
WICKHAM MASTERPLAN ECONOMIC & MARKET ANALYSIS

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EXECUTIVE SUMMARY

CONTEXT AND PURPOSE OF THE STUDY

Newcastle as well as the greater Hunter region has undergone significant economic change over the past decade, evolving beyond its' industrial and manufacturing origins towards a more economically diverse regional city. The renewal of Newcastle has become a major undertaking of the NSW Government. The 'Revitalising Newcastle' program includes the rollout of new transport infrastructure, incorporating a new light rail line extending from Newcastle East to Wickham. UrbanGrowth NSW is leading the 'Newcastle Urban Transformation and Transport Program' in partnership with Newcastle City Council to drive the future growth of the Newcastle CBD to accommodate the additional 10,000 jobs and 6,000 homes required by 2036.

Wickham is an inner-city suburb of Newcastle approximately 3km west of the Newcastle CBD. As part of the Revitalising Newcastle program, the construction of a new, fully accessible interchange for rail, light rail and buses at Wickham is now imminent, further strengthening the importance of Wickham to the future of Newcastle.

Council is preparing a Masterplan for Wickham, recognising the need to incorporate flexibility into the planning framework and allow Wickham to grow and develop over time having regard to changes in population and lifestyle characteristics, trends in employment, retail and community service provision. The Wickham Masterplan will act as the guiding planning document for future redevelopment within Wickham and support the principles outlined within the 'Newcastle Urban Transformation and Transport Program'.

AEC Group (AEC) has been engaged by Council to undertake property market analysis and feasibility testing to understand the viability and scale of future development and renewal within the Study Area. Market intelligence and feasibility testing will inform Council's masterplanning process through identifying the opportunities and constraints of redevelopment within the Study Area.

Urban renewal is without exception accompanied by infrastructure requirements. AEC's brief also includes examination of potential infrastructure funding mechanisms that could ensure sustainability of future development within the Study Area.

KEY FINDINGS

Lifestyle and Market Preference

Our market investigations suggest a growing acceptance of higher density living in Newcastle City Centre, with prices paid for residential units in apartment buildings comparable to low density, detached dwellings on the fringe of the city centre. This suggests an awakening of the benefits of city living and an emerging and growing trend towards lifestyle and convenience.

While much of the sales activity in Newcastle City Centre is driven by an active investor market, keen interest by downsizers from Newcastle and its surrounds on the benefits of city living has influenced provision of larger stock (3 bedrooms+) in new developments. The market for residential units is buoyant and while there is an establishing market for high density living, the constraints of affordability conceivably place a ceiling on the pace of price growth.

The performance of retail and commercial uses is more muted in comparison to residential uses, however steady demand is observed for well-located and functional floorspace. This is a function of market cycles (residential uses have experienced an uptick in market conditions over the last 24 months) as well as an incremental revitalisation of Newcastle which has resulted in a growing number of residents in the city centre.

Non-residential Uses

Demand for non-residential uses in the Study Area is mixed. Demand by local service industry is strong, with the central location of the Study Area attractive for businesses to service their key markets. The type of existing floorspace is more industrial in nature. Commercial-type floorspace has not traditionally been sought after in the Study Area (generally limited to the upper level of a warehouse building) however with the development of new mixed use buildings that include contemporary commercial suites, new businesses are observed to be emerging.

As the resident population grows, so too will demand for retail and non-retail businesses and associated floorspace. In addition to retail and commercial businesses, local service businesses who are also population-driven (e.g. automotive repairs, panel beaters, food and beverage suppliers) who often seek industrial-type floor space in proximity to their key markets will likewise seek accommodation in central and accessible locations.

Careful planning and management of the co-existence of these uses is critical in order for each use to continue to be viable in the Study Area.

Development Activity

Existing uses and existing-use values underpin the viability of redevelopment in the Study Area. Concomitantly, the likely end-sale values of new residential and non-residential product drive development scale and developer interest. The property market appraisal highlights the buoyancy of the residential market and receptiveness to higher-priced, high density product, indicated by the success of 470 King Street in Newcastle West

By their development site purchases, developers are not surprisingly observed to be targeting large sites (sites in excess of 1,000sqm in area) as well as those with nominal/modest improvements which are equivalent to less than \$900/sqm/FSR potential under planning controls. This implies that for sites currently permitted with FSR 1:1, only sites where existing-use values are less than \$900/sqm of overall site area would be feasible to develop. The analysis of existing-use values indicates most properties within the Study Area are worth more than \$1,000/sqm of overall site area.

Despite the market for higher density product and planning permissibility, it is conceivable that not all sites will develop to their full planning capacity. This will occur where a developer does not expect the cost of higher density (and taller buildings) to be adequately offset by increased revenue. This could be related to site-specific issues (e.g. geotechnical issues including mine-subsidence or capacity issues where a site is not able to accommodate the floorspace and comply with development standards) and/or a developer's perception of market appetite.

CONSIDERATIONS FOR THE MASTERPLAN

Market Factors

Development and activity in the Masterplan area are influenced by a number of key factors:

- **Site assembly and landowner expectations**

A key challenge for renewal to occur in established urban areas is the need to consolidate numerous sites in separate ownership. Even though a developer may offer a price that exceeds the existing-use value, a landowner's objectives are not always financial and do not always align with development imperatives.

Notwithstanding the challenges of site assembly in established urban areas, where planning controls and permissibility are clearly articulated (as well as contributions liability), market expectations of development sites expectedly adjust and are reflective of respective development potential. Where sites are rezoned to a higher order use or upzoned (e.g. densities are increased), land value expectations thereby increase in tandem.

- **Market demand and capacity to pay**

The depth of market demand and the market's capacity to pay for higher density product underpins the desirability of new development. Current market activity underscores a growing acceptance of high-density city living, with pricing levels indicative of a market willing to pay prices which approach the price of houses in the city's suburbs. Despite the success of a number of new developments in recent months, there is an upper price limit which is driven by affordability factors.

- **Cost of development and typology**

Individual site characteristics and constraints influence the type of development that will be pursued on a site. Environment and site constraints (e.g. flooding, slope, mine subsidence) cumulatively impact on development cost which then influences the type of development that is feasible to develop.

Even though some sites are permitted to relatively high densities (e.g. FSR 4:1), owing to these development cost factors, it is conceivable that not all sites will have the market capacity to accommodate that floorspace.

Scale and Pace of Redevelopment

While densities can be an effective tool for planning authorities to encourage renewal and redevelopment, not all uses respond to density. Industrial uses do not generally respond to density in the same manner residential uses do, requiring vehicle circulation space and loading/unloading areas as well as high span building clearance. Sites that have environmental issues (for example mine subsidence) also do not necessarily respond to density as the cost to remedy may not necessarily be offset even after allowing for additional revenue in a taller building.

Generic feasibility testing suggests the threshold for mixed use development to be FSR 1.5:1 to FSR 2:1, depending on how much a developer pays to consolidate a site. There are sites where existing buildings are fairly modern and substantial (2 or 3 storeys), which will be more expensive for a developer to consolidate and accordingly require higher FSRs to be financially feasible to develop.

If Council wanted to incentivise large scale and immediate renewal of the Masterplan area, higher densities (beyond FSR 2:1) could be considered to enable the displacement of existing uses and redevelopment of those sites. If however Council's intention is to encourage viable businesses to remain, particularly those that occupy modern buildings and valuable sites, Council could consider designating lower FSRs, that are sufficient to incentivise redevelopment of those buildings that are approaching the end of their economic useful lives.

This study assumes that Council would desire an orderly renewal of the Masterplan area, i.e. those sites that are ripe for redevelopment progressed first, with other sites improved with good quality and functional buildings to continue to accommodate businesses and residents until such time they are ripe for redevelopment. Accordingly a base FSR of 1.5:1 is assumed to apply to the Study Area except in Rail Edge where FSRs are at 4:1 and 6:1.

Selection of base FSR has implications for the scale and pace of redevelopment, however also underpin the potential for Council to receive a contribution to public benefit.

FUNDING PUBLIC BENEFIT

There is an opportunity for Council to capture some of the value created towards public benefit in the Masterplan area, subject to the ability of site-specific proposals to achieve good planning and built form outcomes.

Existing Mechanisms

The use and role of incentive-based infrastructure funding mechanisms are important particularly where, owing to statutory limitations, not all infrastructure can be funded by Section 94 contributions or Section 94A levies. Incentive-based infrastructure funding mechanisms can be effective if conceived and implemented well, as demonstrated by the Green Square Community Infrastructure Floorspace.

Since its implementation over a decade ago, significant public domain and community infrastructure works have been delivered in Green Square. Today, the Sydney DCP 2012 outlines a list of "community infrastructure" that can be delivered in exchange for, subject to a merits assessment, "additional floorspace" in Green Square. These community infrastructure items include public streets, pedestrian and bike networks and public open spaces.

One way of attracting developer interest to an area is to increase the height and FSR controls, however, often this increases landowner expectations and can result in a scale of development that is not financially viable.

The financial benefit resulting from a development of bonus floorspace is enjoyed both by the landowner and developer - the landowner benefits from an increase in land value and the developer from an increase in development profit. In many cases the landowner and developer are the same party.

By levying a contribution rate for bonus floorspace that captures a proportion of the land value uplift, both developer and landowner benefit. As only a proportion of value uplift is captured (say 50%), the remaining value created (50%) benefits the landowner while the developer benefits from a higher profit for a larger development.

This mechanism is only viable where the prices paid for development sites reflect the contribution required for bonus floorspace, i.e. that a developer does not overpay for a site. It is for this reason that the City of Sydney and City of Ryde have sought to codify and clearly detail bonus floorspace contributions so that the relevant parties are informed at the outset and able to make informed decisions at the time of site purchase.

Our review of codified incentive mechanisms identifies some common themes:

- Codified incentive mechanisms have sought to quantify planning gain (specifically land value uplift) that results from a planning intervention on an aggregate basis (i.e. not property-specific).
- A portion of the quantified planning gain (specifically land value uplift) is sought to be captured at 50% of the uplift, expressed as a dollar amount for each additional square metre of GFA.
- The above methodology would appear to have widespread market/industry acceptance as evidenced by high levels of take-up in Green Square.
- Bonus contributions seek to leverage residential markets while recognising that retail/ commercial markets are more fragile and have less tolerance to additional contributions.

'Reasonable Capture' of Development Profit

In November 2016, the Department of Planning and Environment (DPE) issued a draft Practice Note and draft Planning Circular (DPE, 2016a) to clarify the use of planning agreements to fund items of infrastructure.

The draft Practice Note does not express support for a planning agreement related to land value increase, rather supporting a "reasonable share" of development profit. It also states that a planning agreement should not seek to capture "windfall gain". By our analysis and understanding of what constitutes windfall gain, we suggest that where a proponent (landowner or developer) actively seeks to change the planning controls (as opposed to unsolicited planning intervention by government), any value created or that results from the change in planning controls is not windfall gain.

This study has a number of reservations on the draft Practice Note, particularly where capture of a proportion of development profit necessitates examination and verification of development feasibility assumptions on each site which can potentially be a high cost and high resource activity for all parties. The quantum of development profit can be subject to a variety of assumptions including the cost of capital (debt and equity) and complex finance structuring arrangements, etc.

In contrast, defining a contribution at a dollar rate per square metre of additional GFA can be easily verified by available market evidence and/or a valuer.

In cases where sites are purchased at a price reflective of their development potential under the LEP and subsequently developed to greater FSRs, a share in development profit (as supported in the draft Practice Note) would result in a larger contribution amount than if a 50% share of land value uplift were required.

- **Capture of land value increase**
Potential for contribution of \$330/sqm-\$490/sqm of additional GFA achieved over base FSR.
- **Capture of development profit (reasonable share)**
 - If developer purchases a site reflective of planning controls, potential for contribution of \$610/sqm-\$760/sqm of additional GFA achieved over base FSR.
 - If developer purchases a site speculatively assuming a successful change to planning controls (whether change of zone or increase to FSR or height), no potential for contribution.

If however, a higher purchase price is paid for the site on the speculative basis that a higher FSR would be achievable, feasibility testing and calculations indicate there is minimal opportunity for a contribution to public benefit without undermining the feasibility of development.

Requiring a contribution that is expressed in dollar terms per additional GFA achieved is considered to be the most transparent and easily understood by the market. When development sites are traded, they are almost without exception quoted in terms of price per unit/site or price per GFA. Such a mechanism would also facilitate independent verification by a land economist and/or valuer relying on market evidence. In circumstances where a specific site may have environmental issues (e.g. mine subsidence or contamination), the cost impacts to the project can be factored into a feasibility analysis to examine the impacts on the value of additional GFA.

A possible incentive within a contributions requirement could be an encouragement for contributions in the form of works-in kind in response to an infrastructure plan prepared as a result of strategic planning by Council. This not only has a cash flow benefit for developers but can serve to deliver key infrastructure works that would benefit the amenity and desirability of the Masterplan area. However where there is limited take-up of incentive floorspace, it could result in piecemeal delivery of public domain works.

As outlined earlier, landowner expectations are directly related to development potential of a site. A rezoning or upzoning will almost always immediately translate to increased landowner expectations which then influence the price paid by a developer to assemble a development site. It is therefore critical for any intention by Council to 'capture' a proportion of value to be made clear from the outset so that developers do not overpay for a site.

TABLE OF CONTENTS

DOCUMENT CONTROL	I
EXECUTIVE SUMMARY	II
TABLE OF CONTENTS	VII
1. INTRODUCTION	1
1.1 BACKGROUND AND OVERVIEW	1
1.2 PURPOSE OF THE STUDY.....	1
1.3 METHODOLOGY AND APPROACH	2
1.4 STUDY STRUCTURE	3
1.5 ASSUMPTIONS AND LIMITATIONS	3
2. PROPERTY MARKET APPRAISAL	4
2.1 RETAIL AND COMMERCIAL LAND USES.....	4
2.2 RESIDENTIAL LAND USES	6
2.3 DEVELOPMENT ACTIVITY.....	8
2.4 IMPLICATIONS FOR THE STUDY AREA	12
3. MASTERPLAN OPTIONS	14
3.1 OBJECTIVES.....	14
3.2 WICKHAM CHARACTER PRECINCTS	14
3.3 POTENTIAL DENSITIES.....	15
3.4 GENERIC FEASIBILITY TESTING	16
3.5 IMPLICATIONS FOR THE STUDY AREA	20
4. INFRASTRUCTURE FUNDING MECHANISMS	21
4.1 STATUTORY FUNDING MECHANISMS	21
4.2 INCENTIVE-BASED MECHANISMS.....	22
4.3 EFFECTIVENESS OF INFRASTRUCTURE FUNDING MECHANISMS	27
5. CONCLUSION AND RECOMMENDATIONS	32
5.1 MATTERS FOR CONSIDERATION	32
5.2 RECOMMENDATIONS	34
REFERENCES	36
APPENDIX A: FEASIBILITY ASSUMPTIONS	37

1. INTRODUCTION

1.1 BACKGROUND AND OVERVIEW

The Wickham Masterplan project area ('Study Area') is located along the north-western boundary of the Newcastle City Centre within the Newcastle City Council local government area, approximately 3km west of the Newcastle CBD. In accordance with the 'Wickham Urban Village, A Concept Strategy & Study' document released by Newcastle City Council in 1996 endorsing a mixed-use zoning among other strategies, a locality specific DCP was implemented in 2006 to progress the transition of the Study Area. Despite the implementation of partial zoning changes and amendments to building heights, progression of this goal is yet to materialise.

