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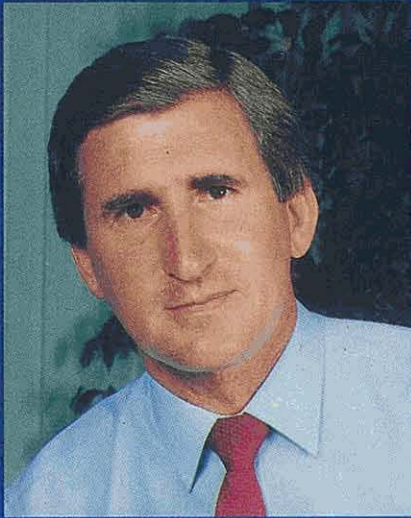
ROADS 2000

Sydney Region



**Department of Main Roads
New South Wales**

A new deal for road users



Roads 2000 is a breakthrough for planning in New South Wales. For the first time we have a realistic plan for road development to the year 2000.

It follows detailed investigations undertaken by the Department of Main Roads and extensive consultation with all sectors of the community.

Naturally, in any such program there are many competing needs that must be weighed. The Government has established priorities based on the main criteria of projected population growth, land use and available road funds.

The first priority, of course, is to maintain the existing road network. At the same time, innovative traffic management measures are being introduced to get the maximum benefit from our existing system. But more than this, Roads 2000 sets out the guidelines for road improvements that will put this State in a better position to face the challenge of the future.

This brochure deals with the main improvements for the Sydney region and includes:

- **The Second Harbour Crossing to eliminate Sydney's worst bottleneck.**
- **The Eastern Distributor to take traffic out of city streets.**
- **Completion of three major East-West Freeways to bring our city closer together.**

The Western Gateway, including the Western Freeway from Lapstone to Concord connecting to the City-West Link and on into the City.

The South Western Freeway from Liverpool to Alexandria and linking to the city via the Southern Arterial

The Castlereagh Freeway from Seven Hills to North Ryde linking to the city via an improved Epping Road and the new Gore Hill Freeway.

□ **Easier Cross-City Travel.**

A new Orbital Route linking all major incoming highways for quick distribution across the city.

Development of two north-south routes, one from Berowra to Waterfall and one from Berowra to Liverpool

A better Ring Route 33 from Mona Vale to Blakehurst with a new deviation from Rhodes to Lakemba, duplication of Ryde Bridge and several new flyovers.

□ **A new deal for Sydney's fast growing western region with a massive development of a first class road network.**

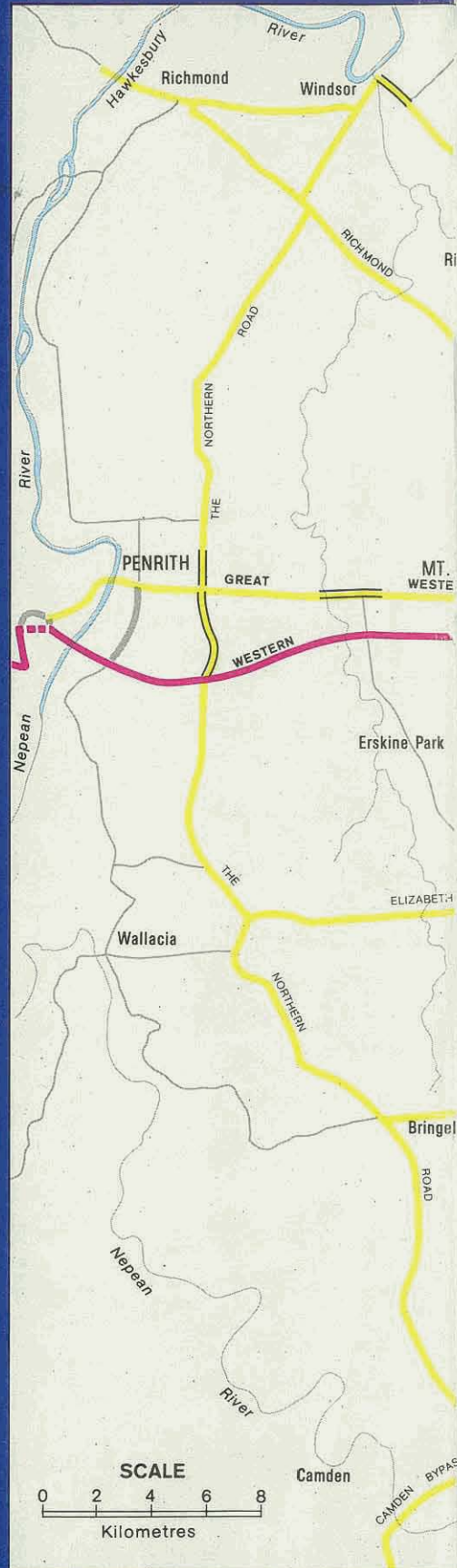
□ **The construction of flyovers to end congestion at intersections.**

These flyovers are planned along Ring Route 33, the South Western, Castlereagh and Gore Hill Freeways, the Western Gateway, the Eastern Distributor, the intersection of the Hume Highway with Woodville Road and of Victoria Road and James Ruse Drive.

The Government is committed to providing better roads in each and every region of New South Wales. To ensure that the plan meets changing community needs, there will be continuing consultation and periodic reviews of the program.

