Discussion Paper to NSW Productivity Infrastructure Contributions (IC) Review Inquiry 2020

Source: Draft Book Extracts for Discussion

Author

Title

draft Renewing Cities with Value Capture Planning (2020 Springer Publishing)

Sub-title

Model for Achieving Equitable Housing, Public and Open Spaces and Sustainable Transport

Contact

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Introduction

Thank you for the opportunity to submit this Discussion Paper to the NSW Productivity Infrastructure Contributions (IC) Review Inquiry 2020. This follows an email exchange on

I expressed regret that time did

not permit me to make a formal submission before closing date. We agreed that I could submit this discussion paper. The paper can be circulated, quoted and noted for public record and access (if the Inquiry so determines).

This discussion Paper consists of extracts from my draft book to be released in late December 2020 by Springer Publishing. My background as an author (Rauscher) on urban planning (including comment on the upcoming book on value capture planning) is on the last page of this discussion paper.

The Discussion Paper is laid out as follows (based on book extracts):

- 1. Book Abstract
- 2. Chapter 1 Abstract and Conclusions
- 3. Chapter 2 Abstract and Value Capture Planning (VCP) Model
- 4. Chapters 3-6 Abstracts and Results and Conclusions on Applying the Model
- 5. Chapter 7 Abstract
 - 5.1 Results from VCP Application by Planning Principles and Developer Provisions and/or Levy Alternative
 - 5.2 VCP and Implications of Coronavirus to Future Urban Planning
 - 5.3 Value Capture Planning (VCP) as a Valuable Planning Tool
 - 5.4 Future Directions of Value Capture within Urban Planning
- 6. List of Abbreviations
- 7. Author Biography

1. Book Abstract

The focus of the book is on renewing cities with value capture planning (VCP). Value capture is achieving public needs by capturing value on lands designated for development or government infrastructure. A VCP model is proposed and applied to selected study area cities and precincts within those cities. Chapter 1 focuses on cities currently using value capture and outlines steps any government can take to adopt value capture policies. Before looking at these steps, the implications of the coronavirus pandemic (2020) for future urban planning (including value capture) is reviewed (i.e. health, open space, transport and housing).

The VCP model is then introduced in Chapter 2, including three planning principles (to be examined) and components (in brackets) of those principles as follows: 1. *Equitable Housing* (affordable, social and market). 2. *Public and Open Spaces* (natural areas, open spaces, and public spaces); and, 3. *Sustainable Transport* (rail, bus and active transport). In addition, the second part of the model, *Developer Provisions and/or Levy Alternative*, is then outlined. The four study area cities selected

contain major renewal areas. These include (renewal area and city in bracket): 1. an inner city area (Central to Eveleigh Renewal Area (CERA), City of Sydney); 2. a middle ring city (Sydenham to Bankstown Urban Renewal Corridor (SBURC), City of Canterbury Bankstown); 3. a growth centre city (Gosford City Centre Revitalisation) (GCCR), Central Coast Council); and, 4. a regional capital city (Newcastle City Centre Renewal Area (NCCRA), City of Newcastle).

Within each city renewal area (separate chapter each) a case study renewal precinct is then selected. For each renewal precinct a background is provided on population, planning and development trends. The VCP model is then applied to each renewal precinct. Results and conclusions on the model application are drawn for each precinct. With these results, it's also shown how the model can be extended beyond a precinct to other parts of the city study area. The overall results of applying the model across all precincts and study areas is assessed in Chapter 7. In addition, within this chapter the implications of the coronavirus pandemic (Chapter 1) for future urban planning across the study areas is commented on. The application of the model to any city or region in Australia or anywhere in the world is then addressed. Finally, comments are offered on the future directions of value capture planning within cities and regions.

2. Chapter 1 City and Region Renewal and Value Capture Planning

Abstract The chapter outlines planning for renewing cities and regions using value capture (VC). Before looking at VC more closely, the implications of the coronavirus pandemic (2020) for future urban planning (including value capture) are reviewed (i.e. housing, open spaces, and transport). The focus of the chapter then moves to cities adopting VC policies to guide renewal of parts of those cities. Those governments that use VC within their planning are then examined. It's explained how VC policies are triggered by government decisions. These include for example: land up-zoning and designation of major government infrastructure projects. The chapter then addresses key aspects of VC planning, including: 1. background to value capture; 2. applying value capture; 3. innovations in value capture; 4. value capture approaches; 5. value capture in different countries; 6. contrasting views on value capture; and, 7. variations and confusions about value capture. Finally, the chapter explains how value capture is administered through value capture planning (VCP) programs, including engaging the governing body, developers and the community.

