



ENGINEERS
AUSTRALIA

Draft Transport Access Strategy

Public consultation submission

September 2016

Table of Contents

[About Engineers Australia.....3](#)

[Introduction to this response.....3](#)

[Introductory comments.....3](#)

[Issue 6: Innovative pricing.....4](#)

[Issue 7: Improved infrastructure.....5](#)

[Conclusion6](#)

About Engineers Australia

The Institution of Engineers Australia (Engineers Australia) is the peak body of the engineering profession. We are a member-based professional association with over 100,000 individual members. Established in 1919, Engineers Australia is a not-for-profit organisation, constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

You can read more about Engineers Australia, our policy positions and associated resources at www.newsroom.engineersaustralia.org.au.

Introduction to this response

This submission begins with some introductory comments and an overview of Engineers Australia's infrastructure principles. The draft Strategy covers a range of priority areas and Engineers Australia will provide information against two:

- Issue 6: Innovative pricing: developing innovative pricing mechanisms to support the greater use of public transport in order to make it more viable.
- Issue 7: Improved infrastructure: providing more opportunities for people to walk, cycle and use public transport by making sure infrastructure is safe, accessible and attractive to use.

Introductory comments

Engineers Australia's interests in infrastructure development are related to two factors:

- Well managed infrastructure and infrastructure services give rise to substantial economic externalities that underpin productivity growth essential to continued improvement in Australia's standard of living.
- Engineers build, operate, maintain and use infrastructure services in most areas of the economy and as a result have important insights into the critical role infrastructure plays in Australia's prosperity.

The status of Australian transport infrastructure has not improved substantively since 1999. Research based on constant price statistics shows that although the monetary value of infrastructure construction has increased, it has simply kept pace with economic expansion and population growth, the two key factors determining the demand for infrastructure services.

Reform of infrastructure planning and management institutions in Australia has been glacially slow; in respect of roads infrastructure it has been non-existent and the number of highly authoritative and competent agencies urging fundamental reform of the wider notion of transport (not just roads) infrastructure is increasing each year. Engineers Australia sees this issue as critically important to the issues before the Committee and strongly supports these calls.

The recently released National Infrastructure Plan from Infrastructure Australia is the latest call for change.¹ The Plan makes the vital point that best results will be achieved through a comprehensive overhaul of Australia's approach to infrastructure planning and development. Comprehensive and integrated land use and infrastructure planning is necessary to ensure that scarce funds are directed towards projects with the highest potential returns for the nation and State, Territory and local economies. Present practices are simply not working. Change is already underway as demonstrated by the important improvements occurring in Sydney.

We believe that the purpose of infrastructure is to establish the basis for higher quality, sustainable and productive lives for all Australian. To fulfil this challenge infrastructure must become more sustainable. Building more and more roads has not worked as the increasing congestion in our cities demonstrates. At the same time transport infrastructure delivery in regional areas has at best been ad hoc.

¹ Infrastructure Australia, Australian Infrastructure Plan, Priorities and Reforms for our Nation's Future, February 2016, www.infrastructureaustralia.gov.au

Engineers Australia has been involved in assessing the status of Australia's infrastructure since 1999 through its Infrastructure Report Cards. We have reflected the lessons from this experience in the following principles:

- Infrastructure must be managed to advance socio-economic goals not political ones.
- Infrastructure planning without land use planning is not sensible
- Infrastructure planning is integral to governing not an optional extra
- Infrastructure is not the exclusive preserve of governments, the private sector is a key player
- Infrastructure must be managed sustainability and over its full expected life
- Infrastructure governance must be rigorous and must be de-politicized
- ICT enabled infrastructure delivers more value for money, especially in coordinated system
- Short term acquisition practices should be discarded in favour of whole of life considerations.

These principles summarise the essential requirements for the development and operation of sustainable infrastructure assets providing sustainable infrastructure services.