Owing to historical and more recent planning controls, the Study Area contains a range of land uses including industrial, commercial and residential. While recent mixed-use developments within the Study Area is encouraging, the potential development capacity of the Study Area is currently constrained under the existing planning measures (e.g. building heights) in place notwithstanding other physical and economic constraints associated with the precinct.

Newcastle City Council (Council) understand the transformation of the Wickham precinct is an opportunity to exhibit best practice urban renewal and planning. Planned Council and NSW Government investment into new public transport infrastructure, community and education facilities and public domain works as outlined in the Newcastle Urban Transformation and Transport Program (NUTTP) will undoubtedly lift the profile of the Newcastle City Centre and Wickham precinct whilst driving economic growth within the region.

Council is preparing a Masterplan for Wickham, recognising the need to incorporate flexibility into the planning framework and allow the Study Area to grow and develop over time having regard to changes in population and lifestyle characteristics, trends in employment, retail and community service provision. Thus, a careful assessment of the many factors that influence the success of the Study Area and its development over time is required. A thorough understanding of the development and investment market, and in particular those fundamental elements which can attract or hinder private sector investment, is critical to effectively implement planning controls in line with the objectives for the Study Area.

1.2 PURPOSE OF THE STUDY

AEC Group (AEC) has been engaged by Council to undertake property market analysis and feasibility testing to understand the viability and scale of future development and renewal within the Study Area.

Urban renewal is without exception accompanied by infrastructure requirements. AEC's brief also includes examination of potential infrastructure funding mechanisms that could be employed to ensure the sustainability of any future development within the Study Area.

Market intelligence and feasibility testing will inform Council's masterplanning process through identifying the opportunities and constraints of redevelopment within the Study Area. The Wickham Masterplan will act as the guiding planning document for future redevelopment within Wickham and support the principles outlined in the Newcastle Urban Transformation and Transport Program.

The Study Area

The Study Area is defined as the area shaded in grey in Figure 1.1 which comprises a large section of B4 Mixed Use zoned land within the suburb of Wickham.

The "Study Area" is referred to interchangeably with "the Precinct" and "the Masterplan area".

Figure 1.1: Study Area



Source: NCC (2016)

Wickham is an inner-city suburb of Newcastle approximately 3km west of the Newcastle CBD. The Study Area comprises a large section of the Wickham locality, situated along the north-west boundary of the Newcastle City Centre, bordered by Albert Street (north), Throsby Creek (east), Hannell Street (south) and the Newcastle rail line (west).

Newcastle as well as the greater Hunter region have undergone significant economic change over the past decade, evolving beyond its' industrial and manufacturing origins towards a more economically diverse regional city. The renewal of Newcastle has become a major undertaking of the NSW government, with UrbanGrowth NSW delivering the 'Revitalising Newcastle' infrastructure rollout incorporating a new light rail line extending from Newcastle East to Wickham as part of 'Newcastle Urban Transformation and Transport Program' in partnership with Council to drive the future growth of the Newcastle CBD to accommodate the additional 10,000 jobs and 6,000 homes required by 2036.

As part of the 'Revitalising Newcastle' program, the construction of a new, fully accessible interchange for rail, light rail and buses at Wickham is now imminent, further strengthening the importance of the Precinct to the future of Newcastle.

The Study Area contains a mix of industrial, commercial and residential uses. The northern and western parts of the Study Area are predominantly employment generating uses with a diverse mix of businesses including manufacturing, automotive, food and drink processing among others while the southern and eastern parts of the Study Area are dominated by residential uses (including detached houses and terraces and recently constructed medium density units) and commercial office suites which are occupied by small food retailers (cafés).

1.3 METHODOLOGY AND APPROACH

In order to meet the requirements of the brief, AEC carried out the following tasks:

- Market conditions and activity**
 Property market appraisal in Wickham and surrounds to identify patterns of supply and demand, understand the trends, drivers and influencing factors that underpin market and development activity as well as purchaser preferences and requirements.

Examination of existing uses and existing-use values to understand cost implications for developers who seek to consolidate a site.

- **Potential development typologies and planning controls**

Property market appraisal to identify development typologies currently progressed and prices paid for various development sites.

Generic feasibility testing to identify aggregate thresholds required for feasible development in the Precinct.

- **Case study analysis of floorspace incentive mechanisms**

This is to understand the infrastructure funding mechanisms and practice in NSW as well as ad-hoc practice by councils. The analysis also examines the effectiveness and take-up of bonus floorspace incentives.

- **Recommendations for application and implementation**

Market considerations for the Masterplan and mechanism to fund infrastructure.

The overarching objective of the analysis is a clear understanding of the market appeal, viability and nature of sustainable development within the Study Area.

1.4 STUDY STRUCTURE

The analysis firstly considers the economic and market structure of the Study Area, which is influenced by growth in the local catchment as well as development activity within the Study Area, Newcastle West and surrounds. In the context of historical and expected growth, the analysis then considers the potential for the Study Area to renew and accommodate growth.

The analysis is structured in the following chapters:

Chapter 2 carries out a property market appraisal of Wickham and Newcastle West to investigate patterns of supply and demand, market conditions and the nature of development activity.

Chapter 3 considers various development typologies that could accommodate demand for various uses within Wickham and surrounds and tests their generic feasibility under existing and potential planning controls.

Chapter 4 undertakes a review and analysis of the infrastructure funding mechanisms utilised by NSW local governments. The chapter also reviews recently released draft practice note and planning circular and outlines implications for Council.

Chapter 5 makes recommendations for refinement and development of the Masterplan and opportunities for Council to capture value for public benefit.

1.5 ASSUMPTIONS AND LIMITATIONS

AEC acknowledges a number of limitations associated with the generic feasibility analysis.

- Generic development options are formulated for feasibility testing based on permissible FSRs. This is useful for the purposes of considering the financial feasibility of development options however the development schemes are notional only, and have not been capacity, urban design or engineering tested. AEC are not urban designers or architects. As such the financial feasibility testing carried out is a numerical exercise with no regard to physical site capacity, shadow impacts, building separation or other design considerations.
- Desktop appraisal of 'as is' property values, without the benefit of internal inspections.
- Generic feasibility testing does not consider nuances of a site typically considered in detailed feasibility analysis. Development costs assumed are 'generic', based on construction cost publications and past industry experience. No provision is made for extraordinary development costs that may be necessary as a result of ground conditions or environmental constraints.

Notwithstanding the limitations above, the approach is considered appropriate for the purposes of reviewing if planning controls are financially feasible in the Study Area.

2. PROPERTY MARKET APPRAISAL

2.1 RETAIL AND COMMERCIAL LAND USES

2.1.1 Trends and Drivers

The development industry is dynamic and constantly reinventing commercial formats to meet the ever-changing demands of consumers. The transformation of development is the result of a combination of social, economic, technological and policy trends. However, the rate at which development occurs can be significantly countered by planning constraints (e.g. statutory requirements, difficulties with infrastructure provision, fragmentation of ownership), site and capacity constraints (e.g. bushfire, flooding, slope and landslip), lack of infrastructure and commercial pressures.

If residential growth is stagnant due to any of the reasons mentioned above, it impacts on population growth. Population growth is one of the key drivers of demand for commercial and retail land uses. Without population expansion, economic growth stalls because of less demand for commercial and retail floorspace.

As well as broader macro-economic factors, site-specific characteristics influence the attractiveness and appeal of space. For example, the aesthetic presentation of industrial space is arguably less important however is critical for retail and commercial space to have market appeal. Where a variety of industries (industrial, commercial, retail) locate in close proximity, land use and presentation conflicts can arise.

The performance of retail and commercial floorspace in the Newcastle City Centre has been patchy. By virtue of the sheer length of Hunter Street, poorer located assets have suffered from prolonged letting-up periods and high vacancies levels. Notwithstanding, there is healthy demand for well located assets with contemporary and functional floorspace.

2.1.2 Market and Development Activity

Leasing Activity

The industrial and commercial markets within the Study Area are relatively tightly held with limited sales or leasing activity witnessed over the past 12 months. Leasing activity across all commercial sectors within greater Newcastle has slowed in recent times; businesses are opting to purchase premises when possible as opposed to leasing given the availability of low-cost credit.

Market analysis of current industrial space available for lease within the Study Area indicates rent ranges from \$60/sqm to \$120/sqm (gross), and can be subject to lengthy letting-up periods depending on quality. Little industrial leasing activity has been observed owing to the limited amount of stock available.

Demand is typically restricted to local service industries, with local letting agents noting little new interest from has been observed apart from traditional industrial-type occupiers however new users have begun to emerge in recent times. For example, 29 Bishopsgate Street was recently leased to a small craft beer brewing company for three years at \$50,000 per annum net (\$87/sqm). Additionally, some small industrial strata units along Throsby Street have recently been converted into cafes.

Commercial office space within the Study Area is mixed; older top floor commercial offices are seen within industrial warehouses while new ground floor space has recently emerged following residential development along Throsby Street. As such, rents vary accordingly with older stock attracting net rents of \$150/sqm-\$170/sqm while newer space achieves rates circa \$250/sqm (net). An example is contemporary ground floor space at 18 Throsby Street that was let to a yoga studio at \$250/sqm for a 3+3 year term.

Office suites in Newcastle West are limited but do generate marginally higher rents given their centralised location, with rates of \$250/sqm-\$300/sqm (net). Demand for commercial office space within Wickham and Newcastle West is generally mixed; with recent activity particularly strong from local medical practitioners and engineering firms. Anecdotal evidence from local letting agents note that a large proportion of recent activity is driven by local businesses downsizing premises; many local businesses have reduced employee numbers over the past 12-18 months and have naturally sought smaller premises as a result.

Sales Activity

Sales activity within the industrial and commercial markets by contrast has been buoyant with a surge in demand witnessed by local selling agents over the past 12 months. The affordability of land and the availability of credit is driving buying activity; the economic benefits of purchasing versus leasing is stimulating local business as well as a variety of investors, in particular private Sydney-based investors who are vying for redevelopment opportunities. Speculative interest has increased given the potential rezoning of the Study Area.

Sales of small industrial warehouse sites (<1,000sqm) in the B4 and IN2 zones indicate sales rates between \$1,400/sqm to \$2,400/sqm of overall site area are currently being achieved, with sites of a smaller size attracting the higher end of this sales range. Yields have begun to contract as competition is driving up sale values whilst rents remain flat.

Sales of newly constructed strata office suites at the ground and lower floors of residential developments indicate strong interest from local service based businesses, with strata sales at 18 Throsby Street achieving rates between \$2,500/sqm and \$3,600/sqm of building area.

Local letting agents note that where industrial space is marketed for lease, strong interest is shown from prospective buyers who seek to acquire the site for owner occupation. This was recently observed at 15 Fleming Street where an industrial warehouse originally marketed for lease was sold to a local food processing company for \$660,000.

Table 2.1: Industrial Sales Activity, Wickham

Address	Site Area (sqm)	Sale Price (Sale Date)	Sales Analysis (\$/sqm)	Comments
9 Albert St	257	\$800,000 (Sep 16)	\$3,113/sqm	Freestanding warehouse part fitted for office use; understood to be sold to a local developer intending on redeveloping the site.
15 Fleming St	460	\$660,000 (July 16)	\$1,435/sqm	Freestanding warehouse which was originally marketed for lease at \$39,000 pa (\$85/sqm) however during leasing campaign the letting agent received multiple offers to purchase and site was eventually sold off-market to a local food processing company.
18 Grey St	1,292	\$1,125,000 (Apr 2016)	\$870/sqm	Small warehouse (440sqm) with office and mezzanine storage and yard storage. Small and basic nature of buildings is reflective of relatively low price (on a rate per square metre of site area).
22 Wickham St	263	\$370,000 (Feb 2016)	\$1,406/sqm	Irregular shaped corner block with warehouse (older style) used for storage.
146 Hannell St	371	\$875,000 (Jan 2016)	\$2,359/sqm	Retail showroom/warehouse/office and residential uses combined in a 2 level building that is recently refurbished.
21 Railway St	2,641	\$1,150,000 (Dec 2015)	\$435/sqm	Warehouse and showroom (older style). Small and basic nature of buildings is reflective of relatively low price paid (on a rate per square metre of site area).

Source: AEC

Existing-use Values

Existing-use values of sites with freestanding industrial buildings are driven both by the market for existing industrial uses as well as the market for new mixed use development. Buildings that are well presented and refurbished or that are substantial (over 2 levels) are observed to sell for higher prices (>\$2,000/sqm of overall site area).

In contrast, sites where the existing buildings are small relative to the allotment size and basic (older style warehouses) more modest prices are paid (<\$1,000/sqm of overall site area). Developers are observed to be seeking out these types of sites where the buildings are nearing the end of their economic useful lives.

Recent commercial property sales within Newcastle West (outside the Study Area) also exhibit strong interest from local businesses and investors.

Market participants are observed to pay prices according to their motivations - investors are driven by investment returns/yields, owner occupiers by quality and suitability of space and developers by the potential for development. In the current market environment, sites with nominal improvements yet with higher permissible densities underpin the prices being paid by developers.

2.2 RESIDENTIAL LAND USES

2.2.1 Trends and Drivers

The long-term outlook for the Inner Newcastle residential market is good, underpinned by strong fundamentals including:

- Steady population growth.
- Low interest rates.
- Low unemployment rates.
- Local and State funded infrastructure projects.
- Changing household demographics and lifestyle preferences.

