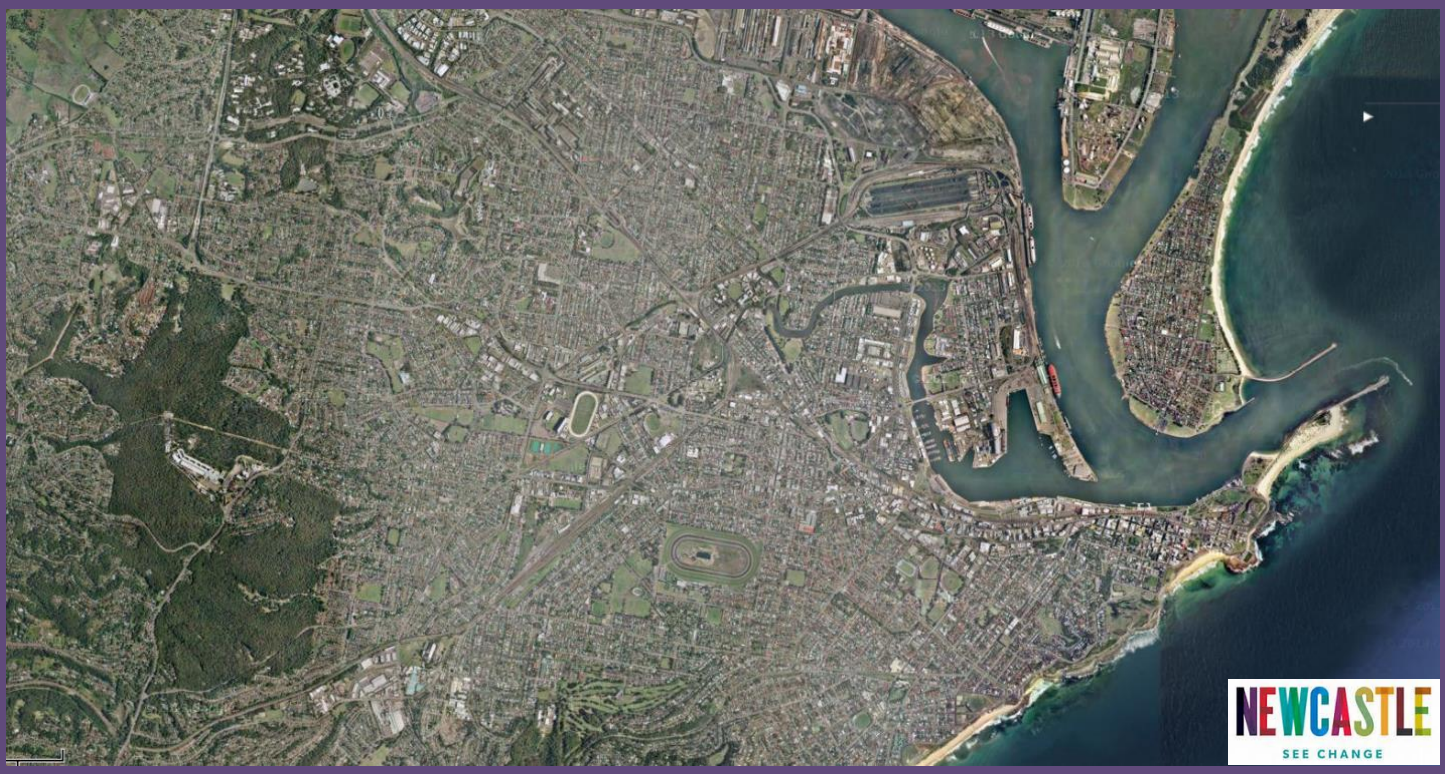
Property Council of Australia

1. Copy of a research report commissioned by the Property Council of Australia in response to a question on notice from The Hon. Catherine Cusack
2. Copy of a CBD Map showing commenced, approved and planned developments since release of the 2012 Newcastle Urban Renewal Strategy in response to a question on notice from The Hon. Greg Pearce.

Revitalising Newcastle CBD – leveraging light rail investment

Prepared for the Property Council of Australia, New South Wales Division, Hunter Chapter.

September 2013



ASPIRE MANAGEMENT CONSULTING
Urban Project Solutions

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1.0 Executive Summary

Similar to circumstances that lead to the consideration of city centre renewal strategies the Newcastle CBD has experienced long term under investment and slow growth, which in part the heavy rail corridor has been considered to have created a significant physical barrier hindering significant transformation and renewal.

With the decision to terminate the heavy rail line at Wickham and consider investment in light rail infrastructure, experience and research evidence from the United States indicates that, with the right policy settings, there are real opportunities to leverage maximum economic benefits from the light rail investment to revitalise the Newcastle CBD.

The *Best Practice Guidelines for Light Rail Design* prepared by the City of Vancouver and based upon what has and has not worked in other cities during the 25 years that light rail systems have been in operation in American cities states:

> "Light Rail Transit is not just about moving people from one point to another. It is also about building community. Done properly, light rail systems will help communities fulfil their vision and their values.
>
> The City of Vancouver's Comprehensive Plan and Vancouver City Centre Vision and Subarea Plan minimize sprawl and revitalize downtown Vancouver through new public and private investment. LRT is one way to stimulate new development and reduce dependence on the automobile."

Research evidence from studies undertaken in the United States drawing upon over 30 years of lessons learned from urban transformation along light rail systems have found that significant economic benefits can be realised only when a system is planned with polices and complementary land use strategies in place.

Experience and research suggests that light rail infrastructure investment is likely to have a multiplier effect of 2.5-4 providing a very substantial economic boost and reduction in unemployment. A secondary multiplier of 2 to 2.5 flows from the development along the light rail corridor, as such the long run economic benefits are likely to be quite substantial given the total value of development and redevelopment over a recurring development lifecycle.

Using an example from Dallas, which has experienced over US$1.3B in development along the Dallas Area Rapid Transit (DART), this represents an economic value of US$2.6B to US$3.25B over almost 20 years.

For the Gold Coast the initial investment in the first stage of the light rail system of $1.6B is likely to generate an economic value of $3-4.8B, providing a very substantial economic boost and reduction in unemployment. The secondary multiplier for urban development along the corridor over a 20 to 30 year development lifecycle could conservatively realise up to a further $4B-$7.5B of additional economic benefits.

