

# Broadmeadow Place Strategy (Stage 1 Rezoning)

## Economic Impact Assessment

NSW Department of  
Planning and Environment

April 2024

# Document Control

---

Project Manager: Jacob Vince  
Email: jacob.vince@atlaseconomics.com.au  
Telephone: +61 1300 149 151

Job ID: J283  
Job Name: Broadmeadow Masterplan  
and Rezoning

Client: NSW Department of Planning and Environment  
Client Contact: Andrew Golden

Document Name: Broadmeadow Stage 1 EIA draft

Last Saved: 17/05/2024 9:56 AM

Version	Date	Prepared by	Reviewed by
Draft v1.0	8 December 2023	Jacob Vince	Esther Cheong
Draft v1.1	2 May 2024	Jacob Vince	Esther Cheong
Final	17 May 2024	Jacob Vince	Esther Cheong

Liability limited by a scheme approved under Professional Standards Legislation

All care and diligence has been exercised in the preparation of this report. Forecasts or projections developed as part of the analysis are based on adopted assumptions and can be affected by unforeseen variables. Consequently, Atlas Urban Economics Pty Ltd does not warrant that a particular outcome will result and accepts no responsibility for any loss or damage that may be suffered as a result of reliance on this information

# Executive Summary

## BACKGROUND

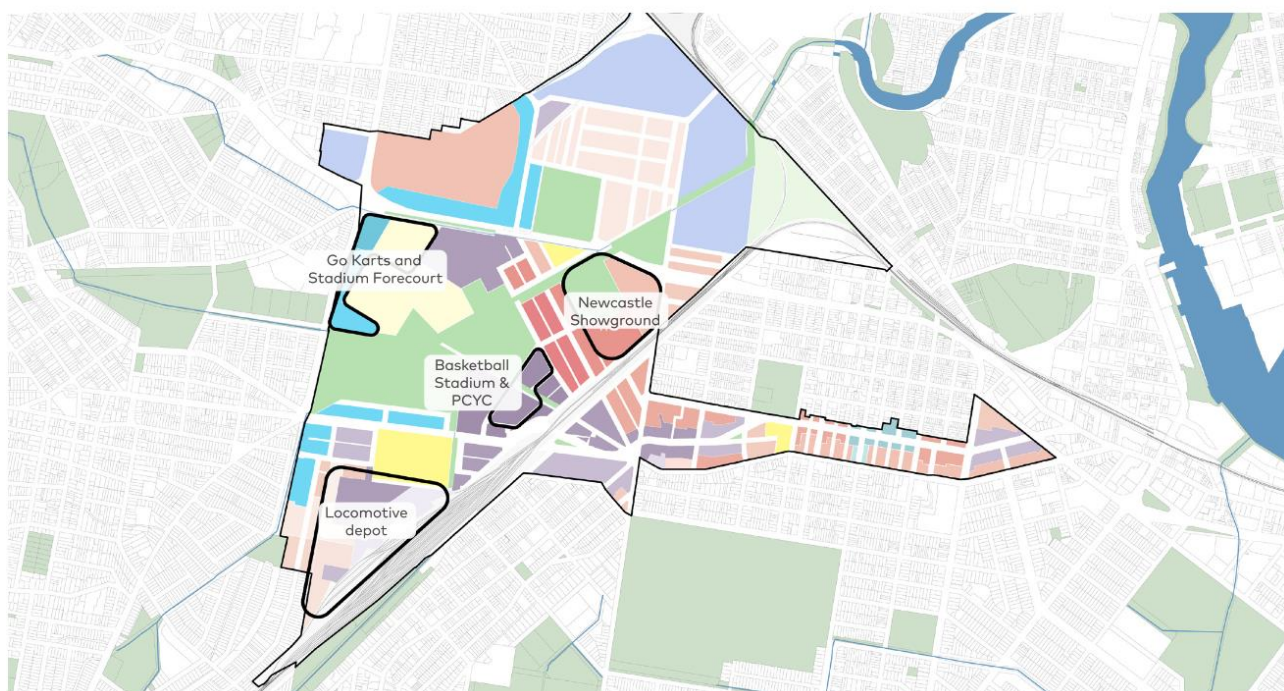
In December 2022, the NSW Government announced \$73.5m towards the Rezoning Pathways Program – an initiative designed to unlock 70,000 homes across NSW by 2024. The Broadmeadow Regionally Significant Growth Area (**Broadmeadow**) has been identified as one of 10 sites to participate in this pilot program.

Located ~3km west of the Newcastle Central Business District (**CBD**), the Broadmeadow Regionally Significant Growth Area was identified in the Hunter Regional Plan 2041 as a priority location for housing growth and urban renewal.

As part of the Rezoning Pathways Program, the NSW Department of Planning, Housing and Infrastructure (**DPHI**), in partnership with the City of Newcastle is preparing a Place Strategy and Structure Plan for Broadmeadow.

The Structure Plan envisages a staged urban renewal process and identifies three development stages. As part of Stage 1, several Government-owned sites are planned for rezoning to provide immediate housing and employment opportunities (**Stage 1 Rezoning**s). These are being led by DPHI with a target rezoning date of 2024.

**Figure ES-1: Stage 1 Rezoning**s



Source: Atlas Economics

Atlas Economics (Atlas) is part of a multi-disciplinary team engaged by DPHI to support the preparation of the Place Strategy. To support the Stage 1 Rezoning package, Atlas is engaged to carry out an Economic Impact Assessment (**the Study**).

### Scope and Approach

The Study focuses on the economic activity generated by the Stage 1 Rezoning, with the following tasks undertaken:

- Review the strategic context of the Broadmeadow Regionally Significant Growth Area, including the vision and objectives for the precinct as outlined in State and local government planning policy.
- Market appraisal to understand the patterns of supply and demand for commercial, retail and residential uses and the baseline market context of the Study Area.
- Review of the preferred Broadmeadow Place Strategy and First Move Rezoning to observe how the proposed land uses respond to market demand.
- Estimate the economic impacts of the First Move Rezoning on the local Newcastle economy and surrounding region.

## STAGE 1 REZONINGS

The First Move Rezoning cover various Government-owned landholdings within the Hunter Park Precinct and former Locomotive Depot Site. The following land uses are proposed:

- The **Former Locomotive Depot site** is developed into a new mixed-use centre, comprising 1,017 medium and high-density dwellings and approximately 19,460sqm of retail and commercial services floorspace.
- The **Basketball Stadium and PCYC site** is developed into a mix of uses as the gateway to the Hunter Park sports and recreation precinct, accommodating 1,042 high-density dwellings, ~2,900sqm of retail and commercial floorspace and ~9,400 of community floorspace.
- The **Newcastle Showground site** will become a new residential community anchored by high-quality greenspace, accommodation 1,141 medium and high-density dwellings.
- The **Go Karts and Stadium Forecourt site** will support the evolution of the Hunter Park sports and recreation precinct, accommodating the future Newcastle Entertainment Centre, short-term accommodation (estimated at 40,000sqm) and retail and food and beverage precinct (estimated at 51,500sqm).

The Stage 1 Rezoning could provide capacity for almost 20% of the total dwellings needed across Newcastle by 2041.

## DEMAND FOR PROPOSED LAND USES

Infill precincts proximate major central business districts such as Broadmeadow will attract a significant level of demand for a variety of land uses.

Based on market research and analysis, the following observations are made on the likely market need for the land uses proposed in the Stage 1 Rezoning.

**Table ES-1: Viability of Proposed Land Uses, First Move Rezoning**

Land Use	Observations	Comment
Residential	<ul style="list-style-type: none"> <li>• All levels of Government have identified that Australia is currently experiencing a 'housing crisis', with historically high dwelling prices and record low vacancy levels having significant social and economic impacts.</li> <li>• The National Cabinet agreed to a National Housing Accord to collectively deliver 1.2 million dwellings across Australia over 2024-2029. NSW would need to deliver 375,000 dwellings over this period.</li> <li>• The Newcastle housing market is facing pressure as demand is outstripping supply. House prices have risen by 43% since 2018, with vacancy levels sub-1% (SQM Research, 2023).</li> <li>• The most recent DPE population projections for the Newcastle LGA indicate the over the coming decades to 2041, an additional ~17,800 dwellings will be required – equating to almost 900 dwellings per annum.</li> <li>• The First Move Rezoning would unlock theoretical capacity for an additional ~3,200 dwellings (30% being Affordable Housing). This would account for almost 20% of the supply needed across Newcastle LGA by 2041.</li> </ul>	Residential uses proposed in the First Move Rezoning (~3,200 dwellings) will respond to a clear market need for housing across the Newcastle LGA
Retail	<ul style="list-style-type: none"> <li>• Historically, there has been around 2.2sqm of retail floorspace provided for every resident across Australia.</li> <li>• In the Newcastle LGA, there is approximately 2.4sqm of retail floorspace per capita (as at 2022).</li> <li>• A mix of trends, principally growing uptake of online retailing, is likely to result in a modest decline in the amount of physical retail floorspace demand over the coming years.</li> <li>• The First Move Rezoning provide capacity for ~3,200 dwellings, which could accommodate some 8,210 new residents.</li> <li>• The first Move Rezoning provides <i>capacity</i> for some ~73,000sqm.</li> <li>• Whilst this is beyond the historical per capita rate in Newcastle, it is noted that some of this floorspace will be catering to a larger catchment than future residents alone.</li> <li>• It will be important that the delivery of the retail floorspace capacity identified in the Stage 1 Rezoning is appropriately staged and delivered.</li> </ul>	Retail uses proposed in the First Move Rezoning will need to be appropriately staged and delivered.

Source: Atlas Economics



## ECONOMIC IMPACTS OF FIRST MOVE REZONINGS

The economic impacts of the First Move Rezonings are estimated using an Input-Output model and assessed at the Newcastle LGA level. The assessment distinguishes the economic impacts during construction and those upon completion.

The analysis only examines the economic activity generated by the land uses envisaged in the First Move Rezonings. Existing economic activity on each of the First Move Rezoning sites is not estimated as:

- The existing Newcastle Basketball Centre is being relocated to a new, large facility opposite McDonald Jones Stadium.
- The existing Newcastle Entertainment Centre and Showgrounds are proposed to be relocated to the north of the Broadmeadow Study Area.
- The heritage-listed former Locomotive Depot site has not been operational for decades and is currently vacant.

Accordingly, the economic activity estimated in this analysis is considered entirely 'additional' or 'net new'.

### Construction Phase

During construction, the First Move Rezonings are projected to generate significant economic impacts for Newcastle:

- **\$3.76 billion** in output (including \$2.1 billion in direct activity).
- **\$1.46 billion** contribution to GRP (including \$623.2 million in direct activity).
- **\$860.2 million** in incomes and salaries paid to households (including \$429.5 million in direct income).
- **8,413 FTE jobs** (including 4,237 FTE directly employed over the course of construction activity).

### Operational Phase

The First Move Rezonings would support a significant annual increase in economic activity across Newcastle on completion:

- **\$1.1 billion** in output (including \$438.2 million in direct activity).
- **\$585.6 million** contribution to GRP (including \$235.5 million in direct activity).
- **\$319.9 million** in incomes and salaries paid to households (including \$151.4 million in direct income).
- **537 ongoing FTE jobs** (including 358 FTE directly related to activity on the Site).

Table ES-2 summarises the estimated economic impacts during the operational phase.

**Table ES-2: Operational Impacts in Newcastle LGA, First Move Rezonings**

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
<b>Operational Employment</b>				
Direct	\$127.1	\$76.1	\$55.2	700
Flow-on Type I (Production-induced)	\$71.5	\$35.0	\$19.4	174
Flow-on Type II (Consumption-induced)	\$130.2	\$72.8	\$31.8	333
<b>Total</b>	<b>\$328.8</b>	<b>\$183.9</b>	<b>\$106.3</b>	<b>1,206</b>
<b>Dispersed Employment</b>				
Direct	\$311.2	\$159.4	\$96.3	807
Flow-on Type I (Production-induced)	\$205.6	\$96.0	\$53.5	482
Flow-on Type II (Consumption-induced)	\$261.5	\$146.3	\$63.8	669
<b>Total</b>	<b>\$778.3</b>	<b>\$401.7</b>	<b>\$213.6</b>	<b>1,958</b>
<b>Total Operational Impacts</b>				
Direct	\$438.2	\$235.5	\$151.4	1,507
Flow-on Type I (Production-induced)	\$277.2	\$131.0	\$72.9	656
Flow-on Type II (Consumption-induced)	\$391.7	\$219.1	\$95.6	1,002
<b>Total</b>	<b>\$1,107.1</b>	<b>\$585.6</b>	<b>\$319.9</b>	<b>3,164</b>

Source: Atlas Economics

## OTHER SOCIO-ECONOMIC BENEFITS

City-shaping projects have the ability to generate a much greater level of economic impacts than smaller, more 'typical' developments. As one of Newcastle's largest urban renewal areas, the initial development of the Broadmeadow Regionally Significant Growth Area could catalyse economic activity across the Newcastle economy.

Beyond the economic impacts generated by the First Move Rezoning during the construction and upon becoming operational, other more indirect economic and social impacts could be produced.

- **Catalyse the Broadmeadow Regionally Significant Growth Area**

The Broadmeadow Regionally Significant Growth Area is recognised in State and local strategic planning policy as a key urban renewal precinct. The Stage 1 Rezoning is proposed on Government-owned landholdings. All things being equal, consolidated sites have better prospects of development.

Accordingly, the Stage 1 Rezoning presents an excellent opportunity to 'catalyse' development activity within the Broadmeadow Regionally Significant Growth Area and act as a market signal for further development.

- **Partially Address Local Housing Demand**

The Newcastle LGA is projected to require an additional ~17,800 dwellings over the 2021-2041 period – equating to almost 900 dwellings per annum. The Stage 1 Rezoning would unlock theoretical capacity for an additional ~3,200 dwellings (30% being Affordable Housing). This could meet almost 20% of future demand to 2041.

- **Support Housing Affordability and Diversity**

Approximately 30% of housing delivered under the Stage 1 Rezoning will be Affordable Housing. This aligns with State and local government planning policy on increasing the supply of Affordable Housing and will support the creation of a new diverse community within the Stage 1 Rezoning areas.