Conclusions

There are a number of conclusions reached in canvassing urban planning in the post coronavirus era and the future role of value capture planning (VCP). Firstly, there is likely to be significant changes to the design of cities in the post coronavirus era (i.e. housing; public and open spaces; and, sustainable transport). Secondly, in addressing future renewal of cities, there is potential scope for the adoption and application of VCP (applicable to any country and as illustrated in case city examples). In addition, it was postulated how VCP could be used as a tool in achieving equitable planning outcomes (e.g. housing, open spaces and transport) as examined in coming chapters.

3. Chapter 2

Greater Sydney and Regions' Renewal - Value Capture Planning Model

Abstract This chapter outlines the development of a value capture planning (VCP) model and details how it will be applied to study areas (4 cities within urban corridors in Australia). Firstly, the potential opportunities for the application of value capture to the renewal of cities is outlined. Attention is drawn especially to the implications of the coronavirus pandemic (2020) on future urban planning (Chapter 1). The VCP model is then outlined and selected planning principles of the model explained. These principles and components (in brackets) are: Equitable *Housing* (affordable, social and market housing); *Public and Open Spaces* (natural areas, open spaces and public spaces); and, *Sustainable Transport* (rail, bus, and active transport). The chapter then explains the application of these planning principles and the developer provision and/or levy alternative. The concept of extending the VCP model application from a precinct level (i.e. renewal areas) to areas beyond the precinct is also commented on.

The Greater Sydney and region centres planning is then introduced. Study areas and case study renewal precincts within these areas are selected for model application. Comments are also offered on surveys to be completed within the selected renewal areas. These areas include by type of urban area (renewal area and city in bracket): 1. an inner city area (Central to Eveleigh Renewal Area (CERA), City of Sydney); 2. a middle ring city (Sydenham to Bankstown Urban Renewal Corridor (SBURC), City of Canterbury Bankstown); 3. a growth centre city (Gosford City Centre Revitalisation (GCCR), Central Coast Council); and, 4. a regional capital city (Newcastle City Centre Renewal Area (NCCRA), City of Newcastle).). Finally, case study precincts within each study area city are selected and comment offered on surveys to be undertaken for each precinct.

Value Capture Planning (VCP) Model

The Value Capture Planning (VCP) Model consists of four (4) tables as follows.

1. Equitable Housing

Housing in most cities is the most important provision of population need, after food. Equitable housing signifies a balance of housing types, including: affordable, social and, market housing. The first table (2.1) (Equitable Housing) incorporates four key steps of value capture (VC) for an authority to apply. An example of planning new housing at 4,000 units is taken within the table.

Step	1	2	3	4		
Checklist	Housing Types	Meet Criteria of Need for Housing Types (Examples)	Addressing Design Guidelines for Housing Types (Examples)	Projected # and % of New Housing Units(Example)		
	All New Housing	Housing standards	Variety of designs	4,000 (100%)		
y	1. Affordabl Housing	e Special housing groups	Innovative architecture	1200 (30%)		
Y	2. Social Housing	Social support needs	Maintenance efficiencies	800 (20%)		
У	3. Market Housing	Housing as income compatible	Range of housing style choice	2,000 (50%)		
Steps as per columns						
1	Tick the checklist for housing types that apply					
2	Adopt criteria for housing provision					
3	Refer to design guidelines for housing					
4	4 Projected # and % of new housing units by type					

Table 2.1 Value Capture Planning (VCP) Table: Equitable Housing

Application Summary

A checklist is provided to identify housing types (Step 1). Step 2 is meeting criteria of need for housing types. Step 3 is addressing design guidelines for housing types. The projected units of new housing by types (Step 4) can be calculated by number and %. The planning body can then use these numbers within developer agreements (Table 2.4).

2. Public and Open Spaces

Public and open space provisions in most cities is a critical principle of planning for a population. Components include: natural areas, open spaces, and public spaces. The second VCP table (2.2) (Public and Open Spaces) incorporates five key steps.

