Technical paper on value capture

SGS Economics & Planning

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The brief

IA has requested a technical paper that will:

- Define the value capture mechanisms relevant to transport or other relevant projects;
- Provide detailed analysis of each mechanism, including how and at which stage of the project cycle each contributes funding and/or financing to projects, as well as from which source funds are drawn;
- Critically assess the applicability (including positives and negatives) of each approach in the Australian context;
- Note barriers to implementation of various mechanisms for capturing value; and
- Discuss in which circumstances each mechanism is most appropriate, with specific attention to the Australian context.

Drivers of value

It is contended that in the Australian context a property's gross value is a function of six drivers:

A. **Amenity values** reflecting the site's locational and natural qualities, its proximity to regional open space and recreational opportunities, plus the quality of general 'urban upkeep', that is, the maintenance of historic infrastructure investment. This 'raw' amenity value component increases in an urban setting.
B. **Population growth** (as a proxy of economic growth) which in an urban context enhances the general scarcity and utility of the property.
C. **State level infrastructure provision** reflecting the property's direct access to beneficial or 'social' infrastructure such as public transport, major roads, schools and hospitals
D. **Granting of development rights** to allow for realisation of latent value, effected through rezonings an increase in development potential and/or development approvals
E. **Local level infrastructure provision** reflecting the value of off-site development servicing infrastructure such as reticulated water and sewerage, stormwater drainage, distributor and collector roads
F. **On-site improvements** undertaken by the land owner including buildings, landscaping and other facilities.

If developers or land owners are charged for the value of local development infrastructure (E), through local infrastructure charges levied on a user pays basis then the extent that the underlying land value (driven by A to D) increases over time or following the granting or upgrading of development rights represents a 'windfall' gain to the land owner (or seller). It is this increment that is legitimately subject to value sharing or value capture arrangements to realise funding for public projects, including transport infrastructure.

More discussion on the drivers of land value and the idea of the 'unearned' increment is included in section 2.

Benefits of and limits to value capture reform

The revenue potential associated with capturing windfall value gains is potentially quite large. It is dominated by the gains in residential property, which account for 75% of all land value, and 82% of all land value **gain** over the last 25 years in Australia. The total value of State level property based taxes (stamp duty and land tax) is estimated to be a modest portion of total windfall land value gains nationally. All existing State level property taxes could be replaced by a value capture tax on unearned value gain with a net increase in revenue.

Notwithstanding the significant potential for reform there is a need for caution in relation to some value capture ideas currently being suggested for Australia.

For example, variants of the US value capture approach of Tax Increment Financing (TIF) have been suggested. These imply the identification of zones where uplifts in property tax and other revenue are assumed from the provision of infrastructure, with the cost of infrastructure funded by hypothecation of the revenues. The mechanisms are reliant on an increase in both the level of private development and higher property prices. However, if the expected gains are not realised, the debt may become an unsupportable burden for the infrastructure authority. Furthermore, the hypothecation of all the uplift in taxes to pay for the transport infrastructure is likely to be unrealistic as some will be related to other infrastructure projects and some will be diverted from other locations where it was expected to provide a revenue stream for an alternative project. Current tax structures that can contribute to value capture (e.g. capital gains tax) may be administered at different levels of government and may be neither readily identified with the identified precinct(s) nor willingly transferred if so identified

Value capture mechanisms

There is already a range of mechanisms which have the effect of extracting or capturing parts of the spectrum of property value discussed above. While some are explicitly intended to capture value gain, and specifically to fund infrastructure provision, or other public works and services others were designed for general revenue raising and any 'value capture' characteristic is incidental. A list of broadly defined 'value capture' mechanisms operating in Australia, or suggested in recent literature, includes the following.

Recurrent taxes levied on underlying land value and on particular classes of property, for example:
- State land taxes
- Local government property rates

Taxes on property transactions, for example:
- Federal Goods and Services Tax
- Federal Capital Gains Tax
- State Stamp Duties

Development contributions, for example:
- Local development infrastructure charges
- State level infrastructure charges
- Betterment levies for additional development rights
- Provision of public benefits in return for development bonuses / sale of bonus gross floor area (GFA)

Leveraging government interest in land, for example:
- Development of impacted government owned land, or sale of air rights for development above this land
- Joint venture developments
- Sale of advertising concessions at stations or in motorway corridors.

Hypothecated or benefitted area rates and charges, for example:

- 'Special rates' for benefitted areas
- Separate rates or charges applying to whole LGAs
- Tax increment financing

More detail on each mechanism is provided in Section 3 and Appendix 1.

Evaluation of mechanisms

There are a range of criteria which might be utilised to evaluate different value capture mechanisms, to highlight their advantages and disadvantages and applicability given the Australian context. The following criteria have been applied in this case:

- **Applicability** – mechanisms are available and applicable given the existing Australian legislative and regulatory environment.
- **Revenue yield** – mechanism is worthwhile from a revenue perspective given costs of collection and required expenditure
- **Revenue reliability** – revenue source is stable and predictable
- **Economic efficiency** – mechanism does not negatively distort land, property and labour markets, or 'double dip'
- **Clarity** – that the logic for the mechanism is clear with costs and benefits explicitly understood and clear to all
- **Equity** – people in similar economic circumstances are treated equally; costs are borne by those who benefit.
- **Extent of barriers to implementation** – mechanism will be accepted by stakeholders, can be incorporated within the project development cycle.

A detailed evaluation of each mechanism is included in Appendix 2. A summary is provided in Section 5.

The evaluation highlights the following barriers to the implementation of a coherent value capture system:

- The difficulty of distinguishing between the 'one-off' uplift created when additional development rights are granted (at approvals stage) and the 'background' growth in value uplift (from amenity investments, population and economic growth and state infrastructure) has made it difficult to design robust value capture systems. This is partly to do with the fact that different levels of government have responsibility for the drivers of land value and the associated taxation or charging mechanisms. Coordinating action between levels of government is difficult, though in general state governments have the relevant responsibilities over land management and taxation.
- Widening the application of value capture mechanisms meets inevitable resistance from property owners and property development interests which means it can be politically fraught.
- It may be difficult to introduce additional uplift levies when multiple, though often imperfect, proxy mechanisms already exist. Implementing comprehensive reform is 'hard'.
- Because it is difficult to effectively identify a distinct catchment of beneficiaries when new major transport infrastructure is proposed, it is difficult to establish an efficient and equitable system of value related charges.
- There is also a danger of 'over-development' where prospective funding from value capture sources might depend on the provision of additional development rights.

The evaluation and analysis highlights that for the task of major infrastructure funding six value capture mechanisms are preferred in the Australian context. All require adjustments to how they are currently deployed or reforms to expand their application for effective use in major infrastructure funding. The six mechanisms and the required adjustments or reforms are as follows:

1. **Reformed state land taxes**. These are recurrent taxes that would need to be broader based including applying to the family home to generate more significant state revenue. They are not necessarily suited to funding particular infrastructure as they capture general land value uplift as well as that specifically related to infrastructure provision.
2. **Special rates**. These would contribute funding to discrete infrastructure projects by applying to all properties within nominated benefiting catchment areas, and based on the likely value related uplift associated with the infrastructure. In most jurisdictions legislation would be required to allow state governments to implement such a scheme.
3. **State level infrastructure charges**. These currently apply to subdivisions for urban development in greenfield contexts in NSW and Victoria but would need to be extended to infill areas, and desirably have a closer link to value uplift.
4. **Betterment levies**. These would be transaction fees for additional development rights equivalent to the uplift in value associated with the type of new floorspace being proposed.
5. **Reformed stamp duty**. These would be transaction fees at the point of sale of properties, still paid by the purchaser, but only based on a share of the net uplift in value since the previous sale.
6. **Targeted use of government land**. The aim here is to capture long term uplift through the development and project cycle. It would require a more interventionist role for government in purchasing, planning and potentially holding strategically located land benefitting from transport investment

More detail on four of these mechanisms – focussing on the ideas of betterment levies as development licence fees applying when additional development rights are granted, reformed systems of stamp duty and state land taxes to, respectively, better capture value uplift at the point of property sale and/or over time and greater but targeted use of government owned land – is provided in the report to suggest a further research and reform agenda.

1 INTRODUCTION

The idea of using value capture to fund infrastructure projects is gaining momentum in urban policy discussions in Australia.

Infrastructure Australia has scheduled the preparation of a value capture policy paper and has commissioned SGS Economics and Planning to provide a technical advice paper to inform the policy work.

IA's brief requested a technical paper that will:

- Define the value capture mechanisms relevant to transport or other relevant projects;
- Provide detailed analysis of each mechanism, including how and at which stage of the project cycle each contributes funding and/or financing to projects, as well as from which source funds are drawn;
- Critically assess the applicability (including positives and negatives) of each approach in the Australian context;
- Note barriers to implementation of various mechanisms for capturing value; and
- Discuss in which circumstances each mechanism is most appropriate, with specific attention to the Australian context.

The technical paper has the following content:

- A discussion of the theoretical underpinnings of value capture, including the drivers of property value and value capture implications
- Summary descriptions of various value capture mechanisms, including their application to infrastructure projects, their usual source, and their relationship to the drivers of value
- A discussion of limitations to value capture as presented by some advocates, and a need for caution in any system design or reforms.
- An evaluation of value capture mechanisms including a discussion of barriers to the implementation of a more coherent system of value capture in Australia and the identification of six 'preferred' possible mechanisms for major infrastructure funding in the Australian context.
- More detail on reform ideas with a focus on a betterment levy system where development rights are increased, stamp duty re-engineering to make the system a charge on uplift only where it exists, land tax reform to capture value from investments in state infrastructure and background increases in value from amenity upgrades and population growth and more targeted use of government land ownership to capture value generated through the development and infrastructure provision process
- A conclusion which highlights the promise of value capture mechanisms for major infrastructure funding in Australia, reiterating the 'preferred' mechanisms from the evaluation, while pointing out limitations and barriers to their wider use.

2 UNDERSTANDING VALUE CAPTURE

2.1 Drivers of property value

Various reports have identified the components of land value in the context of trying to communicate concepts around value capture.[1] Drawing from this work, while also focussing on conceptualising the mechanisms that might apply to realising value capture arrangements, it is contended that in the Australian context a property's gross value is a function of six drivers:

A. **Amenity values** reflecting the site's locational and natural qualities, its proximity to regional open space and recreational opportunities, plus the quality of general 'urban upkeep', that is, the maintenance of historic infrastructure investment. This 'raw' amenity value component increases in an urban setting.
B. **Population growth** (as a proxy of economic growth) which in an urban context enhances the general scarcity and utility of the property.
C. **State level infrastructure provision** reflecting the property's direct access to beneficial or 'social' infrastructure such as public transport, major roads, schools and hospitals
D. **Granting of development rights** to allow for realisation of latent value, effected through rezonings an increase in development potential and/or development approvals
E. **Local level infrastructure provision** reflecting the value of off-site development servicing infrastructure such as reticulated water and sewerage, stormwater drainage, distributor and collector roads
F. **On-site improvements** undertaken by the land owner including buildings, landscaping and other facilities.

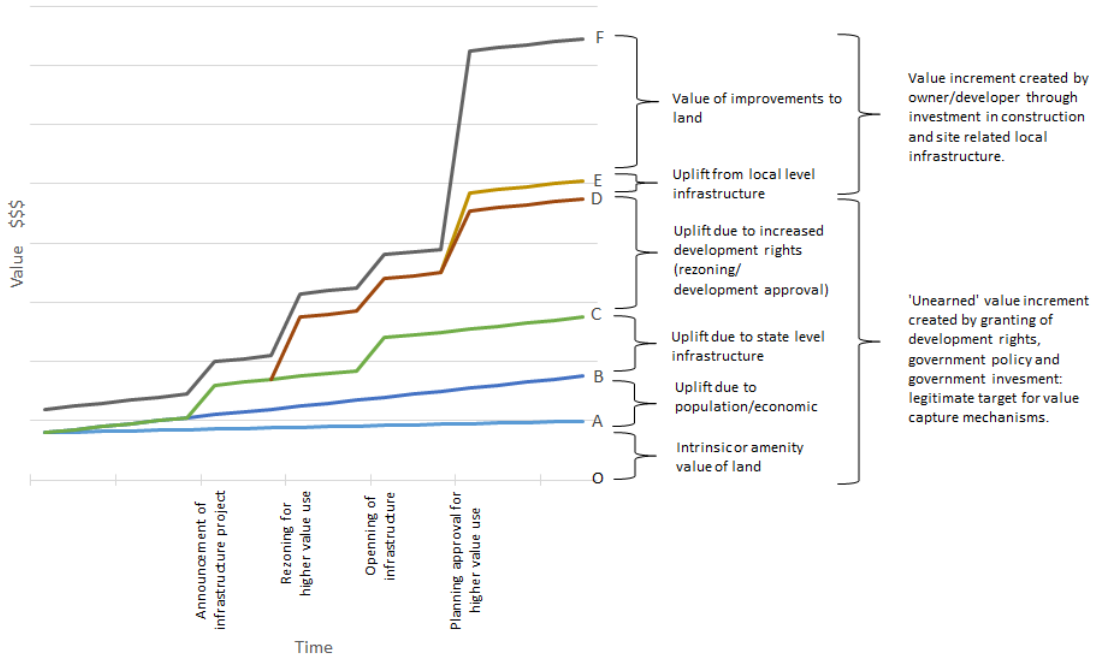
In the absence of a proximate beneficial state level infrastructure investment or the awarding of additional development rights through rezoning or the like, the value of a particular piece of property (in an economically healthy region) can be expected to increase steadily over time reflecting due maintenance of legacy infrastructure and urban services to which the site has access (A) and population/economic growth (B).

Other things equal, proximate state level infrastructure investments (C) will cause an episodic value uplift against this background trend of growth. So will the granting of actual or latent development rights (D), which will typically be followed by investment in local servicing infrastructure provision (E) and on-site improvements and new buildings (F) to accommodate more intense land use and activity.

The share of property value created by or attributable to the 'community' via government policy and investment– and therefore legitimately a target of value capture mechanisms to generate funding for infrastructure and public works - versus that created by owners of land or developers, is shown in Figure 1.

[1] See Peter Newman, Evan Jones, Jemma Green and Sebastian Davies-Slate (December 2015) *Entrepreneur Rail Model, Tapping Private Investment for New Urban Rail*, Curtin University, page 34
Fensham P and Gleeson B (2003) 'Capturing Value for Urban Management: A New Agenda for Betterment' *Urban Policy and Research*, Volume 21, Issue 1, pages 93 - 112

FIGURE 1. PROPERTY VALUE UPLIFT DRIVERS IN VALUE CAPTURE CONTEXT



If developers or land owners are charged for the value of local development infrastructure (D to E), through local infrastructure charges levied on a user pays basis then the extent that the underlying land value (O to D) increases over time or following the granting or upgrading of development rights represents a 'windfall' gain to the land owner (or seller). Developers who generally anticipate operating on the basis of reasonable margins on their investment in on-site improvements and contributions to local development infrastructure (D to F) should be indifferent to a charge on a reasonable share of the betterment increment (O to D), which will otherwise be appropriated by the 'raw' land seller. It is this increment that is legitimately subject to value sharing or value capture arrangements to realise funding for public projects, including transport infrastructure.

It is important to note however – as emphasised in Figure 1 – that the uplift varies over time, depending on the 'trigger'.

The components of value uplift associated with amenity and population growth (O to B) will be particularly hard to disentangle, and may occur more smoothly 'in the background'.

Uplift associated with proximate state level infrastructure provision (B to C) may be staggered with a jump at project announcement and then another at project opening, and gradual increases as user benefits are realised. However, distinguishing any of these tranches of uplift for particular sites or precincts may be difficult given the dynamics and multiple potential influences on underlying land value.

The granting of increased development rights will tend to be followed by more immediate uplifts in value (C to D).

The logic behind these two latter sources of property value, and the value capture implications, is explored further below.

2.2 The logic for 'capturing' value

Capturing value from the granting of development rights

When a rezoning or development approval increases the development potential of a particular parcel additional development rights are granted to the land owner, which are not available to all land owners. This represents a 'rationing' of development rights which the community allows or understands because it is part of appropriate planning, rather than a 'free for all' which would result if there were no restrictions on development rights.

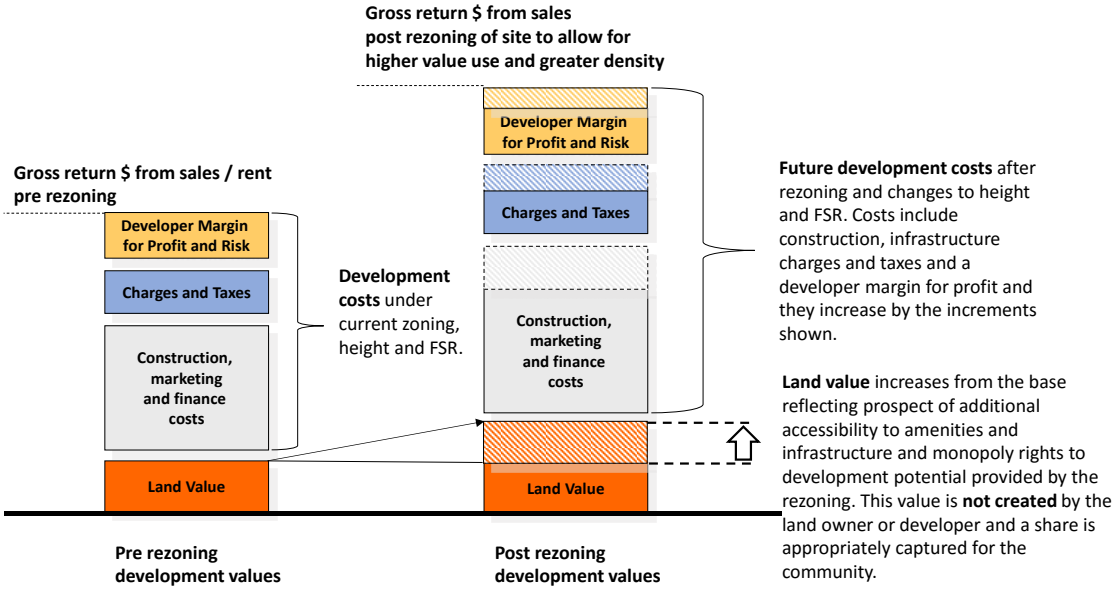
The value of these special opportunities – so-called 'monopoly rents' – is reflected in increased land value. Other things equal, a piece of land which has latent or realized approval for the construction of a major shopping centre will be more valuable than land without this privileged access to retail centre development rights. Similarly, land approved for a multi-storey apartment building will be worth more than otherwise equivalent land designated for a low rise industrial building, and so on.

LUTI and Mecone have recently published a report which looked at the value impact from a change in land use zoning, and a change in allowable development density from Sydney's key transit and transit-oriented investments over the period 2000 to 2014. It found that a change to zoning to allow for the highest and best use for the specific transit mode led to significant relative value benefits, and that every 1:1 increase in Floor Space Ratio equates to a marginal 23.9% increase in land value.[2]

It is reasonable to use the development assessment system to extract a share of the uplift in land value related to the additional development rights that have been granted to a site. Note that this is separate from obligation on the part of the development proponent which requires them to pay their fair share for infrastructure that benefits their project (e.g. development contributions).

Figure 2 below highlights some of these concepts. It shows the pre and post-zoning 'development values'.

FIGURE 2. VALUE UPLIFT FROM GRANTING OF ADDITIONAL DEVELOPMENT RIGHTS



[2] LUTI Consulting and Mecone Planning (2016) Transit and Urban Renewal Value Creation (with support from the NSW Government and the CRCSI, http://mecone.com.au/articlesandnews/transit-urban-renewal-creation

When considering the potential for the redevelopment of a site, a developer calculates the base price for the land, accounting for construction and development costs including infrastructure charges and taxes, a margin for profit and risk, and likely future revenues, sales or rents.

After a change to the zone and/or development controls, all costs, including the profit expectation, will rise as a higher value and denser development can be constructed. All other things being equal, the value of the land can also be expected to rise, because of the special development potential and prospective increase in access to amenities and infrastructure being granted to future occupiers of that land by the community through the development process. This increase in land value is wholly independently of any investment by the land owner or developer. For this reason it is reasonable that a share of the uplift in value be extracted to fund public infrastructure and services.

A 'betterment' levy, which is a payment for all or part of the uplift in land value occasioned by a rezoning or granting of a development right, is an appropriate 'value capture' mechanism. Betterment levies were an integral part of early town planning legislation in the UK and Australia. More recently, formal betterment capture provisions at the planning approvals stage have given way to negotiated and ad hoc arrangements for securing 'planning gain' for the community.

Capturing value in areas with enhanced accessibility

In some cases explicit value capture mechanisms have applied to public transport projects, and in particular to the areas around stations where accessibility is improved significantly. As noted earlier even where there is no specific increase in development potential provided in these areas, land values are still likely to rise, which allows mechanisms such as tax increment financing or forms of 'rates surcharges' (which apply to escalating property values) to be considered (e.g. Sydney Harbour Bridge levy and Cross Rail in the UK). These recurrent and usually 'sunsetted' property based charges are conceptually distinct from a levy or charge on the 'one-off' uplift in value from an increase in development rights, and could apply in parallel.

In work for the National Housing Supply Council, SGS[3] identified that investment in transport infrastructure projects which significantly elevate the effective job density, or connectivity, of an area can trigger significant housing intensification in such areas and increases in land values. This research demonstrated that increased housing density around major transport projects has the potential to increase the residual land value in inner, middle and outer ring suburbs. However the effects of major infrastructure projects can extend over considerable geographic distances; that is, increases in value extend beyond immediate proximity to transport corridors. This is because major projects generally have the effect of linking up existing major arteries and expanding the city's accessibility footprint.

The LUTI-Mecone study mentioned earlier also analysed the land value uplift associated with access to transit infrastructure in Sydney and found that "the value created from the investment in public transit varies by mode, with the average heavy rail public transport accessibility benefit across the Sydney Metropolitan Region is 4.5%, with an uplift of up to 50% in some subregions analysed."[4]

It is important to note that proximity to new infrastructure and improvements in access are not the only factors which contribute to land value uplift[5], and that the drivers discussed earlier (intrinsic amenity, population and economic growth, existing access to other state level or beneficial infrastructure) also play a role.

Another factor influencing value uplift is how new infrastructure compares to existing alternative transport options. If an area is already well-serviced by active travel or other transportation options, then new transit lines or improvements may not actually lead to greater accessibility. Conversely, in

[3] SGS, 2013, *Infrastructure Investment and Housing Supply*, prepared for National Housing Supply Council, June 2013.

[4] LUTI Consulting and Mecone Planning (2016) Transit and Urban Renewal Value Creation (with support from the NSW Government and the CRCSI, http://mecone.com.au/articlesandnews/transit-urban-renewal-creation

[5] See Bliss, 2016, 'Does transit Always Increase Land Value?' *Citylab*, 26 April http://www.citylab.com/commute/2016/04/transit-station-property-value-study/479730/

areas with a stronger car dependence, the rising costs of car use (including congestion, parking supply, and fuel and running costs) mean that public transport accessibility could well be expected to become increasingly valuable and translate into higher land prices.

Overall, there is evidence that the provision of transit infrastructure can improve property values[6], although proximity alone will not guarantee this and a holistic and nuanced approach should be taken when assessing the potential for land value uplift from new infrastructure.

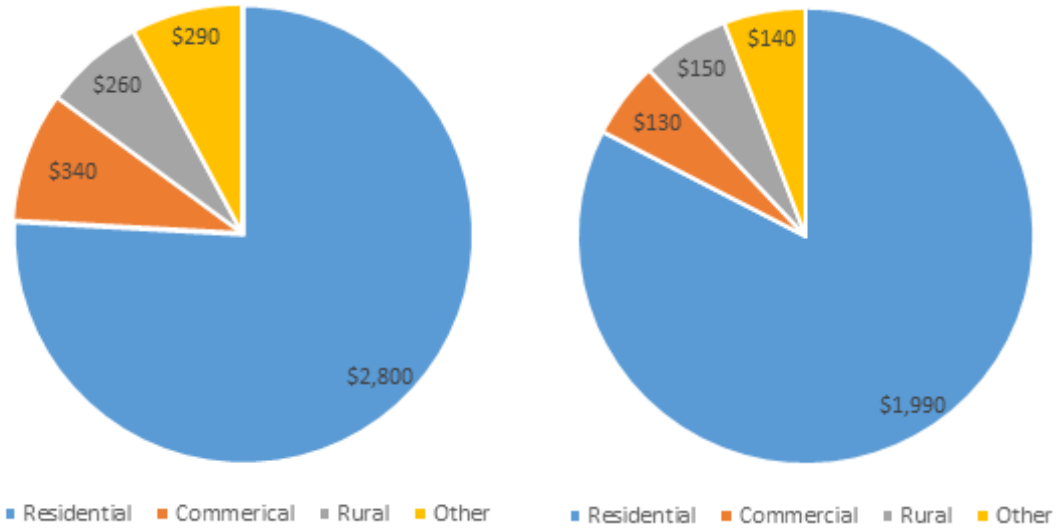
Any increment in value that is created by proximity to or flow-on benefits from transport infrastructure is clearly created by government investment. It is legitimate that it be subject to a value sharing or value capture arrangement for investment or re-investment in public projects, including transport infrastructure.

2.3 The potential of land value capture reform

An effective land value capture mechanism would ideally capture a large portion of the windfall or unearned gains arising from public investment without penalising or inhibiting property development and investment that generates earned value added and new economic contribution. While the current ad hoc array of mechanisms captures some of the unearned value, at times it also taxes some property heavily where there is little gain (or a loss) of value (as discussed in section 3).

The capacity to capture windfall value gain is potentially quite large. It is dominated by the gains in residential property, which account for 75% of all land value, and 82% of all land value **gain** over the last 25 years in Australia (see Figure 3).

FIGURE 3. TOTAL LAND VALUE IN 2012 (LEFT); UPLIFT IN LAND VALUE FROM 1989 TO 2012 (RIGHT) ($ BILLIONS)

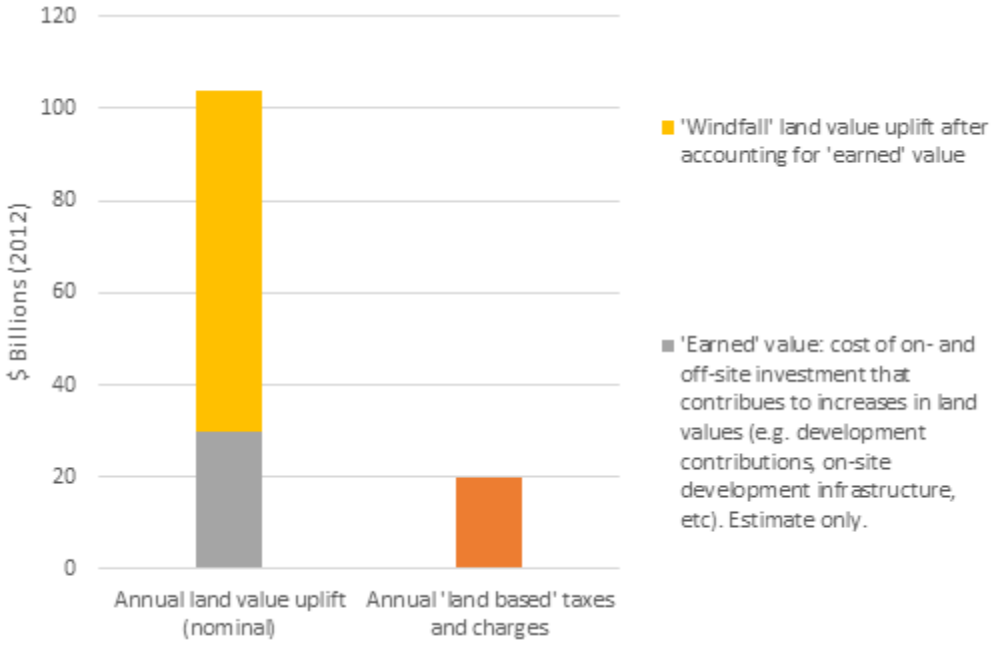


Source: 5204.0 Australian System of National Account, Table 61. Value of Land, by Land use by State/Territory, 30 June 2012.

While a number of current taxes and charges in some way capture a slice of property value gain (whether earned or unearned), the total value of State level property based taxes (stamp duty and land tax) is estimated to be a modest portion of total windfall land value gains nationally (see Figure 4). All existing State level property taxes could be replaced by a value capture tax on unearned value gain with a net increase in revenue.

[6] See also Consult Australia and AECOM (2016) Value Capture Road Map http://www.aecom.com/au/wp-content/uploads/2015/12/Value-Capture-Roadmap-2015.pdf

FIGURE 4. ANNUAL LAND VALUE UPLIFT VS LAND BASED TAXES AND CHARGES



Source:
5204.0 Australian System of National Account, Table 61. Value of Land, by Land use by State/Territory, 30 June 2012.

3 VALUE CAPTURE MECHANISMS

3.1 Introduction

There is already a range of mechanisms which have the effect of extracting or capturing parts of the spectrum of property value discussed above. While some are explicitly intended to capture value gain, and specifically to fund infrastructure provision, or other public works and services others were designed for general revenue raising and any 'value capture' characteristic is incidental.

A list of broadly defined 'value capture' mechanisms operating in Australia, or suggested in recent literature, includes the following.

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Development contributions, for example:

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Leveraging government interest in land, for example:

- Development of impacted government owned land, or sale of air rights for development above this land
- Joint venture developments
- Sale of advertising concessions at stations or in motorway corridors.

Hypothecated or benefitted area rates and charges, for example:

- 'Special rates' for benefitted areas
- Separate rates or charges applying to whole LGAs
- Tax increment financing

Each of these is described below in Table 1. It also highlights how the mechanism applies to the funding of transport infrastructure projects, the source of the funding and the timing of payment. This draws on a state by state review of Australian practice and experience included in Appendix 1.