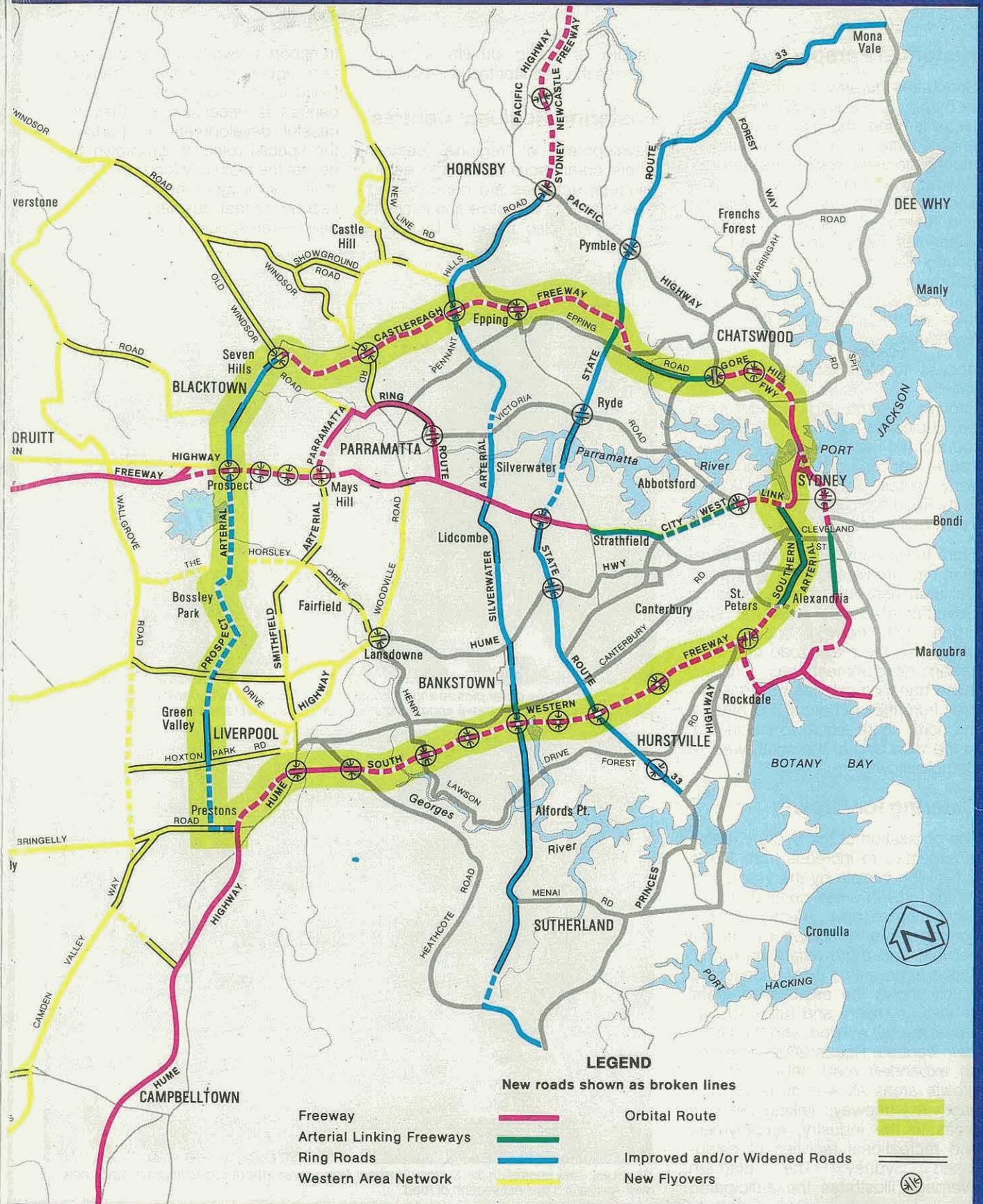
Roads 2000 is a responsible way forward for road development in New South Wales. It will benefit motorists by reduced travelling time, costs and accidents.

LAURIE BRERETON
MINISTER FOR ROADS





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Regional Issues

Historical Perspective

Soon after the arrival of the first fleet to Sydney Cove in 1788, the arable lands around the Parramatta area and extending to the surrounding mountains were settled and farmed. Roads were built between Sydney and Parramatta and on to Windsor and Richmond. Roads to Liverpool, Wisemans Ferry, South Head and Botany Bay further opened up the colony. In 1814 work started on the first road to connect the Blue Mountains and the farmlands to the west of Sydney.

Access to the Illawarra area was initially via Appin, a direct route through Lugarno and on to Mt Keira being cleared by 1845. The coastal route of the Pacific Highway to Newcastle was not opened until 1930, early routes being inland via The Putty Road from 1820 and Wisemans Ferry/Wollombi from 1844.

From these early beginnings the region has grown enormously. The initial tram network, now replaced by Government buses, and the suburban rail network have supplemented the major road corridors. Urban development has followed these transport arteries covering the area from the Harbour to Parramatta, the north shore, south to Heathcote, to the west and to the south-west to Campbelltown.

Catering for Growth

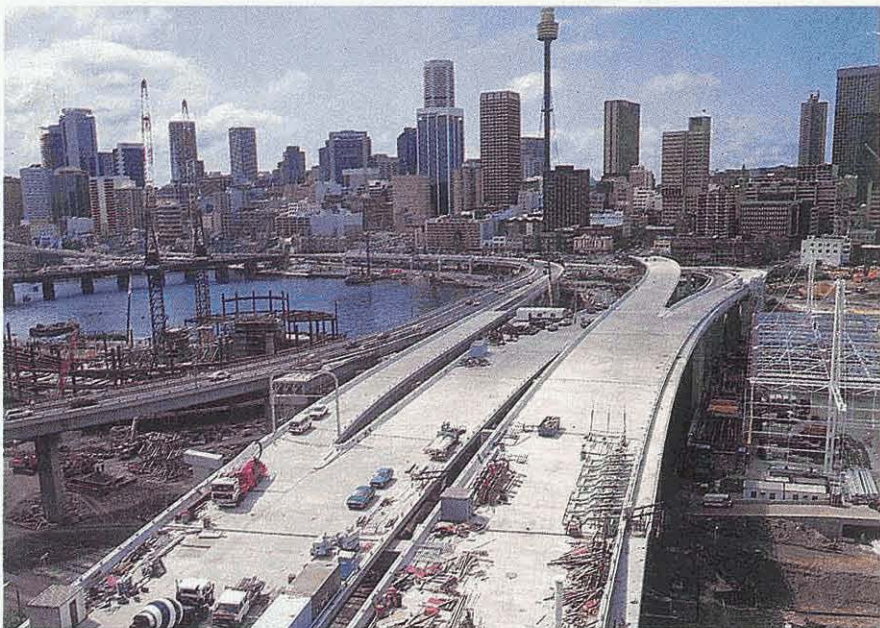
The population of the Sydney region is expected to increase from 3.5 to 4.1 million people by the year 2000. As the growth areas continue to expand, homes and industry are becoming more remote from the rail network and more reliant on roads. This is apparent on the adjacent map which shows the established areas as well as recent and future growth areas, the rail network and the larger town centres. Roads 2000 proposes an expanded road network in the growth areas as well as major new east-west freeways linking the new areas to the industry, employment and recreational facilities of established Sydney. The diagram overpage illustrates the anticipated

pattern of traffic growth and reinforces the need for these initiatives.

