

Central to Eveleigh Transformation Strategy: Draft Principles and Key Moves

City of Sydney submission to Urban Growth NSW
July 2015



CITY OF SYDNEY 
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TRIM 2015/336036

July 2015

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Figure 1. Central to Eveleigh from the air
Figure 2. Central to Eveleigh graphic by UrbanGrowth NSW



Executive Summary

This submission responds to UrbanGrowth NSW (UGNSW) consultation called the Central to Eveleigh Transformation Strategy for the Central to Eveleigh corridor. UGNSW is the NSW Government's developer of publicly-owned State Significant Development sites and is charged with making recommendations for development scenarios beyond the Redfern Waterloo area to include Central Railway lands which are within the City of Sydney LEP.

This rail corridor has the potential to be a transformative and long-term urban renewal project. It is entirely within the City of Sydney Council (the City) Local Government Area (LGA). The wider study area covers about one fifth of the City of Sydney LGA. It could become the home to almost 40 per cent of the City's residents and 15 per cent of workers by 2036. The corridor has high strategic value as it is at the southern end of Central Sydney – the heart of Global Sydney – which is surrounded by employment, education and creative industry clusters and contains significant rail and adjoining arterial road infrastructure.

The City acknowledges the opportunity to provide formal feedback following the community workshop on 30 May 2015 and through the project's online engagement portal. This submission responds to the vision, draft principles and key moves and makes recommendations to align the vision with the City's vision for Sustainable Sydney 2030 and ensure the principles and key moves will deliver on that vision.

Key recommendations arising from key moves

1. The Central to Eveleigh Transformation Strategy should tightly reference the objectives and principles of **Sustainable Sydney 2030** and **A Plan for Growing Sydney** – both plans should equally and transparently guide both planning and development directions and inclusions.
2. The transformation of Central to Eveleigh should reflect the themes **green**, **global** and **connected**. Success in developing the corridor will be based on establishing and maintaining good working **relationships** and partnerships, a **restorative** approach to renewal and **resilient** outcomes in decision-making – being aware of adaptation and mitigation strategies as we face climate change.
3. The Central to Eveleigh corridor has been identified as an **expansion opportunity for Central Sydney** productivity uses in Sustainable Sydney 2030 and the NSW Government's 'A Plan for Growing Sydney'. The future growth of

the Central Sydney office market is a priority for the Sydney Metropolitan Area, let alone the corridor. Strong finance and professional service sectors with connections to education, creative industry and technology sectors has the potential to build a competitive and resilient profile for Sydney's regional role as a 21st century global city. A minimum allocation of employment uses must be allocated against short term development goals that could be pushed to overcome the high costs of over-rail development.

4. Adopt a **robust housing policy** with diversity targets before any proposals involving housing on UGNSW sites are progressed. On public land, policy settings should set an average target of **21-24 per cent for affordable rental housing** across all UGNSW inner city redevelopment sites, balancing high-value free market housing (catering for owner-occupiers and investors) with the proportionate needs of those not able to compete in what has become a global market for acquiring housing assets in Sydney. In the context of site zoning uplifts, clear targets of around **60 per cent for market and 40 per cent for all other non-market housing types** (including affordable and retaining existing social housing numbers) should be set for Central to Eveleigh to cater for all of the community.
5. Density targets need to be tested to ensure that the major amenity provisions for residential development required by the NSW Government's recently adopted **Apartment Design Guide** can be met. Planning flexibility needs to be built into plans by demonstrating that multiple rather than singular solutions can deliver the established amenity outcomes.
6. Celebrate the living culture of Aboriginal and Torres Strait Islander communities through growing the **Eora Journey**. Engage with Aboriginal and or Torres Strait Islander people to carry out work that relates directly to their histories and stories, further empowering our first peoples through the re-instatement of their history making it visible in the public domain, celebrating their culture and their ongoing contribution to the life of the City.
7. Support **business development and employment for local Aboriginal and Torres Strait Islander communities** by forming collaborative partnerships with organisations and communities; building the capacity of business owners and entrepreneurs through procurement opportunities and affordable space; and create employment opportunities through development.
8. Acknowledge the important role of **heritage conservation areas** in the Central to Eveleigh Study Area through Redfern, Chippendale and Surry Hills which have high resident and job densities that host emerging creative industries due to their attractiveness, fine grain character and flexible and diverse building stock. The

Transformation Strategy should continue to support the live/work role of these conservation areas by retaining existing building stock and protecting affordable workspaces with good amenity that are attractive to emerging industry clusters.

9. Urban transformation at Central to Eveleigh should **minimise traffic generation and congestion**, building on the key attributes of the area by focussing on creating great streets and walkable neighbourhoods; and linking people to efficient, multi-modal public transport interchanges.
10. UGNSW should review the principles and key actions **minimise the energy, water, and waste footprint** of new development, helping to reduce climate shock vulnerability of buildings, places and people within the corridor. Climate shocks can result from prolonged or unusual heat events or dry periods, and will impact human health and urban productivity.
11. Require **C40 Climate Positive certification** for the Corridor development and establish a Single Utility Model, using the Barangaroo model as a basis, to manage the delivery of robust sustainability targets. Also consider certification for a broad community sustainability rating tool. These provide a framework for the delivery and monitoring of precinct wide water recycling as well as tri-generation.
12. Commit to **new open space** for an incoming population that meets their recreational needs. Work with the City to identify how renewal will deliver new open space in the Corridor and Study Area, including dedications through developer contributions for larger parks and sports fields in the wider study area if they cannot be provided within the publicly-owned corridor.
13. Support the ongoing **revitalisation of Redfern Street** as the heart of the Redfern village through the careful transformation of the corridor and upgrade and co-location of uses at Redfern Station.
14. Commit to Australian Technology Park (ATP) growing as a centre of technology and advanced industries growth focusing on productivity, research and employment. Ensure mechanisms to **prohibit residential** within the precinct as a strategic intent; preserve heritage buildings, artefacts and spaces; ensure public access and connectivity is maintained and enhanced for workers for the whole community.
15. The current ATP site has both park space and roads. To enable all of the public space within the ATP site to be maintained and preserved, **ensure the transfer of the open public spaces in ATP to the City of Sydney** on the completion of development on this site.

16. Maintain ongoing **engagement and consultation** with the whole community during all phases including all delivery and refinement stages.

Amended draft principles

Principles should focus on providing an improved urban life for existing and future residents and workers that is resilient to future change. This can be achieved through well planned high density renewal areas and continued support of the surrounding existing dense conservation areas.

For the city as a whole, density in inner areas supported by public transport, increases productivity, reduces congestion and builds on existing infrastructure. Inner city jobs are more accessible, particularly by public transport, to a greater number of workers from across the metropolitan area than jobs in other areas. This creates more choice for employers seeking workers and reduces congestion. Together the productivity of the city as a whole is increased.

Sustainable Sydney 2030 says denser cities can be the healthiest, greenest and most stimulating place for people with the least environmental footprint. The City recommends expanding and amending the draft principles to be consistent with **Sustainable Sydney 2030** including, but not limited to the following:

Public transport

- Locate high densities close to fixed rail and light rail transport stops.
- Ensure higher job densities within 400 metres of Central and Redfern stations and any new rail stations.
- Provide early development scenario data to patronage and feasibility studies for light rail to serve areas beyond ten minute walking catchment of heavy rail stations.

Public open space

- Provide new public open space to meet the needs of resident and worker population growth.
- Ensure parks are at least 5,000 square metres to provide for a variety of uses and users as achieved in similar urban renewal precincts undertaken on private land.
- Use streets and laneways to separate open space from sensitive uses such as housing, ensuring its public character.
- Have continuous active frontages where parks adjoin new buildings.
- Ensure sun access to new and existing parks with at least 50 per cent of the area receiving at least four hours between 9am and 3pm at midwinter.

Social Infrastructure

- Allow sufficient dedicated land for a range of state-provided social infrastructure including hospitals, aged care, child care and schools (primary and secondary) that provides for new residents and address existing shortfalls within new high density areas.
- Allow space for physical recreational needs including active sports.
- Allow space for water recycling and waste water treatment utilities
- Allow space for emergency services

Street layout

- Provide highly permeable, low traffic speed street layouts that give priority to pedestrians and bicyclists.
- Ensure continuous active street frontages in new high density areas.
- Do not locate residential uses on busy roads or beside rail lines to ensure a healthy life (if unavoidable use buildings designed specifically for noise mitigation).

Buildings

- Test and ensure housing amenity standards in the Apartment Design Guide can be met at the early planning stages. Ensure 70% of dwellings receive solar access during winter control hours – extended hours should not be used. Satisfaction of SEPP 65 becomes unachievable when maximum gross FSRs exceed 2.5:1 (englobo) and net FSRs exceed about 4:1.
- Do not undermine existing residential amenity of residential areas or parkland by unreasonable additional overshadowing.
- Implement the City of Sydney's Design Excellence requirements for all new buildings over 25m high in high density areas.
- All car parking structures are to be sleeved or concealed. Do not exceed City of Sydney variable car parking rates in order to manage on-road congestion.
- At higher densities, reserve high floor to ceiling ground floors (and first floor or basements) for future retail, food and beverage and commercial uses and allow easy conversion of first floors to non-residential uses in the long term.



Figure 3: Central to Eveleigh Corridor and Study Area (UrbanGrowth NSW)

1. Introduction

On behalf of the NSW Government, UGNSW is preparing a draft '*urban transformation strategy*' to direct urban renewal of significant government lands in and around the rail corridor from Central Station to Macdonaldtown and Erskineville Stations as well as NSW social housing estates at Eveleigh, Waterloo and Redfern.

In July 2014, the City of Sydney Council (the City) resolved to enter into a Memorandum of Understanding with UGNSW (the MoU) which sets out how the City and UGNSW will cooperate to consider the best planning framework in the City of Sydney LGA. The MoU was prepared on the premise that if the City and UGNSW have shared objectives and principles for the planning and redevelopment, then better urban renewal and strategic planning outcomes will follow.

UGNSW is consulting on the vision, draft principles and key moves that will inform the strategy for the Central to Eveleigh Corridor. Information was presented to a community forum on 30 May 2015 and via an online consultation portal. This submission responds to the proposed vision, draft principles and key moves in that documentation.¹ These key moves are described as the 'essential urban design and planning principles required to realise the vision' for Central to Eveleigh.²

This submission is based on – an understanding of the planning and economic issues facing the City and the Central to Eveleigh Study area; strategies and plans, including ***Sustainable Sydney 2030***; and the City's extensive experience with urban renewal projects such as the 278 ha Green Square Urban Renewal Area, Ashmore Precinct and Harold Park. Throughout the submission the Corridor refers to the 80 hectares of government land on and adjoining the railway corridor. The Study Area refers to the 565 ha of land within a 10 minute walk of the corridor as defined by UrbanGrowth NSW. The boundaries of these two areas are shown in **Figure 3**.

The Central railway land raises some profound questions. Should the track capacity be reduced or expanded? Should provision be made for a high speed intercity train station? Should the tracks be relocated below ground to make way for future ground level development? These issues sit with Transport for NSW and need to be resolved before UGNSW can proceed at the northern end. The future of operation of Redfern Station will also guide development in the south.

The City acknowledges the opportunity to provide an extended response to the vision, principles and key moves. The City also acknowledges the range of opportunities to provide input to the project to date.

¹ http://engage.centraltoeveleigh.com.au/city_thinking_home/documents

² Central to Eveleigh Urban Transformation and Transport Program - Discussion Guide, May 2015, p23, http://engage.centraltoeveleigh.com.au/city_thinking_home/documents/22885/download

2. City and Central to Eveleigh

The Central to Eveleigh corridor is a three kilometres long are covering more than 80 hectares of government land. At one end of the corridor is Central Station and the southern extent of Central Sydney - the economic hub of metropolitan Sydney and the heart of Australia's only global city with key finance, business services and tourism sectors.

Redfern and Eveleigh at the other end of the corridor comprise a diverse community with deep associations with the place, adapted transport infrastructure with historical significance, social housing estates, an evolving local main street and the Australian Technology Park business precinct. Creative industry, small business and education hubs have developed either side of the corridor through Surry Hills, Chippendale, Ultimo-Pyrmont and Darlington. Distinct residential communities live and work in the heritage areas alongside the corridor and throughout the wider study area.

A well-considered and staged transformation of the Central to Eveleigh corridor offers significant opportunities to strengthen existing communities and activities, support the growth of Metropolitan Sydney and contribute to each of the ten strategic directions of Sustainable Sydney 2030.

The City in its own planning documents has contemplated the transformative concept of rail corridor development around Central Station in its 1971, 1988 and more recently in the 2008 release of *Sustainable Sydney 2030*. In 2008 it was framed as an opportunity to re-cast the city's southern gateway, create a public space at the base of the George Street spine and connect Haymarket, Ultimo, Surry Hills, Chippendale and southern Central Sydney.

The development of the corridor has the clear potential to be one of the most significant city shaping projects in the LGA given its location (connecting north and south, dividing east and west). This potential could impact on future transport infrastructure, and up to 92,000 workers (15 per cent of all City workers) and 108,000 residents (37 per cent of all City residents) that could be living within a 10 minute walk of the corridor by 2036.³

The complete transformation will have a long time frame. The early planning, vision and objectives need to be strong, clear and well founded in the public interest to deliver and share the benefits for Sydney through changing economic conditions, evolving communities and successive governments.

³ UrbanGrowth NSW, Presentation: Community workshop draft design and planning principles, 30 May 2015, http://engage.centraltoeveleigh.com.au/city_thinking_home/documents/22887/download and Bureau of Transport Statistics

The City supports the transformation of Central to Eveleigh as an opportunity to create benefits for the City's residents, workers, businesses and visitors, solve existing urban problems and contribute to the future productivity and competitiveness of the NSW economy.

Central to Eveleigh renewal can:

- Connect the inner city and central Sydney through improved access to Redfern Station and pedestrian and cycle shared crossings over the rail corridor in order to link communities, businesses, open space and other infrastructure.
- Build on all aspects of the City's Eora Journey celebrating Aboriginal and Torres Strait Islander culture and heritage through major public art projects, events, economic development and the creation of an Aboriginal Knowledge and Cultural Centre.
- Ensure leading sustainable urban renewal through district scale energy and water recycling infrastructure, buildings and public spaces that achieve design excellence and diverse housing to meet the needs of the community.
- Amplify the economic opportunities associated with the continued agglomeration of internationally, nationally and regionally focused finance, education, business services and creative industry hubs – create different ground rent circumstances for start-ups, SMEs and mature hi-tech and business services.
- Demonstrate the benefits of collaborative participation and governance between governments and communities.

3. Draft Vision, Principles and Key Moves

UrbanGrowth NSW (UGNSW) has set out a vision to shape Central to Eveleigh, draft design principles to guide development and 10 key moves required to realise the vision for the transformation of the Central to Eveleigh Corridor.

<i>Vision</i>			
<i>Living</i>	<i>Community</i>	<i>Working</i>	<i>Resilience</i>

<i>Principles</i>					
<i>Diversity</i>	<i>Variety</i>	<i>Transition from Old to New</i>	<i>Active Streetscapes</i>	<i>Accessible Public Spaces</i>	<i>Community facilities</i>

<i>Key Moves</i>				
<i>1. Renew Redfern Station</i>	<i>2. Green Corridor + Open Space</i>	<i>3. Connections</i>	<i>4. Roads and Traffic</i>	<i>5. Centres of Activity</i>
<i>6. New Economies</i>	<i>7. Live and Work</i>	<i>8. Cultural and Heritage</i>	<i>9. Building Scale and Design</i>	<i>10. Housing Diversity</i>

This submission provides feedback on the visions, key moves and the draft design principles as well as a selection of questions posed online and in the discussion guide relating to the key moves.

The City has identified the important issues which need clear intent and guidance through the key moves and design principles in order to achieve both UGNSW’s vision for Central to Eveleigh and the City’s vision for *Sustainable Sydney 2030*.

