

Newcastle Future Transit Corridor

Strategic Justification for Interim Corridor Protection

September 2024



Acknowledgement of Country

Transport for NSW acknowledges the traditional custodians of the land on which we work and live.

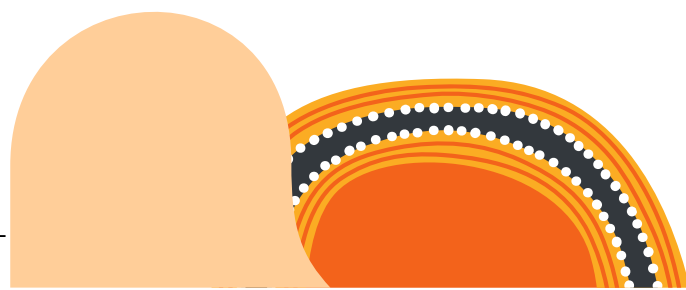
We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of NSW.

Many of the transport routes we use today – from rail lines, to roads, to water crossings – follow the traditional Songlines, trade routes and ceremonial paths in Country that our nation's First Peoples followed for tens of thousands of years.

Transport for NSW is committed to honouring Aboriginal peoples' cultural and spiritual connections to the lands, waters and seas and their rich contribution to society.

Table of Contents

1.	Report Purpose.....	5
1.1	Background	5
1.2	Objective of corridor protection.....	5
2.	Strategic Context.....	6
2.1	Inner Newcastle	6
2.2	Forecast growth.....	7
2.2.1	Population and employment.....	7
2.2.2	Broadmeadow Regionally Significant Growth Area.....	7
2.2.3	The need to support housing growth and diversification in Newcastle	8
2.2.4	Transit Oriented Development Precincts in Inner Newcastle.....	9
2.3	Newcastle Light Rail	9
2.4	Customer outcomes	11
3.	Business need for corridor protection	13
3.1	Reduced capital cost	13
3.2	Community certainty	15
3.3	Reduced impacts.....	15
3.4	Strategic planning realization.....	15
4.	Conclusion	17



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1. Report Purpose

1.1 Background

Greater Newcastle is a global gateway, the second largest city in NSW, and key metropolitan hub in the prosperous Hunter Region. The population of Greater Newcastle continues to grow, with the economy diversifying from its historical reliance on coal exports to a more knowledge and service-based industries.

Private vehicles are the predominant mode of travel in Greater Newcastle, accounting for the vast majority of work travel within the Hunter region. Without focus on improving multi-modal options Greater Newcastle will see increased congestion on the road network, increased travel times and reduced speed and reliability.

Newcastle Light Rail Stage 1 (operations commenced 2019) replaced 2.7km of former heavy rail corridor in Newcastle's CBD with Light Rail. Improving pedestrian permeability across the former heavy rail line improved connectivity between the Newcastle CBD and the Hunter River, releasing 1.4km of waterfront sites for redevelopment to support the more holistic renewal of the CBD.

In July 2023, the NSW Government directed Transport to progress with planning of a future transit corridor (preferred corridor) consistent with the Hunter Regional Plan and further investigations on a potential light rail extension from the existing Newcastle Interchange to Broadmeadow noting timing on both delivery of a mass transit system, including mode, is still to be determined.

Transport is looking to display the preferred corridor from Newcastle Interchange onto Broadmeadow only given the growth occurring in and around West Newcastle and the need to identify an alignment to facilitate development along the corridor.

This report seeks to outline the strategic justification for the protection of the preferred corridor to reduce long-term infrastructure costs and community disturbance.

1.2 Objective of corridor protection

Protection of the Newcastle future transit corridor would:

- Demonstrate integration of land use and transport planning in the consideration of the critical transport infrastructure needed to support renewal in the Broadmeadow growth area.
- Provide developers with certainty about which CBD locations are affected by a transport corridor in future.
- Demonstrates early progress on the Newcastle Light Rail extension.

2. Strategic Context

2.1 Inner Newcastle

The Hunter Region has the largest share of the State's regional population and regional employment. It is Australia's largest regional economy and drives 28% of regional NSW's total economic productivity. The vision for the Hunter is to be the leading regional economy in Australia, where people enjoy an enviable quality of life within an exceptional natural environment.

Greater Newcastle is the capital and creative hub of the region. It is Australia's global gateway and the second largest city in NSW. The population of Greater Newcastle is growing, especially in the residential areas of Broadmeadow, Adamstown, Kotara and Charlestown and Glendale. By 2036, 117,000 new residents will call Greater Newcastle home, and it is projected to grow to around 760,000 by 2056, making it home to more people than the state of Tasmania or the Australian Capital Territory. The Greater Newcastle economy is also diversifying from its historical industrial uses and reliance on coal exports to a more knowledge and service-based economy.

The Inner Newcastle City area covers a corridor between Newcastle West, where the Newcastle Transport Interchange resides, out to Broadmeadow and includes several landmarks such as Newcastle McDonald Jones Football Stadium, Newcastle Entertainment Centre, Newcastle Showground, Newcastle Basketball and Hockey Clubs and Newcastle Racecourse.