With the right vision and integration strategies, these findings suggest there are significant opportunities for Newcastle.

With this context in mind, the Newcastle CBD Renewal Taskforce, comprised of local industry experts, is currently preparing a report to Government which will answer two questions in the context of the Newcastle CBD revitalisation;

1. Where is the best location for a Transport Interchange?
2. What is the best route for Light Rail to travel?

Best practice indicates a clear vision is critical for the overall success of maximising broader economic benefits from light rail investment.

The Newcastle City Council has set a clear vision for the revitalisation of the CBD:

> ***To manage, facilitate and enable revitalisation in Newcastle City Centre to make it a great place to live, work and play.***

This vision and broader considerations are important elements to create an integrated vision for the outcomes to be realised from both the CBD revitalisation and the light rail infrastructure investment and contribute to achieving Council's vision for the City Centre to make it a great place to live, work and play.

Recommendation 1:

Establish a clear vision and outcomes intended from the integrated light rail infrastructure investment and CBD revitalisation. The revised vision may take the form of:

To manage, facilitate and enable revitalisation in Newcastle City Centre and along the light rail corridor to make it a great place to live, work and play.

CBD route selection

The key issue of route selection into the CBD considered the options of:

- Utilise the existing heavy rail corridor
- Hunter Street

However from stakeholder feedback, presented at Attachment 1, the Hunter Street route option is preferred through the CBD, which aligns closely to best practice and research findings to maximise broader economic benefits from the proposed light rail investment. This light rail route option would also likely provide greater potential for some sites to become more viable for redevelopment.

Recommendation 2:

Having regard to stakeholder feedback and the best practice and research findings outlined previously, the preferred route into the CBD that would be the most likely to maximise broader economic benefits is along Hunter Street.

This option also takes into consideration the ability to renew the existing heavy rail corridor to provide improved access and interface with the waterfront, particularly to leverage from the emerging increasing cruise ship economy.

The route should continue to Nobby's and Newcastle Beaches to provide broader destination attractors and maximise ridership opportunities.

Interchange location

Interchange location options are generally considered to be Wickham, Hamilton and Broadmeadow.

Based upon stakeholder feedback it is considered that the constraints at Wickham are likely to exclude that location as an interchange option, however it is recognised that the overall role and function of an interchange or interchanges will need to be informed by broader transport network planning.

Notwithstanding the need for further technical considerations, Broadmeadow does provide a better interchange location advantage in its land availability for development as an interchange and proximity to and connectivity relationship to the CBD, major event precinct and access through to the University and John Hunter hospital should a more extensive light rail network link to those key ridership generators that are common elements of other systems. The Broadmeadow location may also provide the capacity to include park and ride facilities. There

are many high quality transit interchange design approaches that could be utilised creating high quality mixed used development opportunities, while providing a major entrance statement

Recommendation 3:

Having regard to stakeholder feedback and subject to further detailed technical assessment, the preferred interchange location is Broadmeadow.

This option also takes into consideration the longer term consideration of heavy rail network service improvements such as being able to bring trains from Maitland into Broadmeadow and then continue possibly as far as the Central Coast and thereby creating a "Hunter Suburban Line" and then the capacity to introduce an express Sydney Service between Broadmeadow and Central cutting travel time by up to 50 minutes and taking cars off the M1, which is a key recommendation of Infrastructure NSW's State Infrastructure Strategy.

The State Government's recent announcement provides for greater certainty for the longer term planning of the revitalisation of the Newcastle CBD and enables considerations for how best to maximise the economic benefits for revitalisation through leveraging light rail infrastructure as part of the renewal of the city centre.

2.0 Purpose of this report

This report has been commissioned by the Property Council of Australia (PCA), New South Wales (NSW) Division – Hunter Chapter to help inform policy making for the future revitalisation of the Newcastle Central Business District (CBD) leveraging the expected investment in light rail infrastructure.

The report is a high level report that provides insights, from research and experience, on optimising and leveraging investment in the proposed light rail infrastructure to maximise the economic benefits that could be realised through the revitalisation of the Newcastle CBD.

The report does not duplicate the more technically focussed work being undertaken by Transport for NSW (TfNSW) though the findings of this report may help inform the further work to be undertaken by TfNSW in relation to the potential consideration of a broader light rail and integrated transport network for Newcastle.

3.0 Study scope

The Newcastle CBD Renewal Taskforce, comprised of local industry experts, is currently preparing a report to Government which will answer two questions in the context of the Newcastle CBD revitalisation;

3. Where is the best location for a Transport Interchange?
4. What is the best route for Light Rail to travel?

These questions are to be answered within a framework that:

1. Gives primacy to urban design and renewal - economic benefits of urban transformation.
2. Focuses on where the greatest development potential can be unlocked – leveraging urban transformation from light rail investment.
3. Considers regional growth projections – smart growth management through compact development along a light rail corridor, and in particular station precincts.
4. Suggests complimentary measures to maximise the benefits of the light rail investment - considering mutually support policy levers.

4.0 Introduction

In the most part it will be private investment that will deliver (re)development outcomes within the Newcastle CBD, which is generally no different to the circumstances facing any other urban renewal area.

Revitalisation of city centres is a well recognised and accepted strategy to provide a catalyst for redevelopment and renewed activation. City centres reach a point in their life cycle where the economic and social value in particular require an injection of new vibrancy to help grow and attract new business and jobs, CBD residential living and improve the quality of the built form, urban design and local amenity.

Similar to circumstances that lead to the consideration of city centre renewal strategies the Newcastle CBD has experienced long term under investment and slow growth, which in part the heavy rail corridor has been considered to have created a significant physical barrier hindering significant transformation and renewal.

The long standing debate about the long term function of the heavy rail service into the Newcastle CBD has been somewhat resolved through the NSW Government's announcement in December 2012 by the Minister for Planning that the heavy rail would stop at Wickham and be replaced by a regular frequent bus service between Wickham and Newcastle.

The strategy was subsequently been revised to include light rail. The funding for the light rail infrastructure project will be provided by the leasing of the Port of Newcastle, making it possible to deliver light rail to the Newcastle CBD, and providing the potential basis for a wider light rail service linking the CBD with surrounding suburbs and beaches.

In the 2013-14 NSW Budget, the NSW Government announced that an additional $340 million would be available for a new vision for Newcastle, in addition to the $120 million the Government has already committed to the revitalisation.