Step	1	2	3	4	5	
Checklist	Public an Open Spa Types		Projected New Public and Open Spaces	Address Design Guidelines for Public and Open Spaces (Examples)	Cost of Public and Open Spaces Provision by Type	
У	1. Natural Areas	Natural area regeneration	ha	Amount of regeneration	\$	
У	2. Open Spaces	Active and passive spaces	ha	Connecting public and open spaces	\$	
У	3Public Areas	Need for public spaces	ha	Amount of spaces required	\$	
Totals	Totals		ha		X \$	
Steps a	Steps as per columns					
1		Tick the checklist for			apply	
2	Adopt criteria for public and open spaces provision					
3		Projected new public and open spaces				
4	Refer to design guidelines for public and open spaces					
5	Cost of open spaces provision by type (total cost shown as X\$)				n as X\$)	

Table 2.2 Value Capture Planning (VCP) Table: Public and Open Spaces

Application

A checklist is provided to identify public and open spaces types (Step 1). Step 2 is meeting criteria of need for public and open spaces provision. Step 3 is projecting new public and open spaces by type. Step 4 is addressing design guidelines for public and open spaces. Step 5 calculates the cost of the new public and open spaces. The user of the table can then use these numbers in formulating developer provisions and/or levy alternatives among stakeholders (Table 2.4).

3. Sustainable Transport

Sustainable transport is the third planning principle of the VCP model and an important infrastructure provision for the planning of communities. Sustainable transport components include: rail (heavy and light); bus; and active transport. This third VCP table (2.3) (sustainable transport) incorporates five key steps.

Step	1	2	3	4	5	
Checklist	Sustainat Transport Provision	for Sustainable	Address Design Guidelines for Sustainable Transport (Examples)	Projected New Transport Provisions (i.e. infrastructure)	Cost of New Transport Provisions by Type	
У	1. Rail (heavy and light)	Demand and d access	New station, transport or interchange	Type Provision	\$	
y	2. Bus	Demand and access	Bus transit way	Type Provision	\$	
У	3. Active Transport	Cycleways, Pedestrian paths, and share ways	Cycling and walking links	Type Provision	\$	
Total						
Steps	Steps as per columns					
1	1 Tick the checklist for sustainable transport types that apply					
2						
3	Refer to design guidelines for sustainable transport provisions					
4	Projected new transport provisions					
5	5 Cost of new transport provisions by type (total cost shown as Y\$)					

Table 2.3 Value Capture Planning (VCP) Table: Sustainable Transport Provisions

Application

A checklist is provided to identify sustainable transport provisions (Step 1). Step 2 is meeting criteria for the transport provisions. Step 3 is addressing design guidelines for sustainable transport. Step 4 is projecting sustainable transport provisions new public and open spaces by type. Step 5 calculates the cost of new sustainable transport provisions. The user of the table can then use these numbers in formulating developer provisions and/or levy alternatives among stakeholders (Table 2.4).

4. Developer Provision and/or Levy Alternative

The second stage of the VCP model is the Developer Provision and/or Levy Alternative. Developer provisions (i.e. within development agreements) of value capture planning (VCP) allows the developer a choice of providing a facility and/or (if more appropriate) a levy alternative. The forth VCP table (2.4) incorporates two key steps.

Table 2.4 Value Capture Planning (VCP) Table: Developer Provision and/or Levy Alternative for Public and Open Spaces, and Transport Infrastructure

Step	1	2			
Check List	Projected Units of New Housing by Type and % (see Table 2.1)	Developer Provision and/or Levy Alternative per New Housing Unit			
		Public and Open Spaces X \$ (total) (see Table 2.2)	Transport Provision Y \$ (total) (see Table 2.3)		
У	All New Housing (example) 4,000 (100%)	X \$ + Y \$ ÷ 4,000 Units = Z \$ per unit			
y	1. Affordable Housing 800 (20%)	\$ per unit for 800 Units			
y	2. Social Housing 1200 (30%)	\$ per unit fo	or 1200 Units		
У	3. Market Housing 2,000 (50%)	\$ per unit for 2,000 Units			
Steps as	Steps as per columns				
1	Tick the checklist for housing types that apply and projected new housing by type and %				
2	Value capture levy per new housing unit for public and open spaces, and transport infrastructure (Z \$ per unit)				

Application

A checklist is provided to address the projected new housing (Step 1) by type and % from Table 2.1. Step 2 identifies the developer provision or levy alternative per new housing unit for public and open spaces (Table 2.2) and sustainable transport provisions (Table 2.3). The user of the table can then use these numbers in formulating developer provisions and/or levy alternatives among stakeholders.