These factors ultimately form the core drivers to demand. The Newcastle Urban Transformation and Transport Program (NUTTP) is set to deliver new public transport options and public domain, educational facilities and recreational areas to re-establish the vibrancy of the Newcastle CBD and surrounding inner city suburbs, including Wickham. The urban renewal of Inner Newcastle has already begun to spur private investment and draw new residents to the area.

The transition to medium and high density living within Newcastle is well underway. Underpinning the rise in unit developments across Newcastle are fundamental demographic shifts; an ageing population who no longer require large freestanding houses, rising land values creating affordability issues and shrinking family sizes which no longer require large housing. These drivers are already at the forefront of the Newcastle residential market; analysis reveals large numbers of residents are relocating from the hinterlands and outer suburbs to the Inner Newcastle apartment market.

2.2.2 Residential Activity

Existing Residential

The residential market within Wickham is broad; a range of dwelling typologies are observed (cottage, townhouse, terrace, apartments) which vary in age and condition. Terrace housing and cottages are prevalent throughout most of the southern and eastern portions of the Study Area, while newer townhouses and apartment buildings have emerged east along Throsby Street, parts of Hannell Street and Grey Street.

Recent sales evidence of terrace housing and detached cottages indicate demand for such product remains good; numerous heritage listed cottages and townhouses within and near the Study Area have recently transacted after short marketing periods, achieving sale prices from \$450,000 to \$600,000 (\$2,500/sqm-\$4,000/sqm of site area).

Resales of modern townhouses and units are less common, although recent sales evidence indicates modern units (<10 years old) are achieving sales rates of \$4,500/sqm to \$6,000/sqm of internal area in locations along Throsby Creek. Newcastle West in contrast has exhibited larger volumes of unit sale activity, with similar sale rates being achieved.

Existing-use Values

Sales evidence of residential properties within the Study Area indicates older style detached houses sell for between \$2,500/sqm to \$4,000/sqm of site area.

Analysis of rental values within the Study Area and Newcastle West indicates current rates being achieved range from \$450-\$500 per week for detached houses/townhouses and modern apartments with 2-3 bedrooms, while smaller stock (studios and 1 bedroom apartments) achieve rates from \$230-\$280 per week.

Discussions with local letting agents indicates that the rental market activity is relatively subdued due to limited stock currently available. This is likely to change when an influx of residential units become available for lease over the coming 18-24 months when current developments with high numbers of investor purchasers are completed.

Off-the-plan Residential Sales

There are numerous developments at various stages within the Study Area and Newcastle West. Development activity has been observed to have been gathering momentum over the past 12 months, with several large unit developments (150+ units) recently completed or currently being progressed. Medium density development is also prevalent, particularly within the Study Area with some examples of former commercial sites being adaptively reused to accommodate for boutique-style developments including combinations of studio apartments, units and/or townhouses.

The feasibility of high-density residential development within the Study Area is underpinned by the markets' capacity to absorb more expensive product as development scale increases. The West-End development at Wickham, the Verve Residences at Newcastle West and Aero Apartments at Newcastle West offer insight into the nature and scale of market demand likely to be achieved within the Study Area given the recentness of marketing, proximity to the Study Area, and development scale.

- **“West-End”, 3-13 Charles Street, Wickham**

A 10 storey residential development comprising 122 units which completely sold out in July 2016 following the commencement of marketing in mid-November 2015, indicating a stable take-up rate of 3 sales per week. Average sales rates were in the order of \$7,500/sqm, with sale prices of \$330,000-\$356,000 (1 bedroom), \$480,000-\$520,000 (2 bedrooms) and \$730,000-\$760,000 (3 bedrooms).

Investors comprised the majority of purchasers (approx. 70%), with Sydney investors accounting for up to 25% of all investor sales. The owner occupier buyers were mainly local couples downsizing from the outer suburbs, while first home buyers were active in the sub-\$500,000 product range.

Prices tended to rise approximately \$5,000 per floor depending on aspect and view corridor, while additional car spaces attracted premiums of \$15,000- \$25,000.

- **“Verve Residences”, 470 King Street, Newcastle West**

The 20 storey residential development at 470 King Street in Newcastle West comprising 197 units commenced marketing in late June 2016. Take-up has been strong thus far with approximately 40% sold (av. 5 sales per week). Price points being achieved are relatively high; 1 bedroom units are in the order of \$400,000-\$510,000 while 2 bedroom units are achieving prices from \$520,000 to \$700,000. Several pricing milestones for 3 bedroom apartments have been achieved, with three sales above \$1.6m with remaining stock commanding asking prices from \$750,000 to \$1.8m.

Strong response thus far has come primarily from owner occupiers, accounting for 75% of buyers. The owner occupier cohort has been quite mixed, with large numbers of first home buyers absorbing the lower level product while downsizers relocating from Newcastle's hinterland (Adamstown Heights, New Lambton Heights, etc.) have exhibited strong purchasing power for two and three bedroom stock on the upper floors, particularly those with coastal views. Of the investor segment, most are local residents in addition to several Sydney-based investors.

Parking is provided to all units except studios, however only 3 bedroom units contain 2 spaces. Anecdotal from the marketing agent indicates that likely premiums generated if additional spaces were included for 1 or 2 bedroom units range from \$50,000 to \$75,000.

- **“Aero Apartments”, 766 Hunter Street, Newcastle West**

The 14 storey residential development 'Aero' at 766 Hunter Street comprising 44 residential units commenced marketing in May 2016 and sold out by mid-July 2016 (approx. 4 sales per week). Sales rates achieved averaged at approximately \$7,400/sqm, with ranges from \$6,000/sqm to \$9,000/sqm dependant on unit type and floor level. Prices achieved ranged from \$400,000 to \$500,000 (1 bedroom), \$520,000-\$700,000 (2 bedroom) and \$870,000-\$970,000 (3 bedroom).

The strong response was predominantly driven by local investors, with the local marketing agent advising that investors accounted for approximately 60% of total sales. Of interest, approximately half of these local investors identified that they intend to move into their unit within the next 5 years following the completion infrastructure works within the Newcastle CBD. Owner occupier purchasers represented approximately 40% of total

purchasers, with a mix of first home buyers, downsizers and middle aged couples/families relocating from neighbouring suburbs and the Newcastle hinterlands.

Prices tended to increase with floor level depending on views achieved, averaging between \$5,000 to \$15,000 per floor. Car spaces were provided with all units, with additional spaces included in two bedroom offerings commanding premiums of \$25,000-\$40,000.

Table 2.2 identifies the current sales rates being achieved for off-the-plan developments within Wickham and Newcastle West.

Table 2.2: Sales Activity (Off-the-plan), Wickham and Newcastle West

Address	Units (storeys)	Unit Sizes (sqm)				Sales Rates (\$/sqm)			
		1b	2b	3b	4b+	1b	2b	3b	4b+
3-13 Charles St Wickham	122 (10)	50-53	68-73	92	-	\$7,500	\$7,700	\$7,500	-
470 King St Newcastle West	197 (20)	50-59	82-93	105-145	300	\$7,700- \$8,600	\$6,200- \$7,600	\$7,000- \$12,000	\$11,600
766 Hunter St Newcastle West	44 (14)	65-71	85-110	110-135		\$6,000- \$8,000	\$7,000- \$9,000	\$7,000- \$8,500	-
1-9 Beresford St Newcastle West	68 (9)	50	68-85	101-107	-	\$6,700- \$8,400	\$8,000- \$9,500	\$7,400- \$7,600	-
122-124 Parry St Newcastle West	31 (8)	71	96-110	136	207	\$6,300- \$7,000	\$7,000- \$9,000	\$7,000- \$9,000	\$7,500

Source: AEC

Also of interest is the sale and take-up rates being achieved at 'Herald Apartments' at 28 Bolton Street in Newcastle with approximately 70% of stock sold following release in early October 2016 (av. of 41 sales per week). Sales rates being achieved are particularly strong; ranging from \$6,000/sqm to \$9,000/sqm for units on upper floors with prominent view corridors. Owing to the views achievable, price increments per floor are understood to range from \$10,000 to \$40,000 per floor.

2.3 DEVELOPMENT ACTIVITY

2.3.1 Development Pipeline

The residential development pipeline has the potential to deliver approximately 4,700 new dwellings across the Newcastle LGA by 2021 (if all proposals eventuate into delivery). Low density product (detached houses, terraces and townhouses) account for approximately 30% of these dwellings while 70% are units and apartments.

A desktop audit of residential developments within the inner suburbs of Newcastle is useful in understanding the level and type of development within the immediate vicinity of the Study Area and importantly provides insight into comparable locations that may compete for market activity and developer interest.

Table 2.3: Development Pipeline of Inner Newcastle

Suburb	No. of Developments (Dwellings Proposed)	% of Total Newcastle LGA	Development Typology		
			Houses	Townhouses	Units/Apartments
Newcastle	17 (1,530)	33%	0%	0%	100%
Newcastle West	8 (521)	11%	0%	0%	100%
Wickham	10 (486)	10%	0%	8%	92%
Hamilton	3 (64)	1.5%	0%	0%	100%
Cooks Hill	5 (32)	0.7%	12%	44%	44%
Total	43 (2,633)	56%	0.2%	2%	97.8%

Source: CordellConnect

As evidenced by **Table 2.3**, Inner Newcastle (including the suburbs of Newcastle, Newcastle West, Wickham, Hamilton, Cooks Hill) is playing a substantial role, contributing to more than 50% of new dwellings proposed across the Newcastle LGA with medium-high density development providing the overwhelming majority of new dwellings.

The ability and appetite of the market to absorb these new dwellings is influenced by a range of factors, however the underlying fundamentals underpinning demand for new housing stock within Newcastle remain sound. The shift towards high-rise living within Newcastle is on-going with analysis of recent market activity showing the receptiveness of the local market to higher-density product.

With the provision of new infrastructure within Inner Newcastle and the urban renewal of the Newcastle CBD, it is likely that Wickham is well placed to accommodate future demand for residential units.

2.3.2 Development Typologies and Unit Mix

Residential Typologies

The progression of new residential development within the Study Area is comprised of mainly low to medium rise development with the exception of 3-13 Charles Street (10 storeys). Environmental constraints and building height restrictions have worked in unison to limit the development of higher density residential product to date.

Higher density residential development is observed within Newcastle West owing to the higher permissible FSRs and building heights. Numerous high-rise developments are observed within the locality, particularly along King and Hunter Street.

- **Low rise (1-4 storeys)**

The on-going development of lower density townhouse and unit stock is prevalent within the Study Area with a mix of developments currently being progressed; 90-94 Hannell Street (24 townhouses), 25 Throsby Street (5 townhouses, 20 units, 3 commercial units) and 6 Hannell Street (6 studio apartments).

Residential intensification is commonly observed with residential flat buildings incorporating mixes of townhouse, unit and ground floor retail/commercial product as developers seek to maximise floorspace and net saleable area.

It is conceivable that owing to environmental constraints (e.g. increased cost associated with mine subsidence) some developments are progressed to lower densities despite being permitted under the LEP for higher densities.

- **Medium rise (5-8 storeys)**

Few medium rise developments have been progressed within the Study Area in recent times; developers tend to opt for either smaller scale development (1-4 storeys) or high-rise residential (8+ storeys). Though, medium rise development often presents the highest and best use for sites within the Study Area under current planning controls, e.g. the proposed 8-storey residential development at 5 Wickham Street incorporating 40 units.

Medium rise development is also prevalent in Newcastle West, notable examples being along Parry Street and Steel Street, e.g. Parry Grande (8-storeys with 31 units) and Spire Apartments (7-storeys with 161 units).

- **High rise (9-20 storeys)**

No high-rise development is observed within the Study Area to date, except the 10 storey mixed-use development at 3-13 Charles Street currently under construction. Mine subsidence severely impinges upon site suitability throughout much of the Study Area's northern precinct which in conjunction with height restrictions along the rail corridor limit the potential for high density residential development.

Higher density residential sites are more prevalent within neighbouring Newcastle West, with current developments ranging from 14 to 20 storeys.

Unit Mix

This section examines the unit mix of planned and current residential development within Wickham and Newcastle West. This analysis is useful as it highlights product that is proposed, which is indicative of market preference and potential gaps in supply.

Table 2.4: Unit Mix, Wickham and Newcastle West

Address	Unit Mix										Total
	Studio		1b		2b		3b		4b+		
	No.	%	No.	%	No.	%	No.	%	No.	%	
Wickham											
73 Railway Ln	32	15.5%	32	15.5%	142	69%	0	0%	0	0%	206
3-13 Charles St	0	0%	42	34%	76	62%	4	3%	0	0%	122
26 Throsby St	0	0%	0	0%	46	94%	3	6%	0	0%	49
5 Wickham St	0	0%	1	2.5%	39	97.5%	0	0%	0	0%	40
12 Bishopsgate St	0	0%	7	19%	30	81%	2	5%	0	0%	37
29 Throsby St	3	27%	8	73%	0	0%	0	0%	0	0%	11
128 Hannell St	6	100%	0	0%	0	0%	0	0%	0	0%	6
Newcastle West											
470 King St	4	2%	109	55%	40	20%	41	21%	3	2%	197
23 Steel St	1	0.6%	61	37.9%	77	48%	22	14%	0	0%	161
643 Hunter St	24	18.8%	33	25.8%	68	53%	3	2%	0	0%	128
990 Hunter St	8	10.5%	24	31.6%	33	43%	4	5%	5	7%	76
122-124 Parry St	0	0.0%	5	16.1%	19	61%	7	23%	0	0%	31

Source: CordellConnect/NSW JRPP

It is evident from the analysis in Table 2.4 that two bedroom units are the most common unit type included in new developments within Wickham and Newcastle West, which is a universally common trend across apartment markets owing to the attractiveness of such product to both investor and owner occupier purchasers.

Studios are also prevalent given the high proportion of first home buyers within the local market who are generally more price sensitive compared to other purchasers. Discussions with local sales agents indicate that the adaptive reuse of former commercial/industrial buildings is common practice within Wickham which lends itself to studios as developers seek to maximise floorspace.

Provision of 3 bedroom units is observed to be higher compared to many Sydney markets. The shift in housing preference away from larger detached housing towards medium-high density units is a key driver within Inner Newcastle; a large proportion of off-the-plan sales are to local residents relocating from nearby suburbs. Supply has also shifted to accommodate and encourage this shift via larger stock - 3, 4 and 5 bedroom apartments are observed in addition to larger internal room sizes.

