

Planning, government charges, and the costs of land and housing

authored by

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ACRONYMS

ACTPLA	Australian Capital Territory Planning Authority
AHURI	Australian Housing and Urban Research Institute
APA	American Planning Association
CSD	Case Study Developments
CSL	Case Study Location
EPAA	Environmental Planning and Assessment Act
GST	Goods and Services Tax
HIA	Housing Industry Association Ltd, Australia
HLGPM	Housing, Local Government and Planning Ministers
HUD	Housing and Urban Development (US Department of)
LGA	Local Government Area
NSW	New South Wales
PC	Productivity Commission
PCA	Property Council of Australia
PIP	Priority Infrastructure Plans
RDC	Residential Development Council
SEPP	State Environmental Planning Policy
QLD	Queensland
UDIA	Urban Development Institute of Australia
UK	United Kingdom
US	United States

EXECUTIVE SUMMARY

Land use planning requirements and government taxes are blamed increasingly for rising costs of residential development and consequent housing unaffordability (RDC 2006a, UDIA 2007). Concerns include the indirect and often unpredictable costs that arise from planned intervention in the land and housing market, direct costs associated with complying with building and design controls, time taken to secure approval, and fees and charges for administration, infrastructure or other public services associated with development. There is a growing body of research and literature addressing the indirect impacts of the planning system on the land and housing market, particularly the link between land use planning and housing supply (see Barker 2006, Bramley 2007, Evans 2004, Quigley and Raphael 2004). However, within this broad field of work, little attempt has been made to quantify the direct costs to housing development arising from government taxes and planning regulations.

This research addresses that gap. It seeks to identify the range of government and planning related costs that arise through the residential development process, and quantify their relative weight as a proportion of the total cost of development. By using a multiple case study methodology that extends across three Australian State jurisdictions and several local planning authority areas, the study also seeks to determine the extent to which such costs might differ in different regulatory settings.

This positioning paper is the first research output in the overarching study. It reviews existing research and literature on the impacts of government land use regulations and charges and the costs of housing development, both internationally and within Australia. It sets out the overall research aims and a methodology for the empirical case study component of the research.

Research aims, questions and approach

This research aims to establish a methodology for examining the impacts of specific classes of planning regulations and charges on the costs of housing development in Australia. This information will provide a basis for assessing the cost impacts of proposed and existing planning requirements and charges for residential development against the underlying community objectives of those requirements; and for reducing these costs where appropriate, or offsetting potential impacts upon affordability. The following questions guide the study:

1. What is the international evidence regarding the impacts of land use planning regulations and charges on the cost of housing development?
2. What is the existing evidence on the costs of land use planning requirements and charges associated with the residential development process in Australia?
3. How does the cost impact of specific planning requirements and charges differ across the Australian States and Territories, and in a sample of selected case study developments? Specifically:
 - What are the relative costs associated with specific planning requirements, processes and charges, as a proportion of total planning related costs and total residential production costs, across a sample of case study jurisdictions? What factors explain divergences across these case studies?
 - To what extent are applicable planning related costs and charges able to be estimated upfront at feasibility analysis stage, across the case study jurisdictions? What factors explain the extent to which requirements and charges are able to be known up front (i.e. complexity/simplicity of planning

processes and charges, stability/instability in planning requirements and charges over time, complexity of the site or project itself, or other factors)?

- Have Australian developers adjusted their decisions regarding which housing types to produce (including target densities and market sectors) according to different planning requirements and charging regimes?

4. What are the policy implications of these findings? Specifically:

- How should policy makers and planners evaluate these potential cost impacts against the specific objectives of the regulation?
- To what extent could complementary measures (e.g. regulatory or alternative funding mechanisms) be introduced to offset any negative impacts on the costs of producing new and affordable housing in preferred locations?

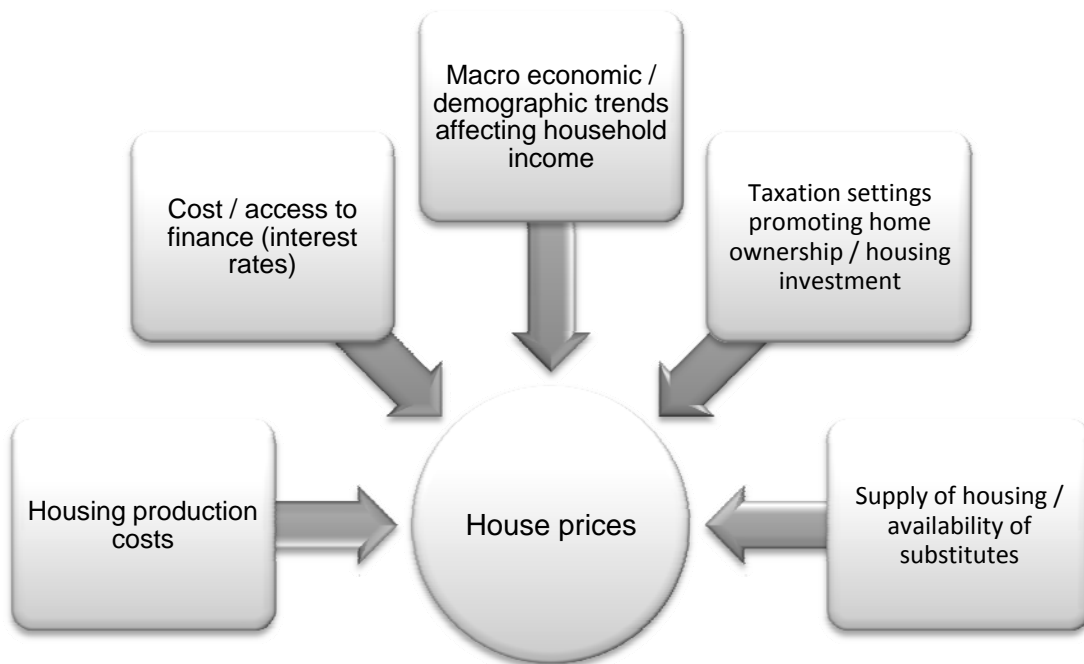
The research design involves four key stages. First we appraise existing international and national research on theoretical relationships between planning regulation, residential development costs and house prices. We also review existing empirical evidence on these links, noting that such research is limited, highly contested and focuses broadly on planning regulation and its impact on the supply and demand of housing, rather than specific impacts of planning requirements on the costs of housing production. These latter impacts are the focus of our study's empirical component.

Figure 1 (over page) shows the cost of housing production to be just one of several broad factors impacting upon house prices. Additional factors include macro-economic and demographic trends affecting household incomes, taxation settings, the cost of finance and the availability of substitute housing options. Like housing production costs, the availability of substitute housing options is also partially affected by planning settings, but also by levels of residential mobility, preferences and physical or geographic constraints (Aura and Davidoff 2006).

Figure 2 illustrates the main components affecting the costs of housing production. Of these, the costs most directly influenced by planning requirements are land acquisition and holding costs, materials, and planning fees and charges. Other costs are not influenced directly by planning requirements – including the cost of labour, marketing or sales commissions, the cost of finance and government taxes. This study centres on the housing production costs that are most directly related to planning requirements: for instance, procedural obligations affecting the time taken for planning approval, design controls affecting materials, and development application and administration fees and contribution levies.

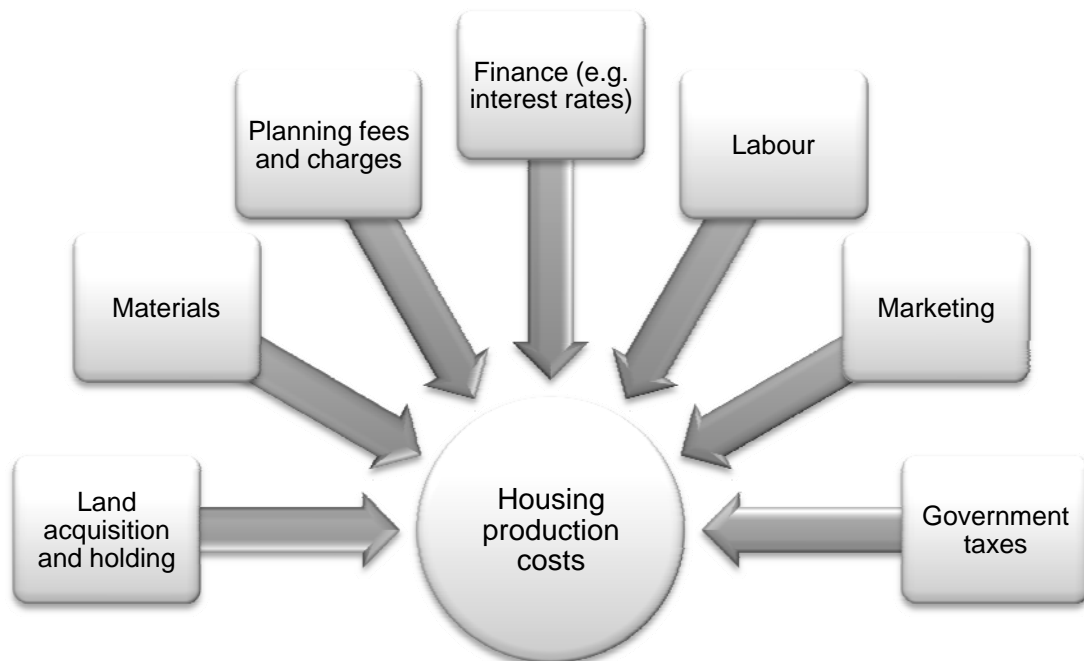
The second stage of the research seeks to design a replicable method for determining the range of regulatory controls, processes and charges that impact on the cost of housing development. Thirdly, we apply and test this method by collecting empirical data from several case studies. And lastly we construct a policy framework to evaluate the potential cost impact of each planning control, process or charge against the underlying community objective of the requirement. This will assist planners and policy makers in evaluating the cost implications of existing and proposed requirements, and in reducing these costs or offsetting them where appropriate. For instance, where planning requirements for new environmental infrastructure in residential estates add significantly to housing development costs, these costs might be offset by reduced development contributions for local infrastructure, in recognition of the broader community benefit associated with more sustainable approaches to local energy, water or waste facilities. Other examples might reveal planning requirements that add considerably to the cost of housing development but do not necessarily result in significant benefits to the wider community – for instance, the use of particular building materials to satisfy aesthetic concerns.

Figure 1: Factors influencing house prices



Source: the authors

Figure 2: Factors influencing housing production costs



Source: the authors

Overview of positioning paper

This positioning paper presents the preliminary findings of our first stage of research. It reviews international and national research on the relationships between planning regulation, residential development and house prices. We cover two broad sources: published scholarly research on spatial and urban land use planning and the costs of land and housing, including infrastructure provision; and research and advocacy

sponsored by industry sources on the relationships between planning and government requirements and the costs of housing development. It is worth noting a disjunction between these two sources of literature. While the scholarly literature focuses on theoretical relationships between planning regulation, land and housing prices, with some attempts to quantify these theoretical relationships through empirical research, very little work examines relationships between planning requirements and the direct costs to developers of producing housing. Instead, the emphasis is on the broader relationships between planning regulation as a housing development constraint and the implications of this constraint for housing demand and supply, and therefore price trends.

Industry research and advocacy in Australia also expresses concern regarding the impacts of planning regulation (particularly policies to contain urban growth) upon housing demand and supply, and therefore price and affordability. However, the empirical focus of such research has been the direct costs to housing developers of planning processes, fees and charges. While there is not necessarily a direct and immediate relationship between housing production costs and house prices, it is generally accepted that production costs are an important component in market price. This is particularly so in the long term, as very high production costs with limited potential for profit relative to other investment opportunities are likely to discourage housing development over time. It is therefore an important research goal to understand the factors that influence the costs of housing production. In particular, it is important to understand the costs of relatively discretionary factors, such as planning regulations and charges.

This paper outlines the industry research on the cost impacts of planning processes, fees and charges in Australia. It establishes the methodological framework for further empirical research on these costs across case studies in three eastern States: New South Wales, Queensland and Victoria. Those States were selected because their development contribution regimes are the most established and enable the broadest range of charges to be levied. In order to understand the different types of planning related costs that may arise in the case studies and across the Australian States and Territories more broadly, this paper also reviews Australian literature on planning jurisdiction features, reforms and development contribution regimes. Regulatory frameworks governing urban development differ across State, Territorial and local planning jurisdictions in Australia, with likely implications for the costs associated with securing approval for residential development. Of these costs, development contributions towards local and sometimes regional infrastructure are identified by industry as one of the most significant items, although actual amounts vary from jurisdiction to jurisdiction. This paper draws on primary legislation and policy documents to describe the development contribution regime at State and Territorial levels, including a particular focus on the detailed arrangements in New South Wales, Queensland and Victoria.

We now summarise our preliminary findings in relation to each of the research questions.

What is the international evidence regarding the impacts of land use planning regulations and charges on the cost of housing development?

The international research reviewed in this paper shows that planning interventions in the land and housing markets are associated with a range of direct and indirect costs and benefits. Benefits include the design, health and safety, environmental protection, and social and economic advantages of coordinated development, and protection from negative external impacts that might arise from uncoordinated

development. Planning also helps ensure that essential shared services and infrastructure are in place to support new development. Global environmental concerns, and in particular climatic change, have established a new imperative for planning systems to effectively manage the environmental impacts of new developments. Those systems must also ensure that settlements are sufficiently resilient to withstand the impacts of extreme weather events, predicted to increase in frequency and intensity in future (Christensen et al. 2007).

Based on our review of the international literature we distinguish four overall types of costs associated with planning intervention. Those costs relate firstly to unanticipated or undesirable impacts – for instance, if either ‘over’ or ‘under’ regulation produces the effect of deterring, rather than supporting, development in areas where it would otherwise be desired. These costs, arising from the potentially undesirable impacts of planning regulation as a constraint on housing supply, have been the main focus of international research on the relationships between planning requirements and housing costs, particularly in regard to house prices. The literature establishes some price impacts associated with planning regulation. However, many authors have found these impacts are difficult to distinguish from either the effects of increased demand arising from the planned creation or preservation of amenity, or non planning factors such as natural geographic constraints, residential mobility and preference trends.

A second range of costs relates to the procedural expenses of establishing the planning system. These include the costs of establishing bureaucratic, legislative and court systems, as well as ongoing costs incurred by planning authorities as they undertake their functions. To some extent these costs may be passed on to the developer through application or administration fees. However, transferral does not negate them. The developer also expends resources on participating in the planning process, via staff time and site holding costs while approval is sought. This time compounds the impact of direct costs associated with planning requirements, including development application fees and any development contributions, since interest must be paid on these expenses until project completion and sale (Crowe 2007).

Thirdly, there are costs associated with meeting planning requirements for design or building materials. Ongoing research in the United States suggests that such costs, determined by planning design requirements, often preclude the development of diverse or modest housing forms and structures (such as prefabricated or multi-unit housing). In this way, such requirements work to exclude low and moderate income earners from certain areas (Knaap et al. 2007, HUD 2005). Gaining a comprehensive understanding of the impact of planning controls on housing development costs and the types of housing that are consequently produced is difficult because requirements vary significantly across local jurisdictions (Knaap et al. 2007). Estimates in the United States suggest that exclusionary planning requirements may directly raise development costs by 20-35 per cent (HUD 2005).

A fourth range of costs relates to securing planning approval. These include the payment of application and administrative fees, the provision of studies or consultant reports, and developer contributions towards infrastructure and services. Our review of the international literature shows these contributions are justified by policy makers as a way of capturing some of the ‘windfall’ associated with planning approval (in the United Kingdom), and/or based on the ‘impact’ of the development on the need for infrastructure within the area (in the United States).

The considerable body of literature on the use of these development contributions, or ‘impact fees/exactions’ as they are termed in the United States, shows they are

important in facilitating urban growth (Burge et al. 2007, Chapin 2007, Marthur 2007). As well as higher neighbourhood amenity, other benefits include price signals on the costs of residential development in different areas, and discouraging land banking by making contributions payable at the time of a residential rezoning (Dollery et al. 2000, Neutze 1999).

Debates have focused on whether development contributions result in higher house prices, and if so, have negative implications for affordability. Our review of those debates can be summarised as follows. Firstly, the capacity for developers to directly pass on contributions to home buyers depends on the market at the time (Been 2005). However, when contributions are set too high, they will discourage new housing development or stimulate premium housing development with a higher profit margin, in both scenarios reducing the availability of modest or diverse housing types. Secondly, positive impacts on house prices have been noted in relation to higher-end market segments, but lower value housing markets and prices have shown to be unaffected by the imposition of such fees (Mathur 2007). This may be explained by the fact that contributions for basic utilities do not add to the amenity or desirability of a neighbourhood, while other types of fees to provide community facilities or parks are able to be capitalised in house prices, which represents value to home purchasers and existing residents (Chapin 2007).

When the intention is to recover some or all of the costs associated with local infrastructure or services required by the development, the way in which the contribution is calculated becomes important. If calculated per dwelling or per site, contributions might discourage medium density housing, and encourage larger housing and residential lots, as the charge becomes a smaller proportion of the total development cost (Evans 2004). By contrast, our review showed that a levy that represents a percentage of construction costs (per dwelling) or is fixed per hectare (rather than lot) might encourage more modest housing types and a more economical use of land.

What is the existing evidence on the costs of land use planning requirements and charges associated with the residential development process in Australia?

Our review of industry studies and papers published in the past five years showed an overall consistency of concern about the costs of regulation generally, and government taxes charges and levies in particular. It is asserted by the sector that taxes, levies and compliance costs now amount to about a third of the cost of new house and land packages, including costs of meeting planning regulations and holding costs associated with the approval process (RDC 2007a). Specific issues relate to land supply decisions of State or local governments, complexities or delays in the planning process, and the scale and complexity of developer contributions.

Concern has also been directed to the scale of increase of developer contributions and other taxes and charges, as much as the actual charges themselves. Quantitative estimates regarding the costs of these charges vary across the industry reports and studies, and information on the methodologies underpinning the research is limited. At this stage, mostly anecdotal information is available on the impacts of time dedicated to securing planning approval or the costs of meeting planning requirements. This information suggests that approval times may take 1-2 years (and 2-5 years for a rezoning), with planning compliance costs amounting to between 6 and 10 per cent of total construction (HIA 2003, UDIA 2007).

Our review of industry provides a detailed basis for understanding the range of planning and non planning costs that occur through the residential development process. These relate to process costs, development control requirements, direct

fees and charges associated with planning approval including development contributions, and other non planning costs such as government taxes and stamp duties. Many of these costs are incurred whether or not planning approval is granted. We summarise these costs in Table 11 of this report as a basis for further investigation through the empirical component of this study.

GST and State taxes amount to a significant proportion of the total taxes and charges identified in the industry studies. For instance, the Residential Development Council calculates that the total cost of a new home in Sydney in 2007 includes \$42,727 in GST and \$27,493 in State Stamp Duty and land taxes, together amounting to \$75,222. This compares to \$26,817 of local government developer contributions and approval fees in a growth centre location (RDC 2007b, p.14). Similarly, the Residential Development Council asserts that in Redland, Queensland, combined GST and State taxes amount to \$62,142 compared to \$15,876 in local government fees and development contributions towards site level and neighbourhood infrastructure.

How does the cost impact of specific requirements and charges differ across the Australian States and Territories, and in a sample of representative selected case study developments?

Chapter Three of this report outlines the different regulatory regimes currently operating in Australian States and Territories for levying fees for planning services and contributions towards infrastructure through the planning process.

All State jurisdictions have provisions in place to collect contributions towards site-based, neighbourhood or local level infrastructure required for development to proceed. NSW, Queensland and Victoria enable local planning authorities to set their own fees or charges under a contributions plan, but such plans are not mandatory. Several jurisdictions (NSW, Victoria, Tasmania) enable voluntary planning agreements to cover infrastructure contributions. In reviewing the approaches to developer contributions across the Australian States and Territories, we have found that most jurisdictions refer to principles of 'nexus' for contributions levied under contributions plans, but that these do not apply to voluntary agreements or levies.

However, there are differences in approaches to development contributions across Australian planning jurisdictions. These relate to the types of infrastructure or services that may be funded in this way, the scale of their operation (from site through to a region or sub region), the amount of the contribution and the way it is determined, and the timing of the contribution – who pays and who is likely to bear the cost. Specific arrangements for levying development contributions in our focus jurisdictions of NSW, Queensland and Victoria are summarised in Figures Three through to Five (p.14).

What are the policy implications of these findings?

There are a number of policy implications of these preliminary findings, particularly in relation to designing or reviewing planning requirements and development contribution regimes. In summary, planning controls and procedural requirements should align with the potential impact of the development. For instance, preferred housing types and housing associated with lower environmental and social impact should be subject to simpler and faster planning assessment processes. Further, planning controls should promote diverse housing types and offset growth management constraints through provisions for greater density or new development in alternative, substitute locations. Development controls that represent barriers to lower cost or diverse housing forms should be dismantled, or, if justified by environmental or heritage objectives, offset by specific provisions to secure housing opportunities for

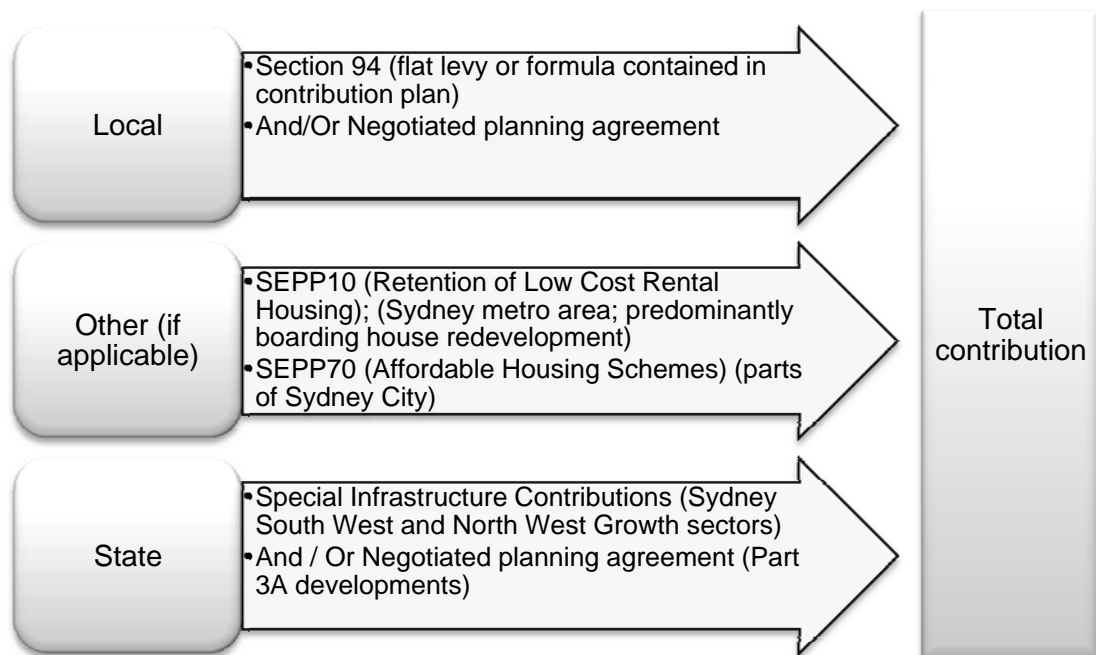
lower income households. Similar provisions are needed in high amenity and centrally located areas where there are physical supply limitations. Development contribution settings may provide an important mechanism for securing these housing opportunities for lower income groups, as has been demonstrated in the UK and in many cities of the US.

However, caution is needed when considering opportunities to implement such contribution requirements for dedicated affordable housing (Gurran et al. 2008). To ensure the obligation does not discourage new housing development or inflate housing production costs, it must be levied at the point at which increased development potential (i.e. windfall value) is conferred. In Australia this generally occurs when a rezoning or a variation in planning rules is passed to allow a development to proceed.