Furthermore, the Newcastle LGA remains a relatively homogenous housing market with only 10% of housing stock being high-density housing. The Stage 1 Rezoning would contribute to a sizeable increase in the number of apartments, partly addressing the lack of housing diversity currently observed.

- **Increase in Rates and Taxation Revenues**

Along with greatly increased economic activity, the Stage 1 Rezoning will support significant taxation revenues to all levels of government including Council rates, local and State development contributions, payroll tax, stamp duty, land tax, and income tax. There could also be an opportunity for voluntary planning agreements (VPA) between developers of the Stage 1 Rezoning Sites and State/local government.

The economic impacts estimated demonstrate the First Move Rezoning has economic merit, having the ability to contribute significantly to the Newcastle economy.

The First Move Rezoning is also considered to have strategic planning and market merit, potentially catalysing further development in the Broadmeadow Regionally Significant Growth Area upon implementation of the Broadmeadow Place Strategy.

# Table of Contents

---

Executive Summary .....	i
Table of Contents.....	v
1. Introduction.....	1
1.1 Background .....	1
1.2 Broadmeadow Regionally Significant Growth Area.....	1
1.3 Emerging Preferred Masterplan.....	2
1.4 Scope and Approach .....	4
1.5 Assumptions and Limitations.....	5
2. Existing Context .....	6
2.1 Strategic Planning .....	6
2.2 Existing Land Uses.....	9
2.3 Demographic Profile .....	10
2.4 Employment Profile.....	10
3. Need for Land Uses .....	12
3.1 Residential Land Uses .....	12
3.2 Retail Land Uses.....	13
3.3 Industrial Land Uses .....	15
3.4 Implications for First Move Rezoning .....	17
4. Economic Impact Assessment.....	18
4.1 Overview and Approach.....	18
4.2 Economic Activity and Impacts.....	20
4.3 Other Socio-Economic Impacts .....	22
4.4 Summary of Findings.....	22
References.....	24

## Schedules

1 Input-Output Modelling Methodology.....	26
---	----

# 1. Introduction

---

## 1.1 Background

In December 2022, the NSW Government announced \$73.5m towards the Rezoning Pathways Program – an initiative designed to unlock 70,000 homes across NSW by 2024. The Broadmeadow Regionally Significant Growth Area has been identified as one of 10 sites to participate in this pilot program.

Located ~3km west of the Newcastle Central Business District (**CBD**), the Broadmeadow Regionally Significant Growth Area was identified in the Hunter Regional Plan 2041 and Greater Newcastle Metropolitan Plan 2036 as a priority location for housing growth and urban renewal.

As part of the Rezoning Pathways Program, the NSW Department of Planning, Housing and Infrastructure (**DPHI**) in partnership with the City of Newcastle (**the City**), is preparing a Place Strategy and Structure Plan for the Broadmeadow Regionally Significant Growth Area (Broadmeadow).

The Structure Plan envisages a staged urban renewal process and identifies three development stages. As part of Stage 1, several Government-owned sites are planned for rezoning to provide immediate housing and employment opportunities (**Stage 1 Rezoning**s). These are being led by DPHI with a target rezoning date of 2024.

Atlas Economics (**Atlas**) is part of a multi-disciplinary team engaged by DPHI to support the preparation of the Place Strategy and Master Plan. As part of this work, Atlas is engaged to carry out an Economic Impact Assessment (**EIA**) to accompany the rezoning package for Stage 1 of the Place Strategy and Master Plan.

## 1.2 Broadmeadow Regionally Significant Growth Area

The Broadmeadow Regionally Significant Growth Area (the Study Area) spans ~280ha of land across the suburbs of Broadmeadow and Hamilton North within the Newcastle local government area (LGA). The Study Area comprises a diverse mix of land uses, including recreational, residential, education, commercial and industrial.

Key precincts within the Study Area include:

- The **Hunter Park Precinct** which is centrally situated within the Study Area and includes McDonald Jones Stadium, the Newcastle Harness Racing Club, Newcastle International Hockey Centre, the Newcastle Entertainment Centre, the Newcastle Basketball Centre, Magic Park and the Knights Centre of Excellence. This precinct is owned by a mix of NSW Government agencies.
- The former **Locomotive Depot Site** at the southern end of the Study Area, which comprises a mix of former depot buildings adjacent the marshalling yard on the Main Northern Line. Formally closed in 1994, the site has been identified as a heritage precinct with the potential for adaptive reuse.
- The **Hamilton North Industrial Precinct** which is located at the northernmost end of the Study Area and comprises a mix of light and heavy industrial uses. Major landholdings within this precinct include the UGL Site, the former Newcastle Gasworks site and the former Shell site.
- The **Nineways Precinct** immediately east of Broadmeadow Train Station, which features a mix of retail and commercial uses around Tudor Street and Lambton Road.
- The **Lambton Road Precinct** which comprises a mix of retail and commercial uses along and south of Lambton Road in the southern section of the Study Area.

The Study Area itself is bisected by Styx Creek – a natural canal which runs from Throsby Creek in the north to Newcastle's southwestern suburbs. Accordingly, much of the Study Area is flood prone and periodically floods.

Like much of Newcastle, the Study Area is also subject to ground contamination given historical coal mining and industrial activity. This is particularly apparent in the Hamilton North Precinct, where several sites are highly contaminated and have been partially remediated (e.g. the former Newcastle Gasworks site).



## 1.3 Integrated Master Plan

Following on from an Enquiry by Design workshop held in October 2023 and based on the findings and recommendations of the multi-disciplinary masterplan team, DPHI and Cox have developed an Integrated Master Plan.

An Integrated Master Plan forms a guide for the future growth and development of a precinct, where future movement networks are designed in conjunction with appropriate land use and density with consideration to both movement and open space. By defining delivery strategies based on thorough analysis of a place's present and predicted social, environmental and economic patterns, the Broadmeadow Integrated Master Plan (**the Master Plan**) establishes an informed long-term framework to achieve sustainable development outcomes.

The Master Plan envisages a broad mix of residential, entertainment, urban services, commercial/retail and public open space and aligns with the aspirations for Broadmeadow outlined in the *Hunter Regional Plan 2041* (detailed in Chapter 2). Key aspects of the Master Plan include:

- **Long-term Expansion of Newcastle Light Rail**

The Master Plan assumes that over the long-term, the Newcastle Light Rail will be expanded to Broadmeadow via the Tudor Street/Belford Road corridor. This will produce opportunities for densification and produce a vibrant arterial high street extending from Broadmeadow to the Newcastle City Centre.

- **Hunter Park**

A redeveloped Hunter Park will balance entertainment and recreation with tourist accommodation, commercial and mixed use development. Hotels, food and beverage, and supporting event facilities on Griffiths and Lambton Roads will meet the demand for local accommodation for events at the stadium and indoor arena. A new regional and aquatic centre will accommodate recreational needs from the broader Hunter Region whilst activating the precinct.

- **New Mixed Use Town Centre**

A new mixed-use Town Centre for Broadmeadow will straddle the existing multi-modal transport interchange. Leveraging existing and future rail, bus and light rail connections, the Town Centre will deliver new high density housing co-located with a range of employment, retail and dining opportunities.

- **A New Pedestrian Boulevard**

A wide, green, pedestrian boulevard will link the multi-modal transport interchange to the Entertainment Precinct at Hunter Park. Nearby, residential uses will frame the Newcastle Showground at the edge of high-quality open space.

- **Adaptive Reuse of the Former Locomotive Depot**

In the southwest of the Precinct the railway heritage items will be adaptively reused and celebrated as community spaces. Government-owned lands provide an excellent opportunity for a wide variety of housing typologies and tenure options, within medium density residential and mixed use development that respond to flood risks.

- **Retention of Industrial Lands in Hamilton North**

Existing industrial sites in Hamilton North will be retained and reinforced as critical employment generating uses. With gradual redevelopment over time, a green buffer will be provided to the surrounding residential area. Small-scale artisan manufacturing, event production, technical services and creative industries will increase employment density and build upon the incubator infrastructure that is emerging in Hamilton North.

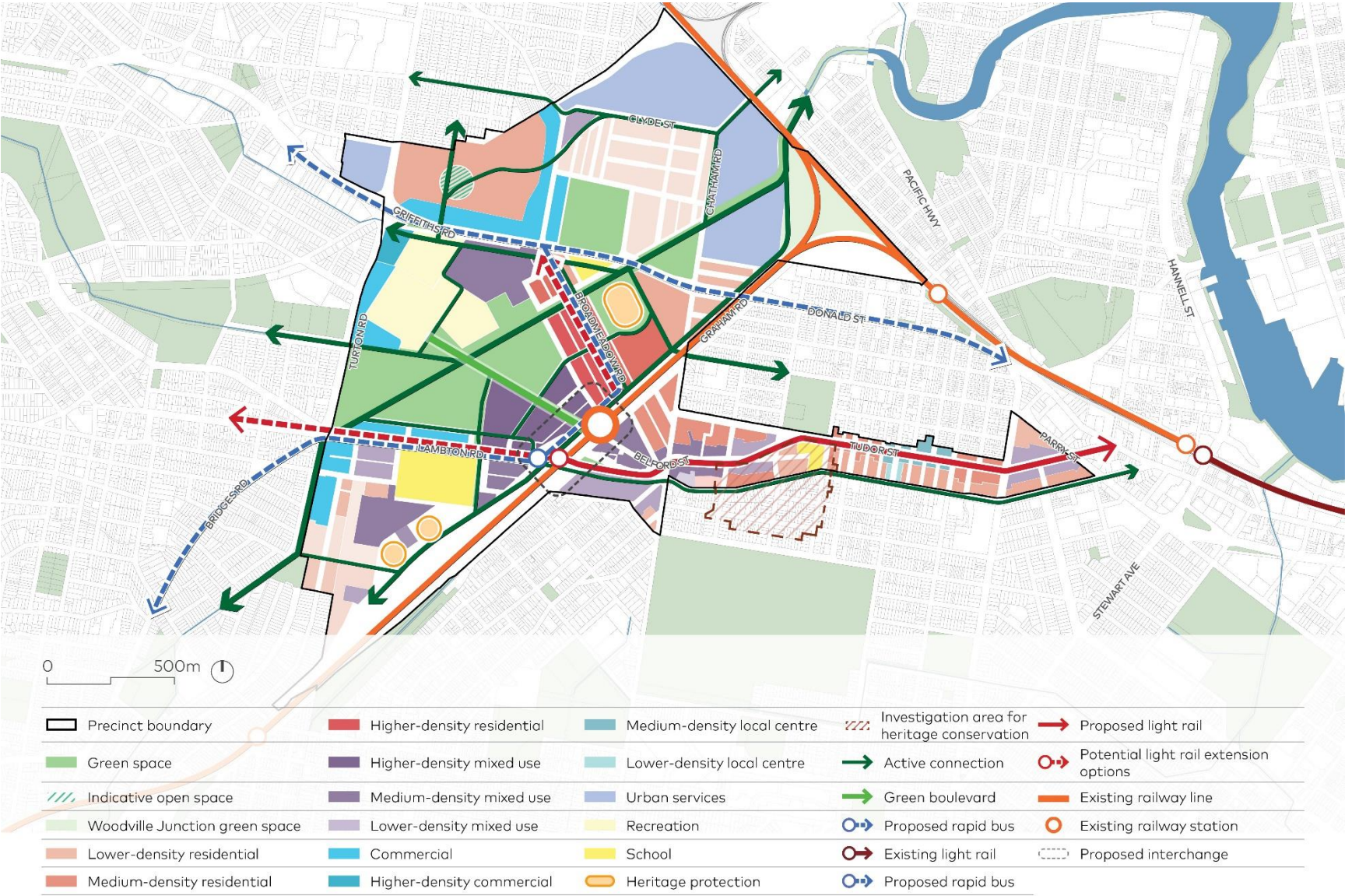
- **Former Goninan Site**

A new residential community will emerge on the former Goninan site in Hamilton North. Ringed by commercial uses and located near an active local centre on Clyde Street, residents will be within walking distance to ample retail and employment opportunities. A future rapid bus corridor on Griffiths Road will place the Newcastle CBD and Broadmeadow Station within reach.

- **Revitalised Styx Creek**

Linking each area together is a revitalised Styx Creek. Given contamination risks, Styx Creek will be landscaped to be a much more accessible and amenable space. Increased canopy cover and water-sensitive urban design initiatives will develop Styx Creek into the backbone of a restored ecosystem and a comprehensive active transport network.

Figure 1-1: Broadmeadow Intergrated Master Plan



Source: Cox Architecture/DPHI



## Stage 1 Rezoning

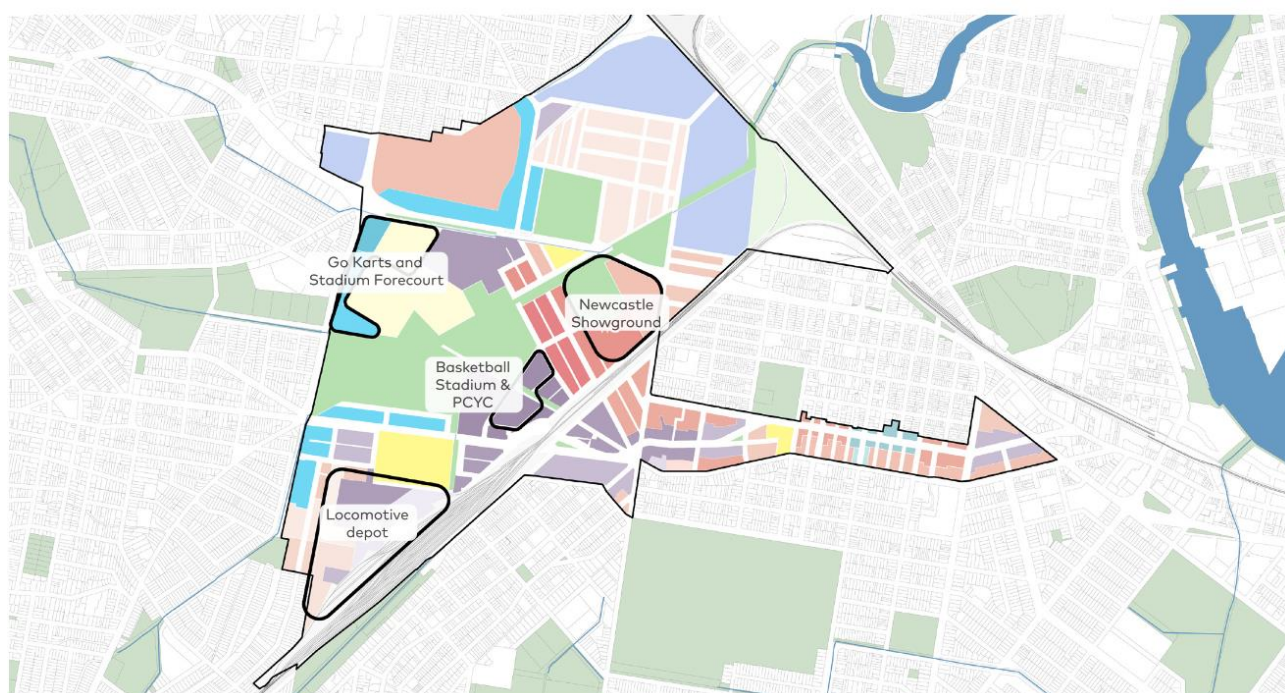
DPHI are leading the rezoning for an initial set of sites across Broadmeadow (referred to interchangeably as the 'Stage 1 Rezoning' and 'Government Moves') which are the focus of this EIA.

