

## Chapter 2: Urban settlement and travel patterns in the region

### 2.1 Population and employment location in the 21st century

Where people live, and where jobs are located, has a major bearing on future travel demands and the likely success of transport system changes. If large distances separate the starting and finishing points of trips, motorised transport is necessary. And if trip ends are dispersed throughout the community, public transport services are less likely to pass close enough to be competitive with the car.

The region has a major imbalance between the location of housing and jobs. For example, in 1992 the City of Brisbane had about 40% of the region's population, but over 53% of its jobs. People are tending to live in suburban dormitory areas and accessing employment and other essential activities by car.

This IRTP is based on agreed plans in the *Regional Framework for Growth Management* which seeks to concentrate population growth in agreed urban development corridors and concentrate new jobs in agreed business and industry centres across the region. This would help reduce the imbalance between employment and housing location and cut down on the amount of peak period commuter travel. It would also assist public transport by concentrating passenger demands around major service corridors.

Under the *Regional Framework for Growth Management* the majority of new housing and population growth will be accommodated in four major urban areas:

Sunshine Coast	214 000
Gold Coast City (including Beenleigh)	252 000
Toowoomba	25 000
Brisbane Metropolitan area (including Ipswich)	609 000
Existing smaller urban areas and balance of region	81 000
Total growth between 1992 and 2011	1 181 000

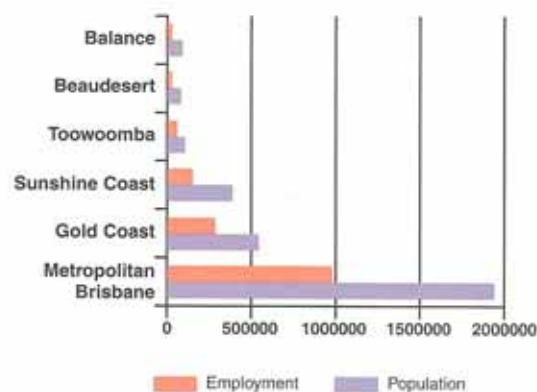
Employment growth is expected to roughly match population growth, increasing by 65% from about 911 000 jobs in 1992 to 1.5 million jobs in 2011. Under previous trends, employment growth was expected to remain focussed on the City of Brisbane, while its population would increase only slightly on 1992 levels.

Even with the changes proposed by the *Regional Framework for Growth Management*:

- much of the population growth will be accommodated in new development on the fringes of the region's urban areas. Only 12% of the additional population will be accommodated in the City of Brisbane;