Key issues arising from vision, principles and key moves

1. The Central to Eveleigh Transformation Strategy should tightly reference the objectives and principles of **Sustainable Sydney 2030** and **A Plan for Growing Sydney** – both plans should equally and transparently guide both planning and development directions and inclusions.
2. The transformation of Central to Eveleigh should reflect the themes **green**, **global** and **connected**. Success in developing the corridor will be based on establishing and maintaining good working **relationships** and partnerships, a **restorative** approach to renewal and **resilient** outcomes in decision-making – being aware of adaptation and mitigation strategies as we face climate change.
3. The Central to Eveleigh corridor has been identified as an **expansion opportunity for Central Sydney** productivity uses in Sustainable Sydney 2030 and the NSW Government's 'A Plan for Growing Sydney'. The future growth of the Central Sydney office market is a priority for the Sydney Metropolitan Area, let alone the corridor. Strong finance and professional service sectors with connections to education, creative industry and technology sectors has the potential to build a competitive and resilient profile for Sydney's regional role as a 21st century global city. A minimum allocation of employment uses must be allocated against short term development goals that could be pushed to overcome the high costs of over-rail development.
4. Adopt a **robust housing policy** with diversity targets before any proposals involving housing on UGNSW sites are progressed. On public land, policy settings should set an average target of **21-24 per cent for affordable rental housing** across all UGNSW inner city redevelopment sites, balancing high-value free market housing (catering for owner-occupiers and investors) with the proportionate needs of those not able to compete in what has become a global market for acquiring housing assets in Sydney. In the context of site zoning uplifts, clear targets of around **60 per cent for market and 40 per cent for all other non-market housing types** (including affordable and retaining existing social housing numbers) should be set for Central to Eveleigh to cater for all of the community.
5. Density targets need to be tested to ensure that the major amenity provisions for residential development required by the NSW Government's recently adopted **Apartment Design Guide** can be met. Planning flexibility needs to be built into plans by demonstrating that multiple rather than singular solutions can deliver the established amenity outcomes.

6. Celebrate the living culture of Aboriginal and Torres Strait Islander communities through growing the ***Eora Journey***. Engage with Aboriginal and or Torres Strait Islander people to carry out work that relates directly to their histories and stories, further empowering our first peoples through the re-instatement of their history making it visible in the public domain, celebrating their culture and their ongoing contribution to the life of the City.
7. Support ***business development and employment for local Aboriginal and Torres Strait Islander communities*** by forming collaborative partnerships with organisations and communities; building the capacity of business owners and entrepreneurs through procurement opportunities and affordable space; and create employment opportunities through development.
8. Acknowledge the important role of ***heritage conservation areas*** in the Central to Eveleigh Study Area through Redfern, Chippendale and Surry Hills which have high resident and job densities that host emerging creative industries due to their attractiveness, fine grain character and flexible and diverse building stock. The Transformation Strategy should continue to support the live/work role of these conservation areas by retaining existing building stock and protecting affordable workspaces with good amenity that are attractive to emerging industry clusters.
9. Urban transformation at Central to Eveleigh should ***minimise traffic generation and congestion***, building on the key attributes of the area by focussing on creating great streets and walkable neighbourhoods; and linking people to efficient, multi-modal public transport interchanges.
10. UGNSW should review the principles and key actions ***minimise the energy, water, and waste footprint*** of new development, helping to reduce climate shock vulnerability of buildings, places and people within the corridor. Climate shocks can result from prolonged or unusual heat events or dry periods, and will impact human health and urban productivity.
11. Require ***C40 Climate Positive certification*** for the Corridor development and establish a Single Utility Model, using the Barangaroo model as a basis, to manage the delivery of robust sustainability targets. Also consider certification for a broad community sustainability rating tool. These provide a framework for the delivery and monitoring of precinct wide water recycling as well as tri-generation.
12. Commit to ***new open space*** for an incoming population that meets their recreational needs. Work with the City to identify how renewal will deliver new open space in the Corridor and Study Area, including dedications through developer contributions for larger parks and sports fields in the wider study area if they cannot be provided within the publicly-owned corridor.

13. Support the ongoing **revitalisation of Redfern Street** as the heart of the Redfern village through the careful transformation of the corridor and upgrade and co-location of uses at Redfern Station.

14. Commit to Australian Technology Park (ATP) growing as a centre of technology and advanced industries growth focusing on productivity, research and employment. Ensure mechanisms to prohibit **residential** within the precinct as a strategic intent; preserve heritage buildings, artefacts and spaces; ensure public access and connectivity is maintained and enhanced for workers for the whole community.

15. Maintain ongoing **engagement and consultation** with the whole community during all phases including all delivery and refinement stages.

4. Draft Vision

UGNSW has drawn on feedback from stakeholders and the local community to shape a vision for the future of Central to Eveleigh, expressed under four themes.

Living: This will be a place with a broad supply and choice of homes and active and attractive public places to support social diversity and community connections.

Community: This will be a place that celebrates our rich diversity and heritage and gives everyone easy access to community and cultural facilities.

Working: This will be a dynamic and popular place to work – a place that connects many types of businesses and offers the right balance and diversity of service, trade, digital, education, innovation and creative industries.

Resilience: This will be a place that responds to economic, social and climatic changes in ways that benefit our quality of life and the quality of our environment – a place that harnesses new opportunities to enrich the community.

The City broadly supports UGNSW's generalised statements; however they lack detail, targets and definitions to understand how they will translate into a quality outcome.

It is suggested that UGNSW update the ten targets in Sustainable Sydney 2030 which cover: greenhouse gas reduction target, local electricity and water generation capacity, additional dwellings in total target, social and affordable housing target as proportion of dwellings, employment target, public transport target, active transport target, walkability target, green link accessibility target, development trust target. It is important that UGNSW uses the Transformation Strategy to secure wide-ranging development targets (as suggested in 'Amended Draft Principles') and that funding for infrastructure is made possible by allocating and sharing development gains with land-holding government authorities, NSW Government Properties and private sector developers over time.

How can we make our vision a sustainable one?

Cities have a critical role in reducing greenhouse gas emissions because although they cover only two per cent of the Earth's land surface, they have more than 50 per cent of the population and account for 75 per cent of the world's emissions.

Addressing climate change is the biggest challenge we have locally and globally. Improving energy efficiency and identifying alternative sources of energy, including renewable energy, continue to be a priority.

Sydney is one of the fastest growing first world cities in the top fifteen most liveable cities in the world. Population projects to 2036 and 2050 suggest a significant increase far beyond the current numbers served by existing infrastructure. As the water catchment is limited, and desalination is expensive and energy intensive, all new development should aspire for greater water and energy conservation targets so as to reduce large infrastructure investments in the future such as additional dams and water network.

The City of Sydney recognises the importance of an enduring, balanced approach which takes into account the city's economy, ecology, society and culture.

Sustainable Sydney 2030 is a plan for a more sustainable, walkable city with a minimal environmental impact, green with trees, parks, gardens and linked open spaces. It is city with healthy ecosystems and where the air, land and waterways are clean; with highly efficient buildings and transport systems. It is an unashamed plan for a city green by example and green by reputation.

Public commitment to sustainable outcomes

The Central to Eveleigh redevelopment provides a major opportunity to make significant progress towards these targets. The precinct should be committed to the **C40 Climate Positive Development Framework** developed by C40 Cities.

Barangaroo has established this precedent and carbon neutrality is built into every aspect - commercial, retail, residential occupation, as well as cleaning and waste contracts for example. Each tenancy is individually metered and carbon budgets per square meter are assigned based on tenancy type. Performance is monitored and renewable energy certificates are used where a carbon budget is exceeded. Sustainability clauses, including carbon budgets are included within standard commercial leases.

A significant economic imperative to this planning work is the economic impact of climate change through the immediate impacts such as the interruption of vital services and infrastructure like energy, transport and communications. In the longer-term, potential disruptions to workforce productivity must be considered in terms of structural impacts if critical sectors such as tourism or transportation are adversely affected. An increasing number of extreme weather events could lead to reduced economic certainty which could lead to less stable economic growth.

In terms of urban design, many aspects of the built form, such as building heights, materials, spacing, orientation, and ground cover contribute to the “**urban heat island effect**”. This means that the city heats during the day and retains this heat well into the night. Good design can actively reduce the urban heat island and prevent excessive heat stress on the city’s community, plants, animals and systems like road, water and energy infrastructure. The residents of a very dense precinct like Central to Eveleigh are at particular risk from the urban heat island effect - but this can be mitigated by designing in green spaces, cool pavements and other ways to allow the area to cool down at night in summer.

Climate change

Climate change adaptability is included as a component of resilience, but is not followed through in the principles or the key actions. To make the vision more sustainable, UGNSW should review the principles and key actions to ensure that they are directed to reducing development vulnerability to climate shocks of buildings, places and people within the corridor. These climate shocks can result from prolonged or unusual heat events or dry periods, and will impact human health and urban productivity.

Reduce energy and potable water consumption

In its vision for *Sustainable Sydney 2030*, the City has set world-class targets for **reductions in energy and water consumption**, including a reduction in energy-related emissions of 70 per cent and a reduction in potable water demand of 10 per cent. These targets have been formulated in knowledge of the rapid growth of business and residential activity in the City area over the next 15 years.

To achieve the Sustainable Sydney 2030 targets, best-practice targets for energy and water efficiency must be built into all new development from the very outset of the planning process. Further, all significant scale development must include mandates and incentives for large-scale on-site energy generation and alternative water supply systems (both within buildings and so as to connect individual buildings to networks provided by alternative energy and water providers). Appropriate rewards should be provided to developers that respond positively and creatively to the City’s expected water and energy outcomes.

Major projects must conserve future demand for freshwater given the physical and economic limitations on creating new dams and catchments to serve a significantly increased metro population. Like the Green Square Town Centre, Barangaroo South and Central Park, the Central to Eveleigh transformation project should incorporate best practice water efficiency design (efficient fixtures and fittings) and be **dual plumbed** to enable connection to a district-wide recycled water service.

Precincts should be designed for collection, treatment and reuse of locally generated wastewater, stormwater and rainwater for non-potable use including toilet flushing, laundry, cooling and irrigation.

An independent recycled water supply based on collection and mining black water reduces reliance on fresh drinking water irrigation, toilets and laundries and allows maintenance of green space to keep the city green and cool during rising temperatures and changing rainfall patterns associated with climate change. The iconic green walls at Central Park would not have been possible without the provision on recycled water onsite.

At a whole-of-area scale such as Central to Eveleigh, lead agencies such as UrbanGrowth NSW have a special responsibility to lead and foster the achievement of sustainable energy and water outcomes, including provision of appropriate space and access rights in individual development sites and in the public realm, for decentralised energy and water providers to develop and carry on their activities.

Recommendations

UrbanGrowth NSW should review the principles and key actions to ensure that they are directed towards minimising the energy, water, and waste footprint of new development, helping to reduce the climate shock vulnerability of the buildings, places and people within the corridor. Specific targets, which are a step up from current targets, should be agreed so as to reduce public funding for additional major infrastructure to service Sydney's expanding population.

Achieve the internationally recognised C40 Climate Positive certification for the corridor development and establish a Single Utility Model, using the Barangaroo model as a basis, to manage the delivery of robust sustainability targets. Also consider certification for a broad community sustainability rating tool. These provide a framework for the delivery and monitoring of precinct wide water recycling as well as tri-generation.

5. Draft Design Principles and Density Done Well

Draft Design Principles

- 1. Diversity: Building height and form should be varied. It should not create a curtain of high-rise that is the same height.***
- 2. Variety: The look and feel of buildings (design, facades and articulation) should have variety and contribute to the visual appeal of the area.***
- 3. Transition from new to old: The tallest buildings should be where they have the least impact and taper down in height to meet height in existing neighbourhoods.***
- 4. Active streetscapes: Buildings provide active frontages and footpaths attract pedestrians and foot traffic.***
- 5. Accessible public spaces: High levels of activity and used frequently by a diverse range of groups.***
- 6. Community facilities: Community facilities are co-located near areas of community activity and are designed to support and activate public spaces.***

Principles to guide the development of higher-density communities should focus on providing a better life for existing and future residents and workers based on design that is resilient to future change. This can be achieved through well planned high density in renewal areas and continued support of the surrounding existing dense conservation areas.

Careful, skilled planning and design will produce high density with high amenity. This will ensure the continuing productivity and attractiveness of Sydney as a place to live and work. It will assist broadening the understanding of the benefits of change.

In the context of the city as a whole, more density in inner areas increases productivity, reduces congestion and builds on existing infrastructure. It is most important that inner city areas include high job density as well as high residential density. Inner city jobs are more accessible, particularly by public transport, to a greater number of workers from across the metropolitan area than jobs in other

areas; this creates more choice for employers seeking workers and reduces congestion. Together the productivity of the city as a whole is increased.

Understanding density

In discussing density, emphasis is often given to the relationship between height and the site. This relationship is not linear, as illustrated in **Figure 4** below.

Measuring density

Density has many definitions and methods of measurement. Height, typically a sensitive issue, is an unusual and less useful measure. More common and useful measures include how many people live in an area; how many live and work in an area; or the amount of floor area in relation to an area (commonly referred to as floor space ratio). These should be referred to and explained with relevant parallel case studies to provide context for a meaningful conversation on the transformation of urban precincts. The case studies should include familiar places in Sydney and international examples.

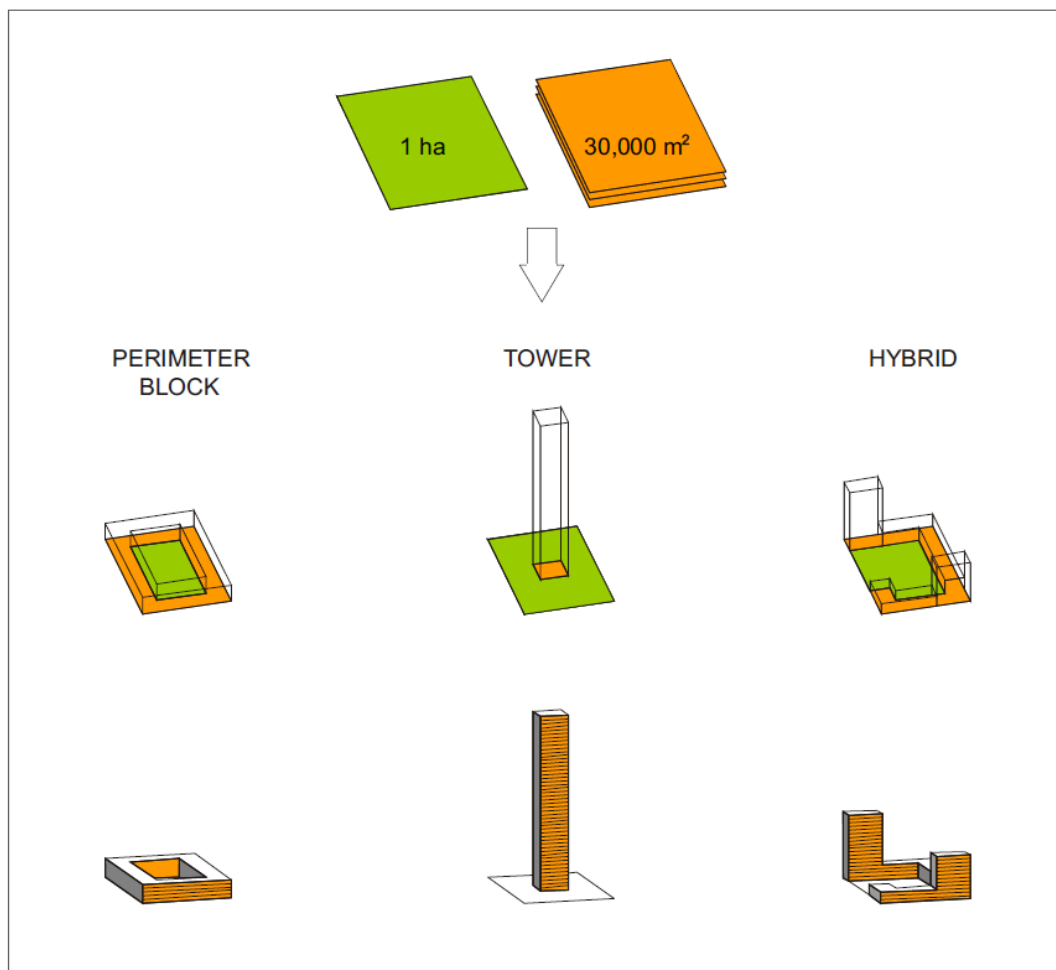


Figure 4: Australian Apartments at the third millennium, Paul Walter 2007 (unpublished)

The scale of measurement also affects comparisons. An individual 'site density' measure usually refers to the private land area only of a particular development excluding roads; 'net density' includes the immediate local or surrounding streets and small parks; while, 'gross density' would include larger parks, infrastructure and other space.

As the area being measured increases, the density figure decreases as more unoccupied space is included. For example, for a large renewal area, the gross residential density of the Green Square Urban Renewal Area (GSURA), which covers 278 ha and expected population of around 54,000 people, is around 20,000 people per square kilometre. The GSURA has at an average Gross Floor Area (GFA) ratio of around 2.5:1

Comparing density

Density varies locally, often by large factors, and therefore selective choice of areas to be measured can easily distort comparative measures and make them meaningless. In comparative analysis it is important that the differences between the areas measured are fully described and equated.

For example, at St Leonard's Station the peak site density is around 77,000 people per square kilometre. However, this is for an area of less than two hectares. For the suburban areas of St Leonards in Willoughby and North Sydney local government areas, the density is 7,250 people per square kilometre (less than one tenth the density of the small area). This is because density constantly varies and peak densities are usually contained as they take advantage of surrounding lower densities for their amenity in relation to outlook and solar access.

