



**HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON
INFRASTRUCTURE TRANSPORT AND CITIES INQUIRY INTO THE
ROLE OF TRANSPORT CONNECTIVITY ON STIMULATING
DEVELOPMENT AND ECONOMIC ACTIVITY**

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Planning Institute of Australia

Leading effective planning for people and places

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TABLE OF RECOMMENDATIONS

Recommendation 1

The guiding principles used by the US National Surface Transportation Infrastructure Financing Commission should be taken into account when considering the type of instrument used to 'value capture a part of the capital gain accruing to a person following a planning or infrastructure decision made by government.

Recommendation 2

Infrastructure Australia should be requested to expressly consider the issue of how projects are to be funded and financed when an infrastructure project is referred to the authority for consideration so this issue (including relevantly, the appropriate 'value capture' mechanism to be employed to support the project) can be considered early in the project development process.

Recommendation 3

Federal infrastructure funding should be placed in an Urban Infrastructure Fund, with prospective projects funded using broad cost-benefit analysis and assessed against the goals of the National Urban Policy before funds are released to project proponents.

Recommendation 4

PIA is pleased the Federal Government now has a designated Minister for Cities and the Built Environment and that the Government proposes to develop bilateral principle based arrangements with the states and territories to improve urban areas with states and territories.

The 2011 document *Our Cities, Our Future: A National Urban Policy for a Productive, Sustainable and Liveable Future* should be used as the basis to develop the arrangements referred to above, and should be expanded to consider the development of the national population policy and national urban settlement policy referred to in the PIA submission to the Infrastructure Australia 2015 Infrastructure Audit.

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Introduction – the importance of transport connectivity

The Planning Institute of Australia (**PIA**) welcomes the opportunity to make a submission on the role of transport connectivity in stimulating development and economic activity.

PIA is the peak professional body representing 5,000 urban and regional planners across Australia and overseas, who work to create more productive, sustainable and liveable communities.

Planners work in all levels of government across multiple agencies, as well as an equally large contingent in the private sector working across all facets of the development industry.

Infrastructure is vital to a well-functioning and productive society. It is a key element in our built environment and integrated planning for infrastructure is an important part of the work that many planners undertake.

PIA plays a key role in both advocating for better planning and in building the capacity and capability of planners to shape our communities.

Planners are concerned about planning for liveable affordable and sustainable places and quality of the built environment.

Moreover, liveability, environmental and economic activity need not be mutually exclusive. The challenge for planners is to reconcile these competing needs to create good places for people to live, work and play.

Transport connectivity – the joining together of these places– is therefore important, so as to create communities with a human dimension whilst ensuring the efficient operation of regional and national economies.

As discussed in *Moving Australia – A Transport Plan for a Productive and Active Australia*¹ (**the Moving Australia report**), a document co-sponsored by PIA, Australia's \$9.4 billion congestion bill is set to double by 2020, and grow exponentially through to 2030 and beyond if left unchecked.

Without significant reform, the compounded cost of every extra person on Australia's often at-capacity transport networks will impact on the employment opportunities, productivity and social wellbeing of the next generation.

¹ <http://ozebus.com.au/solutions-for-moving-people/moving-australia-2030>

Consequently, transport infrastructure must be ‘futureproofed’ with in-built capacity for later expansion. This includes preserving transport corridors, integrating transport planning with residential and commercial development, and ensuring adequate resources are available.

Moreover, Australian cities are among the worlds most urbanised.

In 2010, it was estimated that over three-quarters of the Australian population lived in capitals and other major cities of more than 100,000 inhabitants. Of these, approximately 64 per cent of the entire population lived in capital cities.²

New South Wales, Victoria, Western Australia and South Australia have the most dominant capital cities as they are home to more than half of the total population in those States.

The four largest capital cities, Sydney, Melbourne, Brisbane and Perth, together accounted for almost 60 per cent of national population growth from 2001 to 2010, despite substantial migration from these cities to other cities and regions.³

Sensible planning outcomes are therefore necessary to manage these realities.

PIA is in favour of transport investments that deliver significant public benefits in the form of improved mobility, efficiency of distribution, environmental quality, growth management, land use, housing affordability, social equity, historic preservation, urban design and economic development.

It follows that PIA supports an integrated planning and decision making framework where land use planning processes fully account for the transport implications and requirements of our towns, cities and regions, noting that transport and development are not two separate things but two facets of the same challenge (i.e. transport is land use planning).

The South Australian Transport and Land Use Plan is one such example.

Value capture and infrastructure

Finding 27 of the Australian Infrastructure Audit was:

The current level of public sector expenditure – especially in the transport sector, which remains largely funded by government rather than by user charges – may be unsustainable in the face of increasing budget pressures to fund welfare and health services.⁴

² Australian Bureau of Statistics (2011) *Australian Demographic Statistics 2010-2011*

³ Australian Bureau of Statistics (2011) S.Cat 5220.0 Gross State Product 2010-2011

⁴ Infrastructure Australia *Australian Infrastructure Audit* (2015): 8

PIA believes that in suitable cases it is appropriate to design a suitable mechanism to 'value capture' some of the capital gains associated with planning decisions, on affordability and intergenerational equity grounds.

This is because it is appropriate for the wider community to gain some of the benefit when planning decisions and public infrastructure investment bring a windfall gain to the property owner.

There are a number of different methods of 'value capture' that transport infrastructure could be funded, as set out in Chapter 3 of the Moving Australia report.

For convenience, the chapter is **attached** to this submission.

One identified method - tax incremental financing, which would see infrastructure bond investors promised a share of future gains in land taxes that would be generated by rising property prices near new urban projects such as light rail – appears to be a mechanism increasingly winning the support of the Federal Government.⁵

However, some development proposals generate a public good or benefit that may be difficult to fund in this way. The provision of a cycleway would be one such example.

As the Office of the Infrastructure Coordinator said in its submission to the Productivity Commission's Public Infrastructure inquiry:

There are many possible funding models available and the Office suggests that the Commission could begin by examining, for example, the applicability of landholder levies, tax increment financing and value capture from government land. Any investigation into alternative funding models must necessarily entail a consideration of how the alternative models can be applied on a case-by-case basis to ensure that the unique circumstances of each project are taken into account.⁶

PIA agrees with this caution.

The Moving Australia report referred to six guiding principles used by the US National Surface Transportation Infrastructure Financing Commission to guide its funding and finance framework.

⁵ See Tax increment financing for new infrastructure is not "a new tax" says expert *Australian Financial Review* 13 October 2015 - <http://www.afr.com/news/economy/tax-increment-financing-for-new-infrastructure-is-not-a-new-tax-says-expert-20151013-gk81ke> See also Turnbull government's plan to make cities cooler and greener *Sydney Morning Herald* 18 January 2016 – <http://www.smh.com.au/federal-politics/political-news/turnbull-governments-plan-to-make-cities-cooler-and-greener-20160118-gm8fdz.html>

⁶ Office of the Infrastructure Coordinator *Submission to the Productivity Commission Inquiry Into Public Infrastructure* (2013): 3 – see : http://infrastructureaustralia.gov.au/policy-publications/publications/files/PC_Public_Infrastructure_Inquiry_Submission_Infrastructure_Coordinator_FIN_AL.pdf

It said a funding and financing framework should:

1. support the overall goal of enhancing mobility of all users of the transportation system;
2. generate sufficient funding to meet national investment needs on a sustainable basis;
3. cause users and direct beneficiaries to bear the full cost of using the transportation system to the greatest extent possible. This will not be possible in all instances, and when it is not, any cross-subsidisation must be intentional, fully transparent, and designed to meet network goals, equity goals, or other compelling purposes;
4. encourage investment in the transportation system;
5. incorporate equity considerations – for example, generational equity, equity across income groups, and geographic equity; and
6. support the broad public policy objectives of energy independence and environmental protection.⁷

These principles should be considered when determining what form of value capture is employed for a particular piece of transport infrastructure.