The Stage 1 Rezoning include the Newcastle Showground site, Basketball Stadium and PCYC, Locomotive Depot and Go Karts and Hunter Stadium Forecourt.

The Basketball Stadium and PCYC and Newcastle Showground sites will catalyse development in the centre of the Broadmeadow Precinct and establish a local vernacular for future development. New and rejuvenated open spaces are accompanied by active streetscapes that respond to the pedestrian scale, defining new 15-minute neighbourhoods with easy access to daily needs and strong active transport connections.

The Government Moves sites will provide capacity for approximately 3,200 new dwellings, 8,200 new residents and over 2,000 new jobs. These figures equate to 171% of the dwellings originally earmarked for Broadmeadow in the *Hunter Regional Plan 2041* and will assist in Newcastle's future housing needs.

Figure 1-2: Stage 1 Rezoning



Source: Cox/DPHI

## 1.4 Scope and Approach

Atlas is engaged by the NSW DPE to support implementation of the Broadmeadow Place Strategy and Stage 1 Rezoning. This advice is provided in several parts, including:

- **Land Use and Market Analysis Paper** which carried out property market research and development feasibility analysis to understand the opportunity for Broadmeadow to accommodate various land uses.
- Attendance at two **Enquiry by Design Workshops** in May and October 2023 with the wider consultant and stakeholder team which resulted in the preparation of various Master Plan scenarios and the selection of a Preferred Scenario.
- **Economic Impact Assessment (this Study)** which considers how the Stage 1 Rezoning respond to demand for various land uses and estimates the economic impacts that could result if the Stage 1 Rezoning were implemented.

### Approach to Economic Impact Assessment

The following tasks have been undertaken to complete the Economic Impact Assessment.

- Review the strategic context of the Broadmeadow Regionally Significant Growth Area, including the vision and objectives for the precinct as outlined in State and local government planning policy.

- Market appraisal to understand the patterns of supply and demand for commercial, retail and residential uses and the baseline market context of the Study Area.
- Review of the preferred Broadmeadow Place Strategy and Stage 1 Rezoning to observe how the proposed land uses respond to market demand.
- Estimate the economic impacts of the Stage 1 Rezoning on the local Newcastle economy and surrounding region.

## 1.5 Assumptions and Limitations

Atlas acknowledges a number of limitations associated with the Study.

- The long-term economic implications of the COVID-19 pandemic, particularly the shift in migration patterns to the regions, is yet to be fully understood.
- The macro-economic outlook is currently subject to significant uncertainty due to, *inter alia*, global and domestic inflation, labour shortages and various military conflicts.
- The 2021 Census was administered during the COVID-19 pandemic and at a time of widespread lockdowns across Australia's east coast. Activity recorded at this time may not be accurately representative of employment levels.
- Data from third party sources is assumed to be correct and is not verified.
- Desktop market research has been undertaken without physical site surveys and inspections.
- Specific assumptions related to economic impact modelling are detailed in Chapter 4.
- Some economic impacts are not typically modelled within an Input-Output modelling framework, with alternative economic measures better placed to assess their impacts (e.g. Cost Benefit Analysis, Computable General Equilibrium).

Notwithstanding the above, all due care, skill and diligence has been applied to this Study as is reasonably expected.

## 2. Existing Context

This Chapter considers Broadmeadow's existing context, including relevant strategic planning policy, current land uses, the local demographic and worker profile.

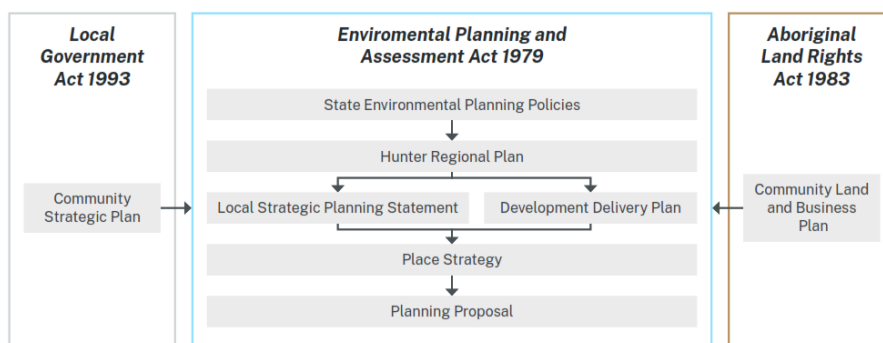
### 2.1 Strategic Planning

#### 2.1.1 Hunter Regional Plan 2041

The Hunter Regional Plan (**the Regional Plan**) is the principal strategic planning framework for the Greater Hunter Region<sup>1</sup>.

It is a statutory 20-year framework prepared under the Environmental Planning and Assessment Act (EP&A Act) which is intended to inform Local Strategic Planning Statements (LSPS) within each respective LGA across the Greater Hunter Region and inform the development of individual Place Strategies, including Broadmeadow.

Figure 2-1: Statutory Planning Framework



Source: DPE (2022)



The Regional Plan specifically identifies 'regionally significant growth areas' appropriate for urban renewal and accommodating housing growth across the Greater Hunter Region. Broadmeadow is specifically identified as a regionally significant growth area within the Greater Newcastle area.

#### Place Strategy Outcomes

The Regional Plan outlines the need for the preparation of a Place Strategy for the Broadmeadow Regionally Significant Growth Area. It outlines a series of key 'place strategy outcomes' which are intended to inform the development of the Place Strategy, focused into seven key themes. These include:

- Diverse and Affordable Housing
- Blue and Green Heart of Newcastle
- Active and Public Transport
- Heritage Assets
- Nationally Significant Precinct
- Urban Renewal and Climate Change Adaptation
- Unique Areas of Change

The Regional Plan describes specific outcomes and actions under each of these themes (which are summarised in **Table 2-1**).

<sup>1</sup> Includes the LGAs Cessnock, Dungog, Lake Macquarie, Maitland, MidCoast, Muswellbrook, Newcastle, Port Stephens, Singleton and Upper Hunter.



**Table 2-1: Place Strategy Outcomes, Broadmeadow Regionally Significant Growth Area**

Theme	Outcomes
Diverse and Affordable Housing	<ul style="list-style-type: none"> <li>Planning will promote new 15-minute neighbourhoods with housing and job options for the precinct.</li> <li>Broadmeadow's connectivity and access to transport infrastructure will drive opportunities for optimal density and diversity in housing types.</li> <li>Housing choice will be supported where a diversity of dwelling types, including apartments and multi-dwelling housing is provided close to high-frequency public transport and open-space assets.</li> </ul>
Blue and Green Heart of Newcastle	<ul style="list-style-type: none"> <li>Create vibrant community spaces through quality public spaces and plazas.</li> <li>Revitalise Styx Creek to enable a well connected green and blue heart at the centre of Broadmeadow.</li> <li>Undertake ecological restoration and urban greening.</li> <li>Cool places by retaining water and expansive tree canopy in the landscape.</li> <li>Establish a hierarchy of open spaces for legibility and wayfinding.</li> </ul>
Active and Public Transport	<ul style="list-style-type: none"> <li>Improve walking and cycling connections across Styx Creek, the rail line and Griffiths, Lambton and Turton roads.</li> <li>Improve public transport, including potential light rail connections.</li> <li>Create accessible spaces for all members of the community.</li> <li>Protect and secure land for transport upgrades, including potential light rail and fast rail.</li> </ul>
Heritage Assets	<ul style="list-style-type: none"> <li>Re-use heritage sites and significant buildings for residential, employment or tourism uses as part of the Locomotive Precinct.</li> <li>Integrate significant landscape sites into the fabric of Broadmeadow.</li> <li>Engage and celebrate Aboriginal and European heritage.</li> </ul>
Nationally Significant Precinct	<ul style="list-style-type: none"> <li>Leverage upgrades to the Hunter Park to create a world-class sport and entertainment complex.</li> <li>Make Broadmeadow as a destination of choice for entertainment, housing, recreation and discovery.</li> <li>Achieve optimum densities of the regional plan and promote employment and tourism activities near high-frequency public transport, open space and walking and cycling connections.</li> </ul>
Urban Renewal and Climate Change Adaptation	<ul style="list-style-type: none"> <li>Encourage sustainable built form and public spaces.</li> <li>Encourage affordable housing choices that respects local character.</li> <li>Manage flooding/water cycle from Styx Creek and its tributaries.</li> <li>Provide opportunities for land uses to transition and adapt in a changing landscape.</li> </ul>
Unique Areas of Change	<ul style="list-style-type: none"> <li>Land in and surrounding the Locomotive Precinct will be investigated for potential housing, employment or unique cultural tourism opportunities. Urban design will integrate heritage into the fabric of the precinct including connections to and through the site and between adjacent uses such as the Hunter School of Performing Arts and brownfield sites. Site-specific matters (flooding, heritage, feasibility, traffic) will guide change.</li> <li>Land north of Griffiths Road including properties in Hamilton North, the Goninan's site and other industrial assets on Clyde Street and Chatham Road could revitalise and refresh the northern gateway of Broadmeadow. These brownfield sites can provide new walking and cycling connections and affordable housing within easy walking reach of daily needs and local social hubs. Each neighbourhood would have its own distinct character, spatial layout and built form. This northern precinct development will benefit from safe and convenient connections across Griffiths Road to adjacent suburbs and from Hunter Park and Broadmeadow Rail Station.</li> <li>Development will only proceed once contamination and flooding are resolved.</li> <li>Open space and quality urban design will provide a platform for optimum densities of the regional plan and a unique and diverse skyline.</li> </ul>

Source: DPE (2022)

## 2.1.2 Newcastle Local Strategic Planning Statement

The Newcastle LSPS is the strategic planning link between the Hunter Regional Plan and Newcastle's Local Environmental Plan (LEP).

Similar to the Regional Plan, it is a 20-year planning framework which implements priorities from the Newcastle Community Strategic Plan (Newcastle 2030) and brings together land use planning actions in other City strategies.

The LSPS outlines Planning Priorities to achieve the City's land use planning vision and will inform our decisions on any changes to the planning rules in Newcastle Local Environmental Plan 2012 and the Development Control Plan 2012.



### Catalyst Area: Broadmeadow

The LSPS identifies Broadmeadow as a 'Catalyst Area' with the potential for urban renewal. Redevelopment of the precinct is identified to be focused around the development of a world class sport and entertainment precinct, whilst former industrial land could provide opportunities for delivering new jobs, visitor accommodation and housing.

The LSPS includes an indicative dwelling and jobs target for the Broadmeadow Catalyst Area of 1,500 dwellings and 550 jobs by 2036. The LSPS also includes a goal of providing at least 30% affordable housing within all new Catalyst Areas.

## 2.1.3 Newcastle Local Housing Strategy

The Newcastle Local Housing Strategy 2020 (LHS) sets a framework for the provision of housing across the Newcastle LGA over the coming 20 years. The LHS formed part of the evidence base which informed the Newcastle LSPS.

The LHS concluded that the Newcastle Local Environmental Plan 2012 (NLEP 2012) had a theoretical capacity of 60,000 additional dwellings. This theoretical capacity is over three times the total number of dwellings projected to be required within the LGA by 2041 (19,450 dwellings). It was noted however that actual housing supply is likely to be lower, due to site-specific constraints, poor development feasibility and sites being withheld from development.

Key priorities identified in the LHS included:

- Maintain and encourage housing supply in the right locations.
- Diversify housing type and tenure across the LGA to provide for a range of housing needs.
- Increase the availability of accessible and adaptable housing.
- Increase the supply of affordable rental housing.
- Ensure new housing and changes to exiting housing reflect the desired future local character.
- Homes are designed to be ecologically sustainable and to reduce resource requirements through the dwelling life cycle.

## 2.1.4 Newcastle Employment Lands Strategy

Similar to the LHS, the Newcastle Employment Lands Strategy (ELS) formed part of the evidence base which informed the Newcastle LSPS and provides a framework for planning for employment lands across the Newcastle LGA.

The ELS made several specific recommendations for Broadmeadow, including:

- In the medium to longer-term, facilitate development of a new local centre in Broadmeadow (preferably in the Nineways Precinct) to accommodate demand for up to 5,000sqm of retail floorspace by 2036.
- Ensure that new retail development at Broadmeadow does not harm the role or function of other centres, particularly Hamilton and Newcastle City Centre

The ELS also made recommendations on existing industrial land in the Broadmeadow Study Area, noting that existing light industrial land should be retained and managed to support a diverse range of industrial and other urban service functions.

The ELS noted that precincts that include 'remnant' industrial lands (such as Broadmeadow) should be considered for redevelopment to other uses.