The same density can be attributed to widely differing environments as the measures disguise complex interrelationship of street widths, household size, dwelling size, size of gardens, number of stories in buildings, the building's shape, distribution of parks and infrastructure provision.

When making density comparisons similar sized areas (number of hectares or square kilometres) should be used and the measures should be supplemented with notes to qualify outcomes.

For example, if comparing the population density of an area in Hong Kong, it is important to note that Hong Kong dwellings are smaller, have a different household size (2.9 people per dwelling in Hong Kong compared to 1.95 in inner Sydney) and buildings in Hong Kong are generally more closely spaced and taller but have better access to light and air.⁴ This means that a similar population density (people per square kilometre) in Hong Kong may have around half the physical floor area or bulk of a similar population density in inner Sydney.

⁴ <http://www.censtatd.gov.hk/>

Perception of density

High, medium and low density will vary in meaning depending on context, the system of measurement and perception.

Often when density is talked about values are implied. High density may be used to indicate the efficient use of land and active streets to some and lack of light and lack of privacy to others. In a discussion of density it is important to illustrate all these factors so that choices can be informed. This can also be done by showing parallel case studies. Discussions of density should also include macro issues, for example, of carbon based fuel use in relation to density as shown in **Figure 5** below.

To suggest that there is a trade-off between height of buildings and provision of community infrastructure is too simple and may lead to a misunderstanding of the issues. More density will result in higher populations that require more community services and more common open space.

Economies of scale allow for better provision of community facilities at higher density. However, tall buildings for their own sake are more expensive to build and require higher levels of investment, require purchasers to pay for a 'view' as well as a convenient location, make the important spaces between tall buildings with the life of the city takes place, more difficult to be realised as environmental conditions are more difficult to manage.

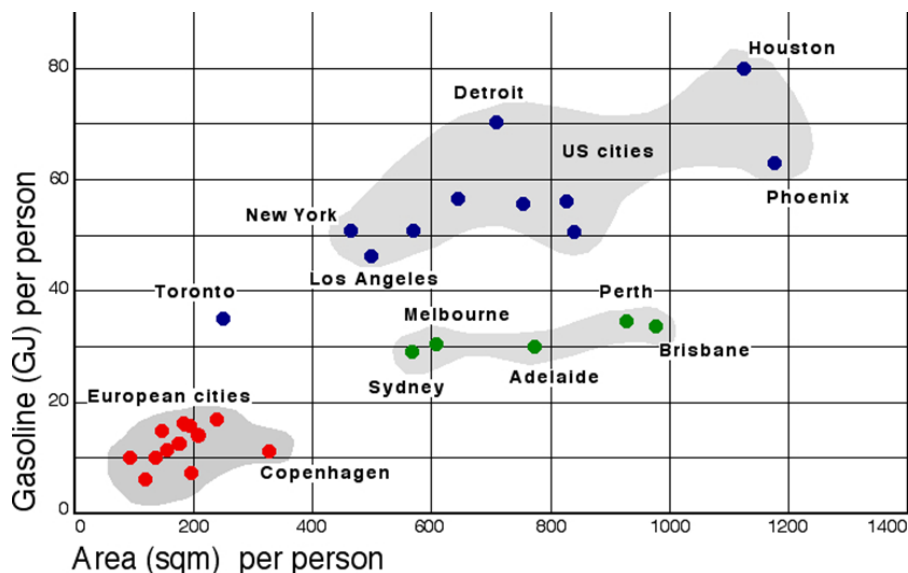


Figure 5: the relationship between urban density and fuel consumption

CASE STUDY: Superdensity: The Sequel (<http://www.superdensity.co.uk/>)

In London, a recent study ‘Superdensity: The Sequel’ promotes high densities and sets forward recommendations to ensure good amenity is obtained at the highest densities. Importantly, this pro-high-density report is particularly cautionary in relation to very high densities.

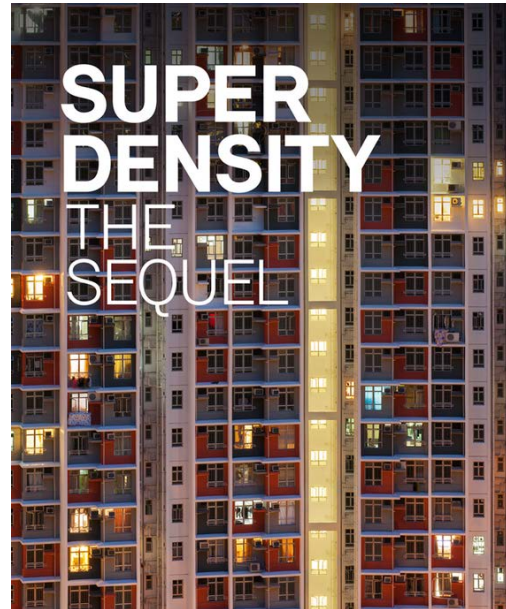
“...above...350 homes per hectare⁵ there should be a presumption against development, and that any exceptions should be subject to more rigorous impact testing...” (p6).

This precautionary approach is supported by recent experience in the City of Sydney.

At Central Park where the residential site density is likely to be around 740 people per hectare, residential development does not meet the amenity requirements of the NSW Government **Apartment Design Guide** with apartments having habitable rooms without external windows and lack of natural cross ventilation.

At Green Square Town Centre the projected residential site density is around 645 people per hectare, and landowners are experiencing much difficulty in meeting the amenity requirements of the Apartment Design Guide without distorting urban design outcomes.

Green Square Town Centre has almost 15 per cent of their site area in consolidated park and Central Park has a similar percentage. They have continuous street frontages with active uses at the ground level. There is provision for community buildings and the inclusion of employment uses beyond those required to support the residential populations. These attributes provide additional amenity to the city as a whole and will ensure their ongoing success as places.



htc Levitt Bernstein Pollard Thomas Edwards PRP 2015



Figure 6: Central Park, Chippendale - 7 May 2014: Central Park development (Hired Gun/City of Sydney)

⁵ Equivalent to 680 people per hectare assuming 1.95 persons per dwelling

Response to consultation questions

Do you think these design principles will contribute to a more liveable area?

Do you have suggestions for other design principles?

The draft principles proposed by UGNSW fall into two categories. The first describe some aspects of building design and are: *Diversity, Variety and Transition from New to Old*. The second relate to the urban design of places and not necessarily buildings *Active Streetscapes, Accessible public spaces and Community facilities*.

The City proposes a broader set of urban design principles that include and expand the UGNSW's draft principles. They are linked to the Central to Eveleigh vision of a place for Living, Community, Working and Resilience and provide a framework for ensuring the Ten Key Moves meet the Vision.

Proposed principles

Public transport

- Locate higher densities close to fixed rail transport stops.
- Ensure higher job densities at Central and Redfern stations and any new rail stations – productive uses rather than predominately residential uses.
- Provide light rail to serve areas beyond ten minute walking catchment of heavy rail stations.

Consistency with vision:

Living – It allows lower car ownership and use, positively impacting on housing and life affordability. Leisure time is increased with shorter trips to work.

Community – Social infrastructure and community facilities located reasonably close to public transport are accessible to the whole community increasing the possibilities for a richer social life across the city.

Working – The city's productivity is increased by reserving land for enterprise and employment purposes, limiting congestion, increasing choice for workers looking for jobs and employers sourcing workers.

Resilience – Fixed and dedicated rail solutions (existing or new) are required. In high density areas buses are not sufficient as congestion leads to unreliable service at peak times, they involve interchange to the rail system for metropolitan trips and their capacity is relatively low.

Public Open Space

- Provide new public open space⁶ to meet the needs resident and worker population growth.
- Ensure precinct parks are at least 5,000 square metres to provide for a variety of uses and users.
- Ensure that there is a north facing pocket park near every residential block.
- Separate parks from sensitive uses (e.g., housing) with streets and laneways, to minimise conflicts and allow for a wider range of uses and configurations
- If parks adjoin buildings ensure continuous active frontages
- Ensure sun access to parks existing and new (at least 50 per cent of the area for at least four hours between 9am and 3pm at midwinter)
- Ensure parks are protected from noise by not being located adjacent to busy roads or rail lines.

Consistency with vision:

Living – New parks in high density areas should be large enough to provide for a variety of uses and users, at least 5,000 square metres, and should be separated from adjacent sensitive uses, such as housing, to reduce conflicts in use. This is best achieved by surrounding parks with streets and lanes (including slow speed pedestrian priority shared ways). Streets also clearly define an open space area as publicly accessible rather semi-privatised space associated with a particular building. Sunlight access and protection from noise for the amenity of existing and new public open space must be ensured.

Community – Public space must be accessible and clearly visible from the public domain and should not immediately adjoin sensitive uses, such as housing, to reduce the risk of potential conflict between the ordinary use of public open space and the amenity of adjacent users. This is best achieved by having parks surrounded by streets or lanes on all sides. In the City of Sydney the vast majority of new and longstanding parks are like this. Whereas at lower density areas 10 per cent of the site may be sufficient, at higher densities (Green Square Town Centre and Central Park) 15 per cent is more appropriate. Placing parks at edge of new development adjacent to existing areas encourages the integration of new and existing communities.

Working – Parks also provide amenity for workers and high amenity areas attract workers. Ensuring lunch time sunshine to parks increases their enjoyment of parks. When sizing parks five workers should be considered as equivalent to one resident.

⁶ The provision of new open space is discussed in more detail under Key Move 2: Green Corridor

Resilience – Parks become permanent in a city's layout but will change use over time. Therefore the size and enclosure with public streets are important to allow for change over the long term without being subject to sensitive bounding uses or restrictive site area.

Social Infrastructure

- Plan for and deliver the social infrastructure for new residents and existing shortfalls within new high density areas
- Plan for hospital and health related needs
- Plan for primary and secondary school needs with active facilities on the school site (St Andrew's roof) – do not overrun adjoining public parks.
- Plan for aged care and child care needs
- In each new high density area provide a distinctive community facility

Consistency with vision:

Living – People's everyday lives are improved with access to social infrastructure and a range of community facilities. Ensuring that all the various facilities are accessible across larger areas is a key benefit of urban transformation.

Community – These need to be universally publically accessible places as they provide for the collective needs and social life of the whole community. A new high school is an already identified need. The proposed population (1,500) does not fit on the former Cleveland Street Public School site. However, the site marked 'education' on the UGNSW concept plan for C2E, being railway car park and substation land starting at Devonshire Street tunnel and stretching to the south along the railway side of Prince Alfred Park should be studied for the suitability of new high school with good transport links.

In each new development area a distinctive community facility, like CarriageWorks at North Eveleigh, and the library at Green Square Town Centre, should be provided. These will assist the development of local identity and the integration of new places into the city as a whole.

Working – Community facilities should be co-located with shopping streets or public open space as they add synergy to these uses. The approach of co-locating uses should consider existing and emerging centre where public and private investment has been made. For example, the ongoing revitalisation of Redfern Street should be supported by community facilities.

Resilience – Community facilities need to be flexible in their arrangement, and independent and freestanding in form to allow for change over time to respond to changing community needs.

Street layout

- Provide highly permeable, low traffic speed street layouts that gives priority to pedestrians and bicyclists
- Ensure continuous active street frontages in new high density areas
- Do not locate residential uses on busy roads or beside rail lines to ensure a healthy life [if unavoidable use specially designed noise barrier buildings]

Consistency with vision:

Living - Design of streets at higher density should give: pedestrian priority in decision making, for example, wider footpaths with substantial tree planting); a safer environment with lower traffic speed using a design speed of 30km/h; and, a permeable network with maximum block lengths of 120 metres). Apartments at street level need to balance activation with privacy and security. Close to public transport stops and at intensive retail areas awnings for weather protection of pedestrians should be provided.

Noise and pollution from busy roads and railways can harm human health and can interfere with people's daily lives if naturally ventilated apartment buildings are located close by. The community health costs could be substantial and should be considered at early planning stages by not locating residential buildings on busy roads and railways or by implementing noise barrier buildings that provide for protection against noise and pollution and provide natural ventilation including natural cross ventilation.

Community – Active street frontages encourage social interaction increasing the sense of community and, assist safety and security. Zero setbacks need to be universal to eliminate ambiguous space at ground level that may attract crime and misuse, discontinuous frontages should be avoided as they create ambiguous places with inadequate definition of the boundary between public and private space.

Working – Active street frontages encourage local provision of goods and services, decrease congestion and assist in building local economies.

Resilience – Increased social interaction in a supportive physical environment encourages a rich social life increasing the community's social resilience.

Buildings

- Ensure the housing amenity standards of the Apartment Design Guide can be met with a variety (not singular) solutions at early planning stages
- Do not undermine existing residential amenity by overshadowing
- Locate naturally ventilated housing away from busy roads and railways

- Implement the City of Sydney's Design Excellence Strategy for all new buildings in high density areas
- Ensure diversity of employment and housing, of housing tenure and variety of housing types
- At higher densities, reserve ground floors for retail and commercial uses and allow easy conversion of first floors to commercial and retail uses in the long term

Consistency with vision:

Living - Ensure housing amenity standards can be obtained. As density increases achieving amenity for apartments becomes more difficult. Density targets should be tested to ensure that the major amenity provisions, as required in the Apartment Design Guide referenced in State Environmental Planning Policy 65 – Design Quality of Residential Apartment Development, can be met. Building typologies should not exceed 18 metre depth and provide for natural cross ventilation; site planning should provide appropriate building separations; sun access is to be provided and protected; and planning flexibility needs to be maintained by avoiding fixed singular solutions in early planning stages; and floor space calculations should use a 70 per cent efficiency rate to allow for circulation space; private open space and the like.

Diversity of dwelling sizes is required to provide for a variety of household types [no more than 40 per cent of dwellings should be studio and one bedroom and at least 10 per cent should have three or more bedrooms (SDCP 4.3.2.12)]. To support public health that is affected by noise and pollution locate housing away from busy roads and railways (ISEPP). Diversity of tenure including increased social housing, rental housing, student and boarding houses will assist housing affordability and accommodate a diverse community.

Community – Sensitivity to existing surrounding amenity is important in integrating new development at higher densities into the city. This should be focused on measurable amenity impacts, particularly overshadowing. Design Excellence engenders community support for new buildings and is more important at higher densities. The City of Sydney's Design Excellence Policy (based on competition) should apply across all new developments. As design excellence enables and excellent design to achieve a 10 per cent increase in GFA, physical planning should build this into maximum achievable envelopes. Diversity and variety of building height and design is a likely outcome of Design Excellence and design for amenity rather than a principle in itself.

Working – Diversity of uses providing for housing and jobs at relatively equal density across the area will increase the productivity of dense areas and must be encouraged. This enables some people to live and work close by decreasing congestion; improving workplace participation and productivity; and enhancing community. This is characteristic of the dense conservation areas in the study

area where job density is roughly equivalent to population density.

Resilience – New development requires time to embed new economies and reach the synergy required for sustaining retail development. In dense areas ground floors should be designed to suit retail and commercial uses and first floors should allow for conversion to these uses over time. As ground floors are not suitable for residential at high densities temporary uses, lower rents, delayed sales and other strategies are required to provide a short term bridge to long term resilience. Buildings with good natural light and ventilation rely less will be less susceptible to climate changes and to shocks from rising energy costs.

Recommendations – Discussing Density

Careful, skilled planning and design can produce higher density with good amenity. This will ensure the continuing productivity and attractiveness of Sydney as a place to live and work. It will assist broadening the understanding of the benefits of change.

- Early planning work should provide the community with sufficient information to understand the proposed density.
- When explaining density show a number of relevant parallel case studies:
 - Compare the densities using more than one measure, such as population density and floor space ratio.
 - Include familiar local examples alongside any international examples.

Compare similar sized areas

- Only use commonly used metric units, for example, people per hectare or people per square kilometre.
- Note any significant differences that effect the apparent perception of density for example, household size and dwelling size.
- Provide a brief background description with relevant comparative information, for instance, this area is also located close to the city centre, it has wider streets that occupy more area and a smaller provision of parkland; or both figures include workers but there are relatively more workers in this area; this area was built in the nineteenth century and is gradually declining in density.

Recommendations – Draft Design Principles

Public transport

- Locate high densities close to fixed rail transport stops.

- Ensure high job densities at Central and Redfern stations and any new rail stations.
- Provide light rail to serve areas beyond ten minute walking catchment of heavy rail stations.

Public Open Space

- Provide new public open space to meet the needs resident and worker population growth.
- Development should respect the City of Sydney sun access controls for Belmore Park.
- Ensure parks are at least 5,000 square metres to provide for a variety of uses and users.
- Separate parks from sensitive uses such as housing with streets and laneways.
- If parks adjoin buildings ensure continuous active frontages.
- Ensure sun access to existing and new parks with at least 50 per cent of the area for at least four hours between 9am and 3pm at midwinter.
- Ensure parks are protected from noise by not being located adjacent to busy roads or rail lines.

