUTH OF YASS IVTERIM WORK FJR IMPROVEYENT OF ALIGNMENT \& SRADING | DEPT | 1 | 463,401 |  |  |  | 463.401 |
| 2 | YASS 15.1 KM TO 19.8 KM SOUTH OF YASS EARTHWORKS, DRAINAGE \& RECOHSTRUCTION OF PAVEMENT | DEPT | 1 | 1,307,603 |  |  |  | 1,307,603 |
|  | TOTAL |  |  |  |  |  |  | 50.949.045 |
| 3 | GUNAIVG 55.0 KM TO 57.7 KM SOUTH OF GOULBURN grayular overlay 8 gituminous surfacing | DEPT | 1 | 39,894 |  |  |  | 39,894 |
| 3 |  | DEPT | 1 | 367 |  |  |  | 367 |
| 3 | GUYNIVG NIDENIMG OF FORMATION EM SITUMIHOUS SUKFACING OF SHOULDERS | DEPT | 1 | 3,336 |  |  |  | 3,336 |
| 3 | MULWAREE GPDOACHES GRIDGE OVER WILLOW TREE CPEEK 26.0 KM SUUTH OF | $\begin{aligned} & \text { GOULEGRN } \\ & \text { DEPT } \end{aligned}$ | ${ }_{1}$ | 319.230 |  |  |  | 319,230 |






| ROAS | LOCAL GOVT AREA <br> LOCATION OF dORK <br> DESCRIPTION OF NORK <br> state hichials (CONT 0 ) | $\begin{aligned} & \text { CONST N } \\ & \text { AUTH } \end{aligned}$ | nastra RD Cl | $\operatorname{com}_{s}$ | $\begin{gathered} \text { SOURCE OF } \\ \text { STATE } \\ \text { S } \end{gathered}$ | $\begin{aligned} & \text { FUNDS } \\ & \text { LOANS } \\ & \$ \end{aligned}$ | $\begin{gathered} \text { TOTAL } \\ \text { s } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | ```PLAMD SRENOTHEVIVG S.5 KMTT 31.5 KM VORTH OF WEST WYALONG strengThevivg & widening of pavfyevt``` | DEPT | 1 | 2,328 | 337 | 2,992 | 5,657 |
| 6 |  | DEPT | 2 | 332.216 | 48,018 | 426,846 | 807.080 |
| 6 |  | COUNCIL | L 2 | 985 | 142 | 1.265 | 2,392 |
| 6 | CEDRA LACHLAN RIVER AT COHRA SEvev span prestressed concrete girdep arioge | DEPT | 2 | 1:938,826 |  |  | 1,938.826 |
| 6 | COWRA $1 C 0.67$ KM TO $1 C 1.57$ KM WEST OF BATHURST SIRENGTHENING OF PAVEMENT \& WIDENING OF FGRMATION | COUNCIL | 12 | -5,348 | -773 | -6,871 | -12,992 |
| 6 | COWRA LYNCH ST FROM LIVERPODL ST TO YAIN ST, COWRA reconstruction \& eituyinjus surfacing stage - 1 | COUNCIL | 12 | 25,154 | 5,081 | 45.168 | 85.403 |
| 6 | COWRA LYNCH ST FROM LIVERPOOL ST TO MAIN ST COWRA recovstruction \& gitumingus surfacivg stage - ? | $C_{\text {OUN }} \mathrm{CI}_{\text {L }}$ | L 2 | 21,492 | 3,105 | 27.601 | 52.188 |
| 6 | COWRAPPROACHES QRIDGE OVER LACHLAN RIVER AT COWRA | COUNCIL | 12 | 14.425 | 2.094 | 18.612 | 35.191 |
| 6 |  | council | 12 | 40.729 | 5,887 | 52.330 | 98.946 |
| 6 | COWRA $0 . ?$ KM TO 7.3 KM WEST OF COWRA रEHABILIIATIJV OF PAVEMEVT | COURCIL | 12 | 28,971 | 4,187 | 37,223 | 70,381 |
| 6 |  | OEPT | 2 | 1,244 | 180 | 1.598 | 3.022 |
| 6 | HAY RECONSTRUCTION E BITUMINOUS SURFACIVG SHET. HAY | COUNCIL |  | 19.002 | 2.747 | 24.415 | 46,864 |
| 6 |  | COUNCIL | L 2 | 19.143 | 2.767 | 24,596 | 46.506 |
| 6 |  | council | L | 28,971 | 4,187 | 37.223 | 70,381 |
| 6 |  | COUNCIL |  | -8,047 | -1,163 | $-10.339$ | -19,549 |
| 6 | ```WEDDIV 60.7 KM TO 6Z.2 KM WEST OF GRENFELL StRENGTHENING& WIDENING OF PAVEMENT``` | council |  | 80,474 | 11,632 | 103,397 | 195.503 |

## SOURCE

 state FUNDS LOANS TOTAL STAT: HIGHWAYS (CONT ${ }^{-}$)FTML 3
10.0 KM TO 130.0 KY NORTH OF 3OURKE RESTORATION JF SHOLLDERS DEPT $1 \quad 43.849$
(RT)

6,338
56,339
3,425,099 zESTORATION JF SHOLILDERS
39.9 KM TO 41.1 KY NOPTH OF ORANGE QEHAGILITATION OF PAVEMEVT

2E.7 KM TO 3Z. 3 KM AEST OF BATHURST PEATBILITATIJN \& IMPROVEVENT TO GRADING \& ALICNMEMT DEPT ANS IDENING GRIDGE OVER ROCKS CREEK NO. 210.8 KM WEST OF BATHURST

DEPT 1
28,072
25
36.069
68.899

DEPT 1
4
32
61
7 FVANS
APPROACHES
BRIDGE OVEP ROCKS CREFK NC. 1 1L. 2 KM WEST OF BATHURST
THURST
DEPT
209.750

30,317
269,497
509.564
 QECOASTRUCTION S SITUMINJUS SURFACING AT RAILWAY LEVEL CROSSIHG COUNCIL 1

12,458
1,801
16.007

30,266
$-1,80$
$-16,007$
$-30.266$
70,381
7 ORAPGE 5 S. 5 KK TO S 3.2 KM WEST OF BATMURST
peconstruction
TWO MILE CREEK O6.5 KN TO 72.55 KM NORTH OF ORANGE RECONSTPUCTION E BITUMINJUS SURFACIMG

DEPT
1 TOTAL 7

GOGAY 2.5 KM TO 12.6 KM AEST OF NYVGAN dIOEMING OF FORMATION \& RESHEETING OF SHOULDERS
DEPT $1 \quad 101,927$
27.741
246.596
466.264

9 CEVTZAL DARLING 147.5 KM TO 177.2 KM HEST OF CJBAR JIJEVIVG OF SHOULDERS

DEPT

 LOCAIION OF AORK HESCRIPTION OF WORK STATE HICHAYS (CONT ${ }^{-}$) MAITLAVD
DIVIDED CARRIAGEWAYS PUELIC UTIILITY ADJUSTMENTS EASTER
 PEHAGILITATIJY \& SFARING SHOULDERS
15.6 KM 1096.7 KM WEST OF MAITLAND RECONSTRUCTION OF PAVEMEVT

Of $^{29}$ PAVKME TO
MAYLAVD 29.6 KM TO 30.35 KM WEST OF NENCASTLE REHASILITATIJA OF PAVIMEYT
DEPT 6 2.711
 PECONSTRUCTION OF PAVEMEVT \& PUELIC UTILITY ADJUSTMENT
$\qquad$ 15.6 KM TO 15.7 KM WEST OF MAITLAND PECJNSTRUCTIJN DF PAVEMEVT
13.7 KM TO 15.6 KM WEST OF MAITLAND

MAITLAVO
PECJNSTRUCTIJV 8 zミCONSTRUCTIOV \& PITUMIROUS SURFACING
15.3 KM TO 15.5 KM WEST DF MAITLAND TLAVD 15.3 KM TO
RECONSTRUCTION OF PAVEMENT

2R.4 KM TC 29.5 KM VORTH OF VENCASTLE


2E.4 KM TO 29.5 KM VORTH OF NEACASTLE TLAND
fouk lathe carriagitway

 DEPT MAIN NORTHERN RAILWAY LINE 48 KM NORTH OF MUSWELLEROQK
THREE SPAN REINFOKCED CONCRETE DRIOGE DEPT

DEPT ELIEROOK

2,711

34,842

625,499

7,371 EPT 6 6 URRURUN2I 51.4 KM TO 58.1 KM NORTH OF YUSWELLGROOK REHABILITATIOV OF PAVEMENT URRURUNOI GE.75 KM TO 77.56 KM HORTH OF YUSWELLBROOK REHASILITATION OF PAVEMEVT

```
            MAI MAI
``` MOTORWAY - FENCIMG
DEPT


991,484 107,212
CONST NAASRA NAASRA AUTH RD CL COM"WL
\[
242,338
\]

SOURCE OF FUNDS STATE OF FUDS STATE
\(\$ 8\)

\section*{total}
991.494
107.212
242.338





9 TEntERFIELO 9
TOTML 9
10 GGLLIVA 5.9 KM TO 7.1 KM NORTH OF BALLINA
 RECONSTRUCTION \& EITUMINDUS SURFACING

B BLLIVGE: \(\quad 75.3 \mathrm{KM}\) TO 194.3 KM NORTH OF KEMPSEY PEYASILITATION \& UIDENING OVER SELECTED SECTIOVS
 LIDENIHG OF FJQMATION S STREVGTHENIVG JF PAVEMENT GELLIVGEN
AIDENIVG OF PAVEMENT KM REALIGNMENT OF CURVE

YELLOH ROCK
CRD \& RENRY ISLAND RD BGOS
GLLIVGEN YELLOU ROCK RD \& NEARY ISLAND RD GS.S KM NORTH OF KEMPS
39.0 KM TO \(40.4 \mathrm{~K} M\) VORTH OF GALLINA PEALIGNMEVT JF SHORT SECTION EYROV \(2{ }^{2} .27 \mathrm{KM}\) TO 31.39 KM NORTM OF BALLINA RECOMSTAUCTION OF PAVEMEVI

DEPT
 GYRON 51.3 KM TO 52.6 KM VORTH OF BALLINA zECONSTRUCTIJN R gituminjus SURFACIVG
ROAD LOCAL GOVT AREA
STATE highways

BRIUGE OVER PYES CREEK 59.4E KY NORTH OF GLEN INNE
tarban Creek 15.7 KM MORTH of tenterfielo RRETE PLAVK BRIDGE

9C.O KM TO ? 4.84 KY NORTH OF TAMWORTH
74.30 KM TO \(75 . O B \mathrm{KM}\) NORTH OF TAMWORTH f Pavemevt 95:0 KM TO

CONST NAASRA
AUTH RO CL COM-
SLTH OEVIGTION DEPT

12,109
930,690 DEPT 1

700,238
rotal

139,823
67.089
12.109

930,690
700.238
3.122

14,921
10.337

LOCATION OF AORK DESCRIPTION OF WORK
state highways (CONTD)
C3FFS HAPGCUR 25.2 KM TO 27.94 KM NORTH JF CJFFS HARGOUR RECONSTRUCTION R EITUMINOUS SURFACING

CJFFS HAPGOUR 30.2 KM TO 33.4 KM NORTH OF COFFS HarbOUR PECJNSTFJCTIJY OF WEDDINS BELLS DEVIATION

COFFS HARQCUR GPIDGE OVER COFFS CREEK 0.3 KM NORTH OF COFFS HAREOUR RECONSTFUCTION OF APPROACHES COFFS HARSUUR hallS RD to azalea ave, coffs hargour PRJVISION OF OVERTAKING LANE CJFFS HARBOUR O.4 KM TO 1.9 KM NORTH OF COFFS HARBOUR RECONSTRUCTION \& BITUMINOUS SURFACING

COFFS HARBOUR 161.3 KM TO 101.S KM NORTH OF KEMPSEY IMPROVEMENT OF INTERSECTION
CIDENING

GRIDGE OUER POUNDYARD CREEK 2S.9 KM NORTH OF COFFS HARGOUR
GRIDGE OVER POUNDYARD CREEK 2E.9 KM NORTH OF CORF
GRIDGE OVER NOOLGOOLGA CREEK 25.5 KM NOFTH OF COFFS HARBOUR
DEPT 1

DEPT 6
GOSFCRD 44.8 KH TO 77.3 KM NORTH OF SYDNEY
aSHAPILITATIDN OF VARIOUS SECTICYS
72. E KM VORTH OF SYDMEY AT JUNGTION HITH MR2ZS AT KARIONG

DEPT 6
GOSFORD DEVIATIOY OF SHIO AT KARIONG 72.0 KY NORTH OF SYDNEY PUALIC UTILITY ADJUSTMENTS DEPT

DEPT 6 165,720

DEPT
6
GOSFORD CUT ROCK CREEK E.O KY VORTH OF GOSFORD REIVFORCED CONCRETE BRICSE

DEVIATIONO
YONEY PAVEMENT \& FIVISEING WORKS SHIO AT KARIONG 7Z.C KM NORTH OF SYONEY

DEP 1 1.118.279
GGSFJRD BRIOGE OVER CUT ROCK CREEK 7.9 KM TO 8.O KM NORTH OF GOSFORD
BRIOGE OVER CUT ROCK CREEK 7.9 KM TO 8.O KM NORTH OF GOSFO
a
EATER TAREE APPROACHES

GRIDGE OVER STEHART'S RIVER ? 6.04 KY NORTH OF TAREE
STEWART-S RIVER JC.OL KY TJ 30.10 KY NORTH OF TAREE
DEPT
\(11,358,212\)
182.965
182.965

SOURCE OF FUNDS
STATE
129.863

1,154,361
2.182 .060
GREATLR TAKEE MANHING ST TO MACQUARIE ST, TAREE
    ARLR TAMEE
RECORSTEUCTIDA OF DIVIDED CARRIAGEAAYS
ATER TAPIE
    GECOBSTRUCTIDN OF DIVIDED CARRIAGEAAYS
GRIGYERTAPIE PULTENEY ST TO MANNING ST, TAREE
        RECDISTEUCTION PGUTENEY STVIDED CARRIAGEAAYS
    Gh:AtER TAREE oxLey St to CChPER St, takee
        ater taree oxley stito cchper st, takee
peconsthuction a Eituminous surfacing GRIDGE OVER SY pile caps, hutments, b piers ewarts rivir 37.3 km north of taree GASTINGS SRIDGE OVER NORTH COAST RAILWAY LINE, RUSS GLEN APPROACHES SRIDGE OVER NORTH COAST RAILWAY LINE, RUSS GLEN D \(\qquad\)
CONST NAASRA AUTH RDCL COM-WLTH
 \(\begin{array}{cc}\text { OURCE OF FUNDS } \\ \text { STATE } \\ \text { S } & \text { LOANS }\end{array}\)
COUNCIL 12,777
1,84716,41731.041
dIJENING \& STREMGTHCNIVG OF PAVEMEVT NORTH OF TAREE
HASTINGS NORTH COAST RAILAAY LINE, ROSS GLEN 46.iJ3 KM NORTH OF TAREE OVERERIDGE

NORTH COASt RAILAAY LINE, ROSS GLEN 46.i] KM NORTH Of TAREE
Hofisgy
gEROWRA WAIERS RD TO LLROWRA TJLL STRENGTHENING Of FAILED ヨituminious paverelit BEAUPONT RC, MT KURING~GAI gornsiy
RIGHt turn bay REAUYONT RC, MT KURING~GAI DEPT 6 GRIDGE OUER GREEN AATTLE CREEK 115.8 KM NORTH OF TAPEE 1 PPSEY HKJDGE OVER GILLS CRERK 115.5 KM TO \(116.4 \mathrm{KM} \underset{\text { NOPTH OFF TAREE }}{\text { DEPT }}\)
KMPSEY
HPDQUACHES GREEN WATTLE CFEEK 3.O? KM SOUTH OF KEMPSEV

OEPT

KMPSEY GILLS CREEK Z.79 KM SOUTH OF KEMPSEY THREE SPAN PRESTRESSED CONCRETE GIRDER BRIDGE DEPT 6

KEMPSEY NOFTH COAST RAILNAY LINE Z. 60 KM SOUTH OF KEYPSEY PRESTRESSED CONCRETE ERIDGE EPT 0

Krmeser \(10 \geq .46 \mathrm{KM}\) to 1 Ce. ? KM VOPTH OF TAREE DEviAtiov

10K.4 KM TO 11 C .1 KY NORTH OF TAREE SEY CONSTRUCIION, WIDENING \& PROVISION OF CLIMSIVG LANE


    LOCAL govt area
stats highwars (CONT-D) DESCRIPTION OF NORK

SOURCE
STATE
S
St

\section*{total}


 \(\underset{S}{S T A T E}\) fUNOS LOANS
5 TOTAL STATE HIEHNAYS (COHT \({ }^{-D}\) ) OFSCRIPIION OF JORK AYONG \(\quad\) SECOND CARRIAGEWAY 125.9 kM TO 12 E. 2 KM NORTH OF SYONEY WYONS STREXGTHENIVG S SEALING OF SHOULDERS NORTH CF SYDHEY STRE:MGTHENIVG \& SEALING OF SHOULDERS

DEPT 6
316.669

ORTH OF SYDNEY
DEPT 6
70.945 DEPT 6 JIDENING \(\$\) RECONSTRUCTION OF PAVEMEVI of Srower wroits

OF PAVEMEVI NORIH OF SYDNEY

DURIMBAA TO DOYALSSO
OF SYDNEY regazilitation of varions sfctions DEPT 268,276 WYONG 93.2 KM TO \(94 . \therefore\) KM VORTH OF SYONEY rehabilitation cf northejung carriauehay DEPT 621,434 -YONG REHABILITATION OF PAVEMEYT 124.3 KM TO 125.3 XY NORTH OF SYOHEY rehabilitation of pavemevt

DEPT \(6 \quad 587.382\)
 DEPT 6.327

\(\begin{array}{lll}\text { DNEY } \\ \text { DEPT } & 10.810\end{array}\) UYONG CDGBS RD \& R WAY O-GRIDGE, 99.15 KM TO 90.37 KM NORTH OF SYDNEY WYONG 125.9 KM TO 12 欠. 2 KM MCRTH OF SYDNEY

SECJVD CARRI
 DEPT

DEPT \(6 \quad 42.398\) UYONG LAKE MUNMORAH SCHOOL 123.5 KM VORTH OF SYDNEY PEDESTRIAN BRIDGE
DEPT 6 2e6,742 DEPT 1 -3.380

WYONG 106.24 KM TO 1 CE. 95 KM YORTH OF SYONEY WIDENing s rectarstructioy of pavemevt
99.65 KM TO 104.0 KY P:ORTH OF SYDMEY STRENGHENINE \& WIDERING OF PAVEMENT

DEPT 6 9C4, 390
DEP
\(9 C 4,390\)
64.074

STATE ROADS SYSTEM - CONSTRUCTION

```

HOCIL gOVT AREA

```

LOCATION OF NORK DESCRIPTION: OF dORK

\author{
STATE HICHAAYS (CONTCD)
}

\begin{tabular}{cc} 
State \\
S & OUNOS \\
& \\
& \\
&
\end{tabular}
12.629
112.264
\[
31.240
\]
\[
277.698
\]99,119187,41423,907741,413

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline ROR & LOCAL GDVTAREA \(\quad\) lOCATIDN: OF NORK
STATE HIGHYAYS (CONTCD) DESCRIPTICH OF WORK & CONS T AUTH & nassa Ro CL & comentith & \[
\begin{gathered}
\text { SOURCE OF } \\
\text { STATE } \\
\$
\end{gathered}
\] & FUNDS
LOANS
\[
s
\] & TOTAL \\
\hline 13 & \(\qquad\) SUPPLY \& DELIVEFY OF STEEL GIRDERS & DEPT & 6 & 102,859 & 21.135 & 79,627 & 213,621 \\
\hline 13 &  pedestrian overicidge & DEPT & 6 & ?1,892 & 9.653 & 24,689 & 66.234 \\
\hline 12 & ```
HOFRSGY RIGHT TURN BAY DARTFORD RO, NERMAYHLSST
``` & DEPT & 6 & 22,902 & 9,959 & 25,471 & 68,332 \\
\hline 13 & ```
HORNSGY (GIGT TURN GAYS NORMANHURST RD, NORMARHURST
``` & DEPT & 6 & 319.212 & 96,623 & 247.115 & 662,950 \\
\hline 13 & ```
HORNSGY DUFFY AVE, NORNANHURST
    gIGHt tURN bays
``` & DEPY & 6 & 114.536 & 34.669 & 88,667 & 237.872 \\
\hline 1: & \begin{tabular}{l}
hUKlisgy ousfrvatory park, penhant hills \\
IMPROVEMENT OF INTERSECTICN
\end{tabular} & DEPT & 6 & 63,863 & 19.331 & 49.439 & 132.633 \\
\hline 17 & ```
hortisgr geORgl TO lilLA PDE, PENHANt hills
    qECONSTRUCTIDN TO SIX LAVES
``` & DEPT & 6 & 1.026.527 & 310,723 & 794,670 & 2.131 .926 \\
\hline & TOTAL 13 & & & & & & \(4,466.264\) \\
\hline 14 &  & ealrana COUnC & \[
\operatorname{llo}_{1} 1
\] & 19.314 & 2,792 & 24.815 & 40.921 \\
\hline 14 & HAY 172.7 KM TO 173.6 KM WEST OF NARRANDERA RECONSTRUCTION \& WIDENING & DEPT & 1 & 37.250 & 5,377 & 47.797 & 90.374 \\
\hline 14 & HPY 16.0 .4 KM TO 172.7 KM WEST OF NARRANDERA pectustruction se widening & DEPT & 1 & 290,577 & 40,553 & 360.690 & 681.614 \\
\hline 14 & \[
\begin{aligned}
& \text { HAY RECONSTEUCTION\& } 106 \text { HIDENING OF PAVEME:NT }
\end{aligned}
\] & DEPT & 1 & 52,111 & 7.532 & 66.955 & 126.598 \\
\hline 14 & HAY 164.3 KM TO 166.8 KM WEST OF NARRANDERA RECOASTRUCTION \& WIDENING OF PAVEMCNT & DEPT & 1 & 11,443 & 1,654 & 14,702 & 27.799 \\
\hline 14 & WAGGA JAGGA 72.8 KM IO \(74 . \mathrm{C}\) KM SOUTH CF GUVDAGAI strengitening of pavement ok existinc alignment & DEPT & 2 & 123,095 & 19,237 & 171,007 & 323.339 \\
\hline 14 & WGGGA \(\quad\) AGGA INTERSECTION OF TASMAF: RD 77.9S KM TO 7:34 KM PROVISIOR OF TURNING LABES & \[
\begin{aligned}
& \text { WEST OF } \\
& \text { DEPT }
\end{aligned}
\] & GUNDAG
\[
1
\] & GAI 51.215 & 7.403 & 65,804 & 124,422 \\
\hline 14 & WhGga wagGa 16.1 KM TO 24.3 KM WEST OF WAGGA WAGGA PEHASILITATION R HIDENING & DEPT & 1 & 6.347 & 917 & 8,155. & 15.419 \\
\hline
\end{tabular}


ctats hichuars (comío)

MILDUKA BRIDGE 75.0 KM TO 79.2 KM WEST OF EUSTON
 14
TOTAL 14
YASS 8.87 KM TO \(10 . C \mathrm{KM}\) SOUTH OF YASS
    Strevithe:IIYG of pavement g wiotilyg of fcamation

REHABILITATIJN OF PAVEMEVT \& WIOEMING OF FJKYATION
TOTAL 13
```

LJCAL gOVT AREA
LOCATIOH OF NORK
STATE HIGHWAYS (CONT'O)

```


\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline ROAD & LOCAL GOVTAREA
SIATE HIGHAAYS (CONT & \[
\begin{aligned}
& \text { CONST N } \\
& \text { AUTH }
\end{aligned}
\] & \[
\begin{aligned}
& \text { NAASRA } \\
& R D ~ C L
\end{aligned}
\] & \[
\operatorname{con}_{s}^{-W L T H}
\] & \[
\begin{gathered}
\text { SOURCE } \\
\text { STATE } \\
\text { S }
\end{gathered}
\] & \[
\begin{aligned}
& \text { FUNDS } \\
& \text { LOANS } \\
& S
\end{aligned}
\] & TOTAL \\
\hline 17 & \begin{tabular}{l}
JERILJERIE \\
1.? KM TO 3.16 K. VORTH OF JERILDERIE \\
RECONSTKUCTION \& EITUMINOUS SURFACING OF APPROACHES
\end{tabular} & DEPT & 1 & 297,731 & 41,588 & 369.690 & 699.009 \\
\hline 17 & MOREE PLAIHS GUYDYR RIVER 11.2 KY NORTH OF MOREE - BOOLOOROO five spant prestressed concrete Girder brioue & \[
\begin{aligned}
& \text { BRIDGE } \\
& \text { DEPT }
\end{aligned}
\] & 1 & 15 & 2 & 19 & - 36 \\
\hline 17 & MORTE PLAINS 97.18 KM TO 98.32 KM HORTH OF YARRABRI STRENGTHENIVG 3 GITUMINOUS SURFACING & COUNCIL & 11 & -1,395 & \(-202\) & -1,792 & -3.389 \\
\hline 17 & MORES PLAI:IS 1.22 KM TO 3.22 KM NCRTH OF YOREE STRENGTHENING \(\mathcal{S}\) HIDENING EXISTING PAVEMENT & DEPT & 1 & 163,504 & 23.647 & 210.206 & 397,457 \\
\hline 17 & MOREE PLAINS 113.43 KY TO 114.00 KM VORTH OF MOREE AT BJGGABI IURNOUT FOR SHELL TRUCK PORT & \[
\begin{aligned}
& \text { IILLA } \\
& \text { DEPT }
\end{aligned}
\] & 1 & 83 & 12 & 107 & 202 \\
\hline 17 & MOREE PLAINS 4.0 KM TO \(4 E .0\) KM VORTH OF MOREE RECOASTRUCTIOA Cf FAILED PAVEMENT & DEPT & 1 & 55.651 & 8,044 & 71,503 & 135.198 \\
\hline 17 & NARRABRI 4.3 KM TO 5.3 KM NORTH OF NARRABRI REHABILITATION OF PAVEMENT \& SHOULDERS & DEPT & 1 & 126.549 & 18,291 & 162,596 & 307,436 \\
\hline 17 & NARRABR1 45.0 KM TO 55.0 KM NORTH OF NARRABRI REEONSTRUCTION & DEPT & 1 & 281,386 & 40,671 & 361,538 & 683,595 \\
\hline 17 & narrabrl
OEVIATIO & NARRAGRI DEPT & 11 & 879,628 & 127.140 & 1,130,186 & 2.136 .954 \\
\hline 17 & NARRABRI NARPABRI TO MOKEE RAILWAY LINE ?. 2 KM NORTH OF N SIVGLE SPAN PRESTRESSED CONCRETE PLANK BRIDGE & NARRAGRI DEPT & 11 & \(4,3 \leq 9\) & 630 & 5,601 & 10.590 \\
\hline 17 & Narraydera murrumbidgee river z. 3 kM south of narrandera REIVFORCED CJNCRETE BRIDGE & DEPT & 1 & 189 & 27 & 243 & 459 \\
\hline 17 & NGRGANDERA MURRUMBIDGEE RIVER ?. 46 KM SOUTH OF NARRANDERA four span prestressed coverete plank bridge & DEPT & 1 & -30 & -4 & -38 & -72 \\
\hline 17 & Narrandera \({ }_{\text {PPProaches }}\) bridege over murrumbidgee river at narrandera & DEPT & 1 & . 46.928 & 0.783 & 60,295 & 114,006 \\
\hline 17 & NaRROMINE 50.6 KM TO 62.0 KM VORTH OF PAZKES Strengthening \(\quad\) hidening of pavement & DEPT & 1 & 98,251 & 14,201 & 126.238 & 238,690 \\
\hline 17 & WARRJMIVE 102.0 kM TO \(10 t .0 ́ \sigma \mathrm{KM}\) NJRTH OF PARKES STREVSthenivg \(s\) widening of pavemevt & DEPT & 1 & 390,947 & 56,507 & 502.306 & 949.760 \\
\hline 17 & \begin{tabular}{l}
URARA \\
51.0 KM TO © 9.0 KM SOUTH OF Narrandera dIDENING OF FORMATION S StRENGTHENING OF PAVEMENT
\end{tabular} & DEPT & 1 & 330.902 & 47,841 & 425.273 & 804,106 \\
\hline
\end{tabular}
```

COCATION OF NORX SIATE MIGHAYS (CONTCO) ESCEIPTION OF WORK