Note - Extending the VCP Model beyond the Precinct

The concept of extending the VCP model beyond the precinct to other areas is addressed. While the model is formulated to apply to areas such as renewal zones the application to other areas (i.e. urban corridors or whole of cities) is addressed in each chapter. Greater Sydney and regional centres bordering Greater Sydney are introduced and examined next. From this examination four case study areas will be selected to apply the VCP model to in subsequent chapters

4. Chapters 3-6

Chapter 3 Inner City Renewal and Value Capture Planning - Greater Sydney's Central to Eveleigh Renewal Area (CERA)

Abstract The chapter addresses renewal of inner city areas and applies a value capture planning (VCP) model. Two subjects (from earlier chapters) of significance to inner city areas are firstly summarised: 1. the implications of the coronavirus pandemic (2020) for future urban planning (Chapter 1); and, 2. VCP model (including planning principles of: equitable housing, public and open spaces, and sustainable

transport) (Chapter 2). The Central to Eveleigh Renewal Area (CERA) (under the State of New South Wales and within the City of Sydney) is then introduced. The VCP model is then applied to the case study Waterloo Housing Estate Renewal Precinct within the CERA. Results and conclusions are then drawn. The application of the model to areas beyond the Precinct is also addressed, including application to: the CERA; the City of Sydney overall; and, other inner city areas of Greater Sydney. At chapter's end it's noted that Chapter 7 will address: 1. overall results of applying the model to each of the four case study areas; and, 2. the application of the model to any urban or regional centre elsewhere in Australia or in the world.

Results and Conclusions on Applying the Model

In applying the value capture planning (VCP) model (via the four tables) to the Waterloo Housing Estate Renewal Precinct there were a number of results and conclusions. Examining the first planning principle (*Equitable Housing*) (Table 3.4) it was shown that value capture can ensure public lands (such as this renewal area) can meet affordable, social and market housing needs. At the same time (it was indicated) the public (via the State) can benefit from land value increases in the rezoning and land use upgrading process of a renewal site. In addition housing is provided to balance the overall population mix of the upgraded estate (adding further land value to the site).

Moving to the second planning principle (*Public and Open Spaces*) within the model a checklist of steps to apply the model simplified the process (Table 3.5). Given the renewal site will cater for a very high density population, open spaces had been designed and proposed to the State. It was shown how the Sydney City Council significantly expanded these space (reference Section 3.5.4 above). As a redevelopment site the project could expand opportunities for connecting public and open spaces (including replicating natural area features lost over years).

Moving to the third planning principle (*Sustainable Transport*) within the model a further checklist was provided (Table 3.6). The development of the new Waterloo Metro rail station and associated residential towers and commercial service businesses would be major contributors to land value increases. These increases could flow partly back to the pubic under value capture (via the State ownership of most of the renewal site). Significant increases in State asset value and potential land leases and/or sales should create a significant revenue stream. Part of this stream could be applied to undertaking other transport initiatives (i.e. bus services and active transport) within the study area as noted in Table 3.6.

The forth part of the model to be applied was the developer provision (and/or levy alternative) (Table 3.7). The total cost of public and open spaces was added to the total cost of sustainable transport infrastructure to achieve an overall costing associated with the Waterloo Housing Estate Precinct development. To achieve a spread of the costings per housing unit this total cost was then divided by the number of development units by type (e.g. affordable, social and market). It was then shown that these costings could be a combination of developmer provision and/or levy alternative per new housing unit.

In conclusion, in applying the model, there is an overall end result (in costing and meeting needs stemming from proposed development). It is shown that the tables can be used for individual planning principles or any combination of planning principles. It was also suggested that the application of the VCP model to larger areas beyond the Waterloo Housing Estate Precinct could also be considered. A comparison of these results with the results of applying the model to the three other study sites (Chapters 4, 5, and 6) will be addressed in Chapter 7.

Chapter 4

Middle Ring City Renewal and Value Capture Planning - Greater Sydney's Sydenham to Bankstown Urban Renewal Corridor (SBURC)

Abstract This chapter addresses renewal of middle ring city areas and applies a value capture planning (VCP) model. Two subjects (from earlier chapters) of significance to middle ring city areas are firstly summarised: 1. the implications of the coronavirus pandemic (2020) for future urban planning (Chapter 1); and, 2. VCP model (including planning principles of equitable housing, public and open spaces, and sustainable transport) (Chapter 2). The Sydenham to Bankstown Urban Renewal Area (SBURA) (under the State of New South Wales and mostly within the City of Canterbury Bankstown) is then introduced as the study area. This is the second of four selected study areas. The VCP model is then applied to the case study Canterbury Renewal Precinct, within the SBURA. Results and conclusions are then drawn, including the potential application of the model to other precincts within the study area. The application to: the City of Canterbury Bankstown; the SBURA; and, other Greater Sydney middle ring areas. At chapter's end it's noted that Chapter 7 will address: 1. overall results of applying the model to each of the four case study areas; and, 2. the application of the model to any urban or regional centre elsewhere in Australia or in the world.

