Value Capture or Infrastructure Charges?
A tale of two Brisbane transport infrastructure projects
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Abstract

Value capture for government to gain a share in growth in land and property values due to public infrastructure investments has been explored in numerous academic journals, government policy documents and public infrastructure business cases. The rationale supporting value capture as a public policy intervention is well documented yet the uptake of value capture by government to help fund public infrastructure is very limited. Betterment levies are designed to capture and share increased property values gained from public infrastructure. Additionally, infrastructure charges, impact fees or developer contributions designed for beneficiaries of urban development approvals to contribute to the cost of public infrastructure. This paper examines value capture and infrastructure charges from a transport and land use practitioner viewpoints in the Queensland context. The Brisbane Cross River Rail and Brisbane Metro projects provide valuable insights as case studies into how major transport projects are being delivered to help answer the value uplift and/or infrastructure charges question.

1. Introduction

State governments in Australia experiencing high population growth face the challenge of funding expensive public infrastructure. The Productivity Commission argues that “when the benefits from infrastructure accrue to more than single users, governments should also consider value-capture initiatives — such as betterment levies and property development — so that the wider beneficiaries contribute to funding” (Productivity Commission, 2014, Vol 1, p 121). The principle of beneficiaries contributing to public infrastructure applies in both the urban planning and transport planning functions within government (that is, integration land use and transport).

This paper reviews the current arrangements in Queensland that can be applied to value sharing of the benefits arising from new and enhanced infrastructure, using the Brisbane Cross River Rail and Brisbane Metro, two major public transport projects, as case studies. A dual perspective is explored; first a land use planning perspective and then a transport planning perspective. A brief review of literature drawn from journal articles, conference papers and government reports are included. The paper finishes with discussion of institutional arrangements, political contexts and risk using a strategic triangle policy framework that assists in informing the viability of policy initiatives.

2. Importance of urban planning and infrastructure

The Productivity Commission identified the role of urban planning is to create efficient and effective functioning cities, which is acknowledged as a complex undertaking with provision of timely infrastructure (that is water, sewerage, transport, telecommunications, energy, parks, stormwater, waste disposal and human services) a key to delivering this complex undertaking (Productivity Commission, 2011). The “Our cities, our future” report identifies improving the efficiency of urban infrastructure through maximising the returns on new and existing infrastructure and connecting private investment capital with productive infrastructure as one of three key approaches to making Australian cities more productive (Australian Government, 2011). Funding contributions by users and value sharing by property owners is more equitable than solely relying on the broader tax base that includes non-users and those living further away (Infrastructure Australia, 2016). Value capture and infrastructure charges...
can play a role in meeting this efficiency, effectiveness and equity challenge however it requires integration between managing land development and funding transport infrastructure.

3. Property and Value uplift

This section provides a brief explanation of the key concepts of property values, value uplift and value sharing.

3.1. Property Values

Property values and rents are derived from intrinsic attributes within the property and extrinsic features outside the property. Intrinsic value is derived from the actions of the land owner, often by enhancing building structures. Extrinsic value is determined by the activity of adjacent land owners and provision of infrastructure, services and development rights by public agencies. Positive extrinsic value can for example be local government increasing development rights through planning schemes and development approvals. Negative extrinsic value can occur for example from highway noise affecting adjacent properties.

3.2. Value uplift

Henry George developed a philosophy of land owners owning the value they create themselves and economic value derived from their land belonging equally with the community (Council of Georgist Organisations, 2018). The economic land value can be natural resources on or under the property and extrinsic value created by government and adjacent property owners. The sharing of property values increases from these extrinsic benefits with the community is the underlying premise of value capture. In other words, the internalisation of the positive externalities of public investment into revenue for these public investments.

3.3 Value share

Governments passively collect their share of the extrinsic property value increases from government actions through property value derived taxes; that is collection of rates or levies per property based on a percentage of the property value. This approach is the primary income stream for local government across Australia. Infrastructure Australia argues that “a broad-based land tax reflects a charge for the ongoing productive capacity of the land, incentivising owners of the land to use it efficiently – or else transfer ownership to somebody else who will use it efficiently” (Infrastructure Australia, 2016, p17). Value uplift levies based on this logic are therefore a pricing mechanism that encourages higher development.

