
AUSTRALASIAN RAILWAY ASSOCIATION SUBMISSION

To

Standing Committee on Infrastructure,
Transport and Cities

On

Role of transport connectivity in stimulating
development and economic activity



THE ARA

The Australasian Railway Association (ARA) is a not-for-profit member-based association that represents rail throughout Australia, New Zealand and Indonesia. Our members include rail operators, track owners and managers, manufacturers, construction companies and other firms contributing to the rail sector. We contribute to the development of industry and government policies in an effort to ensure Australia's passenger and freight transport systems are well represented and will continue to provide improved services for Australia's growing population.

The ARA thanks the Standing Committee on Infrastructure, Transport and Cities for the opportunity to provide this submission. For further information regarding this submission, please contact Emma Woods, General Manager Passenger and Member Services via ewoods@ara.net.au or 02 6270 4512.

THE ROLE OF PUBLIC TRANSPORT

Continued investment and expansion of public transport is crucial to the success and productivity of the nation. Whether Australians travel by public transport or not, they still benefit from its existence and use. However, long term investment into public transport by governments at all levels is limited by demands on competing priorities such as health, education and roads. Investment in and use of public transport ensures less vehicles and therefore congestion on roads, decreased transport-related emissions, fewer road accident costs and healthier and more active lifestyles for Australians.

Governments around the globe are investing in integrated multi-modal public transport systems to solve the challenges facing cities and regional centres.

Cities drive the economy and wealth of the nation. Collectively, Sydney, Melbourne, Perth, Brisbane and Adelaide CBDs produce 12.3 per cent of Australia's total economic output by employing 10.6 per cent of the population. With only 0.6 per cent of the population living in

CBDs, public transport links in to, out of and within city centres are vital to maintain and improve productivity.¹

Similar to other countries, Australian cities faces the following challenges:

- **a growing and urbanised population:** Australia is one of the most urbanised countries in the world. 35 per cent of Australia's population resides in Melbourne and Sydney and Australia's larger capital cities are growing at triple the rate of regional areas.²
- **expanding and geographically spreading cities:** 74 per cent of Australia's population is expected to live in a capital city by 2061.³
- **congested roads:** By 2020, road congestion is forecast to cost Australia \$20.4 billion annually through lost productivity as a result of time wasted in traffic.⁴
- **increasing greenhouse gas emissions:** On a per capita basis, Australia is the highest carbon emitter in the OECD and one of the highest in the world.⁵

Public transport provides the solution to each of these challenges.

Cities may be the powerhouses of the nation but our regions are also vital contributors to our economic and social viability. The Australasian Bureau of Statistics (ABS) forecasts the population outside of cities to grow by 26 percent between 2007 and 2026.⁶ Regional Australia also contributes substantially to our economy; being the "major source of Australia's export earnings" and attracting almost \$16 billion in tourism expenditure.⁷

In 2012, 71 per cent of Australians travelled to work or study by private vehicle (a 1 percent decrease from 2009) while only 16 percent travelled by public transport.⁸ During the same period, 2012, Australia's rail networks moved more than 850 million passengers.⁹ That is 16.4 million passengers per week or 2.3 million people each day of the year.

Our cities and regions will only continue to prosper with continued improvements to existing public transport systems and expansion into alternative modes of public transport.

TERMS OF REFERENCE

a. Identifying the likely impact on property values and property-related tax revenues as a result of transport connectivity;

Proximity to public transport and other amenities are commonly cited as drivers of commercial and residential property values. Thus, when public transport offerings and amenities are improved, property values typically do too and, if a mechanism such as value capture is not introduced, this value significantly benefits the land or property owners. As a result, government capital, or taxpayer dollars, is invested in infrastructure and well-located individual property owners reap the benefits both in terms of access to the service and in value to their property. With constrained government budgets, value capture is increasingly utilised to see property owners re-pay a portion of the value created by the infrastructure investment back to the government for further infrastructure investment. However, property price impacts vary according to a number of factors; the type of property, the distance to the station, the mode of transport offered, other amenities in the area, etc. And thus, calculating value uplift and the figures to be returned to government are not a simple blanket calculation that can be commonly applied to all transport projects or a specific mode of transport. Rather, individual project must be assessed.