Social Infrastructure

- Account for all social infrastructure for new residents and existing shortfalls within new high density areas.
- In each new high density area provide a distinctive, multipurpose and adaptable community facility.

Street layout

- Provide highly permeable, low speed street layouts that give priority to pedestrians and bicyclists.
- Ensure continuous active street frontages in new high density areas.
- Residential uses should be located away from busy roads and rail lines to ensure healthy internal noise environments; or use specially designed noise barrier buildings where the conflict is unavoidable.

Buildings

- Ensure the housing amenity standards of the Apartment Design Guide can be met with a variety (not singular) of solutions at early planning stages.
- Do not undermine existing residential amenity by overshadowing.
- Locate housing away from busy roads and railways.
- Implement the City of Sydney's Design Excellence Strategy for all new

buildings in high density areas.

- Ensure diversity of employment and housing, of housing tenure and variety of housing types.
- At higher densities, reserve ground floors for retail and commercial uses and allow easy conversion of first floors to commercial and retail uses in the long term.

Implications for built form

At the community workshop on 30 May 2015, UrbanGrowth presented a built form scenario for the Central to Eveleigh Corridor and the Redfern and Waterloo housing estates. The built form presented is shown in **Figure 6**.



Figure 6: Built form option for Central to Eveleigh Corridor
UrbanGrowth NSW, Presentation 30 May 2015

(http://engage.centraltoeveleigh.com.au/city_thinking_home/documents/22887/download)

Key issues arising from the City's proposed principles and the built form scenario are:

- The three dimensional form drawings do not show an appropriate quantum of open space in the higher density areas, do not appear to have sufficient sized open space, do not appear to have appropriately defined open space and appear to decrease sun access to existing parks.
- The three dimensional form drawings do not provide continuous street frontage in the higher density area; and show buildings adjoining busy roads and railways which should be avoided for housing or designed as noise barrier buildings.
- The three dimensional form drawings may not provide appropriate housing amenity in the higher density areas.

6. Key Moves

Key Move 1: Renew Redfern Station

Partner with Transport for NSW to renew Redfern Station connecting Redfern and Wilson streets and unlocking adjacent land for development and increased activity.

Response to consultation questions

How can we make Redfern and Wilson Streets lively and attractive places?

Redfern Street is the village street of Redfern and should remain its heart. The City has been active in working with local businesses and community groups in efforts to revitalize Redfern Street, and the Central to Eveleigh Transformation Strategy is an opportunity to build on those efforts. The revitalization of Redfern Street has had a positive impact on the local community, including businesses, and should be the continuing focus in this area. Part of the City's approach has been to develop Redfern as an Activity Hub, locating community services, including the Council's Neighbourhood Service Centre, on Redfern Street.

Initiatives to date have included:

- **Shopfront Improvement Grant program**, also known as Roll-Up Redfern, assisting landlords and building owners to rejuvenate shopfronts on Redfern Street, removing shutters and bars to make the streetscape more attractive and appealing. This grant program is an initiative of Roll-up Redfern, comprising City of Sydney, Redfern Waterloo Authority, and South Sydney Business Chamber, REDwatch, and Souths.
- **107 Redfern Street** is a creative-industry focussed innovation and incubator space. It has been assisted by a City of Sydney accommodation grant, contributing to the refurbishment and fit-out of a Council-owned property. Conditions of the grant included requirements that occupants would activate Redfern Street, and would build partnerships with local community organisations and businesses that would encourage further small-scale creative enterprises.
- The City has invested approximately \$20 million on **streetscape upgrades** to Redfern Street, from Regent St to Redfern Park. The upgrade has included new paving, smartpoles, street trees, lighting and public art. Street closures have been implemented to create new parks and plazas.

- The award-winning upgrade of **Redfern Oval**, providing improved access to open space, along with new facilities, and creating a community anchor along Redfern Street.

Recommendations:

- Partner with Transport for NSW, the City of Sydney, and local businesses and community groups to support the ongoing revitalisation of Redfern Street as the heart of the Redfern village community through the careful transformation of the corridor and upgrade and co-location of uses at Redfern Station.
- Work with the City, and local community and business groups to identify new programs, and to continue existing programs, that focus on initiatives to rejuvenate Redfern Street.

Key Move 2: Green Corridor

Create green streets and pathways along the corridor that form part of a wider green network that connects local activities, parks, public spaces and schools.

General response

The 'green' in the City's 2030 vision to be green, global and connected means a city that is ecologically sustainable and also green with trees, parks, gardens and linked open spaces. Our streets, squares, parks and open space need to serve the community's access, recreation and social needs⁷.

Central to Eveleigh offers the opportunity to extend and connect existing green spaces and create new green streets, parks and public spaces to create a green corridor. Green streets, buildings and parks offer many benefits to a dense urban environment including opportunities for healthy and active living, resilience and respite from a changing climate, a sense of wellbeing, social connection and creating attractive places for working, living and visiting.

For Central to Eveleigh to be a green corridor the Transformation Plan and development will need to address connections to open space, greening the public and private domain and providing new open space for recreation and social needs.

Connections to open space

Connections to open space are well articulated in Key Move 2. These types of connections are consistent with the City's Liveable Green Network, as shown in **Figure 7**. The network will connect pedestrians and cyclists to key destinations including major parks and recreation facilities. The network is planned to be delivered around quality public space, green streets and legible routes. Central to Eveleigh will improve the Network by opening new opportunities for connections across the rail corridor.

Greening the city

The Greening Sydney Plan focuses on the opportunities to increase canopy cover, landscape amenity and biodiversity within the City of Sydney. Greening the city filters and improves the air we breathe, shades our houses and streets, reduces stormwater pollution and improves the appearance, economic value and liveability of the cities. Transformation of the corridor is an opportunity to contribute to the City's target for 23.5 per cent of the council area to have tree canopy coverage by 2030. The City has also adopted a Green Roofs and Walls Policy to encourage green roofs and walls on new and existing buildings to contribute to the overall greening of the

⁷ Sustainable Sydney 2030 (2014) Objective 9.2

City. Green streets and pathways throughout the corridor will contribute to the City's vision for greening the city.

New open space

A green corridor also needs new green spaces for recreation and social interaction in addition to improved connections and greener streets. However, Key Move 2 fails to acknowledge the need for new open space. This issue has been discussed in more detail in the response to the draft design principles.

The demand for our parks and sporting facilities will increase as Sydney's residential and worker population grows. The City's estimated residential population has more than doubled over the past two decades to 191,918 people and is anticipated to grow to 273,500 by 2031 - a further increase of 42.5 per cent. Currently, three out of four people live in an apartment, which is forecast to grow to 80 per cent by 2030. An estimated 437,727 workers are also in our local government area each day, estimated to increase by a further 120,033 (27.4 per cent) to a total of 557,760 by 2031.

Current open space provision

The City of Sydney currently has about 300 hectares of open space occupying about 11 per cent of the City and averaging 15 square metres of open space per resident. As population grows and accounting for known planned open space and potential provision of new open space through development contribution, the amount of open space per resident is expected to drop to about 12 square metres per resident.

It is estimated the Central to Eveleigh study area has about 45 hectares of open space comprising about eight per cent of the land area and averaging 7.5 square metres of open space per resident. If Victoria Park, the southern section of Wentworth Park, Tumberlong Park and the southern section of Waterloo Park are included as they are on the boundary of the study area the total open space *increases to 64 hectares*.

The current ATP site has both park space and roads. To enable all of the public space within the ATP site to be maintained and preserved, ensure the transfer of the open public spaces in ATP to the City of Sydney on the completion of development on this site.

Open space needs

Sustainable Sydney 2030 sets a target for all residents to be within 400 metres of local open space. The City is reasonably well served for local open space consisting of pocket parks between 200 and 1,500 square metres. The Central to Eveleigh Study Area has good access to parks up to 1,500 square metres however there is limited access to parks above 1,500 square metres over in the Macdonaldtown and Erskineville parts of the Study Area at the south western end of the corridor.

The City's future open space needs are for larger parks and sports fields. Larger district level parks of at least 5,000 square metres provide opportunities for a more diverse range of recreational uses and a higher carrying capacity which is essential to high density urban areas. The City currently has a shortfall of about 11 sports fields which is expected to grow to 27 sports fields with population growth to 2030. The demand is exacerbated because of the forecast growth of young people living in high density housing.

The low and high growth scenarios used by UGNSW will see population of the Study Area increase by 29,000 and 56,000 residents respectively. Based on the recommendation of UGNSW's Draft Community Infrastructure and Social Issues Review⁸ one 3,000 square metres park should be provided for every 5,000 new residents. This would be less than 1 square metre per new resident and would see the open space per resident in the Study Area drop from 7.5 square metres to 5.3 square metres and 4.2 square metres per resident under the low and high growth scenarios. The provision of open space as a proportion of corridor land area would be about two and four per cent under the low and high growth scenarios.

The City acknowledges that increasing resident and worker populations, changing demographics and underlying trends in recreation needs and patterns make the provision of new open space challenging. There are benefits to upgrading existing open space to improve recreation opportunities and carrying capacity. Over the past decade, the City has invested extensively in improving and expanding our sporting facilities and carrying out park renewals to improve open space for active and passive recreation. These include the \$33 million redevelopment of Redfern Park and \$30 million renewal of the 7.5 hectare Prince Alfred Park. However, upgrading existing open space will not alone reasonably serve the incoming and existing population.

Responses to consultation questions

How do we create great green spaces that contribute to well-being and bring people together?

A great green space network is determined by the quantity, accessibility, diversity, size and quality of the open space. In high density areas good provision of open space is needed as there is less private open space and it supports active living. A good distribution of open space is needed for access and supports social equity and quality of life. Easy access is needed for people to enjoy and benefit from the open space. A diversity of parks and uses within parks help meet the recreational and social needs of the community. Larger parks allow for a wider range of uses and benefits and for more people to use the spaces than a series of smaller parks. The quality of the visitor experience including the embellishment, facilities, programing,

⁸ http://engage.centraltoeveleigh.com.au/city_thinking_home/documents/22879/download

maintenance and management is the key to attracting use.

Given the ongoing fall in green open space per capita, it is increasingly important that new green open space is well-designed so the space works harder in order to contribute to the passive and active recreational needs of the community. This requires less focus on passive landscapes and more focus on providing destination sites of a significant area sufficient to accommodate a diverse range of active sport and recreation at a district and regional level. It is also increasingly important that new parks and open spaces are well connected, close to public transport with ease of pedestrian access.

Great green (recreational) spaces should be designed and managed to ensure they are: inviting, welcoming and inspiring; safe and secure; accessible, inclusive and connected; of robust design with facilities, assets and features that provide for the needs; and welfare of visitors and are easy to service, keep well-presented and well-maintained.

Fit for purpose

The quality of a space is influenced by its usability and recreational purpose, not necessarily its “greenness”. The nature of a public space should be determined by the role it plays in the recreational and social needs of the community. Great recreational spaces may require hard-scape spaces in addition to green soft-scape so appropriate spaces can host increasingly diverse activities such as markets and events.

Multifunctional and diverse

Great recreational spaces that attract people and provide a space for a community’s social, recreational and cultural needs must be multifunctional and support diverse recreation and other activities.

For example, previous models may have been to provide a basketball or tennis court. The new model for success would consist of a multipurpose sports area that could accommodate basketball, netball, tennis, ball games, with surrounding ancillary features which may involve the provision of skate-able elements, rebound walls, fitness equipment or robust furniture and structures which can accommodate such use located within a Wi-Fi hot spot with supporting infrastructure such as seating, shade, shelter and toilet facilities.

A multi-functional space will also allow for temporary and portable infrastructure such as skate ramps, tables and seating or ping pong tables at weekends and public holidays.

Accessible

There will be growing need to address current access restrictions at existing sites such as Prince Alfred Park which is relatively difficult to access from neighbouring residential areas such as Chippendale. Improving access to significant district parks and facilities such as Victoria Park will become increasingly important through

enhanced pedestrian access across bounding trunk roads such as City Road and Parramatta Road.

Biodiversity

Urban biodiversity comprises the plants, animals and other organisms most people encounter in their day-to-day lives.

Research has shown that urban biodiversity can contribute to the quality of life of urban residents by improving visual and recreational amenity and providing a connection with the natural world, which lowers stress, boosts immunity, and improves cognitive function. While biodiversity has been greatly reduced from its original state in the council area, many indigenous plants and animals remain, and there is substantial potential to conserve and enhance the habitats that support them.

To promote urban biodiversity the City has developed its Urban Ecology Strategic Action Plan, with the aim of restoring and conserving resilient urban ecosystems that support a diverse range of locally indigenous flora and fauna. The action plan has identified that the Central to Eveleigh corridor has strong potential as a 'habitat linkage' between the City's biodiversity 'priority sites'.

How can we improve public open space in the area so that it is actively used by everyone?

People remain healthier both mentally and physically through access to a diverse open space network that can offer activities ranging from social activities to active casual recreation which requires larger sites.

Great spaces needed to be well promoted to raise community awareness and inspire usage. Some existing recreational facilities within the identified precinct are not well promoted and some members of the local and wider community are not aware of their availability, for example, the sports facilities at the Australian Technology Park. Promotion may involve design elements such as way-finding and facility signage and coordinated well publicised programming of recreational activities.

Accessible and inclusive design with good links to pedestrian and public transport infrastructure and provision of diverse facilities that accommodate a range of recreational needs will reduce barriers to visitation and participation.

Improving access to open space is important but capacity and quantity also needs to be improved to accommodate demand from population growth. UrbanGrowth NSW's Delivery Framework needs to identify the infrastructure and amenity improvements to increase carrying capacity of existing open space and how those improvements are to be delivered.

Can green building facades and roof tops play a role in a wider green grid for the area?

Green roofs and walls can contribute to a greener city. The City has recognised this in its Greening Sydney Plan and the Green Roofs and Walls Policy and encourages green roofs and walls in all development. Green roofs and walls offer a range of benefits including improved air quality, beautifying buildings and the cityscape, supporting local biodiversity, creating additional space for urban food production, supporting our physical and mental health, insulating buildings from heat and noise, extending roof life by protecting the waterproofing layer from weather and temperature changes, slowing and cleaning storm water runoff from buildings, and cooling city temperatures and reducing the urban heat island effect.

Reducing the urban heat island effect is a key aspect of climatic resilience for Sydney. Extreme and persistent high temperatures cause stress to the health of people, plants and animals. Cities can be a few degrees warmer than regional areas because surfaces such as roads, footpaths and the sides of buildings absorb and release energy from the sun.

Green roofs can also play a role in providing communal open space for a building's occupants. However, they are generally not a substitute for publicly accessible parks as they do not provide the same level of public access and the provision of space for active and semi-active recreation is limited. Public buildings, such as multi-functional community facilities, provide an opportunity for recreational courts.

Recommendations:

- Create new open space to meet the recreational, social and health needs of the community and connect to a wider green network of streets and pathways that links local activities, parks, public spaces and schools.
- The current ATP site has both park space and roads. To enable all of the public space within the ATP site to be maintained and preserved, ensure the transfer of the open public spaces in ATP to the City of Sydney on the completion of development on this site.
- Integrate green streets and pathways with the City's Liveable Green Network and Greening Sydney Plan.
- Commit to new open space that will contribute to the demand from the incoming population and meets the recreational needs.
- Work with the City to identify how renewal will deliver new open space in the Corridor and Study Area, including through developer contributions for larger parks and sports fields in the wider study area if they cannot be provided within the government owned Corridor.
- The Delivery Framework needs to identify cost, funding, and responsibility for the infrastructure and amenity improvements that will increase carrying capacity of existing open space.
- Identify locations for new open space that could increase the size of existing open space, such as at Prince Alfred Park.
- Provide larger, consolidated open space with public street frontages in the renewal of the Redfern and Waterloo social housing estates.

Key Move 3: Connections

Improve and create crossings of the railway corridor to provide better walking, cycling and public transport connections between major local places and activities.

General response

The City supports the improvement of existing crossings and creating new crossings of the railway corridor in the Central to Eveleigh study area. The 'connected' in the City's 2030 vision to be green, global and connected means a city that has a safe and attractive walking and cycling network linking places, open spaces and areas of interest.

Central to Eveleigh provides an opportunity to connect previously isolated areas of the City over the railway line and connect to the city's walking and cycling networks benefiting the wider community. As much as possible, the new crossings should align with the existing street layout, and be direct routes that are easily legible with clear wayfinding strategies.

Walking and cycling have economic, social and environmental benefits for the whole community. To realise these benefits, the City has set targets for walking to make up a third of commuter trips and 60 per cent of local trips; and for cycling to make up 20% of all trips with the council area.