4. Brisbane CBD Public Transport Projects

There are currently two major public transport projects in Brisbane being advanced through a business case process. A suburban rail project is being advanced by the state government and a bus’ project is being advanced by the Brisbane City Council (BCC); both serve the Brisbane Central Business District.

4.1 Brisbane Cross River Rail

Brisbane Cross River Rail (BCRR) is the Queensland Government project to build a railway tunnel under the Brisbane River and CBD to increase the capacity of the South East Queensland suburban rail network. The project involves six kilometres of twin railway tunnels, four new underground stations and upgrades to two surface stations at a nominal cost of $5.4 billion (Department of Transport and Main Roads, 2017). The relative costs and benefits of the project are summarised Table 1.

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1 This is the basis for mining companies paying royalties to state governments.
2 The buses are articulated into consists equivalent to light rail on rubber wheels.
Table 1: BCCR monetised cost and benefits.

<table>
<thead>
<tr>
<th>Project costs</th>
<th>Project benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>Percentage</td>
</tr>
<tr>
<td>Capital</td>
<td>50%</td>
</tr>
<tr>
<td>Operating</td>
<td>44%</td>
</tr>
<tr>
<td>Rolling stock</td>
<td>6%</td>
</tr>
<tr>
<td>Other benefits</td>
<td></td>
</tr>
</tbody>
</table>

The business case refers to ‘supporting urban revitalisation’ around stations at Woolloongabba and Bowen Hills and ‘enlivening’ the southern end of the CBD. The state government established the Cross River Rail Delivery Authority (CRRDA) in April 2017 to progress the project. Tenders to construct the project are progressing with the route and location of stations publicly available.

The business case discusses the possibility of value capture and identifies examples of value sharing from other projects that include:

1. Sale of development rights.
2. Levies applied to beneficiaries.
3. Infrastructure charges, impact fees or developer contributions.

The business case concludes that the potential value uplift is limited however estimates $4.8bn NPV from a range of passive federal, state and local government revenue streams (Department of Transport and Main Roads, 2017, p224).

The CRRDA is tasked with developing strategies to facilitate economic development around railway stations with a focus on government owned land. The business case states Queensland Government is committed to fully paying for the project avoiding the need to progress value capture arrangements, other than joint development of surplus state government land. Why this may be the case is considered later in the paper.

4.2 Brisbane Metro

The BCC is progressing the introduction of bus based light rail into the existing busway network\(^3\) (Brisbane City Council, 2017, 1). There are two lines; Metro 1 from Royal Brisbane Women’s Hospital to the University of Queensland, and; Metro 2 from Roma Street Railway Station to Eight Mile Plains at the southern end of the South East Busway\(^4\). Brisbane Metro is designed to increase the throughput efficiency of the existing busway network. The nominal costs for the project are in the Table 2 (Brisbane City Council, 2017, 3). The biggest single capital cost item is undergrounding the existing Cultural Centre Station to remove the current busway bottle neck in South Brisbane.

Table 2: Brisbane Metro monetised costs.

<table>
<thead>
<tr>
<th>Confidence level</th>
<th>Capital cost ($m)</th>
<th>Operating cost ($m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P 50</td>
<td>$868</td>
<td>$38</td>
</tr>
<tr>
<td>P 90</td>
<td>$944</td>
<td>$41</td>
</tr>
</tbody>
</table>

The business case is silent on value capture as a funding option (Brisbane City Council, 2017, 2). Brisbane Metro is listed by Infrastructure as a High Priority Project (Infrastructure Australia, 2018).

\(^3\) Most of busway network was built, paid for and is owned by the state government.

\(^4\) For comparison, the South East Queensland suburban rail network is a much larger network.
4.3 Inter-modal integration

Each network is stand alone with limited inter-modal connection between the two modes. It is possible to transfer directly between the two modes at Boggo Road/Park Road and Roma Street; other possible transfers will require electronic ticket tagging on and off and a short walk.

5. Land use planning in Queensland

Both Brisbane projects recognise in their business cases the need to leverage higher land use development; that is land use transport integration. The BCRR business case identifies the “land use benefits such as positive impacts on density of economic activity and city building” (Department of Transport and Main Roads, E18). The Brisbane Metro business case makes broad city shaping statements but lacks the detailed what could be done around each station contained in the BCRR business case. This section outlines the role state and local government undertakes in land use planning in Queensland critical to leveraging the higher land use.