According to a 2013 study by PRD Nationwide, "Melbourne's median house price is, on average 10.9 per cent higher in railway suburbs."¹⁰ More recently, the Sydney light rail extension between Lilyfield and Dulwich Hill, that opened in March 2014, saw apartment prices in nearby suburbs, Leichardt, Haberfield, Summer hill and Dulwich Hill average growth of 3.6 percent, a 1.3 percent increase above the Sydney average of 2.3 percent.¹¹

In August 2014, Nationwide UK conducted a review of the impact on London, Glasgow and Manchester house values in proximity to tube and railway stations. The graph below illustrates the influence that distance to a rail station has on property values in these cities. In doing so it highlights that the impact on property prices varies between regions and distances to stations. The study confirmed the need for proximity to transport offerings,

concluding that property 1.5km from a train station does not increase in value.¹² However, other studies suggest this distance is shorter, with a number arguing 800m is as far as the value uplift benefit reaches.

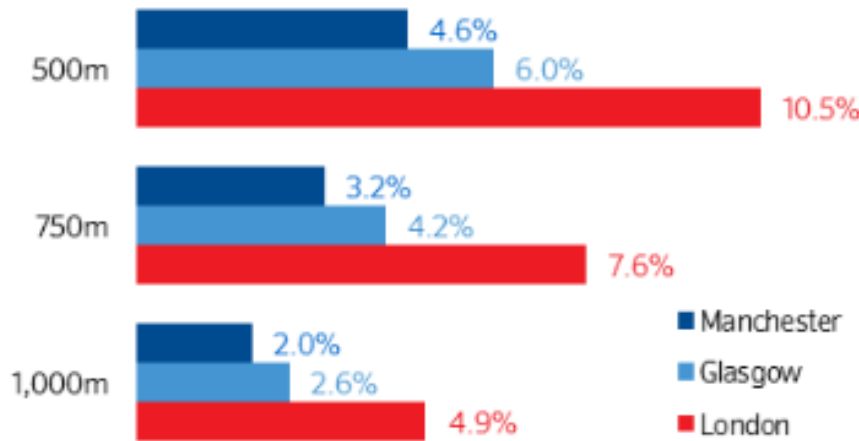


Figure 1: Premium compared to property located 1,500m from station¹³

Locally, the Bureau of Infrastructure, Transport and Regional Economics (BITRE) paper *Transport Infrastructure and Land Value Uplift* provides a valuable overview of the impact of heavy rail, light rail and bus rapid transit on property prices. This is documented in table 1.

The significant range in value uplift demonstrates the complexity around determining the value public transport connections provide and reiterates that a 'blanket' average value increase cannot be attributed to all projects. Rather, individual projects must be individually considered, taking into account the many variations – the type of property, the mode of public transport offered (and the availability of other public transport links in the vicinity), the proximity to public transport and other amenities in the region.

Mode	Average value uplift (%)	Range (%)	Number of observations
Heavy Rail	6.9	- 42 to + 40	18
Light Rail	9.5	- 19 to + 30	32
Bus Rapid Transit	9.7	- 5 to + 32	14

Table 1: Average value uplift per transit mode¹⁴

Similarly, the Tourism and Transport Forum provide the following examples of value uplift specific to Light Rail projects in Manchester (Metrolink), California (VTA), and Dallas Texas (DART). As per Table 2 below, the TTF reports that property within 400m of light rail stations in these cities report an increase in value ranging from 30 percent to 120 percent.

Premium value of properties within 800m of light rail System	Property	Location	Distance from Station	Premium
MetroLink	House	St Louis	30m	32%
VTA	Apartment	Santa Clara County	400m	45%
VTA	Office	San Jose	400m	120%
DART	Retail	Dallas	400m	30%

Table 2: Premium value of properties within 800m of light rail¹⁵

As property taxes are a percentage of the total value of commercial or residential real estate, property taxes paid to State and Local governments increase with property value uplift. Thus, the government is in part receiving part of the value uplift through increased property taxes. However, by formally introducing value capture, there is scope for governments to receive a larger portion of the value uplift around public transport.

b. examining options for the application of value-capture mechanisms to sustainably fund transport infrastructure;

Due to global fiscal constraints, governments at all levels are increasingly exploring and introducing innovative ways to sustainably fund and finance vital infrastructure projects.

For decades, innovative revenue-raising tools have been used to generate hypothecated funds for transport infrastructure and service improvements. For example, jurisdictions throughout the United States draw on a variety of 28 taxes that are dedicated sources of public transport revenue. These range from property taxes to car parking levies, fuel taxes and casino taxes, the revenue from which is solely dedicated to funding public transport.

