

## 6 Sustainable Transport Projects in Other Regions

### 6.1 Transport Improvement Programs

Useful evidence can be drawn from other cities in Australia where serious attempts have been made to improve public transport.

- In Perth, it is claimed by the lobby group People for Public Transport that public transport usage has increased 2 ½ times in the 8 years since the suburban railways were electrified and extended in 1991<sup>48</sup>.
- In Melbourne, public transport patronage is already high on the tram network, where service frequencies are generally better than every 12 minutes throughout the day. The successful bidders for the privatisation of these networks have budgeted on patronage increases of up to 84% on the suburban trains and 40% on the trams as a result of service improvements. This growth is expected to come more from a change in the modal split of existing travellers (a change from one transport mode to another) than from growth in the catchment population.<sup>49</sup>

In 2002, it appears that these growth targets will not be met, due mainly to the failure of the franchisees to improve services sufficiently to attract the new patronage. The primary objective of the franchisees is to produce an acceptable shareholder return on the capital invested by the overseas parent companies. On this criteria, the privatisation program in Melbourne may fail. This should not be interpreted as negating the potential for increased modal split for public transport.

- On the Gold Coast, buses run every 5-10 minutes on the trunk route between Tweed Heads and Southport. Admittedly, this area has a large tourist population, but on the other hand it is mainly a narrow strip catchment area. The relevant point is that the opportunity provided by tourism has been used to underpin a good quality public transport service where the majority of passengers are local residents. The high frequency trunk services are fed by routes covering the inland residential areas, many of which have 20 or 30 minute frequencies through the day. The resident population size covered by these services in Gold Coast is similar to the population of the Newcastle / Lake Macquarie area.
- In Penrith, when conventional bus services were replaced by minibuses at higher frequencies, patronage increased at an annualised rate of 39%<sup>50</sup>. Again, this was achieved by altering the modal split of existing travellers.
- In Canberra in 1998, 32% of the population used public transport. 37% of bus users did so at least 5 days a week and 75% did so at least once a week. 52% of frequent bus users were aged between 15 and 24 years<sup>51</sup>.
- In the southern Queensland town of Warwick (population 12000), bus patronage increased by 60% following the introduction of new off-peak services in 2001. Warwick Shire Council contributed to this success by providing road improvements, bus stop infrastructure and timetable information cases at most bus stops<sup>52</sup>.
- In Tasmania, a network of inter-town bus services has been developed, and studies are being undertaken on accessibility standards between rural towns and regional centres. The regional bus services are designed to meet the demand for travel between towns by both local residents and tourists. Tasmania has about the same population and the same area as the Lower Hunter.

---

<sup>48</sup> Media release issued on 29 November 1999 by People for Public Transport and Rail 2000 in Adelaide, quoted in §5.17.7

<sup>49</sup> Media Release from National Express (which was awarded three public transport franchises in Melbourne), 25 June 1999

<sup>50</sup> *Monitoring Minibus Services in Penrith* NSW Dept of Transport, March 1994

<sup>51</sup> Media Release, Australian Bureau of Statistics, 14 April 1999

<sup>52</sup> Australian Bus and Coach website, 5 April 2002

In Wollongong, an attempt has been made by the Council and the RTA to adopt an integrated approach to the allocation of transport funds for the urban growth area at West Dapto, southwest of Wollongong.

- It has been estimated that a modal split of 30% of trips by public transport has to be achieved by new residents if the current capacity of the road system leading to Wollongong is not to be exceeded.
- Consideration has been given to diverting the funds that might otherwise be put into widening the Southern Freeway towards the more cost effective solution of designing the residential development so that public transport can be provided in a way that will attract people to it in preference to their car.
- However, it is not only the public transport in the West Dapto area that has to be attractive. People have to be able to reach their destination by public transport, and this requires consideration of all the transport links throughout the urban area, but especially to the major employment centres.

In July 2002, the Minister for Transport announced a \$350m 10-year Central Coast Transport Plan.<sup>53</sup> The plan details large funding injections to eradicate traffic black spots and improve bus and train infrastructure.

Aspects of the Plan related to sustainability include:

- New railway station and transport interchange at Warnervale
- Investigations into upgrading the Newcastle - Sydney rail line to reduce travel times
- Improvement and expansion of bus services and information
- Ferry wharves
- Traffic management, bus priority and pedestrian facilities
- Cycleways
- Innovative transport solutions fund
- Voluntary behaviour change program
- Bicycle lockers at railway stations.

A Central Coast Transport Task Force will be established, including representation from local government in Gosford and Wyong.

In these examples, the plans for growth in public transport have occurred in urban situations that have many similarities to the Lower Hunter. They show that it is possible to change the modal split for current travel, provided the appropriate incentives are in place. Population size and traffic congestion are not the only drivers to public transport growth (as is often the inference from metropolitan situations).

## **6.2 Regional Models for Integrated Transport**

Regional management of integrated public transport systems has been a key factor in the success of many public transport projects in areas outside the capital cities in Britain, France, Germany and North America. Improvements made to transport services in Tasmania, South East Queensland and Perth in recent years indicate that holistic metropolitan and regional transport management provide the best opportunities for service improvement.

It is common practice in Europe, where public transport is well developed despite high car ownership levels and good road networks, for a high degree of physical and service coordination to be provided in regional centres through an autonomous regional organisation.

---

<sup>53</sup> *Newcastle Herald* 1 August 2002

## 6.2.1 United Kingdom

In the UK, there are several examples of the Public Transport Executive model. A regional body has the responsibility for transport policy, planning, integration, infrastructure and information. It manages assets on behalf of Government agencies, and contracts with operators to provide services.

Two examples are the Greater Manchester Passenger Transport Authority and the Tyne and Wear Passenger Transport Authority in Newcastle<sup>54</sup>, both of which have achieved considerable successes with the coordination of multi-modal public transport systems, the conversion of former rail lines to light rail systems, the extension of light rail into redevelopment areas and city renewal projects, and the shared use of heavy rail tracks by light rail vehicles<sup>55</sup>.

Both Manchester and Newcastle have restricted car access to the city centre, but the city centres have survived and thrived despite challenges from emerging regional centres. In the 1970s and 1980s, both cities took advantage of their legacy of former colliery rail corridors to develop a network of light rail lines that now form the backbone of their high frequency public transport systems.