Results and Conclusions on Applying the Model

In applying the value capture planning (VCP) model (via the four tables) to the Canterbury Renewal Precinct there were a number of results and conclusions. Examining the first planning principle within the model (*Equitable Housing*) it was shown that value capture could ensure renewal lands (e.g. within the Precinct) can meet affordable, social and market housing needs. At the same time it was shown that the public (via the State) could benefit from land value increases in the rezoning and land upgrading processes within a renewal area.

Moving to the second planning principle (*Public and Open Spaces*) it was shown how public and open space needs can to be designed to incorporate value capture planning. It was illustrated how renewal of the Canterbury Renewal Precinct lent itself to opportunities for new public and open spaces. This would include, for example, restoring natural areas along the Cooks River. These areas along the foreshores have been impacted over the years of development. Finally, it was noted that the land value

increases from the precinct's development would enable public and open space provisions to be achieved.

Moving to the third planning principle (*Sustainable Transport*), the focus was on the upgrading of Canterbury rail station (under the Metro South West project). It was shown that this upgrading had a catalytic development effect on new residential and commercial businesses, including land value increases. These increases could be configured to flow partly back to the pubic (i.e. the State ownership of the station's site and curtilage). Significant increases in State asset value and potential land leases and/or sales could create a further revenue stream of public benefit. Part of this stream could be applied to undertaking further transport initiatives (i.e. bus service facilities, transit ways and active transport) as noted in Table 4.4.

Finally, moving to the developer it was shown how the developer provisions and/or levy alternative per new housing unit could be incorporated within the model. The total cost of public and open spaces was added to the total cost of sustainable transport infrastructure to achieve an overall costing. This total cost was then divided by the anticipated number of new units (e.g. affordable, social and market housing) to achieve a costing per housing unit.

In conclusion, there is a cumulative end result in applying the VCP model to the Canterbury Renewal Precinct (i.e. in costing and meeting public needs). It was shown that the model could be designed for one or more of the three planning principles (additional principles can be added dependent of circumstances of precinct renewal). It was also suggested that the VCP model application to areas beyond the Canterbury Renewal Precinct was feasible. A comparison of these results with the results of applying the model to the three other case study sites (Chapters 3, 5, and 6) will be addressed in Chapter 7.

Chapter 5

Regional Growth Centre Renewal and Value Capture Planning – Gosford City Centre Revitalisation (GCCR)

Abstract The chapter addresses revitalisation of regional growth centres using a value capture planning (VCP) model. Two subjects (from earlier chapters) of significance to growth centres are firstly summarised: 1. the implications of the coronavirus pandemic (2020) for future urban planning (Chapter 1); and, 2. VCP model (including components of housing, public and open spaces, and sustainable transport) (Chapter 2). The Gosford City Centre Revitalisation (GCCR) program (under the State of New South Wales and within the Central Coast Council) is then introduced. The Gosford City Centre is then selected as the case study precinct within the GCCR. The position of the City Centre within the Somersby to Erina Corridor (SEC) is then outlined. The VCP model is then applied to the Gosford City Centre precinct. Results and conclusions are then drawn, including the potential application of the model to other precincts within the study area. The application of the model beyond the Gosford City Centre is also addressed, including application to: the SEC; the Central Coast Council area overall; and, other NSW regional growth centres. At chapter's end it's noted that Chapter 7 will address: 1.

overall results of applying the model to each of the four case study areas; and, 2. the application of the model to any city or regional growth centre in Australia or in the world.

Results and Conclusions on Applying the Model

In applying the value capture planning (VCP) model (via the four tables) to the Gosford City Centre case study (under the Gosford City Centre Revitalisation program) there were a number of results and conclusions. Examining the first planning principle (*Equitable Housing*) within the model it was shown that value capture could ensure Gosford City Centre meets affordable, social and market housing needs. At the same time it was shown that the public (via the State) could benefit from land value increases in the rezoning and land upgrading processes under the Gosford City Centre Revitalisation program.

Moving to the second planning principle (*Public and Open Spaces*) within the model it was shown how public and open spaces can be provided at an optimum provision basis. The revitalisation area of the City Centre lends itself to opportunities for new connecting public and open spaces. This includes restoring natural areas such as the Brisbane Water foreshores and bush reserves that have been impacted over the years. Finally, the land value increases from Gosford City Centre's development should enable these public and open space provisions to be achieved.

