Policy Position –
Value Capture

POSITION

1. Summary

Value capture is an umbrella term describing a mechanism that can source funding from entities other than government. Value capture aims to recover some of the value created from public investment , generated for private beneficiaries.

However, definitions begin to vary when the following questions are raised:
What mechanism is best for raising these funds?
How much can these mechanisms realistically be expected to raise?
Where are these raised funds directed?

In reviewing some of the various mechanisms touted as 'value capture' and how they have been applied internationally, the Urban Development Institute of Australia (Victoria) has sought to evaluate those mechanisms against principles that are critical in identifying an effective value capture mechanism(s).

To identify whether 'value capture' mechanisms are effective, mechanisms must include the assurance that:

- additional value has been generated through government investment that increases the capacity for uses;
- value is only captured when and where it is generated;
- the proportion of value captured does not diminish the ability for value to be realised; and
- value is not captured after it has already been realised.

In designing an effective framework for 'value capture', the UDIA has sought to identify the mechanisms that, if designed and implemented correctly, would be effective in capturing the value created from government investment.

2. Preferred Approaches to 'Value Capture'

Based on our research and assessment of various policies and positions, the UDIA has identified the following approaches as being the most effective mechanisms for 'value capture'. Utilising one or a combination of these mechanisms can ensure that an adequate level of value created through government investment can be captured for the benefit of the wider public:

- Tax incremental financing is appropriate for all types of infrastructure investment as it utilises the existing tax and charge systems to determine the level of funding that can be generated.
- The sale of development or air rights and the sale or lease of space/ land is appropriate where the infrastructure investment provides an opportunity for government to directly capture additional value through better utilisation of public land/ infrastructure.

- Major Beneficiary Contributions are appropriate in instances where a small number of large stakeholders largely benefit from the infrastructure investment and agree to fund all or part of the project to realise those benefits.

- A Betterment Levy is appropriate where the parameters from which there is a quantifiable uplift in value from the potential investment in a piece of infrastructure can be identified. To address some of the potential unintended consequences, when, where and how a betterment levy is applied needs to be given careful consideration. However, a broad application of the levy can be a blunt tool that affects housing affordability.

3. Implementation of a Betterment Levy

The following looks at ways a betterment levy could be applied throughout the development cycle of the infrastructure project while minimising potential unintended consequences. These include:

- Application of levy on land not benefitting from an uplift in value;

- Continuation of the levy once value has already been captured/ realised;

- Impact on commercial viability of existing operations/ financial hardship.

In terms of setting a levy, concerns around the equitability of the charge would need to be further explored. This paper seeks only to identify when and where the mechanism should be applied to ensure that value is captured in a way that meets the principles identified by the UDIA.

Project planning and construction

Prior to committing to an infrastructure project, the scope of beneficiaries within proximity of the potential infrastructure investment is to be identified and the potential uplift in value per lot identified.

Once an infrastructure project has been planned and committed to, landowners and strata owners benefit from an immediate uplift in the value of the land. However, this isn't monetised until the land has been sold. Once it is sold, the full value of the uplift is likely to be realised by the vendor. It is at this point that an upfront betterment levy is applied to the sale of the land, paid for by the vendor.

Project completion

Once the project is completed, landowners and strata owners likely benefit from an uplift in demand for residential and commercial space that is close to the infrastructure. It is at this point that an annual betterment levy could be applied to property.

However, owner occupiers aren't likely to monetise the value uplift from the infrastructure until they have sold the property. As such, occupiers that can provide evidence of financial hardship/housing stress, should be able to defer the betterment levy until the sale of the land or property.

Should the land or property be sold prior to the term of the betterment levy being completed, the land owner or strata owner is to pay an upfront betterment levy which is calculated from the net present value of the expected amount to be received through the levy minus what has already been paid.

