Chapter 4

Improving public transport

4.1 This chapter summarises comments in submissions about how public transport should be improved.

4.2 Many of the points below are matters of organisational efficiency which apply regardless of the level of funding available ('need for better services and more infrastructure' are the obvious exceptions).

Need for better services

4.3 The most prominent comment in submissions was the need for better services.

4.4 The main elements of public transport service quality are route coverage, frequency, operating hours, speed and comfort.

4.5 Many areas of Australian cities have adequate route coverage,¹ but score poorly on frequency, operating hours and speed. Bus/tram services in inner areas are often adequately frequent (four per hour or more during the daytime), but very slow and unreliable because of traffic congestion. Bus services in outer areas are usually infrequent (two per hour or less) and not full-time. They are often slowed by extremely circuitous routes which are designed to give the greatest route coverage at least \cos^2 .

4.6 A frequency of at least four per hour is an important threshold of service quality. Four to six per hour (one each 10-15 minutes) is the level where people start to not bother looking at the timetable ('turn up and go'). It is the level needed to encourage more interchange trips, as discussed below (paragraph 4.12 ff).³

4.7 To improve public transport speed the major focus will have to be tram and bus priority measures, the aim of which is to make services congestion-free.⁴ These measures are also very important to improve reliability, since delay in traffic

¹ In greenfields development areas routes are typically planned having regard to government guidelines about the maximum walking distance from a bus stop.

² Mees 2000:238

Submission 136, Public Transport Users Association, p.6. K. Dobinson (10,000 friends of Greater Sydney, *Committee Hansard* 6 March 2009, p.44. Prof. J. Stanley, *Committee Hansard* 30 March 2009, p.67. G. Davis, *Committee Hansard* 20 July 2009, p.40. The threshold of 'forget the timetable' travel is commonly said to be a frequency of 12 minutes: for example TRL 2004:71, Mulley 2009:23

⁴ D. Mellish (BusNSW), *Committee Hansard* 6 March 2009, p.25. Heavy rail services being already congestion-free, to increase their speed much would require very costly investment in straightening alignments and rationalising junctions.

congestion is the major cause of unreliable service (and unreliable service is very detrimental to the rider's experience even if the nominal frequency is good).⁵

4.8 Speed and frequency combine to make total trip time, including waiting time, perceived by the rider, so tradeoffs between them are possible. Frequency and reliability will be more important for shorter trips, especially transfer trips (trips with interchange between two public transport services). Linehaul speed will still be important for longer trips between major interchange points.

4.9 Comfort involves both the design of the vehicle and the level of crowdedness. It is to be expected that as general living standards improve comfort becomes relatively more important, as can be seen in the improving design of trains and buses as well as cars (with air-conditioning standard, for example). Mr Litman (Victoria Transport Policy Institute) suggested that public transport operators should focus more on comfort as a way of marketing against the convenience of car travel.⁶ Both actual and perceived safety and security concerns should also be addressed.

Committee comment

4.10 More frequent services will increase ridership, but it is unlikely that the extra ridership will be enough to cover the extra operating costs.⁷ The overall operating subsidy needed will probably increase (an exception may be where new services create a 'network effect', as discussed below).

4.11 The present level of public transport service represents the communally accepted compromise between service quality and subsidy cost. A challenge for governments is how to improve infrequent 'social service' public transport to the point where it can begin to attract 'choice' riders, without excessively increasing the cost of public subsidy. The measures discussed below should help do this, as they improve service quality independent of frequency.

Need for a complete network

4.12 Historic public transport routes are mostly radial routes focussed on central business districts (especially for rail). However travel to central business districts is now only a small proportion of total travel.⁸

⁵ Excess waiting time from unreliable service has a far greater perceived detrimental value than normal waiting time: TRL 2004:90.

⁶ T. Litman (Victoria Transport Policy Institute), *Committee Hansard* 31 July 2009, p.4-5. A survey of Sydney car commuters found that comfort and convenience factors (primarily 'vehicle faster') were very important, and cost factors were not important in forming their decision to use the car. Transport Data Centre 2008:13

⁷ That is, the elasticity of demand with respect to frequency is less than 1. Mees 2000:85. TRL 2004:19

⁸ For example, from 6.30-9.30am weekdays, trips to the Sydney CBD are about 5 per cent of all trips in the Sydney region. G. Corpuz, NSW Transport Data Centre, pers. comm July 2009

4.13 Submissions argued that to encourage use of public transport for a wider variety of trips, it is important to create a complete network. This requires a complete grid or spider's web of routes with sufficiently frequent services; quality interchange facilities; timetables and ticketing that facilitate transfers; excellent information services; and preferably a single metropolitan public transport authority to plan and promote these things (some of these points are expanded below).⁹

4.14 In practice this requires improving cross-suburban routes to create the parts of the grid or spider's web that are not served by existing radial services. This will mostly be by bus.^{10 11}

4.15 With a complete network and convenient transfers the effective reach of the network may be greatly increased very cost effectively, as public transport becomes more attractive for people whose origin and destination do not happen to lie on a single route.

