THE CASE FOR A NATIONAL APPROACH FOR METROPOLITAN PASSENGER TRANSPORT IN AUSTRALIA

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SUMMARY

This paper summaries a significant report, commissioned by the Australasian Railway Association (ARA, 2006), and prepared with the assistance of L.E.K. Consulting. The objective of the report was to provide a national perspective on the key challenges and pressures on public transport in Australia, present new facts and data at a national level, and to propose an agenda for action. This paper summarises the key conclusions of this report.

Australia is the only OECD country without a national ‘moving people’ strategy, and there is a compelling case for an integrated and coordinated approach to significantly improve the effectiveness of Australia’s public transport sector. This should involve all levels of government, public transport operators, and the business community. Without such an across-the-board-agenda, backed by all levels of government including the Commonwealth, Australia faces growing urban congestion and mobility problems that will constrain the national economy and diminish the quality of life that Australians value and expect. More effective metropolitan public transport systems can also make an important contribution to reducing carbon dioxide emissions.

Today only 10% of city trips in Australia are undertaken by public transport, yet if those 3 million plus trips currently made daily by public transport were converted to private car trips, our cities would cease to function effectively. Between 2005 and 2006 rising petrol prices have driven a 4% rise in rail patronage nationally - up to 10% in some instances - with resultant impact on the capacity of already constrained passenger systems and also affecting freight movements.

Over the last two years, State Governments have recognised the need for action and committed significant new funding to public transport. However throwing money at this significant problem is not the only solution - much can be achieved through coordinated planning and a national approach. Lines of responsibility for the broad range of transport issues including funding, policy, planning, maintenance and taxes can cut across government departments with conflicting interests. A continuation of the current fragmented approach to
public transport has a potentially large, deleterious impact on Australia’s economy, city liveability, and the health of its population and ecology.

The Commonwealth Government takes a ‘hands-off’ approach to public transport yet, in effect, promotes car usage. It does so through such areas as roads funding, tax incentives favouring company car usage and support to the automotive industry.

The benefits of an effective public transport system reach through economic issues and the mitigation of rising fuel prices and go to the heart of the Australian way of life. It can ameliorate and avert further growing traffic congestion (already costing the economy more than $15bn pa), improve city liveability, have far-reaching environmental and health benefits, and provide mobility for those who for numerous reasons are otherwise excluded.

**Australian Metropolitan Public Transport - Issues and Challenges**

Over the last 20 years, metropolitan public transport patronage has grown roughly in line with population growth at slightly over 1% pa as indicated below.

Prior to the recent growth brought on by high petrol prices, public transport’s mode share (the proportion of motorised trips on public transport) has remained largely unchanged, and in some cities has declined. This trend is indicated below.
Issues and challenges facing the public transport sector can be grouped into four areas: social and demographic trends, city design and planning, operations and funding, and policy and governance.

**Social and Demographic Trends**

Social and demographic trends are changing the type of trips people need to make. Such trends include changes in working hours, more part-time work and more employment outside CBD areas. Many of these types of trips are less suited to public transport and more suited to private vehicles. Cars have continued to become more affordable due to lower prices and higher income levels and they now also offer vastly better consumer features (e.g. air conditioning, CD players, airbags, etc). Australian motorists pay less for their fuel than people in most other developed countries. As a result of city design, cheaper cars and relatively cheap petrol, car ownership levels in Australia are among the highest in the world. There are, however, many external costs of car use (particularly accidents and pollution) that are not directly incurred by drivers. Transport options for people in the outer suburbs are extremely limited without access to a car and rising fuel prices have demonstrated how vulnerable these households are to transport costs.