ABOUT US

Urban Development Institute of Australia (Victoria)

The Urban Development Institute of Australia (UDIA) is the peak industry body for the urban development sector. In Victoria, we provide over 350 member companies with the benefits of policy and advocacy, industry intelligence, networking and business building.

Our members include developers, consultants, financial institutions, suppliers, government authorities and utilities. Together we drive industry discussion and debate and inform all levels of government achieving successful planning, infrastructure, affordability and environmental outcomes.

DETAILED ANALYSIS & COMMENT

1. What is Value Capture?

Value capture is an umbrella term that refers to mechanisms used to procure funding for public infrastructure from sources other than the government. Value capture is aimed at recovering some or all of the value that public infrastructure generates for private landowners or similar beneficiaries from these beneficiaries themselves.

However, definitions begin to vary when the following questions are raised:
What mechanism is best for raising these funds?
How much can these mechanisms realistically be expected to raise?
Where are these raised funds directed?

Value capture has been used before in Australia and around the world, but in varying forms and to widely varying degrees of success. The idea of off-setting some of the government cost of infrastructure is exciting, as it may lead to an increase in the government's capability to provide more infrastructure. This increase in infrastructure is imperative for Victoria's rapidly increasing population, expected to reach over 10 million by 2051.

However, there are currently many reservations within the industry about how effectively value capture can be applied. Primarily, this uncertainty revolves around the question of how a mechanism can be implemented in a way that realistically benefits developers. There are also concerns on the effect that a poorly executed system would have on the already strained cost of housing in Victoria.

The biggest concern of the industry is that direct property taxation will be touted as value capture rather than capturing value when and where it is created.

2. Value Creation vs Value Realisation

There is a perception that 'rezoning' is the step that awards a site or land additional 'value'. However, it is the positon of the industry that 'value' is created independently from how a site is zoned or rezoned. This is because the 'value' of land is predominantly driven by the land or site's access and proximity to infrastructure and public amenities like jobs, transport and schools.

For commercial uses, the value of land is largely determined by its ability to attract customers and employees. The larger the catchment of potential customers and employees, the higher the value. For residential purposes, the value of the land is largely determined by its desirability as a place to live. The higher the desirability, the higher the market acceptance for higher density products as home buyers and occupants tend to trade off access and proximity with things like size, private yards, etc.

Increasing the land's access to and proximity to jobs, services and public amenities creates value for commercial and residential uses by:

- Increasing the catchment size of consumers and employees; and
- Increasing the desirability of higher density products.

Therefore, to create additional value, the land or site's access and proximity to infrastructure and public amenities must be increased.

Proponents for including 'value capture' to a rezoning, argue that allowing land to be developed for a higher and better use creates value. However, those proponents fail to recognise the differences between 'value creation' and 'value realisation'. When a zoning allows the full and best use of the site to be realised, the price developers are willing to pay increases as the risk associated with realising the land's value decreases.

This is because a rezoning often occurs after 'value' has been created from an investment in infrastructure such as roads, rail, schools, etc. In those circumstances, the rezoning unlocks the full and best use of the site, which allows more of the site's value to be realised with less risk and cost. As such, the increased price that developers are willing to pay for land reflects the reduction and risk involved in realising the full and best use of the land.

To further demonstrate the differences, two scenarios have been created to establish the differences between 'value creation' and 'value realisation' for identical locations where the current zoning reflects the highest and best use based on market demand and product acceptance for the area of the subject site.

In scenario 1, the site's zoning remains the same but state government announced an infrastructure investment that will increase the area's access to jobs in the CBD and the potential catchment of consumers and employees outside the area. The announcement of the investment immediately increases the desirability of the site for both commercial and residential purposes. Despite no rezoning, prices increase as a result of demand for commercial and residential units despite the inability to realise the site's highest and best use.

In scenario 2, the same piece of land is zoned to allow for a higher and better use, but its level of access and proximity to jobs, services and amenities does not change. As the land's previous zone already reflected the site's highest and best use, the price of the land doesn't increase as its value has already been realised.