In establishing a role for public transport, it should be enshrined in the motto of delivering "frequency, connectivity and visibility"... Connectivity refers to the provision of door-to-door services with minimum delay and almost seamless interchanges. Visibility is predominantly knowing where the mode is coming from and going to, and when.. It is all about networks, not corridors per se.¹²

4.16 For example, comparing Melbourne with Toronto (which is often cited for its well-managed, integrated public transport service): though they have similar population and urban form, Toronto has a more rational grid of routes and better planned interchanges. It has a much higher proportion of linked trips (trips that involve transfer between two or more public transport vehicles) and a much higher occurrence of riders accessing train stations by bus. Toronto also has much higher

⁹ For example submission 136, Public Transport Users Association. Submission 143, J. Scheurer. Dr G. Glazebrook, *Committee Hansard* 6 March 2009, p.50. Scheurer et al. 2005:23. Mulley 2009:27. Where the network is simple and service at 'forget the timetable' frequency is not affordable (for example, in regional centres), a 'pulse timetable' can be used to facilitate transfers: all buses meet at a central point at the same time in each cycle, wait a few minutes for transfers, then continue. P. Mees, *Committee Hansard* 30 March 2009, p.53

¹⁰ For example see submission 143, J. Scheurer, for suggestions for a better regional bus network in north east Melbourne. Similarly submission 33, Bus Industry Confederation, p.19

¹¹ A few of Melbourne's tram routes have a cross suburban function. Cross suburban through city trips by rail may be important.

¹² Submission 7, Prof. D. Hensher, attachment: 'Frequency and Connectivity: Key Drivers of Reform in Urban Public Transport Provision', *Journeys*, Nov. 2008, p.26-27. Similarly J. Scheurer, *Committee Hansard* 30 March 2009, p.41. See submission 136, Public Transport Users Association, p.5 for the mathematics of the network effect: completing the network may win new patronage far in excess of what would be predicted by normal elasticity of demand, because it makes already existing services usable by far more people.

public transport use per person than Melbourne. European cities with still higher public transport use have a still higher proportion of linked trips.¹³

Need for a legible network and integrated information services

4.17 To encourage occasional users and transfer trips, it is essential to have a legible network of routes and excellent information about timetables and ticketing.

4.18 In this regard the achievements of Australia's authorities are mixed. Some cities have integrated information and marketing under a single brand, even where service provision is contracted out (eg Transperth). In Sydney the separate government rail and bus authorities, on their websites, do not mention each other's existence.¹⁴

4.19 A legible network requires not only good information, but a simple route structure:

Much evidence now supports the view that higher ridership can be achieved in public transport systems through the operation of frequency and simple network structures....¹⁵

It is imperative that bus routes either provide fast, direct links between hubs (Smartbus) or slower, circuitous service to access a maximum number of households within walking distance, rather than both functions at a time.¹⁶

4.20 These things are particularly important to attract new and infrequent riders and offpeak riders. It is important to market to these groups, not only to the city commuters who are the focus of the most current concerns about overcrowding, because accommodating more offpeak riders on existing services has low marginal cost and will improve cost recovery.

To encourage people to try public transport and then stick with it, we need to make their first public transport experience a good one. We need to give them information in advance on what options are available and how to use

- 15 Submission 34, Prof. G Currie, p.9
- 16 Dr J. Stone, *Committee Hansard* 30 March 2009, p.47. Scheurer et al. 2005:23

¹³ Submission 136, Public Transport Users Association, p.12. Submission 33, Bus Industry Confederation, p.30. Mees 2000:178. Access to rail stations is - in Melbourne: 61% by walking and cycling, 9% by bus 'in the early 1990s'; in Toronto: 20% by walking and cycling, 76% by bus: Scheurer et al 2005:8. See also submission 138, Bicycle Network, p.5, which gives a figures of 20% of Melbourne train riders accessing the station by bus.

¹⁴ Similarly they do not mention, and their network maps do not show, the many private bus routes that overlap their territories. Both websites (Cityrail and Sydney Buses) do link to a separate 'Transport Info' trip planner which covers almost all metropolitan bus and rail services, however they do not alert readers to the fact the the trip planner includes services other than their own. Sydney Buses links to Cityrail under a menu option described opaquely as 'useful links'.

public transport. This includes route maps, timetables, instructions on how to buy tickets.¹⁷

Need for convenient ticketing

4.21 It is essential to have convenient ticketing valid on all modes, and a fare structure which does not penalise transfers.¹⁸

4.22 Older systems typically have prepaid multiple ride tickets sold off the vehicle: one fare debited allows any number of boardings (bus or train) within a period (typically $1\frac{1}{2}$ to 2 hours) to allow transfers (Melbourne, Canberra, Adelaide, Darwin, Newcastle buses, Hobart).

4.23 Modern systems use a stored value smartcard which is debited by tagging on and off the vehicle (Brisbane, Perth and many overseas cities). The user tops up the card value as needed. The system may be able to debit a savings account automatically, in which case the user never has to think about paying a public transport fare again. This is an important convenience for infrequent users who are more likely to be unfamiliar with the ticketing system.

4.24 Improvements may be very cost-effective. When a new ticketing system was introduced in Brisbane in 2004 public transport use jumped significantly.¹⁹

4.25 Usually single cash fares are still available on buses. This is desirable so as not to discourage occasional users.

Committee comment

4.26 Giving due attention to the points above is favourable to encouraging off-peak and infrequent riders, not only the city commuters who are the focus of most current concerns about overcrowding. Encouraging offpeak riders is important because it will improve cost recovery (since extra offpeak riders can be handled at little marginal cost). Encouraging infrequent riders is important in order to increase community awareness of public transport.

Need to integrate cycling and walking measures with public transport

4.27 Submissions noted the need to plan measures to encourage cycling and walking consistently with public transport measures, as they support each other.

¹⁷ Submission 43, P. Flanagan, p.4

¹⁸ Mulley 2009:34

¹⁹ Submission 191, Brisbane City Council, p.24. Brisbane City Council, additional information 3 March 2009. Blake 2009:21. Other factors may have contributed, including an effective fare cut and service improvements about the same time: Cr J. Prentice (Brisbane City Council), *Committee Hansard* 3 March 2009, p.8,10. Streeting and Barlow 2007.