```
CONST NAASRA
AUTH RD CL
COM-WLTH
\(s\)

\section*{SOURCE OF FUNDS STATE OANS \\ Stat \(\$\)}
\(s\)

629.628

TRENGTMEMIVE 31.5 KM TO S7.: XM SOUTH OF VARRANDERA STRENGTMENING WIDENING OF PAVEMEVI

DEPT 1259,172
37,480
332,996
WESDI
SELFCTED LENGTHS \(4 J .5\) KY TO 49.5 KM NORTH OF WEST WYALON
StzEáthening \& WIUCNING Of PAVEMEVT - SCLECTED LENGTHS
DEPT 1 IC8.481
15.080
139.381
263.542

TOTAL 17

74.0 KM TO 95. R KM VORIH OF SILGANDRA

WIDENIMG OF PAVEMENT
UCNAMELE
RECO:ISTHCTION
95.14 KM TO 95.32 KM NORTH OF SILGANDRA
T.AY3LE APOROACHES

BRIDGE OVFR CASTLEREAGM PIVER J. 13 KM NORTH OF COONAMELE
127,803
124.882
236.127

OONAMBLE
CASTLEREAGH RIVER, COONAMELE five span prestressed concrete brioge

NORTH OF GILGAN
8,796
18,472

164,207
310,482

\(\begin{array}{ll}\text { NORTH OF GILGAN } \\ \text { DEPT }\end{array} \quad 3,3 R 4\)
OEPT \(2 \quad 101.907\)

14,729
130,934
247.570

GESTORATION JF FLOOD DAMAGED CULVERTS
ALGETT 113.4 KM TO 114.0 KM HORTH OF COONAMBLE
REHABILITATION: WIDENINS OF PAVEMEVT
WALGETT NAMOI RIVER O.? \(\quad\) KY NORTH OF HALGETT EISHT SPAN PRESTRESSEO CDHCRETE BRIDGE

TOTAL 18
gombala outskiris cheex 13.0 KM SOUTh of gomeala TJUR SPAN PRESTRESSED CONCGETE GRIDGE

TOMEALA 17.5 kM TO 20.5 KM SOUTH GF 3OMEALA QECJVSTRUCTION \& Situminjus SUGFACING

9 COOMA-MONAKD CDOMA RIVER 105.95 KM SOUTH OF COOMA FJUR SPAV DRESTRESSED CONCRETE PLAHK ERIDGE
DEPT 23.29244,060
\begin{tabular}{lllll} 
COUNCIL 2 & 115,401 & 10.680 & 148.272 & 280.353 \\
COUNCIL 2 & 117.332 & 16,959 & 150.753 & 285.044 \\
DEPT 2 & 24.120 & 3.486 & 30.990 & 58.596 \\
DEPT 2 & 49.768 & & & 41.768
\end{tabular}


STATE ROADS SYSTEY - CONSTRUCTION
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{State roads systey - Construction} & \multicolumn{3}{|r|}{APPENDIX 5.0048} \\
\hline ROAD & logal govt area STATE HIGHWAYS & \[
\begin{array}{rr} 
& \text { LOCATIOM OF WORK } \\
\text { (CONT-D) } & \text { DESCRIPTIOA: OF WORK }
\end{array}
\] & \[
\begin{aligned}
& \text { CONST N, } \\
& \text { AUTH }
\end{aligned}
\] & NAASRA RD CL & \[
\operatorname{com}_{s}
\] & \[
\begin{gathered}
\text { SOURCE OF } \\
\text { STATE } \\
\text { S }
\end{gathered}
\] & \[
\begin{gathered}
\text { FUNDS } \\
\text { LOANS } \\
S
\end{gathered}
\] & TOTAL \\
\hline 20 & \[
\begin{aligned}
& \text { BERPIGAN } \\
& \text { SIX SPAR PRESTR: }
\end{aligned}
\] & MUL'NALA CANAL 50.35 kM EASt \(3 F\) DENILIQUIN ESSED CONCfite PLABK gFidge & DEPT & 2 & 5,664 & 816 & 7.252 & 13.712 \\
\hline 23 & \[
\begin{aligned}
& \text { BERFIGAY } \\
& \text { RECOVSTRUCTIJN }
\end{aligned}
\] & 121.9 KM TO \(12 \mathrm{Z}\).3 KY WCST OF ALEURY § 2IDEAINJ & councit & 12 & 28,971 & 4.187 & 37.223 & 70,381 \\
\hline 20 & HUME REHABILITATION & bridee over yajors creek íc. 2 <M to 26.6 ky east - SHCULDER \& DRAINAGE IMPRCVEMEVTS & \[
\begin{aligned}
& \text { TOF ALS } \\
& \text { DEPT }
\end{aligned}
\] & \[
\begin{gathered}
\text { SURY } \\
2
\end{gathered}
\] & 1,260 & 183 & 1.626 & 3.075 \\
\hline 20 & \begin{tabular}{l}
hume \\
VIDENING
\end{tabular} & BRIDGE OVER MAJORS CREEK 4.8 KM EAST OF HOULONG & DEPT & 2 & 27,100 & 3.917 & 34,820 & 65,837 \\
\hline & TOTAL 20 & & & & & & & 2.031.005 \\
\hline 21 & CENTRAL DARLING RECONSTRUCTION & 25.0 KM TO 31.0 KM SOUTH OF IVAfithoe ? gITUMINJUS SURFACING & DEPT & 2 & 102,380 & 14.798 & 131,543 & 248,721 \\
\hline 21 & CCNTRAL DARLING RECONSTRUCTIJN & 29.C KM TO 31.0 KM SOUTH OF IVARHOE \& BITUMINOUS SURFACING & DEPT & 2 & 110.867 & 16,025 & - 142.448 & 269,340 \\
\hline 21 & \begin{tabular}{l}
DENILIGUIV \\
RECONSTRUCTION
\end{tabular} & CRISPE ST \& OCHERTYRE ST, DENILIQUIN OF INTERSECTION & DEPT & 2 & 124.156 & 17.945 & 159,522 & 301.623 \\
\hline 21 & \[
\begin{aligned}
& \text { DENILIZUIV } \\
& \text { RECONSTRUCTION }
\end{aligned}
\] & OCHERTYRE ST FROH HARDIVGE ST TO CRISPE ST, DENI of damaged pavement & ILIGIN COUNCIL & L 2 & 35,251 & 5,095 & 45.293 & 85.639 \\
\hline 21 & hay foje span oqestres & LACHLAN RIVER, BJOLIGAL RESSED CONCRETE PLAYK BRIDGE & DEPT & 2 & 66,327 & 9,587 & 85,220 & 161,134 \\
\hline 21 & hay prcoustruction & GRIDGE AT BOOLIGAL 70 ..? KM TO 77.7 KM NORTH OF HAY OF SOUTHERS APPFOACH & \[
\begin{aligned}
& \text { HAY } \\
& \text { DEPT }
\end{aligned}
\] & 2 & 254,475 & 36.781 & 326.960 & 618,216 \\
\hline 21 & \begin{tabular}{l}
MURKAY \\
reconetruction
\end{tabular} & 65.0 KM TU 65.4 KM YOFTH OF MOAMA \& WIDENINS & DEPT & 2 & 259,372 & 37.489 & 333,253 & 630.114 \\
\hline 21 & murrar reconstruction & 64.4 KM TO 69.? KM NORTH OF MOAMA \& WIDENING & DEPT & 2 & 11,593 & 1,676 & 14,895 & 28,164 \\
\hline & TOTAL 21 & & & & & & & 2,342.951 \\
\hline 22 & \[
\begin{aligned}
& \text { BROXTV HILL } \\
& \text { REHABILITATION }
\end{aligned}
\] & J.O KY TJ 3.4 KM SOUTH OF GROKEN HILL Of PAVEMEVT & COUNCIL & 13 & 14.500 & 2.096 & 18,630 & 35.226 \\
\hline 22 & \begin{tabular}{l}
GROXEV HILL \\
pavement rehagit
\end{tabular} & LANE ST FROM BAGOT ST TO BUCK ST, BROKEN HILL LItATION & COUNCIL & L 3 & 19.782 & 2,859 & 25.617 & 48,058 \\
\hline
\end{tabular}


CONST NAASRA
AUTH RD CL COMWLTH
25.10 KM TO 26.7 R KM WEST OF BRAIDWOOD \(\therefore\) Llagiavia RECONSTRUCTION \(\begin{gathered}25 \text { Bitumindus supfacivo }\end{gathered}\)

PALLAGAVDA 39.9 KM TO 3J.44 KY WEST JF JZAIDNOOD RECONSTPUCTION \& QITUMINOUS SURFACi!:G

YISRONLUSLA 28.02 kM TO 21.3 KM EAST OF QUEANBEYAN RECONSTEUCTIDN : GITUMINOUS SUFFACING YARRJWLUMLA MOLCNGLO RIVER O. Z KM EAST OF QUEANBEYAR fIVE SPAY PRESTRESSED COVCRTTE GRIDGE

YGRRJALUMLA APPROACHES
fgidge over railway line 9.7 km east of queanbeyan
DEPT 2
3RIOGE CVER MOLONGLO CREEK O. 3 KM EAST OF DUEANEEYAN
YOREOULUMLA
RROWLUMLA 19.7 KM IO 2?.0 KM EAST OF QUEAMBEYAN RECONSTRUCTION R RITUMINOUS SURFACI:G

TOTAL 5t GUVNIVG \(21.10 \times M\) ro 2 ? 65 KY SJUTH OF SUNNING RECONSTRUCTION R BITUMINJUS SURFACIHG

ZT. \(G\) KM TC \(2 E .7\) KR SOUTH OF GUNNING
GUNNIVG vg
econstruction e bituminjous surfacing
runtilig 17.0 KM TO 19.7 KM SOUTH OF GUNRING RECODSTPUCTION \& EITUMIHOUS SUFFACING
 PCCOHSTRUCTIDN : WIDENJHE
YAPROWLUMLA 12.1 KM TC 12.6 KM SOUTH OF GUVAIMG IMPROVEMENT OF JUNCTION

TOTHL S2

CROOXAELL
PELJNSTRUCTION
29.37 KM
TO 32.0 KM NORTH OF CROOKWELL

COUNCIL 2 144,854

COUHCIL 23.799

SOURCE OF FUNDS
STATE LOANS OANS
7.334 65,191 123,263 97,700 23,461
\begin{tabular}{|c|c|c|c|c|c|}
\hline COUNCIL & & 37,177 & 5,374 & 47,767 & 90.318 \\
\hline COUNCIL & 2 & -804 & -116 & \(-1,033\) & -1.953 \\
\hline council & 2 & 36,020 & 5,206 & 40,281 & 87,507 \\
\hline COUNCIL & 2 & 62,770 & 9.073 & 80.650 & 152,493 \\
\hline COUACIL & 2 & 1,746 & 252 & 2.243 & 4,261 \\
\hline & & & & & 332.606 \\
\hline Couticil & 3 & 42,973 & 6,211 & 55.214 & 104,398 \\
\hline COUNCIL & 2 & 43.456 & 6,231 & 55,835 & 105,572 \\
\hline
\end{tabular}

LOCATION OF dOZK
taunk roads (CONTC)RECONSTRUCTION A BITUMINOUS SURFACING
COUNCIL 3 3,505

55 COONABARAZRAN 42.9 KM TO 47.45 KM NORTH OF CJOLAH aEcOMSTRUCTION R BITUMINJUS SURFACIVE
COUNCIL \(3 \quad 20,923\)
DEPT \(2 \quad 436,390\)

APPENDIX



```

                            COCAYION OF dORK DESCRIPTION OF dORK
    $$
\text { TRU:IK ROADS (COR:T }{ }^{-D)}
$$

COOLAH talgragar river, uarjry YIVE SPAN PRESTRESSED CONCRETE GRIDGE

```
CONST NAASRA AUTH RDCL COM-WLTH

COUNCIL 215,192
SOURCE
STATE
S FUNDS
LOANS
\(s\)
council \(3 \quad 18.145\)
19,519
BAREABA 75.8 KM TC 77.4 KM NOKTH OF TAYWORTH
    PECOVSTPUCTION \&. REALIGHMENT

COUNCIL 318.145
2.623

23,313
44,081
GARRASA 4.41 KM TO R.5 KM SOUTH OF BARRABA RECDNSTRUCTION \& EITUMINOUS SURFACING

COUNCIL \(3 \quad 62,216\)
8,993
79,938
151,147 eifgara myall ckeek e.0 km north of aingara SIX SDAN STEEL GIRDER BRIDGE

OEPT 3 928,694
928.694 olngara brioge over myall creek 2.4 Km to 10.1 KM NORTH Of EINGARA APPROACHES
council 3
106,226
15.354

136,485
258,065
VILLA 50.2 KM TO 61.9 KM YORTH OF MAVILLA
RECOISTRUCTIJN \& EITUMINOUS SURFACIVG
COUNCIL \(3 \quad 62.770\)
GIUE SPAN PRESTRESSEDA CRFEK 21.33 KM VORTH OF TAMAOPTH
FIVE SPAN PRESTRESSED CONCRETE BRIDGE
COUACIL \(3 \quad 138,394\)

\section*{APPROACHES}

GRIDGE OVER ATtUAGA CREEK 19.6 KM TO 20.0 KM NORTH OF TAMWORTH
COUNCIL \(3 \quad 99.102\)
YALLAROI
RECJVSTRUCTIJN OF FAILED PAVSMENT KY NORTH OF WARIALOA
YALLAROI 21.8 KM TO 23.2 KM VCRTH OF WARIALDA reconstauction of damaged pavement
Yallargi 19.4 KM TC 29.7 KM VOPTH OF abialda reconstruction of failed pavement
YALLAROI
RECONSTRUCTION OF FAILED PAVEMENI RECONSTRUCTION OF FAILED PAVEMENT
63


NINE CELL REIAFORCED CONCRETE ECX CULVERT
COUNCIL \(3 \quad 0.336\)
9.073

80,650
152.493

19,960
177,430
335.484

14,32
127,331
240.757 TOTAL 63

65 GYROY 1.60 KM TO \(2.35^{\circ} \mathrm{KM}\) SOUTH OF BYRON BAY RECONSTRUCTION \& BITUMINOUS SURFACING

ROAD LOCAL GOUT AREA

\section*{TRUNK ROADS}

LISMORE \(\begin{aligned} & \text { APPROACHES }\end{aligned}\)

CONT D

 LOCATION OF NORK
DESCRIPTION OF WORK CUNCIL 3 COUNCIL 3

TVML 35
BALEAVALD
dIJEMING S SEALING OF PAVEMEVT KY SOUTH OF GALZANALD
BALRAVALE 3.4 KM 10 22.6 KM SOUTH OF SH14 RESEALING VARIOUS SECTIOVS WAKCOL WAKCOL RIVER 55.63 KM NORTH OF THE MURRAY RIVER AT SHAN HILL DEMOLITION OF OLD GRIDGE

11,033 TOTAL 57

GOURKE WIPBAR CREEK, 129.44 K. 4 SOUTH JF GOURKE THREE SFAN PRESTRESSEC CJNCRETE PLANK BRIDGE

JRIDGE OVER WINEAR CREEK 129.4 KM SOUTH OF GOURKE
COUNCIL 348.295
gOURKE

DUNLOP CREEK 107 KM SOUTH OF EOURKE REIVIOKCED CONCHETF BOX CULVEKT Z APPROACHES
7.4 KM TJ 13.0 KM EAST OF GOUKKE
6.7 KM TO \(4 \mathrm{C}\).7 KM WEST OF GREYARRIMA
G. 7 KM TO 4 C .7 KM WEST OF BREUARRINA
1.0 kM TO 15.4 kM WEST OF MEVIVDEE gituminjus suffaciyg

SRIDGE OVER NELYAMJO GREEK 91.7 KM NORTH OF HILCANMIA
COUNCIL \(3 \quad 28.971\)

CGUNCIL 182.024

COUNCIL \(3 \quad 62,770\)
\(r\)
COUNCIL 3 261.955
08 WALGETT THIRTEEN MILE WARRAYISOOL 20.29 KM WEST OF WALGET حqESTRESSED CONCRETE GKIJGE

\[
\begin{array}{ll}
\text { OURCE OF FUNDS } \\
\text { STATE } & \text { LOANS } \\
S & \$
\end{array}
\]
total
\[
1.986 \quad 17.657
\]33.385
\begin{tabular}{lll}
6.979 & 62.038 & 117.302 \\
3.490 & 31,019 & 58.651 \\
6.530 & 58.048 & 109.757
\end{tabular}
74.46

140,763


\begin{tabular}{lll} 
COUNCIL 3 & 16,385 & 16,385 \\
COUHCIL 3 & 36,006 & 36,006
\end{tabular}
\begin{tabular}{rrrrr} 
COUHCIL 3 & \(1,047,820\) & & \(1.047,820\) \\
COUHCIL 3 & 38,628 & 5.583 & 49.631 & 93.842
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline COUNCIL & 3 & 26,913 & 12.562 & 111.669 & 211.144 \\
\hline council & 3 & \(-16.573\) & -2.396 & -21.294 & -40,263 \\
\hline council & 3 & 14.485 & 2,094 & 18.612 & 35.191 \\
\hline COUNCIL & 3 & 52.787 & 7.630 & 67,823 & 128.260 \\
\hline \multirow[t]{2}{*}{council} & 3 & 28.771 & 4.187 & 37,223 & 70,381 \\
\hline & & & & & 404.693 \\
\hline COUNCIL & 3 & 38,622 & 5,5:2 & 49.623 & 93,827 \\
\hline COUNCIL & 2 & 12.071 & 1.745 & 15.510 & 29.326 \\
\hline COURCIL & 2 & 7.420 & 1,073 & 9,534 & 18.027 \\
\hline \multirow[t]{2}{*}{COURCIL} & c & 46,659 & 6,744 & 59,949 & 113,352 \\
\hline & & & & & 254,532 \\
\hline
\end{tabular}


```

                LOCATICN OF WORK DESCRIPTION OF WORK TRUNK ROGDS (COHT \({ }^{-D}\) )
    CULCAIRN GE.C KM TO 69.5 KM SOUTH OF WAGGA WAGGA
RECONSTRUCTION E BITUMINOUS SURFACING
CULCAIRN G.15 KM TO 6.95 KM SOUTH OF CULCAIRN
WIDERING \& STRENGTHENING ON EXISTING LINE \& GRADE
CULCAIRN GO.5 KM TO 70.4 KF SCUTH OF NAGGA HAGGA
WIDENING S STGEHGTHING ON FXISTING PAVEMEHT
H\&FCFY 1C.77 KM TO 11.E1 KY SOUTH OF YOUNG
RECONSTPUCTION \& GITUMINOUS SUPFACING
HUME RECONSTRUCTION \& 13.10 KM TO 14.20 KM HORTH OF ALEURY
RECONSTRUCTION \& BITUMINJUS SURFACING
JUNEE RECONSTRUCTION \& RITUMINOUS SUGFACIHG
SUAEE RECONSTFUCTION R BITUMMINOUS SURFACING

```
LOCKHAKT 36.3 KM TO 44. K KM SOUTH OF NASGA WAGGA
    RECONSTKUCTION R EITUMINOUS SURFACING

LOCKHART
WIDENING S STRENGTHENING ON EXISTING ALIGNMEYT
    لIDENING \(\mathcal{S}\) STRENGTHENING ON EXISTING ALIGNMEVT
WAGGA WAGGA
RECONSTRUCTION R BITUMINOUS SURFACING
    GGA HAGGA
RECONSTRUCTION S BITUMINOUS SURFACING
wagca wagga
    CECTAGGATPUCTIJN
12.7 KM TO 16.5 kM SOUTH OF WAGGA WAGGA
YOURG BRIDGE OVER OPENIMG CREEK S4.7 KM NORTH OF YOUNG
    ADPROACHES DPENING CREEK 34,59 KM VORTH OF YOUNG
    OPENING CREEK 34.S9 KM VORTH OF YOUNG
THREE CELL REINFORCED CONCRETE gox CULVERT
YOURG OPEMING CREEK Z4. \(\because 9\) KM VORTH OF YOUNG
    four cell reinforced concrete box culvert
iotril

\begin{tabular}{|c|c|c|}
\hline \[
\begin{gathered}
\text { SOURCE OF } \\
\text { STATE } \\
\text { S }
\end{gathered}
\] & \[
\begin{aligned}
& \text { FUNDS } \\
& \text { LOANS } \\
& \$
\end{aligned}
\] & \[
\begin{gathered}
\text { TOTAL } \\
\hline
\end{gathered}
\] \\
\hline -2,035 & -18,086 & -34.197 \\
\hline S. 164 & 45.908 & 86.803 \\
\hline 3,908 & 34,742 & 65.689 \\
\hline 5.539 & 49,239 & 93.101 \\
\hline 9,073 & 80,650 & 152.493 \\
\hline \(4: 469\) & 39,728 & 75,117 \\
\hline 5.999 & 53.330 & 100.836 \\
\hline 2,334 & 20.749 & 39.232 \\
\hline 1,578 & 14.029 & 26.526 \\
\hline 7,188 & 63,900 & 120.828 \\
\hline 9,631 & 85,613 & 161,877 \\
\hline 7,080 & 62,938 & 119,003 \\
\hline 7.677 & 68.242 & 129,032 \\
\hline 2,280 & 20,265 & 38,387 \\
\hline 1.210 & 10.754 & 20.334 \\
\hline
\end{tabular}


state roads system - CONSTPUCTION
tRUYK ROADS (CONT © LCCATION OF WORK DESCRIPTION OF NORK

NORTH COAST RAILWAY, STROUD ROAD GRFAT LAKES SPAN STEEL GIRCEP S. CONCRETE BRIOGE
guprell creek 21.0 kM Nest of shio, purfleet GRIVFOKCED CJACRETE GRIDGE

CRIATER TARIE approaches

AL \(\quad 90\) 90
besa valley 14.9 kM to 17.06 Ky acst of paygula Gravelling \& bituminous surfacing

TUTM 21
```

OMEALA

```
    DEVIATION 2.4 KM TJ 6.24 kM SOUTH OF SJYBALA
SOAEALA
RECONSTKUCTION 8 B BITUMINOUS SURFAGING
    HOMEALA SAUCY CREEK 5.5 KM WEST OF GOMBALA
        SAUCY CREEK 5.5 KM WEST OF OOMBALA
EISHT SPAN STEEL GIRDER \& REINFORCED CONCRETE BRIDGE
gomgala racecourse creek 4.35 kM west jf bombala
    GYPEE SPAN STEEL GIRDER S REINFORCED CJVCRETE JRIDGE
Tうた~~ 83
O4 WAKODL MERRAN CREEK 1?Z.O <Y WEST OF DENILIQUIN
    THREE SPAN PRESTRESAED CREEK 1?Z.O KY
WAKOOL GLEESONS ORIDGE S9.0 KM WEST OF OENILIGUIN
        APPROACHES
            GRIDGE OUER MERRAN CREEX 133.0 KM WEST OF DENILIOUIN
        GPOROACHES
CONST NAASRA AUTH RD CL COM-WLTH \(\$\)

SOURCE OF FUNDS STATE LOANS






\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline ROAD & \begin{tabular}{l}
local sovt area \\
MAIV ROADS
\end{tabular} & \[
\begin{aligned}
\text { LOCATION OF NORK } \\
\text { (CONT-D) DESCRIPTION OF NORK }
\end{aligned}
\] & CONST NAASRA AUTH RD CL & \[
\mathrm{COM}_{\mathrm{S}} \mathrm{WLTH}
\] & \[
\begin{gathered}
\text { SOURCE OF } \\
\text { STATE } \\
\text { S. }
\end{gathered}
\] & FUNDS LOANS \(\$\) & \[
\begin{gathered}
\text { TOTAL } \\
s
\end{gathered}
\] \\
\hline 147 & \[
\begin{aligned}
& \text { LISMJRE } \\
& \text { QEEOMSTRUCTION }
\end{aligned}
\] & 12.36 KM 1015.35 KY NJRTH OF dOODGURN \(\&\) Bitumiritis suffacivg & council 4 & & 214，807 & & 214，807 \\
\hline & POT：L 147 & ． & & & & & 216．807 \\
\hline 149 & \[
\begin{aligned}
& \text { CASSVS } \\
& \text { APPROACHES }
\end{aligned}
\] & BRIDCE OVER OAKEY CRERK 4z．5 KY WEST OF NOODGURN & COUHCIL 3 & 73，645 & 1C，645 & 94,622 & 178，912 \\
\hline & TOTAL 140 & & & & & & 178，912 \\
\hline 151 & COFFS HARBOUR PEALIGNMENT OF & 3.3 KM TO 3.7 KM WEST OF COFFS HARGOUR curves & COUNCIL 3 & 27，696 & 4.003 & 35，585 & 67．284 \\
\hline 151 & \[
\begin{aligned}
& \text { COFFS HIARBUUR } \\
& \text { TYPS FOUR INTER }
\end{aligned}
\] & CEMETERY ACCESS 9．？KM TO 9.7 KY NORTH OF COFFS RSECTION & harfour COUNCIL 2 & \[
18,657
\] & 2，697 & 23.972 & 45，326 \\
\hline 151 & \[
\begin{aligned}
& \text { COPMAVHURST } \\
& \text { PECJVSTOUCTIOV }
\end{aligned}
\] & 28.4 kM TO 20.0 kM NORTH OF GRAFTON g eituminous surfacing & COUNCIL 4 & & 175．524 & & 175．524 \\
\hline 151 & \begin{tabular}{l}
ULMMF7A \\
マลCコ・ISTruction
\end{tabular} & BS．4 KM TO 6S．4 KM NGRTH OF COFFS HARSOUR \＆EItUMINJUS SURFACIMG & couticil 3 & 28.971 & 4.187 & 37.223 & 70.381 \\
\hline & TJTAL 151 & & & & & & 358．515 \\
\hline 152 & \[
\begin{aligned}
& \text { MACLEAY } \\
& \text { PECONSTRUCTION }
\end{aligned}
\] & 11.5 KM TO 12.35 KM EAST OF MACLEAM g gituminjus surfacing & council 3 & 5，952 & 860 & 7.647 & 14，459 \\
\hline 152 & \[
\begin{aligned}
& \text { NGCLEAM } \\
& \text { R=CONSTRUCTION }
\end{aligned}
\] & 12． 25 kM TO 13.5 KY ［AST OF YACLEAM \＆EITUMIyJUS SUFFACI＇JG & council 3 & 20，569 & 2，973 & 26，428 & 49.970 \\
\hline & TOTAL 152 & & & & & & 64，429 \\
\hline 157 & RICHYOVO RIVER QCCONSTRUCTION & 0.29 KM TO ח． 78 KY EAST OF SHiO，עOOOBURN \＆REALIGMMENT & COUNCIL 3 & 13.464 & 1，946 & 17．299 & 32，709 \\
\hline & TOTAL 153 & & & & & & 32.709 \\
\hline 154 & \[
\begin{aligned}
& \text { CAMDEY } \\
& \text { PECOVSTRUCIION }
\end{aligned}
\] &  8 IMPROVEMENT Df INTERSECTION & COUNCIL 6 & －9，262 & －2，985 & －7．635 & －20，482 \\
\hline 154 & \[
\begin{aligned}
& \text { CAMDEV } \\
& \text { PECJVSTRUCTION }
\end{aligned}
\] & COE日ITY RD TO CRINGELLY RD，ORAN PARK of failed pavement & COUNCIL 6 & 46.064 & 13，937 & 35，645 & 95,626 \\
\hline
\end{tabular}


STATE ROADS SYSTEM - CONSTRUCTION







ROAD LOCAL GOVT AREA
\[
\text { MAIN ROADS (COHT } \left.{ }^{\circ} D\right)
\]