Based on the above, it is difficult to justify 'value capture' mechanisms that apply to actions that allow the realisation of the existing, underlying value of the land. This is especially true when land has already been transacted after the 'value creating' action has occurred, but before 'value' can be realised.

3. Value Capture Mechanisms

The following mechanisms include different approaches that have been identified as value capture mechanisms. While they all identify ways in which funding can be procured from sources rather than government's existing funds, not all would be considered by the whole industry as true value capture.

Tax Increment Financing (TIF): [1]
TIF uses future additional revenue gains from taxes to finance the borrowing required to fund public infrastructure improvements that will in turn create those gains. The TIF model involves repayments of a project loan from growth in tax revenues above the pre-project baseline.

There are some possible negative outcomes of TIF, such as the funding source underpinning borrowing may create market distortion by misrepresenting the current value of homes or investment around the development.

TIF might also act as a disincentive to land developers who are not entirely confident in the accuracy or use of a pre-project baseline. There is also the added risk that unless it is implemented with caution, TIF could be collected on wealth gains not directly created by the development.

Growth Areas Infrastructure Contributions (GAIC)
GAIC is a one-off contribution designed to provide essential state infrastructure and to support development in Melbourne's newest suburbs. It is a one-off contribution payable on certain "events" usually associated with urban property development. These are usually buying, subdividing, and applying for a building permit on large blocks of land.

When first introduced in November 2011, GAIC was identified as an approach for ensuring that the substantial windfall gains that result from changes to the urban growth boundary and land being rezoned for urban development contributes fairly to offset the financial impact of the additional infrastructure service provision.

However, by the time the bill introducing GAIC was passed, the contributions framework turned into a direct developer charge.

Developer contributions
These are a one-off payment by property developers as a condition of development permission or rezoning. The payments are designed to recoup costs of the infrastructure related to the development.

This mechanism is most relevant in the context of planning changes in land use and development, and when it can be demonstrated that infrastructure projects will lead to a material development activity

[1] Infrastructure Victoria report pg 72

defined precinct. This mechanism is applicable when rezoning land such as greenfield areas, new transportation precincts and urban renewal initiatives.

Major beneficiary contributions
These contributions are negotiated from parties who are deemed to benefit the most from the implementation of infrastructure. To successfully operate this mechanism, it is imperative to have a valuation system in place by which the major beneficiaries of any infrastructure implemented can be clearly identified.

The funding required from the beneficiaries must also be negotiated prior to the project delivery. For example, this can be used when large asset or landowners such as airport operators, shopping centers and commercial precinct owners would clearly benefit from infrastructure.

Property development, air rights, asset sales or leases
This mechanism is applicable when the land is government owned, and the infrastructure is built in anticipation of an increase in value of the land, whereby the profit of sale of the land can be attributed towards recovery of some of the cost of the infrastructure.

This notion of asset recycling can be used when the infrastructure is being built in stages, and each stage can be sold off to fund the next, or, when the introduction of infrastructure creates opportunity for the government to commercialise their land.

Floor area ratio and floor area uplift mechanism
This mechanism is applicable as a form of value capture when built form controls such as height, floor area ratio (FAR) and bonuses such as a floor area uplift (FAU) mechanism is put in place for a specific catchment.

In the instance of these built form controls, any proposal to exceed floor area ratio (FAR) or height limits must be accompanied by a demonstrable contribution to public amenity. In this way, the government has the ability to obtain contributions towards, or even the full cost of, public amenity infrastructure.

Betterment levies
Betterment levies consist of a payment required from all 'beneficiaries' in a defined catchment area who are deemed to benefit from proposed infrastructure. This levy does not operate on discretionary scale of who benefits most to least and is charged accordingly; rather everyone pays the same amount.

This mechanism can only be applied successfully and equitably when beneficiaries in the defined catchment area are all assessed to profit equally from the proposed infrastructure.