Broadmeadow as a strategic centre will service the Hunter region with higher order facilities with high density commercial and residential uses. Hamilton is in the centre of the corridor which includes a shopping and entertainment district.

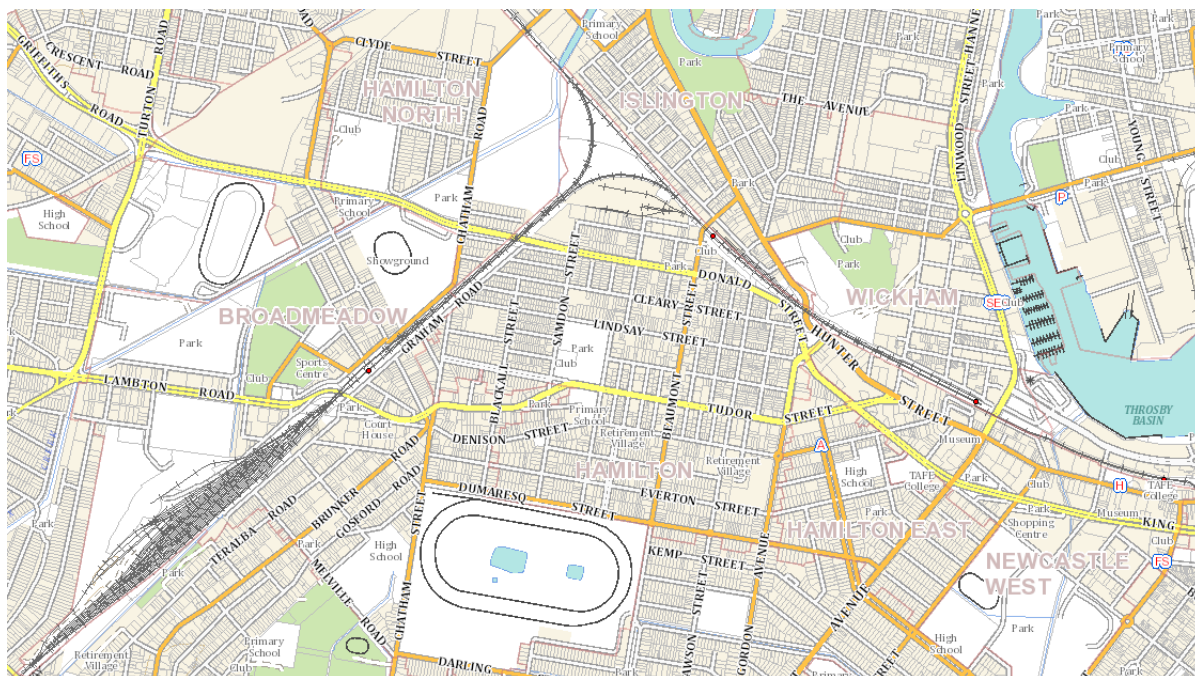


Figure 2-1 Inner Newcastle area encompassing the Newcastle Transport Interchange and Broadmeadow

Surrounding suburbs to the south and southwest include Adamstown and New Lambton and the main shopping precinct of Kotara. The suburbs of Georgetown, Waratah and Callaghan are to the northwest.

2.2 Forecast growth

2.2.1 Population and employment

The Newcastle Local Government Area (LGA) is anticipated to grow by 66,000 people by 2061. This growth will mostly occur in the Newcastle City Centre and in the greenfield areas northwest of Inner Newcastle.

Based on travel zone data, the walking catchment of Inner Newcastle has a population of around 14,000, and around 18,400 workers. Since 2018 (when the Strategic Business Case for a light rail extension through Inner Newcastle was prepared) there has been negligible change in population within the catchment, however employment has increased at an average rate of 2.8% each year.

Table 1 Population and employment within the corridor catchment (2023)

Travel zone		Population	Employment
6314	Broadmeadow Station West	473	3,461
6315	Hamilton Station South	2,529	3,255
6316	Broadmeadow Station East	3,032	4,475
6317	Hamilton East	2,355	3,671
6300	Adamstown Station East	2,318	614
6304	Adamstown Public School	2,479	1,127
6313	Hamilton North	849	1,759
Total		14,034	18,361
Average annual growth since 2018		-0.1%	2.8%

2.2.2 Broadmeadow Regionally Significant Growth Area

Broadmeadow Regionally Significant Growth Area has been identified in The Hunter Regional Plan 2041 and Greater Newcastle Metropolitan Plan 2036 as a priority location for future growth. This means providing more housing and a greater choice of housing close to existing transport and the city centre.

The City of Newcastle's Local Housing Strategy (2021) sets targets for housing and jobs by 2036. Broadmeadow's target is 1,500 dwellings and 500 jobs.