TABLE 1. SELECTED FUNDING MECHANISMS

Funding mechanism	Project application	Source of funds
Recurrent taxes levied on underlying land value or classes of property		
State land taxes Land taxes are levied on a different basis in each State, but generally apply to land parcels and properties excluding primary residences. They are typically levied with a base component then on a staggered basis as a percentage of property value above certain thresholds. Uplift in the value of land as a result of transport infrastructure investment and other economic development generates a higher amount of land tax, and in this way is a true value capture mechanism.	Contributes to general state revenue, not project specific	Annual payment by eligible land or property owners
Local government property rates Local government rates apply to most private properties and are administered primarily by the relevant local council. Funding from rates is mostly used for local services and maintenance of community facilities. Rates are notionally based on a percentage of property value (either unimproved or capital improved) though a minimum flat rate is often charged for properties below a certain value. Typically, rates are set by reference to the cost of service provision and administration, and are therefore more of an administrative and service charge rather than an explicit value capture mechanism.	Contributes to general local revenue, not project specific	Annual payment by land or property owners
Taxes on property transactions		
Federal Goods and Services Tax The Goods and Services Tax (GST) is currently applied across Australia to most goods, services and other items, at a rate of 10%. The ATO advises that generally, "selling or renting existing residential premises are input-taxed sales and do not include GST. However, if the residential premise is considered 'new', it is a taxable sale and GST is applicable."[7] Different provisions apply to the supply and purchase of commercial premises. GST is payable on the construction inputs associated with the development of new infrastructure and buildings. Because of the exemptions applied currently, GST is not really a property or land based value capture mechanism. However, where government investment and policy generates economic activity that is captured in higher GST revenue it plays a role as intended as a value added tax.	Contributes to general federal revenue, passed on to the states, not project specific	Payable on purchase of eligible goods and services including on construction inputs and some property sales
Federal Capital Gains Tax Capital Gains Tax (CGT) is applied at the point of sale for different assets, including property, though it does not apply to primary residences. For eligible properties, 50% of the difference between the initial purchase and ultimate sale price is taxed at the seller's marginal tax rate. Though partial in its application, CGT is clearly a value capture mechanism and will increase with beneficial infrastructure impacts capitalised into land value. As a federal tax there is no means to allocate it specifically to fund transport infrastructure.	Contributes to general federal revenue, not project specific	Payable after sale by property sellers but not on principal homes
State Stamp Duties Stamp duties are applied to transfers of major assets at the point of sale, including for property, and are generally applied as a percentage of sale price to be paid by purchasers. Because they are based on sale values, stamp duties can be seen as a form of value capture. However, they only apply to properties that are sold, and only to purchasers at the end of the development process. As such, they are not a comprehensive (or particularly efficient) approach to value capture.	Contributes to general state revenue, not project specific	Payable by property purchaser at point of sale

[7] Australian Taxation Office (2 June 2015) Residential Premises, https://www.ato.gov.au/Business/GST/When-to-charge-GST-(and-when-not-to)/Input-taxed-sales/Residential-premises/

Funding mechanism	Project application	Source of funds
Development contributions		
Local infrastructure charges Local infrastructure charges should be based on user pays and cost apportionment principles, and paid by developers as part of the planning process to contribute to the funding of local infrastructure. Systems of local infrastructure charges are levied as Section 94 Contributions in NSW, Development Contributions in Victoria, and Infrastructure Charges in Queensland. In the absence of a system of user pays based local infrastructure charges, value capture mechanisms would be a means of funding local infrastructure requirements. However, where there is a robust system of local infrastructure charges in place, they should be 'netted' out in any estimate or calculation of the uplift which might otherwise be subject to a value capture levy.	Funds local site related infrastructure	Payable by development proponent once development approval is granted
State level infrastructure charges Where they are applied, state level infrastructure charges are paid during the development process, and contribute towards infrastructure costs at the state or regional level, such as for roads and major transport projects as well as social infrastructure. Examples of these include the Special Infrastructure Contributions (SICs) imposed in NSW for Sydney's Growth Centres, Growth Areas Infrastructure Contributions (GAICs) in Victoria, and infrastructure charges for priority development areas (PDAs) in Queensland. As currently applied, state level infrastructure charges are notionally user pays charges (or at times in NSW, 'impact mitigation payments). In reality though, they are value capture levies not directly related to anticipated value uplift, that nevertheless recognise that beneficiaries of infrastructure investment should contribute to its funding.	Funds state infrastructure	Payable or provided as works in kind by development proponent once development approval is granted
Betterment levies for additional development rights Betterment levies are based on the appropriation of a share of the 'unearned' uplift in land value that is created by a rezoning or allowing a better or higher value use on a site. Developers operating on the basis of reasonable margins on their investment in local development infrastructure and on-site improvements should be indifferent to a value capture charge on a reasonable share of the betterment increment, which will otherwise be appropriated by the pre-rezoning / pre-approvals land owner. Betterment levies are conceptually distinct from the local infrastructure and state level charges discussed above, as the revenue collected is not necessarily tied to particular infrastructure projects. The only formal examples of the use of this type of mechanism in Australia are the Lease Variation Charge (LVC) in the ACT and the 'Value Uplift' charge which applies in infill Priority Development Areas in Queensland and charges to reconfigure lots with a Plan of Development or for a Material Change of Use in greenfield PDAs. The LVC is based on capturing 75% of the uplift in value gained from a change in lease and the allowable uses on a site, such as rezoning to allow for higher density developments. The Queensland charges are based, in the infill PDAs, on a schedule of rates per sqm of Gross Floor Area uplift above those allowable in Plot Ratio Controls in the Brisbane City Plan, and in the Greenfield PDAs, on a per dwelling basis. In the Melbourne Central City Built Form Review the Victorian Government has proposed that developments which exceed the base floor area ratio will be matched by public benefits such as on-site public open space and laneways, or social housing within the development. This is an explicit betterment capture scheme.	Funds 'public benefit' works, could be project specific	Payable or provided by development proponent as works in kind once development approval is granted

Funding mechanism	Project application	Source of funds
Development bonuses or sale of bonus GFA Development bonuses and the sale of bonus GFA is a type of development based contribution, applied in addition to standard local infrastructure charges. It is a commonly used mechanism for value capture in Australia and elsewhere. Developers are allowed bonus or additional floor space above that allowed in planning controls in return for cash contributions, the provision of infrastructure, or other off-setting public benefits. Some schemes operating in Australia currently award bonus GFA for elements including improved design standards, provision of community facilities or public space, and for affordable housing. This type of betterment capture is often a focus of negotiated planning agreements (which are allowed in all state jurisdictions e.g. Voluntary Planning Agreements in NSW, Section 173 Agreements in Vic).	Funds public benefit works, could be project specific	Payable or provided by development proponent as works in kind once development approval is granted
Leveraging government interest in land		
Development on government owned land, or sale of air rights for development This mechanism is based on government already owning or acquiring land in the vicinity of new transport infrastructure, or where development and infrastructure is planned, and capturing 100% of the associated value uplift in the leasing price with developers for ground, air or below ground development rights, or in the sale price if it is sold by a public agency. While it is common practice for Australian governments to lease or on-sell land it owns to reap some value associated with increased development rights or infrastructure investment, it is now mostly done on an ad hoc or opportunistic basis. Earlier generations have adopted a more systematic approach to public land development. The New Towns in Britain were first established in the early 20th century and through loans, the land and infrastructure necessary to establish new towns was purchased and put in place by government owned development corporations. The corporations then managed the sale and rent of properties, with the revenue generated by this largely paying off the loan amounts with additional revenue then returned to the government over several decades.[8] Canberra remains the main example of this comprehensive approach in Australia. The land is owned by the State, and the government reaps significant income when land is first converted to leasehold title, and again with subsequent lease variations for more intense land uses. In Australian the State housing and then land development commissions which focussed on developing government owned land leveraged value for public benefits have mostly been disbanded. Only Western Australia now has an active state owned land commission (LandCorp) which purchases greenfield land for development and sale, often in joint ventures, with revenue recycled for reinvestment and dividends to the State Treasury. Economic Development Queensland and the Metropolitan Development Authority in WA have a more active ownership, planning and development role as a government urban renewal agency than either of their NSW or Victorian equivalents (UrbanGrowth NSW or Places Victoria) which are mostly land wholesalers, albeit seeking to add planning and development value. As established in the initial planning and funding design for the Melbourne Docklands precinct, Places Victoria receives a value capture dividend when sites are redeveloped.	Funds all development infrastructure including contributing revenue to major state transport infrastructure	Provided by public land owner as works in kind or dividend to state revenue for legacy infrastructure maintenance or new state infrastructure

[8] Department for Communities and Local Government, 2006,*Transferable Lessons from the New Towns*, http://www.futurecommunities.net/files/images/1_4_CLG_New_Towns_review_0.pdf

Funding mechanism	Project application	Source of funds
Joint venture developments Joint developments usually involve a partnership between the public and private sectors to build on land which is controlled by the public sector. An example of this might be where a private development partner builds a new railway station for the State, with a private residential or commercial development above publicly owned government land. Southern Cross Station in Melbourne is perhaps the largest example in Australia. In these cases, the uplift associated with the development rights anticipated by the private partner 'pays' for the transport infrastructure.	Contributes to state transport infrastructure	Provided by joint venture partner as works in kind
Sale of advertising concessions at stations or in motorway corridors Land use changes and infrastructure investments present opportunities for governments to sell or lease the rights to advertising in key locations, such as in and around newly developed train stations. The revenue generated by this can then contribute to the cost of the provision of infrastructure over the life of the project, rather than as a one-off charge. While associated with infrastructure, this is perhaps not strictly a value capture mechanism, as it is not necessarily linked to uplift in the value of the property asset.	Contributes to off-setting state transport infrastructure and operating costs	Provided by private sector advertisers
Hypothecated or benefitted area rates		
'Special rates' for benefitted areas Special rates (or 'benefitted area levies' amongst other variations) are applied to certain land parcels or precincts to fund specific local infrastructure needs, which the levied land owners are expected to benefit from. In Australia, special rates have been used to fund local amenity and infrastructure improvements, like roads, drainage works, street maintenance, footpaths and parks rather than public transport projects. A boundary is usually drawn around the precinct anticipated to benefit from the works. All properties are expected to contribute an amount per year for a nominated number of years to pay for the works. Strictly speaking, this is a 'user' or 'beneficiary' pays levy, though it also anticipates land value uplift associated with the new infrastructure or works.	Funds nominated infrastructure or public works	Paid annually usually for a specific period by all eligible property owners in a nominated 'benefitting' precinct
Rates applying to whole LGAs Separate rates are also applied to whole local government areas, rather than to particular precincts or geographic areas. These are typically not 'value' related, but flat charges to fund, for example, environmental waster services or the purchase and maintenance of environmentally valuable lands. However, they can be transport related. Gold Coast City Council has applied an annual Transport Improvement Levy (TIL), which partially funded the first stage of its light rail network. Similarly the Melbourne Underground Loop Levy applied to all properties in the City of Melbourne. Anticipating variability in the distribution of value benefits, different rates were applied to properties in different local government areas to contribute funding for the Sydney Harbour Bridge.	Funds nominated services, infrastructure or public works	Provided by all eligible property owners in a nominated Local Government Area

Funding mechanism	Project application	Source of funds
Tax Increment Financing (TIF) Tax Increment Financing (TIF) is used in the United States, including for the expansion of the New York subway, but has yet to be implemented in Australia. It uses expected uplifts in property tax and other revenue to fund infrastructure, through enabling governments to raise bond finance against the future revenue generated within a designated zone as a result of the infrastructure investment. This allows for funds to be available at the construction stage with a bond issuance, repaid by the additional tax revenue flowing from the development of the surrounding area. Once a TIF district is established, taxes collected at the local level are capped (albeit usually indexed), with the additional tax revenue collected by the agency responsible for the transport infrastructure project. The mechanism is reliant on an increase in both the level of private development and higher property prices.	Funds a specific infrastructure project	Provided by all eligible property owners in a nominated 'benefitting' precinct

3.2 Funding or supporting property value drivers

Table 2 shows how the current array of mechanisms support or fund the generation of the property value drivers identified earlier. Some of the mechanisms have multiple roles.

TABLE 2. CURRENT MECHANISMS TO SUPPORT VALUE DRIVERS IN AUSTRALIA

Drivers of property value	Current funding mechanisms to support or generate value
A. Amenity values	– Federal Capital Gains Tax – Land Tax – Local government property rates – Separate rates or charges applying to whole LGAs – Other local, state and federal taxes (including income tax)
B. Population growth	– Federal Goods and Services Tax – Federal Capital Gains Tax – Land Tax – State Stamp Duties – Other local, state and federal taxes (including income tax)
C. State level infrastructure provision	– Land Tax – State Stamp Duties – State level infrastructure charges – Development of impacted government owned land, or sale of air rights for development above this land – Development bonuses / sale of bonus gross floor area (GFA) – Joint venture developments – Sale of advertising concessions at stations or in motorway corridors. – Other state taxes and federal government contributions (including rom income tax)
D. Granting of development rights	– Development bonuses / sale of bonus gross floor area (GFA) – typically via Planning Agreements – Development of impacted government owned land, or sale of air rights for development above this land
E. Local level infrastructure provision	– Local development infrastructure charges – 'Special rates' for benefitted areas – Development bonuses / sale of bonus gross floor area (GFA) – Other local and state taxes

It can be seen from the table that Australian jurisdictions already 'capture' value through various mechanisms. There is then unlikely to be a brand new value capture mechanism which unlocks a major new source of revenue.

However, the overall system has developed in an ad hoc way, and the overlaps and imperfections are multiple. As the logic of capturing the 'unearned increment' and the need for alternative infrastructure funding sources grows, the requirement to establish a clearer and more robust approach to value capture will become increasingly important.

The likely limitations and constraints, and opportunities, therefore need to be better understood. The following sections seek to build this understanding.

4 LIMITS TO VALUE CAPTURE PROPOSALS

4.1 Existing taxes and charges and value uplift

As mentioned earlier land and its improvements are already subject to a range of existing taxes and changes including land tax, stamp duty, capital gains tax (CGT), company tax, development contributions, and voluntary planning agreements. The application of these taxes already extract a proportion of the uplift in land value from land owners, buyers and sellers.

The application of the existing taxes and charges depends on a range of factors including threshold values (e.g. land tax), triggers (e.g. capital gains tax and stamp duties are paid on sale of land) and exemptions (e.g. exemption of owner occupied dwellings from land tax and CGT).

The equivalent proportion of the value or uplift which is captured from a site will depend on:

- The value of the land
- The value of the improvements
- How long the site has been owned
- How often the site is sold
- Whether or not the site attracts a land tax liability (and for which level of government)
- Whether or not the owner is subject to a CGT liability when they sell the site (likely to apply to small-scale investors and land speculators)
- Whether or not there is a company tax liability associated with the development of site (likely to be the case for developers but will depend of net profitability across portfolio of development projects.

All of these factors may be at play and should be considered in the design of any value capture system. They also constrain the extent to which 'value capture' can be an 'answer' to infrastructure funding. The reality is that while value uplift is undoubtedly generated in some circumstances – and should be subject to value capture arrangements - there may be a limit to how much can be extracted for new projects, given the obvious need to maintain a margin for a return on capital and that at least part of any value uplift may be captured and accounted for via existing mechanisms.

This section aims to illustrate some of the limits to value capture in practice by reference to the difficulties of 'hypothecating' value uplift revenues which is assumed by some value capture proponents, the current incidence of property related taxes and charges which may already capture value, and a recent proposal for value capture to fund a private fast rail proposal.

4.2 The difficulties of 'hypothecating' value uplift revenues

As discussed earlier Tax Increment Financing (TIF) is a US mechanism which uses expected uplifts in property tax and other revenue to fund infrastructure, through enabling governments to raise bond finance against the future revenue generated within a designated zone as a result of the infrastructure investment. The sale of bonds finances the infrastructure and returns are generated by the additional tax revenue flowing from the infrastructure related development of the surrounding area. The mechanism is reliant on an increase in both the level of private development and higher property prices. If the

expected gains are not realised, the bond debt may become an unsupportable burden for the infrastructure authority.

To some extent the idea behind Tax Increment Financing is also adopted by other advocates of major infrastructure projects where value capture has been suggested as a funding mechanism, for example private proponents of fast rail projects, though in these there may be a greater reliance on repaying privately sourced capital investments from the betterment or uplift related to the rezoning of land for more intense or urban uses, rather than recurrent property tax related receipts. Nevertheless, the idea of 'hypothecating' future property related tax revenues or levies on the granting of development rights – to fund infrastructure projects - is common to both TIF and these betterment funded fast rail projects.

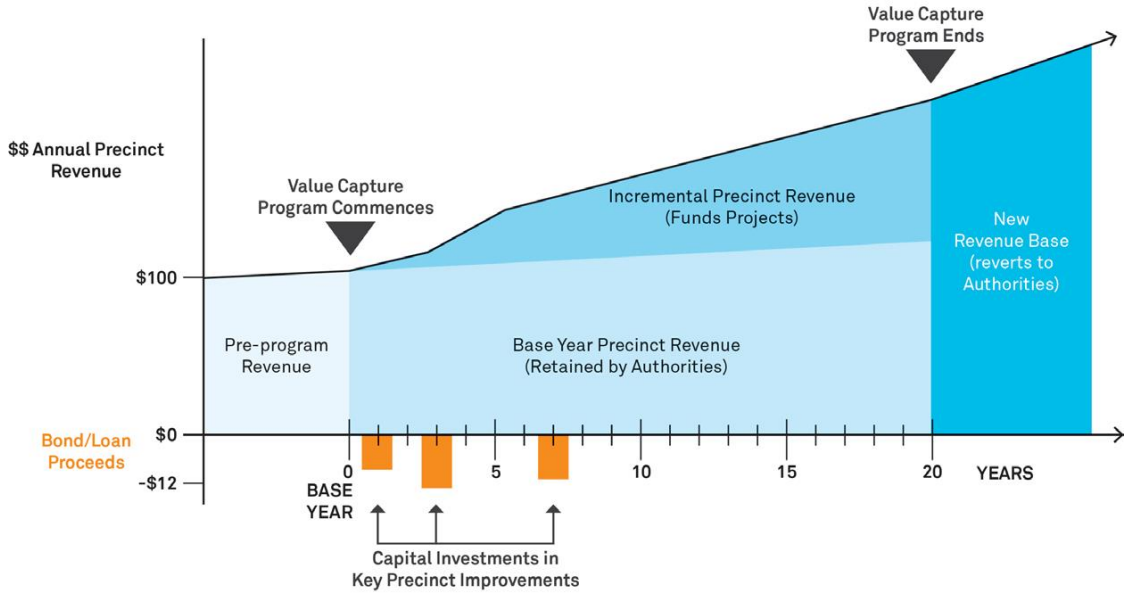
The limits to this approach includes the following:

- A 'new' project to be funded by a hypothecated value capture funding stream may attract investment or development from other parts of the city/state, with offsetting reductions in revenue in those locations (for example, state infrastructure charges, land tax or stamp duty collections committed for other infrastructure or spending could fall);
- Revenues may be expected to rise in a location from investment even in the absence of the infrastructure investment, and these may be needed by the relevant jurisdiction for normal operations (for example, an investment in a hospital or major park etc might also lead to an increase in values and the impact of these wouldn't be able to be 'quarantined' and separated from the infrastructure related investment)
- Hypothecating cash flow streams reduces flexibility as circumstances change over the life of the project
- The drawing of the boundaries for either a TIF or betterment levy may be expanded 'artificially' to ensure sufficient revenue to fund the project and this will capture benefits (or value uplift) from other non-funded investments
- Current tax structures that can contribute to value capture (e.g. capital gains tax) may be administered at different levels of government and may be neither readily identified with the identified precinct(s) nor willingly transferred if so identified.

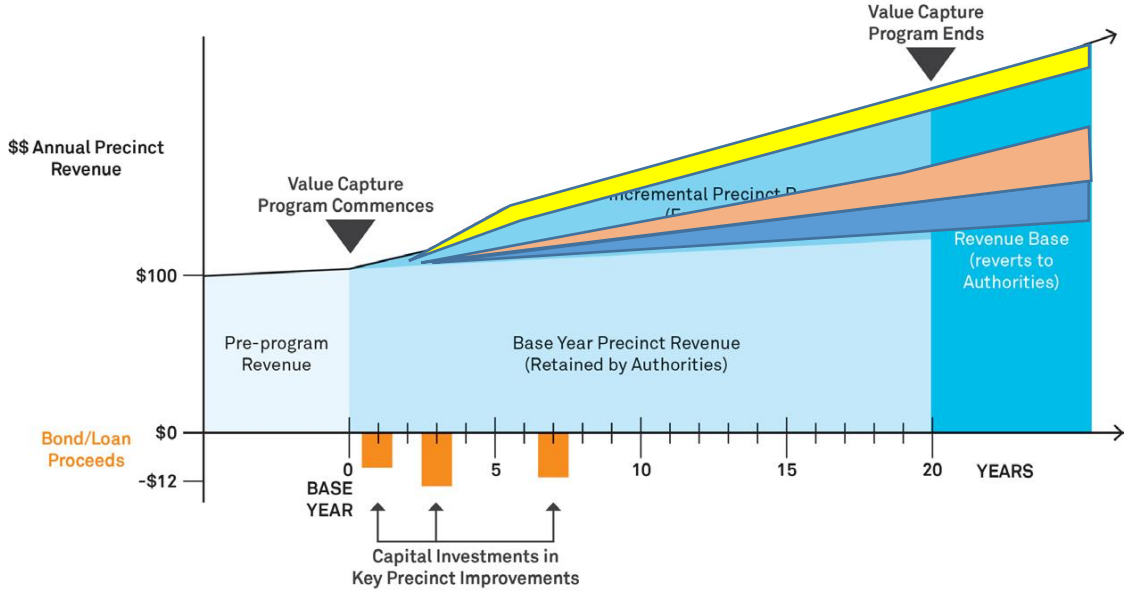
This highlights that assuming all the taxes on the projected land value uplift from any transport investment, or betterment on the related upzoning, will all be available to fund infrastructure costs is not likely to be the case. Figure 1 aims to illustrate the issue by showing a diagram from a document promoting the capture of value increments for project funding and then another indicating that a portion of the increments may in fact not be available or counted upon.

FIGURE 5. ILLUSTRATIONS OF THE 'CALLS' ON VALUE UPLIFT

Diagram from *Value Capture Roadmap,* AECOM June 2015 Figure 1, Value capture funding model



The real picture may be less encouraging:



Revenue gain from other investments (would have happened anyway)
Revenue gain from investments transferred from other locations
Revenue gain for other levels of government not able to be captured

4.3 The incidence of taxes and charges compared to value uplift

Because of the different ways land development and value is 'taxed' two similar sites could incur a different mix and magnitude of taxes and changes over their 'lives'. To highlight this interplay of taxes and charges and the extent to which land value uplift is already 'captured' through existing taxes and charges, two sites in the Mascot Station Precinct in Sydney were examined.

A number of broad assumptions were necessary. The analysis is based on sales data and imputed land and capital improved values over time. The estimated taxes and charges include: land tax (assessed annually, based on current rates and real land values); stamp duty (assessed for those years the property sold, based on current stamp duty rates and real property values); an allowance for capital gains tax or company taxes that might be payable (again for those years when the property sold); and development contributions (estimated at 1% of the value of the capital improvements when the site was redeveloped). Local rates were not included. Current rates of stamp duty and land tax have been used due to the difficulty of tracing historic rates.

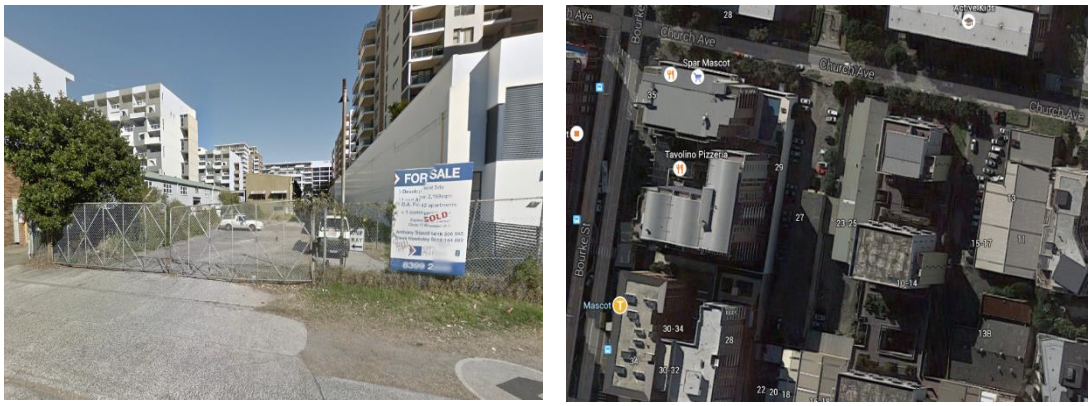
Due to the number and nature of the assumptions, this analysis serves to broadly illustrate the issues cited above rather than providing a particularly accurate or definitive assessment.

27 Church Avenue, Mascot

27 Church Avenue is a 2000 sqm site that is in the process of transitioning from industrial to high density residential. The site sold twice in period 2002 to 2015. The most recent sale in 2013 included a development approval for 42 apartments.

The total taxes and charges collected in this period have been estimated at $940,000 (2016 $) while the land value uplift is estimated at $5.5 million. The significant increase in land value is associated with the change from industrial to residential and the planning approval for an apartment development. In this case taxes and charges are equivalent to an estimated 17% of the uplift in land value. Stamp duty accounted for half of the value, land tax accounted for a third and other taxes (capital gains and/or company tax) accounted for the remainder.

FIGURE 5. 27 CHURCH AVENUE, MASCOT – SITE AND CONTEXT



31 John Street, Mascot

31 John Street is a 650 sqm site that was once part of a larger industrial zoned piece of land. The site was sold in 2002 for $531,000 (2016 $), redeveloped as a 5 storey commercial building in 2009, and sold in 2015 for $7.9 million. In the intervening period the building was sold four times.

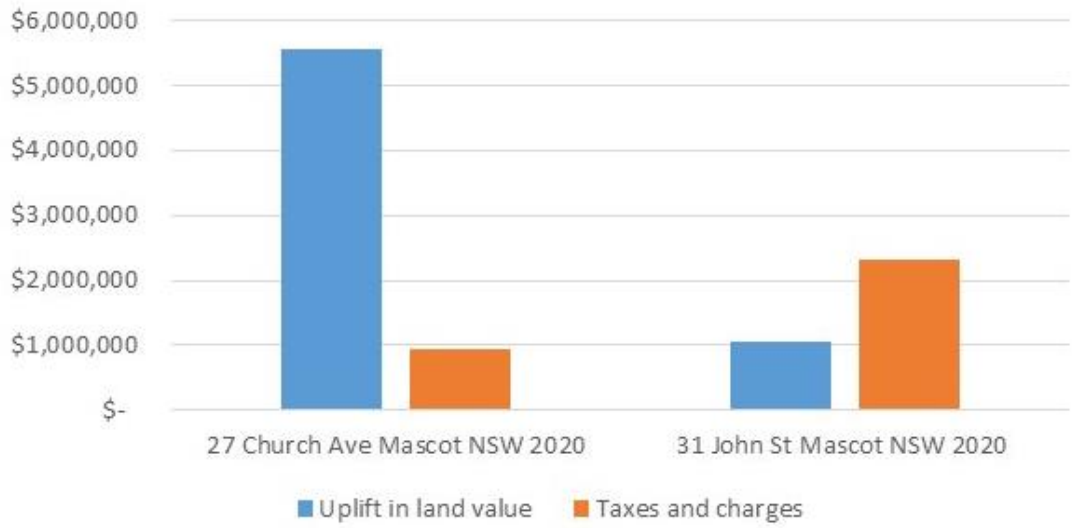
The total taxes and charges collected over the 13 year period were estimated at $2.3 million (2016 $) while the land value uplift was estimated at $1 million. This suggests existing taxes and charges have captured more than double the uplift in land value over the period considered. While an extreme case given the six sales in the period being considered it highlights firstly, the inefficiencies of stamp duties

(continuing to be applied without any value being created) but secondly, that there are already proxy mechanisms related to value. Stamp duty accounted for 65% of the total taxes and charges, other taxes (capital gains and/or company tax) accounted for 25% and land tax accounted for less than 10%.

FIGURE 6. 31 JOHN STREET, MASCOT – SITE AND CONTEXT

The different 'stories' for the two sites near each other is shown in Figure 7.

FIGURE 7. LAND VALUE UPLIFT VERSUS TAXES AND CHARGES (2002 TO 2015)



Source: SGS Economics and Planning Pty Ltd.

4.4 Risks associated with value capture funded fast rail

The Sydney Morning Herald recently reported on proposals to build 'mega rail projects' in Sydney including a fast rail line between central Sydney and Wollongong.[9] The first stage of this project from Wollongong to Dumbarton and between Picton and Campbelltown has an identified cost of $3.75 billion, according to the newspaper report. This is proposed to be paid for by a $250 per square metre levy on new homes and businesses built along the proposed lines and train stations – or more particularly on about 100,000 new homes in the Macarthur plan area.

[9] See O'Sullivan, M. (2016) 'Fast train bonanza: big investors in race to build major new Sydney rail projects', *Sydney Morning Herald,* 20 June, viewed 8/8/16 at http://www.smh.com.au/nsw/fasttrain-bonanza-big-investors-in-race-to-build-major-new-sydney-rail-projects-20160624-gpqua1.html

The Macarthur South Area, which is the focus of the first stage of the fast rail proposal, has been the subject of recent planning by the NSW Department of Planning and Environment[10] where up to 35,000 homes in Menangle Park and Mount Gilead and a new town at Wilton have been proposed. The planning documentation notes that a further 33,000 homes could be supported beyond 2036 supported by the construction of the Outer Sydney Orbital, upgraded Hume Highway interchange and the Maldon-Dumbarton freight rail line

To achieve the 100,000 homes anticipated by the fast rail project proposal (compared to the 68,000 anticipated by the DPE) will require a significant increase in density in the area. The average floor area of new houses in Australia is about 240 square metres and in this area the average would need to be a minimum of 150 square metres to achieve the $3.75 billion cost, based on a flat charge per dwelling (with no discounting assumed), as per the following assumptions:

Betterment charge per sqm	$250
Homes	100,000
Average size (sqm)	150
Total 'chargeable' sqm	15,000,000
Total	$3,750,000,000

While plausible there are a number of risks related to these assumptions, again highlighting the issues already mentioned. These include the following:

- The betterment charge adds up to about $37,500 per dwelling. This is perhaps five percent of the final sale price (assuming say $750,000), and would be in addition to existing charges such as the Special Infrastructure Charge which is currently set at about $200,000 per developable hectare (say $10-15,000 per dwelling depending on the ultimate residential density).
- To achieve the additional yield and density assumes that purchasers will trade off benefits received in other locations with those available from new development in this area. In other words a compelling offer will be necessary to realise the anticipated yield. As the DPE work shows, development in this area will need to be supported by other major infrastructure works including the Outer Sydney Orbital and upgraded Hume Highway that might also have a 'claim' on the uplift.
- The additional yield also assumes that other outer western Sydney release areas, or infill areas with already good access to the metropolitan rail network, as well as access to other desirable urban services and amenities, would have less development than projected. This may have implications for cash flow and the provision of infrastructure and services in these other areas. On the other hand if the new development is more sustainable than the development being diverted then the case is stronger.
- If the development doesn't proceed as anticipated, remembering that 100,000 homes represents 3 to 4 years of **total** anticipated metropolitan Sydney demand (of which only 15 to 20 percent is typically in greenfield areas such as Macarthur South), there is a risk not only of project failure but also to cash flows and returns on associated, committed investment in other services and infrastructure by local, state and federal governments. The state and/or federal government would more than likely be anticipated to 'bail out' the project.

This cautious tone is not to say that an appropriately structured value capture scheme couldn't have a role in funding major new transport infrastructure, because it could have, just that the assumptions need scrutiny to ensure environmental and planning values won't be compromised, and that the public interest is being served, including that the supplementary government funding risks or obligations are understood.

[10] Department of Planning and Environment (2015) *Greater Macarthur Land Release Investigation Preliminary Strategy & Action Plan*, viewed 8/8/16 at http://www.planning.nsw.gov.au/~/media/Files/DPE/Plans-and-policies/greater-macarthur-land-release-investigation-land-use-and-infrastructure-analysis-preliminary-strategy-and-action-plan.ashx

5 EVALUATION OF MECHANISMS

5.1 Evaluation criteria

There are a range of criteria which might be utilised to evaluate different value capture mechanisms, to highlight their advantages and disadvantages and applicability given the Australian context. The criteria chosen here have drawn on those identified in a Consultation Paper as part of the 'Henry' Tax Review (namely equity, efficiency, simplicity, sustainability and policy consistency)[11] while also considering the objectives for this study identified in the project brief.

The following criteria have been applied:

- **Applicability** – mechanisms are available and applicable given the existing Australian legislative and regulatory environment.
- **Revenue yield** – mechanism is worthwhile from a revenue perspective given costs of collection and required expenditure
- **Revenue reliability** – revenue source is stable and predictable
- **Economic efficiency** – mechanism does not negatively distort land, property and labour markets, or 'double dip'
- **Clarity** – that the logic for the mechanism is clear with costs and benefits explicitly understood and clear to all
- **Equity** – people in similar economic circumstances are treated equally; costs are borne by those who benefit.
- **Extent of barriers to implementation** – mechanism will be accepted by stakeholders, can be incorporated within the project development cycle.

5.2 Evaluation summary

A detailed evaluation of each of the mechanisms against these criteria is included in Appendix 2. The evaluation in Appendix 2 generally takes two perspectives: firstly, how does the mechanism perform on its own terms given its current role in infrastructure funding and secondly, how would it perform if modified or reformed with the aim of an enhanced role in funding major transport and other state level infrastructure. A summary of the evaluation from the second perspective, distilled into a consideration of the advantages and disadvantages of each is shown in Table 3.