The role of stakeholders

There has been substantial comment on the needs, advantages and opportunities presented by integrating land use and transport planning.

Decisions regarding transport investment, mode and location have had a huge impact upon the development of Australia's regions and cities. Yet in many instances land use planning and decision making has occurred with little or no regard for resultant impacts on transport and movement, funding or investment.

The critical issue PIA wishes to reinforce is the need to integrate land use planning and infrastructure provision - particularly transport and water infrastructure.

This is important as transport planning and investment decisions continue to occur with an inadequate understanding of the land use and development consequences of such decision making.

⁷ Moving Australia report:74

As PIA said in its submission to the (now published) 2015 Infrastructure Audit, prepared by Infrastructure Australia:

We must begin by noting that while the notion of developing an Infrastructure Plan for Australia is applauded; developing this in the absence of any clear national policy on population, urban settlement, or overarching economic strategy is highly problematic. The lack of a national population policy, a national urban settlement policy, or a national economic strategy impacts on the ability to adequately plan for the future. Quite simply, Infrastructure provision should be driven by the need to support population growth, and to support growth of markets. How can you know where to put the infrastructure when there is no guidance on where population growth is best directed, or what the economic strategies to underpin national economic growth and prosperity may be?

It therefore agrees with Finding 19 of the Australian Infrastructure Audit, that long-term planning necessarily involves dealing with uncertainty, with current issues including:

- the implications of demographic change for Australian society generally and government finances in particular;
- the scope and direction of technological change;
- changes in the global economy;
- the future of work, e.g. where people work, incomes and part-time work and
- the prospect of climate change, and uncertainty as to how the international community will respond.⁸

The planner and the planning process plays a significant role in getting these things right – but so do other key stakeholders.

Relevant stakeholders include:

1. residents and communities - contributing knowledge and local context to shape the planning and design responses;
2. federal government - providing direction and guidance on the provision of infrastructure and protection of values of national significance, monitoring the performance of our cities, and delivering microeconomic reform to enable planning systems and processes to work effectively;
3. state government - delivering legislation and systems that support local governments and foster social, environmental, economic and cultural wellbeing;
4. local government - empowered to implement planning solutions that are in the best interest of the broader community, and founded on policy and strategy that is informed by evidence and broad stakeholder consultation; and

⁸ *Australian Infrastructure Audit*:ibid

5. Property development and construction industry - investing in our cities, towns, communities and infrastructure that supports liveable communities.

PIA does not believe the Federal Government has a role in day to day development assessment.

As indicated in the *National Urban Policy*:⁹

State, Territory and local governments are key players in shaping and managing our cities.

These levels of government provide most of the facilities and services that maintain community wellbeing such as health, education, law and order. They invest in infrastructure, such as roads and railways, as well as investing in or regulating other utilities like power and water.

Together, these levels of government have the primary responsibility for planning for urban growth and change and have the responsibility for statutory land use planning development approvals.

The subsidiarity principle should apply in planning matters – planning decisions should generally be made at the level closest to those who are affected by decisions.

However, there are some expectations that can be reduced to standards capable of national application.

The connectivity of living spaces is one of them.

This means there is an expectation that land use planning and infrastructure provision (particularly transport and water infrastructure) is integrated - monitoring this type of standard is a role the Federal Government and its authorities are able to play.

Infrastructure Australia

The Productivity Commission's report into Public Infrastructure said, in relation to the issue of corridor protection:

An alternative approach is for the Federal Government to assist in setting the overarching framework and strategy for corridor protection. The Victorian Government (sub. DR196) stated that such an approach could be managed through the existing IA project appraisal process. It suggested this could involve the acknowledgment of common protection principles and Federal Government contributions to corridor protection costs for nationally significant infrastructure¹⁰.

⁹ Federal Government *Our Cities, Our Future: A National Urban Policy for a Productive, Sustainable and Liveable Future* (2011): 12

¹⁰ Productivity Commission *Public Infrastructure Inquiry Report Vol.1* (2014):277

A variation of this idea that can be applied in this context would be to require Infrastructure Australia to advise how particular infrastructure proposals satisfy the COAG *National Objectives and Criteria for Future Strategic Planning of Capital Cities*, which requires (amongst other things) planning systems to be integrated across functions, including land-use and transport planning, economic and infrastructure development, environmental assessment and urban development.¹¹

Infrastructure Australia should also be requested to expressly consider the issue of how projects are to be funded and financed so this issue (including relevantly, the appropriate 'value capture' mechanism to be employed to support the project) can be considered early in the project development process.

This could be done now through an amendment to the:

- *Guidelines for making submissions to Infrastructure Australia's infrastructure planning process, through Infrastructure Australia's Reform and Investment Framework*¹² and the *Reform and Investment Framework Templates for use by Proponents*¹³ - that is, the documents used by states and territories when submitting projects to be considered by Infrastructure Australia; and
- Minister's statement of expectations¹⁴ and Infrastructure Australia's statement of intent¹⁵, which sets out what the Minister wants Infrastructure Australia to do and what the agency will do to satisfy the Minister (respectively).

A subsequent extension of this process would be to place Federal funds appropriated for urban infrastructure purposes into an Urban Infrastructure Fund, with prospective projects funded using broad cost-benefit analysis and assessed against the goals of the National Urban Policy before funds are released to the project proponents.

This is another way the Commonwealth can ensure that transport connectivity is taken into account in the land use/infrastructure planning process.

The Federal Government itself.

PIA believes that the Federal Government has a leadership role in shaping Australia's cities of tomorrow through the provision of infrastructure, protection of values of national significance and development of a clear national growth strategy which focuses on spatial productivity, liveability and sustainability.

¹¹ Criterion 1

¹² http://infrastructureaustralia.gov.au/projects/files/Reform_and_Investment_Framework_Guidance.pdf

¹³ http://infrastructureaustralia.gov.au/projects/files/Infrastructure_Priority_List_Submission_Template_Stage_7_Transport.pdf

¹⁴ <http://infrastructureaustralia.gov.au/about/files/IA-Statement-of-Expectations-2015-17.pdf>

¹⁵ <http://infrastructureaustralia.gov.au/about/files/IA-Statement-of-Intent-2015-17.pdf>

Federal Government interest in planning issues oscillates.

However, that said, PIA is pleased the Government now has a designated Minister for Cities and the Built Environment and proposes to develop bilateral principle based arrangements to improve urban areas with states and territories.¹⁶

In 2011 the Federal Government published *Our Cities, Our Future: A National Urban Policy for a Productive, Sustainable and Liveable Future*.¹⁷

This document should be used as the basis to develop the arrangements referred to above.

It should be expanded to consider the development of the national population policy and national urban settlement policy referred to in the PIA submission to the Infrastructure Australia 2015 Infrastructure Audit, discussed above.

Conclusion

Should the recommendations made by PIA in this submission be accepted, the issue of transport connectivity will become central to the planning process, thereby improving the liveability of the urban environment, to the benefit of all Australians.