Reimagining Broadmeadow Place Strategy is being developed by City of Newcastle to outline a 30-year vision which will help guide future land use and infrastructure investment in the area. This Strategy will act as a blueprint for how the precinct will change over time, looking at the infrastructure, opportunities and constraints, and highlighting the planning controls needed to enhance the precinct for both current and future residents (Figure 2-2). The Broadmeadow precinct may see more housing, employment opportunities, public spaces and facilities developed in the area over time.

Department of Planning, Heritage and Infrastructure is leading initial State-led rezoning process to catalyse the precinct and deliver homes.

Broadmeadow's central location, existing and future public transport opportunities, Government owned land and large industrial sites provide an opportunity for Government and private investment. Broadmeadow's role as a key driver of economic growth for the Hunter region will be influenced by the investment decisions made into the precinct.



Figure 2-2 Broadmeadow Regionally Significant Growth Area investigation area (Source: Planning for the future of Broadmeadow, City of Newcastle 2023)

2.2.3 The need to support housing growth and diversification in Newcastle

The Hunter Regional Plan 2041 estimates that 17,850 additional dwellings are needed in Newcastle. Over 700 new dwellings will need to be provided on average each year. The plan recommends that dwellings are delivered at a density of 75 dwellings per hectare (minimum) in the urban core when within 800 metres of strategic centres and public transport corridors. This will influence housing affordability and diversity, focus new housing in areas close to jobs and green spaces, support efficient transport and reduce urban sprawl.

The current density of housing in the Broadmeadow precinct is about 12 dwellings per hectare. A key part of the Reimagining Broadmeadow Place Strategy will be to outline how diverse and affordable housing can be delivered as part of any future rezonings. Diverse and affordable housing can be delivered in a number of ways, one of which is through density and proximity to public transport corridors. The transport corridor in the Broadmeadow precinct can influence the type and number of dwellings able to be achieved.

As well as supporting increased densities in the Broadmeadow precinct and diverse and affordable housing, the transport corridor helps create place. The space around the corridor can be planned to become a setting for future community interaction and a place that accommodates a diversity of people and economic activity.

The Department of Planning, Heritage and Infrastructure draft structure plan for the area proposes a significant increase in dwellings and employment in the precinct. In the draft structure plan, connectivity between Broadmeadow and the Newcastle CBD is achieved through the extension of the Newcastle Light Rail.

2.2.4 Transit Oriented Development Precincts in Inner Newcastle

Housing is the NSW Government's top priority. The NSW Department of Planning, Housing, and Infrastructure (DPHI) has announced the amendment to the State Environmental Planning Policy (Housing) to introduce TOD Precincts within 400m of identified railway stations including Newcastle Interchange and Hamilton Station to create capacity for new homes over 15 years.

From April 2024, new planning control applied within 400 metres of these stations. The changes will allow residential flat buildings in residential zones and local centre zones, along with shop top housing in local centre and commercial zones. Proposed changes to planning controls:

- A 22-metre height for residential flat buildings to maintain design standards, and a maximum building of 24m for buildings containing shop top housing to accommodate commercial ceiling height.
- A maximum FSR of 2.5:1 has been set. This allows for buildings of up to 6 storeys.
- Introduction of a minimum lot width of 21m and no minimum lot size.
- Minimum active street frontage controls in E1 and E2 zones
- A 2% mandatory affordable housing contribution

Newcastle Interchange and Hamilton Station are part of the first stage of the TOD SEPP applies to 18 Station Precincts and that emphasises the urgency of early corridor protection for the Newcastle transit corridor.

2.3 Newcastle Light Rail

Newcastle Light Rail (NLR) commenced operations in early 2019, along a 2.7km route between Newcastle Interchange in Wickham and Newcastle Beach. As shown below, the route connects precincts along six stops and enables interchange to heavy rail at Newcastle Interchange.

NLR contributed to urban renewal and land use changes in and around the Newcastle City Centre and improved pedestrian permeability across the former heavy rail line, releasing 1.4km of waterfront sites for redevelopment to support the more holistic renewal of the CBD.