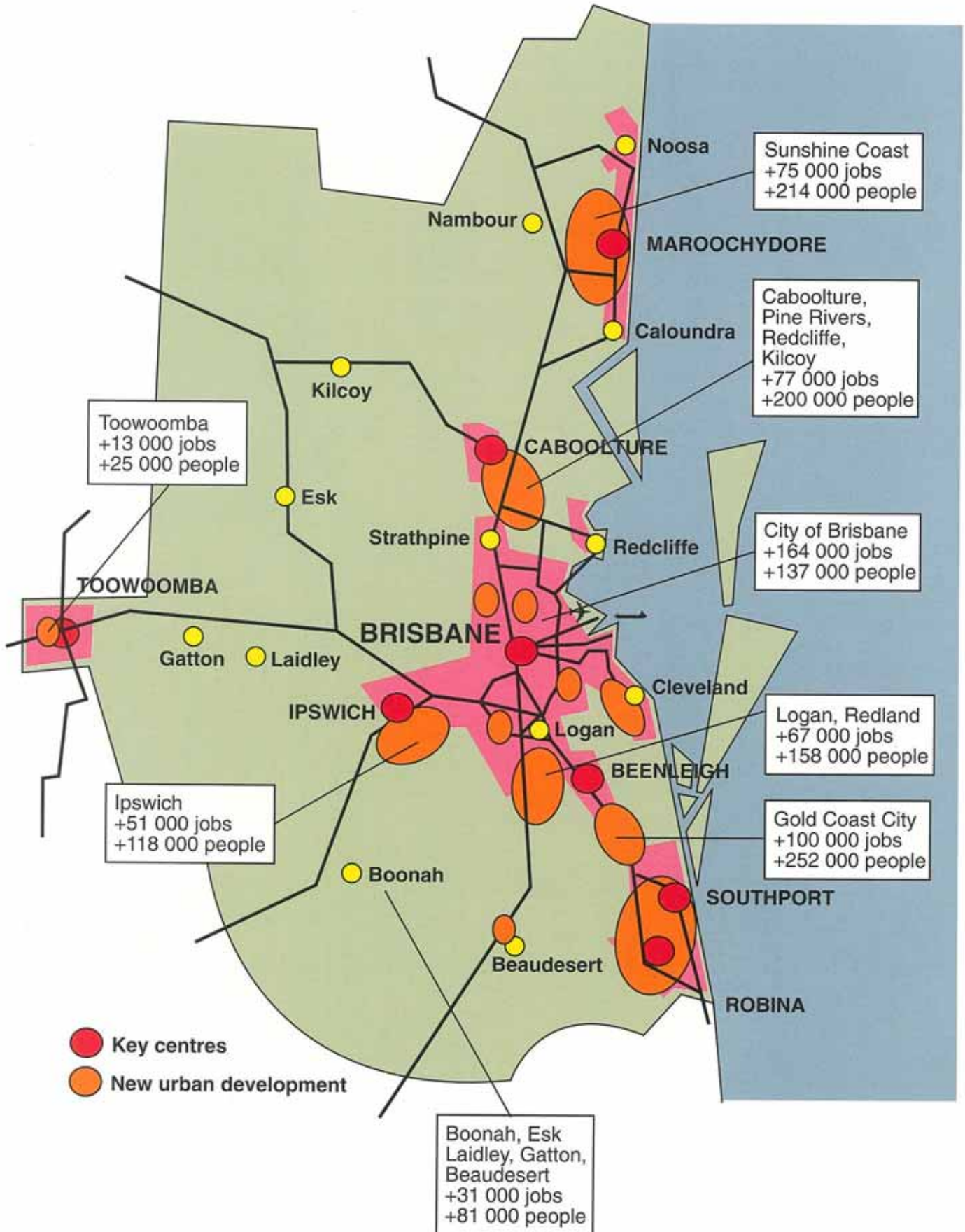


Total population and jobs in 2011



Predicted population and employment in SEQ metropolitan areas

# Predicted population & employment growth – South East Queensland 1992 – 2011



- over 27% of the new jobs would still be located in the City of Brisbane;
- by 2011, over 43% of jobs, but only 29% of population, would be located in the City of Brisbane; and
- an estimated 200 000 commuters will enter the City of Brisbane each day from around the region to work.

Many of those jobs which are located closer to new housing areas will become more widely and randomly distributed, meaning they will be difficult to access with public transport.

**2.2 Travel trends for the period 1992 to 2011**

The IRTP has predicted the growth in travel demand using data from the 1991 census and major surveys of regional travel behaviour undertaken in 1986 and 1992. The planning methodology and technical data are presented in the *IRTP Technical Report*, May 1996. The calculations use the patterns of housing and employment adopted by the *Regional Framework for Growth Management*.

Trips were analysed on the basis of numbers of people rather than numbers of vehicles to provide a better basis for planning a mix of transport modes to meet people's travel needs. Traditional transport planning usually removed public transport trips and walking and cycling trips from the calculations and considered only private cars and commercial vehicles.

These projections confirm a clear trend towards more trips, longer trips, increased car dependency, and a decline in public transport use. In the 20 years between 1992 and 2011 the number of person trips made each working day would increase by over 70% from 6.9 to 11.8 million and the total amount of motorised travel, would increase from 46.7 to about 93 million vehicle kilometres each day, an increase of almost 100%.

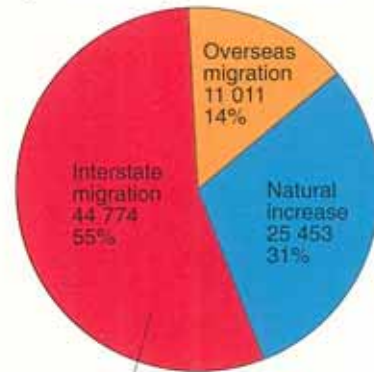
And with population and car ownership continuing to grow, the same trends could continue beyond 2011 if major changes are not made.

**2.3 Projected travel patterns**

In 1992, an average household generated about 10 trips each day, and almost 95% of these were local trips, under 20 km. The Brisbane metropolis was the focus for over 72% of all trips. Analysis of changing trip patterns over the period 1992 to 2011 reveals that:

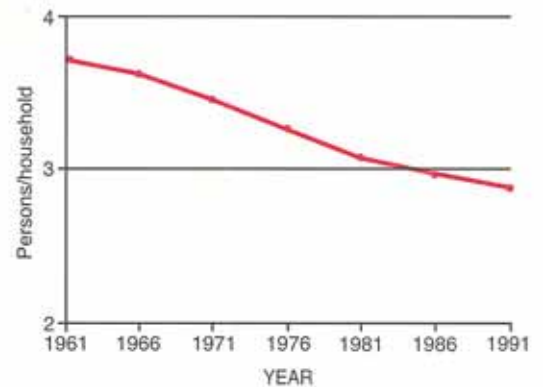
- in total numbers, local trips are projected to remain dominant and increase the most. For example, for the southern sector of the region south of the Coomera River, there were 775 800 local trips in 1992. In 2011 this would

**Contributions to population growth (whole of Queensland) between October 94 and September 95**



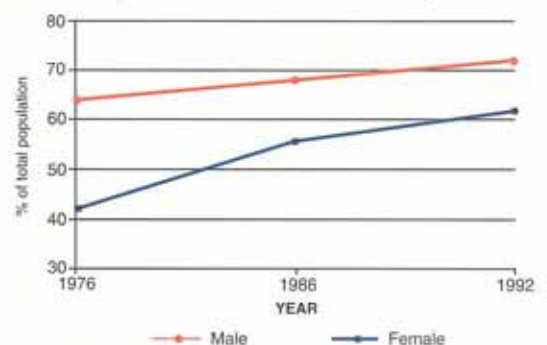
NSW and Victoria accounted for 79% of net interstate migration

