

ASSOCIATION OF CONSULTING ENGINEERS AUSTRALIA

PUBLIC PASSENGER TRANSPORT INFRASTRUCTURE AND SERVICES

Inquiry into the investment of Commonwealth and State funds in public passenger transport infrastructure and services

Nicola Grayson Acting Chief Executive Officer

Neil Bassett Policy Officer

The Association of Consulting Engineers Australia (ACEA) is an industry body representing the business interests of firms providing engineering, technology and management consultancy services.

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ACEA SUBMISSIC

L6/50 Clarence Street Sydney NSW 2000

GPO Box 56 Sydney NSW 2001

P.0299224711

F.0299572484

E . acea@acea.com.au

W. www.acea.com.au

INTRODUCTION

ABOUT THE ACEA

The Association of Consulting Engineers Australia (ACEA) is an industry body representing the business interests of firms providing engineering, technology and management consultancy services.

There are over 260 firms, from large multidisciplinary corporations to small niche practices, across a range of engineering fields represented by the ACEA with a total of some 46,000 employees.

The ACEA presents a unified voice for the industry and supports the profession by upholding a professional code of ethics and enhancing the commercial environment in which firms operate through strong representation and influential lobbying activities. The ACEA also supports members in all aspects of their business including risk management, contractual issues, professional indemnity insurance, occupational health and safety, procurement practices, workplace/industrial relations, client relations, marketing, education, sustainability and business development.

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EXECUTIVE SUMMARY

The ACEA believes that economic and social infrastructure whether it's upgraded, expanded or new can benefit all sectors of the economy and secure long term improved economic prospects based on productivity growth. Planned sensibly, such investment can also contribute significantly to reducing greenhouse emissions which will lessen the impacts of climate change. It will also ensure that Australia is well prepared to meet the inevitable upturn in demand that will flow as the world moves out of the current challenging economic conditions.

Even though it's recommended that the focal point of attention of infrastructure development and investment should be primarily directed towards our national economic supply chain (ports, rail and road) a strong investment in public passenger transport infrastructure and services is encouraged and supported. This must provide Australia with a set of public infrastructure assets that benefits all Australians for years to come.

The ACEA believes that a more efficient and effective public passenger transport infrastructure and services will help to reduce traffic congestion and pollution, such as exhaust emissions. It will also help to provide an on-going critical community service that continually offers a low cost means of travel for people to get to places of work or study. To achieve these ambitious goals the plan needs to be developed in collaboration and consultation with key stakeholders and undertaken using strategic planning, suitable funding and delivery, as well as sound policy development.

The ACEA also supports any initiative that encourages more adults in Australia to use public passenger transport and services. All schemes, whether compulsory or voluntary, should aim to reduce dependency on private car use. The National Travel Behaviour Change Projectⁱ is one such project which aims to voluntary change behaviour towards more adults using sustainable methods of travel to work or study such as walking, cycling, public transport and ride-sharing.

The ACEA believes the current debate around Commonwealth and State investment, measures or mechanisms for public passenger transport infrastructure and services development is extremely relevant considering the current economic downturn currently being experienced in Australia. Any future investment in infrastructure, whether it's publicly or privately funded, is supported especially as a number of infrastructure projects have been cancelled, delayed or downgraded in the last 6 months (The value of total investment projects was \$607.2 billion in the fourth quarter, 5.8 per cent decline from previous three monthsⁱⁱ).

The ACEA welcomes this opportunity to provide a written submission addressing the issues surrounding investment of Commonwealth and State funds in public passenger transport infrastructure and services to the Senate Standing Committee on Rural and Regional Affairs and Transport. For this submission the ACEA has commented mainly upon the measures to which the Commonwealth Government could facilitate improvement in public passenger transport services and infrastructure. If in the future the ACEA is able to make a comment on other areas requested in this inquiry, then it will respond accordingly.

If you require any further information regarding this submission please contact Neil Bassett at: neil@acea.com.au or tel: 02 9922 4711

INQUIRY INTO THE INVESTMENT OF COMMONWEALTH AND STATE FUNDS IN PUBLIC PASSENGER TRANSPORT INFRASTRUCTURE AND SERVICES

1. AUDIT OF STATE PUBLIC PASSENGER TRANSPORT IN AUSTRALIA

QA; Provide an assessment/audit of the state of public passenger transport in Australia.