**Newcastle-upon-Tyne** has a population of about 500 000 people, similar to the Lower Hunter. Its integrated transport and city centre strategies have enabled it to emerge in a strong economic position as investment moves away from the traditional manufacturing sectors to the financial and service industries<sup>56</sup>. The Tyne and Wear Region has a population of 1.1million, and has many settlement, topographic and social features that make comparisons with the Lower Hunter worthwhile.

The performance of Nexus (the Tyne and Wear Passenger Transport Executive) in 2000 is impressive<sup>57</sup>, and is a challenge to what could be achieved in the Lower Hunter, given the similarities which exist between the two regions.

◇ Metro (light rail) passengers	33 million
◇ Rail and ferry passengers	2.8 million
◇ Bus passengers	168 million
◇ Private bus contracts coordinated	263
◇ Community Care journeys	592 000
◇ Traveline Telephone enquiries	250 000
◇ Information leaflets distributed	2.4 million
◇ Bus stops provided and maintained	6100
◇ Bus stations provided and maintained	9.

The Tyne and Wear Passenger Transport Authority has prepared a Local Transport Plan 2002-2005. This is a comprehensive 174-page document which provides a detailed outline of integrated transport planning and projects for the Newcastle Region. It is driven by the vision that 'all residents have access to a more prosperous, safer, healthier, and more sustainable lifestyle in a more attractive environment'<sup>58</sup>. The five local government bodies and the public transport operators in the Northumberland County are partners in the Plan.

Public transport usage in Tyne and Wear is 182 trips per person per year, nearly twice the national average and the highest in the regional areas of England. Partly because of decisions made 30 years ago to convert former industrial rail lines to the light rail Metro and run the Metro under the City Centre, car ownership levels are lower than in other metropolitan areas and are increasing at a slower rate than the national average.

---

<sup>54</sup> Explanatory information and performance data is available on websites <[www.gmpte.gov.uk](http://www.gmpte.gov.uk)> and <[www.twpta.gov.uk](http://www.twpta.gov.uk)>

<sup>55</sup> *Twenty years of the Tyne and Wear Metro* Tramways and Urban Transit, June 2000 - August 2000

<sup>56</sup> *Magnetic north drawing investment, jobs* Australian Financial Review, 28 November 2002

<sup>57</sup> Selective extracts from Nexus Annual Report, March 2000

<sup>58</sup> Plan is available on website <[www.twpta.gov.uk](http://www.twpta.gov.uk)>

The centrepiece of the Transport Plan is the extension of the Metro Light Rail system by 18.5km to Sunderland **using the existing rail line which has been upgraded for shared use by both heavy and light rail vehicles**. The Metro extension was opened on schedule on 31 March 2002. 'Experience to date with mixed operation between Metro and other heavy rail services (passenger and freight) has been good. Indeed, the implementation of this type of service including the additional safety devices that have been installed has gone remarkably smoothly and is a testament to the ability and determination of the staff of both Nexus and Railtrack'<sup>59</sup>.

Between Newcastle and Sunderland, including the section of shared track between Pelaw and Sunderland, there are:

- 6 Metro trips each hour, stopping at all stations, with a journey time 29minutes
- 2 train trips each hour, stopping only at one intermediate station, with a journey time of 21 minutes.

The Transport Plan also includes the full range of transport planning issues and projects.

- ◇ Sustainable principles and policies
- ◇ Transport planning and land use
- ◇ Road network usage and development
- ◇ Traffic management
- ◇ Expansion of bus, ferry and rail services
- ◇ Intermodal interchange
- ◇ Integrated ticketing
- ◇ Pedestrians and cyclists
- ◇ Transport for those with impaired mobility
- ◇ Project funding and timing
- ◇ Community participation.

The Local Transport Plan for Tyne and Wear would be a suitable model for the Lower Hunter Sustainable Transport Plan which is proposed in the Action Strategies in this Issues Paper (Vol 1, §4.3).



Light Rail Vehicles at Jesmond Station in Newcastle. The Metro system has retained the former heavy rail stations. From March 2002, these vehicles operate over shared track with heavy rail trains along the Metro extension from Pelaw to Sunderland

By comparison, **Bristol** (also a former mining region in UK) allowed development over its former rail corridors and does not have a suburban rail public transport system. Consequently, its City Centre suffers from chronic traffic congestion, bus services are unable to attract decent patronage, and regional centres are a threat to the City Centre survival. Its recent plans to introduce a light rail network have been plagued by a lack of funds and difficulties finding suitable corridors<sup>60</sup>.

<sup>59</sup> Report of the Director General to the Tyne & Wear Passenger Transport Authority, 8 May 2002

<sup>60</sup> *Bristol Supertram still requires development* Tramways and Urban Transit, May 2001

In **Wales**, SWIFT (South Wales Integrated Fast Transit) is a consortium of six local authorities working in partnership with local bus and train operators and Railtrack. Its principal aim is to improve public transport along the corridors leading to central Cardiff<sup>61</sup>.

SWIFT has carried out a detailed transport study, resulting in a package of comprehensive and integrated improvements to public transport services and infrastructure which form a 5-year strategy with five individual themes (bus, rail, interchange, ticketing and marketing), all aimed at providing a realistic alternative to driving into Cardiff.

As an example, the SWIFT Rail Strategy is built on developing the extensive rail network centred on Cardiff. SWIFT is working in partnership with the National Assembly, train operators, Railtrack and the Strategic Rail Authority to progress the strategy, using European funding, Transport Grant resources, and its partners own contributions. The main elements of this £55 million investment program are:

- ◇ New services
- ◇ Enhanced service levels and frequencies (core frequency target of 4 trains per hour)
- ◇ Track speed and capacity improvements
- ◇ New stations and commuter parking
- ◇ Better integration and interchanges
- ◇ Ticketing initiatives, including integrated smartcards.

As a matter of interest, the timetable book for the regional rail services based on Cardiff (similar to the Hunter Region) contains a 26-page supplement showing the full timetable of increased services on all lines when major events are held at the Millennium Stadium in Cardiff.

## 6.2.2 Canada

The City of **Toronto** in Canada is considered a pacesetter in transport planning, with successive governments since 1954 boosting public transport funding and bucking a growing reliance on freeway building. As a result, Toronto's public transport system has grown to be the largest people mover in North America. Toronto's motor vehicle usage is half that of any state in the USA and considerably less than Australian cities<sup>62</sup>, even though car ownership rates per capita are slightly higher than in Australia<sup>63</sup>.

In Toronto, public transport carries around a quarter of all city travel (3 times more than Australian cities). Fares bring in over two thirds of the cost of running the system (2 times more than Australian cities). The public transport services are fast and frequent<sup>64</sup>.