If this is not the case, and the mechanism is applied regardless of discrepancies in the extent of how beneficiaries are affected by infrastructure, this levy runs the risk of simply becoming another tax on developers or landowners.

4. Case Examples

Hong Kong

The Metropolitan Transit Railway Corporation (MTR) simultaneously develops transit infrastructure alongside land development in its Rail + Property program. MTR pays the government a land premium and a competitive tender process ensues between private developers. MTR then receives a share of the profits from the developers, with which they fund new infrastructure as well as maintenance.

The government profits through this scheme through collecting the land premium and its approximate 75% stake in MTR. The 2014 financial year saw MTR pay $590 million USD in dividends to the government.[2]

San Francisco

The Transbay Terminal in San Francisco was opened in 1939 as a train station; however, in subsequent years was reduced to a bus terminal and became partly inoperable due to an earthquake.

It is currently undergoing construction to become the Transbay Transit Center, one of the most active and diverse transport hubs in the region. The surrounding area, formerly mostly carparks, is in the process of redevelopment, designated to contain 4,500 (35% which are affordable housing) new homes and new office space supporting 24,000 jobs and 9,300 sqm of retail space.

Tax Increment Financing (TIF) is in part financing the redevelopment, as well as development impact fees. Local, state and federal fees will make up the rest of the costs, including regional bridge toll revenues from the city's currently highly congested bridges.- The new facility will significantly alleviate pressure from other roads and forms of transport leading in and out of San Francisco, and will offer particular relief to the congestion on the bridges.

London

A large portion of the £14.8 billion Crossrail project in London was derived from land-based value capture charges. The Crossrail is seeking to implement 10 new and 30 upgraded stations across Greater London that will accommodate the 42km east-west rail line across the same area.

The value capture mechanisms in use to pay for roughly a third of this project are:

- An annual business rate supplement of 2% from non-domestic properties in Greater London with a ratable value of above £55,000. The rate was set until a £3.5 billion loan was repaid;
- A community infrastructure levy paid by developers on all new development across Greater London, expected to raise £0.3 billion;
- An additional developer charge using an existing mechanism is expected to raise £0.3 billion;
- Development rights through the sale of surplus land and air rights at some stations; and
- Major beneficiary contributions were negotiated from Heathrow Airport Holdings Ltd, Canary Wharf Group (who are receiving a Crossrail station at Canary Wharf) and Berkley Homes.

[2] http://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/the-rail-plus-property-model

5. Issues and Concerns with Value Capture

The main issues and concerns with value capture and the way it is currently defined in Australia is that a lack of transparency or coherency between federal, state and local governments would likely lead to an inaccurate capturing of funds from developers and result in increasing house prices.

A further concern relates to sale of land between developers and land-owners in an area of impending infrastructure. When the infrastructure charge is anticipated, and the developer cannot pass those additional supply chain costs on to home buyers due to market conditions, the developer will seek to pay less for the undeveloped land and thus keep total development costs at an economically sustainable level. However, this passing back or "back shifting" is unlikely in many instances due to land owner behaviour. Long term land owners have a reservation price, below which they will not sell.

In Australia's current climate, there is a level of confusion and inconsistency across different levels of government. Identifying an appropriate definition and approach to 'value capture' must be better coordinated to ensure that its benefits can be properly achieved and realised.

For example, it is essential for an area designated for transport infrastructure to be, or have the capacity to be, densely populated to increases commuter volumes to relieve pressure on the environment and road congestion. This requires decision makers for both infrastructure investment and planning to better coordinate their activities.

Furthermore, there must be in place a routine and transparent system of infrastructure implementation, as one of the main problems that arises with value capture is the noticeable discrepancy between when capital for when infrastructure is required and when the value resulting from this infrastructure can be effectively captured.