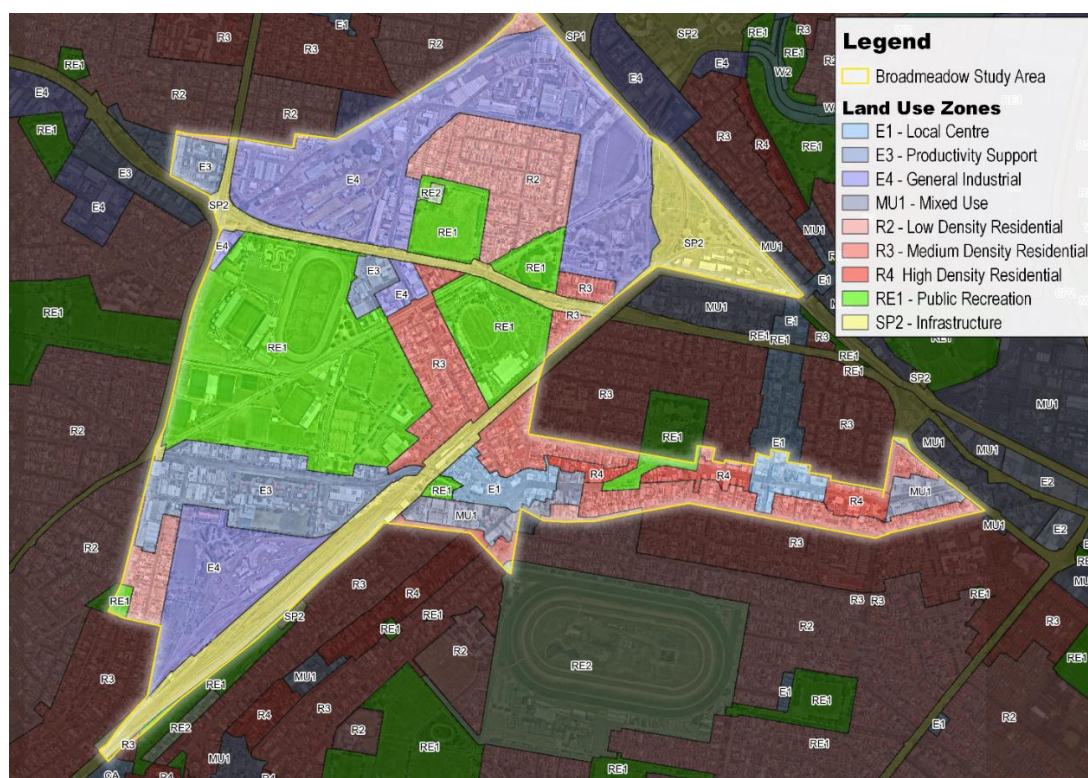
## 2.2 Existing Land Uses

Broadmeadow comprises a diverse mix of existing land uses as reflected in the variety of land use zones which currently apply across the Study Area. These include:

- **RE1 Public Recreation** which includes much of the Hunter Park precinct, Styx Creek and Smith Park in Hamilton North. Whilst zoned 'Public Recreation', many of these areas are not publicly accessible (e.g. parts of the Hunter Park precinct).
- **E1 Local Centre** which is focused in the Nineways Precinct and on Tudor Street at the junction with Beaumont Street. Land uses in the E1 zone are mainly commercial and fine grain retail in nature, with some older style shop top housing.
- **E3 Productivity Support** which applies to the Broadmeadow Shopping Village and surrounding employment precinct opposite the Harness Racing Club and to much of the Lambton Road Precinct. Existing land uses within these areas include a mix of single storey and low rise commercial, industrial and fast food buildings in addition to the Broadmeadow Shopping Village which is a small, older style shopping centre anchored by IGA.
- **E4 General Industrial** which includes the Hamilton North industrial area and the former Locomotive Depot precinct at the southern end of the Study Area. A broad mix of factories, warehouses, strata industrial suites and depot buildings are located throughout the E4 zone.
- **MU1 Mixed Use** applies to part of the Nineways Precinct along Heddon Road and comprises a mix of low rise commercial buildings occupied by a mix of commercial, large format retail and urban service operators. A small cluster of MU1 is also located along Tudor Street and accommodates a mix of commercial and fine grain retail uses.
- **R2 Low Density Residential** is mainly focused in the Hamilton North residential area immediately south of the Hamilton North industrial precinct and is characterised by older style detached housing on smaller, fine grain lots. A small pocket of R2 land is also located immediately west of the Locomotive Depot Precinct.
- **R3 Medium Density Residential** is located throughout much of the Study Area, immediately north of Broadmeadow Train Station and along Tudor Street.
- **R4 High Density Residential** applies to small pockets along Tudor Street to the east of the Nineways Precinct, though is mostly occupied by detached houses, low rise commercial buildings and car yards.

Figure 2-2 illustrates the mix of land use zones which apply across the Broadmeadow Study Area.

Figure 2-2: Land Use Zones, Broadmeadow



Source: Atlas Economics

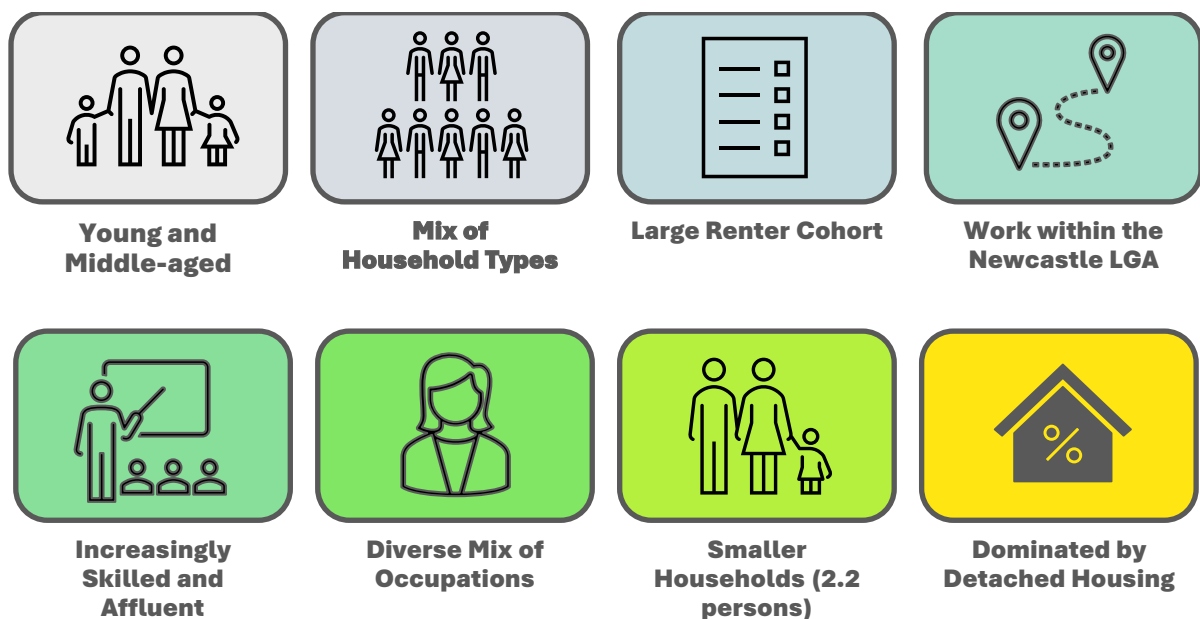
## 2.3 Demographic Profile

The Broadmeadow Study Area comprised a total of just over 2,600 residents in 2022 (based on the suburb boundaries of Broadmeadow and Hamilton North). Analysis of the demographic profile shows that the Study Area is characterised by:

- **Younger and middle-aged residents**, with ~70% aged 49 years old and younger.
- **A mix of household types**, with large numbers of lone person (30%), couples without children (22%) and couples with children (21%) households.
- **A large cohort of renter households**, with almost 40% of households currently renting.
- **Increasingly educated and affluent**, with education and household income levels akin to the Newcastle LGA average.
- Generally **work within the Newcastle LGA** and **travel to work via car**.
- A vibrant and relatively **even split of blue and white collar** professions.
- **Smaller households**, with the average household size of 2.2 persons per household smaller than the Newcastle LGA average of 2.3 persons per household.
- **Mostly low-density housing formats**, with most households (irrespective of household size) living in detached houses with 3 or more bedrooms.

Figure 2-3 illustrates some of the key socio-demographic characteristics of the Study Area as at the 2021 Census.

Figure 2-3: Common Socio-Demographic Characteristics, Broadmeadow Study Area



Source: ABS (2022)

## 2.4 Employment Profile

To understand the existing employment profile of the Broadmeadow Study Area, historical employment data from Transport for NSW's Transport, Performance and Analytics (TPA) division has been analysed. Employment data is sourced from TPA's *Travel Zone Projections 2022 (TZP22)* dataset, which is the primary population, workforce and employment dataset used to inform State Government strategic planning.

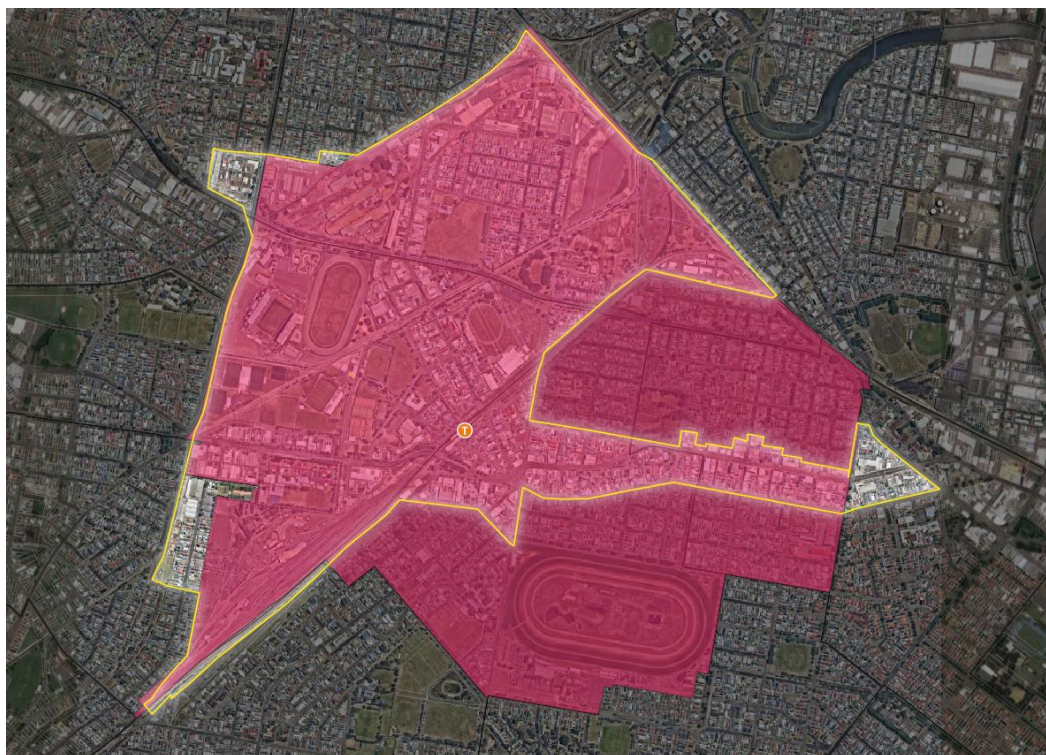
A selection of geographies known as Travel Zones (TZs) are selected for the purpose of this analysis and are defined as the 'Broadmeadow Employment Catchment'.

Whilst the geographical boundaries of these selected TZs are larger than the Broadmeadow Study Area (also comprising the Hamilton Local Centre), they provide insight into the type and rate of employment growth within Broadmeadow over the 2016-2021 period.

Figure 2-4 illustrates the Broadmeadow Employment Catchment (highlighted in pink) compared to the Study Area.



**Figure 2-4: Broadmeadow Employment Catchment**



Source: Nearmap/TPA (2022)

The Broadmeadow Study Area was estimated to accommodate approximately 11,800 jobs as at 2021 (TfNSW, 2022). The mix of local industries is diverse, a direct reflection of a myriad of land uses observed throughout the Study Area.

Five industries account for around 60% of local employment, and include:

- Health Care and Social Assistance: ~1,700 jobs (14.5% of jobs)
- Professional, Scientific and Technical Services: ~1,300 jobs (11.0% of jobs)
- Financial and Insurance Services: ~1,000 jobs (8.9% of jobs)
- Transport, Postal and Warehousing: ~1,000 jobs (8.9% of jobs)
- Accommodation and Food Services: ~1,000 jobs (8.9% of jobs)

Whilst it is important to understand the individual industry makeup of the Study Area, considering employment composition in broader industry terms is often more useful. Broad industry classifications (BICs) group the 19 ANZSIC sectors into four main industry categories – Population-serving, Knowledge Intensive, Health and Education and Industrial.

From a BIC perspective, Population-serving and Knowledge Intensive industries are the major employers across the Study Area, both accounting for around a third of local employment. This is followed by Health and Education, and lastly Industrial.

As shown in **Table 2-2**, this composition has remained largely unchanged over the 2016-2021 period. All BICs recorded growth over the five years to 2021 with the exception of Industrial, which declined by some 4% (~60 jobs).

**Table 2-2: Employment by BIC (2016-2021), Broadmeadow Study Area**

Broad Industry Category	2016		2021		Change (2016-2021)	
	No.	%	No.	%	No.	%
Population-Serving	3,860	35%	4,034	34%	174	5%
Knowledge Intensive	3,431	31%	3,866	33%	435	13%
Health and Education	2,024	19%	2,306	20%	282	14%
Industrial	1,623	15%	1,564	13%	-59	-4%
<b>Total</b>	<b>10,938</b>	<b>100%</b>	<b>11,770</b>	<b>100%</b>	<b>832</b>	<b>8%</b>

Source: TfNSW (2022)



### 3. Need for Land Uses

Brownfield precincts proximate major CBDs such as Broadmeadow will attract demand for a variety of land uses. This Chapter considers the role of Broadmeadow in accommodating demand for the land uses proposed in the Stage 1 Rezonings (i.e. residential and retail). Demand for industrial uses is also considered in the context of the Structure Plan.