Moving to the third planning principle (*Sustainable Transport*) the upgrading of the Gosford rail station could be a priority for the State, along with associated new residential and commercial businesses. These would be major contributors to land value increases. These increases can be configured to flow partly back to the pubic (via the State ownership of the station's site and curtilage). Significant increases in State asset value and potential land leases and/or sales could create a further revenue stream of public benefit. Part of this stream could be applied to undertaking further transport initiatives (i.e. bus service facilities, transit ways and active transport) in the Gosford City Centre (and beyond).

Finally, moving to financing, it was shown how the developer provision and/or levy alternative per new housing unit could be incorporated within the model. The total cost of public and open spaces was added to the total cost of sustainable transport infrastructure to achieve an overall cost. It was then shown that these costings could be a combination of developer provision and/or levy alternative per new housing unit.

In conclusion, there is a cumulative positive end result in applying the VCP model to the Gosford City Centre revitalisation area (i.e. in costing and meeting public needs). It was shown that the model could be used for one or more of the three planning principles (dependent of circumstances of precinct revitalisation). It was also suggested that the application of the VCP model beyond the Gosford City Centre could be considered. A comparison of these results with the results of applying the model to the three other case study sites (Chapters 3, 4, and 6) will be addressed in Chapter 7.

Chapter 6 Regional Capital City Renewal and Value Capture Planning - Greater Newcastle Metropolitan Area (GRMA)

Abstract This chapter addresses the renewal of regional capital city centres using a value capture planning (VCP) model. Two subjects (from earlier chapters) of significance to regional capital city centres are firstly summarised: 1. the implications of the coronavirus pandemic (2020) for future urban planning (Chapter 1); and, 2. VCP model, including three planning principles of: equitable housing, public and open spaces, sustainable transport (developed in Chapter 2). In addition; a second stage of the model incorporating developer provisions and/or levy alternatives is outlined. The study area of the Greater Newcastle Metropolitan Area (GNMA) is then introduced. The case study within this area is the Newcastle West Renewal Precinct under the Newcastle City Centre Renewal (NCCR) program. The Wickham area (within the Renewal Precinct) is selected for examining the funding of public facilities and infrastructure via value capture. The VCP model is then applied to the wider Newcastle West Renewal Precinct. Results and conclusions are then drawn, including the potential application of the model to other precincts within the study area. The application of the model beyond the Renewal Precinct is also addressed, including application to: the NCRA; City of Newcastle; and, the GNMA. The ability to apply the VCP model to other NSW State regional capitals is also addressed. At chapter's end it's noted that Chapter 7 will address: 1. overall results of applying the VCP model to each of the four case study areas; and, 2. the application of the model to any urban or regional centre elsewhere in Australia or in the world.

Results and Conclusions on Applying the VCP Model

In applying the value capture planning (VCP) model (via the three planning principles and developer provisions and/or levy alternative) to the Newcastle West Renewal Precinct case study there were a number of results. Examining the first planning principle (*Equitable Housing*) within the model it was shown that value capture could ensure Newcastle City Centre renewal sites meet housing needs (affordable, social and market housing). At the same time it was shown that the public (via the State) could benefit from land value increases in the rezoning and land upgrading processes under the Newcastle City Centre Renewal Plan.

Moving to the second planning principle (*Public and Open Spaces*) it was shown how public and open spaces provisions could meet designated needs. As a renewal area Newcastle West lends itself to opportunities for new connecting public and open spaces (including restoring natural areas that have been impacted over the years).

Moving to the third planning principle (*Sustainable Transport*) the creation of the Wickham Interchange (train, light rail and bus) facility in 2019 was noted as is a major contributor to land value increases. These increases should be configured to flow partly back to the public purse. This could occur for

example given the State ownership of the rail and bus interchange facilities and land curtilage. Significant increases in State asset value and potential land leasing and/or sales could create a significant revenue stream for the public benefit. Part of this stream could be applied to undertaking further transport initiatives (i.e. bus services facilities, transit ways and active transport) in the Newcastle City Centre (and beyond).

Finally, moving to the developer, the model showed how the developer provision and/or levy alternative per new housing unit could be achieved. For the Precinct, the total cost of public and open spaces was added to the total cost of transport infrastructure to achieve an overall costing associated of these two items. To then achieve a spread of the costings per housing unit this total cost is divided by the anticipated number of new units (e.g. affordable, social and market). It was then shown that these final costings could be met via developer provision and/or levy alternative per new housing unit (final column in that Table). A comparison of these results with the results of applying the model to the three other case study sites (Chapters 3, 4, and 5) will be addressed in Chapter 7.