The ARA's paper *Innovative Funding and Financing for Public Transport* explores various mechanisms currently implemented around the world to fund and finance public transport infrastructure. The paper is available from the ARA website at: www.ara.net.au

The funding tools explored in the paper are:

- **Value Capture:** capitalising on the increased value that public transport provides for nearby commercial and residential properties, value capture recoups part or all of the increased value transport improvements provide to nearby properties.
- **Transit-Oriented Developments (TODs):** as well as acting as a tool to encourage greater patronage, property developments at and around public transport stations are being increasingly utilised to generate long-term revenue to support public transport operations.
- **Congestion Charging:** a user-pays demand-management approach where road users pay to access roads or areas, generating funds for reinvestment in public transport and providing incentives for drivers to switch to public transport.
- **Payroll Tax:** employees or employers are levied a small percentage of their taxable income that is then hypothecated to fund public transport investments.
- **Sales Tax:** a percentage of the purchase price is added to the purchase price of goods and services and then drawn upon for public transport investment.
- **Fuel Tax:** a percentage is added to fuel prices and hypothecated for transport investments.

The paper highlights that the success of these (and other) tools relies on common criteria that must:

- **Keep pace with inflation:** it is vital that any revenue raising mechanism rises with CPI to continue generating sufficient funds as the economy grows. Failure to do so (Australian and United States Federal fuel excises are examples of this) stalls the revenue generating capabilities of the mechanism, effectively decreasing the revenue raising abilities with each CPI rise.
- **Be hypothecated for transport uses only:** the benefit to providing a reliable and dedicated source of revenue is that long term planning can then occur.

Hypothecating, or dedicating the revenue from a specific revenue-raising tool provides certainty and allows long-term planning and commitments to be made.

The two common models of value capture are:

- **Tax Increment Financing:** where a certain increase is forecast within a region or district around the development and a percentage, or increment is agreed to be levied to fund the infrastructure investment overtime or return a portion of the project cost back to the government. Kansas City Light Rail is an example of this.
- **Joint Property Development:** when government partners with infrastructure developers, or establishes infrastructure development capabilities within the government that allows the developer to recoup part of the value uplift through its own property development as a revenue source to fund transport projects or reinvest in the system. Hong Kong's MTR is an example of this.

Transport or transit-oriented developments (TODs) are a funding tool that closely compliment value capture by stimulating urban growth, and therefore value uplift. Specifically, TODs are increasingly popular commercial, residential and retail spaces located at or within walking distance of transport hubs that stimulate urban development and in turn generate revenue to fund or support transport investments. TODs can be newly constructed or redevelopments of existing structures. Similarly, air-rights to construct a TOD above a station can be sold to property developers as a means to fund a transport development. Alternatively, the transport operator or authority develops and manages a TOD to provide ongoing funding for the transport system.

TODs are proven to generate significant funds that can be reinvested in public transport. As well as providing ongoing sources of revenue for transport services and infrastructure investment, TODs have been shown to encourage public transport patronage and reduce road congestion by encouraging people to walk and ride public transport instead of drive.

Although TODs do exist in Australia, there is scope to expand. Governments could follow Hong Kong's example and establish property developments around transport hubs to help provide long-term revenue for transport infrastructure and service investment. These could either be sold as "air rights", given to property developers to manage, or public transport operators could diversify as has been done in Hong Kong where the public

transport operator manages some developments. Either way, the TOD value increase provides a value capture opportunity for government.

Overseas Experiences

London Jubilee Line – the missed opportunity of value capture

London Property Developer Don Riley penned a book “Taken for a Ride: taxpayers, trains and HM Treasury” in which he reviewed the construction of the London Underground’s £3.5 billion Jubilee Line Extension which linked Central London with East London.

The underground rail line extension was funded through a public-private partnership. In his book, Riley estimates that in the 10 years (1992-2002) following the extension, properties within a 1000 yard radius of the new underground stations increased in value by approximately £13.5 billion collectively yet no mechanism was in place to return any of this value to the government. This has become a common example of why governments should consider value capture as a mechanism to fund major transport infrastructure investment.

Downtown Kansas City, Missouri – Tax Increment Financing

After unsuccessful attempts to fund a city-wide light rail network, the Kansas City local government established the Transportation Development District (TDD), an area around a proposed two-mile streetcar route that was identified to directly benefit from the project. The local government then put a land value capture, or increment tax within the TDD up for public vote. On 12 December 2012, residential and commercial property owners within the TDD voted in favour of land value capture to contribute funds towards the construction of the Downtown Kansas City Streetcar. 319 voted yes, 141 voted no¹⁶. A 1 percent sales tax and car parking levy within the TDD was also approved.¹⁷.