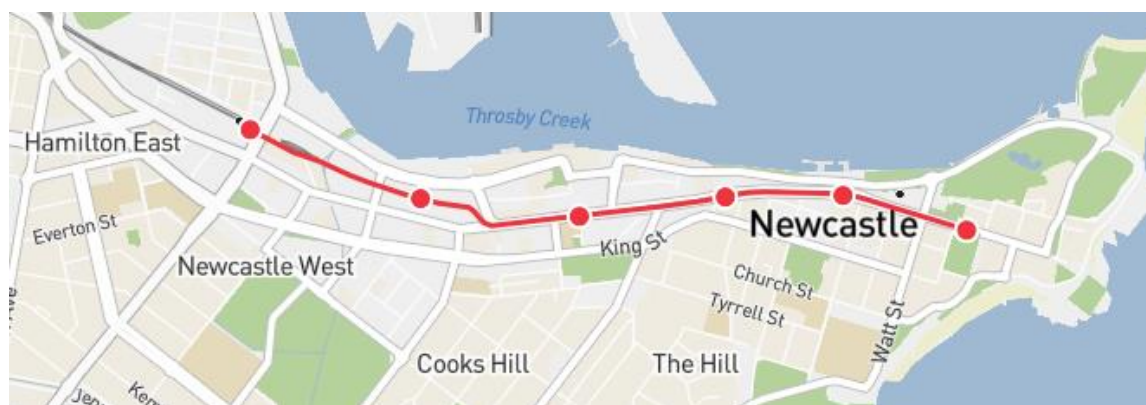


Figure 2-3 Newcastle Light Rail Stage 1 alignment and stops

In 2019, possible extensions to the NLR were assessed as part of the Newcastle Light Rail Extension Strategic Business Case (SBC), which found that the Newcastle Interchange – Broadmeadow - John Hunter Hospital corridor was the preferred corridor for a project but concluded that there was 'no urgent need' to extend Newcastle Light Rail. Recognising that it is a strategic corridor for future land use, the SBC recommended the investigation of a pathway to preserve the corridor. The SBC was publicly released in 2020 in response to community interest.

In 2022, TfNSW examined 21 light rail route options between Newcastle Interchange and Broadmeadow and, through multi-criteria analysis that took into account constraints and opportunities in the area, identified a preferred route for a potential future extension.

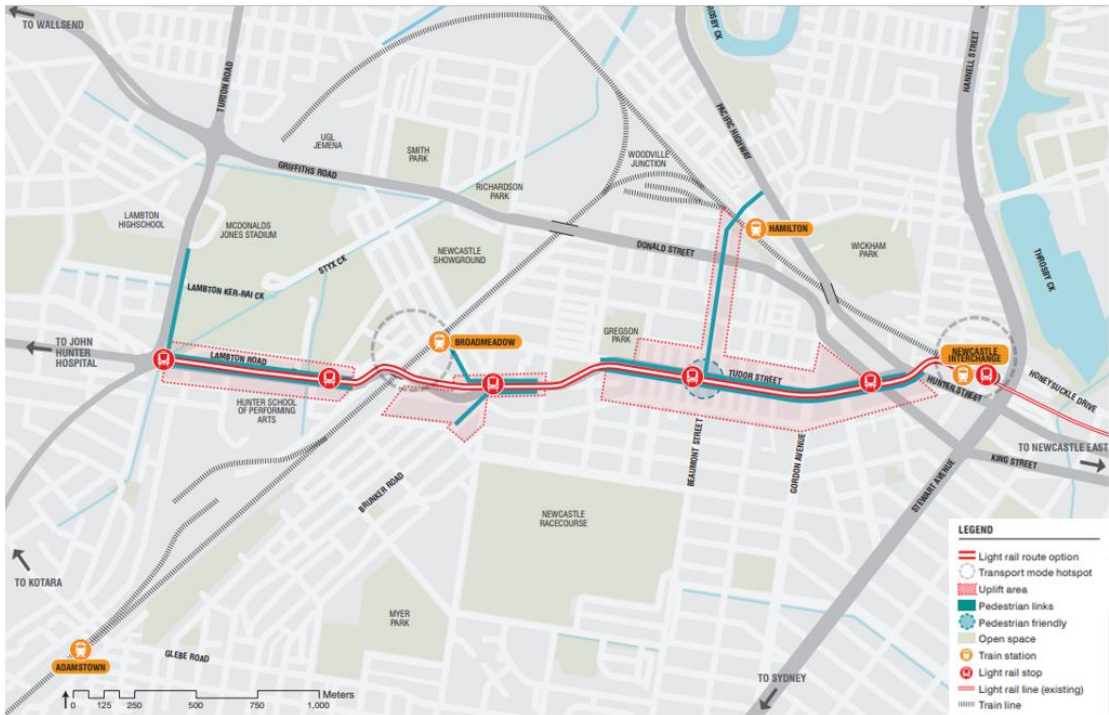


Figure 2-4 Newcastle Light Rail extension, indicative route

The preferred route extends along Tudor Street, which is wide enough to accommodate light rail to connect to Broadmeadow without affecting properties.

Properties between the Newcastle Interchange and Railway Street, and on the western side of Railway Street are affected (Figure 2-5). This segment of the corridor is subject to significant development pressure, especially properties that are not heritage constrained.