5. Chapter 7 Future Directions of Planning Cities and Regions with Value Capture

Abstract This chapter reviews conclusions reached from the application of the value capture planning (VCP) model to the four case study precincts and addresses the future of planning cities with value capture. Moving from these precincts (Waterloo, Canterbury, Gosford City Centre, and Newcastle West), each individual planning principle of the model as applied is reviewed, including components (in brackets): *Equitable Housing* (affordable, social and market housing); *Open and Public Spaces* (natural areas, public and open spaces); and, *Sustainable Transport* (rail, bus and active transport). In addition, given implications of the coronavirus (COVID-19) in planning urban areas, comments on the use of VCP in future years are offered. An overall assessment of the VCP model is then presented, including the application of the model to any urban centre in Australia or anywhere in the world.

1. Results from VCP Application by Planning Principles and Developer Provisions and/or Levy Alternative

Having reviewed the results stemming from the application of the value capture planning (VCP) model to the four case study precincts, the individual planning principles and developer provisions and/or levy alternative can be examined. The planning principles within the model and components (in brackets) included: Equitable *Housing* (affordable, social and market housing); *Open and Public Spaces* (natural areas, open spaces and public spaces); and, *Sustainable Transport* (rail, bus and active transport). These are now examined, commencing with equitable housing.

Equitable Housing

The VCP model applied the planning principle of *Equitable Housing* to the four case study precincts (noted above). In summary, it can be concluded that the value capture model can create outcomes ensuring renewal and revitalisation lands (e.g. within the case study renewal precincts) to meet affordable, social, and market housing needs. It can also be concluded within all study areas that the public (via the State) could benefit from land value increases in the rezoning of lands and land up grading within the study areas. Finally, it is concluded that a value capture program needs to reflect the varied physical, social and economic circumstance of a locality (i.e. renewal area). This is likely to result in equitable housing provisions varying across a city or region (i.e. inner city and regional growth areas).

Public and Open Spaces

The VCP model applied the planning principle of *Public and Open Spaces* to four case study precincts (noted above). In summary, all case study precincts were planned for higher densities than was current in those precincts. This meant that the value capture program would need to ensure that generous open spaces and public spaces are incorporated into the planning and to be financed. The varying circumstances of the renewal areas, means a value capture program needs to accommodate the multiple opportunities for connecting public and open spaces. In several of the case studies (i.e. Canterbury and Gosford) the importance of restoring natural area features lost over years was noted. Alternative public and open space design options (i.e. proposed by State and local government councils) provides an opportunity for value capture to be used as a planning tool to achieve desired outcomes (i.e. capturing land value increases).

Sustainable Transport

The development (or upgrading) of rail stations featured in all case study precincts. The new Waterloo Metro rail station, Canterbury station upgrading to Metro standards, Gosford Interchange (potential), and the Newcastle Interchange were all noted as potential catalysts to land value increases. It was shown that these increases could flow to the pubic (given the State ownership of most of these renewal sites). It was also shown (at these precinct locations) that there was likely to be significant increases in State asset value and land leasing and/or sales stemming from these transport initiatives. It was concluded that part of this revenue stream could be applied to undertaking wider transport initiatives (i.e. bus services and active transport) within those precincts and beyond.

Developer Provision and/or Levy Alternative

The developer provision and/or levy alternative in all precinct case studies offered the developer options in participation with the State and/or local authority. It was acknowledged that collaboration within State and local government units would vary by location. There was however in all the case study precincts opportunities for developers to contribute in meeting public and open spaces, and transport

infrastructure needs. Finally, it was noted there would likely be new opportunities for developers participating within value capture planning (VCP) programs.

2. VCP and Implications of Coronavirus to Future Urban Planning

The implications of the coronavirus (COVID 19) to future urban planning was addressed in Chapter 1 (and noted in subsequent chapters). The chapter concluded that it was the denser urban sections of cities that felt the brunt of the virus. This was especially the case in poorer sections of cities, where housing overcrowding may have contributed to the virus spread. The COVID 19 virus's impact on centers raised questions about future planning strategies. The earlier chapter noted the importance of planning to incorporate resilience of the city structure. This would be particularly important for the city to cater to the needs of its population when disasters such as an infectious disease strike. The Chapter also noted the importance of planning administrations being aware of infectious diseases and pandemics. In summary the Chapter noted factors for planners to consider in designing and renewing cities to minimize impacts of future infectious diseases. These factors included: health guidelines for renewing cities; infectious disease control programs; implications of global warming; and, housing design. Future directions of value capture planning (VCP) is looked at next.