LOCATION OF WORK ESCRIPIIOH OF NORK
hoSPITAL RD TO VICTJRIA AVE, CJNCORO paviment

TOTHL 200
206 duges 11.0 KM TO 13.0 KM ERST OF DUBgo zecovitruction \& bituminjus supfacivg

PECJVSTRUCTIJN \& REHAOILITATIONOF PAVI MENT

TOTAL 206
CORST NAASRA AUTH RDCL COM \({ }_{s} \mathrm{WLTH}^{\mathrm{T}}\)

COUNCIL 6
12
SOURCE
STATE
STATE UND LOANS

TOTAL 8
COUNCIL \(3 \quad 17,002\)

2,457
21,845
COUHCIL \(2 \quad 57.808\)
8,355
74,274
DEPT 2410,589
COUMCIL \(3 \quad 7,061\)
1.021

9,072

COUNCIL \(2 \quad 15,934\)
20,473
COUNCIL \(2 \quad 79.670\)

11,515
102,363

COUNCIL 2139.925
17.189
152.801
\(\operatorname{CCUNCI}_{\mathrm{L}} \mathrm{j}\)

CouncIL \(\geq 2.521\)

TOTAL 211
214 MERRIAA 19.77 KM TO 31.72 KY SOUTH OF CASSILIS
SPAVELLIVG \& 3ITUYINOUS SURFACING

TCTAL こ14

140,437

181,741 17.154

25

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Road & ljcal govt area MaIN ROADS & LOCATION JF dORK
\[
(\operatorname{con} T-D)
\] DESCRIPTION OF NCRK & \[
\begin{aligned}
& \text { COHST NAI } \\
& \text { AUTH RI }
\end{aligned}
\] & \begin{tabular}{l}
AASRA \\
RD CL
\end{tabular} & \[
\mathrm{com}_{s}
\] & \[
\begin{gathered}
\text { SOURCE } \\
\text { STATE } \\
3
\end{gathered}
\] & \[
\begin{gathered}
\text { FUNDS } \\
\text { LOANS } \\
\$
\end{gathered}
\] & Totat \\
\hline 220 & \begin{tabular}{l}
simgleton \\
peconstauction
\end{tabular} & 2.70 KM 10 3. 3 C KM FROM GFAHXTJN \& EITUMINJUS SURFACIVG & COUHCIL & 3 & 5.794 & 837 & 7.445 & 14,076 \\
\hline & TOTAL & . & & & & & & 1,418,946 \\
\hline 223 & LAK:. MACOJAFIE JVERERIGUE & 7.32 KM SOUTH OF ERJACMEADJW & DEPT & 0 & & 207.168 & & 207.168 \\
\hline 227 & \[
\begin{array}{r}
\text { LAK: MACQUAFIE } \\
\text { APOZDACHES }
\end{array}
\] & railwar overgrioge at caroiff & council & 6 & & 145,873 & & 145,873 \\
\hline & TOTAL 223 & & & & & & & 353,041 \\
\hline 227 & \[
\begin{aligned}
& \text { SUTHERLAND } \\
& \text { PECJVSTRUCTION }
\end{aligned}
\] & SYLVANIA RD TO SH1, GYYEA 8 WIDENINS TO SIX LiNES & Council & o & 671 & 203 & 519 & 1.393 \\
\hline 227 & \begin{tabular}{l}
SUTHERLANO \\
pecovstrjction
\end{tabular} & GYMEA BAY RD TO SYLVAMIA RD, MIRANDA. \& AIDEVINS TO SIX LANES & council & 6 & 395.835 & 119.817 & 306,432 & 822.084 \\
\hline & TOTAL 227 & & & & & & & 823.477 \\
\hline 233 & \begin{tabular}{l}
aELLIVEJJV \\
fJUR SPAV PREST
\end{tabular} & BELL RIVER IV MAUGHAV ST, WELLIHGTON reessed concrete grioge & council & 3 & 496.552 & & & 486.552 \\
\hline \(25 \geqslant\) & \begin{tabular}{l}
WELLINGTON \\
PECJNSTRUCTIJN
\end{tabular} & 19.9 KM TO Z1.4 KM SOUTH WEST OF WELLINGTON \& EITUMINJUS SURFACIVG & council & 3 & 10,160 & 1.469 & 13,054 & 24,683 \\
\hline 233 & \begin{tabular}{l}
dellivgion \\
APPROACHES
\end{tabular} & gell river in maughan St, wellington & council & 3 & 72,427 & 10,469 & 93.058 & 875.954 \\
\hline 233 & ```
uflliyajoy
    RLCJNSTRUCTIJN
``` & 21.4 KM TO 23.t KM SOUTH WEST \(2 F\) WELLINGTOV \& BITUMINDUS SURFACIVG & COUNCIL & 3 & 24,494 & 3.540 & 31.471 & 59.505 \\
\hline & TOTML 235 & & & & & & & 746,694 \\
\hline 277 & \[
\begin{aligned}
& \text { CABOVYE } \\
& \text { RECONSTRUCTION }
\end{aligned}
\] & 39.65 KM ro 43.65 KM WEST OF ORANGE 8 BITUMINJUS SURFACIMG & COUNCIL & 3 & 3,364 & 486 & 4,322 & 8.172 \\
\hline 237 & \[
\begin{aligned}
& \text { CADOYNF RECONSTRUCTION } \\
& \text { RETM }
\end{aligned}
\] & \[
\begin{aligned}
& \text { 43.69 KM TO } 45.9 \text { KM WEST CF ORANGE } \\
& \text { S BITUVINJUS SURFACING }
\end{aligned}
\] & COUNCIL & 3 & 28.971 & 4.187 & 37.223 & 70.381 \\
\hline 237 & ```
wtDD:N
    PECJNSTRUCTION
``` & 106.6 KM TO 1C7.4 KY FQJM JRANGE TOWARDS GR \& Eituminjus SURFACIIG & L coulicil & \[
3
\] & 29.184 & 4,218 & 37.497 & 70.899 \\
\hline
\end{tabular}

ROAO LOCAL GOUT AREA MEIN RJADS (CONTCD)

LICAIIJR: OF JORK CESCRIPTIOA: OF WORK 105.5 KM TO 106.5 KY NORTH OF ORANGE QECONSTRUCTION \& EITUMINJUS SURFACIYG
CONST NAASRA
AUTH RD CL COM-WLTH
\begin{tabular}{cc} 
SOURCE \\
STATE & FUNDS \\
S & LOANS \\
& S
\end{tabular}

\section*{TOTAL}
TOTAL 2IE.
241 FOOKJAS FISRS CREEK 9.3 KM TJ TC.O KY WEST OF 3OOROWA
    QECONSTRUCTION FISHERS CREEK 9.0 KM TJ
COUNCIL 3 31,373
    TOTAL 241
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{COUNCIL 3} \\
\hline
\end{tabular}
243 GUNDAGAI 20.5 KM TO 30.0 KM WEST OF GJNDAGAI
    RECONSTRUCTION \& BITUMINOUS SURFACIVG OF GJNDAGAI
243 GUNDAGAI 27.0 KM TO \(2 \circ\) EKK WEST OF GUNOAGAI
COUnCIL 329.56
    PECJVSTRUCTIJV \& BITUMINJUS SURfACING
243 JUNTE. 1.2 KM TO 3.3 KM EAST JF JUREE
    R=CONSTRUCTION g AITUMINJUS SURFACIVG JF JUAEE
    TOTAL 243
COUNCIL \(3 \quad 0.830\)

TOTAL 243
COUNCIL 3 EO:8
24E playvey millthorpe railway line 11.1 ky north of blayney
    SIVGLE SPAN REINFORCED CONCRETE BRIOGE COURCIL 3 12,236
1,769
15,721
29,726
245 GLAYNEY GRIDGE OVER BLAYNEY - GDURKE RAILWAY 11.1 KM NDRTH OF bLAYNEY
    SILLS ? DECKIVG
GRIDGE over blayney - adurke railway 11.1 xM mdrth of blayney
COUNCIL 3 80.954
11,701
104,013
196,668
245 aLAYYEY 4.16 XM TO S.I KM dES! \(3 F\) BLAYYFY
    STPEVGTHENINS S WIDENIVG OF PAVEYEVT COUNCIL 3 3LAYYFY 10,667

STATE ROADS SYSTEM - CONSTRUCTION
ROAD LOCAL GOVT AREA
MAIN ROADS (CONTCD)
245 DRANGE WARRENDINE ST TO FRAHKLIN RD, JRANGE reconstruction e eituminous surfaciva

TOTFL 345
LOCATIJN JF dORK DESCRIPTION OF WORK REIVFORCED CONCRCTE BRIDGE

SOURCE state STATE
\(\$\) fUNOS LOANS
80.74980.749
\begin{tabular}{lll} 
COUNCIL 4 & 80.749 & 80.749
\end{tabular}
\begin{tabular}{lllll} 
COUNiCIL 3 & 38.030 & 58.497 & 92.390
\end{tabular}
roric \(24 ?\)
25? EVANS GRIOGE OUER FISH PIVER AY OCOVNELL
253 OBEROY FISH RIVER 19.07 KM SOUTH OF BATHURST CJUQ SPAY PRESIRESSEC COVCRETE GIRDER BPIDSE

EIGHT MILE SNAMP CREEK 24.1 KM NORTH OF OBERON 253 OBEPJY \(\begin{array}{r}\text { EIGHT MILE SAMAP CREEK } \\ \text { THRE SPAN PRESTRESSED CONCRETE SRIDGE }\end{array}\)
DEPT 3 165,110
\begin{tabular}{|c|}
\hline \multirow[t]{2}{*}{253 03!RJV} \\
\hline \\
\hline
\end{tabular} RECONSTRUCTION \& EITUMINJUS SURFACING
```

253 OURKJY GRIOGE OVER SWAMP CREEK, O-CONVFLL ADPROACHES arioge over swamp creek, otonvfle

```

TETAL 253
COUNCIL \(3 \quad 55.579\)31,019
\begin{tabular}{|c|c|c|c|}
\hline 256 & \begin{tabular}{l}
gouljury \\
RECONSTRUCTIJN
\end{tabular} & \begin{tabular}{l}
UNION ST TO \\
8 bituminjus
\end{tabular} & chantry sta goul bura SURFACIVG \\
\hline
\end{tabular} UNION ST TO CHANTRY ST
RECONSTRUCTIJN \& EITUMINDUS SURFACIVG
MULFGREE
RECDHSTRUCIION \& BITUMIHOUS SURFACIVG RECJMSTRUCIION R Bitumitious SURFACIVG
\begin{tabular}{|c|c|c|c|c|c|}
\hline COUNCIL & 3 & 11.018 & 1,593 & 14,156 & 26,767 \\
\hline \multirow[t]{2}{*}{council} & 3 & 16.900 & 2,443 & 21.713 & 41.056 \\
\hline & & & & & 67.823 \\
\hline DEPT & 7 & & 604,006 & & 604,006 \\
\hline DEPT & 7 & 1,720,540 & & & 1.920 .540 \\
\hline DEPT & 3 & 50.751 & 7,335 & 65.207 & 123.293 \\
\hline
\end{tabular}


ROAD LOCAL GOVT AHEA
YAIN ROADS (CONTCD)

LOCATIOH OF dORK
DESCRIPIION OF WORK valler 6.0 kM to 32.0 kM SOUTH of CAMDEN heavy patching
25? WOLLONOILLY HEAVYPATCHING E.0 KM TJ 32.3 kM SOUTH OF CAMOEN

TOTAL 259
\begin{tabular}{l} 
COHST NAASRA \\
AUTH RDCL COM-WLTH \\
\hline
\end{tabular}

SOURCE STATE FUNDS LOANS \(\$\) LOANS
\(4,277 \quad 38,022\)

COUNCIL 32,79226.81546.921TOTAL 250
261 ShJALHAVEV MYRTLE CREEK 22.3 KM WEST OF NOWRAORE-CAST COVCRETE BOX CULVERT
ING:CARRIEEE 10.63 KM TO 11.20 KM EAST JF ShasPECONSTRUCTION R REALIGNYENTCOUNCIL \(3 \quad 17.916\)2,59023,01943.52523,461TOTAL E61
\(3 \quad 29.59\),
    vgecarrigee
        a!proaches
            BRIDGE OVER YAPRUNGA CREEK 37.4 kM TO 37.5 KM
    WINGECARKIgLE YARRUNGA CREEK 35.0 KM NEST DF NOWRA
COUNCIL OF NOWRA
CO.6571,39612.408
DEPT 3 159.104

26513,4761,94817,31532.739fotml
\begin{tabular}{lllll} 
& & & 32.739 \\
COUNCIL 3 & \(\mathbf{3 1 , 3 8 5}\) & 4,536 & 40.325 & 76.246
\end{tabular}







MAIN ROADS (CONTCD)

LOCATION OF dORK UESCRIPTIOT: JF dORK

 state state
\(s\)

\section*{TOTAL}



\begin{tabular}{|c|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { CONST N } \\
& \text { AUTH }
\end{aligned}
\] & násra RD CL & \[
\mathrm{COMF}_{\mathrm{S}}
\] & \[
\begin{gathered}
\text { SOURCE OF } \\
\text { STATE } \\
\text { S }
\end{gathered}
\] & fUNOS LOANS \(\$\) & \[
\operatorname{Total}_{3}
\] \\
\hline \multirow[t]{2}{*}{COUNCIL} & L 6 & 48.725 & 14,749 & 37.720 & 101.194 \\
\hline & & & & & 101.194 \\
\hline Council & L 3 & 14,485 & 2,094 & 18,012 & 35,191 \\
\hline COUNCIL & 13 & 24,278 & 3.509 & 31,193 & 58,980 \\
\hline COUNCIL & 3 & 23.094 & 3.338 & 29.673 & 56.105 \\
\hline COUNCIL & & 1.442 & 208 & 1.853 & 3.503 \\
\hline \multirow[t]{2}{*}{council} & & 712 & 103 & 915 & 1.730 \\
\hline & & & & & 155,509 \\
\hline council & 13 & 167,651 & & & 167.651 \\
\hline COUNCIL & 3 & 62,869 & & & 62,869 \\
\hline COUNCIL & 3 & 1,152,604 & & & 1.152,604 \\
\hline council & 3 & 52.391 & & & 52.391 \\
\hline \multirow[t]{2}{*}{council} & L 3 & 144,854 & 20,937 & 180,115 & 351,906 \\
\hline & & & & & 1,787.421 \\
\hline \multirow[t]{2}{*}{DEPT} & \(\bigcirc\) & 13,058 & 3.953 & 10.109 & 27,120 \\
\hline & & & & & 27.120 \\
\hline
\end{tabular}










ROAD LOCAL SOVT AKEA
ocation ja dork
\begin{tabular}{|c|c|c|c|c|c|}
\hline CONST & natsra & & SOURCE & 0 F & FUNDS \\
\hline AUTH & RD CL & COM－WLTH & state & & LOANS \\
\hline & & s & \＄ & & 5 \\
\hline
\end{tabular}

MAIN ROADS（CONTO） LESCRIPTION OF NORK

TOTAL 543
544 L！SツコマE RAJLVAY LEVEL CROSSING AT TUVCESTER
IVSTRLLATIJV OF TYPE＂FO FLASHING LIGHTS \＆WARVING SELLS
S44 RICHYOND RIVER RENTLY CZCSSINE 11 EZKM WEST OF LISMORE IVSTALLATION OF F TYPE FLASHING LIGHTS

TOTAL 544
total

0
\begin{tabular}{lllll} 
DEPT 3 & 10,794 & 1,560 & 13.869 & 26,223
\end{tabular}
\(\begin{array}{lllll}\text { COUNCIL 3 } & -19 & -3 & -25 & -47\end{array}\) 26.176

545 galliva missingham grilge over vorth creek at east ballina NORTH CREEK 2.1 KM EAST OF BALLINA NALL：YA NORTH CREEK 2.1 KM EA TOTAL 545

546 TLACKIJAY MR154，BELL ST TO JRUMYOND ST，UINDSOR RECJNSTRUCTION OF SHOULDER
\begin{tabular}{lll} 
DEPT & 7 & 46.40 \\
DEPT & 7 & 93.958
\end{tabular}14．04535.92096.365CARLTON RD TO MCCULLOCH ST，RIVERSTON
RECOHSTRUCTION OF PAVEMEYT G PROVISIONS OF ORAINAGE CARLTON RD TO MCCULLOCH SI，RIVERSTON

TOTAL 546
567 HUM：VAGIOUS LOCRTICNS AITHIV CJUVCIL AREA


TOTAL 547 GYRPIGAN 63.3 KM TO SS． KM FROY CORONA TOWARD TOCUMWAL reconstruction r bituminjus sukfacing

TOTAL 550
55：CDYAマSJ 9.9 KM TJ 11.0 KM VORTH OF DENILIQUIN RECONSTRUCTION \＆BITUMINJUS SURFACIVG

552 COVAZGO 11.0 KM TO 1 I． 7 KM VORTH OF DEYILIQUIN PECONSTRUCTION \＆BITUMINJUS SURFACING

COUNCIL \(3 \quad 40,230\)

COUNCIL 3 7，243
51.690
97.735

17，596





\section*{State roads system - CONStPuCtion}

APPENDIX 5.0105

\section*{RJAD \\ LOCAL SOVT AREA \\ MAIN RJADS (CONT-D) \\ LOCATION OF NOZx DESCRIPTION OF NOQK}

\section*{COMST NAASRA}

AUTH RD CL COM-WLTH
SOURCE OF fUNDS
STATE LOANS
\(S\)
total

39,651,111 18,525,131 24,782,549 82,958,791
```

ROAD LOCAL GOVT AREA

```
            गTHER ROAOS
200: BOTAVY KAILWAY LIME AT O-RIORDAN ST, MASCOT
            TNJ SPAII PRESTRESSED CONCRETE GIRDER CVERERIDGE
2OC? BETAVY O-RICRDAN ST, HIGH ST TO JOYCE DR, MASCOT
        doENING TO SIX LANES

        PZJUISION JF RIGHT TUR: JAYS
    TOTAL EnJP
2014 ROCKDALE FOREST RD TO SHI, ROCKDALE
        PJPLIC UTILITY ADJUSTME:UTS
    forinl 2914

\[
\text { TOTiL } \quad \text { I224 }
\]

 LOANS
\(\$\)

\section*{TOTAL}
\begin{tabular}{ccc} 
SOURCE & OF FUNDS & \\
STATE & LOANS & TOTAL \\
S & \(\$\) & \(\$\)
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline DFPT & ¢ & 107.020 & 32,394 & 82,848 & 222,262 \\
\hline DEPT & 6 & 526,351 & 159,323 & 407.470 & 1,093,144 \\
\hline DEPT & 6 & 24.142 & 7,308 & 18.089 & 50.139 \\
\hline & & & & & 1,365,545 \\
\hline council & 6 & -42.643 & \(-12,908\) & - 3 3,012 & \(-88,563\) \\
\hline
\end{tabular}
\begin{tabular}{lllll} 
COUNCIL 7 & 105.631 & 31.974 & 81.773 & 219.378 \\
COUNCIL 7 & 13.542 & 4.099 & 10.494 & 28.125
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline COUNCIL & 6 & 6,813 & 2,062 & 5,275 & 14,150 \\
\hline \multicolumn{6}{|l|}{} \\
\hline COUTCIL & 6 & 65,004 & 19.678 & 50.322 & 135,002 \\
\hline couricil & 0 & 23.252 & 7.038 & 18,000 & 48,290 \\
\hline COUNCIL & 6 & 8,930 & 2.673 & 6,835 & 18,338 \\
\hline
\end{tabular}

215,780
\begin{tabular}{lllll} 
CCUNCIL 7 & -2.850 & -865 & -2.211 & -5.932 \\
COUNCIL 7 & -2.375 & -799 & \(-1,839\) & -4.933
\end{tabular}

RJAD LJCAL SJVT AREA
DTHER ROADS（CONT＇D）

TOT：L 2035
2J41 HJRSTVILLE CROYDON RO TO FOREST RO，GEXLEY HEIVY DATCHIVG AY SELECTEO LOCATIONS

2．ム1 HURSTVILLE STOAEY CREEK RO AT QUEENSGURY ZD，PENSHURST IYアマวvēyevt jf Curve

2041 HURETVILLS AUSYIN AVf TO MGLNTVIEN AVE，NARHEE
ycavy paichivg of paveneyt
2041 HURETVILLE STONFY CREEK RD FROM CRJYOON RO TO FOREST RD，HURSTVILLE
HEqVY PATCHING AT SELECTED LOCATIONS COUNCIL O

OTAL 2041
2943 KU－RIVE－GAI MONA VALERD TO HOPACE ST，ST IVES
JIDENING TO FOUR LANES
COUNCIL \(6 \quad 157,713 \quad 47,739 \quad 122,092\)

TCTEL 2 Cu 3


MOTAL 2n4n
20S2 ZYOE BRIDGE OUER JUFFALJ CREEK AT PITTWATER RD，DORCRIA PAPK

205：ayot nuffalo creek at pitthater ro，goronia park アEIVFJREED CJVCRETE BJX CULVERT

TOTAL ？CS2
ZOTS ASHFIZLS LIVEZPOQL RE TO FFLDEEICK ST，CROYDON
JIV
JIVED SIX LAYE CAVRRIAGEWAYS

CONST NAASRA AUTH RD CL COM＂WLTH

SOURCE OF FUNOS
STATE
State LOANS

\begin{tabular}{ll} 
COUPICIL O & 35,912 \\
COUNCIL O & 23,142
\end{tabular}



ROAD LOCAL GOVT AREA गthes rJadj (CONT D)

\author{
LOCATIOR OF WORK SESCRIFTIOL JF NORK
}

TOTAL 20.77
20:1 GYOE GOPROACHES BRIDGE DVER NORTHEPV FAILKAY LINE, EAST: 1000
GOPROACHES

TSTAL 2 EOT


2094 ELACKION: SEVEN HILLS RAILWAY STATION RAILAAY OVERBRIOGE
\(20 E 4\) GLACKTOWN GLACKTOUV CREEK O: BLACKTONN RJAD five cell livk slafi culvert

TOTAL ت̈S4
zots blac<rohn eastern creek, olacktody
20:5 JLACKTOAN EASTERN CREEK, JLACKTCAV
PRESTRLSSED CCNCRETE GRIDGE
202e: ALACKYJWN LYTON St TO GREAKFiSt ad, flacktown RECONSTRUCTION \&. WIDENING

2085 QLACKIOAN RICHMOND RO FROM CJPRAN RO TO BREAKFAST RO, JLACKTOWN
RECONSTFUCTIJN R EITUMINOUS SURFACING COURCIL 6 23,853
2085 GLACKTOWN LORK ST TO ELACKTOAN RE, ELACKTOWN JUVSARRIJEE PD EXTENSION

2OSS GLACKTONV PATCHIYG KENT ST TO WILLIAM ST, BLACKTOAR higavy patchivg cf favemevt

2095 3LACKIONN GREAKFAST RU TC FALMOUTH FAD, DOONSIDE RECDNSTRUCTION \& WIDENING TO FOUR LANES

COUNCIL 7629
council \(0 \quad-6,971\)
CCUNCIL \(6 \quad 138\)
COUNCIL \(6 \quad 2,77 \mathrm{C}\)

total.



ROFD LOCAL GOVT AREA
JTHER ROADS (CONT D)
LOCATIOH OF WORK DESCRIPTION OF NORK

TOTAL SOT2
SO13 BAVKSTJdN ROBERYS PD, KARUAH ST TO REBECCA RD, CHULLORA AIDENING TO PROVIDE SIX LANFS

TOTAL 5013
COHST NAASRA
AUTH RD CL COM-WLTH
S
```

SOURCE OF state 5
$s$

``` fUNDS
LOANS 5 total 5

5015 PARKAMAITA HEMSWORTH AVE TO OLD WINDSOR RD, NORTHMEAD DIVIDED SIX LAVE CARRIAGEUAYS

TOTAL SCIS
SOIS BANKSIOAN SALT PAN CREEK P.E KM SOUTH OF BANKSTOWN SIVGLE SPAN PRESTRESSED CONCRETE GIRDER

5016 EANKSTOWN ALFORDS POINT PRIDGE FROM CLANCY ST TO ALMA RD, EXTENSION OF NORTHERN APPROACH
macauley ave to calterzury ro, bankstown


PADSTOW
DEPT 6
33,427

DEPY \(6 \quad 61,526\)
18,624
47.630
127.780

5015 bankstoun arkley St to bryant st, bankstown
SIX LANE DIVIDED CARRIAGEWAY \& GRADE SEPARATIOV - STAGE 1
DEPT 6
241.169

73,000
186.699

500,868

TOTAL 5015
5Jこ3 3LACくTJAY 3.4 KY T 3 L. 5 KY WEST JF PARRAMATTA
PECONSTRUCTION \& AIDENING TC FOUR LANES
DEPT \(7 \quad 518,279\)
5033 BLACKTOWN OLO HINOSOR RO 8 SEVEH HILLS RO, SEVEN HILLS

DEPT 7 167.135
50.591

129,386
943.357


111


EXPENDITURE FROY fUNDS PROVIDED BY :
ROAD CLASSIFICATIJN
FREEWAYS
SIATE HIGHNAYS
TEUIK ROADS
MAIV ROADS
OIHER RJADS
SUG TOTALS
MISCCILAVEOUS CONSTRUCTION
FINAL IDTALS
\begin{tabular}{|c|c|c|c|}
\hline commoviealith & State & LOANS & total \\
\hline \$ & S & * & \(s\) \\
\hline 7こ,745,203 & 13,516,303 & 4,942,850 & 92,507.451 \\
\hline 153.752,283 & 24,024,159 & 30,062,507 & 227,038,946 \\
\hline 12,450,241 & \(4,138.897\) & 8,787,390 & 25,376.528 \\
\hline 39,051,111 & 13,525,121 & 24,782,549 & 82.958.791 \\
\hline 9,850,254 & 7,408,388 & 4,795,451 & 22,124.093 \\
\hline 299,592,094 & 67,942,968 & 82,370,747 & 450,005,809 \\
\hline & -74,871 & & -74,871 \\
\hline 299.692.394 & 67,368,097 & 82,370,747 & 449,930,938 \\
\hline
\end{tabular}


SUMMARY OF PAYMENTS ON LOCAL ROADS urean local roads - CONStruction

GENERAL GRANTS
\begin{tabular}{|c|c|}
\hline LOCAL GOVT AREA & general grants \\
\hline AShFIELD & 87.500 \\
\hline AUEURN & 132,200 \\
\hline BANKSTOWN & 406:500 \\
\hline baUlkham hills & 347.100 \\
\hline BL Acktown & 516.200 \\
\hline blue mountains & 374,900 \\
\hline BOTANY & 75,200 \\
\hline EURYOOD & 88,500 \\
\hline CAMDEN & 102,000 \\
\hline CAMPEELLTOWN & 247,600 \\
\hline CANTERBURY & 258,600 \\
\hline CONCORD & 62,500 \\
\hline or ummorne & 77.800 \\
\hline FAIRFIELO & 330,500 \\
\hline 60 SFORD & 458,500 \\
\hline greater cessnock & 432.700 \\
\hline ha whe Sbury & 389.500 \\
\hline holroyo & 234,402 \\
\hline HORNSBY & 431.100 \\
\hline HUNTERS HILL & 35,000 \\
\hline hurstiville & 161,700 \\
\hline K1 AMA & 80.900 \\
\hline kotaram & 119.50C \\
\hline KU-RING-GAI & 342,500 \\
\hline lake macquarie & 553.300 \\
\hline
\end{tabular}