The proposed new light rail option between a minimum of Wickham and Newcastle is potentially only the beginning of a light rail system for Newcastle. $10 million will be allocated to explore the potential for this link to be the basis for light rail linking the CBD with surrounding suburbs, beaches and the broader Hunter region. Any broader light rail network consideration will also need to be cognisant of the commercial viability of such a network to be attractive to private sector financing and interest.

The announcement of the truncating of the heavy rail network at Wickham has been a major defining moment for the long term planning for the revitalisation of the Newcastle CBD.

Transport corridors (rail or road) are often seen as physical barriers to revitalisation of urban areas, and are frequently confronted where waterfront renewal is also involved.

The State Government's announcement provides for greater certainty for the longer term planning of the revitalisation of the Newcastle CBD and enables considerations for how best to maximise the economic benefits for revitalisation through leveraging light rail infrastructure as part of the renewal of the city centre.

5.0 Newcastle CBD Revitalisation

The Newcastle City Council has set its vision for the revitalisation of the CBD:

> ***To manage, facilitate and enable revitalisation in Newcastle City Centre to make it a great place to live, work and play.***

To achieve this vision the Council aims to:

- Create more opportunities to live in the city centre including student and visor accommodation.
- Create a high quality public domain, walkable and accessible city promoting healthy lifestyles, multi modal transport options and greening the city.
- Improving opportunities for business and government investments such as the University, Law Courts and Convention Centre.
- Improve developer engagement and application processes.
- Enable ease of getting to work via high quality, efficient multi modal transport options.
- Create a playful city with mixed uses for day and night time activity, so that the city centre is safe, attractive and inclusive for locals and visitors alike.
- Attract locals and visitors through maintaining and celebrating heritage, high quality public domain, events and destination tourism.

A Newcastle Urban Renewal Strategy was developed by the NSW Department of Planning and Infrastructure in 2012 in consultation with the City of Newcastle and key State Government agencies to recommend an integrated package of initiatives aimed at developing a solid basis for the long-term successful renewal of the city centre.

6.0 Best practice light rail design and city building

As part of light rail system design the following criteria are generally part of the key route and corridor alignment considerations:

- Maximisation of system patronage with the selection of a route that allows ease of access to and from the major attractors of passengers (and from experience and examples there are commonly connected “attractors”/patronage generators). Maximising the walk up catchment is a major driver for patronage. Stations need to be close to the entrances of major attractors with no barriers (such as busy roads or buildings blocking line of sight) restricting safe and efficient access and egress. For the Gold Coast, Sydney and Perth light rail system designs key ridership generators have been included along the routes such as Universities and hospitals as well as travelling through CBD areas;
- The corridor selected allows the light rail system to be implemented and operated in a cost effective manner. Constraints such as road/corridor widths, existing services, ground conditions and existing road use will influence capital and operating costs of the system;
- Land requirements are reasonable without excessive impacts or costs (ie not having to acquire large amounts of land to form a suitable corridor). This also gives consideration to a corridor settlement pattern and current and future densities along any corridor particularly around station precincts; and
- Creation of competing development corridors (land use and/or transit) is avoided, being mindful of a creating a corridor hierarchy similar in essence to a centres or road hierarchy. The intent of many light rail systems is to operate within an existing road corridor and surrounding compatible land use. This is where assessment of alternative routes/corridor alignments will be considered in terms of advantages of minimising impacts on private land and existing traffic, and, importantly from a private sector investment attraction perspective for the light rail construction and operation, the ability to maximise patronage (passengers/ridership) over time.

While these are important engineering based considerations, and in terms of system patronage commercial viability criticality (where there is existing low public transport use this will be a critical issue in terms of longer term behavioural change), there is also caution around choosing corridors to minimise construction costs instead of maximising the potential for development (Handy S., *Smart growth and transportation – land use connection. What does research tell*

us?, 2005). Densities along the corridor, as indicated previously, will support the long term commercial viability of the light rail system.

6.1 *Best practice – City Building*

It is accepted that the fundamental benefit of a transit investment is dramatically dependent on its role in providing mobility. And further to that view consider that energy savings, air quality contributions, congestion relief, offsetting roadway infrastructure needs, etc., all require the transit services to be utilised by travellers for those benefits to be captured. This view on broader benefits is further compounded if it is narrowly considered that the economic impact of construction will occur regardless of the system's subsequent success, even the land use influencing power of light rail transit (LRT) ultimately will be dependent on the system servicing a meaningful role in providing mobility.

While this view is relevant in terms of the commercial viability aspect of the light rail project, the almost symbiotic and integrated relationship with land use cannot be ignored to realise broader economic benefits but to also contribute to and improve the commercial viability (ridership) of the light rail system and broader transport network.

The *Best Practice Guidelines for Light Rail Design* prepared by the City of Vancouver and based upon what has and has not worked in other cities during the 25 years that light rail systems have been in operation in American cities states:

"LRT is not just about moving people from one point to another. It is also about building community. Done properly, light rail systems will help communities fulfil their vision and their values.

The City of Vancouver's Comprehensive Plan and Vancouver City Centre Vision and Subarea Plan minimize sprawl and revitalize downtown Vancouver through new public and private investment. LRT is one way to stimulate new development and reduce dependence on the automobile."

7.0 Proposed Newcastle Light Rail and CBD revitalisation

The proposed investment in light rail infrastructure provides an opportunity to accelerate the revitalisation of the Newcastle CBD and realise broader economic benefits.

However it should be recognised that it is likely that a CBD section of a light rail system would usually form part of a broader light rail network to help improve the longer term commercial viability of such a system. The commercial viability assessment is also likely to consider the broader scale of a light rail network for Newcastle and what scale a possible first stage may take to attract private sector interest.

Notwithstanding the technical considerations that will need to be undertaken, research evidence from studies undertaken in the United States drawing upon over 30 years of lessons learned from urban transformation along light rail systems have found that:

- Significant impacts and stimulated economic benefits only occur when a system is planned with polices and complementary land use strategies in place.
- Land values increased higher for residential and office properties located in close proximity to a light rail station.
- Property value impacts tend to be localised around rail stations particularly for commercial uses, suggesting that careful consideration needs to be given to the location of stations and policies that guide and incentivise development around them.
- The magnitude of impacts on property values will vary according to:
  - How much accessibility is improved;
  - The relative attractiveness of the locations near the station area; and
  - The real estate market in the location.
- Additional financial incentives and assistance with land agglomeration as well as beautification programs are needed beyond land use planning frameworks. For instance, a US$15M beautification program was implemented to encourage redevelopment at one location on the Bay Area Rapid Transit (BART) system. Beyond development incentives, Cervero and Guerra (2011) state that “External factors like higher motoring and parking costs will be more effective than well-intended urban design strategies at creating the kinds of urban densities needed for cost-effective transit services”.
- Urban densities of around 30 people per half hectare around stations is desirable.
- Related to the above dot point, ridership gains are substantial where jobs are concentrated within 500 metres of a station and housing within 1 kilometre.