The ACEA believes that Australian cities, towns and rural communities suffer from poor access to and little incentives to use public passenger transport infrastructure and services. This has come about due to a lack of government and private investment and sustainable planning.

As a result, the ACEA suggests that the current set of public passenger transport infrastructure and services can be described in many areas and cases as unsustainable, unaffordable, inefficient and ineffective. This has caused a reduction in access by the public to key services, such as health and education, and importantly employment.

The state of public passenger transport in many large cities, such as Sydney and Melbourne is of concern as they have problems relating to coordination and ownership. For example, Sydney has a lack of integration in public rail and private bus networks, especially in Western Sydneyⁱⁱⁱ. Melbourne has issues surrounding privatisation of trains and trams.

According to the Public Transport Users Association (PTUA) the major problems associated with Melbourne's public passenger transport relates to waiting times, cost and safety.

The PTUA suggests, "*If public transport services were improved, more people would use the system and it would be safer as a result. It is also necessary to provide adequate staffing of stations and vehicles if passengers are to feel safe^{iv}".*

2. PUBLIC INVESTMENT IN PRIVATE VEHICLE AND PUBLIC TRANSPORT

QB; What are the current and historical levels of public investment in private vehicle and public passenger transport infrastructure and services?

The ACEA is currently unable to comment on this area due to not having enough information available to make a valuable and constructive contribution. If in the future the ACEA is able to make a comment, then it will respond accordingly.

3. THE BENEFITS OF PUBLIC PASSENGER TRANSPORT

QC; Provide an assessment of the benefits of public passenger transport.

What are the direct benefits of public transport?

The direct benefits of developing, investing in and encouraging the use of public passenger transport infrastructure and services can be measured and identified in a number of ways.

For example, the economic benefits of an increase in bus patronage can be identified through a decrease in traffic congestion. According to a 2006 Report to the Bus Industry Confederation^v the cost of traffic congestion in Australian cities was around \$22 billion in 2005–06 and was expected to

rise strongly over the next 15 years.

The Report calculated that a 10 per cent increase in bus occupancy rates would in each year:

- Save 5 lives and result in 76 fewer cases of serious injury due to traffic crashes;
- save \$104 million in traffic crash costs;
- reduce greenhouse gas emissions by 409,340 tonnes;
- improve the health costs of the Australian community by around \$20 million; and
- reduce noise costs by \$11.8 million.

As noted above, the increase in bus patronage would reduce greenhouse gas emissions which are polluting our environment. Emissions such as carbon monoxide, oxides of nitrogen, hydrocarbons and particulates, all of which reduce our air quality, could be reduced if public passenger transport infrastructure and services are increased, further invested in and encouraged to use.

In addition, if increases in traffic congestion and exhaust emissions continue it will impose repeated and significant costs on all levels of government and the community. This could include but not limited to growing hospital costs; increases in insurance premiums to cover rising hospital charges; emergent costs associated with a growing need for more state and local environmental clean-ups; and government costs for new environmental legislation or regulations (i.e. emission trading scheme).

Another example of a direct benefit can be identified in the savings that business operators could make especially in their ability to better make and deliver goods and/or services to markets.

For example a reduction in traffic congestion will help business operators by:

- reducing the number of delivery drivers and vehicles required;
- lowering the time taken to get goods and/or services to markets;
- improving consistency in delivering goods and services;
- cutting costs of all business-related travel, including vehicle maintenance and fuel; and
- improving business productivity as it becomes more efficient and effective.

What are the indirect benefits of public transport/pedestrian activities?

There a number of indirect benefits for developing, investing in and encouraging the use of public passenger transport infrastructure and services. These are less explicit than some of the economic benefits mentioned earlier. These could however be recognised as long-term individual and community benefits.

For example, walking as a mode of transport not only reduces traffic congestion and air pollution but can improve the health of the person undertaking the walking. The ACEA suggests that regular walking can help a person to lose body fat, maintain a healthy weight, improve fitness and reduce the risk of developing conditions such as heart disease, type 2 diabetes and osteoporosis. What's more an individual who is healthier is more likely to have a better mental well-being and the potential to work, rest and play for longer periods, as well as possibly living longer. A person who walks to work or study can also reduce their individual health costs. For example, an adult lower their medical costs (e.g. health insurance) and reduce car ownership and operational costs (e.g. car insurance, maintenance and fuel costs). These savings reduce household expenditure which instead is used to save, invest or spend on other things.