#### 3.1 Residential Land Uses

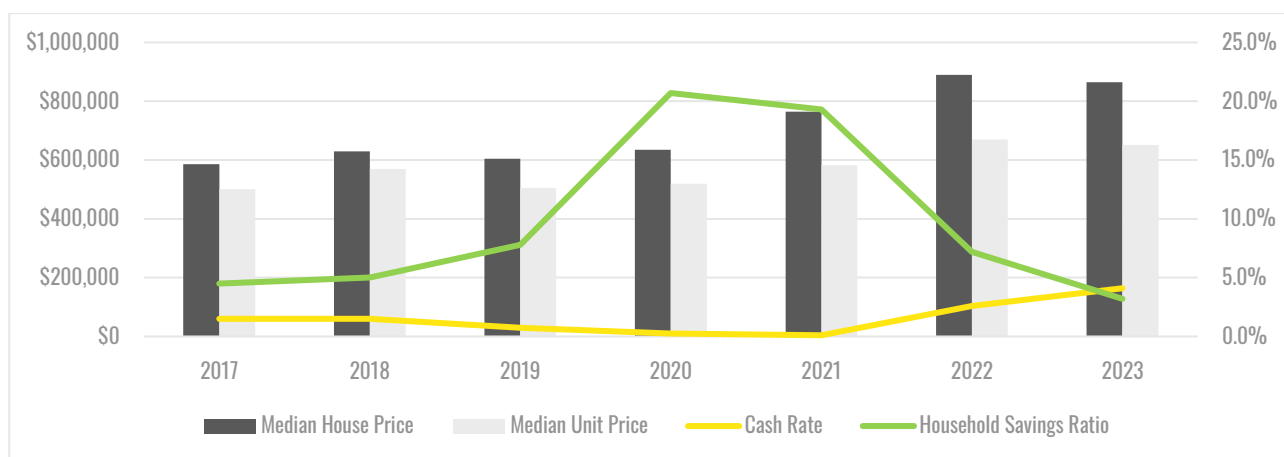
##### Existing Demand

Like much of Australia's East Coast, demand for housing in Newcastle has outstripped supply in recent years, resulting in significant price escalation and historically low rental vacancy rates. All levels of Government recognise that Australia is facing a 'housing crisis', with the National Cabinet announcing a National Housing Accord in October 2023 with the ambitious aim of delivering 1.2 million new dwellings over 2024-2029.

These housing fundamentals are playing across Newcastle. As of October 2023, the median house price across the Newcastle LGA was recorded at \$865,000. This follows growth of over 43% since 2018. Units have also recorded strong growth over this period – up 29% to reach just over \$650,000. Dwelling growth has been particularly swift since 2020.

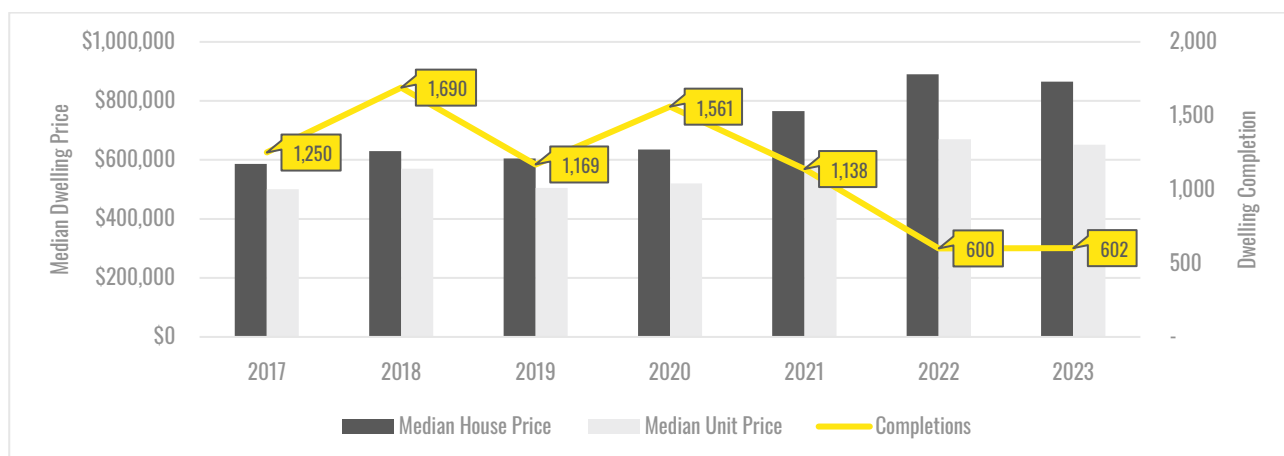
Local housing demand has been driven by a mix of factors; strong population growth, rising household income levels, low unemployment and robust local economic conditions. The historically low cash rate and major uptick in household savings during the COVID-19 period of 2020-2022 has arguably been the primary driver behind dwelling price growth (**Figure 3-1**). Coinciding with this convergence of demand drivers has been a sustained decline in housing completions. As shown in **Figure 3-2**, completions have generally been declining since 2018 whilst prices have recorded robust growth.

**Figure 3-1: Dwelling Values , Cash Rate and Household Savings Ratio (2017-2023), Newcastle LGA**



Source: ABS (2023)/PriceFinder (2023)/RBA (2023)

**Figure 3-2: Dwelling Values and Completions (2017-2023), Newcastle LGA**



Source: DPE (2023)/PriceFinder (2023)

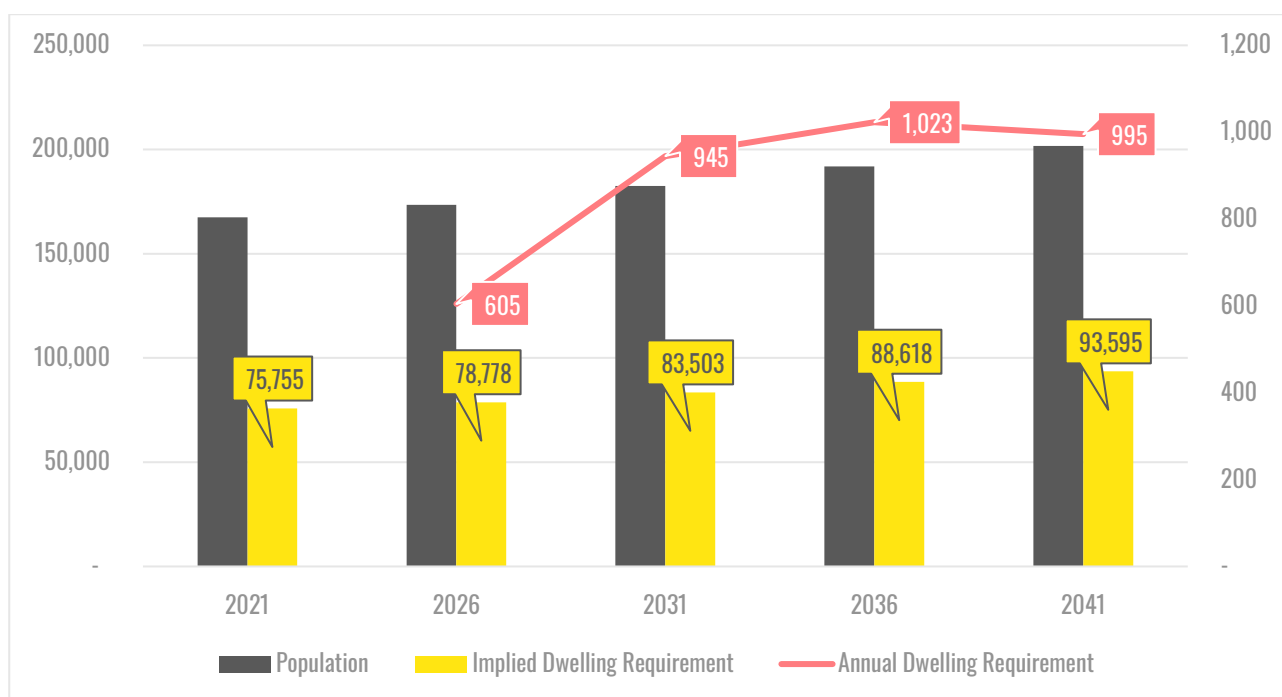
## Future Demand for Housing

Looking forward, population growth will be one of the key drivers of demand for new housing across Newcastle.

Official population projections in NSW are carried out by the DPE Demography and Research Unit. These projections of population growth are divided by projected household occupancy rates to arrive at the number of implied dwellings required to accommodate the projected population.

The most recent population projections prepared by DPE (2022) suggest that the Newcastle LGA will record an additional ~34,000 residents over the 2021-2041 period. To meet this level of growth, circa 17,800 dwellings will be required over the same period – equating to almost 900 dwellings per annum. This is illustrated in **Figure 3-3**.

**Figure 3-3: Population Growth and Implied Dwelling Requirement (2021-2041), Newcastle LGA**



Source: DPE (2022)

### Role for Broadmeadow

The Stage 1 Rezoning proposed under the Preferred Emerging Masterplan would unlock theoretical capacity for an additional ~3,200 dwellings, 30% of these being Affordable Housing dwellings. This alone would account for almost 20% of the implied dwellings needed to satisfy population growth across Newcastle by 2041.

Accordingly, Broadmeadow has the potential to play a significantly role in meeting Newcastle's future housing.

## 3.2 Retail Land Uses

### Australian Retail Provision

Historically, there has been around 2.2sqm of retail floorspace provided for every resident across Australia. This is a widely accepted ratio used throughout the Australian retail industry, based on the last ABS Retail Census undertaken in 1991/92. Retail demand has progressively risen over the past 20-30 years, aligning with real income growth and retail spending.

Retail benchmarks will expectedly vary across metropolitan areas. For instance, retail benchmarks in inner suburban locations are typically around 1sqm per person, where larger format retailers are less commonly located.

In the Newcastle LGA, there is approximately 2.4sqm of retail floorspace per capita as at 2022 (based on the 2022 resident population and total retail floorspace supply identified in the *Newcastle Employment Lands Strategy 2019*).

## Trends and Influences on Retail Demand

The retail sector has been at the forefront of structural change over the past 24-36 months. Whilst the longer-term impacts of the COVID-19 pandemic on spending habits and trends are yet to fully materialise, strategic planning for new precincts such as the Study Area should be cognisant of these potential trends as they will influence the type and quantum of retail floorspace needed over the coming decades. Some of the more obvious longer-term impacts more likely to persist include:

- **Higher Retail Penetration Rates**

Whilst falling from its peak in mid-2021 during the height of COVID-19 lockdowns, online retail penetration rates across Australia have settled at higher levels than pre-pandemic (10.8% in October 2023, ABS). Looking forward, retail penetration levels are expected to grow further. CBRE, for example, project that total online spending will account for 15% of all Australian retail spending by 2027 (CBRE, 2023). Overall, this will provide greater competition for physical retailers, erode some demand for physical floorspace and change retail formats and layout.

- **Changing Shopping Habits**

The pandemic has emphasised the importance of localised shopping facilities and the value of local stores. It has demonstrated the capability of physical retail to provide functions which online retail cannot – the ability to touch, feel and inspect product; the ability to forge connections; instant product fulfilment and return; the experience of being in an active and engaging physical space. Physical retailers who provide convenience or experience are likely to be more resilient. Those without these characteristics are likely to see reductions in demand.

- **Changing Customer Location**

The pandemic has fundamentally altered working patterns with the rise of working from home. This is, in turn, impacting on the quantity, type and spread of retail floorspace needed at the local level. It is likely that more office-based workers will work from home more often, lowering aggregate demand for physical space in traditional office locations. This is resulting in lower city-based retail demand but higher levels of suburban/ regional retail demand.

Overall, the above factors are anticipated to result in a moderate softening in retail floorspace demand (on a per capita basis) as consumers shift to online retailing. These factors are expected to 'play out' across Greater Newcastle and accordingly have implications for the Study Area.

## Market Demand

Demand for retail uses across the Study Area and broader Newcastle region has been strong over the past 18-24 months, a direct reflection of robust population growth, construction activity and localised shopping activity.

For instance, some of the largest shopping centres proximate the Study Area – Westfield Kotara and Marketown Shopping Centre – are trading well with effectively nil vacancy (Arealytics, 2023). The neighbouring Beaumont Street precinct in Hamilton is also trading well with minimal vacancies observed as of October 2023.

Within the Study Area itself, there is an estimated 30,000sqm of retail floorspace. The market is observed to be tightly held, with an estimated retail vacancy rate of 2.7%. This is well below the range of 5%-6% considered reflective of 'healthy' vacancy levels and are further reflective of positive local retailing conditions.

### Role of Broadmeadow

The Stage1 Rezoning provides capacity for some ~73,000sqm of retail and commercial services floorspace.

Whilst this is beyond the historical per capita rate in Newcastle (2.3sqm per person), it is noted that some of this floorspace will be catering to a larger catchment than future residents alone (i.e. visitors to the Hunter Park sports and recreation precinct).

It will be important that the delivery of the retail floorspace capacity identified in the Stage 1 Rezoning is appropriately staged and delivered so any adverse impacts to surrounding centres can be mitigated.

### 3.3 Industrial Land Uses

#### Demand Drivers

Industrial markets across Australia's East Coast are experiencing historically strong market conditions, buoyed by the significant rise in e-commerce driving demand for logistics space, large scale infrastructure projects, residential construction activity and strong population growth driving demand for urban services.

The Newcastle industrial market is no exception. Demand driven by the mining, energy, residential construction and freight and logistics industries is contributing to some of the region's strongest market conditions on record. Vacancy levels are at historically low levels, with capital values and rents recording significant growth over the past 12-24 months.





Demand for industrial land and property across Newcastle is expected to remain strong. Many of the demand drivers (population growth, renewable energy transition, residential construction, major infrastructure projections) are expected to gather future momentum moving forward. Coupled with the potential expansion of the Port of Newcastle into a containerised port, there demand outlook for industrial land across Newcastle is robust.

#### Demand for Different Industrial Typologies

The industrial market is highly diverse and accommodates a broad mix of activities. This has accordingly led to the emergence of a mix of industrial sub-precincts and industrial building typologies to suit the needs of different industries.

**Table 3-1** provides a brief description of the broad industrial typology categories and the occupiers they accommodate.