[11] See Commonwealth Government (2008) Australia's Future Tax System: Consultation Paper

TABLE 3. SUMMARY OF ADVANTAGES AND DISADVANTAGES OF VALUE CAPTURE MECHANISMS LEVIES TO FUND MAJOR INFRASTRUCTURE

RECURRENT TAXES ON LAND OR PROPERTY			
MECHANISM	**ENHANCED ROLE FOR MAJOR INFRASTRUCTURE FUNDING**	**ADVANTAGES**	**DISADVANTAGES**
State land taxes	Reform to broaden base to include most property and generate more value related revenue	– Economically efficient (non-distorting, broad-based, levied on immobile resource) – Highly stable revenue source which will grow with property value uplift – Few compliance costs for use or extension of use as administrative system already in place – Clearly linked to value uplift created by transport investment (and other uplift) drivers)	– As currently applied, does not tax value of primary residences in most jurisdictions – extending it to be 'broader based' as suggested and more closely linking it with value uplift may face property owner opposition and political difficulties
Local government property rates	Reform to extract or increase share for state level infrastructure	– Accepted and stable source of revenue	– Not a 'value capture' charge – currently represents a service charge for local government administration, services and facilities calibrated as a rate in the dollar – Currently only available to local governments therefore difficult to extend or justify for funding of state level infrastructure projects

TAXES ON PROPERTY TRANSACTIONS			
MECHANISM	**ENHANCED ROLE FOR MAJOR INFRASTRUCTURE FUNDING**	**ADVANTAGES**	**DISADVANTAGES**
Federal Goods and Services Tax	Reform to apply more uniformly to property transactions with a share dedicated to infrastructure	– Few compliance costs, as already collected through tax system – Stable source of revenue	– Federal tax, not able to be hypothecated or dedicated for state transport infrastructure – Broadening its application politically difficult – Equity and efficiency constraints as not necessarily linked to value uplift from transport infrastructure
Federal Capital Gains Tax	Reform to apply more uniformly to property transactions with a share dedicated to infrastructure	– Few compliance costs, as already collected through tax system – Stable source of revenue	– Federal tax, state not able to hypothecate or allocate for transport infrastructure – Current exemptions limit capacity for revenue – broadening the base to more property transactions politically difficult
State stamp duties	Reform to apply a tax to a share of only the increase in unimproved value of property since previous sale, paid by purchaser	– Currently generates significant revenue for states where property price inflation and activity is strong – could be made more reliable by this reform as it could be calibrated to constitute a varying share of value uplift while returning constant revenues – Few compliance costs as already collected by the States – Reform would link more closely to value therefore greater efficiency and equity – Reform would remove barrier to housing and labour market mobility which current stamp duty regime imposes	– Appetite for reform exists – Revenue is dependent on property market conditions and on number of transactions undertaken – Politically difficult to constrain uplift received by vendors

DEVELOPMENT CONTRIBUTIONS			
MECHANISM	**ENHANCED ROLE FOR MAJOR INFRASTRUCTURE FUNDING**	**ADVANTAGES**	**DISADVANTAGES**
Local infrastructure charges	Reform to widen local infrastructure funding arrangements to nominated major infrastructure	– Systems in place – levying for beneficial infrastructure accepted	– Should be designed as a user charge for only site related local off-site infrastructure – not land 'value' related – difficult to demonstrate nexus with new development – Up-front charges – should be limited in scope to minimise impact on affordability – Mostly contestable by developers, tied to development cycles – reform would lead to more revenue uncertainty
State level infrastructure charges	*Widen use of state level infrastructure charges to infill areas for nominated major infrastructure*	– Funding allocated specifically for infrastructure – Acts as a 'proxy' betterment levy – Systems in place, few barriers to implementation	– Currently only applied to greenfield areas in NSW and Vic – extension to infill areas to affect renewal development may meet resistance – Relatively arbitrarily set to recoup a share of infrastructure costs - charges don't necessarily relate to value uplift – Revenue may be reliant on market conditions
Betterment levies for additional development rights	*Reform for more comprehensive application as 'development licence' fees where development rights are increased*	– Precedents emerging (in Queensland Priority Development Areas, Melbourne City Council Built Form Review and in negotiated planning agreements) – Non-distorting if appropriately designed and set as it captures 'unearned' value uplift – Potential to generate a relatively stable and substantial amount of revenue – Geographically equitable	– Can be dependent on market conditions – Challenge to design and implement a system that reflects value uplift but doesn't deter development and is not a 'stalking horse' for overdevelopment – Likely to be other claims for betterment levy revenues (local amenity and public domain works, affordable housing etc)
Development bonuses or sale of bonus GFA	*Wider use of negotiated agreements for provision of equivalent value public benefits where development rights are increased or floorspace 'bonuses' provided*	– Applicable in most jurisdictions as part of development approval processes – Flexible - can be applied to different scales of project, e.g. for both local and state level infrastructure	– Given based on negotiation not suited to and not likely to produce significant or reliable revenues for major infrastructure

		– Potential for issues with community concerns about over development and breaching established planning rules – Revenue subject to property market and business cycle fluctuations – Need for negotiation particularly at major infrastructure scale will add delays and costs

LEVERAGING GOVERNMENT INTEREST IN LAND			
MECHANISM	**ENHANCED ROLE FOR MAJOR INFRASTRUCTURE FUNDING**	**ADVANTAGES**	**DISADVANTAGES**
Development of government land or air rights	*More active government purchase, planning and development of land including retaining some for leasehold to capture future value uplift*	– Suited to both brownfield and greenfield locations – Closely links land use with provision of transport infrastructure – If well designed (state retains land and provides leases in strategic locations) offers opportunity for on-going revenues and public benefits – Economically efficient method	– Limited by the availability of government land – may not be comprehensive – Need for effective scheme design to ensure there is no opportunity cost of holding land – Possibility of over-development of sites and compromising good planning to generate the most revenues or in-kind public benefits
Joint venture developments	*More active government purchase, planning and development of land for joint venture purposes to raise funds*	– Suited to both brownfield and greenfield locations – Closely links land use with provision of transport infrastructure – If well designed (state retains land and provides leases) offers opportunity for on-going revenues and public benefits – Economically efficient method	– Better suited to single site specific projects where government owns land as negotiations for major transport infrastructure and corridors likely to be complex and add to costs – Risk sharing is fraught – requires strong market to ensure projects proceed as planned – Possibility of over-development of sites and compromising good planning to generate the most revenues or in-kind public benefits
Sale of advertising concessions	*More aggressive approach to raise additional revenue for wider role in funding*	– Stable source of revenue – Economically efficient method – Most jurisdictions already use to some extent	– Not a value capture mechanism – Revenue modest compared to project costs – only sufficient to modestly off-set operating costs – Revenue may be reliant on market conditions, and is not available up front

HYPOTHECATED OR BENEFITTED AREA RATES			
MECHANISM	**ENHANCED ROLE FOR MAJOR INFRASTRUCTURE FUNDING**	**ADVANTAGES**	**DISADVANTAGES**
'Special rates' for benefitted areas	*Application of rate surcharges within identified benefitting areas for nominated period to part fund major transport infrastructure*	– Effective if able to be designed and apportioned to identifiable beneficiaries – Stable and reliable source of revenue – Geographically equitable	– Difficult to design and determine major infrastructure beneficiaries and thereby identify an appropriate 'catchment' – Likely to require legislative change to enable state governments to utilise property rating regime for infrastructure funding (though Melbourne precedents in particular)
Rates applicable to whole LGAs	*Application of flat rate levy on ratepayers of a local government area to part fund major transport infrastructure*	– Stable source of revenue – Can recoup substantial costs over time	– Charges don't target the uplift of a specific project (usually flat rate) – Less geographical equity, as all properties in the local government area will be liable – not linked to relative benefits or uplift so some non-beneficiaries will pay
Tax increment financing (TIF)	*Reform to hypothecate future property and related tax revenues for infrastructure funding*	– Infrastructure finance is available up front (if bond schemes are used) – Flexible, and can be used to target specific areas for urban renewal – Can be more politically attractive, as doesn't involve new taxes/levies (just allocates uplift in taxes which is occurring in any case)	– Difficult to apply in Australia with current legislation and tax system – complex to apply and addresses a financing problem Australia doesn't have – Many risks associated with reliance on development related future tax revenue – May divert or assume tax revenues already accounted for in other spending – Ultimately TIFs add to risk but do not add to revenues that would otherwise be realised, and they do not necessarily increase the capture of publicly funded, private windfall gains – Overdependence may lead to over development of sites beyond community expectations

5.3 Barriers to the implementation of a coherent value capture system

Drawing from Table 3 it can be seen that the following barriers are in the way of implementing a more comprehensive and effective value capture system in Australia.

1. **Lack of understanding of the distinction between the 'one-off' uplift created when additional development rights are granted (at approvals stage) and the 'background' growth in value uplift (from amenity investments, population and economic growth and state infrastructure).**

These value components have tended to be conflated. For example, state level infrastructure charges in Melbourne (the Growth Area Infrastructure Charge) and NSW (Special Infrastructure Contributions) are, in effect, both a one off levy on development rights related uplift and a charge for state infrastructure induced uplift while being relatively arbitrarily set to what developers will find acceptable.

The charges applying to the PDAs in Queensland have distinguished between these value components by requiring, where relevant, the payment of a value uplift charge and an infrastructure charge.

2. **Resistance to imposts on residential properties**

Land tax is highly efficient in that it attaches to an immobile resource (land can't be moved to a different jurisdiction or 'avoided' in some way) and, if levied on a consistent and comprehensive basis to most properties on the basis of value, is a highly effective way of capturing 'background' uplift linked to amenity improvements, population growth and state infrastructure provision.

However, a comprehensive land tax system by definition should include a tax on residential properties including 'family homes'. Residential property represents about 75% of land value in Australia. Only residential property that is owned for investment or are second or third private properties are subject to land tax in most states and territories.

In particular, owner occupiers of properties that are asset rich but income poor may find a land tax an additional cost which is hard to pay. Characteristically these are older, long term residents living on a pension. This has been a major barrier to land tax reform.

Nevertheless, hypothecated property rates and surcharges have set a precedent for the wider use of land taxes, and appear to be more acceptable. Both Parks Victoria and Melbourne Water are funded by broad based rate surcharges based on a combination of minimum and value related levies.

3. **Resistance by property development interests**

The development industry is confronted by an array of infrastructure and development charges and is naturally wary of additional imposts. Nevertheless, it is clear that many land owners and developers take advantage of the absence of effective value capture mechanisms, particularly at the land rezoning or development approval stage when additional development rights are granted, to benefit from significant uplifts in land value. Where this gain arises from speculative land transactions with little economic value added, discouragement may not have any real social cost (but still be met with objections from speculators).

The starkest examples of this are probably where industrial land is converted to high density residential in high land value locations. At least in greenfield areas there are different (if sometimes imperfect) value capture mechanisms in place (e.g. state infrastructure charges or government owned land developers).

4. **The difficulty of implementing additional uplift levies when multiple, though often imperfect, proxy mechanisms already exist**

This has probably also stifled reforms to introduce broader based land taxes which would be a more effective way of capturing a share of the 'background' uplift, because stamp duties already play an imperfect role in this area. The ACT government has recognised this tension and is moving to replace stamp duties with broader based land taxes.

5. **The difficulty of effectively identifying beneficiaries of state infrastructure**

While it is clear that new transport infrastructure which increases accessibility will add to land values it is difficult to draw a definitive boundary around beneficiaries. Furthermore, there are multiple drivers of land value and distinguishing the different drivers or influences is difficult. Defining a catchment for an infrastructure related uplift levy is therefore fraught. In the case of the Gold Coast Light Rail Transport Infrastructure Levy (TIL) the Gold Coast Council applied a flat rate charge to all properties in the local government area. While the broader logic for such a value capture levy is sound there has clearly been no attempt to relate it to actual uplift nor to distinguish different beneficiaries within the LGA, where most in terms of uplift would be within a few hundred metres of the light rail corridor.

This difficulty of identifying who benefits from state infrastructure investment and to what extent leads to the political problem of designing a system where people may be paying for something they do not feel they are benefiting from. This was the reason both the Melbourne Underground Loop Levy and the Sydney Harbour rates surcharge were abandoned prior to their planned implementation period. From this perspective it is desirable that schemes seek to tie the setting of the charge with land value so properties pay in proportion to the value of (financial) benefits they receive

6. **The danger of 'over-development' given prospective funding from the provision of development rights**

There is a real danger that where value capture is seen as the 'answer' to infrastructure funding, development envelopes and development rights are expanded to provide resources to match the cost task. Planning rules, environmental capacity and community sentiment are likely to be ignored or overlooked in such cases. The decision to allow a development or not must lead and be independent from the value capture implications.

7. **Retreat by state governments from integrated land development**

The dismantling of agencies such as state land commissions (Landcom in NSW and VicUrban in Victoria) has removed the ability of governments to capture the various components of land uplift on the urban fringe. When fully functioning and operating through the vertical layers of land development from purchase, to planning, to local infrastructure provision, to subdivision, development and sale, in the 1980s and 1990s, these agencies typically returned a dividend to state government treasuries which highlights the existence of the value uplift. Economic policy orthodoxy rather than any suggestion of organisational or institutional failure was at the heart of the demise of these agencies.

Places Victoria and UrbanGrowth NSW, the infill focussed Victorian and NSW post-runners to these land commission agencies, have a narrower mandate, more or less contained to developing existing government land for sale or wholesale (without the retail element). This restricts their income earning potential.

Queensland, through Economic Development Queensland (EDQ), and Western Australia, through LandCorp and the Metropolitan Development Authority, have maintained a more comprehensive government role in value capture related land development. In addition EDQ has also established a charging regime which distinguishes between the development rights related and infrastructure related value uplift.

5.4 Applicability of mechanisms for major infrastructure funding in the Australian context

The evaluation and analysis in Appendix 2 and this chapter highlights that for the task of major infrastructure funding six value capture mechanisms are preferred in the Australian context. All require adjustments to how they are currently deployed or reforms to expand their application for effective use in major infrastructure funding.

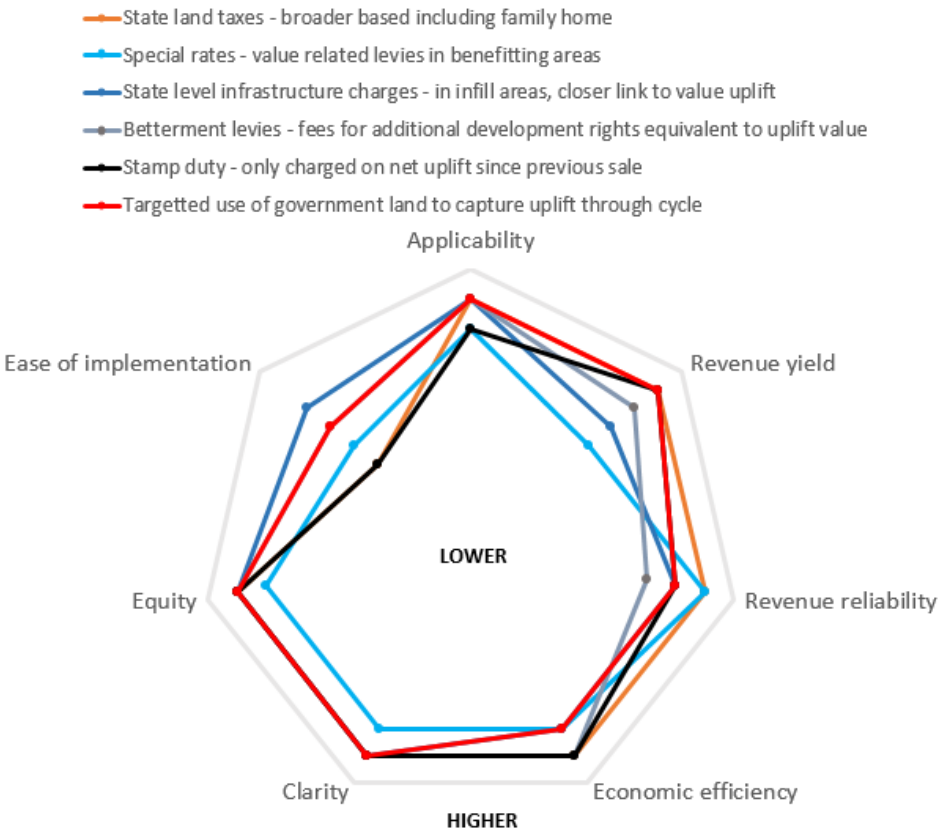
The six mechanisms and the required adjustments or reforms are as follows:

A. **Reformed state land taxes**. These are recurrent taxes that would need to be broader based including applying to the family home to generate more significant state revenue. They are not necessarily suited to funding particular infrastructure as they capture general land value uplift as well as that specifically related to infrastructure provision.
B. **Special rates**. These would contribute funding to discrete infrastructure projects by applying to all properties within nominated benefiting catchment areas, and based on the likely value related uplift associated with the infrastructure. In most jurisdictions legislation would be required to allow state governments to implement such a scheme.
C. **State level infrastructure charges**. These currently apply to subdivisions for urban development in greenfield contexts in NSW and Victoria but would need to be extended to infill areas, and desirably have a closer link to value uplift.
D. **Betterment levies**. These would be transaction fees for additional development rights equivalent to the uplift in value associated with the type of new floorspace being proposed.
E. **Reformed stamp duty**. These would be transaction fees at the point of sale of properties, still paid by the purchaser, but only based on a share of the net uplift in value since the previous sale.
F. **Targetted use of government land**. The aim here is to capture long term uplift through the development and project cycle. It would require a more interventionist role for government in purchasing, planning and potentially holding strategically located land benefitting from transport investment.

Figure 8 is a summary of the evaluation of these six value capture mechanisms contained in Appendix 2. It shows that state level infrastructure charges perhaps confront the least barriers to implementation while reformed state land taxes, reformed stamp duty and targeted use of government land may provide the greatest revenue potential. The performance of the six mechanisms diverges most against these two criteria.

Not all the measures could be deployed at the same time. An appropriate package of recurrent and transaction based approaches could be developed following further examination. Further ideas for reform – focussing on betterment levies, reformed systems of stamp duty and state land taxes and wider use of government owned land - are discussed in the next section.

FIGURE 8. EVALUATION OF SIX PREFERRED VALUE CAPTURE MECHANISMS



6 IDEAS FOR REFORM

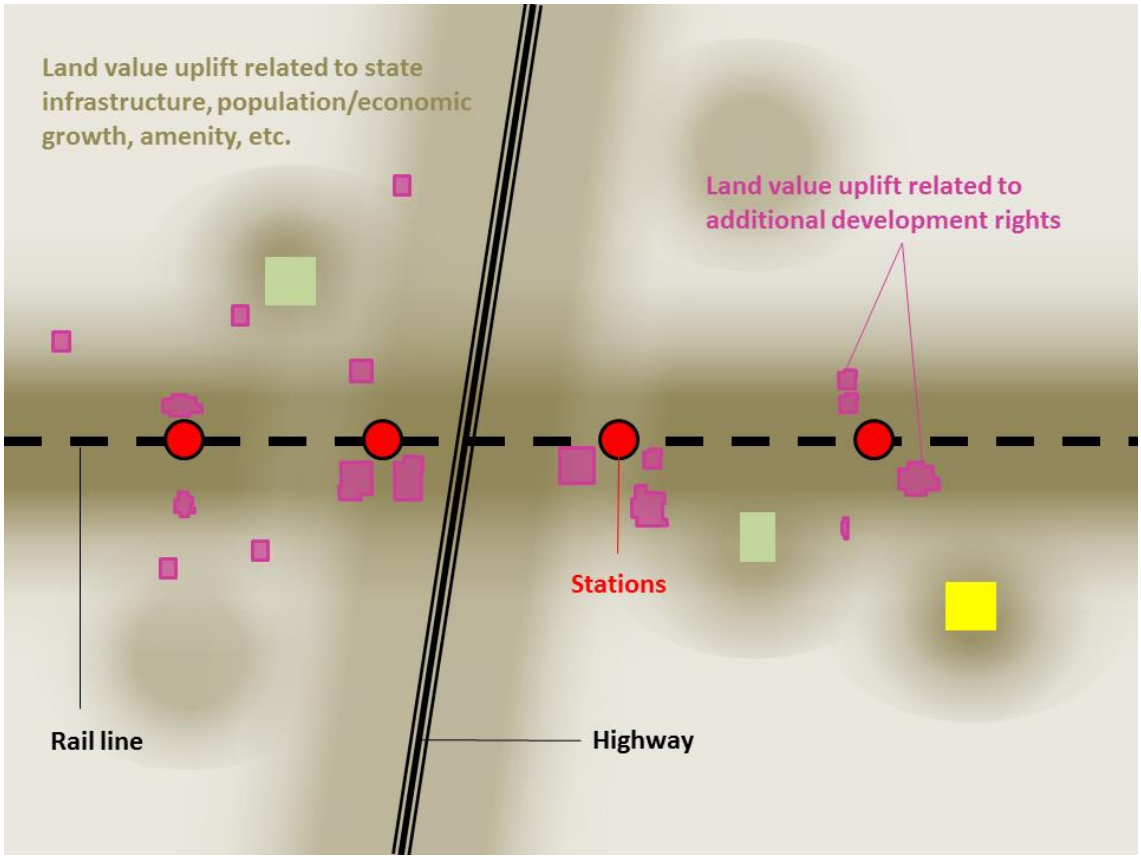
6.1 Introduction

This paper has emphasised that property value is driven by a number of sources. Aside from investments by owners or developers in on-site improvements and the payment of charges for site related local infrastructure, property value is driven by:

- **Amenity values**, reflecting inherent qualities but also the state's maintenance of historic infrastructure and gradual provision of new services
- **Population and economic growth** which, particularly in an urban context, enhances the scarcity value of property
- **State level infrastructure provision**, including transport infrastructure provision which boosts accessibility to services and jobs
- **The granting of development rights** which allocates monopoly rights to land owners allowing them to benefit from the realisation of latent value.

Figure 9 aims to illustrate the incidence of these elements of value uplift.

FIGURE 9. ILLUSTRATION OF THE INCIDENCE OF LAND VALUE UPLIFT



The uplift associated with the granting of additional development rights is isolated to particular sites where approvals are granted. While the uplift associated with the provision of state transport

infrastructure is spatially defined, as shown by the darker corridor along the rail line and highway, in many cases and in lots of areas it will be difficult to isolate the uplift from the transport investment from other factors including amenity value and other infrastructure such as schools or parkland.

Some possible reforms which take these factors into account, and point the way forward, are as discussed below. The first two are clearly alternative approaches and would not both be implemented. The third and fourth proposals could be combined or modified if implemented in conjunction with one or the other of the first two proposals.

6.2 Betterment levies on value uplift created by the granting of additional development rights

There are few options available to state governments to such a levy, notwithstanding the clear theoretical case for such a charge. Introducing a coherent and comprehensive system, similar to the ACT's LVC, would enable the opaque, negotiated agreements which are now becoming the norm for major developments and seem to add to uncertainty, to be avoided in most cases.

A '*development licence'* system could be contemplated, consistent with that being proposed by the State Government for central Melbourne. A key proposition is that 'development rights' have a value that is conceptually distinct from the attributes of the particular piece of land which might host development. In theory 'development rights' could be auctioned separately, that is, without reference to any specific piece of land (though the planning controls set for the site would still apply). Indeed, this occurs in some countries overseas which feature 'transferable development rights', and in some Australian jurisdictions albeit in a more restricted way. For example, the Victorian Government's Docklands Authority (the predecessor to Places Victoria) sold development rights in the Docklands Area separately to the land, with land ownership passing over only after projects or stages had been completed.

From this perspective betterment levies are similar the sale of licences by governments to access other rent generating activities which are rationed for the sake of overall community wellbeing and market efficiency. For example, in the cases of liquor distribution, commercial fishing, or radio and TV broadcasting a licence fee is paid by parties that are granted access to these restricted market via government regulation. By the same logic the granting of development approvals could be subject to licence fees.

Making the granting of development approvals for increased development rights or plot ratio conditional on the provision of defined community benefits is tantamount to a licence fee arrangement, albeit delivered in kind rather than a monetary payment.

The proposed central Melbourne system identifies a schedule of per square metre uplift rates for different uses in different precincts which a development proponent would be required to pay for approved floorspace above that currently allowed or existing on the site. The Queensland PDA approach also includes a schedule of 'value capture' charges for different uses.

An important feature of any such system is that the development rights be granted on planning merits independent of the value of the 'development licence' fee paid by the development proponent.

Comprehensive betterment levy systems would also enable state governments to 'claw back' funding from the federal government, as it would replace some Capital Gains Tax contributions.

6.3 Re-engineering 'stamp duty' to capture value gain rather than tax total property value

This proposal would be an alternative to the proposal discussed in section 6.2 above, and would also replace existing stamp duties. It is broader in scope than the first proposal in capturing a wider scope of value gains.

As the Mascot examples in section 4 show, stamp duties at present bear no relationship to economic productivity of land or to passive, unearned windfall increases in land value. The total amount of tax collected primarily reflects the level of transactions in the market, and only secondarily changes in land values.

Existing stamp duties relate to the total value of property sales, not just the land component. The intent of value capture from passive gains in value would be best met with a tax only on the land component, and specifically on the **unearned increase in land value** since the previous change in ownership.

For example:

Assessed land value at previous transfer plus direct investment*:	$150,000
Current economic (market) value:	$200,000
Tax rate on assessable value increase:	60%
Tax payable:	$30,000
Payment to vendor:	$170,000

* This would be the purchase value adjusted for CPI plus direct investments and infrastructure contributions that add to land value since purchase.

While the responsibility for payment is imposed on the buyer, the structure of the transaction is tantamount to a tax on the seller. The obligation to pay is on the buyer: they cannot register the title in their name until the tax is paid.

This would capture the real (inflation adjusted) value gain from all sources listed in section 2.1 and illustrated in Figure 1, except DE and EF, and would apply to all properties at time of sale. A more detailed consideration of the mechanics and transition issues would be required to take the idea further.

Over the past quarter century, annual aggregate national land value increases, net of CPI, have averaged about five times the total annual revenue from all state property taxes – stamp duties and land tax. Allowing for other direct contributions to value gain through investment in the property and contributions through specific infrastructure charges, the remaining passive or unearned value gains will still be well over double the current tax take. In principle, all state stamp duties on property and land taxes could be replaced by a tax on unearned value gain of about 50%. Revenues would increase if the level is set above this, or if some recurrent taxes such as land tax are retained (recommended).

The benefits of this approach include:

- It avoids the need to identify the extent to which any particular property 'benefits' from any particular state transport or other infrastructure investment
- It directly links the amount paid with the value of benefits received (it is equitable)
- It would provide more autonomy for state governments in spending decisions
- It would replace the current inefficient stamp duties.

Such a form of tax could dramatically reduce land speculation (depending on the rate set) and would dampen the prospect of property bubbles, while not diminishing real gains in property values derived

from economic productivity. It may slightly reduce consumption based on borrowing against equity from unearned property value gains in long held assets.

6.4 Land tax reform which recognises the multiple drivers of land value uplift, including state infrastructure

As discussed, an extension of land tax to all properties would capture the *recurrent* benefits of value uplift which stems from the policies and investments of government. While Approach 2 applies to capital increases, a universal recurrent land tax shares most of the same benefits listed.

While the 'purest' reform would involve 'tidying up' the current system to remove exemptions and applying an appropriate rate in the dollar to the unimproved value of an owner's landholdings, it might be that a transitional reform would involve a 'metropolitan transport land tax' hypothecated for spending on transport improvements. This would apply only in metropolitan areas as a rate in the dollar and only begin for properties above a certain value (e.g. $200,000 unimproved value). Linked to future value rises and to needed transport spending, such an approach might be more politically acceptable.

Federal government support and incentives might also be necessary to make land tax reform at the state level more palatable for state governments.

It will be tempting for state governments to 'stop short' of land tax reform by persisting with state level infrastructure charges or perhaps by establishing benefitted area levies in catchments which are seen to benefit from transport infrastructure investments. Because of the apportionment dilemmas, and because existing taxes and charges apply to some elements of value uplift, the reality is that these will only be acceptable if set conservatively (well under true costs). Broad based land taxes can be set conservatively but are likely to generate significant funds for infrastructure over time, and the largest beneficiaries pay the most.

6.5 More strategic use of government owned land to capture value for transport infrastructure

Australian governments have generally retreated from the use of government owned land developers, particularly in NSW and Victoria. There is a strong case for reinvigorating the leverage of government owned land for value capture outcomes with the following elements:

- **Government owned renewal agencies** intervening to purchase, plan and prepare strategic sites where market failure exists (e.g. fragmentation, contamination, etc.) for sale and development by the private sector.

- **Government owned greenfield land developers**, in the market for 'raw' land and pursuing an innovation agenda through the development process to reap the value of rezoning, subdivision, the provision of local and state infrastructure and housing development (the latter often in joint ventures with the private sector).

- **Holding major government owned renewal sites or precincts for development on a leasehold basis**, to capture value through successive waves of development. In Australia state governments are dependent on the federal government for tax transfers to meet their spending responsibilities. This is one driver behind the states selling government land assets to supplement revenues. It also may explain some of the risk averse approaches to the development of government owned sites such as Barangaroo (e.g. requiring an upfront payment for South Barangaroo and making contamination 'clean-up' the responsibility of the developer). Governments appear reluctant to commit resources in the short term. However, there is a strong case that government should hold ownership of major renewal sites or precincts and offer them to the market on a long term

leasehold basis, after preparing them for development. The government is assured of receiving a fair and appropriate share of the uplift value in these circumstances.

The last two points would be somewhat diminished in importance if the approach in section 6.3 was adopted.

7 CONCLUSION

An appropriately designed system of land value capture has significant potential to raise revenue for public works and infrastructure in Australia, and to contribute to a more efficient and logical way of taxing land.

An effective land value capture mechanism would ideally capture a large portion of the windfall or unearned gains arising from public investment and the granting of development rights, without penalising or inhibiting property development and investment that generates earned value added and make an important economic contribution. While the current ad hoc array of mechanisms captures some of the unearned value, at times it also taxes some property heavily where there is little gain (or a loss) of value.

The capacity to capture windfall value gain is potentially quite large. It is dominated by the gains in residential property, which account for 75% of all land value, and 82% of all land value **gain** over the last 25 years in Australia. The total value of State level property based taxes (stamp duty and land tax) is estimated to be a modest portion of total windfall land value gains nationally. All existing State level property taxes could be replaced by a value capture tax on unearned value gain with a net increase in revenue.

Notwithstanding the significant potential for reform there is a need for caution in relation to some value capture ideas currently being suggested for Australia.

For example, variants of the US value capture approach of Tax Increment Financing (TIF) have been suggested. These imply the identification of zones where uplifts in property tax and other revenue are assumed from the provision of infrastructure, with the cost of infrastructure funded by hypothecation of the revenues. The mechanisms are reliant on an increase in both the level of private development and higher property prices. However, if the expected gains are not realised, the debt may become an unsupportable burden for the infrastructure authority. Furthermore, the hypothecation of all the uplift in taxes to pay for the transport infrastructure is likely to be unrealistic as some will be related to other infrastructure projects and some will be diverted from other locations where it was expected to provide a revenue stream for an alternative project. Current tax structures that can contribute to value capture (e.g. capital gains tax) may be administered at different levels of government and may be neither readily identified with the identified precinct(s) nor willingly transferred if so identified

Some barriers to the wider use of value capture mechanisms as identified in the report include the following:

- The difficulty of distinguishing between the 'one-off' uplift created when additional development rights are granted (at approvals stage) and the 'background' growth in value uplift (from amenity investments, population and economic growth and state infrastructure) has made it difficult to design robust value capture systems. This is partly to do with the fact that different levels of government have responsibility for the drivers of land value and the associated taxation or charging mechanisms. Coordinating action between levels of government is difficult, though in general state governments have the relevant responsibilities over land management and taxation.
- Widening the application of value capture mechanisms meets inevitable resistance from property owners and property development interests which means it can be politically fraught.
- It may be difficult to introduce additional uplift levies when multiple, though often imperfect, proxy mechanisms already exist. Implementing comprehensive reform is 'hard'.

- Because it is difficult to effectively identify a distinct catchment of beneficiaries when new major transport infrastructure is proposed, it is difficult to establish an efficient and equitable system of value related charges.
- There is also a danger of 'over-development' where prospective funding from value capture sources might depend on the provision of additional development rights

The evaluation and analysis contained in the report highlights that for the task of major infrastructure funding six value capture mechanisms are preferred in the Australian context. All require adjustments to how they are currently deployed or reforms to expand their application for effective use in major infrastructure funding.

The six mechanisms and the required adjustments or reforms are as follows:

1. **Reformed state land taxes**. These are recurrent taxes that would need to be broader based including applying to the family home to generate more significant state revenue. They are not necessarily suited to funding particular infrastructure as they capture general land value uplift as well as that specifically related to infrastructure provision.
2. **Special rates**. These would contribute funding to discrete infrastructure projects by applying to all properties within nominated benefiting catchment areas, and based on the likely value related uplift associated with the infrastructure. In most jurisdictions legislation would be required to allow state governments to implement such a scheme.
3. **State level infrastructure charges**. These currently apply to subdivisions for urban development in greenfield contexts in NSW and Victoria but would need to be extended to infill areas, and desirably have a closer link to value uplift.
4. **Betterment levies**. These would be transaction fees for additional development rights equivalent to the uplift in value associated with the type of new floorspace being proposed.
5. **Reformed stamp duty**. These would be transaction fees at the point of sale of properties but only based on a share of the net uplift in value since the previous sale.
6. **Targetted use of government land**. The aim here is to capture long term uplift through the development and project cycle. It would require a more interventionist role for government in purchasing, planning and potentially holding strategically located land benefitting from transport investment.