SUMMARY OF PAYMENTS CN LOCAL ROADS urean local roads - constauction
\begin{tabular}{|c|c|c|c|c|}
\hline local govt area & general grants & \begin{tabular}{l}
SPECIAL \\
WORXS SUGSIDIES
\end{tabular} & Abrd grants & total \\
\hline Lane cove & 68,800 & & 30.00 C & 98,800 \\
\hline LEICHHARDT & 144.600 & & 20.70C & 165,300 \\
\hline LIVERPOOL & 323.400 & & 180,00C & 503.400 \\
\hline maitland & 225,500 & & 93.300 & 318,800 \\
\hline manly & 85,100 & & 36.200 & 121.300 \\
\hline marrickville & 189.909 & & & 189,900 \\
\hline mosman & 71.100 & & 31.800 & 102.900 \\
\hline newcastle & 389,100 & & 160,20C & 549.300 \\
\hline NORTH SYONEY & 108,200 & & 98.000 & 206,200 \\
\hline parramatta & 342,600 & & 30,000 & 372.600 \\
\hline PENRITH & 389.100 & 572,062 & 55,800 & 1.016.962 \\
\hline PORT Stephens & 227,800 & & & 227.800 \\
\hline RANDUICK & 249.800 & & & 249,800 \\
\hline ROCKDALE & 201,200 & & 36.000 & 237.200 \\
\hline RY DE & 219.800 & & 224,500 & 444.300 \\
\hline Shellharbour & 147.300 & 4,734 & 64.900 & 216.934 \\
\hline Strathfield & 66,300 & & & 66.300 \\
\hline SUTHERLAND & 545,900 & & 401.200 & 947.100 \\
\hline SYONEY & 204,500 & & 80,00C & 284,500 \\
\hline WARRINGAH & 555,200 & & 100,00C & 655.200 \\
\hline waverley & 116.100 & & & 116.100 \\
\hline WILLOUG HBY & 124,300 & & & 124,300 \\
\hline wOLlondilly & 241,000 & & & 241.000 \\
\hline WOLLONGONG & 501.800 & 251.160 & 356.90 C & 1.109,800 \\
\hline WOOLLAHRA & 124,600 & & & 124,600 \\
\hline
\end{tabular}
LOCAL GOYT AREA GUMMARY OF PAYMENTS ON LOCAL ROADS

\section*{RURAL LOCAL ROAD - CCNSTRUCTION}

\section*{CONST}

AMOUNT

GLOUCESTER

GUYRA

ARMIDALE

ARMIDALE
eega valley

8EGA Valley

BELLINGEN
bombala

BO OROWA
gOURKE

BREWARRINA

CABONNE

Campaelltoun

COFFS HARBOUR

COFFS HAREOUR

COFFS HARBOUR

115C 38.3 KM TC 44.3 KH NORTH CF GLOUCESTER RECONSTRUCTICN \& EITUPINCUS SURFACING
falconer creek at vardes mistake rd PRESTRESSEO CONCRETE GRJDGE
eulavie creek on tenandra to goorianana rd REINFORCEC CONCRETE BRICEE
dumaresa creek at markhap st. armidale REINFORCEC CONCRETE BRIDEE
rural local roads
ERIDGES TC REPLACE EERRIES
TANTO CREEX AT YOURIE RO TWO SPAN FRESTRESSED COACRETE BRIDGE
leans creek on the thora 10 darkyood rd REINFORCEC CONCRETE BRIDEE

DELEGATE GIVER AT DELEGATE
REINFORCEE CONCRETE BRIDGE
HOVELLS CGEEK AT THE JERGINGOMAR/DAREY FALLS RO SIX SPAN FRESTRESSED CONCRETE GRIDGE
talyalalka creek on the louth to tilpa road REINFORCEE CONCRETE GRIDGE
COKhara RIVER ON JOES GATE ROAD REINFORCEC CONCRETE BRIDGE
SPRING CREEK - KEARNEY'S ERIDGE
REINFORCES CONCRETE BRIDGE
RURAL LOCAL ROADS
ERIDGES TC REPLACE FERRIES
NORTH BOAMEEE CREEK REINFORCEC CONCRETE BRIDGE

COFFS HAREOUR - SAWTELL LINK RD AT SOLTH GOAMBEE CREEK REINFORCEC CONCRETE BRIDGE

FRIDAY CREEK AT FRIDAY CREEK RD REINFORCEC CONCRETE BRIGGE

AUTH

CCUNCIL
165.933
COUNCIL
CUNCIL .
COUNCIL 3.473
DEPT 74.975
COUNCIL \(\quad 68,550\)
CCUNCIL 42.285
COUNCIL 10,665
COUNCIL 113.481
COUNCIL 20,700
COUNCIL 91,770
COUNCIL 9,959
DEPT . 81,479
council
103,000
cCUNCIL
\(-103.000\)

COUNCIL
2.800

\section*{ROAD}

\section*{Co oma-monaro}

COCMA-MONARO

COOTAMUNORA
coura
oumaresa

GILGANDRA

GLOUCESTER

GLOUCESTER

GRAETON

GUNNING

GUYRA

HARDEN

HASTINGS
hasting s

HASTINGS

HASTINGS

LOCATION OF NORK DESCRIPIION OF YORK

EOEUNDARA CREEK AT THE COCMA/GOBUNDARA RD PRESTRESSED CONCRETE ERIGGE

St RIRE-A-LIGHT CREEK ON EREDSO RD TO JERANGLE RD REINFORCEC CONCRETE BRIDCE
mitama cheek at mallendoon st, cootarundra REINFORCE: CONCRETE ERIDGE

LaChlan river at the eillimars/ morrigsanoway ro FIVE SPAN PRESTRESSED CCACRETE 日RIDGE
gara river at thargarah
FIVE SPAN PRESTRESSED CCACRETE BRIDGE
KICKAEIL CREEK ON THE DUEGO TOCOLLIE RD THREE CELL REINFORCED CCNCRETE BOX CUIVERT
tENIS BRIOGE 35.4 KM NORTH UEST Of GLOUCESTER REIMFORCEO CONCRETE BRILGE

COBARK RIVER ON COEARK RCAD
REINFORCEC CONCRETE BRIDGE
YASHPOQL CREEK ON WASHPOCL ROAD PRESTRESSED CONCRETE ERIDGE
rural local roads
BRIDGES TC REPLACE FERRIES
JOHNS CREEK AT WAVERLY RD
REINFORCEC CONCRETE BRIDGE
IRISH JACKS CREEK ON MOPPITY RD
2 CELL REINFORCED CONCRETE BOX CULVERT
ERIDGE OVER HASTINGS RIVER AT ROCKS FERRY APPROACHES

BRIDGE OVER HASTINGS RIVER 2.0 KM EAST OF UAUCHOPE PRINCIPAL'S SUPERVISION

HASTINGS RIVER 2.0 KM EASTIOF HAUCHOPE NINE SPAN PRESTRESSED CCNCRETE GIRDER GRIDGE
limeburnefs creek at limeeurners creek road PRESTRESSED CONCRETE ERIDGE

CONST
AUTH
\begin{tabular}{lr} 
COUNCIL & 114.722 \\
COUNCIL & 95.239
\end{tabular}
COUNCIL 1.090
COUNCIL 125,000
COUNCIL 121.564
COUNCIL \(\quad 2,669\)
COUNCIL -1.465
COUNCIL \(\quad 75,000\)
COUNCIL \(\quad 30,000\)
DEPT 52,367
COUNCIL \(\quad 5.836\)
COUNCIL \(\quad 28.000\)COUNCIL
OEPT 37.335

DEPT
772.053

COUNCIL
\begin{tabular}{|c|c|c|c|c|}
\hline local govt area & ROAD & LOCATION OF YORK DESCRIPTIOA OF WORK & CONST AUTH & \[
\underset{s}{\text { AMOUNT }}
\] \\
\hline hasting s & & uItson river at eallingara REINFORCEC CONCRETE BRIDGE & COUNCIL & 55,000 \\
\hline hatues Soury & & REDEANK CREEK AT KURMOND TO NORTH RICHMOND RD REINFORCEO CONCRETE ERIDGE & COUNCIL & 12.264 \\
\hline HUME & & Leyel crossing at gerogery on sells rcad INSTALLATION Of fLASHING LIGHTS g yaraing gells & COUNC IL & 25,490 \\
\hline KEMPSEY & & CONNERTION CREEK - DULTHANGI BRIDGE REIAFORCEC CONCRETE BRIDEE & COUNCIL & 33 \\
\hline krogle & & \begin{tabular}{l}
rural Local roads \\
ERIDGES TC REPLACE FEGRIES
\end{tabular} & OEPT & 28,566 \\
\hline MOREE PLAINS & & ERIOGE OVER MOOMIN CREEK ON ELSIEVILLE/CLARENDON REINFORCE CONCREIE ERIDGE & COUNCIL & 116.350 \\
\hline mulwaree & & CIXONS CREEX AT THE KIPPILAN/POMERAY RD Prestressed concrete eridee & COUNCIL & 93,000 \\
\hline murray & & middle creek on the mathoura to tocumbal road REINFORCEC CONCRETE BRIDGE & COUNCIL & 20,000 \\
\hline warromine & & 5.5 XM WEST OF GIN GIN CULYERT BRIDGE SUESIDY & COUNCIL & 22,058 \\
\hline PARRY & & MOONEI CREEK AT NEW ENGLAND GULLY RD REINFORCEC CONCRETE BRIDEE & COUNCIL & 118,500 \\
\hline SE VERN & & \begin{tabular}{l}
DEVELOPMENTAL ROADS \\
Payments to councils for long service leave
\end{tabular} & COUNCIL & 904 \\
\hline Shoalhaven & & tullarmallah creek at sussex inlet access road PRESTRESSED CONCRETE GRIDGE & COUNCIL & 71.824 \\
\hline SNOWY RIVER & & ALPINE HAY 26.6 KM TO \(29 . C\) KM WEST OF JINDAGYNE RE CONSTRUCTION & COUNCIL & 499,818 \\
\hline SNOHY RIVER & & ALPINE UAY 15.7 KM TO 20.0 KM WESI OF JIMDABYNE RE CONSTRUCTION & DEPT & 19.301 \\
\hline SNOUY RIVER & & 24.0 KM TC 26.6 KM WEST OF JINDABYNE PE CONSTRUCTION \& BITUMINCUS SURFAGING & DEPT & 621,221 \\
\hline SNOUY RIVER & & 26.6 KM TC 29.C KM HEST OF JINDABYNE STRENGTHEAING \& UIDENING OF PAVERENT & DEPT & 310,618 \\
\hline
\end{tabular}


\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{local govt area} & \multirow[b]{3}{*}{GENERAL GRANTS} & \multirow[b]{3}{*}{RURAL LOCAL R RESTORATICN OF flCOD DAPAGE} & \multirow[b]{3}{*}{CCNSTRUCTION AND RCAD DEDICATION SURVEYS} & \multirow[b]{3}{*}{maintenance CONTINGENCIES} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{APPENDIX 6.3 .0002}} \\
\hline & & & & & & \\
\hline & & & & & \[
\begin{aligned}
& \text { ABRD } \\
& \text { GRANTS }
\end{aligned}
\] & TOTAL \\
\hline COFFS HARBOUR & 397.925 & & & & & 397.925 \\
\hline conargo. & 198,100 & & & & 91,000 & 289.10C \\
\hline COOLAH & 241,500 & 95,000 & & & 130.000 & 466,500 \\
\hline COCLAMON & 230.400 & 30.503 & & & 101,600 & 362,503 \\
\hline COOMA-MONARO & 300,300 & 15.750 & & & 235,100 & 557,150 \\
\hline COONABARABRAN & 289,000 & 130,000 & & & 106.400 & 525.400 \\
\hline COONAMBLE & 315.900 & 176.640 & & & 128.600 & 621.14 C \\
\hline COOTAMUNDRA & 161,400 & 46.834 & & & 76.300 & 284.534 \\
\hline COPMANHURST & 202,600 & & & & 93.000 & 295,600 \\
\hline corowa & 199.900 & & & & 87,000 & 286.900 \\
\hline covra & 267.300 & & - & & 113.400 & 380,700 \\
\hline CR OOKWELL & 205,600 & & & & 93.800 & 299,400 \\
\hline culcairn & 180,500 & 13,088 & & & 84.100 & 277,688 \\
\hline DENILIOUIN & 42,100 & & & & 20,000 & 62,100 \\
\hline Du880 & 344,700 & 19.085 & & & 132.900 & 496.685 \\
\hline dumareso & 237,400 & 7.CCO & & & 221,000 & 465,400 \\
\hline DUNGOG & 223,300 & & & & 35,400 & 268,700 \\
\hline EUR0800 ALLA & 372.800 & 21,785 & & & 138,400 & 532.985 \\
\hline EVANS & 365,600 & 63.960 & & & 170,000 & 599,560 \\
\hline forbes & 338.700 & 13.653 & & & 139.500 & 491.853 \\
\hline gilgandra & 229,400 & 47.812 & & & 97.600 & 374.812 \\
\hline GLEN INNES & 45,000 & 2,000 & & & 16.000 & 63,000 \\
\hline gl OUCESTER & 224,400 & 5.625 & & & 401,955 & 631.980 \\
\hline GOSFORD & & & & & 168,800 & 168.800 \\
\hline GOUL AUR N & 54,700 & & & & 21.200 & 75.900 \\
\hline & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{local govt area} \\
\hline \multicolumn{2}{|l|}{GRAFTON} \\
\hline \multicolumn{2}{|l|}{great lakes} \\
\hline \multicolumn{2}{|l|}{6REATER CESSNOCK} \\
\hline \multicolumn{2}{|l|}{GREATER LITHGOL} \\
\hline \multicolumn{2}{|l|}{GREATER TAREE} \\
\hline \multicolumn{2}{|l|}{GRIFFITH} \\
\hline \multicolumn{2}{|l|}{GUNDAGAI} \\
\hline \multicolumn{2}{|l|}{GUNNEDAH} \\
\hline \multicolumn{2}{|l|}{GUNNING} \\
\hline \multicolumn{2}{|l|}{gurra} \\
\hline \multicolumn{2}{|l|}{hatden} \\
\hline \multicolumn{2}{|l|}{HASTINGS} \\
\hline \multicolumn{2}{|l|}{ha wie Sbury} \\
\hline \multicolumn{2}{|l|}{hay} \\
\hline \multicolumn{2}{|l|}{HOLEROOK} \\
\hline \multicolumn{2}{|l|}{HURE} \\
\hline \multicolumn{2}{|l|}{inverell} \\
\hline \multicolumn{2}{|l|}{JERILDERIE} \\
\hline \multicolumn{2}{|l|}{JUNEE} \\
\hline \multicolumn{2}{|l|}{KEMPSEY} \\
\hline \multicolumn{2}{|l|}{krogle} \\
\hline \multicolumn{2}{|l|}{LACHLAN} \\
\hline \multicolumn{2}{|l|}{LEETON} \\
\hline LISmore & \\
\hline LOCKHAR T & \\
\hline
\end{tabular}

GENERAL
GRANTS GRANTS
rural local roads - ccnstauction and maintenance

\section*{restoraticn of FLOOD DAFAGE}

RCAD DEDICATION
CONTINGENCIES SURVEYS

\section*{ABRD
GRANT GRANTS}

TOTAL
80.100
\begin{tabular}{rr}
135,500 & 449,200 \\
96,360 & 96,360 \\
150,000 & 620,500 \\
199.918 & 740.643 \\
76,130 & 378.127 \\
91.000 & 365.920 \\
219.200 & 953.100 \\
65,200 & 208.205 \\
106.925 & 347.023 \\
85.500 & 270.677
\end{tabular}
\begin{tabular}{rr}
606.665 & 1.110 .965 \\
50.000 & 50.000
\end{tabular}
\(60.000 \quad 227.200\)
70.600 224.700
105.900 366.195
\(125.300 \quad 717.507\)
\(52.600 \quad 237.300\)
\(85.300 \quad 316.168\)
\(182.500 \quad 631,005\)
346.311
\(179.400 \quad 714.000\)
91,600
307.525

454,487
80,000


\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{4}{|r|}{\multirow[t]{2}{*}{rural local roads - construction and maintenance appendix 6.3.CO00}} & \multicolumn{2}{|r|}{\multirow[t]{2}{*}{APPENOIX 6.3.COO6}} \\
\hline & & & & & & \\
\hline local govt area & GENERAL GRANTS & RESTORATICA OF flCOD DAMAGE & \[
\begin{aligned}
& \text { RGAD DEDICATION } \\
& \text { SURYEYS }
\end{aligned}
\] & contingencies & \[
\begin{aligned}
& \text { ABRD } \\
& \text { GRANTS }
\end{aligned}
\] & total \\
\hline WOLLONDILLY & & & & & 105,900 & 105.90C \\
\hline wollongong & & 3 CO .000 & & & & 800,000 \\
\hline ur Cng & & & & & 300.000 & 300,00c \\
\hline rallaroi & 261,100 & 320.513 & & & 125,000 & 707.013 \\
\hline yarrowlumla & 101.600 & & & & 76,300 & 237,900 \\
\hline yass & 275.300 & 4.677 & & & 109.600 & 389,577 \\
\hline roung & 217.597 & 25.768 & & & 97.300 & 340.665 \\
\hline rotal & 32,168.152 & 9.364 .202 & 32,45,6 & & 15,905,669 & 57.416,479 \\
\hline
\end{tabular}
rural local roads - maintenance cf special subsidy brioges
\begin{tabular}{|c|c|c|c|c|}
\hline local govi area & ROAD & LOCATION OF WORK DESCRIPTION OF WORK & CONST
AUTH & \[
\begin{gathered}
\text { AMOUNT } \\
\text { S }
\end{gathered}
\] \\
\hline duebo & 1165 & minore - coolgaggie creek rd at macquarie river MaIntenance of minore bridge & DEPT & 14.245 \\
\hline bega valley & & CATHCART - ROCKY hall - hyndham road ay towamba river MaIntenance of new euildings brioge & DEPT & 882 \\
\hline OUNGOG & & armidale - kangarco hills rd at gara river Ma Intenance cf thalgarrah bridge & DEPT & 7,762 \\
\hline DUNGOG & & CUNGOG-UPFER WANGAT RCAD AT WILLIAMS RIVER MAINTENANCE OF BANDONGROVE BRIDGE & DEPT & 71 \\
\hline EVANS & & eathurst-ponkey hill ro-rankins gridge over macauarie river MAINTENANCE (SPECIAL SUESIOY BRIDGES) & DEPT & 83.408 \\
\hline forbes & & WARROO - Yarraginda rd at lachlan river MAINTENANCE OF WARROO BRIDGE & DEPT & 12,747 \\
\hline 60 ULBURN & & LANDSOOUNE GRIDGE OVER MULHAREE PONDS GOULGURN EUNGONIA ROAD MAINTENANCE (SPECIAL SUESIDY GRIDGES) & DEPT & 72,803 \\
\hline GREATER LITHGOL & & StONEY POINT RD AT COX'S RIVER MAINTENANCE Of MCKANE'S ERIDGE & DEPT & 29,448 \\
\hline INVERELL & & inverell failway station and macintyre river at inverell MAINTENANCE OF INVERELL RAILUAY GRIDGE & DEPT & 35,726 \\
\hline JUNEE & & MUNDARLO ERIDGE OVER MURRUMEIDGEE RIVER JUNEE TUMBLONG GOAO maintenance (SPECIAL SUBSIOY BRIOGES) & DEPT & 566 \\
\hline KEMPSEY & & hest Kempsey - south kempsey rd at macleay river MAINTENANCE OF KEMPSEY RAILUAY fOOTgRIDGE & DEPT & 8,143 \\
\hline LACHLAN & & goobang caeek at condobolin MAINTENANCE OF GOOgANG BRIDGE & DEPT & 6.207 \\
\hline maitland & & LUSKINTYRE GRIDGE OVEG HUATER RIVER, LOCHINVAR MAINTENANCE & DEPT & 48,826 \\
\hline moree plains & & pallamallaha - giniguy railhay station road at guydir river MAINTENANCE CF PALLAMALLAGA BRIDGE & DEPT & 4,872 \\
\hline MUDGEE & & \begin{tabular}{l}
Cudegong giver at wilgertree flat \\
maintenance of special suesioy brioges
\end{tabular} & DEPT & 3.929 \\
\hline mudGEE & & cullengone - cobbora rd at byaldra creek Maintenance of beryle bridge & DEPT & 44,630 \\
\hline
\end{tabular}

LOCATION OF WORK DESCRIPTION OF WORK

ROSSI BRICGE OVER WOLLONOILLY RIVER NEAR GRABEEN GULLEN MAINTENANCE (SPECIAL SUESIDY BRIDGES)

DENMAN - EAERAMI RD AI GOLLBURI RIVER maintenance of yarrana eridge
ERIDGE OVER PATERSON RIVER. MAITLAND maintenance
GLEN INNES - NELTON BCYO ROAD AT MANH RIVER maintenance of marin bridee
GLEN INNES - EMMAVILLE RO AT SEVERN RIVER MA INTENANCE OF fLADUURY ERIDGE
GLEN INNES - NELTON BCYO RD AT HENRY RIVERMA INTENANCE OF NEWTON BOYO BRIDGE

RAVENSHORTH - COORANGOOLA RD AT GLENNIE'S CREEK MAINTENANCE OF MIDOLE FALBROOK GRIDGE

ROMBAY ERIDGE OVER SHOALHAVEN RIVER GRAIDHOOD QUEANBEYAA RD MAINTENANCE (SPECIAL SUESIDY GRIDGES)

ERIDGE OVER TUMUT RIVER ON TUMUT-JONES BRIDGE RD maintenance of Junciicn (she lley) baicge

GEURIE - ARTHURVILLE RD AT MACQUARIE RIVER maintenance of scaering flat gridge

STONEQUARFY CREEK, UPPER FICTON RD, PICTON MAINTENANCE OF VICTURIA ERIDGE
DEPT 8,046
DEPT \(\quad 72,540\)

CONST
AUTH

DEPT

COUNCIL

COUNCIL
8,000
wational parks ano yllolife service IMPROVED AMENITY WITHIN PUNGO NATIONAL PARK

RURAL LOCR ROADS FORESTRY COMMISSICN OF N.S.W. PAYMERIS FOR CONSTRUCTICN 8 MAINTENANCE OF FORESTRY ROAOS

RURAL LOCAL ROADS - SCIL CONSERVAYION SERVICE OF N.S.Y.
PAYMENTS FOR ROADSIDE EROSION CONTROL

SUPMARY of expenditure - logal reads
\begin{tabular}{lr} 
URUAR LOCAL ROAD & \(17,964,500\) \\
RURAL LOCAL ROAD & \(64,448,885\) \\
DIRECT WCRKS EXPENDITURE & \(82,413,385\) \\
ENGINEERING ADMINISTRATICN & \(32 \overline{2}, 168\) \\
GENEFAL ADMINISTRATICN & 328,670 \\
TCTAL
\end{tabular}

ROAD
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{FREEWAYS} \\
\hline & F1 & NCRTH SYONEY & DSPARTMEy \\
\hline \multirow{6}{*}{total} & F1 & WARRINGRH & OSPARTMENT \\
\hline & F1 & & \\
\hline & \(f:\) & GOSFARD & DEPARTMENT \\
\hline & F？ & GOSFORO & \\
\hline & F？ & HCRNSEY & DEPARTMENT \\
\hline & \(F ?\) & HUNTESS HILL & DEPARTMENT \\
\hline \multirow[t]{9}{*}{total} & \(F\) ？ & & ． \\
\hline & F4 & AUBURN & DEPARTMENT \\
\hline & F4 & PLACKTOWN & departient \\
\hline & F4 & CCNCORD & DEPARTMENT \\
\hline & F4 & HCLPOYD & DEPARTMENT \\
\hline & F4 & farqavatita & department \\
\hline & F4 & PENPITH & OEPARTMEVT \\
\hline & F4 & Strathfield & DEPAETMENT \\
\hline & F4 & Srover & DEPACTMENT \\
\hline \multirow[t]{5}{*}{total} & F4 & & \\
\hline & \(F \cdot\) & CAMPGELLTCWA & DEPARTMENT \\
\hline & \(f\) & LIVERFOOL & DEPAETMENT \\
\hline & F 5 & WINGECARRIGEE & depaftment \\
\hline & F5 & WOLLOADILLY & DEPAFTMENT \\
\hline \multirow[t]{4}{*}{total} & F & & \\
\hline & Ft & Sutherland & DEPAFTMENT \\
\hline & Ft & SYDNEY & DEPARTMENT \\
\hline & fs & WOLLONGONG & DFPAETMENT \\
\hline \multirow[t]{2}{*}{total} & F6 & & \\
\hline & F7 & Sroner & department \\
\hline tctal & F7 & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & \[
\begin{array}{r}
415,470 \\
57,079 \\
472,555
\end{array}
\] & \[
\begin{aligned}
& 415.476 \\
& 57.770 \\
& 472.555
\end{aligned}
\] \\
\hline 48？．136 & 54，166 & 537， 202 \\
\hline 1，？41 & & 1，？41 \\
\hline 472，502 & 35．967 & 509，369 \\
\hline & 162，319 & 162，310 \\
\hline \multirow[t]{10}{*}{956，970} & 252，352 & 1，209，351 \\
\hline & 209，476 & 209．67t \\
\hline & 114，476 & 114，476 \\
\hline & 22，795 & 22.780 \\
\hline & 170，825 & 179，925 \\
\hline & 5.907 & 5．937 \\
\hline & 307，180 & 307，120 \\
\hline & 141，291 & 141，291 \\
\hline & 36，215 & 30，215 \\
\hline & 1，008，159 & 1，008．150 \\
\hline 620．5．97 & & （20，097 \\
\hline ここ， 0 C & & 22．001 \\
\hline 15t，こo4 & & 196，206 \\
\hline I 1 1， 240 & & 361．240 \\
\hline \multirow[t]{7}{*}{1，己C1，14？} & & 1，201，142 \\
\hline & 23，275 & 23，？75 \\
\hline & 909 & 909 \\
\hline & 1，134，735 & 1，134．735 \\
\hline & 1，158，519 & 1，15F，¢16 \\
\hline & 15，719 & 15，715 \\
\hline & 15，719 & 15，719 \\
\hline
\end{tabular}

DEPAFTVENT
EEGA VALLEY
EURJBCDALLA
KIAMA
DEPARTMENT
DEPARTYENT
DEPARTMEVT
DEPARTMENT
DEPARTMEAT
DEPARTME:NT
DEPARTMENT
cCuncil
CCUNCIL
CEPARTME
CCUACIL
\begin{tabular}{|c|c|}
\hline DEPARTMENT & 13C,559 \\
\hline DEPARTMENT & \\
\hline DEPARTENT & 2,46C \\
\hline DEPARTMENT & 4,100 \\
\hline DEPARTMENT & \\
\hline depaftuent & ¿C.500 \\
\hline DEPAFTMENT & \\
\hline DEPAFTEENT & 144,223 \\
\hline CCUACIL & 22t.495 \\
\hline DEPAFTMENT & 954,956 \\
\hline depagtment & 47C,431 \\
\hline DEPARTMEST & 4ce,t61 \\
\hline DEPARTMENT & t19, 58 \\
\hline DEPARTMENT & 1,645 \\
\hline departaent & ?87.757 \\
\hline departmavt & 6,560 \\
\hline ofpartment & 1,16?,26? \\
\hline department & 4,10C \\
\hline depaftment & \\
\hline DEPAFTMENT & 456.002 \\
\hline DEPAETMENT & 1,185,594 \\
\hline OEPAFTMENT & \\
\hline ccuncil & \\
\hline DEPAFTMENT & \\
\hline c Cuncil & \\
\hline departmevt & 353,410 \\
\hline
\end{tabular}