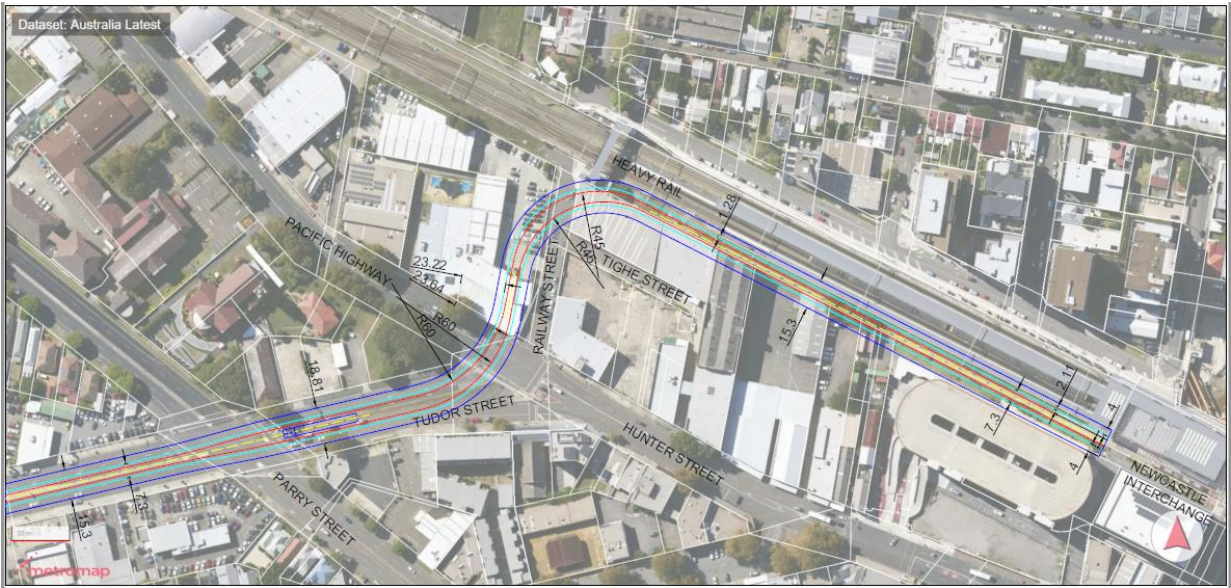


Figure 2-5 Access to Newcastle Interchange

Identification of this corridor as part of investigations to support renewal in the Broadmeadow growth area helps provide certainty to developers about which CBD locations will be affected by a transport corridor in future.

2.4 Customer outcomes

There is a need to change the strong car culture in Newcastle

There is a strong car culture in Newcastle, with private vehicles used for 85% of trips (HTS 2022/23 for Newcastle LGA), which increased from 79% pre-covid (HTS 2019/20). Car ownership also increased in the period: 53% of households have access to 2 or more vehicles in 2021 compared to 51% in 2016 (ABS data, Newcastle LGA).

The car is convenient, there is no significant congestion outside short peak times, and ample parking is available with few restrictions outside Newcastle CBD. In Broadmeadow in particular, parking is mostly free and unrestricted at the station and on surrounding residential streets, and there is additional paid parking available at the Entertainment Centre and other sports facilities.

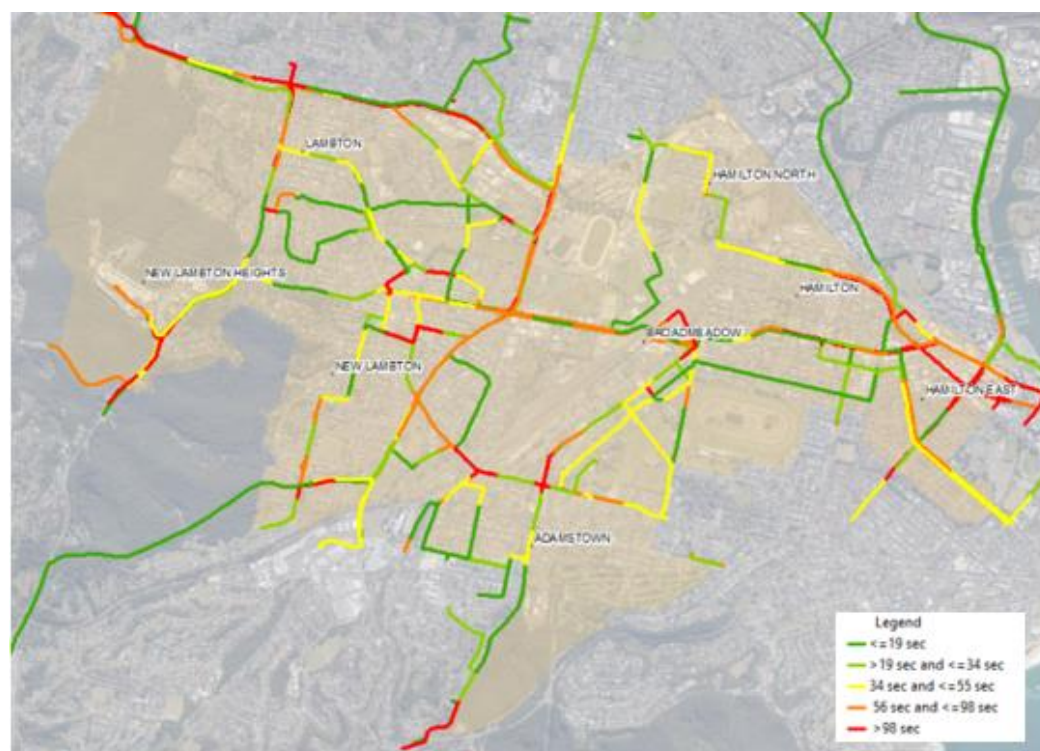
Journey times by motorized modes will become increasingly unreliable.