Issue 6: Innovative pricing

The draft strategy has a focus on encouraging more use of public transport through changes to fare structures and controlling demand for car parking through pricing. These are valid considerations but do not acknowledge that demand is also driven by access to public transport infrastructure that is high quality and meets the needs of commuters.

Paying for new infrastructure is often a challenge and is the focus of Engineers Australia's comments with regard to innovative pricing.

Although the costs of governance, institutional and planning reform can be viewed as the normal costs of government, implementing changes to existing infrastructure and building new infrastructure must be funded either from government consolidated revenue or through user pays. Prevailing political views concerning government expenditure are reflected in trends in engineering construction on infrastructure. Construction in real terms completed peaked in 2011-12 and has fallen in each year since. New commencements, also in real terms, peaked a year earlier, in 2010-11 and have also fallen each year since. This perspective is complicated by some private sector construction on infrastructure assets owned by the sector, for example, in the electricity, rail and telecommunications sectors. The value of this contribution cannot be accurately estimated because in available statistics it is compounded with private sector construction of infrastructure to support specific resources projects in often remote locations.

What is abundantly clear is that the public sector contribution to infrastructure development has fallen substantially behind economic and population growth and private sector infrastructure provision in urban areas still has not developed its full potential. As well as institutional reform, new ways to fund infrastructure development need to be found. Value capture is a serious option that warrants consideration by governments and infrastructure authorities. Value capture is the new revenue flows from the application of various government taxation options to the increase in land value following the implementation of infrastructure projects.

Recently, the Bureau of Infrastructure, Transport and Regional Economics (BITRE) has reviewed the potential to fund infrastructure through different forms of value capture. The review covers many of the case studies cited in international studies and also looks at a number of Australian studies. The review is somewhat sceptical in its approach but none-the-less concludes that there are "compelling reasons why public funders should capture land value uplifts from their investment in transport infrastructure."²

Having identified the flaws in mechanisms like tax increment funding, betterment taxes, transactions taxes and joint development, the paper concludes that a broad based land tax along the lines proposed by the Henry review addresses most flaws and avoids the majority of market distortions posed by other mechanisms.

² BITRE, Transport infrastructure and land value uplift, Information Sheet 69, 15 June 2015, www.bitre.gov.au

Engineers Australia believes that a key message from overseas case studies is that successful value capture mechanisms are ones tailored to the situation they relate to. The most prominent example is MTR Hong Kong which fully funds its railway operations and was profitable from an early stage through the integration of railway and property development.

The methodology for determining land value capture in car dependent cities has been documented by McIntosh, Newman, Trubka and Kenworthy³ in a forthcoming peer reviewed article that is available on the web. Thistle proposes a five step framework to determine the potential to use value capture to fund infrastructure projects. The paper applies the framework to a contemporary rail project in Western Australia. Engineers Australia believes this methodology is transferable to other situations and commends it for further consideration.

A key recommendation from the Infrastructure Australia plan released this year is that there should be a public inquiry to identify a new funding model to replace existing road taxes and charges.⁴ Engineers Australia strongly supports such a review. The question of land value capture is closely related to potential alternative funding models and inclusion in the suite of options considered by the Tasmanian government would ensure overall consistency in how transport infrastructure funding is approached.

Issue 7: Improved infrastructure

The draft strategy has a focus on increasing the use of bicycles as a transport option in Tasmania, and notes the importance of connectivity between transport hubs. An example cited was the need for secure bike storage at transfer points. The comments provided by Engineers Australia with regard to improved infrastructure focus on connectivity. The comments draw on a nation-wide perspective but can be adapted for the Tasmanian context.

The meaning of connectivity is highly dependent on the situation examined, but the common link is accessibility. In urban areas it is often associated with the density of connections and the directness of links in local road systems. It also refers to the connections between local road systems and the CBD. In regional areas connectivity is mainly concerned with access to transport services between regional centres and between these centres and domestic markets located in large cities or ports for export to international markets.