The system will commence operation in 2016 with plans underway to fund phase 2 of the project through an expanded TDD. Figure 2 illustrates the initial TDD that received a 60 per cent supporting vote and permitted the project to proceed. It also illustrates the proposed expanded TDD that will be used to fund the following stages of the project by expanding the area included paying the value capture, 1 percent sales tax and car parking levies.

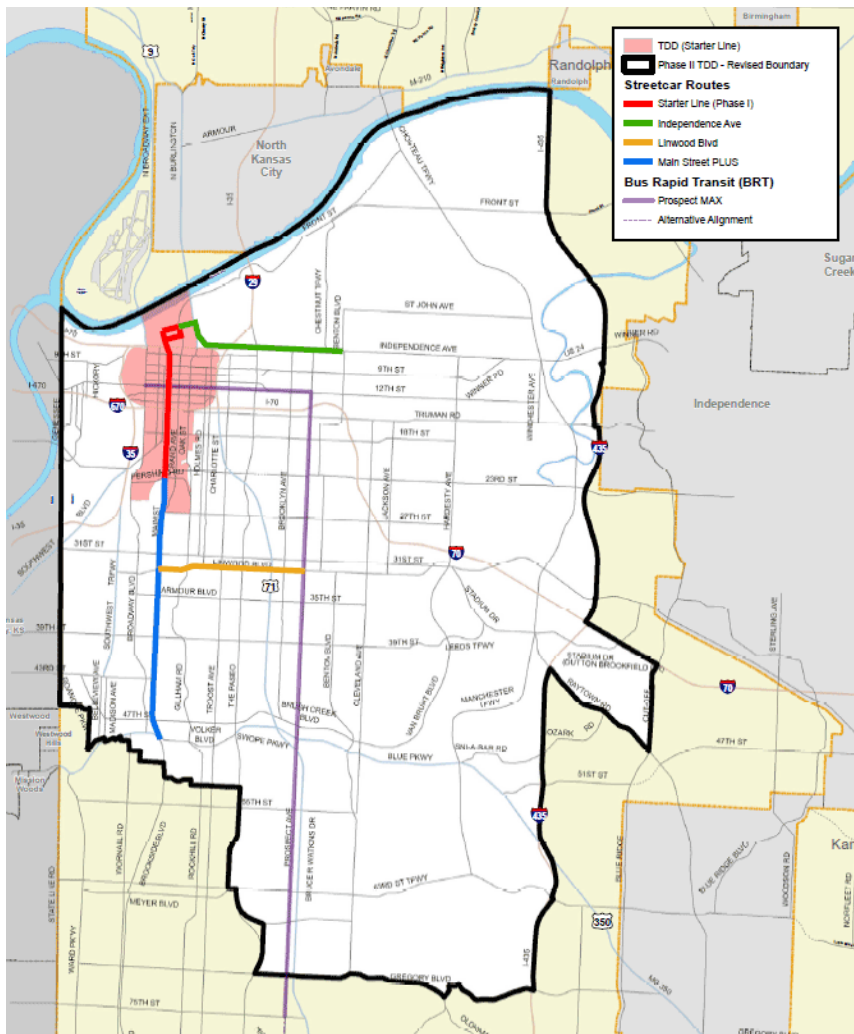


Figure 2: Phase II Streetcar TDD - Proposed Boundary 3.24.2014¹⁸

Hong Kong - Joint Property Development

Unlike most public transport systems in the Western world, Hong Kong’s metro is not subsidised by Government. The system is self-funded through the fare box, commercial station retail rent and residential and commercial property developments, which use a combination of joint property development value capture and TODs.

First announced by the government in 1973 with an initial cost of HK\$ 500 million, by 1982 the Hong Kong metro system was generating a profit, partly due to the increase in land value along the metro line¹⁹.

Land in Hong Kong is owned by the State. MTR Corporation, who operate and manage the system have adopted a “Rail+Property” approach to fund investment in the metro. In a joint property development approach, MTR leases land adjacent to its rail extensions from the government and then develops the land into commercial or residential properties (or a combination of both). MTR pays the government the value of the land without the rail line, allowing the corporation to capture and profit from the value the rail expansion generates. As well as removing the need for the usually significant government subsidies seen in other operations around the globe, MTR is a publically listed company that returns dividends to its shareholders.