The corridor is partly served by rail. The Central Coast and Newcastle Line connects Broadmeadow to the Newcastle Interchange. Although in-vehicle travel time between these stations is only 8 minutes, the service does not compete well with private vehicle because of long wait times due to infrequent services. Most people travel beyond the city and require an interchange, with additional travel time penalty.

The corridor is well served by frequent and direct bus routes on a one-seat journey. For trips along the corridor, journey times remain about 30% longer by public transport than by car (in-vehicle travel time). Currently, average speeds for buses are around 14km/h compared to 21km/h for cars between Newcastle Interchange and Broadmeadow. Speeds of both buses and cars are expected to worsen in the future with increased congestion.

Buses as a mode are also unreliable with frequent delays and cancellations. Over time, the current bus delays will worsen as traffic congestion grows, hindering reliability, which will discourage people from using bus services.

Figure 2-6 Bus delay time per km (sec) in AM peak

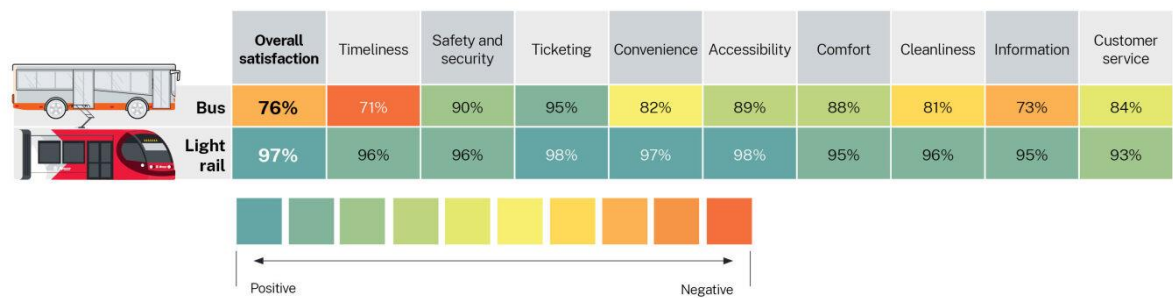


Light rail is perceived as an attractive mode of transport and provides capacity for growth in the long term

Post-Covid changes in travel behaviours have seen reduction in public transport usage, due to reduced travel and less congestion on road corridors (similar to other regions including Sydney).

Patronage on the light-rail, although still considerably below the system capacity, is significantly higher than the rest of the network. This is primarily due to the higher population density along that corridor, substantial use by visitors and the high performance of the light-rail system, illustrated by satisfaction rates shown in **Error! Reference source not found..**

Figure 2-7 Comparison of light-rail and bus customer satisfaction in Newcastle



Source: Customer Satisfaction data, TfNSW, AAI portal

According to STM data, current public transport mode share in Broadmeadow is 7.5%, which is above the Greater Newcastle average (of 3.5%) and in line with the public transport mode share target for Newcastle identified in the Greater Newcastle Future Transport Plan.

Currently, the road network is congested during relatively short periods of time at peak hours. Although congestion is not a significant concern at present, if no action is taken, the prevailing car centric culture will persist, and congestion will worsen as the population grows. This, in turn, will negatively impact the quality of life, amenity and overall liveability.

Preserving the opportunity for a future segregated public transport corridor will help mitigate future increase in private vehicle trips and improve the liveability and vibrancy of our communities. Prioritising more road space for public transport, pedestrians, cycling and micromobility can potentially enhance urban efficiency and provide capacity to support significantly additional economic activity and population growth.

It is estimated that the total number of people moved per hour in Tudor Street as a multimodal street could triple compared to the same amount of space on a car-oriented street.

3. Business need for corridor protection

3.1 Reduced capital cost

Property acquisition in the Newcastle CBD in the vicinity of Newcastle Interchange represents a risk to the future delivery of the light rail extension due to likely substantial increases in property acquisition costs overtime.

The Hunter Regional Plan provides key direction to continue to support Greater Newcastle as an emerging economic and lifestyle city by, amongst other things, reinforcing revitalisation of Newcastle City Centre.