2.3.3 Development Site Sales

Site sales activity within the Study Area and Newcastle West has markedly increased over the past 12 months, with the low interest rate environment and CBD infrastructure developments driving interest from developers and land owners alike seeking to capitalise on opportunities where residential development is permitted and feasible.

This section examines development site transactions that have occurred over the past 12-18 months within Wickham and Newcastle West. This analysis is useful as it illustrates what developers can afford to pay for sites and the extent this has changed over the current market cycle.

Table 2.5: Development Site Sales, Wickham and Newcastle West

Address	Site Area (sqm)	GFA (sqm)	Sale Price (Sale Date)	Analysis			Comments
				\$/sqm of site area	\$/sqm GFA	\$/unit	
Wickham							
5 Throsby St	671	-	\$1,100,000 (July 2016)	\$1,639	-	\$91,700	Site sold as an investment opportunity with development potential. A DA is lodged for refurbishment of the existing 3 storey building and conversion of upper floors into 12 units. Higher sale reflective of refurbishment, rather than comprehensive redevelopment.
12 Bishopsgate St	903	2,890	\$1,800,000 (May 2016)	\$1,993	\$623	\$56,250	Site sold with original DA for 32 units and ground floor retail space in a 10 storey building (achieving FSR 3.2:1). Since purchase of the site a s96 amendment has been submitted for 37 units and ground retail of 50sqm in a 9 storey building (equivalent to FSR 3.3:1). A mix of basement and deck parking is proposed. The proposed development is below permitted FSR of 6:1.
3-13 Charles St 14-22 Wickham St	2,641	10,564	\$10,370,000 (April 2016)	\$3,927	\$982	\$85,000	Site sold with DA approval for 10 storey mixed use development - 4 ground floor commercial suites and 122 apartments. Currently being marketed.
90 Hannell St	8,984	8,970	\$7,800,000 (July 2016)	\$872	\$869	\$220,000*	DA submitted for 24 townhouses (3 bedrooms) and 3,055sqm of commercial space. Even though the site is permitted to FSR 1.5:1, the DA proposes FSR 1:1.
25 Throsby St	1,673	2,108	\$1,600,000 (Aug 2015)	\$956	\$759	\$59,300	Site sold with existing warehouse to be demolished for construction of a 3 storey development comprising 22 units and 5 townhouses. Currently being marketed.
5, 11 Wickham St	1,091	2,913	\$1,420,000 (May 2015)	\$1,302	\$487	\$35,500	Existing industrial warehouses proposed to be demolished for 8 storey building comprising 2 commercial units and 40 residential units. DA submitted.
Newcastle West							
766-770 Hunter St	1,250	3,775	\$3,000,000 (Aug 2016)	\$2,400	\$795	\$68,200	Original DA lodged in Sept 2015 for 15 storey development comprising 62 residential units known as Aero Apartments. Subsequently approved for 14 storeys and 44 units. Although sale recorded at August 2016, sale price was conceivably negotiated prior to Sept 2015. Marketing of the units commenced in May 2016 and sold out by mid-July 2016.
Newcastle							
509-511 Hunter St	3,436	16,264	\$9,500,000 (Feb 2014)	\$2,765	\$584	\$36,300	Sold with existing commercial buildings, marketed as having approval for a mixed use residential/retail complex with 3 residential buildings up to 18 storeys and 252 residential units. Subsequently progressed for 262 units. Marketing of the units commenced in mid 2014, approximately 70% sold.

*per unit equivalent (non-residential GFA converted to residential units) owing to substantial proportion of commercial space proposed
Source: AEC Group/Core Logic RPData

Prices paid for development sites can be observed to vary significantly if analysed by site area (\$872/sqm of site area to nearly \$4,000/sqm of site area). This is due to variances in density (FSR) - some sites achieving FSR 1:1 while other sites achieving nearly FSR 5:1.

If analysed by unit/site, prices paid for development sites vary less between typologies (for example between various unit development sites) however do reflect a difference for development type and date of transaction. These differences are further analysed below.

A number of observations are drawn from the analysis in **Table 2.5**, particularly relating to differences observed between prices paid per unit/site:

- **Planning status**

Sites that are sold with the benefit of development approval can achieve sale prices substantially more than those where a new purchaser has to prepare and submit a development application. With development consent, planning risk is conceivably at a minimum with the developer only having to manage market and financial risk.

In comparison to other development site sales (ranging from \$55,000 per unit/site to \$70,000 per unit/site), a premium is observed to be paid for 3-13 Charles Street and 14-22 Wickham Street (with the benefit of development consent), at \$85,000 per unit/site.

- **Date of sale**

The 2013-2015 period saw development activity and prices paid for development sites strengthen significantly. It is evident from the prices paid that market conditions within Wickham and Newcastle West also have strengthened significantly over the past 12-18 months. Comparing the price paid for 5 & 11 Wickham Street (\$35,500 per unit) to that paid for 12 Bishopsgate Street (\$56,250 per unit) suggests an increase by more than 50% in 12 months.

- **Type of development**

On a rate per unit proposed, prices paid vary according to the type of development proposed. For example, prices paid per townhouse/site is notably higher than prices paid per unit/site (compare \$220,000 per townhouse/site at 90 Hannell Street with \$56,250 per unit/site at 12 Bishopsgate Street).

Prices paid for sites also vary between those sites where a comprehensive redevelopment (and demolition) is proposed compared to sites where existing buildings are proposed for refurbishment and/or extension. In the case of 5 Throsby Street, the site was sold as an investment opportunity with development potential. A DA has been lodged for refurbishment of the existing building and conversion of upper floors into residential units. As the cost of construction is less than a new development, the site sold for a higher price of \$91,700 per unit/site.

The most consistent unit of analysis by which to consider the value of a development opportunity is by sqm of GFA potential. From the analysis in Table 2.5, prices paid for the various development opportunities ranges from \$480/sqm/GFA to \$870/sqm GFA for sites without the benefit of development consent. More recent site sales (2016) are at the upper end of the range, i.e. \$800/sqm/GFA to \$870/sqm/GFA, compared to those sales occurring in 2014 and 2015 which disclosed prices at the lower end of the range, i.e. \$480/sqm/GFA to \$760/sqm GFA. Where a site has received development consent, a higher sale price of \$980/sqm/GFA is observed.

This analysis indicates market expectations are in the order of \$800/sqm/GFA to \$870/sqm/GFA (for sites appropriately zoned but without development consent).

2.4 IMPLICATIONS FOR THE STUDY AREA

Lifestyle and Market Preference

Our market investigations suggest a growing acceptance of higher density living in Newcastle City Centre, with prices paid for residential units in apartment buildings comparable to low density, detached dwellings on the fringe of the city centre. This suggests an awakening of the benefits of city living and an emerging and growing trend towards lifestyle and convenience.

While much of the sales activity is driven by an active investor market, keen interest by downsizers from Newcastle and its surrounds on the benefits of city living has influenced the incorporation of larger stock (3 bedrooms+) within new developments. The market for residential units is buoyant and while there is an establishing market for high density living, the constraints of affordability conceivably place a ceiling on the pace of price growth.

The performance of retail and commercial uses is more muted in comparison to residential uses, however steady demand is observed for well-located and functional floorspace. This is a function of market cycles (residential uses have experienced an uptick in market conditions over the last 24 months) as well as an incremental revitalisation of Newcastle which has resulted in a growing number of residents in the city centre.

Non-residential Uses

Demand for non-residential uses in the Study Area is mixed. Demand by local service industry is strong, with the central location of the Study Area attractive for businesses to service their key markets. The type of existing floorspace is more industrial in nature. Commercial-type floorspace has not traditionally been sought after in the Study Area (generally limited to the upper level of a warehouse or industrial building) however with the development of new mixed use buildings that incorporate contemporary commercial suites, new businesses are observed to be accommodated within the area.

As the resident population grows, so too will demand for retail and non-retail businesses and associated floorspace. In addition to retail and commercial businesses, local service businesses who are also population-driven (e.g. automotive repairs, panel beaters, food and beverage suppliers) who often seek industrial-type floor space in proximity to their key markets will likewise seek accommodation in central and accessible locations. Careful planning and management of the co-existence of these uses is critical in order for each use to continue to be viable in the Study Area.

Development Activity

Despite the market for higher density product and planning permissibility, it is conceivable that not all sites will develop to their full planning capacity. This will occur where a developer does not expect the cost of higher density (and taller buildings) to be adequately offset by increased revenue. This could be related to site-specific issues (e.g. geotechnical issues including mine-subsidence or capacity issues where a site is not able to accommodate the floorspace and comply with development standards) and/or a developer's perception of market appetite. The analysis of development site sales in Table 2.5 indicate there to be two developments that are not proposed to be developed to their extent of their maximum FSRs - 90 Hannell Street and 12 Bishopsgate Street.

Existing uses and existing-use values underpin the viability of redevelopment in the Study Area. Concomitantly, the likely end-sale values of new residential and non-residential product drive development scale and developer interest. The analysis in section 2.2 highlights the buoyancy of the residential market and receptiveness to higher-priced, high density product, indicated by the success of 470 King Street in Newcastle West.

By their development site purchases, developers are not surprisingly observed to be targeting large sites (site areas in excess of 1,000sqm) as well as those with nominal/modest improvements which are equivalent to less than \$900/sqm/FSR potential under planning controls. This implies that for sites currently permitted with FSR 1:1, only sites where existing-use values are less than \$900/sqm of overall site area would be feasible to develop. The analysis of existing-use values in section 2.1 and 2.2 indicate most properties within the Study Area are worth more than \$1,000/sqm of overall site area.

The opportunity for development and revitalisation in the Study Area as well as the planning controls required to support the same are examined in the next chapter.

3. MASTERPLAN OPTIONS

3.1 OBJECTIVES

Council is progressing preparation of a Masterplan for the Study Area in consultation with local landowners, business owners and agency stakeholders.

The Masterplan will seek to respond to the following objectives:

- Improve connectivity within Wickham and to adjoining destinations.
- Create safe, attractive and inclusive public places.
- Ensure built environment is functional, responsive and resilient.

Development of the Masterplan is progressed, with the vision of character and built form described below.

3.2 WICKHAM CHARACTER PRECINCTS

Council envisage a number of distinct precincts within the Masterplan area, each with the potential to accommodate a mix of uses and to be shaped by infrastructure assets that surround the area, i.e. Wickham Park in the west, the new light rail and transport interchange to the south, harbour to the east and existing urban areas to the north.

Figure 3.1 illustrates the various character precincts envisaged for the Masterplan area.

Figure 3.1: Character Precincts



Source: NCC

Given the Study Area is an urban area with established uses and existing buildings, large scale redevelopment is unlikely to occur, rather renewal is more likely to occur incrementally as sites are progressed for redevelopment when financially feasible.

Development activity is at present principally focused in the “Rail Edge” precinct where permissible FSRs are at 4:1 and 6:1. There is a small amount of development activity along Throsby Street where the existing FSR is 1.5:1.

In order to achieve the objectives of the Masterplan, alternate densities are proposed in some areas in the Study Area. The next section details these potential densities.

3.3 POTENTIAL DENSITIES

Much of the eastern portion of the Study Area is envisaged to retain existing density controls (FSR and height) with the rest of the Study Area proposed for higher densities.

- Emerging Industry Quarter**
 Current permissible FSRs are a mix of 1:1 and 1.5:1. Potential FSRs of 1.5:1, 2:1 and 2.5:1 are considered.
- Park Edge**
 Current permissible FSRs of 1.5:1 and 4:1. Potential FSRs of 2:1 and 4:1 are considered.
- Village Hub**
 Current permissible FSRs of 1:1 and 1.5:1. Potential FSRs of 1.5:1 (retention of existing) and 2:1 considered.
- Harbour Edge**
 Current permissible FSR of 1.5:1. Potential FSRs of 1.5:1 (retention of existing) and 2:1 considered.
- Rail Edge**
 Current permissible FSRs of 4:1 and 6:1. Retention of FSRs proposed.

The western portion of the Study Area (Park Edge and Emerging Industry Quarter) is envisaged with a lift in FSR, the southern portion (Rail Edge) and eastern portion (Village Hub and Harbour Edge) largely envisaged to retain existing FSRs.

Figure 3.2 illustrates the potential densities envisaged for the Study Area.

Figure 3.2: Potential Development Densities



Source: NCC

In order to understand the likely take-up of development opportunities should the above potential densities be applied, generic feasibility testing is undertaken at various FSRs. This is detailed in the next section.

3.4 GENERIC FEASIBILITY TESTING

3.4.1 Introduction

The capacity of residential zoned land to accommodate new dwellings can be thought of as two-fold: planning capacity and market capacity.

- **Planning capacity** (or theoretical capacity) refers to the physical ability of land to be developed, taking into account permissibility under planning framework, environmental and infrastructure constraints, etc.
- **Market capacity** refers to issues of commercial viability - whether pricing levels, development costs, etc. make development a commercial proposition, i.e. if development is financially feasible.

In some instances constraints to housing supply could be as a result of market capacity, relating to market and economic factors, in which case those impediments are beyond the control of planning authorities.

This chapter assesses the 'market capacity' of nominated sites to be developed and suggests amendments to the planning framework where appropriate.

The Hypothetical Development or Residual Land Value (RLV) approach has been adopted as the method of assessment, utilising development feasibility software Estate Master. The RLV approach involves assessing the value of the end product of the development, allowing for development costs, and making a further deduction for the profit and risk that a developer would require to take on the project.

The Residual Land Value (RLV) can be defined to be the maximum price a developer would be prepared to pay for a site in exchange for the opportunity to develop the site, whilst achieving target hurdle rates for profit and project return. This approach involves assessing the value of the completed product, making a deduction for development costs and further deduction for profit and risk whilst ensuring the development achieves the target project margin and return.

A key metric for development feasibility is land value, which is a 'residual' after all costs and revenues are taken into account. The figure must be of a sufficient amount to encourage the owner to sell and/or displace the current use. In order for development of the Site to be viable, the Residual Land Value must exceed the 'as is' value of the land, i.e. the value of the land in its existing use including all improvements.

3.4.2 Factors Affecting the Financial Feasibility of Development

There are a considerable number of factors affecting the feasibility of individual sites for redevelopment and rarely is a single factor the only cause of poor development feasibility. Urban land is subject to market factors which directly affect their land values and the feasibility of developing into higher and better uses.

The following are a selection of common factors that affect the feasibility of development, particularly in an established urban centre such as Newcastle and the Study Area.