- Increasing the number of jobs around stations appears to have a stronger impact on ridership than increasing population alone.

In summary, for public transport infrastructure such as light rail to realise the broader economic benefits a coordinated package of mutually supportive policy levers is required that, as a minimum, enable:

- increased densities along the transit corridor, which both help manage population and concentrate jobs growth as well as maximising the efficiency of the transport network,
- integrated economic development opportunities for employment generation and the property development value generated from the infrastructure investment.

Case study examples of economic benefits

- Portland's Central Business District (CBD) was a typical declining downtown with office vacancy rates rising and retail centres fading. However when their light rail system. MAX, was implemented, downtown office vacancy rates declined to levels below those of suburban office parks; there was an increase in rents; and the development of an attractive retail hub in the CBD. Portland has seen over US$2B of development surrounding downtown station areas (HDR Inc, 2005). Note: Portland's MAX light rail system commenced operations in 1986 with a 24km line and is currently a 91.6km line;
- Dallas has experienced over US$1.3B in development along the Dallas Area Rapid Transit (DART). A study of the DART system in 1999 found that the value added premium for retail spaces near stations was 30% over spaces located further away from station nodes (Cervero and Duncan, 2002). Note: DART commenced operations in 1996 with a 18km line and is currently a 136.8km line;
- Denver's lower downtown has been recognised as one of the United States' most successful new urban neighbourhoods with the implementation of its light rail (Geller, 2003). Note: Denver's light rail system commenced operations in 1994 with a 8.5km line and is currently a 56km line.
- In San Jose's downtown core, commercial properties in proximity to light rail stations were worth $203/m^2 more than other properties. Though the study also found that proximity to the light rails corridor without nearby access to a station might have little benefit (Cervero and Duncan, 2002). Note: San Jose's light rail system commenced operations in 1987 with a 14.5km line and is currently a 67.9km line

As Cervero (1984) observed, reflecting many of the findings above:

"As a relatively permanent investment along a fixed corridor, light rail systems can encourage urban development in the city centre and declining areas, change the pattern of urban development, affect land uses, and increase nearby property values. It can also help strengthen development in existing neighbourhoods, rejuvenate declining areas and attract new clusters of development around station sites".

7.1 *Light Rail and CBD revitalisation*

Best practice indicates a clear vision is critical for the overall success of maximising broader economic benefits from light rail investment.

The Newcastle City Council has set a clear vision for the revitalisation of the CBD:

> ***To manage, facilitate and enable revitalisation in Newcastle City Centre to make it a great place to live, work and play.***

This vision and broader considerations are important elements to create an integrated vision for the outcomes to be realised from both the CBD revitalisation and the light rail infrastructure investment and contribute to achieving Council's vision for the City Centre to make it a great place to live, work and play.

Example of leading practice vision

The City of Minneapolis has adopted the following goals for the Hiawatha LRT Corridor.

i. Preserve the liveability of all adjacent neighbourhoods through careful planning for land use and station area development that includes active participation of neighbourhood residents and businesses;

ii. Strengthen neighbourhoods by reinvestment in housing, multi-use facilities and renovation projects;

iii. Attract new employment opportunities throughout the Corridor and provide excellent transportation connections for citizens to existing and new businesses;

iv. Improve alternative transportation options within the City with changes to the existing bus service and the addition of light rail transit service; and

v. Promote the continued growth, accessibility and economic vitality of Downtown Minneapolis through light rail transit service in the Hiawatha Corridor.

The criteria then used to assess options for route and corridor alignment will be informed by this vision and outcomes and will lead to identification of interchange location options and route options through the CBD also having regard to broader transport network planning.

This would then enable strategies to be developed as part of the CBD revitalisation to implement the key findings from research outlined previously, in particular to aim to have:

- Urban densities of around 30 people per half hectare around stations as desirable.
- Jobs being concentrated within 500 metres of a station and housing within 1 kilometre. Increasing the number of jobs around stations appears to have a stronger impact on ridership than increasing population alone.
- Increase densities along the transit corridor, which will help to both manage population and concentrate jobs growth as well as maximising the efficiency of the transport network.
- Leveraging private sector investment.

Recommendation 1:

Establish a clear vision and outcomes intended from the integrated light rail infrastructure investment and CBD revitalisation. The revised vision may take the form of:

To manage, facilitate and enable revitalisation in Newcastle City Centre and along the light rail corridor to make it a great place to live, work and play.

7.1.1 Light rail route

The key issue will be route selection into the CBD.

Obvious options are:

- Utilise the existing heavy rail corridor
- Hunter Street

However from stakeholder feedback, presented at Attachment 1, the Hunter Street route option is preferred through the CBD, which aligns closely to best practice and research findings to maximise broader economic benefits from the proposed light rail investment. This light rail route option would also likely provide greater potential for some sites to become more viable for redevelopment.

This option is also reflected in the Strategic Framework for Hunter Street Revitalisation prepared for Newcastle City Council in December 2010 provides an option of light rail running along Hunter Street as illustrated in the following Figure 1.