More detail on four of these mechanisms – focussing on the ideas of betterment levies as development licence fees applying when additional development rights are granted, reformed systems of stamp duty and state land taxes to, respectively, better capture value uplift at the point of property sale and/or over time and greater but targetted use of government owned land – was provided in the report to suggest a further research and reform agenda.

APPENDIX 1: STATE BY STATE REVIEW OF MECHANISMS

The tables below detail the systems and regulations concerning current and potential methods of value capture in NSW, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

New South Wales

TABLE 4. MECHANISMS IN NEW SOUTH WALES

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
RECURRENT TAXES ON LAND OR PROPERTY	
State land taxes	NSW land tax applies to all properties outside of primary places of residence, under the *Land Tax Management Act 1956*. The rates are applied based on 2 thresholds: - properties valued over $482,000 pay $100 plus 1.6% up to the next threshold - properties valued at over $2,947,000 pay $39,540 up to this level, and 2% for amounts over that.[12] Land tax is not a comprehensive value capture levy in NSW. Revenue raised by the tax contributes to the State's consolidated revenue. Since 2014, a foreign investor surcharge on land tax has been in place in NSW for residential real estate, with the rate expected to rise to 0.75% in 2017.[13]
Local government property rates	Rates in NSW are a primary source of income for local councils, and are used for local infrastructure and maintenance. The amounts charged differ between LGAs, and increases in rates are controlled by the State government through the Independent Pricing and Regulatory Tribunal (IPART).[14] The system for council rates is set out in the *Local Government Act 1993*. Council rates can be charged based on the value of a property or with a fixed rate, and also differ depending on the use of the property (i.e. residential, business, farming, mining). Additional charges can be levied by councils to fund specific infrastructure (see hypothecated or benefitted area rates below), but so far, the raising of council rates generally hasn't been utilised to capture value associated with infrastructure investment or zoning changes.
DEVELOPMENT CONTRIBUTIONS	
Local infrastructure charges	NSW infrastructure charges are collected under Section 94 of the *Environmental Planning and Assessment Act 1979* (the EP&A Act), and are regularly used across the State. The funds generated are held separately to be used for specific local improvements associated with developments. Through a contributions plan, councils are able to levy developers for the cost associated with the development. There is currently a $20,000 cap on contributions in existing areas and $30,000 in greenfield areas, as part of reforms made in the last 10 years. This means the 'user pays' signalling of the system has been significantly eroded.

[12] NSW Government Office of State Revenue, 'Land Tax,' http://www.osr.nsw.gov.au/taxes/land

[13] See Nicholls, 2016, 'NSW Budget 2016: Foreign property buyers in NSW to be hit with stamp duty and land tax hikes,' http://www.smh.com.au/nsw/nsw-budget-2016-foreign-property-buyers-in-nsw-to-be-hit-with-stamp-duty-and-land-tax-hikes-20160613-gpiaap.html

[14] NSW Government Valuer General, 'Council rates,' http://www.valuergeneral.nsw.gov.au/council_rates

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
State level infrastructure charges	Special Infrastructure Charges (SICs) have been applied in the North West and South West Growth Centres of Sydney, with the funding raised contributing to state level infrastructure (state and regional roads, land needed for social infrastructure elements such as schools). SICs are applied through a determination made under Section 94EE of the EP&A Act, allowing the government to collect special contributions to support the provision or extension of infrastructure, including for transport. The rate of contribution is indexed annually and is dependent on the class, type and location of the development, and is intended to contribute 50% of infrastructure provision costs in the Growth Centres. SICs are payable on the granting of a Subdivision or Construction Certificate from Council. Funding generated by SICs is held in a Special Contributions Area Fund, though most SIC liabilities have been met by works-in-kind. SICs can be used to fund infrastructure outside the special contribution area, as long as it benefits the development in some way, such as regional public transport.
Betterment levies	There is no current system for the application of betterment levies in NSW, and would likely require legislative changes to implement. Voluntary Planning Agreements and some systems of development bonuses are used as proxies for betterment capture.
Development bonuses or sale of bonus GFA	Additional development rights are able to be negotiated in NSW through Voluntary Planning Agreements (VPAs), where additional development rights are sold to developers in return for cash or community infrastructure.[15] Under the *Environment Planning and Assessment Act 1979*, developers can provide a monetary contribution, land, or other material public benefit to be used for public purposes. These have been used in St Leonards by North Sydney Council and Lane Cove Council, and by Ryde Council around Macquarie Park.[16] A number of LGAs also have formal incentive schemes where additional development capacity is granted in return for public realm improvements. One example is the City of Sydney, Local Environmental Plan, which allows for additional floor space up to a ratio of 2.2:1 if developers provide community infrastructure. The Council has also used development incentives to improve the public realm under the Green Square Development Control Plan, in allowing for an FSR of 2.2:1 (compared to 2:1 normally) if developers provide land for public roads, open space, or contribute to drainage and flood mitigation.[17] The *State Environmental Planning Policy (Affordable Rental Housing) 2009* also offers a 20% increase in FSR (or a ratio of 05:1, whichever is greater) if developers provide particular types of housing close to public transport corridors.[18]
LEVERAGING GOVERNMENT INTEREST IN LAND	
Development or air rights	Landcom was the government owned land developer but its activities are being wound up. UrbanGrowth NSW is the government's urban renewal agency and it is planning for and managing the wholesaling of major government owned landholdings but generally for sale, though with some leasing. The NSW Government purchased the land for the Rouse Hill town centre well before its eventual development, after it was identified in the 1988 Metropolitan Strategy. This advanced purchasing and planning of land for future major centres to capture uplift is not a feature of current planning or public land management practice. Recent examples of NSW rezoning and then selling its land for development to capture additional revenue include the Wentworth point Urban Activation Precinct, where former maritime land has been rezoned for high density housing and community uses, and the North Ryde Station Urban Activation Precinct, where the land around the train

[15] Consult Australia & AECOM, 2015, *Value Capture Roadmap*, June 2015, http://www.consultaustralia.com.au/docs/default-source/cities-urban-development/value-capture-roadmap/value-capture-roadmap-as-web.pdf?sfvrsn=2

[16] See Urbis, 2013, 'When "voluntary" contributions become just another cost to development in NSW,' http://www.urbis.com.au/think-tank/newsletters/when-%E2%80%9Cvoluntary%E2%80%9D-contributions-become-just-another-cost-to-development-in-nsw

[17] See City of Sydney, http://www.cityofsydney.nsw.gov.au/__data/assets/pdf_file/0011/134120/130318_PDC_ITEM06.pdf

[18] NSW Department of Planning and Environment, 2014, http://www.planning.nsw.gov.au/Policy-and-Legislation/Housing/~/media/180BF5EA62894296B4F7FD96782344B5.ashx

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
	station (left over after construction) was rezoned to provide for higher density housing and community open space.[19] The sale of air rights above station infrastructure has been used less, though examples include the Chatswood Transport Interchange project, and sites above Bondi Junction, Hurstville, St Leonards and Kogarah stations.[20]
Joint venture developments	Joint developments have been used in various public housing estate redevelopments, including the Bonnyrigg Living Communities project. The station 'air rights' projects identified above are also examples of joint ventures seeking to capture value for public benefit.
Sale of advertising concessions	Current NSW legislation would allow revenue generated through the leasing of transport or advertising sites to be used to contribute towards the costs of a particular transport project. Transport for NSW allows a number of media and advertising agencies to use spaces in and around transit ways across Sydney, and revenue created by advertising spaces is often incorporated as part of business cases for projects.[21]
HYPOTHECATED OR BENEFITTED AREA RATES	
'Special rates' for benefitted areas	Under the *NSW Local Government Act 1993*, councils are able to apply special rates in certain circumstances, however, these have mostly been used for maintenance of local infrastructure rather than for major transportation projects or for value capture. Examples of NSW councils applying special rates to particular areas within their LGAs are Parramatta City Council's CBD Infrastructure Special Rate and North Sydney Council's Crows Nest Main Street Levy.[22] An older example is the levy that was applied to land holders to the north and south of Sydney Harbour in order to fund the construction of the Sydney Harbour Bridge, though this also required legislation.[23]
Rates applicable to whole LGAs	Similar to the above, councils can apply additional rates for infrastructure across an LGA. Councils can apply to IPART to charge higher rates in order to provide necessary infrastructure, with many recently doing so to maintain local infrastructure assets or improve their overall financial stability rather than to fund larger infrastructure projects.[24] Particular examples include North Sydney's Infrastructure Levy and Ku-ring-gai Council's Infrastructure Primary Rate,[25] which have been used to fund elements such as drainage, roads, street furniture, and car parks.
Tax increment financing (TIF)	TIF has not been used in NSW. Implementing TIF in NSW would require a significant policy shift and changes to legislation.
TAXES ON PROPERTY TRANSACTIONS	
State Stamp duties	Stamp duty applies across NSW for sales or transfers of land or businesses including residential properties, under the *Duties Act 1997*, and applies in brackets according to land value, ranging between those under $14,000 to those worth $3 million and over.[26] Stamp duty receipts are returned to State government consolidated revenue, rather than being hypothecated for particular projects.

[19] See Department of Planning and Environment, 2014, 'Wentworth Point Urban Activation Precinct, http://www.planning.nsw.gov.au/~/media/9F16D8B97CA248519EB60FF6F891B96D.ashx;

[20] Ibid.

[21] Ibid.

[22] See Parramatta City Council, 2015, 'Rates – Frequently Asked Questions,' http://www.parracity.nsw.gov.au/your_council/council/pay_rates/faq; North Sydney Council, 2014, 'Crows Nest Streetscape Report 2013-14,' http://www.northsydney.nsw.gov.au/Projects_Infrastructure/Streetscapes/Crows_Nest_Mainstreet_Special_Levy_and_Strategic_Plan

[23] See SGS, 2015, *Draft Report*, prepared for Rail, Tram and Bus Union (RTBU Australia), September 2015, http://www.rtbu.org.au/innovative_funding_models

[24] NSW Office of Local Government, 2016, 'Frequently Asked Questions – Rates and Charges,' https://www.olg.nsw.gov.au/sites/default/files/FAQ-rates-and-charges.pdf

[25] Ku-ring-Gai Council, 2016, 'Infrastructure Levies,' http://www.kmc.nsw.gov.au/Your_Council/Organisation/Rates_levies_fees_charges/Special_rates_and_charges/Infrastructure_levies

[26] NSW Government Office of State Revenue, 2016, 'Transfer of land or business duty,' http://www.osr.nsw.gov.au/taxes/transfer-land

Victoria

TABLE 5. MECHANISMS IN VICTORIA

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
RECURRENT TAXES ON LAND OR PROPERTY	
State land taxes	Land tax in Victoria is applicable to most properties over a threshold value of $250,000, under the *Land Tax Act 2005*. This excludes primary residences. As in NSW, the Victorian Government has recently introduced an increased rate of 1.5% to be paid by foreign investors but not Victorian residents.[27] The tax is calculated based on the unimproved value of the site, rather than the value of the buildings or infrastructure on it.
Local government property rates	Council rates in Victoria are made up of a municipal charge, a waste management charge, and a rate in the dollar, and are enabled under the *Local Government Act 1989*. In 2015, the Victorian government introduced a rate capping scheme under the "Fair Go Rates System", which limits rate rises each year.[28] The amount paid by a property owner is determined by a specified rate in the dollar (based on the total amount the council needs to collect in rates) and the value of the property, similar to how rates are calculated in NSW.[29] Differential rates can be set for different types of land in recognition of the extent of infrastructure and services provided to particular properties (see 'special' rates below), but the highest rate charged has to be no more than 4 times the lowest rate.[30]
DEVELOPMENT CONTRIBUTIONS	
Local infrastructure charges	Councils can prepare Development Contributions Plans (DCPs) to fund the infrastructure associated with new developments. A reformed system for developer contributions was introduced through the *Planning and Environment Amendment (Infrastructure Contributions) Bill 2015*, which applies to greenfield growth areas and strategic development areas.[31] This allows for an infrastructure levy to be collected, in 2 parts: - Via a standard levy, applicable to metropolitan and non-metropolitan areas, set at standard rates for residential, retail, commercial and industrial developments, and which funds local infrastructure (roads, community facilities etc.) - Via a supplementary levy, an optional charge for when the standard levy doesn't raise enough to meet the cost of necessary infrastructure, which can be used in growth areas which are not subject to the GAIC scheme (see below).[32]
State level infrastructure charges	Growth Areas Infrastructure Contributions (GAICs) are charged to contribute to funding State infrastructure in the growth areas of Melbourne. The scheme is administered under Part 9B of the *Planning and Environment Act 1987* and the *Taxation Administration Act 1997*. GAICs are triggered by transfers of title, subdivisions, building permits, and significant acquisitions within the prescribed growth areas, currently within the LGAs of Cardinia, Casey, Hume, Melton, Mitchell, Whittlesea and Wyndham.[33]

[27] State Revenue Office Victoria, 'Land Tax,' http://www.sro.vic.gov.au/land-tax

[28] See Victorian Local Government Association, 2016, 'What is rate capping?' http://www.vlga.org.au/What-were-doing/Rate-Capping

[29] See MAV, 2016 'Council rates explained,' Fact Sheet, http://www.mav.asn.au/about-local-government/local-government-finance/Pages/council-rates-property-valuations.aspx

[30] Victorian Government, 2015, 'Guide to Councils – Rate and charges,' http://knowyourcouncil.vic.gov.au/guide-to-councils/finance-and-planning/rates-and-charges

[31] Department of Environment, Land, Water & Planning, 2015, 'Infrastructure contributions reform,' http://www.dtpli.vic.gov.au/planning/about-planning/improving-the-system/infrastructure-contributions-reform

[32] Department of Environment, Land, Water & Planning, 2015, 'Reforming Infrastructure Contributions,' Fact Sheet, June 2015, http://www.dtpli.vic.gov.au/__data/assets/pdf_file/0004/278050/Infrastructure-Contributions-Fact-Sheet-June-2015.PDF

[33] State Revenue Office Victoria, 2016, 'Growth Areas Infrastructure Contribution,' http://www.sro.vic.gov.au/growth-areas-infrastructure-contribution

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
	The GAIC can be made as a cash payment, or provided as works-in-kind. The charge is incurred per hectare, and is dependent on when the transaction which triggered the GAIC liability occurred and when the land was brought into the Urban Growth Zone.[34] Four "events"/triggers for a GAIC – transfer of title, subdivisions, building permits and significant acquisitions. "The GAIC is imposed when the first of these events takes place and affects the land until it is paid. Once it is fully paid, the GAIC recording over the title to the land is removed and the contribution will not apply to any subsequent GAIC events… If land outside the contribution area subsequently becomes part of the contribution area, the GAIC will be triggered on the first GAIC event after this happens."[35] Funding from GAICs is held in 2 public funds – the Growth Areas Public Transport Fund (which is used for public transport infrastructure and related costs), and the Building New Communities Fund (which can be used for different types of infrastructure such as transport that is not part of major public transport projects). Any GAIC paid for any particular property benefitting from a transport project will reduce the land value uplift which might otherwise attach to it.
Betterment levies	There are currently no betterment levy mechanisms used for development in Victoria though negotiated agreements allow for provision of public benefit works in return for additional development rights. In the Central City Built Form Review the State Government has proposed that developments which exceed the base floor area ratio will be matched by public benefits such as on-site public open space and laneways, or social housing within the development. This is an explicit betterment levy scheme, recognising the value of granting additional development rights and requiring equivalent in-kind public works.[36]
Development bonuses or sale of bonus GFA	Because plot ratios or floor space ratios are less prevalent as a planning control in Victoria (compared to Queensland and NSW respectively) development bonuses are rarely used. Nevertheless, as in NSW, voluntary agreements can be negotiated between development proponents and councils in Victoria, under the *Planning and Environment Act 1987*. This allows for councils to negotiate with proponents to provide infrastructure and/or monetary contributions for infrastructure. As mentioned above the Victorian government has recently proposed changes to the planning controls within the Melbourne CBD to introduce incentives for developers in exchange for public benefits.[37] The proposal has suggested that if developers provide on-site public space or laneways, office uses, public space within the development or social housing, they may be entitled to a floor area ratio above 18:1.
LEVERAGING GOVERNMENT INTEREST IN LAND	
Development or air rights	The Victorian government has policies which identify surplus land and the conditions under which it can be sold and developed for a higher use.[38] In 2014, it was announced that under a Station Precinct Enhancement Program many government owned sites adjacent to train stations and which were not needed for transport purposes would be put up for sale.[39] For the government to maximise and capture the value from the sale of the land, effective planning of the subject sites is required. A recent example of development rights being leveraged in exchange for infrastructure is with the contract for the Melbourne Metro rail tunnel, where the successful bidder will

[34] State Revenue Office Victoria, 2016, 'GAIC land and administration,' http://www.sro.vic.gov.au/gaic-recordings-certificates-and-notices

[35] See http://www.sro.vic.gov.au/growth-areas-infrastructure-contribution

[36] SGS Economics and Planning, 2016, Central City Built Form Review – Economic Issues Final report Prepared for the Department of Environment, Land, Water and Planning, February http://www.delwp.vic.gov.au/__data/assets/pdf_file/0003/330195/Central-City-Built-Form-Review-Economic-Issues-Final-Report-2016.pdf

[37] Department of Environment, Land, Water and Planning, 2016, 'Shaping Melbourne's Central City,' http://delwp.vic.gov.au/__data/assets/pdf_file/0010/330211/C270-Central-City-Built-Form-Summary-Doc.pdf

[38] Treasury and Finance, 2016, 'Victorian Government Land Sales,' http://www.dtf.vic.gov.au/Infrastructure-Delivery/Victorian-Government-land-sales

[39] Jewell, 2014, 'Victorian government to sell of unused rail land,' http://www.thefifthestate.com.au/innovation/planning/victorian-government-to-sell-off-unused-rail-land/60465

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
	have development rights for two prominent sites in the CBD in exchange for the tunnel works.[40]
Joint venture developments	As in NSW, the Victorian government often partners with private sector entities to deliver major infrastructure projects, often through the government's renewal agency Places Victoria.
Sale of advertising concessions	Roadside and public transport advertising is currently managed by Victrack and Vicroads, such as for the large format billboards along road and rail corridor and in train stations across Melbourne. Revenue from these types of sources will be returned to the agency owning the asset and is thereby available for services and administration provided by that agency.
HYPOTHECATED OR BENEFITTED AREA RATES	
'Special rates' for benefitted areas	Special rates can be applied by Victorian councils under the *Local Government Act 1989*, including for elements such as footpaths, roads, kerbs, etc., but must be levied in proportion to the benefits the works generate. In this way they could be characterised as a user levy or charge, levied recurrently on 'end users' rather than 'up-front' on developers (which makes them a more efficient charging mechanism). Because they are limited to use by local councils, special rates have not been used for the purpose of funding major transport infrastructure projects or as a value capture mechanism. Ratepayers also have rights to object if more than two thirds of a project cost is proposed to be raised through a special charge.[41]
Rates applicable to whole LGAs	Councils are able to levy a common, flat service or municipal charge on all properties in the LGA to cover waste collection for example or Council administration costs under the *Local Government Act 1989*. One older example of an LGA wide rate being used is the levy that was charged to City of Melbourne ratepayers between 1963 and 1995, in combination with a surcharge on train tickets, to fund 25% of the cost of the City Loop rail network.[42] This charge required legislation. Parks Victoria is part funded by a Parks Charge which is paid once a year, under Section 139 of the *Water Industry Act 1994*. The charge applies to all Victorian ratepayers, though there are exemptions for farms, crown land, land used for public purposes (such as a school), unrateable land as defined under the *Local Government Act 1989*, and recreational lands as determined under the *Cultural and Recreational Land Act 1963*.[43] It applies as a rate in the dollar based on Net Annual Value (NAV) but most properties pay a minimum charge of $70.62. Only properties valued by the Local Council over $333,609 will pay more than the minimum charge. Such a charge assumes parks provision adds to property values and is a form of broad based value capture. A similar mechanism, the Melbourne Water Waterways and Drainage Charge, is collected under the *Water Act 1989* on behalf of Melbourne Water. This provides funding for managing the health of waterways, riparian vegetation, flood protection and drainage services in the Port Phillip Bay catchment area.[44] A minimum annual charge is applied for residential ($95.48) and rural properties ($52.48), with a minimum and rate in the dollar charge for non-residential properties ($109.80 + 1.1684 cents in the dollar of NAV).
Tax increment financing (TIF)	TIF mechanisms are not currently used in Victoria, and would likely require changes to legislation to implement.
TAXES ON PROPERTY TRANSACTIONS	
State Stamp duties	Stamp duty in Victoria is administered under the *Duties Act* 2000, with the amount paid dependent on whichever is greater of the price paid for a property or the market value.

[40] See Carey, 2016, 'Melbourne Metro rail tunnel contract includes offer to build new CBD towers,' http://www.theage.com.au/victoria/melbourne-metro-rail-tunnel-contract-includes-offer-to-build-new-cbd-towers-20160428-gohi67.html

[41] Victorian Government, 2015, 'Guide to Councils – Rate and charges,' http://knowyourcouncil.vic.gov.au/guide-to-councils/finance-and-planning/rates-and-charges

[42] See SGS, 2015, *Draft Report*, prepared for Rail, Tram and Bus Union (RTBU Australia), September 2015, http://www.rtbu.org.au/innovative_funding_models

[43] Parks Victoria, 2016, 'how we're funded,' http://parkweb.vic.gov.au/about-us/who-we-are/how-were-funded

[44] See Melbourne Water, 2016, 'Waterways and drainage charge,' http://www.melbournewater.com.au/aboutus/customersandprices/Documents/WP3%20FAQs%20WWDC.pdf

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
	This is calculated on a sliding scale, ranging between properties valued at under $25,000 to those valued above $960,000. In Victoria the duty applies to primary homes (though a concession is available) as well as investment, business and primary production land properties.[45] The Victorian Government has recently floated the idea of removing stamp duty and replacing it with broader based land tax, but has not yet implemented the reform.[46]

Queensland

TABLE 6. MECHANISMS IN QUEENSLAND

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
RECURRENT TAXES ON LAND OR PROPERTY	
State land taxes	Land tax in Queensland is charged on freehold land, with principle homes exempt (provided they are not used for business or other purposes), and generally only applies on properties valued above $600,000.[47] Like NSW and Victoria, Queensland also charges a higher rate for foreign investors.[48]
Local government property rates	Local governments in Queensland have some flexibility in how they charge their rates. A general rate can be applied based on unimproved land values as a rate in the dollar amount, or a minimum rate which is paid irrespective of value.[49] Councils can charge a differential rate based on factors such as land use, access or use of council services, and could potentially be used to target value uplift. Queensland councils can also levy charges on all or sections of land within their LGAs to fund particular services (see hypothecated or benefitted area rates below).
DEVELOPMENT CONTRIBUTIONS	
Local infrastructure charges	The infrastructure charges system in Queensland underwent a review in 2013 and 2014.[50] The *Sustainable Planning (Infrastructure Charges) and Other Legislation Amendment Act 2014* will require local governments to have a Local Government Infrastructure Plan (LGIP) as part of their planning schemes from July 2016, which identifies the trunk infrastructure (i.e. infrastructure between and outside of individual developments) required within an LGA to service expected urban development. Charges are able to be levelled on developers where additional demand will be placed on local infrastructure as a result of their development. The maximum chargeable amounts are set out in the *State Planning Regulatory Provision (adopted charges)* under the *Sustainable Planning Act 2009*. Under the new system, if local councils set their developer contributions in line with a 'fair value schedule of charges' (10% below the cap for residential and 15% for non-residential), they will be able to access funding from a co-investment program to fund priority infrastructure. This is intended to incentivise development while ensuring an adequate level of funding is accrued from developers. As in NSW where a cap on Section 94 contributions exists, these reforms have significantly diluted the 'user pays' based price signals of the previous system, where charges were based on a total cost apportionment basis.

[45] State Revenue Office Victoria, 'Land Transfer Duty,' http://www.sro.vic.gov.au/land-transfer-duty

[46] See Collyer, 2016, 'Victoria thinks the unthinkable – land tax,' https://www.prosper.org.au/2016/03/03/victoria-thinks-the-unthinkable-land-tax/

[47] Queensland Government, 2016, 'Land Tax,' https://www.qld.gov.au/environment/land/tax/

[48] See Ludlow, 2016, 'Qld government hit foreign investors with new property tax,' http://www.afr.com/news/politics/qld-government-hit-foreign-investors-with-new-property-tax-20160608-gpez6m

[49] Department of Infrastructure, Local Government and Planning, 2016, 'Rates and Charges,' http://www.dilgp.qld.gov.au/local-government/finance/rates-and-charges.html

[50] See Department of Infrastructure, Local Government and Planning, 'Local government infrastructure planning and charging framework review,' http://www.dilgp.qld.gov.au/infrastructure/local-government-infrastructure-planning-and-charging-framework-review.html

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
State level infrastructure charges	Under the *Economic Development Act 2012*, the Minister for Economic Development Queensland (MEDQ) can levy charges and other terms for the provision of infrastructure in designated Priority Development Areas (PDAs) which have been specified for accelerated development.[51] The framework for the charges differs between PDAs. In some areas there is both a general infrastructure charge and a value uplift component levied, based on land use type and GFA. In greenfield PDAs (currently Greater Flagstone and Yarrabilba, Ripley Valley and Caloundra South), there are also State charges to reconfigure lots with a Plan of Development (reconfiguration of a lot) or for a Material Change of Use, and a Special Infrastructure Levy applied per residential lot.[52]
Betterment levies	As mentioned above Queensland has an explicit betterment levy or 'value uplift' charge for infrastructure which applies in its Priority Development Areas. This is the only such value capture charge operating in Australia.
Development bonuses or sale of bonus GFA	An example of a development bonus policy used in Queensland is the Gold Coast's *City* Plan, which allows for residential density bonuses to be given provided that community benefits are included above those that would normally be provided to meet planning controls. The total density bonus is limited to 40% above the normal ratio, with additional bonuses given for environmentally sustainable design, landscaping, community facilities, greater accessibility, and increased street activation.[53]
LEVERAGING GOVERNMENT INTEREST IN LAND	
Development or air rights	An example of this being used in Queensland is as part of Stage 1 of the Gold Coast light rail. A number of properties were acquired along the route for construction uses. As these sites were no longer required, they are being progressively sold off. The uplift in value generated by proximity to rail line is accruing to the government and contributing to paying down the overall project cost.
Joint venture developments	The Queensland government has undertaken joint developments with private partners in the past, and is seeking to do so in current projects like the CQ University campus in Rockhampton. There don't appear to be any projects to date which have focused specifically on value capture around major transport lines, though there is not obvious constraint on the government from doing so.
Sale of advertising concessions	The sale or lease of advertising space can is being used to fund part of the operating costs of the Gold Coast light rail. It was initially expected to contribute a large share of the funding needed, through selling space on the trams, but this has been revised down over the course of the line being constructed.[54]
HYPOTHECATED OR BENEFITTED AREA RATES	
'Special rates' for benefitted areas	Queensland councils can apply a levy on specific land which is expected to receive a special benefit from a particular service or facility, such as for road maintenance.[55] This could be used for value capture purposes in targeting areas improved by major transport infrastructure.
Rates applicable to whole LGAs	Queensland councils can also levy a charge on all properties within an LGA to fund a particular service that benefits the entire community, with examples such as purchasing land for environmental protection and waste management services. This type of mechanism has been used to partially fund stage 1 of the Gold Coast's Rapid Transit light rail network, in the form of a Transport Infrastructure Levy (TIL).[56] Each ratepayer is charged the $117 TIL annually, which is used to support investment in roads

[51] See Department of Infrastructure , Local Government and Planning, 2016, 'Infrastructure Funding Framework,' http://www.dilgp.qld.gov.au/planning/development-assessment/infrastructure-funding-framework.html

[52] Department of Infrastructure , Local Government and Planning, 2015, 'Economic Development Queensland Infrastructure Funding Framework, http://www.dilgp.qld.gov.au/resources/guideline/pda/infrastructure-funding-framework.pdf

[53] City of Gold Coast, 2016, http://cityplan.goldcoast.qld.gov.au/Pages/plan/viewer.aspx?vid=10133

[54] See Ardern, 2014, 'Expected tram advertising revenue has $87 million black hole,' http://www.goldcoastbulletin.com.au/news/gold-coast/expected-tram-advertising-revenue-has-87-million-black-hole/story-fnj94idh-1226906441212

[55] Department of Infrastructure, Local Government and Planning, 2016, 'Rates and Charges,' http://www.dilgp.qld.gov.au/local-government/finance/rates-and-charges.html

[56] See ABC News, 2011, 'Council boosts transport levy,' 3 June, http://www.abc.net.au/news/2011-06-03/council-boosts-transport-levy/2744456

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
	and transport generally, and as such it doesn't explicitly target the uplift in value created by infrastructure investment.
Tax increment financing (TIF)	TIF is not currently used in Queensland, and would likely require legislative changes.
TAXES ON PROPERTY TRANSACTIONS	
State Stamp duties	Transfer duty is payable in Queensland under the *Duties Act* 2001, and is based on whichever is greater of the price paid or value of a property. A concession is available for properties which are intended to be principal places of residence.[57] No duties apply to properties under $5,000 in value, with the highest rate bracket for properties above $1 million,[58] and the State government has recently announced plans to remove stamp duty for farm properties.[59] Foreign purchasers also pay an additional 3% from October 2016.

Western Australia

TABLE 7. MECHANISMS IN WESTERN AUSTRALIA

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
RECURRENT TAXES ON LAND OR PROPERTY	
State land taxes	Land tax in WA is calculated on unimproved land value, with none paid on values below $300,000. The rate is charged based on a bracketed system, with the highest rate levied for land valued at over $11 million, which is set at $186,550 plus $2.67 for every dollar above $11 million.[60] Land tax is charged on all properties excluding primary places of residence.[61] WA also charges a Metropolitan Region Improvement Tax (MRIT), which is used to fund land acquisitions to provide roads, parks and other public facilities.[62] The MRIT has been in place since the 1950's and only applies to LGAs within a specified metropolitan area, and only to the same properties that are subject to land tax. The rate is currently set at 0.14 cents for every dollar of aggregate taxable value of the land above $300,000. The WA Government had proposed introducing a similar charge for the regional parts of the State, but in the end only applied it to the Peel and Greater Bunbury districts in its 2015 Budget.[63]
Local government property rates	Like other jurisdictions, local government rates in WA are primarily used to fund local community services and facilities. The amount charged is based on a share of the gross annual rental value (GRV) of rateable land within urban areas, and unimproved land value in non-urban areas.[64] There have been proposals put forward by the State government to limit rate increases in line with CPI or other measures, but this has been met with significant opposition from WA councils who have argued that it will impact on their ability to provide adequate infrastructure and services.