One of the main barriers to a formal application of value capture is clearly identifying who and why are the main beneficiaries of proposed infrastructure, coordinating the timing mismatches between when capital for infrastructure is required and when capital from value capture is realised. Another issue regarding value capture is whether beneficiaries will acquiesce with protocols requiring them to contribute towards infrastructure that the government might be able to build with or without their contribution.

6. Various Policy Positions

UDIA National

The UDIA National body puts forward a position on the mechanisms available to the federal government. UDIA National is adamant that value capture should not act as an 'upfront tax, levy or charge on new home owners and new development owners' that would contribute to general infrastructure funding.

The UDIA advocates the implementation of a 'rigorous and robust valuation methodology' that prevents any increase in property prices unrelated to the new infrastructure being obtained through value capture mechanisms.

The currently hold the position that the government needs to acknowledge value capture will not be applicable for certain intended infrastructure, and even when it is applicable, they cannot be expected to fully fund new infrastructure in the majority of cases.

Federal Government

In the discussion paper published November 2016, the Australian government defines value capture as "identifying and quantifying the value created from the development of the new infrastructure, and connecting it with the costs of infrastructure". The paper states that "by better linking projects and beneficiaries, this approach can also encourage better land use planning and improved infrastructure investment decision-making".

The Australian government sees value capture as "an opportunity for governments to better leverage value increases as a means of funding the capital costs of infrastructure, while sharing the costs with those that benefit the most".

However, it remains unclear if the government's intention is to use value capture to capture funds that would not be feasible from only government funding, or to apply value capture mechanisms when implementing all public infrastructure. *Using Value Capture to help deliver major land transport infrastructure: Roles for the Australian Government Discussion Paper, November 2016*

Infrastructure Victoria

Infrastructure Victoria encourages the Australian government to explore all possibilities of funding infrastructure, as Australia's swiftly growing population bodes the inescapable necessity of generating much more infrastructure in the near future.

In principal, Infrastructure Victoria has stated that value needs to be created before it can be captured.

Infrastructure Victoria highlights identifying and quantifying the beneficiaries of infrastructure as one of the most challenging but important processes of implementing an equitable value capture mechanism. If this process can be realised, Infrastructure Victoria endorses major beneficiary contributions as one of the more fair and equitable mechanisms of value capture.

Infrastructure Victoria also recommends the Government considers betterment levies in order to capture value from a wider range of beneficiaries.

Department of Premier and Cabinet (Victoria)
The Department of Premier and Cabinet (DPC) in Victoria recently released the *Value Creation and Capture Framework* to provide a consistent and concerted approach to assessing and increasing the economic, social and environmental benefits of investments in Victoria.

The framework defines value capture as "government capturing a proportion of the incremental economic value created by government investments, activities and policies". The captured value may then generate alternative revenue streams, assets or other financial value for Government which could assist in funding those investments and activities.

Value creation activities include: Strategic land use assessment; land creation; land consolidation, acquisition and reservation; structure planning; planning scheme amendments; planning conditions; third party incentives; procurement conditions; innovation through procurement; private finance and ownership; Victorian Design Renewal Panel and property development rights.

Value capture activities include: commercial opportunities; infrastructure levies on development; road tolls; private asset manager user charges uplift; private asset manager efficiency dividend and voluntary contributions by beneficiary businesses.

Consult Australia
Consult Australia recommends the establishment of a Federal Minister for Cities and Urban Development in recognition of the key roles that cities play in the national economy. The new Minister's portfolio should work with state planning and infrastructure agencies to set national standards and guidelines, support research on national urban policy issues, and develop model legislation for state, territory and local governments.[3]

Consult Australia advises that to successfully implement value capture it would be necessary to establish a 'revenue benchmark' prior to a program commencing. This benchmark would be monitored against specific planned investments in transport infrastructure and urban renewal.

Consult Australia also recommends capturing additional value over and above a 'without investment' scenario; that is, they are based upon a net increase in surrounding property value or tax revenues created by the infrastructure.