5.1. Queensland state government

Land use planning in Queensland is delegated to local government and regulated by the Sustainable Planning Act 2009 and Local Government Act 2009. The state government manages local government planning through state policies and regulations, regional plans and regulations and state government approved local government planning schemes.

Direct involvement of the state government in land use planning is confined to specific locations determined by the state government, referred to as Priority Development Areas (PDA’s), and managed within the state government by Economic Development Queensland (EDQ). The BCRR project identifies use of PDA’s for state government land around stations earmarked for redevelopment.

5.2. Local government

Local government is at the forefront of urban planning through development approval required for land and property development undertaken by the private sector. The primary regulatory tool in Queensland are local planning schemes that comprise:

- Strategic planning frameworks.
- Land use zones, codes, performance requirements.
- Local Government Infrastructure Plans (LGIP’s).

The rationale behind LGIP’s is that any increase in urban density, such as rural to urban, requires additional public infrastructure. Queensland local authorities use their LGIP to derive infrastructure charges based on the following principles:

- User pays - a systematic method across a broader range of local infrastructure.
- Transparency - linkage of infrastructure with land use plans and how infrastructure charges are derived.
  (Wright, Cleary and James, 2011, Wright and Grayson, 2014).

LGIP infrastructure charges are collected for trunk roads, parks, stormwater management, water, sewerage and land for community facilities shared across multiple developments (Department of Local Government, Racing and Multi-cultural Affairs, 2014). Public transport infrastructure can be included providing it is confined to land and works for roads (i.e. buses) and bus stops. The consequence of the current arrangements is that Brisbane Metro would be excluded from the use of infrastructure charges

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5 Local government planning schemes have no jurisdiction over PDA’s.

6 Infrastructure charges exclude local residential streets and parks built within a subdivision provided directly by developers, referred to as “non-trunk” infrastructure, where it is clear the infrastructure solely benefits the development.
except for limited sections that are on local government roads. Conversely, EDQ has greater flexibility in which public infrastructure can attract infrastructure charges.

5.3 Infrastructure Charges

Infrastructure charges are cost driven, that is costs of infrastructure are derived and then apportioned across potential development within the LGIP area. The anticipated amount of revenue collected for the public infrastructure is contingent on approved developments being completed and a limited number of contributors, especially in existing built up areas. Infrastructure charges are transactional in nature (that is, one off) and can be specifically targeted to types of development and specific locations (Infrastructure Australia, 2016).

6. Property value derived charges

Property value charges that have a direct relationship to the value of property; that is as the value of a property increase or decreases, the property charges rise or fall accordingly. In most states, a specific state government agency provides valuations for all rateable properties across the state. Local government is usually the prime users of these valuations and, in several states, state government agencies for specific purposes.

The two methods used to value property are:

- Unimproved land value – this is the value of the land excluding any structural improvements to the land. WA apply this method in rural areas and Qld and NSW adopt this method for all local government rates based on property values.
- Improved land value – this is the value of a property that includes the structures and other improvements on the property. In WA it is assessed in terms of gross rental value and SA and Victoria on the overall capital value.

6.1. Local government

Local government uses the property valuation multiplied by a rate in the dollar, such as 10 cents for every dollar the property is valued. In Queensland this can be applied in three ways:

- General rate – same rate in the dollar across the whole of the municipality and revenues are not tied to specific services, facility or activity and therefore seen as a broad based tax.
- Differential rate – different rate in the dollar for specific land uses, such rural versus urban.
- Separate area rate – higher rate to cover the cost of specific infrastructure or service within a defined area based on the beneficiaries.

(Wright and Grayson, 2014).

Local government therefore has the power to capture a share of rising land or property values for specific projects through the separate area rate mechanism.

6.2. State government

The Queensland state government currently has no tax or levy based on property value, other than passive stamp duties. Some states do collect revenue based on the value of properties, such as the Western Australian state government Perth Metropolitan Improvement Tax (MIT), which is used for the acquisition of private land for transport and land with high environmental values. The MIT is an ongoing tax limited to commercial owners and house owners who rent their dwellings.