[57] Queensland Government, 'Home transfer duty concession rates,' https://www.qld.gov.au/housing/buying-owning-home/home-transfer-duty-concession-rates/

[58] Queensland Government, 'Transfer duty rates,' http://www.qld.gov.au/housing/buying-owning-home/transfer-duty-rates/

[59] Queensland Government, 2016, 'Palaszczuk Government looking out for Rural Queensland,' Median Statement, June 14 2016, http://statements.qld.gov.au/Statement/2016/6/14/palaszczuk-government-looking-out-for-rural-queensland

[60] Department of Finance, 2016, 'What is Land Tax?' http://www.finance.wa.gov.au/cms/State_Revenue/Land_Tax/What_is_Land_Tax_.aspx

[61] See Department of Finance, 2016, 'Are you eligible for an exemption?' http://www.finance.wa.gov.au/cms/State_Revenue/Land_Tax/Exemptions.aspx

[62] Office of State Revenue, 2015, '2014-15 Land Tax,' https://www.finance.wa.gov.au/cms/uploadedFiles/_State_Revenue/Land_Tax/Land_Tax_Brochure_2014-15.pdf

[63] Emerson, 2015, 'Regional land tax scrapped,' https://au.news.yahoo.com/thewest/regional/south-west/a/28061056/regional-land-tax-scrapped/

[64] See City of Gosnells, 2016, 'What are local government rates?' http://www.gosnells.wa.gov.au/Your_property/Your_City_rates/What_are_local_government_rates

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
DEVELOPMENT CONTRIBUTIONS	
Local infrastructure charges	The State Planning Policy 3.6 Development Contributions for Infrastructure, was introduced in 2009 under the *Planning and Development Act 2005*, and applies across Western Australia.[65] It sets out the how local governments determine their developer contribution schemes to provide for community infrastructure. Development contributions generally apply within defined Development Contribution Areas (DCAs). The rate of charge levied is based on the total land area owned within the specified DCA that is undeveloped, and takes into account GST, development costs, interest, stamp duty and other taxes.[66] Like most jurisdictions, funds from developer contributions have to be used for the local area within the DCA and for the purposes set out in the relevant plan.
State level infrastructure charges	There is no system of state level infrastructure charges, though the MRIT is used to partly fund the acquisition of land required for state purposes, such as roads, transport and public space.
Betterment levies	There are currently no betterment levy mechanisms used in WA.
Development bonuses or sale of bonus GFA	WA councils are able to offer development incentives through their local planning policies. One such example is City of Perth's Planning Scheme No.2, which allows for Council to award additional plot ratio in exchange for the provision of public facilities, priority land uses, or the conservation of heritage places.[67] Contributions under the policy can be in the form of monetary contributions or in-kind works either on or off site. The policy generally allows for an increase of 20% in plot ratio per lot, with an additional 20% available if the development includes special residential uses (e.g. a hotel).
LEVERAGING GOVERNMENT INTEREST IN LAND	
Development or air rights	The WA Government has signalled that it will be releasing more land around transport corridors to improve housing affordability.[68] Thus implies the use of value creation for public benefits.
Joint venture developments	The literature scan does not reveal any significant joint developments for major projects.
Sale of advertising concessions	WA currently allows for advertising at its train stations, and as in some of the other States, this is managed by a private company for Transperth. In 2014-15 advertising revenue for the Public Transport Authority was over $6 million,[69] with this funding going towards partially offsetting subsidies for public transport.
HYPOTHECATED OR BENEFITTED AREA RATES	
'Special rates' for benefitted areas	Under WA's *Local Government ACT 1995*, specified area rates can be imposed on particular areas of land to meet the cost of providing a specified work, service or facility, provided that the ratepayers in that area benefit from the work, have access to it, and contribute to the need for it. Funding raised by these rates must be spent on the project for which the rate is imposed. As in other jurisdictions this is a form of user charge.
Rates applicable to whole LGAs	Local governments in WA can levy service charges across their council areas, but this is limited to certain purposes identified in the *Local Government (Financial Management) Regulations1996*, including underground electricity and neighbourhood surveillance.
Tax increment financing (TIF)	TIF is not currently used in WA, and would likely require legislative changes.
TAXES ON PROPERTY TRANSACTIONS	
State Stamp duties	Stamp duty is charged on land transactions, with the rate determined by the purchase price or value. Properties under $80,000 pay $1.90 per $100, while the highest bracket applied to properties over $500,000, at $19,665 and an additional $5.15 for every $100

[65] See Western Australian Planning Commission, 2016, 'State Planning Policy 3.6 Development Contributions for Infrastructure, http://www.planning.wa.gov.au/publications/1029.asp

[66] See *State Planning Policy 3.6 – Development contributions for* infrastructure, in Western Australian Government Gazette, November 2009, http://www.planning.wa.gov.au/dop_pub_pdf/sps3.6_dev_contributons.pdf

[67] City of Perth, 2015, *Planning Scheme No.2 – Bonus Plot Ratio*, http://www.perth.wa.gov.au/static_files/cityplanningscheme2/policies/4.5.1%20Bonus%20Plot%20Ratio.pdf

[68] See Hennessy, 2015, '$20 land release near Perth train stations to tackle affordability,' http://www.perthnow.com.au/realestate/news/perth-wa/20m-land-release-near-perth-train-stations-to-tackle-affordability/news-story/ed2452655c37762f885c852fd2d4b0da

[69] PTA, 2015, *Annual Report 2014-15*, http://www.pta.wa.gov.au/portals/0/annualreports/2015/pdfs/PTA%20Annual_Report_2014-15_Full_Report.pdf

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
	above that. A number exemptions and concessions can apply, including for residential properties, which have higher dutiable value thresholds than the brackets described above.[70]

South Australia

TABLE 8. MECHANISMS IN SOUTH AUSTRALIA

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
RECURRENT TAXES ON LAND OR PROPERTY	
State land taxes	Land tax is collected in SA under the *Land Tax Act 1936* and the *Taxation Administration Act 1996*. The rate charged relates to the total site value of a property, with properties valued under $323,000 paying no land tax. Principal places of residence are exempt from the charge.[71]
Local government property rates	Like most States, council rates in SA primarily fund local community services and infrastructure, rather than significant transport infrastructure projects. Rates are charged based on land and property value, which is revisited annually, and a rate in the dollar measure, as in Victoria.[72] Council rate increases aren't currently limited by the State Government as they are in NSW and Victoria.
DEVELOPMENT CONTRIBUTIONS	
Local infrastructure charges	In the past, SA has relied on negotiation of individual infrastructure agreements between state government authorities, local governments, utilities providers, and the developer without a documented process or clear apportionment rules.[73] Development contributions have previously been made at the time of land subdivision towards public open space under the *Development Act 1993*.[74] The Government has recently completed a series of reforms to the planning system under the *Planning, Development and Infrastructure Act 2016*. This requires the costs of defined infrastructure projects to be recovered through a charge on land within a contribution area, collected by the relevant council. Costs are to be established through an infrastructure plan in agreement between developers and existing residents.[75]
State level infrastructure charges	There is no system of state level infrastructure charges.
Betterment levies	There are currently no mechanisms for betterment levies to be applied in SA.
Development bonuses or sale of bonus GFA	It is not clear whether SA's planning reforms will allow for development bonuses to be granted for infrastructure provision. Previously, under Adelaide's Development Plan for the city area, bonus plot ratio could be granted in exchange for the provision of social infrastructure, including pre-schools and open space.[76]
LEVERAGING GOVERNMENT INTEREST IN LAND	
Development or air rights	The Government is intending to sell a number of sites around Port Adelaide, though there is no indication as yet that this will be used to leverage value capture related public benefits including for transport improvements, for example.[77]

[70] See Department of Finance, 2016, 'Transfer Duty,' https://www.finance.wa.gov.au/cms/State_Revenue/Duties/Transfer_Duty.aspx

[71] RevenueSA, 2016, 'Land Tax,' https://www.revenuesa.sa.gov.au/taxes-and-duties/land-tax

[72] Local Government Association of South Australia, 2016, 'Resourcing Council Services – Council Rates,' https://www.lga.sa.gov.au/page.aspx?u=326

[73] PWC, 2012, *Major Infrastructure Funding Alternatives*, prepared for Office of the Economic Development Board, July 2012, http://economicdevelopmentboardsa.com.au/wp-content/uploads/2013/07/2012_07-MajorInfrastructureFundingAlternativesreportfinal.pdf

[74] See SA Government, 'The Planning and Development Fund,' http://dpti.sa.gov.au/__data/assets/pdf_file/0003/118434/Pre-lodgement_The_Planning_and_Development_Fund_standard.pdf

[75] Department of Planning, Transport and Infrastructure, 2016, 'Planning Reform in South Australia,' http://www.dpti.sa.gov.au/planning/planning_reform

[76] Department of Planning, Transport and Infrastructure, 2014, 'Development Plan – Adelaide (City),' http://www.adelaidecitycouncil.com/assets/acc/Business/docs/30_January_2014_-_Adelaide_Council_Development_Plan.PDF

[77] See ABC News, 2015, 'Port Adelaide to be 'transformed after SA Government land sale, making way for housing, commercial development,' http://www.abc.net.au/news/2015-05-15/port-adelaide-to-be-transformed-by-sale-of-40ha-of-land/6472146

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
Joint venture developments	To date, joint ventures have been mainly in the form of PPPs for specific projects.
Sale of advertising concessions	Local governments and the State government have guidelines concerning the use of advertising, such as billboards. As in other jurisdictions, it the revenue generated by leasing out advertising space would be used to offset infrastructure costs or operations.
HYPOTHECATED OR BENEFITTED AREA RATES	
'Special rates' for benefitted areas	'Separate' rates are able to be used by councils under the *Local Government Act 1999*, to support activities that will be of particular benefit to the land in a particular area. Differential rates can also be applied based on zoning, land use, and to particular localities.
Rates applicable to whole LGAs	Councils in SA are able to levy additional service charges for infrastructure and other purposes, such as for waste management. Between 2003 and 2015, the Save the River Murray Levy was charged from the State level to all properties which sourced water from the River under the *Water Industry Act 2012*. This included both residential properties (which paid at least $40 per year) and non-residential properties (which paid at least $182 per year), to contribute to works to improve the River's health.[78]
Tax increment financing (TIF)	TIF is not currently applicable in SA, and would require legislative changes to use.
TAXES ON PROPERTY TRANSACTIONS	
State Stamp duties	The SA Government recently abolished stamp duties which previously applied to non-real property transactions, and is in the process of phasing out the duties on non-residential non-primary production real property transfers.[79] It has also recently extended concessions on stamp duty charges for apartments bought off-the-plan anywhere in the state. Stamp duty rates applied to real property transfers are based on whichever is greater of the value of the land including improvements or the price paid including GST.[80] Properties below $12,000 in value pay $1 for every $100, with the highest duty bracket being for those valued at over $500,000, paying $21,330 plus $5.50 for every $100 over that. The Government had also proposed removing all stamp duties on real estate transactions in favour of a broad-based land tax as part of its State Tax Review in 2015,[81] but has chosen not to implement those changes.

Australian Capital Territory

TABLE 9. MECHANISMS IN THE AUSTRALIAN CAPITAL TERRITORY

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
RECURRENT TAXES ON LAND OR PROPERTY	
State land taxes	Land tax in the ACT is a fixed charge (currently $945) with marginal rates applied to the unimproved land value of the property (between 0.41% on values up to $75,000 and 1.23% for those valued above $275,001).[82] Commercial properties have not been charged land tax since 2012. The tax is charged under the *Land Tax Act 2004*, and makes up part of the Government's general revenue.
Local government property rates	Rates in the ACT are charged under the *Rates Act 2004*, and are calculated based on a fixed charge and a valuation charge based on unimproved land value.[83] The rates also differ between residential, commercial, and rural properties, and between unit and non-unit buildings. Funding from rates generally goes towards maintenance of roads and paths, recreational areas and community facilities, waste services, streetscape

[78] Department of Environment, Water and Natural Resources, 2015, 'Save the River Murray Levy abolished,' http://www.environment.sa.gov.au/Home/Full_newsevents_listing/News_Events_Listing/150617-save-river-murray-levy-abolished

[79] SA Government, 2016, 'The facts about tax reform in South Australia,' http://www.taxreform.sa.gov.au/

[80] RevenueSA, 'Stamp Duties,' http://www.revenuesa.sa.gov.au/taxes-and-duties/stamp-duties

[81] See ABC News, 2015, 'Annual homeowner tax of $1,200 an option in SA Government's overhaul of state's tax system,' 11 February, http://www.abc.net.au/news/2015-02-11/sa-government-releases-discussion-paper-on-tax-system/6085352

[82] See ACT Revenue Office, 'Land Tax,' http://www.revenue.act.gov.au/duties-and-taxes/land-tax

[83] See ACT Revenue Office, 'Rates,' http://www.revenue.act.gov.au/duties-and-taxes/rates

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
	maintenance, and other essential services. Rates in the ACT have been increased in recent years as part of the process of phasing out stamp duty (see below).
DEVELOPMENT CONTRIBUTIONS	
Local infrastructure charges	The ACT does not have a system for collecting infrastructure charges. Because new release land is owned by the ACT Government, planning for local development infrastructure can occur 'up-front' and the required costs are able to be internalised in the price which developers are prepared to pay to develop the land. In this way, the government interest in land is able to be leveraged for public benefit (see below).
State level infrastructure charges	Due to the ACT being both a State/Territory and local level government, there are no distinct state or local categories of infrastructure. Costs for state equivalent infrastructure are internalised into the cost of developing land as described above.
Betterment levies	The Lease Variation Charge (LVC) effectively captures the value of uplift gained when land is rezoned. The LVA is unique to the leasehold system of property ownership in the ACT, and targets the unearned uplift property owners receive from a change in use of land, such as an increase in the allowable number of dwellings on a site. It is currently designed to capture 75% of the value uplift and is determined through either a valuation or a codified regime. Charges levied under the codified regime are prescribed through a table of fees, with a charge for each additional unit in residential developments, and per square metre of GFA for commercial developments. The valuation method multiplies the value of the property after the change of use compared to prior by 75%. The LVC has been vocally criticised by the property development industry as stifling development, and in recent years has consistently generated less revenue than forecast in ACT Government budgets.
Development bonuses or sale of bonus GFA	The ACT Government doesn't currently have a density bonus scheme in operation. Under the current and draft Master Plans for the Woden and Belconnen Town Centre's respectively, it has proposed allowing developers extra building heights on sites within the town centres if they meet a set of criteria. The proposed criteria include producing a higher quality of design, off-site works, increases in minimum unit sizes and the proportion of adaptable housing, and higher standards of energy efficiency and sustainable design.[84] This is somewhat perplexing as the current LVC arrangements should enable the Government to capture the uplift in value from the granting of additional development rights in any case. By seeking public benefits beyond what is allowed in planning controls – in addition to LVCs – it may be that the government is 'double-dipping'.
LEVERAGING GOVERNMENT INTEREST IN LAND	
Development or air rights	As mentioned above, because undeveloped land designated for future urban development is government owned, the system of leveraging value for public benefits and infrastructure is well developed in the ACT. New release greenfield land is made available to developers via the Land Development Agency (LDA) through expressions of interest and the price developers are prepared to pay will reflect requirements for local or state level infrastructure provision established by the ACT Government. In infill areas, there has been less opportunity for development or air rights to be leveraged as part of infrastructure improvements in the ACT, because there have been few investments in major transport infrastructure. The light rail investment is expected to enable infill land to be redeveloped at higher densities in the corridor. The ACT Government will capture a share of the value uplift when it redevelops the public housing estates it owns and through the LVC mechanism discussed above.
Joint venture developments	To some extent, the system of land development in the ACT is based on joint development, with government retaining ownership pf the land, and provision for private development made possible through the leasehold system. In this way, for example, the LGA often undertakes redevelopment in partnership with private entities. Redevelopment of land in the new light rail corridor will present new opportunities for the ACT Government to capitalise on value uplift through joint developments.

[84] See ACT Government, 2015, *Woden Town Centre Master Plan*, http://www.planning.act.gov.au/__data/assets/pdf_file/0011/42140/Woden_Master_Plan-web.pdf; ACT Government, 2015, *Belconnen Town Centre Draft Master Plan*, http://www.planning.act.gov.au/__data/assets/pdf_file/0006/41847/Draft_Belconnen_master_plan-WEB-25Sept.pdf

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
Sale of advertising concessions	As there are currently no major transit stations in Canberra, the ACT Government only offers advertising space at bus shelters and on the buses themselves. This is managed by two separate companies.[85] Revenue from advertising was $545,000 in 2015, and would be applied to offset the costs of operating the bus network.
HYPOTHECATED OR BENEFITTED AREA RATES	
'Special rates' for benefitted areas	The ACT does not currently have a system of charging different rates for particular areas which benefit from infrastructure investment. The option of a levy on nearby properties to fund the light rail line between the City and Gungahlin was previously raised by the ACT Government but has been ruled out in the face of criticism from the development community.[86] Given the LVC system is in place it is surprising the ACT Government made this suggestion.
Rates applicable to whole LGAs	As above, due to the ACT being both a State/Territory and local level government.
Tax increment financing (TIF)	TIF is not currently used in the ACT, and would require policy and legislative changes.
TAXES ON PROPERTY TRANSACTIONS	
State Stamp duties	In 2012, the ACT Government announced it would be phasing out stamp duties over a 20 year period, and introducing a property tax as part of rates paid by property owners to replace it. Since then, the rate at which duty is paid has been slowly reduced. For example, the rate for residential and commercial transactions below $200,000 was reduced from 2.4% in 2012 to 1.48% in 2016, and will eventually reach zero.[87] The rates for commercial properties are being reduced at a faster rate than for residential buildings.

Federal level

TABLE 10. FEDERAL LEVEL MECHANISMS

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
TAXES ON PROPERTY TRANSACTIONS	
Goods and Services Tax (GST)	The Goods and Services Tax (GST) is currently applied across Australia to most goods, services and other items, at a rate of 10%, under the *A New Tax System (Goods and Services Tax) Act 1999*. GST applies to sales of land, commercial premises and residential properties (but not to the sale of new residential properties), and to the construction inputs associated with the development of new infrastructure and buildings. Because of the exemptions applied currently, GST not really a property or land based value capture mechanism. However, where government investment and policy generates economic activity, that is captured in higher GST revenue, and as such it acts as a more general value capture tax. Revenue from GST is currently distributed to the States based on a per-capita share and 'relativity' factor, and is not distributed solely on where the revenue was raised.[88]
Capital Gains Tax (CGT)	CGT is collected under the *Income Tax Assessment Act 1997*, and is based on the income tax rate of the owner of the asset which is the subject of the tax. CGT is applied at the point of sale for different assets, including property, though it does not apply to primary residences. For eligible properties, 50% of the value of the uplifts from the purchase price is taxed at the seller's marginal tax rate. Though partial in its application, CGT is clearly a value capture mechanism as it increases with value. As new infrastructure increases the value of adjacent land and properties,

[85] See ACT Government. 'Bus Advertising,' https://www.action.act.gov.au/About_ACTION/bus_advertising

[86] See McIlroy, 2015, 'Property group calls for government to rule out light rail taxes or charges,' http://www.canberratimes.com.au/act-news/property-group-calls-for-government-to-rule-out-light-rail-taxes-or-charges-20150728-gilylh.html

[87] ACT Revenue Office, 'Land and improvements,' http://www.revenue.act.gov.au/duties-and-taxes/duties/land-and-improvements

[88] Dale, 2014, 'Distributing GST revenue to the states: Where is the revenue raised and what is a 'relativity'? http://www.aph.gov.au/about_parliament/parliamentary_departments/parliamentary_library/flagpost/2014/july/gst-relativities-where-is-revenue-raised

MECHANISM	LEGISLATIVE AND REGULATORY FRAMEWORKS
	the extra revenue generated through the CGT as a result could be used as funding for infrastructure projects. The Australia Institute has proposed that the CGT should apply to the sale of houses worth over $2 million in value (including primary residences to which it currently does not apply),[89] though this idea hasn't been taken up by the Government, and has been criticised by the Property Council.

[89] Australia Institute, 2016, 'Australia's biggest tax break: Capital Gains Exemption,' http://www.tai.org.au/content/australia%E2%80%99s-biggest-tax-break-capital-gains-exemption

APPENDIX 2: EVALUATION OF MECHANISMS

Overview

A list of broadly defined 'value capture' mechanisms operating in Australia, or suggested in recent literature, includes the following.

Recurrent taxes levied on underlying land value and on particular classes of property, for example:

- State land taxes
- Local government property rates

Taxes on property transactions, for example:

- Federal Goods and Services Tax
- Federal Capital Gains Tax
- State Stamp Duties

Development contributions, for example:

- Local development infrastructure charges
- State level infrastructure charges
- Betterment levies for additional development rights
- Provision of public benefits in return for development bonuses / sale of bonus gross floor area (GFA)

Leveraging government interest in land, for example:

- Development of impacted government owned land, or sale of air rights for development above this land
- Joint venture developments
- Sale of advertising concessions at stations or in motorway corridors.

Hypothecated or benefitted area rates and charges, for example:

- 'Special rates' for benefitted areas
- Separate rates or charges applying to whole LGAs
- Tax increment financing

Each of these is described below including how the mechanism applies to the funding of transport infrastructure projects (if at all), the source of the funding and the timing of payment. A diagram 'explaining' the incidence of the mechanism given the property and project cycle context over time and by reference to the component of value uplift is included where relevant.

Assessment criteria

Each of the mechanisms is then qualitatively evaluated using the following criteria:

- **Applicability** – mechanisms are available and applicable given the existing Australian legislative and regulatory environment.
- **Revenue yield** – mechanism is worthwhile from a revenue perspective given costs of collection and required expenditure
- **Revenue reliability** – revenue source is stable and predictable
- **Economic efficiency** – mechanism does not negatively distort land, property and labour markets, or 'double dip'
- **Clarity** – that the logic for the mechanism is clear with costs and benefits explicitly understood and clear to all
- **Equity** – people in similar economic circumstances are treated equally; costs are borne by those who benefit.
- **Extent of barriers to implementation** – mechanism will be accepted by stakeholders, can be incorporated within the project development cycle.

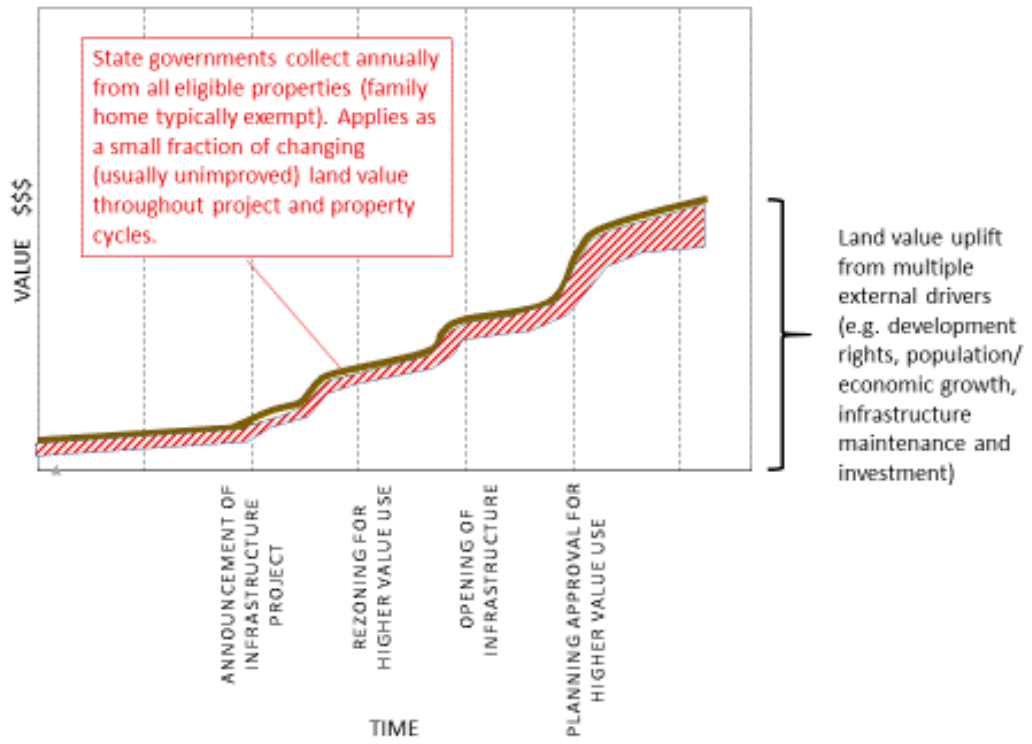
The evaluation generally takes two perspectives: firstly, how does the mechanism perform on its own terms given its current role in infrastructure funding and secondly, how would it perform if modified or reformed with the aim of an enhanced role in funding major transport and other state level infrastructure. This distinction is emphasised in the evaluation summary 'spider web' diagrams that precedes the detailed evaluation against each criteria.

Recurrent taxes: State land taxes

Description	Project application	Source of funds
Land tax is levied on a different basis in each state, but generally applies to land parcels and properties excluding primary residences. It is typically levied with a base component then on a staggered basis as a percentage of property value above certain thresholds. Uplift in the value of land as a result of transport infrastructure investment and other economic development generates a higher amount of land tax, and in this way is a true value capture mechanism.	Contributes to general state revenue, not project specific	Annual payment by eligible land or property owners

Property value uplift through project and planning cycle

FIGURE 10. INCIDENCE OF STATE LAND TAX



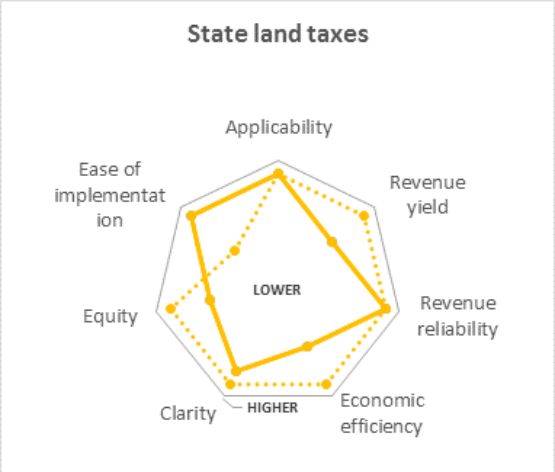
Evaluation summary

——— **Solid line and marker**
Current role in state infrastructure funding -

Existing arrangements including major exemptions

••••••••• **Dotted line and marker**
Possible future 'value capture' role for major infrastructure funding -

Reform to broaden base to include most property



Applicability

Land tax is already applied in each jurisdiction, with all of the systems exempting primary residences from tax calculations. Broadening the land tax base by lifting exemptions would enable the mechanism to regularly capture the uplift in value generated by transport investments and realised development potential. Typically, land taxes have been collected as part of general state revenue but it would be possible to broaden the base and explicitly allocate all or part of the increase in revenue to transport or other investments with public benefits. To some extent this is already the case with the Metropolitan Region Improvement Tax (MRIT), which is used to fund land acquisitions to provide roads, parks and

other public facilities in WA, though the land tax exemptions (including exempting principal residences) also apply to the MRIT.

Revenue yield

Land tax is generally a smaller revenue stream than stamp duty, but is a consistent source of funding. The current exclusion of primary or owner-occupied residences severely limits the potential revenue that can be gained from the tax. Yields would strengthen with increases in property value if the incidence of the tax was tied to a rate in the dollar, and if current exemptions were lifted.

Revenue reliability

Land tax is a stable and predictable source of revenue as the subject of the tax is immobile, and it is more stable than other taxes such as stamp duty, because it does not rely on a transaction taking place.

Economic efficiency

Land tax is seen as a very efficient way of raising revenue, because the land on which it is based is immobile, which means it can't be 'shifted' to lower or no taxing regimes, nor avoided given the central role of real property in the market economy. However, as advocated by the Henry Tax Review, land tax regimes would be more efficient in Australia if there were fewer exemptions, with the taxable properties expanded to include all land, including family homes.[90] A number of reports examining opportunities for tax reform in recent years have also advocated removing state stamp duties in favour of a broader land tax applicable to properties which are currently exempt.[91]

Clarity

The system for the collection of land tax is a straightforward and transparent process and the payment of property related taxes is a well understood concept by the broader public.

Equity

Land and property taxes can tend to affect those who are more reliant on physical assets than on income, and conversely benefit those on higher incomes. The inequities of taxing people who are 'asset rich but income poor' arises. There are systems of compensation which can be introduced, but to some extent the reason for taxing property is to encourage behaviours which maximise utility and income earning potential. Therefore, compensation mechanisms need to be carefully designed not to remove some of that incentive. In general, using land taxes as a means of value capture is geographically equitable, as those who most benefit from uplifts in land value will be those who contribute the most.

Extent of barriers to implementation

The administrative barriers to broader use of land tax are modest, given that state governments already have land tax systems in place, and the explicit power to extend or adjust the rates at which the tax applies. The political barriers to extending the tax to principal places of residence and family homes, are however, significant. Beginning in metropolitan areas with an explicit hypothecated 'transport levy' based on progressive land taxation principles (learning from the Melbourne Parks Charge and the MRIT)

[90] See *Australia's Future Tax System: Final Report*, Chapter 6: Land and resource taxes, http://taxreview.treasury.gov.au/content/FinalReport.aspx?doc=html/publications/papers/Final_Report_Part_1/chapter_6.htm

[91] See Deloitte Access Economics, 2016, *The revenue raising potential of a broad-based land tax*, prepared for the Property Council of Australia, March 2016, https://www.propertycouncil.com.au/AsiCommon/Controls/BSA/Downloader.aspx?iDocumentStorageKey=90e43349-f7d7-4bda-856e-6947c34e54c7&iFileTypeCode=PDF&iFileName=Deloitte%20Report%20-%20The%20revenue%20raising%20potential%20of%20land%20tax; KPMG, 2016, *Economic Modelling of Property Tax Reform Options*, prepared for NSW Business Chamber, February 2016, https://www.nswbusinesschamber.com.au/NSWBCWebsite/media/Policy/Thinking%20Business%20Reports/FINAL-NSWBC-NCOSS-Taking-on-Tax-Report.pdf; McKell Institute, 2016, *A plan to end Stamp Duty: Making property taxation fairer in New South Wales*, March 2016, http://mckellinstitute.org.au/wp-content/uploads/2016/03/McKell_Stamp_Duty_Land_tax.pdf

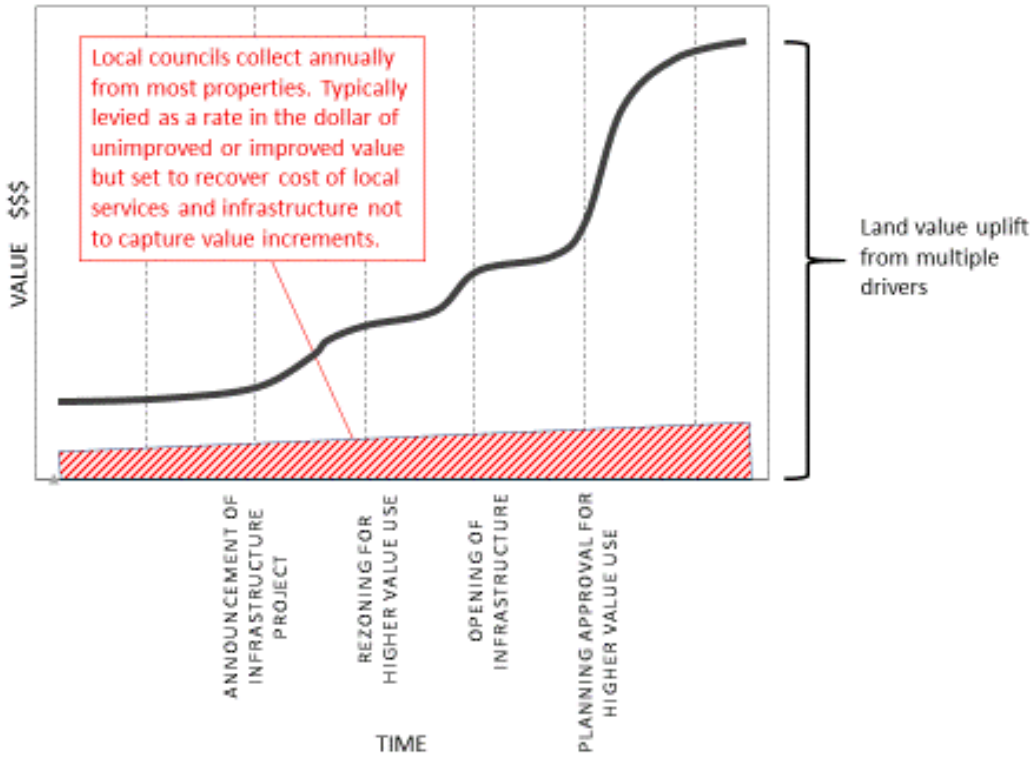
might be an alternative to a more abstract and comprehensive broadening of the existing land tax regime.

Recurrent taxes: Local government property rates

Description	Project application	Source of funds
Local government rates apply to most private properties and are administered primarily by the relevant local council. Funding from rates is mostly used for local services and maintenance of community facilities. Rates are notionally based on a percentage of property value (either unimproved or capital improved) though a minimum flat rate is often charged for properties below a certain value. Typically, rates are set by reference to the cost of service provision and administration, and are therefore more of an administrative and service charge rather than an explicit value capture mechanism.	Contributes to general local revenue, not project specific	Annual payment by land or property owners

Property value uplift through project and planning cycle

FIGURE 11. INCIDENCE OF LOCAL GOVERNMENT PROPERTY RATES



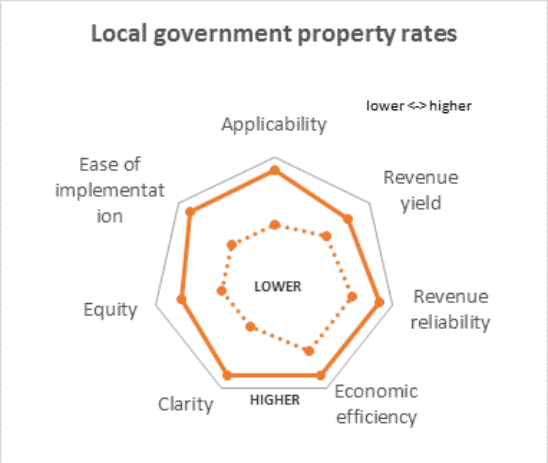
Evaluation summary

——— **Solid line and marker**
Current role in local government funding –

Existing arrangements as 'fit for purpose' local services and infrastructure funding mechanism

••••••• **Dotted line and marker**
Possible future 'value capture' role for major infrastructure funding –

Reform to extract or increase share for state level infrastructure



Applicability

Local government rates are already applied in all Australian States and Territories, but in most cases the revenue generated is only used for local government services and infrastructure (South-east Queensland with its larger councils is the exception, with local revenues sometimes spent on major transport services and infrastructure).. It would take a major shift in approach for the local government rating system to be widened to fund major transport infrastructure on a value capture basis. An extension to the land tax system would be a more logical approach.