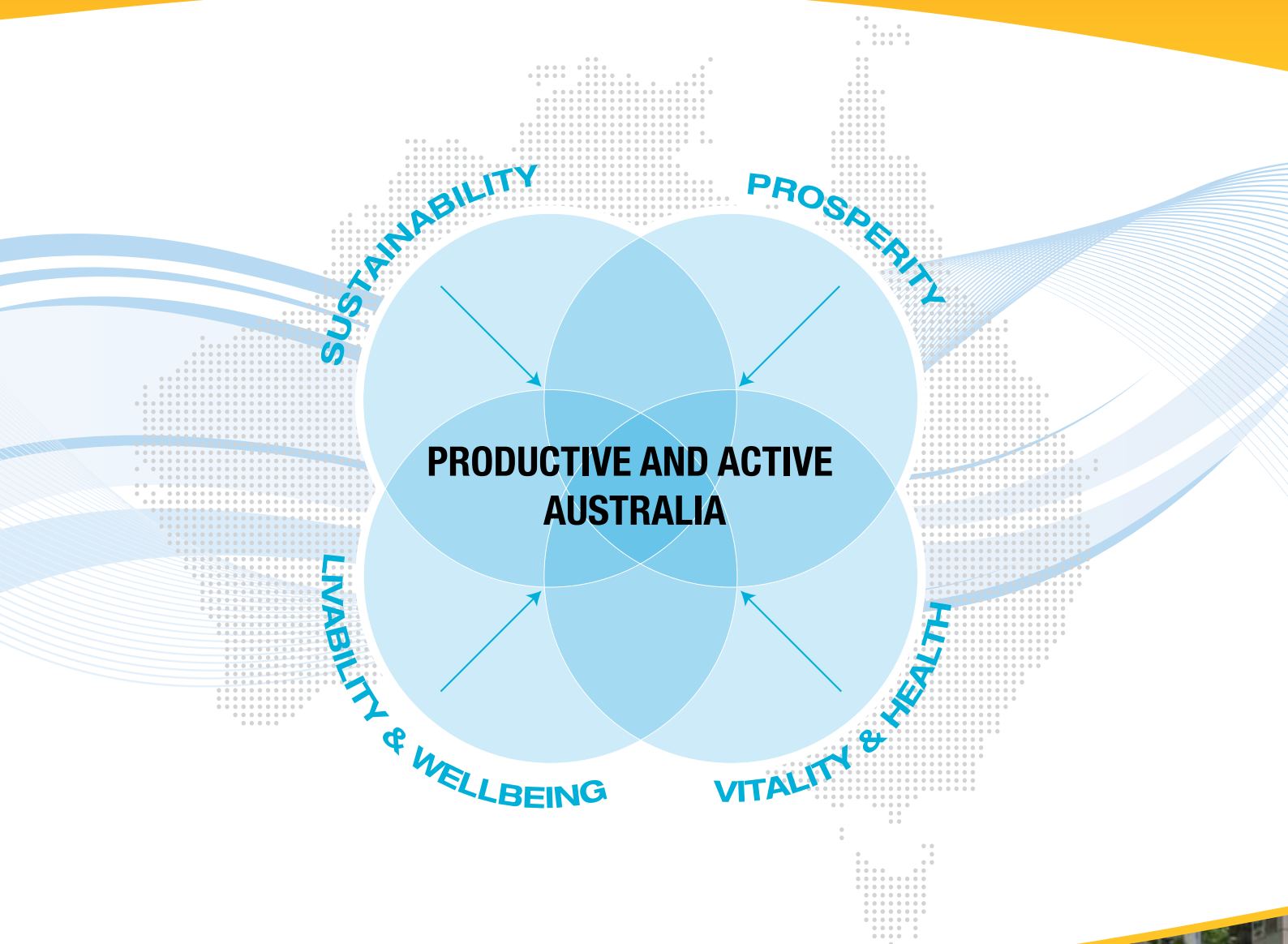
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¹⁶ As announced by the Hon Greg Hunt MP in a speech to the Sydney Business Chamber. 19 January 2016: <http://www.greghunt.com.au/Home/LatestNews/tabid/133/ID/3623/Long-term-planning-and-cities-for-the-next-century--Sydney-Business-Chamber.aspx>

¹⁷ https://infrastructure.gov.au/infrastructure/pab/files/Our_Cities_National_Urban_Policy_Paper_2011.pdf

MOVING AUSTRALIA 2030

➤ *A TRANSPORT PLAN FOR A
PRODUCTIVE AND ACTIVE AUSTRALIA*



CHAPTER 3

OUR TRANSPORT SYSTEM IN 2030: A PROSPEROUS NATION (FUNDING)

The Moving People 2030 Taskforce acknowledges that in order to achieve our vision for Australia's transport system in 2030, many of the recommendations contained in this report need to be underpinned by sustainable funding mechanisms.

This chapter of the Report looks at a range of measures to provide governments with a more sustainable framework from which to fund land transport infrastructure projects and programs. It analyses investment and funding arrangements for transport, as well as current taxation arrangements and incentives.

The Report draws on a range of sources including two reports, namely Moving People: Solutions for a Growing Australia and Moving People: Solutions for a Liveable Australia.

3.1 Investment and Funding

3.1.1 Context and some principles

In *Moving People: Solutions for a Liveable Australia*, Stanley argues that there is a strong case to be made that Australian land transport infrastructure spending is below the level that is needed, as evidenced by the decline in real expenditure levels and results of many transport benefit-cost analyses on unfunded proposals.

The consequences include lost productivity gains, lesser levels of environmental improvement, a higher road toll and greater social exclusion.

Infrastructure Australia has highlighted this problem, in the context of increasing demands on government revenues from other sectors as well as infrastructure.¹²⁶

Increasing transport infrastructure and services requires increased funding. The Committee for Melbourne distinguishes infrastructure funding from financing: *funding* refers to the entity that *ultimately* pays for the infrastructure, while *financing* refers to payment up front.

The focus in the current report is on funding.¹²⁷ The Committee for Melbourne identifies three main sources of funding:¹²⁸

1. The community via government funds (general taxation)
2. Infrastructure beneficiaries (e.g. value capture levies)
3. Infrastructure users (e.g. congestion taxes; tolls).

As the current fiscal environment in Australia is not conducive to greater reliance on the first of these funding sources; this increases the focus on the second and third avenues, both of which have arguments for efficiency and fairness in their favour.

It has long been recognised that transport expenditure, pricing and funding should be more closely connected. If efficient outcomes are desired, 'user pays' principles should underpin pricing.

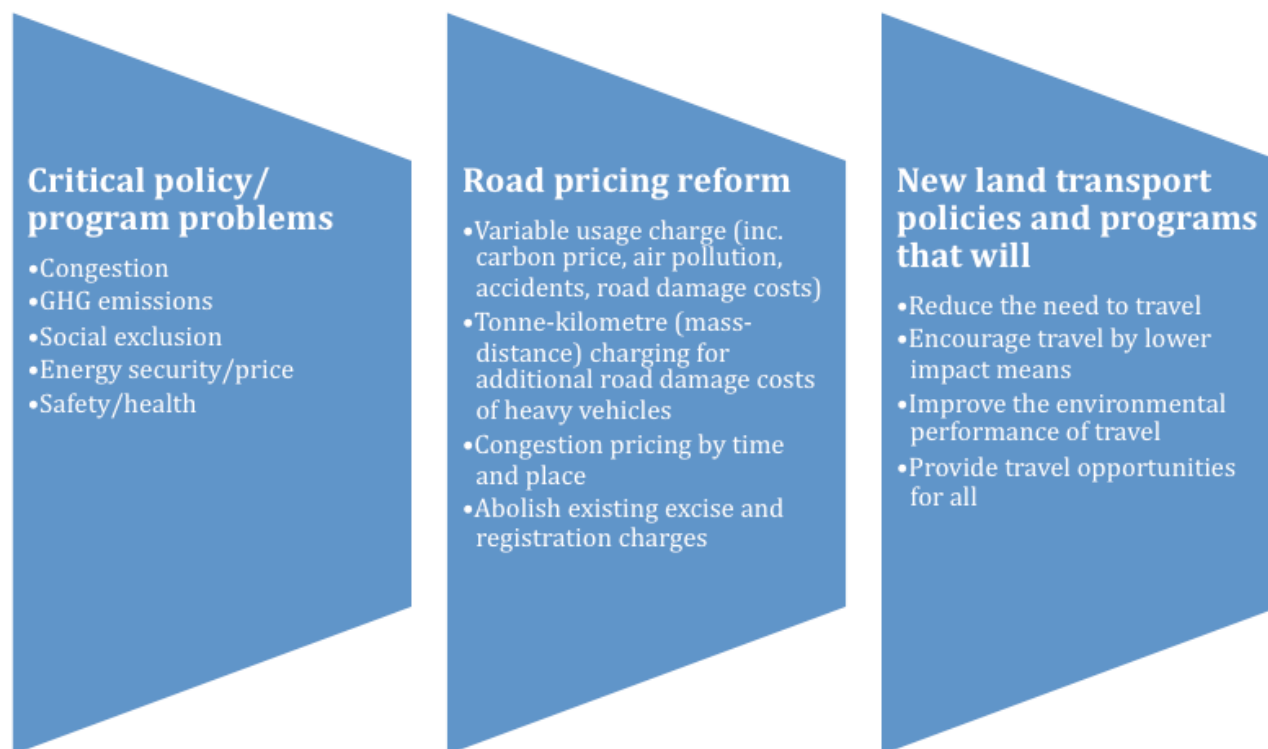
More recently, the increasing focus on integrating land use and transport planning has encouraged a broadening of the 'user pays' focus to 'beneficiary