**Household size**  
Brisbane Statistical Division

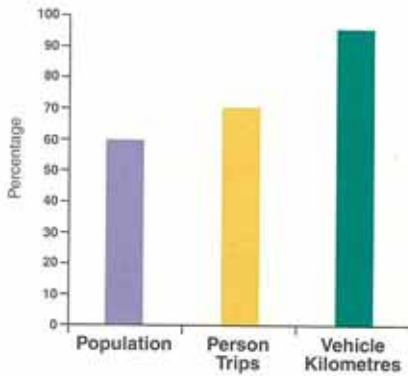


The average numbers of people in households is declining. Trip making is related to households, rather than numbers of people, so as households numbers grow, trips numbers grow.

**Driver's Licence availability**



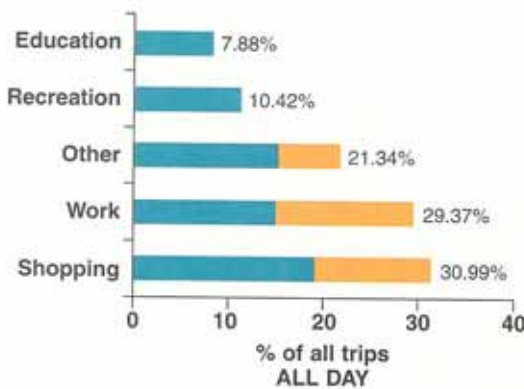
### Growth rates for population and travel



Percentage growth over 20 years 1992 to 2011

Population growing at 2.5% p.a.  
 Person trips growing at 2.6% p.a. because people are travelling more.  
 Vehicle kilometres growing at 3.5% p.a. because of increased person trips and our urban areas are getting bigger.

### Trip purpose 1992



Others include:  
 home to home;  
 home to child care; and  
 passenger serving journeys.

■ Home based  
 ■ Non-home based



increase by 88% to 1.5 million local trips each day. By comparison, only 40 000 trips from this sector would be to the Brisbane area;

- average trip length will increase from 12.5 to 15 km due to the expansion of urban areas and the dominant pattern of detached housing with little mixing of non-residential land uses;
- significant growth in percentage terms is projected for trips between neighbouring sectors. For example, a 366% increase in trips between the Beenleigh sector and the Gold Coast sector. However in total trip numbers, this only increases from 15 700 to 73 100;
- the City of Brisbane will remain the focus for a large proportion of the longer trips in the region;
- over 90% of all trips will be associated with three major urban areas of Metropolitan Brisbane (including Ipswich), the Sunshine Coast and the Gold Coast; and
- bypass trips which seek to avoid a major centre enroute to another destination (e.g. interstate trips) will continue to be a small proportion of total travel.

## 2.4 Transport funding

### Transport revenue in the SEQ region

Fragmentation of planning and funding responsibilities has made the task of understanding the region's capacity to fund the transport system very difficult. Much more study is needed of how and when funding is allocated to transport, so the best use of scarce public resources can be made.

Table 1 provides a break up of public funding estimated for capacity enhancement, system maintenance and operating subsidies. They do not include farebox revenue from Queensland Rail and Brisbane City Council (Brisbane Transport) buses which is also reinvested in system operations. The figures are primarily based on 1994/95 budget figures.

### Private sector funding

As part of development processes, private sector developers can be required to:

- construct local streets and pedestrian and cycling infrastructure, and cater for public transport;
- provide public transport interchanges in retail centres;
- pay contributions to upgrades of local arterial roads; and
- provide land for future transport corridors.

Private transport providers also invest significant amounts in bus and taxi fleets, which are essential elements of the region's public transport system.

The amount of private sector investment in the region is significant but almost impossible to accurately estimate without detailed work. It could be between \$300 and \$500 million each year.

The majority of private sector road development funds are invested in constructing new urban streets as part of land development works. Monetary or in-kind contributions to State main road infrastructure totalled less than \$20 million in 1994/95.

**Table 1 Public sector funding for transport in South East Queensland in 1994/95**

<b>Road infrastructure</b>	
National Highways	\$76 m
Other State roads	\$210 m
Local government roads	\$265 m
Bus priority measures on roads	\$8 m
Sub total	\$559 m
<b>Rail and intermodal infrastructure</b>	
Intermodal facilities	\$5 m
Passenger rail capital works	\$170 m
Sub-total	\$175 m
<b>Passenger services</b>	
Passenger rail subsidies	\$94 m
Subsidies to private bus operators	\$12 m
School transport subsidies	\$56 m
State subsidy to Brisbane City Council buses	\$29 m
Brisbane City Council subsidy to BCC buses	\$40 m
Kerbside infrastructure by SEQ local govts	\$10 m
Sub-total	\$241 m
Bikeways and pedestrian paths (estimate)	\$10 m
Rail freight subsidy (SEQ estimate)	\$40 m
Total public funds for transport in SEQ	\$1025 m