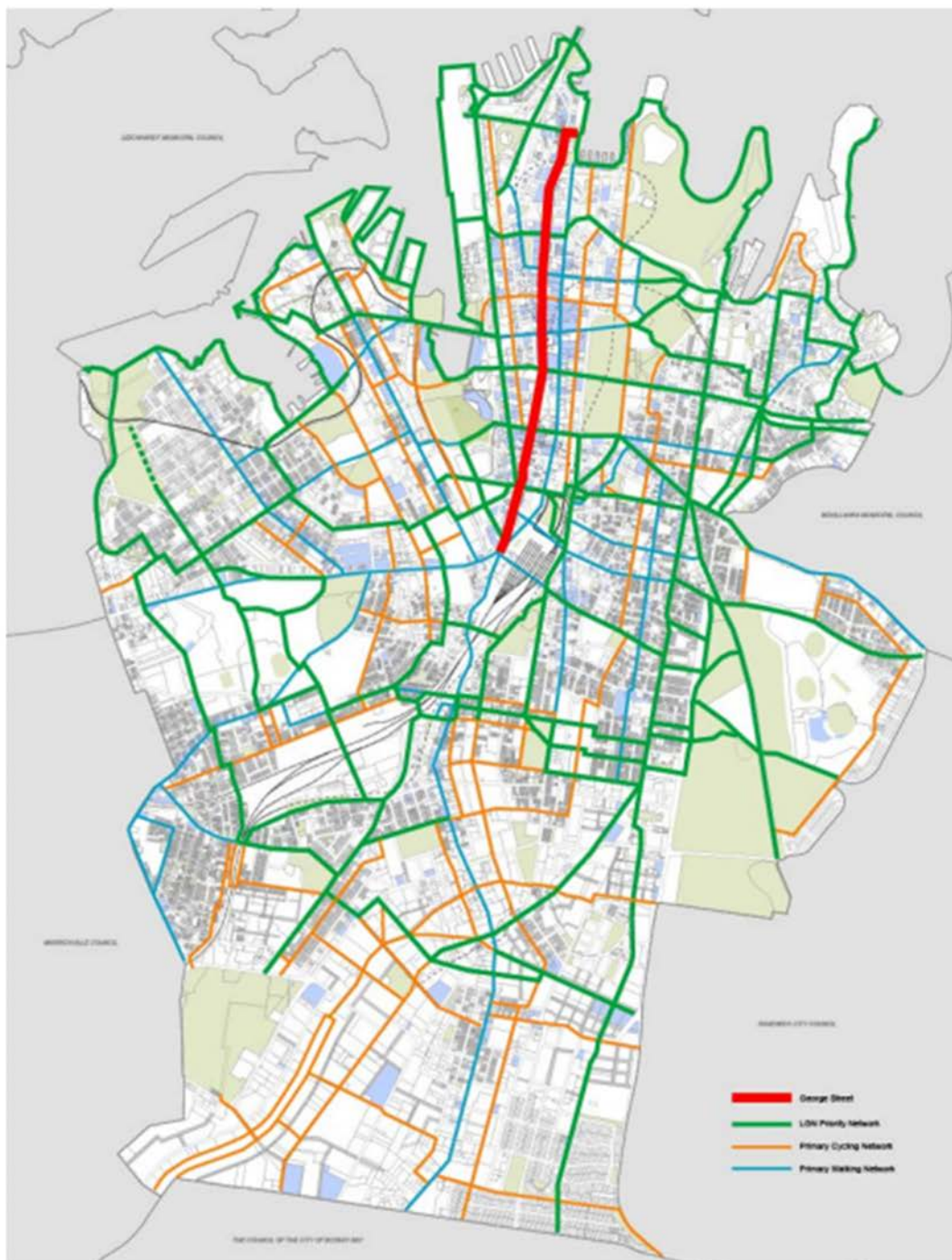
New east-west crossings across the rail corridor will add to the City's Liveable Green Network, a comprehensive and legible network of walkways and cycleways, shown in **Figure 7**. These potential new crossings are an opportunity to complete gaps in the network connecting businesses, communities and facilities across the corridor. For walking connections, the new crossings should meet the City's Walking Strategy and Action Plan 2015 targets for walking. The location and design of the crossings should make walking quick, convenient and easy; Inviting and interesting; and safe and comfortable. Walking connections that connect to train stations, particularly Redfern, will promote public transport use and support more dense development types.

For cycling connections, the new crossings should complement and connect to the City's existing bicycle network. Already they City has cycle ways through Prince Alfred park which can be connected and other opportunity to connect to the 'Broadway link' connecting linking Darlington to Ultimo via Chippendale.

Sydney Metro project

The Sydney Metro project is a critical piece of transport infrastructure at the local and

metro scales. It will both enhance the connectivity and accessibility of key locations along its route, while releasing capacity on the existing heavy rail and bus networks. Transport for NSW have indicated that the route will include a stop within the wider study area for Central to Eveleigh corridor, with likely locations either at Sydney University, or on the site of the existing Department of Housing social housing estate at Waterloo. The station options are shown in **Figures 8 and 9**.



- George Street - "The Main Street"
- LGN Priority Network – Pedestrian & Cycle
- City-wide Pedestrian Priority Street
- City-wide Cycling Priority Street

Figure 7: Liveable Green Network (City of Sydney)

There are potential benefits with both the University and the Waterloo area, offering different opportunities for urban transformation, land use, economic development, and residential densification.

A Sydney University station would likely serve education and employment demand at Sydney University and the Royal Prince Alfred hospital site. It will improve the connections of this nationally significant precinct, with its clusters of health, education, and other knowledge-based industries to similar clusters at Macquarie University and Macquarie Park. This station will bring largely economic benefits to the corridor.

The Waterloo station option would support urban renewal of the existing Department of Housing social housing estates as part of the Central to Eveleigh urban transformation; as well as employment growth at the Australian Technology Park. Much of the patronage area within a ten-minute walk of the potential Waterloo station is already served by Redfern station.

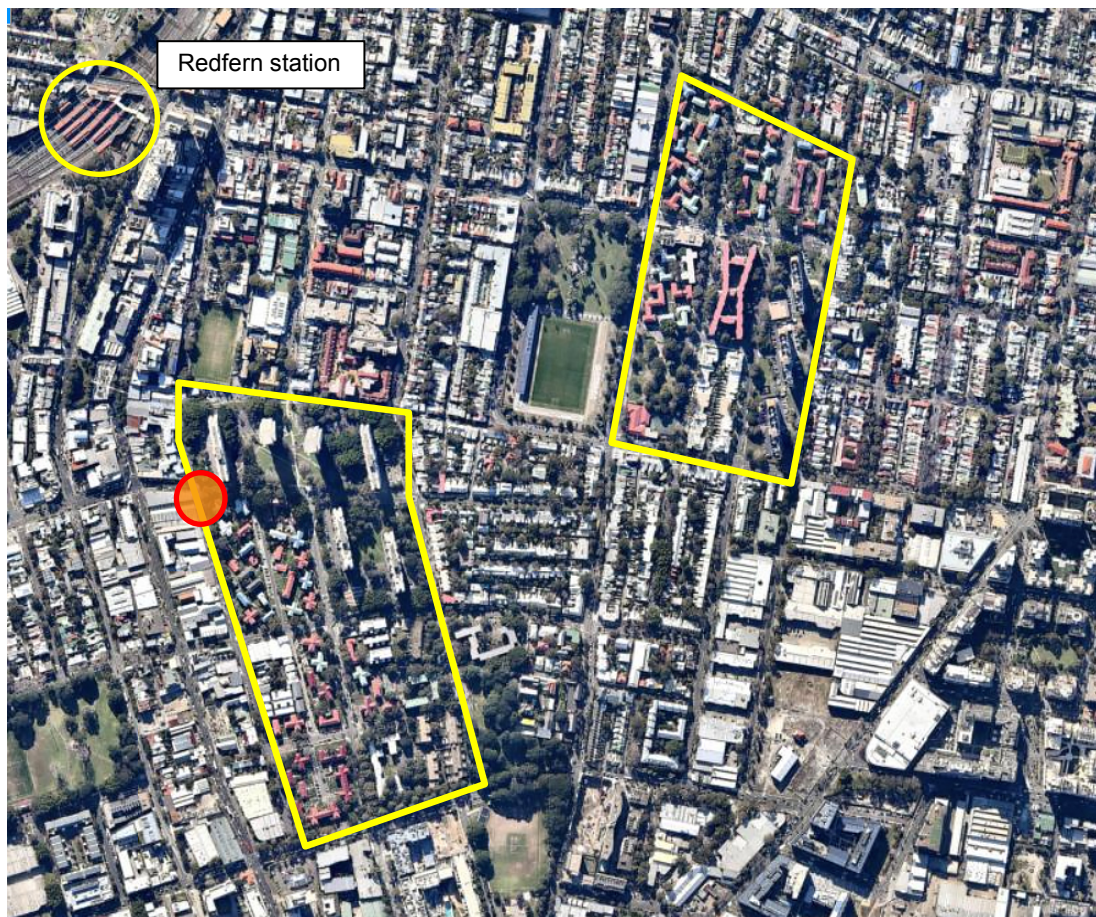


Figure 8: Sydney Metro Project – Waterloo Station option, shown as a red circle. Redfern Station is highlighted with a yellow circle, and Department of Housing lands are edged in yellow.

Any decision on station location should be informed by realistic patronage forecasts, based on institutional expansion at Sydney University and the Royal Prince Alfred Hospital; and on realistic and achievable residential densities at the Waterloo site. In order to achieve acceptable residential amenity within a dense urban neighbourhood, the City estimates that a density of approximately 50,000 per square

kilometre is achievable with skilled and comprehensive planning. This equates to roughly 10,000 prospective residents at the Waterloo Department of Housing lands.



Figure 9: Sydney Metro Project – Sydney University Station option, shown as a red circle. Redfern Station is highlighted with a yellow circle, and major activity centres at Sydney University are also highlighted.

Responses to consultation questions

What places should we try to connect by crossing the rail corridor? Who should these crossings be for?

Crossings should be for pedestrians and cyclists, and linking to public transport where practicable. Each of the new crossings should connect to the City's Liveable Green Network of walkways and cycleways. This will create new links to the urban renewal areas and ensure direct links to the entire network for pedestrian and cyclists. Indicative crossing options from the City's Liveable Green Network are shown in Figure 8, and provide links to and from resident populations, Redfern Station, open space such as Prince Alfred Park, and also major emerging economic clusters such as Sydney University, the Australian Technology Park, Alexandria and the future Green Square Urban Town Centre.

What places along the corridor don't have enough connection opportunities?

Currently the majority of the transit corridor is a barrier to convenient east west movement so connections that relate to the adjoining street grid would be beneficial.

Existing crossings over the Central to Eveleigh rail corridor are mostly car oriented streets with the Devonshire Street Tunnel from Surry Hills to Haymarket/Ultimo being the only pedestrian crossing. Additional crossings should be focussed on active transport such as walking and cycling. Indicative crossing options from the City's Liveable Green Network are shown in **Figure 7**.

The ATP is a special case as the site has already been offered for tender. Public access through site must be maintained at all times. It is preferable that the roads and foot[paths are transferred to the City of Sydney, and at a minimum the sale documentation must allow for that possibility by any incoming owner or leaseholder.

Recommendations:

- Improve and create crossings of the railway corridor to provide better walking, cycling and public transport connections between key economic clusters; and between major local places and activities.
 - Crossings are to connect with the City's Liveable Green Network, addressing and completing network gaps.
 - Crossings should try to align with existing street layout and be direct as possible.
 - New crossings are to protect the character and current local street network that is in most parts highly walkable.

- Maintain public permeability and access to all streets within the ATP through positive covenants and by enabling the transfer of the streets to the City of Sydney in any lease or sale documentation.

Key Move 4: Roads and Traffic

Reconsider the design and layout of local roads and traffic movements to better manage congestion, improve walking and bike riding environments and to better connect with the city and surrounds.

General response

There is a major conflict in the area between local residents and visitors that want to walk and cycle, and a significant amount of regional vehicular through-traffic causing congestion.

The City is preparing a strategic transport study in consultation with Transport for NSW that will identify transport infrastructure to support the growing population. There will be additional consultation about transport issues from this study.

Responses to consultation questions

How can we improve traffic flow in the area?

The site represents Australia's most accessible development site - situated between Sydney two biggest rail interchanges (Central and Redfern), with access to light rail and future light rail, metro regional bus routes and cycle networks.

Higher-speed traffic on the Botany Road-Regent Street 'one-way pair' creates conditions which are unwelcoming for pedestrians and for businesses. This will continue to be a major barrier to successful renewal and activation along these streets. Eliminating the 'one-way pair', and returning Botany and Regent to two-lanes in each direction, will reduce traffic speeds and encourage a more welcoming pedestrian environment, with positive impacts for residents and businesses.

The Transformation Strategy should focus on minimising any traffic generated by new development; and improving active and public transport options and accessibility to encourage a mode-shift away from private vehicle use. Prioritising walking and cycling connections will make it safe and easy for people to get around and will improve local traffic flow. Given the high degree of access to public transport and the potential improvements to walking and cycling connections the development of the corridor offers the potential to be delivered as a low-car precinct.

What are your ideas for improving the area for pedestrians?

Pedestrians should be considered the design priority for the precinct. Amenity and

directness of walking routes will increase walking as a mode of transport, easing the congestion on other transport networks. The City of Sydney Walking Strategy and Action Plan 2015 outlines key directions to cater for a better environment for pedestrians:

- Make walking quick, convenient and easy
- Make walking inviting and interesting
- Make walking safe and comfortable
- Create a strong walking culture

People will choose to walk if it is **quick, convenient and easy**. The Central to Eveleigh area must have clear and consistent signs and direct, legible walking routes. New networks to footpaths, open space or parks should be connected to the wider network through the Liveable Green Network. Network of streets and should include shared zones, zebra crossings and clear consistent wayfinding.

Walking should be **inviting and interesting**. Visually interesting and lively streets should be a part of the Central to Eveleigh Area. Creating a sense of place through the design of the public domain through public art, lighting, landscaped areas, well designed active street frontages and entries to residences. A high quality of streetscape including kerb ramps, lighting and street furniture is a must for the area. Overall any development should be reflective of the human scale, so as to be accommodating and not imposing to pedestrians in the environment.

Walking should be **safe and comfortable**. People will avoid walking where they feel unsafe or uncomfortable. Therefore the built environment must be designed to address the needs of pedestrians, including:

- consideration of road safety and personal security
- introduction of low speed environments, including shared zones and shared paths
- provision of shelter to protect pedestrians from the elements such as rain wind and sun; and places to stop and rest such as seating, shade and cover
- on-street parking to provide a buffer between traffic and activated footpaths
- active street frontages and be permeable with through site links

Creating a strong **walking culture** has a positive impact on community wellbeing and the wider transport network. Walking takes pressure off other parts of the transport system and provides connections to other modes, while adding activity to the public domain and creating a more liveable community through social interaction. Sydney-based research⁹ demonstrates that the greatest changes in travel behaviour

⁹ Kent, J., *PHD Thesis: Secured by Automobility: Why Does the Private Car Continue to Dominate Transport Practices?*, UNSW, 2013

occur when people are in transitional periods such as moving house, jobs or schools. The Central to Eveleigh Transformation Strategy is an opportunity to instil a walking culture through raising awareness of pedestrian facilities and infrastructure; and through campaigns advocating walking as a transport option in schools and workplaces.

Key infrastructure improvements for improving the area for pedestrians and cyclists should include:

- A street design that gives priority to people
- Managing and minimising through traffic in neighbourhood streets
- Reduce speed limit in all streets to low speed environments
- A focus on ensuring good walkability to transport interchanges, and neighbourhood centres
- Provide a high quality of streetscape including kerb ramps, lighting and street furniture
- Provide a pedestrian crossings lights on all legs of signalised intersections
- All moderate to high trafficked footpaths to be increased to be 3.5m wide
- Introduce medians to narrow traffic lanes and increase crossing safety
- Introduce pedestrian crossings at desire line points
- Widening of the footpath at Lawson Street, Redfern.

How could we create a system of roads that can manage high volumes of cars and other vehicles and provide a safe and enjoyable place to walk and cycle?

The concept of a road network for high volumes of vehicles and a safe and enjoyable place to walk and cycle is conflicting. The site represents Australia's most accessible development site - situated between Sydney's two biggest rail interchanges (Central and Redfern), with access to light rail and future light rail, metro regional bus routes and cycle networks.

A well-considered transformation strategy for the area can avoid a significant increase in vehicle trips through focussing on active transport and public transport options. Car share schemes have also proven to be an effective tool in reducing traffic generation from large developments.

The focus should be on providing a road system that prioritises the most efficient forms of moving people and that contributes to the creation of place.