Revenue yield

Rates make up a large proportion of the funding received by local governments, though in some jurisdictions, the state government limits how much rates can rise each year. It would be difficult to justify a reform to the local property rating system that would contribute to a significant share of major transport infrastructure funding.

Revenue reliability

As they are paid yearly and are a well-established revenue source for local councils, rates are a highly stable source of funding. A legislated system whereby local rates funded major transport infrastructure would presumably also generate a reliable revenue stream.

Economic efficiency

Local rates are an efficient tax for all the same reasons that land tax is, though in all jurisdictions modest inefficiencies have been introduced as rates have transitioned away from their link to property values towards being charges. Most jurisdictions levy a minimum charge as a base amount, unrelated to value. However, unlike land tax, council rates apply to nearly all properties including owner-occupied houses, and are therefore more broad based and more efficient.

Clarity

Council rates, including the threshold levels and how they are calculated, are publicly available and have a relatively high level of transparency. It is understood that council rates are needed in order for most local services to be delivered, so their purpose and benefits are also clear to the public. It would be much less clear if rates were extended, or a share of rate revenue was diverted, to fund major transport infrastructure.

Equity

Like land tax, there is the potential for those who are 'asset rich and income poor' to be more affected by any rise in council rates, where these rises relate to a rise in property values. Compensation or hardship provisions may be available to poorer ratepayers. On the other hand, there is a certain 'levelling out' of the impact of differences in property values from the fact that most jurisdictions levy a minimum rate or charge irrespective of property value, reflecting the service charge nature of local government rates. In this way the system is less progressive and owners of lower valued properties might feel they are carrying more of the financial burden. State governments are sensitive to rises in local government property rates hence the introduction of rate capping systems in NSW and Victoria.

Extent of barriers to implementation

Adjusting property rating systems to ensure they meet the evaluation criteria for the job that they are intended for (i.e. funding local government services and infrastructure) should be the priority for any reform. They have no role as a value capture mechanism for state level infrastructure funding. An extended land tax system or explicit rate surcharges clearly associated with funding state level infrastructure would be preferred.

Taxes on property transactions: Federal Goods and Services Tax

Description	Project application	Source of funds
The Goods and Services Tax (GST) is currently applied across Australia to most goods, services and other items, at a rate of 10%. The ATO advises that generally, "selling or renting existing residential premises are input-taxed sales and do not include GST. However, if the residential premise is considered 'new', it is a taxable sale and GST is applicable."[92] Different provisions apply to the supply and purchase of commercial premises. GST is payable on the construction inputs associated with the development of new infrastructure and buildings. Because of the exemptions applied currently, GST is not really a property or land based value capture mechanism. However, where government investment and policy generates economic activity that is captured in higher GST revenue it plays a role as intended as a value added tax.	Contributes to general federal revenue, passed on to the states, not project specific	Payable on purchase of eligible goods and services including on construction inputs and some property sales

[92] Australian Taxation Office (2 June 2015) Residential Premises, https://www.ato.gov.au/Business/GST/When-to-charge-GST-(and-when-not-to)/Input-taxed-sales/Residential-premises/

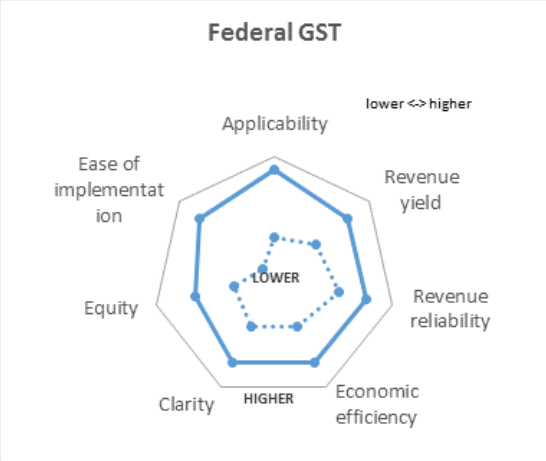
Evaluation Summary

———— Solid line and marker
Current role in federal government funding –

Existing arrangements to raise revenue for general federal and state government expenditure

••••••••• Dotted line and marker
Possible future 'value capture' role for major infrastructure funding –

Reform to apply more uniformly to property transactions with a share dedicated to infrastructure



Applicability

GST-type taxes (e.g. value added or sales taxes which sometimes apply in local jurisdictions) have been used overseas for value capture purposes, or have been hypothecated for infrastructure funding. Because GST is a federal government levied tax it would be difficult to engineer such a shift in Australia. Many property transactions are GST exempt and this would need to be reviewed. Furthermore, by its nature as a tax which is in addition to the market price of goods it does not have any value capture characteristics.

Revenue yield

Because GST is not applicable to existing residential property sales, it would be limited in the amount of revenue it could generate as part of a value capture scheme.

Revenue reliability

GST is a stable source of revenue, though like other taxes discussed here, it can be influenced by wider property market trends and economic fluctuations.

Economic efficiency

Using the GST as part of a value capture scheme would be difficult, as it is hard to allocate GST revenue to any particular project under the current system. It is undesirable to do so as GST is forwarded to the states on an untied basis for allocation according to state budgetary priorities and this is appropriate.

Clarity

The application of the GST is transparent and clear, though some current exemptions render it slightly less so (though the exemptions have an equity rationale). Specifically widening or allocating the GST to somehow reflect value creation from and fund infrastructure provision would be convoluted and introduce less clarity.

Equity

GST applies at a flat 10%, and as such the amount of GST paid in property transactions where it applies will be proportional to value. This is equitable in theory, though it doesn't take into account the ability of people to pay.

Extent of barriers to implementation

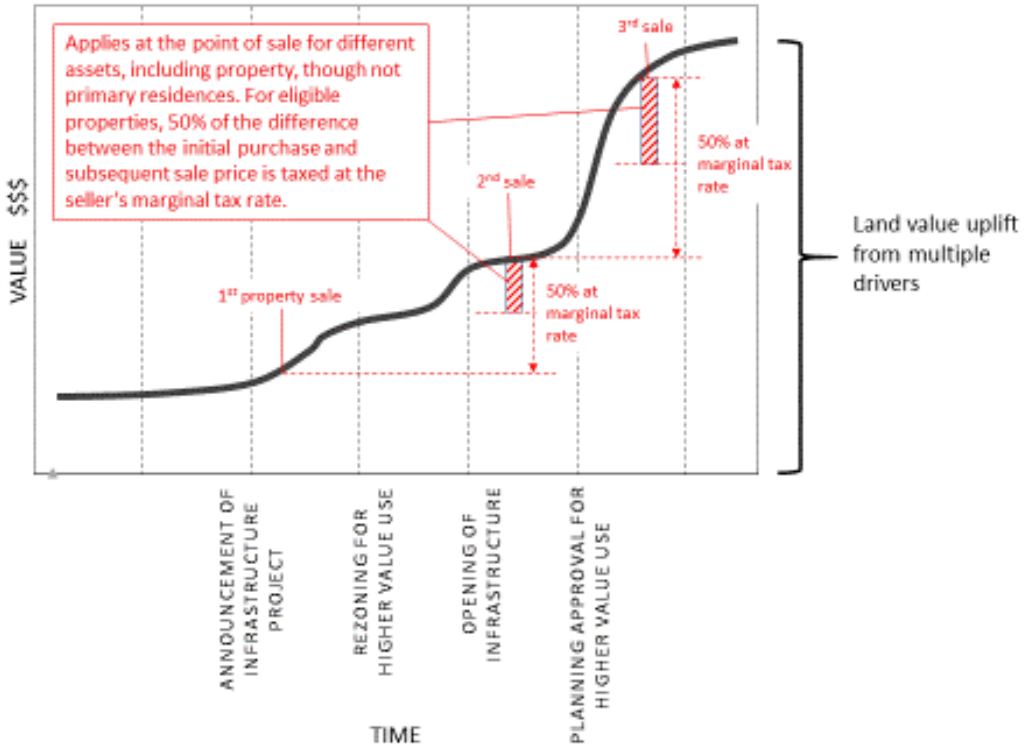
The primary barrier to any reform of the GST to specifically fund state level major infrastructure is that it is federally based, with no method under the current system to hypothecate funds for particular projects. Furthermore, the 'value' link able to be drawn to any particular project is tenuous at best.

Taxes on property transactions: Federal Capital Gains Tax

Description	Project application	Source of funds
Capital Gains Tax (CGT) is applied at the point of sale for different assets, including property, though it does not apply to primary residences. For eligible properties, 50% of the difference between the initial purchase and ultimate sale price is taxed at the seller's marginal tax rate. Though partial in its application, CGT is clearly a value capture mechanism and will increase with beneficial infrastructure impacts capitalised into land value. As a federal tax there is no means to allocate it specifically to fund transport infrastructure.	Contributes to general federal revenue, not project specific	Payable after sale by property sellers but not on principal homes

Property value uplift through project and planning cycle

FIGURE 12. INCIDENCE OF FEDERAL CAPITAL GAINS TAX



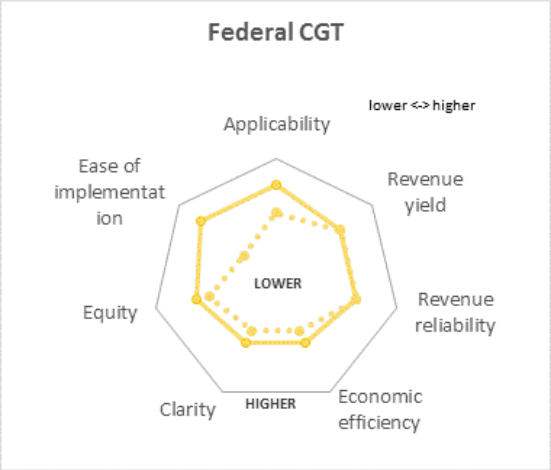
Evaluation Summary

——— **Solid line and marker**
Current role in federal government funding –

Existing arrangements to raise revenue for general federal government expenditure

••••••• **Dotted line and marker**
Possible future 'value capture' role for major infrastructure funding –

Reform to apply more uniformly to property transactions with a share dedicated to infrastructure



Applicability

The CGT has value capture characteristics in that it targets the uplift in value between transactions – though for property transactions to which it applies the total uplift in value, including improved land value, is considered. A true value capture levy or mechanism would only capture a share of the increase in unimproved land value. The CGT is however a federal tax and it cannot be used for the purposes of targeting the uplift in value associated with a certain project or to hypothecate funds for a particular project.

There have been recent calls for a reduction in the capital gains tax discount (e.g. by the Grattan Institute[93]) which would increase the amount collected, though there are few advocates for removing the family home / owner-occupier exemption. CGT is also not applied to owner-occupiers.

Revenue yield

Using CGT more widely to capture property value uplift as a result of transport infrastructure investment (and other drivers) has the potential to generate a substantial amount of revenue. Revenue is currently limited because principle residences are excluded. Because CGT is based on the payee's income tax rate, tax brackets and deductions will also affect the amount of revenue generated by the measure.

Revenue reliability

CGT is collected following completed transactions and is therefore somewhat reliant on property market and economic conditions more broadly. Where price escalation is modest and fewer sales are being made there is likely to be less revenue collected. In stable economic conditions however CGT is a relatively reliable source of revenue.

Economic efficiency

If the CGT was able to be used a as value capture mechanism, such as through federal grants to the States of funding equal to the level of value induced by an infrastructure investment, it would be economically efficient as the increased value would be reinvested back into the project. At the same time, the transaction costs associated with the collection of CGT and identifying which projects it relates and should be allocated to would be inefficient. On balance it would not be efficient for the federal government to 'quarantine' the CGT associated with any particular property for a particular transport project.

[93] Wood, D. and Daly, J. (2016) Hot property: Negative gearing and capital gains tax reform, https://grattan.edu.au/report/hot-property/

Clarity

How and why CGT is applied is generally well understood, and it is generally clear in how it is calculated and applied. Utilising it for transport infrastructure funding would not be well understood and would introduce less clarity.

Equity

The selective application of CGT (not applying to the family home for example) introduces a variety of equity issues and distortions in its incidence and utility.

Extent of barriers to implementation

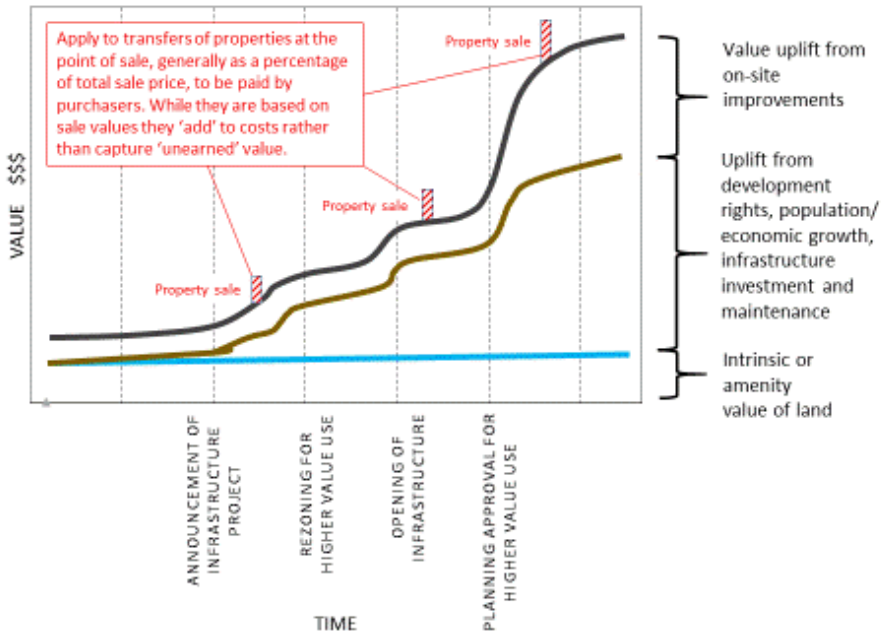
Utilising CGT as an explicit value capture mechanism is not a practical option. CGT is a federal tax and is currently 'untied' in its use or application. It would take a major shift in federal policy to hypothecate it to transport investment undertaken by state governments. Because it is applied selectively, and in particular not on family homes, it is not a comprehensive 'value capture' charge.

Taxes on property transactions: State stamp duties

Description	Project application	Source of funds
Stamp duties are applied to transfers of major assets at the point of sale, including for property, and are generally applied as a percentage of sale price to be paid by purchasers. Because they are based on sale values, stamp duties can be seen as a form of value capture. However, they only apply to properties that are sold, and only to purchasers at the end of the development process. As such, they are not a comprehensive (or particularly efficient) approach to value capture.	Contributes to general state revenue, not project specific	Payable by property purchaser at point of sale

Property value uplift through project and planning cycle

FIGURE 13. INCIDENCE OF STAMP DUTIES



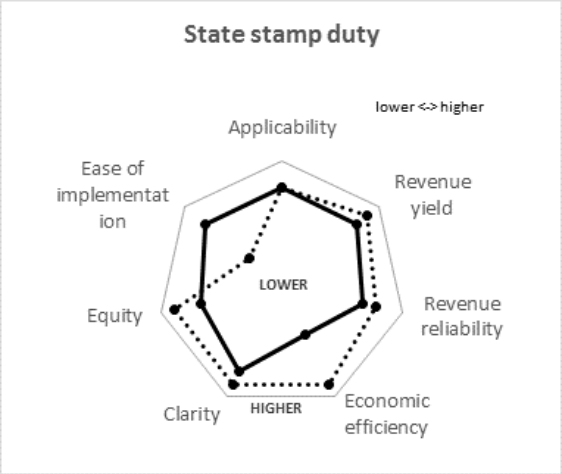
Evaluation Summary

———— Solid line and marker
Current role in federal government funding –

Existing arrangements to raise revenue for general state government expenditure including infrastructure spending

•••••••• Dotted line and marker
Possible future 'value capture' role for major infrastructure funding –

Reform to apply a tax to a share of only the <u>increase</u> in unimproved value of property since previous sale, paid by purchaser



Applicability

Revenue generated by stamp duties is significant for state government (particularly for the faster growing states with escalating property values). It is not currently hypothecated or specifically used for transport infrastructure investment. Such a change would be appropriately resisted by state treasuries because it is difficult to 'ring fence' the impact of any particular transport investment (or transport investments in general) on property value rises. General population and economic growth is a contributor to property price inflation (and therefore stamp duty revenues) as well as transport investment.

A number of jurisdictions in Australia are considering phasing out stamp duties in favour of broader based land tax and this is an appropriate reform direction. An alternative reform, evaluated in the diagram above, would be to tax a share of the uplift in the unimproved value of a property since its previous sale, with the tax paid by the purchaser within or as part of the purchase price. Unlike the current stamp duties the tax would not apply if there was no value uplift. This would be a true 'value capture' version of stamp duty.

Revenue yield

In an escalating and healthy property market stamp duties are a significant revenue source as it is a legal requirement to pay when most property types are sold.

The 'reform' version could generate even more revenue depending on what share of uplift was 'taxed'. Revenue need not be hypothecated for transport infrastructure investment.

Revenue reliability

Given that stamp duty payments are based on sale prices and transactions they are linked to property market cycles, with lower revenue generated at low points and higher revenue at high points in the cycle. This variability is a problematic feature of stamp duties and wouldn't be eradicated in the reform version. In fact it could be exacerbated because it would generate less revenue in a 'flat' market where linked to uplift only and not transactions in general.

Economic efficiency

Stamp duties are generally seen as being an inefficient form of taxation because they place an extra and significant impost on mobility in the housing market which thereby constrains the effective functioning of the labour market. Their 'once-off' nature and their incidence at a relatively high percentage of the sale price have a distorting influence on property markets. In addition, they do not reflect the economic

productivity of land because they can apply multiple times to the same property if that property is regularly sold, even if the value of the property doesn't change.

The reform version corrects for the distortions by only applying to increments in net uplift at each new transaction. The reform would make rural and suburban properties relatively more attractive because they would attract no or only a small tax or duty if their value had not increased or only increased marginally.

Clarity

Stamp duties are a straight-forward and transparent mechanism of revenue generation, as they are applied equally across the relevant jurisdictions, they are based on a proportion of sales price, and are a straightforward charge to calculate. Nevertheless they are not advertised within the sale price and typically represent an unwelcome additional and often surprisingly high impost for the purchaser.

Equity

The burden of stamp duty falls heavily on movers who may be over-represented by younger people and those seeking to locate to improve life opportunities. Older people with stable and established jobs and those holding property for investments are not similarly taxed.

Extent of barriers to implementation

Historically there has been opposition from the development and property industry to stamp duty which is seen as a distorting and heavy impost on the demand side of the housing market[94]. Amongst experts such as the Grattan Institute[95] there is general support for reform, and the replacement of stamp duties on property transactions with a broad based land tax including on existing housing and 'family homes'. Not surprisingly the politics of this are difficult, and South Australia abandoned the idea after recently suggesting it. Canberra is pushing on with its reforms in this area.

Except in its important current role as a major source of revenue for state government spending, stamp duties on property transactions are not likely to have a major role as an explicit value capture mechanism for transport investment.

The reform discussed here would stand alone, though could be implemented along with land tax reform. The political and community resistance could be significant. The barriers to implementation are the 'achilles' heel of what is otherwise a robust value capture reform idea.

Development contributions: Local infrastructure charges

Description	Project application	Source of funds
Local infrastructure charges should be based on user pays and cost apportionment principles, and paid by developers as part of the planning process to contribute to the funding of local infrastructure. Systems of local infrastructure charges are levied as Section 94 Contributions in NSW, Development Contributions in Victoria, and Infrastructure Charges in Queensland. In the absence of a system of user pays based local infrastructure charges, value capture mechanisms would be a means of funding local infrastructure requirements. However, where there is a robust system of local	Funds local site related infrastructure	Payable by development proponent once development approval is granted

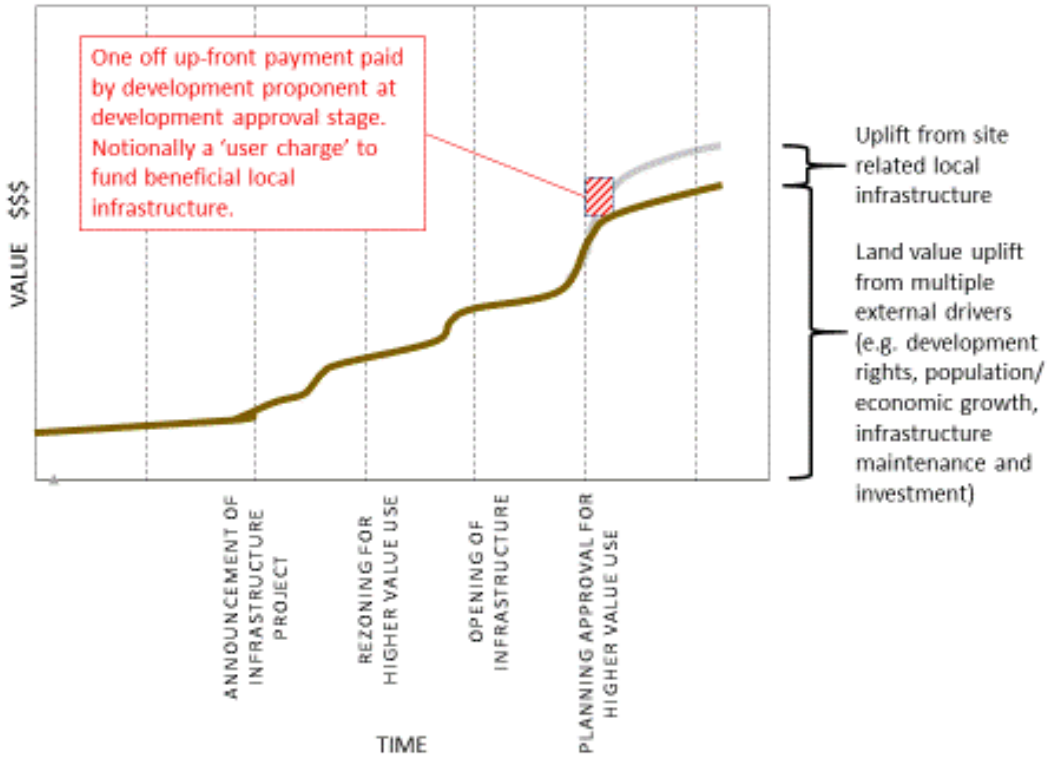
[94]Westenberg, N. (2014) Stamp out stamp duty to encourage labour movement, https://www.propertycouncil.com.au/Web/Content/Media_Release/National/2014/Stamp_out_stamp_duty_to_encourage_labour_movement.aspx

[95] Daley, J. and Coates, B. (2015) Property Taxes, http://grattan.edu.au/wp-content/uploads/2015/07/826-Property-Taxes.pdf

infrastructure charges in place, they should be 'netted' out in any estimate or calculation of the uplift which might otherwise be subject to a value capture levy.		

Property value uplift through project and planning cycle

FIGURE 14. INCIDENCE OF LOCAL INFRASTRUCTURE CHARGES



Evaluation Summary

———— Solid line and marker
Current role in funding local infrastructure–

Existing arrangements for councils to raise revenue for local development infrastructure

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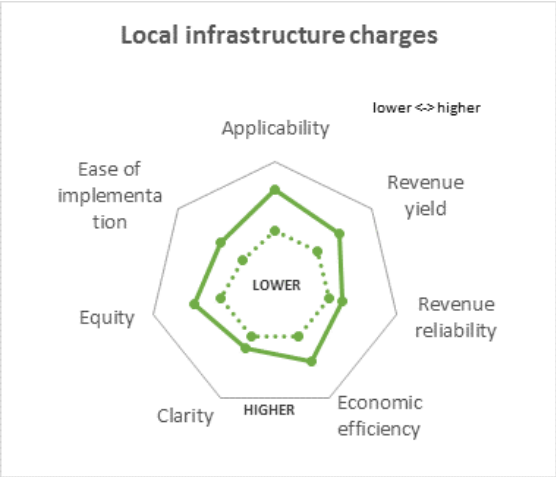
Possible future 'value capture' role for major infrastructure funding –

Reform to widen local infrastructure funding arrangements to nominated major infrastructure



Applicability

Infrastructure charges of different forms are used in all of the jurisdictions discussed, with the exception of the ACT. In most cases the funds raised can only be used for specified local infrastructure (which

typically excludes transport) where a nexus with the development in question can be shown. In this context however infrastructure charges are better defined as user charges, rather than value capture levies, though in most jurisdictions which have infrastructure charges the 'user pays' nature of the mechanism has been eroded. Almost by definition local infrastructure charges are not suited to funding major transport infrastructure which is of regional or metropolitan wide significance.

Revenue yield

Correctly designed and implemented local infrastructure charges should raise funds equivalent to the cost of the infrastructure, except where the extent or rate of development is greatly at odds with that projected. With caps and limits to schemes being introduced in NSW, Queensland and Victoria for example, the yield potential of infrastructure charge systems is being constrained, with councils or state government having to 'make up the difference' as a subsidy to development. Local infrastructure charges do not and should not be expected to make a major funding contribution to major transport infrastructure.

Revenue reliability

Infrastructure charges are a relatively stable source of revenue for local infrastructure, though the amount that can be generated from them will be impacted by the property market and the receipt of funds can be uneven (meaning that in the absence of a financing mechanism infrastructure may not be provided until sufficient funds are collected). If development doesn't occur to the extent anticipated then there will be an absolute or timing shortfall in the collection of receipts. This is a risk associated with up-front charges reliant on new development occurring. Recurrent charges on all properties, as discussed above, provide a more reliable revenue source. Local infrastructure charges should not be relied upon for major transport infrastructure funding.

Economic efficiency

Again, correctly designed and implemented infrastructure charges are relatively efficient, where they apportion costs equivalent to usage. The inefficiency of the mechanism stems from the need to predict future development and levy the charge 'up-front' before the 'users' have arrived to make a judgement on their 'willingness to pay' for the local infrastructure being provided. That choice is not available given that the extent of infrastructure provision is decided and funding is provided early before a development is complete or occupied. The up-front application of infrastructure charges also raises the possibility that development is made unfeasible. It would not be 'efficient' to apportion all major transport infrastructure costs to an identified future development area or catchment as beneficiaries are difficult to quarantine in this way.

Clarity

With modifications that have eroded the original logic of these infrastructure charges as 'user charges' the systems that have evolved in NSW and Queensland are anything but clear in their rationale and role, though the systems have been made simpler for developers which is also desirable in terms of cost management. The Victorian system appears the most robust and truest to the user pays idea, while also offering simplicity to developers.

The distinction between infrastructure charges (where they exist) as user charges and not value capture mechanisms is probably not widely understood. Where infrastructure charges are not used (South Australia) negotiated agreements are emerging which aim to capture some value uplift, which could be used to fund local development infrastructure, typically funded by infrastructure charges in other states. This is similar to the 'planning gain' system that is routinely used in the UK through 'section 106' agreements. The emerging UK system lacks clarity, though the CIL has some of the characteristics of a value capture charge for higher level infrastructure (see box below).

Equity

Again, if well designed, infrastructure charges should be equitable and allocate costs according to usage. However, the 'top-up' subsidies that are prevalent in the Queensland and in particular the NSW system do not appear to be equitable in that they favour greenfield development where costs exceed the infrastructure charges or development contribution 'caps'. In these cases the governments were keen to encourage development and the up-front charges were acting as a barrier so it is understandable why they changed the system as they did. However, a reform which maintained its user pays characteristic would have been preferable. It would be difficult to design an equitable system of local infrastructure charges to fund major transport infrastructure because the nexus with identifiable beneficiaries would be difficult to establish.

Extent of barriers to implementation

There are considerable barriers to extending the system of local infrastructure charges for use as a 'value capture' system for major transport infrastructure. The current systems are notionally based on 'user pays' principles where future beneficiaries of local infrastructure are able to be identified. It would be much more difficult to identify beneficiaries of major transport infrastructure on the same basis. It would also undermine the current systems which have been developed to fund local government infrastructure.

UK Developer contributions

Section 106 contributions are established by legal agreement as part of the Planning Application process to "provide contributions to offset negative impacts caused by construction and development".[96] Section 106 agreements must be relevant to the development they relate to, but still provide something of a 'catch-all' mechanism and can cover: local open space and community infrastructure; the mitigation of impacts on local transport networks (for example); affordable housing and even highways, education places and training programs.