Cycling can greatly increase the catchment area of train stations, while almost all public transport trips have a walking element:

Cycling has to be seen as part of the mainstream transport system....There is a very strong body of science that says that the value of public transport use is multiplied several times when you increase the connectivity between cycling and walking activity and using buses and trains.²⁰

4.28 The Bicycle Network submitted that cycling is very suitable to replace many short car trips to train stations. Most of these trips are less than 5 km long, and providing commuter carparks at stations is very expensive by comparison with providing facilities for bicycles. A paved car parking space costs \$5,000-\$15,000 (not including land value); by comparison, a cage for 26 bicycles costs \$60,000.²¹

4.29 Submissions noted initiatives in Australia and elsewhere to enable bicycles to be carried on public transport: for example, racks on buses (Canberra) and special compartments on trains (eg Portland Oregon, San Francisco). Submissions urged that Australian authorities should implement these measures.²²

4.30 Submissions urged the need to fund infrastructure improvements to enable safe cycling, as lack of safe routes is the greatest disincentive:

The reason people are not riding is not because they do not have a bike. It is because they do not have somewhere to ride. As soon as you provide places to ride, people will get bikes.²³

Well maintained, safe to use (free from obstacles, separated from traffic) and secure (well lit, patrolled) network of walking and cycle ways, that actually follow routes that people tend to use (rather than following vacant usable land), will promote their use.²⁴

4.31 Brisbane City Council described its city cycle amenities:

We have provided the first end-of-bike-ride facility in Australia, down at King George Square... That provides showers, lockers, laundry services

²⁰ S. Powrie (Bicycle Institute of South Australia), *Committee Hansard* 23 July 2009, p.51. Similarly S. Lennon (Pricewaterhouse Coopers), *Committee Hansard* 6 March 2009, p.55.

²¹ Submission 138, Bicycle Network. Mr H. Barber, *Committee Hansard* 30 March 2009, p.11ff. 40 per cent of trips in Melbourne are less than 2km long: submission 130, Environment Victoria, p.5. Similarly M. Burke (Pedestrian and Bicycle Transport Institute of Australasia), *Committee Hansard* 3 March 2009, p.17. Similarly P. Strang (Bicycle Federation of Australia), *Committee Hansard* 19 March 2009, p.41

²² Submission 76, Cycling Promotion Fund, p.24,38,39. Submission 115, Environment House Inc, p.5. Similarly M. Burke (Pedestrian and Bicycle Transport Institute of Australasia), *Committee Hansard* 3 March 2009, p.25.

²³ Mr H. Barber (Bicycle Victoria), *Committee Hansard* 30 March 2009, p.18. Similarly Dr E. Hanna (Public Health Association), *Committee Hansard* 20 March 2009, p.4. H. Webster (Fleurieu Regional Development), *Committee Hansard* 23 July 2009, p.4

²⁴ Submission 13, Public Health Association Australia, p.6

and hair dryers so that you do not have to have helmet hair, which is a big issue. What amazes us are the thousands of people who go out in the morning from five to six to get their cycling exercise then go home, have a shower and get in the car and come in to work. What we are trying to do is encourage them to commute to work.²⁵

4.32 The Australian National Cycling Strategy 2005 was developed by the Australian Bicycle Council (an association of relevant government agencies such as road and traffic authorities and other stakeholders). It aims to encourage cycling with policies such as:

- cycling should be an essential consideration in integrated land use and transport planning;
- suitable infrastructure and facilities should be provided; and
- cycling should be supported and promoted.

4.33 The strategy is an 'agreement to cooperate', and is not prescriptive. It leaves it to the member governments to decide what targets they will establish for increasing cycling.²⁶

4.34 Submissions urged Australian Government assistance to promote cycling.²⁷ Submissions noted the need for more fine-grained planning of the urban environment to facilitate walking:

[Transport planning] should also entail attention to the physical facilities for access and connectivity for people walking and cycling – often the finegrained details that can make such a difference, such as the cross-ability of an intersection or shelters from rain and sun.²⁸

Need for better institutional arrangements

4.35 Submissions stressed the need for good governance to make sure that the city's public transport services are delivered effectively and to make sure that infrastructure investment is prioritised widely.

4.36 Infrastructure Australia in a recent report to the Australian government said similarly:

Simply investing in more capacity is not the only requirement to improve public transport in Australia. Public transport is not administered and managed in Australian cities as well as in many cities overseas. With more emphasis on public transport in the future, and with more funds set to be invested, governments need to ensure that public transport meets best

²⁵ Cr J. Prentice (Brisbane City Council), Committee Hansard 3 March 2009, p.13-14

Austroads, *The Australian National Cycling Strategy 2005-2010*, 2005, p.4 and pp 14-15.

²⁷ For example, submission 87, Australasian Railway Association, p.64.