Land Value and Site Assembly

In order to economically acquire and develop land, the proposed use must translate into a higher value than the existing use including any improvements on it (or 'as is' use). Development will only occur if the proposed use is valuable enough to displace existing uses. While existing improvements may be dated and due for replacement, in many instances they may still be providing a good level of functional utility and thereby be relatively valuable.

As a consequence, the acquisition of land can be a high-risk and high-resource activity for developers, particularly where numerous parcels of land have to be amalgamated prior to development. Where numerous sites are required for a development block, the payment of incentives over and above market value is often required.

When sites are upzoned to higher densities landowner expectations often increase in tandem - unrealistic landowner expectations can thwart site assembly efforts.

In the Study Area, existing uses are a mix of industrial buildings and warehouses with sporadic residential cottages and commercial properties. Some of these properties are in a fine grain lot pattern and can pose challenges

particularly, where existing buildings are in good functional condition and existing-use values are accordingly high. There are however opportunities within the Study Area where large sites in consolidated ownership could be attractive for redevelopment.

Land Use and Effective Demand

The type of land use proposed on a site underpins the value of a site, i.e. the price a developer would be willing to pay in exchange for the opportunity to develop the site.

At present in many suburban markets, residential is the dominant use - outpricing other uses (on a rate per square metre). As a consequence, in land use zones where a diverse range of uses is permissible, often residential uses represent the most financially attractive use, therefore making it difficult for other uses to compete for development sites. This is reflected in the development pipeline, where mixed use (residential) developments exceedingly outnumber commercial developments.

Effective demand, rather than underlying demand, is relevant for development feasibility. The ability of households to pay for housing underpins the type and nature of development the market can respond with.

While market attitudes in the Newcastle city centre are shifting and smaller residential product is enjoying increasing market acceptance, prices achieved for residential units are nevertheless broadly limited by prices paid for detached dwellings. For example, if a 3 bedroom detached dwelling is available for \$900,000 in a comparable location, it is unlikely a 3 bedroom unit will be able to achieve the same level of pricing.

While market acceptance is growing for residential living in Newcastle, residential markets are still relatively price-sensitive. Apartments need to be appropriately priced or they could experience prolonged periods of marketing.

Construction Costs

The cost of construction can increase substantially as buildings become taller. Service requirements will dictate that more lifts will be required so that vertical transportation times are not compromised. Service shafts and fire escapes are correspondingly wider too.

In deciding the amount of capital to apply to a site, i.e. how intensely (how many storeys) the site should be developed, developer capital will be applied to the point where incremental revenue is equal to incremental cost. It is no surprise that in many price-sensitive markets buildings are developed to 8-9 storeys.

In Newcastle, there is growing market appeal for higher density living particularly where sweeping water views are available. Though, the market for high density living is not as established as locations such as Sydney CBD or North Sydney where prices on the 30th floor are many-fold prices on the sixth floor. This accordingly limits the number of storeys that is viable to develop.

Table 3.1 outlines the potential cost and revenue differential as buildings become taller in Newcastle. For comparison purposes, the indicative revenue differential observed in Sydney CBD is also provided.

Table 3.1: Indicative Cost v Revenue Comparison

No. of Storeys	Newcastle (\$/sqm)		Sydney CBD (\$/sqm)	
	Ave. Cost	Ave. Revenue	Ave. Cost	Ave Revenue
<3 storeys	\$1,900	\$7,000	\$1,900	\$12,000
4-7 storeys	\$2,200	\$7,500	\$2,200	\$15,000
7-20 storeys	\$2,800	\$8,500	\$2,800	\$25,000
21-35 storeys	\$3,500	\$9,500	\$3,500	\$30,000

Source: Rawlinsons (2016), RLB (2016), AEC

In Newcastle the issue of mine subsidence can have implications for tall buildings. Towers will only be developed in locations where developers can expect to offset the increased cost of construction (e.g. with taller buildings, more basement levels or in the case of Newcastle the cost of grouting) with higher revenue levels. It is therefore no surprise that residential towers are only feasible to develop in limited markets, i.e. those where there is a market capacity to pay higher prices for higher floors. Notwithstanding the impost of grouting costs on new development, access to the Newcastle Mines Grouting Fund can assist in limiting the cost.

Planning/Development Controls

Planning and development controls have the ability to affect feasibility through changes in land use zoning and densities but also through the costs associated with design requirements and securing planning approvals.

Codes for parking, open space, sustainability, etc. all have the ability to influence the cost of development. As an example of the influence of development controls, an increase in density will increase height and cost of construction but may also impact on code-based requirements such as car parking areas.

The cost of code compliance could have a disproportionate impact on cost, e.g. where additional basement parking is required, and could severely undermine the economics/ feasibility of development.

In order to mitigate the cost associated with mine subsidence, deck parking is commonly pursued in multi-storey buildings in Newcastle and with the car park floorspace not included in the FSR calculations. This is accompanied by the additional benefit of lower cost of deck car park construction as compared with basement parking.

Summary

In established urban areas in close proximity to transport networks and major centres, site amalgamation is arguably the largest challenge for development and renewal. In some instances redevelopment into higher densities is sufficient to displace existing uses and facilitate site assembly for development, however landowner objectives are not always financial in nature and do not always align to enable development.

There is considerable residential development ongoing in Newcastle, however confined to areas where existing buildings are nearing the end of their economic useful lives or where vacant blocks of land are available. Existing-use values, small lot patterns and ownership fragmentation issues (supply side issues) and constrained end sale values and market attitudes (demand side issues) are all challenges for new development to overcome.

3.4.3 Notional Development Typologies

This section provides an overview of generic feasibility testing carried out to assess the appropriateness of existing planning controls to promoting redevelopment and renewal. Notional development schemes premised on specific densities and land use types are tested for development feasibility.

This section and the next section (section 3.4.4) carries out generic feasibility testing that examines:

- Various development typologies on a hypothetical site of 1,000sqm.
- Existing and proposed planning controls in the Study Area.

Prevailing property prices ('as is' values) are a key factor to development feasibility. Sites with significant and valuable buildings will expectedly have higher property values and therefore cost more to amalgamate into a development block.

Hypothetical Development Typologies on Hypothetical Site

A hypothetical site of 2,000sqm is used to test the generic feasibility of mixed use development at different FSRs.

- **FSR 1:1**
Currently applicable to a small area around Throsby Street, Lindus Street and Bishopsgate Street close to Railway Street. Not proposed under the Masterplan.
- **FSR 1.5:1**
Currently applicable to most of the Study Area and proposed for some areas under the Masterplan.
- **FSR 2:1**
Not currently applicable under the LEP, proposed for some areas under the Masterplan.
- **FSR 2.5:1 (at 9 storeys and 20 storeys)**
Not currently applicable under the LEP, proposed for some areas under the Masterplan. Two height scenarios are additionally tested at this FSR.

3.4.4 Generic Feasibility Testing Outcomes

In order to be considered feasible to develop, the RLVs (residual land values) associated with each development must exceed the existing-use property values (or 'as is' values) of a site in order to displace its existing uses. Based on market evidence analysed in Chapter 2, existing-use site values in the Study Area range from \$1,000/sqm to \$4,000/sqm of site area, depending on use.

A site with modern and substantial buildings (e.g. over 2 levels) offering high functional utility expectedly has a higher existing-use value than a site with an old/dilapidated warehouse, or a site that is vacant. A desktop analysis of existing-use values affirms that those sites with old and aged warehouse buildings have lower existing-use values (<\$1,000/sqm of site area) whereas those sites improved with more modern and substantial buildings have higher existing-use values (in some cases >\$2,000/sqm of site area).

Sites that provide a good level of functional utility are valuable and represent a high cost for a developer to consolidate. Accordingly, higher FSRs are required for them to turn over and be redeveloped. The converse is true for sites with modest buildings (less than \$1,000/sqm of site area) where lower FSRs are required for development to be financially feasible.

The presumption in this generic feasibility testing is that sites with good quality buildings (i.e. those that may be worth more than \$1,500/sqm to \$2,000/sqm of site area) are not yet ripe for development and Council would not want to see those existing uses displaced prematurely, i.e. before the buildings approach the end of their economic useful lives.

Based on the foregoing commentary, this analysis assumes that only sites nearing the end of their economic useful lives (i.e. those worth < \$1,500/sqm of overall site area) are targeted for redevelopment in the immediate term.

Overall the financial feasibility results of development vary according to the density of use and development type. Table 3.2 summarises key cost and revenue metrics extracted from financial feasibility testing carried out in Estate Master development feasibility software.

Table 3.2: Generic Feasibility Testing Outcomes

Description	Existing Planning Controls		Alternate Planning Controls		
	FSR 1:1	FSR 1.5:1	FSR 2:1	FSR 2.5:1 (9 storeys)	FSR 2.5:1 (20 storeys)
Land Use Split	Ground floor retail (500sqm), upper floors residential				
Assumed No. of Storeys	3-4	3-4	6-8	<10	20
Average Revenue (\$/sqm) ¹	\$7,200	\$7,200	\$7,500	\$7,500	\$7,750
Average Cost (\$/sqm) ²	\$3,668	\$3,690	\$3,862	\$3,806	\$3,868
Residual Land Value (RLV)	\$919,052	\$1,361,233	\$1,690,902	\$2,179,836	\$2,343,191
(\$/sqm of site area)	\$919	\$1,361	\$1,690	\$2,180	\$2,343
(\$/sqm/overall GFA)	\$919	\$907	\$845	\$872	\$1,172
Feasible? ³	No	Marginal	Yes	Yes	Yes

Notes: 1 - based on net saleable area, 2 - based on gross building area, 3 - based on an assumed range of assumed existing-use values of <\$1,500/sqm of site area
Source: AEC

The generic feasibility testing suggests that a minimum FSR 1.5:1 is required for feasible development in the Study Area. Where sites are more valuable (existing-use values at \$1,500/sqm or more), an FSR of at least 2:1 is required. We highlight that this generic testing does not consider the nuances of a site, for example a particular site may have contamination issues or mine subsidence issues which may necessitate more expensive site works. If there are site-specific factors that result in a higher development cost base, the site may require a greater level of FSR for redevelopment to be a feasible proposition.

In some instances the development of more valuable sites (i.e. those sites worth more than \$2,000/sqm of site area) can be incentivised with higher densities. That said, not all land uses and locations respond to density, as evidenced by developments analysed in Table 2.5 and the cost-revenue equation outlined in Table 3.1. In some instances mine subsidence has cost implications for higher density development and depending on the cost-revenue proposition, higher densities may not necessarily be feasible to pursue.

3.5 IMPLICATIONS FOR THE STUDY AREA

3.5.1 Observations and Influencing Factors

Development and activity in the Masterplan area are influenced by a number of key factors:

- **Site assembly and landowner expectations**

A key challenge for renewal to occur in established urban areas is the need to consolidate numerous sites in separate ownership. Even though a developer may offer a price that exceeds the existing-use value, a landowner's objectives are not always financial in nature and may not necessarily align with development imperatives. There are however opportunities within the Study Area where large sites in consolidated ownership could be attractive for redevelopment.

Notwithstanding the challenges of site assembly in established urban areas, where planning controls and permissibility are clearly articulated (as well as contributions liability), market expectations of development sites expectedly adjust and are reflective of respective development potential. Where sites are rezoned to a higher order use or upzoned (e.g. densities are increased), land value expectations thereby increase in tandem.

- **Market demand and capacity to pay**

The depth of market demand and the market's capacity to pay for higher density product underpins the desirability of new development. Current market activity underscores a growing acceptance of high-density city living, with pricing levels indicative of a market willing to pay prices which approach the price of houses in the city's suburbs.

Despite the success of a number of new developments in recent months, this analysis is cognisant of an upper limit which is driven by affordability factors.

- **Cost of development and typology**

Individual site characteristics and constraints influence the type of development that will be pursued on a site. Environment and site constraints (e.g. flooding, slope, mine subsidence) cumulatively impact on development cost which then influences the type of development that is feasible to develop.

Even though some sites are permitted to relatively high densities (e.g. FSR 4:1), owing to these development cost factors, it is conceivable that not all sites will have the market capacity to accommodate that floorspace.

3.5.2 Matters for Consideration

Depending on Council's objectives for the pace of development, it could select an appropriate FSR within various precincts of the Masterplan.

- **Slow and incremental development**

Generic feasibility testing suggests that where current FSR controls are at 1:1, they are not feasible. Where sites have modest or nominal improvements, they could be feasible to develop at FSR 1.5:1. Those sites acquired for less than \$1,500/sqm of site area, or even less at below \$1,000/sqm of site area, are the likely candidates for redevelopment at this density.

- **Moderate pace of development**

If Council would like to see redevelopment and renewal of the Masterplan occur at a quicker pace, Council could consider a base/minimum FSR of 2:1. This would incentivise more sites to be redeveloped. There is however a risk that viable businesses currently operating within functional and good quality non-residential buildings would be displaced and have to seek alternate accommodation.

Council recognise a need to effect a range of public domain and infrastructure works to support implementation of the Masterplan. The potential for new development (particularly where increased densities are sought) to contribute to public benefit is identified by Council. The tolerance and ability for new development to contribute to public benefit is examined in the next chapter.

4. INFRASTRUCTURE FUNDING MECHANISMS

4.1 STATUTORY FUNDING MECHANISMS

Current statutory funding mechanisms are fairly rigid in their scope of application, in that only 'additional' demand resulting from new development can be funded via these mechanisms. Furthermore, development contributions in established areas were capped to \$20,000 per dwelling in 2008. Councils are able to apply for funding from the Priority Infrastructure Fund following an assessment of the contributions plan by the Independent Pricing and Regulatory Tribunal (IPART).

The main types of developer contributions that are applicable in NSW are:

- **Section 94 contributions**
Payable to local councils when development results in additional floorspace and presently capped at \$20,000 per dwelling in established areas and \$30,000 per dwelling in the growth centres (now known as priority growth areas).
- **Section 94A levies**
Levied as a percentage of development cost and payable to local councils. Section 94A levies are commonplace in established urban centres where new development is likely to be infill opportunities and incremental in nature.
- **Planning agreements**
Negotiated between a developer and consent authority, often where there is no contributions plan or if a change to planning controls is sought (e.g. land use zone, density).
- **Affordable housing levy**
Levy payable to council in designated areas where the availability of affordable housing is low or development results in a need for affordable housing.
- **Special infrastructure contribution (SIC)**
Applicable in the growth centres to fund regional infrastructure.

Section 94 Contributions

Section 94 of the *Environmental Planning and Assessment Act 1979* covers the contribution of development towards local infrastructure provision.