Over the next twenty years, current projections show a substantive increase in population and employment in the Newcastle City Centre, with an additional 1,400 people living in the vicinity of Newcastle Interchange and 6,900 additional jobs.¹

The historical trend in the median cost of houses near the Interchange shows an approximate 37% growth between 2020 and 2024. Similarly, the growth percentage for units in the area during the same period is about 38%.²

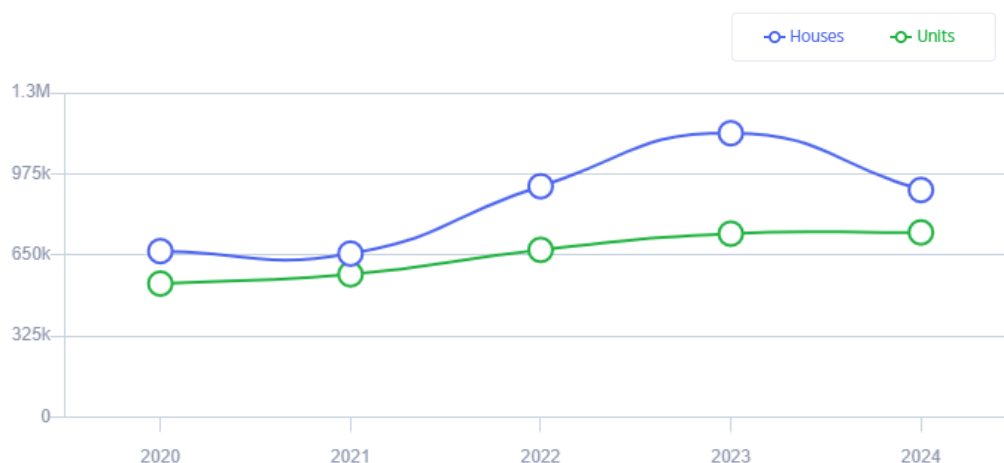


Figure 3-1 Median growth in the cost of houses and units near Newcastle Interchange

Source: <https://www.yourinvestmentpropertymag.com.au/top-suburbs/nsw>

City of Newcastle also reports that recently \$1.85 billion in new development has been assessed over the last 12 months, with more than 1,650 development applications determined, representing a 25 percent increase on 2020 figures.

Capital city migration to Newcastle increased by 1 percent in 12 months, and with a 10 percent increase during COVID in 2021.

With the planning strategy committed by the NSW Government, the current trend of development is expected to continue to grow over the next decade in order to meet the projected population and employment growth. This means that land value in the Newcastle City Centre will continue to increase, which will in turn increase the cost of property acquisition when the delivery of the future light rail extension commences.

In addition to natural growth, land value can increase further as a result of infrastructure announcement. For example, median unit and house growth value along Newcastle light rail

¹ Employment and population forecast based on Travel Zone projections 2022, Transport for NSW

² <https://www.yourinvestmentpropertymag.com.au/top-suburbs/nsw>

corridor increased between 2015 (Preferred route for light rail chosen) to 2017 as shown in Figure 3-2.

Additionally, the University of Queensland in 2016 outlined a 7.1 to 9.5 per cent increase in the market price of residential properties located within a 400m to 2km vicinity of the Gold Coast light rail.

Another study in Sydney on the impact of a light rail line on residential property values used the hedonic pricing model. Results showed that during the announcement phase, properties within 400 meters of the station were 3.3% more expensive than those within 400–800 meters. During construction, properties within 0–400 meters sold at a 3.1% premium compared to those within 400–800 meters.³



Figure 3-2 Median value in houses and units in Newcastle CBD 2015-2024



Figure 3-3 Median growth in houses and units in Newcastle CBD 2015-2024

Overseas migrations are another driver for NSW’s population growth. In the 2023-24 fiscal year, NSW was allocated a total of 4,150 skilled visa slots which includes 1,500 places for the Skilled Work Regional visa category which is an ongoing commitment to support regional NSW by attracting skilled workers to those areas.

Protection of the corridor will also ensure that incompatible development will not occur, which could make the preferred corridor unaffordable.

³ [Impact of light rail line on residential property values –a case of Sydney, Australia," International Journal of Housing Markets and Analysis, Emerald Group Publishing Limited, vol. 15\(3\), pages 691-708, July,](#)

Given the strategic planning vision for the Broadmeadow Regionally Significant Area and the rapid growth in Newcastle CBD, there is a business need for protecting land for the future Newcastle light rail corridor extension. This would in turn enable early integrated planning whilst reducing the financial cost of project delivery.

3.2 Community certainty

Protection of the corridor would not only result in lower project costs that threaten the viability of the Newcastle light rail extension, but it would also provide greater certainty about the land near Newcastle Interchange that is being affected and allow unaffected sites to be planned for land uses and urban form compatible with the presence of a transit corridor.

Discussion about a potential future extension has been in the public arena for the past five year, since operation of the Newcastle Light Rail began. Community interest has led to the public release in 2020 of a strategic business case for the extension, which broadly concluded that there was 'no urgent need' to extend Newcastle Light Rail in the short to medium term, but which recommended the investigation of a pathway to preserve the corridor.

3.3 Reduced impacts

Protection of a corridor will provide clarity for developers and approval authorities regarding the sites that could potentially be affected by future light rail extension operations. There is an opportunity to implement mitigation measures through design as sites come up for redevelopment progressively. This will be less impactful than retrofitting design measures at the time of construction of the light rail, particularly where proposed development is in the vicinity of the proposed light rail corridor. Measures to mitigate noise, visual and access impact can be included in design and approval conditions.