²⁸ Submission 142, Dr C. Mason, p.5

practice and is as efficient as possible... Public transport administration in Australia could benefit from a more outwardlooking approach including cooperation and communication with other agencies and governments when planning for the future.. With the Commonwealth signalling that it might invest in urban transport systems as a means to boost national productivity, now is the time for nationwide reform to improve public transport governance.²⁹

4.37 In evidence to this inquiry the key element of good governance was usually said to be a single regional public transport authority with the power and responsibility to plan and deliver the city's public transport service in an integrated way under a single brand (whether or not service provision is contracted out).³⁰

4.38 Perth has such an authority (Transperth). Brisbane has recently established one.³¹ Sydney and Melbourne do not. Melbourne's franchising out of train and tram operations since 1999 has been particularly criticised for creating a lack of clear accountability for managing the whole network:

No-one is in charge. Whose job is it to make the bus connect with the train in Melbourne? It is kind of everyone's and therefore it is nobody's... we do not have anyone in charge because our public transport system is franchised. We do have a departmental regulator but they collect statistics on things and report how often trains are late and so on. They do not integrate and knit all the different parts of the system together.³²

Metlink has been established as an agency owned by the two operators and responsible for revenue distribution and user information.... However, Metlink's role is not that of an accountable public transport agency - comparable, for instance, to Western Australia's TransPerth or Vancouver's TransLink - with the authority to conduct comprehensive planning for network and service improvements, and implement them independently of the commercial interests of the operators. As a result, the involvement of the public sector in network and service development across the train and tram operations remains largely passive.³³

4.39 Zurich was mentioned as a good model in which service provision is contracted out, but the central agency remains fully responsible for planning the total

²⁹ Infrastructure Australia 2008:45

³⁰ For example submission 67, Western Sydney Regional Organisation of Councils, p.2. Submission 136, Public Transport Users Association, p.30. S. Lennon (Pricewaterhouse Coopers), *Committee Hansard* 6 March 2009, p.57. Dr J. Dodson, *Committee Hansard* 3 March 2009, p.41,46. D. Mellish (BusNSW), *Committee Hansard* 6 March 2009, p.27.

³¹ The Translink Transit Authority: see <u>http://www.translink.com.au/aboutus.php</u>

³² Dr P. Mees, *Committee Hansard* 30 March 2009, p.55-6. Similarly Dr J. Stone, *Committee Hansard* 30 March 2009, p.40,47; Dr. Bowen (Public Transport Users Association), *Committee Hansard* 30 March 2009, p.21

³³ Scheurer 2005:29.

network and ensuring performance by the contractors, and politically responsible for the outcome:

Their traffic planning division has only six staff and they do all the timetabling, coordination and integration. The reason they are able to do that is that they have other agencies which, by and large, are public agencies such as the Swiss Federal Railways which provide the services for them... The overall coordinating agency runs not just timetables and integrates things but also keeps an eye on the people providing the services to make sure that they do so competently and efficiently.³⁴

4.40 Submissions argued that Australian Government funding should be conditional on best practice governance, including the presence of a regional public transport authority to plan and deliver a fully integrated network service.³⁵

Committee comment

4.41 The Committee agrees that Australian Government funding for transport initiatives should be conditional on reforms to state and territory transport and planning departments to create central coordinating agencies along the model of the Public Transport Authority of Western Australia.

Need for a strategic transport plan

4.42 Submissions stressed the need for a long term strategic transport plan for the city as a whole, which has goals and actions detailed enough for performance to be monitored:

While comprehensive transport policy statements that set out the governmental goals to be pursued in a sector like transport may be unusual, the existence of integrated transport plans (e.g. for a city or larger region) that set out system development requirements (including infrastructure development needs) to meet these goals, with clearly defined roles and responsibilities for delivering and updating the plans and maintaining long term plan currency (with regular update), is equally unusual. This has become known in some conversations as the 'tactical level gap'. This tactical level weakness reflects an inability, or unwillingness, on the part of governments, mainly at State level, where most infrastructure development responsibilities lie, to take a long term strategic view of sectoral development needs and to maintain the commitment.³⁶

4.43 Submissions regretted what they saw as a lack of consistency and follow through in Sydney and Melbourne transport planning in particular:

³⁴ Dr P. Mees, *Committee Hansard* 30 March 2009, p.56

³⁵ For example submission 136, Public Transport Users Association, p.26. Dr J. Stone, *Committee Hansard* 30 March 2009, p.39,46.

³⁶ Submission 33, Bus Industry Confederation, p.16

For too long planning in NSW has been a fragmented, ad-hoc process undertaken by a range of government and non-government agencies often operating in complete isolation from each other. As a result many transport plans have lacked a strategic or long-term focus, have incorporated conflicting priorities and are often ambivalent in terms of specific commitments and undertakings. Plan-making has become largely marginalised from the Government's budget-setting process and has been "captured" by the State Treasury and some large agencies such as the RTA.³⁷

Although the Victorian Government's Meeting Our Transport Challenges (MOTC) document theoretically allocated a good proportion of the total package to public transport, many of the public transport proposals were in the distant future or poorly directed. A number of the MOTC public transport proposals now appear to have been dropped in the government's latest Victorian Transport Plan.³⁸

4.44 Some submitters suggested that Australian Government funding for transport infrastructure projects should be conditional on the existence of a strategic plan, with adequately detailed goals, actions and performance criteria so that the success of projects can be assessed, and evidence that the project is consistent with the plan.³⁹

Need to integrate transport planning and urban planning

4.45 Submissions stressed the need to integrate transport planning with urban planning generally. The public transport will not attract riders if the pattern of development in the region makes it impossible to plan an efficient network that serves the places where people want to go. For example:

The area between Wallsend and Minmi has been an ongoing development for many years. The original road between Wallsend and Minmi was a narrow bitumen road. Now it looks like the main stem of a bunch of grapes with small residential areas hanging off it like berries. A nightmare to plan movements of buses to reasonably service the area.⁴⁰

4.46 Major city strategic plans invariably express a goal of making urban development more conducive to public transport use - for example, by promoting infill development, slowing urban fringe development, and concentrating commercial

³⁷ Submission 67, Western Sydney Regional Organisation of Councils, p.1

³⁸ Submission 136, Public Transport Users Association, p.13

³⁹ For example submission 33, Bus Industry Confederation, p.16. Submission 13, Metropolitan Transport Forum, p6. D. Bowen (Public Transport Users Association), *Committee Hansard* 30 March 2009, p.26. Similarly S. Holliday (Planning Institute of Australia), *Committee Hansard* 20 March 2009, p.22-23; B. Nye (Australasian Railway Association), *Committee Hansard* 20 March 2009, p.39; Prof. D. Hensher, *Committee Hansard* 6 March 2009, p.31.