According to the MTR’s 2014 Annual Report, MTR develops residential property for sale in collaboration with property developers and invests in commercial real estate in its station developments. In 2014, MTR’s investment portfolio consisted of shopping malls and 18 office floors of the two International Finance Centre office towers, generating HK \$40,156 million per annum.²⁰

MTR compliments its Rail+Property strategy with TODs. They are extensively used throughout Asia and are acknowledged as the primary funding source that negate the need for government subsidies. According to the MTR website, “our use of transit-oriented development enables us to self-finance our day-to-day railway operations, establish reasonable fares and ensure sustained patronage of the system”²¹. A 2010 review of the Hong Kong metro and 25 of its TODs found that an MTR station with a TOD added around 35,000 weekday passengers to the system²².

Thus, a value capture mechanism can be greatly enhanced with TODs. As they increase in value, so too does the revenue generating capabilities of the value capture.

c. considering means, including legislative and administrative actions, by which government and the private sector can best utilise value-capture funding mechanisms;

The Federal Government should consider developing a policy to implement a form of value capture with all new public transport projects. It should complement this policy with one that encourages transit-oriented developments. Not only will these attract urban development on and around stations that is proven to entice additional users onto public transport networks, it will have the financial benefit of improving the value of properties that are part of or in proximity to the development, thus providing a value capture opportunity for government.

Public transport providers in Australian cities could collaborate with real estate agencies and property developers, as MTR does in Hong Kong, to capitalise on the heightened value improved public transport services will provide for property values. Alternatively, public transport operators could diversify to include property develop internally.

A formal commitment at a Federal level to continue to invest in public transport will provide certainty to private investors and assist in attracting development to new or existing public transport precincts.

The Federal Government may explore the value of developing a body to assist in the application of value capture, noting that each project will require its own consideration and calculations and that the more cost effective approach may be to allow State Governments to manage value capture independently.

The Federal Government may also consider whether it stipulates the inclusion of value capture as a requirement in providing Federal funds to public transport projects.

d. considering the appropriate roles of each of the three levels of government in establishment sustainable value-capture funding mechanisms for planning and infrastructure construction;

All levels of government have a significant role to play in public transport.

The Commonwealth collects income tax and a portion of other taxes such as the goods and services tax while State Governments collect “taxes on property, on employers’ payroll, and on the provision and use of goods and services”²³ and local government revenue is mainly drawn from rates. In 2013-14, State property taxes reported the highest growth of all Commonwealth and State taxes, increasing 19 percent.²⁴

Property taxes obviously provide a growing revenue source that could be tapped into further with the introduction of value capture. The obvious issue is who collects the revenue. Considering the structure of tax payments to the three levels of Australian governments and that public transport infrastructure is typically majority-funded at a State level, the ARA is of the view that value-capture funding mechanisms should be introduced and therefore payments received, at a State Government level.

Of note is The Grattan Institute’s paper ‘Property Taxes’ released in July 2015 which explores the potential for property taxes to increase Federal and State budget revenue.

The report highlights the “risks of multinational tax avoidance, the increasing mobility of capital around the world, and the increasing value of residential property” as the drivers behind the need for tax reform.²⁵ It proposes a small property levy, introduced at the council level stating that it could raise as much as \$7 billion per year for state governments.

“A low-rate, broad based property levy using the council rates base could raise about \$7 billion a year for state and territory governments through an annual levy of just \$2 for every \$1000 of unimproved land value, or \$1 for every \$1000 of capital improved property value. The costs to property owners would be manageable. A homeowner

would pay a levy of \$772 a year on the median-priced Sydney home valued at \$772,000, or \$560 a year on the median-priced Melbourne home valued at \$560,000. People with low incomes and no wealth would pay nothing. Low-income retirees with high value houses could defer paying the levy until their house is sold.”²⁶

The implication of both multinational tax avoidance and property taxes on Federal and State budgets outlined by the Grattan Institute is highlighted in 2013-14 Tax analysis by the ABS. According to the ABS, between 2012-13 and 2013-14, income taxes paid by individuals to the Commonwealth increased by 4 per cent but income tax obtained by the Federal Government from enterprises decreased 1 per cent, equivalent to a reduction in Federal revenue of \$1,009 million.²⁷ During the same period, State Governments reported a 19 per cent increase in property tax income, a reflection of the significant growth in the property market.²⁸

The growth in the property tax as a result of growth in property values provides a significant opportunity to governments. Ultimately, the actual legislative and administrative requirements, and which level of government administers the value capture mechanism would need to be determined by appropriate government staff.

e. examining any international experiences of the delivery of HSR projects by value-capture methods and the impact of high speed rail on city and regional development;

High Speed Rail (HSR) is not just another rail project, and it should not compete with or detract from funding for other rail or public transport investments. HSR is about the future of Australia. It is a transformative project which will benefit a large part of Australia’s population living in capital cities and regional centres along the East Coast.