¹²⁶ Infrastructure Australia 2012 – *Report to COAG Reform Council* (p46), Commonwealth Government, Department of Infrastructure and Transport, Canberra.

¹²⁷ Committee for Melbourne, 2012, *Moving Melbourne: A Transport Financing Discussion Paper*, Committee for Melbourne.

¹²⁸ Committee for Melbourne, 2012, *Moving Melbourne: A Transport Financing Discussion Paper*, Committee for Melbourne.

Figure 3.1: Problems and Policy Directions: Moving People – Solutions for a Growing Australia



Source: Stanley and Barrett (2010).

pays', and a focus on the role that various value capture techniques might play in helping to fund transport infrastructure.

The beneficiary-pays approach recognises users are not necessarily the only ones who might gain from infrastructure improvements.

Australia's Future Tax System (the Henry Tax Review) recommended governments should consider user-pays pricing, through network-wide variable congestion pricing and transparent use of revenues. It also argued for an accelerated roll-out of mass-distance-location charging for heavy vehicles.¹²⁹ Infrastructure Australia has supported these recommendations.¹³⁰

Moving People Solutions for a Growing Australia argued that pricing reform was central to both behaviour change and funding.¹³¹ It proposed a user pays marginal social

cost pricing regime, as summarised in Figure 3.1, where price signals would be used to influence behaviour and raise revenue. This is a broader approach than congestion pricing as outlined in Chapter 1.

Pricing reform in land transport is a concern in many jurisdictions. The UK Institute for Fiscal Studies has just completed a study on motoring taxation for the UK RAC Foundation.¹³²

The report noted the declining fuel tax revenue flow to the national government (from improving fuel efficiency and slowing traffic growth) and its significance for national government revenues in coming years, a £13 billion fall from the current £38b revenue flow by 2029, at current fuel taxation and vehicle excise rates.

The report also pointed out that fuel taxation is an inefficient way to charge for road use, because only a small part of the external costs of road use is correlated with fuel use. To deal with this declining revenue base

¹²⁹ Henry, K and Treasury, 2010, *Australia's Future Tax System*, Commonwealth Government, Canberra.

¹³⁰ Infrastructure Australia 2011, *Report to COAG: Communicating the Need for Action*, Infrastructure Australia, Canberra.

¹³¹ Stanley, J. And Barrett, S, 2010, *Moving People Solutions for a Growing Australia*, Produced for the ARA, BIC, UITP, Canberra.

¹³² Johnson et al, 2012, *Fuel for Thought: The What, Why and How of Motoring Taxation*, Institute for Fiscal Studies/RAC Foundation for Motoring, London.

and improve the efficiency of the pricing regime, Johnson et al recommend a pay-as-you-go pricing system, with road pricing (including congestion charging) allowing reductions in fuel taxes and vehicle excise duties.

In the United State the US Federal gas tax contributes revenue to the Highway Trust Fund. That tax, however, has been unchanged at 18.4c/gallon since 1993. Revenue flows into the Fund are declining as per capita car use drops and fuel economy rates improve, resulting in less money for spending on roads and public transport (both of which receive money from the Fund). Congress has had to provide top up funding since 2008. The US National Surface Transportation Infrastructure Financing Commission report, *Paying Our Way*, proposes shifting from the current US road funding system, based largely on indirect user fees in the form of federal motor taxes, toward a new system built around more direct user charges, in the form of fees for miles driven.¹³³

The Commission points out that the current US transport system is underpriced, and that a vehicle mile travelled (VMT) charging system, which would strengthen the connections between expenditure, pricing and funding, is the consensus choice for the future. The Commission proposed the US Federal Government commit to deploying such a system by 2020.

The US Commission set out six guiding principles for its funding and finance framework: the funding and finance framework:¹³⁴

1. Must support the overall goal of enhancing mobility of all users of the transportation system
2. Must generate sufficient funding to meet national investment needs on a sustainable basis
3. Should cause users and direct beneficiaries to bear the full cost of using the transportation system to the greatest extent possible. This will not be possible in all instances, and when it is not, any cross-subsidisation must be intentional, fully transparent, and designed to meet network goals, equity goals, or other compelling purposes

4. Should encourage investment in the transportation system
5. Should incorporate equity considerations – for example, generational equity, equity across income groups, and geographic equity
6. Should support the broad public policy objectives of energy independence and environmental protection.

These are useful guidelines for pricing and funding reform in Australia.

3.1.2 User pays in the Australian context

An important user pays charging principle argued in *Moving People: Solutions for a Liveable Australia* is that transport users should generally be confronted with meeting the social costs of their travel choices, unless there are good policy reasons for doing otherwise. It raises the question of how much Australian road users currently pay in various road taxes and charges.

In *Moving People: Solutions for a Liveable Australia*, Stanley conducted an extensive analysis of the trends in Australia regarding road user taxes and charges (including fuel excise, state and territory charges, and tolls) and the extent to which these taxes and charges cover the costs of road use (including external costs).

One of the main conclusions from this research is that Australian road users do not meet the full social costs of their travel choices. It is increasingly arguable that they may not even meet the direct road infrastructure/ servicing costs associated with their road use.

Stanley argues there is a growing gap between the total cost (including social or external) costs of road use in Australia, and current road user charges, suggesting there is an urgent need for road pricing reform.

Moving People: Solutions for a Liveable Australia suggests a road pricing system incorporating:

- > A use-based charge to cover carbon costs (which could remain as a fuel-based charge, like excise)
- > A use-based charge to cover the costs of road construction and maintenance attributable to lighter vehicles (distance and location based)
- > A tonne kilometre charges for the additional road

¹³³ US National Surface Transportation Infrastructure Financing Commission, 2009, *Paying Our Way: A New Framework for Transportation Finance*, Washington DC.

¹³⁴ US National Surface Transportation Infrastructure Financing Commission, 2009, *Paying Our Way: A New Framework for Transportation Finance*, Washington DC. (pp 26-27)

damage attributable to heavy vehicles (distance and location based)

- > A use-based charge to cover the external cost component of accident costs (distance and location based)
- > Use-based charges to levy the more polluting vehicles for their health (air pollution) costs (distance and location based)
- > A congestion pricing scheme to make users accountable for the congestion costs attributable to their road use (distance, location and time based).

The Taskforce would support further exploration of the of the need for road pricing reform as a way of providing a sustainable funding mechanism for transport infrastructure and services and engendering positive travel behaviour outcomes.

3.1.3 Value Capture mechanisms

User-pays funding mechanisms can be complemented by a range of value capture mechanisms. These sit somewhere between general taxation and user charges as a revenue source, being essentially viewed as payments by non-user beneficiaries, for example landowners or developers.