Part of the reasons for Toronto's success relate to transport planning and land use decisions over the last 4 decades. Together with a deliberate decision to build public transit systems rather than only freeways (as was happening in most other North American cities), commercial centres, employment areas and high-density residential areas were built around the public transport nodes. This has meant that, with high service frequencies, people are able to use the integrated bus, light rail and suburban rail systems for most trip purposes.

Public transport routes operate on a grid system. Ticketing allows unlimited transfers between modes. There are very high percentages of transfers, even during off-peak periods. As an example of the extent of intermodal integration, light rail vehicles operate into the paid area at railway stations.

---

<sup>61</sup> *Guide to Services Valley Lines*, Sept 2001 - June 2002, page 17

<sup>62</sup> *Sydney Morning Herald*, 30 July 1994

<sup>63</sup> *A Very Public Solution: Transport in the Dispersed City*, Paul Mees, Melbourne, 2000, page 182

<sup>64</sup> Nature Conservation Council Seminar brochure, July 1994

In the last 10 years, passenger demand has exceeded the ability of the system to cope adequately. Changes to funding and administrative arrangements have meant that the necessary on-going investment in the system has not occurred. Despite the success of the integrated public transport network, there has been increased pressure to put more money into roads, especially from the neighbouring growth areas not served by the public transport network.

In **Vancouver**, TransLink (Greater Vancouver Transportation Authority) is responsible for planning, financing and operating a regional transportation system that moves people and goods efficiently, and supports the regional growth strategy, air quality objectives and economic development of the Greater Vancouver Regional District<sup>65</sup>.

TransLink produces and implements the Regional Transport Plan, which includes transport strategies, roads, public transport, ferries, cycles, travel demand management, air quality, intelligent transport systems and budgets. It determines the allocation of regional funds to the appropriate transport mode to meet the demand.

Vancouver is widely acknowledged as having one of the best integrated transport systems in the world.

Towns and cities in North America which replaced their trains and light rail systems with buses in the 1950s and 1960s have become car-dominated. They are now attempting to put the light rail systems back again<sup>66</sup>.

### 6.2.3 Australia

'**Metro Tasmania**' operates government buses in Hobart, which has a similar population to the Newcastle / Lake Macquarie area, as well as in the regional centres of Launceston and Burnie. While adopting a commercial perspective, it still retains the 'appearance' of a government operator in terms of customer benefits. It has been given a five-year program of government funding which reduces each year as efficiencies are implemented. Service delivery has improved as an outcome of this management approach<sup>67</sup>.

**South East Queensland** has for many years adopted an integrated approach to regional transport planning, management, operation and funding<sup>68</sup>. This has seen, for example, the completion of the 85km electrified inter-city passenger rail network from Brisbane to Robina, with plans to go further south to Coolangatta. Travel to the Gold Coast is provided with coordinated Trainlink buses using integrated fares and tickets.

TransLink is a major initiative being led by Queensland Transport to create new directions in public transport. Its objectives are:

- to create a comprehensive, integrated and coordinated transport system across the whole of South East Queensland
- to use technology to increase efficiencies in the system to provide better services for the people of the region
- to ensure that public transport offers a realistic alternative to car travel
- to plan for the future growth of South East Queensland.

---

<sup>65</sup> Translink website [www.translink.bc.ca](http://www.translink.bc.ca)

<sup>66</sup> Mike Colle, Chairman of Toronto Transit Commission, Smogbusters Seminar, Sydney, July 1994

<sup>67</sup> *Annual Report Metro Tasmania 1998/99*

<sup>68</sup> *Transport and Regional Development in South East Queensland* Robert Stimson, Australian Planner, Vol 39 No 3, 2002

From October 2002, TransLink became the coordinating body for all public transport in Southeast Queensland. Individual train and bus operators retain their independence, and TransLink oversees integrated ticketing, coordination of routes and timetables, and marketing. TransLink has a staff of 40 drawn from state and local government transit agencies<sup>69</sup>.

**Illawarra's** *Action for Transport* was released in March 1999. The Integrated Transport Strategic Plan was developed through a whole of community approach following agreement at a regional level to a range of environmental, sustainable, social, economic and operational values for an integrated transport system. It nominated the organisations accountable for the completion of the agreed actions, and set out 130 actions in a total of 26 strategies needed to achieve the regional goals. It established performance indicators related to the regional goals for Journeys to Work, School and Shop, Freight, Inter-regional and Recreation Journeys.

Similar successes could be expected from regional management and integration of transport systems in the Lower Hunter.

**Gladstone** is 'Queensland's Port City'. It has many industrial attributes that are similar to Newcastle, but with a smaller population.

The Gladstone Integrated Regional Transport Plan 2000-2030 was released for consultation in July 2000, followed by the Implementation Report 2001-2002.

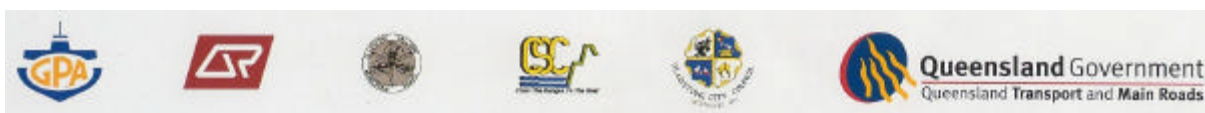
The foreword to the Plan states:

*The Queensland Government and the Gladstone City and Calliope Shire Councils are all committed to generating jobs and prosperity in the region. The development of the Gladstone Integrated Regional Transport Plan is a practical example of this commitment to regional economic development. At the same time, the region's transport system must be developed in an ecologically sustainable manner and in a way which contributes to an attractive lifestyle for residents.*

*Given the significance of Gladstone as a major industrial centre in Queensland, an important emphasis of the GIRTP is on freight and commodity movements. However, the GIRTP also considers other transport issues such as passenger transport in and through the region and walking and cycling.*

*The GIRTP is being developed through a partnership approach. It involves the State Government collaborating with local government to deliver the region's transport system. A strong partnership between state and local government is essential if the major transport challenges facing the Gladstone region are to be met. The GIRTP sets out a comprehensive framework for the future development of the Gladstone region's transport network for the next 30 years. It contains consolidated action plans which will be implemented co-operatively and in a co-ordinated manner by all of the agencies involved.*<sup>70</sup>

A very significant factor in the process for the GIRTP is that the documentation carries the logos of the participating government agencies: Queensland Government: Transport and Main Roads, Gladstone City Council, Calliope Shire Council, Gladstone Port Authority, Queensland Rail, Gladstone Calliope Aerodrome Board, and (on the Implementation Plan) Gladstone Economic and Industry Development Board. This is a powerful sign of participation and commitment to the regional planning process.