⁴⁰ Submission 30, B. Griffin, p.1

development in selected regional centres which can be the focus of logical public transport networks.⁴¹

4.47 Measures to reduce car-dependence and make public transport work better in new suburbs include:

- reserving new corridors for fast public transport early in the planning of greenfields developments;
- subdivisions planned with a street pattern that allows buses to be routed efficiently, with good pedestrian access from bus stops to the surrounding area;
- activity centres located rationally so they can be the focus of transport networks or interchange points;
- design principles that give high priority to a quality environment for cyclists and pedestrians - for example, cycle-friendly road design, permeable street layouts which do not force circuitous trips, and suitably placed local and neighbourhood centres to promote walking and cycling for trips within the neighbourhood;
- public transport services provided from the outset, rather than being retrofitted years later, after the new residents have established car-dependent habits;
- 'transit oriented development' medium density mixed-use development around public transport nodes; and
- increase in residential density generally (since this makes public transport services more viable).⁴²

4.48 Increasing residential density in established areas ('urban consolidation'), is controversial. However it should be stressed that general urban consolidation is not the same as transit-oriented development. Urban consolidation is usually taken to mean the attempt to increase population over wide areas of established suburbs by infill development or rezoning for denser development. Capital city strategic plans now commonly aim to house a significant proportion of future population growth within the existing urban footprint, to limit the amount of greenfields development at

⁴¹ For example, NSW Government 2005:81.120,156. Victorian Government 2008b:3

⁴² For example submission 26, Campbelltown and District Commuters Association, p.4. D. Mellish (BusNSW), *Committee Hansard* 6 March 2009, p.25. S. Fingland (Western Sydney Regional Organisation of Councils), *Committee Hansard* 6 March 2009, p.64. D. Smith (Davis Bus Lines), *Committee Hansard* 20 July 2009, p.33. Submission 8, Prof. P. Newman, p.15. Submission 53, Council of Mayors SEQ, p.14. Submission 98, ACEA, p.8. NSW Government 2005:81,155. Victorian Government 2008b:9,17. Government of Western Australia 2009:2. Queensland Government 2009:140. For an overview of transit oriented development see for example http://www.patrec.org/conferences/TODJuly2005/TODJuly2005.html which is the papers of a 2005 conference by the Western Australia Planning and Transport Research Centre (PATREC).

the fringe.⁴³ Undiscriminating urban consolidation usually arouses strong opposition from existing residents, and experts debate whether the benefits are worth the costs.⁴⁴

Committee comment

4.49 Most public discussion of promoting public transport focuses on the technicalities of improving the public transport service, and unfortunately gives little attention to the important land use planning connection. It should always be stressed that all land use planning is transport planning, as land use planning decisions have a dominating effect on people's travel habits. The best public transport service will not attract riders if the nature of urban development in the catchment area makes it impossible for the route to serve people's needs.

4.50 Urban strategic planning is the responsibility of State and Territory governments. The needed initiatives involve State and local government. Most of them require regional scale planning going beyond the boundaries of any one local government area. The right institutional arrangements and powers are needed to ensure that the planning and the execution are coherent.

4.51 The committee takes no position here on the urban consolidation debate, but stresses that many other planning initiatives to promote walking, cycling and public transport, as noted above, can and should be done in any case, regardless of views about the best overall urban population density.

4.52 Governments who promote urban consolidation to reduce car use need to remember that the planning policy is not enough: improved public transport must also be provided. Denser population in areas where existing public transport is mediocre or overloaded, without improvement, will simply increase traffic congestion.

Need for infrastructure investment

4.53 Most submissions argued the need for significant investment in public transport infrastructure. However they stressed the need for orderly cost benefit analysis and prioritisation, in keeping with a city-wide long term strategic transport plan.⁴⁵

4.54 Infrastructure Australia, a statutory authority established in 2008 to advise on infrastructure funding, recently commented:

⁴³ For example Victorian Government 2008b:3; NSW Government 2005:123,134; Queensland Government 2009:90; Government of Western Australia 2009:2

⁴⁴ For example see Troy 1996. For an example of residents opposition see Save Our Suburbs (NSW) at <u>http://www.sos.org.au/new_home.html</u> See discussion in House of Representatives Standing Committee on Environment and Heritage, *Sustainable Cities*, 2005:43.