The Centre for Transportation Studies at the University of Minnesota has identified a number of value capture mechanisms that are potentially useful as a means of funding transportation infrastructure, as set out in Table 3.1.¹³⁵

The 2012 Infrastructure Finance Working Group report, *Infrastructure Finance and Funding Reform*, recommends use of techniques such as value capture.

3.1.3.1 Tax Increment Financing

Tax Increment Financing (TIF) is widely used in the US and is now being used by local government in the UK to help drive local investment and economic growth.¹³⁶ In essence, TIF allows (usually) local government to borrow against predicted growth in locally sourced revenues in

a defined area, to help fund activities that will drive that growth.

TIF has been used for fifty years in the US to fund a range of infrastructure and development projects, with almost every US state having passed relevant enabling legislation. Bonds are usually issued to provide the necessary upfront funds for infrastructure/urban renewal initiatives, additional annual local tax revenues being used to meet interest and principal repayments. TIF is particularly suited to an urban renewal context.

TIF might also be relevant at state level, where the incremental revenues could be state property related taxes (primarily land tax and stamp duty). This revenue would be used mainly to fund infrastructure otherwise funded by state governments.

A key issue in relation to TIF as a possible funding source is the extent to which the infrastructure programs being financed lead to a net increase in development related revenues to the sponsoring government, as distinct from simply diverting revenue from one area to another (even within the same municipality). US evidence on this account is mixed, with Dye and Merriman, for example, finding little evidence that TIF actually led to net new development in a Chicago area case study.¹³⁷

In a governmental context where infrastructure is in short supply and available capital funds are scarce, net increases in governmental revenue streams seem more likely to be realisable to meet payments on borrowings for infrastructure.

This would seem to be the case in Australia at present, particularly in cities where population growth pressures are severe. Major urban renewal projects, which usually include substantial transport infrastructure components, should be suitable candidates. Joint ventures between government land agencies and local government, or between local government and the private sector, could see local government drawing on TIF finance to help accelerate infrastructure provision and its subsequent rate income flows.

¹³⁵ Centre for Transportation Studies, 2009, *Value Capture for Transportation Finance*, Centre for Transportation Studies, Minnesota.

¹³⁶ The Property Council of Australia (2012) calls this funding method Growth Area Bonds.

¹³⁷ Dye, R, and Merriman, D, 2006, "Tax Increment Financing: A Tool for Local Economic Development", *Land Lines*: January 2006, Volume 18, No 1, accessed online at http://www.lincolninst.edu/pubs/1076_Land-Lines-January-2006-Volume-18-Number-1

Table 3.1: Value Capture in a Framework of Transportation Finance

Funding Mechanism	Beneficiaries		Measurement of Benefit	Finance Instrument
General revenue	General public		General tax base	General fund allocation; property tax; transportation sales tax (US)
Value capture	Restricted non-user beneficiaries	Landowners	Land value growth	Land value taxes
			Property tax growth	Tax increment financing
			Assessed special benefits	Special assessments
			Transportation utility	Transportation utility fees
		Developers	Off-site development opportunities	Development impact fees
			Off-site access benefits	Negotiated exactions
			Development privileges	Joint development
			On-site development opportunities	Air rights
User fees	Users of transportation facilities	Vehicle operators	Gas consumption	Gas taxes
			Mileage	Mileage-based charges
			Vehicle units/types	Vehicle sales tax; license tab fee; wheelage fees
			General access rights	Tolling
			Demand-controlled access rights	Congestion pricing
			Rights to incur environmental impacts	Transportation environmental taxes/fees
		Passengers	Ridership	Fares or permits

Source: Centre for Transportation Studies, 2009.

3.1.3.2 Special Assessments

These impose special charges on property close to a new facility, with the charges only being raised for those properties that receive a special (identifiable) benefit from the public improvement, such as a new transport facility. Committee for Melbourne uses the generic description of Benefitted Area Levy for this type of funding source.¹³⁸ For example, Melbourne's Regional Rail Link and Sydney's North West Rail project will benefit properties located adjacent to proposed stations.

Some value capture in relation to such properties also may be pursued through means such as air rights development or joint development projects, as discussed below, but all properties that will clearly gain could be subject to a special assessment. This approach has much in common with TIF.

The Property Council of Australia (PCA) notes that a number of Australian jurisdictions apply a value capture levy, citing the example of a recently introduced value capture charge introduced in Queensland by the Urban Land Development Authority.¹³⁹

3.1.3.3 Metropolitan Improvement Levy

This is a broad-based charge related to all properties in a large area, set at a low rate and used to fund specific government services. It might be levied at a flat rate per property, or as a proportion of property value. The advantage of the latter is that it implies an element of value capture, and is not as regressive as a flat levy. Discussing this approach in a transport context, the Committee for Melbourne calls this a Broad-Based Transport Improvement Levy. Melbourne has a Parks Levy, for example, which fits this model.

One way to increase the availability of funding for transport infrastructure and service initiatives that deliver community value would be to implement such a levy, hypothecated for transport purposes, particularly where the relevant services are widespread throughout the charging area, such as public transport.

For example, a metropolitan improvement levy could be used to help fund public transport service costs in

growing suburbs, on the argument that there are direct user benefits, 'option benefits' (essentially insurance benefits, to those who might possibly need to, or wish to, use the service at some future time - a form of beneficiary-pays) and reduced external costs of road use from the availability of such services. The likely redistribution of revenue raised from inner and middle areas to outer areas may have equity benefits, since most public transport service benefits currently accrue to inner-to-middle urban residents.

3.1.3.4 Developer Contributions

Developer contributions are one-time charges levied on new development to help recover costs of public infrastructure and services. They are commonly used in Australia for greenfields development and major projects such as Docklands.

Levying such charges on a consistent basis across all new urban development is appropriate, particularly with urban infill being expected to play a bigger role in most cities.

3.1.3.5 Negotiated Exactions

Negotiated exactions might cover similar types of costs to a development impact fee, but would be subject to negotiation, rather than being the outcome of a formal, formulaic process. They may be in-kind contributions (e.g. of open space), instead of money. The Centre for Transportation Studies explains that negotiated exactions are not typically applied to off-site infrastructure provision.¹⁴⁰

3.1.3.6 Joint Development

In a transport context, joint development refers to the development of a transport facility and adjacent private real estate, often based around a railway station where higher density development might accompany station redevelopment (e.g. transit oriented development).

In an Australian setting, this might involve a partnership between a public land development agency or transport authority, and a private sector developer.

¹³⁸ Committee for Melbourne, 2012, *Moving Melbourne: A Transport Financing Discussion Paper*, Committee for Melbourne.

¹³⁹ Property Council of Australia, 2012, *Securing Victoria's Future: A program to Plan Fund and Deliver Infrastructure*, Property Council of Australia, Melbourne.

¹⁴⁰ Centre for Transportation Studies, 2009, *Value Capture for Transportation Finance*, Centre for Transportation Studies, Minnesota.

Joint development may include air rights development such as above a railway station.

3.1.3.7 Air Rights

Air rights agreements establish the right to develop above or below a facility, in exchange for a financial contribution or future additional property and/or income taxes. Revenue from such an initiative may be used for a range of public purposes, such as place making, but is most likely to be retained within the development site.

Major new transport projects, or urban development projects, may add value to the space above or below a transport facility. For example, air rights above Wurundjeri Way in Docklands, Melbourne, have been part of a development proposal before the market for bidding in early 2012.

In Australian cities, developments above railway stations usually have a high cost for podium development, relative to surrounding land prices. This typically means high density development will be needed to establish a financially feasible opportunity.

Such proposals are unlikely to generate sufficient funding to facilitate developments beyond those covered by the particular joint development arrangements, but they can be significant for a small number of major development opportunities.

