I. Green Square: From A Rich Industrial Past To A Vibrant, Sustainable And Connected Community

Region
Asia and the Pacific

Award Scheme
Guangzhou Award

Sustainable Development Goals
Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

Summary
The 278 hectare Green Square redevelopment is Australia’s largest urban renewal project, with a population to peak at 61,000 residents and 21,000 workers by 2030. It is strategically located within one of the most important economic corridors in Australia, 3.5km south of Sydney's CBD and 4km from Sydney Airport and Port Botany.

Background and Objective
Green Square has been the focus of regional and local planning the mid-1990s, following the announcement of a direct rail line connecting Sydney’s international airport to the CBD for the Sydney 2000 Olympic Games with a station at Green Square. The announcement was the catalyst for the first large scale ‘brownfield’ renewal in Australia, so as to capitalise on Green Square’s strategic location between the Sydney CBD, Sydney Airport and Port Botany. Until then most large scale development in Sydney occurred in ‘greenfield’ areas at the fringes of urban areas. The lands in Green Square were part of Sydney’s, and Australia’s, manufacturing powerhouse. Major structural economic changes in the 1970’s saw industries becoming obsolete or relocating to larger and cheaper sites at Sydney’s fringes or overseas. Green Square was seen as an opportunity to use existing underutilised infrastructure and deliver housing more economically. Green Square is situated within Sydney’s ‘Global Economic Corridor’, Australia’s dominant area of economic activity and job growth. Green Square is strategically placed to provide housing next to jobs, major health facilities and transport corridors. Under the NSW government’s metropolitan strategies, Green Square is identified as a planned major centre delivering jobs, homes and a wide range of services and facilities. It is planned to deliver homes for 61,000 people and 21,000 new jobs by 2030. The City’s Sustainable Sydney 2030, its long term strategic vision and direction, sees Green Square as a major opportunity for growth, infrastructure improvements and renewal to contribute significantly to Sydney’s sustainability. The goal is to establish a transit oriented sustainable and harmonious community, based on high density living. At the core is the realisation of the new town centre as the commercial, retail, entertainment and cultural hub. The aim is to create a place with a minimal environmental footprint and a vibrant and well-connected community where it is easy to: walk and cycle use and enjoy well-connected streets, public spaces, cultural and recreational facilities use convenient and integrated public transport connections and services celebrate high quality public spaces as the focus of activity have access to high quality housing, including affordable housing, shopping, commerce, services and jobs. The City provides strategic leadership, at the nexus of the complex partnerships and agreements with many government agencies, private developers and other stakeholders, which are required for the successful renewal. These partnerships include: multiple planning agreements that include contracts for civil works delivered by private developers high level consultative and advisory committees and networks including state government and technical experts to oversee the macro elements of the renewal area and in some cases jointly deliver infrastructure informal partnerships with stakeholders, business and the community to consult and liaise on implementation and community building issues, and develop community relations programs. Total estimated public infrastructure cost in Green Square (2015 prices) is AUS1.3 billion for land, roads and utilities, trunk drainage, parks and community facilities, excluding state provided infrastructure such as public transport and schools. Through value capture schemes and levies the private sector contributes 79% of total infrastructure costs. Of the remaining 21% the City contributes 2/3 and 1/3 is funded by federal and state governments. Approximately AUS13 billion in construction will have been spent over the next 10 years to regenerate Green Square, with the City forward funding AUS$40 million to build world-class community facilities and infrastructure: a library and public plaza, community and creative centre and halls, aquatic centre and sporting field, land acquisitions and essential civil and public domain infrastructure. In addition to funding, the City contributes skills and human resources to develop strategic policy, engage with developers and the community, project manage civil projects, achieve design excellence through design competitions, deliver community services and maintain assets at a high standard.

Actions and Implementation
The learnings from the City’s experience in urban renewal would offer other cities insights on an approach that can be applied to regeneration of large scale and high density areas. It would include: defining the vision for the place within the local, regional and metropolitan context undertaking detailed
master planning and economic testing a strategy and plan to deliver hard and soft infrastructure integration concept design plans for civil infrastructure and public domain establishing source of funding for public infrastructure early, including forward funding needs setting a value capture scheme(s) before uplift is granted by planning controls early development of a staging plan with flexibility to change over time buy-in and resources from all key stakeholders – in particular government and private sector community consultation and engagement plan with clear lines of communication and feedback set out process for regular review, monitoring, feedback and refinements. The City conducts many tours, receives delegations and makes presentations at many forums. In addition, the City would be happy to share information on various aspects of the renewal project.