Fostering Regional Centres

Development of regional centres where commercial, retail and entertainment activities are concentrated means a more attractive and interesting city. It also mean a balanced

transport network with shorter trips and higher use of public transport. Good road access to and around centres is necessary for their successful development. In particular, the special roles of downtown Sydney as the main city focus and Parramatta as the geographic centre and second central business district has been given special attention.

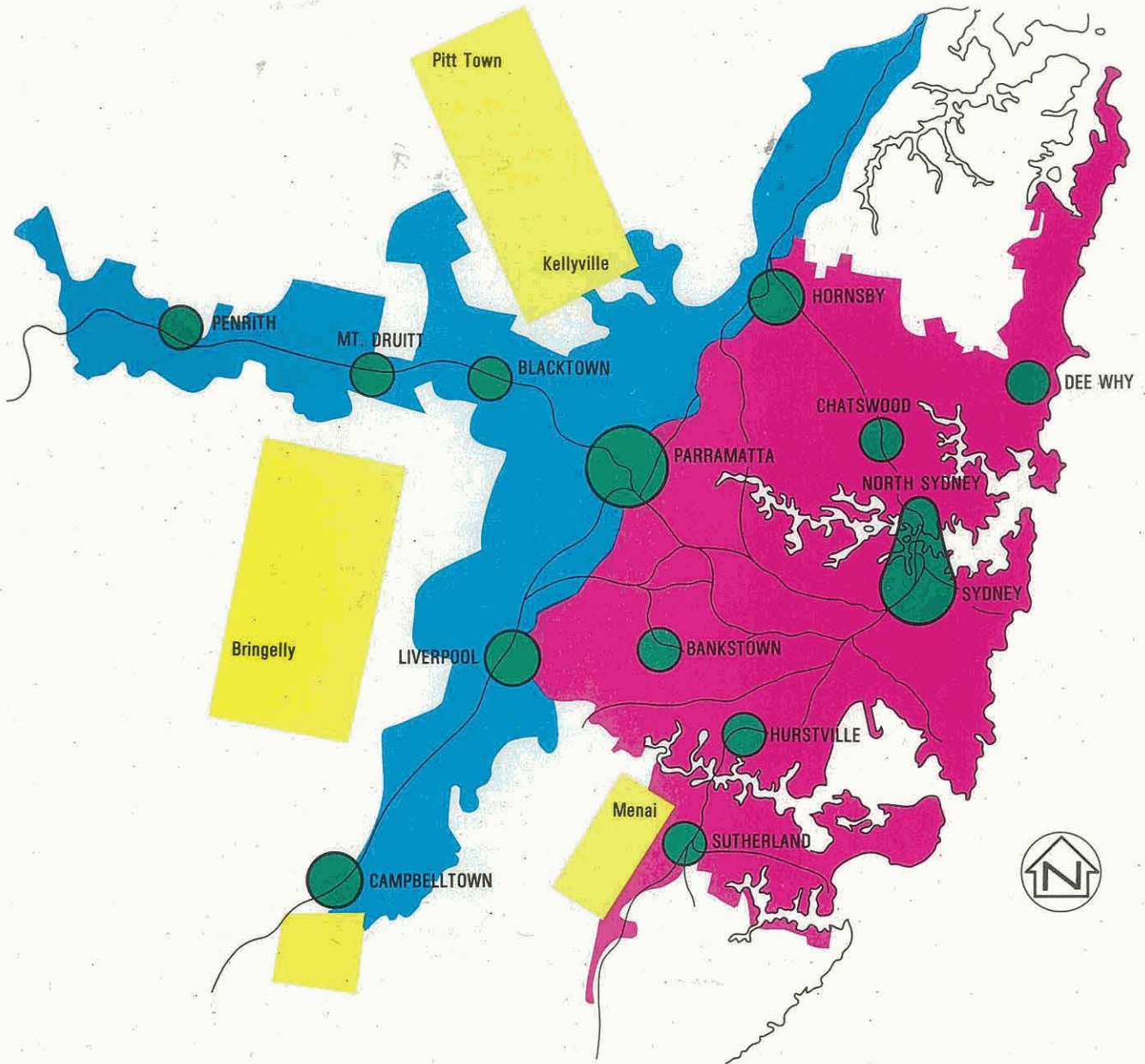


A closer view of the cover picture shows construction of viaducts over Darling Harbour. This is part of major works to improve access between the Sydney CBD and the western suburbs.



Electronic lane control on the Sydney Harbour Bridge was introduced to improve traffic flow over Australia's busiest section of road.

The Sydney Region



LEGEND

Centres



Established Sydney



Growing Sydney



Future Sydney



SCALE

0 5 10 15 20



kilometres

Regional Issues

Road Safety

Road safety is a major issue for the community. Each year there are more than 65000 crashes in New South Wales with some 1000 deaths and 35000 people injured. In addition to the personal anguish, the estimated monetary cost to the community is a billion dollars per year. About 60% of accidents occur in the Sydney region. The construction and traffic management projects of Roads 2000 will reduce accidents for motorists and pedestrians.

Reducing Congestion

Another important objective of Roads 2000 in the Sydney region is to reduce road congestion. Sydney needs a strong arterial road network but does not need the extensive system advocated in the early County of Cumberland Scheme and the 1974 Sydney Area Transport Study. The freeways of those networks are not all necessary and would have taken 150 years to build with normal funds.