3.1.4 Other Land Transport Funding Opportunities

3.1.4.1 Increased Borrowings

A traditional way of financing investment in land transport infrastructure has been government borrowings. A major advantage of this approach is that it enables the funding of these financing costs to be spread over the life, or part thereof, of the asset, so that the generation(s) that benefit can meet the financing costs.

A disadvantage, however, is that these costs are not specifically financed by users (unless explicitly levied as a user charge for the facility developed with the borrowings, like a toll) but by taxpayers more broadly. In the current fiscal environment, where the Australian Government and state and territory governments are seeking to keep a tight rein on spending, increased borrowings for infrastructure are not popular politically,

even if the relevant investment might generate significant public value.

The Governor of the Reserve Bank was quoted as saying:

"In fact, the Commonwealth of Australia and its constituent states are at present able to borrow at about the lowest rates since Federation."¹⁴¹

Such historically low borrowing costs, in real terms, should encourage governments to look closely at doing more with this funding source.

The Victorian Division of the Property Council of Australia (PCA) has examined the scope for the Victorian Government to increase its level of debt funding of infrastructure, as part of a concerted effort to lift the state's level of infrastructure improvement.¹⁴² This is seen as fundamental to lifting the state's declining rate of productivity growth. PCA note that the state's budget position is in good shape, and that Victoria has perhaps the least likelihood of any state of its credit rating being downgraded. Drawing on US and Queensland experience, the report suggests that if the state's credit rating were to be downgraded from AAA to AA+, this would increase interest rates by between 0.4 and 0.7 percentage points.

PCA's analysis suggests Victoria's net infrastructure investment "... is set to decline back to pre-2006 levels (when expressed as a share of GSP) by 2014-15". They further suggest the state might be able to borrow an additional \$3b per annum for three years (\$9b in total) without exceeding a net-debt-plus-superannuation to revenue ratio of 130 per cent, and thus avoid downgrading of credit risk.

Borrowing an additional \$5b (rather than \$3b) annually for three years would see this ratio reach 139 per cent in year 3. The report suggests that this would be likely to result in a downgrade from AAA to AA, but the increased borrowing costs occasioned by such a downgrade might be justified if the relevant investment were well chosen.

Given that the PCA analysis picked Victoria for its investigation, the state it thought was best placed

¹⁴¹ *The Age*, 26 July 2012, Business Day page 1.

¹⁴² Property Council of Australia (Victorian Division) 2011, *Pre-budget Submission 2011-12*, accessed online at <http://www.propertyoz.com.au/library/Victorian%20Pre%20Budget%20Submission%202011%202012.pdf> Interestingly, this report gave no attention to user pays financing methods.

in terms of credit risk, it would not be appropriate to extrapolate Victoria's results to a national figure. The analysis does, however, suggest current infrastructure borrowing constraints may be too tight, and productivity benefits could flow from a more relaxed borrowing stance, as part of a wider package of infrastructure funding streams.

The \$9b identified by PCA as potentially able to be funded by increased borrowings would be sufficient to meet almost one quarter of the estimated capital costs (of \$38.9b) of the state's top transport infrastructure priorities identified by PCA.¹⁴³

The current focus on maintaining AAA credit ratings has been noted by the Infrastructure Finance Working Group, who argue that:

*"Arguably, rigidly applying the strategy of maintaining AAA credit ratings can be counter-productive, particularly where States have a range of important infrastructure projects with high economic value ... that need to be undertaken promptly and can generate long-lasting benefits."*¹⁴⁴

3.1.4.2 Public-Private Partnerships (PPPs)

PPPs have played a major role in development of some of Australia's most significant transport infrastructure investments over the past couple of decades, particularly urban toll roads, where private equity and borrowings for infrastructure financing are rewarded through associated user-pays toll funding. Public transport service delivery contracts for private sector provision also represent a form of PPP.

As an investment vehicle, PPPs have lost some of their lustre in recent years, with concern over high and escalating bidding costs, and some significant shareholder losses with some poor bid projects which have been vulnerable to 'optimism bias'.

PCA indicates private borrowing costs are perhaps 200 basis points above public costs, suggesting PPPs need to play a role of complementing publicly funded infrastructure, so that the total level of investment is higher than would otherwise be possible. Higher private

sector borrowing costs and profit expectations, in a risky environment, mean careful selection of major projects for PPPs is vital. From a public sector viewpoint, it is critical that the granting of a major transport PPP, with its associated long term operating rights, does not entail significant loss of transport network control.

In view of the losses on some major recent projects, it might be worthwhile for the public sector to take more of the construction stage risk for some PPP projects, with the operational stage being contracted out once traffic flows have settled down (essentially as a management contract).

Level crossing abolition programs in capital cities, especially Melbourne, provide an interesting opportunity for PPPs. Bundling a number of projects for bidding might attract a better price than a series of one-off bids. More importantly, given high project costs, tolling of vehicles might be an effective way to help meet project costs. This has the additional advantage of reinforcing the concept of user pays. Electronic tolling could be used to this end, with the state or perhaps local government being party to the proposal.

3.1.4.3 Asset sales

Infrastructure Australia has drawn attention to the possible sale or lease of government assets as a means of freeing up funds for new infrastructure. For example, the NSW Government has announced its intention to re-invest into state infrastructure some of the proceeds from selling a long term lease of Port Botany.¹⁴⁵

Sale of existing freeways is another possibility for raising substantial sums. This could take form of outright sale; a long term management lease; or perhaps the narrower form of the sale of a lane on a freeway, for use as a high occupancy toll lane.

Asset sales and privatisation of service delivery have been used by states and territories for many years to free up funds for investment and shift infrastructure commitments to the private sector.

The Taskforce supports the Infrastructure Australia approach, which includes stimulating an informed community discussion about the arguments for and

143 Property Council of Australia, 2012, *Securing Victoria's Future: A program to Plan Fund and Deliver Infrastructure*, Property Council of Australia, Melbourne.

144 Infrastructure Finance Working Group, 2012, *Infrastructure Finance and Funding Reform*, Report to Infrastructure Australia.

145 *Infrastructure Australia 2012 – Report to COAG Reform Council* (p46), Commonwealth Government, Department of Infrastructure and Transport, Canberra.

against retaining assets in government ownership.

3.1.5 Conclusions on Sustainable Funding

Declining revenues and a growing infrastructure backlog in Australia highlight the urgency of finding new ways to fund transport infrastructure.

Arguments of efficiency and fairness both support a greater reliance on user pays and beneficiary pays pricing systems. User pays systems have the benefit of reducing the size of the apparent investment backlog by encouraging behavior change, providing equity concerns are addressed.

The increased focus on land use and transport integration as a policy direction focuses attention on how the benefits of transport infrastructure are transmitted through the urban system. Much benefit will ultimately accrue to land owners, who should contribute to the costs of the initiatives that increase the value of their assets.

This beneficiary-pays approach could be used more widely, and there are a range of value capture mechanisms available to this end.

Optimising funding opportunities across various payment mechanisms (user-pays, various beneficiary-pays options, and direct government funding) requires careful balancing of the funds raised from each mechanism, to ensure the total funding structure is effective and equitable.

Across all funding sources, an increased total commitment will be required in coming years to lift productivity and enhance liveability and social inclusion, while protecting the environment. Public transport fares are a further potential source of revenue. Fare revenues typically meet less than half the operating costs of public transport in Australian cities. Higher cost recovery targets should be set when reformed road user charging is in place, with retention of suitable concession fares on equity grounds.

Metropolitan land use and transport strategies should specify how various funding sources will be combined to fund the transport initiatives required in the plan. This implies that an Infrastructure Plan should accompany a Land Use Plan and Transport Plan, along the lines proposed in NSW.

Recommendation: Standing Council on Transport and Infrastructure to investigate the options for sustainable funding of transport infrastructure.

