

- smoothing out of traffic peaks and changing signals to accommodate traffic conditions prevailing at the time, rather than predetermined signal settings;
- better detection and management of traffic incidents;
- identifying priority vehicles like buses and aiding their progress through the signals system; and
- accurate road-side public information on traffic flow conditions, congestion and parking supply along key arterial roads.

**ACTIONS:**

KA 8.5 Implement a system of bus priority measures

KA 8.6 Use intelligent transport systems to manage traffic flows

A 8.7 Implement better incident management on roads

A 8.8 Plan a network of HOV/transit lanes and trial T2 transit lanes where T3 lanes are not viable

A 8.9 Revise road design standards to accommodate public transport

**8.4 Better planning of road needs**

A key issue for the region is resolving the need for new or upgraded major roads to connect major urban development corridors. While the most pressing problems relate to the Pacific Highway, the other highways leading north, south and west of Brisbane are all experiencing major urban growth along their perimeters. Without proper planning, they will be heavily congested with commuter traffic in peak periods by 2011.

In the past, investigation of the need for and costs and benefits of major new roads often centred on relieving congestion for general motor traffic. While congestion is a major cause of economic and social disruption, continually adding road capacity is not the only solution to overcome it. Investigations of new road opportunities must be undertaken within a broader context which:

- investigates the underlying reasons for the network deficiencies, and develops and tests a range of solutions aimed at alleviating the problems;
- ensures a maximum number of the predicted trips are carried on public transport, and where appropriate, by walking and cycling in accordance with the IRTP mode share targets;
- supports agreed regional development outcomes including the development of new employment and industry areas, and freight transport;



- considers the options for maximising service delivery of existing roads alongside proposals to provide new facilities. This includes increasing the proportion of higher occupancy vehicles using the roads;
- assesses the potential alternative uses of the funding to provide high quality alternative urban transport solutions;
- explicitly assesses and considers in total cost estimates the need for further investment in roads to alleviate congestion created in other parts of the system by the construction of the new road (especially where adding capacity merely transfers the problem to a location where construction is difficult or expensive); and
- gives the fullest possible consideration to the cost of impacts on communities and the environment before deciding whether to proceed with a road proposal.

### Local arterial roads and local by-passes

Poorly planned new urban communities along the periphery of major national highways and inter-regional roads tend to rely on these roads as the main trunks onto which all local traffic is fed. These impacts can be avoided by providing local arterial roads and judicious use of highway interchanges. Then, at the appropriate point, vehicles wishing to make a longer distance journey could access the major road system.

This can be achieved if quality, direct local arterial road systems are planned and provided as part of urban development, and the number and spacing of highway interchanges is rationalised.

A key need is to ensure that local arterial road systems provide alternatives to avoid choke points in the inter-urban road system, especially at river crossings.

Major urban growth areas where local arterial road planning must accompany urban development plans include:

- Caboolture and Mango Hill/Griffin to protect the integrity of the Bruce Highway as a National and inter-regional Highway;
- the western urban corridor from the Centenary Highway to Rosewood to protect the integrity of the National and inter-regional highways;
- West Burleigh to Coomera development corridor, to ensure the Pacific Motorway will be able to perform its strategic functions as an inter-regional road; and
- Logan River to Springwood to help keep local traffic pressures off the Pacific Highway.



Widening existing roads which pass through commercial and residential areas can bring local traffic, through-traffic and pedestrians into conflict. In some cases, new roads will be the best solution when the full range of issues and impacts are considered. The IRTP supports local government investigations of the need for local by-passes around centres, such as an Inner City Bypass, where they support urban renewal and other IRTP objectives.

**ACTION:**

KA 8.10 Local arterial networks to keep local trips off regional roads

**Better road network planning**

The provision of new road networks must:

- support the SEQ 2001 objective of locating jobs and housing closer together;
- be limited to moderated travel growth, taking account of increased public transport use;
- support higher occupancy vehicle travel;
- incorporate quality local arterial roads so journeys within urban areas do not have to be made on national or inter-urban roads; and
- consider the provision of walking and cycling paths and bicycle lanes where these contribute to better connections for non-motorised travel.

**8.5 Strategic road network actions**

Road development actions to support the achievement of the IRTP key objectives are included in the strategic transport opportunities described in Chapter 4.

Some of the most significant actions are:

- upgrading of the Pacific Highway to the NSW Border, (including the construction of High Occupancy Vehicle lanes between Klumpp Road and the Logan Motorway; the eight lane Pacific Motorway south of the Logan Motorway; and investigation of the Tugun Bypass);
- upgrading of the Bruce Highway from the Gateway Motorway to the Caboolture-Bribie Is Road;
- upgrading of the Gateway and Logan Motorways to maintain a high standard urban bypass of Brisbane;
- completion of the Southern Brisbane Bypass to link the Logan Motorway to the Gateway Motorway;
- enhancing road access to the Port of Brisbane;
- construction of a new crossing of the Toowoomba Range and Toowoomba bypass;
- provision of bus priority on major roads in the following areas:



- Brisbane metropolitan arterial network;
- Ipswich;
- Gold Coast Highway Southport to Coolangatta, and on bus routes to the new rail stations; and
- Maroochydore to Caloundra, with particular emphasis on Maroochydore town centre; and
- widespread provision of peak period transit lanes on major Brisbane metropolitan arterials, as well as the Gold and Sunshine Coasts.

In addition, new road actions will need to be developed as the region's population continues to grow. These new actions should support the achievement of the IRTP objectives and consider the road planning principles discussed above.

### **The Pacific Highway corridor**

Travel demands are predicted to increase throughout the Pacific Highway corridor due to urban development along the highway periphery, as well as continued growth in housing and employment on the Gold Coast itself. The City of the Gold Coast is expected to accommodate an additional 252 000 people, or around 21% of the region's expected population growth from 1992 to 2011. Apart from the City of Brisbane, Gold Coast City is the most important location for employment, with an additional 121 000 jobs, or 20% of the region's expected employment growth.

Major projects under way in this corridor are:

- construction of the eight lane Pacific Motorway between the Logan Motorway and Smith St and six lanes to Nerang by 2000;
- construction of High Occupancy Vehicle lanes between the Gateway Motorway and Logan Motorway by 2001;
- planning for the upgrading of the Logan Motorway at the northern end of the Pacific Motorway;
- conducting a feasibility study for the Tugun Bypass at the southern end of the Pacific Motorway;
- planning for the provision of a combination of service roads and local arterial roads as part of urban development, to allow people to travel within urban communities without having to access the Pacific Highway or Pacific Motorway; this will include additional river crossings of the Logan and Coomera rivers; and
- Robina rail and feeder bus services by late 1997.