In relation to development contributions more broadly, the international literature confirms that such contributions are an important mechanism for financing local infrastructure, and generally benefit new and existing home owners (Chapin 2007). These benefits are predicated on modest contributions associated with the provision of direct utilities, local services and community infrastructure. In recent years however, there has been increasing pressure in some Australian jurisdictions to use development contributions to fund major infrastructure needed by new urban development, such as train lines, education facilities or hospitals. Both the scholarly research and our review of industry position papers suggests that the market will not bear disproportionate infrastructure charging regimes.

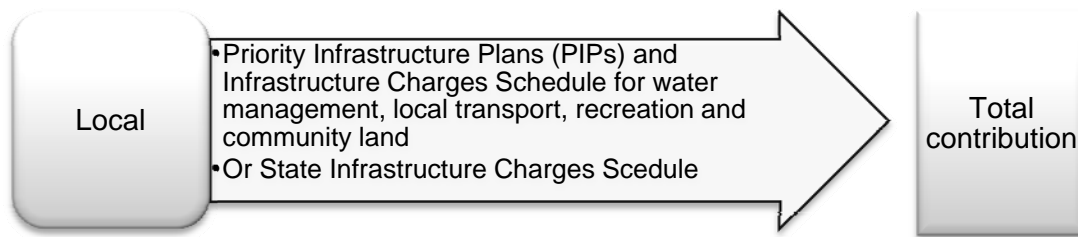
These findings are of significance to policies for infrastructure charging relief in Australia. For instance, a central source of funding leverage for crucial infrastructure could support new housing development in preferred regional locations, or in brownfield urban sites requiring expensive remediation work. Such an approach would not remove standard contributions for direct and neighbourhood infrastructure requirements, but would improve the overall supply of well located residential land by offsetting costs associated with new regional transportation facilities or difficult remediation works in renewal areas.

Figure 3: Development contribution framework in NSW



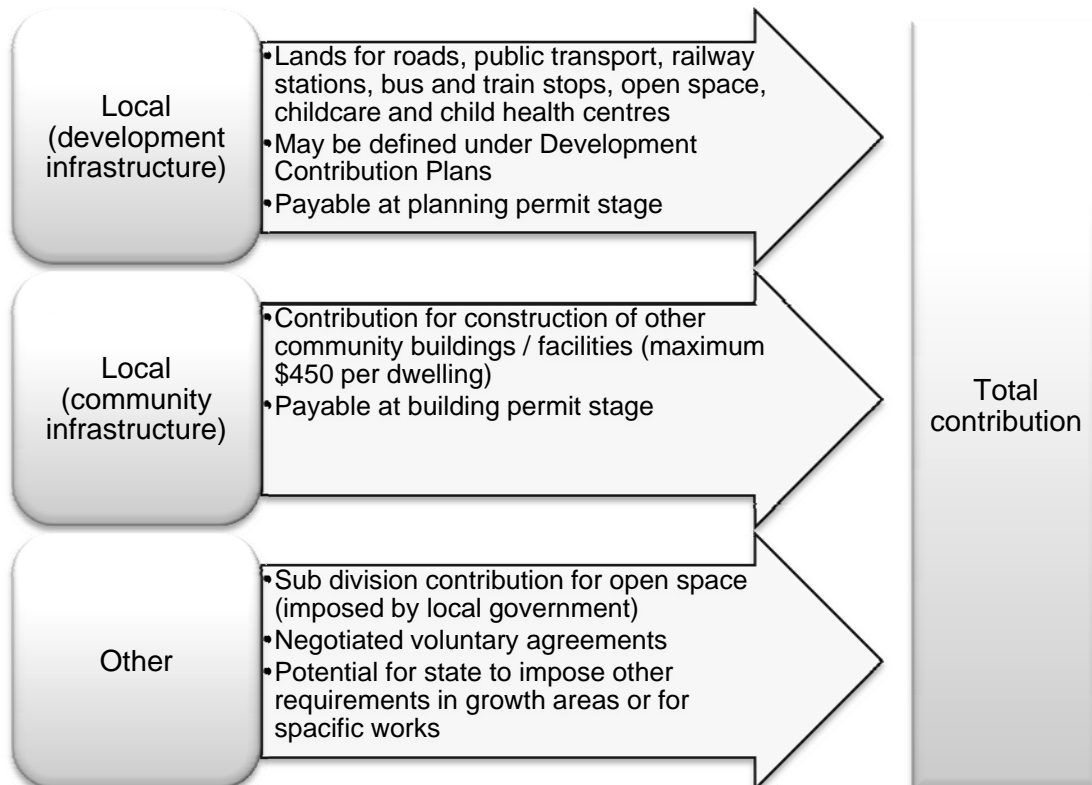
Source: The authors

Figure 4: Development contributions in Queensland



Source: The authors

Figure 5: Development contributions in Victoria



Source: The authors

Next steps

Empirical investigation is needed to test these preliminary findings, and to quantify the relative proportion of development costs dedicated to each type of expenditure. The findings of this research will inform policy and planning decisions, both in the jurisdictions analysed and more broadly, by establishing a methodology for identifying points where regulatory costs to housing development arise, and the likely weight of such costs relative to the overall cost of housing.

When combined with a policy framework for analysing and offsetting (where appropriate) the cost impacts of planning requirements, this information should contribute to more informed plan making, development assessment and infrastructure funding arrangements in Australia.

1 INTRODUCTION

Public and industry concern about housing affordability in Australia focuses largely on the costs of buying a new home. Yet this aspect of housing policy has been relatively neglected in academic and policy research, particularly in Australia. In the United Kingdom and parts of Europe, where systemic undersupply of new housing relative to demand has been linked to escalating affordability problems, there has been much scrutiny of the capacity and efficiency of the planning system to deliver sufficient new housing (Barker 2006, Lawson and Milligan 2008). Similarly, in the United States, the relationship between housing costs and planning regulations, charges, and procedural requirements has been an issue of national concern since at least the mid 1990s (HUD 2005); and some studies have examined theoretical and actual price impacts of planning regulation (Black and Hoben 1985, Dawkins and Nelson 2002, Dowall 1981). Planning regimes differ significantly across the United States as local cities and counties have much discretion within State planning legislation. Overall however, research estimates that land use regulations may add up to \$200,000 to the cost of a house in parts of North America (Rhodes 2008).

The 'rediscovery of housing supply' (Bramley 2007) as a crucial aspect of national housing policy across the United Kingdom, parts of Europe, the United States and now Australia has brought urban land use planning to the fore of housing debate. Housing policy makers and economists have two fundamental concerns about urban planning and its impacts on affordability. The first relates to its primary function of regulating land supply and residential development – a process which, it is argued, imposes inherent costs upon housing production by artificially constraining supply and pushing up the price of housing across the whole market (Beer et al. 2007, Quigley and Raphael 2004). Related concerns point to the global shift toward considerations of environmental sustainability. Interpreted in urban planning policy, sustainability goals include containing urban growth and limiting the release of new land on the fringe of cities. It is argued that these measures exacerbate the scarcity effect of planning regulation (Nelson et al. 2002). The second concern relates to the direct and indirect costs associated with the development process itself – meeting building and design controls, time taken to secure approval, and fees and charges for administration, infrastructure, or other public services associated with development (Monk et al. 1999, White and Allmendinger 2003).

There is a sizeable body of research and literature concerning the first of these two arguments – i.e. the impact of planning on the market price of land and, by extension, housing, although much of this work remains contested (see for example Anthony 2003, Barker 2006, Black and Hoben 1985, Bramley and Leishman 2005, Dawkins and Nelson 2002, Dowall 1981, Evans 2004, Quigley and Raphael 2004, Quigley and Rosenthal 2005). There has been far less scholarly research to quantify the direct and indirect costs to housing production that stem from planning or other government requirements. This latter question is the focus of the current study.

It is likely that the actual costs of planning will differ from place to place, due to the administrative and legislative differences that characterise planning requirements and processes across jurisdictions. In relation to Australia it has been argued that a combination of direct and indirect costs associated with the planning process contributes significantly to the cost of producing a new home. For example, the Housing Industry Association of Australia (HIA) estimates such costs at between 25 and 35 per cent of the price of new houses, averaging \$67,000 per house depending on jurisdiction (HIA 2003). Other sectors of the industry reports claim costs have reached about \$139,000 per house in certain areas such as the growth centres of

Sydney's North and South West (UDIA NSW 2007). These claims conflate housing production costs (incurred by developers and builders) with house prices (paid by purchasers), assuming the capacity to directly pass on these costs in all market scenarios, or the willingness to reduce prices accordingly if such costs are incurred. As discussed in this report, such assumptions have not been fully supported by either the theoretical or empirical evidence (Dawkins and Nelson 2002). However, irrespective of the precise relationship between housing production costs and prices, sound regulatory policy dictates firstly, a need to understand the actual cost impact to producers of various regulatory requirements and charges, and secondly, to assess whether these costs are justified against the underlying goal of the regulation. Further, research in the United States reveals situations in which regulatory requirements such as planning controls, fees or charges are specifically designed to make housing more costly to produce as a way of discouraging the entry of lower income groups into certain suburbs or neighbourhoods (HUD 2005).

There has been very little academic research undertaken in Australia to replicate this emerging research in the United States or to systematically substantiate the claims made by Australian industry sectors. Nor is there comprehensive and comparative research regarding the basic approaches to setting planning related charges and compulsory developer contributions in Australia, which is a major focus of industry concern (UDIA 2007, Urbis JHD 2006).

By drawing on the international research and an objective review of existing Australian data, this study develops a consistent approach for determining the cost effect of planning regulations and charges on house development in Australia. It seeks to quantify the cumulative impact of State and local government regulations and charges with reference to a selection of case study developments in new release and urban renewal areas across inner city, suburban, and non-metropolitan local government areas. It also aims to evaluate the cost impacts of existing and proposed regulation on housing production against the explicit objectives of planning regulation, as a basis for identifying ways to avoid unnecessary or unjustifiable regulation and to offset affordability impacts where such regulatory costs are unavoidable.

1.1 Policy context

Government regulations and charges associated with the development process can affect the cost of housing in many ways. Urban planning controls and requirements all have direct impacts on the costs of housing development. These impacts might relate to the location and release of residential land; the configuration and design of residential development; the costs of contributing to local infrastructure through development levies and charges; the cost of obtaining development approval; and the strategic policies governing urban renewal and redevelopment.

Planning controls also impact on housing in more indirect ways. When the cost of complying with planning controls becomes a barrier for lower income groups who wish to enter the housing market, those controls may be regarded as "exclusionary". Some of the earliest planning controls in the United States were specifically designed to be exclusionary by raising the cost of housing development in certain areas (HUD 2005, Milligan et al. 2004).

Secondly, the processes associated with obtaining planning approval add to housing development costs both directly and indirectly. One example is the time taken for a proposal to be assessed. Costs associated with lengthening approval times were identified as an issue in Australia during the national housing strategy process in the early 1990s, and later, the Productivity Commission inquiry into first home ownership (NHS 1991, PC 2004). However, few planning jurisdictions attempt to quantify such

costs when deciding to introduce specific planning controls or procedural requirements. Studies in the United States and the United Kingdom suggest that difficulties and delays in obtaining planning approval affect developer behaviour and reduce the amount of development activity in an area, leading to longer term supply constraints that have implications for the price of housing (Nelson et al. 2002, Monk and Whitehead 1999).

In addition to the costs associated with obtaining planning approval, other government taxes or charges that have an impact on the price of housing in Australia include the Federal Goods and Services Tax (GST) charge on construction costs and State government stamp duty tax on property transactions. Taken together, this range of taxes, charges, controls, regulations, requirements and processes all add to the costs of housing production.

1.2 Research questions and approach

This research aims to establish a methodology for examining the impacts of specific classes of regulations and charges on the costs of housing development in Australia. Industry-generated research on the costs of government regulation on residential development in Australia has provided an important starting point in quantifying the cost impacts of government and planning requirements on housing development. However, it is necessary to make an objective appraisal in order to substantiate key findings and build upon that work. This information will provide a basis for assessing the cost impacts of proposed and existing planning requirements and charges for residential development against the underlying community objective of the requirement; for reducing these costs where appropriate or offsetting potential impacts on affordability. The following questions guide the study:

1. What is the international evidence regarding the impacts of land use planning regulations and charges on the cost of housing development?
2. What is the existing evidence on the costs of land use planning requirements and charges associated with the residential development process in Australia?
3. How does the cost impact of specific planning requirements and charges differ across the Australian States and Territories, and in a sample of selected case study developments? Specifically:
 - What are the relative costs associated with specific planning requirements, processes and charges, as a proportion of total planning related costs and total residential production costs, across a sample of case study jurisdictions? What factors explain divergences across these case studies?
 - To what extent are applicable planning related costs and charges able to be estimated upfront at feasibility analysis stage across the case study jurisdictions? What factors explain the extent to which requirements and charges are able to be known up front (i.e. complexity / simplicity of planning processes and charges; stability / instability in planning requirements and charges over time; complexity of the site or project itself; or other factors)?
 - Have Australian developers adjusted their decisions regarding which housing types to produce (including target densities and market sectors) according to different planning requirements and charging regimes?
4. What are the policy implications of these findings? Specifically:
 - How should policy makers and planners evaluate these potential cost impacts against the specific objectives of the regulation?

- To what extent could complementary measures (e.g. regulatory or alternative funding mechanisms) be introduced to offset any negative impacts on the costs of producing new and affordable housing in preferred locations?

The research design involves four key stages, consistent with the research questions:

- The appraisal of existing international and national research on the theoretical and empirical evidence on the relationships between planning regulation and the costs of housing development or house prices; and the collection of primary and secondary information on existing planning frameworks, fees and contribution regimes in Australia;
- The design of a reliable and replicable method for determining the range of planning controls, processes and charges impacting on the cost of housing development in Australia and for calculating these cost impacts;
- The collection of empirical data from a demonstration of this model across the Australian states and in relation to several case studies (in New South Wales, Queensland and Victoria, which have detailed development contribution frameworks in place); and,
- The development of a policy framework to evaluate the potential cost impact of each planning control, process or charge against the underlying community objective of the requirement.

This positioning paper presents the findings of the first of these stages. It reviews international and national research on the relationship between planning regulation, residential development, and house prices, covering three broad sources:

- Published research on spatial and urban land use planning and the costs of land and housing, including infrastructure provision (reported in the scholarly literature);
- Research commissioned or sponsored by the public sector on the costs of residential development and infrastructure provision (such as government inquiries or reviews); and
- Research and advocacy sponsored by non government and industry sources on the relationships between planning and government requirements and housing affordability (such as industry commissioned reports or submissions).

It also reviews Australian literature on planning jurisdiction features, reforms and development contribution regimes. Regulatory frameworks governing urban development differ across State, Territorial and local planning jurisdictions in Australia, with likely implications for the costs associated with securing approval for residential development. Of these costs, development contributions towards local and sometimes regional infrastructure are identified by industry as one of the most significant items, although actual amounts vary from jurisdiction to jurisdiction. This paper draws on primary legislation and policy documents to describe the development contribution regime at State and Territorial levels, including a particular focus on the detailed arrangements in New South Wales, Queensland and Victoria.

Our focus is on English language literature, and due to the policy changes over time in this field we focus predominantly on studies published in the past 10 years. Our international review looks chiefly at regions with comparable land use planning traditions, in particular the United Kingdom (UK) and the United States (US), where a deep literature has evolved to address relationships between planning and residential development outcomes, particularly outcomes relating to housing supply and affordability.

This literature review aims firstly to provide a context for the study's empirical work by explaining the theoretical relationships between urban land use planning and the costs of housing production. The review also distinguishes between planning and its implications for the costs of housing development as direct and indirect influences on house prices and affordability. Secondly, it helps establish both a broad typology of costs to residential development associated with land use planning processes, and a methodology for determining costs in particular plan-making or development application settings. The typology should have broad applicability across planning jurisdictions, while the more detailed methodology is likely to be more limited in application to the Australian setting, and perhaps to particular states and territories within Australia. Both will be tested in the case study sites as part of the empirical research.

There are significant differences in the regulatory frameworks governing urban development within each State and local planning jurisdiction in Australia. This report includes a review of Australia wide literature on planning jurisdiction features, reforms, and development contribution regimes. It is not feasible to cover every local and State government regulation in detail. The empirical component of this research therefore is limited to three eastern states: NSW, Queensland and Victoria. These states have been selected because their development contribution regimes are the most established and enable the broadest range of charges (Gurran 2007), and such charges form the focus of industry concern regarding the impacts of planning requirements on housing production costs (Urbis JHD 2006, UDIA 2007). By reviewing the primary legislation, policy and guidance concerning the development contributions frameworks applying the three states, this paper will provide a basis for establishing a more detailed methodology by which to quantify the costs to housing development of planning regulation and government charges. As Chapter Four shows, the methodology will be tested in the empirical case study research to follow.

1.3 Understanding planning related costs to housing development

The next three sub-sections explain key terms and concepts used in this report, in particular housing production costs and affordability, planning fees, charges and development contributions, and other direct and indirect government charges.

1.3.1 Housing production costs and affordability

The research objectives of this project relate ultimately to house prices and affordability. However, we recognise that house prices within a given market are affected by many more factors than the costs of building a house or developing a residential subdivision. These include the price of existing housing, the costs and availability of finance, income and economic trends, and the availability of alternative housing supply.

'Affordability' describes the relationship between income and housing costs, with 25-30 per cent of gross household income commonly recognised as a benchmark of affordability (Yates and Milligan et al. 2007). Government housing assistance policies focus on low to moderate income groups, i.e. groups up to 120 per cent of median household income for a particular location or region (HLGPM 2005). This is because higher income groups have more residual income after housing costs, even if these housing costs exceed the 30 per cent benchmark. In addition, higher income groups are more able to control the amount of money they are prepared to spend on housing by adjusting their expectations and preferences.

The Australian Housing, Planning and Local Government Ministers (HLGPM) define affordable housing in their Framework for National Action on Affordable Housing:

Affordable housing is housing which is affordable for low and moderate income households across home ownership, private rental as well as public rental tenures. (HLGPM 2005, p.1)

This definition includes social housing managed by government or community providers, as well as lower cost home ownership or private rental housing. 'Low cost housing' is frequently used interchangeably with affordable housing, but its meaning differs slightly. 'Low cost' housing may result from deliberate government or planning intervention but is usually not subsidised by the government. It includes all private market housing that is accessible to low and moderate income households. 'Low cost' housing might also describe housing that is built to modest design or construction standards.

The costs associated with the planning system may affect housing affordability overall. For example, actions to restrict residential land release or relax supply constraints might have an impact upon prices and, therefore, upon the capacity of certain income groups to afford housing. The relationships between planning interventions and overall housing affordability are complex since they are strongly influenced by broader economic conditions and fiscal policy (Bramley and Leishman 2005). For instance, if taxation policies are designed to encourage investment in the family home, they will increase demand for housing, and often larger, higher quality housing as a form of personal wealth accumulation (Evans 2004). This is problematic if the planning system is trying to encourage more contained development and smaller housing – in that case, the two policies are working at cross purposes. The planning (supply) constraint combined with the taxation (demand) incentive may then inflate land and housing prices. In other words, broader affordability issues can emerge when macro-economic policy decisions are not aligned with planning requirements.

Planning requirements and controls may also have a more specific and quantifiable impact on the costs of building a single home or developing multiple dwellings in a new housing estate. While our report acknowledges the broader affordability impacts of planning, our focus is on quantifying these specific costs associated with planning controls and requirements for housing development. These costs are quite different to the broader issues of affordability outlined above – although unnecessary or excessive costs are likely to contribute to the problem (HUD 2005). In a situation of perfect supply/demand equilibrium, the costs of housing production would form a clear component of the total price paid on the market for a complete house and land package. However, in a falling market or a situation of lower demand for housing, the buyer may actually be able to purchase a better quality home (where production costs were higher) for a lower overall market price. By contrast, strong demand for housing combined with a shortage is likely to increase market price, irrespective of the actual costs of housing production (Been 2005). We return to these issues throughout this report.

In focusing on the cost implications of planning requirements for housing development, our particular concern is the impact of these requirements on the development of modest and diverse housing types in preferred areas. Such housing is most likely to be affordable to lower and moderate income groups.

1.3.2 Planning related fees, charges, and development contributions

Planning related fees and charges include development application fees paid to a planning authority and other administrative charges associated with the planning process.

The terminology used to describe the payments made to planning authorities by developers for local infrastructure provision during the planning process differs from jurisdiction to jurisdiction. The generic term ‘development contributions’ is used in this report to describe payments made by a developer to a planning authority to contribute to shared local (or regional) infrastructure, facilities or services. Development contributions may include levies (calculated per dwelling or as a proportion of development value), or impact fees (calculated to recognise the actual impact of the proposal on particular local infrastructure or amenities). Development contributions are set as part of the planning process and their payment becomes a condition of final planning approval. The payment itself may be a monetary amount, land, buildings, or works in kind. Development contributions and the different ways for planning authorities to establish them and collect them through the development assessment process are discussed in detail in Chapter Two and in relation to the Australian context in Chapter Three.

1.3.3 Other government charges and costs associated with the residential development process

There are other direct and indirect government charges and costs associated with residential development in Australia. These might include charges that are beyond the scope of the planning system itself – such as stamp duty on property acquisition, land tax or the Goods and Services Tax (GST). Table 1 summarises the main taxes associated with property and the construction process in Australia.

Table 1: Taxes on property and housing construction in Australia

<i>Tax</i>	<i>Description</i>
State land taxes	States taxes on value of land used for rental properties and second homes. Some land taxes on premium value owner-occupied property
Local government land taxes	Local governments levy land taxes (rates) on most residential properties
Stamp duties on transfers of land and housing and on mortgages	Most State governments levy stamp duty on the value of property when it is transferred and on mortgages
GST on home renovations, land sales and new buildings	10 per cent GST applies to: <ul style="list-style-type: none"> → maintenance and renovation expenditure for existing housing; and → sales of land and new buildings

Source: Adapted from Abelson and Joyeux (2007)

While we document these charges where they are referred to in industry reports as a cost to residential development, and will note them as broad cost items if nominated by participants in the case study research, such taxes are not a direct focus of this project.

1.4 Structure of this paper

This paper is in five parts. Following this introductory chapter, Chapter Two establishes the conceptual framework for understanding the costs and benefits of the planning system overall as well as the cost impacts for housing of planning requirements, fees and charges. Many of these fees and charges are collected from developers as contributions for infrastructure. The chapter reviews the literature on these requirements. It also explains recent increases in development contributions to fund regional infrastructure in some Australian jurisdictions as an expression of the

political shift towards neo-liberalism in funding essential services and infrastructure for urban development.

Chapter Three outlines the current policy and institutional framework for planning and infrastructure provision in Australia, with an emphasis on costs arising through this framework for house builders and developers. The chapter outlines the basic structure of the building and development industry in Australia, as a basis for understanding the sequencing of costs incurred and potential differences between Australia and other Anglo – American contexts. It also establishes the generic typology of costs associated with planning and development that is presented in Chapter Two. Chapter Three concludes by proposing a detailed schedule of likely planning related costs and charges for housing development, which will be tested through empirical case study research.

Chapter Four introduces the methodology for the empirical component of this research, including the criteria for identifying case studies and the range of issues to be addressed through interviews and documentary analysis. It also describes the approach to developing a framework for analysing cost implications of planning controls and charges, against the perceived benefits of the policy goals underpinning them.

Chapter Five summarises the interim findings of this study with reference to the research questions. It specifically addresses the international and existing Australian evidence on affordability impacts of government land use regulations and charges for housing development costs, and ways to evaluate these potential cost impacts against the specific objective of the regulation.