3.1.6 Summary of Sustainable Funding Options

- > A use-based charge to cover carbon costs (which could remain as a fuel-based charge, like excise)
- > A use-based charge to cover the costs of road construction and maintenance attributable to lighter vehicles (distance and location based)
- > A tonne kilometre charges for the additional road damage attributable to heavy vehicles (distance and location based)
- > A use-based charge to cover the external cost component of accident costs (distance and location based)
- > Use-based charges to levy the more polluting vehicles for their health (air pollution) costs (distance and location based)
- > A congestion pricing scheme to make users accountable for the congestion costs attributable to their road use (distance, location and time based)
- > Road user charges (excluding tolls): pay for road costs, including externalities, and contribute to costs of public transport (capital/operating deficit), walking and cycling initiatives that reduce the external costs of road use
- > Tolls: fund (wholly or in part) the financing costs of specific works on which the tolls have been levied or perhaps specific works on other related links. Higher tolls on congested portions of existing tollways could be used for purposes that can be negotiated with the operator. New tolls on congested existing freeways could be used for road improvements or to contribute to public transport improvements that help ease congestion (if the tolls are privately levied following asset sale, the asset sale revenues can be used for similar purposes)

- > Metropolitan improvement levy: fund part of the public transport operating deficit, particularly for services in growth areas. Such a levy might also be used to fund other metropolitan services, such as place-making initiatives
- > Borrowings (can be public or private): fund major public or private projects, on which user charges or tolls might be imposed that can help to repay borrowings
- > Private equity: a component of the cost of financing PPP's, with tolls and perhaps a government contribution used to provide a return
- > Tax Increment Financing and special exactions/ rates (value capture mechanisms): involve direct government revenue streams that are used to fund borrowings that have been used for specific investments that will increase property values, which may be transport investments
- > General Council rates: fund the access component of local road costs
- > Federal/State grants: national roads, state roads and part of local roads, until such time as road user charging provides the revenue stream to fund the road costs; major public transport capital. The grants could be from hypothecated excise revenue or some revenues from asset sales
- > Public transport fares: Fares are a further source of revenue.

3.2 Tax and Public Transport

3.2.1 Introduction

As Australia faces the dual challenges of rising urban congestion and the need to move towards a low carbon economy, encouraging sustainable and efficient transport has never been more important. While the development of 'hard infrastructure' such as new roads, train lines, and rolling stock is vital for meeting Australia's transport task to 2030, the creation of a strong structural taxation framework is required not only to fund this infrastructure, but also to encourage individuals to make more efficient transport choices.

Australia's existing taxation environment for transport is an ineffective demand management tool, potentially

encouraging people away from sustainable transport. This generates perverse outcomes, increasing congestion and carbon emissions as well as reducing revenue for reinvestment. The Taskforce believes there is a strong case to better use taxation to encourage public and active transport.

3.2.2 The GST and Public Transport

The Goods and Service Tax is collected on a range of activities related to the operation and use of public transport systems in Australia.

GST is collected on public transport fares, vehicle and rolling stock purchases, and the materials used in the manufacture of public transport vehicles.

Some of the resultant GST revenue is utilised by states for the development of road infrastructure. This infrastructure supports activities such as car use that run counter to the goal of the Australian Government attempting to foster a sustainable transport culture.

The Taskforce believes the Australian Government should invest GST collected from expenditure related to public transport into an Australian Government Public and Active Transport Fund.

Estimates of the revenue collected would be developed through business reporting from public transport operators, including the GST paid on fuel excise, which could be measured through rebate claims under the Fuel Tax Credits Scheme.

The GST collected on fuel excise from all vehicles alone is estimated to be in the vicinity of \$2b per annum, so we can assume the sum collected from all public transport operations will be a sizeable amount.

The benefits of this funding system include:

- > Responsibility for public transport service delivery remains with State and Local Governments
- > The revenue burden on the community is not increased, and it can further be argued that the savings in urban congestion and environmental costs will result in a positive economic outcome
- > The administrative burden would be limited
- > The benefits of consuming transport offset the costs.

This measure would not be a world first; in 2007 the Singapore Government committed millions of dollars of GST revenue to a dedicated public transport fund as part of their GST offset package.

3.2.3 Fringe Benefits Tax

Australia's ability to transition to a more efficient transport system by 2030 is inhibited by a taxation environment that favours private vehicles. One of the most notable examples of this is the application of Fringe Benefits Tax (FBT) on salary packaged vehicles.

Until May 2011, Australia's FBT scheme unintentionally encouraged car travel as the payable tax rate reduced for salary packaged vehicles as the number of vehicle kilometres travelled increased. This encouraged people to drive unnecessarily in order to access a more favourable tax rate. (See Table 3.2)

Table 3.2: Fringe Benefits Tax Rate for Car Travel

Yearly km Travelled	Statutory Rate
Less than 14,999	26%
15,000 to 24,999	20%
25,000 to 40,000	11%
Over 40,000	7%

Source: ATO (2011)

In light of this inefficiency, incremental tax incentives based on km travelled were replaced in 2011 with a flat rate of 20 per cent. This has been an important first step in addressing the inequality in the tax treatment of private and public transport. However, FBT still gives preferential treatment to private motor vehicles over public transport. If an employer meets the cost of an employee's public transport costs, the full FBT rate of 46.5 per cent is applied, compared to only 20 per cent for cars. As a result, despite being less damaging than in the past, Fringe Benefits Tax still inadvertently increases congestion and transport sector carbon emissions by increasing the relative cost of public transport.

FBT should be reformed to level the playing field between salary-packaged vehicles and public transport, and remove perverse incentives for employees. This would not only increase public transport mode share for commuter trips, but also free up revenue for more productive purposes. Subsidies for salary packaged private vehicles and related expenses total more than

\$600 million per year,¹⁴⁶ representing a significant opportunity to put government spending on transport to better use.

Extending FBT tax incentives for public transport use has already achieved significant success abroad. In the United States, commuters have had access to tax-free benefits for employer-provided public transport costs for more than two decades. Under the scheme, employers can provide a tax-free allowance for commuter-related expenses including public transport fares, parking, carpooling and cycling costs. Eligible employees can also 'cash out' the effective value of an employee parking space as a tax-free salary bonus.

Analysis from the US indicates that commuter benefits programs can be a highly successful demand management tool. The initiative has reduced peak motor vehicle use by up to 30 per cent with a corresponding increase in public transport use by employees of 10 to 50 per cent.¹⁴⁷

The Taskforce believes that Australia should replicate this success. At a minimum, the playing field between public transport and private vehicle should be equalised, either through a cessation of FBT incentives for private vehicles or the implementation of corresponding scheme for public transport.

Recommendation: Implement tax based incentive schemes to encourage work related public transport trips.

3.2.4 Diversifying Taxation on Transport

While there are a number of specific opportunities to amend transport taxation that are of considerable merit, there is no 'silver bullet' solution.

There are a wide array of important factors that Australia's future transport system must address,

¹⁴⁶ Tourism and Transport Forum, Tax Incentives for Public Transport, 2011

¹⁴⁷ Replogle, M. (2002): Address to the Committee on Transportation and Infrastructure, U.S. House of Representatives, May 21, 2002.

Table 3.3: Possible Road Taxation Structures Related to Carbon Economies

Previous arrangement		Current arrangement		Australia 2030	
Target	Instrument	Target	Instrument	Target	Instrument
General revenue raising	Fuel taxes, state taxes on motor vehicles	Carbon Emissions	Carbon Tax	Carbon Emissions	Carbon Tax
		General revenue raising	Fuel taxes, state taxes on motor vehicles	Congestion	Location and time based charges
				Road usage	Mass, location and distance based charges
				Other social costs	Specific taxes, charges or regulations
				Efficient revenue raising	Fuel tax, annual registration

Source: Tourism & Transport Forum, *Funding Challenges of Public Transport*, 2012¹⁴⁸

including speed, reliability, safety, affordability and carbon efficiency.