**City Design and Planning**

A legacy of 50 years of car-oriented city design significantly limits the effectiveness and efficiency of public transport. Australian cities have grown well beyond the boundaries of the extensive middle and inner city public transport networks developed in the first half of the last century. Australia’s urban sprawl has led to population densities which, as indicated below, are very low by international standards.
At a local level, the design of many new suburbs has not taken account of public transport needs, sometimes in terms of very basic features such as sufficient road widths for buses. Even where inner areas have been redeveloped, there has often been a strong emphasis on cars via the provision of car parking. Low urban density has been induced by the flexibility and independence of car ownership. However, this predominant focus on cars, made possible by low fuel costs, was a one-dimensional and expensive approach to meeting the nation’s travel needs. Recent studies have shown that in car-dependent communities, the overall cost of transport can be up to 13% of city wealth, but in communities with a high share of public transport, it can be as low as 5%. Current and future generations of Australians now have to deal with the fact that their cities have been designed around cars and a fundamental reassessment is now needed to find more sustainable forms of travel. Public transport will play a major role in this reassessment.

**Operations and Funding**

Public transport systems are under pressure in a number of operational and funding areas after many years of under-investment and largely car-centric planning policies. Mainly as a result of fuel price rises, rail patronage in 05/06 has risen by more than 4% nationally, and total patronage is up 10% in some instances, resulting in significant capacity constraints and overcrowding in peak periods. A number of key elements of transport infrastructure (e.g. city loops) and rolling stock/vehicles are at, or approaching, capacity limits. This is leading to most State Governments to commit large sums of capital to create greater peak capacity, largely to benefit CBD-bound commuters. In contrast, many outer-suburban areas suffer from poor service coverage, with many residents not able to effectively access public transport services.

State Governments currently inject over $3bn pa to operate the metropolitan public transport systems, and provide further funding for capital works. The extent of the subsidy is indicated below.
Australia’s public transport systems operate at low cost recoveries by international standards (32% nationally), due to a range of factors such as low off-peak patronage, relatively generous concession policies and in some cases, cost inefficiencies. The following chart shows Australian cost recoveries versus some international benchmarks.

Freight movements on rail are significantly, and increasingly, constrained due to shared infrastructure between passenger and freight services, particularly in Sydney. Road-based public transport (bus and tram) is suffering from slower speeds and decreased reliability because of traffic congestion and insufficient road priority measures.

Policy and Governance

Australia is the only OECD country without a national “moving people” strategy. There is fragmented responsibility for many areas of transport. State Governments have jurisdictional responsibility for public transport and the Commonwealth Government has adopted a “hands off” approach to public transport. Despite this, the Commonwealth plays a significant role in road funding and has a strong interest in ensuring efficient freight movements and furthering economic growth, through vibrant, prosperous and well functioning cities. It also bears many
of the costs and consequences of social exclusion that can arise through poor access to jobs and services. In its current form the national forum for passenger transport issues (APTG) is under-resourced. There are unintended consequences of Commonwealth Government taxation incentives which favour company car use over public transport. Similarly, the various mechanisms of support that State and Commonwealth governments give to the automotive industry also disadvantage public transport. At a State level, responsibility for Planning, Transport and Roads is frequently divided among a number of Ministers and Departments, increasing co-ordination challenges.

The Case for Greater Focus, Co-Ordination And Investment

There are four key reasons why Governments and other stakeholders must act to bring about a step change in travel behaviour. Public transport will be a key instrument to help bring about this change.

Relieving Transport Congestion

Traffic congestion is on the rise in Australia’s major cities; not just in central areas, but also in the outer suburbs; not just in the morning and evening peaks, but also during the day and on weekends. Despite heavy expenditures on road networks, and the construction of many toll roads, average urban traffic speeds are decreasing, negatively impacting freight efficiency, labour productivity and city liveability. This is illustrated below.

Congestion makes Australia’s cities less efficient and they are the key to much of the nation’s economic wealth. According to the BTE, congestion already costs the economy more than $15bn pa and this is forecast to grow to $30bn pa by 2015 without action.