2 URBAN LAND USE PLANNING AND HOUSING PROVISION

Housing is one of many urban policy objectives considered and promoted through land use planning and development regulation. Other important objectives include environmental protection and economic prosperity. This chapter explains the rationale for the regulatory system, and how it might impact on the costs of developing new housing. In this chapter we do not address the range of other government taxes or charges that may arise during the development process, although we recognise the impact upon housing expenditure of these non planning related costs. As shown in the following two chapters, our goal in this research is to identify these costs in broad terms and to quantify them in relation to specific case study examples.

The first part of Chapter Two outlines the reasons for urban land use and development regulation through the planning system. Those reasons relate to broad normative goals like environmental protection, economic efficiency and social equity in urban growth (Blake and Collins 2004, Barker 2006). While important, such goals and the regulation designed to promote them impose constraints and costs to housing development. For example, planning decisions about the location and amount of land released for new housing, specific urban design and building controls or requirements, and financial levies for infrastructure may all represent direct and indirect costs to the development process. Indirect costs may arise from important environmental or design requirements, or be associated with planning system deficiencies (for instance, land shortages, delays in releasing land or issuing approval). Direct costs may include administration fees or infrastructure contributions. The second part of this chapter focuses more closely on these direct planning-related charges and contributions for infrastructure provision, which in some states of Australia have become a major component of the costs associated with securing planning approval for housing development. The third section of this chapter situates the discussion on funding for infrastructure alongside a broader political shift towards neo-liberal economic policy in Australian urban governance.

2.1 Can we afford urban planning?

There are inherent costs in the urban planning process, and these necessarily add to the costs of housing production (White and Allmendinger 2003). But are these costs justified by the value that planning adds to the housing development process? To answer this question it is necessary to outline the reasons for urban planning and the costs associated with not planning.

Urban planning is a form of government intervention in the land and property development market to achieve strategic public policy objectives (Blake and Collins 2004). Unlike other forms of government intervention to achieve a public good which might focus on the imposition of a tax or a charge, the land use planning system relies almost entirely on spatial regulation (Evans 2004). This intervention is articulated through legal rules governing the ways in which land may be used and managed, and through legal processes for securing permission or 'consent' to carry out certain types of change. For instance, if a policy objective is to avoid inconvenience or the intrusion into residential amenity of hazards associated with the manufacturing industry, one policy lever might be to tax the pollution itself, in order to encourage the industry owners to purchase technology to mitigate their impact. But if it is not the pollution per se that is the problem – for instance, noise pollution matters more in a residential area than a rural one – the issue can be managed by requiring noise generating activities to be situated away from homes.

In the context of housing development, the planning system intervenes to regulate the types of land and locations that may be used for housing development to occur; the amount or density of housing that may be developed; the configuration and design of this housing; the sequencing of this development; and the types of services to support the development (from utilities to parks and community centres). While these planning interventions are not associated with direct costs like taxes or charges, there are costs associated with regulation itself (Quigley and Rosenthal 2005). Before turning to these costs of regulation, and the extent to which they are offset by benefits or savings elsewhere in the system, it is important to explain the overall policy and economic rationales used to justify planning intervention.

2.1.1 The purpose of planning

There are several fundamental reasons for intervening to regulate the private use of land, and in the way in which cities are planned and homes developed. These arguments relate to physical planning goals – design, health and safety, environmental protection – as well as social and economic objectives. A critical rationale for urban planning intervention is to protect community members and the environment from negative external impacts that might arise from uncoordinated private development. We discuss each of these points in turn.

Planning for externalities

The impacts of a development extend beyond the site of a development itself. For instance, a building will cast a shadow that may extend beyond the owners' actual plot of land to affect sunlight for neighbours. These impacts are particularly pronounced in urban areas, where there are beneficial impacts of proximity to goods and services, but also negative effects associated with congregation (such as traffic congestion). The economic term 'externality' is used to describe both positive and negative effects associated with market activities, including development. The planning system provides a way of managing or preventing negative externalities. For example, it can intervene to restrict development that will significantly increase road traffic. Planning can also intervene to encourage or maximise positive externalities, such as the economies of scale in infrastructure provision for denser populations. Although the free market provides no instrument to capture the impacts of development for neighbours or the community at large, land use regulation provides an opportunity to address diseconomies and encourage positive externalities (Barker 2006, p.25).

Social fairness and participation

Further to this argument is the expectation that planning should promote social fairness in urban development outcomes and participation in decisions that affect all community members, not only those who own property (Bramley et al. 1995). Benefits arising from urban development processes generally favour some groups more than others. Disadvantages, such as poor environmental amenity associated with industrial development, may have a negative impact on the wellbeing of others. Improvements in urban amenity, such as the establishment of a park or the redevelopment of a retail precinct, have positive impacts on land values and so will benefit existing land owners and those with higher incomes who are able to afford to live in these areas. In contrast, lower income groups may have to pay a higher proportion of their income to access housing in improved areas, or may be more likely to be 'pushed' to locations that are further away or have less environmental amenity. The planning process itself plays a role in determining these outcomes so that the costs and benefits of decisions are evaluated in a way that is socially fair (Golland and Gillen 2004). Simultaneously, public planning processes provide an opportunity for

land use decisions to be made in a more consultative way, rather than being confined to the 'insider' property owners.

Monopolies

Economists argue that welfare distribution is maximised by a market operating in perfect competition (Evans 2004). A barrier to competition that can arise in the land and housing market occurs when an individual or group of sellers acts to restrict the release of land for sale. Planning intervention provides an opportunity to counteract this type of monopolistic behaviour, by promoting opportunities for development elsewhere or by enabling the compulsory acquisition of land that is needed for essential urban development (Barker 2006).

Informing and coordinating the development process

Market efficiency can be aided by information about what other actors are likely to do. In relation to the land market and residential development, an investor is unlikely to risk acquiring a parcel of land for a significant housing project if they do not know what the future plans will be for surrounding lands. Future activities on these surrounding areas – for instance, the establishment of large industry – might undermine the appeal of the land for housing. Similarly, if it is known that government plans to invest in the provision of major transportation and civic infrastructure to support future population growth in a particular area, such an area would become highly desirable for new housing development. The planning system provides a way of generating and disseminating this necessary information (Barker 2006).

The planning system also provides an important mechanism for coordinating the essential shared services needed to support new development – such as infrastructure for industry or housing (Barker 2006, p.26). In this sense it has been argued that developers depend on the planning system as much as planners depend on developers to enact their plans.

Planning for aesthetic design, health and safety

Early expressions of urban planning focused on the physical elements of city development. Aesthetic design was a crucial element of the city plans prepared at the turn of the twentieth century, particularly in the US (Hall 1996). Health and sanitation were also important elements of early planning regulation (Beyer 1965). Basic development and building controls to guarantee minimum street widths (to prevent the spread of fire) and construction and waste management standards (to prevent the spread of disease) were introduced in the mid nineteenth century across the United Kingdom, the United States and Australia (Hall 1996). Considerations such as aesthetic appearance, health and safety remain important principles of land use and development regulation today. Ironically, many of the twentieth century responses to the disease ridden slums of the industrial cities – such as the development of suburban housing on single plots of land – facilitated the type of car-dependent urban form that is now implicated in conditions like obesity and respiratory illnesses (Blake and Collins 2004).

Urban planning regulation has assumed new policy significance in the context of global environmental concerns. Those concerns include the loss of many species of plants and animals, the degradation of natural resources, and climatic change. Urban planning is charged with two roles in relation to addressing the issue of climate change. The first is to reduce anthropomorphic contributions to the greenhouse gases that assist global warming (largely carbon dioxide). The main contributions arise from the burning of fossil fuels via petroleum and coal-generated electricity (IPCC 2007). These contributions are exacerbated when the earth's capacity to

absorb carbon, through carbon 'sinks' such as forests and oceans, is diminished through deforestation and the acidification of the sea as it warms (Gupta et al. 2007). Land use planning must therefore discourage or eliminate activities that draw on fossil fuels – for example, travel by motor car and energy intensive buildings. Planning also needs to preserve and where possible extend forest cover and vegetation to offset carbon emissions (ODPM 2004).

In this context, the second important role of urban planning regulation is to defend human settlements and the natural systems upon which they depend. It is widely argued that extreme weather events such as cyclones, storm surges, floods and bushfires are likely to increase in frequency or intensity in the future (Christensen et al. 2007). Persistent changes like increased temperatures and drought will also threaten human health, safety and the capacity of infrastructure systems (like energy, water, waste or transportation) to provide basic services to urban communities (Henessey et al. 2007). Urban planning regulations can establish basic protections against natural hazards such as flood risk or cyclone (e.g. by setting resilient construction standards). These provisions, often challenged by developers in the past as overly onerous constraints on land use, are likely to assume increased importance in future. So the land use planning system also provides crucial regulations to assist in adapting urban settlements and infrastructure to potential climate change impacts that are already underway.

While emerging concerns about the risks posed by climate change mean that some adaptation measures will now be prompted by the market (for instance, the pricing of insurance premiums), planning will play a major role in ensuring the adequate protection of public infrastructure and new development through planning regulations (SMEC 2007). Planning will continue to play a role in the provision of public goods that would otherwise be underprovided by the free market. Those goods might include open space and community infrastructure for existing and new urban areas.

2.2 What are the costs associated with planning intervention?

There are a number of ways to evaluate the costs associated with planning intervention. A primary consideration is whether the system is actually achieving the objectives it sets out to (Evans 2004). In simple terms, planning objectives are achieved if the spatial area covered by a plan develops and changes in ways that are consistent with the goals established by that plan. These goals are qualitative in nature. They might relate to an efficient and accessible urban structure, the availability of suitable land for employment and housing, protection of environmental quality, cultural heritage and amenity, and social fairness in access to housing, services, work, education and recreational opportunities. Some planning frameworks identify indicators as benchmarks to determine progress in meeting their objectives. Indicators might relate to environmental quality, take up of employment lands, or housing market trends. Other plans are evaluated by default when planning provisions are consistently applied (or not) as areas grow and change.

For the purposes of this study, we put aside the question of whether or not planning goals and regulations are being achieved overall or within a given situation. This research therefore assumes that planning regulations are more or less achieving what they set out to do. In relation to housing, this means identifying a sufficient supply of residential land and development opportunities in the right locations and in response to projected demand, while still maintaining an efficient urban structure and environmental performance (Golland and Blake 2004). The cost of achieving these goals must then be determined.

Those costs relate to four broad areas: (1) the unanticipated or undesirable impacts or costs of land use regulation; (2) the procedural costs of establishing the system; (3) the costs of meeting the criteria established in the system; and (4) the costs associated with securing approval for development within this system. This latter subset of costs relates to direct taxes, payments or levies required as a condition or outcome of planning approval (which are made only if approval is successful); and to other expenditure described as 'premium seeking', which is incurred whether or not the proposal is approved (Evans 2004, p.103). We now discuss each of these four cost types in turn.

2.2.1 Costs of regulation

Economists argue that planners tend to emphasise the physical consequences of planning regulation, viewing economic factors as beyond the scope of the planning system (Evans 2004). However, the economic implications of planning decisions naturally influence the actions of developers. If these impacts are unanticipated, the development outcomes arising are likely to undermine the intent of the plan. The archetypal example offered in relation to housing is the situation where planning controls are so stringent that housing will be very expensive to produce. This occurs either because the supply of land is so limited, or due to the prohibitive nature of additional planning requirements, ranging from lot sizes to design controls (Nelson et al. 2002). If the existing market cannot support these higher costs, the housing will not be built, or will be built in another region where constraints are lower (Bramley and Leishman 2005, Monk and Whitehead 1999). Sometimes this is a desirable outcome but if it is an unintended consequence, it may have far wider economic impacts as land prices inflate.

On the other hand, the planning system can and does influence land economics in a way that encourages positive housing and development outcomes. By limiting development opportunities to suitable locations, the planning system protects environmental amenity and supports efficient infrastructure provision. The nature of the planning limitation itself encourages preferred patterns of development in urban areas – such as more concentrated residential dwellings to support services, shops and public transport – or the redevelopment of well-situated urban land that is underutilised. If development entitlements¹ through planning regulations are given too liberally, it is unlikely they will be taken up at all. Developers will be unwilling to risk an investment that might be devalued suddenly by a flood of competing products (or developments) that might well exceed demand (Bramley 1996).

This situation has been observed in many cities of the United States where there are ample provisions for high density developments, and yet perversely, the prevailing patterns of housing and commercial buildings are low density (including the ubiquitous car park) (Nelson et al. 2002). Investment in new residential projects can be deterred by the uncertainty and risk associated with an excess of development opportunity relative to demand. Scattered development patterns or project abandonment might also result from this situation (Bramley and Leishman 2005). Another negative scenario that may arise occurs when it is cheaper to build new homes than to renovate existing housing. An over-supply of new housing opportunities relative to housing in the existing market can destabilise existing markets, again leading to disinvestment, decline and even housing abandonment (Evans 2004). These illustrations suggest that, when used effectively, the planning system should reinforce

¹ These entitlements are generally expressed through land use tables in zoning instruments under Australian and American planning provisions, and through indicative development plans in the United Kingdom.

preferred patterns of development with economic benefits for landholders and the wider community. Conversely, a low or no planning scenario may attract as many costs as would be incurred if a planning system was used misguidedly (Bramley et al. 1995).

Table 2: Types of costs associated with planning system and development control

<i>Cost type</i>	<i>Incurred by</i>	<i>Incurred whether or not approval is granted</i>	<i>Cost if this element is abandoned</i>
Costs of regulation (e.g. impact on land prices)	Landholder		Dispersed, low, or no development Negative externalities
System establishment (studies, consultation, plan formation)	Government (but may be passed on through charges)	✓	Negative externalities
Meeting planning requirements (e.g. complying with environmental controls)	Developer		Negative externalities
Securing planning approval – direct taxes or development contributions	Developer / landholder		Contributions towards community infrastructure
Securing planning approval – application / referral fees	Developer / landholder	✓ (nb: costs likely to be lower if proposal complies with prevailing controls but profits likely higher if application to vary controls approved)	Assessment costs shift to government
Securing planning approval – ‘premium seeking expenditure’	Developer / landholder	✓ (Generally incurred when proposal does not comply with existing controls)	

Source: The authors

In understanding the potential for particular planning settings to encourage or discourage preferred forms of development, it is important to review the literature on planning and house prices. As noted above, much of the research on the relationships between planning and housing outcomes focuses on the impacts of land use regulation on house prices and affordability. There has been a particular focus in the United States, and to a lesser degree the United Kingdom, on the impact of planning policy settings designed specifically to limit the release of new land for environmental reasons, and potential house price inflation. In essence this work seeks to test the theoretical potential for regulation as a constraint on land prices, and by extension, the price of housing (Dawkins and Nelson 2002). In a general sense, as established already, planning regulates and constrains the use of land by restricting which areas may be used for particular purposes; the intensity and form of that development; the requirements and costs associated with seeking approval for change; and sometimes, the sequence or timing of land release for new development

(Dowall 1981). Therefore it is hypothesised that these regulations reduce supply and so have an impact on prices.

Empirical research carried out over the past two decades supports this theoretical link between different planning regime settings and housing price impacts. A trajectory of work dating from the early 1980s in the United States has sought to categorise particular regulatory settings established by local planning authorities and examine quantifiable correlations between these different settings and land and house prices. For instance, Black and Hoben (1985) evaluated a sample of local regulatory environments as 'restrictive', 'normal' or 'permissive', and observed higher land prices in so called restrictive environments (Black and Hoben 1985). A more recent survey of jurisdictions within America's 50 largest metropolitan areas was conducted in 2003, yielding 1,844 responses from local planning authorities (Pendall et al. 2006). The authors noted the absence of a national data base on land regulation in the United States, which could be used as a basis for testing relationships between planning regulation and housing outcomes, including affordability. Their work contributed to closing this gap by establishing benchmark characterisations of current metropolitan regulatory regimes according to a fourfold classification: exclusionary, restrictive, innovative or accommodating.

Without referring to empirical classifications of planning regime settings, some economists claim distinct and significant relationships between growth management policies and higher house prices (e.g. Quigley and Raphael 2004, Quigley and Rosenthal 2005). Other researchers adopt econometric measures to model the hypothetical price impact of supply increases in high demand locations (Aura and Davidoff 2006). This work suggests that liberalising planning constraints in high demand areas is unlikely to improve affordability. Using downtown Manhattan as an example, Aura and Davidoff (2006) show that in order to offset the price impact of planning supply constraint to any significant degree, a fifteen fold increase in permitted density would be needed. Even if such an increase were physically viable (and assuming that the marginal cost of additional housing unit construction does not increase above a certain threshold of building height), the environmental and amenity impacts are likely to be unacceptable.

Other researchers argue it is difficult to isolate planning regime factors from other potential contributing issues, such as the impact of natural constraints on the supply of developable land, or population growth and housing demand. These factors could actually stimulate a more restrictive planning response as a form of management (Dawkins and Nelson 2002). For instance, a study of 45 cities in the United States evaluated the impact of natural geographic and regulatory constraints on house prices. The research found that combined constraints might affect 40 per cent of price difference, of which a quarter relates to regulation (Rose 1989a & b; cited in Dawkins and Nelson 2002).

Similarly, economic and demographic trends influence demand for housing. Economic growth stimulates business and housing activity, and also generally leads to population growth. Employment and income growth, along with access to finance, increase capacity for households to compete for housing in desirable locations. Nelson et al. (2002) and Bramley et al. (1995) concluded that the relative elasticity of demand within different housing sub markets has the greatest influence upon house prices of any other factor, including planning — especially within metropolitan regions. Demographic changes, including rates of new household formation, also contribute to increased demand for housing. Norris and Shiels (2007) showed how population growth and rising demand in Ireland over the mid 1990s led to a dramatic inflation in house prices. This increase occurred despite a rather loose planning system, which

the authors argue did not constrain overall housing output nationally. Thus, in context of generating new housing supply, the capacity of the housing industry to respond to demographic shifts in the short term may be of greater impact than planning settings.

It is also difficult to separate price impacts associated with planning regulation from the positive demand impacts associated with preserving or encouraging amenity. Planning constraint to protect important rural landscapes, and to encourage service and housing concentration for walkability and economic vitality, tends to stimulate higher demand for housing in proximity to these benefits. This occurs both in accessible central locations and on the rural fringe. If there are no ready substitutes for these desirable locations – that is, if demand is relatively ‘inelastic’ – there is likely to be a price impact. This can be offset in a strategic sense by attempting to replicate positive attributes in as many comparable contexts as possible. In other words, containment may remain the overarching planning objective, but this should not be interpreted to limit overall new housing supply. Rather, new supply opportunities must be intensified within preferred areas, and alternative locations for contained housing provision established (Dawkins and Nelson 2002). Further, to avoid impacting negatively on affordability more generally, it is important that such controls are offset by strategies to ensure sufficient housing supply in preferred locations, supplemented by specific provisions for affordable housing to serve the needs of the lowest income groups (Whitehead 2007).

Finally, it is worth considering whether the objectives served by land use planning might be achieved by mechanisms other than land use regulation? Many economists assert that a taxation system would be a far more effective and even equitable way to manage negative externalities associated with development (Evans 2004). Firstly, it is argued that a tax system would have no impact on the cost of land itself. It would not lead to the perverse outcome where activities that are socially beneficial – such as the preservation of native vegetation or farmland – are associated with little financial benefit or value, while approval for developments that are associated with significant impact and potential externalities actually confers significant financial benefit for the landholders involved (Evans 2004, p.168).

Furthermore, it is argued that a system of taxes would allow compensation to be awarded to those affected negatively by the development. The system of land use controls does not. Also, a tax system would allow any developer to independently weigh the costs of a particular type of development against the potential profits. However, the capacity to levy a tax to offset costs of development assumes that these costs are predictable and fixed. In the case of land use, it is actually very difficult to predict the costs of a development, which might not be fully known for some time. Further, if the intention is to compensate groups that are disadvantaged by the development, it is necessary to identify these groups. Again, these groups may be difficult to identify and may extend across generations:

While one may be aware of the nature of the effects of some activity, a precise costing may be difficult to obtain, and the precise balancing implied by the theory may be more than adequately replaced by a physical control (Evans 2004, p.169).

One benefit associated with taxes is the capacity to adjust them over time if they seem too high or too low. However, as land itself is irreplaceable, and its development difficult to reverse, there is little room for error. Further, there are distributional considerations in the use of taxes, since some people will have more financial capacity to pay them than others. Taxes are less of a deterrent to the very wealthy, and it would be possible for some to buy themselves out of a tax (for

instance, against polluting a river) while the rest of society would bear the physical externality. It is argued that a physical control is a far safer option for these reasons.

Before putting aside entirely the potential for taxes to influence development outcomes, rather than land regulation, it is worth considering whether some types of taxes may have a useful role in the planning system when used in combination with, or to support, land use planning controls. In the United States, impact fees are levied on developments that are found to have negative impacts on particular populations or on the environment. Those fees are used both as a form of social compensation for the negative impacts, and as a way of discouraging development in places where it is not desirable but land use controls themselves have not been effective (Been 2005, Evans, Cowley and Lawhon 2003). Impact fees are discussed further in Section 2.3.2.

The example of impact fees leads to a final point about the relationships between controls and taxes in land regulation. While controls may be the preferred form of regulation, it is important they are used mindfully, and that they support or work together with other prevailing taxes or subsidies. Just as land use controls have economic effects, fiscal policy and tax decisions also have physical effects – for instance, on the demand and supply of land and housing. If the land use planning system is seeking to constrain urban form and encourage more concentrated housing development, it is critical that taxation policies do not contradict these goals by stimulating demand for over-consumption of housing through larger and more lavish housing forms. Rather, fiscal policy, taxation, and subsidies should work together with the planning system to support overall housing and urban development goals (Evans 2004).

2.2.2 Costs to government of the planning system

In addition to the indirect constraints or costs associated with land use planning regulation (few of which accrue specifically to governments), there are direct procedural costs to government associated with establishing a planning system. These include the costs of establishing a bureaucracy, legislation and court system, and the ongoing studies and research required to justify and inform plan making and development and assessment. These costs are incurred by government and are justified by the social benefits associated with the planning system overall, as outlined above.

The costs to government of establishing and maintaining the planning system differ significantly depending on the way in which planning control is imposed, however, and the level of detail of that control (Evans 2004). It is also likely that there are different costs to developers associated with different planning systems. To understand the various costs associated with system types it is useful to look to the British and American systems. Australia's Anglo-American planning regimes, established by state governments, tend to sit somewhere on the spectrum between two extremes (Evans 2004, Gurran 2007, White and Allmendinger 2005).

At one extreme, the British planning system controls development in a highly detailed way. For instance, proposals that otherwise seem to comply with local plan objectives may be refused for any number of subjectively determined reasons, such as physical appearance (Evans 2004). The British system is also highly regulatory – most land use changes require formal development assessment, and approval is by no means certain. The system should have the benefit of optimising environmental outcomes but the costs of extensive assessment and negotiation time are considerable, while the risks of refusal are likely to deter some development that might otherwise be proposed (Monk and Whitehead 1999). There are further implications for the type of

development that occurs. Smaller developers appear disadvantaged by this uncertain and expensive process, and have fewer resources to mount an appeal if their proposals are refused. Greater homogeneity in developers means more aesthetic homogeneity in development outcomes, and perhaps less choice for purchasers (Evans 2004).