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7 Infrastructure charges are only payable near the end of development completion (e.g. sewer connection). Often development speculation occurs when properties with approved development are sold at a higher price compared to pre-approval.
6.2.1 Stamp Duty

A variation of the property value rates is stamp duty collected each time a property is sold. Table 3 shows the dutiable value in Queensland.

Table 3: Stamp duty rates in Queensland.

<table>
<thead>
<tr>
<th>Dutiable value</th>
<th>Duty rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below $5,000</td>
<td>Nil</td>
</tr>
<tr>
<td>$5,000 to $75,000</td>
<td>$1.50 for each $100, or part of $100</td>
</tr>
<tr>
<td>$75,000 to $540,000</td>
<td>$1,050 plus $3.50 for each $100, or part of $100</td>
</tr>
<tr>
<td>$540,000 to $1,000,000</td>
<td>$17,325 plus $4.50 for each $100, or part of $100</td>
</tr>
<tr>
<td>Above $1,000,000</td>
<td>$38,025 plus $5.75 for each $100, or part of $100</td>
</tr>
</tbody>
</table>

1 Available at www.qld.gov.au/housing/buying-owning-home/transfer-duty-rates

Stamp duty in Queensland is progressive with high property prices attracting a higher rate in the dollar duty. This means increases in property prices due to increased extrinsic value may attract higher rate in the dollar, which may be referred to as ‘bracket creep’. Stamp duties are considered a passive approach as it is not applied or amended for any specific public infrastructure beneficiary.

6.2.2 Value Capture

As mentioned the Queensland state government is directly involved in development approvals in specific locations through EDQ. EDQ currently applies a value capture charge when rural land is granted urban development rights, albeit cost driven. This precedence could potentially apply in PDA’s around BCRR stations.

6. Capturing value uplift

This section provides a very brief outline of value capture methods and a brief review of the literature.

6.1. Value capture methods

The capturing of value uplift to fund specific public infrastructure is known as a betterment levy. It is a levy applied to properties identified as potentially gaining benefit from proposed new public infrastructure and services. Betterment levies are considered equitable and efficient as it recovers increase land values arising from the benefits of the infrastructure (Roukouni and Medda, 2012, Medda, 2012, The World Bank, 2018). The Queensland local government separate area rate can be applied as a betterment levy.

A variation of betterment levies is tax increment finance. This entails future revenue from marginal increases in property values within an existing levy is hypothecated to specific public infrastructure and services. In the United States, many cities used betterment levies in the form of separate area rate, or special assessment districts, on the increment in land values caused by public infrastructure improvements (Peterson, 2009).

The third option is government gaining a financial return by developing underutilised land assets through joint development of land and/or air rights. Redevelopment authorities in Western Australia for example obtained value uplift from underutilised government owned land and sale of air rights over the

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8 Levies are different from taxes. Funds raised from levies are hypothecated to specific infrastructure and services. Taxation raises revenue use for general government purposes.
undergrounding of suburban railways\textsuperscript{9}. A key factor for the success of this approach is existing high property values in the surrounding suburbs.

6.2. Literature review

This section presents a short review of the literature drawn from journal articles and government funded reports.

Firstly, different studies and ex post analyses by academics to determine increment land value increases can differ by as much as 300 percent\textsuperscript{10} (Peterson 2009). Another review of 36 different studies identified a range of uplift from zero to 15 percent (Baker and Nunns, 2015). The analysis of road infrastructure reveals redistribution of growth with changes to land values and economic benefits accruing from spatial relocation (Cervero and Kang, 2011). Further changes to land value are generally smaller the further land is from the city CBD (Mulley and Tsai, 2016). Mohammad et al found land value changes higher than property value changes, that is intrinsic property enhancements, and there is no noticeable difference from rent prices compared to property prices (Mohammad, et al, 2013). Infrastructure Australia (2016) found property prices as a predictor for future revenue streams is unreliable. Overall there is mixed results of value uplift with no assurance that value uplift would automatically occur.

Secondly, the literature identifies that the timing of the public infrastructure, from announcement to completion, is also important. Figure 1 shows potential increases in land values on project announcement as land owners speculate on increases in land values (Infrastructure Australia, 2016). The rate of value increase is lower after rail construction is completed when the actual benefits are realised (Mohammad, et al, 2013). The policy implication of this means the need to also announce the betterment levy regime\textsuperscript{11} at the time of project announcement. This has not occurred with BCRR and Brisbane Metro.