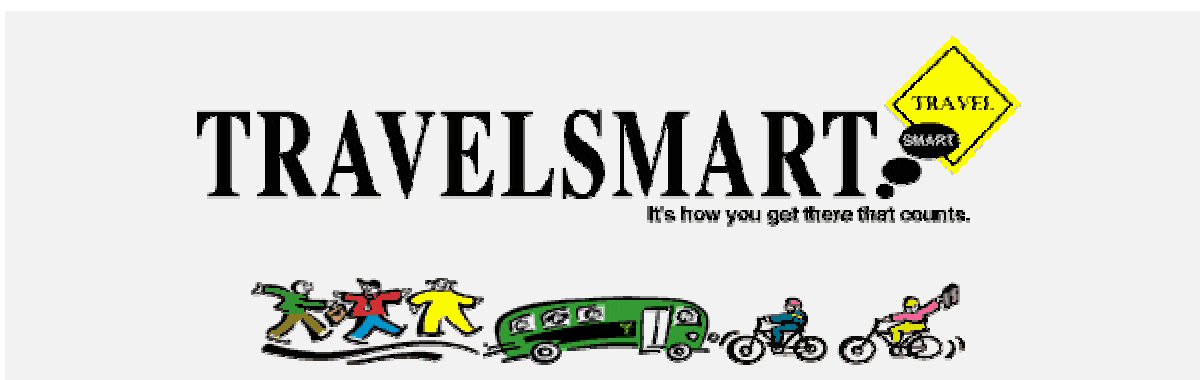


<sup>69</sup> Australian Bus and Coach website, 23 October 2002

<sup>70</sup> *Gladstone Integrated Regional Transport Plan 2000 - 2030: Draft for Consultation* Queensland Department of Transport, July 2000

## 6.3 TravelSmart

TravelSmart is the brand name for a voluntary travel behaviour change program aimed at encouraging people to reduce private vehicle travel in favour of more sustainable modes such as walking, cycling, public transport, ride sharing and shorter trips.



### 6.3.1 Brisbane

Queensland Transport has undertaken a broad range of programs designed to encourage people to reduce car dependency and increase their use of public transport, cycling, walking, and car sharing<sup>71</sup>.

One of these programs is TravelSmart, a program which is also in use in Perth, Adelaide and Melbourne. A TravelSmart Centre provides information to community, industry and government groups on a range of current public transport initiatives in South East Queensland. It provides a focal point for public transport planning and co-ordination, and a forum for community, industry and government groups to work towards transport targets and objectives.

Other activities at the TravelSmart Centre are designed to raise the profile of public transport.

- Information about major projects such as the South East Transit Project and the Integrated Ticketing Project can be found under one roof.
- Interactive displays, smartcard ticketing equipment from around the world and information storyboards take the public transport user on a journey into the future, where public transport will be the first choice to the South East Queensland travelling public.

The TravelSmart programs undertaken by Queensland Transport are directly relevant to the ways that sustainable transport issues could be handled in the Lower Hunter. This is demonstrated by a brief outline of these programs, taken from the website <[www.transport.qld.gov.au](http://www.transport.qld.gov.au)>.

#### TravelSmart Workplaces

Workplaces generate many trips, most of which involve private vehicles including employees commuting to work; business trips, clients visiting, service and delivery/courier trips.

Reducing potential vehicle trips associated with a workplace offers potential benefits for the employer, employees, and the community. A reduction in vehicle trips leads to better environmental performance through reduced pollutant and greenhouse gas emissions as well as increased employee fitness and well-being.

- **The Project**

A TravelSmart workplace project involves working with an organisation to identify travel patterns and find ways to reduce unnecessary vehicle trips.

<sup>71</sup> Queensland Transport website <[www.transport.qld.gov.au](http://www.transport.qld.gov.au)>. Background information from Alton Twine, Principal Marketing and Communications Officer, Marketing and Public Education Unit, Queensland Transport, Sept 2002

An innovative partnership has been established between Queensland Transport and the Brisbane office of Gutteridge, Haskins and Davey (GHD) to become Queensland's first TravelSmart Workplace.

GHD is an international company providing leadership in management, engineering, environmental, planning and design services with a commitment to balanced sustainable development.

- **The Results**

A staff survey has been undertaken at GHD and is currently being analysed. By analysing the survey results and examining organisational policies, a number of actions to assist staff in changing their travel patterns will be developed.

## **TravelSmart Schools**

Recent studies have revealed that in some schools up to 77% of children are driven to school in dry weather, increasing up to 95% during wet weather. On a typical day 54% of children are driven to school, 22% catch public transport, 15% walk and 7% ride a bicycle.

This is a phenomenon of parenting that has emerged since the late 1980's. Prior to this it was more common for children to walk or cycle to school, often with other children in the street or with their brothers or sisters.

Today it is not uncommon for parents to drive their children to school even if it is only a few hundred metres away. The reasons for this are many and varied, including the perceived threat to the safety of children, both from traffic and 'stranger danger'.

The irony is that the danger from traffic increases as more children are driven to school. Unless our car use is reduced, air pollution, greenhouse gas emissions and traffic congestion will get worse.

### **Projects**

- **Schools Project**

In response to the above issues the TravelSmart Schools Project was developed as an effective way of educating the school community and future generations to consider making alternative choices to using the car.

The program aims to raise students' awareness about the impacts of high car use and our car culture. One of the main impacts of car use is air pollution and thus one of the aims of the program is better quality air. The program is suitable for use across year levels and lends itself to different Key Learning Areas focuses.

- **Curriculum Project**

Queensland School Curriculum Council syllabus documents: the Study of Society and Environment and The Arts Key Learning Area have been used to generate TravelSmart modules. The modules for The Arts syllabus have been used by schools during 2000 and 2001.

The TravelSmart module is based on level four of the Study of Society and the Environment.

- **Rural Schools Project**

In 1999 Queensland Transport piloted a Rural Schools Program with Kilcoy State High School. The objectives of the program were to investigate trip planning and promote the use of public transport, walking, cycling and car sharing while on an excursion to Brisbane. Schools are invited to visit the TravelSmart Centre to experience this workshop.