They hypothecate only the resulting increase in tax revenues to fund the infrastructure, not the underlying pre-investment tax revenue[4]. Consult Australia's assessment is that to ignore value capture would be to 'accept a steadily diminishing quality of life for future generations'.

Property Council of Australia
Property Council Australia supports the State Government's pursuit of, and approach to, implementing value capture mechanisms, applauding the 'old fashioned methodological approach' being used by the government to carefully test the strengths and weaknesses of the different mechanisms available.

[3] https://www.consultaustralia.com.au/docs/default-source/cities-urban-development/value-capture-roadmap/value-capture-roadmap-as-web.pdf?sfvrsn=2 31
[4] https://www.consultaustralia.com.au/docs/default-source/cities-urban-development/value-capture-roadmap/value-capture-roadmap-as-web.pdf?sfvrsn=2 8

Property Council Australia does voice concern on the possibility of value capture simply being another tax on landholders and increasing the cost of housing. The Property Council also seeks to remind the Government that land tax, stamp duty, rates, fire services, property and car parking levies already serve in capturing uplift in value from infrastructure development.[5]

Urban Taskforce
Urban Taskforce takes the position that with the introduction of value capture, land and property taxes would need to be reviewed, culminating in the removal of stamp duty as this increases the cost of housing.

International approaches to value capture cannot be directly applied to Australia and must undergo extensive adaptive measures before they can be implemented. For example, the method used in Hong Kong would not be feasible in Australia as majority of the land is private, not Government owned. The model used in San Francisco, where there is a combination of TIF, toll revenues and state and federal funding might be a more suitable model to apply in Australia.

Grattan Institute
Value capture is a tax on the increase in land values that results when a new or upgraded piece of infrastructure improves an area's accessibility.

Acknowledges that the landowner is the one getting the windfall and therefore should be the one effectively taxed, but warns that a landowner maybe asset rich but cash poor.

Identifies rezoning as a form of value creation and that the costs associated with developer charges are passed onto the landowner.

Recommends implementing one value capture framework to be applied consistently for specific projects. Recommends a broad based tax as an effective way to receive benefits from an uplift in land values.

[5] https://www.propertycouncil.com.au/Web/Content/News/National/2016/Getting_value_capture_right.aspx

7. UDIA (Victoria) Principles for Value Capture

In reviewing the role and purpose of Value Capture, the UDIA's position on 'Value Capture' is that where government investment generates value benefited by a select few, a value capture mechanism is an appropriate way for some of that value to be captured and re-invested to benefit the wider community.

For example, with value capture mechanisms, the limited amount of government spending can be spread across more projects that cater for the needs of many communities. Without value capture, the same amount of government spending would be spread across a more limited scope of projects that caters for the needs of a limited number of communities.

However, in addressing the concerns and issues with how 'Value Capture' has previously been sought, the UDIA recommends that the following principles must be considered in designing a 'Value Capture' mechanism. These include:

- Additional value has been generated through government investment that increases the capacity for uses;
- Value is only captured when and where it is generated;
- The proportion of value captured does not diminish the ability for value to be realised; and
- Value is not captured after it has already been realised.

Government Investment

There is a misconception that a planning scheme amendment which rezones land for higher value use is the creation of value. While the planning scheme amendment allows for the value of the land to be realised, in majority of circumstances it has been the investment made to increase the capacity for redevelopment years before the rezoning that has created the value.

While the rezoning increases the value of the land, this is due to a reduction in the level of risk associated with developing the land rather than increasing the capacity of the land for development. As the reduction in the level of risk associated with a rezoning varies from location and location setting a standard 'value capture' mechanism with a planning scheme amendment is difficult.

For this reason, the UDIA recommends that 'value capture' mechanisms focus on the value that is generated from increasing the capacity of uses (i.e. increased density, increased commercial activity, etc.) associated with the infrastructure investment.