There are also other indirect benefits associated with adults using cycling and walking as a mode of transport to get to work or study that are difficult to measure. For example, it's difficult to evaluate and put a tangible cost on the increased vitality of the individual and community due to their reduction in car use and dependency. There are also indirect benefits from the use of public transport in reduced congestion that leads to reduced travel times and the personal and social benefits that derive from lowered stress levels, more time available for family, etc.

Why is public transport used?

According to the Australian Bureau of Statistics (ABS) in 2008^{vi} the majority of adults who use public transport to get to work or study (59 per cent) believe public transport was more suitable, comfortable and less demanding than other modes of travel.

It was reported that adults who used public transport did so because it was cheaper than other forms of travel. This probably relates to the growing costs associated with car usage over the last few years (i.e. petrol prices). It was also noted that 19 per cent of adults who used public transport did not own a car, especially those aged between 18-24 years. However, those adults aged 35 years and over, only 11 per cent did not own a car and therefore had to use public transport to get to work or study.

In addition, even though public awareness has increased regarding environmental awareness, such as greenhouse gas emissions and climate change, only 3 per cent of adults who used public transport did so because they were worried about the environment.

The ACEA believes the ABS figures basically show that public transport is used by adults because it's more comfortable and cheaper than other forms of transport and the best option if other forms of transport aren't available or owned.

Why is public transport not used?

In the same 2008 ABS report the most common cause for adults not using public transport to get to work or study was due to there being no service available at a convenient time (28 per cent). While it's noted in the report that one of the main reasons that adults used public transport was based on its convenience, it was also the same reason why others used different forms of transport, such cars.

Furthermore, 20 per cent of adults reported that that the length of time spent on public transport was too long. Also, 14 percent of adults aged over 55 years reported that they did not use public transport for their journey to work or study because they needed their own vehicle before, during or after work or study hours.

The ACEA believes that the main reasons why public transport is not commonly used is due to its lack of service and availability as a mode of travel to work or study, and that cars offer more suitability and comfort for travel.

4. COMMONWEALTH GOVERNMENT MEASURES & FUNDING OPTIONS

Question D; What are the measures by which the Commonwealth government could facilitate improvement in public passenger transport infrastructure and services?

There are a number of measures in which the Commonwealth Government could impose to help improve public passenger transport infrastructure and services. The ACEA has identified a number of possible measures that are well-known, and in some cases implemented in some jurisdictions and countries, which can be considered to help public passenger transport infrastructure and services.

Importantly, it is clear from Australian and overseas experience, that there is no single 'silver bullet' solution to increasing the use of public passenger transport infrastructure and services. The ACEA recommends that an integrated approach of complementary measures, tailored to the particular circumstances of each urban area, offers the best prospect of increasing patronage on public passenger transport.

Congestion tax

A congestion tax applied to vehicles coming into major cities will help to reduce traffic congestion. It can be promoted as a way of encouraging adult car users to think about the alternatives to car use, such as public transport.

There are a number of cities across the world (London, Oslo & Singapore) that already have in place a congestion tax on car use in designated areas. In the London example a fee is imposed on drivers entering a specific area (Central London which includes its financial and entertainment districts) at a particular time (between 7 a.m. and 6:30 a.m.) in an area known to be heavily-used by cars and prone to traffic congestion. All car drivers who wish to enter Central London have to obtain a pass (daily, weekly or yearly) and register their car license or a series of posted cameras across Central London, who record cars coming in and out of the area, will record all drivers without a pass. Those who enter the area without a pass are fined^{vii}.

The London congestion tax revenues are used to improve local public passenger transport infrastructure and services, which include upgrading buses, cycle paths and public transport availability. Revenues are also be used to promote initiatives to encourage greater use of public transport.

Importantly, the congestion tax has reduced the amount of traffic using the Central London area by a reported 30 percent^{viii}. This also means a reduction in greenhouse gas and exhaust emissions which improves air quality and the overall health of the local community. The ACEA believes that a congestion tax can provide additional income and funding for governments that enables them to upgrade existing public passenger transport infrastructure and services. This could encourage more adults to use public transport to get to work or study, especially if the infrastructure or services are more convenient, comfortable, cheap and assessable.

However, there are disadvantages of imposing a congestion tax on drivers. For example, business operators are impacted by customers who wish to shop in the targeted area but are discouraged as a result of the congestion tax. According to the London Chamber of Commerce, since the congestion tax charge began, independent stores saw a 53 per cent dip in profitability and retail stores witnessed a 22 per cent drop^{ix}.