7, 577 ,675
1,397,898
parRICKVILLE
RCEXDALE
SHELLMARCCUA
SHOALFAVEN
SYONEY
WOLLONGONG
OLLGAGO:IG

ALBURY
ASHFIE
AUGURA
AUGURA
BANKSTOW
CAFPPELLTCNN
CAFPRELLT
GCuLetra
GCULBERN
GUNDAGAI
GUNDAGAI
GUNNIAG
HARDEN
hClsrcok
HCLQOYO
hume
iverfool
ULWAREE
parqanatta
STRATHFIELD
WGGG WAGEA
ingecarribee
GOLLONDILLY
allondilly
WOLLONDILLY
WCLLOADILLY
Y\&s
-
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & ROAD & local government & ARFA & & WCRK CARRIED & out ey \\
\hline & 3 & GUNNING & & & department & \\
\hline & 3 & mulwaree & & & DEPARTMENT & \\
\hline & ? & YARROWLUMLA & & & department & \\
\hline & \(?\) & yarrowlumia & & & & \\
\hline \multirow[t]{9}{*}{total} & \(?\) & & & & & \\
\hline & & & & & & \\
\hline & 4 & EEGA VALLEY & & & DEPAETMENT & \\
\hline & 4 & CCOMA-MCNARC & & & department & \\
\hline & 4 & COOMA-MONARC & & & ccuncil & \\
\hline & 4 & COOMA-MSNARC & & & ccuncil & \\
\hline & 4 & gundagai & & & department & \\
\hline & 4 & SNOWY RIVER & & & DEPARTMENT & \\
\hline & 4 & tumut & & & DEPARTMENT & \\
\hline \multirow[t]{15}{*}{total} & 4 & & & & & \\
\hline & 5 & ASHFIELD & & & Department & \\
\hline & 5 & AUBURN & & & DEPARTMENT & \\
\hline & 5 & Pathurst & & & DEPARTMENT & \\
\hline & 5 & ELACKTOHN & & & DEPARTMENT & \\
\hline & 5 & flue rountains & & - & DEPARTMENT & \\
\hline & 5 & BURUOCD & & & DEPARTMENT & \\
\hline & 5 & evans & & & DEPARTMEVT & \\
\hline & 5 & GREATER LITHGCd & & & DEPARTMENT & \\
\hline & ¢ & HOLROYO & & & DEPAETMENT & \\
\hline & 5 & LEICHMARDT & & & department & \\
\hline & 5 & PARRAMATta & & & DEPARTMENT & \\
\hline & 5 & PENRITH & & & DEPARTMENT & \\
\hline & 5 & STRATHFIELD & & & DEPARTMENT & \\
\hline & 5 & SYDNEY & & & ceuncil & \\
\hline \multirow[t]{12}{*}{total} & ? & & & & & \\
\hline & 6 & Pathurst & & & DEPARTMENT & \\
\hline & 6 & ELAND & & & OEPARTMENT & \\
\hline & 6 & blayney & & & department & \\
\hline & \(t\) & CARRATHOOL & & & DEPARTMENT & \\
\hline & 6 & CCWPA & & & ccuncil. & \\
\hline & \(t\) & CCJRA & & & DEPARTMEMT & \\
\hline & \(\epsilon\) & CCIRA & & & ccuncil & \\
\hline & \(t\) & EVANS & & & department & \\
\hline & 6 & HAY & & & & \\
\hline & 6 & HAY & & & DEPARTMENT & \\
\hline & 6 & URANA & & & department & \\
\hline & \(\theta\) & WEDDIA & & & CCUACIL & \\
\hline
\end{tabular}


\section*{SOUFCE OF fUNDS}

8010
LOCAL GOVEFNMENT AREA
wCRK carried cut ey
COMMONGEALTH
!

TOTAL

DEPARTMENT
DEPAFTMENT
CCUNCIL
DEPARTMER
CCuACIL
DEPARTMENT
defartment
DEPARTMENT
OEPARTMENT
CCUACIL
DEPARTMENT
DEPARTMENT
DEPARTMENT

OEPARTMENT
depafiment
CCUACIL
OEPARTMENT
CCUACIL
DEPAFTMENT
CCUACIL
DEPARTMENT

\begin{tabular}{|c|c|}
\hline ARMIDALF & council \\
\hline DUMARFSO & department \\
\hline GLEN INNES & CCUNCIL \\
\hline GLEN INNES & ofpartment \\
\hline greater cessncck & DEPAETMENT \\
\hline gurpa & depagtment \\
\hline Maitland & DEPARTMENT \\
\hline maitland & council \\
\hline maitland & DEPARTMENT \\
\hline MAITLAND & CCUNCIL \\
\hline maitland & DEPARTMENT \\
\hline MAITLAND & \\
\hline maitlano & OEPARTMENT \\
\hline murrugundi & department \\
\hline MUSWEL & COUNCIL \\
\hline
\end{tabular}

\section*{DEPARTMENT \\ CCUNCIL \\ DEPARTMEN \\ DEPAETMENT \\ EPAPTMENT \\ CUACIL \\ CCUACIL \\ DEPARTMENT} DEPARTM
CCUNCIL
gathuFs
ogan
POGAN
OOGAN
OCGAN
cagonne
oueeo
NARRONINE
orange
orange
WELLINGTON
2.413.114

2,613,114
\begin{tabular}{rr}
20,524 & 20,524 \\
578 & 538 \\
2,729 & 2,728 \\
208,995 & 208,995 \\
756,717 & 756,717 \\
516,832 & 516,832 \\
209,354 & 209,754 \\
148,326 & 148,724 \\
266,391 & 266,391 \\
37,597 & 37,597 \\
193,263 & 187,263 \\
98,736 & 88,736 \\
306,725 & 396,725 \\
\(2,896,740\) & \(2,893,740\)
\end{tabular}
\begin{tabular}{rr}
212,802 & 212,902 \\
11,545 & 11,545 \\
34,504 & 34,804 \\
3,428 & 3,428 \\
5,908 & 5,908 \\
609,327 & 609,337 \\
1,791 & 1,731 \\
947,694 & 947,694 \\
483,570 & 483,570 \\
\(2,390,519\) & \(2,310,819\)
\end{tabular}

04,552
180.757
180.757
1.626

1,625
60.677
59.598

59,598
247,932
247,932
433,109
433,109
4,527
1,432
1.632
78,821

78,921
7,956
2,956
1,132
274,400
243,536
26.075
27.06

ACRK CAPRIED CUT EY

MUSWELLEROOK NEWCASTLE
NUNDLF
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scove
SEVERN
SINGLETON
SINGLETOP
SINGLETON
SINGLFTON
SINGLETON
SINGLETON
TAMNOFTH
TAMWORTH
TAMWORTH
TAMNOFTH
TENTERFIELD
TENTEPFIELD
TENTERFIELD
TENTERFIELD URALLA
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EFLLINGEN
EYRDN
COFFS HARSOUR
CCFFS HARPOUR
COFFS HAREOUR
GCSFORD
GOSFORD
GCSFORD
GRAFTCN
great lakes
grEatER TAREE
greater taree
greater taree
GREAYER TAREE
GREATFR TAREE
GREATER TAREE
HASTINGS
HASTINGS
KEMPSEY
KEMPSEY

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DEPARTMENT
DEPARTMENT DEPAFTMENT DEPAFTMENT DEPAGTMENT DEPARTMENT DEPARTMES CCUACIL
oEPARTMENT
CCUACIL
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DEPARTMENT OEPARTMENT CCUACIL DEPARTMENT CCUACIL
CCUACIL
DFPARTMENT
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DEPARTMENT CCURCIL
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dEPAFTMENT
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cCuncil
DEPAGTMENT
CCUACIL
DEPARTMENT
CCUACIL
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DEPARTMENT
CCUNCIL
department
\begin{tabular}{|c|c|c|}
\hline commonwealth & state & jotal \\
\hline ， & \＄ & s \\
\hline て28．724 & & 229．？24 \\
\hline 1\％9，718 & & 129.718 \\
\hline 84，525 & & 84.925 \\
\hline 707， 51 & 118．cet & 225，647 \\
\hline 184，938 & & 184．839 \\
\hline ごこ，590 & & 243．990 \\
\hline 427．516 & & 427，816 \\
\hline 44 ce & & 448 \\
\hline 166．710 & & 166，719 \\
\hline c， 0.60 & & 9，060 \\
\hline 218．424 & & 218，424 \\
\hline 4，127 & & 4，127 \\
\hline 66，723 & & 66，723 \\
\hline 59.947 & & 59，947 \\
\hline \＆4，¢ 37 & & 64，937 \\
\hline 51，209 & & 51，209 \\
\hline こ「，C16－ & & 2C．014－ \\
\hline 28， 12 & & 29，\({ }^{\text {P12 }}\) \\
\hline 106，93？ & & 106．93？ \\
\hline 2．192－ & & 2．192－ \\
\hline 275．223 & & 275．222 \\
\hline 199，767 & & 189，767 \\
\hline \multirow[t]{12}{*}{4,537 ¢16} & 118，06t & ¢．055，922 \\
\hline & 338，373 & 339，？ 7 ？ \\
\hline & 1c3，230 & 103，230 \\
\hline & 48，169 & 69，169 \\
\hline & 370，740 & 370.740 \\
\hline & 375，002 & 376，002 \\
\hline & 35，448 & 35，442 \\
\hline & 18，715－ & 18，715－ \\
\hline & 748， 048 & 748，त4\％ \\
\hline & 447 & 447 \\
\hline & 408，192 & 498，192 \\
\hline & 2，900 & 2，900 \\
\hline \multirow[t]{10}{*}{\(? 10\)} & & 31 C \\
\hline & 160，787 & 160，79？ \\
\hline & 902，362 & 902．？32 \\
\hline & 32，226 & 32，226 \\
\hline & 9，179 & 9，179 \\
\hline & 9，403 & 9，40\％ \\
\hline & 1，061，877 & 1，061．877 \\
\hline & 5，026－ & 5，096－ \\
\hline & 34，317 & 34，217 \\
\hline & 517．775 & 517.775 \\
\hline \multirow[t]{3}{*}{4,136} & 876，011 & 880.147 \\
\hline & 8－ & 8 － \\
\hline & 330，726 & 330.726 \\
\hline
\end{tabular}

SCUFCE CF FUNDS
HCRK CARRIED OUT BY
\begin{tabular}{|c|c|c|}
\hline COMMONVEALTH & state & total \\
\hline \multirow[t]{3}{*}{1} & 5 & \$ \\
\hline & 24,937 & 24.937 \\
\hline & 4.5.950 & 435.950 \\
\hline \multirow[t]{6}{*}{\[
\begin{aligned}
\equiv c \varepsilon, & s \in n \\
& 20
\end{aligned}
\]} & 737,855 & 1,006,812 \\
\hline & & 929 \\
\hline & 4.671 & 4,671 \\
\hline & 74,619 & 74,619 \\
\hline & 385,741 & 795,741 \\
\hline & 1.563.687 & 1,503, © 27 \\
\hline \multirow[t]{2}{*}{1,549} & & 1,548 \\
\hline & S,9]E & 5,838 \\
\hline & & 11.05? \\
\hline \multirow[t]{5}{*}{\[
12.204
\]} & & 12,204 \\
\hline & \(3 ¢ 2\) & 392 \\
\hline & ?6,882 & 76,283 \\
\hline & 158.587 & 158,587 \\
\hline & 4.671 & 4,671 \\
\hline \multirow[t]{11}{*}{40.210} & & 40,810 \\
\hline & 90,354 & 91.331 \\
\hline & 538,620 & ?38,620 \\
\hline & 582,997 & 582.997 \\
\hline & 16,078 & 16.078 \\
\hline & 20,490 & 20.410 \\
\hline & 403,066 & 40?,066 \\
\hline & 14.455 & 14.455 \\
\hline & 163,275 & 167.275 \\
\hline & 766,077 & 796:077 \\
\hline & 149,242 & 149,242 \\
\hline ¢75.785 & 37,498 & 1,013,293 \\
\hline 1.5?2 & & 1,032 \\
\hline 1,48? & & 1,483 \\
\hline 1.719.250 & 12,428,280 & 1x,746,530 \\
\hline
\end{tabular}
CCONAEARAERAN
GILGAADRA
GUNNEEAM
HASTIAGS
HASTIAGS
HASTISGS
HASTINGS
HASTIAGS
PARRY
PARRY
TAMWORTH
WALCHA
WARREA
\begin{tabular}{|c|c|c|}
\hline DEPARTMENT & 718,538 & 718,538 \\
\hline DEPARTMENT & 777,607 & 777,607 \\
\hline ccuncil & 153,029 & 18?,C29 \\
\hline defartuent & 9,076 & 9,070 \\
\hline ccuncil & 1.623- & 1,623- \\
\hline DEPAETMENT & 120,038 & 120.038 \\
\hline council & 12,590 & 12.990 \\
\hline DEPARTMENT & 350,423 & ?50,42? \\
\hline CCUACIL & 201,545 & 201.545 \\
\hline ofeparmment & 106.966 & 106.966 \\
\hline cCuncil & 52.128 & 52,12 \({ }^{\circ}\) \\
\hline DEPAGTMENT & 577,568 & 577,568 \\
\hline defarturnt & 144,472 & 144,472 \\
\hline & 3.252,651 & ?.252,651 \\
\hline
\end{tabular}
WGRK CARRIED OUT EY
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{GLEN INNES INVERELL}} \\
\hline & \\
\hline & MOREE PLAINS \\
\hline & MCree plains \\
\hline & MCREE PLAINS \\
\hline & MCREE PLAINS \\
\hline \multicolumn{2}{|l|}{NYMPOIDA} \\
\hline \multicolumn{2}{|l|}{SEVERN} \\
\hline \multicolumn{2}{|l|}{SEVERG} \\
\hline \multicolumn{2}{|l|}{SEVERA} \\
\hline \multicolumn{2}{|l|}{SEvera} \\
\hline \multicolumn{2}{|l|}{WALGETT} \\
\hline \multicolumn{2}{|l|}{WALGETT} \\
\hline \multicolumn{2}{|l|}{Walsett} \\
\hline \multicolumn{2}{|l|}{yallarol} \\
\hline \multicolumn{2}{|l|}{Yallaroi} \\
\hline \multicolumn{2}{|l|}{yallaroi} \\
\hline \multicolumn{2}{|l|}{Yallakol} \\
\hline & Yallafol \\
\hline
\end{tabular}

CCUNCIL
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CCUACIL
department
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AULKHAM HILLS
AIRFIELD
HOLROYD
HORNSEY
parranatta.

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\section*{galranald \\ balqanald}

HAY
MURRUVEI DGEE
NARGANDERA
WAGGA WAGSA
WGGGA WAGEA
WagGa wagea
WAGGA WAGGa
WAKOOL
WENTWCRTH
DEPARTMEN
CCUACIL
OEPARTMENT DEDARTMENT DEPARTMENT department cCuncil
DEPAFTMENT
CCUNCIL
DEPAFTMENT
DEPARTMENT
\begin{tabular}{|c|c|c|}
\hline cornonhealth & state & total \\
\hline \multirow[t]{28}{*}{!} & \(s\) & \$ \\
\hline & 46,708 & 46.708 \\
\hline & 222,964 & 222,964 \\
\hline & 827,826 & 827.826 \\
\hline & 2,661 & 2,661 \\
\hline & 688 & 458 \\
\hline & ¢9.093 & 59,08? \\
\hline & 497.253 & 497.253 \\
\hline & 362.232 & 262,233 \\
\hline & 59,081 & 50,081 \\
\hline & 21.549 & 21,549 \\
\hline & 18.976 & 18,976 \\
\hline & 14,564 & 14,564 \\
\hline & 47,397 & 47.397 \\
\hline & 25,613 & 25,613 \\
\hline & \[
31,204
\] & 61,204 \\
\hline & \[
7.080-
\] & 7,080- \\
\hline & 23,912 & 23.912 \\
\hline & 154,393 & 154,898 \\
\hline & 137,048 & 137.048 \\
\hline & 2,576.378 & 2,576,379 \\
\hline & 15,412 & 15.612 \\
\hline & 22,903 & 2?.99? \\
\hline & 15,412 & 15.412 \\
\hline & 428 & 429 \\
\hline & 153,280 & 157.280 \\
\hline & \[
65,069
\] & 65,069 \\
\hline & 272,594 & 272,594 \\
\hline & & 567,439 \\
\hline & \[
6,171
\] & 6,131 \\
\hline & 499.665 & 499,665 \\
\hline & 420,323 & 420,32? \\
\hline & 461.065 & 401,065 \\
\hline & 26,157 & 26.157 \\
\hline & 4,398 & \[
4,798
\] \\
\hline & 434,357 & 434,357 \\
\hline & 37.597 & 37,597 \\
\hline & 183,512 & 183.512 \\
\hline & 4?5.483 & 435.48? \\
\hline & 3,076,127 & ?,076,127 \\
\hline 459.244 & & 409,244 \\
\hline 55,49C & & 95,690 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline & 16 & EALLINA & council \\
\hline & 16 & CASINC & ccuncil \\
\hline & 16 & CASINC & department \\
\hline & 16 & casinc & ccuncil \\
\hline & 16 & INVERELL & ccuncil \\
\hline & 16 & INVEPFLL & ccuncil \\
\hline & 16 & KYOGLE & department \\
\hline & 16 & LISMOFE & ccuncil \\
\hline & 16 & MCREE PLAINS & ccuncil \\
\hline & 16 & RICHMOND PIVER & DEPARTMENT \\
\hline & 16 & RICHMCND RIVER & CCUNCIL \\
\hline & 16 & RICHMCND PIVEF & ccuncil \\
\hline & \(1 t\) & tenterfield & DEPARTMENT \\
\hline & 16 & TFNTFRFIELD & ccuncil \\
\hline & 16 & TENTEFFIELD & DEPARTMENT \\
\hline & \(1 t\) & tenteprield & ccuacil \\
\hline & 16 & tenteffield & department \\
\hline & 16 & Yallaror & council \\
\hline total & 16 & & \\
\hline & & & - \\
\hline & 17 & EERRIGAN & depaftment \\
\hline & 17 & BLAND & DEPARTMENT \\
\hline & 17 & coolaron & department \\
\hline & 17 & coonabaragkan & DEPARTMENT \\
\hline & 17 & OUEAO & OEPARTMENT \\
\hline & 17 & forges & DEPARTMENT \\
\hline & 17 & FCres & CCUACIL \\
\hline & 17 & FCREES & DEPAQTMENT \\
\hline & 17 & GILGANDEA & department \\
\hline & 17 & JERILOERIE & department \\
\hline & \(1 ?\) & MCREE PLAINS & DEPAETMENT \\
\hline & 17 & mCREE PLAINS & CCUNCIL \\
\hline & 17 & MCREE PLAINS & DEPAPTMENT \\
\hline & 17 & NARGAERI & COUNCIL \\
\hline & 17 & NARRAERI & DEPARTMENT \\
\hline & 17 & NARRANDERA & DEPARTMENT \\
\hline & 17 & NARROMINE & DEPARTYENT \\
\hline & 17 & PARKES & DEPARTMENT \\
\hline & 17 & URANA & DEPARTMENT \\
\hline & 17 & WEDDIN & DEPARTMENT \\
\hline TOTAL & 17 & & \\
\hline
\end{tabular}
\begin{tabular}{rr}
103,015 & 103,015 \\
29,003 & 29,003 \\
58,974 & 58,974 \\
21,486 & 21,494 \\
1,905 & 1,905 \\
375,098 & 375,098 \\
576,653 & 576,657 \\
241,320 & 241,320 \\
63,670 & 63,670 \\
159,561 & 159,561 \\
112,790 & 112,790 \\
\(38,671-\) & \(38,671-\) \\
938,111 & 938,111 \\
3,223 & 78,227 \\
48,344 & 48,744 \\
106 & 106 \\
47,534 & 47,534 \\
34,612 & 36,612 \\
\(2,776,632\) & \(2,776,632\)
\end{tabular}
\begin{tabular}{rr}
141,793 & 141,792 \\
378,629 & 378,621 \\
271,638 & 231,638 \\
181,448 & 181,642 \\
163,120 & 163,120 \\
9,992 & 9,092 \\
296,635 & 296,635 \\
3,513 & 3,513 \\
252,792 & 252,792 \\
123,572 & 123,532 \\
144,886 & 144,984 \\
6,465 & 6,445 \\
\(1,098,502\) & \(1,099,502\) \\
73,582 & 73,582 \\
\(1,108,276\) & \(1,108,276\) \\
279,182 & 270,132 \\
713,059 & 713,059 \\
338,717 & 339,717 \\
103,114 & 193,114 \\
59,169 & 50,169 \\
\(5,798,014\) & \(5,798,014\)
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & ROAD & LCCAL govervment area \\
\hline . & & \\
\hline & 12 & Brewarrina \\
\hline & 18 & GREWAFRINA \\
\hline & 18 & EfEWAFRINA \\
\hline & 18 & coonarale \\
\hline & 19 & gilgandra \\
\hline & 18 & WALGETT \\
\hline & 12 & WALGETt \\
\hline & 19 & WALGETt \\
\hline & 18 & WALGEtt \\
\hline & 18 & WALGETT \\
\hline total & 19 & \\
\hline & 19 & eomeala \\
\hline & 10 & bcmiala \\
\hline & 19 & combala \\
\hline & 19 & combala \\
\hline & 19 & COOMA-MONARO \\
\hline & 19 & yarrolilumla \\
\hline TOTAL & 19 & \\
\hline & & - \\
\hline & 2 r & alEURY \\
\hline & 2 C & BERRIEAN \\
\hline & 2 C & CONARGO \\
\hline & 29 & CORDWA \\
\hline & \(2{ }^{2}\) & deniliguin \\
\hline & 20 & DENILIQUIA \\
\hline & 20 & hume \\
\hline TCTAL & 2? & \\
\hline & 21 & CARRATHOOL \\
\hline & 21 & CENTRAL DARLING \\
\hline & 21 & Central darliag \\
\hline & 24 & DENILIDUIN \\
\hline & 21 & DENILIQUI* \\
\hline & 21 & DENILIGUIN \\
\hline & \(? 1\) & HAY \\
\hline & 21 & hay \\
\hline & 21 & hay \\
\hline & 21 & murrar \\
\hline & 21 & hindouran \\
\hline total & 21 & \\
\hline
\end{tabular}

CCUNCIL
OEPARTMENT
CCUACIL
DEPAFTMENT
DEPAGTMENT
OEPARYME
CCUNCIL
oEPaRTMEN
CCURCIL

\section*{department \\ cCuncil \\ ccuncil \\ CEPARTMENT DEPARTMENT} DEPARTMENT
department
DEPAATMENT
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oEpartment
cCuncil
oEPARTMENT
\[
\begin{aligned}
& \text { DGPARTMENT } \\
& \text { CCUACIL } \\
& \text { DEPARTMENT } \\
& \text { CCUNCIL } \\
& \text { DEPARTMENT } \\
& \text { CCUACIL } \\
& \text { DEPARTMENT } \\
& \text { CCUACIL } \\
& \text { DEPARTMENT } \\
& \text { DEPARTMENT } \\
& \text { DEPARTMENT }
\end{aligned}
\]

CCMMONWEALTH
state
TOTAL
1
\(\$\)
\(4,278-\)
58,478
30,218
551,299
173,345
25,842
64,653
90,188
\(9,471-\)
593,893
\(1,574,297\)
4,278
59,478
30,219
559,299
173.345
25,842
64,633
90,188
9,471
593,893
\(1,574,297\)
\begin{tabular}{|c|c|}
\hline 7,687 & 7.687 \\
\hline 198, 182 & 189.682 \\
\hline 31.991 & 31,091 \\
\hline 77,794 & 77.794 \\
\hline 563,676 & 563,676 \\
\hline 41,651 & 41.651 \\
\hline 911,481 & 911.481 \\
\hline ¢1, 8 ? 2 & 51,932 \\
\hline 349,113 & 349,113 \\
\hline \(4 \mathrm{C8.193}\) & 408.193 \\
\hline 370,490 & 370,490 \\
\hline 27.929 & 27.929 \\
\hline 7.609 & 7,609 \\
\hline 294,479 & 294,479 \\
\hline 1,509.635 & 1,509.635 \\
\hline
\end{tabular}
\begin{tabular}{rr}
38,644 & 38,644 \\
31,614 & 39,614 \\
293,747 & 293.747 \\
27,779 & 27,779 \\
6,445 & 6,446 \\
13,722 & 13,722 \\
341,197 & 341,187 \\
2,651 & 2,651 \\
20,647 & 20,447 \\
391,543 & 391,567 \\
293,267 & 293,267 \\
\(1,461,046\) & \(1,461,046\)
\end{tabular}

ROAD
LOCAL GOVERNMENT AREA
\begin{tabular}{ll}
\(2 ?\) & EROKENHILL \\
22 & BROKEAHILL \\
22 & WENTWCRTH \\
22 & WENTWCRYH \\
22 & WENYWCRYH \\
22 & WESYEGN DIVISION \\
22 &
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multirow[b]{3}{*}{TCTAL} & ? ? & Lake macquatie \\
\hline & 2? & NELCASTLE \\
\hline & 23 & \\
\hline & 25 & SHELLHARBCUR \\
\hline & 25 & WINGECARRIBEE \\
\hline
\end{tabular}

WYONG
TCTAL \(2 \epsilon\)

GCRX CARAIED CUT EY
council
DEPAGTMENT
DEPAGTMENT
OEPARTMENT


DEPARTMENT
DEPARTMENT

\section*{CONCIL}
ccuscil

DEPARTMENT
DEPARTMEMI

DEPARTMENT
DEPARTMENT
DEPARTMEAT

\section*{convonigalta} \(!\)


\section*{state}
\(\$\)

13.42 2.5.52 17.607 17.402 744,660 655,645 1,451,303

16,117
39,273
55.280
39.27
55.29

440,134 563.?20 1,00?,460

180,792
25,578 216,360


\section*{SOURCE OF FUNDS}

ROAD
CCAL GOVERNMENT AREA
CRK CARRIED CUT EY
COMNONLEALTH
state
5
total
328.349

339,349
\begin{tabular}{|c|c|c|c|}
\hline & 57 & Pland & council \\
\hline & 57 & POGAN & ccuncil \\
\hline & 57 & forpes & ccuncil \\
\hline & 57 & JUNEE & CCUACIL \\
\hline & 57 & LACHLAN & COUNCIL \\
\hline & 57 & TEMORA & cruncil \\
\hline total & 57 & & \\
\hline & 59 & JERILDEPIE & ccuncil \\
\hline & 59 & LOCKHART & cCuNCIL \\
\hline & 56 & UgANA & council \\
\hline & 59 & WAGGA WAGGA & ccuacil \\
\hline TOTAL & 55 & & \\
\hline & 61 & bcgan & council \\
\hline & 61 & caboyme & council \\
\hline & 61 & CCEAR & cCuncil \\
\hline & 61 & fCrses & ccuncil \\
\hline & 61 & LACHLAN & c Cuncil \\
\hline & 61 & ORANGF & ccuncil \\
\hline & 61 & PARKES & ccuncil \\
\hline total & 61 & & \\
\hline & 62 & CCOtar & ccuncil \\
\hline & 6 ? & Merrima & council \\
\hline & 62 & MERPIbA & ccuncil \\
\hline & 62 & scove & ccuncil \\
\hline TOTAL & 62 & & \\
\hline & 6 ? & barrafa & ccuncil \\
\hline & 6 ? & garrama & DEPARTMENT \\
\hline & 6 ? & dingafa & CCUNCIL \\
\hline & 6 ? & eingara & OEPARTMENT \\
\hline & 6 ? & inverell & ccuncil \\
\hline & 62 & vanilia & ccuncil \\
\hline & 63 & manilla & ccuncil \\
\hline & 6? & parry & ccuncil \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline 164,374 & 164,774 \\
\hline 21,367 & 31,367 \\
\hline 21.424 & 21.484 \\
\hline 144.7E8 & 144.768 \\
\hline 347 & 347 \\
\hline 221.560 & 221,566 \\
\hline 65,013 & 65,012 \\
\hline 698,919 & 698,919 \\
\hline 9,919 & 9,919 \\
\hline 114.408 & 114,499 \\
\hline 50,973 & 50,973 \\
\hline 11,550 & 11.250 \\
\hline 196,940 & 180.04C \\
\hline 20, 008 & 30,00s \\
\hline 143.258 & 143,258 \\
\hline 140.596 & 140, 16 \\
\hline ? 1.484 & 21,484 \\
\hline 171.769 & 131.789 \\
\hline 11,017 & 11,017 \\
\hline 143,525 & 14.?,525 \\
\hline 021,607 & 621.607 \\
\hline 68.9t? & 69.95? \\
\hline 88.510 & 38, ¢1C \\
\hline 25,073- & 25,0こ?- \\
\hline 65.810 & 65,?10 \\
\hline 197.75C & 197,750 \\
\hline 89.860 & 59,860 \\
\hline 126.110 & 126,11C \\
\hline 104,296 & 104.286 \\
\hline 979 & 971 \\
\hline 49.264 & 49,266 \\
\hline 114,260 & 114,260 \\
\hline 6.099 & 6.099 \\
\hline 96,220 & 96,22C \\
\hline
\end{tabular}


componmealth
\begin{tabular}{|c|c|}
\hline state & total \\
\hline S & \(s\) \\
\hline 10,151 & 10.158 \\
\hline 127.056 & 137.656 \\
\hline 39,467 & 39.467 \\
\hline 63,059 & 63,059 \\
\hline 39,503 & 39,503 \\
\hline 27.654 & 37.654 \\
\hline 98.787 & 99,787 \\
\hline 69,4.4 & 60,404 \\
\hline 10.054 & 10,354 \\
\hline 185,309 & 185.?09 \\
\hline 20,65 & 30,651 \\
\hline 23,677 & 23,677 \\
\hline 124,278 & 184.278 \\
\hline 929,250 & 929.250 \\
\hline
\end{tabular}
gnuletra
GOULBURN
MULWAFEE
Muldaree
tallaganda
council
cCuncil
CCUNCIL
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CCUNCIL
cuncil