Value is captured when and where it is generated

In the same way that the value of land increases as risk associated with the highest and best use of the land is reduced, the value of land associated with the delivery of capacity increasing infrastructure investment is increased as the certainty of delivery is increased.

In many cases the increase in value isn't actually monetised until the land is purchased after the infrastructure investment or commitment has created the uplift. These realities must be considered when exploring an approach to value capture.

Ability to realise value

Increasing the cost of realising the additional capacity generated from the infrastructure investment has an impact on its feasibility. The gap between the redevelopment value of land and the market value existing uses on the land can vary. Any additional costs for the redevelopment can therefore make it unfeasible for the value uplift of the land to be realised.

As such, any value capture mechanism must consider the amount of value that can reasonably be expected to be captured without reducing the feasibility of the land's capacity to be realised.

Retrospectivity

Seeking to capture value after it has already been realised is inequitable and increases the cost of new housing. As such, any mechanism for value capture must be well known before any potential uplift in value can be realised. In situations where a value capture mechanism is introduced after the infrastructure investment has been committed should incorporate relevant transitionary provisions for their implementation.

4. Evaluation of different forms of 'Value Capture'

Value Capture Method	Evaluation
Developer Contributions / Development Charges	*Government investment:* Sometimes. In majority of cases, the developer contributions pay for a significant proportion of local infrastructure to provide a basic level of amenity and services for the development and its occupants. GAIC is intended to cover a proportion (up to 15%) of the costs expected for providing state government infrastructure to land newly included within the urban growth boundary. However, the scope and timing of state government infrastructure investment is not clear. *Value is captured when and where it is generated:* In the instance of GAIC, the value uplift generated from including land within the urban growth boundary was created at the point of its inclusion with a large proportion or possibly all value captured by the landowner at the point of the land's sale. While it is argued that the knowledge of GAIC allows the developer to factor the additional cost as part of price, this fails to recognise the behaviour of vendors. Passing back infrastructure charges onto the vendor is unlikely in many cases due to the behaviour of land owners in setting their own reserve price. Attempts to back pass the development charge that results in an offer below the landowners reserve price means that they will not sell. In weaker market conditions where vendor expectations are lowered and the potential homeowners' willingness and ability to pay is less, the development charge in theory could be passed back to the landowner. *Ability to realise value:* Local infrastructure contributions generally apply a standard rate to the developable area of land, thereby increasing the likelihood of its feasibility. The only instance that development would not be feasible is where the costs associated with developing specific areas are considerably high and the market value of land is low. However, GAIC is applied to both developable land and land required for public purposes. Under the current legislation, the greater the proportion of land required for public purposes (other than schools), the greater the cost of GAIC per lot. *Retrospectivity:* In most instances, infrastructure charges are known.

Value Capture Method	Evaluation
	Verdict: Development charges is not an appropriate tool for capturing a proportion of value uplift. Furthermore, due to its impact on housing prices, its appropriateness for funding users fairly and equitably is also questioned. Additionally, Development Contributions and Charges do not guarantee delivery of infrastructure as collected money doesn't always get spent efficiently and effectively.
Betterment levies	*Government investment:* Betterment levies are applicable when planning changes or investments lead to material land value gains for all new and existing properties in a defined catchment. Not all planning changes justifies the use of a betterment levy. Investment that increases the capacity of the land may be accompanied by planning changes that allows the additional value to be realised. It is the creation of additional capacity on the land that justifies a betterment levy. *Value is captured when and where it is generated:* While the value is created for the land owner, the additional value is unlikely to be monetised until the sale of the land or with the sale of retail, commercial or residential units/ space (new or old). While a betterment levy would capture some of the potential value the landowner is expected to receive from the sale of land, after the sale of land, a betterment levy is likely to act as an additional holding cost for development with the full value of the land likely to have been captured by the land owner. *Ability to realise value:* Depending on the term of the betterment levy and the cost, this approach would unlikely impact the ability for a landowner to realise the value of their property. Approach would need to identify the potential value uplift associated with the development and planning changes and estimate an appropriate levy amount and term that does not significantly impact the commercial viability of existing uses and cause financial hardship. *Retrospectivity:* Generally applied when the investment leads to material land value gains. Arguably, the commitment for investment would result in a material land value gain.