What is called for is an affordable plan. This plan must include the essential freeway links, including the South Western, Western and Castlereagh Freeways, while at the same time using the existing network to maximum efficiency.

Because of the importance of commercial and freight movement to the economy of New South Wales, special effort is being given to reducing costly delays on important truck routes.

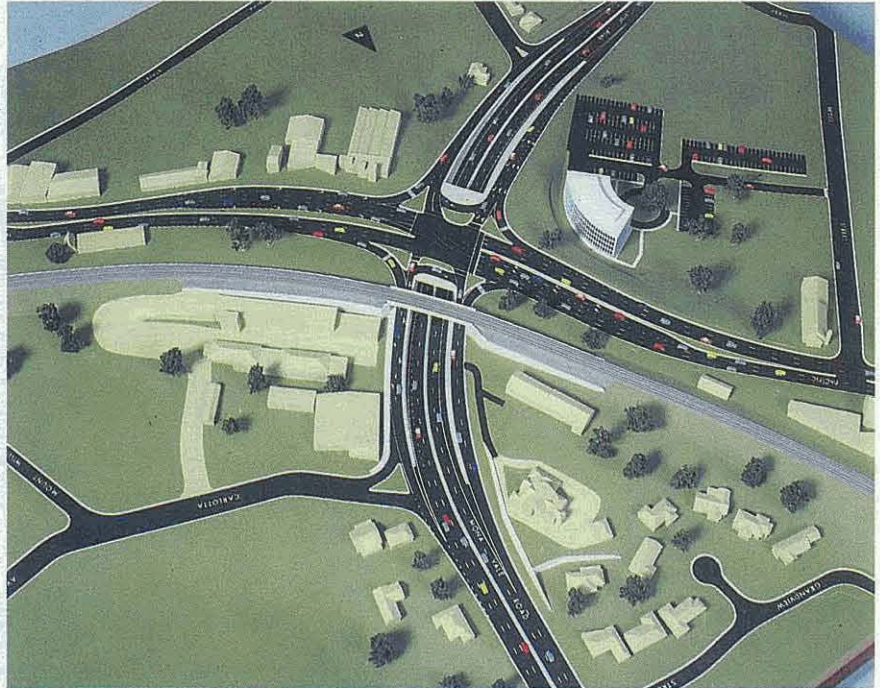
Public Transport

The efficient use of the road network also means encouraging a healthy public transport system. Without the added peak capacity provided by Sydney's trains and buses the road network would be unable to cope with the demand. There is also a sizeable part of the community reliant on public transport for mobility. Roads 2000 has therefore adopted strategies to promote road based public transport.

Improving the Environment

Roads and traffic have an enormous impact on the community. The positive effects such as improved access and development of regional centres have already been referred to. Adverse effects such as where through

traffic intrudes into residential streets are of great concern to local communities and were the subject of many submissions. The strategies of Roads 2000 directly address these issues.

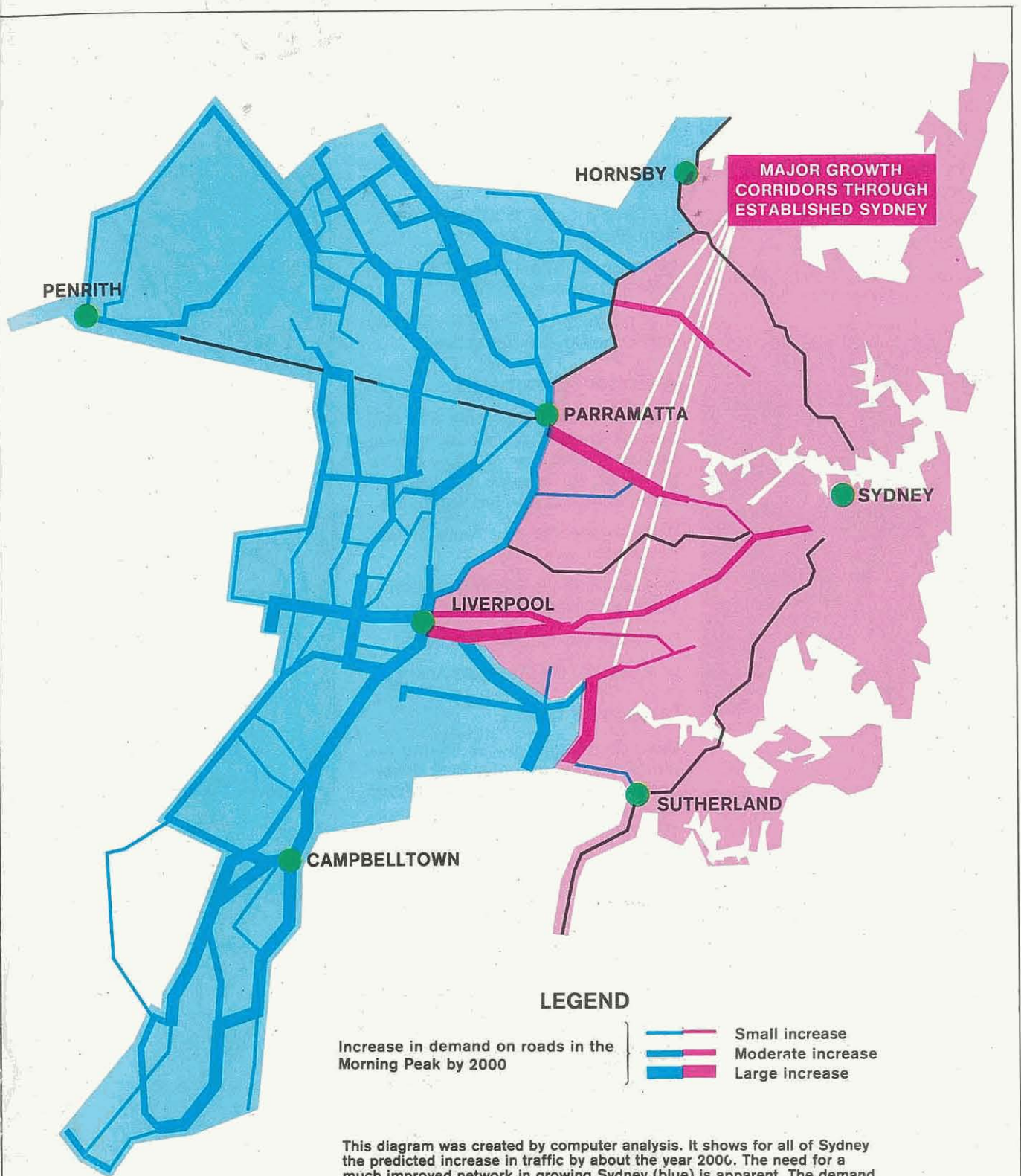


A model of the Pymble Interchange, now under construction at the intersection of the Pacific Highway with Ryde and Mona Vale Roads.