## **TravelSmart Suburbs**

Queensland Transport has been working with people in selected suburbs to inform them of their transport options and motivate them to change their travel behaviour.

- **The Project**

The TravelSmart Suburbs Brisbane Pilot project was conducted in a trial area located in the inner northern Brisbane suburbs of Grange, Newmarket, Wilston, Windsor, Alderley, Gordon Park and Lutwyche. The project targeted 450 randomly selected households. Households that chose to participate were interested in making changes to their current travel behaviour.

Households were able to choose from a wide selection of information that gave them alternatives to car travel for their trips. This included individualised and stop specific timetables, community maps as well as cycling and walking guides. Households were also offered a personal visit from a travel consultant to explain their travel options.

During the course of the individual project sessions, households on the average chose eight items of information - the information chosen by households was often for travel modes not currently used.

- **The Results**

The TravelSmart Suburbs Pilot project has brought about a substantial increase in the quality of life for Queenslanders.

The audited results from the 450 participating households are:

- walking increased 16%
- cycling increased 6%
- public transport use increased 33%
- car as driver trips decreased 10%
- car as passenger trips decreased 5%
- vehicle kilometres travelled decreased 10%.

It is important to note these results have been achieved without expenditure on more infrastructure or public transport services.

Benefits for the community and individuals:

- less traffic, noise and pollution in local streets
- improved personal security (more people on the streets walking & cycling)
- savings in car running costs
- fewer road crashes
- improved health from physical activity
- reduced greenhouse gases.

Benefits for the government:

- increased public transport patronage and reduced rates of public transport subsidies
- reduced pollution and greenhouse gas emissions from car usage
- increased community health levels and community interaction.

## **TravelSmart Destinations**

Destinations such as hospitals, shopping centres and universities generate a large number of trips everyday. These destinations are all required to provide large parking areas at considerable cost and on valuable land, which could be utilised for far more profitable purposes. By providing cycling and walking facilities as well as public transport services at these destinations, more people will be encouraged to choose modes of transport other than the car to make these journeys.

- **The Project**

Queensland Transport aims to identify major travel destinations in South East Queensland and work with their management to produce transport plans. Each plan will include a range of facility and service improvements for walking, cycling and public transport as well as ways to implement behaviour change campaigns.

When the TravelSmart plan was first announced in Brisbane in October 1995, there was an inevitable reaction from the road lobby and other organisations fearing restrictions on car movements and adverse affects on business. Brisbane City Council distributed a brochure to its ratepayers dispelling the concerns as myths, and providing examples of where integrated transport planning actually improved traffic and business<sup>72</sup>.

---

<sup>72</sup> *Myths and Facts of Transport Planning* Transit Australia, June 1996, page 131

## 6.3.2 Perth

The Department for Planning and Infrastructure (DPI) and the Department of Environment Protection (DEP) in Western Australia run transport awareness initiatives in Perth under the TravelSmart banner. The issues addressed are similar to those in the Lower Hunter. This is illustrated by an extract from the website <[www.environ.wa.gov.au/community/travelSMART.asp](http://www.environ.wa.gov.au/community/travelSMART.asp)>.

### **What's The Problem?**

Perth has a very high and increasing level of car use. In fact, there are over two million car trips made per day. These car trips make up 63% of all non-commercial trips. By 2029 this number will rise dramatically to over 4.5 million trips if current trends continue unchecked.

Traffic congestion is an increasing problem, and vehicle emissions are the single biggest contributor to Perth's declining air quality.

Simply continuing to expand the road network on its own is not environmentally, socially or economically sustainable. The [Metropolitan Transport Strategy \(MTS\) \(Transport WA, 1995\)](#) identified ways to achieve a more 'balanced' transport system including: improving public transport services; improving the environment for walking and cycling; changing land use patterns; and changing people's own transport choices.

### **What Can Individuals Do?**

Improved air quality and reduced traffic congestion can be achieved by everyone making small changes in the way they travel. Going by foot, bicycle, bus or train for even one trip a week makes an enormous difference. Here are some simple steps:

- Think about which trips you could change.
- Find out how to change them using the contacts overleaf.
- Try the change when you're not in a rush.

There are many advantages to using your car less. You can :

- save money;
- improve your health;
- develop a sense of community; and
- enjoy travelling in different ways.

The community benefits include:

- better air quality;
- better local living environment;
- support for local business; and
- less traffic congestion.

### **TravelSmart Can Help**

TravelSmart aims to change people's travel habits and encourages them to walk, cycle, bus, train or carpool.

TravelSmart agencies conduct a number of programs to start people thinking about their travel choices. These include:

- TravelSmart Workplace;
- Individualised marketing for households;
- TravelSmart action plans for local areas;
- Action plans for trip generators (places that many people need to travel to); and
- TravelSmart to School.

### **TravelSmart Workplace**

TravelSmart Workplace aims to reduce the number of single occupant vehicle trips into the Perth central area in order to improve air quality and reduce traffic congestion.

This program focuses on commuters and involves a free 26-week information campaign designed to raise awareness and encourage use of transport alternatives. As well as improving air quality, the program can improve the general health and efficiency of employees. TravelSmart Workplace guides for carpooling, walking, cycling, and using public transport are available.

TravelSmart Workplace also supports organisations to develop and implement a Green Transport Plan tailored to their needs. An access audit and travel survey provides information on current travel patterns and barriers and opportunities for change. A workplace committee and a planning workshop are used to identify actions to reduce car trips and promote alternatives.

### **TravelSmart in Communities**

The DPI works with local government to develop local solutions to the high level of car use. The community is actively encouraged to be involved in developing and implementing the solutions.

### **TravelSmart to Major Destinations**

A lot of people work at or visit major destinations such as hospitals or tertiary institutions, and most arrive by car. The DPI works with organisations to develop and promote the use of sustainable transport.

### **TravelSmart to School**

Designed for Years 5 to 7, this 10 week curriculum-based program, which culminates in a TravelSmart to School week and a 'Magical Mystery Tour', includes a resource kit and teacher support.

## **6.3.3 Lower Hunter**

It would appear that the TravelSmart program would be an appropriate mechanism for advocating sustainable transport issues in the Lower Hunter. TravelSmart is coordinated by National Transport Secretariat, and contributory funding is available through the Australian Greenhouse Office (AGO). It is understood that the AGO has made an appropriation of funds for NSW, but these have not yet been allocated by Transport NSW. The Lower Hunter could use the strategies advocated in this Issues Paper (Vol 1, §4) to apply for the NSW funding allocation.