Contributions paid under this regime are based on principles of reasonableness, nexus and fair apportionment of the cost of planned infrastructure to development. This model is generally used where development is occurring at a predictable pace and infrastructure needs can be reasonably foreseen and planned.

Costs of infrastructure are generally apportioned on the basis of estimated demand load on infrastructure or estimated benefit from public amenities and public services. Accordingly, this form of contribution is a form of upfront (and estimates based) user pays charge.

The contributions are payable as a condition of development approval as a cash payment or if agreed, dedication of land or works-in-kind in lieu of cash payment. The manner of charging is based on the characteristics of development (such as land development or project / building development) and based on the selected unit of charge. In order for s94 contributions to be charged, the relevant agency must prepare a s94 Contributions Plan which is generally based on the planning framework for an area and its associated population (residents and workers) estimates, development estimates and infrastructure needs. The cost of infrastructure is then apportioned to development sites using a method deemed reasonable for the circumstances, with the objective being to share costs fairly amongst benefiting developments or sites.

The limitations of current statutory funding mechanisms have been recognised by local governments, with an increasing role played by a range of incentive-based funding mechanisms to fund and deliver public domain and infrastructure works.

Section 94A Levies

Section 94A levies are typically used in established urban areas where new development is expected to occur at an incremental rate. A percentage levy is applied to the estimated development cost to arrive at a s94A levy.

In Newcastle City Centre the s94A levy is currently at 2%, having been reduced from 3% in 2013 and resolved by Council to remain at 2% until the end of 2016/2017 financial year. The levy is currently under review.

4.2 INCENTIVE-BASED MECHANISMS

The use and role of incentive-based infrastructure funding mechanisms are important particularly where, owing to statutory limitations not all infrastructure can be funded by Section 94 contributions or Section 94A levies.

There are only a few incentive-based infrastructure funding mechanisms that are codified in NSW. Those few include Green Square Community Infrastructure contributions (formerly known as the Bonus FSR Contributions System) and Ryde LEP 2014 (Amendment 1) Macquarie Corridor (formerly Macquarie Park Bonus FSR Contributions scheme). These are described further below.

Incentive-based infrastructure funding mechanisms generally seek to leverage:

- Density bonuses and/or planning concessions in an LEP or SEPP.
- 'Capture' of planning gain/value uplift associated with a rezoning or increased density, wherein contributions to public benefit are sought. These are typically negotiated as part of a planning agreement.

In addition to Green Square Community Infrastructure incentive provisions, the City of Sydney adopted new planning controls and the Employment Lands Affordable Housing Program to allow for the transition of employment lands in Green Square from traditional industrial uses to accommodate a diverse range of business activity.

The Employment Lands Affordable Housing Program seeks to encourage the provision of affordable rental housing within the Green Square Employment Lands area and provides a framework for the implementation and operation of two approaches.

- Application of a new levy to fund new affordable rental housing.
- Permissibility of residential uses subject to contribution to/delivery of affordable rental housing.

In many cases, contributions to infrastructure are levied/collected through planning agreements executed in conjunction with planning proposals that either seek to take-up additional floorspace within a codified document or seek a change of zone/use and/or change in density.

4.2.1 Green Square Community Infrastructure Floorspace (Sydney LEP 2012)

Part 6 Division 2 of the Sydney LEP 2012 provides for "additional floorspace" (previously known as bonus floorspace) over and above "base controls" outside Central Sydney in a number of circumstances. These include:

In Green Square where 'community infrastructure' is also provided, i.e. where development for the purposes of recreation areas, recreation facilities (indoor and outdoor), public roads, drainage or flood mitigation works is carried out.

- Commercial premises where 'end of journey floorspace' is also provided, e.g. showers, change rooms, lockers and bicycle storage areas.
- A building that demonstrates design excellence.
- Additional floorspace provided in Green Square is subject to the City of Sydney's 'Development Guidelines – Providing Community Infrastructure in Green Square' (City of Sydney, 2012), referred to as "The Guidelines".

A development proposal incorporating floorspace additional to that permitted in the LEP must be acceptable in terms of environmental capacity, compliance with development controls and have little or no impact on adjoining properties and the surrounding area.

If acceptable on a merits assessment, a package of community infrastructure work must then be agreed with the City. The Sydney DCP identifies a range of community infrastructure (local infrastructure including public streets, pedestrian and bike networks and public open spaces) to be provided in conjunction with community infrastructure in Green Square.

Community infrastructure proposed must be acceptable to the City, and where there is no community infrastructure identified in the Sydney DCP within a site, the additional floorspace could still be achieved subject to the proponent contributing towards the delivery of other community infrastructure off the site but within Green Square.

The Guidelines provide clear direction on how the value of community infrastructure is to be assessed. A dollar rate is used to establish the value of the additional floorspace and package of community infrastructure to be delivered. This dollar value is then used to guide the community infrastructure package, i.e. the quantum of monetary or in-kind contributions to be made.

The dollar rates per square metre of additional floorspace are as follows:

- Residential - \$475/sqm of additional floorspace.
- Retail - \$275/sqm of additional floorspace.
- Other non-residential uses - \$200/sqm of additional floorspace.

These monetary contribution rates are inclusive of GST and were endorsed by the City of Sydney and adopted in 2003. The rates have not been revised since that time. The contribution rates are currently under review by the City.

The monetary contribution rates are premised on a 50% capture of value created (by land use) that results from take-up of the community infrastructure provisions.

For example, if site value was \$2,000/sqm under base controls of FSR 2:1 but worth \$3,000/sqm following take-up of additional floorspace of FSR 1:1, the increase in site value as a result of the additional floorspace is \$1,000/sqm. A 50% capture of this additional value is equivalent to \$500/sqm.

A voluntary planning agreement (VPA) is the legal instrument used for the City and proponent to come to mutual agreement on the additional floorspace and appropriateness of the community infrastructure package, the VPA to be prepared and executed as required by the Environmental Planning and Assessment Act 1979 and Environmental Planning and Assessment Regulation 2000.

History and Premise of Contribution Rates

The predecessor to Community Infrastructure Floorspace in Green Square is the Bonus FSR Contribution system. Following the adoption of South Sydney DCP (1997), an incentive system was put in place with base FSR and maximum FSR identified for the Green Square Urban Renewal Area.

The difference between the base and maximum FSR is known as a 'bonus FSR, where developers were able to potentially achieve a bonus in exchange for delivering an appropriate package of works which would comprise infrastructure and/or public domain works.

Large scale renewal in Green Square commenced in the late 1990's with more than 7,000 dwellings completed in the 10 years from 2002 to 2012. Much development in Green Square over the period has been delivered utilising the bonus FSR provisions with significant public domain works funded and delivered through VPAs.

4.2.2 Macquarie Park Corridor Incentive Scheme (Amendment 1 in Ryde LEP 2015)

Amendment 1 Macquarie Park Corridor (referred to as 'Amendment 1') is an amendment to the current Ryde LEP 2015. The purpose of the amendment is to increase height and floor space ratio controls for the Macquarie Park Corridor to enable the implementation of new roads and parks that will support employment growth and the evolution of Macquarie Park Corridor from Business Park to a specialised employment centre.

Amendment 1 provides a set of incentive controls for the Macquarie Park Corridor which allows for an increase in height or FSR in return for monetary contributions and/or the delivery of public infrastructure including roads and open space. This infrastructure to be delivered is identified in the supporting documentation for Amendment 1.

Incentive Scheme/Funding Model

An incentive scheme operates alongside the LEP controls, a landowner able to develop up to the 'base FSR' under the LEP without making any contributions. A landowner wishing to unlock the site's development potential is alternatively able to make the necessary contributions to access the incentive/bonus FSR.

The principles that underpin the incentive scheme are stated to include:

- **Transparency**
A clear understanding of what infrastructure is to be funded and how contribution rates are calculated and applied to individual sites.
- **Equity**
Landowners must be convinced that the framework treats landowners fairly and that both infrastructure and incentives for development are based on equity and fairness.
- **Practical**
Implementation of the mechanism must be practical and occur in a timely fashion to avoid delays and provide certainty for commercial dealings.
- **Feasible**
The contributions must be reasonable and provide infrastructure without undermining development feasibility at each stage.

Feasibility modelling established that approximately \$298/sqm of bonus FSR was required to fund the cost of the required infrastructure. Notwithstanding, the value of the bonus FSR was calculated at around \$500/sqm and hence a \$298/sqm contribution (60% capture of the bonus) was considered too high to provide adequate incentive for developers to take up the additional floorspace.

Following extensive feasibility testing, Council set the maximum contribution at 50% of the capture of value uplift, or \$250/sqm of additional commercial FSR.

4.2.3 Green Square Employment Lands Affordable Housing Program

The Employment Lands Affordable Housing Program (the Program) provides background, requirements and operational detail for the establishment of affordable rental housing, recognised as key social infrastructure "necessary to support sustainable employment growth and efficient business in the City of Sydney LGA" (City of Sydney, 2015).

The Program contains two approaches to encourage the provision of affordable rental housing and outlines the framework for the implementation and operation of these approaches.

- **Affordable housing levy**
All development within the Green Square Employment Lands are required to make a contribution towards affordable housing, either in-kind or monetary or both.
- **Permissibility of residential uses**
Two areas (termed "the investigation areas" within the Green Square Employment Lands have been identified as having the potential to be rezoned to allow residential uses (market housing) where changes to planning controls will result in public benefit, i.e. delivery of affordable rental housing.

A guideline document is prepared to guide the preparation of planning proposals for the rezoning of a site to allow for market housing as well as for increases in density (whether height and/or FSR). Any proposed changes must have strategic planning merit, and have regard to a number of considerations, including:

- Consistency with the strategic objectives of the NSW Government and The City.
- Appropriateness of proposed uses.
- Suitability of the proposed built form for the site and surrounds.
- Resultant public benefit from change in planning controls.

The City recognises the cost associated with the permissibility of employment lands for residential uses and consequent displacement of business. Equally, The City also recognises the critical need for affordable housing resulting from the rezoning and urban renewal of the Green Square Employment Lands.

Similar to the premise of the Community Infrastructure floorspace provisions in Green Square, an incentive-based mechanism that seeks to capture a portion of the value uplift created by the rezoning applies (e.g. from IN2 Light Industrial to B4 Mixed Use).

A schedule of generic land value rates is applied to estimate the 'before' and 'after' land value of a site that is rezoned. Contribution dollar amounts are equivalent to a 50% capture of increase in land value as a result of a rezoning to permit development of residential in an otherwise industrial area.

There are numerous ad-hoc initiatives by councils in metropolitan Sydney seeking to participate in a share of value uplift resulting from density bonuses and/or planning concessions including rezonings.

The approaches by councils in these instances are not consistent and commonly in response to VPA offers received from proponents. We are aware of a range of percentage captures of value uplift (10%-60%) that have been negotiated. We are also aware of instances in particularly strong and rising residential markets where councils have succeeded in sharing not just in land value uplift but also in development profit.

4.2.4 Draft Planning Circular and Draft Practice Note

In November 2016, the Department of Planning and Environment (DPE) issued a draft Practice Note and draft Planning Circular (DPE, 2016a) to clarify the use of planning agreements to fund items of infrastructure.

Draft Planning Circular on Strategic Planning and Infrastructure Funding

The purpose of the draft planning circular is to guide councils, industry and the community on the importance of strategic land use and infrastructure planning and the appropriate use of voluntary planning agreements (VPAs) that consider fair and reasonable mechanisms for funding infrastructure and other public benefits.

Key provisions include:

- Recognition that VPAs facilitate development contributions for a variety of public purposes, some extending beyond the scope of s94 contributions or s94A levies.
- Infrastructure and public benefit is likely to be delivered in a more comprehensive way if undertaken in tandem with broad strategic planning, rather than determined at the site level.
- VPAs are suited to large development sites where there are "clear benefits in the managed delivery of public benefits in association with development".
- The process and procedure for negotiation of VPAs should be identified by a planning authority and made clear to a developer and VPAs should provide a public benefit that has a clear link to the development.
- A planning authority should not refuse to consider or refuse to forward a planning proposal for gateway determination because a VPA related to land value uplift has not been entered into.
- Consideration of a planning proposal should not be premised on the financial outcome of a VPA.
- Planning authorities should identify when money received under various planning agreements is to be pooled and applied towards the provision of public benefit. In these situations an adopted plan or policy stating the infrastructure objectives would be appropriate.

The draft Planning Circular is to be read in conjunction with the draft Practice Note, which is considered next.

Draft Practice Note on Planning Agreements

The draft Practice Note (DPE, 2016a) is issued to assist in the preparation of planning agreements. It recognises that planning agreements provide a flexible framework under which state and local councils can share in the provision of infrastructure in new release areas or in major urban redevelopment projects.

The draft practice note states that, in contrast to s94 development contributions which are subject to the 'nexus' requirement by the Environment Planning and Assessment Regulation 2000, planning agreements are not required to bear the same nexus because they are by nature voluntary (unlike s94 contributions which are compulsory), facilitating planning benefit where changes to environmental planning instruments are sought.

The following considerations (as relevant to this study) are outlined for planning authorities to consider:

- A planning agreement can wholly or partly exclude the application of local infrastructure contributions (by councils) or special infrastructure contributions (by state government), giving the planning authority scope for negotiating trade-offs in an agreement. This means financial, social and environmental costs and benefits of the development can be redistributed through an agreement.
- Benefits (or contributions) to be provided under a planning agreement should not be used to justify a variation from a development standard (or change to an environmental planning instrument) where the variation is not justified on planning grounds and the benefit is not directed towards achieving the planning objective of the relevant standard.
- While planning agreements should complement other contributions mechanisms, they should not be used as defacto substitutes for contributions plans.
- The concept of 'value capture' is supported, however the provision of planning benefits for the community should be "capturing part of development's profit". The percentage capture should be a "reasonable share of development profit", ensuring the developer's share of profit does not fall below that which is required for the development to be feasible.

Furthermore, the draft practice note provides that planning authorities should ensure:

- Planning agreements are not used as a mechanism to capture "windfall gain".
- Planning agreements are evidence based, preferably peer reviewed and used as a mechanism to introduce agreed public benefit, developed through the processes of strategic planning and community consultation.
- A proposed development provides opportunity for public benefit and infrastructure (including affordable housing) to be delivered by development with regard to the fair apportionment of costs.
- The method of apportioning infrastructure costs is clear, justified and ensures the developer an entitlement to profit that enables development to proceed.
- Proper investigation and consideration of development feasibility and capacity to pay is carried out, preferable on an "open-book basis", if raised as an issue by the developer.