A long-term approach to managing through traffic will be essential but should not be the driver for built form and road network decisions. With proper investment in public transport and cycling infrastructure the area will see a reduction in through traffic over the long term.

Recommendations:

- Design urban transformation at Central to Eveleigh to minimise traffic generation, and build on the key attributes of these neighbourhoods by focussing on creating attractive pedestrian and cycling environments.
 - Prioritise active transport of walking, cycling and public transport patronage
 - Manage and minimise through traffic in neighbourhood streets
 - Reduce speed limits on all streets to create pedestrian-friendly low speed environments
 - Focus on ensuring good walkability to transport interchanges, and neighbourhood centres
 - Design streets to give priority to people
 - Provide a high quality of streetscape including kerb ramps, lighting and street furniture
 - Provide pedestrian crossings lights on all legs of signalised intersections, with crossing responding to pedestrian desire lines
 - Develop blocks with through site links, and which are permeable and have active street frontages
 - All moderate to high trafficked footpaths to be increased to be 3.5m wide.
 - Introduce medians to narrow traffic lanes and increase crossing safety
 - Widen the footpath at Lawson Street to improve safety and access at Redfern Station

Key Move 5: Centres of Activity

Create centres of activity and density around train stations and focus on community services, cultural and retail facilities.

General response

Transforming train stations to co-locate uses can reduce trips, create agglomeration benefits for business and improve safety through passive surveillance. However, stations function within a broader economic and social environment. As places that attract people stations have a powerful role in shaping the land uses and activities of the surrounding areas.

The corridor features four existing train stations and one potential new station. Each of these stations plays a different role in their local and regional social and economic context.

Central Station has a diverse and powerful role in the corridor and the Sydney metropolitan area. It is the hub of Sydney's transport network. It sits amongst education and creative industry hubs. It's a tourism gateway and has dense and diverse residential precincts on its edges. Given this diverse role it does not function as a local community centre. These centres are located towards Crown Street, Haymarket and Oxford Street.

Redfern Station is part of an area in transition with a strong and diverse residential community. It is close to education and innovation hubs and connected to an evolving local retail precinct. Erskineville and Newtown Stations help form distinct local centres that to varying degrees serve local communities and visitors. Macdonaldtown provides transport access for the local community while a new station at Waterloo could form the heart of a new local centre.

All the stations must have public transport access as their priority. The transformation of each of these stations then needs a unique objective and different approach. Transformation must play to the strengths and opportunities of each whether it be to support existing activity, create a new centre or provide new services and facilities that are difficult to deliver elsewhere in a precinct.

Response to consultation questions

How can we make stations about more than public transport movements?

Stations first and foremost must be about public transport movements including

prioritising access to and in and around stations. Co-location of a range of complementary uses and a quality public domain will attract a range of people to a station precinct. Pedestrian connections are critical to making stations accessible for the local population and connecting station users to surrounding businesses.

CASE STUDY

CROSSRAIL ART PROGRAMME: THE CULTURAL LINE

(<http://www.crossrailart.co.uk/>)

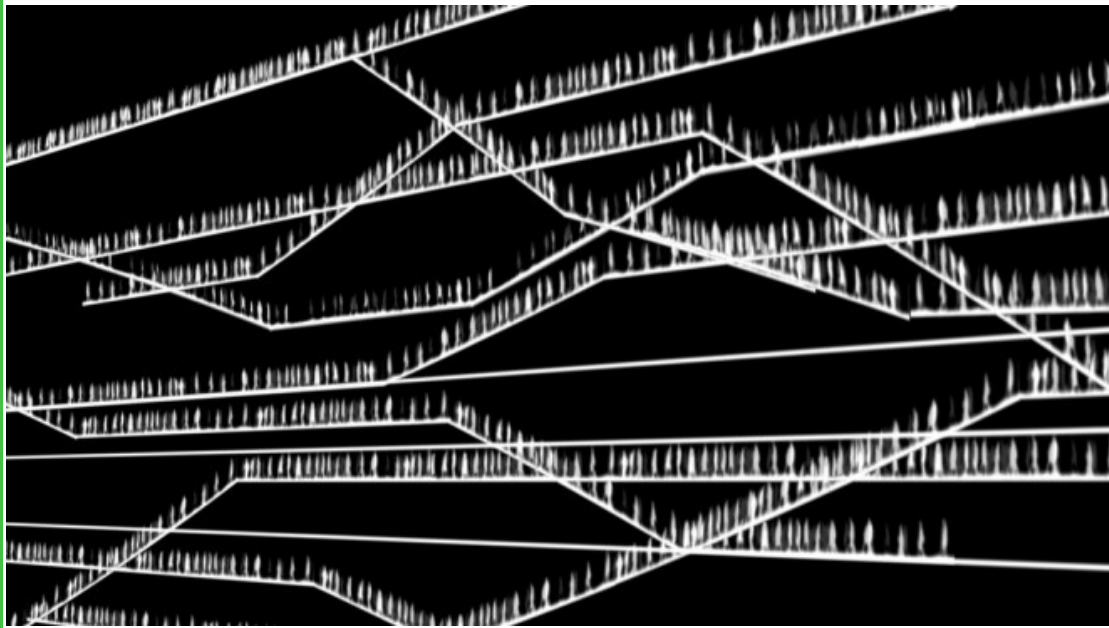


Figure 10: Michael Rover, Canary Wharf Proposal
(<http://www.crossrailart.co.uk/news/canary-wharf-art-unveiled>)

Crossrail is a 118-kilometre railway line under construction in London and its environs. It is expected to begin full operation in 2019 with a new east-west route across Greater London. It will provide a high-frequency commuter and suburban services and relieve the pressure on several London Underground lines.

The Cultural Line has been developed as part of the Crossrail Art Programme and aims to create inspirational buildings and spaces along the line. The strategy links London art galleries to create a permanent line-wide exhibition across eight central Crossrail stations resulting in eight unique destinations, with a site specific art intervention embedded into the design and architecture of each station.

What community facilities and other services should be located at Redfern, Central, and Waterloo stations?

State provided social infrastructure and community facilities play a critical role in a socially sustainable city, providing focal points for community life and supporting vibrant and resilient neighbourhoods. The State's social infrastructure includes health services, schools and aged care services. The City's community facilities help support the diverse communities, who live, work and play in our area. The provision of community facilities in the City is guided by four overarching objectives of connectedness and wellbeing; capacity and resilience; equality; and local identity and liveability.

Social and community facilities that are accessible to the wider community provide critical opportunities to support and strengthen ***community connectedness and wellbeing***. Co-locating diverse services and programs in one facility encourages interaction between social groups across generations, cultures and income groups. This creates opportunities for cooperation and collaboration, and to contribute to increased trust and wellbeing among the community.

Community ***capacity*** can be strengthened through social programs and services that address issues affecting communities, such as entrenched socio-economic disadvantage and social exclusion. Multipurpose facilities attract a wide range of users at various times of day, allowing for the social connections and sense of community that builds community ***resilience***.

The City aspires to create a "city of villages" within which communities have ***relatively equal access*** to a wide range of community facilities and services in their local neighbourhoods. Relative equality of provision is maintained through monitoring the characteristics and trends of communities to ensure facility and service provision remains appropriate. The provision of accessible, affordable facilities and services that support those who face social disadvantage and exclusion also supports relative equality.

Community facilities have the potential to become focal points for gatherings and ***places of community importance and identity***. Facilities can be "community living rooms" that support a city's sense of liveability, through providing accessible (and often free) spaces for people who seek rest and respite, recreation, learning and socialising opportunities.

Local needs

The neighbourhoods of Newtown and Erskineville are relatively under-provided for in terms of local and district level social infrastructure. There is a strong and growing need for more facilities, particularly a large library and associated community facilities that can be used for hire or programming for social programs and services. This is a priority in the City's 10 year Financial Plan but any additional demand generated by renewal in the corridors will create additional pressure. Contributions

will need to be channelled into new facilities investment. The key community facilities priority for the City in the Newtown and Erskineville area is an integrated multipurpose facility with a new library at its heart.

CASE STUDY: South Sydney Hospital Site – Green Square



Figure 11: Esme Cahill Building, South Sydney Hospital site (City of Sydney illustration)

The City's plan is to transform Green Square urban renewal area into an attractive, vibrant and sustainable urban place. With the unprecedented future population increase (a total of 54,000 residents and 20,000 workers by 2030), the City is working on priority projects to deliver quality community facilities, good transport connections, park and open spaces and infrastructure.

Two significant City-led projects include the Green Square Town Centre Community and Creative Facilities and Matron Ruby Grant Park, which will be built on the former South Sydney Hospital site. The first stage of the South Sydney Hospital Site is the restoration of three heritage buildings to house creative art spaces, studios, exhibition areas and community shed and childcare for 60 children. The estimated delivery date for stage one is 2017. Stage two consists of a community hall, youth space, specialist medical centre and rehearsal space.

As well as a larger integrated community facility well located to be accessible to the communities of Newtown and Erskineville, more localised facilities play an important role in supporting local community life. This will be important to consider in the corridor, where expected high population densities may warrant provision of

additional local community facilities. This may include general types of adaptable facilities providing programmable space, spaces for hire and use as 'community living rooms'. These facilities could provide for arts and cultural uses, and co-working and other types of spaces for local businesses/creative and social enterprises. Co-locating with existing local cafes/ open space would be ideal.

Recommendations:

- Transform train stations to strengthen existing economic, social and cultural activity and provide community services, cultural and retail facilities to meet the needs of existing and new communities
- Develop strategies for each station that look to co-locate uses so the strengths and opportunities of each precinct are realised
- Transform stations and their environs so that activity is generated for the surrounding business areas
- Provide community facilities to meet the needs of development and ensure funding strategies are in place prior to increasing land values based on the following principles:
 - Strengthen community connectedness and well-being
 - Strengthen community capacity and resilience
 - Support relative equality
 - Strengthen local place identity and liveability
- Help address the current relative under provision of community facilities in Newtown and Erskineville
- Identify locations for schools that have good pedestrian and transport access
- Prioritise public transport access - good connections to stations should be complemented by other uses.

Key Move 6: New Economies

Use the proximity to higher education institutions, Royal Prince Alfred Hospital, Australia Technology Park and the CBD to improve productivity and create a major centre of Sydney's growing new economies focussed on knowledge-intensive, education, creative, cultural and digital industries.

General response

Sustainable Sydney 2030 is the City's vision to be Green, Global and Connected. The Global is for Sydney to maintain its position as Australia's leading international city, containing the premium spaces needed for high-value jobs in significant industry clusters such as finance and professional services; and the social, cultural and recreational facilities needed to attract and retain global talent. It also requires supporting lower value jobs within the economic value tree.

The Central to Eveleigh corridor has been identified as an expansion opportunity for Central Sydney office uses in Sustainable Sydney 2030, as shown in **Figure 12** and the State Government's ***A Plan for Growing Sydney***. It has also been identified in both the 1971 and the 1988 major strategic plans for Central Sydney as shown in **Figure 13**. Following through on this long-identified strategic priority, as part of the Central to Eveleigh Transformation Project, will contribute directly to the 'working' and 'resilience' components of UGNSW's vision for the corridor.

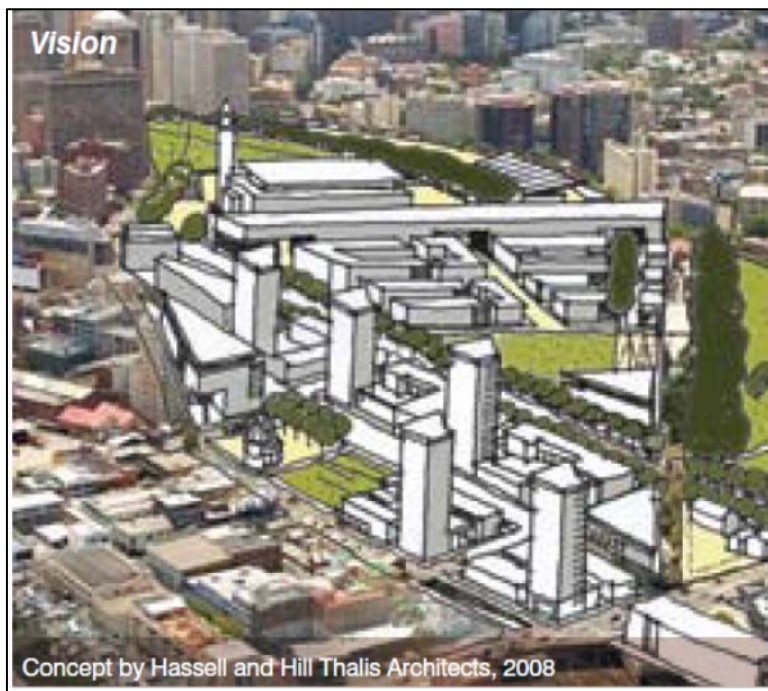


Figure 12: Sustainable Sydney 2030 (2008) – recasting Central Station as a new city square, redevelopment of the airspace above the rail lines reconnecting suburbs and providing space for new developments. The area requires a mixture of reuse, conservation and renewal.



Figure13: Both the 1971 Strategic plan (left) and the 1988 Strategic Plan (right) identified the Central to Eveleigh corridor as an opportunity for additional CBD activities. In the 1971 plan expansion opportunities are shaded purple; and shaded red in the 1988 Strategy. The dashed black line is the Central railway part of Central to Eveleigh.

New economies

Fostering job growth based on existing clusters of creative industry and the health and education sectors will play an important role in the expansion of Sydney's economy, whilst building adaptability, diversity and flexibility to give resilience in the face of changing economic conditions and priorities.

Central to Eveleigh is ideally positioned to take advantage of this opportunity, with its proximity to existing clusters of strong employment growth. Some of the highest rates of employment growth over the past five years took place in the digital, creative and service industries. Pyrmont and Ultimo have seen a 46 per cent growth in jobs, with the digital economy leading the way. Employment in Redfern has grown by 25 per cent and Surry Hills has grown by 20 per cent, with up to one in four workers employed in the creative industries. Glebe, Annandale and Camperdown have seen a 38 per cent rise in jobs, and there are now 23 per cent more jobs in Haymarket and Chinatown. **Figure 14** demonstrates how the Central to Eveleigh redevelopment can provide a direct physical connection between Redfern and these clusters in Surry Hills, Chippendale, Ultimo and Pyrmont.



Figure 14: Industry clusters in the council area (City of Sydney Floor Space and Employment Survey 2012) The Central to Eveleigh corridor, highlighted in the dashed black line, has a critical role to play in connecting key clusters of high-value jobs in emerging and established industry clusters.

Sydney's emerging challenge

However, the biggest challenge for Sydney's future prosperity will be maintaining its attractiveness to the established clusters of financial and services firms in Central Sydney.

Sydney is Australia's major finance centre and home to world-leading businesses. More than 200 of the top 500 Australian corporations have headquarters in the City. It is a base for the growing banking, technology and professional and specialist service sectors, with a highly skilled workforce expected to exceed 560,000 workers across the local government area by 2030. The finance and professional services industries dominate Sydney's global centre and attract high-skilled workers from across the world. More than 39 per cent of city workers or close to 173,000 people are employed in these sectors, which encompass finance and financial services and

professional and business services. This is an increase of more than 26,000 jobs across these sectors in the period 2007 - 2012; a time when it could have been expected that job numbers may have declined.

Central Sydney is the heart of metropolitan Sydney and is a key attractor for investment, talent and economic productivity in Australia. Economic activity in Central Sydney is estimated to be worth \$101 billion, representing almost 7 per cent of Australia's Gross Domestic Product.

Constrained by the harbour to the north and west, and by parklands to the east, Central Sydney does not have easy access to land for its medium-to-long term expansion. Room for growth is essential to maintain Sydney's attractiveness and competitiveness as a Global City. In particular, Central Sydney has a limited supply of development sites suitable and capable of delivering the large floor plate building typology preferred by the financial and professional service firms. In the future, this could pose a very real constraint for the continued expansion of investment, and the growth of high-value jobs, in Central Sydney.

To ensure that Central to Eveleigh can accommodate the high-value office jobs of the future, will require that UrbanGrowth:

- Identify the land needed for Central Sydney growth, and move to ensure it is not lost to residential development
- have a good understanding of the type of floor space and facilities required by industry to be the workplaces of the future
- develop planning controls that drive built form outcomes that are appropriate to industry but also contribute in a positive way to the existing structure and form of the city

Permitting residential development to dominate urban transformation in the Central to Eveleigh corridor will not contribute to jobs growth and the future economic prosperity of Sydney.

The City is in the process of finalising a Strategy for Central Sydney. The Strategy will address the future demands and needs of the CBD and will touch on how Central to Eveleigh can play its role. The City encourages Urban Growth to review the Strategy once available and work with the City to ensure long term prosperity.