\section*{department \\ CCUACIL \\ cCuncil \\ DEPARTMENT \\ ccuncil}

\section*{CARRATHOOL}
CARRATHOOL
CENTRAL DARLING
GRIFFITH
LEETON
cCuNCIL
CCUNCIL
cCuncil
Cuncil
CUNCIL
EETON
NARRANDERA

EROKEN HILL
81

TCTAL
91
81
GESTEAN DIVISION
rotal 3?
newCAStLE

CASINC
COPMANHURST
GRAFTCN
\begin{tabular}{rr}
2,973 & 2,973 \\
3,008 & 3,008 \\
74,829 & 74,829 \\
23,935 & 23,935 \\
42,207 & 42,207 \\
146,952 & 146,952
\end{tabular}
\begin{tabular}{rr}
245,371 & 245,331 \\
44,552 & 44,552 \\
1,418 & 1,412 \\
209,270 & 209,270 \\
198,941 & 198,941 \\
9,089 & 9,789 \\
708,601 & 709,601
\end{tabular}
\begin{tabular}{rr}
16,328 & 16,328 \\
141,251 & 141,251 \\
157,579 & 157,579 \\
& \\
9,619 & 0,619 \\
9,619 & 9,619 \\
& \\
& \\
81,223 & 31,223 \\
285,950 & 235,950 \\
28.187 & 29,137
\end{tabular}








PAD
LCCAL GOVErnment area
WCRK CARRIED OUT EY
state
TOTAL
!
307.6 ?4
\(\$\)
TOTAL 150

\begin{tabular}{ll} 
CAMDEA & CCUNCIL \\
HAWKESRURY & DEPARTMENT \\
LIVERFODL & CCUACIL \\
PENRITH & DEPAETMENT
\end{tabular}

TCTAL 15
DEPACTMEN

\section*{DEPARTMEN}
ccunci
DEPARTMENT
TOTAL 15
HAWKESBURY
ENRITH

TOTAL 156
156
oEpartment
\begin{tabular}{ll}
40,293 & 40,393 \\
40,382 & 40.392
\end{tabular}
manly
WARRINGAH
TOTAL
159

TOTAL 16
eaulkham hills
DEPARTMENT
council

TOTAL \(\begin{array}{r}169 \\ 169\end{array}\)
HORNSEY
-
\(16 ?\)
162
162

KU-RING-GA
RYDE
WARPINGAH
DEPARTMENT
DEPARTMENT
OEPARTMENT

DEPARTMENT


CCUNCIL
cCuncil
DEPARTMEN
TOTAL 164
MaNLY
MOSMAN
NCRTH SYDNEY
NCRTH SYONEY
WARPIKGAH

DRUMMCYNE
HUNTESS HILL
LEICHFARDT

DEPARTMENT
DEPARTMENT DEPARTMENT
355.365
90.455 524.124

171,269
\(\begin{array}{rr}171.259 & 176.277 \\ 75.2752 & 75.252\end{array}\)
104.803 104.293
\(\begin{array}{ll}128.049 & 125.649 \\ 645.909 & 645.939\end{array}\)
\begin{tabular}{rr}
645,909 & 645.939 \\
1.301 .445 & 1.209 .445
\end{tabular}
30,455
524,124
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multirow[t]{2}{*}{ROAD} & LCCAL GJVERAMENT AREA & WCRK CAFRIED OUP ey & COMYONMEALTH & state & total \\
\hline & & & & ! & \(s\) & \$ \\
\hline \multirow[b]{4}{*}{total} & 165 & Parramatta & DEPARTYENT & & 100,0?8 & 100,038 \\
\hline & 165 & Srover & DEPARTMENT & & 247,325 & 247,325 \\
\hline & 155 & SYONEY & ccuacil & & 4,064 & 4,664 \\
\hline & 165 & & & & 1,?11,971 & 1,311.971 \\
\hline \multirow[b]{3}{*}{rotal} & 968 & huntefs mill & CEPACTMENT & & 95,034 & 95,034 \\
\hline & 166 & Lane cove & OEPARTMEYT & & 36.5§5 & 36,585 \\
\hline & \(16 t\) & & & & 131.619 & 121.619 \\
\hline \multirow{4}{*}{-} & 167 & BANKSTOUV & DEPAPTYENT & & 1:7,470 & 137,470 \\
\hline & 16? & CAMPBELLTCWA & DEPARTMENT & & 5,907 & 5,907 \\
\hline & 167 & CANTEREURY & DEEARTMENT & & 548.608 & 548,608 \\
\hline & 167 & LIVERPOOL & DEPARTMENT & & 498,625 & 498.625 \\
\hline \multirow[t]{4}{*}{TOTAL} & 137 & & & & 1,190,070 & 1,10n.670 \\
\hline & \(16 \%\) & hurstville & council & & 4.1,787 & 41.797 \\
\hline & 15 \% & RCCKOALE & DEPARTMENT & & 1?9.042 & 130.042 \\
\hline & 165 & RCCKDALE & CCUACIL & & 22,316 & 22,316 \\
\hline \multirow[t]{2}{*}{TOTAL} & 16.9 & & & & 203.15s & 209.155 \\
\hline & & & - & & & \\
\hline \multirow[b]{2}{*}{TOTAL} & 169 & RCCKDALF & ccuncil & & & \\
\hline & 169 & & & & \[
15,560
\] & \[
15.56 t
\] \\
\hline \multirow[b]{5}{*}{TOTAL} & 176 & ACTAYY & CEPAFTMENT & & \(98.7 \geq 5\) & 98.725 \\
\hline & 176 & RANDLICK & OEPGRTMENT & & 29.037 & 20.037 \\
\hline & 178 & SYONEY & department & & 42,103 & 42,103 \\
\hline & 178 & SYONEY & CCUACIL & & 7.612 & 7,612 \\
\hline & 170 & & & & 177.477 & 177,677 \\
\hline \multirow{6}{*}{total} & 171 & EGTANY & DEPARTMENT & & 13,350 & 13.250 \\
\hline & 171 & RANDWICK & DEPARTMENT & & 25,72? & 25,72? \\
\hline & 171 & PANDWICK & ccuscil & & 13,079 & 1?,079 \\
\hline & 171 & SYDVEY & ccuncil & & 15.639 & 15.639 \\
\hline & 171 & & & & 67,791 & 67,791 \\
\hline & 172 & SYOUEY & council & & 4.327 & \(4: 327\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline commontealth & state & Jotal \\
\hline \multirow[t]{13}{*}{1} & 5 & 3 \\
\hline & \[
\begin{array}{r}
29,513 \\
56,806 \\
33,927 \\
124,573
\end{array}
\] & \[
\begin{array}{r}
29,517 \\
56,806 \\
37,927 \\
124,572
\end{array}
\] \\
\hline & 3,223 & 3,223 \\
\hline & 192,48? & 192,603 \\
\hline & 6,976 & \(6.97 t\) \\
\hline & 11.363 & 19,?6? \\
\hline & 5,113 & 5,113 \\
\hline & 107,926 & 107,92t \\
\hline & 327,0¢4 & 327,034 \\
\hline & 262,231 & 202,231 \\
\hline & 23,32C & 23.320 \\
\hline & 285,551 & 285,551 \\
\hline & \[
\begin{aligned}
& 5,049 \\
& 5,049
\end{aligned}
\] & \[
\begin{aligned}
& 5,040 \\
& 5,049
\end{aligned}
\] \\
\hline \multirow{4}{*}{2.736} & 53.163 & 57.163 \\
\hline & こ26,000 & ?38,736 \\
\hline & 200,940 & 209.148 \\
\hline & 3e3, 11 & 353,311 \\
\hline \multirow[t]{11}{*}{2,73} & 942.622 & 945,259 \\
\hline & 70t- & \(706-\) \\
\hline & 17.729 & 17.721
930 \\
\hline & 11.814 & 11.814 \\
\hline & 31,924 & \[
31.924
\] \\
\hline & \[
87,907
\] & \[
87.907
\] \\
\hline & \[
149,569
\] & \[
149,569
\] \\
\hline & 14,304 & 14,304. \\
\hline & \[
5.907
\] & \[
5,907
\] \\
\hline & \[
249,990
\] & \[
249.016
\] \\
\hline & 117.509 & \[
117,599
\] \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline COMPONWEALTH & state & total \\
\hline \multirow[t]{22}{*}{1} & 5 & \(\pm\) \\
\hline & 378,826 & 378,826 \\
\hline & 162,589 & 162,539 \\
\hline & 122,315 & 122,315 \\
\hline & 9,511 & 9,511 \\
\hline & 9,943 & 9,963 \\
\hline & 257,149 & 257,149 \\
\hline & 80,784 & 80,784 \\
\hline & \[
103,230
\] & 103.230 \\
\hline & \[
81,192
\] & 81.192 \\
\hline & 2,299 & 2,299 \\
\hline & 37,652 & 37,652 \\
\hline & 866,664 & 866,664 \\
\hline & 6,048 & 6,048 \\
\hline & 38,934 & 39,934 \\
\hline & 7.280 & ?.280 \\
\hline & 43,330 & 4?,230 \\
\hline & 99.3C9 & 90,309 \\
\hline & 42,067 & 42.037 \\
\hline & 31.319 & 31,319 \\
\hline & 268,287 & 268,237 \\
\hline & & \\
\hline & 19,502 & 19,502 \\
\hline & \[
5,461
\] & 5,461 \\
\hline & \[
5,461
\] & \[
5,461
\] \\
\hline & \[
11,701
\] & \[
11,701
\] \\
\hline & \[
42,125
\] & 4?,12? \\
\hline & & \\
\hline & \[
4 \div 6,579
\] & \[
435.579
\] \\
\hline & \[
915,952
\] & \[
015.952
\] \\
\hline & 22.623 & 22,023 \\
\hline & 1,933,360 & 1,933,360 \\
\hline & 495,474 & 495.434 \\
\hline & 495,4?4 & 495,434 \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|}
\hline & \multicolumn{3}{|c|}{SOUFCE OF FUNDS} \\
\hline WCRK CARRIEO OUT EY & comrontealth & state & TOTAL \\
\hline & 1 & 1 & \$ \\
\hline council & & \[
\begin{aligned}
& 70,683 \\
& 70,68 ?
\end{aligned}
\] & \[
\begin{aligned}
& 70.653 \\
& 70.683
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& \text { CCUACIL } \\
& \text { DEPARTMENT }
\end{aligned}
\] & & \[
\begin{array}{r}
2,373 \\
28,707 \\
31,250
\end{array}
\] & \[
\begin{array}{r}
2,372 \\
29.707 \\
31,080
\end{array}
\] \\
\hline DEPARTMENT cCuncil & & \[
\begin{array}{r}
6,411 \\
148,372 \\
154,783
\end{array}
\] & \[
\begin{array}{r}
6,411 \\
148: ? 72 \\
154,732
\end{array}
\] \\
\hline \begin{tabular}{l}
DEDARTMENT \\
DEPAETMEVT \\
DEPARTMENT \\
CCUACIL
\end{tabular} & & \[
\begin{array}{r}
151,713 \\
272,486 \\
13.775 \\
90,377 \\
528,351
\end{array}
\] & \[
\begin{array}{r}
151,713 \\
272,486 \\
13,775 \\
90,377 \\
528,351
\end{array}
\] \\
\hline \begin{tabular}{l}
council \\
depaptuent \\
CCUNCIL \\
oepartment
\end{tabular} & & \[
\begin{array}{r}
76,528 \\
13,826 \\
3,637 \\
13,386 \\
103,237
\end{array}
\] & \[
\begin{array}{r}
76,828 \\
13,986 \\
3,337 \\
13.836 \\
108,237
\end{array}
\] \\
\hline ccuncil ccuncil & & \[
\begin{array}{r}
31,578 \\
175,617 \\
147,175
\end{array}
\] & \[
\begin{array}{r}
31,578 \\
115,617 \\
147.195
\end{array}
\] \\
\hline council council & & \[
\begin{array}{r}
97,148 \\
13,981 \\
111.129
\end{array}
\] & \[
\begin{array}{r}
97,14 \varepsilon \\
13,981 \\
111,129
\end{array}
\] \\
\hline \begin{tabular}{l}
ccuncil \\
ccuncil \\
ccuncil
\end{tabular} & & \[
\begin{array}{r}
18.214 \\
257.787 \\
56.878 \\
322.879
\end{array}
\] & \[
\begin{array}{r}
19,216 \\
257,787 \\
56,878 \\
332,879
\end{array}
\] \\
\hline
\end{tabular}




\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & ROAD & LGGAL GOVERNMENT AREA & WORK CARAIED OUY RY & COMMONWEALTH & State & TOTAL \\
\hline & & & & 1 & 5 & 5 \\
\hline TOTAL & \[
\begin{aligned}
& 244 \\
& 244
\end{aligned}
\] & Murpumeidgee & COUNCIL & & \[
\begin{array}{r}
7,012 \\
67,688
\end{array}
\] & \[
\begin{array}{r}
7,012 \\
67,638
\end{array}
\] \\
\hline total & \[
\begin{aligned}
& 245 \\
& 345 \\
& 245
\end{aligned}
\] & \begin{tabular}{l}
elayey \\
OPANGE
\end{tabular} & ccuacil
CCUACIL & & \[
\begin{aligned}
& 40,239 \\
& 55,179 \\
& 95,498
\end{aligned}
\] &  \\
\hline total & \[
\begin{aligned}
& 24 t \\
& 24 t \\
& 246
\end{aligned}
\] & elayney
EVANS & council CCUACIL & & \[
\begin{aligned}
& 46,433 \\
& 34,052 \\
& 80,485
\end{aligned}
\] & \[
\begin{aligned}
& 46,437 \\
& 34,052 \\
& 30,435
\end{aligned}
\] \\
\hline total & \[
\begin{aligned}
& 243 \\
& 243 \\
& 243 \\
& 245 \\
& 242
\end{aligned}
\] & \begin{tabular}{l}
CCOROWA CROOKWELL \\
GUNNING \\
MULWAREE
\end{tabular} & \begin{tabular}{l}
COUNCIL \\
ccuncil \\
cCuncil \\
council
\end{tabular} & & \[
\begin{array}{r}
74,698 \\
05,701 \\
2,962 \\
14,665 \\
194,926
\end{array}
\] & \[
\begin{array}{r}
74,698 \\
95,701 \\
2.962 \\
11,665 \\
194.926
\end{array}
\] \\
\hline TOTAL & \[
\begin{aligned}
& 25 \mathrm{C} \\
& 250
\end{aligned}
\] & CCQOw & council & & \[
\begin{aligned}
& 5 ? 7 \\
& 53 ?
\end{aligned}
\] & \[
\begin{aligned}
& 533 \\
& 533
\end{aligned}
\] \\
\hline rotal & \[
\begin{aligned}
& 251 \\
& 259
\end{aligned}
\] & GUNiING & ccuncil & & \[
\begin{aligned}
& 94,194 \\
& 94,104
\end{aligned}
\] & \[
\begin{aligned}
& 94,194 \\
& 94,194
\end{aligned}
\] \\
\hline total & \[
\begin{aligned}
& 252 \\
& 252 \\
& 252
\end{aligned}
\] & EVANS & DEPARTMENY CCUACIL & & \[
\begin{array}{r}
2,034 \\
89,588 \\
91,622
\end{array}
\] & \[
\begin{array}{r}
2,034 \\
99,588 \\
99,622
\end{array}
\] \\
\hline TCTAL & \[
\begin{aligned}
& 257 \\
& 257 \\
& 257 \\
& 257 \\
& 257 \\
& 257 \\
& 257
\end{aligned}
\] & \begin{tabular}{l}
PATHURST \\
EVANS \\
GREATER LITHGCM \\
CPEROX \\
CEERON \\
ORERON
\end{tabular} & \begin{tabular}{l}
council \\
council \\
DEPARTMENT \\
DEPARTMEVT \\
DEPARTMEVY \\
ceuncil
\end{tabular} & & \[
\begin{array}{r}
9,775 \\
29,970 \\
177,466 \\
22,679 \\
89.465 \\
165,0.38 \\
475,143
\end{array}
\] & \[
\begin{array}{r}
9,775 \\
29,970 \\
177,466 \\
22,679 \\
89,445 \\
105,808 \\
435,143
\end{array}
\] \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & \multirow{3}{*}{ROAD} & \multirow{3}{*}{lCCAL GOVFRANENT} & \multirow{3}{*}{AREA} & \multicolumn{4}{|l|}{State roads syster－maintenance source of funds} \\
\hline & & & & WCRK Carried cut ey & componmealth & State & TOTAL \\
\hline & & & & & 1 & s & 5 \\
\hline \multirow[t]{2}{*}{TCTAL} & \(23^{7}\) & & & & & 144，394 & 146．294 \\
\hline & & & & － & & & \\
\hline & 264 & KIANA & & cruncil & & \[
\begin{array}{r}
108.708 \\
26.788
\end{array}
\] & \[
\begin{array}{r}
108,708 \\
24,788
\end{array}
\] \\
\hline & 264 & WINGECARRIREE & & CCUNCIL & & \[
\begin{array}{r}
26,788 \\
135,496
\end{array}
\] & \[
\begin{array}{r}
26,788 \\
135,496
\end{array}
\] \\
\hline TOTAL & 264 & & & & & & \\
\hline \multirow[b]{2}{*}{TOTAL} & \[
360
\] & \multirow[t]{2}{*}{WINGECARRIBEE} & & \multirow[t]{2}{*}{council} & & \[
\begin{aligned}
& 38,113 \\
& 38,113
\end{aligned}
\] & \[
\begin{aligned}
& 38,113 \\
& 38,913
\end{aligned}
\] \\
\hline & \[
26^{\circ}
\] & & & & & & \\
\hline \multirow[b]{3}{*}{TCTAL} & 266 & \multirow[t]{3}{*}{KIAMA
SHELLHAPBCUR} & & \multirow[t]{3}{*}{\begin{tabular}{l}
ccuncil \\
ccuncil
\end{tabular}} & & 35，390 & 35．380 \\
\hline & \(26 t\) & & & & & 8，337 & 8．737 \\
\hline & 266 & & & & & 43.717 & 43．717 \\
\hline \multirow[b]{3}{*}{TOTAL} & & \multirow{3}{*}{Shoalhaven} & & \multirow{3}{*}{ccuncil} & & & \\
\hline & 267 & & & & & 77.191
37.191 & \[
37.191
\] \\
\hline & 267 & & & & & 37．191 & 37，191 \\
\hline \multirow[b]{4}{*}{TOTAL} & & \multirow{4}{*}{\begin{tabular}{l}
MULWAREE \\
YARROWLUMLA
\end{tabular}} & & \multirow{4}{*}{council ccuncil} & & & \\
\hline & 268 & & & & & 39，869 & 39，269 \\
\hline & 268 & & & & & 49.939 & 49.938 \\
\hline & 268 & & & & & 89，807 & 89，807 \\
\hline \multirow[b]{4}{*}{total} & 270 & tallaganda & & COUNCIL & & 48，124 & 48，124 \\
\hline & 275 & tallaganda & & DEFAKTMENT & & 22.579 & 22，578 \\
\hline & 370 & \multirow[t]{2}{*}{Yaprollumia} & & \multirow[t]{2}{*}{ccuncil} & & 50.917 & SC．017 \\
\hline & \(\bigcirc \bigcirc\) & & & & & 151，619 & 151．619 \\
\hline \multirow{7}{*}{TOTAL} & & \multirow[t]{3}{*}{\begin{tabular}{l}
EUROBCDALLA \\
tallaganda
\end{tabular}} & & \multirow[t]{3}{*}{council council} & & 158．018 & 159．018 \\
\hline & 271 & & & & & 40，99C & 4C．99C \\
\hline & 271 & & & & & 198，998 & 198，998 \\
\hline & 273 & fega valley & & CCUACIL & & 153，200 & 183．29C \\
\hline & ミプ & gega valler & & OEPAOTMEV & & 15．961 & 15，961 \\
\hline & 272 & eega valley & & ccuncil & & 3，7C8 & ？．758 \\
\hline & 272 & EUROECOALLA & & ccuncil & & 25，045 & 25.045 \\
\hline
\end{tabular}

\section*{STATE ROADS SYSTEY - MAINTENANCE}




\section*{state roads systen - maintenance}

SOUFCE OF FUNDS



SCURCE Of fundos
\begin{tabular}{|c|c|c|c|}
\hline & ROAD & LCCAL GOVfrnment & area \\
\hline & 725 & Willoughey & \\
\hline total & 329 & & \\
\hline & 329 & CCONAEARAERAN & \\
\hline & 325 & WALGETt & \\
\hline & 3こ? & WALGETt & \\
\hline total & 828 & & \\
\hline & \(33:\) & SYDNEY & \\
\hline total & 375 & & \\
\hline & 731 & EERRIGAN & \\
\hline & 731 & COROWA & \\
\hline & 731 & CULCAIRN & \\
\hline & 331 & HOLRQCOK & \\
\hline & 371 & hume & \\
\hline total & 331 & & \\
\hline & 332 & HSRNSPY & \\
\hline total & ? 3 c & & \\
\hline & 537 & Walgett & \\
\hline & 333 & WARREN & \\
\hline TOTAL & 333 & & \\
\hline & 334 & COOLAH & \\
\hline & 334 & coonabaraeran & \\
\hline total & \% 34 & & \\
\hline & \(7 \times 5\) & WYONG & \\
\hline total & 335 & & \\
\hline & 336 & GCSFORD & \\
\hline & T36 & WYONG & \\
\hline
\end{tabular}



\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multirow[t]{2}{*}{ROAD} & local govervmeyt area & 'ACR'K CARRIED OUT EY & COMRONGEALTH & State & rotal \\
\hline & & & & 1 & \$ & 9 \\
\hline & 361 & KYoGLE & ccuncil & & 481.887 & 481,?87 \\
\hline & 761 & tenterfield & council & & 5,789 & 5,779 \\
\hline total & 361 & & & & 487.086 & 497.686 \\
\hline & 362 & tenteffifld & ccuncil & & 68.673 & 69,623 \\
\hline total & 762 & & & & 68.623 & 63,623 \\
\hline & 367 & BERRIGAN & ccuncil & & 22,224 & 22,226 \\
\hline total & \(36 ?\) & & & & 22,224 & 22,226 \\
\hline & 365 & hCrnsey & DEPARTMENT & & 95.20C & 95.200 \\
\hline & 366 & hornsey & ccuncil & & 1,504 & 1,504 \\
\hline & 366 & KU-RING-GAI & ccuicil & & 92,763 & 92,763 \\
\hline total & ? 66 & & & & 129.467 & 199,467 \\
\hline & \(? 67\) & Moree plains & council & & \[
210,991
\] & 215.961 \\
\hline TOTAL & 767 & & & & \[
210,801
\] & \[
210,891
\] \\
\hline & 769 & Bland & council & & 29,192 & 29,192 \\
\hline & 368 & CARRATHOOL & council & & 34.750 & 34.750 \\
\hline tCTAL & 565 & & . & & 63.942 & 62.942 \\
\hline & & & DEPAPTMENT & & 18,911 & \\
\hline & \[
368
\] & HUME & CCUNCIL & & 999 & 998 \\
\hline & ? 69 & & DEPAFTMENT & & 131.699 & 131.699 \\
\hline TOTAL & 364 & & & & 151.508 & 151.508 \\
\hline & & & & & & \\
\hline & 370 & HUME & ccuacil & & 13,545 & 13,545 \\
\hline & 370 & LCCKHART & ccuncil & & 64,451 & 64.451 \\
\hline & 775 & NARRANDERA & ccuacil & & 5,893 & 5.892 \\
\hline total & 370 & & & & 127.253 & 127,253 \\
\hline & ? 71 & ELAND & council & & 9,619 & 9,619 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multirow[t]{2}{*}{ROAD} & local goverament area & WCRK CARRIED OUT EY & conmonwealith & state & total \\
\hline & & & & 1 & \(\$\) & 8 \\
\hline & 371 & CARRATMOOL & CCUNCIL & & 3.595 & 3.595 \\
\hline & - 71 & LACHLAN & ccuncil & & 24.755 & 24.755 \\
\hline total & 771 & Lachlan & & & 37,969 & 37.969 \\
\hline \multirow[b]{2}{*}{total} & 573 & \multirow[t]{2}{*}{WInGECAORIEEE} & CCUNCIL & & 47,049 & 47.048 \\
\hline & 372 & & & & 47.048 & 47, 48 \\
\hline \multirow[b]{6}{*}{TOTAL} & 37 & HCRNSEY & DEPARTMENT & & 12,272 & 12,372 \\
\hline & 273 & Lane cove & Department & & 173,085 & 175.085 \\
\hline & 372 & Parravatta & DEPARTMENT & & 13.009 & 13,6C9 \\
\hline & 373 & RYDE & DEPARTMENT & & 6.531 & 6.531 \\
\hline & 372 & WILLOLGHEY & department & & 16.749 & 15.749 \\
\hline & \(37 \%\) & & & & 222,346 & 222,345 \\
\hline \multirow[b]{4}{*}{TOTAL} & 377 & Casonne & ccuncil & & 73,240 & 73.242 \\
\hline & 377 & fCREES & council & & 115.427 & 115.487 \\
\hline & 377 & Lachlan & ccuncil & & 58,433 & 58,433 \\
\hline & 377 & & & & 247,210 & 247,210 \\
\hline \multirow[b]{2}{*}{TOTAL} & 37\% & \multirow[t]{2}{*}{EELLINGEN} & cCuncil & & 846 & 946 \\
\hline & 370 & & & & 846 & 346 \\
\hline \multirow[b]{2}{*}{TOT4L} & & \multirow[t]{2}{*}{harden} & \multirow[t]{2}{*}{ccuncil} & & \[
\begin{aligned}
& 14,867 \\
& 14,967
\end{aligned}
\] & \[
\begin{aligned}
& 14,867 \\
& 14,867
\end{aligned}
\] \\
\hline & 370 & & & & 14,967 & \[
14,867
\] \\
\hline \multirow[b]{3}{*}{TOTAL} & & \multirow[t]{3}{*}{\[
\begin{aligned}
& \text { BCOROMA } \\
& \text { HARDEN }
\end{aligned}
\]} & & & 8,872 & \(8.8 \geq 2\) \\
\hline & 385 & & cCuncil & & 17.605 & 17.008 \\
\hline & 380 & & & & 26,44C & 26,44C \\
\hline \multirow[t]{3}{*}{total} & 391
3.34 & harden & CCUNCIL & & \[
\begin{aligned}
& 67,274 \\
& 97,274
\end{aligned}
\] & \[
\begin{aligned}
& 97,274 \\
& 97,274
\end{aligned}
\] \\
\hline & 382 & Glev lnves & cCuncil & & 3.0999 & 7.689 \\
\hline & 382 & INVERELL & council & & 35,901 & 35,101 \\
\hline
\end{tabular}