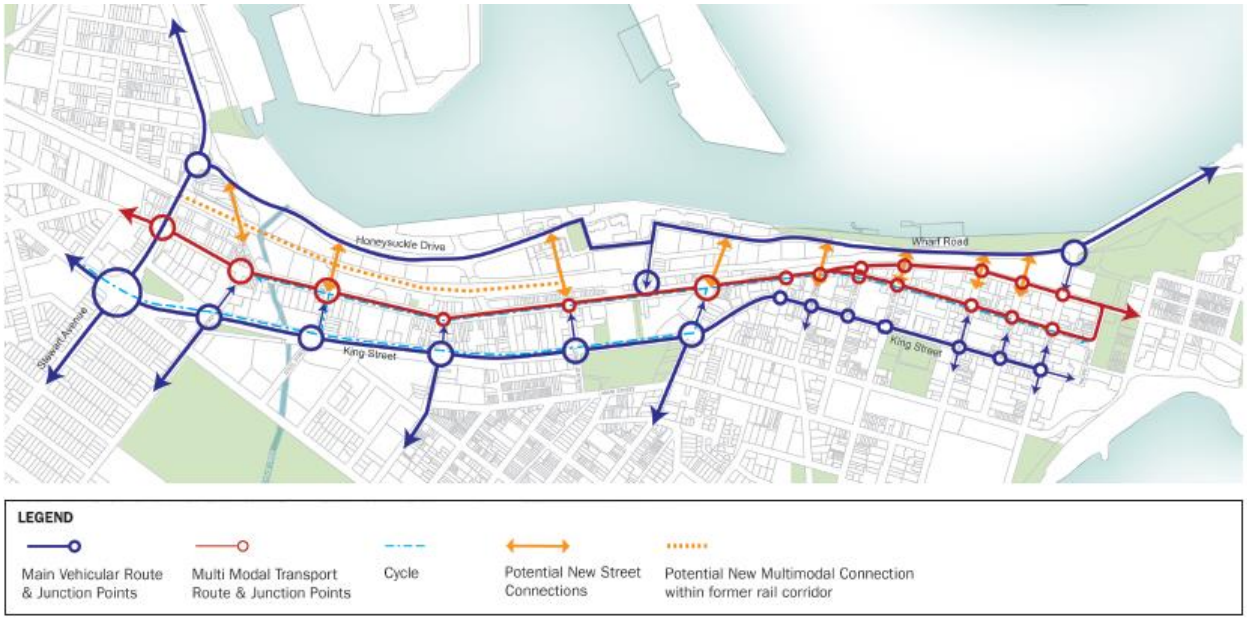


Figure 1: Light Rail option, Strategic Framework for Hunter Street Revitalisation, 2010.

The Strategic Framework suggested:

"Replacement of the heavy rail service with a high frequency light rail system or equal running along Hunter Street connecting the broader community and coastline is the desired outcome. This would assist in further activation of Hunter Street with public transit infrastructure and reinforcement of Hunter Street as a multi modal transit corridor. It is envisaged that the light rail be aligned in a co-shared zone with low speed vehicle movements."

The Newcastle Urban Renewal Strategy (NURS) also identified a range of development opportunities and proposes amended zonings and building heights along Hunter Street, which would support the preferred light rail corridor alignment and station precinct development and leverage the broader economic benefits from the light rail infrastructure investment as illustrated in the following figures.

Figure 2: Opportunity sites adjoining Hunter Street Mall. Source: Department of Planning and Infrastructure, Newcastle Urban Renewal Strategy 2012. © Department of Planning and Infrastructure 2013.

Figure 3: Opportunity sites Civic. Source: Department of Planning and Infrastructure, Newcastle Urban Renewal Strategy 2012. © Department of Planning and Infrastructure 2013.

Figure 4: Opportunity sites West End. Source: Department of Planning and Infrastructure, Newcastle Urban Renewal Strategy 2012. © Department of Planning and Infrastructure 2013.

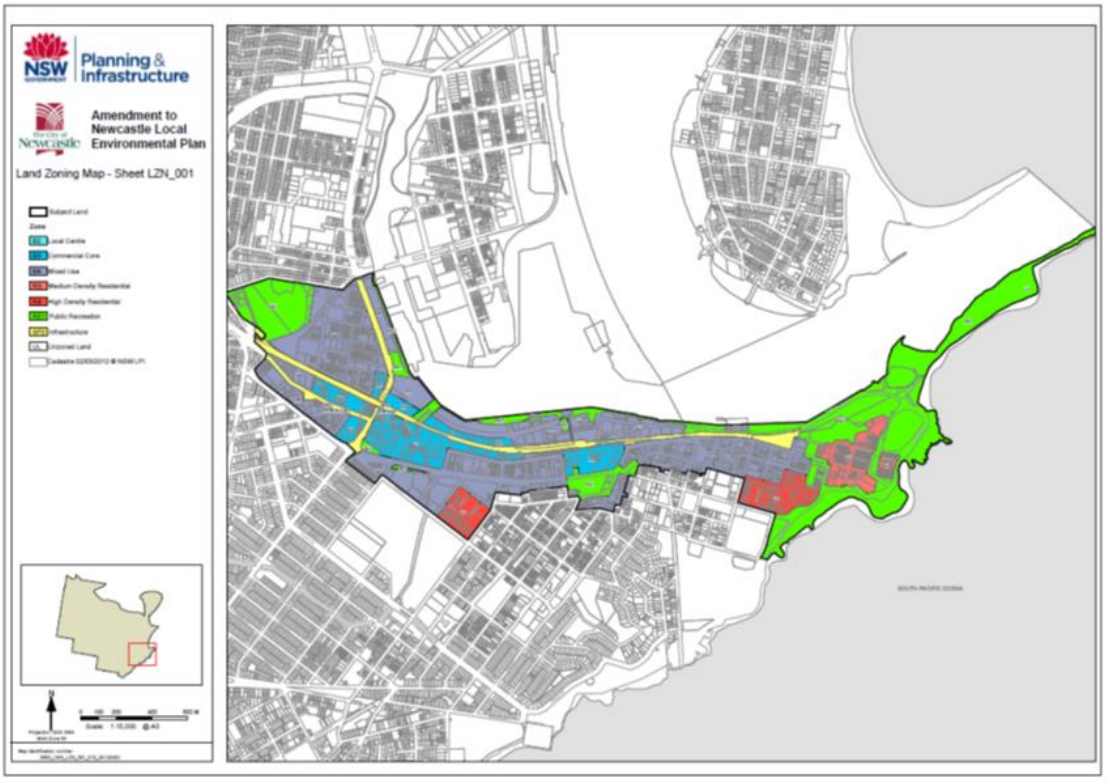


Figure 5: Proposed Land Zoning. Source: Department of Planning and Infrastructure, Newcastle Urban Renewal Strategy 2012. © Department of Planning and Infrastructure 2013.