Other key considerations (as relevant to this study) include:

- If a planning agreement is to be linked to planning incentives, density bonuses, planning trade-offs, etc., details of the relevant scheme and its implementation should preferably be contained in an environmental planning instrument or development control plan.
- In the case of a bonus scheme, planning authorities should carry out public consultation, consider the apportionment of funding, examine the feasibility impact and determine the need for the infrastructure.
- Planning proposals, development consents or modifications should be considered on their merits, with the unwillingness of a developer to enter into a planning agreement related to land value increase not a reason to refuse a proposal. By the same token, a planning proposal that may have negative planning outcomes cannot be justified solely on the basis of an opportunity to enter a planning agreement related to windfall gain.

The next section considers the effectiveness of infrastructure funding mechanisms, also in the context of the recently released draft planning circular and draft practice note.

4.3 EFFECTIVENESS OF INFRASTRUCTURE FUNDING MECHANISMS

4.3.1 Statutory Mechanisms

Statutory mechanisms are aimed at facilitating the provision of 'incremental' infrastructure, i.e. as new development occurs.

- **Section 94 development contributions**

These contributions can only be imposed following the preparation of a contributions plan which details the local infrastructure needed and draws the nexus between infrastructure need and new development. In recent years these contributions have been capped (\$20,000 in established areas and \$30,000 in greenfield areas).

- **Section 94A development levy**

This was introduced to allow development contributions to be levied in areas of sporadic development, e.g. regional areas where development is slow/sporadic and established urban areas where development is mainly 'infill' and sporadic in nature.

Imposition of a percentage levy on development does not require councils to prepare a contributions plan akin to s94, particularly due to the nexus required to be established under s94 between development and increased demand for public amenities and public services. A s94A development contributions plan is still required, and which outlines the priorities for the expenditure of the contributions with reference to a works schedule.

Statutory mechanisms are generally centred on the principle of inclusionary zoning, where mandatory contributions are 'included' for all development within a defined area.

These statutory mechanisms were designed to facilitate provision of local infrastructure on an incremental basis and are generally effective where new infrastructure need is predictable, easily identified and quantified.

They are less effective in circumstances of urban renewal development where the required infrastructure is less 'local' in nature and/or where existing infrastructure may require augmentation due to age or is inadequate by contemporary planning standards. It is for these reasons that many local councils are increasingly relying on incentive based infrastructure funding mechanisms.

4.3.2 Incentive-based Mechanisms

Incentive-based infrastructure funding mechanisms can be incredibly effective if conceived and implemented well, as demonstrated by the Green Square Community Infrastructure Floorspace (formerly known as the Green Square Bonus FSR System).

Since its implementation over a decade ago, significant public domain and community infrastructure works have been delivered in Green Square. Today, the Sydney DCP 2012 outlines a list of "community infrastructure" that can be delivered in exchange for, subject to a merits assessment, "additional floorspace" in Green Square. These community infrastructure items include public streets, pedestrian and bike networks and public open spaces.

The large scale renewal of Green Square (led by and cross-subsidised by the residential market) has been effective in delivering substantial amounts of community infrastructure. But for the permissibility of residential uses in Green Square, the rate of infrastructure delivery would conceivably have been much slower.

More recently, the City of Sydney has recognised that the rezoning of the Green Square Employment Lands from industrial to mixed business uses will result in an increased need for affordable housing in the area. To this end, the City has put in place an incentive-based approach to procure affordable rental housing. This includes leveraging the residential market to cross-subsidise the provision of new affordable housing units.

The strength of the residential market in recent years has been unparalleled. This is due to a combination of factors, including a low supply period over the 2004-2008 period which resulted in severe pent-up demand. The strength of this property market has been harnessed effectively in Green Square where the City of Sydney has obtained a significant level of public benefit in new and renewed infrastructure, and seeks to continue to do so for affordable housing outcomes in the employment lands.

Take-up and success of the Macquarie Park Corridor Incentive Scheme remains to be seen. While only recently incorporated into the Ryde LEP (in 2015), it is conceivable that infrastructure delivery will occur at a more moderate pace than witnessed in Green Square given that the contributions to public benefit are directly related to demand for and take-up of commercial space. Delivery of public benefit in areas that are non-residential in nature is expected to be more incremental and not to the same rate of delivery as witnessed in Green Square.

Key Observations

One way of attracting developer interest to an area is to increase the height and FSR controls, however, often this increases landowner expectations and can result in a scale of development that is not financially viable.

The financial benefit resulting from a development of bonus floorspace is enjoyed both by the landowner and developer - the landowner benefits from an increase in land value and the developer from an increase in development profit. In many cases the landowner and developer are the same party.

By levying a contribution rate for bonus floorspace that captures a proportion of the land value uplift, both developer and landowner benefit. As only a proportion of value uplift is captured (say 50%), the remaining value created (50%) benefits the landowner while the developer benefits from a higher profit for a larger development.

This mechanism is only viable where the prices paid for development sites reflect the contribution required for bonus floorspace, i.e. that a developer does not overpay for a site. It is for this reason that the City of Sydney and City of Ryde have sought to codify and clearly detail bonus floorspace contributions so that the relevant parties are informed at the outset and able to make informed decisions at the time of site purchase.

Our review of codified incentive mechanisms identifies some common themes:

- Codified incentive mechanisms have sought to quantify planning gain (specifically land value uplift) that results from a planning intervention on an aggregate basis (i.e. not property-specific).
- A portion of the quantified planning gain (specifically land value uplift) is sought to be captured at 50% of the uplift, expressed as a dollar amount for each additional square metre of GFA.
- The above methodology would appear to have widespread market/industry acceptance as evidenced by high levels of take-up in Green Square.
- Bonus contributions seek to leverage residential markets while recognising that retail/ commercial markets are more fragile and have less tolerance to additional contributions.

Developers are more likely to be willing to pay more for and access bonus floorspace provisions in a rising market, with the expectation that it will be offset by sales revenue. An example is development of incentive/community infrastructure in Green Square. It is conceivable that in a falling market or where demand conditions are soft, developers may not even contemplate bonus floorspace or even develop to the maximum permitted floorspace.

4.3.3 Implications for Funding Infrastructure in the Study Area

There is an opportunity for Council to capture some of the value created towards public benefit and specific items of infrastructure that relate to the Masterplan area, subject to the ability of site-specific proposals to achieve good planning and built form outcomes.

Many industrial-type uses are still present in the Precinct, many of which appear to be operating viably. Large scale renewal will undoubtedly result in a need for delivery of wide-ranging infrastructure to ensure the amenity of future residents, workers and visitors. Beyond s94A levies, an incentive floorspace scheme that captures some of the value created by the permissibility of additional floorspace could assist with delivering public benefit.

Analysis of the codified incentive contributions mechanisms above reveals common use of a dollar rate contribution for additional floorspace (by land use). This contribution is equivalent to 50% of the value of the additional floorspace proposed. This represents the land value component of planning gain and does not take into account the increase in profit a developer may enjoy from a larger development.

The recently released draft planning circular and draft practice note (DPE, 2016a) appears to favour the capture of a proportion of the increase in development profit over the increase in land value, advocating proper investigation and consideration of development feasibility on an “open-book” basis. It also states that planning agreements should not be used as a mechanism to “capture windfall gain”.

We have some reservations with some of the principles articulated in the draft policy documents released by DPE:

- **Capture of “windfall gain”**

According to the Economic Times, windfall gain (or windfall profit) is an “unexpected gain in income which could be due to winning a lottery, unforeseen inheritance or shortage of supply. It further notes that windfall gains are transitory in nature. An example of property prices is given in the Economic Times definition - for instance, when real estate property prices rise dramatically and the owner can make a substantial amount of profit by selling the property (also referred to as “windfall profit”). It notes that many countries define laws to tax windfall profits.

By our understanding, “windfall gain” could cover an unexpected rezoning or an upzoning (increase to density), expansion of the urban footprint or the construction of a new access road, all of which could result in a rise in property prices. This rise in property prices would be akin to windfall gain. This is in contrast to development profit which accompanies project risk and is intended to compensate for the risk that is inherent in development.

Accordingly, our interpretation of “windfall gain” is where the financial gain is unexpected or unforeseen, and not due to the endeavours of the landowner or developer. Consequently and as a matter of construction, where a change to planning controls is actively sought by a proponent we suggest it does not fall within the definition of windfall gain. As a corollary of this, capture of a proportion of land value increase or development profit would therefore not amount to capturing windfall gain.

- **“Reasonable share” in development profit**

The draft practice note supports capture of a “reasonable share” of development profit for public benefit, noting that there should be a recognition of a developer’s entitlement to a share of development profit and that the capture of development profit should not result in the developer’s share falling below a level where the development is no longer feasible to undertake.

To test the quantum of development profit share that could be captured by Council, we have carried out modelling to establish what a “reasonable share” of development profit might be whilst ensuring a developer still receives a share of profit that meets investment hurdle rates. This is compared against the method of capturing a 50% share of the value of additional floorspace, which represents the land value component.

Table 4.1 builds on generic feasibility testing in section 3.4 and outlines the two methods of ‘value capture’, i.e. a capture of land value uplift compared with a capture of development profit.

The following steps define the calculations in Table 4.1:

- Adopt FSR of 1.5:1 as a generic base FSR - earlier assessed in section 3.4.4 to be the minimum FSR required on an aggregate basis for development of sites to be feasible.
- **Implications for land value**
 - Examine implications for land value if development was to beyond base FSR 1.5:1.
 - Apply 50% capture to increase in land value uplift to calculate contribution (\$/sqm additional GFA).
- **Implications for development profit**

Iteratively test the proportion of development profit that could ‘reasonably’ be captured whilst ensuring target hurdle rates (development margin and internal rate of return) are feasible for development. The cost of land is a key variable to calculating development profit, and is varied in 2 scenarios tested below.

 - If the price paid for a site was reflective of development potential to base FSR of 1.5:1, development to beyond the FSR 1.5:1 would result in a higher development profit (as the development is now larger).
 - If the price for a site paid speculatively assumed a higher development potential beyond FSR 1.5:1 would be achievable, development profit would be modest.

Table 4.1: Potential Value Capture Calculations

Description	Existing Planning Controls		Alternate Planning Controls		
	FSR 1:1	FSR 1.5:1	FSR 2:1	FSR 2.5:1 (9 storeys)	FSR 2.5:1 (20 storeys)
Land Use Split	Ground floor retail (500sqm), upper floors residential				
Assumed GFA (sqm)	1,000	1,500	2,000	2,500	2,500
Assumed No. of Storeys	3-4	3-4	6-8	<10	20
Capture of Land Value Uplift					
Residual Land Value (RLV)	\$919,052 (a)	\$1,361,233 (b)	\$1,690,902 (c)	\$2,179,836 (d)	\$2,343,191 (e)
Uplift to Residual Land Value ¹ (\$/sqm of additional GFA)			\$329,669 (c - b) \$659	\$818,603 (d - b) \$819	\$981,957 (e - b) \$982
Capture 50% (\$/sqm of additional GFA)			\$330 (f)	\$409 (g)	\$491 (h)
Total Contribution ²			\$165,000 (f) x 500sqm	\$409,000 (g) x 1,000sqm	\$736,500 (h) x 1,500sqm
Capture of % Development Profit (land cost assumed at RLV of base FSR 1.5:1)					
Assumed Land Cost ³	\$919,052	\$1,361,233	\$1,361,233	\$1,361,233	\$1,361,233
Development Profit	\$821,435	\$1,276,053	\$2,081,341	\$3,058,700	\$3,295,021
Required Development Profit ⁴			\$1,728,579	\$2,208,977	\$2,254,838
Profit for Reasonable Capture ⁵ (\$/sqm of additional GFA)			\$312,201 (\$624/sqm)	\$756,594 (\$757/sqm)	\$922,606 (\$615/sqm)
% Capture of Profit			15%	25%	28%
Capture of % Development Profit (land cost assumed at respective RLVs)					
Assumed Land Cost ⁶	\$919,052 (a)	\$1,361,233 (b)	\$1,690,902 (c)	\$2,179,836 (d)	\$2,343,191 (e)
Development Profit			\$1,728,092	\$2,181,956	\$2,243,320
Required Development Profit ⁴			\$1,728,092	\$2,181,956	\$2,243,320
Profit for Reasonable Capture ⁵ (\$/sqm of additional GFA)			-	-	-
% Capture of Increased Profit			-	-	-

Notes:

1 - Uplift to Residual Land Value over assumed base FSR of 1.5:1

2 - Multiplied by additional GFA over base FSR of 1.5:1

3 - Land cost assumed at \$1,361,233 which is the RLV of development to FSR 1.5:1

4 - For development to be feasible, i.e. target hurdle rates (development margin and internal rate of return) are achieved

5 - Capture of profit for public benefit whilst still ensuring development is feasible

6 - Land cost paid assumes site can be developed to beyond the base of FSR 1.5:1, i.e. developer pays a speculative price for the site on the assumption that greater floorspace will be achieved

Source: AEC

The following observations emerge from the analysis and calculations in Table 4.1.

- **Implications for capture of land value uplift:**

- As development potential increases, so does site value (or residual land value, RLV). In terms of uplift in land value, the analysis suggests \$650/sqm-\$980/sqm per additional GFA.
- Should 50% of this additional value per sqm of GFA be captured for public benefit, contribution rates of \$330/sqm-\$490/sqm of additional GFA could be considered.

- **Implications for capture of development profit share (2 scenarios):**

If however, Council sought to capture a proportion of development profit (instead of a proportion of land value uplift), the opportunity for this contribution to public benefit depends on the presumed cost of land.

- Scenario 1: If a developer purchases a site for a price reflective of development to base FSR controls (assumed at FSR 1.5:1 in the generic testing), a reasonable proportion of profit share (15%-28% in the examples above) equates to a larger monetary amount than if just a proportion of land value uplift were captured.

In the cited examples, contribution rates of \$610/sqm-\$760/sqm of additional GFA result. This is greater than the \$330/sqm-\$490/sqm of additional GFA if a proportion of land value increase per square metre GFA was captured.

- Scenario 2: If a developer purchases a site on a speculative basis assuming there is greater development potential than contained in the planning instrument, and pays a higher price for the site, the analysis shows there to be limited opportunity for Council to share in development profit without the development becoming unfeasible.

The opportunity for Council to share in any value associated with change to planning controls is underpinned by the cost of land, whether a site is purchased for its development potential under the relevant planning instrument or if a site was purchased at a price speculative of and predicated on change to planning controls.