Car parking tax

A car parking tax basically means that when a car driver parks their vehicle in a specific designated area, they pay an additional levy on top of the parking fee.

Currently in NSW there is a car parking tax which is governed under the Parking Space Levy (PSL) Act 1992. The object of the Act "... *is to discourage car use in business districts by imposing a levy on off-street commercial and office parking spaces, and by using the revenue so raised to finance the development of infrastructure to encourage the use of public transport to and from those districts.*^x"

A car parking tax aims to discourage car users from parking their cars in congested areas. In similar way to a congestion tax, not only does it persuade car drivers to consider alternative transport, it helps to reduce traffic congestion and greenhouse gas and exhaust emissions.

The ACEA recommends that any car parking tax should require that all revenues raised from the parking levy be used in the construction and maintenance of car and bicycle parking facilities, or other critical public passenger infrastructure and services. This approach would match the NSW PSL Act 1992.

For example, according to the NSW Government and the NSW Ministry of Transport "*Every dollar* raised is spent on building and maintaining bus, rail and ferry interchanges, commuter car parks, bus shelters, taxi stands, kiss and ride facilities, bicycle lockers, light rail systems and better passenger information and security systems. Recent projects include the Liverpool - Parramatta and North West Transitways, upgrade of the Parramatta Transport Interchange, building of new commuter car parks and the installation of secure bike lockers at railway stations^{xi}".

In short, the ACEA believes that a car parking tax has the same benefits and disadvantages as a congestion tax. This is because both aim to encourage and incentivise a change in behaviour, but they also impose an additional tax and financial burden on car users and some business operators (retail).

Development Control

A constructive measure to increase the use of public passenger transport is to limit the number of car parking spaces associated with new developments, including both commercial and residential.

The ACEA recommends that the powers of planning authorities to control development and land use could be increased. Planning authorities could make all new developments meet revised public passenger transport planning authority requirements. For example, all new major developments (shopping centres & residential blocks) could have modified and stricter parking space restrictions in relation the development size, as well as conditions to have greater links to public transport infrastructure and services.

The ACEA believes that increased development control by planning authorities will help improve public passenger transport infrastructure and services. However, as most new buildings, major developments or changes to existing buildings require planning permission from a planning authority, it would need all planning authorities and relevant legislation to be administered and enforced consistently.

Transport Orientated Development

The ACEA suggests that new or existing towns or cities should be based on the principles of transit orientated development (TOD). These development principles are targeted to help improve the use of public passenger transport infrastructure and services.

According to the Victorian Department of Planning and Community Department, TOD is "...*a form of urban development that clusters a greater mixture of land uses around a high quality transport service. The transport node, either train, light rail or bus terminus is designed to be the focus for the development and ideally becomes the community 'heart'. It is where people shop, work, meet, relax and live^{rxii}.*

An example of the use of principles of TOD applying to an urban development can be identified in the Green Square Urban Renewal Area project in Sydney. This project aims to achieve an integrated and

sustainable transport system which:

- reduces the growth of cars based trips;
- creates a significant shift from private vehicles to public transport, with a target by 2016 for Sydney CBD work trips by public transport of 75 per cent and 25 per cent for metropolitan work trips as per NSW State Government's target set in the State Plan;
- manages the increasing freight movements from Port Botany expansion; and
- improves the livability of the inner city^{xiii}.

Many urban renewal projects within Australia could benefit from the principles of TOD. New and remodeled mixed-use commercial and residential areas could be designed and planned to provide residents and employees with greater links to public passenger transport infrastructure and services, as well as providing walkable/cycle-friendly precincts. All of these principles will help to reduce car use, traffic congestion and greenhouse gas and exhaust emissions, while also providing suitable housing, shops, recreation and employment.

The ACEA believes that integrated and sustainable transport systems should be developed and planned for all urban renewal projects in similar fashion to the Green Square Urban Renewal Area project. All of these renewal projects should also aim to achieve the TOD principles and objectives which are incorporated in the Green Square project.

Voluntary initiatives

Voluntary initiates are beneficial measure to encourage or incentivise changes in "personal' or "private" behaviour.

The National Travel Behaviour Change (NTBC) project is one example of a designed voluntary initiative which aims to encourage changes in "personal' or "private' travel behaviour. This Project currently involves the Australian Capital Territory, South Australia, Queensland, Victoria and the Commonwealth Government. Its main objective is to reduce the environmental impact of cars and promote the use of more sustainable ways of travel (walking, cycling and public transport)^{xiv}.