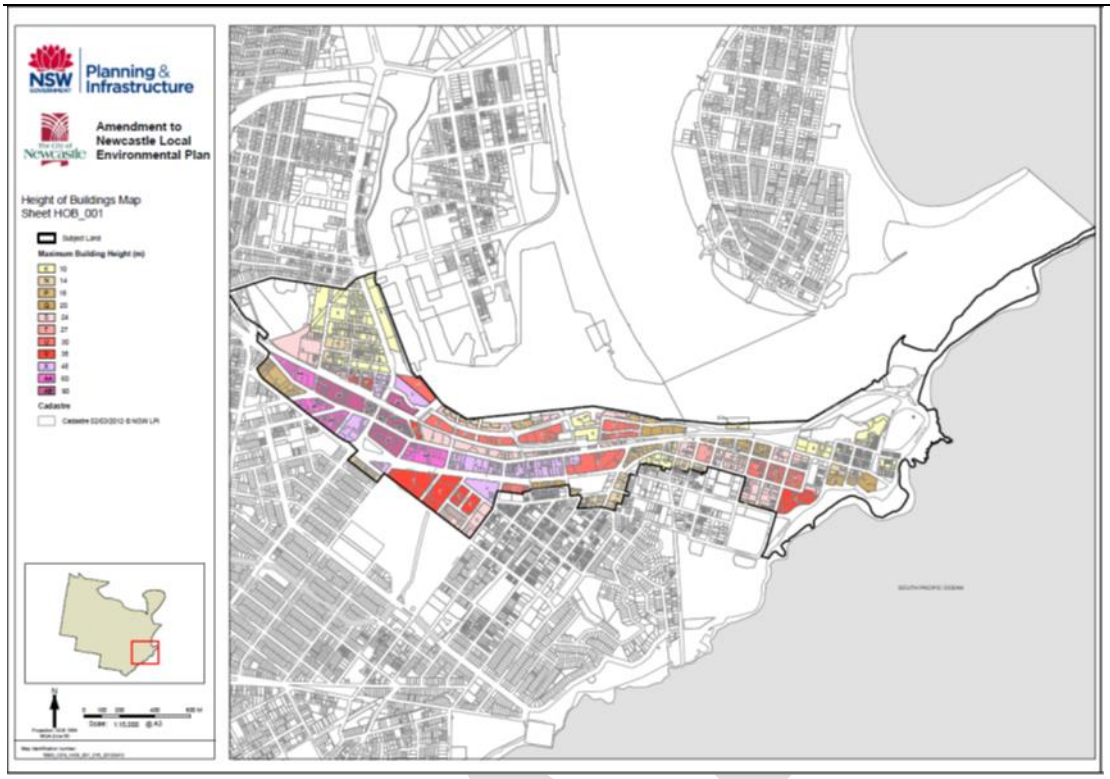


Figure 6: Proposed Building Heights. Source: Department of Planning and Infrastructure, Newcastle Urban Renewal Strategy 2012. © Department of Planning and Infrastructure 2013

Key considerations will be station locations and station precinct development to support the light rail system and CBD revitalisation.

Recommendation 2:

Having regard to stakeholder feedback and the best practice and research findings outlined previously, the preferred route into the CBD that would be the most likely to maximise broader economic benefits is along Hunter Street.

This option also takes into consideration the ability to renew the existing heavy rail corridor to provide improved access and interface with the waterfront, particularly to leverage from the emerging increasing cruise ship economy.

The route should continue to Nobby's and Newcastle Beaches to provide broader destination attractors and maximise ridership opportunities.

7.1.2 Interchange location

Interchange location options are generally considered to be Wickham, Hamilton and Broadmeadow.

Based upon stakeholder feedback it is considered that the constraints at Wickham are likely to exclude that location as an interchange option, however it is recognised that the overall role and function of an interchange or interchanges will need to be informed by broader transport network planning.

Notwithstanding the need for further technical considerations, Broadmeadow does provide a better interchange location advantage in its land availability for development as an interchange and proximity to and connectivity relationship to the CBD, major event precinct and access through to the University and John Hunter hospital should a more extensive light rail network link to those key ridership generators that are common elements of other systems. The Broadmeadow location may also provide the capacity to include park and ride facilities. There are many high quality transit interchange design approaches that could be utilised creating high quality mixed used development opportunities, while providing a major entrance statement for commuters.

Recommendation 3:

Having regard to stakeholder feedback and subject to further detailed technical assessment, the preferred interchange location is Broadmeadow.

This option also takes into consideration the longer term consideration of heavy rail network service improvements such as being able to bring trains from Maitland into Broadmeadow and then continue possibly as far as the Central Coast and thereby creating a "Hunter Suburban Line" and then the capacity to introduce an express Sydney Service between Broadmeadow and Central cutting travel time by up to 50 minutes and taking cars off the M1, which is a key recommendation of Infrastructure NSW's State Infrastructure Strategy.

It is likely that whichever option for interchange location and route selection is preferred there will be a transition period during the construction and commencement of operation of the light rail system if the project proceeds, which will need to be managed.

7.1.3 Potential economic benefits

Maximising the opportunities from the investment in light rail infrastructure is critical to realising longer term economic benefits. Both the initial investment in the infrastructure and any additional but interrelated benefits generate their own economic multipliers. In broad terms the initial investment in infrastructure is the primary multiplier and additional investment leveraged from the initial investment, and are demonstrably interrelated, are secondary multipliers.

For instance, the investment in light rail infrastructure and the investment in urban redevelopment leveraged from the initial investment in light rail provide multilayered short and long run economic benefits.

Experience and research suggests that light rail infrastructure investment is likely to have a multiplier effect of 2.5-4 providing a very substantial economic boost and reduction in unemployment. United States infrastructure spending has focused on a fiscal multiplier of 2.8 times (Han, X., *Why Invest in Infrastructure?*, 2012) and up to 4.0 times in Federal Reserve Bank of San Francisco research (Leduc, S and Wilson, D., *Highway Grants: Roads to Prosperity*, 2012). This forms the primary multiplier and represents the economic benefits flowing from the light rail infrastructure delivery.

A secondary multiplier flows from the development along the light rail corridor as evidenced from the previous examples from the research from the United States. An economic multiplier of 2 to 2.5 is considered a reasonable multiplier based upon research for general housing development and local economic development (Oregon Housing and Community Services, *Housing as an economic stimulus*, 2008; and Morgan J. Q., *Analysing the Benefits and Costs of Economic Development Projects*, University of North Carolina, 2010.). The long run economic benefits are likely to be quite substantial given the total value of development and redevelopment over a recurring development lifecycle.