\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & ROAD & LCCAL GOVERNMENT AREA & WCRK CARAIED OUT ey & componhealth & state & roral \\
\hline & & & & 1 & 5 & \$ \\
\hline total & 518 & & & & 82.009 & 82,009 \\
\hline total & \[
\begin{aligned}
& 510 \\
& 519
\end{aligned}
\] & HAWKESBURY & CCUACIL & & \[
\begin{aligned}
& 67.244 \\
& 67.244
\end{aligned}
\] & \[
\begin{aligned}
& 67,244 \\
& 67,244
\end{aligned}
\] \\
\hline tCtal & \[
\begin{aligned}
& 520 \\
& 520
\end{aligned}
\] & OEERON & CCUNCIL & & \[
\begin{aligned}
& 132,125 \\
& 1 \geq 2,125
\end{aligned}
\] & \[
\begin{aligned}
& 132,125 \\
& 132,825
\end{aligned}
\] \\
\hline tOTAL & \[
\begin{aligned}
& 522 \\
& 522 \\
& 522 \\
& 522
\end{aligned}
\] & Shellharbcur WOLLOAGONG WOLLONGONG & \begin{tabular}{l}
ccuncil \\
CCUNCIL \\
DEPARTMENT
\end{tabular} & & \[
\begin{aligned}
& 53,509 \\
& 26,571 \\
& 13,921 \\
& 94,001
\end{aligned}
\] & \[
\begin{aligned}
& 53,509 \\
& 28,571 \\
& 12,921 \\
& 94,001
\end{aligned}
\] \\
\hline total & \[
\begin{aligned}
& 523 \\
& 523 \\
& 523
\end{aligned}
\] & LEICHHARDT SYDNEY & ccuncil council & & \[
\begin{array}{r}
52,007 \\
4,624 \\
56,631
\end{array}
\] & \[
\begin{array}{r}
52,007 \\
4,624 \\
53,631
\end{array}
\] \\
\hline total & \[
\begin{aligned}
& 524 \\
& 524
\end{aligned}
\] & EYRON & CCUNCIL & & \[
\begin{aligned}
& 64,509 \\
& 64,509
\end{aligned}
\] & \[
\begin{aligned}
& 64,509 \\
& 04.509
\end{aligned}
\] \\
\hline total & \[
\begin{aligned}
& 525 \\
& 525
\end{aligned}
\] & WARRINGAH & DEPARTMENT & & \[
\begin{aligned}
& 736,27 C \\
& 736,270
\end{aligned}
\] & \[
\begin{aligned}
& 736,270 \\
& 736,270
\end{aligned}
\] \\
\hline total & \[
\begin{aligned}
& 526 \\
& 526 \\
& 526
\end{aligned}
\] & CABONNE ORANGE & council council & & \[
\begin{array}{r}
115,090 \\
26,924 \\
142,026
\end{array}
\] & \[
\begin{aligned}
& 115,090 \\
& 26,934 \\
& 142,024
\end{aligned}
\] \\
\hline TOTAL & \[
\begin{aligned}
& 527 \\
& 527
\end{aligned}
\] & LAKE MaC Quarie & council & & \[
\begin{aligned}
& 92,070 \\
& 82,078
\end{aligned}
\] & \[
\begin{aligned}
& 82,078 \\
& 82,078
\end{aligned}
\] \\
\hline & 52? & SYONEY & CCUACIL & & 35.395 & 35.395 \\
\hline
\end{tabular}




eERRIEAN
TCTAL 564

565
565
MUDGEE
total
565

566
ecmbala
CuACIL

\section*{department \\ CCUNCIL}
cCuNCIL
TOTAL 567
\(56^{\circ}\)
TOTAL

TOTAL

570
570
570
TOTAL
57
plue mountains
HAWKE SBURY
PENRITH

57
57

57
5 572

CCUNCIL
CCUACIL

29,819
19,581
49.40C
\begin{tabular}{rr}
34,014 & 34,014 \\
34,014 & 34,016 \\
& \\
682 & 682 \\
682 & 682
\end{tabular}
\begin{tabular}{|c|c|}
\hline 13,201 & 13,201 \\
\hline 12.984 & 12.984 \\
\hline 7.4C9 & 7.409 \\
\hline 33,594 & 33,594 \\
\hline 95,566 & 95.566 \\
\hline 95,566 & 95, 566 \\
\hline 52.832 & 52.832 \\
\hline 52,832 & 52,832 \\
\hline 39,059 & 39,059 \\
\hline 49.868 & 49,862 \\
\hline 783 & 78. \\
\hline 89.710 & 89.710 \\
\hline 38,308 & 38,308 \\
\hline 38,308 & 38.308 \\
\hline
\end{tabular}
\begin{tabular}{rr}
5,671 & 5,671 \\
28.575 & 28,575 \\
34.246 & 34,246
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & \multirow[b]{2}{*}{ROAD} & \multirow[b]{2}{*}{lccal government} & & \multicolumn{2}{|l|}{State roads systen - malntenance} & \multicolumn{2}{|l|}{Ce SOURCE OF funds} \\
\hline & & & AREA & WCRK CAPRIED OUT PY & COMRONGEALTH & State & total \\
\hline \multirow[b]{5}{*}{total} & & & & & 1 & \(s\) & \(s\) \\
\hline & 573 & Cabonne & & CCUNCIL & & 17,843 & 17,943 \\
\hline & 573 & ORANGE & & ccuncil & & 9,223 & 9,233 \\
\hline & 573 & WELLINGTOK & & cCuncil & & ¢2,773 & 92,773 \\
\hline & 573 & & & & & 119.849 & 119,849 \\
\hline & 574 & Parravatia & & DEPARTMENT & & \[
55,862
\] & \[
55,802
\] \\
\hline total & 574 & & & & & \[
55,862
\] & \[
55,362
\] \\
\hline \multirow{4}{*}{TOTAL} & 575 & & & COUNCIL & & 116.695 & \\
\hline & 575 & HASTINGS & & OEPARTMENT & & 117.984 & \[
904
\] \\
\hline & 575 & & & & & 117.679 & 117.679 \\
\hline & & & & . & & & \\
\hline \multirow{4}{*}{tCTAL} & & ECOROMA & & & & & \\
\hline & 576 & COWRA & & CCUACIL & & \[
54,322
\] & \[
54,322
\] \\
\hline & 576 & & & & & 72,596 & 72,596 \\
\hline & - & & & & & & \\
\hline \multirow[t]{2}{*}{TOTAL} & \[
\begin{aligned}
& 577 \\
& 57 ?
\end{aligned}
\] & GROKEN HILL & & CCUNCIL & & \[
\begin{aligned}
& 0.714 \\
& 6.794
\end{aligned}
\] & \[
\begin{aligned}
& 6,714 \\
& 6,714
\end{aligned}
\] \\
\hline & & & & & & & \\
\hline \multirow[b]{2}{*}{TOTAL} & \[
578
\] & LIVERFOOL & & DEPMRTMENT & & \[
\begin{aligned}
& 32,110 \\
& \geq 2,910
\end{aligned}
\] & \[
\begin{aligned}
& 32,110 \\
& 32,110
\end{aligned}
\] \\
\hline & \[
572
\] & & & & & & \\
\hline total & \[
\begin{aligned}
& 575 \\
& 576
\end{aligned}
\] & PARRY & & council & & \[
\begin{aligned}
& 10,757 \\
& 16,757
\end{aligned}
\] & \[
\begin{aligned}
& 16.757 \\
& 16.757
\end{aligned}
\] \\
\hline \multirow[t]{2}{*}{total.} & 580
580 & GOSFORD & & cCuncil & & \[
\begin{aligned}
& 48,211 \\
& 48,211
\end{aligned}
\] & \[
\begin{aligned}
& 48,219 \\
& 49,211
\end{aligned}
\] \\
\hline & & & & & & & \\
\hline \multirow[t]{2}{*}{TOTAL.} & 531
531 & WOLLONGONG & & COUNCIL & & \[
\begin{aligned}
& 33,205 \\
& 33,205
\end{aligned}
\] & \[
\begin{aligned}
& 33,205 \\
& 33,205
\end{aligned}
\] \\
\hline & 532 & WOLLONGONG & & CCUACIL & ' & 1.254 & 1,256 \\
\hline
\end{tabular}
\begin{tabular}{rr}
32.642 & 32.442 \\
57.183 & 57.183 \\
13,399 & 13.309 \\
102.934 & 102,934
\end{tabular}

\section*{balganald}
balramald
balqakild

\section*{ccuncil}
ccuncil
\begin{tabular}{|c|c|}
\hline \[
\begin{aligned}
& 13,919 \\
& 35,926 \\
& 49,845
\end{aligned}
\] & \[
\begin{aligned}
& 13,919 \\
& 35,926 \\
& 49,845
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 66.604 \\
& 66.604
\end{aligned}
\] & \[
\begin{aligned}
& 66, \in 04 \\
& 66,604
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 61,310 \\
& 61,310
\end{aligned}
\] & \[
\begin{aligned}
& 61,310 \\
& 61,310
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 63,530 \\
& 25,501 \\
& 89,031
\end{aligned}
\] & \[
\begin{aligned}
& 63,530 \\
& 25,501 \\
& 89,031
\end{aligned}
\] \\
\hline \[
207
\] & 207 \\
\hline
\end{tabular}
\begin{tabular}{lr}
52.992 & 52.992 \\
2.035 & 2.035 \\
55.027 & 55.027 \\
& \\
334.358 & 334.358 \\
354.358 & 334.358 \\
& \\
23.842 & 23.842
\end{tabular}


\section*{state roads syster - vaintenance}

ROAO
LOCAL GOVERNMENT AREA
CRK GARRIED OUT E
COMMONWEALTH SOUFCE OF funds

TOTAL 602
WOLLONGONG
cuncil
STATE
\(\$\)
7.1?7
7.137
\begin{tabular}{ll}
6,473 & 6,473 \\
6,473 & 6,473
\end{tabular}

13,060
13,060
13,060
13.060
\begin{tabular}{|c|c|}
\hline \[
\begin{aligned}
& 41,653 \\
& 41,623
\end{aligned}
\] & \[
\begin{aligned}
& 41,683 \\
& 41,683
\end{aligned}
\] \\
\hline 13,954 & 13.954 \\
\hline 13,954 & 13,954 \\
\hline 95.020 & 95,020 \\
\hline 95,020 & 95,020 \\
\hline 27.585 & 27,595 \\
\hline 27,585 & 27,535 \\
\hline 21.178 & 21.178 \\
\hline 21,178 & 21,178 \\
\hline 123,788 & 123.738 \\
\hline 123.788 & 123.738 \\
\hline \[
78.669
\]
\[
78.669
\] & \[
\begin{aligned}
& 78,600 \\
& 78,669
\end{aligned}
\] \\
\hline
\end{tabular}



\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multirow[t]{2}{*}{ROAD} & lccal goverament area & WCRK CARRIED OUT EY & commonmealth & state & total \\
\hline & & & & 1 & 5 & \(s\) \\
\hline & 2032 & ROCKDALE & ccuncil & & 10,856 & 10,856 \\
\hline TOTAL & 2032 & & & & 10,856 & 10,256 \\
\hline & 2033 & huntefs hill & council & & 89,938 & 89.088 \\
\hline & 20?3 & RYDE & council & & 10,28 & 10,283 \\
\hline toral & 203? & & & & 100,271 & 109,271 \\
\hline & 2034 & Sutherlano & council & & 31.972 & 31.972 \\
\hline & 2034 & SUTHERLANE & DEPARTMENT & & 181 & 181 \\
\hline total & 2034 & & & & 32,153 & 32.152 \\
\hline & 2035 & hornsey & COUNCIL & & 21.824 & 21.826 \\
\hline TOTAL & 2035 & & & & 21,824 & 21,826 \\
\hline & & MCSMAN & council & & & \\
\hline & \[
2036
\] & NORTH SYONEY & ccuncil & & \[
13,954
\] & \[
13.956
\] \\
\hline TOTAL & 2036 & & & & 21.500 & 21, 500 \\
\hline & 2039 & etue mountains & council & & 65,008 & 65,008 \\
\hline TOTAL & 2739 & & & & 65,008 & 65,008 \\
\hline & 2040 & ASHFIELO & council & & 1.c91 & 1.081 \\
\hline & 20.40 & CANTERSURY & ccuncil & & 5.783 & 5,793 \\
\hline total & 2340 & & & & 6,264 & 6,866 \\
\hline & 2041 & hurstille & ccuncil & & 110,798 & 110.798 \\
\hline & 2341 & RCCKDALE & council & & 16,398 & 16,398 \\
\hline TOTAL & 2341 & & & & 127,196 & 127,196 \\
\hline & 2042 & LEICHHAPD & ccuncil & & 6,976 & \[
6,970
\] \\
\hline total & 204? & & & & 6,976 & \[
6,976
\] \\
\hline
\end{tabular}

\begin{tabular}{|c|c|}
\hline state & TOTAL \\
\hline s & 3 \\
\hline \[
\begin{aligned}
& 6,035 \\
& 6,0 \geq 5
\end{aligned}
\] & \[
\begin{aligned}
& 6.035 \\
& 6.035
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 1.934 \\
& 1.934
\end{aligned}
\] & \[
\begin{aligned}
& 1,934 \\
& 1,934
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 12,089 \\
& 12,089
\end{aligned}
\] & \[
\begin{aligned}
& 12,089 \\
& 12,089
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 17.453 \\
& 17.453
\end{aligned}
\] & \[
\begin{aligned}
& 17,453 \\
& 17,453
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 33,008 \\
& 33,008
\end{aligned}
\] & \[
\begin{aligned}
& 33,008 \\
& 33,008
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 3,0 \leq 8 \\
& 5,731 \\
& 8,789
\end{aligned}
\] & \[
\begin{aligned}
& 3,058 \\
& 5,731 \\
& 8,789
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 47,840 \\
& 12,279 \\
& 60,819
\end{aligned}
\] & \[
\begin{aligned}
& 47,840 \\
& 12,279 \\
& 60,719
\end{aligned}
\] \\
\hline \[
\begin{array}{r}
26,8 \geq 5 \\
7.583 \\
34,498
\end{array}
\] & \[
\begin{array}{r}
26,835 \\
7,582 \\
34,418
\end{array}
\] \\
\hline \[
\begin{aligned}
& 21.416 \\
& 9,951- \\
& 11,465
\end{aligned}
\] & \[
\begin{aligned}
& 21,416 \\
& 9,951- \\
& 11,465
\end{aligned}
\] \\
\hline 31.962 & 31,962 \\
\hline
\end{tabular}

\section*{STATE ROADS SYSTEM - MAINTENANCE}

SCUGCE OF FUNDS

ROAD LOCAL GOVERNMENT AREA

TOTAL 205

2050
. 59
TOTAL 2.75

2060
TOTAL 2060

2061
TOTAL 2961

2063
2963
TCTAL 2063

2064
TOTAL 2064

2065
TOTAL 206

2066 TCTAL \(\begin{aligned} & 2368 \\ & 2060\end{aligned}\)

2069 TOTAL 2069

PENRITH

ASHFIELO

ASHFIELD
CONCORD DRUMMCYVE
canteraury

GANKSTOWN

\section*{parramatta}
parravatta

BANKSTOWN

AUBURN

WCRK CARRIED OUT EY COMPONHEALTH 1

STATE
\(s\)
31,962
\begin{tabular}{ll}
4,465 & 4,465 \\
3,414 & 3,414 \\
7,879 & 7,879 \\
& \\
& \\
6,668 & 6,668 \\
6,668 & 6,668 \\
& \\
& \\
30,277 & 36,277 \\
36,277 & 36,277
\end{tabular}
council
ccuncil
council

CCUNCIL
council

COUNCIL
DEPARTMENT
council
cCuncIl
total
5
31,962
council
council
ccuncil

COUNCIL
30,277
36,277
36,277
\begin{tabular}{rr}
8,733 & 8,733 \\
34,504 & 34,504 \\
43.237 & 43,237
\end{tabular}
\begin{tabular}{ll}
1.437 & 1,437 \\
1.437 & 1.637
\end{tabular}
\begin{tabular}{ll}
1,461 & 1,461 \\
1,461 & 1,461
\end{tabular}
\begin{tabular}{ll}
16,063 & 16,063 \\
16,062 & 16,063
\end{tabular}
16,063 16,063
\begin{tabular}{ll}
11.870 & 11.870 \\
11.870 & 11.870
\end{tabular}
\begin{tabular}{ll}
11.870 & 11.870 \\
11.870
\end{tabular}
SCURCE OF FUNDS








ROAD
local government area

TOTAL 4046
 SOUACE OF funds
\begin{tabular}{|c|c|c|}
\hline COMMOALEALTH & STATE & total \\
\hline \multirow[t]{4}{*}{9} & 5 & \$ \\
\hline & 10.635 & 10.635 \\
\hline & \[
\begin{aligned}
& 1,747 \\
& 1.747
\end{aligned}
\] & \[
\begin{aligned}
& 1,747 \\
& 1,747
\end{aligned}
\] \\
\hline & \[
\begin{aligned}
& 4,732 \\
& 4,732
\end{aligned}
\] & \[
\begin{aligned}
& 4,732 \\
& 4,732
\end{aligned}
\] \\
\hline - & \[
\begin{aligned}
& 1,182 \\
& 1,182
\end{aligned}
\] & \[
\begin{aligned}
& 1,182 \\
& 1.182
\end{aligned}
\] \\
\hline & \[
\begin{aligned}
& 24,3.9 \\
& 29,719 \\
& 54,049
\end{aligned}
\] & \[
\begin{aligned}
& 24,330 \\
& 29,719 \\
& 54,749
\end{aligned}
\] \\
\hline & \[
\begin{aligned}
& 5,233 \\
& 5,233
\end{aligned}
\] & \[
\begin{aligned}
& 5.233 \\
& 5.233
\end{aligned}
\] \\
\hline & \[
\begin{aligned}
& 1,275 \\
& 1,275
\end{aligned}
\] & \[
\begin{aligned}
& 1,275 \\
& 1,275
\end{aligned}
\] \\
\hline & \[
\begin{aligned}
& 12,730 \\
& 12,7 \geq 0
\end{aligned}
\] & \[
\begin{aligned}
& 12.730 \\
& 12.730
\end{aligned}
\] \\
\hline & \[
\begin{aligned}
& \epsilon 2,8 \in 8 \\
& 62,868
\end{aligned}
\] & \[
\begin{aligned}
& 62.268 \\
& 62.869
\end{aligned}
\] \\
\hline & \[
\begin{aligned}
& 72,850 \\
& 72,850
\end{aligned}
\] & \[
\begin{array}{r}
72.850 \\
72.850
\end{array}
\] \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline WCRK CARRIED OUT EY & COMMONWEALTH & STATE & total \\
\hline & 1 & s & 5 \\
\hline DSPARTMENT & & \[
\begin{aligned}
& 5,789 \\
& 5,759
\end{aligned}
\] & \[
\begin{aligned}
& 5,789 \\
& 5,789
\end{aligned}
\] \\
\hline DEPARTMENT & & \[
\begin{aligned}
& 29,575 \\
& 29.535
\end{aligned}
\] & \[
\begin{aligned}
& 29.535 \\
& 29.535
\end{aligned}
\] \\
\hline DEPARTMENT & & 11,6t1 & 11,601 \\
\hline depagtment & & 19,632 & 19,632 \\
\hline DEPARTMETH & & 80,419 & 80,419 \\
\hline DEPARTMENT & & 8,438 & 8,438 \\
\hline DEPARTMENT & & 7.5C2 & 7, 502 \\
\hline DEPARTMENT & & 9,342 & 9,342 \\
\hline DEPARTMENT & & 63,834 & 68,834 \\
\hline DEPAQTMENT & & 10,421 & 10,421 \\
\hline cluncil & & 1.611 & 1.681 \\
\hline depaftuent & & 60,382 & 60,382 \\
\hline department & & 166,071 & 166.071 \\
\hline DEPARTMENT & & 16.746 & 16.146 \\
\hline DEPARTMENT & & 15.469 & 15,469 \\
\hline DEPARTMENT & & 33,71t & 33,716 \\
\hline DEPARTMENT & & 1.094 & 1,084 \\
\hline CCUNCIL & & 38,473 & 38,473 \\
\hline DEPARTMENT & & 26,962 & 36,862 \\
\hline department & & 1,051,502 & 1,051,502 \\
\hline departuent & & 20,308 & 20,368 \\
\hline DEPARTMENT & & 5,907 & 5,907 \\
\hline DEPARTMENT & & 80.489 & 8C,419 \\
\hline department & & \[
310.771
\] & 310.771 \\
\hline department & & 360.000
1.577 .142 & 360,000
\(1.577,142\) \\
\hline DEPARTMENT & & 352,367 & 352,367 \\
\hline DEPARTMENT & & 44,773 & 46,77? \\
\hline CEUACIL & & 1.182 & 1,182 \\
\hline department & & 246,894 & 246,804 \\
\hline DEPARTMENT & & 204,178 & 204,179 \\
\hline DEPARTMENT & & 28,258 & 29,258 \\
\hline department & & 39,603 & 39.603 \\
\hline council & & \[
\begin{array}{r}
108.628 \\
5,010.965
\end{array}
\] & \[
\begin{array}{r}
109,628 \\
5,010,965
\end{array}
\] \\
\hline
\end{tabular}

EXPENDITURE FROM FUNDS PROVIDED EY:

ROAD CLASSIFICATION

FREEWAY
STATE HIGHWAYS
trunk rcads
MAIN ROADS
other roads

SUB-TCTALS
maintenance of zand acguired FOR FUTURE WORKS

TRAFFIC GOUTE LIGHTING SUESID
ENFCRCEMENT OF ORDINANCE \(30 C\)
OF LOCAL GOVERNMENT ACT (NET EXPENOITURE)
miscellaneous expenditure
final totals
§

2,15\%,12:
15.239 .266

9,202
\(17,405,785\)
\(147,196,104\)
150.292

555,209
\(5,079,6 \in 1\)
12.323
193.383.647
150.292

TOTAL
\(\$\)

5, C65,525
7?,555.?8:
16,513,833
61,497, t4t
7.964.307

164,591,397

955,209
\(5,079,661\)
12.303
17. \(0.789,438\)
traffic signals and other facilities - all roads
APPENDIX 8.1 .0001
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline ROAD & LOCAL GOVT & area & \[
\begin{array}{r}
\text { LOCATION } \\
\text { DESCRIPTION }
\end{array}
\] & \begin{tabular}{l}
OF WORK \\
OF HORK
\end{tabular} & \[
\begin{aligned}
& \text { CONST } \\
& \text { AUTH }
\end{aligned}
\] & \[
\begin{gathered}
\text { NAASRA } \\
\text { RD CL }
\end{gathered}
\] & COM \({ }^{\text {alth }}\) & \[
\begin{aligned}
& \text { SOURCE OF } \\
& \text { STATE }
\end{aligned}
\] & FUNDS LOANS & TOTAL \\
\hline CONS & RUCTION WCR & crs frebays & & & & & \(s\) & \$ & \$ & 3 \\
\hline f1 & \[
\begin{aligned}
& \text { SYDNEY } \\
& \text { CLOSED }
\end{aligned}
\] & SYONEY & harbour brioge ON SURVEILLANCE & & DEPT & 6 & & 3,580 & & 3.580 \\
\hline \(F 1\) & \[
\begin{aligned}
& \text { SYONEY } \\
& \text { ORIVEA }
\end{aligned}
\] & \begin{tabular}{l}
SYDNEY \\
AID SCHEME
\end{tabular} & harbour bridge & & DEPT & 6 & & 317.484 & & 317,484 \\
\hline & TOTAL & 11 & & & & & & & & 321,064 \\
\hline & TOTAL & & freeways & & & & & 321,064 & & 321,064 \\
\hline
\end{tabular}



TRAFFIC SIGNALS AND OTHER FACILITIES - ALL ROADS
APPENOIX 8.1 .0004
hoad local govt area

LOCATION OF VCRK DESCRIPTION OF WCAK

STATE HIGHAKS (CONTOD)
5 PENRITH GREAT WESTERN HIGHUAY E HEWITT ST, COLYTON installation of traffic signals

TOTAL 5
7 BOGAN MITCHELL HIGHBAY 8 OLD WARREN RD. NYNGAN IMPR OVEMENT 10 EXISTING Y JUNCTION

7 BOGAN MITCHELL HIGHMAY \& FORD ST, NYNGAN
ROAD ClOSURE
7 DUSBO
COERA ST \& DARLING ST, DUGBO LEft TURM LANE

FITZROY ST \& COBRA ST, DUEEO FITZROY ST \(\&\)
PROVISION OF CENTRAL MEDIANS

COUNCIL 1
CONST NAASRA
AUTH RDCL COR YLTH CONSTRUCTION HCRKS
\(\square\)
3 .

DEPT 6
\(s\)
26.875 fUNDS
LOANS

TOTAL 7
MINOR IMPROVEMENTS COUACIL \(1 \quad 2 C, 039\)
20.039

9 ARMIDALE NEH ENGLAND HIGHWAY, DANGAR ST \& GARNEY ST, ARMIDALE
ROUNDABOUT
NEW ENGLAND HIGHWAY, Dangar st \& Barney St. armidale council
COUNCIL 121.293
8,786
\begin{tabular}{lll} 
COUnCIL 1 & 8,786 & 8,786 \\
COUNCIL 7 & 7,238 & 7,238
\end{tabular}
```

RMIDALE

```

ROUNDABOUT
MARSH St \(\&\) duraresa St, armidale
COURCIL 153.466
21,293
53.466

21,940
21.940

RECONSTRUCTION OF SIGNALS
DEPT S
MUSAELLERCOK NEY ENGLAND HJGHYAY \& SYDNEY ST, MUSWELLBROOK SIGNALS

DEPT 1
2,593
9. MUSWELLBRCOK NEH ENGLAND HIGHHAY \& SYDNEY St, muSHELLBROOK SIGNALS

NEY ENGLAND HIGHWAY 8 SYDNEY ST, MUSUELLBROOK DEPT 1
NEW ENGLAND HIGHUAY, GOONOO GOONOO RD S SCOTT RD, TAMYORTH
9 TAMLORTH \(\quad\) ROUNDAEOUT
INTERSECTION CF GOONOO RD \& SCOTT RD, TAMLORTH
council 1
92,634
948
848