The ACEA believes that voluntary initiatives, like the NTBC are an effective measure by which the Commonwealth Government could further develop and promote to help facilitate improvement in public passenger transport infrastructure and services. Voluntary measures are deemed a softer approach to encourage change rather compulsory measures.

However, the ACEA suggests that any future voluntary initiatives to improve public passenger transport infrastructure and services will require a better understanding of:

- how to motivate people (e.g. not all people are the same & there are differences in how people can be motivated);
- the people targeted (e.g. how they think, use and make decisions about their cars);
- behaviour changes that appeal to people (e.g. will people be attracted to reducing dependency on their cars?);
- money as a motivator (e.g. does it act as incentive or disincentive for change?), and

 how to disseminate information about travel costs, transport alternatives and the pros and cons of "public" versus "private" travel (e.g. do people know how much public passenger travel costs compared with private car use?).

Specific purpose payments (SPP)

An important measure that helps to improve public passenger transport infrastructure and services is the use of specific purpose payments made by the Commonwealth Government to the States and Territory Government's (SPP's).

The Commonwealth Government uses SPP's to make grants to the States and Territories which allows the commonwealth to engage in areas of national policy interest. The SPP normally have certain conditions attached to them by which the States or Territories have to fulfill specified obligations in order to receive payments. SPP's are used in areas such as transport, health, education, housing and social security. According to the Australian Government Budget 2007/08, SPP payments were estimated to total \$30.8 billion, an increase of \$2.5 billion (9.0 per cent) over 2006-07 period.^{xv}.

Examples of SPP for State transport development are the Commonwealth's funding for road programs. This includes: the national highway, roads of national importance, the black spots programme, and the roads to recovery programme^{xvi}.

The ACEA suggests the Commonwealth Government could make additional State transport development SPPs to the States and Territories. This could result in conditional grants being imposed that set new targets, new objectives (TOD principles) and demands that increases in public transport patronage are meet.

These grants could also be tied to certain other conditions where the states are compelled to match the grant or maintain funding levels, reduce greenhouse gas and exhaust emissions by guaranteed levels, or undertake research and development of alternative forms of non-polluting transport such as trams and electric cars.

In short, the ACEA recommends that additional Commonwealth Government SPP's will improve public passenger transport infrastructure and services. However, the ACEA suggests there are a number of problems surrounding the additional use of SPP's to improve public passenger transport infrastructure and services. These problems could impede on the States and Territories ability or desire to meet any targets or objectives.

For example supplementary SPP's may:

- intensify Commonwealth Governments centralisation and their power over spending and policy-making;
- be used by the Commonwealth Government for short-term political gains (i.e. used to impose political precedence);
- increase government administration and bureaucracy (i.e. escalate a lack of accountability and initiate blame-game between Commonwealth and States); and
- result in the belief that the Commonwealth Government is responsible for all public passenger infrastructure and services when actually some areas are the duty of the States etc.

Public private partnerships (PPP's)

PPPs is a generic term that covers a broad range of schemes whereby private participation in public infrastructure is encouraged as a means by which governments (both Commonwealth and State) can undertake upgrading and development beyond the limitations of fiscal budgets by attracting private

capital involvement and/or investment in exchange for risk/reward, equity participation and longerterm revenues.

There are no 'preferred models' of a PPP. Each PPP is developed as a unique set of often complex agreements and circumstances and may also take various forms including PPPs (privately funded partnerships), BOO (Build Own Operate), BOOT (Build Own Operate Transfer) etc. Depending on the size and nature of a particular project, the development and operating structure of a PPP can be extremely complex, often requiring reporting and review to ministerial and parliamentary bodies.

The ACEA supports the use of PPP's as a suitable measure and as funding option to improve public passenger transport infrastructure and services. The use of PPP's can:

- raise finance for public passenger infrastructure and services;
- improve the performance of the public transport sector; and
- achieve best value for money 'whole of life' approach.

However, the ACEA believes that the use of PPP's as measure and funding option can involve the following risks:

- Design, construction and commission risk (e.g. the key risk for consulting engineering firms, where a variety of factors can influence the outcome of the design, for example incorrect information being supplied to the consulting engineer causing significant delays or in worst cases project failure);
- User and revenue risk (e.g. where the projected number of users for the infrastructure falls short from reality, or is slow to materialise);
- Maintenance and operation risk;
- Technology decay;
- Changing regulatory environment;
- Financial risk; and
- Political risk.