Using the example from Dallas, which has experienced over US$1.3B in development along the Dallas Area Rapid Transit (DART), this represents an economic value of US$2.6B to US$3.25B over almost 20 years.

For the Gold Coast the initial investment in the first stage of the light rail system of $1.6B is likely to generate an economic value of $3-4.8B, providing a very substantial economic boost and reduction in unemployment. The secondary multiplier for urban development along the corridor over a 20 to 30 year development lifecycle could conservatively realise up to a further $4B-$7.5B of additional economic benefits.

8.0 Development activation for Newcastle CBD

In considering the opportunities to maximise broader economic benefits from light rail infrastructure investment, research indicates that city planners and officials should first address a key question: Why is economic development not occurring in a given area in the first place?

Possible reasons include relatively high cost to business startups, unattractive locations (crime, poor infrastructure) and unnecessary zoning and regulations. Unless these barriers are lowered or removed, the long-run economic development objectives, with or without light rail, will not fully be met *(*Garrett, T.A, *Light-Rail Transit in America: Policy Issues and Prospects for Economic Development,* Federal Reserve Bank of St. Louis, August 2004).

Ultimately to create economic development opportunities for and activate the revitalisation of the Newcastle CBD the approach, which reflects many of the matters raised through stakeholder feedback, must provide:

- certainty of planning, financial, local law and other requirements such as investment attraction incentives to support development feasibility, capability and achievability.
- a planning framework that facilitates (re)development and leverages the investment in the light rail infrastructure.
- a clearly defined infrastructure plan and developer contributions regime that facilitates and does not constrain or is a barrier to (re)development.
- an active engagement and marketing strategy to attract and facilitate investment within the Newcastle CBD.
- good governance, commitment and budget support at a local level where success of the development outcomes resides.

While economic growth and jobs creation are a key policy focus for governments, the contributing elements are not well integrated into current policy frameworks and arguably due to this lack of integration, policy frameworks may act independently or in direct conflict with broader economic policy.

Fundamentally the development activation approach should contribute to economic development as the policy frameworks developed should facilitate private sector investment that will drive economic growth and job creation.

This was a key finding in the recently released Infrastructure Advantage report (McAuliffe, S., McEwan, A. 2013, p15), which found that developing and setting in place a coordinated package of mutually supportive policy levers is necessary to enable urban revitalisation to be facilitated and stimulated.

The relationships between policy frameworks and economic development is illustrated in the following figure 2.

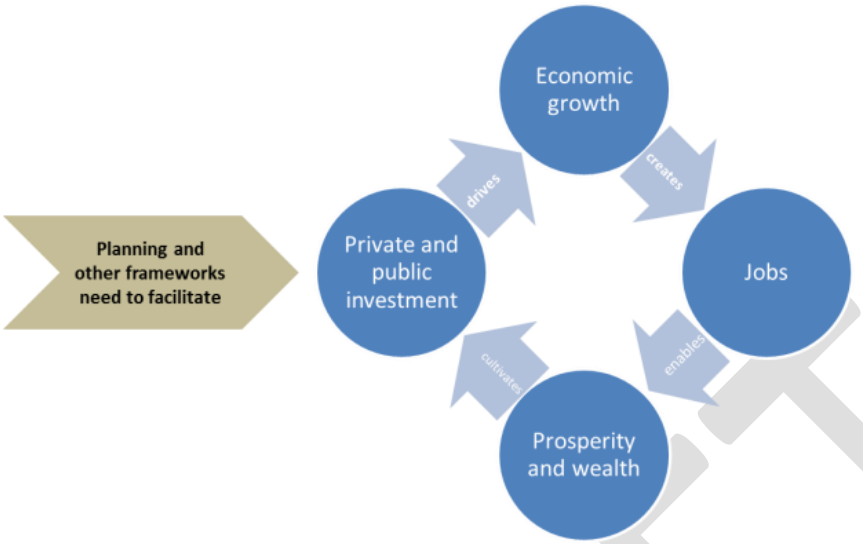


Figure 2: Economic development outcomes

The economic development intent of the Newcastle CBD should also aim to achieve the goals and objectives of the National Urban Policy – productivity; sustainability; liveability and good governance.

8.1 *Infrastructure*

Infrastructure provision is critical for supporting timely and cost effective urban development. Infrastructure needs to be planned, costed and budgeted to enable funding strategies to be developed to ensure delivery in time for development.

8.2 *Understanding development activation constraints*

The planning framework and infrastructure network capacities can potentially place unintended constraints on development.

However, these are not the only limiting factors on development feasibility. Apart from general market conditions it is important to clearly understand the broader range of development constraints that are impacting on development activation in specific locations.

A key constraint impacting on the certainty of financial feasibility of development in Newcastle is mines subsidence mitigation. This was recognised in stakeholder feedback and a strategy to resolve the uncertainty will be critical to improve development activation and achieve the Newcastle CBD revitalisation objectives.

8.3 *Implementation strategy considerations*

A key area of deficiency in many development activation and urban revitalisation approaches is the lack of a clearly defined implementation strategy.

A clearly defined and measurable implementation strategy is critical to ensure development objectives are being realised and benefits delivered.

It also provides a review ability to respond to and address any issues with strategy actions moving forward through the establishment of baseline and ongoing monitoring and reporting arrangements.

Measuring success over time and gathering a knowledge base of key learnings provides the basis for improvements to such strategies in the future.

A successful urban revitalisation implementation strategy requires:

- Managing to results milestones that are clearly measurable.
- Appropriate organisational alignment and capability.
- Resourcing including budgets and funding.
- Communication and engagement.

9.0 Recommendations

The opportunities for development activation for the Newcastle CBD are significant if the right policy settings are established and implemented correctly and integrated with the light rail infrastructure investment.

As mentioned in this report the *Best Practice Guidelines for Light Rail Design* prepared by the City of Vancouver and based upon what has and has not worked in other cities during the 25 years that light rail systems have been in operation in American cities states:

> "LRT is not just about moving people from one point to another. It is also about building community. Done properly, light rail systems will help communities fulfil their vision and their values.
>
> The City of Vancouver's Comprehensive Plan and Vancouver City Centre Vision and Subarea Plan minimize sprawl and revitalize downtown Vancouver through new public and private investment. LRT is one way to stimulate new development and reduce dependence on the automobile."