⁴⁵ For example submission 58, RACQ, p.4

In large measure, Australian cities have drawn upon the investment in rail networks made in the early to mid twentieth century. Major new investment is now needed to sustain our cities over the next several decades and beyond. Increased network capacity is required to meet population-driven patronage growth and to provide the scope for significant mode shift from private vehicles to public transport.⁴⁶

4.55 Most Australian governments have recently made or are planning major investments in key public transport corridors (busways in Brisbane, heavy rail elsewhere).⁴⁷ The Australian government in the May 2009 budget committed to funding a number of major public transport projects. They include Regional Rail Express (Tarneit link) in Melbourne, Gold Coast light rail in Queensland; Gawler Rail line modernisation in Adelaide; Seaford to Noarlunga rail extension in Adelaide; and Adelaide O-bahn buslane extension. The Australian Government is also contributing to preconstruction or feasibility work on the West Metro (Sydney), East-West tunnel (Melbourne) and Brisbane inner city rail expansion. The total Australian Government commitment to these projects is about \$4.6 billion.⁴⁸

4.56 There was some discussion in evidence of the merits of light rail and bus rapid transit.⁴⁹ The consensus was that they have different strengths. Light rail provides higher quality service at higher capital cost, and (it is argued) can more successfully reshape urban development towards public transport use because of its visibility and permanence. High quality bus rapid transit can provide similar benefits (possibly not to the same extent) at lower capital cost, and has flexibility as buses can move from the busway onto local streets.⁵⁰ Which of them is more economical on operating costs will depend on the particular situation.⁵¹

- 50 This refers to busways designed for kerbside boarding. Systems with high, level boarding (for example Curitiba and Bogota) need a platform at every stop.
- 51 Light rail will become relatively more economical at higher loads because of the ability to run fewer, longer vehicles: K. Warrell, *Committee Hansard* 6 March 2009, p.57

⁴⁶ Infrastructure Australia 2008:45

⁴⁷ Long term plans for rail expansion in Brisbane are also under study: Hon. R. Nolan, Minister for Transport, *Cross river rail key to city's transport future*, media release 12 May 2009. See Queensland Transport 2008.

⁴⁸ Hon. A. Albanese, Minister for Infrastructure, Transport, Regional Development and Local Government, *Budget provides historic investment in rail*, media release 12 May 2009

^{49 &#}x27;Bus rapid transit': high quality congestion-free bus services. Details vary: for example Brisbane and Adelaide (O-bahn) have completely grade separated bus roads. In Curitiba and Bogota (the most cited examples) buses use segregated median lanes on arterial roads. Sydney has separate bus roads without grade separation, with significant on-street running in central areas: Parramatta-Liverpool T-way and north west T-way. See Currie 2009 for an overview.

4.57 The most common view was that it is wrong to say that one is generally superior to the other: it is a matter of 'horses for courses' depending on the situation.⁵² Brisbane's high quality busways, though expensive, are generally regarded as successful;⁵³ on the other hand the Gold Coast, after considering both options closely, has chosen light rail.^{54 55}

4.58 Submissions noted that in any case there is a strong need for more widespread bus/tram priority measures to make street public transport congestion-free more widely than is possible by building only trunk route busways.⁵⁶

Committee comment

4.59 The committee agrees that significant catch-up investment in public transport infrastructure is needed, particularly in light of the current strong growth in patronage, and the inevitability that congestion-free public transport will be more important in future as our cities become bigger and more congested.

4.60 Investment may be by government, subject to the normal discipline of ensuring that the benefits will outweigh the costs taking account of non-financial matters, or by public-private partnership where the situation makes that practical. This will tend to be where it is practical to recover costs through direct user charges. Where benefits are widely spread among the community at large or it is not practical to

For example M. Roth (RACQ), *Committee Hansard* 3 March 2009, p.77. Prof. D. Hensher, *Committee Hansard* 6 March 2009, p.34. K. Warrell, *Committee Hansard* 6 March 2009, p.56.
M. Apps (Bus Industry Confederation), *Committee Hansard* 19 March 2009, p.37. R. Waldock (Public Transport Authority of WA), *Committee Hansard* 23 March 2009, p.6. Prof. G. Currie, *Committee Hansard* 30 March 2009, p.37. Mr Litman argued that 'rail transit has a more long term leverage effect [on property values]':*Committee Hansard* 31 July 2009, p.4

⁵³ Some commentators question whether the benefits justify the high cost, or suggest that priority should be given to upgrading the railways that already exist nearby: submission 58, RACQ, p.4 & *Committee Hansard* 3 March 2009, p.77. Mees 1997; Dodson & Sipe 2006:43; RACQ 2008:12. See also Queensland Parliament Public Works Committee, reports 39 and 42, 1997. Brisbane busways complete, under construction or committed have/will cost about \$2.9 billion (south east 2001: \$599 million; inner north 2008: \$466 million; Boggo Rd 2009: \$226 million; eastern stage 1: \$140 million; eastern stage 2 to Coorparoo: \$465 million; northern stages 1 & 2 to Kedron: \$777 million; south east Springwood extension \$230 million. Extensions east to Capalaba and north to Bracken Ridge are proposed. ('Busways' at www.transport.qld.gov.au accessed 5 August 2009; Queensland Department of Transport and Main Roads, additional information 11 August 2009)

⁵⁴ W. Rowe (Gold Coast City Council), *Committee Hansard* 3 March 2009, p.65. Mickel 2008. Blake 2009:23.

⁵⁵ A further issue for both modes (but in practice, more for busways) is that public transport using freeway easements, though it may serve long distance commuters well, is not well suited to serving transfer trips over the whole network, since freeways tend to skirt around the activity centres or arterial road junctions which are the logical interchange points. Mees 2000:75.

⁵⁶ For example Prof. G Currie, submission 34, p.9. D. Mellish (BusNSW), *Committee Hansard* 6 March 2009, p.25.

recover costs commercially, it is necessary to make the investment publicly.⁵⁷ Related issues are discussed in Infrastructure Australia's December 2008 report.⁵⁸ These issues were not much mentioned in evidence to this inquiry and will not be considered further here.