Fare increases

Fare increases area a measure that can be used to help improve public passenger transport infrastructure and services. The ACEA recommends that any increase in fares must be used in a similar way as the NSW PSL Act 1992, in that all extra revenues raised must be used to improve public transport and services.

The ACEA supports the use of fare increases as a measure and as funding option to improve public passenger transport infrastructure and services. However, any increase in fares are controversial and can cause frustration and a possible boycott of public passenger transport by adults particularly when tangible improvements to be public transport are not identified, such as comfort or better service. In addition, any fare increases must be in line with or below inflation.

Fringe benefit tax (FBT) amendments

The ACEA believes that some arrangements under FBT could be either discouraged or changed by the Commonwealth Government to help improve public passenger transport infrastructure and services.

Many employees use the current FBT arrangements to use their car provided by their employer to reduce their tax levels. It could be suggested that the existing FBT arrangements may increase greater car use and car dependency. Current FBT arrangements could be amended to have the effect of encouraging employees to reduce and rethink their car use. This could help persuade employees to use of public passenger transport to get to work.

The ACEA supports amendments to certain arrangements FBT as a measure to help improve public passenger transport infrastructure and services. The ACEA suggests that employers could be encouraged to promote alternative fringe benefits to replace car and car parking fringe benefits, such as additional cash salary payments.

5. THE ROLE OF COMMONWEALTH GOVERNMENT

QF; What is the role of Commonwealth Government legislation, taxation, subsidies, policies and other mechanisms that either encourage or discourage public passenger transport?

The ACEA in Question D (measures by which the Commonwealth Government could facilitate improvement in public passenger infrastructure and services) has recommended a number of government mechanisms that can either encourage or discourage public passenger transport patronage. Please refer to this section for more information for Question F.

In addition, the ACEA believes that there is also an immediate economic need to attract more investment from the private sector. To achieve this, the Commonwealth Government should offer incentives through the Budget similar to previous efforts where the Government has offered concessional tax treatment for infrastructure projects. The ACEA welcomed the Government's announcement that, as a part of the \$4.7 billion Nation Building Package, it will introduce a 10 per cent investment allowance to encourage businesses to undertake capital investment. This type of incentivising is worthwhile and must operate in conjunction with direct expenditure from the Government.

6. INTERNATIONAL EXAMPLES OF PUBLIC PASSENGER TRANSPORT INFRASTRUCTURE AND SERVICES

QG; Are there any best practice international examples of public passenger transport and services?

The ACEA is currently unable to comment on this area due to not having enough information available to make a valuable and constructive contribution. If in the future the ACEA is able to make a comment, then it will respond accordingly.

^{iv} www.ptua.org.au/melbourne/problem/

^v CRA International, 2006 'A report to the Bus Industry Confederation: Impact on the Australian economy of increased bus patronage", Kingston, ACT, Australia

vi Australian Bureau of Statistics, Australian Social Trends 2008-4102.0

^{vii} London Congestion Tax, <u>www.tfl.gov.uk/roadusers/congestioncharging/</u>

viii London Congestion Tax, www.tfl.gov.uk/roadusers/congestioncharging/

^{ix} London Chamber of Commerce.

^{xi} Parking Space Levy, <u>www.transport.nsw.gov.au/aboutus/psl.html</u>

xii Victorian Department of Planning and Community Development.

xⁱⁱⁱ Green Square Urban Renewal Area: Transport Management and Assessability Plan, <u>www.cityofsydney.nsw.gov.au/Development/UrbanRenewalProjects/GreenSquare</u>

xiv www.environment.gov.au/settlements/industry/ggap/ntbc.html

^{xv} mirror.nla.gov.au/budget/2007-08/bp3/html/bp3_main-04.htm

xvi The Commonwealth Government's Role in Infrastructure Provision, www.aph.gov.au/library/Pubs/rp/2003-04/04rp08.pdf

ⁱ National Travel Behaviour Change (NTBC), Australian Government, Department of Environment, Water, Heritage and the Arts, <u>www.environment.gov.au</u>

ⁱⁱ Australian Financial Review, 2nd February 2009

[&]quot;Western Sydney Regional Organisation LTD, "Transport Needs of Sydney's North-West Sector", Sep 2008.

^{*} Parking Space Levy Act, 1992.