Global experience shows that people will transfer from plane to HSR if the trip is under than three hours. Over than three hours and people will continue to fly. As a result, the success of HSR along Australia’s East Coast relies on its ability to travel between capital cities in under 3 hours. The key with HSR is that the travel is CBD to CBD, not airport to

airport, further reducing travel time. Modelling shows at 350km/hr, the required travel times are achievable, thus confirming HSR's suitability along Australia's East Coast.

Overseas travel trends show that HSR creates new living circles as people use HSR to commute one hour for work and three hours for recreation. It effectively shrinks the country. Individuals can commute much farther than is achievable with traditional modes of transport, allowing people to relocate outside cities and commute with HSR.

HSR is a nation-building project. The funding should reflect this and be drawn from a special allocation. In terms of HSR, the ARA believes the Government could reduce its financial investment by introducing funding mechanisms such as value capture along the route and around stations, acquiring larger parcels of land than is required for the corridor and selling the land back to developers, as well as encouraging TODs.

Ultimately though, the government must first preserve the corridor.

f. examining methods of implementing value-capture in both greenfield and brownfield developments; and

One could argue that greenfield sites provide simpler value capture opportunities but, brownfield sites, particularly high density regions around stations in cities for example may provide value capture opportunities of greater financial reward due to the potential for greater property value increases amongst existing property.

The BITRE references an AECOM study on Sydney Central Station which highlighted the "highly fragmented land ownership" of the area as a barrier that would probably result in modest value uplift if the station precinct was redeveloped. However, it goes on to estimate that improved value of \$30billion could be realised if the "airspace above the rail yards was redeveloped for passive recreation" and developments occurred on the adjacent land and surrounding areas.²⁹ This proposal is likened to the creation of Millennium Park in Chicago which opened in 2004 after \$490 million was invested (\$95 million of which was raised through tax increment financing) to create a 24.5 acre park in the centre of Chicago.

Reviews of the value the park created were conducted in 2011, concluding that the park

had generated significant value in the surrounding region. Specifically, a population increase of 71 percent in the area, a 22.4 percent increase in apartment rents adjacent to the park, higher average occupancy rates in adjacent rental properties and \$2.45 billion in construction building which was estimated to provide 70,000 direct and indirect jobs.³⁰

TODs are an example of property developments that can be implemented in greenfield or brownfield sites.

g. examining ways to capture future value opportunity when reserving transport corridors.

When reserving transport corridors in greenfield sites, governments could purchase additional adjacent land, to on-sell to developers in future. Ensuring mechanisms are in place for value capture over a long timeframe will assist in capturing future value uplift.

CONCLUSION

Continued investment and expansion of public transport is crucial for the success and productivity of the nation. Long term investment into public transport requires a fresh look to ensure all priorities in transport, infrastructure, health and education can be funded.

Value capture mechanisms have a long successful track-record funding public transport infrastructure and supporting public transport services around the globe. This provides a significant opportunity for Australian governments to recoup part of their infrastructure investment, allowing further investment in infrastructure projects.

A clear commitment by government to invest in transport hubs as well as a commitment to a project pipeline will provide certainty to private investors and encourage greater property development around public transport systems. All levels of government have a role to play.

Government will need to determine the legislative and administrative actions required to introduce and capitalise on value capture mechanisms.

In general terms, the ARA recommends:

- The Federal Government makes a formal commitment to continue investing in public transport. This will provide certainty to private investors and assist in attracting development to new or existing public transport precincts.

With regards to value capture, the ARA recommends:

- Projects are assessed on a case-by-case basis as experience shows there is no consistent increase in property value.
- Value uplift revenue recouped by government must be hypothecated and reinvested in public transport.
- Governments should develop value capture policies that include greater use of TODs to provide supporting revenue for public transport systems.
- The Federal Government may explore the value of developing a body to assist in the application of value capture, noting that each project will require its own consideration and calculations.
- That revenue recouped through value capture is collected at a State level.

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