- 4.61 The committee sounds these cautions:
- High profile high cost projects (current proposals are mostly rail) may be needed as once in a generation city-shaping initiatives; however they should not be allowed to remove attention from the need for continuous improvement to the total network (such as bus/tram priority measures, better interchange arrangements, coordinated timetabling, real time information systems).
- Major projects should be consistent with a long term strategic transport plan for the city, and should be properly justified and prioritised by cost benefit analysis.
- Cost benefit analysis should give adequate attention to externalities, and to matters that are hard to quantify or have not been sufficiently noted in the past (such as agglomeration benefits).⁵⁹
- If public-private partnerships are used, they should not be allowed to bias decision-making towards projects that find private partners more easily, at the expense of other projects that may be a higher priority for the city's overall transport plan.

Issues for rural and regional public transport

4.62 Many submissions raised concerns about poor public transport in rural and regional areas. For example:

The levels of investment in rural and regional services is negligible in comparison to metropolitan areas. This is quite apparent in the State Plan; State Infrastructure Strategy and the Ministry of Transport's Accessible Transport Action Plan for NSW Transport, Roads and Maritime Agencies.⁶⁰

To date, local government does not have the financial funding capacity to invest the required money and the State Government has not shown the same commitment to Regional areas as it has done to Metropolitan areas.

⁵⁷ Public private partnerships in transport have been used mostly for tollroads. They may also be used for airspace developments. Prof. P. Newman, *Committee Hansard* 23 March 2009, p.38

⁵⁸ Infrastructure Australia 2008:72ff

^{59 &#}x27;Agglomeration benefits': positive externalities created by firms colocating with a certain density. See discussion in Infrastructure Australia, *Outline of Infrastructure Australia's prioritisation methodology*, September 2008, p.12. Including agglomeration benefits in costbenefit analysis will tend to favour public transport in comparison with road projects, as public transport can better serve the needed density of activity. Prof. P. Newman, *Committee Hansard* 23 March 2009, p.44-45. Prof. G. Currie, *Committee Hansard* 30 March 2009, p.33.

⁶⁰ Submission 111, Northern Rivers Social Development Council, p.5

Our region supports nearly 40,000 people spread over 5 major urban towns and several smaller rural communities. Combined they would qualify for some State Government help – individually they don't.... When compared to the tax-payer funds which are expended on city dwellers, the effort spent on rural residents is minuscule. In many cases, a single passenger trip in the city, is subsidised by up to \$10. Some people in rural areas would not get that level of subsidy in a year. There is no equity of public transport services between the city and regional taxpayers.⁶¹

4.63 Local town services, where they exist, have the features of outer suburban services: they are mostly infrequent 'social service' services for non-drivers, which cannot attract 'choice' customers. Intertown services connecting smaller towns to regional centres are usually extremely infrequent, and may have poor coordination of information services and marketing, which discourages occasional users.

4.64 Submissions noted not only poor basic services, but deficiencies of organisation and coordination which limit the usefulness of such services as do exist. For example:

Access to the school bus for regular and senior passengers is at the discretion of the bus operator.... Buses to Canberra and Parramatta cannot set down in Moruya as this is less than 30kms from Tuross Head.... It will be patently obvious that there are some serious incongruities when it is possible to travel from the Tuross Head highway turn off point to Newcastle for \$2.50 for a journey in one day and it is not possible to commute to Moruya for all the immediate requirements of community living. The whole range of services is fraught with complexities and inconsistencies...⁶²

[Transport infoline website and call centre] services are not available for transport services across rural and regional NSW.⁶³

4.65 Cross-border coordination problems also exist. For example, TOOT suggested that the regional transport service linking the Northern Rivers of NSW to Brisbane would probably be much better if there was not a state border between them.⁶⁴

Committee comment

4.66 As with suburban public transport, a key challenge for governments is to provide more effective service without excessively increasing the cost in public subsidy. However even without increasing operational budgets there is obviously

⁶¹ Submission 47, Fleurieu Regional Development, Similarly submissions 4, Alexandrina Council, 46, City of Victor Harbor Council, 105 Wellington Shire Council, 118 East Gippsland Shire Council, 119 Light Regional Council

⁶² Submission 24, Tuross Head Progress Association, p.1

⁶³ Submission 111, Northern Rivers Social Development Council, p.5. Similarly submission 119, Light Regional Council, p.3, referring to the Barossa Valley.

⁶⁴ K. Kolbe (TOOT), *Committee Hansard* 31 July 2009, p.14

room for improvement in providing better centralised information and marketing, and coordinating services so that the timetables are rational and riders are not hampered by bureaucratic restrictions relating to operators' territories.

Special needs public transport, community transport

4.67 Submissions noted that some needs which are currently met inadequately or not at all by regular public transport may be more suitable for community transport.

Providing improved access opportunities by public transport will sometimes be achieved by improving route bus service levels. In other situations, it can be achieved by increasing the use of existing school bus services, with suitable contractual variations to encourage greater use of these vehicles or it may be met by use of community transport services. Community transport is a growing sector servicing a large number of community needs such as the distribution of food to the elderly, taking the disabled to education, shopping, medical and other destinations. With an ageing population and high fuel costs long term, this service sector is likely to be increasingly demanded. It is increasingly being considered as a form of public transport in its own right.⁶⁵

4.68 'Community transport' has no precise boundaries, but usually refers to transport more tailored to special needs than is possible with regular public transport - for example, serving the health care or social needs of people with disabilities or the frail elderly. It may be offered by local councils or charitable groups using buses, minibuses or cars. It has a focus on door-to-door service, but may also involve scheduled services (for example, a weekly community bus). Drivers are often volunteers.