Reconstruction of the roundabout at the intersection of Bunnerong and Gardeners Roads, Kingsford, has removed the intersection from the Accident Blackspot List.

The demand for an improved road network



This diagram was created by computer analysis. It shows for all of Sydney the predicted increase in traffic by about the year 2000. The need for a much improved network in growing Sydney (blue) is apparent. The demand for improved access to established Sydney (red) is highlighted.

Strategies to develop the Sydney Network

Catering for Growth

Support the growth areas of Sydney by developing strong arterial links to the established suburbs and by developing the road network in growth areas.

- Complete the Western Freeway from Lapstone to Concord.
- Construct the South Western Freeway from Prestons to Alexandria.



The F4-Western Freeway between Concord and Mays Hill.

- Construct the Castlereagh Freeway from Seven Hills to North Ryde.
- Upgrade the route from Menai via Alford's Point through to Rookwood Road.
- Routes in the growth areas to be built or upgraded include Hoxton Park Road; Elizabeth Drive; Horsley Drive; Prospect Arterial; Wallgrove Road and extension to South Western Freeway; Bringelly Road; Smithfield Arterial from Liverpool to Parramatta; Richmond Road; Windsor Road; Old Windsor Road; Showground Road; Menai Road.

A Better City Centre

Improve access to the Sydney Central Business District and provide bypass routes to remove through traffic from the city centre to foster its role as the prime focal point for the Sydney region.

- Construct a Second Harbour crossing.
- Construct the Eastern Distributor.
- Construct the City-West link from Concord to the city.
- Develop the Southern Arterial from Alexandria to the city.
- Improve Cleveland Street by widening at intersections.
- Construct the Gore Hill Freeway from Lane Cove to Naremburn.

A Better Parramatta

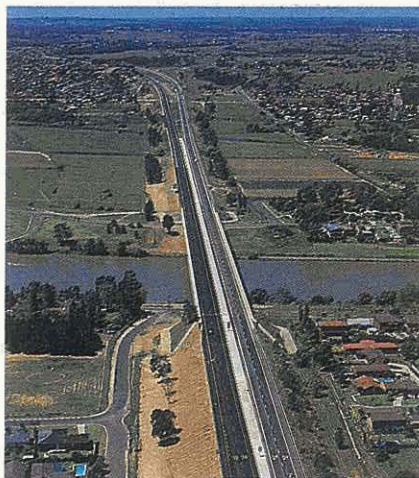
Improve access to Parramatta and provide bypass routes to remove through traffic from the city centre to foster its role as the second major centre of the Sydney region.

- Complete the ring route around Parramatta.
- Complete the Western Freeway between Prospect and Mays Hill.
- Widen Windsor Road.
- Complete the Smithfield Arterial.

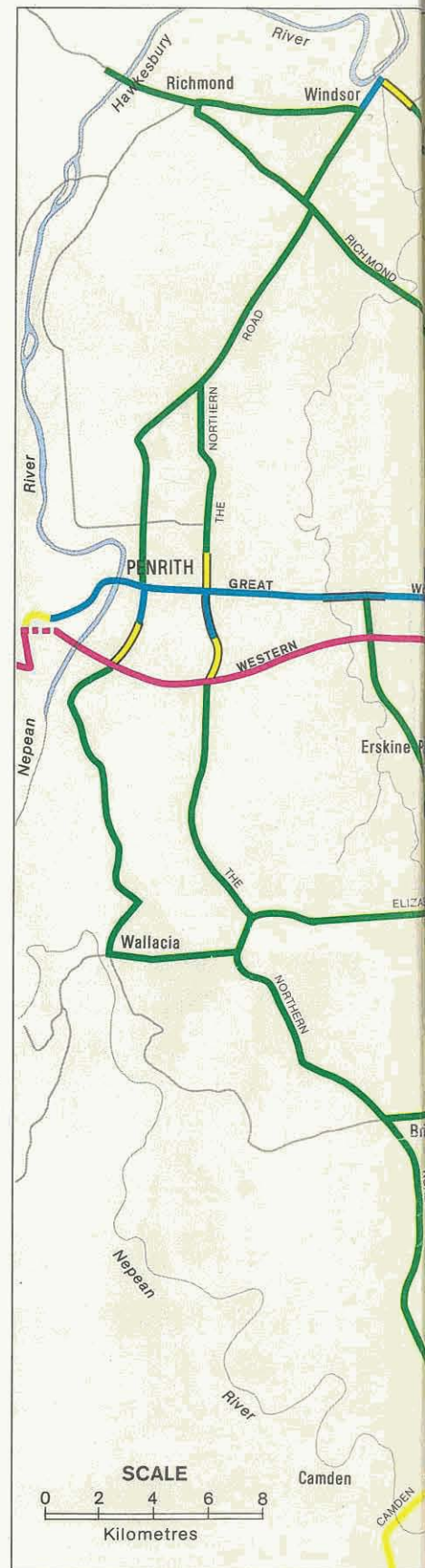
Improved Travel

Develop primary routes linking regional centres to foster their development, create truck routes around town centres and improve cross-city travel.

- Develop a new Orbital Route linking all major incoming highways.



The F4-Western Freeway crossing the Nepean River at Regentville.