The **Community Infrastructure Levy** (CIL) has been established more recently and is a tool for local authorities to help deliver a wide range of infrastructure to support the development of an area including: transport, flood defences, schools, hospitals, and other health and social care facilities plus play areas, parks and green spaces, cultural and sports facilities, academies and free schools, district heating schemes and police stations and other community safety facilities.[97] The CIL is levied according to a schedule and is thereby meant to provide more clarity and certainty than the negotiated section 106 system. However, the two systems are operating side by side with CILs payable by all new development which relies on the infrastructure, not just by a few larger-scale schemes as is typically the case for section 106 contributions. Section 106 planning contributions remain for site-specific infrastructure and for provision of affordable housing.[98]

In summary, the UK's Planning Advisory Service notes that: "S106 agreements, in terms of developer contributions, should be focused on addressing the specific mitigation required by a new development. CIL has been developed to address the broader impacts of development. There should be no circumstances where a developer is paying CIL and S106 for the same infrastructure in relation to the same development… The balance between the use of S106 and CIL will be different depending on the nature of the area and the type of development being undertaken."[99]

[96] See Southwark Council, 2016, 'Section 106,' http://www.southwark.gov.uk/info/200152/section_106

[97] See Planning Practice Guidance, 2014, http://planningguidance.planningportal.gov.uk/blog/guidance/community-infrastructure-levy/spending-the-levy/

[98] See https://www.southsomerset.gov.uk/media/429014/cil_faqs_ssdc__3_.pdf

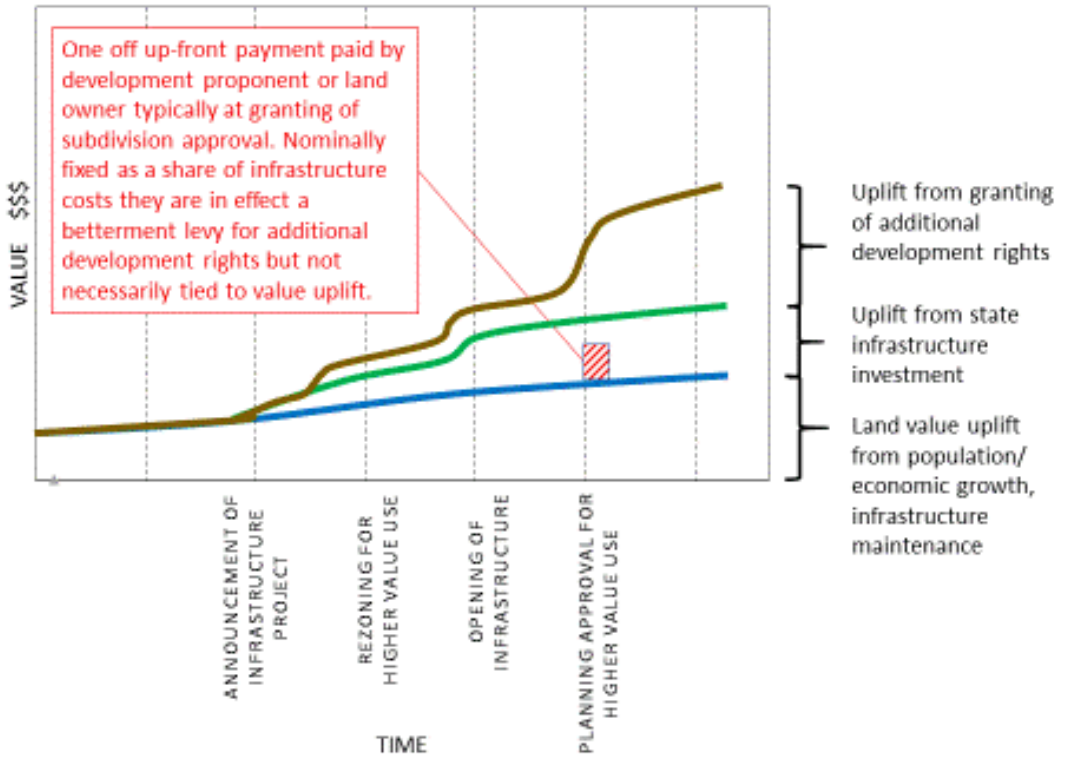
[99] See PAS, 2015, 'S106 obligations overview,' http://www.pas.gov.uk/3-community-infrastructure-levy-cil/-/journal_content/56/332612/4090701/ARTICLE

Development contributions: State level infrastructure charges

Description	Project application	Source of funds
Where applied, state level infrastructure charges are paid during the development process, and contribute towards infrastructure costs at the state or regional level, such as for roads and major transport projects as well as social infrastructure. Examples of these include the Special Infrastructure Contributions (SICs) imposed in NSW for Sydney's Growth Centres, Growth Areas Infrastructure Contributions (GAICs) in Victoria, and infrastructure charges for priority development areas (PDAs) in Queensland. As currently applied, state level infrastructure charges are notionally user pays charges (or at times in NSW, 'impact mitigation payments). In reality though, they are value capture levies not directly related to anticipated value uplift, that nevertheless recognise that beneficiaries of infrastructure investment should contribute to its funding.	Funds state infrastructure	Payable or provided as works in kind by development proponent prior to granting of Subdivision or Construction Certificate

Property value uplift through project and planning cycle

FIGURE 15. INCIDENCE OF STATE LEVEL INFRASTRUCTURE CHARGES



Evaluation summary

——— **Solid line and marker**
Current role in funding greenfield state level infrastructure–

Existing arrangements for funding infrastructure in greenfield areas (NSW and Vic)

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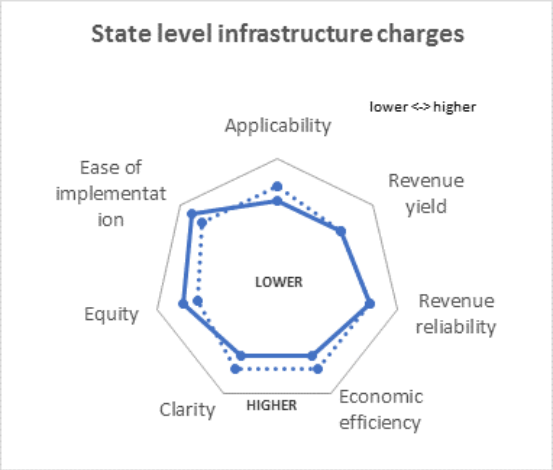
Possible future 'value capture' role for major infrastructure funding –

Reform to widen state level infrastructure charges to infill areas for nominated major infrastructure



Applicability

State level infrastructure charges have been introduced in the form of SICs in NSW and GAICs in Victoria to fund greenfield infrastructure, and they operate as a 'quasi' value capture mechanism, on the assumption that the zoning to urban and the provision of infrastructure will increase the value of the land.

Provided they can be extended and adapted for infill areas such charges could be used more widely as value capture mechanisms for infrastructure funding though it would be more robust if they were linked to anticipated value uplift occasioned by the granting of additional development rights.

Because the current arrangements are not strictly 'value capture' based, not universal and because they have not yet been used in infill areas the applicability of state level infrastructure charges is currently moderate but could be more widespread.

Revenue yield

In practice state level contributions for infrastructure in NSW and Victoria are set at a level that developers will tolerate, and only recoup part of the costs of provision. Because SICs and GAICs are currently limited in their application to greenfield areas only, this also limits the revenue potential. A more comprehensive system in both greenfield and infill areas, and based on value capture principles, would provide a broader revenue base.

Revenue reliability

As currently levied state level charges for greenfield infrastructure are a stable source of funding given rapid growth in both Sydney and Melbourne. The revenue generated is set aside specifically for infrastructure projects, and is not at risk of becoming part of general consolidated revenue. Like local developer contributions, revenues from state level charges have the potential to be impacted by property market conditions, including in the time that might be taken to recoup the costs of major infrastructure projects.

Economic efficiency

As a charge on an immobile asset state level charges are efficient and because they are not punitive, in that they are set to capture only a partial share of the 'unearned' value uplift, they should be 'non-distorting' within the greenfield development context. The fact that all three of Australia's largest cities have such charges also limits their distortionary influence. It could be argued that because they apply in

greenfield areas and not infill areas in Sydney and Melbourne they might distort development activity in favour of infill areas. As noted however, the levying of local infrastructure charges is now constrained, particularly in NSW and this is a distortion in favour of greenfield development. Perversities abound in infrastructure charging regimes. The case for reform to clearly distinguish user charges for local infrastructure and establish a value capture system for state level infrastructure is readily apparent.

Clarity

State level infrastructure charges are intended to reflect 'user pays' principles but they are not set for full cost recovery and are really partial value capture or betterment levies for additional development rights. Nevertheless the system is relatively clear and its purpose well understood. Developments which benefit most from the proximity to transport infrastructure investment and the subsequent uplift in value contribute to infrastructure costs. Because the charges applicable to developments are clearly specified publicly, the mechanism is relatively transparent.

Equity

State level infrastructure charges are relatively geographically equitable, in that those who are set to benefit from a given infrastructure project or rezoning decision are required to pay – and only when subdivision or Construction Certificates are granted in NSW and at similar trigger points with the addition of property sales, in Victoria. The inequity in the system comes from the fact that only new development will pay the charge. Existing development which also benefits from an increase in property value – where no redevelopment is proposed – will also benefit.

Extent of barriers to implementation

State infrastructure charges, like local charges, are inevitably perceived by the development industry as stifling development and adding to costs. Wider use of such charges, for example in infill areas, may face resistance from the same industry sources. Nevertheless, while state level infrastructure charges are imperfect as they are not an effective 'user pays' charge (with weak apportionment) and are not a clearly signalled betterment levy (because they are not based on value uplift), there is scope to widen their use to fund major transport infrastructure, particularly as the legislative power already exists in NSW, Victoria and Queensland.

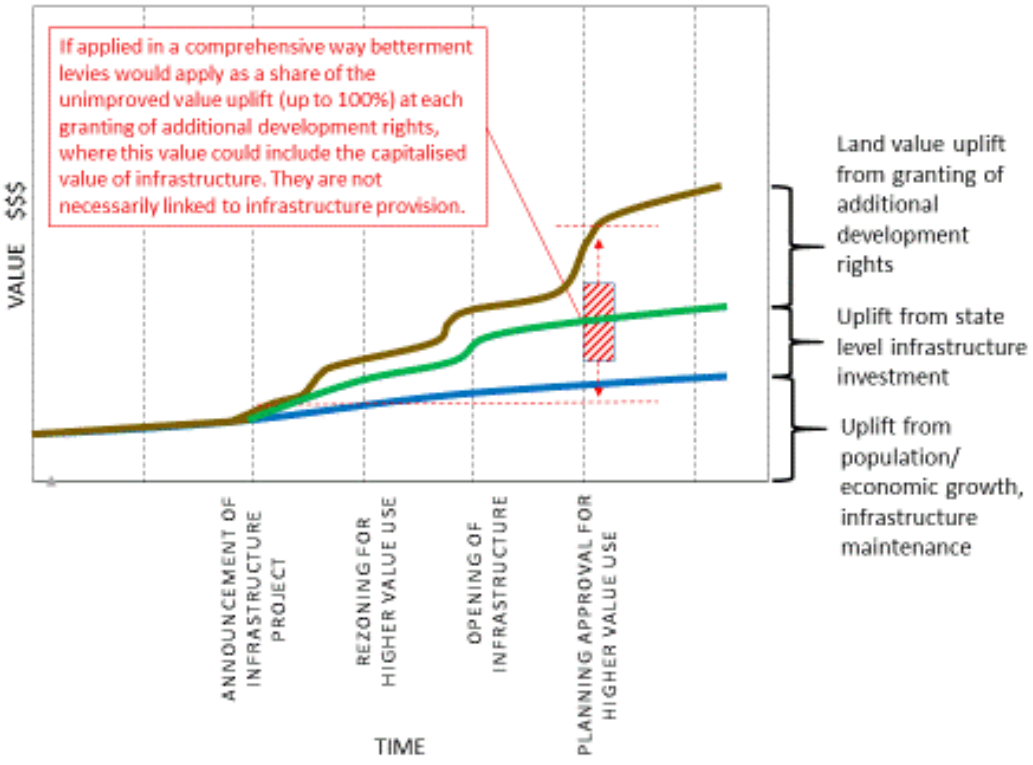
Development contributions: Betterment levies for additional development rights

Description	Project application	Source of funds
Betterment levies are based on the appropriation of a share of the 'unearned' uplift in land value that is created by a rezoning or allowing a better or higher value use on a site. Developers operating on the basis of reasonable margins on their investment in local development infrastructure and on-site improvements should be indifferent to a value capture charge on a reasonable share of the betterment increment, which will otherwise be appropriated by the pre-rezoning / pre-approvals land owner. Betterment levies are conceptually distinct from the local infrastructure and state level charges discussed above, as the revenue collected is not necessarily tied to particular infrastructure projects. The only formal examples of the use of this type of mechanism in Australia are the Lease Variation Charge (LVC) in the ACT and the 'Value Uplift' charge which applies in infill Priority Development Areas	Funds 'public benefit' works, could be project specific	Payable or provided by development proponent as works in kind once development approval is granted

in Queensland and charges to reconfigure lots with a Plan of Development or for a Material Change of Use in greenfield PDAs. The LVC is based on capturing 75% of the uplift in value gained from a change in lease and the allowable uses on a site, such as rezoning to allow for higher density developments. The Queensland charges are based, in the infill PDAs, on a schedule of rates per sqm of Gross Floor Area uplift above those allowable in Plot Ratio Controls in the Brisbane City Plan, and in the Greenfield PDAs, on a per dwelling basis. In the Melbourne Central City Built Form Review the Victorian Government has proposed that developments which exceed the base floor area ratio will provide equivalent value public benefits such as on-site public open space and laneways, or social housing within the development. This is an explicit betterment capture scheme.		

Property value uplift through project and planning cycle

FIGURE 16. INCIDENCE OF BETTERMENT LEVIES FOR DEVELOPMENT RIGHTS



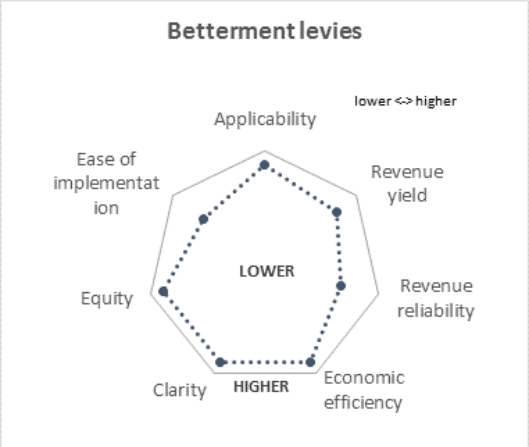
Evaluation summary

———— Solid line and marker
Current role in funding infrastructure and public benefit works–

Not included as use is currently limited

•••••••• Dotted line and marker
Possible future 'value capture' role for major infrastructure funding –

Reform for more comprehensive application where development rights are increased



Applicability

The only formal mechanism for applying betterment levies for additional development rights- linked to value uplift after taking into consideration other relevant costs and charges - in Australia is the ACT's Lease Variation Charge (LVC) which is enabled by the leasehold system which exists there. The SICs in NSW and GAICs, while notionally 'infrastructure' charges are, in effect, (imperfect) betterment levies.

True betterment charges or levies could be implemented in the states, but would likely require legislative changes to provide an appropriate head of power. Conceptualising betterment levies as 'development licences' is an appropriate way forward.

A key proposition is that 'development rights' have a value that is conceptually distinct from the attributes of the particular piece of land which might host development. In theory 'development rights' could be auctioned separately, that is, without reference to any specific piece of land. Indeed, this occurs in some countries overseas which feature 'transferable development rights', and in some Australian jurisdictions albeit in a more restricted way. For example, the Victorian Government's Docklands Authority (the predecessor to Places Victoria) sold development rights in the Docklands Area separately to the land, with land ownership passing over only after projects or stages had been completed.

From this perspective betterment levies are similar to the sale of licences by governments to access other rent generating activities which are rationed for the sake of overall community wellbeing and market efficiency. For example, in the cases of liquor distribution, commercial fishing, or radio and TV broadcasting a licence fee is paid by parties that are granted access to these restricted market via government regulation. By the same logic the granting of development approvals could be subject to licence fees.

Making the granting of development approvals for increased development rights or additional floor area conditional on the provision of defined community benefits (as occurs with negotiated agreements or through the sale of 'bonus floor area') is tantamount to a licence fee arrangement, albeit delivered in kind rather than a monetary payment.

One reservation about the applicability of betterment levies for major transport infrastructure funding is that there are likely to be other claims on the funds. For example funds could be expended on local public works or public domain improvements, affordable housing provision or local traffic improvements.

Revenue yield

Betterment levy mechanisms can generate a secure and significant amount of revenue, depending on how they are set up and applied. As seen in the example of the ACT's LVC, when there are fewer developments being undertaken the revenue generated by a betterment levy will – not surprisingly - decline. Over a full development cycle however an appropriately structured betterment levy system (which doesn't deter development) can be expected to attract significant revenue, though how much might be available for major transport infrastructure would depend on the structure of the system, political priorities and who is the recipient government organisation.

Revenue reliability

Betterment levies can be a stable source of revenue, but as mentioned above, will be reliant on property market conditions. As mentioned above where there are other claims on the funds they may be less reliable for major transport infrastructure.

Economic efficiency

Betterment levies are economically efficient, as they target those who benefit from the increase in value directly and, if applied universally, will not distort investment behaviours.

Clarity

The logic behind betterment levies is clear. As zoning changes are put into place, the benefit that developers and property owners gain in the form of an uplift in property value is 'unearned,' and it is reasonable to expect that some of this value is returned to the government and community for re-investment in public works and infrastructure.

Equity

Betterment levies are equitable in that they seek to return a reasonable share of the value to the community which created it, while also levying those who gain from the additional development rights.

Extent of barriers to implementation

A difficulty associated with the implementation of betterment levies can be the quantification of the uplift in value. As seen in the ACT example, government forecasts have often overestimated the amount of revenue that the mechanism will generate. Another barrier is the perception that these types of charges negatively impact on development activity and act as a disincentive for redevelopment projects to occur. This is more likely where valuations are left to negotiation.

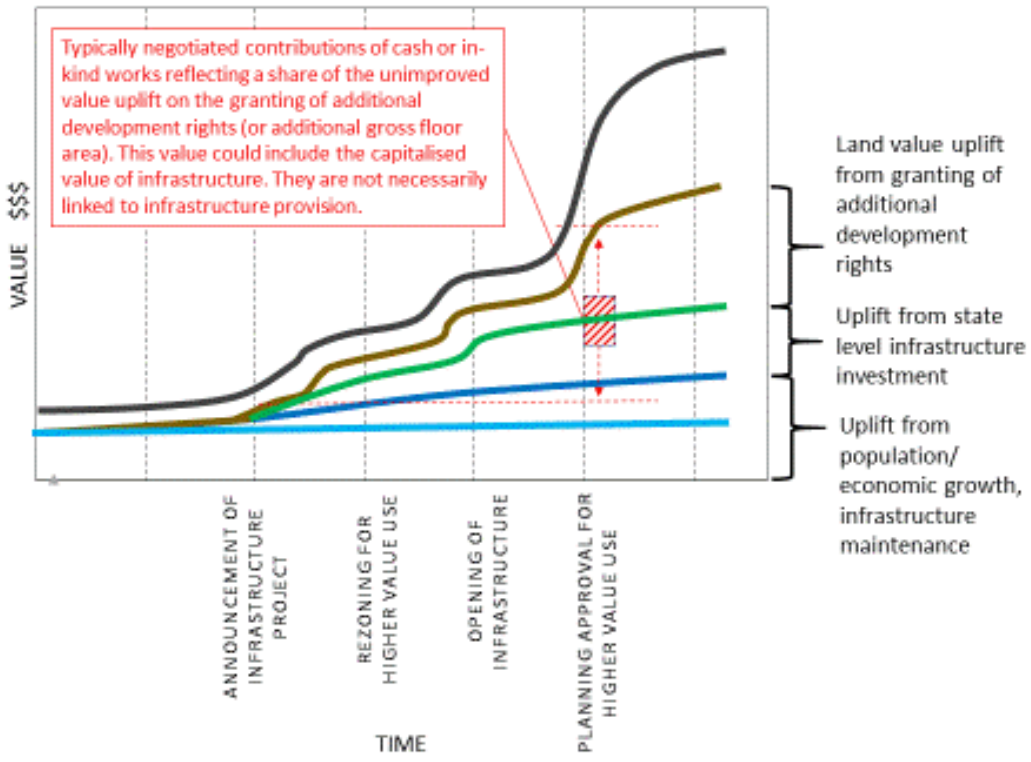
A 'pre-signalled' area or place specific levy, based on an analysis of the prevailing property market and value of net additional floorspace in different categories, and consistent with the idea of a 'development licence fee' is a means to address these barriers.

Development contributions: Development bonuses or sale of bonus GFA

Description	Project application	Source of funds
Development bonuses and the sale of bonus GFA is a type of development based contribution, applied in addition to standard local infrastructure charges. It is a commonly used mechanism for value capture in Australia and elsewhere. Developers are allowed bonus or additional floor space above that allowed in planning controls in return for cash contributions, the provision of infrastructure, or other off-setting public benefits. Some schemes operating in Australia currently award bonus GFA for elements including improved design standards, provision of community facilities or public space, and for affordable housing. This type of betterment capture is often a focus of negotiated planning agreements (which are allowed in all state jurisdictions e.g. Voluntary Planning Agreements in NSW, Section 173 Agreements in Vic).	Funds public benefit works, could be project specific	Payable or provided by development proponent as works in kind once development approval is granted

Property value uplift through project and planning cycle

FIGURE 17. INCIDENCE OF CONTRIBUTIONS FOR 'DEVELOPMENT BONUSES'



Evaluation summary

———— **Solid line and marker**
Current role in funding infrastructure and public benefit works–

Mostly negotiated agreements used for local amenity and infrastructure works, some affordable housing

•••••••• **Dotted line and marker**
Possible future 'value capture' role for major infrastructure funding –

Wider use where development rights are increased or floorspace 'bonuses' provided

Applicability

Development or floorspace bonuses are already granted in return for the provision of public benefits as part of development approvals in Australian states and territories, mostly by local governments through negotiated planning agreements. The bonuses are usually provided in return for contributions to local amenity and infrastructure works, and sometimes affordable housing, rather than major transport infrastructure.

Using negotiated agreements to grant additional development rights or floorspace bonuses in return for cash to provide major transport infrastructure would be a potential and mostly undesirable cause of delay and uncertainty in the development process.

Revenue yield

The amount of revenue (or works in kind) generated through this mechanism depends on how it is set up, and is also influenced by property market conditions and fluctuations. Because schemes are typically voluntary or negotiated on a relatively ad hoc basis, applying only to proposals seeking to vary development controls, revenues or their in-kind equivalent are less than they would be if a comprehensive betterment or value capture scheme applied.

Revenue reliability

Revenue is not reliable given it is highly dependent on favourable market conditions and negotiated outcomes.

Economic efficiency

Development bonus systems that are not comprehensive and only voluntary are not particularly efficient. They may rely on allowing development beyond that included in legitimately set planning controls which may come with community costs such as overshadowing or additional traffic. Alternatively, they may be provided for just a few sites to acceptable environmental or capacity limits, meaning that the other sites are not able to reach these limits which represents an 'artificial' restriction on development which also implies a community cost. Furthermore, the negotiated nature of many of the bonus systems is also likely to add costs and time to the development process.

Clarity

The logic behind this mechanism is relatively straightforward, in that in exchange for the provision of community infrastructure developers are rewarded with bonus floor area or other elements. However,

unless there is a clear pre-scheduled set of floor space values it is likely that the valuation of the bonuses will be opaque, requiring negotiation and additional costs.

Equity

An issue with the application of bonus schemes has been that when developers are awarded extra development capacity, the extra infrastructure capacity required to service the additional floor area and population may not have been accounted for, and as a result the infrastructure hasn't been able to meet demand (for example, the development has added to traffic congestion).[100]

The development community has raised concerns that in NSW, the sale of development bonuses through VPAs is being used a means to undermine the cap on contributions set by IPART.[101] There is also an apparent equity issue if particular developers are providing works which others who haven't contributed are benefitting from.

Extent of barriers to implementation

As most Australian jurisdictions already utilise development bonuses in some form or another, there are few barriers to its implementation for value capture purposes, at least in a limited way. However, more widespread use of negotiated agreements to provide additional floorspace for unspecified public benefits risks undermining good and transparent planning outcomes.

As the mechanism is also dependent on offering sufficient incentives for owners or developers to participate, wider market economic conditions are another potential barrier. Contributions are likely to diminish when market conditions are less favourable.

Leveraging government interest in land: Development on government land or air rights

Description	Project application	Source of funds
This mechanism is based on government already owning or acquiring land in the vicinity of new transport infrastructure, or where development and infrastructure is planned, and capturing 100% of the associated value uplift in the leasing price with developers for ground, air or below ground development rights, or in the sale price if it is sold by a public agency. While it is common practice for Australian governments to lease or on-sell land it owns to reap some value associated with increased development rights or infrastructure investment, it is now mostly done on an ad hoc or opportunistic basis. Earlier generations have adopted a more systematic approach to public land development. The New Towns in Britain were first established in the early 20th century and through loans, the land and infrastructure necessary to establish new towns was purchased and put in place by government owned development corporations. The corporations then managed the sale and rent of properties, with the revenue generated by this largely paying off the loan amounts with additional revenue then returned to the government over several decades.[102] Canberra remains the main example of this comprehensive approach in Australia. The land is owned by the State, and the government	Funds all development infrastructure including contributing revenue to major state transport infrastructure	Provided by public land owner as works in kind or dividend to state revenue for legacy infrastructure maintenance or new state infrastructure

[100] Consult Australia & AECOM, 2015, *Value Capture Roadmap*, June 2015, http://www.consultaustralia.com.au/docs/default-source/cities-urban-development/value-capture-roadmap/value-capture-roadmap-as-web.pdf?sfvrsn=2

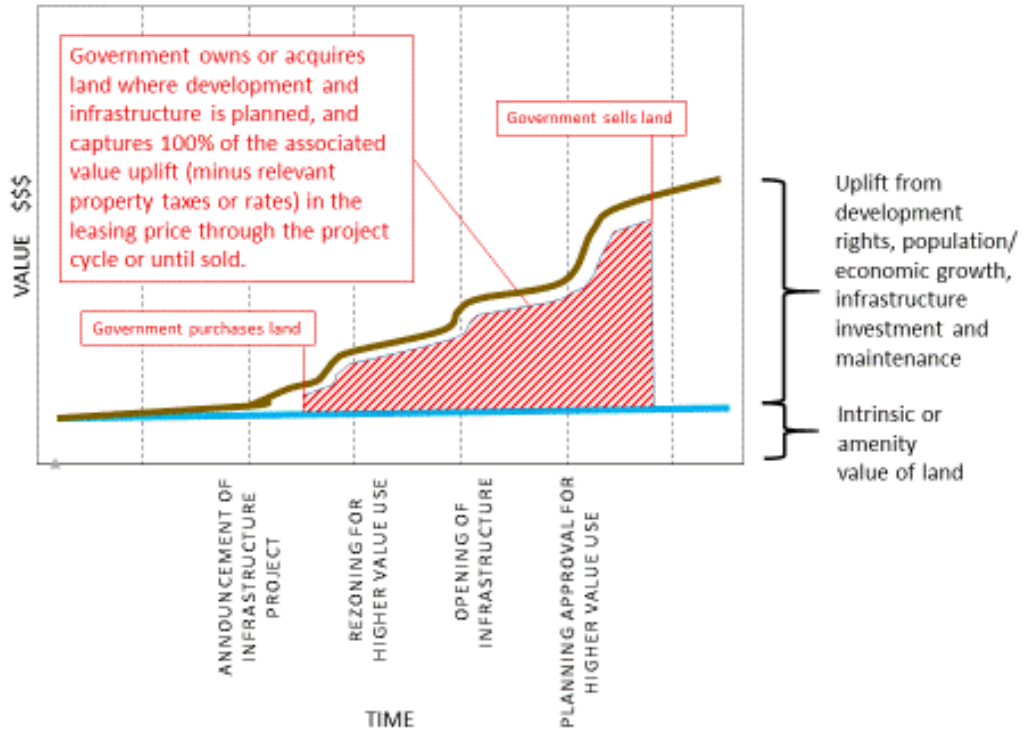
[101] See young, 2016, 'Sale of planning decisions through value capture on the rise,' http://www.apimagazine.com.au/2016/03/sale-of-planning-decisions-through-value-capture-on-rise/

[102] Department for Communities and Local Government, 2006,*Transferable Lessons from the New Towns*, http://www.futurecommunities.net/files/images/1_4_CLG_New_Towns_review_0.pdf

reaps significant income when land is first converted to leasehold title, and again with subsequent lease variations for more intense land uses. In Australian the State housing and then land development commissions which focussed on developing government owned land leveraged value for public benefits have mostly been disbanded. Only Western Australia now has an active state owned land commission (LandCorp) which purchases greenfield land for development and sale, often in joint ventures, with revenue recycled for reinvestment and dividends to the State Treasury. Economic Development Queensland and the Metropolitan Development Authority in WA have a more active ownership, planning and development role as a government urban renewal agency than either of their NSW or Victorian equivalents (UrbanGrowth NSW or Places Victoria) which are mostly land wholesalers, albeit seeking to add planning and development value. As established in the initial planning and funding design for the Melbourne Docklands precinct, Places Victoria receives a value capture dividend when sites are redeveloped.		

Property value uplift through project and planning cycle

FIGURE 18. INCIDENCE OF USE OF GOVERNMENT LAND OR AIR RIGHTS



Evaluation summary

———— Solid line and marker
Current role in funding infrastructure

Mostly focussed on planning and coordinating infrastructure to add value to existing government property and then disposing of the asset

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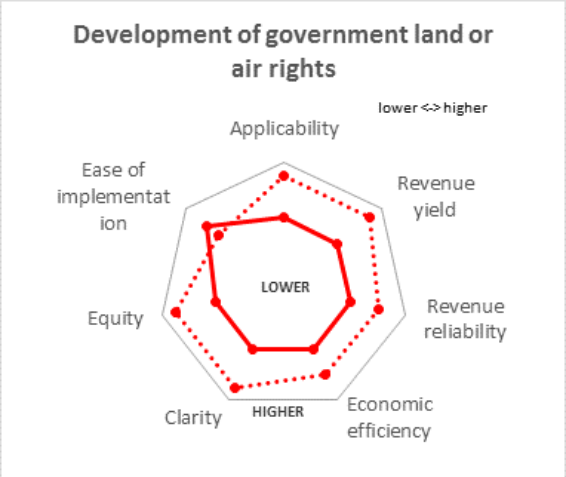
Possible future 'value capture' role for major infrastructure funding –

More active government purchase, planning and development of land including retaining some for leasehold to capture future value uplift



Applicability

Leveraging infrastructure provision or funding outcomes by using government owned land has diminished as an urban management approach in Australia.

Canberra, with its government owned land and leasehold system for private development, was the biggest such scheme and its land tenure and infrastructure funding legacy remains unique in Australia. The British New Towns and Garden Cities from the early to mid-20th century left a similar legacy in the UK ultimately returning a dividend on the initial land investment. A restatement of the principles underpinning this program includes *'Land value capture for the benefit of the community'* as the first principle.[103] As mentioned, there were active greenfield land development commissions in most states until recently (only LandCorp in WA remains) while the various renewal agencies (UrbanGrowth NSW, Places Victoria, Economic Development Queensland, Metropolitan Development Authority in WA) are concentrated in different positions at the relatively non-interventionist end of the land ownership, planning and development continuum.

Otherwise there are few examples of comprehensive approaches to the use of government owned land being retained to leverage long term development and infrastructure outcomes by State Governments. If anything the opposite is the case with most state governments having relatively aggressive land disposal programs. Ad hoc structure and master planning for government owned land does occur, usually with the aim of maximising sale prices but sometimes to align with government policy objectives.

While it may be unrealistic to expect a wholesale return to large scale investment by government in land for development and value capture, the precedent is well established, and given the demonstrable theoretical and practical sense of such programs there is a case for a rethink and revised approaches drawing on best practice.

Revenue yield

The amounts generated by this mechanism are likely to differ depending on market conditions and the type of development that is undertaken. More importantly it will also be limited by the availability of government land in appropriate locations and the model applied to manage and generate and apply value from it. Targetted purchase, planning and development of government owned land in and around planned rail stations could yield significant revenues over time.

[103] Town and Country Planning Association (2014) *New towns and garden cities lessons for tomorrow*, December http://www.tcpa.org.uk/data/files/TCPA_New_Towns_Study_Stage_1_An_Introduction_EMBARGOED.pdf

Revenue reliability

As above the reliability of this as a revenue source will be dependent on the extent of government owned land actively deployed to realise benefits and revenues. It will also fluctuate with property market changes.

Economic efficiency

Selling development or air rights is generally economically efficient, though there can be compliance costs associated with its application, particularly in negotiating with developers. It could be argued that 'holding' government land in anticipation of future development or future compounding returns is inefficient and represents an opportunity cost for the tied up capital. This can be addressed by leasing land for its highest and best use in the interim.

Clarity

The mechanism is relatively transparent, with the gains by the public and private sector in such arrangements being clear.

Equity

Selling development or air rights on government owned land is generally equitable, as the value of government investment in infrastructure will be capitalised into land value which will be retained by the government. Developers will pay a clear 'price' for development rights and be entitled to a profit on these and other costs. This attributes value to those who have 'earned' it.

Extent of barriers to implementation

The main barrier with this mechanism is that it relies on the government owning sufficient land or actively intervening in the property market. With competing priorities for government capital this is not typically a priority for government.

Another barrier can be the community resistance that is often generated by redevelopment and transport projects.[104] Sometimes the government is an easier target than the private sector when it comes to the development of its assets.