A number of different tax mechanisms are required to meet the requirements of each. While any good tax policy should address multiple objectives of the transport task, any one in isolation can have unintended consequences. For example, price discounts for low emission vehicles are effective at cutting carbon emissions, but can also encourage congestion. Similarly, subsidisation of public transport over roads reduces emissions and congestion, but can leave lower socio-economic areas facing accessibility issues, as well as having adverse impacts on freight efficiency.

Given the wide divergence of goals and methods to achieve them, Australia must enact a comprehensive and integrated approach to tax that accurately reflects the true cost of transport.

It is the view of the Taskforce that price signals in relation to factors such as emissions, congestion, road maintenance and other social costs are vital to achieving this.

Above (Table 3.3) is an example of how Australia's future taxation environment could be modified to better fund and encourage efficient use of transport.

3.2.5 Ride to Work Incentives

Providing a 'Ride to Work' tax incentive has also proved successful. In the UK, evaluations have revealed that by early 2011, 15,000 employers had signed up to provide bikes (to a maximum value of £1,000) to their employers for commuting, and over 400,000 people had taken advantage of the scheme.

Under the scheme 649,000 car trips were replaced each week, and it was the UK's second most popular salary sacrifice based employee benefit.¹⁴⁹

The evaluation showed that 76% of users would not have purchased a bike without the cycle to work scheme, and 70% of users classified themselves as novice or occasional cyclists. There was a higher take

148 Accessed online at <http://www.ttf.org.au/Content/ptfundingchallenges0910.aspx>

149 Cycle to Work Alliance, 2011, *Behavioural Impact Analysis*, Cycle to Work Alliance, UK.

up by 'lower rate' taxpayers (73%), and 87% noticed improvements in their health since joining the scheme.¹⁵⁰

Internationally, some countries also pay cash subsidies to citizens in return for kilometres travelled by active transport. In Belgium the employer is allowed to provide a tax free payment for commuting by bicycle of €0.20/km up to a distance of 15km per day. In the Netherlands, AUD\$25 per person is spent on active travel/bicycle initiatives.¹⁵¹

Recommendation: Standing Council on Transport and Infrastructure conduct a comprehensive review of transport taxation arrangements

Recommendation: Implement targeted incentives or ride to work incentive schemes to increase bicycling mode share as a percentage of all trips to work and education.

3.2.6 Carbon Pricing and Public Transport

The inclusion of heavy vehicles in the Clean Energy Plan from the Australian Government (carbon pricing scheme) addresses the growth in emissions from the freight sector.¹⁵²

In announcing details of the policy, Prime Minister Julia Gillard acknowledged the importance of public transport in the abatement of transport sector emissions.¹⁵³

In fact the Prime Minister, in launching the Clean Energy Plan, referred to it as the "equivalent of taking 45 million cars off the road."

In its current form, the carbon price effectively reinforces the modal inequity between private and public transport

by exempting fuel for light passenger vehicles but being positioned to impose a carbon price on diesel used in bus passenger transport vehicles by 2014, and imposing the price immediately on diesel used by trains.

The decision to exempt petrol sends incorrect price signals to commuters. It is estimated by Professor Stanley that a carbon price of \$23 per tonne will add about 6 cents a litre to diesel prices, and that this will result in a cost imposition of almost \$40 million annually in direct costs to the bus industry.¹⁵⁴

Stanley contends that due to the nature of bus contracts around Australia, the carbon price will be passed through to the state governments. This will increase public transport fares, and result in a loss of public transport patronage.¹⁵⁵

According to Stanley, an alternative to the politically unpopular increase in public transport fares may see state governments "*forgo future investment in public transport, to compensate for the extra costs of current services because of carbon pricing.*" This would see added impacts to congestion, and social issues related to a lack of public transport services.¹⁵⁶

The Taskforce takes the view that the carbon produced by public transport operations should be viewed as "good carbon" in the sense the emissions related to public transport have the effect of reducing GHG and carbon emissions related to car use.

While it may not be possible to separate buses and rail from heavy vehicles under the Clean Energy Plan, the Taskforce believes complimentary measures under the scheme can be used to offset any cost imposition on public transport operations.

In a 2010 speech as Secretary of the Department of Climate Change and Energy Efficiency, Dr Martin Parkinson identified that "*support for the development of new low-emission energy technologies, integration of climate considerations into transport planning, provision of general energy efficiency information, and addressing*

150 Cycle to Work Alliance, 2011, *Behavioural Impact Analysis*, Cycle to Work Alliance, UK.

151 Cycle to Work Alliance, 2011, *Behavioural Impact Analysis*, Cycle to Work Alliance, UK.

152 Stanley, J, 2011, "Public Transport – Collateral Damage of our New Carbon Price", *The Conversation* 11 July, 2011, accessed online at <https://theconversation.edu.au/public-transport-collateral-damage-of-our-new-carbon-price-2181>.

153 Tourism and Transport Forum, 2011, Position Paper: Tax Incentives for Sustainable Transport, Tourism and Transport Forum, Sydney.

154 Stanley, J, 2011, "Public Transport – Collateral Damage of our New Carbon Price", *The Conversation* 11 July, 2011, accessed online at <https://theconversation.edu.au/public-transport-collateral-damage-of-our-new-carbon-price-2181>.

155 Stanley, J, 2011, "Public Transport – Collateral Damage of our New Carbon Price", *The Conversation* 11 July, 2011, accessed online at <https://theconversation.edu.au/public-transport-collateral-damage-of-our-new-carbon-price-2181>.

156 Stanley, J, 2011, "Public Transport – Collateral Damage of our New Carbon Price", *The Conversation* 11 July, 2011, accessed online at <https://theconversation.edu.au/public-transport-collateral-damage-of-our-new-carbon-price-2181>.

split incentives in rental markets” were important elements in reducing carbon emissions.¹⁵⁷

There are a range of opportunities for complimentary measures under the Clean Energy Future Plan to support public transport operators and encourage the expansion and improvement of public transport services.

These include, but are not limited to:

- > The development of a clean fleet scheme to upgrade the bus and train fleet
- > The investment of carbon pricing revenue in public and active transport infrastructure
- > Investment in TravelSmart initiatives through the scheme.

Recommendation Any carbon pricing system to be undertaken by the Australian Government to reflect the environmental impacts and benefits of different modes of transport and include complimentary measures such as investment in encouraging low-carbon transport choice; public transport, walking and cycling.

This would constitute an investment in the bus industry of 1.5 per cent of existing value.¹⁵⁸

Other assets related to the operation of rail and bus public transport networks could be considered in this measure.

Recommendation: Implement public transport asset depreciation incentives for public transport operators.

3.2.6 Depreciation of Public Transport assets

Depreciation of public transport assets can be used as an innovative mechanism to fund public transport services through forgone tax receipts rather than direct investment in rolling stock or infrastructure.

An example of this is the statutory effective life cap for buses. If this were returned from its current level of 7.5 years to 5 years, it would serve as an incentive measure for the upgrade of the Australian bus fleet and the expansion of bus public transport services, and reduce the operating cost of a bus over its life by 1.5 per cent.

157 Gittins, Ross, 2011, “A carbon price can’t save the planet by itself”, *Sydney Morning Herald*, accessed online at <http://www.smh.com.au/environment/climate-change/a-carbon-price-cant-save-the-planet-by-itself-20110212-1ar5b.html>

158 Bus Industry Confederation, 2012, Bus Industry Confederation Submission to the Clean Energy Draft Law, Bus Industry Confederation, Canberra



*Transport and logistics accounts
for as much as 9 per cent of Gross
Domestic Product in Australia*