Sydney Region Concept Plan



Developing the Road System

□ Construct the South Western Freeway from Prestons to Alexandria and complete the Southern Arterial to Ultimo.

□ Complete the Western Gateway including the Western Freeway from Lapstone to Concord and the City-West Link to the City.

□ Construct the Castlereagh Freeway from Seven Hills to North Ryde and connect to the city by an upgraded Epping Road and the Gore Hill Freeway.

□ Improve Ring Route 33 with duplication of Ryde Bridge, a new deviation from Concord to Lakemba, completion of widening of sub-standard sections and construction of several flyovers.

□ Develop a major north-south route connecting the Sydney Newcastle Freeway at Berowra to the Southern Freeway at Waterfall via Silverwater.

□ Develop a new north-south arterial route from the South Western Freeway at Prestons via Prospect and thence to the Castlereagh Freeway at Seven Hills.

□ Extend the Sydney-Newcastle Freeway from Berowra to Wahroonga.

Develop Special Truck Routes

□ Construct a new link from Port Botany to the South Western Freeway

□ Develop a route from Mascot, west to Parramatta Road including a new link across the canal between Mascot and St Peters.

New Links

Introduce new links into the system to eliminate indirect traffic paths or severe congestion.

□ A second harbour crossing.

□ A new link between Silverwater Road and Kissing Point Road at Dundas.

□ A new link connecting Stewart Street and Rutledge Street at Eastwood.

□ To eliminate congestion on Victoria Road, alternative solutions such as grade separation or constructing a new low capacity link over the Parramatta River at Abbotsford will be evaluated.

Relieve Congestion

Relieve severe congestion points by localised road widening or grade separation, especially on major routes.

Construction of grade separated flyovers to eliminate delays and improve safety at:

□ Victoria Road and James Ruse Drive.

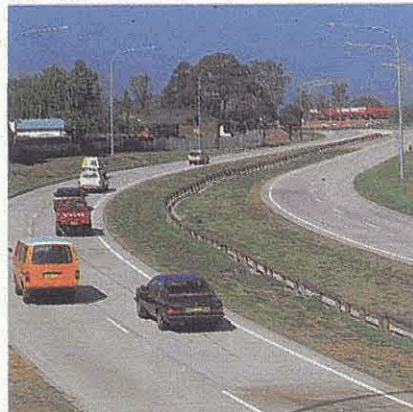
□ Woodville Road and the Hume Highway.

□ Intersections with the South Western Freeway at the Princes Highway, Bexley Road, King Georges Road, Belmore Road, River Road, Fairfield Road, Heathcote Road and the Hume Highway.

□ Intersections along the Western Freeway at Church Lane, Greystanes Road, Ettalong Road and on the City-West Link at White Bay.

□ Intersections along Ring Route 33 at the Pacific Highway, Victoria Road, Western Freeway, Parramatta Road, Hume Highway and Hillcrest Avenue.

□ Intersections with the Castlereagh Freeway at Beecroft Road, Pennant Hills Road, Windsor Road and Old Windsor Road.



The extension of Joseph Street to Orange Grove Road has provided a new link at Cabramatta West.



Widening of the bends at Bilgola has allowed the Urban Transit Authority to extend articulated bus services to Palm Beach.



Duplication of the bridge over Lane Cove River has eased congestion on Epping Road.

□ Intersections along the Gore Hill Freeway at the Pacific Highway and Willoughby.

□ Intersections with the Sydney-Newcastle Freeway at the Pacific Highway, Mount Colah, Windybanks and north of Berowra.

□ Intersections along the Eastern Distributor.

Construction of the bypass of Epping as an early project of the Castlereagh Freeway.

Duplication of Tom Ugly's Bridge.

Construction of a new Spit Bridge.

Upgrading of the intersection of the Princes Highway and President Avenue, Rockdale.

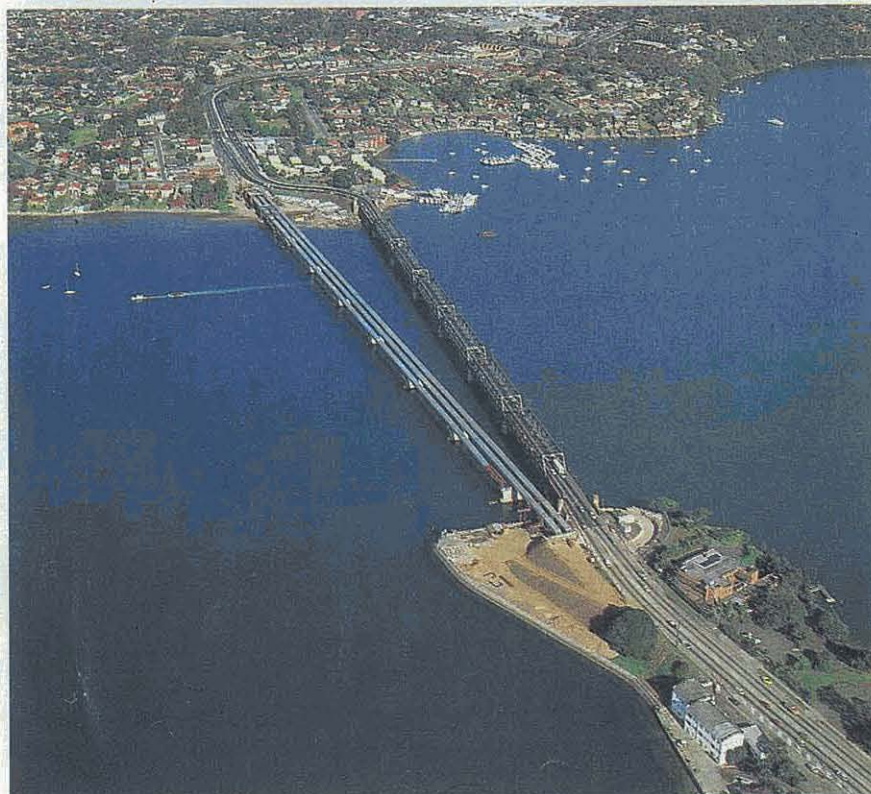
Erection of trial low cost partial grade separation structures at sites such as:

□ Boundary Road/Archbold Road and Penshurst Street, East Roseville.