4.69 Community transport is funded by Local Councils, or by the Commonwealth/State Home and Community Care Program (HACC), or by states separately from HACC.⁶⁶ Eligibility criteria typically limit the use of community transport services to particular categories of people and/or types of trips.⁶⁷

4.70 A review of HACC by the Bus Industry Confederation (BIC) found that in 2002-03 there were approximately 3,000 HACC funded organisations providing services to 700,000 people a year. HACC transport serviced 4.7 million trips with a national spending of \$44.1 million.⁶⁸ The Municipal Association of Victoria advised that Victorian Councils spend about \$5.8 million per year administering community transport. This rises to about \$21.3 million if the cost of vehicles and contributions to other community transport services are added:

⁶⁵ Submission 33, Bus Industry Confederation, p.25

⁶⁶ For example, NSW Community Transport Program.

⁶⁷ Submission 33, Bus Industry Confederation, p.26. See also submission 187, Community Transport Organisation.

⁶⁸ Submission 33, Bus Industry Confederation, p.26

The lack of investment for regional public transport, both train and coach services, has resulted in councils and not-for-profit organisations providing buses or trying to use whatever transport infrastructure is within those towns to move people around...councils have really stepped up to the plate to fulfill a gap in transport...⁶⁹

4.71 Community transport needs are increasing because of the aging population and the trend to regional centralisation of health services and similar social services.⁷⁰ Submissions noted the increasing burden that is falling on local councils who provide transport not only for special needs groups but also to make up for the lack of adequate regular public transport. For example, the Western Australian Local Government Association (WALGA) described the situation in the Shire of Roebourne:

There is no dedicated public transport within or connecting towns in the Shire of Roebourne, Over the past 5 years, the Shire of Roebourne has sought to provide a transport option for the residents... Saturday bus is funded by PTA. Sunday bus is jointly funded by Shire of Roebourne, Rio Tinto and PTA... Feedback from the Shire is that the community bus is not meeting fully the needs of the community: the timetable is very limited... The general feeling is that PTA should fund public transport.⁷¹

4.72 Submissions suggested that the interface between regular public transport and community transport could be better organised to give more cost effective service:

The community bus service has only recently been increased to a weekly run and this service could be folded into a regular daily service and for those who required personal assistance because of special needs could be aided in that environment rather than on the community bus...⁷²

When allowance is made for school transport services, regional route bus services and community transport, including HACC funded initiatives, it is apparent that there are many resources currently being devoted to providing mobility for various categories of people who are often transport disadvantaged, in regional Australia. However, eligibility criteria tend to exclude some categories of traveller and/or types of trips. Yet there is often physical capacity for additional travellers to have their needs met.⁷³

⁶⁹ Submission 155, Municipal Association of Victoria, p.13. S. Holcombe (MAVV), *Committee Hansard* 20 July 2009, p.5

⁷⁰ Submission 40, P. Mackenzie, p.5. Submission 105, Wellington Shire Council, p.5. Submission 155, Municipal Association of Victoria, p.13

⁷¹ Submission 134, Western Australia Local Government Association, p.5-6. Similarly J. Cherry (Council of Mayors South East Queensland), *Committee Hansard* 3 March 2009, p.54. W. Rowe (Gold Coast City Council), *Committee Hansard* 3 March 2009, p.67ff

⁷² Submission 24, Tuross Head Progress Association, p.1. Similarly Cr L. Rosenberg, *Committee Hansard* 23 July 2009, p.17. M. Apps (Bus Industry Confederation), *Committee Hansard* 19 March 2009, p.35.

⁷³ Submission 33, Bus Industry Confederation, p.26

4.73 The Australian Taxi Industry Association suggested that taxis should be used more for community transport.⁷⁴ The Community Transport Organisation disagreed on the grounds that community transport is a specialised service requiring different skills, and that community transport organisations do already use taxis where appropriate.⁷⁵

4.74 Julia Farr Association described the difficulties that people with disabilities have with transport - in particular, limited availability of accessible taxis; slow progress of public transport operators towards meeting the 2002 Disability Standards for Accessible Public Transport; and the declining availability of air travel to people with special needs, for a number of reasons which may be summarised as the unhelpful attitude of operators.⁷⁶

Committee comment

General committee comment: need to plan for long term change

4.75 To return to public transport more generally: the aim of the measures mentioned above is to change people's travel behaviour in favour of more sustainable, less car-dependent behaviour, leading to cleaner and less congested cities. That change may be slow, as it requires changing patterns of urban development and human behaviour developed over two generations.

4.76 The important thing is to set a trend to reduce car-dependence in the long term by creating incentives for behaviour change and providing the means for that change to occur. In the foreseeable future walking, cycling and public transport will continue to be unsuitable for many travel needs. The aim is to make it easier for people to use them where they are suitable. On the positive side, because the present public transport share is so low, only a small behavioural change by motorists is needed to greatly increase public transport use. This would make better services more viable.⁷⁷

⁷⁴ Submission 99, Australian Taxi Industry Association, p10

⁷⁵ Submission 187, Community Transport Organisation, p.4ff: 'Specialist Community Transport operations catering specifically and exclusively to the needs of the frail, aged and disabled and their carers came into existence in large part because of a notable incapacity and unwillingness of mainstream public transport operators – especially taxi drivers – to consistently empathise with and meet the higher care needs of vulnerable passengers.'

⁷⁶ Submission 71, Julia Farr Association. A. Fidock & L. Hallahan (Julia Farr Association), *Committee Hansard* 23 July 2009, p.26ff

For example, if car and public transport trips are now in the ratio 9 to 1, and 10 per cent of car trips become public transport trips, this would almost double public transport use.