9 TAMLORTH \(\begin{aligned} & \text { ROUN DAgOUT }\end{aligned}\)
BNTERSEGTION CF GOONOO RD \& SCOTT RD, TAMLOATH
122,247
122,247
TOTAL 9
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline ROAD & local govt area & LOCATION OF WORK DESCRIPTION OF WCRK & CONST N AUTH & NAASRA RO CL & COM \({ }^{\text {chith }}\) & \[
\begin{aligned}
& \text { SOURCE OF } \\
& \text { STATE }
\end{aligned}
\] & FUNDS LOANS & total \\
\hline CONS 1 & TRUCTION WCRKS State h & HIGHMAYS (CONT0] & & & 5 & \$ & \$ & \$ \\
\hline 10 & COFES HAREOUR RE CONSTRUCTION O & SH10, ORLANDO SI \(\varepsilon\) bray St, CCffs harbour of SIGVALS & DEPT & 1 & & 60.341 & & 80,341 \\
\hline 10 & great lakes PROVISION OF BUS & PaCIfIC hIghway at St josephs school bulahdelah S STOPPING AREA & COUACIL & 11 & & 10,668 & & 10,668 \\
\hline 10 & \begin{tabular}{l}
LAKE MACQUARIE \\
CHANNELISATION O
\end{tabular} & PACIfIC HIGHWAY 8 MARKS PCINT RD, MARKS PCINT OF INTERSEGTIOA & DEPI & 6 & & 49.118 & & 49,118 \\
\hline 10 & Lake mac quarie traffic signals & pacific mighuar s maude st, eelmont & DEPT & . 6 & & 46.177 & & 46.177 \\
\hline 10 & NE HCASTLE SIGNAL RECONSTRUC & KING St 8 UNICN ST, NEHCASTLE UCTION & DEPT & 6 & - . & 1.591 & & 1.591 \\
\hline 10 & \begin{tabular}{l}
NEWCASTLE \\
traffic signals
\end{tabular} & MAITLAND RO \& HUBBARD ST. ISLINGTON & DEPT & 6 & & 48.978 & & 48.978 \\
\hline 10 & \begin{tabular}{l}
HYONG \\
Channelisation
\end{tabular} & SH10 RIVER KD, WYONG & COUNCIL & L 6 & & 12,245 & & 12,245 \\
\hline & TOTAL 10 & & & & & & & 229.118 \\
\hline 11 & \begin{tabular}{l}
WARREN \\
PEDESTRIAN GRADE
\end{tabular} & APPROACH TO BEIDGE OVER MACQUAKIE RIVER XARREN E SEPRAATICN & council & 11 & & 8,786 & & 8,786 \\
\hline & TOTAL 11 & & & & & & & 8.786 \\
\hline 16 & LISMORE ROUNDABOUT & UNION ST 8 ELLIOT RD, LISMORE & COUNCIL & 12 & & 49,091 & & 49.091 \\
\hline & TOTAL 16 & & & & & & & 49,091 \\
\hline 17 & DUEEO SIGNALS & DARLING ST \& EINGEWARRA ST, OUSEO & OEP \({ }^{\text {d }}\) & 1 & & 136.515 & & 136,515 \\
\hline 17 & MOREE PLAINS SIGNALS & BALO St \% heber st. MOREE & DEPT & 1 & & 47.257 & & 47.257 \\
\hline 17 & marrabri IMPROVEMENT OF & 40. 1 KM NORTH OF NARRAERI INTERSECIION & council & 11 & & . 25.981 & & 25.981 \\
\hline 17 & \begin{tabular}{l}
Parkes \\
WIDENING
\end{tabular} & railuay level crossing c.es kr south of parkes & DEP \({ }^{\text {I }}\) & 6 & & 214.542 & & 214,542 \\
\hline
\end{tabular}





traffic signals and other facilities - all roads




\section*{traffic sienals and other facilities - all roads}


CONSTMAASRA
AUTH RDCL COM WLTH SOURCE
STATE
OTHER ROADS (CONTCD)
 fUNDS
LOANS TOTAL

TOTAL 2058
\(s\)
s
oans
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & TOTAL 2058 & & & & & 29.369 \\
\hline 2059 & CONCORD RECONSTRUCTION & GURUOOD RD GIPPS ST. CONCCRD OF SIGNRLS & DEPT & 7 & 38,906 & 38,106 \\
\hline & TOTAL 2059 & & & & & 38.106 \\
\hline 20 ts & ASHFIELD SIGNALS & NORTOM ST 2 HCLDENST, ASHFIELD & DEP 1 & 7 & 17.656 & 17.656 \\
\hline & TOTAL 2065 & & & & & 17.656 \\
\hline 2066 & parranatta RECONSTRUCTION & ó connell st f argyle st. pabramatia OF SIGNALS & DEP \(T\) & 8 & 8.377 & 8,377 \\
\hline 2066 & parramatta RECOMSTRUCTION & maceuarie st \(80^{\circ}\) connell st, farramatta Cf SIENALS & DEPI & 7 & 9,538 & 9.538 \\
\hline 2066 & parramatta SIGNALS & \(0^{\circ}\) Connell st 8 george st, pagramatta & DEP1 & 7 & 10,487 & 10.487 \\
\hline 2066 & Parramat ta RECONSTRUCTION & macquarie st \(80^{\circ}\) connell st. parramatta OF SIGARLS & DEPI & 7 & 29,898 & 29,898 \\
\hline & TOTAL 2066 & & & & & 58,300 \\
\hline 2069 & AUBURN SIGNALS & raus Cn st, the crescent, \(\%\) SCuth parade, auburn & DEP \({ }^{\text {I }}\) & 7 & 36,012 & 36,012 \\
\hline & TOTAL 2069 & & & & & 36,012 \\
\hline 2070 & NORTH SYDNEY SIGNALS & RIVER RD \& SHIRLEY RD, CrCus mest & DEP 7 & 7 & 37.382 & 37,382 \\
\hline & TOTAL 2070 & & & & & 37.382 \\
\hline 2071 & FAIRFIELD SIGNALS & canley yale ro 8 camerideg st, canley vale & DEPT & 6 & 4.402 & 4,402 \\
\hline & TOTAL 2071 & & & & & 4,402 \\
\hline
\end{tabular}



CONST NAASRA
AUTH RD CL COM HLTH SOURCE
STATE FUNDS STATE LOANS total

ROAD LOCAL GOVT AREA CONSTRUCTION NCRKS

\section*{OTHER ROADS (CONI'D)}
 COMP:ETION OF SIGNPOSTING
```

BOGAN
SCHOOL BUS BAYS

```

GOGAN ST \& HARREN ST, NYNGAN
BRENARRINA ALL CONTRCLLEC 4 -WAY INTEGSECIIONS COMPLETION OF SIGNPOSTING
BROKENHILL WILLIAMST \& CXIDEST, BRCKEN HILL ROUNDAEOUT

CAMDEN
ROUNDABOUT
MDEN
ROUN DABOUT
CAMPBELLTCWN ROUN DAEOUT
campeelliche SIGNALS

CAMPBELLTCUN SIGNALS HAROLO ST \& RCSEWOGO DR, MACGUARIE FIELDS NCORD

BROUGHTON ST 8 GIPPS ST, CONCCRD TRAFFIC SIGNALS

UNCONTROLLED INTERSECTIONS OA RURAL LOCAL ROADS COMPLETION OE SIGNPOSTING
densliguin uncontrole id intersections on local roads SIGNPCSTING fOR INTERSECTION CONTROL

DENILIQUIA DENILIQUIN TOGN GYPASS SIGNPCSTING 8 INTERSECTION IRFROVEMENT

HANGING ROCK TO CORRIGAHS EEAGH RESERVE, EATEMANS BAY
COUACIL 4

DEPT 7

DEPT?council 4
    eIKEHAY
faIRFIELD
        SIGNALS

NELSON ST. BAGBARA ST S STATICN ST; FAIRFIELD SIGNALS
faIRFIELD Sackyille st 8 canley vale go, canley vale RECONSTRUCTION CF SIGNALS - BLACKSPOT

2,58124,42918.40418,4048.005
traffic signals and other facilities - all rcads

ROAD LOCAL GOVT AREA
CONSTRUCTION WCRKS
OTHER ROADS (CONT'D
```

fAIRfIELD
ROUNDABOUT

```
FAIRFIELD
ROUNDAEOUT
falrfield
    ROUNDABOUT
FAIRFIELD
    SIGNALS
FAIRFIELD VARIOUS LOCATIONS
    MINOR RECONSTRUCTION WORKS
FAIRFIELD VARIOUS LCCATIONS
    PROVISION OF SKID RESISTANCE
resistance
    MIMOR RECONSTRUCTION UORKS DEPT 8
GOSFORD GLACKWALL RD 8 ORANGE GROVE GD, BLACKLALL
    IMPROVEMENT OF INTERSECTION
GREATER LITHGOH MAIN ST \& ESXEANK ST. LITHGOI
    RECONSTRUCTION OF SIGNAL
GREATER TAREE
ROUNDABOUT \(\quad\) MULDCON ST, CCHPER ST, MILLIGAN ST \& KOROAGA DR, TAREE
    CONCRETE TRAFFICISLANDS AT COUACIL 4
HASTINGS BRIDGE ST LCRD ST, PORT MACGUARIE
    ROUN DABOUT
HOLROYD
    SIGNALS
HOLROYD
    HAWKESVIEL RD \& FOULER RD, MERRYLANDS
HORNSBY SUTHERLAND RD \& EEECROFT RD, EEECROFT
    PEDESTRIAN REFUGE ISLAND
hO RNSEY
    various locations
    INTERSECTION IMPROVEMENTS
DESCRIPTIOR OF HORX
glad St One st \& st john's rd, cagramatta
hamilton rd, york st b earbaba st, fairfield
EDENSOR RD\& HUMPHRICS RD, ECANYRIGG

FAIRFIELD ST CFf-RAMP FROM FAIRFIELD OUERERIDGE
UARIOUS LOCATIONS
MINOR RECONSTRUCTION WORKS PROVISION OF SKID RESISTANCE

VARIOUS LCCATIONS

GLACKWALL RD 8 ORANGE GROVE GD, BLACKHALL IMPROVEMENT OF INTERSECTION
```

greater taree winter st at manning st \& at fulténey st, taree

```

GRIDGE ST 8 LCRD ST, PORT MACGUARIE

CORNELIA RD \& RAILWAY OVERBRIDGE, TOONGABEIE

COUACIL 4

TABEE
COUNCIL 4
COUACIL 5
DEPT 7
COUACIL 8

SOURCE OF FUNOS
\(\$\)

28,064
3
\(s\)

COUACIL 8
28,064

44,920
44,920

39,096
39,096
11.383

11,388

182,158
182.158
68.705

68,705
7.820
7.820
1.490

1,490
1.441
1.441

74,202
74,202

4,703
4.703

110,104
110.904
\(-972\)
\(-972\)

13,600
13,600

2,282

COUNCIL 7
26,540
26.540

traffic signals and other facilities - all roados


\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{CONST matsra} & SOURCE OF & FUNDS & \\
\hline \multirow[t]{2}{*}{AUTH} & \multirow[t]{2}{*}{RD CL} & COM'wlin & State & LOANS & TOTAL \\
\hline & & \$ & \(s\) & 3 & \(s\) \\
\hline COUACIL & 4 & & 7,951 & & 7,951 \\
\hline council & 8 & & 22,573 & & 22.573 \\
\hline \(D E P T\) & 6 & & 27,081 & & 27,081 \\
\hline DEPT. & 8 & & 310,612 & & 310,612 \\
\hline DEPT & 6 & & 119.884 & & 119,884 \\
\hline DEPT & 6 & & -8,675 & & -8,675 \\
\hline council & 8 & & 163.132 & & 163,132 \\
\hline council & 4 & & 5,562 & & 5.562 \\
\hline DEP T & 6 & & 32,397 & & 32,397 \\
\hline DEPT & 6 & & 29.632 & & 29.632 \\
\hline DEPT & 6 & & 32,006 & & 32,006 \\
\hline OEP 7 & 7 & & 35,344 & & 35.344 \\
\hline DEPT & 8 & & 53.619 & & 53.619 \\
\hline DEPT & 8 & & 40,924 & & 40.924 \\
\hline council & 4 & & 38.518 & & 38.518 \\
\hline council & 7 & & 5.468 & & 5,468 \\
\hline
\end{tabular}




\section*{OPERATION OF DRIVER AIO AND TOU SERYICES}

APPENDIX 8.2.COO1


1. Roads which are the responsibility of the Department of main Roads -
(a) Where work was carried out by the Department -
\begin{tabular}{|c|c|c|c|}
\hline Freeways & 100 & 101 & 201 \\
\hline State Highways & 309 & 8,894 & 9,203 \\
\hline Trunk and Ordinary Main Roads other than the County of Cumberland & - & 427 & 427 \\
\hline Ordinary Main Roads in the County of Cumberland & 732 & - & 7.32 \\
\hline \multicolumn{4}{|l|}{Unincorporated areas of the Western Division} \\
\hline Trunk and Ordinary Main Roads & - & 680 & 680 \\
\hline Unclassified Roads & - & 2,489 & 2,489 \\
\hline \multicolumn{4}{|l|}{here work was carried out for the Department by Councils -} \\
\hline State Highways & 6 & 1,055 & 1,061 \\
\hline Ordinary Main Roads in the County of Cumberland & 3.72 & - & 372 \\
\hline
\end{tabular}
2. Roads which are the responsibility of Councils wholly financed by the

Department of Main Roads -
Trunk and Ordinary Main Roads other than in the County of Cumberland
\begin{tabular}{lll}
- & \(\frac{23,239}{23,239}\) \\
\hdashline & - & \\
\hline
\end{tabular}
* County of Cumberland refers to the area defined in Part IV Section 9 of the Main Roads Act, 1924

Excludes Secondary, Tourist, Developmental Roads and Unclassified Roads in incorporated area.
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APPENDIX NO. }

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DISTANCES OF FREEWAYS, STATE HIGHWAYS, TRUNK ROADS, ORDINARY ROADS SECONDARY ROADS, TOURIST ROADS AND DEVELOPMENTAL ROADS
IN NEW SOUTH WALES FOR THE FIVE YEARS ENDED 30 JUNE 1984


\section*{SLMMARY Of EXPENDItURE - Traffic SIGNALS AND Other facilities}

ROAD CLASSIFICATION
\begin{tabular}{|c|c|c|c|c|}
\hline ROAD Classification & COMmOAWEALTH & state & LOANS & total \\
\hline & 3 & 5 & \$ & s \\
\hline \multicolumn{5}{|l|}{CONSTRUCTION} \\
\hline freebays & & 321.064 & & 321.064 \\
\hline State hightars & 273.174 & 1.993.391 & & 2,266,565 \\
\hline trunk roads & & 460.966 & & 460.966 \\
\hline main rcads & & 2,373,503 & & 2,373,503 \\
\hline other rcads & & 6,474,164 & & 6,474,164 \\
\hline SUE TOTALS & 272.174 & 11,623,089 & & 11.896,262 \\
\hline \multicolumn{5}{|l|}{MAINTENANCE 8 OPERATION} \\
\hline \begin{tabular}{l}
ROADMARKING \& SIGNPOSTING - DEPARTMENT \\
- COUACIL
\end{tabular} & \[
\begin{array}{r}
2.247 .467 \\
22.29 \mathrm{C}
\end{array}
\] & \[
\begin{array}{r}
15,479,843 \\
2,657,043
\end{array}
\] & & \[
\begin{array}{r}
17.727,310 \\
2.679,333
\end{array}
\] \\
\hline SIGNALS \begin{tabular}{ll} 
- DEPARTMENT \\
& - COURCIL
\end{tabular} & \[
\begin{array}{r}
58,644 \\
143,914
\end{array}
\] & \[
\begin{array}{r}
12.601,927 \\
412.427
\end{array}
\] & & \[
\begin{array}{r}
12,600,471 \\
556,341
\end{array}
\] \\
\hline DRIVER AID \begin{tabular}{l} 
- DEPARTMENT \\
\\
\\
\end{tabular} & & 2,291,975 & & 2,391,975 \\
\hline SUB totals & 2.472 .315 & 33.543 .115 & & 36,015,430 \\
\hline FINAL TOTALS & 2,745,489 & 45,960,203 & & 47.911.692 \\
\hline
\end{tabular}


FINAL TOTALS
EXPENOITURE FRCM FUNOS PROVIOEDEY:
maintenance and operation
ROADMARKING © SIGAFOSTING SIGNALS national roads other roads \(s\) s s


\section*{yallaroi}

\section*{YARROWLUMLA}
4.487
9.891
4.487
vass
4.263

9,851
roung
11.435

14,519

traffic signals and other facilities - all hcads
maintenance and operation
\begin{tabular}{|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{ROADMARKING \& SIGNFOSTING} & \multicolumn{2}{|c|}{SIGNALS} & \multirow[t]{2}{*}{total} \\
\hline WORK BY COUNCILS & NATIONAL ROADS & OTHER ROADS & NATIONAL ROADS & OTHER ROADS & \\
\hline & \$ & 5 & \(\$\) & \$ & 5 \\
\hline tallaganda & & 20,583 & & & 20,583 \\
\hline TAPWORTH & 22,290 & 19.249 & & 3.093 & 44.632 \\
\hline TEMORA & & 1,363 & & & 1,363 \\
\hline tenterfielo & & 4,547 & & & 4.547 \\
\hline tumbarumba & & 2.731 & & & 2.731 \\
\hline tumut & & 13.147 & & 86 & 13.233 \\
\hline TWEED & - & 28,532 & - & 13,503 & 42.035 \\
\hline UL MARra & & 2,860 & & & 2,860 \\
\hline uralla & & 12,406 & & & 12,4c6 \\
\hline UR ANA & & 2,253 & & & 2,253 \\
\hline HAGGA UAGGA & & 44.326 & & 29,525 & 73.851 \\
\hline HAKOOL & & 28,634 & & & 28.634 \\
\hline Halcha & & 3.450 & & & 3.450 \\
\hline Walgett & & 31.101 & & & 31.1C1 \\
\hline Warren & & 11.894 & & & 11.894 \\
\hline UEDDIN & & 10.134 & & & 10.136 \\
\hline WELLINGTON & & 25.287 & & & 25.287 \\
\hline WENTHORTH & & 9,557 & & 1.370 & 10,927 \\
\hline windouran & & 619 & & & 699 \\
\hline HINGECARRIBEE & & 72.482 & & & 72,482 \\
\hline HOLLONDILLY & & 30,318 & & & 30,318 \\
\hline WOLLONGONG & & 5.610 & - & & 5.610 \\
\hline UYON6 & & 483 & 7,809 & Po568 & 9.860 \\
\hline
\end{tabular}
traffic signals and other facilities - all boads
maintenance and operation
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{3}{*}{WORK EY COUNCILS} & \multicolumn{2}{|l|}{ROADMARKING \& SIGNFOSTING} & \multicolumn{2}{|c|}{SIGNALS} & total \\
\hline & NATIONAL ROAOS & OTHER ROADS & NATIONAL ROAOS & Other roads & \\
\hline & \(s\) & \$ & 5 & \$ & \$ \\
\hline NAPBUCCA & & 13.345 & & & 13.345 \\
\hline NARRABRI & & - 29.355 & & & 29.356 \\
\hline narrandera & & 9,813 & & & 9,813 \\
\hline narromine & & 19,166 & & & 19,166 \\
\hline hewcastue & & 9.836 & & 126.352 & 135.188 \\
\hline nundle & & 2.785 & & & 2,785 \\
\hline OEERON & & 12.339 & & & 12,339 \\
\hline ORANGE & & 46.510 & & 16.041 & 62,551 \\
\hline PAGKES & & 69.593 & & & 69.593 \\
\hline PARRY & & 5.927 & 17.839 & & 23,866 \\
\hline PE NRITH & & 81,400 & & & 81.4 CO \\
\hline PORT STEPHENS & & 11.729 & & 2,651 & 14.380 \\
\hline Queanbeyan & & 3,213 & & 16.373 & 24.591 \\
\hline QUIRINOI & & 3.661 & & & 3.861 \\
\hline RICHMOND RIVER & & 5,800 & & & 5.800 \\
\hline RYLSTONE & & 12.664 & & & 12.084 \\
\hline SCONE & . & 12.136 & & & 12.136 \\
\hline SEVERN & & 3.881 & & & 3,881 \\
\hline Shellharbour & & 667 & & & 667 \\
\hline shoalhaven & . & 3,570 & & & 3,570 \\
\hline SIAGLETON & & 5.489 & & 124 & 5.613 \\
\hline SNOWY RIVER & & -14.273 & & & 14.273 \\
\hline SYONEY & & 45.967 & & 111 & 46,078 \\
\hline
\end{tabular}
traffic signals and other facilities - all roados
madntenance and operatica
\begin{tabular}{|c|c|c|c|c|c|}
\hline WORK BY COUNCILS & \begin{tabular}{l}
ROADMARKING \\
national roads
\end{tabular} & 8 SIGNFOSTING OTHER ROADS & NAT IONAL ROADS SIGNALS & Other roads & total \\
\hline & \$ & \$ & \(s\) & \(s\) & \$ \\
\hline hure & & 18.231 & & & 18,231 \\
\hline INVERELL & & 58.905 & & & 58.9C5 \\
\hline JERILDERIE & & 7.789 & & & 7.789 \\
\hline JUNEE & & 2.207 & & & 2,207 \\
\hline KEMPSEY & & 29,285 & & 8,436 & 37.721 \\
\hline KI AMA & & 73 & . & & 76 \\
\hline KYOGLE & & 31,104 & & & 31.104 \\
\hline lachlan & & 15.258 & & & 15,258 \\
\hline lake macquarie & & 36.239 & & 51.695 & 87.933 \\
\hline LEETON & & 3.931 & & & 3.931 \\
\hline LI SMORE & & 85,233 & & 2,982 & 88.215 \\
\hline LOCKHART & & 4,789 & & & 4.789 \\
\hline maclean & & 16,454 & & & 16.454 \\
\hline maitland & & 3.390 & 19,295 & & 23.185 \\
\hline manilla & & 2.477 & & & 2,477 \\
\hline MERRIWA & & 11,885 & & & 11.885 \\
\hline moree plains & & 35,492 & & 17.966 & 53.458 \\
\hline MU DGEE & & 27,688 & & 79 & 27.767 \\
\hline mulwaree & & 49.262 & & & 49.262 \\
\hline muraty & & 480 & & & 480 \\
\hline MURRUMBIDGEE & & S,826 & & & 5.826 \\
\hline MURRURUNDI & & 6,871 & & & 6.871 \\
\hline musuellerook & & & 3,471 & * & 3,471 \\
\hline
\end{tabular}
maintenance and operaticn
\begin{tabular}{|c|c|c|c|c|c|}
\hline WORK br COUNCILS & \[
\begin{aligned}
& \text { ROADMARKING } \\
& \text { NATIONAL ROADS }
\end{aligned}
\] & 8 SIGfifosting OTHER RCADS & NATIONAL ROADS SIGNALS & other roads & total \\
\hline & \(s\) & 5 & s & s & s \\
\hline evans & & 15,497 & & & 15,497 \\
\hline corees & & 36,300 & & & 36,3c0 \\
\hline gilgandra & & 6.693 & & & 6.693 \\
\hline glen innes & & 5,573 & 1.365 & & 6.938 \\
\hline glcucester & & 4.115 & & & 4.115 \\
\hline 60 SFORD & & 20,277 & 14,930 & 9,695 & 44,902 \\
\hline 60 ulburn & & 30,138 & 43.657 & & 73,795 \\
\hline grafton & & 27.982 & & & 27,992 \\
\hline great lakes & & 15.943 & & & 15,948 \\
\hline greater ces snock & & 7.682 & & 2,995 & 10.677 \\
\hline greater lithgou & & 7.376 & & 7.247 & 14,623 \\
\hline greater taree & & 19,549 & & 13.744 & 33.293 \\
\hline Griffith & & 42.233 & & & 42.233 \\
\hline gundagal & & 2.691 & & & 2.691 \\
\hline gunnedah & & 62.202 & & 2.963 & 65.165 \\
\hline gunning & & 7,342 & & & 7.342 \\
\hline gutra & & 4.905 & & & 4.905 \\
\hline harden & & 9.259 & & & 9,258 \\
\hline hastings & & 17.422 & & & 17,422 \\
\hline hatikeseury & & 51.025 & & & 51.025 \\
\hline har & & 4.284 & & & 4.284 \\
\hline molbrook & & 1.390 & & & 1.390 \\
\hline hornsay & & 50.947 & & & 50.947 \\
\hline
\end{tabular}
traffic signals and other facilities - all roads
maintenance and operation


TrAffic signals and other facilities - all bcads
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{3}{*}{WORK EY COUNCILS} & \multirow[t]{2}{*}{\begin{tabular}{l}
ROADMARKING \\
NATIONAL ROADS
\end{tabular}} & g SIGNFOSTING & \multicolumn{2}{|c|}{SIGNALS} & \multirow[t]{2}{*}{total} \\
\hline & & OTHER ROADS & NATIONAL ROADS & Other roads & \\
\hline & \(s\) & 3 & 3 & \(s\) & \$ \\
\hline al bury & & - 39,811 & 31.185 & 25.755 & 96,751 \\
\hline ARVIDALE & & 14.449 & & & 14.449 \\
\hline ballina & & 24.119 & & & 24,119 \\
\hline balranald & & 9.375 & & & 9.375 \\
\hline earraba & & 9.212 & & & 9.210 \\
\hline 日A thurst & & \(17.47 ?\) & & 4.495 & 21.967 \\
\hline baUlkham hills & & 43.851 & & & 43.859 \\
\hline eega valuey & & 43.353 & & & 43.353 \\
\hline EELLINGEN & & 13.650 & & 507 & 14.157 \\
\hline EERRIGAN & & 10.315 & & & 10,016 \\
\hline gingara & & 2.551 & & & 2.551 \\
\hline EL ACKTOWN & & 93,762 & & & 98,762 \\
\hline eland & & 7.756 & & & 7.796 \\
\hline elayney & & 2.937 & & & 2.987 \\
\hline elue mountains & & 22.009 & & 495 & 23.103 \\
\hline EOGAN & & 2.509 & & & 2.500 \\
\hline eombala & & 19.019 & & & 18,018 \\
\hline BOOROWA & & 15,553 & & & 15.553 \\
\hline GOURKE & & 9,375 & & & 8,375 \\
\hline brebarrina & & 14.755 & & & 14.755 \\
\hline ERCKEN HILL & & 87,814 & & 30.426 & 118,240 \\
\hline EYRON & & 33.996 & & & 33,896 \\
\hline CABONNE & & 48.919 & & & 48,819 \\
\hline
\end{tabular}

TRAFFIC SIGNALS ANO OTHER facilities - all rgads
\(t\)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{3}{*}{LOAK EY DEPARTPENT} & \multicolumn{2}{|l|}{ROADMARKING \& SIGNFOSTING} & \multicolumn{2}{|c|}{SIGNALS} & \multirow[t]{2}{*}{dotal} \\
\hline & NATICNAL ROADS & OTHER ROADS & NATIONAL ROADS & Other roads & \\
\hline & \$ & \(s\) & 1 & s & 3 \\
\hline SYONEY DIVISI ON & & 4,576,338 & & 4,890,941 & 9.467.279 \\
\hline ILIANARRA division & 216,574 & 1,129,153 & 1.079 & 515.706 & 1,862,512 \\
\hline Parramatia division & \(9[0993\) & 2.491.242 & 12.582 & 1.683,600 & 6,278,398 \\
\hline hunter valley division & 455.350 & 1,300,247 & 35,004 & 559,436 & 2,350,037 \\
\hline NORTH YESTERN EIVISION & 292,944 & 362.721 & & & 655.665 \\
\hline UPPER NORTHERN DIVISION & 123.779 & 294,220 & & & 417.999 \\
\hline NORTH EASTERN DIVISION & & 713,710 & & & 713.710 \\
\hline SOUTHERN DIVISION & 627,733 & 114.217 & & & 741,950 \\
\hline SOUTH COAST DIVISION & & 357.794 & & & 357,794 \\
\hline BLACKTOUN DIVISION & 102,093 & 744.118 & 9.999 & 1.178,010 & 2.040.220 \\
\hline SOUTH WESTERN EIVISION & 332.001 & 432,560 & & & 764,561 \\
\hline CENTRAL MURRAY DIVISION & & 426,362 & & & 426.362 \\
\hline CEntral vestern division & & 696.073 & & & 626,073 \\
\hline murrat darling oivisicn & & 351.238 & & & 351.238 \\
\hline CEATRAL NORTHERN OIVISION & & 321.211 & & & 321,811 \\
\hline LOUER NORTH COAST DIVISION & & 553.475 & & & 553.475 \\
\hline TRAFFIC SIGNAL VORKS DIVISION & & . & & \(1.404,817\) & 1,404,817 \\
\hline CEATRAL MOUNTAINS DIVISICN & & 526.025 & & 304 & 526.329 \\
\hline Traffic & & 63,017 & & & 63, 117 \\
\hline OXFORD ST CONTROL & & 35,521 & & 2,369,013 & 2,404,534 \\
\hline TOTAL & 2,2470467 & 15,479,243 & 58,644 & 12.601 .827 & 30,387,781 \\
\hline
\end{tabular}

\section*{OPERATION OF DRIVER AID AND TOU SERVICES}

\section*{APPENDIX 8.2 .0002}

ROAD LOCAL GOVT AREA

\section*{maintenance horks}

TOU Thuck SERYIC

TOTAL- UNCL

TOTAL

SYONEY SYDNEY HARBOUG GRIDGE
LOCATION OF WCAK DESCRIPTION OF WORK

THER ROADS

CCNST MAASRA AUTH RDCLCOMPLTH DEPI 6

\section*{STATE OF FUNDS LOANS}
\(\$\)
\(1,837.240\)
.837 .240
\(1,837,240\)
\(1,837,240\)
\(1,837,240\)```


[^0]:    (a) Details of these individual years are shown in the 1981-82 Annual Report in 1981-82 terms

[^1]:    Note (a). Moneys advanced from Main Roads have been provided on the basis that these funds are applied towards maintenance and administration charges

[^2]:    The above receipts and payments are included in the statement shown on pages 36 and 37 under the headings 'County of Cumberland Fund and 'Traffic Facilities
    Maintenance of Berowra to Calga Toll Work is met from National Road Grants in the Commonwealth Fund.

[^3]:    - See page 51.

[^4]:    - Includes 101 part-time and casual personnel converted to 52 full-time equivalents.

[^5]:    1. Apprentice signwriter, Vicki Stevens, at work in one of the 16 trades in which the Department
[^6]:    This Report was tabled in Parliament
    31 October 1984 and was available to Public immediately thereafter.

[^7]:    9.00 Distances of freeways, State Highways, Trunk Roads, Ordinary Main Roads, Secondary Roads, Tourist Roads and Developmental Roads in New South Wales for the five Years ended 30 June 1984.
    10.00 Distribution between the Department and Councils of Responsibility for Care and Control of Roads at 30 June 1984 in accordance with the Provisions of the Main Roads Act, 1924.