**Table 3-1: Common Industrial Typologies**

Industrial Typology	Description
<b>Logistics Parks and Distribution Centres</b> 	<p>Logistics parks and distribution centres predominantly accommodate transport and freight orientated users which provide regional interstate services.</p> <p>These precincts comprise large (typically greater than 10,000sqm) high clearance warehouses with significant hardstand and yard space for truck and container movements. Site coverage in these precincts is generally low (50%) with sites in excess of 10ha often required.</p> <p>Common examples of these typologies across the Hunter Region are located in precincts such as Beresfield, Tomago and Sandgate where accessibility to the Pacific Highway is strong.</p>
<b>General Industrial</b> 	<p>General industrial precincts accommodate a broad mix of industrial and business activities (e.g. manufacturing, utilities, transport and freight, urban services, etc) and accordingly accommodate a mix of large and small building typologies.</p> <p>Site coverage in these precincts is typically higher (up to 80%) with a mix of lot sizes.</p> <p>There are numerous examples of general industrial areas across the Hunter Region, including Cardiff, Warabrook and Wallsend.</p>
<b>Light Industrial/Urban Services</b> 	<p>Light industrial and urban service precincts typically accommodate industrial users with a direct population-serving function.</p> <p>These users can typically be accommodated in smaller warehouses, showrooms or industrial suites, and include operators such as construction companies, large format retailers, automotive repairs and recreational uses.</p> <p>As Newcastle's population has rapidly expanded over the past decade, demand for well-located light industrial precincts has grown commensurate. Local examples include Hamilton North and Wickham.</p>
<b>Enterprise Parks</b> 	<p>Enterprises uses is a broad term which refers to light industrial and business uses which require a mix of industrial, warehouse, office and/or showroom space.</p> <p>Enterprise parks generally accommodate knowledge-intensive industries which require a mix of industrial, high-tech, storage showroom and commercial floorspace. This has resulted in the hybridisation of typologies with sites being developed more intensely with a greater proportion of office and/or showroom space.</p> <p>Such forms of hybrid industrial development are prolific in South Sydney markets, though are yet to emerge in Newcastle or the broader Hunter Region.</p>

Understanding the type of demand for industrial floorspace is therefore important given not all locations will be appropriate for different industrial typologies. Historically dominated by large format manufacturers, industrial land uses in the Study Area (i.e. across Hamilton North) have transitioned to accommodate a greater concentration of light industrial and urban service uses. This is expected to further intensify over the coming years as the population of Newcastle expands.

### Remaining Industrial Land Supply

According to the NSW Government's *Employment Land Development Monitor*, there was approximately 758.8ha of undeveloped and zoned employment land across the Newcastle LGA as at January 2022. However, much of this remaining land supply is not currently serviced with critical infrastructure (e.g. water, wastewater, electricity and/or gas).

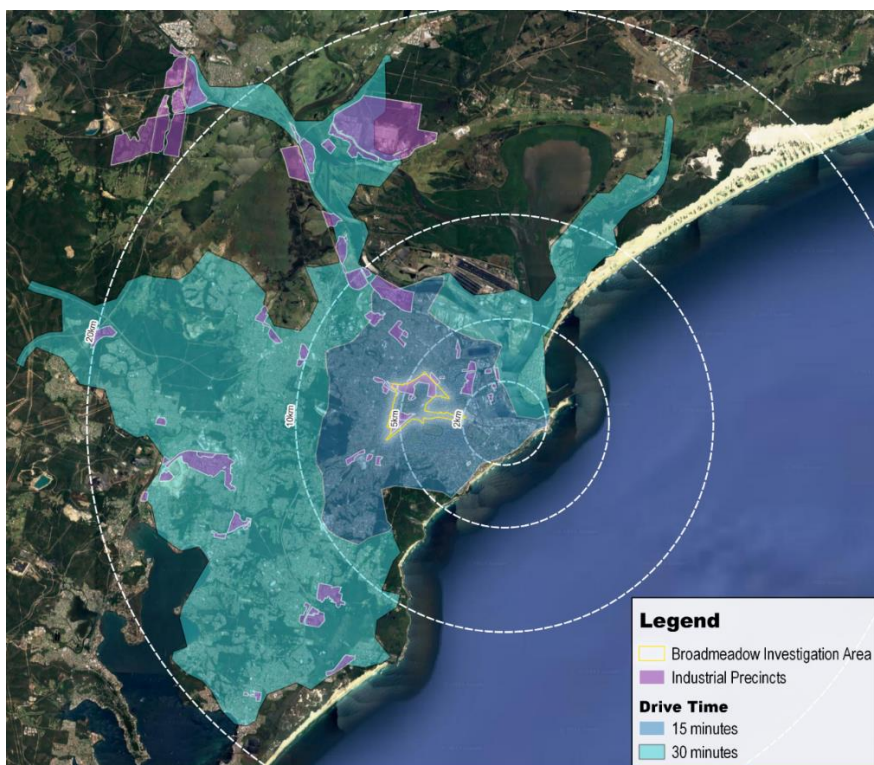
When accounting for land that is both zoned *and* serviced, the amount of remaining industrial land across the Newcastle LGA is significantly lower at **178.5ha** (including 101ha in E zones and ~77ha in SP zones).

Much of this vacant industrial land is located on the periphery of the Newcastle urban area and located in the industrial precincts of Sandgate and Beresfield. These precincts are highly popular amongst large industrial occupiers (e.g. freight and logistics operators) given their proximity to the motorway network and availability of large land parcels.

In contrast, there is very little vacant industrial land within inner Newcastle (~37ha). The Hamilton North precinct (located within the Study Area) currently accommodates 16ha of undeveloped industrial land (noting much of this is contaminated). With the exception of the Mayfield West industrial precinct which comprises ~21ha of vacant industrial land, this represents the only industrial precinct with remaining development capacity within a 15-minute time of the Newcastle CBD.

Proximity to the Newcastle CBD is an important factor for light industrial and urban service operators given their requirement to be close to major population hubs.

**Figure 3-4: Industrial Precincts by Distance and Drive Time of Newcastle CBD**



Source: Atlas Economics/ORS

### Role for Broadmeadow

Given the strong demand outlook for Newcastle's industrial sector and lack of remaining industrial land within inner Newcastle, there is a clear opportunity for Broadmeadow to retain some of its existing industrial land to accommodate industrial uses moving forward. The integrated Master Plan and Structure Plan envisages retaining ~31.5ha of industrial land (within the Hamilton North industrial precinct) to cater to demand for light industrial and urban service uses.



### 3.4 Implications for Stage 1 Rezoning

The Stage 1 Rezoning envisages the delivery of some 3,200 dwellings and ~73,000sqm of retail and commercial services floorspace. This Chapter has examined the market need for the above land uses and makes the following observations.

#### Residential Land Uses

- All levels of Government have identified that Australia is currently experiencing a 'housing crisis', with historically high dwelling prices and record low vacancy levels having significant social and economic impacts.
- The National Cabinet agreed to a National Housing Accord to collectively deliver 1.2 million dwellings across Australia over 2024-2029. NSW would need to deliver 375,000 dwellings over this period to meet the Accord.
- The Newcastle housing market is facing pressure as demand is outstripping supply. House prices have risen by 43% since 2018, with vacancy levels sub-1% (SQM Research, 2023).
- The most recent DPE population projections for the Newcastle LGA indicate that over the coming decades to 2041, an additional ~17,800 dwellings will be required – equating to almost 900 dwellings per annum.

Accordingly, the Stage 1 Rezoning (which provide capacity for ~4,900 dwellings) and the broader Emerging Preferred Masterplan are considered a viable market proposition and will meet some of Newcastle's future housing demand.

#### Retail Land Uses

- Historically, there has been around 2.2sqm of retail floorspace provided for every resident across Australia.
- In the Newcastle LGA, there is approximately 2.4sqm of retail floorspace per capita (as at 2022).
- A mix of trends, principally growing uptake of online retailing, is likely to result in a modest *decline* in the amount of physical retail floorspace demand over the coming years.
- The Stage 1 Rezoning provides capacity for ~3,200 dwellings, which could accommodate some 8,210 new residents.
- The Stage 1 Rezoning provides capacity for some ~73,000sqm of retail and commercial services floorspace.
- Whilst this is beyond the historical per capita rate in Newcastle, it is noted that some of this floorspace will be catering to a larger catchment than future residents alone.

It will be important that the delivery of the retail floorspace capacity identified in the Stage 1 Rezoning is appropriately staged and delivered.

#### Industrial Land Uses

- Whilst not forming part of the Stage 1 Rezoning, the Structure Plan envisages the retaining ~31.5ha of industrial land (within the Hamilton North industrial precinct) to cater to demand for light industrial and urban service uses.
- The Study supports the retention of this existing industrial land, given its strategic location within the Newcastle LGA and strong demand fundamentals for industrial land looking forward.

The next Chapter examines the economic impacts of the Stage 1 Rezoning during construction and upon completion.

## 4. Economic Impact Assessment

This Chapter examines the economic activity and impacts that could result through progression of the Stage 1 Rezoning during construction and upon completion.

### 4.1 Overview and Approach

Economic impact modelling (using models known as Input-Output models) are a method to estimate the overall economic impact within a certain area resulting from a stimulus to the economy, such as a new development or policy.

This analysis considers the economic activity and impacts that could result through progression of the Stage 1 Rezoning during both construction and upon completion.

The analysis only examines the economic activity generated by the land uses envisaged in the Stage 1 Rezoning. Existing economic activity on each of the Stage 1 Rezoning sites is not estimated as:

- The existing Newcastle Basketball Centre is being relocated to a new, large facility opposite McDonald Jones Stadium.
- The existing Newcastle Entertainment Centre and Showgrounds are proposed to be relocated to the north of the Broadmeadow Study Area.
- The heritage-listed former Locomotive Depot site has not been operational for decades and is currently vacant.
- The Hunter Stadium Forecourt is not occupied, and the go-karts track may be relocated to a new location.

Accordingly, the economic activity estimated in this analysis is considered entirely 'additional' or 'net new'.

Economic activity is modelled based on the high-level yields prepared for the various Stage 1 Rezoning Sites. To carry out the economic modelling, a series of assumptions around land use mix and industry allocation have been made by Atlas.

It is highlighted that more detailed development planning for each of the Stage 1 Rezoning Sites is anticipated to occur following rezoning which may result in a different split of land use and industry mixes than that adopted in this Study.

The following yields have been modelled for the purpose of this Study:

- The **Former Locomotive Depot site** is developed into a new mixed-use centre, comprising 1,017 medium and high-density dwellings and approximately 19,460sqm of retail and commercial services floorspace.
- The **Basketball Stadium and PCYC site** is developed into a mix of uses as the gateway to the Hunter Park sports and recreation precinct, accommodating 1,042 high-density dwellings, ~2,900sqm of retail and commercial floorspace and ~9,400 of community floorspace.
- The **Newcastle Showground site** will become a new residential community anchored by high-quality greenspace, accommodation 1,141 medium and high-density dwellings.
- The **Go Karts and Stadium Forecourt site** will support the evolution of the Hunter Park sports and recreation precinct, accommodating the future Newcastle Entertainment Centre, short-term accommodation (estimated at 40,000sqm) and retail and food and beverage precinct (estimated at 51,500sqm).

Economic impacts are assessed at the Newcastle LGA level. An Input-Output model (including the development of specific regional Input-Output transaction tables) was developed to reflect the economic structure of the Newcastle economy (see SCHEDULE 1 for details on the Atlas' approach to regionalisation).

Input-Output modelling considers economic activity through examining four types of impacts as described in **Table 4-1**.

**Table 4-1: Economic Indicators**

Indicator	Description
Output	The gross value of goods and services transacted, including the cost of goods and services used in the development and provision of the final product. Care should be taken when using output as an indicator of economic activity as it counts all goods and services used in one stage of production as an input to later stages of production, thus overstating economic activity.
Gross Product	The value of output after deducting the cost of goods and services inputs in the production process. Gross product (e.g. Gross Regional Product (GRP)) defines a net contribution to economic activity.
Incomes	The wages and salaries paid to employees as a result of the Project either directly or indirectly.
Employment	Employment positions generated by the Project or Proposal (either full time or part time, directly or indirectly). Employment is reported in terms of Full-time Equivalent (FTE) positions or person-years.

Source: Atlas Economics

### Types of Economic Impacts

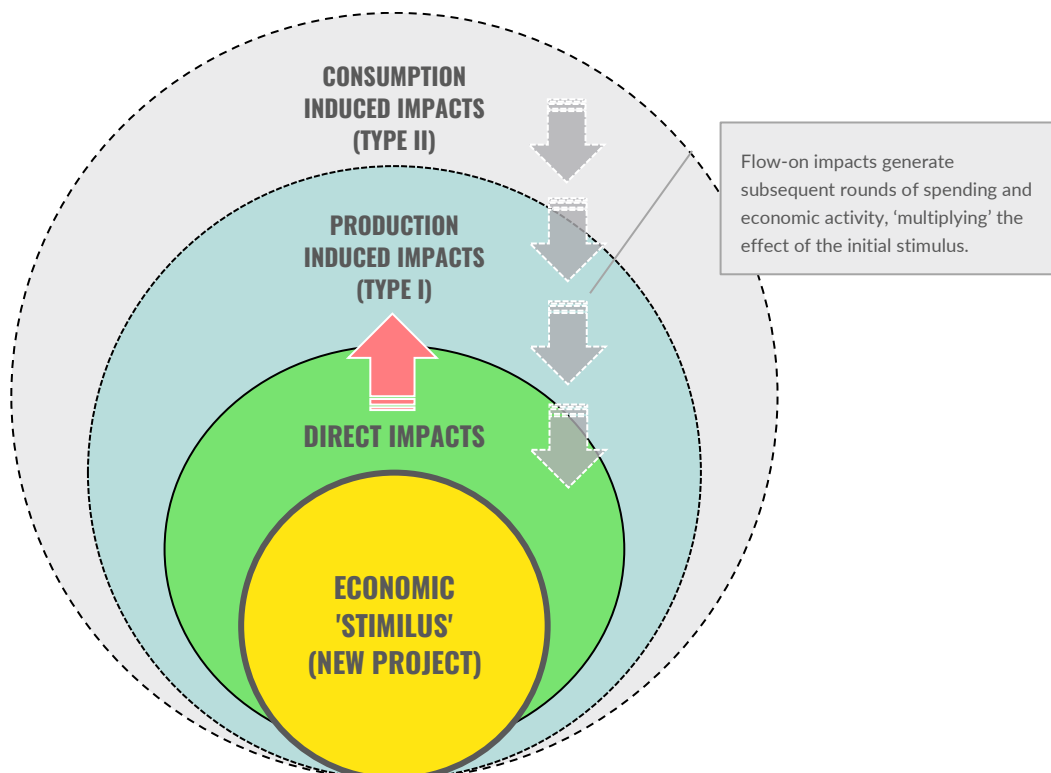
Input-Output modelling traces the economic impact resulting from a stimulus to a local economy through measuring a series of impacts – referred to as ‘Direct’ and ‘Flow-on’ impacts.