City of Sydney Economic Development Strategy

The City of Sydney has developed an Economic Development Strategy that builds on the broad economic themes in Sustainable Sydney 2030 and takes into account contemporary economic challenges. It takes an integrated approach to economic development, recognising that urban productivity is influenced by a range of factors, from market access and innovation, through to liveability and amenity; access to affordable housing for key workers and childcare for parents; and a diverse and well

educated community.

The Strategy sets out the City's vision for the economy of Sydney and the strategies and actions to achieve that vision. It is an overarching framework that guides the City's economic development initiatives and articulates the City's role, priorities and approach. It provides the rationale for engaging with identified priority sectors and delivering outcomes through detailed Action Plans.

In delivering the Economic Development Strategy the City's actions will include:

- Effective planning to ensure the City's planning controls reinforce the role of the city as a primary centre for Metropolitan Sydney, and the preferred location for business, education, cultural and tourist activities;
- Encouraging partnerships and collaboration across all levels of government, with the private and non-government sectors to achieve common goals;
- Leading by example to ensure that the City takes a leadership position in economic development initiatives through its own operations;
- Direct investment in infrastructure, assets, services, events and activity to improve the amenity, liveability and functioning of the City;
- Supporting others through grants and sponsorships designed to catalyse activity, to assist organisations and individuals in delivering initiatives in their area and secure and support major events;
- Advocating for change, particularly where actions are the remit of other levels of government;
- Delivering programs and services for the benefit of groups of businesses in priority industry and economic sectors;
- Marketing and promotion to encourage investment, increased visitation, and business opportunities; and
- Reducing regulatory barriers to make it easier and more efficient to do business.

How can the corridor support a modern and strong economy and local community that contributes to Sydney's prosperity?

To support a modern and strong economy and local community UrbanGrowth will need a solid understanding of the drivers underpinning economic performance locally, and how that local situation fits into the broader Sydney LGA and Sydney metropolitan context.

Factors influencing productivity

The productivity of cities is affected by many factors, including efficiency of infrastructure, inter-business connectivity, people and their skills, ideas, goods and services, liveability and community wellbeing.

The Central to Eveleigh transformation program has the opportunity to create the great urban spaces that can attract and retain global talent. The basic framework of walkable and active streets lined with distinctive buildings will be the base for further investment in pedestrian and cycling infrastructure, cultural and community spaces, and parks and recreation facilities that create the high amenity and liveability spaces in a mixed use environment that are sought by new industries creating high-value jobs. Through the existing and proposed rail connections, the corridor has access to a deep labour pool, making it a competitive location for high-value employment.

Equally important is innovation, because the generation of ideas and transmission of new technologies underpins productivity gains. In order for the city to remain globally competitive in the 21st century, it requires strong foundations across the economy, including:

- A deep labour pool, connected to jobs through efficient mass transit
- Sustainable physical connectivity through transport and pedestrian network systems and connection to broader metropolitan/regional economies
- Localised cluster development – enhancing connectivity and collaboration, spatial facilitation of innovation

Australian Technology Park (ATP)

UGNSW should view Central to Eveleigh as an opportunity to enhance existing clusters of innovation at the Australian Technology Park (ATP). There has been significant government investment in setting up the ATP in terms of planning effort and capital, and there is the capacity to create a truly distinctive place.

Although UGNSW have now committed to selling the ATP through tender, there is still the opportunity through the urban transformation program framework to ensure that it remains true to its original charter of focusing on innovation, technology and local employment and skills. The urban transformation program should look to understand how to build on recent successes though improving connections to Redfern Station and other factors which have limited ATP's success to date.

Existing innovation and technology focussed enterprises at the ATP have been achieving recent success, including ATP Innovations, which partners with technology based start-ups and entrepreneurs to help them grow, achieve success and find investment through the support of personalised assistance and mentoring. Its focus is on technology businesses in engineering, cleantech, IT or life sciences, and its shareholders include the University of Sydney, University of New South Wales, University of Technology, Sydney and Australian National University. ATP Innovations has won two international awards - the Incubator the Year and Technology Incubator of the Year in 2014.

To ensure the ongoing success of the ATP as a growing centre of technology and advanced industries growth focusing on productivity, research and employment it will be important to **prohibit residential** within the precinct as a strategic intent; preserve heritage buildings, artefacts and spaces; ensure public access and connectivity is maintained and enhanced for workers for the whole community.

How can we best support business development and employment training within local communities – including aboriginal communities?

Supporting small, local business

Supporting small, local businesses and prospective entrepreneurs is a key priority area for the City of Sydney and should be a specific focus within the Central to Eveleigh transformation project (especially within any economic/industry strategy for the corridor.)

The City has undertaken recent consultation with small business owners in local areas across the City and several key themes in regards their support requirements have emerged which should inform the Central to Eveleigh project's approach when planning for business development and employment. These include:

- Providing direct business support to small business owners – assisting business in understanding local and wider economic conditions, supporting small business growth and development, helping understand the regulation and legislative environment, exploring the provision of accessible and affordable space for new business (such as the creation of business hubs to share resources amongst home based business.)
- Improving communication and business engagement – Small, local businesses often have specific communication requirements that need to be catered for, and Central to Eveleigh project should approach this in a strategic manner through embedding consultation with local business owners at the heart of the project.
- Supporting place Identity and vibrancy from the perspective of business owners – Small business owners are embedded in their community and place. When that place is undergoing transformation it is crucial to involve the local business community in this process. Business owners want to promote their neighbourhoods via signage, events, festivals and marketing channels to assist in promoting the unique character of the area.
- Providing the basic and creating right environment to do business - Issues that have the most impact for small business are often concerns such as parking, garbage collection, street cleanliness and safety. These should be planned for from the beginning of any transformation project.

Supporting Aboriginal and Torres Strait Islander Business Ownership and Employment

The City welcomes the approach indicated here that Aboriginal and Torres Strait Islander business development, employment, and training are recognised as requiring a specific focus within the Central to Eveleigh project.

The City has made it a priority to encourage the appreciation and development of Aboriginal and Torres Strait Islander cultural heritage and its contemporary expression through our Eora Journey program. We also recognise that without working in partnership to ensure that economic opportunities are enhanced for our Aboriginal and Torres Strait Islander communities then achieving sustainability for those communities in the broadest sense - ranging from recognition of the traditional and living culture through to ensuring economic sustainability – won't be achieved.

To deliver on this, the City's Economic Development Strategy identifies and prioritises Aboriginal employment and enterprise as a key cross-sector theme, and states that a specific and targeted Action Plan will be developed (the Eora Journey Economic Development Plan).

Within the Central to Eveleigh study area there is a critical mass of leading Aboriginal and Torres Strait Islander organisations and businesses that have significant influence at local, metropolitan and national scales. This concentration of key organisations reflects the important contemporary history of the area in regards Aboriginal resilience and the struggle for civil justice. It is crucial that these Aboriginal and Torres Strait Islander organisations and businesses are actively consulted throughout the Central to Eveleigh development process, and especially within any economic/industry strategy for the corridor.

The development of the City's *Eora Journey Economic Development Plan* is ongoing, and to assist its development the City has recently completed significant research and community engagement programs.

Key priorities emerging from the City's consultation and research will be relevant for the Central to Eveleigh project to consider when looking to support business development and employment for local Aboriginal and Torres Strait Islander communities. These include:

- the importance of forming collaborative partnerships with Aboriginal organisations and communities,
- supporting business owners and entrepreneurs through i) capacity building ii) accessing procurement opportunities and iii) access to affordable space, and
- ensuring employment opportunities are created through development (through sub-contracting).

Recommendations:

- Prioritise Sydney's future economic prosperity by identifying and planning for the expansion of Central Sydney, while also maintaining and reinforcing economic links to the growing new employment precincts focussed on knowledge-intensive, education, creative, cultural and digital industries.
 - UrbanGrowth NSW's transformation strategy should acknowledge that the redevelopment of the Central to Eveleigh corridor is an unrepeatable opportunity to provide the commercial floorspace needed to ensure that the growth in key employment sectors can continue.
 - Work with the City of Sydney to identify, and prioritise planning for, the medium-long term requirements of the expanding Central Sydney office market. Planning for residential development should only take place after the employment priorities have been understood and addressed.
 - Directly invest in the urban infrastructure, including parks, recreation facilities, walkable streets, community infrastructure needed to attract and retain global talent, and which are known to positively influence urban productivity.
 - Build on the existing innovation culture established at the Australian Technology Park, ensuring that future development at the Park responds to the original charter for innovation, technology and local jobs growth; and by improving the context of the Park, including transport connections, to make it more attractive to investors.
 - Consult directly with small business owners in the corridor to understand the factors critical to their success, and to building a strong enterprise culture through urban transformation.

- Consult directly with key Aboriginal and Torres Strait Islander peak groups in the corridor on the development of any economic development strategy for the corridor.

- Commit to Australian Technology Park (ATP) growing as a centre of technology and advanced industries growth focusing on productivity, research and employment. Ensure mechanisms to prohibit residential within the precinct as a strategic intent; preserve heritage buildings, artefacts and spaces; ensure public access and connectivity is maintained and enhanced for workers for the whole community.

Key Move 7: Live and Work

Promote live-work environments to increase opportunities to live, work and recreate within Central to Eveleigh.

General response

Modern global cities prosper on the interaction between large and small business, and between business and residents. A successful global city needs to address economic, social, cultural and environmental issues. Increasingly in a global world, liveability is a key driver for prosperity and economic growth—the places where people want to live are also the place they want to set up business and work. The Central to Eveleigh corridor provides an opportunity to harness the benefits of co-locating employment and housing.

The City of Sydney local government area has a global centre- Central Sydney - surrounded by a number of unique local village economies. Together they make up global Sydney. The villages also play a fundamental role, collectively generating a quarter of the city's output or \$25 billion per annum. Not only do the local Villages contribute to economic output, they are integral to the culture, community and liveability of the city, enhancing the wellbeing of residents and workers. The Villages are renowned for their bespoke and fine grain establishments that offer workers and residents places to meet, socialise and share ideas – all critical to the innovation process. It is also critical to the process of attracting global talent to the high-value jobs in finance and services that cluster in Central Sydney.

The villages are employment hubs, accounting for almost 35 per cent of jobs (more than 151,000) outside Central Sydney and Haymarket. Importantly, each village has a distinctive economy and its own specialisation. The industry mix and dominant industry varies from creative industries to education, highlighting a distinctive feature of the city economy – the need for development of industry clusters or activities.

The critical component of live-work environments becomes the ability to reach all of your daily needs – work, living, recreation, retail, services – within easy walking distance; or by public transport for less frequent needs. The challenge for the Central to Eveleigh transformation will be achieving a pedestrian-focussed urban environment, through a network of walkable green streets with pedestrian priority at traffic intersections.

Employment

The conservation areas are also centres of employment as they consist of varied building types including shops and warehouse that continue to provide employment, as shown in Table 2. This should not be underestimated as an attractor for new

industry and business.

Within the conservation areas planning allows for the continued and renewed use of non-residential buildings for commercial purposes. Maintaining buildings for employment uses is more problematic as there is strong demand for residential development through conversion of shops and warehouses to residential uses.

Table 2: Employment in the Heritage Conservation Areas

Employment and population in Heritage Conservation Areas			
	HCA and TZ	Employment	Population
Surry Hills	HCA's 15, 58, 59, 60, 61, 62, 63, 64, 65, 66. TZ 201, 202, 199, 198, 195, 196, 184, 193.	17 404	14 241
Glebe	HCA's 27, 28, 29, 30, 31, 32, 33, 68. TZ 158, 233, 232, 230, 228, 229, 226, 227.	10 597	18 185
Darlinghurst	HCA's 11, 12, 13, 14, 16, 17. TZ 183, 180, 179, 178, 182.	10 694	8801
Potts Point / Elizabeth Bay	HCA's 20, 51. TZ 173, 166, 172, 171, 167.	4598	14 224
Redfern	HCA's 53,54,55,56,57. TZ 20, 214, 213, 218, 217, 211, 212.	5248	8272
Erskineville	HCA's 1, 2, 3, 21, 22, 23, 24, 25, 26, 40, 42, 46. TZ 254, 259, 249, 255, 256, 257, 258, 261.	3183	9312
Newtown	HCA's 38,39, 41, 43, 44, 45, 47. TZ 243, 246, 247, 242.	3486	6400
Woolloomooloo	HCA 71. TZ 169, 170, 165.	3486	4209
Chippendale	HCA's 9, 10, 19. TZ 240, 209, 207.	2746	4820
Paddington	HCA's 48,49,50. TZ 559, 185, 560, 562, 563.	2487	3694
Centennial Park	HCA's 6, 7. TZ 564.	214	2283
		64 143	94 441
	Extracted from BTS Travel Zone explorer Transport for New South Wales 2011 Note: There is not an exact overlap between Conservation Areas and Travel Zones so the table is an approximate guide only. Some Conservation Areas excluded where there is not sufficient overlap with Travel Zones.		
ACL site		608	4617

New development rarely achieves the dense and closely integrated mix of uses as conservation areas do. Changes to controls in the conservation areas need to be undertaken carefully as the risks of unintended consequences that may undermine the established richness, productivity and density. Any changes should be approached with caution.

Protecting inner Sydney heritage conservation areas will support the economy, the environment, and its unique sense of place.

Response to consultation questions

What are the benefits of people living and working in the same place?

The city is home to an estimated 200,000 people. It is also the workplace of over 437,000 workers, accounting for almost four per cent of the Australian workforce. This makes the city the most densely employed and economically active location in the country.

Over 60 per cent of city residents in the workforce are employed locally and work in the city, the highest percentage of any LGA in metropolitan Sydney. This minimises the personal and environmental costs of travel, with over 30 per cent of city residents taking public transport to work. Additionally, “when people work locally they are embedded in the local community and are more inclined to contribute to the social life of the community and retail spending is retained.”¹⁰

The redevelopment of the Central to Eveleigh corridor is a unique opportunity to take advantage of and expand opportunities for strategic employment and economic clusters.

What types of industry and jobs would you like to see in the Central to Eveleigh corridor?

Room for Central Sydney to grow

Central to Eveleigh is an unrepeatable opportunity to allow for the expansion of the high-value job opportunities in the finance and professional service industries which cluster in Central Sydney. Securing the spaces to provide the premium workplaces of tomorrow, driving Sydney’s future economic competitiveness, should be the priority for the Central to Eveleigh Transformation program.

Encouraging highly-productive clusters

¹⁰ Heine, Langworthy et al 2006, from Institute of Sustainable Futures – University of Technology Sydney commissioned by the Council of the City of Sydney, City of Sydney Indicator Framework, 2011, p.29

Increasingly, businesses are locating in clusters of linked activities to take advantage of agglomeration to share knowledge, suppliers and customers, reduce costs and increase innovation. This has important impacts on productivity and the ability of business to compete globally.

Underpinning city productivity and innovation advantages are the development and encouragement of clusters – places that support the exchange of ideas through the interaction of people and innovation from the interaction of business. The city is home to a number of industry clusters either linked by supply chains or by competitive complementarities. Clusters range in scale and can be as small and localised as a street, or extend to the size of several suburbs. There are four significant and strategic industry clusters:

- Financial services and ancillary business and professional services hubs within the northern part of central Sydney;
- Creative industries hub in Surry Hills, Chippendale and Moore Park;
- Education and knowledge economy hub extending from the universities through Broadway to Newtown; and
- Digital industries hub that extends from Ultimo-Pyrmont through Eveleigh (Australian Technology Park) and Green Square.

The redevelopment of the Central to Eveleigh corridor is an opportunity to facilitate space for employment growth in these sectors that are seeing high rates of growth. It is located in a geographically central area in context to the four strategic industry clusters described above. There is also the potential to foster new industry sectors through connecting existing clusters in new ways.

For instance connecting the health and education cluster at Camperdown, with emerging technology clusters may seed opportunities in new industries such as 'health metrics' software. This is similar to recent initiatives that have seen the establishment of Stone and Chalk – a start-up hub for fintech industries, which emerged through collaboration between the technology and finance sectors.

Recommendations:

- Promote the creation of a network of walkable, high amenity, and distinctive localities that cater for the daily live, work and recreation needs of residents in the Central to Eveleigh corridor.
- Recognise that the heritage conservation areas, dense with both jobs and residents, and with an attractive, fine-grain urban character, are already thriving work-live neighbourhoods.
- Prioritise active and public transport modes, to ensure that residents can easily access their daily needs within the corridor.
- Directly invest in the urban infrastructure, including parks, recreation facilities, walkable streets, community infrastructure needed to attract and retain global talent, and which are known to influence urban productivity.

Key Move 8: Culture and Heritage

Make a strong arts, cultural and heritage area even stronger and secure its future in Sydney's cultural landscape.