Among other things, a TravelSmart program in the Lower Hunter would be able to assist and expand the current efforts by the University of Newcastle and Hunter Health to encourage greater use of public transport and alternative transport modes to their main campuses.

## **6.4 Changes to Travel Behaviour**

'Travel Behaviour Change Methods' refers to those approaches where individuals choose their own method of changing travel behaviour rather than simply acting in response to external policies or pressures. These methods are being used increasingly to address travel demand management and related issues<sup>73</sup>.

One of the Travel Behaviour Change Methods is known as Travel Blending®. It offers a way for individuals to reduce the effects of the car by:

<sup>73</sup> *The Evaluation of Travel Behaviour Change Methods - a Significant Change*, Transport Engineering in Australia, Vol 7, 2001, p 35

- thinking about activities and travel in advance
- blending modes of travel
- blending activities by doing as many things as possible on the same journey
- blending over time by making small sustainable changes over longer periods of time
- understanding the issues so that they can make changes themselves
- making changes that suit their own lifestyles.<sup>74</sup>

In 1999, as part of its strategy to reduce the impact of the car in Adelaide, Transport SA ran a six-month Travel Blending® project in the suburbs of Dulwich and Rose Park on the south-eastern edge of the Adelaide CBD.

The results for the 1500 people involved were:

- 10% reduction in car trips in neighbourhood
- 9% reduction in kilometres travelled by car
- 5% less time in car and 20 minutes more leisure time per week reported by drivers
- 6 - 8% increase in time spent walking
- 15% increase in bus trips
- 70% of all changes occurred because of the use of the car more efficiently, rather than changing to other modes of transport.

A pilot study was conducted in South Perth in 1997 using Individualised Marketing (IndiMark®) developed by SocialData in Germany<sup>75</sup>. The same technique was used for the Brisbane TravelSmart Suburbs project quoted in Vo 2, §6.3.1. The Perth study has achieved significant mode choice shifts which have been sustained for over 3 years.

- Car as driver trips went down by 10%
- Walking increased by 16%
- Cycling increased by 91%
- Public transport usage increase by 21%.

The benefit-cost ratio of the project was estimated independently at 13:1.

A similar approach has been adopted in Europe, where the term used is 'Mobility Management'. There are 60 Mobility Management Centres in Germany alone. Similar centres have been established in Britain, Canada and United States.

The first Mobility Management Centre in Austria has been established in the provisional city of Graz, which as a population of 250 000 people, about the same size as Newcastle / Lake Macquarie. The Centre is funded by the City of Graz (33%), by contributions from the region's transport operators, and by 10% commission on tickets sold. Travellers can buy one ticket for travel by all modes and with 60 operators throughout the whole province (population 1.3 million).

The functions of the Mobility Centre in Graz are varied and comprehensive.

- Provides a one-stop shop for all transport information and ticket sales, both by phone and in person

---

<sup>74</sup> AITPM Newsletter, Autumn 2000

<sup>75</sup> *The Perth Experience: Reducing the Use of Cars* Werner Brög et al, Paper presented at Reducing Traffic Congestion in London Seminar, London January 2002

- Provides free personal consulting services to encourage people to use sustainable transport modes
- Runs programs to promote greater understanding and use of public transport, such as 'Safe Routes to Schools' and 'Car-free Days'.
- Conducts telephone marketing campaigns for public transport
- Acts as a service and information point for car sharing
- Rents bicycles (with or without trailers)
- Arranges insurance for cyclists
- Assists community groups preparing submissions for transport and traffic improvements
- Provides information about specialist transport services for disabled people
- Sells mobility-related products
- Manages complaints about transport services.

In Graz, there are 100 000 public transport users each day (nearly twice as many as in the Lower Hunter). The Mobility Centre receives 5000 inquiries each week.

While the Mobility Centre caters for all transport modes and travel purposes, it emphasises those with the greatest potential for sustainable alternatives: leisure activities and people approaching a change in lifestyle<sup>76</sup>.

Examples such as what has been done in regional centres such as Graz demonstrate the potential for achieving sustainable transport targets in the Lower Hunter, and provide some indications of methods that may be successful.

## **6.5 Warren Centre Research on Sustainable Transport**

In July 2002, the Warren Centre for Advanced Engineering at the University of Sydney released its Final Report *Sustainable Transport in Sustainable Cities: Towards a City of Cities*.

The report is the culmination of three years work by 200 professionals who responded to the challenge to raise the performance of Sydney in its development and its transport to world leadership, and to set an example for major cities worldwide.

The issues of sustainability and transport are much greater in Sydney than they are in the Lower Hunter. However, several aspects of the Warren Centre's work are nonetheless relevant to this Issues Paper.

- The Lower Hunter is part of the Greater Sydney Metropolitan Region, and has strong interactions with it.
- Through proper planning and leadership, the Lower Hunter can grow in a way that will avoid the problems that now plague Sydney.
- Some of the fundamental community attitudes identified in the Warren Centre research projects are applicable to the Lower Hunter.
- Some of the solutions to Sydney's problems relating to inter-regional links will impact on the Lower Hunter and provide the opportunity to strengthen its own transport systems.
- The methodology adopted in the Warren Centre research may be suitable for similar work on sustainable transport issues in the Lower Hunter.

---

<sup>76</sup> *Mobility Management Strategies in Europe* Presentation by Karl-Heinz Posch, Travel Demand Management Seminar, Sydney, September 2002

The Foreword to the Warren Centre report provides the context for its relevance to the Lower Hunter<sup>77</sup>.

The Warren Centre report focuses on the community's values and needs while moving the city and its transport system towards a more sustainable outcome. The numerous initiatives presented for a healthier lifestyle, more transparent pricing of transport, improvements to rail, road and bus, new technology and intelligent information systems with more focused management through institutional change are all vital to meeting the challenge.

The key to attaining the desirable future lies in developing Sydney as a group of regional cities, supported by behavioural change programs. It is pleasing to see the NSW Government is already moving to address the change in land use structure and other aspects of the report's recommendations.

The move towards a sustainable city is a long-term commitment. It requires partnerships between all levels of government, industry and business, and with the community.

The Lower Hunter cannot escape being part of this new direction. It can respond as a region to the initiatives and opportunities that will be offered, and use these as a springboard for its own sustainable transport systems.