- **Direct impacts**, which are the first round of effects from direct operational expenditure on goods and services.
- **Flow-on impacts**, which comprise the second and subsequent round effects of increased purchases by suppliers in response to increased sales. Flow-on impacts can be disaggregated to:
  - **Production-induced impacts (Type I)** show the effects of additional activities undertaken by supply chain industries increasing their production in response to direct and subsequent rounds of spending.
  - **Consumption-induced impacts (Type II)** estimate the re-circulation of labour income earned as a result of the initial spending, through other industry impacts, or impacts from increased household consumption.

The estimates of economic impacts consider production and consumption-induced flow-on impacts. Type II impacts are commonly considered to overstate economic activity and therefore the types of flow-on impacts are reported separately.

**Figure 4-1** illustrates the types of economic impacts and their subsequent rounds of impacts.

**Figure 4-1: Types of Economic Impacts (Direct and Flow-on)**



Source: Atlas Economics

## Drivers of Economic Activity

To properly understand the economic impacts likely to result from the Stage 1 Rezoning, it is necessary to distinguish economic impacts during the construction phase and those economic impacts that will be more permanent in nature following completion of construction and commencement of operations.

- **Construction Phase**  
Construction activity will draw resources from and thereby generate economic activity within and from outside Newcastle. Assumptions are made on the proportion sourced from within and from outside Newcastle.
- **Operational Phase**  
On completion of the Stage 1 Rezoning, the Study Area is expected to generate ongoing economic/ operational activity through the direct activity generated by:
  - Ongoing employment from new entertainment, community, recreational, commercial and retail floorspace.
  - Dispersed employment through persons working from home in new housing.
  - Additional household expenditure from new residents accommodated in new housing.

Refer to SCHEDULE 1 for a description of the drivers and assumptions that underpin the assessed economic impacts.

## 4.2 Economic Activity and Impacts

Economic impacts arising in the Construction phase are estimated separately to the Operational phase. Construction impacts are expected to be short-term in nature and will conclude when development activity is completed.

### 4.2.1 Construction Phase

During construction, the Stage 1 Rezoning are projected to generate significant economic impacts for Newcastle:

- **\$3.76 billion** in output (including \$2.1 billion in direct activity).
- **\$1.46 billion** contribution to GRP (including \$623.2 million in direct activity).
- **\$860.2 million** in incomes and salaries paid to households (including \$429.5 million in direct income).
- **8,413 FTE jobs** (including 4,237 FTE directly employed over the course of construction activity).

Economic impacts during construction are summarised in **Table 4-2**.

**Table 4-2: Construction Impacts in Newcastle LGA, Stage 1 Rezoning**

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
Direct	\$2,104.5	\$623.2	\$429.5	4,237
Flow-on Type I (Production-induced)	\$948.5	\$423.5	\$250.1	2,241
Flow-on Type II (Consumption-induced)	\$709.6	\$408.9	\$180.6	1,935
<b>Total</b>	<b>\$3,762.6</b>	<b>\$1,455.6</b>	<b>\$860.2</b>	<b>8,413</b>

Note: Construction impacts are reported in total for the construction phase, and do not represent an average annual estimate.  
Source: Atlas Economics

### 4.2.2 Operational Phase

Following the completion of construction, the Stage 1 Rezoning could support the following annual economic activity through direct and indirect (flow-on) impacts associated with operations and dispersed employment:

- **\$1.66 billion** in output (including \$892.9 million in direct activity).
- **\$894.7 million** contribution to GRP (including \$484.7 million in direct activity).
- **\$524.0 million** in incomes and salaries paid to households (including \$325.4 million in direct income).
- **5,683 ongoing FTE jobs** (including 3,700 FTE directly related to activity on the across the Stage 1 Rezoning Sites).

**Table 4-3** summarises the estimated economic impacts of the Stage 1 Rezoning was developed and operational.

**Table 4-3: Operational Impacts in Newcastle LGA, Stage 1 Rezoning**

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
<b>Operational Employment</b>				
Direct	\$531.3	\$299.4	\$213.6	2,764
Flow-on Type I (Production-induced)	\$163.8	\$78.3	\$44.2	396
Flow-on Type II (Consumption-induced)	\$293.8	\$169.3	\$74.8	801
<b>Total</b>	<b>\$989.0</b>	<b>\$547.0</b>	<b>\$332.6</b>	<b>3,962</b>
<b>Dispersed Employment</b>				
Direct	\$361.7	\$185.2	\$111.7	936
Flow-on Type I (Production-induced)	\$140.3	\$65.0	\$36.6	324
Flow-on Type II (Consumption-induced)	\$169.1	\$97.4	\$43.0	461
<b>Total</b>	<b>\$671.1</b>	<b>\$347.7</b>	<b>\$191.4</b>	<b>1,721</b>
<b>Total Operational Impacts</b>				
Direct	\$892.9	\$484.7	\$325.4	3,700
Flow-on Type I (Production-induced)	\$304.2	\$143.3	\$80.9	721
Flow-on Type II (Consumption-induced)	\$462.9	\$266.7	\$117.8	1,262
<b>Total</b>	<b>\$1,660.0</b>	<b>\$894.7</b>	<b>\$524.0</b>	<b>5,683</b>

Note: Totals may not sum due to rounding.

Source: Atlas Economics

#### Household Expenditure Impacts

In addition to the activity estimated above, the Stage 1 Rezones are projected to generate additional household expenditure resulting from new residents. This activity is estimated to support on an ongoing annual basis:

- **\$348.6 million** in total output (\$196.0 directly).
- **\$197.5 million** contribution to GRP (\$115.2 million directly).
- **\$105.3 million** in wages and salaries to local workers (\$65.5 million directly).
- **1,228 FTE jobs** (828 direct FTE).

It should be noted that operational and household impacts are not additive, due to potential for double counting of economic impacts (e.g., household spending will result in direct and flow-on activity for businesses operating on-site).

**Table 4-4: Household Expenditure Impacts in Newcastle LGA, Stage 1 Rezoning**

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
Direct	\$196.0	\$115.2	\$65.5	828
Flow-on Type I (Production-induced)	\$59.6	\$28.8	\$16.0	147
Flow-on Type II (Consumption-induced)	\$93.0	\$53.6	\$23.7	253
<b>Total</b>	<b>\$348.6</b>	<b>\$197.5</b>	<b>\$105.3</b>	<b>1,228</b>

Note: Totals may not sum due to rounding.

Source: Atlas Economics



### 4.3 Other Socio-Economic Impacts

Beyond the economic impacts generated by the Proposal during the Construction Phase and upon becoming operational, other more indirect economic and social impacts could be produced.

- **Catalyse the Broadmeadow Regionally Significant Growth Area**

The Broadmeadow Regionally Significant Growth Area is recognised in State and local strategic planning policy as a key urban renewal precinct. The Stage 1 Rezoning is proposed on Government-owned landholdings. All things being equal, consolidated sites have better prospects of development.

Accordingly, the Stage 1 Rezoning presents an excellent opportunity to 'catalyse' development activity within the Broadmeadow Regionally Significant Growth Area and act as a market signal for further development.

- **Partially Address Local Housing Demand**

The Newcastle LGA is projected to require an additional ~17,800 dwellings over the 2021-2041 period – equating to almost 900 dwellings per annum. The Stage 1 Rezoning would unlock theoretical capacity for an additional ~3,200 dwellings (30% being Affordable Housing). This could meet almost 20% of future demand to 2041.

- **Support Housing Affordability and Diversity**

Approximately 30% of housing delivered under the Stage 1 Rezoning will be Affordable Housing. This aligns with State and local government planning policy on increasing the supply of Affordable Housing and will support the creation of a new diverse community within the Stage 1 Rezoning areas.

Furthermore, the Newcastle LGA remains a relatively homogenous housing market with only 10% of housing stock being high-density housing. The Stage 1 Rezoning would contribute to a sizeable increase in the number of apartments, partly addressing the lack of housing diversity currently observed.

- **Increase in Rates and Taxation Revenues**

Along with greatly increased economic activity, the Stage 1 Rezoning will support significant taxation revenues to all levels of government including Council rates, local and State development contributions, payroll tax, stamp duty, land tax, and income tax. There could also be an opportunity for voluntary planning agreements (VPA) between developers of the Stage 1 Rezoning Sites and State/local government.

### 4.4 Summary of Findings

Development resulting from the Stage 1 Rezoning is shown to deliver significant and positive economic impacts to the Newcastle economy and will be an important catalyst for future stages of the Broadmeadow Place Strategy.

During construction, the Stage 1 Rezoning is projected to generate significant economic impacts for Newcastle:

- **\$3.76 billion** in output (including \$2.1 billion in direct activity).
- **\$1.46 billion** contribution to GRP (including \$623.2 million in direct activity).
- **\$860.2 million** in incomes and salaries paid to households (including \$429.5 million in direct income).
- **8,413 FTE jobs** (including 4,237 FTE directly employed over the course of construction activity).

Following the completion of construction, the Stage 1 Rezoning would support a significant annual increase in economic activity across Newcastle, including:

- **\$1.66 billion** in output (including \$892.9 million in direct activity).
- **\$894.7 million** contribution to GRP (including \$484.7 million in direct activity).
- **\$524.0 million** in incomes and salaries paid to households (including \$325.4 million in direct income).
- **5,683 ongoing FTE jobs** (including 3,700 FTE directly related to activity on the across the Stage 1 Rezoning Sites).

The economic impacts estimated in this Chapter demonstrates the Stage 1 Rezoning have economic merit, having the ability to contribute significantly to the Newcastle economy.

The Stage 1 Rezoning are also considered to have strategic planning and market merit, potentially catalysing further development in the Broadmeadow Regionally Significant Growth Area upon implementation of the Broadmeadow Place Strategy.

# References

---

ABS (2023a). *Australian National Accounts: Input-Output Tables, 2019-20*. Cat. No. 5209.0.55.001. ABS, Canberra.

ABS (2023b). *Consumer Price Index, Australia*. Cat. No. 6401.0. ABS, Canberra.

ABS (2023c). *Retail Trade, Australia*. Cat. No. 8501.0. ABS, Canberra.

ABS (2017a). *Household Expenditure Survey, Australia 2016*. ABS, Canberra.

CBRE (2023). *Australia's E-Commerce in the Post-Pandemic Era*. Accessible from: <https://www.cbre.com.au/insights/figures/australia-s-e-commerce-in-the-post-pandemic-era>.

Kronenberg, T. (2009). Construction of Regional Input-Output Tables Using Nonsurvey Methods: The Role of Cross-Hauling. *International Regional Science Review*, 32(1), 40–64.

Landcom (2019). *Productive Places: Common Planning Assumptions – Workspace Ratios*. Accessible from: <https://www.landcom.com.au/approach/sustainability/productive-places/>.

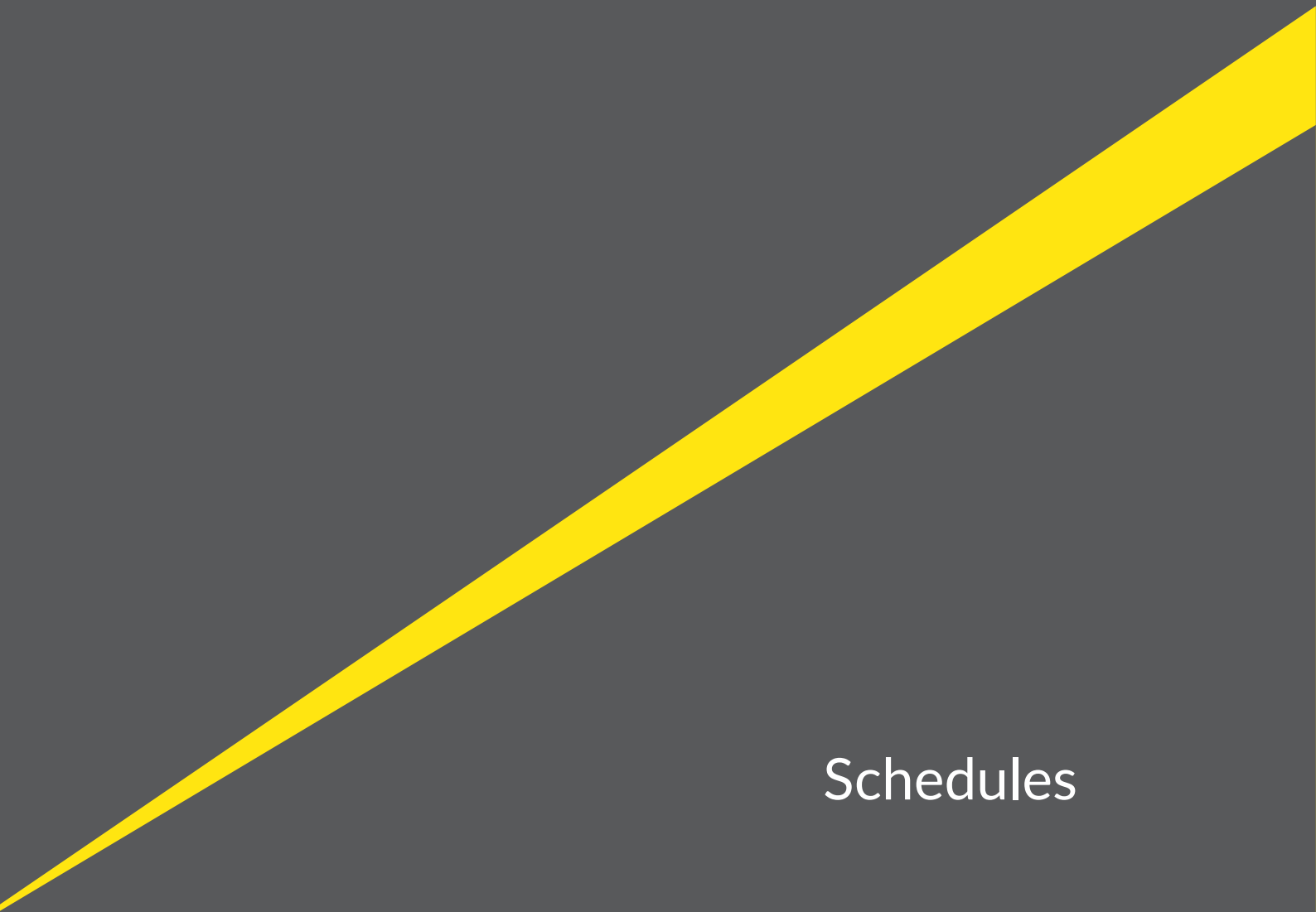
Norbert, S. (2015). Methods for Regionalising Input-Output Tables. *Regional Statistics*, 5(1), 44-65.