5. CONCLUSION AND RECOMMENDATIONS

5.1 MATTERS FOR CONSIDERATION

5.1.1 Wickham Masterplan

Council's vision for the Masterplan area is characterised by distinct character precincts, principally focusing higher densities along the rail corridor and areas next to Wickham Park. The redevelopment and renewal of the Study Area will assist in improving connectivity within the area as well as to adjoining areas. Similar to other areas that have a legacy of industrial uses, transition and renewal into a vibrant mixed use precinct will be accompanied by infrastructure requirements to ensure adequate access and amenity for the new uses.

Our investigations reveal market attitudes to higher density living continue to shift in favour of city living that facilitates access to lifestyle and convenience. Recent market activity indicates sale prices of apartments in some cases approach or exceed the price of freestanding dwellings on the fringe of the city centre. Owner occupiers and investors are understood to be equally active, and in particular the downsizer market.

While affordability factors no doubt constrain the market's ability to pay for new residential product (whether purchase or rent), the market appears to have awakened to the benefits of city living, equally buoyed by public investment into infrastructure and revitalisation initiatives.

Existing uses in the Masterplan area are generally comprised of local service businesses, many of whom have been in occupation for many years. In recent times new occupiers have emerged to take-up space in the area, including medical practitioners, engineering firms and local retail businesses. Existing stock is observed to be tightly held, indicative of the long-term occupation patterns of many current occupants.

An understanding of the values of existing uses is critical to understand the thresholds under which sites may be redeveloped. Existing-use values of sites with industrial buildings are driven by the market for existing industrial uses as well as the market for new mixed use development. Buildings that are well presented and refurbished or that are substantial (over 2 levels) are observed to sell for higher prices (>\$2,000/sqm of overall site area).

In contrast, sites where the existing buildings are small relative to the allotment size and basic (older style warehouses) more modest prices are paid (<\$1,000/sqm of overall site area). Developers are observed to be seeking out these types of sites where the buildings are nearing the end of their economic useful lives.

Density Thresholds

Generic feasibility testing demonstrates that current planning controls (specifically at FSR 1:1) do not facilitate feasible development. Depending on the age and nature of sites within the Study Area (whether existing buildings are modern and valuable or if they are approaching the end of their economic useful lives), different density thresholds would apply for development to be feasible.

While densities can be an effective tool for planning authorities to encourage renewal and redevelopment, not all uses respond to density. Industrial uses do not generally respond to density in the same manner residential uses do, requiring vehicle circulation space and loading/unloading areas as well as high span building clearance. Sites that have environmental issues (for example mine subsidence) also do not necessarily respond to density as the cost to remedy may be prohibitive even after allowing for additional revenue in a taller building.

The threshold for mixed use development appears to be FSR 1.5:1 to FSR 2:1, depending on how much a developer pays to consolidate a site. There are sites where existing buildings are fairly modern and substantial (2 or 3 storeys), which will be more expensive for a developer to consolidate and accordingly require higher FSRs to be financially feasible to develop.

If Council wanted to incentivise large scale and immediate renewal of the Masterplan area, higher densities (beyond FSR 2:1) could be considered to enable the displacement of existing uses and redevelopment of those sites. If however Council's intention is to encourage viable businesses to remain, particularly those that occupy modern buildings and valuable sites, Council could consider designating FSRs that are sufficient to incentivise redevelopment of those buildings that are approaching the end of their economic useful lives.

Cumulatively, the pattern and nature of existing uses and planning framework will undoubtedly underpin development activity, whether sites will transition to alternate uses or if they will remain and continue to accommodate existing uses.

This study assumes that Council would desire an orderly renewal of the Masterplan area, i.e. those sites that are ripe for redevelopment progressed first, with other sites improved with good quality and functional buildings to continue to accommodate businesses and residents until such time they are ripe for redevelopment. Accordingly a base FSR of 1.5:1 is assumed to apply to the Study Area except in Rail Edge where FSRs are at 4:1 and 6:1.

Landowner expectations move in tandem with planning controls - as soon as land is rezoned or upzoned, land values adjust accordingly. As soon as land values adjust, developers will then be required to pay higher prices to consolidate sites and as demonstrated in Table 4.1, the potential for Council to receive a contribution to public benefit is vastly diminished.

5.1.2 Contributions to Public Benefit

There is a recognition by many councils that not all local and community infrastructure can be funded from s94 contributions and s94A levies. This is particularly relevant for urban renewal areas that historically accommodated industrial and similar uses.

The effectiveness of incentive-based mechanisms to fund infrastructure is not in dispute. Many of the codified mechanisms (as detailed in section 4.2) expressly recognise that not all sites have the capacity to accommodate increased densities, regardless of the willingness by a developer to pay a contribution to public benefit. Subject to the environmental capacity of a site, access to additional development potential could be required to contribute to public benefit.

It is important that an incentive contributions framework is within development tolerance and enjoys market and industry acceptance.

It is a truism that capital in search of an investment is mobile and will gravitate to the opportunity that offers the most attractive return. The effectiveness of an incentive contributions mechanism is therefore underpinned by a number of considerations.

- **Efficacy**

Floorspace incentive contributions should be procedurally efficient. Even though negotiations may vary from site to site before eventually culminating in a planning agreement, the process should be swift with the respective parties having a good understanding of the value conferred by the additional floorspace and the contributions required for public benefit.

- **Transparency**

A clear understanding of the principles and methodology of an incentive contribution system is important for industry confidence and buy-in. As with all policy that have cost implications for development, the methodology for required contribution should be predictable and transparent, so as to provide certainty to developers and landowners as they contemplate development of their sites.

- **Equity**

It is important for incentive contributions to be perceived as equitable with clear principles outlining its basis for operation. This will engender industry/market acceptance.

There is a tacit recognition by existing codified incentive floorspace contribution systems that the confinement of value capture for public benefit to land value uplift (excluding the element of development profit) is equitable and that a developer is entitled to any increased development profit as reward for entrepreneurial risk.

The above considerations of efficacy, transparency and equity are broadly consistent with the principles espoused by the recently released draft Practice Note on Planning Agreements.

This study has a number of reservations on the draft Practice Note, particularly where capture of a proportion of development profit necessitates examination and verification of development feasibility assumptions on each site which can potentially be a high cost and high resource activity for all parties. The quantum of development profit

can be subject to a variety of assumptions including the cost of capital (debt and equity) and complex finance structuring arrangements, etc.

In contrast, defining a contribution at a dollar rate per square metre of additional GFA can be easily verified by available market evidence and/or a valuer.

In cases where sites are purchased at a price reflective of their development potential under the LEP and subsequently developed to greater FSRs, a share in development profit (as supported in the draft Practice Note) would result in a larger contribution amount than if a 50% share of land value uplift were required. This comparison is shown in Table 4.1 and re-stated below:

- **Capture of land value increase**
Potential for contribution of \$330/sqm-\$490/sqm of additional GFA achieved over base FSR.
- **Capture development profit** (reasonable share)
 - If developer purchases a site reflective of planning controls, potential for contribution of \$610/sqm-\$760/sqm of additional GFA achieved over base FSR.
 - If developer purchases a site speculatively assuming a successful change to planning controls (whether change of zone or increase to FSR or height), no potential for contribution.

If however, a higher purchase price is paid for the site on the speculative basis that a higher FSR would be achievable, feasibility testing and calculations indicate there is minimal opportunity for a contribution to public benefit without undermining the feasibility of development. It is therefore important for Council to be clear and explicit about contributions required for sites developed beyond planning controls, subject to the ability of a site to deliver good planning outcomes.

It is important that developers are rewarded for additional risk, particularly in a market such as Newcastle where the higher density residential market is arguably less established and features less depth compared to metropolitan Sydney markets.

A possible incentive within the contributions requirement could be an encouragement for contributions in the form of works-in kind in response to an infrastructure plan prepared as a result of strategic planning by Council. This not only has a cash flow benefit for developers but can serve to deliver key infrastructure works that would benefit the amenity and desirability of the Masterplan area. However where there is limited take-up of incentive floorspace, it could result in piecemeal delivery of public domain works.

5.2 RECOMMENDATIONS

As residential conversion of industrial sites within the Study Area continues to accelerate and the nature of the Study Area further shifts towards that of a mixed-use precinct, market interest for non-industrial commercial floorspace will rise. That said, local service businesses (e.g. automotive repairs, panel beaters, food and beverage suppliers) often seek industrial-type floor space in proximity to their key markets, which are population driven.

Some industrial uses do not co-locate well with residential uses. Business hours of operation, access by large trucks and noise can adversely impact residential amenity. The desirability of residential product is influenced by perception of land use conflicts. Equally, the sustainability of industrial and commercial uses is influenced by their ability to operate in a conflict-free environment. Accordingly, the careful planning and management of co-existence by difference uses is important.

Depending on Council's renewal objectives for the Precinct, a base FSR of 1.5:1 to 2:1 could be considered. It is important to balance the benefits associated with redevelopment and renewal against large scale displacement of existing businesses that may be viable or indeed part of an economic cluster of similar businesses in the area.

The draft Practice Note does not express support for a planning agreement related to land value increase. It also states that a planning agreement should not seek to capture "windfall gain". By our analysis and understanding of what constitutes windfall gain, we suggest that where a proponent (landowner or developer) actively seeks to change the planning controls (as opposed to unsolicited planning intervention by government), any value created or that results from the change in planning controls is not windfall gain.

Requiring a contribution that is expressed in dollar terms per additional GFA achieved is considered to be the most transparent and easily understood by the market. When development sites are traded, they are almost without exception quoted in terms of price per unit/site or price per GFA. Such a mechanism would also facilitate independent verification by a land economist and/or valuer relying on market evidence. In circumstances where a specific site may have environmental issues (e.g. mine subsidence or contamination), the cost impacts to the project can be factored into a feasibility analysis to examine the impacts on the value of additional GFA.

As outlined earlier, landowner expectations are directly related to development potential of a site. A rezoning or upzoning will almost always immediately translate to increased landowner expectations which then influence the price paid by a developer to assemble a development site. It is therefore critical for any intention by Council to 'capture' a proportion of value to be made clear from the outset so that developers do not overpay for a site.

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APPENDIX A: FEASIBILITY ASSUMPTIONS

Generic feasibility testing adopts the Residual Land Value approach. This involves assessing the value of the end product of a hypothetical development, then deducting all of the development costs (including site acquisition costs, site demolition and/or clearance, construction costs, consultant fees for design and project management, statutory fees) and making a further deduction for the profit and risk that a developer would require to take on the project.

The land value is the 'residual' that remains, i.e. the amount a developer could afford to pay in exchange for the opportunity to develop the site.

Project Timing

Development application is assumed to be progressed immediately upon settlement with pre-sales occurring shortly thereafter. Construction is assumed to begin in Month 9 and span for 3-18 months per stage depending on scale, sale of remaining units to be completed immediately following.

Development Yield

- Mixed use development assumed to comprise ground floor retail and residential uses on remaining levels.
- Residential units:
 - Internal unit areas: Studio (40-50sqm), 1 bedroom units (55-65sqm), 2 bedroom units (75-90sqm), 3 bedroom units (110-130sqm).
 - Unit mix: Studio: 1 bedroom: 2 bedroom: 3 bedroom (5%: 25%: 65%: 5%).
- Parking ratios: Studio (0.5 space), 1 and 2 bedroom (1 space), 3 bedroom (2 space), visitor (0.2 space).

Revenue Assumptions

- The following generic revenue assumptions are adopted:
 - Studio units - \$335,000 to \$345,000 (\$7,000/sqm to \$8,000/sqm)
 - 1 bedroom units - \$420,000 to \$470,000 (\$7,200/sqm to \$7,600/sqm)
 - 2 bedroom units - \$530,000 to \$650,000 (\$7,000/sqm to \$7,200/sqm)
 - 3 bedroom units - \$770,000 to \$975,000 (\$7,000/sqm to \$7,500/sqm)
- Depending on views available, sale prices are observed to increase incrementally with higher floors:
- \$2,000 per floor for studios and 1 bedroom units.
 - \$5,000 per floor for 2 bedroom units.
 - \$15,000 per floor for 3 bedroom units.
- Revenue is assumed to escalate at 3% per annum.
 - It is assumed that 50% of apartments would be pre-sold prior to construction and the balance would be settled after construction at the rate of 4-8 units per month.
 - Retail/commercial end sale values are assumed at \$4,000/sqm.
 - Other revenue assumptions:
 - GST is included on the residential sales and excluded on retail/commercial sales.
 - Sales commission included at 2% and 1.5% of gross residential and non-residential sales respectively.
 - Marketing costs of 1% of gross sales.
 - Legal cost on sales was included at 0.25% of gross sales.

Cost Assumptions

- Legal costs, valuation and due diligence was assumed at 0.5% of land price and stamp duty was included. These costs to be paid at settlement assumed in Month 3.
- Cost escalation of 3% per annum was assumed to commencement of construction.
- Residential construction is assumed at:
 - \$2,200/sqm (up to 9 storeys).
 - \$2,500/sqm (10-20 storeys).
 - Balconies at \$800/sqm.
- Deck car parking is included at \$20,000 per space.
- Demolition and clearing costs at \$100/sqm of building area, assumed to comprise 80% of site area.
- 1% of construction cost for site works and excavation.
- 1% of construction cost for services infrastructure.
- A further 5% construction contingency allowance is included.
- Given the scale of the project and numerous stages, professional fees at 9% of construction costs, 5% expended pre-construction and 4% during construction.
- Development management fee at 1% of project cost (excluding land and finance).
- S94A development levies at 3% of the cost of development (this assumes the current 2% levy reverts to 3%).
- Land holding costs assumed at statutory rates.
- Other cost assumptions include:
 - Land purchase price injected as equity with remainder debt funded with interest capitalised monthly (nominal 7% per annum)
 - Finance establishment costs at 0.35% of peak debt.

Hurdle Rates and Performance Indicators

Target hurdle rates are dependent on the perceived risk associated with a project (planning, market, financial and construction risk). The more risk associated with a project, the higher the hurdle rate.

Key hurdle rates assumed for the feasibility modelling are:

- Development margin is the profit divided by total development costs (including selling costs).
- Discount rate refers to the project internal rate of return (IRR) at which the net present values of an investment becomes zero.

Adopted hurdle rates are 18% development margin and 18% discount rate, in line with industry expectations for a market such as Newcastle.

If the resulting profit from the feasibility analysis is large enough to meet the target hurdles, the project is considered a commercial proposition.

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