Increasing the productivity of capital cities is a critical element of the government's innovation strategy and congestion is seen as a major impediment. The Grattan Institute⁵ has examined the issues influencing the productivity of cities, noting the particular importance of the rise of knowledge intensive activities. Their analysis concludes that "in significant parts of Australia's four biggest cities, shallow labour markets and increasingly congested transport systems are holding back productivity by making it harder to get the best match between the skills of a worker and the demands of a job."⁶ In a similar vein, the Australian Infrastructure Plan recommends that "governments should upgrade legacy capital passenger transport infrastructure to deliver higher capacity, high frequency services across all modes"⁷ and not to neglect the gaps in access to passenger transport on the outskirts of Australian cities. This process is already underway in Sydney where the North West rail link is an outstanding example of what can be achieved through determined action.

In regional areas, the main accessibility challenge relates to the poor standard of road networks acting as serious constraints to the movement of freight to market destinations. This has been a long standing problem that in 2010-11 was the subject of an ABS research paper reviewing Regional Development Australia Committee regional plans. The review included an assessment of regional transport infrastructure and 45 of 56 regional development associations identified freight constraints including roads unsuitable for heavy vehicles, narrow bridges with low weight limits and the lack of heavy vehicle by-pass routes as barriers to regional growth. When it comes to

³ James McIntosh, Peter Newman, Roman Trubka and Jeff Kenworthy, Framework for Land Value Capture from the Investment in Transit in Car Dependent Cities, Journal of transport and Land Use, scheduled for Vol 10, No 1, 2017, available from <https://www.jtlu.org/index.php/jtlu/article/viewFile/531/656>

⁴ Infrastructure Australia, Australian Infrastructure Plan, Priorities and Reforms for our Nation's Future, February 2016, Recommendation 5.3, p. 87, www.infrastructureaustralia.gov.au

⁵ Grattan Institute, Productive Cities, Opportunities in a Changing Economy, May 2013, www.grattan.edu.au

⁶ Grattan Institute, op cit, p44

⁷ Infrastructure Australia, recommendations 3.2 and 3.3.

infrastructure planning and bidding for attention, regions typically fend for themselves. There are few good examples of regional plans but one is the Illawarra transport connectivity plan.⁸

Present practice has been to allocate scarce infrastructure development funds on a squeaky wheels basis. Once again this familiar problem has been picked up in the National Infrastructure Plan. Two recommendations in particular warrant mention. Infrastructure Australia recommends that State and Territory governments should deliver long term regional infrastructure plans and that the Australian Government should prioritise investment in regional infrastructure where the population is growing quickly and where the bulk of our regional economic growth can be found.⁹ Not only does Engineers Australia strongly endorse these recommendations, we are astonished that they are necessary.

In short, our argument is that connectivity lies at the heart of effective and efficient transport infrastructure. Certainly some improvement is possible by continuing with the ad hoc infrastructure processes now common around Australia. However, the full potential of transport infrastructure will only be realised through an integrated, systematic approach as outlined by the National Infrastructure Plan.

This position does not negate the importance of value capture as another way to fund infrastructure developments irrespective of location. The issues associated with value capture mechanisms reviewed by the BITRE in the paper cited earlier can best be resolved systematically and through national leadership that ensures that issues such as population policy and location, responsibilities of the tiers of government and taxation arrangements are adequately addressed.

Conclusion

To conclude, we would like to reiterate the following two points:

- a. Transport planning should be closely integrated with land use planning otherwise governments will be constantly in remedial mode, and
- b. There should be better separation between transport *within* population nodes (or centres) and *between* population centres.

Thank you for your consideration of this submission. To discuss the issues raised in this paper further, please contact Dr Vicki Gardiner, General Manager of the Tasmania Division, on 03 6218 1901 or by email at tasmania@engineersaustralia.org.au.

⁸ Illawarra Business Chamber, Linking the Illawarra, Improving the Region's Transport Connectivity, www.illawarrabusiness.com.au

⁹ Infrastructure Australia, recommendations 4.1 and 4.2.



ENGINEERS
AUSTRALIA