By contrast, a land use zoning system applies across much of the United States. The details vary according to state legislation and the discretion of local authorities (White and Allmendinger 2005). The land use zoning system operates to specify in advance which particular activities may be undertaken on each parcel of land. Zoning is designed to control negative externalities arising from the juxtaposition of incompatible uses. It focuses on activities as a class rather than on the specific detail of each and every development. Provided that the activity (for instance, detached dwellings or medium density housing) is permitted within the zone, and the design of the development complies with any specified building rules, permission is almost certain. However, the system relies on a separation of potentially incompatible uses. On a large scale, this is associated with greater distances between housing, jobs and services, and more reliance on the private motor car. Zoning has also been used in the United States for other reasons. One is to minimise the need to provide local services (like schools or community facilities, which are funded at the local level) by permitting only low density detached housing, meaning a smaller base population.

The central difference between the two systems is that the British system scrutinises all development in a highly comprehensive way, and thus may be expected to be more costly both to government and to developers. The American system meanwhile offers greater certainty and lower assessment costs at the expense of nuanced treatment of individual development (Evans 2004).

Australian planning combines elements of both these approaches. Land use zoning or equivalent forms of land use classification are applied across all State and Territorial jurisdictions (Gurran 2007). However, the decision to approve most types of development in urban areas remains a discretionary one, made by local government planners (under delegation) and local councils – often with the advice of independent panels, or by a State or Territorial planning authority. The salient point is that the greater the amount of discretion in making a planning decision, the greater amount of uncertainty there is in the planning system. So in theory, more public and private resources are consumed in the process of preparing and assessing documentation relating to a proposal (Evans 2004).

What is gained for the additional resources dedicated to assessing development proposals? One important benefit is the capacity to tailor development outcomes to specific proposals and sites. This helps achieve the best possible solution for the site, while minimising the risk of undesirable outcomes such as failure of a major development leading to its abandonment and dereliction (Evans 2004). However, uncertainty about whether a proposal will be approved may deter even desirable development from taking place (Monk and Whitehead 1999). Alternatively, as noted above, uncertainty about what types of development might be permitted under a very loose regime may also discourage development that would otherwise deliver societal benefits. Simultaneously, such uncertainty could deliver much development that is of questionable benefit indeed (Bramley and Leishman 2005). In relation to Australia, it is worth noting that the majority of State and Territorial planning authorities have undertaken or are undertaking significant reform to their planning frameworks with the objective of reducing the need for detailed assessment of routine proposals (Gurran 2007).

What are the interests of developers in relation to this spectrum of planning system approaches? Developers will argue for flexibility in interpreting the rules applying to their own land (with the interest of optimising the type of activity able to be carried out and therefore the potential value of return). But a general relaxation of rules would not be in their interests, as it would devalue their own investments by flooding the land market with potential alternative development opportunities. As noted, such a deflationary outcome will not necessarily result in development either, because profit margins will be less clear (Evans 2004). The system of constraints and regulation is thus crucial to the viability of developments, particularly those associated with a significant investment of capital, such as a medium or high density housing development. This means that if contained urban form is a priority, constraint would appear to be a critical component of the policy mix under Anglo American planning systems -- both to limit new land release, but also to limit entitlements to land where intensification is preferred.

Finally it is worth acknowledging that there are other models of land use and development planning. The Anglo-American planning model used in Australia, Britain, North America and New Zealand emphasises 'reactive planning' – regulating development proposed by the private sector – rather than 'positive planning', whereby governments play a much more active role in the land and housing development process (Evans 2004). Positive planning intervention is more common in Europe. In the Netherlands for example, local authorities have historically played a strong role in acquiring (and reclaiming) land, servicing it to development standards, and then developing this land directly or through non profit housing associations. This land is then released to the market with stipulations about the ways in which it is to be used, including requirements for infrastructure provision and social housing (Lawson and Milligan 2008). The costs of meeting these obligations are considered by the developer who then pays the remaining 'residual' value for the land in question (Gurran et al. 2007).

To what extent can costs of the planning system be passed on to developers? At the planning authority level, costs for planning services can be passed on to the developer through direct fees and charges. An important criteria for establishing the level of the charge is the extent to which the service is of public benefit (for instance, a change to the planning scheme) or whether the service will predominantly benefit a single developer or party (for instance, a development application). Depending on the policy position of the jurisdiction, the charges will be set somewhere along a spectrum from full cost recovery to an amount based on the value of the development, rather than the costs to the planning authority of assessing it.

Before discussing those costs, we will turn to more specific issues associated with meeting planning controls and the costs associated with development assessment and approval.

2.2.3 Specific costs of meeting development criteria or planning regulations

We have outlined in conceptual terms the range of theoretical costs and intended societal benefits associated with a planning system. We have also indicated some of the potential costs arising from different forms of development regulation (such as taxation), or no regulation, where agglomerations of functions might gather to form built environments in urban areas, but at significant cost to the environment and society. It is difficult to fully calculate these costs in money terms. Indeed, it is likely that neither the overall costs or benefits of planning regulation can be calculated in a precise or fixed way.

It is possible however to establish the cost implications of particular planning controls that regulate the standards for design and construction of buildings or developments. This was attempted in NSW in 2006, when the State government introduced compulsory requirements (known as 'BASIX') for all new residential developments. The requirements relate to basic energy and water efficiency benchmarks that represent a 40 per cent improvement for a standard new dwelling. Prior to the introduction of the control it was estimated that the costs of altering standard designs to achieve compliancy with BASIX (indicated by online automated assessment of plans and issuing of a certificate) were about \$9,000 per dwelling (Allen Consulting Group 2003). It was also calculated that this initial outlay would be offset by reduced energy and water bills (amounting to between \$300-\$600 per year). What is significant about this approach is that the State Government costed the impact of introducing the new controls, and assessed these costs against the projected benefits to the household and to the state of NSW.

When plans are made or development guidelines established in Australia, it is not common practice to undertake a full assessment of the costs associated with either the introduction of new controls or maintaining existing controls at a particular standard. In the United States there is a growing body of applied research to identify unnecessary development controls that add to the cost of housing development, or represent a barrier to lower cost housing forms (APA 1999, HUD 2005). Variations in planning controls from jurisdiction to jurisdiction necessarily mean that this type of research is carried out in relation to specific locations and classes of development. However, types of controls that have been found to impact on housing production costs include excessive requirements for large lot sizes, street setbacks, car parking spaces and expensive building materials. There is potential to replicate this work in Australia with a view to identifying two things: (1) the types of development control that may add unnecessarily to the cost of housing development; and (2) simple methodologies for calculating the financial costs and benefits of introducing new controls, and the circumstances in which such assessments should be undertaken by planning authorities.

The fact that the cost impact of new controls is rarely estimated in a systematic way might provide some weight to the argument that certain controls do increase development costs.

2.2.4 Costs associated with securing planning approval

Aside from costs associated with meeting the specific requirements of planning controls, there is also a range of other expenses associated with securing planning approval. Planning approval may relate to proposed changes in planning control (such as a rezoning of land) or to a specific development. Some costs are paid whether or not the proposal is approved, and therefore represent some risk to the developer. Others are paid only if approval is granted.

The first class of costs we identify include taxes and fees associated with the acquisition of land (like stamp duty), and the general Goods and Services Tax (GST) on activities relating to the development. As outlined above, there are fees for submitting a proposal for planning assessment, and other fees may be charged if the proposal must be referred to other authorities.

Secondly, costs to development are added when an application is prepared for planning approval, a process which may include required studies or consultant reports, and compliance with any specific submission standards. In addition, the time taken to secure this approval (including any delays) represents an expense to the developer in staff resources and holding costs. Economists use the term 'premium

seeking expenditure' to describe costs associated with developing a favourable relationship with the planning authority, hiring consultants, sponsoring public relations activities, and paying for lawyers or barristers if the decision of the planning authority is refused (Evans 2004). These expenses do not guarantee that the proposal will go ahead, but are undertaken to increase the likelihood of success. Unfortunately expenditure on these activities reduces the amount of potential profit before the development has even begun.

The less likelihood of approval, the more likely that resources will be directed to premium seeking expenditure that represents a 'deadweight loss', regardless of whether or not approval is granted (Evans 2004, p.108). The policy goal should therefore be to ensure that planning requirements are as clear and unambiguous as possible, and to apply these standards consistently. Theoretically, this will minimise the amount of money directed to 'deadweight loss' expenditure while maximising funds available for transfer to community benefit. We explore this further in Section 2.3 in a discussion of development contributions.

The third group of costs includes any payments or levies required as a condition or outcome of planning approval. These payments might include development contributions for infrastructure and services at a local (or regional level in the case of NSW). These contributions are made only if approval is successful. As we discuss below, compulsory development contributions are determined and collected in different ways in Australia, with one result being that the impact of these contributions on the costs of housing production is likely to vary significantly.

2.2.5 Summary of costs and benefits associated with planning regulation of housing development

Table 3 summarises the regulatory phases associated with land use planning and housing development, in terms of both rationale or social benefits of each phase and potential direct and indirect costs to the developer. Note that these indirect costs may also have flow-on implications for future investment decisions. If the cumulative costs are too high, it is likely there will be long run negative implications for the amount of new housing produced by the private sector, with flow on implications for affordability, due to reduced supply.

As shown below in Table 3, the ideal policy scenario would direct public expenditure toward establishing a clear and certain planning framework. Private expenditure should then be shifted towards contributions made through the planning process in respect of planning gain or value (largely pushed back to the landholder). This minimises private developer costs on 'dead loss' areas associated with seeking planning approval, and theoretically frees up funds for shared infrastructure and services through development contributions, which benefit house purchasers and the local community.

Table 3: Planning regulation, housing development and potential direct and indirect costs

<i>Regulatory phase</i>	<i>Housing development sequence</i>	<i>Rationale / benefits</i>	<i>Potential direct costs</i>	<i>Potential indirect costs</i>
Land use categorisation / zoning	Where new housing can be located, when new housing can be developed	<ul style="list-style-type: none"> → Efficient provision of infrastructure & services. → Environmental protection. → Avoiding social isolation. → Information about future development prospects. 	May be charge if developer has to initiate rezoning	Zoning / categorisation establishes development potential so influences value Amount of land available may influence land prices
Development controls – density and design requirements	The amount and configuration of new housing, elements of building design	<ul style="list-style-type: none"> → Efficient provision of infrastructure & services. → Environmental protection and sustainability. → Amenity and heritage. → Information / certainty about future change. 		Costs of complying with design requirements (e.g. expensive materials or technology)
Assessment and approval / refusal of proposal to carry out change in the use of land (i.e. 'development')	Planning approval for housing development	<ul style="list-style-type: none"> → Managing change in urban land use. → Protecting community amenity and avoiding negative externalities → Opportunity for community input to decisions that might affect them. 	Application fee. May be fee for other required licenses. Time taken to secure approval. Costs of preparing application.	
Services and infrastructure coordination and provision	Contribution towards infrastructure or services	<ul style="list-style-type: none"> → Facilitating urban development by coordinating and providing basic services. → Ensuring quality shared services that would otherwise be underprovided by market (e.g. open space). → Increased value to home owner / resident. 	Costs of contribution requirement.	
Regulation of construction process and completion to standards	Construction and completion	<ul style="list-style-type: none"> → Health, safety, environmental protection standards. 	May be costs for certification of completion.	

Source: The authors

2.3 Development contributions

Development contributions were first introduced in Australia by developers eager to roll out the shared infrastructure needed to support the massive housing construction boom following the Second World War (Neutze 1995). Parameters for planning authorities to levy contributions from developers as a condition of planning approval have since become incorporated within State and Territorial planning legislation, with approaches differing significantly across jurisdictions (Gurran 2007). Chapter Three describes those different Australian systems and frameworks. In this section, we classify different models for collecting development contributions and discuss the potential impacts of these contributions upon the costs of housing development. We draw on examples of approaches used in the United Kingdom and the United States, to explain these models and show how features of the planning system might influence the efficacy or otherwise of the contribution approach and its impacts on the land and housing market.

2.3.1 *Betterment and development contributions in the United Kingdom*

There are different ways to justify contributions from private developers as part of the planning approval process. The first type of justification relates to the private benefit or 'windfall' associated with planning approval, which represents an opportunity to increase the economic use of the land. This 'windfall' is the difference between the market value of the land before and after planning approval was granted. It is often called 'betterment'. Attempts to hypothecate some of this betterment as a payment (monetary or in kind) to planning authorities suggest a kind of tax – not on development per se, as is sometimes argued, but on the hypothetical profit represented by the opportunity to intensify the use of the land. When this tax is calculated and levied in a formal way, it is described as a 'betterment tax'. However, the concept of 'betterment' is also used less formally to justify the imposition of charges for shared urban infrastructure and services.

In the United Kingdom the term 'planning obligation' is used to describe contributions for community services and facilities, from public parks to social housing, that are negotiated under s106 of the Town and Country Planning Act 1990 (as amended) (Oxley and Dunmore 2004). The obligations are negotiated rather than fixed amounts so cannot be described as a formal betterment tax (Oxley 2006). The likely imposition is known in advance, however, and thus can be factored into land acquisition decisions. Obligations are levied in recognition of the betterment or value uplift associated with planning approval which, as noted above, is always a discretionary decision in the UK. The level of obligation adjusts to market circumstances since the overall viability of the proposed development is taken into account when an obligation is negotiated (Crook et al. 2002, Whitehead 2007). In contrast to a fixed amount – which might seem feasible in a buoyant market, but prohibitive in a falling or depressed market – this negotiated approach reduces risks for developers.

The system of planning obligations has emerged in the UK partly because of fiscal limitations on local government (Evans 2004). Any increase in local tax revenue associated with property value increases (in relation to planning permission, development and increased services provided) actually diminishes the amount of central government grant (intended to maintain equity between local authorities). As planning gain is calculated as a one-off negotiated payment, it is not included in the formula for determining grants to local government (Evans 2004, p.97).

2.3.2 Betterment, value uplift, inclusionary zoning and impact fees in the United States

In the United States betterment or value uplift is established when the planning rules are made, rather than when a development is approved (unless prevailing planning rules have been varied to secure approval) (Evans 2004). In many jurisdictions, inclusionary zoning requirements are introduced at this time as a way of securing some of this value uplift for community needs. This is done frequently, but not solely, for affordable housing. 'Inclusionary zoning' in this sense simply means a contribution to be paid whenever specified development is approved within that zone. When applied to housing, the term 'inclusionary zoning' plays on its antithesis: the zoning regulations are so restrictive that they are deliberately 'exclusionary' of lower income groups (Brunick 2004, Morris 2000, Pendall 2000). The inclusionary designation imposes a contribution requirement, such as land being set aside for open space or housing, or the dedication of housing units (in perpetuity or for a defined period of time). This mechanism can therefore be understood as a type of development contribution. The inclusionary requirement is often explicitly justified on the basis that changes in planning rules to allow residential development or higher density residential development confer a windfall on the private landholder and are likely to increase gentrification (Koebel et al. 2004).

Development contributions are also justified in the US with reference to the impact of that development upon an area's need for services, or upon its environmental quality or amenity. 'Impact' fees, or 'exaction fees' as they are sometimes known, are levied as a condition of approval for developments that are associated with particular impacts for the local or regional community (Been 2005). These impacts could include the need for more urban services or transportation, or the need for low cost housing. Impact fees are now utilised by approximately 60 percent of US cities exceeding 25,000 residents (Been 2005; MAG 2002).

There has been some research in the US to determine the relationship between impact fees and inclusionary zoning requirements on house prices (Been 2005, Calavita 1998, Evans-Cowley and Lawhon 2003). The consensus appears to be that inclusionary zoning requirements are quickly accepted by the market, and so reduce land values in the way that any planning constraint or obligation would operate (Brunick and Webster 2003). In theory, this means the costs of achieving the inclusionary requirement are absorbed by the landholder, who receives a lower market price for the land. The same principle is likely to operate with regard to the imposition of s106 obligations in the UK: the capacity to levy the contribution depends on the ability to transfer these costs back to the landholder via a reduced sales price (Crook and Whitehead 2002, Whitehead 2007). The contribution cannot simply be passed onto the house purchaser, it is argued, because if the purchaser is willing to pay a higher price for the house the developer would likely charge it anyway (Evans-Cowley and Lawhon 2003). The difference in Britain is that if the market has dropped since the land was acquired, the contribution requirement can be lowered too, so the development is not jeopardised and the contribution is not passed on to the purchaser.

A similar argument is put in the US to support the imposition of impact fees for local infrastructure and services. It is argued that the infrastructure and services represent a benefit to house purchaser without imposing significant costs, because if the impact fee obligation is known in advance, it should reduce the purchase price of the land (Been 2005). On the other hand, developers can only try and add the cost of the charge to the market price of their housing if the market is willing to pay a higher price. Even if the higher price is paid for the housing, however, the benefits of local

amenities and infrastructure are not necessarily provided (Been 2005). This is a strong argument for including basic infrastructure contribution requirements in all local plan-making frameworks, either expressed as an impact fee or as a planning obligation. It is crucial however that once implemented within a planning system, the charges are not lifted or reduced without clear assessment of the implications for new and existing residents. Suddenly lifting the requirements would represent a 'windfall' for the immediate land owners or developers, without any guarantee of transferring benefits to those purchasing a home (by way of reduced sales price). So ultimately, the home buyer might pay the same amount for a property that has access to fewer amenities.

There are some circumstances in which impact fees are actually used as a financial deterrent to discourage development, or development of a certain type (Evans 2004). The first example is when planning regulations alone are not strong enough to support growth management goals. In this circumstance, high impact fees might be used to discourage development in undesirable areas. The second example is when impact fees are used to discourage developments that increase local population, thus generating a need for new local authority service provision, without a concomitant increase in property tax revenue to compensate (Evans-Cowley and Lawhon 2003). The US system of funding for local government means that certain commercial developments attract higher property taxes, but generate fewer demands for local infrastructure or facilities, such as schools or health services (Evans 2004). If impact fees are set to discourage higher density housing forms, the call on local expenditure for services will be lower. Zoning provisions may also be used in this way to discourage residential development, particularly higher density residential development – for example, provisions that require large lot sizes or excessive design features (Pendall 2000). This type of zoning is called 'exclusionary zoning' (HUD 2005).

2.3.3 Other levies or charges

In addition, several kinds of more general charges are levied through the planning process to contribute to the costs of shared urban infrastructure. These charges are not tied in such formal ways to landholder 'windfalls' following planning approval, or to the impacts of development (although impact formulae are used sometimes in their calculations). The charges are fixed and non negotiable. They are used to contribute to, or meet the whole cost of, basic service requirements such as utility connections, and also infrastructure such as local roads, footpaths, open space and community facilities. As shown in Chapter Three, most development contributions in Australia fit within this broad description. In Italy they are described as 'urbanisation charges' or 'oneri di urbanizzazione' (Evans 2004, p.111).

Formulae for urban charges or development contributions include a fixed levy representing a proportion of construction costs or a fixed fee per dwelling. When the levy is tied to the number of dwellings, there is a bias towards larger, low density housing in residential developments, because the developer will be liable for a smaller overall charge (Evans 2004). By targeting these individual houses to the premium market, profits can be maximised while expenditure is minimised. By contrast, multi-unit developments will seem less economical. Alternatively, a levy that represents a percentage of construction costs will avoid this distortion, and may even encourage more modest housing forms (Evans 2004). This approach is used in Italy and in parts of Australia.

2.3.4 What are the distributional impacts of these development contributions, taxes and charges?

A major concern about all of these development contributions is that they represent an unfair burden on new residents and house buyers while advantaging existing or earlier residents, who, it is assumed, have benefited from the provision of services through general consolidated taxation revenue. If the cost of producing new housing increases because of development charges, it is argued that the value of existing houses also increases (Huffman et al. 1998). These are important concerns when consideration is being given to the introduction of new charges. By contrast, if the charges are imposed universally through the planning system as an upfront obligation, at either a state or national level, their distributional impact is largely irrelevant (Evans 2004).

Development contributions will represent a higher proportion of housing costs for lower, rather than higher income families. This distortion is minimised however by tying charges to construction costs. The charge will adjust for more modest housing forms, such as medium density housing, where costs per dwellings are likely to be smaller.

2.4 The neo-liberal turn in Australian urban governance and implications for planning and infrastructure provision

In recent years there has been increasing pressure within some parts of Australia to use the development contribution system to fund major regional infrastructure needed for new growth areas, such as rail systems or police stations. Strategic spatial planning processes play an important role in coordinating this infrastructure provision, and ensuring that new development patterns support and follow the existing and planned roll-out of infrastructure. However, expectations that the development process itself can generate the funds needed to provide this infrastructure represent a significant shift in economic and spatial planning policy. To understand this shift and potential implications for the costs of housing development, it is helpful to briefly discuss the neo-liberal turn in Australian urban governance.

2.4.1 Neo-liberalism and urban governance

Despite the increasing shift towards neo-liberalist agendas in many policy arenas, the Australian state (at its various levels) has retained some of its socio-democratic service functions, especially in arenas of traditional high state intervention such as employee entitlements and welfare support for women and ethnic minorities (see Gough 2002). In spite of this maintenance of social service provision and Keynesian welfarism, neo-liberal policies have significantly changed the level and type of state involvement in these areas (Searle 2002). Urban development and planning and infrastructure provision are areas that have experienced an ostensible shift away from state involvement to increased privatisation and market functioning (Bell 1997; Troy 1999; Cook and Ruming 2008).

At its core, neo-liberalism signifies a framework of political and economic authority that champions market operation and efficiency over a wide range of social relations (Brenner & Theodore 2002). As a guiding principle, neo-liberalism seeks to remove the state-centred bureaucracy and executive forms that characterise the socio-democratic tradition of Keynesian-ism. The market is positioned instead at the centre of public management (Larner 2000). Neo-liberalism promotes a core image of the economy as a self-regulating system, where self-interest is seen as a more productive mechanism for optimising national wealth by comparison to government initiatives that

promote the 'common good' (Beeson and Firth 1998). As such, the neo-liberal agenda would seem profoundly antithetical to planning.

The political agenda of neo-liberalism has been marked by a shift away from Keynesian welfarism and a regulated economy, to an environment of unfettered markets (Larner 2003). Under Keynesianism, the state was constructed as the provider of goods and services to a national population, which in turn ensured an adequately high level of social wellbeing (Larner 2000). The privatisation and dissemination of the states' role was seen to allow for a more efficient use of the states resources, and allowed for a reduction in public sector waste (one of the primary critiques levelled at Keynesian welfarism) (Leitner & Sheppard 2002). It was also argued that increasing privatisation would allow urban problems to be sorted out in a businesslike way (Gough 2002).

2.4.2 Keynesian economics and housing production in the post war era

Historically, Government intervention into residential development was perhaps greatest at the end of the Second World War, where housing production became a major element of the broad program of war reconstruction. This was due to a distinct lack of housing options and via the establishment of Keynesian economic policies (Berry 1999). The state used housing as a tool for shaping broader economic activity as a whole, with large areas of housing being planned and developed on the fringe of most of Australia's capital cities. Much of this housing was constructed by the state. However, private developers raced to make their own residential subdivisions, voluntarily bearing the basic costs of subdivision while leaving the state to construct and fund social services and major infrastructure (Troy 1995). By the mid-1960s land developers were beginning to contribute to public expenditure on water and sewage for new suburbs. Meanwhile, the state government attempted to confront the service shortages in established areas (Neutze 1997). In this period local councils began requiring developers to provide drainage and sealed roads within their developments as a condition of approval and, in terms of hydraulic services (sewerage and water), to cover the capital costs of connecting their development to the existing networks (Neutze 1999).

2.4.3 Privatisation of services and user pays

In the late 1970s, reduced funding to the states from the Commonwealth encouraged a shift towards private provision of transport infrastructure (Searle 1999). This had an impact upon new areas planned or developing on the urban fringe. At the same time, the planning system facilitated the speedy development and sale of dwellings in outer urban suburbs, without requiring or providing services or transportation infrastructure to release areas. This trend accelerated for much of the 1980s (Gleeson and Low 2000). In order to fund major transportation infrastructure, the states turned to privatisation through toll roads and private bus services, passing the costs of servicing the developments back to consumers (Black 1999).