□ Parramatta Road/Flood Street, Leichhardt.



Pedestrian safety is assured with this bridge over the Princes Highway, Kirrawee.



Duplication of Tom Uglys Bridge over the Georges River will double the capacity of this busy Princes Highway crossing.

Public Transport

Promote road based public transport, especially in its key role servicing new growth areas and the Parramatta business district.

- Widen Windsor Road and preserve the option for one lane each way to be a public transport priority corridor.
- Promote transit lanes, signal priority and lane priority for buses as required.
- Assist to preserve the option for future public transport along the Hoxton Park–Parramatta corridor.
- Increase the width of narrow kerbside lanes by reducing the width of adjacent lanes when linemarking new surfaces. The extra width makes easier travelling conditions for wider vehicles.
- Provide bus bays.

Improved Efficiency

Apply traffic management measures to improve traffic flow and safety, including:

Co-ordinated application of S-lanes, signals, storage bays, median closures, bus lanes and turn bans on the following routes:

- Hume Highway from Ashfield to Prestons.
- Canterbury Road/Milperra Road from Newtown to Liverpool.
- Windsor Road and Old Windsor Road from Rouse Hill to Parramatta.
- Princes Highway from Broadway to Waterfall.
- South Dowling Street/General Holmes Drive/Kingsway from Moore Park to Sutherland.
- Military Road/Spit Road/Pittwater Road etc from Neutral Bay to Palm Beach.

Increased pedestrian facilities with signalised crossings, refuges and construction of pedestrian over-passes.

Traffic Management

Substantial improvements to road performance and safety have been made over the years with the introduction of traffic management techniques.

Major traffic routes have been systematically assessed and co-ordinated traffic management measures have been developed to get the best out of each route for motorists as well as passengers in cars and buses. Techniques to be used include:

- Traffic signals ensuring safety at intersections and, especially with the innovative SCATS co-ordinating system, smoother flows along routes with improved capacity.
- Sheltered storage bays for turning vehicles to keep through lanes moving and prevent accidents.
- S-lanes and bans on selected turning movements to improve capacity.
- Clearways, transit lanes and other kerbside parking controls to keep valuable roadspace for moving traffic.
- Central medians to separate opposite flows and to keep traffic moving by preventing right turns to mid-block locations.
- Roundabouts to sort out conflicts at intersections on lesser routes.
- Towing services to remove disabled or illegally parked cars blocking a roadway.
- Traffic signals, refuges and overbridges for safe and convenient pedestrian crossing of busy roads.
- Bus lanes and bus bays to help public transport.

This "package" approach has already reduced delays and accidents on Victoria Road, Parramatta Road, Woodville Road and the Pacific Highway.

Bicycles

At a price within the reach of most Australians, bicycles offer a level of mobility for local travel comparable with the car. Cyclists are legitimate

road users and roads should cater for them where it is possible to do so at reasonable cost.

Roads 2000 has adopted a strategy to improve conditions for cyclists. Initiatives for this strategy include:

- Adopting a bicycle safe design for drainage grates in new works and to replace existing parallel grates found to be dangerous.
- Increasing the width of the kerbside lane by reducing the widths of adjacent lanes when line marking new surfaces. This will permit more comfortable use of the kerbside lane

by cyclists.

□ Allowing cyclists to use the shoulders of non-urban freeways, such as on the Southern Freeway from Waterfall to Bulli, the Western Freeway from Blacktown to Lapstone, the Hume Highway from Glenfield to Yanderra and beyond and the Sydney-Newcastle Freeway north of Wahroonga will be looked at. No tolls would be charged for cyclists.

The implementation of this strategy will be discussed with the State Bicycle Advisory Council.



Traffic patterns on major roads are monitored at the Department of Main Road's Traffic Control Centre.



S-lanes allow vehicles to await a right turn without disrupting traffic flow.

The Environment

Protection of the environment is a paramount consideration with any road development.

So often, the road reserve contains the only example remaining of flora resources in a particular area following clearing for agriculture, urban development, mining, grazing, etc.

Where native flora is to be affected by roadworks, modern restoration practices will ensure the return of the local flora resources. Plant materials will be obtained from seeds, cuttings or tissue culture of local plants. Exotic plants will no longer be used.

In urban areas steps are already being taken to minimise the visual intrusion of major roadworks. Large scale planting of native flora provides an effective protection between the road and the surrounding neighbourhood.

This policy recognises the road network is unique, connecting all regions of the State. The diversity of flora and fauna it supports is important to the environment.

Corridors

The prospect of road construction often causes concern where there is a potential loss of property or of valuable urban bushland.

Roads 2000 has addressed this issue.

Now that goals have been established a complete review of the corridors reserved for roadworks will be undertaken.

If it is established that a corridor affecting housing and the local environment is no longer required then it will be abandoned.

For instance, the Lane Cove Valley Freeway reservation between Epping Road and Linley Point is no longer required because of the upgrading of Epping Road and the construction of the Gore Hill Freeway.

Other corridors can be eliminated through upgrading existing roads and improving traffic management.

There are many such corridors and

the review will be treated as an urgent task.

The review has already established the following corridors will be released:

- Lane Cove Valley Freeway reservation between Epping Road and Linley Point.

- Blue Gum Creek route from the Lane Cove River Bridge to the Pacific Highway at Chatswood.

- County road route affecting houses in Lewisham from west of Livingstone Road to Canterbury

Road.

- Johnstons Creek route between Rozelle Bay and Parramatta Road.