Figure 1: Timing impacts of public infrastructure on land values

Thirdly, the concept of accessibility plays a part in determining the beneficiaries of transport infrastructure; that is the benefits are likely to be higher closer to the public transport stations. There are also differences between residential and commercial development with the commercial development beneficiary area being bigger matching the customer and labour catchments when connected to good sub-regional access. There are also variances between public transport stations due to different land use configurations around the stations.


\textsuperscript{9} A good example is the Subi Centro (Subiaco Redevelopment Authority) – see https://cdn.mra.wa.gov.au/production/documents-media/documents/subiaco/file/subi-centro-a-case-study-in-urban-revitalisation.pdf

\textsuperscript{10} These variations are attributable to differences in the way aggregate land value changes are distributed among different parcels.

\textsuperscript{11} This could be achieved by setting the announcement date as the base value for a future betterment levy.
In the case of railways, intensive capital investment can confer most significant accessibility benefits providing:

- The public transport mode share is high\textsuperscript{12} and real estate markets are not weak.
- There is quality and high service frequency and comparative travel times with the private car is competitive.
- Commercial and mixed-used centres are clustered around stations.

Bus rapid transit can work provided there is permanency of services (Mulley and Tsai, 2016).

The literature review provides a mixed bag of findings around value uplift, including unimproved land versus improved property values. The regional nature of both Brisbane Metro and BCRR with a focus on customer and labour catchments suggests broad value uplift across the service area of both projects and, conversely, a relocation of uplift leading to no net gain across Brisbane.

7. Traditional funding public infrastructure

Traditionally public infrastructure is funded by commonwealth, state and local government from general revenue or borrowings repaid by broad-based taxation and user charges. There is a spectrum of infrastructure totally funded from broad-based taxation (e.g., schools, prisons) to infrastructure totally funded from user charges (e.g., water and power utilities, toll roads) (Wright and Grayson, 2014). Local government funds some ‘trunk’ public infrastructure solely through infrastructure charges and depending on timing, may borrow against future infrastructure charges, to bring forward public infrastructure.

The Queensland state government on a regular basis releases state-wide State Infrastructure Plans with regional variations (Department of Infrastructure, Local Government and Planning, 2016). Transport infrastructure comprises the ‘lion’s share’ of Queensland state government-funded infrastructure across the state and relies almost entirely on broad-based taxation despite discussions about value capture. Exceptions to this include public private partnerships\textsuperscript{13}, infrastructure partly or wholly funded by mining companies and grants provided by the Commonwealth Government.

9. Discussion

Discussion in this section is divided into the following topics:

- Institutional arrangements.
- Risk assessment.
- Political implications.

9.1. Institutional arrangements

Existing institutional arrangements have a major impact on capturing value uplift for public infrastructure.

9.1.1. Development control

Local government in Queensland is the major player in the development control process with EDQ active in specifically defined locations. The entry of EDQ into the development control arena has at times antagonised local government with local government jealously guarding their development control powers. This is extremely evident in South East Queensland where the largest local authorities are located, especially BCC where the BCRR project is situated. The BCRR business case only refers to development control using EDQ powers on land currently owned or acquired by the state government for the BCRR project.

\textsuperscript{12} This is probably why increases in land values are greater in Europe and Asia compared to North America (Mohammed, et al, 2013).

\textsuperscript{13} Toll roads for example rely on user charges paid directly by beneficiaries of this infrastructure.
Value capture funding through infrastructure charges is heavily contingent on land owners seeking approval to develop and then progressing their approved development. Local planning schemes and infrastructure charges therefore need to be supportive of higher development of private land around public transport stations.

Infrastructure charges are high risk for government as it has no control over the timing and density of urban development\textsuperscript{14}. Local government typically manages this risk by building infrastructure incrementally to match the actual growth in demand. This approach is problematic as large public transport infrastructure projects require expensive upfront investments before the public transport services are provided.

\textbf{9.1.2. Infrastructure funding}

Local and state governments typically fund public infrastructure through capital borrowings and grants. This is a better fit for transport infrastructure projects that require substantial upfront investment to construct the infrastructure before user benefits can accrue. Both BCRR and Brisbane Metro entail substantial upfront investment.