One of the significant reports from the Warren Centre research examines community values in relation to transport planning and infrastructure<sup>78</sup>. More than 1300 people participated in this research project, first in focus groups, then by phone and finally through a written submission. Key decision-makers in the NSW transport sector were also interviewed.

While the people involved and the survey topics were based in Sydney, the results may point to community values in the Lower Hunter. This would need to be verified by complementary local surveys. However, the transport decision-makers surveyed are the same people who determine transport matters for the Lower Hunter. The survey results which recorded their views about transport issues and community attitudes in Sydney most probably represent their views about the Lower Hunter, which may not be the same as the views of the community.

Subsequent research undertaken in Perth using the same methodology has revealed similar community attitudes to those in the Warren Centre Sydney surveys.

A selection of the research findings gives some indications of what similar surveys might produce about community attitudes in the Lower Hunter.

- Sydney has significant transport and traffic problems and they appear to be getting worse.
  - ◇ 58% of residents agreed
  - ◇ Decision-makers thought that 38% of residents would agree
  - ◇ 47% of decision-makers personally agreed.
- We need better public transport and should spend some of the road budget on improving it (including new modes such as light rail, transit ways or people movers).
  - ◇ 70% of residents agreed
  - ◇ Decision-makers thought that 56% of residents would agree
  - ◇ 89% of decision-makers personally agreed.
- Demand management is preferable to more freeways and cleaner cars.
  - ◇ 64% of residents agreed
  - ◇ Decision-makers thought that 50% of residents would agree
  - ◇ 79% of decision-makers personally agreed.

---

<sup>77</sup> *Sustainable Transport in Sustainable Cities: Towards a City of Cities* Warren Centre for Advanced Engineering, University of Sydney, July 2002, page 3

<sup>78</sup> *Report on Community Values Research Study* Warren Centre Sustainable Transport in Sustainable Cities Project, February 2001

- Regional centres such as Parramatta, Chatswood, Liverpool, Newcastle, Wollongong and Goulburn should be developed in preference to Sydney CBD.
  - ◊ 88% of residents agreed
  - ◊ 95% of decision-makers personally agreed.
- We should be actively investigating, developing and implementing new transport technologies rather than relying on current transport systems to meet future needs.
  - ◊ 84% of residents agreed
  - ◊ 58% of decision-makers personally agreed.

The survey revealed broad public interest and support for new transport technologies. Specifically there was interest in ‘green’ cars, intelligent public transport, smart highways and personal rapid transit. While there was strong public support for government funding of public transport, there was an expectation that the research and development of new technologies would be funded by private investment, with some government funding.

On many issues, decision-makers had similar views to those of the public. However, decision-makers underestimate the level of community’s support for improving public transport and its willingness for this to be funded if necessary at the expense of the roads budget. They also underestimate the extent to which the public are prepared to see traffic demand management solutions rather than the building of more roads.

These survey results about decision-makers emphasise the need for the Lower Hunter Region to be able to formulate its own community opinion and make it publicly known, rather than relying on the perceptions of decision-makers (mainly in Sydney) on what this regional community wants. It strengthens the importance of the strategic action for a Regional Transport Panel outlined in Vol 1, §4.2.

## 7 References

### 7.1 Sustainability and Transport

The references listed below contain source material for the sustainable transport concepts discussed in this Paper.

- *2007 Vision: a Draft Transport Vision for Consultation* Queensland Transport, 1999
- *A Travel Reduction Strategy for Brisbane* Brisbane City Council, 1995
- *A Very Public Solution: Transport in the Dispersed City* Paul Mees, Melbourne, 2000
- *Action for Bikes: BikePlan 2010* NSW Roads and Traffic Authority, Sept 1999
- *Action for Transport 2010* NSW Dept of Transport, 1998
- *Annual Reports* (various) State Transit Authority of NSW
- *Auslink Green Paper: Towards a National Land Transport Plan* Department of Transport and Regional Services, Canberra, November 2002
- *Australia Cycling 1999-2004 National Strategy* Austroads, 1999
- *Basic Community Profiles, 1996 Census* Australian Bureau of Statistics, 1998
- *Better Mobility in Urban Areas: Problems, Solutions, Best Practices* UITP General Commission for Urban Life, Brussels, May 2001
- *Brisbane - Melbourne Rail Link: Economic Analysis* Bureau of Transport Economics Working Paper 45, Canberra, October 2000
- *Bus Stop Style Guide* State Transit Authority of NSW, 1999
- *Community Values Research Study Sustainable Transport in Sustainable Cities Project*, Warren Centre, Sydney, February 2001
- *Economies and Efficiencies in Urban Transport* Council on the Cost of Government, Sydney, July 1996
- *Freight Logistics in Australia: An Agenda for Action* Department of Transport and Regional Services, Canberra, March 2002
- *Gender Perspective on Urban Car Use: A Qualitative Case Study* Robyn Dowling et al, Urban Policy and Research, Vol 17 No 2, 1999
- *Guiding Principles for a Sustainable Future* Northern Rivers Regional Strategy, 1999
- *Impact of Planning of Urban Areas on Use and Attractiveness of Local Bus Services* R Fleming and G Pund, Proceedings of 17<sup>th</sup> ARRB Conference
- *Integrated Land Use and Transport Planning in the ACT* ACT Government, 1999
- *Integrated Regional Transport Plan for South East Queensland* Queensland Transport, 1996
- *Integrating Land Use and Transport, A Planning Policy Package* Dept of Urban Affairs and Planning, 2001
- *Issues Papers* (various) Transport Data Centre, NSW Dept of Transport
- *Light Rail Strategic Plan for NSW* NSW Public Transport Advisory Council, 1997
- *Local Government's Role in Bus Transport* Peter Adams AITPM Newsletter no 2, 1995
- *Local Urban Bus Services: Natural Monopoly and Benchmark Contestability* David Hensher, Institute of Transport Studies, 1993
- *Monitoring of Minibus Services in Penrith* NSW Dept of Transport, 1994