Value Capture Method	Evaluation
	Verdict: The methodology used to set the amount and term for betterment levies will determine whether it is an effective tool for capturing value. Furthermore, offsetting mechanisms could ensure that the betterment levy does not impact the financial viability of existing operations and create unnecessary hardship.
Major beneficiary contributions	_Government investment:_ Investment in the value uplifting infrastructure is underpinned by the negotiation of funding from major beneficiaries. _Value is captured when and where it is generated:_ Major beneficiaries would unlikely negotiate a funding agreement that would allow value to be captured, if value wasn't created for them. _Ability to realise value:_ Major beneficiaries are unlikely to negotiate an agreement that would make it unfeasible to realise value. _Retrospectivity:_ Contributions would be negotiated prior to commitment for the investment in infrastructure. _Verdict:_ If entering an agreement for major beneficiary contributions is voluntary, the approach is considered to be an effective tool for capturing value.
Property development, air rights, asset sales or leases	_Government investment:_ Government investment creates the ability for government to develop excess public land, sell air rights above infrastructure, and sell or lease space/ land. _Value is captured when and where it is generated:_ Value is captured on already government owned land allowing the full value of the infrastructure investment to be captured when and where it is generated. _Ability to realise value:_ Full value of the land or space is realised through sale of development rights, air rights and or the sale or lease of space/ land. A potential buyer would not buy property development rights at a value which makes it unfeasible to develop. _Retrospectivity:_ Applies at and after value has been created.

Value Capture Method	Evaluation
	Verdict: This approach to value capture is the most effective way to capture value of an investment as the full value uplift from an infrastructure project is realised on the government owned land.
Floor area uplift	*Government investment:* Often applied as a mechanism to allow for additional floor area in exchange for a commensurate public benefit. Could be applied as a mechanism in and around land where an infrastructure investment and planning changes increases the capacity for development on the site. *Value is captured when and where it is generated:* In the cases where the opportunity for additional floor area has been created due to infrastructure investment, a floor area uplift mechanism is an approach that allows for the full capacity of the land to be realised in exchange for public benefits. As there are costs associated with providing public benefits, a floor area uplift mechanism must be considered in terms of the monetary value that is being captured to ensure any additional value capture mechanisms do not result in an excessive amount of the value uplift being captured. However, as the value isn't captured until the land is developed it is likely that the costs associated with providing public benefit would operate in the same way that costs associated with developer charges operate as the vendors become savvy to the development potential of the site. *Ability to realise value:* As drafted for c270, the value of the public benefit to be provided is a proportion of the value from additional value that was created. The proposed 10% of additional value is a proportion of the uplift which does not affect feasibility. *Retrospectivity:* Concerns with the setting of the baseline and identification of potential uplift for development. *Verdict:* A floor area uplift mechanism is a very complex tool for delivering additional public value. Due to its complexity and the danger in passing on the costs to new home buyers, this mechanism is not considered an appropriate tool for capturing value.

Value Capture Method	Evaluation
Tax incremental financing	*Government investment:* Funding is based on projected increases in taxation that would be collected from the investment in infrastructure. *Value is captured when and where it is generated:* Utilises increases in taxation created from an increase in the value of property and other economic activities. Furthermore, different measures for calculating incremental tax increases can be applied at the project, precinct and regional scale. *Ability to realise value:* Unlikely to decrease the feasibility of potential development opportunities as does not include any additional costs typically associated with developing land. *Retrospectivity:* Funding is based on tax modelling. Value is captured through existing tax structure once the value of the land increases and the infrastructure creates additional market activity. *Verdict:* Considered to be a highly effective form of value capture.