Over the last two decades, this neo-liberal shift has increasingly extended to housing and spatial planning policy (Beer et al. 2007). Funding for urban infrastructure has become increasingly pressing over the last two decades as traditional sources of funding have declined (Searle 1999). Increasing emphasis has been placed on the private sector to provide the services and infrastructure required by rapidly expanding urban growth in most Australian states (MacLeod et al. 2003; Troy 1999; Searle 1999). The shift towards neo-liberalism has influenced the provision of social services as well as physical infrastructure (Gleeson & Low 2000a&b). Consistent with the ideology of market liberalism, the government has moved to withdraw from fields of

concern by privatising services or to 'distance' themselves from the financing of services by corporatising them wherever possible (Troy 1995).

Consequently, private land developers are increasingly responsible for this social infrastructure, which has led to a new round of privatisation where the state is actively pursuing market involvement in the co-ordination and provision of housing and employment, direct investment in transport, remediation of brownfield sites, preparation of greenfield sites, and co-ordination of community development and human services delivery (Troy 1999). Ironically, while urban policy has increasingly drifted toward neo-liberalism, with the full support of the property and development industry, the industry is now calling for a revival of traditional government investment in the urban infrastructure upon which future growth depends.

2.4.4 Policy rationales underpinning different approaches to infrastructure funding in Australia

Different infrastructure funding regimes can be used to achieve different urban policy objectives (Neutze 1997). We have observed this already in relation to impact fees in the US, used as a financial deterrent for undesirable residential developments in areas that are difficult or expensive to service. This subsection further explores these different policy rationales in the Australian context.

As discussed above, Australian governments have shifted away from the traditional model of funding urban infrastructure through a revenue stream that is generated by taxation, borrowing or, at the local government level, through rate revenue. User pays funding and development contributions represent two additional approaches. User pays models shift the costs of infrastructure or services to the end user (existing or new residents), but a source of up front capital funding is still needed. If the private sector provides this up-front funding, they will need a charging regime that enables them to recoup their investment plus profits. If the public sector provides the up front funds, the imperative to recoup investment through charging may be less — however, a source of up front revenue will still be required. A third approach is through public-private partnerships, where costs and risks are shared, but the private sector seeks the profit (associated with the revenue generated from a user pays charging regime).

When contributions are sought through the planning process for the shared or public infrastructure requirements associated with a development, the charges will add to the production costs of new houses. These costs may be offset by improved amenity and services, which are capitalised into the increased value of the home. As we have stated, while there is not necessarily a direct relationship between the imposition of development contributions and house prices, which depends on short term market conditions, there may be long term impacts associated with discouraging residential development if charging regimes are set too high. What are the policy implications of these different approaches to urban infrastructure provision? Firstly, it makes sense to draw on government funding through revenue supported by payments by end-users for goods that should be used sparingly (like roads, water or energy). At local levels, this upfront public expenditure could be supported by developer contributions, provided these contributions support facilities in proximity to the development and are collected in an efficient way (Neutze 1995). The user pays approach sets a price signal to discourage use. However public ownership of the infrastructure removes the perverse situation where increased use of scarce resources is needed to ensure their profitable management by the private sector. Consumption or use of other types of shared goods, such as recreational areas or public transport, is associated with social benefits. Thus provision and use of these items should be encouraged by low or no charges, rather than a negative price signal. Lastly, when developers must contribute

to the infrastructure needed to support development – local roads, footpaths, utilities and so on — they are more likely to provide these facilities in an efficient way, and arrange their developments accordingly to maximise cost effectiveness and benefits to home buyers that improve market appeal (Neutze 1995; and see Table 4).

Table 4: Summary of policy objectives underlying options for urban infrastructure provision in Australia

<i>Approach</i>	<i>Objective</i>
Government funding (general revenue)	Maximise access to and use of public good (e.g. recreation areas, footpaths / cycle-ways, public transport)
User pays (up front funding, recouped from user charges)	Discourage use of resource associated with significant externalities (e.g. use of roads by private cars; reliance on non renewable forms of energy; waste disposal rather than re-use or recycling)
Developer contributions	Provide basic services and infrastructure in efficient way
Development 'impact fees'	Recoup costs associated with significant negative impacts / externalities of private development

Source: Adapted from Gurrán 2007, p.131

2.4.5 How much should developers contribute?

Impact fees in the United States are intended to work on the premise that development should pay the full marginal cost of providing facilities necessary to accommodate growth (Carrion and Libby 2000). These fees should in turn reflect the characteristics of each individual development, for example, the distance from existing roads, or whether its topography leads to difficulties in reaching water and sewer mains (Been 2005). Further charging the marginal cost of providing services (as opposed to the average cost), however, may encourage developers to operate in areas already serviced by under-utilised infrastructure, such as infill and urban consolidation, rather than fringe greenfield locations. Equating development charges to marginal costs also potentially reassures existing residents that as a result of the development, their property taxes will not increase or the quality of service decrease (Been 2005, Brueckner 2001).

One of the major economic considerations of urban infrastructure and service provision is their inherent 'lumpiness' – that is, the need for upfront construction and payment as a more long run cost effective pricing mechanism than gradual increases in service (Carrion and Libby 2000; Neutze 1997). According to Neutze (1997), 'lumpiness of capacity' means it is more efficient to add to capacity in large lumps than in marginal increments. Most economic models make this assumption. It is generally more expensive to add capacity to existing infrastructure (especially physical) than to provide excess capacity at the time of development, and thus, the marginal cost of capacity is higher in the short-run than in the long-run (Neutze 1997). Some argue that while marginal cost pricing requires that the full cost of service provision (i.e. capital and operating costs) should be included in the equation, when it comes to developer charges, contributions should cover the capital costs while operation costs should be covered by fees for service use (Dollery et al. 2000). In practice development contribution regimes can be structured to recoup capital expenditure incurred by planning authorities as subsequent development takes place. They can also encourage collection for items planned in the future.

2.5 Summary and conclusions

This chapter has explained planning as an important intervention to achieve environmental sustainability, economic efficiency and social equity objectives in housing and urban development. However, we have also shown that planning is associated with a range of direct and indirect costs, and have presented a broad typology of these costs. They arise from land allocation processes, development controls and design requirements, administrative costs associated with securing planning approval, contributions towards infrastructure and services, and certification costs during construction and on completion (see Table 3). There are important benefits associated with each of these regulatory requirements and phases of housing construction, ranging from environmental protection to the efficient provision of infrastructure and services, securing amenity and heritage, and public participation. If these costs are not understood they may have unintended or unanticipated impacts on housing supply or market outcomes. To reduce, offset or eliminate these costs it is important both to quantify them and understand their relative weight in the overall costs of housing production. Such an approach will also inform future decisions regarding new regulations or charges.

Increasingly in several Australian states, development contributions toward infrastructure are becoming an important component of the costs associated with securing planning approval for housing. Development contributions are collected during the planning process but do not necessarily add to the net price of housing, once benefits such as the capacity to access neighbourhood amenities are considered (Been 2005, p.168). While prices may rise in areas where differing contribution regimes are in place, as with other planning obligations such as sustainable design controls, it is difficult to distinguish this price rise from the added production costs imposed by the contribution or the positive amenity created by the existing or planned service, which can create a price premium. These benefits assume that the contributions are limited in scale and confined to the neighbourhood or local needs generated by the development. In recent years however, there has been increasing pressure in some Australian jurisdictions to use development contributions to fund major infrastructure needed by new urban development, such as train lines, education facilities or hospitals. We have argued that this major shift in planning and the funding of regional infrastructure provision can be understood in relation to a broader political shift towards neo-liberal economic policy in Australia's urban governance.

The next chapter grounds this discussion in relation to the characteristics of the housing development industry in Australia. This provides context for understanding the sequence of residential development and costs incurred as part of the planning process. The idiosyncrasies of the Australian housing development industry also explain why cost structures and necessary profit margins may be greater in Australia than in other comparable jurisdictions such as the United Kingdom and the United States. Secondly, as development contributions are often the largest single planning related cost imposition in housing production, the chapter outlines current arrangements for developer contributions across the Australian States and Territories. Finally, the chapter summarises research and advocacy published by industry bodies on the cost impacts of these and other planning related requirements and charges for residential development in Australia.

3 RESIDENTIAL DEVELOPMENT AND PLANNING RELATED COSTS IN AUSTRALIA

To appreciate how direct and indirect expenditure impact on the cost of new housing development and construction in Australia, it is important to understand the structure of the building and development industry. In addition, the differences must be understood between development charging regimes across the different States and Territories, likely one of the largest planning related cost items in some jurisdictions. Chapter Three establishes this context. The first section introduces the basic features of Australia's housing industry. The second outlines the framework for securing contributions from developers through the planning and development process across the States and Territories. It focused specifically on charges relating to infrastructure or service provision that are secured as a condition of planning approval. The third and final section summarises research and advocacy on government and planning related costs to housing production published over the past five years by the Australian housing and urban development industry. We acknowledge the views and concerns expressed by the industry, particularly relating to the potential for housing prices to be impacted upon by government and planning related fees and charges that are incurred through the planning process. However, our main focus is on efforts to quantify this cost impact. We summarise industry-derived estimates of a number of costs, including: meeting planning requirements (such as environmental controls); administration fees and fees for planning consultants; holding costs arising from delays in planning approval; and infrastructure charges or contributions. We also note cost estimates relating to Federal, State and government taxes. Although such taxes are not a focus of our research, observing their occurrence as a total proportion of the costs detailed by industry provides important perspective on the relative impacts of planning requirements as a proportion of total obligation. These estimates, and particularly, the identification of specific direct and indirect classes of cost, help expand upon the preliminary identification of costs associated with planning and residential development as proposed in Chapter Two.

3.1 Structure of the housing and residential development industry in Australia

We have already observed some of the relationships between development industry structure and the impacts of costs associated with the planning process. As noted in Chapter Two, the more uncertain and expensive it is to secure planning approval, the more likely it is that a few large companies will dominate the process. This is due to their ability to achieve economies of scale and maintain adequate banks of land to ensure a flow of development opportunities. Smaller development companies, who also depend on a volume of development to remain viable, are particularly vulnerable to overbid for land at peak market cycles, only to find that the market drops during the process of securing planning approval (Evans 2004). This is likely to exacerbate instability in housing supply and demand, and increase the likelihood of monopolistic behaviour in land release. In the United Kingdom, market dominance by a few major developers is also associated with more homogenous housing development in terms of aesthetic appearance and design. In Australia, it is likely that similar pressures for the housing industry to maintain access to a steady flow of developable land has resulted in the separation of development and construction firms.

3.1.1 The residential development industry

Despite the importance of government, when it comes to planning and the provision of some capital investment, private developers take most of the initiative for

development and redevelopment in Australian cities. They purchase land, arrange finance, seek permission to develop from planning and service authorities, arrange to have the necessary services installed, and find buyers for the completed development (Paris 1993, Ball 2003). The Australian system of land development has a number of distinctive attributes that distinguish it from other countries. The primary difference is the separation of the land development industry from the building industry. While some builders are land developers and vice versa, in most cases the two processes are quite distinct (Burke 1999, Dowling 2005). There is a relatively small number of specialist land developers compared to residential builders, with about 13 000 builders in Australia, compared to only about 1000 land developers (Burke 1999). Another unique feature of the Australian development industry is the relatively large influence the price of land has on typical land and house packages, with the price of land accounting for between 40 and 50 per cent of market price. This is much higher than other countries, such as the UK, where the land price accounts for 10 to 30 per cent of market price (Burke 1999, CDHCS 1992). This is a result of the division of land development and building, with developers needing to secure profit from land (and its services). By contrast, in other countries these costs are subsumed into the overall price of the package.

Australian land developers can be divided into five main categories. In the first are State government land development agencies (e.g. Landcom and VicUrban). Second are small unlisted private development companies. The third are subsidiaries of trading banks, credit companies and life offices. The fourth group are the publicly-listed property development companies (e.g. Stockland and Mirvac). In the final category are the few land development companies connected with house building (e.g. Allam and Long Homes) (Burke 1999).

3.1.2 The building industry

House builders in the Australian context are in a weak position compared to estate developers. They are ineffectual in negotiating building issues with council, and have less ability to capture profits from the development process (Paris 1993). Squeezed by developers and in intense competition with each other, house builders have small returns, and their capacity for innovation in design and construction is severely limited (Burke 1999). Australia's house building industry is characterised by a large number of businesses and a highly dispersed structure (Dowling 2005). Despite an increasing tendency for developers to operate across states, no house builder in Australia is large enough to dominate the market, however that market is defined (CDHCS 1991, Dowling 2005). Rather, it is dominated by small to medium builders, with about 50 per cent of dwellings being constructed by builders who build between one and 50 dwellings per annum (Burke 1999, Dowling 2005). The majority of small to medium firms operate in infill and redevelopment markets, building individual lots when they become available. Over 90 per cent of house construction turnover is attributed to contract building, while the remaining 10 per cent of 'spec' builders are characterised almost entirely by small firms (CDHCS 1991).

The housing built on large estates is primarily developed through larger-scale builders and those involved in joint ventures with developers. As a result of increasing neo-liberal policy in state-run development agencies (such as Landcom in NSW), and the relative power of land development corporations, there is an increasing trend towards joint ventures in developing residential estates. Joint ventures occur when a developer or state agency joins with a single large-scale builder (or a number of builders) to construct the dwellings on a particular estate development. Such ventures further alienate smaller builders, who do not have the ability to build on such

large scales. These economies of scale achieved via large-scale builders are seen as a distinct advantage to land developers and government agencies (CDHHCS 1991).

3.2 Planning fees and development contribution frameworks in Australia

As noted in Chapter Two, all of the Australian States and Territories impose fees to recover some or all of the costs associated with planning services. The basis for imposing these fees, and the range of matters that may be charged for, differs slightly from jurisdiction to jurisdiction and between State and local level planning authorities. The parameters of charging regimes are established by legislation. Fees are charged for processing applications for development approval, which may be a set amount or defined by reference to the value of the development. In addition most jurisdictions charge for requests to amend planning schemes, change existing development approvals, advertise or exhibit development proposals, refer matters to other authorities, review decisions, and so on.

This information is relatively easy to identify. What is less clear, however, is the extent to which existing fees and charges reflect the actual direct and or indirect costs of the planning service, as there has been very limited research to ascertain the costs to planning authorities of the services they provide (PWC and ARUP 2007). In this research we accept that fees and charges for planning services provide a basis for passing on some of the public costs associated with regulating private development. Our goal is to quantify these costs as they are incurred by developers, rather than examine the way in which they are determined. We note however that if full cost recovery is an objective in setting the level of fee for planning service, it becomes even more crucial to ensure that planning services are provided efficiently. It also becomes particularly critical to avoid or remove procedural requirements that are of marginal value, or that are outweighed by the costs of complying with them.

In this section of the paper we focus our research on the somewhat more contentious subject of development contributions and the frameworks for their imposition in Australia. There is some research that identifies the different regimes for levying developer contributions through the planning process (Gurran 2007, Neutze 1997, Productivity Commission (PC) 2007, Troy 1995). Table 5 (below) outlines the primary planning legislation and the broad arrangements for collecting developer contributions within that statutory framework across the Australian States.

Chapter Two examined different rationales or justifications for collecting development contributions through the planning process. To briefly recap on that argument, those justifications can be divided loosely into three groups. The first relates to the private windfall or value uplift associated with a favourable planning approval. In the UK, the value uplift is created when development proposals are approved. In the US, value uplift is associated with rezoning, while in Australian jurisdictions, uplift occurs when planning rules are changed significantly – either for a rezoning or to permit a particular development that would not otherwise be allowed. When a contribution is sought to secure some of this private benefit for public requirements, it is called a ‘betterment tax’. The second group relates to the economic argument for development to meet the internal or direct costs it generates, which we may define as direct site based expenses associated with connections to utilities and roads. Neighbourhood or local costs might also fit in this category i.e. shared facilities like local roads or guttering, without which private development could not occur. The third group relates to the external impacts of a development. ‘Impact fees’ are contributions calculated with reference to the external costs generated by the development, such as the need to increase road capacity or to build new schools, libraries, sporting fields, transport or

affordable housing. The latter two groups will usually be collected when planning approval is granted. The earlier may be sought at the first land sale following the change in planning regulation.

3.2.1 Australian legislation and approaches to developer contributions

The arrangements in Australia combine elements of these three rationales to development contribution. As shown in Table 5 (below), all jurisdictions collect financial or in kind payments to meet all or part of the site-based, neighbourhood or local level infrastructure that is required for development to proceed. Some jurisdictions, like NSW and Tasmania, implicitly draw on the betterment argument to support collection of land, money or other works in kind through negotiated agreements.

Many states (NSW, Victoria, Queensland) define the provisions for specifying development contribution requirements in local plans. These are called Priority Infrastructure Plans (PIPs) in Queensland, and ‘S94 Contributions Plans’ in NSW. (Pending reforms in NSW will alter this model and terminology somewhat.) Western Australia specifies its infrastructure charging requirements through state policy documents. In some states, such as NSW, a variety of approaches may be used. There are usually provisions to appeal the amount of contribution required by the planning authority. In most jurisdictions, there are provisions to vary contribution requirements in certain circumstances, often for development that is in the public interest (such as a school or non profit community centre).

Most jurisdictions refer to principles of ‘nexus’ between the contribution, the need for the service, the location of the service and the development itself; ‘fair apportionment’ so the contribution only reflects the share of the service attributable to the development; ‘reasonableness’ in terms of the amount of money charged; and transparency in calculating contributions, and in managing and spending monies collected. However, such tests are less relevant in relation to voluntary agreements between authorities and developers, or when a system of flat levies is used.

Table 5: Australian legislation for infrastructure funding through the development planning process

<i>State</i>	<i>Relevant legislation</i>	<i>Description</i>
ACT		No statutory means to charge for infrastructure or to levy a development infrastructure charge.
NSW	Environmental Planning & Assessment Act 1979 (EPAA) (Under review)	May require development contributions (cash or in kind) for services and infrastructure, subject to approved contributions plan (S94 EPAA). Must be allocated within LGA itself. May apply flat levy as percentage of proposed cost of development (1-3 per cent). Provisions for planning agreements between developers and consent authorities for developer contributions instead of or in addition to S94 contributions (s93F EPAA). Can be applied to a wider range of matters including affordable housing or environmental conservation, and may be applied across local government areas. Additional infrastructure charges for regional infrastructure may be levied in “special contributions areas” (s94ED EPAA) declared by Minister (currently North West and South West Growth Centres (Sydney).
NT	Planning Act 1999	Service authorities may make contributions plans for infrastructure or public car parking. Infrastructure is defined as prescribed capital works, or works required as a condition of the development permit to be carried out (s67). (“Service authorities” are a Territorial, local government, Power or Water Corporation, or a statutory authority).

<i>State</i>	<i>Relevant legislation</i>	<i>Description</i>
QLD	Integrated Planning Act 1997 Integrating Planning and Other Legislation Amendment Acts 2003 & 2004	Contributions for “development infrastructure” may be levied by local councils (a) under a Priority Infrastructure Plan (PIP); (b) through an Infrastructure Agreement (an agreement between council and a developer for infrastructure provision or contributions); (c) conditions on the planning permit requiring the supply of non shared infrastructure (e.g. internal networks and connecting site to shared networks). PIP forms part of local planning scheme. Generally includes an Infrastructure Charges Schedule for levies. Low growth councils may use standard or “Regulated” infrastructure charges. “Development infrastructure” includes land or works for water, transport, local services (e.g. parks, community halls, libraries).
SA	Development Act 1993 Local Government Act 1999	At time of land subdivision, provisions for dedicating up to 12 per cent for open space (or cash contribution) as well as ceding access roads and contributions for hydraulic connections. Councils can also establish funds for developers to contribute to car parking at a fixed cash rate if this is preferable to on site parking. Under the LG Act 1999, “service rates” and “service charges” might be used as indirect developer charges.
TAS	Land Use Planning and Approvals Act 1993	“Agreements”, which may include provision for payment or other contribution for infrastructure may be made between councils and developers, during development assessment (as a condition of consent); planning scheme provision amendment, or a special planning order. Agreements may be broad in scope, “services, facilities, works and other uses and developments which provide the basis for meeting economic, social and environmental needs” (s70).
VIC	Planning and Environment Act 1987	Developer contributions for either “development infrastructure” or “community infrastructure” levied through: (a) approved Development Contributions Plan (DCP), enforced through conditions attached to planning and building permits; (b) conditions on planning permits (but unless relating to a DCP these contributions must be works or infrastructure on site); (c) Voluntary agreements (registered on title to land). Voluntary agreements may be used when a developer requests an amendment to a planning scheme, or a planning permit. Set levies restrict funds able to be collected through DCPs (e.g. \$900 per residential dwelling for community infrastructure) State agencies may collect additional funds for specific works directly.
WA	Town Planning and Development Act 1928	Developer contributions usually levied through conditions imposed by WA Planning Commission (WAPC) on subdivision approvals. May also be levied through conditions imposed by WAPC or local government on the development of land under a regional or local government scheme. Three types of contributions: (a) ceding or dedication of land for roads, primary schools, public open space (10% of development), foreshores, drainage, and other reserves needed for subdivision; (b) construction of infrastructure and transfer to public authorities; (c) contributions to acquire land or undertake works by public authorities). Process predominantly regulated through WAPC operational policies. Social infrastructure generally not funded through this process.

Source: Adapted from Gurran 2007, p.139, Productivity Commission 2007, pp.183-184.

In Victoria, voluntary agreements that run with the title of the land may be used when a developer requests an amendment to a planning scheme, or a planning permit.

Again this approach provides a way of securing some of the profit associated with the value uplift for public purposes.

As shown in Table 5, NSW extends its contribution framework to the widest range of infrastructure and services, from site based costs through to regional transportation (in the Sydney Growth Centres). By contrast, South Australia confines its contribution approach to provisions for open space, access roads and hydraulic connections (as a dedication of land) and car parking (where onsite provision is not viable). However, there are also provisions under the Local Government Act 1999 for “service rates” and “service charges” which might be regarded as de facto contributions (PC 2007). Tasmania operates through a more flexible arrangement whereby both the amount of contribution and the uses to which it may be put are negotiated. In Western Australia the State government plays a strong role and regulates contribution requirements both through operational policies, conditions imposed through planning schemes and as conditions of subdivision approval. Social infrastructure is generally not funded, aside for land for schools (PC 2007).

As shown in Table 5, there are no statutory provisions for the Australian Capital Territory Planning Authority (ACTPLA) to levy a development for infrastructure contributions. However, infrastructure costs are offset by land sale or the levy for a change of the permitted use, associated with redevelopment. This levy was once known as a “betterment charge”. Alternatively, the lessee may be required to integrate infrastructure with new development, with the ACT government then forgoing land sale income to a commensurate value (ACT 2007).

Until recently, developer contributions in Australia have focused on local needs and facilities. While these may have included shared local level infrastructure and services, there has been a clear distinction between the provision of community centres and libraries by local governments and the provision of significant regional level infrastructure like train lines and hospitals. As shown in Table 6, the focus of development contribution frameworks in Australia is firmly on collection for site based or local level facilities. However, NSW has moved towards contributions for regional infrastructure in designated metropolitan growth sectors. Victoria also appears to be shifting towards contributions for regional infrastructure such as transportation facilities, particularly in areas facing rapid growth pressures.