3.4 Strategic planning realization

Protection of the corridor for the future extension of Newcastle Light Rail could support key principles and directions within the different government strategies.

- **Future Transport Strategy (2022), TfNSW:** *Future Transport Strategy* is a vision and outcomes-led approach to continually improve the NSW transport system for the benefit of its customers, communities, and the economy. An extension of the Newcastle Light Rail aligns with the following outcomes and strategic responses
 1. Connecting our customers' whole lives
 - 30-minute city concept
 - support car-free, active, sustainable transport options
 - develop an inclusive transport system enabling access to services and places for all
 2. Successful places for communities
 - support growth around public transport
 - ensure public transport is available on day one
 - build well-designed transport infrastructure that makes places more liveable and successful
 3. Enabling Economic Activity

- improve the use and efficiency of our roads through road space allocation
 - improve access and experiences
- **Greater Newcastle Future Transport Plan (2018), TfNSW:** The Plan provided the context for Greater Newcastle based on the overarching vision of Future Transport 2056.
- **Hunter Regional Transport Plan (2018), TfNSW:** The Plan is a transport vision for the Hunter Region and includes actions relating to infrastructure, services and policy.
- **State Infrastructure Strategy 2022–2042 (2018), Infrastructure NSW (INSW):** The 20-year Strategy recommends reforms, policies and projects that respond to NSW’s changing economic, social, and environmental outlook. An extension of the Newcastle Light Rail aligns with the following principles and actions:
 1. Boost economy-wide productivity and competitiveness
 - improve public transport within the metropolitan cities of Newcastle
 2. Service growing communities
 - support housing growth in Greater Newcastle and Hunter Region
- **Six Cities Region Discussion Paper (2022), Greater Cities Commission (GCC):** The paper aims to start conversations between different groups within NSW as to the benefit of a Six Cities Region that includes the Lower Hunter and Greater Newcastle City, the Central Coast City, the Illawarra-Shoalhaven City, the Western Parkland City, the Central River City, and the Eastern Harbour City. The GCC estimates the Region Plan for the Lower Hunter and Greater Newcastle City will be released in 2023-2024. This will involve setting public transport targets which an extension of Newcastle Light Rail could support.
- **Hunter Regional Plan 2041:** The Hunter Regional Plan identifies Broadmeadow as a regionally significant growth area that can deliver exceptional place outcomes for Greater Newcastle, be well integrated, equitable and resilient, and foster new neighbourhood identities. The place strategy builds on these priorities and outcomes and plans to deliver a holistic place-based framework for future growth, ensuring all matters are considered.
- **Greater Newcastle Metropolitan Plan 2036:** The Greater Newcastle Metropolitan Plan sets strategies for sustainable growth in Greater Newcastle. It envisions Broadmeadow as a nationally significant sport and entertainment hub that drives growth and transformation in surrounding areas.
- **Newcastle 2040 (2021), City of Newcastle Council (CoN):** The vision document provides strategic guidance for policies and actions for Newcastle within the Lower Hunter and Greater Newcastle City. An extension of the Newcastle Light Rail could support the implementation of regional strategies and plans and public transport network improvements to allow easy movement across the city.
- **Newcastle Local Strategic Planning Statement (LSPS)(2021), CoN:** The Statement aims to guide land use planning across Newcastle over a 20-year timeframe and proposes to support public transport improvements with continued integration of land use and transport planning.
- **Broadmeadow Place Strategy (2023), CoN and DPHI:** The place strategy provides an integrated 30-year vision that recognises the strategic attributes of the precinct and guides future land-use and infrastructure investment decisions, which can be delivered with the support of state and local agencies.

4. Conclusion

Transport for NSW is leading in the planning for the future long term expansion of Newcastle Light Rail by identifying and protecting the corridor in conjunction with the Department of Planning Heritage and Infrastructure investigations supporting the proposed structure plan for Broadmeadow Regionally Significant Growth Area, and City of Newcastle's Reimagining Broadmeadow Place Strategy.

The preferred Newcastle Light Rail extension corridor follows a path from the Newcastle Interchange to Tudor Street, and onwards to the 'Nineways' intersection.

The preferred corridor alignment does require corridor preservation at the Newcastle Interchange, and signals a commitment to the future roll out of increased passenger transport services along the Tudor Street corridor to Broadmeadow.

Transport for NSW is seeking to protect the corridor not in road reserve as an interim corridor protection would:

- Demonstrate integration of land use and transport planning in the consideration of the critical transport infrastructure needed to support renewal in the Broadmeadow growth area.
- Provide developers with certainty about which CBD locations are affected by a transport corridor in future.
- Demonstrates early progress on the Newcastle Light Rail extension.

Corridor protection is critical to ensure a future light extension is viable in the long term. Rising land values and planning intent to continue to focus growth in the Newcastle City Centre risk to increase the capital cost of infrastructure planned for future delivery. Corridor protection will minimize risks that future development could inhibit project delivery.



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