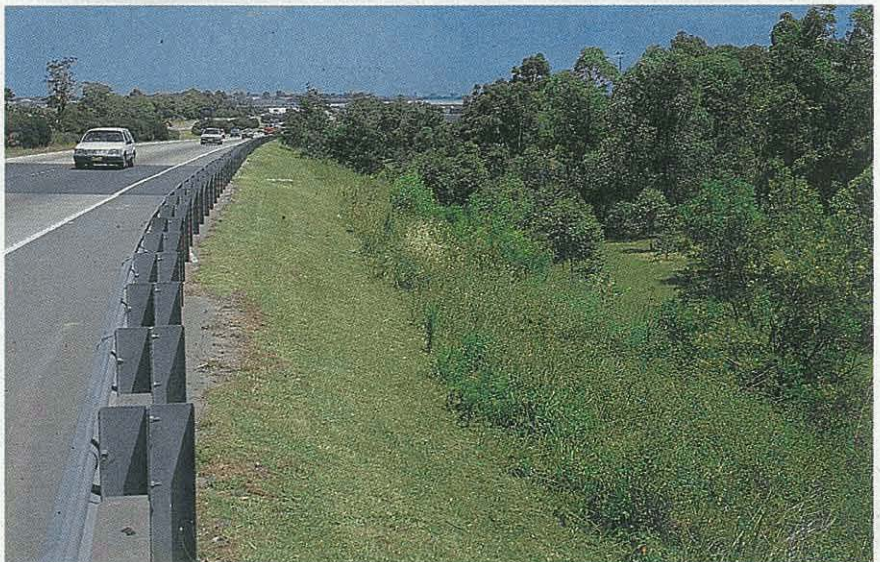
- The Dalwood Homes deviation in Seaforth.

- Widening of Miller Street in North Sydney, which affected a number of buildings of historical importance.

This environmentally conscious program will allow the return of large tracts of valuable urban bushland and residential property to the community.



Release of the Blue Gum Creek corridor will preserve this valuable urban bushland.



The effect of major roads on surrounding neighbourhoods is minimised by landscaping.

Improving the road network benefits everyone.



Motorists benefit from reduced delays.



Safety is everyone's concern.



Tourism needs roads.



Proper planning and new major works leave residential areas free of through traffic.



Produce arrives cheaper at markets.



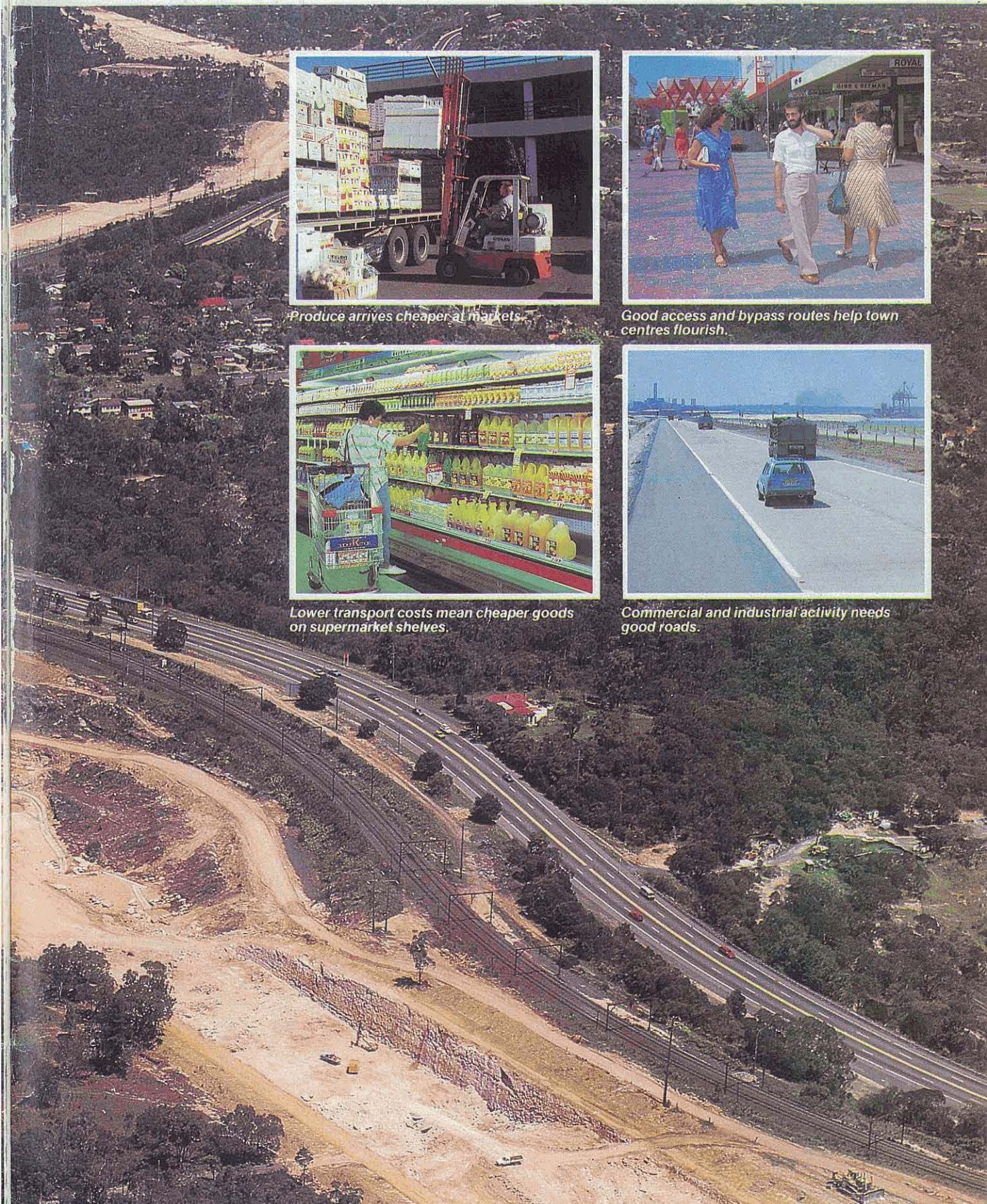
Good access and bypass routes help town centres flourish.



Lower transport costs mean cheaper goods on supermarket shelves.



Commercial and industrial activity needs good roads.





Department of Main Roads New South Wales

*For further information and brochures
on all other regions of the State contact*

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