Table 6: Determination and application of contribution requirements in Australia

<i>State</i>	<i>Direct site costs</i>	<i>Local facilities</i>	<i>Regional facilities</i>	<i>Formula</i>
NSW	✓	✓	✓	Set fee per site / dwelling Flat levy (per cent) Negotiated agreement
QLD	✓✓	✓✓		Set fee (set by council through plan or by standard State Govt. regulation (mid 2008))
SA	✓			Set formula
TAS	✓	✓		Negotiated agreement
VIC	✓	✓	Potential in growth areas	Set formula (per dwelling) Negotiated agreements State may impose other requirements
WA	✓	✓		Proportion of development site (subdivisions) Constraint applying to land

Source: the authors

Decisions at State and Territorial level regarding the extent to which developers will be required to invest in local infrastructure reflect wider debates regarding the ways in which urban infrastructure can and ought to be funded. Lively local debates in recent years position the planning system as a source of revenue for infrastructure versus alternative approaches such as user pays or direct government provision. Some States, such as South Australia, have deliberately limited the ability of local government to require developers to contribute to shared service requirements.

In summary, there are four main differences in approach to developer contributions across the Australian planning jurisdictions:

Types of infrastructure or services that contributions may be levied for

- The types of infrastructure or services that developers may be required to contribute to, which vary from open space and car parking (South Australia) to community facilities, regional transportation infrastructure and in some cases, affordable housing (NSW);

Spatial application of contributions

- Whether the contribution is confined to the costs associated with the individual development itself (for instance, the site based infrastructure needed to connect a dwelling to water or power utilities, or to a road, a requirement in all States), or whether contribution is also made for local facilities or services, a requirement in most States, with only NSW and Victoria enabling some regional level contributions in defined circumstances;

Magnitude or scale of contributions

- The amount of the contribution and the formula for determining it. As noted in Chapter Two there are significant distinctions between formulas that impose a flat fee per dwelling, site, or area and formulas that require a percentage levy based on construction costs. When fees are imposed per dwelling, more expensive development is favoured because the fee is the same irrespective of the overall value, so becomes a smaller proportion of the whole. This raises both sustainability and equity concerns. Similarly, if the fee is set per residential lot rather than per hectare it disadvantages smaller lots and favours larger ones. This is particularly problematic in medium density housing where a unit faces a similar contribution to a house yet is likely to have less impact on the need for infrastructure or services within the locality;

Timing

- Finally, as discussed in Chapter Two, the timing of the contribution requirement is important in terms of who is likely to bear the cost – the landholder, the developer, or the final home purchaser. If the fee is required at the time of rezoning or land sale, it is easier to pass it back to the land owner. If imposed during the construction phase the fees are more likely to be passed on.

The Productivity Commission's Inquiry into the First Home Ownership (2004) considered the impact of developer contributions on housing affordability in Australia. It noted that infrastructure charging regimes have increased over time but not sufficiently to explain house price increases since the mid 1990s. In fact, the Commission found that such contributions have actually diminished as a proportion of house prices over time. The Commission also found that claimed cost savings associated with reducing infrastructure contributions (as they were at the time of the Inquiry) were likely to be 'overstated':

Most categories of change are justified and indeed desirable on efficiency/equity grounds (reduced reliance on developer contributions would

bring a requirement for similar dedicated charges to be collected from home buyers). Housing affordability should not be significantly affected by greater reliance on upfront charging as opposed to charging over time. Developer charges for those items of social and economic infrastructure that provide benefits in common across the wider community have generally been relatively small – though such infrastructure should desirably be funded out of general revenue sources (PC 2004, p.176).

However, the Commission emphasised the importance of following general charging principles for equity and efficiency. Our following summary of development contribution arrangements in NSW, Queensland and Victoria examines how equity and efficiency principles are promoted under current arrangements.

3.2.2 Development contribution framework in NSW

Contributions for local facilities and services have been incorporated in local development control processes in NSW since the end of the second world war 1940s (Gurran 2007). The passage of the State Environmental Planning and Assessment Act (EP&A Act) in 1979 included provisions for development contributions which have been subsequently reviewed over time to make the process more transparent through the use of contribution plans under section 94 of the EPA&A Act. These contributions have since become known as “section 94 Contributions Plans”. Subsequent changes in the past five years have introduced new approaches for contributions, including flat levies of between one and three per cent in certain areas, voluntary agreements, and special contributions in designated growth areas.

Section 94 contributions plans

The framework for developer contributions under section 94 was explicitly justified on the basis that it is economically efficient for charges to be levied on those people responsible for the development in question so that infrastructure costs are taken into consideration when decisions are made (Barnes and Dollery, 1996). It was seen as a way of increasing local government income to meet the additional costs associated with new urban growth, without increasing the rates of existing residents. Underpinning the rationale for section 94 contributions is an argument that existing communities should not bear the financial burden of development – through the need to provide infrastructure – through increased rates (Barnes and Dollery 1996). There are clear requirements for assessing, collecting, administering and spending contributions under section 94. To ensure that the costs are identified and implemented fairly, the principle of ‘nexus’ underpins the way that section 94 contributions are calculated and allocated.

To satisfy the test of nexus there are three criteria. Firstly, there must be a ‘causal’ nexus between the development, the charge being levied, and the items being charged for. Secondly, there must be a ‘spatial’ nexus between the development and the infrastructure or services that the levy is being allocated towards. This spatial nexus has been confined to the local government area but there is also an expectation that the residents of the development will have an opportunity to use the facilities they are helping to fund or augment. Thirdly, there must be a ‘temporal’ nexus between the time the contribution is collected and when it is spent by the authority. While the authority is not required to spend the funds immediately (they can accumulate them to pay for major capital works), they should be spent within a reasonable period of time (DUAP 1997, p.11). Publicly available capital works plans are maintained by councils to show their intentions and progress in relation to section 94 expenditure.

The contributions themselves should not be excessive. The principle of 'reasonableness' is referred to in determining whether the amount being requested is out of proportion with the impact of the development and a reasonable apportionment of the costs of facilities such that 'the contributing population only pays for its share of the total demand' (DUAP 1997, p.13). The Department of Planning's manual for preparing a section 94 Plan describes reasonableness as demonstrating 'fairness, equity, sound judgment and moderation' (DUAP 1997, p.12).

Planning agreements

Alternatively, funds for infrastructure in NSW may be determined through voluntary 'planning agreements', between planning authorities and a developer. A wider range of matters than included in section 94 plans may be covered in a planning agreement, including provision for an affordable housing contribution. A council may choose to exclude the application of s94 developer contributions under a planning agreement.

Special infrastructure contributions and proposed Rezoning Infrastructure Contribution

The Minister for Planning has the power to levy infrastructure charges in special contribution areas, such as the North West and South West Growth Centres as a contribution towards the funding of regional infrastructure. Current levies are around \$23,000 per lot in the Growth Centres (on top of local section 94 requirements), calculated to enable cost recovery of 75 per cent of regional infrastructure items including railway lines and bus services, as well as land for police stations, hospitals, and schools. In November 2007 the State Government foreshadowed a 'Rezoning Infrastructure Contribution' (also known as a 'staged State contribution') to be paid either at the time of rezoning or at the time of sale. The approach recognised that contributions justified by uplift in land value must be levied at the time the uplift is realised, if the contribution is to be passed back to owner of the land. However, this approach has been abandoned in the final package of reforms to developer contributions in NSW, due to "the existing market conditions" (DOP 2008, p. 2).

Impact fees and contributions for affordable housing

Finally, there are a range of other compulsory contributions levied through the planning process in designated areas of NSW. Under *State Environmental Planning Policy 10 – Retention of Low Cost Rental Housing*, approvals to redevelop a boarding house or other designated low cost rental accommodation may be accompanied by a requirement to make a financial or other contribution to offset the social impact of this redevelopment. Monetary contributions may go towards a local affordable housing fund or be used to assist affected residents with rehousing. In kind contributions might include a proportion of the new development to be dedicated to a local affordable housing manager in perpetuity or managed at a lower rent for a defined period. *State Environmental Planning Policy (SEPP) 70 – Affordable Housing Schemes* permits modest collections for affordable housing as a condition of planning approval in defined parts of Sydney. The schemes function in a way that is similar to an inclusionary zoning approach in the United States although the contribution requirement, at a maximum of three per cent of development value, is much smaller than in the United States where inclusionary requirements typically relate to 10 – 20 per cent of new housing in the designated zone (Gurran et al. 2007). Lastly, under the State government's 'Precinct Acceleration Protocol', developers of out of sequence areas have been able to pay additional costs associated with bringing forward infrastructure to service their development. These additional contributions might be described as impact fees because they serve a similar function to impact fees designed to discourage undesirable or out of sequence growth in parts of the US.

The impact fee is used as a growth deterrent, instead of, or as well as, a physical planning control.

Proposed reform to the development contributions framework in NSW

In April 2008, the NSW State Government released the exposure draft of the *Environmental Planning and Assessment Amendment (EPAA) Bill 2008* containing, among other reforms, sweeping changes to the system of development contributions. In its colourful media release announcing the draft Bill, the Department of Planning describes the current system for development contributions as “an uncontrolled form of backdoor taxation on the family home” (DOP 2008, p.1). The proposals introduce new considerations for all developer contributions, including: whether the infrastructure proposed to be funded can be provided in a reasonable time and the impact of the proposed contribution “on the affordability of the proposed development” (s903).

The draft Bill distinguishes between “community infrastructure” (public amenities and services, but not water supply or sewerage services), and “public infrastructure”, (which is also public amenity and services, as well as affordable housing and transport infrastructure) (s 902). Councils will need a contributions plan to require a community infrastructure contribution. There are strict guidelines concerning the types of community infrastructure that may be levied for and the principles of nexus need to be demonstrated. There is a distinction between “direct contributions”, which reflect a contribution towards the actual cost of the infrastructure to service the area (and need to demonstrate principles of nexus and fair apportionment), and “indirect contributions” which are calculated as a percentage of the cost of the development (ss906, 910). Planning authorities may require one or the other, but not both.

A new category of “State infrastructure contributions” is proposed (s914), to replace “Special Infrastructure Contributions” described above. These contributions are to provide for public infrastructure, within defined “State contributions areas”. These contributions are in addition to requirements for community infrastructure contributions. A State Infrastructure Fund will be established to maintain State contributions and a Community Infrastructure Fund will be established to maintain contributions for community infrastructure within designated growth centre areas (EPAA Bill 2008, p.104).

Voluntary planning agreements are preserved under the proposed reforms, and current (limited) provisions for affordable housing contributions are largely maintained. This diversity of mechanisms for levying development contributions in NSW is not necessarily a strength, arguably increasing potential uncertainty and inconsistency in collected contribution amounts across sites and local areas. The growing trend for ‘major developments’ to be assessed directly by the NSW Minister for Planning under Part 3A of the EP&A Act may add to this uncertainty as the Minister is not obliged to adhere to existing planning requirements in assessing such development or in setting conditions of approval.

3.2.3 Development contributions in Victoria

Prior to the 1990s, developer contributions were levied by local authorities in an ad hoc fashion by attaching conditions requiring contributions to planning permits. The case of *Eddie Barron Constructions Pty Ltd v Shire of Pakenham* [1990] in the Victorian Administrative Appeals Tribunal ‘challenged the emerging practice of levying development on a per lot basis in the late 1980s, and established the common law tests of need, nexus, equity and accountability as the basis for [the levying of developer] contributions’ (VCEC, 2005, p. 403). In 1995 the *Planning and Environment Act 1987 (P&E Act)* was amended ‘to make development contributions

plans the sole means...for obtaining development contributions in Victoria' (VCEC, 2005, p. 403), however the new system proved to be 'complex, unclear and impractical' (VCEC, 2005, p. 403). Accordingly, a review of the system was carried out in 1999 and the recommended reforms implemented through gazettal of the *Planning and Environment (Development Contributions) Act* in December 2004 (VCEC, 2005).

The current system for the levying of developer contributions comprises three distinct parts, the use of development contributions plans and consent conditions and the negotiation of voluntary agreements under the *P&E Act*, as well as the requirement for contributions to open space under the *Subdivision Act 1988*. Contributions may be provided through the planning scheme amendment process, through a planning permit process, or through a building permit process (DSE 2007, p.4).

The Act distinguishes between "community infrastructure" and "development infrastructure". Development infrastructure includes the acquisition of land for roads, public transport corridors, public open space, public transport infrastructure, including "fixed rail infrastructure, railway stations, bus stops and tram stops", improvements to open space, drainage works, and "buildings and works for or associated with the construction of maternal and child health centres, child care centres, kindergartens, or any centre which provides these facilities in combination" (DSE 2007, p.17). "Community infrastructure" includes construction for all other community or social buildings and facilities.

Levies for development infrastructure projects are collected through conditions on planning permits. There is no maximum levy for development infrastructure in the *P&E Act*. Community infrastructure contributions are collected before building permits are issued. The maximum levy is "\$450 for each dwelling to be constructed, and 0.25 cents in the dollar of the cost of the building work in any other case" (DSE 2007, p.18).

Local councils may prepare a development contributions plan under the *P&E Act* (ss46H-46QC). If made, these form part of the local council planning scheme and identify infrastructure to be provided under the plan, and so require ministerial endorsement as an amendment to the planning scheme. They are implemented through an overlay zone shown in the planning maps, and do not have to apply to the whole of a municipality. Development Contribution Plans may provide for new infrastructure, or an upgrade, extension or total replacement of an existing item of infrastructure. They are implemented through conditions attached to development approvals.

The final means by which developers may be levied is under Section 18 of the *Subdivision Act 1988*, whereby developers may be required to provide, or pay cash in lieu of (or both) a percentage of all land in a subdivision for public open space.

3.2.4 Development contributions in Queensland

The *Integrated Planning Act 1997 (IP Act)* provides for Infrastructure Charges Plans (ICPs) to levy contributions for "development infrastructure" including urban water supply, drainage, water quality, transport infrastructure; and infrastructure for local community purposes such as public recreation predominantly serving a local area (DIP 2008). The plans are intended to establish both a network of local development infrastructure and the level of service to be provided for this network.

Changes to the *IP Act* in 2004 mean that councils must now prepare Priority Infrastructure Plans (PIPs) to support their local planning schemes if they intend to define their own infrastructure charges (s2.1.3(1)(d) *IP Act* 1997, as amended). Through a PIP councils identify where growth is expected to occur; the nature and

scale of this growth; and the plans and desired service standards for the trunk (bulk) infrastructure necessary to service the growth.

The next step is to prepare an Infrastructure Charges Schedule (ICS) (previously an Infrastructure Charges Plan), under which councils may specify charges for water management (e.g. water supply, sewerage and drainage); transport infrastructure (e.g. roads, traffic control devices and cycle ways); and local community purposes (e.g. public recreation land and land for community purposes).

Should a local council fail to, or decide not to, complete a PIP by June 2008, a standard infrastructure charges schedule developed by the State government will apply. Local councils may elect to adopt the standard schedule prior to this date.

3.3 Industry perspectives on the costs of planning requirements and development contributions in Australia

The residential development industry has expressed mounting concern about the costs of development contributions and other planning and government related charges and requirements. Decreasing affordability is viewed by the industry as the product of two factors that are linked inherently: decreased land supply due to planning restrictions on land release, and increased taxes and levies, which the sector argues are increasing the cost of developing new housing to a level that will not be borne by the market (Day 2006, HIA 2003, PCA 2007).

The following sections draw on industry-commissioned research on the costs associated with planning requirements and development contributions, based on a review of position papers and reports released by the peak industry bodies over the past five years (Table 7). These bodies include the Housing Industry of Australia (HIA), the Property Council of Australia (PCA) and its residential development division, the Residential Development Council (RDC), and the Urban Development Industry Australia (UDIA). Estimates quantifying the cost impacts government taxes, charges, and compliance costs are provided where supplied by the industry reports. Information regarding costing assumptions and methodologies is also provided, where this is contained in the reports reviewed.

Table 7: Industry research on the costs of government charges and housing development in Australia, 2003-2008

<i>Date</i>	<i>Author</i>	<i>Title</i>
6/2003	Housing Industry Australia	Restoring Housing Affordability – the housing industry’s perspective
3/2006	Residential Development Council	Reasons to be fearful? Government taxes, charges and compliance costs and their impact on housing affordability
3/2006	Residential Development Council (Urbis JHD)	Residential Development Cost Benchmarking Study
11/2006	Residential Development Council (Urbis JHD)	National Housing Infrastructure Costs Study
11/2006	Property Council of Australia	Improving Housing Affordability in NSW; A plan for industry and government
6/2007	Property Council of Australia	Infrastructure Levies: Time for Some New Thinking, A submission to the NSW Government
7/2007	Residential Development Council	Beyond Reach: A workforce housing crisis in the making (Australian edition)
7/2007	Residential Development Council	Boulevard of Broken Dreams; The future of housing affordability in Australia
8/2007	Urban Development Industry Australia	An Industry Report into Affordable Home Ownership in Australia

Source: The authors.

As identified by industry, the overall factors contributing to increased residential development costs include a number of factors relating directly or indirectly to planning requirements:

- Holding charges caused by delays in approving land for future subdivision;
- Costs associated with the preparation of development applications;
- Development contributions for infrastructure; and,
- Costs of compliance with increased environmental requirements.

Higher land prices caused by increasing land acquisition costs in key population centres is also identified by industry as an indirect outcome of planning policies designed to contain urban settlements and restrict new land release. As noted in Chapter Two, the current project does not attempt to evaluate this particular claim, aside from the review of international research on the price impacts of planning regulation (which accept a small price impact arising from supply constraint) and strategies to offset this impact (creating more development opportunities within preferred locations and ensuring dedicated affordable housing).

Industry publications also point to factors that are largely beyond the planning system, but that also contribute to increased housing production costs, including:

- Taxes and charges including the introduction of the Goods and Services Tax (GST)
- Interest rate increases;
- Increased construction costs, particularly for higher density dwellings; and
- Skills shortages in the building sector (UDIA 2007).

3.3.1 Industry estimations of government costs associated with residential development process

Across the reports examined it is asserted that taxes and levies as well as compliance costs (costs of meeting planning regulations and holding costs associated with the approval process) now amount to about a third of the cost of new house and land packages (RDC 2007a). Estimates regarding the total costs for residential development of planning requirements and charges vary, depending on jurisdiction and cost assessment methodology. The Residential Development Council estimates that 25 per cent of the price of new homes is due to government charges alone, with extremes of 35 per cent for houses and 28 per cent for new units, although much of this relates to Federal and State taxes such as the GST, stamp duty and land tax (Table 8) (RDC 2006a).

The RDC also seeks to quantify the impact of land supply limitations, referring to research suggesting that "limitations on land supply have already added just under \$30,000 to the price of a block of land" (RDC 2007b, p.8), although the methodology for deriving this figure and the jurisdiction to which it applies is unclear. Currently there is no comparative source of data on planning regulations across Australian local government jurisdictions, let alone their relative intensity. Therefore, such estimates are impressionistic at best, even assuming a rigorous econometric analysis of house price data. Indeed, collecting the necessary regulatory data to enable such research in Australia (following the tradition of similar studies in the United States) is a priority for better understanding the relationships between broader urban planning policy settings and house price and affordability outcomes.

While the proportion of housing costs paid in government development charges is an issue, the industry positions the rapid increase in these fees and procedural costs as the greatest concern. The Residential Development Council argue that these cumulative costs are the second highest cost in developing new housing, after the cost of construction, and exceeding the cost of the land (RDC 2006c & 2007, p.13). They claim that planning related costs have increased around 300 per cent between over the past five years (RDC 2007a, p.1). Earlier reports claimed increases of nearly 600 per cent in certain jurisdictions (Redlands in Queensland) and over 300 per cent for Perth Adelaide and the Gold Coast, 200 per cent in North West Sydney and Canberra and 150 per cent in Melbourne over five years (RDC 2006a).

The Residential Development Council claims that over the last 10 years infrastructure charges per lot for new housing developments has increased by \$56,167 or 466 per cent in Sydney. This increase is directly attributable to the NSW State Government's Special Infrastructure Contribution in the Sydney North West and South West Growth Centres and section 94 charges (RDC 2006c, also cited in UDIA 2007, p.32).

It is argued that that costs for supplying direct works needed by individual dwellings like water and sewerage connections have not increased substantially but that costs for so called 'indirect' infrastructure, like open space, waterways, pedestrian and cycle paths and community infrastructure, have increased dramatically (RDC 2006b, p.11).

Table 8: Taxes and developer contributions in selected regions, Australia

TYPE OF PRODUCT AND REGION	FEDERAL	STATE GOVERNMENT				LOCAL GOVERNMENTS				
		GST	Stamp Duty Developer	Stamp Duty Purchaser	Land Tax	State Infrastructure Charges	STATE TOTAL	Infrastructure charges & Section 94	Application fee & Council Rates	LOCAL GOVT TOTAL
NEW HOUSE AND LAND PACKAGES										
Sydney South West	\$544,115	\$47,727	\$5,403	\$19,115	\$2,975	\$17,500	\$92,721	\$26,000	\$817	\$26,817
Sydney North West	\$570,240	\$50,000	\$6,320	\$20,240	\$3,471	\$50,000	\$130,031	\$33,172	\$600	\$33,772
Hunter	\$361,240	\$31,818	\$1,646	\$11,240	\$942	\$6,000	\$50,645	\$10,500	\$642	\$11,142
Tweed	\$465,740	\$40,909	\$4,028	\$15,740	\$1,594	\$5,000	\$67,271	\$12,000	\$900	\$12,900
Maroochy	\$412,475	\$36,364	\$2,212	\$12,475	\$1,313		\$52,364	\$13,000	\$900	\$13,900
Redland	\$464,225	\$40,909	\$3,258	\$14,225	\$3,750		\$62,142	\$14,194	\$1,662	\$15,876
Ipswich	\$319,325	\$28,182	\$1,668	\$9,325	\$721		\$39,916	\$15,107	\$1,395	\$16,502
Gold Coast	\$391,775	\$33,409	\$2,360	\$11,775	\$1,721		\$49,285	\$15,333	\$1,065	\$16,399
Melbourne	\$366,660	\$31,818	\$2,750	\$16,660	\$3,292		\$54,520	\$5,400	\$1,017	\$6,417
Canberra	\$425,550	\$37,273	\$3,928	\$16,550	\$1,470		\$58,221	\$0	\$780	\$780
Adelaide	\$249,530	\$21,818	\$562	\$8,530	\$650		\$31,580	\$1,563	\$292	\$1,854
Mandurah	\$310,700	\$27,273	\$528	\$10,700	\$80		\$38,381	\$0	\$1,273	\$1,273
Perth	\$573,700	\$52,727	\$4,463	\$15,700	\$4,548		\$55,458	\$0	\$614	\$614
NEW HOME UNIT PROJECTS										
Sydney	\$570,240	\$50,000	\$6,860	\$20,240	\$4,788	\$8,000	\$89,888	\$8,000	\$3,305	\$11,305
Brisbane	\$422,825	\$37,273	\$4,350	\$12,825	\$3,000		\$57,447	\$6,250	\$2,010	\$8,260
Maroochy	\$345,200	\$30,455	\$1,288	\$10,200	\$322		\$42,264	\$7,576	\$712	\$8,288
Gold Coast	\$319,325	\$28,182	\$1,946	\$9,325	\$1,814		\$41,267	\$10,319	\$1,279	\$11,598
Melbourne	\$318,960	\$23,631	\$5,500	\$13,960	\$2,726		\$45,817	\$5,400	\$970	\$6,370
Perth	\$457,700	\$40,385	\$4,230	\$17,700	\$1,497		\$63,813	\$1,950	\$3,025	\$4,975
Adelaide	\$432,080	\$37,727	\$4,671	\$17,080	\$3,769		\$63,247	\$5,794	\$2,441	\$8,235

Source: RDC 2006c & 2007b, p.14 (Since this study infrastructure charges in the North West of Sydney have been reduced to an average of \$35,000 per lot). Note that the "State Total Column" actually combines Federal Charges (the GST) as well.