3. Value Capture Planning (VCP) as a Valuable Planning Tool

The results of the application of the Value Capture Planning (VCP) model to the four case study precincts (noted above) illustrated the value of this planning tool for future planning. The application of value capture planning has shown VCP's advantages as a planning tool, including:

1. Assists Urban Planning Processes

The value capture planning (VCP) tool assists the urban planning processes in ensuring needs generated from development are met (i.e. capturing land value increases from government planning actions or public infrastructure construction). For example, it was illustrated how value capture could be applied within renewal corridors. This includes corridors of: Central to Eveleigh, Sydenham to Bankstown; and, Somersby to Erina) as well the Greater Newcastle Metropolitan Area (City of Newcastle, Lake Macquarie City, Cessnock City, Maitland City and Port Stephens Shire).

2. Strengthening Planning within a Renewal Area

The designation of city or regional renewal (or revitalisation) areas can be significantly strengthened when value capture is introduced as a planning tool.

3. Flexible Agreements with Developers

The results of the application of the VCP model illustrated how value capture could be valued by developers and used within development agreements.

4. Relevant to Local Geography and Development Patterns

The value capture planning principles (as contained within the VCP model) could be selected as relevant to the area's geography and urban development patterns of the subject area.

5. Extending the Model to Other Areas

The VCP model could be applied to areas beyond a study area, as illustrated in applications to the four case study precincts.

6. Easy to Apply

Value capture tables (four in this VCP model) had a wide application range and proved relatively easy to apply (in steps).

7. Additional Planning Principles

A range of additional planning principles could be added to a value capture planning (VCP) program. The VCP model tables allow the introduction of these additional principles.

8. Value Capture Planning at Different Levels of Government

Value capture planning could be applied to any level of government, from local to state to federal.

9. Integrating Value Capture into Other Planning Policies

Value capture can be integrated into a range of other planning policies at different levels of government.

10. Cooperative Planning Approach

Value capture is a tool that lends itself to a cooperative planning approach (i.e. engaging government, developers, and the community).

4. Future Directions of Value Capture within Urban Planning

The above results in applying the VCP model (7.2 and 7.3) and listed advantages (7.4 and 7.5) of VCP, it can be concluded that value capture can be a key planning tool. This would be especially so in the development and renewal of cities and regions. It was shown how VCP within future renewal precincts would provide more certainty in planning and development procedures as well as project finance. This includes implementing planning principles as illustrated in the case study precincts. These included equitable housing, public and open spaces and sustainable transport.

Future value capture programs can also embrace new design parameters and additional planning principles (utilising value capture tables). There are opportunities for all levels of government (local, state, and federal) to consider how best to utilise the value capture planning tool to meet a range of needs (i.e. arising from new development and renewal). The more value capture is used (cooperatively

among stakeholders of government, developers, and the community) the more its effectiveness will help shape the future of planning cities and regions.

6. List of Abbreviations

CBD CERA DCP DPIE EPA ESD FSR GCCR GNMA GPO GSC GSRP HCCRDC ICLEI LA21 LEP	Central Business District Central to Eveleigh Renewal Area Development Control Plan Department of Planning, Industry and Environment (NSW) Environment Planning Assessment Act Ecologically sustainable development Floor Space Ratio Gosford City Centre Revitalization Greater Newcastle Metropolitan Area General Post Office Greater Sydney Commission Greater Sydney Region Plan Hunter Central Coast Regional Development Corporation International Council for Local Environmental Initiatives Local Agenda 21 Local Environment Plan
LVC	Land Value Capturing
LVS	Land Value Sharing
MTR	Mass Transit Rail (Hong Kong)
NCRA	Newcastle City Renewal Area
NCRS	Newcastle City Renewal Strategy
NGO	Non-government organization
NSW	New South Wales
NWRP	Newcastle West Renewal Precinct
PPP	Private Pubic Partnerships
SBURA	Sydenham to Bankstown Urban Renewal Area
SBURC SECS	Sydenham to Bankstown Urban Renewal Corridor
SEPP	Somersby to Erina Corridor Strategy
SIC	State Environment Planning Policy Special Infrastructure Contribution
SM	Sydney Metro
SMC	Sydney Metro City
SMS	Sydney Metro Southwest
SMN	Sydney Metro Northwest
SUP	Sustainable urban planning
UN	United Nations
UTA	Urban Taskforce Australia
VC	Value Capture
VCD	Value Capture Development
VCP	Value Capture Planning
VPA	Voluntary Planning Agreement
WHO	World Health Organisation
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7. Author Biography