- *Operating a Bus and Coach Business* Brewer and Hensher, 1997
- *Planning News* Royal Australian Planning Institute Victoria, May 1999
- *Public Transport New Services Costs and Benefits* UITP, 1989
- *Public Transport Regional Perspectives* UITP, 1989
- *Rethinking Public Transport in Sydney* Urban Frontiers Program, Issues Paper No 5, Paul Mees, 2000
- *Road-based Public Transport and High Occupancy Vehicles: A Guide for Traffic Engineers* Austroads, 2002
- *Shaping Up: Shaping Urban Communities to Support Public Transport, Cycling and Walking in Queensland* Queensland Transport, 1999
- *SMART Targets for Sustainable Transport - a Review of International and NSW Practice* Hidas & Black, Transport Engineering in Australia, Vol 7, 2001
- *Strategic Action Plan: Objectives, Targets and Strategies 1997-2000* NRMA Clean Air 2000
- *Sustainability and Australian Cities* Peter Newman, Australian Planner, 1999
- *Sustainability and Cities: Overcoming Automobile Dependence* Newman and Kenworthy, 1999
- *Sustainability and the Post-modern City* Peter Newman, The Environmentalist, 1995
- *Sustainable Transport in Sustainable Cities: Towards a City of Cities* Warren Centre for Advanced Engineering, July 2002
- *Sustainable Transport: Responding to the Challenges* Institution of Engineers, Australia 1999
- *Technology, Pricing and Management Systems Futures for Urban Public Transport* David Hensher, Institute of Transport Studies, 1994
- *Timetabling for Tomorrow: An Agenda for Public Transport in Australia* Australian Urban and Regional Development Review, 1995
- *Towards a More Sustainable Canberra* Newman and Kenworthy, 1991
- *Towards an Integrated Regional Transport Plan for South East Queensland: Discussion Paper SEQ2001 Project*, 1995
- *Transit Supportive Development - Benefits and Possibilities* Better Cities Program, 1995
- *Transit-Supportive Land Use Planning Guidelines* Ministry of Transport and Ministry of Municipal Affairs, Ontario, 1992
- *Transport for a Sustainable Future: The Case for Europe* John Whitelegg, 1992
- *Transport Plan: Evolution in Motion. Brisbane's Integrated Transport Strategy* Brisbane City Council, 1998
- *Transportation Management: An Area in Need of Development* Public Transport International, November 1999
- *Travel Demand Management Guidelines* Austroads, 1995
- *Travel Demand Management: A Resource Book* Austroads 2002
- *Turning the tables on anti-tram 'experts'* Prof Carmen Hass-Klau, Tramways & Urban Transit, December 2002
- *Urban Public Transport Glossary* Transportation Research Board, 1989
- *Urban Rail CAN Deliver* David Hill, Australian Railway Association, in Railway Digest, May 2002
- *Yearbook and Industry Directory* Australian Railway Association, 2000

## 7.2 Hunter Region Strategies and Projects

Reference material specifically related to recent projects in the Hunter Region is summarised in Vol 2, §4.5 and §4.6. The specific reports referred to, and other relevant references, are listed below.

- *2002 Community Survey* Port Stephens Council, July 2002
- *Action for Transport 2010 – Discussion Paper* prepared by Lake Macquarie City Council, January 1999
- *Activating Public Transport in Newcastle Region, Issues Paper* Newcastle and Lake Macquarie City Councils May 2001, and submissions to its public exhibition from community, STA, SRA, RTA, EPA.
- *Central Newcastle Interchange Study* Rust PPK for Dept of Transport, 1997
- *Draft Public Transport Strategy for the City of Lake Macquarie* Lake Macquarie City Council, June 1999
- *Evaluation of Woodville Junction Proposal* SGS Economics and Planning, December 2002
- *Feasibility of Austrans People-Mover: Western Newcastle Corridor Study Stage 1: Demand* Sinclair Knight Merz Sept 1996
- *Hunter Valley Wine Country Tourism Related Statistics and Information* Cessnock City Council, 2000
- *Honeysuckle Project Transport Study Final Report* Sinclair Knight, 1991
- *Kotara Station Pre-Feasibility Study Final Report* Sinclair Knight Merz, June 2001
- *Lifestyle 2020 A Strategy for Our Future* Lake Macquarie City Council, 1999
- *Lower Hunter Integrated Transport Study - Report for Public Discussion* NSW Dept of Transport 1995
- *Maitland Integrated Transport Study* Dept of Transport, May 1995
- *Maitland Social Plan Community Profile* Maitland City Council, July 2000
- *Maitland Urban Settlement Strategy* Maitland City Council, 2001
- *Newcastle - Monitor of Public Attitudes: Air Quality and the Car 1996* NRMA Clean Air 2000, October 1996
- *Newcastle Bus Usage Survey 2001* Hunter Valley Research Foundation, June 2001
- *Newcastle CBD Transport and Development Study* Travers Morgan, 1990
- *Newcastle Council Vision* Newcastle City Council, 1999
- *Newcastle Light Rail Transit: Newcastle - University Corridor* Transit Planners, 1995
- *Newcastle Pedestrian Access and Mobility Plan* Prepared by GHD for Newcastle City Council, May 2002
- *Newcastle Strategic Directions Statement* Newcastle City Council, 1999
- *Newcastle Transport Community Workshops Report* 1999
- *Newcastle Urban Strategy* Newcastle City Council, 1998
- *Newcastle Urban Strategy: Background Report* Newcastle City Council, 1998
- *Port Stephens Community Profile 1999* Port Stephens Council
- *Port Stephens Community Survey* Port Stephens Council, 1998
- *Proposal for Light Rail Transit in Central Newcastle - Revised Draft Assessment Report* NSW Dept of Transport, 1996

- *Proposal to Boost Public Transport Usage at a Regional Level, Pre-Feasibility Study* Sinclair Knight Merz, Nov 2001
- *Proposed Level Crossings of Rail Line, Civic Station to Newcastle Station* TTM Consulting, Jan 1997
- *Public Transport in Newcastle - An Integrated System* Newcastle Regional Chamber of Commerce. 1996
- *Public Transport: A Rail Strategy for the Newcastle Region* Prepared for Labour Council of NSW by Jacana Consulting, 1992
- *Raymond Terrace and Salamander Bay Urban Design Guidelines* Port Stephens Council, 2001
- *Raymond Terrace Commercial Centre Stud* , Port Stephens Council, April 2000
- *Section 94 Contributions Plan for Car Parking in the Cessnock CBD* Cessnock City Council, Sept 2001
- *TransHunter: A Vision for Transport in the Hunter: Transport Cluster Map* Hunter Region Development Organisation, April 1998
- *Transport Infrastructure Study for the Hunter, North and West Regions of NSW* Discussion Paper prepared by Newcastle and Hunter Business Chamber, June 2000
- *University of Newcastle Travel Modes Survey*, Transit Planners, June 2002, Sept 2002, June 2003
- *Urban Settlement Principles* adopted by Port Stephens Council, Nov 2001, including *Urban Settlement Strategy*