An indicative costing of taxes and charges on house and land packages in a Sydney growth area estimated by the NSW Urban Development Institute of Australia is shown in Table 9. Given that the State Infrastructure Contribution was introduced only in 2005, claims that large increases in development charges relate to new infrastructure payment requirements appear supported, at least within particular locations.

Table 9: Indicative charges and contributions – Sydney Growth Area 2007

<i>Amount</i>	<i>Charge</i>
\$2,000	Stamp Duty (Developer)
\$17,000	Stamp Duty (Sale)
\$33,000	State Infrastructure Contribution (special contribution areas)
\$40,000	S94 Contribution
\$12,000	Sydney Water Charges
\$35,000	GST
\$139,000	Total

Source: UDIA NSW 2007, p.33 (Note, predates reduction in State infrastructure contribution).

The sector argues that increased development levies are occurring at a time when the government is taxing the development industry at record levels through the GST, land tax and stamp duty (UDIA 2007).

In its submission to the NSW State Government on infrastructure levies, the PCA accepts that special State infrastructure charges in Sydney's Growth Centre are an attempt to capture some of the value uplift from a rezoning and to use this to offset the cost of the infrastructure needed to support new development. However, it comments that:

The Government's objective of recouping 100% of regional infrastructure costs (plus backlog infrastructure) from the development process is simply not feasible ... It assumes that all the economic incidence of levies are absorbed into land costs without any impact on investment decisions, supply or pricing. ... It ignores the fact that notional uplift in land price associated with a rezoning

is often insufficient to cover this infrastructure cost. It assumes that land markets behave rationally and only move in response to actual changes in planning controls, not future changes (PCA 2007, p.6, original italics)

The PCA also points to the lack of certainty in cost regimes and the need for investors to negotiate with multiple agencies in NSW if they choose to make infrastructure contributions through a planning agreement.

In the case of Queensland, the UDIA refer to a number of increases in infrastructure related costs, including a rise in water headworks charges of over 1300 per cent in four years, an increase from \$6,000 to \$50,000 per lot for infrastructure charges (UDIA, 2007, p. 41). Infrastructure charges for selected local government areas identified by the Queensland UDIA are provided in the table below.

Table 10: Developer contributions by LGA, Queensland

<i>LGA</i>	<i>Total Charges</i>
Noosa	\$21,358.90
Logan	\$18,048.38
Maroochy	\$17,038.00
Brisbane	\$24,000.00
Gold Coast	\$31,540.31

Source: UDIA 2007, p.41

By contrast, the lack of compulsory development levies for infrastructure is identified by the UDIA as one of the major contributing factors to South Australia's relative affordability on a national scale (UDIA 2007, p.49).

3.3.2 Costs of securing planning approval and complying with development control requirements

Estimates of costs associated with meeting planning controls and of securing planning approval vary across the industry reports. There is little detail on how cost estimates are derived (apart from anecdotal evidence). As noted above, it seems rare for planning authorities to effectively cost their own services or the cost impacts of regulatory requirements. Therefore, industry estimates, however qualitative and partial, provide an important starting point.

The industry points to the "increasing complexity of development assessment", which now means that consultant reports on planning, environmental, engineering and other aspects of the proposal are becoming more and more complex and expensive" (RDC 2006a, p.6). A further problem is that contribution requirements may increase over the time of development assessment, particularly if this time is protracted. According to the UDIA it is not uncommon for infrastructure charges to have increased between \$5,000 and \$40,000 per lot in the time taken to receive development approval. Costs due to delays of \$100,000 per lot are also claimed (UDIA 2007, p.18). It is argued that "the lack of transparency and the rapid increases in such charges have not allowed these charges to be adequately considered at the time of conducting feasibility studies and purchasing land, leaving little option but to raise house and land prices" (UDIA 2007, p.18).

In 2003 the HIA put the figure for "delays" and "inefficiencies" at around 10 per cent of the cost of a new home (HIA 2003, p.18). The industry supports planning system reform to achieve greater simplicity arguing that the market would operate more efficiently if compliance costs were fixed and consistent:

... currently two identical neighbouring homes can be built under different development and building requirements and subjected to different schemes of charges and fees, because they happen to be on opposite sides of the street and come under different planning jurisdictions. The same building company ... may be building the two identical homes, yet the two identical sites may progress at very different rates, as different sets of regulations lead to varying delays and uncertainties. The difference in compliance costs and holding charges are likely to produce different final costs for the identical homes. It also frustrates opportunities to benefit from economies of scale... (HIA 2003, pp.17-18)

The UDIA argues that holding costs of around a year can add an additional \$7,000 to the cost of individual lots, with most rezonings now taking between two and five years, compared to historical waiting periods of around twelve months (UDIA 2007, p.17). This extended approval and zoning process is seen to be the product of increased complexity in planning schemes, State legislation, and the negotiation of individual applications. The NSW chapter of the UDIA argues that the time taken to gain development approval in the case of large-scale land and housing developments is due, in part, to the fact that too many minor issues are being considered in the assessment process and that many minor types of development should be designated as exempt from the need for approval or able to be assessed simply and swiftly if compliant with basic codes (UDIA 2007, p.33).

The empirical component of this study aims to quantify the amount of time taken to assess case study developments and to understand the factors contributing to assessment times. However, we note that all Australian planning jurisdictions have undergone or are undergoing processes of planning reform that are designed to reduce red tape and planning complexity (Gurran 2007). These reform processes are dedicated explicitly to addressing industry concerns.

3.4 Summary and conclusions

This chapter has outlined the structure of the housing development industry, the legislative and institutional framework for government charges and costs associated with housing production, and industry based research that has been undertaken in the past five years to quantify the impact of these costs. While an important source of information about the types of costs incurred through the residential development process, quantitative data varies from study to study, and information about the methods and assumptions involved in data collection is limited – including information about discounting when costs are compared over time. While some studies provide broad estimates, there is little information about the costs of time involved in securing planning approval and costs of compliance with planning regulation. Other issues have not been quantified, such as changes in the contributions framework that may arise following land acquisition, or the submission of an application for planning approval.

Most of the industry studies have used a “top down” methodology to calculate costs per jurisdiction and type of housing, where the existing cost regimes are calculated for hypothetical developments in each jurisdiction. Qualitative estimates and anecdotal costs relating to specific developments are also provided. Given the specific circumstances of each jurisdiction and development, it is likely that a “bottom up” approach will yield more detailed and accurate information. Such an approach would quantify costs in relation to actual developments, rather than hypothetical developments under stated planning and cost regimes. This information may be less able to be generalised, however.

The industry studies do point to significant amounts of money being spent on GST and State taxes. They also provide a detailed basis for understanding the range of costs incurred through the residential development process. Table 11 (below) summarises this information.

As shown in Table 11, many of the costs associated with the planning and housing development process are incurred whether or not planning approval is granted. These are procedural costs associated with application and referral fees, compulsory or 'premium seeking expenditure' on consultant reports and studies, and staff time and holding costs which accrue while permission is being sought. Such expenditure likely represents a smaller amount in total than costs incurred only if approval is granted. Nevertheless, as observed in Chapter Two, much of the expenditure incurred by developers prior to planning approval might be better spent on improving the quality of the development or contributions to community services and infrastructure.

As Chapter Four will show, empirical investigation is needed to test these assumptions, and to quantify the relative proportion of development costs dedicated to each type of expenditure.

Table 11: Typology of planning and government costs and charges associated with planning and housing development in Australia

<i>Costs</i>	<i>Incurred whether or not application approved</i>	<i>Incurred only if application approved</i>
<i>Process costs</i>		
Time (e.g. time for approval, number of meetings; consultation, referrals, appeals)	✓	
Documentation / preparing planning proposal itself (e.g. complexity of requirements, need for special studies; revision requirements)	✓	
Referrals (Referral to State planning authority or other State agencies e.g. transport, heritage, conservation)	✓	
<i>Building / development control requirements</i>		
Standard requirements (e.g. Floor space ratio, height, tree preservation, setbacks, landscaping, private open space, car parking, driveway width/design, Building Code of Australia compliance)		✓
Environmental standards (e.g. energy efficiency / water sensitive design requirements, site remediation)		✓
Heritage requirements		✓
Design standards		✓
Safety/ natural hazards (e.g. bushfire / flooding)		✓
Special needs / disability (e.g. accessible design requirements)		✓
<i>Direct costs and charges</i>		
Planning application fees	✓	
Development contributions		✓
Subdivision / construction certificates		✓
Referral fees	✓	
Licenses (e.g. utilities)		✓

<i>Costs</i>	<i>Incurred whether or not application approved</i>	<i>Incurred only if application approved</i>
Other compulsory charges	✓	
Application fees in case of decision review / appeal	✓	
<i>Other taxes and charges</i>		
Stamp duties on transfers of land and housing and on mortgages	✓	
GST on home renovations, consultancy services, land sales and new buildings	✓ (on consultancy services and sales)	✓

Source: The authors.

In summary, a complex and rapidly emerging policy area has been indicated by our review of the housing development industry structure, arrangements for infrastructure charging in Australia, and industry positions regarding these charges and costs for new housing. Confusion appears to reign about the charging regimes between and across jurisdictions. This is not helped by the continuous motion of planning system and infrastructure funding reform that characterises many of the Australian States and Territories.

Some of these reforms directly address industry concerns. For instance, simplifying the planning system and reducing the need for extensive and detailed assessment of minor developments will shorten approval times and alleviate more onerous planning requirements. Serious issues may be raised, however, by the larger shift towards internalising the costs of infrastructure provision – including major regional services like transport facilities, as has begun in Sydney’s growth centres. These relate to the equity of new charging regimes, which seek contributions for items that were once funded fully by the State. Perhaps more fundamental is the capacity of new housing developments in these areas to remain viable if the special charges cannot be recouped in sales prices.

Drawing on the conceptual framework for understanding Anglo American planning systems, regulation and charging regimes for residential development, and our review of research and literature about the theoretical and observed impacts or costs for housing, we propose the following policy guidance for establishing or reviewing a development contribution regime.

Direct charges associated with connection to water, power and road services should be included as a cost of development (and payable at the time of planning approval).

Contribution to the shared services on which development depends (for instance, neighbourhood roads and parks) may reasonably be required, according to principles of ‘fair apportionment’. The full cost of constructing and maintaining these facilities cannot be internalised by the development, rather, maintenance costs should be recouped through local rates. Contributions can be met through development charges (payable at the time of approval, to ensure services are available at the same time as the development is completed) but all contributions collected should be spent locally. This means that the benefit of the contribution accrues to the developer (who is able to charge higher prices for more amenity) and or the house buyer (who is willing to pay for the additional value capitalised in the home). Advance certainty and long term stability regarding contribution requirements increases the likelihood that contribution requirements can be passed back to the seller of the land in a reduced sale price.

Basing development contributions for housing on a percentage of development value rather than the number of dwellings, avoids encouraging larger and prestige housing types at the expense of modest and more compact housing forms (Evans 2004).

A form of 'betterment' tax might provide a way of offsetting general State expenditure on regional infrastructure. To ensure the obligation is passed back it must be levied at the point at which increased development potential (i.e. windfall value) is conferred. In Australia this generally occurs when a rezoning or a variation in planning rules is passed to allow a development to proceed. However, the intention to seek this contribution must be clearly advised, to overcome the potential for land speculation to drive up land prices in anticipation of new development opportunities.

Other types of requirements may be managed through planning obligation (e.g. inclusionary zoning) but are best introduced when planning rules change and deliver value uplift to the landholder.

Impact fees may be used appropriately to deter development that is out of sequence or to recover compensation for activities that have a direct and negative impact on vulnerable groups, such as low income earners.

This policy guidance will be tested through the empirical research for this project, outlined in the following chapter.

4 METHODOLOGY FOR EMPIRICAL RESEARCH

We have argued that facilitating a sufficient and affordable supply of housing is an important goal of urban planning. However, we have also outlined concerns about the potential costs to housing development associated with the planning system. Empirical research is needed to determine more precisely the range of government imposed costs associated with planning and development, and to quantify their impact in dollar terms and as a proportion of total expenditure on development. Empirical work is also needed to evaluate the impact of these expenses on the costs of housing development against the benefit or objectives they deliver for society and the individual house buyer. Finally, policy guidance is needed to assist planners to understand the potential cost implications of planning process requirements and design or building standards, and to assess these impacts against the benefits of the control. If this analysis demonstrates that the control is warranted, but may lead to regressive impacts on lower income groups, then guidance is needed on establishing approaches to offset these impacts.

This chapter outlines our methodology for addressing these research goals. Section 4.1 restates the research questions and summarises the methods via which they will be addressed. Section 4.2 introduces the case study methodology, including criteria for selecting the cases, sources of evidence that will be sought, and methods of analysis. Section 4.3 explains the approach to constructing policy guidance for analysing the potential benefits and impacts of new planning processes, development standards and/or contribution requirements. It also addresses approaches to offsetting these requirements if they are found to be regressive, or if they might discourage the development of modest and diverse housing types in preferred locations.

4.1 Research questions and summary of methods

The overarching research questions for this project were set out in Chapter One. Flowing from these overarching questions, several sub-questions have arisen during the literature review and analysis of existing development contribution frameworks across the Australian States and Territories (research question three). Those sub-questions will be explored further during the next, empirical component of this study. The overarching research questions and specific sub questions are as follows.

1. What is the international evidence regarding the impacts of land use planning regulations and charges on the cost of housing development?
2. What is the existing evidence on the costs of land use planning requirements and charges associated with the residential development process in Australia?
3. How does the cost impact of specific planning requirements and charges differ across the Australian States and Territories, and in a sample of selected case study developments? Specifically:
 - What are the relative costs associated with specific planning requirements, processes and charges, as a proportion of total planning related costs and total residential production costs, across a sample of case study jurisdictions? What factors explain divergences across these case studies?
 - To what extent are applicable planning related costs and charges able to be estimated upfront at feasibility analysis stage across the case study jurisdictions? What factors explain the extent to which requirements and charges are able to be known up front (i.e. complexity/simplicity of planning

processes and charges; stability/instability in planning requirements and charges over time; complexity of the site or project itself; or other factors)?

- Have Australian developers adjusted their decisions regarding which housing types to produce (including target densities and market sectors) according to different planning requirements and charging regimes?

4. What are the policy implications of these findings? Specifically:

- How should policy makers and planners evaluate the potential cost impacts of planning requirements and charges against the specific objectives of the regulation?
- To what extent could complementary measures (e.g. regulatory or alternative funding mechanisms) be introduced to offset any negative impacts of planning regulations (specific types of development control, procedural requirements, administrative charges and development contributions) on the costs of producing new and affordable housing in preferred locations?

The methodology for this project combines:

- a review of literature on planning related requirements and charges on the costs of housing development, including any policy implications for defining or reviewing planning requirements and development contributions (presented in this paper);
- an analysis of the main controls, costs and charges associated with residential development in Australia, and the different planning approaches to levying development contributions (substantially presented in this paper);
- quantification of these cost impacts, and implications for housing development decisions by collection of empirical evidence within a number of case study developments across three eastern States that have defined infrastructure collection frameworks in place (NSW, Queensland and Victoria);
- establishing parameters for evaluating the potential impacts of these costs on the costs of housing development versus other community objectives;
- policy guidance for establishing and reviewing development contribution requirements for new housing in Australia, and for introducing complementary measures to offset any negative impacts of planning regulations on the costs of producing modest or diverse housing forms in preferred locations.

Table 12 sets out the main methods, data sources, and analytic techniques to address each of our four principle research questions.

Table 12: Research questions, methods, data sources and analysis

Research questions	Research methods, data sources and analysis
1. What is the international evidence on the impacts of land use planning regulations and charges on the cost of housing development?	→ Review of international research on the relationship between planning regulations and charges and housing costs, with a focus on comparable nations with comparable planning systems to Australia (the US and UK).
2. What is the existing evidence on the costs of land use planning requirements and charges associated with the residential development process in Australia?	→ Critical review and analysis of existing Australian research and data on the cost impacts of planning requirements (processes, compliance with controls, fees and charges) on housing development (limited to major studies undertaken in the past five years) to identify the main categories of cost impacts for housing development in Australia.
3. How does the cost impact of specific requirements and charges differ across the Australian States and Territories, and in a sample of representative selected case study developments?; and	<p>→ Analysis of information and planning legislation documenting controls and charges associated with residential development in each State and Territory; interviews with State government planners to confirm this analysis.</p> <p>→ Identification of generic classes of planning control, processes, and charges and their likely impacts on costs of housing production within the various development scenarios; expressed as an indicative cost schedule.</p> <p>→ Case study research on costs associated with planning controls in a representative selection of 12 local government areas in three States; drawing on financial data maintained by developers, and interviews with developers and planning authorities. Interviews and financial data to establish the relative proportion of each cost item to the total planning related and production costs; divergences across the jurisdictions; capacity to determine planning related costs in advance; and implications for decisions regarding which housing types to produce. Testing of the indicative cost schedule through the case studies, and final adjustment to establish a replicable method for determining the cost impacts on housing production of a range of planning controls, processes and charges.</p>
4. What are the policy implications of these findings?	<p>→ Application and adaptation of work documented in US literature, informed by the findings of this research, to develop a policy framework for evaluating and addressing the cost impacts of regulation against purpose in the Australian context; and for establishing or reviewing development contribution requirements for housing.</p> <p>→ Workshopping this framework with a targeted group of senior planners and development professionals and policy makers will act as a validation for the research findings.</p>

Source: The authors.

4.2 Case study approach

The case study areas will be chosen to reflect a range of locational characteristics. Four local government areas will be chosen in each of three States: NSW, Queensland and Victoria. As has been noted, these States have detailed and legally defined frameworks for development contributions through the planning process, and have been the focus of industry concern regarding the scale of development contribution requirements. They consequently present an opportunity to examine both the overall costs associated with seeking planning approval, and the way a variety of different development contribution charging regimes are impacting upon housing production costs. These states are also centres of major development activity and affordability problems, including both inner urban and outer greenfield development scenarios. Within these locations two case study developments will be identified and analysed (a total of 24 case study developments).

Table 13: Case study definitions

<i>Title/acronym</i>	<i>Definition</i>
Case Study Location (CSL)	The Local Government Areas where investigation will take place. A target of four CSLs will be identified in each State.
Case Study Development (CSD)	The individual developments being constructed within the CSL. A target of two CSDs will be analysed in each CSL.

Source: The authors.

4.2.1 Criteria for cases

The case study developments themselves will be sought from different local government areas across the three States, with the ideal being a case from inner city, middle ring, outer ring 'Greenfield' and non-metropolitan urban centres in each State. It is important that the cases represent a diversity of sites, too, to test for differences in relative direct costs to developers and builders of sites in Greenfield areas compared to infill or Brownfield sites.

We will select cases offering some diversity in developer or housing construction firms (small, medium and larger companies). This is an important factor in understanding any relationship between developer characteristics and the causes/impacts of costs associated with planning requirements. In particular, and to maximise potential to compare across jurisdictions, we will seek to examine projects undertaken by developers who operate at the national level along with smaller firms who specialise in a particular location. We will also seek cases that allow us to examine costs associated with both development and housing construction stages, so where possible will look for developments with at least some fully completed stages.

The goal is to identify cases that might be regarded as more or less representative of the different development scenarios in the different regional areas of each State jurisdiction. We will avoid cases situated on particularly difficult sites or associated with other particularly unusual contexts. To these ends, we have developed a matrix of potential development case study jurisdictions (see 4.2.3).

4.2.2 Selection of Case Study Location (CSL)

Each CSL should be selected to represent a development location currently or recently experiencing development growth or pressure. Accordingly, four CSLs have been identified in each State to reflect different spatial areas (inner, middle, outer and regional locations). Indicative CSLs are shown below in Table 14.

Table 14: Indicative case study locations (CSL)

<i>State/area</i>	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>
Inner	Marrickville Council or Randwick City Council	City of Melbourne or City of Port Phillip	Brisbane City Council
Middle	Bankstown City Council or Fairfield City Council	City of Monash or Manningham City Council	Gold Coast City Council or Logan City Council
Outer	Shire of Baulkham Hills or Blacktown City Council	City of Casey or Greater Dandenong City Council	Sunshine Coast Regional Council or Somerset Regional Council
Regional	Coffs Harbour City Council or Port Macquarie-Hastings Council	City of Greater Bendigo or City of Ballarat	Townsville City Council or Cairns Regional Council

Source: The authors.

Note: these indicative CSLs may change slightly depending on capacity to access CSDs. The same selection criteria will apply.

4.2.3 Case study matrix

Our research seeks to explore the impact of State levies and charges on the cost of housing development through in-depth analysis of developer and development typologies. This approach is based on the assumption that the impacts of planning requirements and their implications for housing development differ, not only between States, but between locations within a single State, between styles of development and between sizes of individual developments. A matrix of case study developments has been constructed to explore this complexity. This matrix revolves on three development axes:

- **Development Location:** Following from the literature reported in Chapter Two, and the review of Australian frameworks for fees and developer contributions, we expect to observe significant variations in cost structures between different development locations. In each of the three case study States, one case study LGAs will be selected from: the Inner Metropolitan area; the Middle Metropolitan area; the Outer Metropolitan area; and a Regional Centre.
- **Development Style/Type:** Our review of industry positioning papers and Australian developer contribution frameworks suggests that different styles or types of housing development attract different types of planning regulation and contribution requirements. The capacity to explore these differences is central to our research. As such, CSDs will be divided into three categories: Separate House, Medium Density (e.g. townhouses, villas and duplex), and High Density (e.g. flats and apartments). We recognise these categories are not mutually exclusive – it is possible that some developments contain separate houses and medium density dwellings. However, these broad categorisations are a sound basis for identifying CSDs, facilitating the selection of a cross section of development styles and types. We also recognise that a number of dwelling types do not fit neatly into these categorisations (e.g. boarding houses). We will endeavour to cover some of these more diverse sites when selecting CSDs.
- **Size of Development:** Our review of arrangements for developer contributions and of industry studies in Chapter Three shows that that the type (detached and attached housing) and size of the development (i.e. the number of dwellings produced) are likely to impact on the level of fees and charges attributed to a

particular development. In an effort to explore the impact of the size of development on State fees, charges and building regulations, CSDs will cover a variety of development sizes. We have defined three indicative categories of development size: Small (less than 5 dwellings); Medium (between 6 and 20 dwellings); and Large (more than 20 dwellings). We will confirm these indicative groupings through the course of the research.

4.2.4 Selection of Case Study Developments (CSD)

With three variables per CSD, it is beyond the scope of this research project to explore in detail every possible development combination. Rather, we will attempt to select CSDs that are representative of development in the CSL. For example, it is unlikely that a large development of separate house will be found in the Inner Regions, or alternatively, large high density developments in fringe locations. In total a target of between 12 and 24 CSDs will be analysed, representing a cross section of the major types of developments.

We will use a dual methodology to identify and access CSDs:

- A **top-down** approach will be mobilised in each State to identify developers/developments that meet the selection criteria. We will draw on industry representative bodies, including the Urban Development Industry of Australia (UDIA), as well as national level developers. It is likely that the top-down approach will be most successful in recruiting large developers/development sites.
- A **bottom-up** approach will utilise recent Development Applications in each of the CSLs to recruit CSDs. In each CSL the researchers will review council Development Applications accessible via Council websites or registers. It is expected that the bottom-up approach will be more successful in identifying and engaging small and medium developers/developments.

This dual approach is necessary to cover the diverse, complex and multiple CSDs identified in this research. All CSDs should have been completed recently, or be in the final stages of development. This allows for the accurate collection of financial data, rather than hypothetical estimates or forecasts which may be provided in the earlier stages of development.