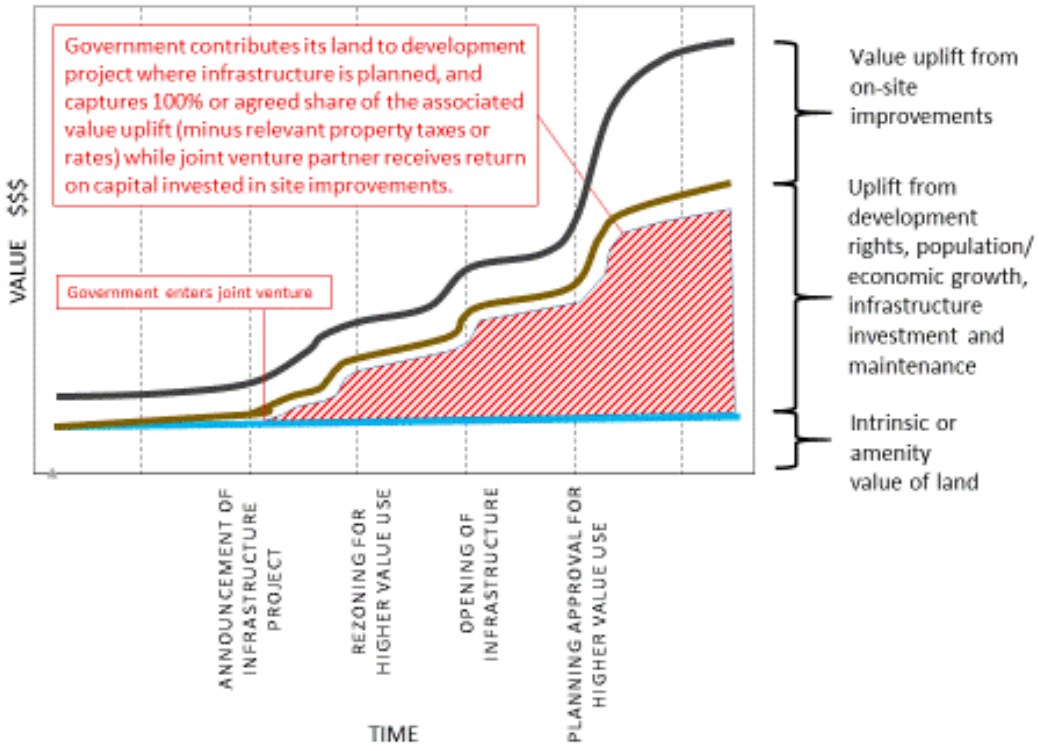
Leveraging government interest in land: Joint venture developments

Description	Project application	Source of funds
Joint developments usually involve a partnership between the public and private sectors to build on land which is controlled by the public sector. An example of this might be where a private development partner builds a new railway station for the State, with a private residential or commercial development above publicly owned government land. Southern Cross Station in Melbourne is perhaps the largest example in Australia. In these cases, the uplift associated with the development rights anticipated by the private partner 'pays' for the transport infrastructure.	Contributes to state transport infrastructure	Provided by joint venture partner as works in kind

[104] Consult Australia & AECOM, 2015, *Value Capture Roadmap*, June 2015, http://www.consultaustralia.com.au/docs/default-source/cities-urban-development/value-capture-roadmap/value-capture-roadmap-as-web.pdf?sfvrsn=2

Property value uplift through project and planning cycle

FIGURE 19. INCIDENCE OF USE OF JOINT VENTURE DEVELOPMENTS



Evaluation summary

———— **Solid line and marker**
Current role in funding infrastructure

Mostly ad hoc opportunities to use government assets for site specific improvements

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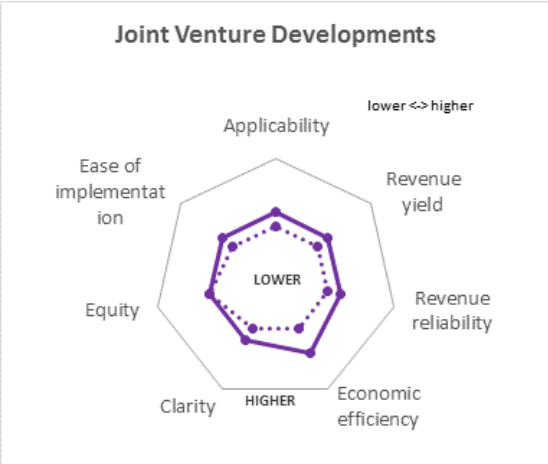
Possible future 'value capture' role for major infrastructure funding –

More active government purchase, planning and development of land for joint venture purposes to raise funds



Applicability

Joint ventures between the public and private sectors are already undertaken regularly in Australia. The ability to use the mechanism is however limited to the land that is owned by governments and also the potential or value of the development compared to the costs of possible disruption to transport or other operations.

The Southern Cross station venture with commercial and retail development funding a new station and transport interchange on government owned land was only possible because high central city returns were available to cover the costs of constructing transport assets generating modest or no financial returns. Even in that case there were legal disputes, delays, and re-designs to rein in cost over-runs.[105]

Revenue yield

The likely yield from this mechanism will depend on a number of different factors, and will differ between developments. It is also likely to be highly influenced by prevailing property market conditions, and as seen by the Southern Cross example, the complexity and potential of the non-revenue generating cost elements.

Revenue reliability

An advantage of this method is that the proceeds generated can be directly used to offset the costs of projects. As mentioned above, however, revenue will be impacted by property cycles and project complexity.

Economic efficiency

Joint developments can be economically efficient, as they encourage increased use of the transport projects they create and they may be able to take advantage of private sector efficiencies and innovation otherwise not available to a purely public sector project. Contractual arrangements will be critical in maximising project efficiency.

Clarity

A lack of clarity can be where joint ventures fail. While the logic of offsetting costs by joining with private sector partners is apparent it is important that strategic and policy objectives are not compromised or obscured in the process. Clarity of purpose then needs to be translated into project design and contractual arrangements.

Equity

Joint developments, particularly if they are redevelopments, are likely to impact on existing landowners to varying extents, potentially in terms of their amenity and impacts on neighbourhood quality. Capturing the value from joint venture projects is equitable, however, as the developer that benefits from a project is contributing to the cost of the infrastructure to support their development, though it is important that the 'share' of the project represented by the government's land holding also benefit from on-going returns, after construction and development costs are accounted for. There is a need to be careful about managing risks and costs in the longer term and this will depend on project design and the chosen governance model.

Extent of barriers to implementation

The primary barrier to using joint ventures for value capture is the complexity of accounting for and managing risks and rewards over time. More complex projects, such as developing over railyards for example, have not proceeded because of the potential for construction and the development to compromise the core function which is passenger and vehicle movement. Constructing to manage these risks is expensive and this may elevate costs to above the value of neighbouring land, with obvious consequences for the attractiveness and viability of the commercial project. Extending the use of joint ventures to fund major transport infrastructure projects would be add to the complexity.

[105] Das, Sushi (2005) 'All change at Spencer St', *The Age*, July 9, http://www.theage.com.au/articles/2005/07/08/1120704557967.html

Leveraging government interest: Sale of advertising concessions

Description	Project application	Source of funds
Land use changes and infrastructure investments present opportunities for governments to sell or lease the rights to advertising in key locations, such as in and around newly developed train stations. The revenue generated by this can then contribute to the cost of the provision of infrastructure over the life of the project, rather than as a one-off charge. While associated with infrastructure, this is perhaps not strictly a value capture mechanism, as it is not necessarily linked to uplift in the value of the property asset.	Contributes to off-setting state transport infrastructure and operating costs	Provided by private sector advertisers

Evaluation summary

——— **Solid line and marker**
Current role in funding infrastructure

Mostly modest off-sets to operating costs

•••••••• **Dotted line and marker**
Possible future 'value capture' role for major infrastructure funding –

More aggressive approach to raise additional revenue

Applicability

Most jurisdictions already allow for advertising on transport facilities and usually with a sensitivity for the presentation and design. State governments have either managed individually what goes onto billboard and other advertising spaces, or contract out the management of these spaces to advertising companies. Expanding the use of advertising concessions to raise funds for major infrastructure probably has limited potential.

Revenue yield

It is likely to be a modest source of revenue relative to major infrastructure construction costs and can't be considered a significant value capture mechanism. It will largely be an offset to operating costs.

Revenue reliability

This has the potential to be a reliable source over the life of a project's operation, but is likely to be somewhat influenced by external economic factors and market conditions. Revenue from these sources would also only be available to governments once projects are completed, rather than up front as with some other value capture mechanisms.

Economic efficiency

The potential revenue gained from advertising in transit corridors is likely to outweigh the relative cost required to facilitate the use of the spaces for such purposes. The mechanism is also unlikely to have any other major economic impacts and is economically efficient because the revenue from the spaces being charged out would be at the market rate. Distortions might arise if a more aggressive approach was adopted (for example if services or station sizing were modified to facilitate advertising concessions rather than being focussed on service needs and efficiencies).

Clarity

Collecting revenue from station and corridor advertising is a straightforward revenue raising method, though with tenuous links to 'value capture'.

Equity

Using advertising space as a source of revenue is unlikely to have any substantial impacts on equity. However consideration would need to be given as to what is an appropriate amount of advertising space and appropriate content in a given context. Local governments often have guidelines concerning advertising and signage which may govern such items.

Extent of barriers to implementation

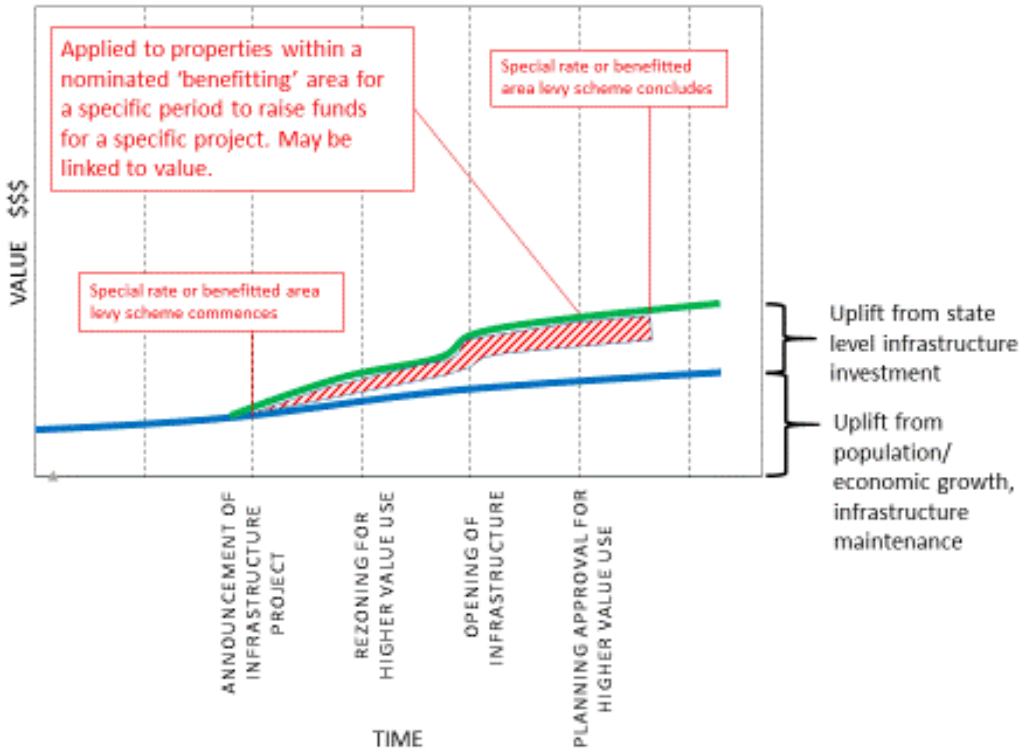
Provided that advertising meets the relevant guidelines of local councils, using this mechanism to recoup costs for infrastructure or operations is straightforward to implement. Barriers may be sensitivity to 'turning over' public assets to private interests and the likelihood of the spaces allocated for advertising being taken up by the market which is related to economic conditions. Widening the use of advertising concessions for infrastructure funding would intensify the impact of these barriers.

Hypothecated or benefitted area rates: Special rates for benefitted areas

Description	Project application	Source of funds
'Special rates' for benefitted areas Special rates (or 'benefitted area levies' amongst other variations) are applied to certain land parcels or precincts to fund specific local infrastructure needs, which the levied land owners are expected to benefit from. In Australia, special rates have mostly been used to fund local amenity and infrastructure improvements, like roads, drainage works, street maintenance, footpaths and parks rather than public transport projects. A boundary is usually drawn around the precinct anticipated to benefit from the works. All properties are expected to contribute an amount per year for a nominated number of years to pay for the works. Strictly speaking, this is a 'user' or 'beneficiary' pays levy, though it also anticipates land value uplift associated with the new infrastructure or works.	Funds nominated infrastructure or public works	Paid annually usually for a specific period by all eligible property owners in a nominated 'benefitting' precinct

Property value uplift through project and planning cycle

FIGURE 20. INCIDENCE OF SPECIAL RATES FOR BENEFITTED AREAS



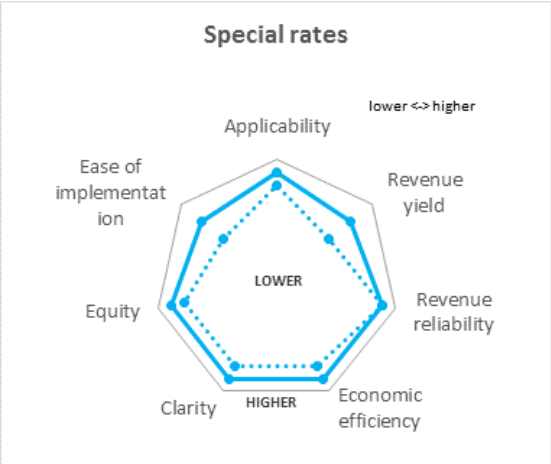
Evaluation summary

———— Solid line and marker
Current role in funding infrastructure

Mostly funds local beneficial infrastructure through system of local property rates

••••••••• Dotted line and marker
Possible future 'value capture' role for major infrastructure funding –

Application of rate surcharges within identified benefitting areas to part fund major transport infrastructure



Applicability

Most of the jurisdictions allow for local councils to impose special rates in particular areas which will benefit from infrastructure projects. They have been used for local infrastructure purposes, such as

providing roads, drainage, and the like, and for maintenance and improvements to streetscapes, with many examples across the country. Typically, at a local government level, they can be characterised as user charges as they are set on a recurrent basis for a period to cover the costs of infrastructure.

Victorian ratepayers pay a Parks Charge to fund regional and National Parks managed by Parks Victoria. It applies as a rate in the dollar based on Net Annual Value (NAV) but most properties pay a minimum charge of $70.62. Melbourne metropolitan ratepayers also pay a Melbourne Water Waterways and Drainage Charge which provides funding for managing waterways, riparian vegetation, flood protection and drainage services in the Port Phillip Bay catchment area mostly as a minimum charge.

Special rates could be extended to capture value uplift, in both infill and greenfield areas, but they have not been used to their potential,[106] typically because there is no available legislative mechanism available to state governments to apply them. Various forms of special rates have been used in previous instances in Australia in order to fund infrastructure, in the form of State surcharges applied in addition to local government rates.

Melbourne's City Loop rail network is one of the few examples of the use of value capture in Australia, with the routes and stations completed in 1985.[107] The State government ultimately contributed 50% of the funding, with City of Melbourne ratepayers contributing 25%, and the Metropolitan Board of Works another 25%. The council rate levy applied between 1963 and 1995.

The Sydney Harbour Bridge is another older example of the application of a special rate for state infrastructure.[108] A surcharge was applied to landholders to the north and south of the harbour, where the value of properties was expected to rise because of the construction of the bridge, made up of 0.2% of a property's unimproved land value. It was removed earlier than what was originally intended (after 15 years) to cover a third of the cost of the project.

The London Crossrail's project is a contemporary project that is being part funded by a rates surcharge.[109] The total cost of the project is expected to be around £15.9 billion. The Crossrail Business Rates Supplement (BRS) is a levy of 2 pence per pound on non-domestic properties (i.e. non-residential, businesses etc.) in London with a rateable value of over £55,000.

Revenue yield

In the local government context special rates are calibrated to deliver an identified amount over a set period. A similar approach would be used for any wider application of special rates or surcharges to fund transport infrastructure. However it is unlikely such a scheme with an acceptable rate surcharge could generate sufficient revenue for anywhere near full cost recovery of a major transport infrastructure project. For example if a 'catchment' of 200,000 properties was identified for a major transport project and the average levy was $200 per year for 25 years this would only raise $1 billion (undiscounted to present dollars). Major transport infrastructure costs multiple billions of dollars and $200 per dwelling would probably be at the outside edge of acceptable levies. A very clear benefit would be expected in return.

Revenue reliability

Because special rates are legislated and levied on a known number of properties they are a highly reliable revenue source.

[106] Committee for Sydney, 2015, A*re we there yet? Value capture and the future of public transport in Sydney*, Committee for Sydney Issues Paper 11, December 2015, http://www.sydney.org.au/wp-content/uploads/2015/10/CfS-Issues-Paper-11-Are-we-there-yet-Value-capture-and-the-future-of-public-transport-in-Sydney-2015.pdf

[107] See SGS, 2015, *Draft Report*, prepared for Rail, Tram and Bus Union (RTBU Australia), September 2015, http://www.rtbu.org.au/innovative_funding_models

[108] See Productivity Commission, 2014, *Public Infrastructure*, Productivity Commission Inquiry Report, Volume 1, No.71, 27 May 2014, http://www.pc.gov.au/__data/assets/pdf_file/0003/137280/infrastructure-volume1.pdf

[109] Greater London Authority, 2016, 'Paying for Crossrail: business rate supplement,' https://www.london.gov.uk/what-we-do/business-and-economy/promoting-london/paying-crossrail-business-rate-supplement

Economic efficiency

Special rates levied by councils are economically efficient because those who benefit from the infrastructure investment are contributing the funding for that investment, and at the local government level is effectively a user-pays system. If engineered as a system for funding state level infrastructure it is also relatively economically efficient as it is broad based, meaning it is usually a modest impost for any particular property (if not attempting to fully fund the project), with a relatively non-distorting impact.

Clarity

As levied by local government special rates are similar to infrastructure charges, in that they are a user pays system, with those in a particular area paying what is intended to be a fair share for the benefit they get from proximity to new infrastructure as reflected in a levy often linked to the total cost of infrastructure provision. This is a clear and accepted approach.

If used to part fund major transport infrastructure there is less clarity as to the benefit 'nexus' between the infrastructure and property owner unless the levy is specifically tied to value uplift.

Equity

A difficulty with this type of mechanism can be determining exactly who receives benefit from a given project within a given area where the rate is applied. Consequently, some people who benefit more may contribute as much funding as those who are likely to benefit less, unless the levy is value related..

Extent of barriers to implementation

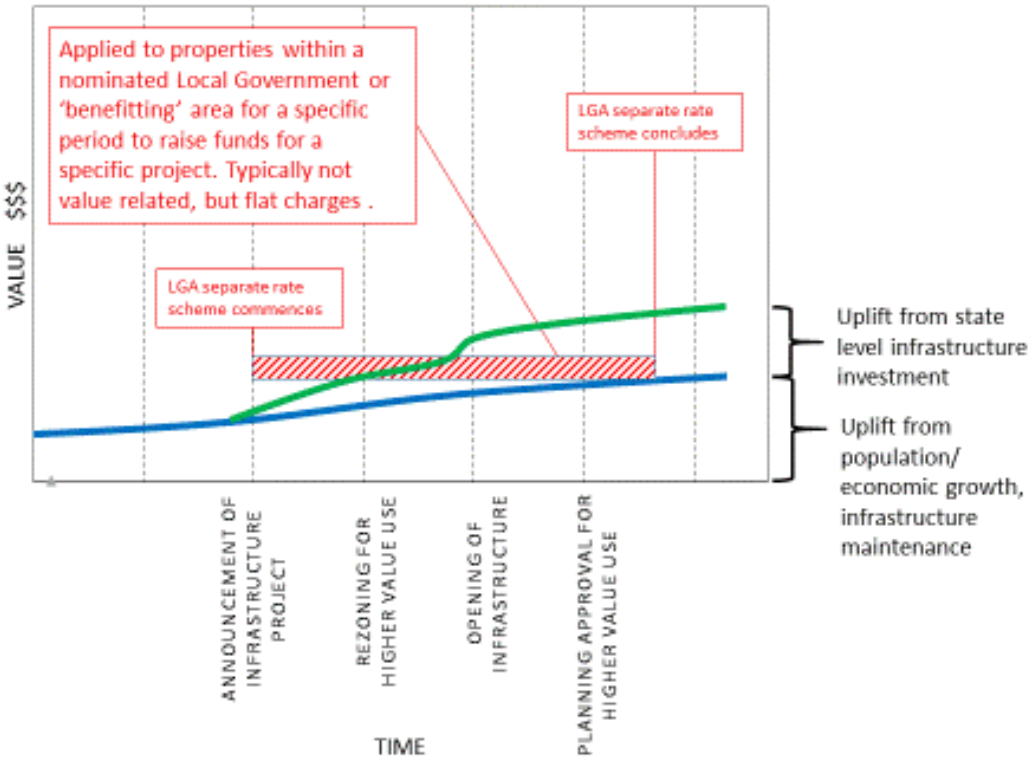
From a mechanical perspective the lack of supporting legislation is the key barrier for state governments to implement rate surcharges or special rate supplements hypothecated for infrastructure funding. Technically the difficulty is in identifying who benefits from infrastructure investment and to what extent, and determining how much should be levied. In turn, this represents the political barrier because of community sensitivities about paying for something whose benefits are not apparent. This was the reason both the Melbourne Underground Loop Levy and the Sydney Harbour rates surcharge were abandoned prior to their planned implementation period. From this perspective it is important in any scheme to tie the setting of the charge with land value so properties pay in proportion to the value of (financial) benefits they receive.

Hypothecated or benefitted area rates: Rates applicable to whole LGA

Description	Project application	Source of funds
Separate rates are also applied to whole local government areas, rather than to particular 'benefitting' precincts or geographic areas. These are typically not 'value' related, but flat charges to fund, for example, environmental waster services or the purchase and maintenance of environmentally valuable lands. However, they can be transport related. Gold Coast City Council has applied an annual Transport Improvement Levy (TIL), which partially funded the first stage of its light rail network. Similarly the Melbourne Underground Loop Levy applied to all properties in the City of Melbourne. Anticipating variability in the distribution of value benefits, different rates were applied to properties in different local government areas to contribute funding for the Sydney Harbour Bridge.	Funds nominated services, infrastructure or public works	Provided by all eligible property owners in a nominated Local Government Area

Property value uplift through project and planning cycle

FIGURE 21. INCIDENCE OF FLAT RATES - WHOLE LGA OR BENEFITTING AREA



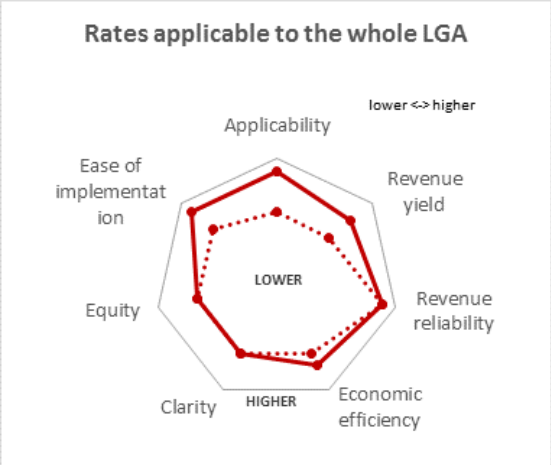
Evaluation summary

——— **Solid line and marker**
Current role in funding infrastructure

Mostly funds local services or development of assets through system of local property rates

••••••••• **Dotted line and marker**
Possible future 'value capture' role for major infrastructure funding –

Application of flat rate levy on ratepayers of a local government area to part fund major transport infrastructure



Applicability

Local Government legislation around the country enables councils to levy additional flat rate service charges on ratepayers across their LGAs for public works or services including waste management. Brisbane City Council used to fund the purchase of conservation land via a separate charge. A rare transport project example, which has the characteristics of a benefitted area levy, is the Gold Coast's TIL, which has supported the first stage of the City's light rail and other transport infrastructure.

As for special rates, appropriate legislative support may be necessary for state governments to apply such an approach for major infrastructure funding.

Revenue yield

The revenue generated by a service charge or similar will depend primarily on how it is set up and the framework it operates in. As for special rates it is not expected that a separate charge on a local government's ratepayer base could fund the full costs of major transport infrastructure.

Revenue reliability

As with other council rates, ratepayers are obliged to pay service charges, and as such they are a highly stable revenue source.

Economic efficiency

Collection of additional charges as part of the rates system in each state has few compliance costs. Such a mechanism, as seen in the Gold Coast TIL example, is less efficient in that it is levied across the LGA at a consistent rate, and doesn't actually target the added value created by the infrastructure improvement. This imposes a modest impost on properties which may not be able to recoup the off-setting real or imputed rent. Local government boundaries are arbitrary in relation to value uplift from transport investments so there are inefficiencies in using them for charging purposes.

Clarity

Applying additional service charges as part of council rates has a clear purpose, and is a relatively transparent process.

Equity

As mentioned above, because these types of charges apply across LGAs and are not differentiated based on property values or the ratepayers relative ability to pay, and because beneficiaries may fall outside the local government boundary, this form of levy can be less equitable than others.

Extent of barriers to implementation

Ratepayers may resist the introduction of an additional rates mechanism to provide infrastructure though as noted above precedents exist. It would be administratively easier to apply a levy to all ratepayers in a local government area rather than identifying or justifying a discrete benefitting 'catchment' and applying a special levy. The need for legislative support may be the key barrier to wider use by state government.

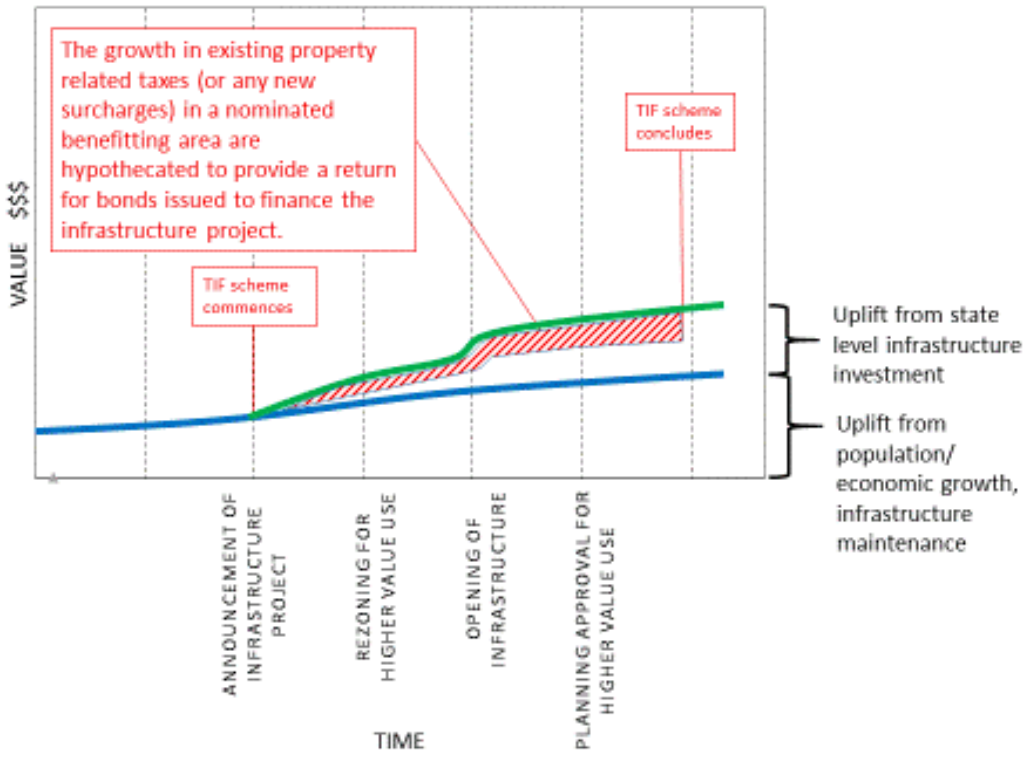
Hypothecated or benefitted area rates: Tax Increment Financing (TIF)

Description	Project application	Source of funds
Tax Increment Financing (TIF) is used in the United States, including for the expansion of the New York subway, but has yet to be implemented in Australia. It uses expected uplifts in property tax and other revenue to fund infrastructure, through enabling governments to raise bond finance against the future revenue generated within a designated zone as a result of the infrastructure investment. This allows for funds to be available at the construction stage with a bond issuance, repaid by the additional tax revenue flowing from the development of the surrounding area. Once a TIF	Funds a specific infrastructure project	Provided by all eligible property owners in a nominated 'benefitting' precinct

district is established, taxes collected at the local level are capped (albeit usually indexed), with the additional tax revenue collected by the agency responsible for the transport infrastructure project. The mechanism is reliant on an increase in both the level of private development and higher property prices.		

Property value uplift through project and planning cycle

FIGURE 22. INCIDENCE OF TAX INCREMENT FINANCING



Evaluation summary

———— Solid line and marker
Current role in financing and funding infrastructure –

Not included as not currently used

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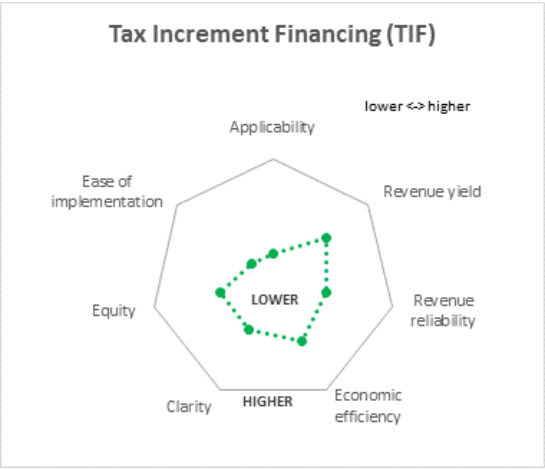
Possible future 'value capture' role for major infrastructure financing and funding –

Reform to hypothecate future property and related tax revenues for infrastructure funding



Applicability

There have been a number of industry reports which have advocated for the use of TIF in Australia to fund infrastructure, but it has not been implemented to date.[110] In most jurisdictions, there would need to be legislative changes to allow for governments to use the mechanism and to establish TIF districts, as well as the establishment of authorities to oversee the process and revenue collection.[111] Additionally, there have been other concerns raised about the risks associated with the mechanism,[112] in light of the experience of some cities in the US where TIF has been used, and resulted in extreme financial difficulties for local governments, in some cases requiring government bailouts.[113] TIF is much less relevant to Australia because local governments have fewer available sources of tax revenue to provide security for bond issues, as well as limited functions compared to the US and elsewhere.[114] Furthermore state governments already have mechanisms in place to source finance for projects and do not typically issue bonds for infrastructure financing.

Revenue yield

A significant issue with TIF is that there is a substantial risk of overestimating the amount of tax revenue that will be generated in future. The revenue yield that is generated is highly dependent on market conditions, and as mentioned previously, will depend on both an increase in development activity and an increase in property values.

Revenue reliability

As discussed above, the risk of overestimating the amount of revenue that will be generated, and the fact that the mechanism relies on increased development and higher prices, means that TIF revenue can be unreliable.

Economic efficiency

The establishment of a TIF district can be economically inefficient if applied in areas that would have been redeveloped regardless of whether a TIF was put in place, because the property taxes that would otherwise have accrued to the relevant local authority are not received.

Clarity

The implementation of a TIF scheme can be complex, and the rationale for such a mechanism can be difficult to understand. The nature of the mechanism, as it has been applied in the US in particular, leaves open the possibility for the scheme to be manipulated to benefit particular firms or areas.[115]

Equity

There is a risk that taxpayers outside of TIF districts end up funding some of the costs that are incurred through the development of the TIF area, particularly if the ultimate revenue generated by the TIF is insufficient to cover costs associated with service provision, such as for transport or other services like education. At the same time, those outside of the TIF district may benefit from the improvements to infrastructure despite not contributing to its funding.

[110] See PWC, 2011, *Funding Infrastructure: Time for a new approach?*, https://www.pwc.com/gx/en/psrc/pdf/time-for-a-new-approach.pdf; PWC, 2013, *Infrastructure Funding and Financing*, prepared for Business Council of Australia, http://www.bca.com.au/publications/securing-investment-in-australias-future

[111] PWC, 2008, *Tax Increment Financing to fund infrastructure in Australia*, Draft Report prepared for Property Council of Australia, April 2008, http://taxwatch.org.au/ssl/CMS/files_cms/198_PwC%20-%20TIF%202008%20report.pdf

[112] See Productivity Commission, 2014, *Public Infrastructure*, Productivity Commission Inquiry Report, Volume 1, No.71, 27 May 2014, http://www.pc.gov.au/__data/assets/pdf_file/0003/137280/infrastructure-volume1.pdf

[113] Examples have included City of Myrtle Beach (South Carolina), and Kansas City. See also NYC Independent Budget Office, 2002, 'Learning from Experience: A Primer on Tax Increment Financing,' http://www.ibo.nyc.ny.us/iboreports/TIF-Sept2002.pdf;

[114] See Productivity Commission, 2008, *Assessing Local Government Revenue Raising Capacity*, April 2008, http://www.pc.gov.au/inquiries/completed/local-government/report/localgovernment.pdf

[115] SGS, 2015, *Innovative Funding Models for Public Transport in Australia*, Final Report, prepared for Rail, Tram and Bus Union Australia (RTBU Australia), September 2015, http://www.rtbu.org.au/innovative_funding_models

Extent of barriers to implementation

The barriers to implementation appear significant. Legislation would be required to enable state governments to implement TIF schemes as utilised in the USA, particularly the application of a property tax increment to properties in a particular benefitting district. The financial risks associated with a mechanism which is reliant on future tax revenues in such an area would need to be considered. It might be possible to adapt the existing taxation system to approximate a TIF system. This would depend on explicitly diverting existing tax revenue (e.g. land tax and stamp duties) in the benefitting area to fund specific items of infrastructure. The equity of diverting tax revenue from other important projects would need to be considered carefully.

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