\textbf{9.1.3. Infrastructure Levy Options}

Both the state government, through EDQ, and local government have the powers to apply betterment levies through special area rates. No such powers exist for the CRRDA, which requires EDQ to undertake this task. This has implications for institutional arrangements if the two competing projects were to both use betterment levies in the same location.

Let us examine the option of a betterment levy for either project. Firstly, betterment levies could be charged across the Brisbane CBD or in residential areas directly serviced by both projects. The former is more equitable given the very high public transport mode share for trips into and out of the Brisbane CBD and improved road traffic conditions for people also driving into and out of the CBD\textsuperscript{15}. BCC could apply special area rate across a broad area but is silent on this option.

Secondly, the state government could implement a betterment levy as it provides unimproved land valuations for each property, so it has a foundation to develop its own special area levy. However, it currently:

- Lacks any current administrative arrangements, although the collection of the levy could be undertaken by BCC, and
- Would most likely require legislation as it would not be appropriate to designate the whole of the Brisbane CBD as a PDA under the jurisdiction of EDQ.

A summary of the different betterment levy options is outlined in Table 3.

\textbf{Table 3: Summary of each value uplift option.}

<table>
<thead>
<tr>
<th>Levy option</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Special area rate</td>
<td>Applied by BCC, renewed annually and based on property value regardless of growth in property value.</td>
</tr>
<tr>
<td>2 Betterment levy</td>
<td>Based on growth in property value from a set from the announcement date of the project. The effects of the project on property values is unknown and likely dwarfed by general economic conditions.</td>
</tr>
<tr>
<td>3 Tax Increment Finance</td>
<td>This isn’t an option as the state government does not have an existing rate or levy scheme in place. A surrogate is the stamp duty on property sales within the benefit area with additional revenue hypothecated to BCRR.</td>
</tr>
</tbody>
</table>

\textsuperscript{14} Increasing density controls around stations doesn’t automatically mean the private sector will develop to the maximum permissible development levels.

\textsuperscript{15} Road travel time savings account for 40% of the BCRR business case project benefits. Similar benefits are espoused in the Brisbane Metro project.
The prospect of the state government and BCC working together in the context outlined in Table 3 is highly unlikely due to historical political differences evident with both pursuing different public transport projects in the same location.

9.2. Risk assessment

The literature raises several key risk issues that are discussed below.

9.2.1. Revenue stream

Revenue stream risks for infrastructure charges and betterment levies are similar but each has a different risk profile. Local government can better manage the risk by incremental expenditure on infrastructure in the case of infrastructure charges. The risk increases when large ‘bring forward’ infrastructure expenditure is required, which can be offset to a degree by negotiating with land developers to pay infrastructure charges in advance.

Revenue certainty with betterment levies is a key risk given the high upfront investment for transport infrastructure projects and uncertainty about future increases in property values. The betterment levies in the literature are predicated on an increase in land values which are outside the control of government. The literature provides little comfort in predicting growth in land values generated specifically by transport infrastructure, as is highlighted in the BCRR business case.

Managing risk for the high upfront cost can be mitigated by moving away from the uncertainty of a fixed share predicated on increasing land values. An option is to apply the local government general rate model which:

- Determines the revenue amount required; and then
- Derives the rate in the dollar to cover this revenue requirement.

Applying this scenario, the rate in the dollar would decline when land values increase and increase when land values decline.

The state government will gain additional stamp duties through more property development and potential stamp duty bracket creep with increases in property values. The extent of this revenue is uncertain, relatively small and is currently absorbed into general revenue.

9.2.2. Beneficiary identification

Accessibility is a concept that appears often in the literature, which generally means the closer you are to a railway station for example, the higher the accessibility and the higher the benefits. It is highly challenging to identify specific beneficiaries and quantify size of the benefits for each beneficiary. Application of a sliding level of benefit however is daunting and difficult to quantify and sell to stakeholders. A possible solution is to let the market decide as per betterment levies, ensuring an equitable distribution of costs on land owners.

The remaining challenge is identification of the levy area, predicting which properties benefit from the new infrastructure\textsuperscript{16}. The Brisbane River forms a natural barrier on three sides of the Brisbane CBD which aids beneficiary identification. The northern side is more challenging and impacted by upgraded services to the Exhibition and Bowen Hills Station. The Woolloongabba Station south of the Brisbane River requires more analysis to determine a beneficiary area and potentially a different rate in the dollar due to different market conditions and land use configurations.