Responses to consultation questions

How can we support the economy, the environment, and a unique sense of place through culture and heritage?

How can we maintain and encourage facilities for a diverse community?

Where are the places of cultural and heritage importance through the Central to Eveleigh corridor and how can we recognise and celebrate these?

Heritage areas and buildings

The heritage fabric of the corridor, from the adjoining nineteenth century conservation areas to the significant rail infrastructure and the intangible sites of cultural and social significance, play an important role in the economic, cultural and social life of the Central to Eveleigh Corridor.

Large areas of inner Sydney consist of Heritage Conservation Areas with many of these in the Central to Eveleigh Study Area. These areas are relatively dense and also have relatively high numbers of jobs. All of inner Sydney's conservation areas are in the top 15 densest areas in Australia. There are few areas in Australia that have densities equal to those in conservation areas.

This is typical for important international cities. In London, Westminster, Chelsea and Kensington and Camden are close to the central area and predominately residential with the majority of the areas consisting of Heritage Conservation Areas. In New York the predominately residential areas, either side of Central Park, and the villages between Downtown and Midtown are largely covered by historic districts. Beijing has a large part of its central area as declared conservation areas.

The conservation areas are also centres of employment as they consist of varied building types including shops and warehouse. In Surry Hills there are about 1.2 jobs for every resident while in Redfern, Chippendale and Newtown there are about 0.6 Jobs for every resident. This mix of population and employment is rarely achieved in new development areas. The character, existing density and building stock should not be underestimated as an attractor for new industry and business. Within the conservation areas planning allows for the continued and renewed use of non-residential buildings for commercial purposes.

Maintaining conservation areas supports local economies, provides for a diverse community and is the foundation for the unique sense of place of these areas. These areas require careful management. Changes of zoning and floor space ratio are coarse instruments that risk undermining the density and productivity of these areas.

A number of the significant heritage buildings have been adapted over the last 20 years including CarriageWorks and those at the Australian Technology Park. Other significant heritage items and places such as the Chief Mechanical Engineers Office, the Clothing Store. Adaptation of significant heritage items should continue and uses that enable public access should be prioritised. To protect their significance, adequate curtilage and a sympathetic setting for proper new development buffer zone (or transition area) are to be identified. The historic relationship between the significant heritage buildings, which is important for understanding the significance of the whole railway precinct, should be preserved through proper protections of their vistas and sensible landscaping.

Eora Journey

UGNSW have recognised the importance of the City's work around the Eora Journey. The Eora Journey celebrates the living culture of the Aboriginal and Torres Strait Islander communities in Sydney. It comprises four projects being undertaken by the City including recognition in the public domain through major public art projects; development of a signature Aboriginal event to celebrate Aboriginal and Torres Strait Islander culture and heritage; an economic development plan to address education, training, business investment, enterprise development and employment; the Barani/Barrabagu project, celebrating the history of Sydney's aboriginal peoples; and an investigating and advocating for an Aboriginal Knowledge and Cultural Centre to provide economic and opportunities and promote cultural understanding among Sydneysiders and visitors.

Cultural activity

Australia is shifting from an economy built on manufacturing and primary industries to one built on knowledge, ideas and creativity. Sydney is at the forefront of this change. The NSW State Government's Creative Industries Economic Profile has noted that creative industries make up 4.7 per cent of total employment, mostly in small businesses. Of the approximately 50,000 businesses operating within the NSW creative industries, 97.4 per cent were small businesses (0-19 employees), 2.3 per cent were medium (20-199 employees) and 0.3 per cent were large. In inner Sydney this concentration is particularly high. The City's Floor Space and Employment Survey (2012) shows that within the Redfern Street precinct the percentage of workers employed within the creative industries is over three times this average, second only to workers employed in higher education. The study also highlights that the creative industries is the dominant industry in the precinct.

A report by the leading innovation research organization NESTA found that investments in iconic public buildings can signal a public commitment to an area but cheaper initiatives to links collaborative businesses and sectors may produce longer lasting impacts for less outlay.

While the City recognises the value of large-scale and iconic cultural infrastructure and notes the particular gaps that exist in this area (such as a lyric theatre), consultation for Creative City identified a particular deficit in affordable space for the small to medium cultural sector, including spaces for cross-disciplinary practice. This is particularly important in the case of Central to Eveleigh, given the high concentration of creative workers and small businesses in the area.

The Study Area currently provides the building stock suitable to creative industries. Existing and easily adapted building stock can be more affordable and more attractive than newly built large mixed use projects. The transformation of Central to Eveleigh could assist creative activity by retaining opportunities for the 97.4 per cent of the sector operating with less than 20 employees.

The transformation of Central to Eveleigh into a higher density living, working, recreational and cultural environment could mean more contested spaces and conflicts between uses. The interaction of mutually desirable but potentially conflicting uses, such as live music and residential uses, need to be considered early in the planning with strategies to manage co-location through physical or other measures.

Cultural Infrastructure Needs

The existing cluster of cultural activity and workers in the Central to Eveleigh corridor and the growth of Redfern as a particularly important cultural hub makes the provision of cultural infrastructure to support professional practice especially important. In August 2014, the City of Sydney launched its Cultural Policy ('Creative City') following an extensive community and cultural sector consultation and engagement process. Creative City identifies five types of 'cultural infrastructure' that are needed throughout the City. These are:

- Cultural infrastructure for 'active' participation for the public, such as spaces with resources and facilities for active making, doing, skill-sharing.
- Cultural infrastructure for professional creative practice and art form development such as rehearsal rooms and artist studios.
- Spaces for creative enterprise including retail.
- Cultural 'venues' and infrastructure for audiences or spectatorship such as a lyric theatre, cinemateque, Indigenous cultural centre, artist-run gallery or exhibition space.
- Spaces for temporary, unplanned or 'special event' cultural use in the public domain including parks, roads, built form.

CASE STUDY: Greenland Centre Creative Hub



In 2014 the City confirmed a Voluntary Planning Agreement with property developer Greenland Australia to create a \$25 million state-of-the-art creative hub as part of a 67 storey residential development in the heart of the Sydney CBD.

The 2,000 square metre hub, spread over five storeys, will feature affordable soundproofed rehearsal spaces for musicians and performing artists, media and editing suites for filmmakers and new media artists, wet/dry studios for visual artists, offices for cultural organisations and a live/work space to be used for a creative fellowship program.

Recommendations:

- Engage with Aboriginal and or Torres Strait Islander people to carry out work that relates directly to their histories and stories, further empowering our first peoples through the re-instatement of their history making it visible in the public domain, celebrating their culture and their ongoing contribution to the life of the City.
 - Celebrate the living culture of Aboriginal and Torres Strait Islander communities through the Eora Journey and provide the community with the opportunities to tell their stories.
 - Consider the existing cultural capital of the precinct and broader city and opportunities to extend, strengthen and amplify this activity.
 - Urban Growth provide opportunities to engage Aboriginal artists and writers as part of the Interpretation Plan and as part of development sites.
- Protect the heritage buildings of the ATP and the CarriageWorks with statutory controls. Continue to sensitively adapt and interpret significant heritage buildings.
 - Maintain the fine grain, distinctive character, diverse uses and adaptability of the surrounding conservation areas.
 - Provide an appropriate setting for the significant heritage buildings and rail infrastructure in the context of new development
- Consider ways to protect the precinct from future usage conflicts arising from residential density and a critical mass of cultural activity.
- Through the Central to Eveleigh Transformation project, develop a strategy to identify and provide affordable spaces for small-to-medium sized cultural enterprises suitable for cross-disciplinary practice.
- Investigate the a range of cultural space and infrastructure needs identified in 'Creative City' and engage with existing service providers in the area to improve existing or develop new programs.

Key Move 9: Building Scale and Design

Develop the right combination, scale and design of new buildings to provide significant housing and employment spaces for Sydney while balancing the impacts on surrounding lower-density residential neighbourhoods.

Responses to consultation questions

How can higher density and lower density be integrated? Can you think of examples where higher density has been designed to fit in with lower density surrounding areas?

Densities in inner Sydney vary greatly in close proximity. This occurs for different reasons and with different levels of success and approaches to managing impacts can depend on the context.

The effects of new and old development meeting can be seen in the two areas in Redfern either side of Bourke Street immediately north of Philip Street. North west of the intersection the population density is 93 persons per hectare while on the east side it varies from 179 to 382 persons per hectare (north to south). The differences in urban form have been managed by: the retention of existing buildings in the new development; ensuring no loss of sun to existing dwellings at critical times; transition in height changes; provision of shared amenity including new open space; pedestrian connections to regional parkland; new low traffic speed streets; new local amenities; and careful architectural design.

Harold Park has buildings of up to eight storeys with an expected density of about 235 persons per hectare. The surrounding one and two storey heritage areas have density ranges from about 50 to 120 persons per hectare. Here the topography, open space, alignment of streets and view corridors and transitioning heights was used to fit the development within the surrounding lower density context.

In other contexts such as across major roads like William Street there is sufficient distance and change of character by infrastructure to produce boundary conditions. At the edge of the metropolitan centre such as where Darlinghurst meets Central Sydney the separation is made by institutions (the museum and Grammar School) and tightly controlled planning boundaries.

To what extent do you think excellent design can minimise or offset the impact of tall buildings and density?

Tall buildings and density are not synonymous so are discussed separately. Tall building impacts should be carefully considered in relation to amenity. Good urban

design will ensure the placement of tall buildings:

- Do not further overshadow existing parks in mid-winter;
- Do not decrease available sunshine to nearby residents in mid-winter; and,
- Protect the privacy of nearby existing private open spaces and living rooms.
- High density can add value to existing neighbouring areas by:
 - Providing new open space accessible to existing residents;
 - Providing new communal and retail facilities; and
 - Providing accessibility to existing local facilities and places, for example new and existing public transport stops, parklands and retail areas.

Sustainable apartment building design

In dense urban areas, poor building design can be a major contributor to poor environmental performance. Up to 60 per cent of an apartment building's total energy can be used in common areas. This is particularly high in high-rise buildings with centralised plant and equipment, and underground car parks. Water use inside apartments is often extremely high. Residents in apartments recycle half the amount that residents in houses do.

Within the City of Sydney, apartment buildings are currently responsible for approximately 10 per cent of the City's greenhouse gas emissions, 38 per cent of potable water consumption and 14 per cent of the City's total waste generation.

In the Central to Eveleigh corridor, Sydney could follow the lead of other global cities that are minimising the carbon impact of new buildings. Europe has a target for all new buildings to have zero net emissions by 2019. In the United Kingdom, all new homes are to be zero carbon by 2016. In Australia, Melbourne has a strategy to be net zero emissions by 2020.

Closer to home, Barangaroo and Central Park have set the benchmark for precincts with apartment buildings that reach high environmental standards.

The City of Sydney recently placed its Residential Apartments Sustainability Plan on public exhibition. The Plan identifies practical actions to reduce the environmental impacts of new and existing apartment buildings, with the opportunity to reduce apartment sector greenhouse gas emissions by 40 per cent and water consumption by 7 per cent by 2030, as well as divert 70 per cent of waste from landfill by 2021.

Recommendations

- Develop the right combination, scale and design of new buildings to provide significant housing and employment spaces for Sydney while balancing the impacts on surrounding lower-density residential neighbourhoods.
- Establish world-best targets to minimise the carbon, water and waste footprints of new apartment buildings.
- Consider topography, open space location, street networks, sun access, retention of character buildings, height transitions, and other locale-specific factors in minimising impacts of taller new buildings.

Key Move 10: Housing Diversity

Use government-owned land to deliver a diversity of housing choices and tenures at different price points to support the corridor's social and economic diversity.

Response to consultation questions

Why is housing diversity increasingly important in Australian cities?

Can the future of housing be as much about renting as it is about owning?

How can we encourage more housing diversity?

Sustainable Sydney 2030 sets out the City's vision that a range of housing types and tenures are provided to underpin Sydney's economic productivity and social and cultural vitality. Key goals include: providing adequate housing to cater for the needs of a growing and diverse population; ensuring supply of affordable housing continues to grow to meet the community's needs; and ensuring the supply of social housing in the inner city is maintained or increased.

To help meet these objectives, in 2008 the City set targets of 7.5 per cent of all LGA dwellings to meet social housing needs and a further 7.5 per cent to meet affordable rental housing needs delivered by CHP (not-for-profit) and other providers by 2030. The City also has targets for the mix of new dwellings delivered by the market to support the growing population which sets ranges for studios, 1 bed, 2 bed and 3 bed or more apartments. These are consistent with the **Apartment Design Guide**.

In May 2015, the City released its Housing Issues Paper.¹¹ This paper highlights the growing housing affordability problem in Sydney, a city where from 2013 to 2014 average sales prices for dwellings grew nine times faster than average earnings due to overheated investment practices. It also sets out the City's position on housing and suggests strategies for providing greater housing affordability in the future, including strategies on how to deliver more affordable rental housing.

The City strongly supports the key move to use government-owned land to deliver increased housing diversity, including affordable housing choices. The City also acknowledges the collaborative work on the Housing Diversity Study being prepared to inform the Central to Eveleigh Transformation Strategy.

The City acknowledges that market housing will form a key part of the transformation of Central to Eveleigh. Residential development must be carefully balanced against

¹¹ <http://sydneyyoursay.com.au/housing-issues-paper>

amenity impacts of the working rail corridor and the opportunities to provide economic and employment uses near key industry hubs.

Before progressing the Central to Eveleigh Transformation Strategy, the NSW Government should adopt a robust housing diversity policy with diversity targets to cater for all of the community. This policy should include a range of considerations such as: 'first step' housing (a higher mix of studio and 1 bed units for a small but strategic percentage of new housing); percentage land allocations for charity housing (poor mobility and non-worker seniors housing); affordable rental housing for key workers and other qualifying lower-paid workers; and state social housing.

Policy settings might average targets across all of UGNSW's inner city sites, balancing high-value free market housing (catering for owner-occupiers and investors) with the proportionate needs of those not able to compete in what has become a global market for acquiring housing assets.

On public sites, we believe the target should be 60% market housing and around 40% for all other housing types including 'first step apartments', social housing, affordable rental housing by registered Community Housing Providers, emergency housing for the homeless, charity housing, senior's housing and aged care. It is suggested that a target of 21-24 per cent of housing be set across UGNSW's inner city portfolio for affordable rental housing under the City's definition of the term.

NSW Planning should adopt clear targets for the delivery of all housing types including affordable rental housing and social housing as part of an overall diversity strategy. In the context of site uplifts, clear targets of 60 per cent for market and 40 per cent for all other non-market housing types (including at least retaining existing social housing numbers) should be set for Central to Eveleigh to cater for all of the community.

Government investment in accordance with the Policy should focus on the forms of housing that cannot be delivered by the market, such as affordable and social housing. The Policy should set out the range of measures to achieve the targets including an affordable housing levy including on sites up zoned in the wider study area.

Renewal of the social housing estates at Waterloo and Redfern within Central to Eveleigh Study Area should, at a minimum, retain the number of social housing units and also provide new affordable housing. It is acknowledged that benefits can be attained by providing a portion of market housing to increase the diversity of the community and help fund the renewal of social and new affordable housing.

CASE STUDY Glebe Affordable Housing



Figure 1: Glebe Affordable Housing Project (illustration: Tim Throsby for City of Sydney)

The City joined with the NSW Government to facilitate the transformation of the 1960s Cowper Street estate in Glebe which comprised 134 social housing dwellings on a 1.49 hectare site. The City worked with the NSW Government to change the planning controls applying to site.

The development will provide a total of 495 units – 247 market dwellings, 153 social dwellings and 95 affordable dwellings plus three retail units. This will increase the social housing units by nearly 15 per cent and providing contemporary new accommodation that better meets the needs of tenants including those who are elderly and or have a disability. The 95 new affordable housing units will contribute to key worker housing in the City and are to be delivered in partnership with City West Housing. Construction of the affordable housing is expected to begin in the first half of 2016 followed by the social housing component.

Recommendations

- Adopt a *robust housing policy* with diversity targets before any proposals involving housing on UGNSW sites are progressed. On public land, policy settings should set an average target of 21-24 per cent for affordable rental housing across all UGNSW inner city redevelopment sites, balancing high-value free market housing (catering for owner-occupiers and investors) with the proportionate needs of those not able to compete in what has become a global market for acquiring housing assets in Sydney.
- In the context of site zoning uplifts, clear targets of around 60 per cent for market and 40 per cent for all other non-market housing types (including affordable and retaining existing social housing numbers) should be set for Central to Eveleigh to cater for all of the community.
- Collaborate with the City on strategies to delivery affordable housing through means including allocation of specific sites and introduction of a new levy.
- Use an income based definition to define affordable housing and relevant targets.
- Retain the existing supply of social housing in the Central to Eveleigh Study Area.
- Ensure minimum amenity standards can be achieved where high density residential development is proposed.

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