Building more freeways and adding lanes to existing roads is not an effective response in the long term, as it simply induces more vehicle traffic. Investments that deliver small decreases in traffic can have a large positive impact on traffic speed (think about commuting during the school holidays). Better and bigger public transport systems will be an essential element in tackling congestion.
**Mitigating Rising Fuel prices**

Fuel prices hit hardest in the “mortgage belt” middle and outer suburbs where transport makes up the largest proportion of weekly budgets. As fuel costs rise, a larger proportion of household budgets has to be diverted to petrol, reducing consumption in other areas. Providing effective public transport solutions can help to relieve the burden of rising fuel prices.

**Reducing Social Exclusion**

A material proportion of the population needs public transport to access jobs and services. Without this, it faces on-going social exclusion which will place a greater burden on government services and benefits. Improved public transport, particularly in the outer suburbs, can therefore reduce social exclusion and its consequential social costs.

![Graph showing percent of long-term unemployed citing lack of transport accessibility as a major factor preventing employment in Victoria (2005)](image)

The disabled and elderly also can be denied effective access to public transport, even in inner metropolitan areas, by virtue of the design of bus and tram stops, railway stations and of vehicles. Those in wheelchairs or with restricted mobility need low-floor buses and trams and appropriately designed stops and stations. This aspect will assume greater importance as the population ages.

**Improving Health and the Environment**

A greater proportion of trips on public transport has advantages for the environment. Australia has among the highest per capita GHG emissions in the world. Greenhouse gas emissions from public transport use are (as illustrated below) considerably lower, on a per capita basis, than from car use and this feature of public transport will form part of a considered response to climate change.
Public transport can also deliver superior health benefits versus cars in terms of greater exercise for users, fewer accidents and lower air pollution.

**Proposed Actions for Stakeholders**

Australia needs a more focussed passenger transport agenda - otherwise urban congestion and mobility will constrain the national economy, and diminish the quality of life in cities. While the average person is somewhat aware of the different responsibilities of the local, state and the Commonwealth governments, they are not interested in matters of jurisdictional responsibility. What they want to see is tangible actions delivered in their communities, which improve their day-to-day travel, irrespective of which layer of government is accountable.

Moving the passenger transport agenda forward in Australia is challenging, due to the number of parties involved, and the complex and interrelated nature of many of the issues. However, the economic, social and environmental benefits demand a more concerted approach. Coordinated actions by all stakeholders will be required to bring about a major shift in travel behaviour and to realise the benefits.

The following action areas were recommended for the key stakeholders.

There is a clear need for the Commonwealth Government to take action to help improve public transport, recognising that State Governments will still have primary responsibility for funding and delivery of services. There are a number of highly valuable and cost effective roles the Commonwealth Government can play. These could form part of an expanded Auslink program with emphasis on urban transport issues, and include:

- Establishing and properly funding an entity responsible for a comprehensive, national treatment of passenger transport issues, via a better funded and resourced ATC/ SCOT group, or an alternative
- Providing independent oversight and monitoring of the efficiency and effectiveness of transport operators
- Providing one-off reform payments to unlock efficiencies that cannot be realised without outside intervention
Taking a leadership role on metropolitan road congestion and road pricing policy that maximises the efficient use of arterial transport links for all modes and ties in with pricing reforms on the interstate transport networks; and
Aligning taxes with public transport policy, modifying FBT rules that favour car use over public transport and allowing employers to provide public transport to employees as part of their salary package, without incurring FBT.
If the Commonwealth Government chose to change its current policy and take more direct involvement in passenger transport, the Government could:
Develop a coordinated national passenger transport plan that lays out high level objectives and strategies for people movement, integrates all modes (roads, public transport, walking and cycling) and is consistent with State-based strategies; and
Provide targeted funding for major capital works of national significance in major cities.