The broader economic benefits that can be delivered through such a strategy must be maximised, which will require sound leadership.

With the proposed investment in light rail, experience and research evidence from the United States indicates that, with the right policy settings, the maximum economic benefits from urban revitalisation can be realised.

The economic and market environment is fertile for the Newcastle CBD to be revitalised and be a strong CBD for the Hunter region into the future.

Key recommendations from this report are:

Recommendation 1:

Establish a clear vision and outcomes intended from the integrated light rail infrastructure investment and CBD revitalisation. The revised vision may take the form of:

To manage, facilitate and enable revitalisation in Newcastle City Centre and along the light rail corridor to make it a great place to live, work and play.

Recommendation 2:

*Having regard to stakeholder feedback and the best practice and research findings outlined in this report, the preferred route into the CBD that would be the most likely to maximise broader economic benefits and facilitate CBD revitalisation is along **Hunter Street**.*

This option also takes into consideration the ability to renew the existing heavy rail corridor to provide improved access and interface with the waterfront, particularly to leverage from the emerging increasing cruise ship economy.

The route should continue to Nobby's and Newcastle Beaches to provide broader destination attractors and maximise ridership opportunities.

Recommendation 3:

*Having regard to stakeholder feedback and subject to further detailed technical assessment, the preferred interchange location is **Broadmeadow**.*

This option also takes into consideration the longer term consideration of heavy rail network service improvements such as being able to bring trains from Maitland into Broadmeadow and then continue possibly as far as the Central Coast and thereby creating a "Hunter Suburban Line" and then the capacity to introduce an express Sydney Service between Broadmeadow and Central cutting travel time by up to 50 minutes and taking cars off the M1, which is a key recommendation of Infrastructure NSW's State Infrastructure Strategy.

Attachment 1 – Stakeholder comments

To help inform consideration of route and interchange locations a group of key CBD and government stakeholders have been consulted to seek input into route and interchange location options and other issues that are considered of relevance to CBD revitalisation delivery.

In summary the feedback indicated:

Route selection

- The desire to concentrate activity in Hunter Street and opening other corridors will dilute the concentration of activity. If light rail is in the rail corridor then buildings and spaces would need to be activated, which dilutes concentration of revitalisation efforts.
- This should only be one part of a regional transport network. The solutions for this local transport solution need to be considered in the broader regional transport network context. Any future transport needs are to be considered before consideration of rail corridor development.
- Establishing if light rail is the right public transport solution should be the initial task that is completed. The appropriate time frames and staging of light rail should then be considered. If light rail is established as feasible transport option then establishing a route that connects key assets and infrastructure, descales the city and provides a meaningful service for the citizens of Newcastle should be the key determinants in the proposed light rail route.
- Traffic studies of source locations for cars travelling to CBD (and future aspirations of commuters) is necessary to work out whether there would be a reduction in vehicles on particular routes. This would provide options for Broadmeadow to CBD on existing rail line or alternate road routes?
- This relationship with the existing line must be understood in these options as the route may be better along the existing heavy rail corridor from a cost perspective also?
- The Wickham to centre alone may prove to be uneconomic. Opportunities to connect Mayfield, University, Showground and Stadium, Westfield and Glebe Road areas need to be considered. The TfNSW studies on potential network should provide necessary numbers to determine options and staging of any expansions.
- Hunter Street option could provide greater commercial options and more interesting opportunities. Preserving the existing rail corridor for outdoor meeting places, walking

and cycling would provide a relaxed and interesting connection between the port foreshore and Hunter Street and from the commercial Honeysuckle precinct to the beach.

Interchange location

- The location for the transport interchange should be driven by the key urban design and planning principles that will best inform the transport solution that will enable the NURS to become reality.
- Could be a smaller light rail node at Wickham that links to West End, market town, a new convention centre, new ferry route, airport services, buses.
- Depending on studies being undertaken, Broadmeadow could be considered as the major 'heavy to light' node.
- Could provide greater number of future options to cover greater area with light rail network and therefore greater potential to reduce vehicle traffic in Newcastle region.

Other issues

- Current economic conditions.
- Physical constraints –mine subsidence, flood zone, peninsula.
- Planning certainty.
- Certainty on the commitments made by government to investment and planning decisions impacting Newcastle CBD. The intent of the recent announcement is welcomed but concrete action is now required.
- Flexibility in planning controls for the CBD.
- Concern of the impact of the light rail announcement. The light rail has the potential to stall important momentum that is now starting to be generated.
- There are some great initiatives underway (uni, law, innovation precincts) that will make a big difference. There is now a need to consider a convention centre (with links to the airport).
- Newcastle has the capacity to attract additional major international and national events. This will help to raise the profile of the city and make investment in amenity, accommodation and services even more attractive.

- Reducing traffic and improving access is necessary in and around the CBD through light rail, improved bus services, cycle paths and walking tracks that connect with surrounding suburbs.
- Parking – transparent policy on capping parking spaces to encourage other modes.
- Improved connection between key nodes – eg airport and CBD.
- Increasing higher density residential opportunities.
- Innovation hubs – support current efforts.
- Mine subsidence – incentives/ concessions.
- Large scale art installations by international and regional artists
- Cruise ship terminal quality and connection

Project : LIFE on Throsby

Project : Hannell St Apartments

Project : Beresford Apartments

Project : Icon Central

Project : Star Apartments

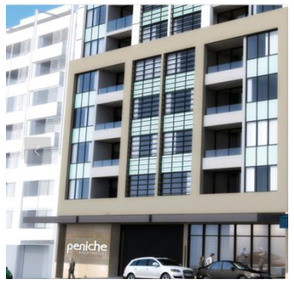
Project : Law Courts Building

Project : Spire Apartments

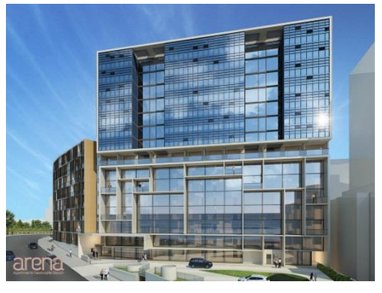
Project : GPT / UrbanGrowth site

Project : University NewSpace

Project : Tattersall's



Project : Peniche



Project : Arena Apartments

Development projects in Newcastle approved / conceptualised since December 2012. Revision 1 – 26/5/2014.