\textsuperscript{16} For example, the BCRR business case uses 800 metres from a station as a guide.
9.3. Political implications

Betterment levies have proven challenging to implement in a political context. The Strategic Triangle Model (Leonard, 2002) provides a useful framework to assess the political implications of new policy initiatives; the framework comprises:

- Capacity – ability of individuals and organisations to effectively deliver and evaluate the policy initiative.
- Public value – quantifying the actual benefits to the public, both individual and the broader community.
- Community support – stakeholders and participants support the innovation.

The discussion again uses Brisbane Metro and BCRR projects as the case studies.

9.3.1 Capacity

Both the state government and BCC have the legislative capacity to develop and implement betterment levies as discussed. The state government would need to build its own rating collection system assuming BCC declined to undertake this role\(^\text{17}\). This capacity doesn’t currently exist within the Department of Transport and Main Roads and the CRRDA.

9.3.2 Public value

Both projects have developed the overall economic, social and environmental benefits in their business cases. The challenge is ensuring there is sufficient evidence of the project’s public value so the policy makers can convince property owners and other key stakeholders of the merits of the project. The lack of consistent value uplift in the numerous projects reviewed in the literature provides no comfort for advocates and provides evidence for antagonists.

9.3.3 Community support

The issue of gaining and maintaining community support is the likely to be the biggest challenge as identified by Infrastructure Australia (2016). The focus of the levy in and around the CBD is positive in that the high level of commercial, office and high-density residential development combined with paid parking supports high public transport ridership. Commercial land owners are also usually more accepting than home owners of paying additional levies to government. The waters for the state government will however be muddied by the potential antagonism of the BCC who are advocating their own major inner-city public transport project without a betterment levy.

10. Conclusions

This paper presents the opportunities and challenges in implementing value capture in the context of two large public transport projects in Brisbane, Queensland. The servicing of a growing CBD with bigger catchments and more efficient movements of people provides a major opportunity to partially offset the capital costs of Brisbane Metro and the BCRR through a form of value capture. The Queensland government and Infrastructure Australia have identified the benefits of capturing a share of property values increases but this is likely to remain an elusive goal.

The Brisbane Metro business case has motherhood statements about integrating land use with the project however is silent on value capture even though BCC has the legislative power to implement a betterment levy. The BCRR business case has extensive discussion on value sharing but concludes that the State Government will fund the entire project using broad based taxation and limit its land use transport integration to land owned by the State Government. The institutional arrangements between state and local government, separate responsibilities for land use planning and transport planning, and

\(^\text{17}\) Brisbane City Council could be directed to perform this task however politically this course of action is highly unlikely.
use of duplicate property-based taxation, levies and infrastructure charges means value sharing for these projects is highly unlikely.

11. References and citations

Australian Government (2011) Our cities, our future: A national urban policy for a productive, sustainable and liveable future Department of Infrastructure and Transport, Canberra, Australia


Brisbane City Council (2017) 1 Brisbane Metro: Business Case Key Findings May 2017 Brisbane, Australia

Brisbane City Council (2017) 2 Brisbane Metro: Business Case – Chapter 8 – City and place analysis and benefits May 2017 Brisbane, Australia

Brisbane City Council (2017) 3 Brisbane Metro: Business Case – Chapter 11 - Cost, risk and economic analysis May 2017 Brisbane, Australia


Department of Infrastructure, Local Government and Planning (2016) Shaping SEQ: Draft South East Queensland Regional Plan Queensland Government, Brisbane, Australia

Department of Infrastructure, Local Government and Planning (2017) State Infrastructure Plan Queensland Government, Brisbane, Australia


Infrastructure Australia (2016) Capturing Value: Advice on making value capture work in Australia Australian Government


Wright, I, Cleary, S. and James, B. (2011) Infrastructure planning and charging in Queensland: evolution or revolution? Knowledge Matters, Herbert Geer, Brisbane, Australia

Wright, I. and Grayson, L. (2014) The role of differential general rates and special rates and charges in funding development infrastructure Colins, Biggers and Paisley Lawyers, Brisbane, Queensland, Australia