Many State Governments have significantly increased their focus and investment in public transport over the last 2 years, but further actions are required to achieve a step change in travel behaviour. State Governments need to:

- Improve their approaches to planning, ensuring that the division of responsibilities at Ministerial level does not impede effective policy
- Improve urban and transport planning disciplines, both in terms of rigour and repetition, and the methodologies for allocating funds between public-transport and road-based private transport
- Maximise the value for money from existing transport expenditure by growing off-peak and shoulder travel, improved service planning, delivering better operating performance and improving efficiency
- Invest for growth of public transport networks, including new mass transit projects, higher peak and off-peak frequencies, new technology and greater capacity
- Achieve more comprehensive separation of commuter and freight rail networks
- Promote modal shift to public transport by better understanding customer segments, and using travel demand management initiatives such as car parking, walking/cycling strategies, TravelSmart programs, and, in time, road pricing; and
- In tandem with Local Governments, implement parking policies that place a cap on the number of cars that can be accommodated in crowded urban areas, and ensuring that revenue raised from parking levies is reinvested in public transport.

Local Governments also play a critical role in planning and local delivery. They need to:

- Consider public transport needs when establishing new developments
- Ensure that mobility and transport needs are identified and accommodated in local planning approval frameworks
- Develop municipal transport plans that are consistent with State Government policy
- Ensure that city liveability is considered in local planning issues such as on-street and residential parking
- Together with State Governments, implement parking policies that place a cap on the number of cars that can be accommodated in crowded urban areas, and ensure that revenue raised from parking levies is reinvested in public transport
- Assist in implementing local measures to speed up road-based public transport modes (i.e. buses and trams), and support walking and cycling strategies; and
• Involve themselves in service planning at a local level to ensure that scarce public resources are being optimally allocated.

The Business Community can play an important role, influencing Government policy and helping to achieve travel behaviour change among their workforce. The business community needs to:

• Continue to highlight the cost of congestion on the economy and lobby for greater measures to ease the congestion burden
• Encourage demand management travel initiatives through flexible work hours or work-from-home arrangements
• Provide salary or other benefits for public transport use
• Install facilities such as bike racks, showers and lockers; and
• Set an example by using and promoting public transport or cycling whenever possible.

Public transport operators need to:

• Improve their operating performance, invest and innovate to make their product more competitive with private vehicles
• Continue to provide more and better services to passengers, in terms of reliability, safety, cleanliness and customer service
• Improve operating efficiency and, where appropriate, work with Governments and unions to implement the necessary elements of labour reform
• Introduce greater innovation into their service offer in areas such as real time information systems, SMS messaging, stop and station design, and the features and benefits of the new smartcard ticketing systems
• Investigate and seek Government support for new technologies that can enhance system capacity or reliability and improve the customer experience
• Support research, policy and planning issues in areas such as travel behaviour change, transit-oriented developments, economic appraisal methodologies, marketing and customer understanding
• Improve modal integration, particularly in terms of fares, timetable co-ordination and interchanges
• Continue to refine and improve service plans to ensure they meet customer needs as cities and travel patterns change over time
• Undertake greater benchmarking and information sharing; and
• Continue to move towards customer-oriented organisations that provide an alternative to car travel.

Collectively, these actions can create a passenger transport system that underpins the sustainability, liveability and economic prosperity of Australia’s great cities.

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REFERENCES

ARA (2006); *National Passenger Transport Agenda*, Australasian Railway Association
www.ara.net.au/dbdoc

Austroads (2005); Road Facts 2005, An Overview of the Australian and New Zealand road systems

Brotherhood of St Lawrence (2006); “Social Exclusion and Public Transport”, Janet Stanley;
Conference on Transport, Social Disadvantage and Well Being, Melbourne, 5-6 April, 2006, Institute of Transport Studies

DOI (2006); Victorian Department of Infrastructure’s Submission to the Inquiry by the
Victorian Competition and Efficiency Commission into Managing Transport Congestion, Melbourne


Public Transport Operators; financial data from the operators in Adelaide, Brisbane, Melbourne, Perth and Sydney

State Transit Authorities; information from a range of sources including QLD (CityTrain, Brisbane Transport and Brisbane City Council Ferries); NSW (NSW State Transit Authority, RailCorp, Transportation and Population Data Centre); VIC (DOI); WA (Transperth); SA (Adelaide Metro and TransAdelaide)

United Nations Statistics Division; Environmental Indicators
<http://unstats.un.org/unsd/environment/qindicators.htm>