4.2.5 Data collection and analysis

Four sources of data will be collected and analysed for each of the 24 CSDs:

- **Council/State government documentation:** Planning instruments, contribution plan documents, council policies outlining charging regimes, development/planning applications, publicly exhibited reports, minutes of council meetings, and information about formal appeals. Planning documents will be analysed to establish policy provisions, procedural requirements, charging regimes, and the relative complexity of planning requirements within each case study jurisdiction. Case study planning documents will be analysed for qualitative assessment of the amount of time taken to prepare the application, the extent to which the application complies with existing controls, and the strength of the application itself (a poorer quality application that does not comply with existing planning controls may explain any subsequent delays in securing planning approval).
- **Developer financial records:** Each developer will be asked to provide financial data relating to the development. Financial data will be compiled and analysed against standard development costings methodology to arrive at a quantitative dollar amount against each cost item, as well as an indicative percentage of total expenditure associated with planning approval and expenditure as a total of

project cost. Two types of cost data will be sought: pre-development feasibility estimates, where available, and actual expenditure. Obtaining both sets of financial data will allow the researchers to explore two themes that emerged persistently in the industry literature regarding the impact of planning requirements on housing development costs: a) shifts in planning requirements and development contribution levies between project inception, lodging of development applications, determination and approval; and b) the capacity to accurately estimate and cost planning requirements at project feasibility stage. Qualitative information to assist in interpreting reasons for divergence between feasibility estimates and actuals will be sought during the interviews with developers and planners (in line with research sub question 3.2). Where possible, financial information will be provided and analysed ahead of the developer interviews.

- **Developer interviews:** Interviews with developers will provide an insight into their approaches to the planning process. The developer will be asked to provide costs for each category outlined in the development fee schedule (see below). Developer interviews will also be used to estimate the costs of building controls and regulations not covered in standard financial reporting (such as the cost impacts of set-backs or environmental considerations), and the costs associated with staff time and meetings with planning authorities. Where the financial records of the developer are incomplete or unclear, the interviews will provide a way of substituting costs, fees and charges. The interviews will also explore the extent to which fees and charges are negotiable/flexible, and the strategies developers use to influence the level of fees charges to their development. Developer interviews will be used to confirm the financial data derived from the analysis of government documentation and developer financial records. Developers will also be interviewed to understand whether and how the cost impacts of specific planning requirements and charges have influenced decisions about the type or mix of housing being produced.
- **Planner interviews:** Interviews with local council planners will be undertaken to determine local policies towards development contributions, including negotiated arrangements, as well as the way in which the particular case study developments proceeded. The interviews will identify causes of delay (if any).

Together these four sources provide a comprehensive data set related to development fees, charges and building regulations across a variety of CSDs.

4.2.6 Fee schedule

Each CSD will be required to complete a standard fee schedule outlining the common planning procedural and design requirements, as well as direct fees, charges and development contributions in each State and local government area. Table 15, over the page, shows a generic cost schedule, adapted from the typology presented in Chapter Three (Table 11). The fee schedule has been developed in line with the literature on planning requirements and development contributions outlined in preceding sections of this paper; the review of policy frameworks that frame development in each State; recent industry research; and the Estate Master development appraisal program². To enable comparison, the actual terminology of each requirement and charge will be recorded in relation to each State. The schedule also includes capacity to record non planning related fees or charges as nominated by developers during the case study interviews, as well as estimated or total

² The Estate Master program is a leading feasibility and financial appraisal / management tool used by developers.

development costs. Such information will be collected to enable planning related costs to be understood as a proportion of the total development costs.

Cost data will be collected on a per development basis (or on completed development stages or precincts, depending on the stage of the development). Qualitative data through developer interviews will explore the implications of these costs for specific dwelling types, if any, and decisions about the particular mix of housing provided in the project.

Table 15: Generic fee schedule

<i>COSTS</i>		
<i>Process costs</i>		
Time (time for approval, number of meetings; consultation, referrals, appeals)	Time	Holding cost
Documentation/preparing planning proposal itself – costs of consultants and studies		
Referrals (Referral to State planning authority or other state agencies, e.g. transport, heritage, conservation)		
<i>Building / development control requirements</i>		
Standard Requirements (e.g. Floor space ratio, height, tree preservation, setbacks, landscaping, private open space, car parking, driveway width/design, Building Code of Australia compliance)		
Environmental standards – e.g. additional costs associated with meeting special sustainability requirements		
Heritage requirements – e.g. additional costs associated with meeting special heritage requirements or set by a heritage officer		
Design standards – additional costs associated with meeting special requirements		
Safety/ natural hazards (e.g. bushfire / flooding) – additional costs associated with meeting natural hazard requirements		
Special needs / disability (e.g. accessible design requirements) – additional costs associated with meeting requirements		
<i>Direct costs and charges</i>		
Planning application fees		
Development contributions:		
Local		
Regional		
Other		
Subdivision / construction certificates		
Referral fees		
Licenses (e.g. utilities, special permits)		
Other compulsory charges		
Application fees in case of decision review / appeal		
<i>Other planning related costs or charges</i>		
Other non planning related fees or charges		
Other costs (total)		
<i>TOTAL development costs</i>		

Source: The authors.

4.3 Constructing policy guidance for analysing benefits and offsetting costs that may impact on the development of modest or diverse housing types

The final stage in the research is developing policy guidance for establishing and reviewing planning requirements and contribution settings for housing development in Australia. This phase will draw on research conducted in the United States on reducing unnecessary barriers to low cost housing production (e.g. HUD 2005), adapting this work to the Australian context. The policy framework will provide a basis for assessing the perceived benefits of the controls, processes or charges and evaluate their impact in terms of direct costs housing development or as deterrents to producing modest or diverse housing types. The guidelines are also intended to demonstrate alternatives to planning requirements that are costly; or ways to offset regressive impacts of essential controls or charges for low income groups.

An indicative worked example of this framework is shown below in Table 16. Empirical information to inform the first four columns of the table will be collected through the case study research across the three State jurisdictions. Evidence for the final two columns will be determined through a facilitated workshop with the senior planner and policy makers. Those columns will address the costs of not introducing or removing a planning requirement; and strategies to offset regressive impacts for low income groups, or perverse deterrents to diverse/modest housing development. The international literature reviewed in this report will also inform this assessment. It is intended that the framework inform future decisions about the cost impacts of planning regulation at local and State scales.

Table 16: Analysing the benefits and offsetting the costs of planning controls and charges: an indicative worked example

<i>Planning requirement (Control / Process Charge)</i>	<i>Stakeholder affected</i>	<i>Initial cost of requirement</i>	<i>Net cost over time</i>	<i>Cost of not introducing or removing requirement</i>	<i>Strategies to offset regressive impacts for low income groups or impacts on affordable housing development</i>
Contribution for open space	Residential developer (if cost known upfront can be transferred back to land holder)	Capitalised proportion of development land	Positive as amenity value capitalised in land or house sales	Depends on availability of other open space in vicinity May mean lower land and housing values over time May mean negative environmental and health impacts	Exempt affordable or low cost housing meeting defined criteria Reduce private open space requirements to offset public open space contribution

Source: The authors.

4.4 Limitations

When interpreting the results of this research, it is important to acknowledge two limitations. While this research will quantify the direct and indirect planning and government costs associated with a sample of residential developments in the three eastern States of Australia, it does not address the broader relationship between housing production costs and charges and the market price of housing. Nor does this project quantify the broader costs and benefits of planning systems and regulation itself.

Secondly, the review of literature and secondary research provides a typology of costs for empirical validation and quantification through multiple case studies. But differences across State and local jurisdictions, and the specifics of each individual development, mean that only limited generalisations can be made from the case studies themselves. Selection of multiple case studies that meet different criteria is a strategy for addressing this limitation. Conclusions about the relative scale and weight of different planning requirements will have greater policy significance than the actual costings in relation to each project.

4.5 Summary and conclusion

This research uses a comprehensive methodological foundation to explore the costs associated with planning requirements and government taxes or charges. It draws on the body of international literature on the relationships between planning systems, developer contribution frameworks and housing development costs, as well as Australian based research sponsored by industry, to construct a broad categorisation of costs and charges (Table 11). This typology, and its more detailed listing of expenditure items, will be tested through multiple case study developments. A quantitative approach is used to analyse financial data. Financial data will be used in relation to each of these categories (and or others that emerge through the study) to quantify the type and amount of each cost type and its relative weight as a proportion of total project costs. The methodology also establishes the parameters for evaluating the potential impacts of these costs on housing development versus other community objectives. It will provide a basis for scoping the range of complementary measures (either regulatory or alternative approaches to funding) that might be introduced to offset any negative impacts caused by important planning requirements upon the production of modest or diverse housing types in preferred locations.

5 CONCLUSION

This paper has explored the ways that planning regulations, processes and contribution requirements may impact upon the costs of residential development. We have outlined existing literature and research on those costs and impacts, both internationally and within Australia, and have established a methodological framework for the empirical components of this study, to be carried out during the next stages of research. We will now summarise our preliminary findings and show the way toward the case study investigations from which our empirical evidence will be drawn.

5.1 Preliminary findings

The following sections provide an overview of our preliminary findings in relation to the overarching research questions.

5.1.1 What is the international evidence regarding the impacts of land use planning regulations and charges on the cost of housing development?

The international research reviewed in this paper shows that planning interventions in the land and housing markets are associated with a range of direct and indirect costs and benefits. Benefits include the design, health and safety, environmental protection, and social and economic advantages of coordinated development, and protection from negative external impacts that might arise from uncoordinated development. Planning also helps ensure that essential shared services and infrastructure are in place to support new development. Global environmental concerns, and in particular climatic change, have established a new imperative for planning systems to effectively manage the environmental impacts of new developments. Those systems must also ensure that settlements are sufficiently resilient to withstand the impacts of extreme weather events, predicted to increase in frequency and intensity in future (Christensen et al. 2007).

The literature points to four overall types of costs associated with planning intervention. Those costs relate firstly to unanticipated or undesirable impacts of land use regulation – for instance, if either ‘over’ or ‘under’ regulation produces the effect of deterring, rather than supporting, development in areas where it would otherwise be desired. It is these costs – the potentially undesirable impacts of planning regulation as a constraint on housing supply – that have been the main focus of international research on the relationships between planning requirements and housing costs, particularly house prices. As outlined in Chapter Two, this literature establishes some price impacts associated with planning regulation. However, many find that these impacts are difficult to distinguish from the positive demand impacts, such as the planned creation or preservation of amenity; and non planning factors, such as natural geographic constraints and residential mobility and preference trends. Understanding the broader relationships between different planning regulatory settings and housing prices is difficult without a consistent and comparable source of data regarding these settings, or the knowledge of what a city would be like without them (Aura and Davidoff 2006, Nelson 1999, Nelson et al. 2002, Pendall et al. 2006). Research of this nature is established in the United States if not extensive (see Dawkins and Nelson 2002, Lewis and Neiman 2000 & 2002, Nelson et al. 2002, Pendall et al. 2006). However, Australia currently lacks a reliable source of data about the diversity of local planning controls as a basis for exploring the relative impact of regulatory settings (particularly constraints) and price difference (Gurran and Phibbs 2008). Such research is an important future priority if relationships between urban policy settings, housing supply, and affordability outcomes are to be better understood.

A second range of costs relates to the procedural expenses of establishing the system. These include the costs of establishing bureaucratic, legislative and court system, as well as the ongoing costs incurred by planning authorities as they undertake their functions. To some extent these costs may be passed on to the developer as application or administration fees, but transferral does not negate them. The developer also expends resources on participating in the planning process, through staff time and site holding costs while approval is sought. This time compounds the impact of direct costs associated with planning requirements, including development application fees and any development contributions, since interest must be paid on these expenses until project completion and sale (Crowe 2007).

Thirdly, there are costs associated with meeting planning requirements for design or building materials. Ongoing research in the United States suggests that such costs, determined by planning design requirements, often preclude the development of diverse or modest housing forms and structures (such as prefabricated or multi unit housing). In this way, such requirements act to exclude low and moderate income earners from certain areas (Knaap et al. 2007, HUD 2005). Gaining a comprehensive understanding of the impact of planning controls on housing development costs and the types of housing that are consequently produced is difficult because requirements vary significantly across local jurisdictions (Knaap et al. 2007). Estimates in the United States suggest that exclusionary planning requirements may directly raise development costs by 20-35 per cent (HUD 2005).

A fourth range of costs relates to securing planning approval, including the payment of application and administrative fees, the provision of studies or consultant reports, and developer contributions towards infrastructure and services. Our review of the international literature show these contributions are justified as a way of capturing some of the 'windfall' associated with planning approval (in the United Kingdom), and/or based on the 'impact' of the development on the need for infrastructure within the area (in the United States).

The considerable body of literature on the use of 'impact fees' or 'exactions' as they are termed in the United States shows that they have proved important in facilitating urban growth (Burge et al. 2007, Chapin 2007, Marthur 2007). As well as higher neighbourhood amenity, other benefits include price signals on the costs of residential development in different areas, and discouraging land banking by making contributions payable at the time of a residential rezoning (Dollery et al. 2000, Neutze 1999).

Debates have focused on whether impact fees result in higher house prices, and if so, have negative implications for affordability. Our review of these arguments can be summarised as follows. Firstly, the capacity for developers to directly pass on impact fees to home buyers depends on the market at the time (Been 2005). However, when fees are set too high they will discourage new housing development or stimulate premium housing development with a higher profit margin, in both scenarios reducing the availability of modest or diverse housing types. Secondly, positive impacts on house prices have been noted in relation to higher end market segments but lower value housing markets and prices have shown to be unaffected by the imposition of such fees (Mathur 2007). This may be explained by the fact that impact fees for basic utilities do not add to the amenity or desirability of a neighbourhood, while other types of fees to provide community facilities or parks are able to be capitalised in house prices, representing value to home purchasers and existing residents (Chapin 2007).

When the intention is to recover some or all of the costs associated with local infrastructure or services required by the development, the way in which the

contribution is calculated becomes important. If calculated per dwelling or per site, contributions might discourage medium density housing, and encourage larger housing and residential lots, as the charge becomes a smaller proportion of the total development cost (Evans 2004). By contrast, our review showed that a levy that represents a percentage of construction costs (per dwelling) or is fixed per hectare (rather than lot) might encourage more modest housing types and a more economical use of land.

There are concerns that new contribution regimes within existing urban areas or regions favour existing residents (who enjoy the new infrastructure without higher property taxes to pay for it) at the expense of newcomers. However, the literature suggests that if the contributions are applied as a proportion of construction costs, and operate universally across a State or national urban system, these distributional considerations become far less important (Evans 2004).

When the intention is to capture windfall associated with planning changes that permit a higher use of land, it is important to impose the charge at the time in the planning process when the new value is created. In the United States, this tends to be at the time when land is rezoned, and in the United Kingdom, when a planning permit is issued. In Australia, where planning systems represent an amalgam of the Anglo American tradition, value is created when there is a substantial change in planning rules – either a rezoning or a variation of prevailing standards.

The research suggests that once implemented within a planning system, developer charges must not be reduced or increased without clear assessment of the market and equity impacts. A sudden reduction of charges will deliver a 'windfall' for the immediate landowners or developers without any guarantee of transferring benefits to home buyers, who might pay the same amount but have access to fewer amenities.

5.1.2 What is the existing evidence on the costs of land use planning requirements and charges associated with the residential development process in Australia?

Our review of industry studies and papers published in the past five years showed an overall consistency of concern about the costs of regulation generally, and government taxes charges and levies in particular. It is asserted by the sector that taxes, levies and compliance costs now amount to about a third of the cost of new house and land packages, including costs of meeting planning regulations and holding costs associated with the approval process (RDC 2007a). Specific issues relate to land supply decisions of State or local governments, complexities or delays in the planning process, and the scale and complexity of developer contributions.

Concern has also been directed to the scale of increase of developer contributions and other taxes and charges, as much as the actual charges themselves. Quantitative estimates regarding the costs of these charges vary across the industry reports and studies, and information on the methodologies underpinning the research is limited. At this stage, mostly anecdotal information is available on the impacts of time dedicated to securing planning approval or the costs of meeting planning requirements. This information suggests that approval times may take 1-2 years (and 2-5 years for a rezoning), with planning compliance costs amounting to between 6 and 10 per cent of total construction (HIA 2003, UDIA 2007).

Our review of industry provides a detailed basis for understanding the range of planning and non planning costs that occur through the residential development process. These relate to process costs, development control requirements, direct fees and charges associated with planning approval including development contributions, and other non planning costs such as government taxes and stamp

duties. Many of these costs are incurred whether or not planning approval is granted. We summarise these costs in Table 11 of this report as a basis for further investigation through the empirical component of this study.

The GST and State taxes amount to a significant proportion of the total taxes and charges identified in the industry studies. For instance, the Residential Development Council calculates that the total cost of a new home in Sydney in 2007 includes \$42,727 in GST and \$27,493 in State Stamp Duty and land taxes, together amounting to \$75,222. This compares to \$26,817 of local government developer contributions and approval fees in a growth centre location (RDC 2007b, p.14). Similarly, the Residential Development Council asserts that in Redland, Queensland, combined GST and State taxes amount to \$62,142 compared to \$15,876 in local government fees and development contributions towards site level and neighbourhood infrastructure.

5.1.3 How does the cost impact of specific requirements and charges differ across the Australian States and Territories, and in a sample of representative selected case study developments?

Chapter Three outlined the different regulatory regimes currently operating in Australian States and Territories for levying fees for planning services and contributions towards infrastructure. We also outlined industry studies seeking to quantify these fees and charges and their impacts on the costs of residential development and house prices.

We showed that all State jurisdictions have provisions in place to collect contributions towards site based, neighbourhood or local level infrastructure required for development to proceed (Table 6). NSW, Queensland and Victoria enable local planning authorities to set their own fees or charges under a contributions plan, but such plans are not mandatory. Several jurisdictions (NSW, Victoria, Tasmania) enable voluntary planning agreements to cover infrastructure contributions. In reviewing the approaches to developer contributions across the Australian States and Territories, we have found that most jurisdictions refer to principles of 'nexus' for contributions levied under contributions plans, but that these do not apply to voluntary agreements or levies.

However, there are differences in approaches to development contributions across Australian planning jurisdictions. These relate to the types of infrastructure or services that may be funded in this way, the scale of their operation (from site through to a region or sub region), the amount of the contribution and the way it is determined, and the timing of the contribution – who pays and who is likely to bear the cost.

5.1.4 What are the policy implications of these findings?

Our review of international research suggests a number of preliminary policy considerations in designing or reviewing planning requirements and development contribution regimes. In summary, planning controls and procedural requirements should be targeted to the potential impact of the development. Preferred housing types and housing associated with lower environmental and social impact should be subject to simpler and faster planning assessment requirements. Further, planning controls should promote diverse housing types and offset growth management constraints through provisions for greater density or new development in alternative, substitute locations. Development controls that represent barriers to lower cost or diverse housing forms should be dismantled, or, if justified by environmental or heritage objectives, should be offset by specific provisions to secure housing opportunities for lower income households. Similar provisions are needed in high

amenity and centrally located areas where there are physical supply limitations. Development contribution settings may provide an important mechanism for securing these housing opportunities for lower income groups, as has been demonstrated in the United Kingdom and in many cities of the United States.

However, caution is needed when considering opportunities to implement such contribution requirements for dedicated affordable housing (Gurran et al. 2007). To ensure the obligation does not discourage new housing development or inflate housing production costs, it must be levied at the point at which increased development potential (i.e. windfall value) is conferred. As noted, in Australia this generally occurs when a rezoning or a variation in planning rules is passed to allow a development to proceed.

In relation to development contributions more broadly, the international literature confirms that such contributions are an important mechanism for financing local infrastructure, and generally benefit new and existing home owners (Chapin 2007). These benefits are predicated on modest contributions associated with the provision of direct utilities, local services and community infrastructure. In recent years however, the shift toward neo-liberalist agendas has meant increasing pressure in some Australian jurisdictions to use development contributions to fund major infrastructure needed by new urban development, such as train lines, education facilities or hospitals. Both the scholarly research and our review of industry position papers suggest that the market will not bear disproportionate infrastructure charging regimes.

These findings are of significance to policies for infrastructure charging relief in Australia. For instance, the Federal Government's new Housing Affordability Fund could provide the funding leverage for crucial infrastructure to support new housing development in preferred regional locations, or in brownfield urban sites requiring expensive remediation work. Such an approach would not remove standard contributions for direct and neighbourhood infrastructure requirements, but would improve the overall supply of well located residential land by offsetting costs associated with new regional transportation facilities or difficult remediation works in renewal areas.

The approaches outlined in the table below combine actual strategies used in some Australian planning jurisdictions (as reviewed in Chapter Three) with the international literature and guidance on how to set effective and equitable development contribution regimes (as outlined in Chapter Two).

Table 17: A hierarchy of approaches to setting development contributions

<i>Rationale / signal</i>	<i>Contribution Type</i>	<i>Approach / timing</i>
Show and recover actual costs of development (at site and neighbourhood level)	Direct charges associated with connection to water, power and road services	Apply to all development on cost recovery basis for onsite services / connections. Payable at the time of planning approval.
Ensure development well serviced by local amenities without financially disadvantaging existing residents	Contribution to the shared services (for instance, neighbourhood roads, community facilities and parks should be required, according to principles of nexus, fair apportionment, or reasonableness).	Consider development objectives in setting contribution formula (e.g. Per hectare rather than per lot, per dwelling type / size rather than per dwelling or household). Payable at the time of planning approval.

<i>Rationale / signal</i>	<i>Contribution Type</i>	<i>Approach / timing</i>
As above	Levy (fixed as proportion of development value, in lieu of contribution for shared services).	Payable at the time of planning approval. Fairer for lower cost/smaller developments.
Betterment capture	“Betterment tax” to offset broader expenditure on regional infrastructure	Payable when betterment conferred – as charge for rezoning or variation in planning rules.
Secure good/service that might otherwise not be provided, justified as betterment capture	Special contributions (e.g. Contributions for affordable housing)	Introduce only when planning rules change to deliver significant value uplift, payable at that time (as land dedication or agreement). Use instead of rather than in addition to Betterment Tax approach.
Deter development that is socially or environmentally undesirable or ensure developer offsets this impact	Impact fees	Use to deter development that is out of sequence or recover compensation for activities that have a direct impact on a particular group or public good.

Source: The authors.

The table above sets out a hierarchy of approaches to setting developer contributions, moving from approaches that are relatively uncontroversial and neutral in terms of cost implications for developers towards approaches that may be associated with much higher costs, provided that these costs are more than offset by planning windfall. The exception is impact fees which in some cases may function appropriately to discourage development that is inconsistent with social and environmental goals. These approaches will be explored further through the case study research and interviews and focus groups with senior planners, development professionals and policy makers.

5.2 Next steps

Empirical research is needed to verify the range of costs outlined in this paper, and to quantify them in relation to a number of actual developments representing different jurisdictions and development scenarios. Empirical research will also provide a basis for developing a policy framework by which to evaluate the potential costs and benefits of planning regulations and procedural requirements, against their intended benefit. This will ensure that when planning requirements are defined, the potential impacts upon the costs of housing production can be considered — including the need for any strategies to offset impacts on the provision of modest or diverse housing forms.

Chapter Four outlined the methodological approach for this research. The empirical phase of this study has commenced and will conclude in October 2008. A final report will document the results of the study.

5.3 Conclusion

The planning system is increasingly recognised as a crucial player in achieving a sufficient supply of new housing and influencing overall housing affordability. Yet in the Australian context, there is a poor understanding of the direct and indirect impacts

of planning requirements upon the cost of residential land development and housing construction, and on the housing market more broadly. This research will make a significant contribution to the evidence base by providing objective and quantifiable information on the relative costs for residential development associated with securing planning approval. The next stage of research will draw that evidence from multiple case study developments within three key Australian States. When combined with a policy framework for analysing and offsetting the cost impacts of planning requirements, this evidence should contribute to more informed plan making, development assessment and infrastructure funding arrangements in Australia.

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