NSW DPE (2022). *Hunter Regional Plan 2041*. Accessible from: <https://www.planning.nsw.gov.au/plans-for-your-area/regional-plans/hunter-regional-plan-2041>.

Rosenthal, S. S., & Strange, W. C. (2003). *Geography, industrial organization, and agglomeration*. *Review of Economics and Statistics*, 85(2), 377-393.

SQM Research (2023). *Vacancy Rates: Newcastle*. Accessible from: [https://sqmresearch.com.au/graph\\_vacancy.php?t=1](https://sqmresearch.com.au/graph_vacancy.php?t=1).

Transport, Performance and Analytics (2022). *Travel Zone Projections 2022 (TZP22)*. Accessible from: <https://www.transport.nsw.gov.au/data-and-research/reference-information/travel-zone-projections-2022-tzp22>.



Schedules



# Input-Output Modelling Methodology

Input-Output models are a method to describe and analyse forward and backward economic linkages between industries based on a matrix of monetary transactions. The model estimates how products sold (outputs) from one industry are purchased (inputs) in the production process by other industries.

The analysis of these industry linkages enables estimation of the overall economic impact within a catchment area due to a change in demand levels within a specific sector or sectors.

Impacts are traced through the economy via:

- **Direct impacts**, which are the first round of effects from direct operational expenditure on goods and services.
- **Flow-on impacts**, which comprise the second and subsequent round effects of increased purchases by suppliers in response to increased sales. Flow-on impacts can be disaggregated to:
  - **Industry Support Effects (Type I)** derived from open Input-Output models. Type I impacts represent the production induced support activity as a result of additional expenditure by the industry experiencing the stimulus on goods and services, and subsequent round effects of increased purchases by suppliers in response to increased sales.
  - **Household Consumption Effects (Type II)** derived from closed Input-Output Models. Type II impacts represent the consumption induced activity from additional household expenditure on goods and services resulting from additional wages and salaries being paid within the catchment economy.

Economic analysis considers the following four types of impacts.

**Table S1.1: Economic Activity Indicators**

Indicator	Description
Output	The gross value of goods and services transacted, including the cost of goods and services used in the development and provision of the final product. Care should be taken when using output as an indicator of economic activity as it counts all goods and services used in one stage of production as an input to later stages of production, thus overstating economic activity.
Gross Product	The value of output after deducting the cost of goods and services inputs in the production process. Gross product (e.g. Gross Regional Product (GRP)) defines a net contribution to economic activity.
Incomes	The wages and salaries paid to employees as a result of the Project or Proposal either directly or indirectly.
Employment	Employment positions generated by the Project or Proposal (either full time or part time, directly or indirectly). Employment is reported in terms of Full-time Equivalent (FTE) positions or person-years.

Source: Atlas

## REGIONAL MODEL DEVELOPMENT

Multipliers used in this assessment have been created using a regionalised Input-Output model derived from the 2020-2021 Australian transaction table (ABS, 2023b).

Estimates of gross industry production in the catchment area were developed based on the share of employment (by place of work) of the catchment area within the Australian economy (ABS, 2022) using the Flegg Location Quotient and Cross Hauling Adjusted Regionalisation Method (CHARM). See Norbert (2015) and Kronenberg (2009) for further details. Where required, values were indexed to current dollar values using CPI (ABS, 2023b).

## Modelling Limitations and Assumptions

Input-Output modelling is subject to a number of key assumptions and limitations (ABS, 2023a):

- **Lack of supply-side constraints:** The most significant limitation of economic impact analysis using multipliers is the implicit assumption that the economy has no supply-side constraints. That is, it is assumed that extra output can be produced in one area without taking resources away from other activities, thus overstating economic impacts. The actual impact is likely to be dependent on the extent to which the economy is operating at or near capacity.
- **Fixed prices:** Constraints on the availability of inputs, such as skilled labour, require prices to act as a rationing device. In assessments using multipliers, where factors of production are assumed to be limitless, this rationing response is assumed not to occur. Prices are assumed to be unaffected by policy and any crowding out effects are not captured.
- **Fixed ratios for intermediate inputs and production:** Economic impact analysis using multipliers implicitly assumes that there is a fixed input structure in each industry and fixed ratios for production. As such, impact analysis using multipliers can be seen to describe average effects, not marginal effects. For example, increased demand for a product is assumed to imply an equal increase in production for that product. In reality, however, it may be more efficient to increase imports or divert some exports to local consumption rather than increasing local production by the full amount.
- **No allowance for purchasers' marginal responses to change:** Economic impact analysis using multipliers assumes that households consume goods and services in exact proportions to their initial budget shares. For example, the household budget share of some goods might increase as household income increases. This equally applies to industrial consumption of intermediate inputs and factors of production.
- **Absence of budget constraints:** Assessments of economic impacts using multipliers that consider consumption induced effects (type two multipliers) implicitly assume that household and government consumption is not subject to budget constraints.

Despite these notable limitations, Input-Output techniques provide a solid approach for assessing the direct and flow on economic impacts of a project or policy that does not result in a significant change in the overall economic structure.

## Drivers of Economic Impact

In order to understand the economic impacts likely to result from the Proposal, it is necessary to distinguish economic impacts during the construction phase and those economic impacts that will be more permanent following construction completion.

- **Construction Phase**  
Construction activity will draw resources from and thereby generate economic activity within and from outside Newcastle. Assumptions are made on the proportion sourced from within and from outside Newcastle.
- **Operational Phase**  
On completion of the Stage 1 Rezoning, the Study Area is expected to generate ongoing economic/ operational activity through the direct activity generated by:
  - Ongoing employment from new entertainment, community, recreational, commercial and retail floorspace.
  - Dispersed employment through persons working from home in new housing.
  - Additional household expenditure from new residents accommodated in new housing.

### Construction Phase

For modelling purposes, construction costs (including contingency) for the Proposal Case were broken down into their respective Australian and New Zealand Standard Industrial Classification (ANZSIC) industries.

The breakdowns were developed based on the following assumptions by Atlas regarding the most appropriate ANZSIC industries for each activity.

**Table S1-1: Construction Cost Allocation (including Contingency)**

Item	Cost (\$M)	ANZSIC
Demolition	\$8.6	Construction Services
Residential Construction	\$1,599.7	Residential Building Construction
Basements	\$120.3	Heavy and Civil Engineering Construction
Commercial/Retail Construction	\$221.7	Non-Residential Building Construction
Community	\$26.4	Non-Residential Building Construction
Recreational Facilities	\$43.6	Non-Residential Building Construction
Short-term Accommodation	\$240.0	Non-Residential Building Construction
Landscaping	\$17.3	Construction Services
Site Works	\$227.8	Heavy and Civil Engineering Construction
Professional Fees	\$300.6	Professional, Scientific and Technical Services
<b>Total</b>	<b>\$2,806.0</b>	

Note: numbers may not sum due to rounding  
Source: Atlas Economics

Of the above capital outlay, not all activity will be undertaken within the Newcastle LGA economy. It was assumed:

- Approximately 75% of the direct expenditure on construction-related activity would be sourced from local businesses and labour. Of this:
  - Approximately 25% of purchases on goods and services (supply chain related activity) made by construction-related businesses sourced from outside Newcastle would be spent within the local economy (i.e., 25% of the Type I flow on activity associated with non-local construction companies is assumed to represent additional local activity in Newcastle).
  - Approximately 5% of wages and salaries paid to construction-related workers sourced from outside the region would be spent on local goods and services, such as food and beverages (i.e. 5% of the Type II).

Only flow-on activity of locally sourced professional, scientific and technical services activity (75%) is included, as it is not anticipated professional, scientific and technical services businesses located outside of Newcastle would purchase goods/ services locally.

### Operational Phase

In order to model the economic impacts, operational employment levels were categorised into the ANZSIC industries.

Employment was estimated through converting the envisaged floorspace in each scenario based on industry standard workspace ratios (Landcom, 2019, Atlas estimates). Estimates were also generated for potential dispersed employment (i.e. residents working from home).

Employment by industry estimates were converted to a direct output value using a multiplier based on the transaction tables developed for this assessment (ABS, 2023a). The resultant estimates of output were modelled as the direct activity associated with the Stage 1 Rezoning.

**Table S1-2: Operational FTE Allocation of Floorspace (Stage 1 Rezoning)**

Site	GFA (sqm)	Use/ANZSIC	Floorspace (sqm/FTE)	Employment (FTE)	Output (\$M)
Former Locomotive Depot	19,460	Retail Trade	35	222	\$97.9
		Food and Beverage Services		111	
		Health Care Services		111	
		Personal Services		56	
		Other Services		56	
Basketball Stadium and PCYC	12,337	Retail Trade	20-100	42	\$43.8
		Food and Beverage Services		21	
		Health Care Services		36	
		Sports and Recreation		94	
Go-Karts Site	8,728	Heritage, Creative and Performing Arts	35-80	55	\$20.6
		Sports and Recreation		27	
		Food and Beverage Services		27	
Stadium Forecourt	91,558	Accommodation	91,558	267	\$368.9
		Retail Trade		737	
		Food and Beverage Services		516	
		Personal Services		193	
		Other Services		193	
All Sites (excl. Go-Karts and Stadium Forecourt)	936 workers <sup>1</sup>	Dispersed Employment (ANZSIC split as per Newcastle LGA Place of Usual Residence Employment)	15% work from home <sup>2</sup>	-	\$361.7
<b>132,083</b>		<b>Total</b>		<b>3,700</b>	<b>\$892.9</b>

Notes: Totals may not sum due to rounding. <sup>1</sup> Calculated assuming an average 2% vacancy, 1.5 FTE workers per household. <sup>2</sup> Estimate considering post-COVID trends.

Source: Atlas Economics

### Household Expenditure

This section outlines the household expenditure that would be associated with the new dwellings proposed as part of the Stage 1 Rezoning and the potential economic activity that could be supported.

The household expenditure activity supported should not be combined with the impacts in the section above, as some of these impacts are likely to have already been captured in the assessment (e.g. some expenditure on retail and food and beverages by households is likely to be spent at the outlets locating on the Stage 1 Rezoning sites).

This section is to understand specific economic activity supported in the Newcastle LGA through household expenditure as its own separate analysis.

The ABS Household Expenditure Survey (ABS, 2017) was used to identify the proportion of weekly household incomes that are spent across expenditure items in the Newcastle LGA. The fourth quintile of NSW residents was used to best represent the expenditure patterns of residents in the surrounding catchment area.

The household survey only contains household expenditure data, and individual residents must be converted to an equivalent number of households. This was achieved by applying the estimated number of dwellings and a vacancy rate of 2% (representative of the current rental market).

This data was converted to 2023 values (ABS, 2023b), annualised and allocated into their respective ANZSIC industries. The breakdown to ANZSIC industries was developed based on assumptions by Atlas regarding the most appropriate ANZSIC industries for each activity. **Table S1-4** shows the household expenditure estimates for the Newcastle LGA.

**Table S1-3: Household Expenditure Estimates (Proposal Case)**

ANZSIC	Total Spend (\$M)	% Spent in Newcastle LGA	Local Spend (\$M)
Ownership of Dwellings	\$61.7	50.0%	\$30.9
Retail Trade	\$62.3	75.0%	\$46.8
Food and Beverage Services	\$31.8	75.0%	\$23.9
Personal Services	\$16.5	75.0%	\$12.4
Other Services	\$22.8	75.0%	\$17.1
Telecommunication Services	\$10.3	25.0%	\$2.6
Road Transport	\$23.2	50.0%	\$11.6
Rail Transport	\$13.9	50.0%	\$7.0
Air and Space Transport	\$9.3	0.0%	\$0.0
Sports and Recreation	\$26.9	75.0%	\$20.2
Primary and Secondary Education Services (incl Pre-Schools and Special Schools)	\$3.3	0.0%	\$0.0
Technical, Vocational and Tertiary Education Services (including Undergraduate and Postgraduate)	\$2.6	60.0%	\$1.6
Arts, Sports, Adult and Other Education Services (including Community Education)	\$0.7	60.0%	\$0.4
Health Care Services	\$16.3	75.0%	\$12.2
Heritage Creative and Performing Arts	\$11.5	75.0%	\$8.7
Electricity Transmission, Distribution, On Selling and Electricity Market Operation	\$3.7	25.0%	\$0.9
<b>Total</b>	<b>\$316.9</b>	<b>61.9%</b>	<b>\$196.0</b>

Notes: Totals may not sum due to rounding. Source: ABS (2017), Atlas



## **SYDNEY**

Level 12, 179 Elizabeth Street  
Sydney NSW 2000

## **MELBOURNE**

Level 7, 333 Collins Street  
Melbourne VIC 3000

T: 1300 149 151

E: [info@atlaseconomics.com.au](mailto:info@atlaseconomics.com.au)

W: [www.atlaseconomics.com.au](http://www.atlaseconomics.com.au)