Outcomes and Impacts

Green Square is one of the fastest growing areas in Australia and is delivering on state government housing targets, with 11,000 new dwellings built and a resident population increase of 10% per year in the last year (currently 26,000 residents). In 2018 the City has completed the key components of the new civic hub at the heart of the town centre – a major community and cultural precinct and a new library and civic plaza which have set new benchmarks in adaptive reuse of heritage buildings, facilities integration, sustainability and design innovation. They provide the spaces for community activities and programs run by the City and various organisations. Many new streets, walkways and bike paths have been delivered, fourteen out of the 35 new parks planned have also been built. This public domain network has made the area much more legible, accessible and connected and has added to the setting for a healthy and active community with opportunities to socialise and recreate at their doorstep. Active transport has significantly increased - patronage at Green Square train station increased by more than 30% each year between 2014 and 2016 and at 14%, the area has the highest rate of commuter trips to the CBD by bicycle in Sydney. There are many measures the City has developed to assess and document change: Regular financial reporting tracks expenditure and performance on the City’s capital works projects delivering infrastructure and of developer contributions Development approvals and construction data measures growth rates and population projections Environmental sustainability progress reports are produced bi-annually for the City Some research and review initiatives include:- internationally renowned urban designers Gehl Architects conduct benchmark studies that map, assess and guide the usability and quality of the City’s public spaces and architecture- a research partnership with NSW University monitors and measures through community surveys social cohesion- partnerships with health and transport government agencies assess evolving conditions (such as public transport use, walking and cycling numbers) to assess and mitigate impacts- a 5-yearly floor space and employment survey measures changes in job numbers and types of employment- capacity studies measure floorspace take-up permitted under the planning framework and available floorspace. The main aspects of the ‘tool kit’ devised to ensure success of the initiative includes: a comprehensive package of detailed planning controls inextricably linked to infrastructure strategies and plans legally binding deeds and planning agreements to seal developer and government commitments to contribute to infrastructure delivery public domain plans and concept designs that map all infrastructure layers transparent, open and consistent communication and engagement with all stakeholders to build trust and confidence in the realisation of the vision. The initiative has set new benchmarks in renewal at a large scale. It contributes to the City’s reputation as a bold and visionary leader, who can demonstrate by doing how denser cities can be the healthiest, greenest, most stimulating places for people – with the least environmental footprint. Ultimately the initiative demonstrates how the City contributes to Sydney as a great place to live, visit and do business in.

Sustainability and Scalability

Goal 3: Ensure healthy lives and promote well-being for all agesGoal 4: Ensure inclusive and equitable education and promote life-long learning opportunities for allGoal 6: Ensure availability and sustainable management of water and sanitation for allGoal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovationGoal 11: Make cities and human settlements inclusive, safe, resilient and sustainableTarget 1: Access for all to adequate, safe and affordable housing and basic services and upgrade slums Target 2: Access to safe, affordable, accessible and sustainable transport systems for all Target 3: Participatory, integrated and sustainable human settlement planning and management Target 4: Safeguard cultural and natural heritage Target 6: Improve air quality and manage municipal and other wastes Target 7: Universal access to safe, inclusive and accessible green and public spaces, in particular of women, children older persons and persons with disabilities Target 9: Improving resource efficiency, mitigation and adaptation to climate change, resilience to disasters and implement holistic disaster risk management Goal 13: Take urgent action to combat climate change and its impactsGoal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions for all

Initiative Contribution

The Green Square renewal framework is set within New South Wales (NSW)’s state government planning legislation and comprises statutory controls, policies and guidelines. It includes: a legal instrument; a development plan; infrastructure and developer contributions plans; public domain plans; and technical codes. The City’s delivery of physical and social infrastructure is set within local government legislation that requires annual reporting of councils’ corporate plans – particularly relevant are a Community Strategic Plan and Resourcing Strategy, which includes a Long Term Financial Plan.
Innovative Initiative

The Green Square project when conceived was revolutionary in that it was the first large scale brownfield redevelopment to be undertaken in Sydney. Masterplanning and coordinating development and delivery of public domain and civil infrastructure across multiple different landownerships had not been done before. The value capture approach to deliver social and civil infrastructure was also revolutionary at such large scale, in particular the zoning model developed to fund essential infrastructure for the new town centre. Other revolutionary approaches at this scale and density include sustainability initiatives such as a water reuse scheme, streets designed with central swales to capture and cleanse stormwater, and significant expansion of tree canopy cover. As the project progressed, the approach to renewal has been evolutionary in that the City refined its planning and infrastructure delivery framework to respond to new state government directions, accelerate infrastructure delivery and respond to community and market expectations. The City resolved to forward fund infrastructure projects and pursue partnerships with state agencies to bridge funding gaps - co-funding a major trunk drain, transport corridor and primary school – all the state government’s responsibility. The City established strategic plans, planning controls, policies, design excellence processes, design codes and technical specifications. This work serves to analyse, define and choreograph public spaces, public transport initiatives and built forms consistent with our objectives for a green, global and connected city. This approach derives from an iterative process of continued review, refinement and monitoring. It is informed by local and international best practice, research and engagement with practitioners, advisory bodies and community engagement. Some of the world’s best practitioners have provided strategic direction – Jan Gehl (Denmark) on activation of public places and Allan Jones (UK) on precinct scale trigeneration, for example. Innovation in delivering Green Square comprises the development and implementation of a holistic urban renewal package including: a strategy implemented through detailed statutory planning controls and development plan, informed by local and state policies concept and detail designs for civil infrastructure and public domain guidelines and codes on specific issues, for example on value capture calculations and green roofs funding arrangements through floor space incentives integrated project management across the City’s and private sector developments governance arrangements through agreements Green Square was earmarked for renewal in the mid-1990s. Despite the airport rail line opening in 2000 and some large sites being redeveloped, some of the essential infrastructure, in particular in the town centre had not been delivered by 2004. The obstacles to development were fundamental. Land was in multiple ownerships, including land required for essential infrastructure. The costs to deal with transport, flooding and contamination were high, with no commitment or engagement from state agencies. The original state government commitment to the project had not addressed infrastructure funding. The City began a comprehensive review of the financing, land use, urban design, transport and social and physical infrastructure and developed a fully costed, infrastructure plan and is investing AU$540 million over the next ten years. Despite numerous meetings with state Ministers and establishment of a coordination committee, agreement and funding for major trunk drainage was not reached until 2014. The City resolved to fund more than half of the trunk drainage, and development is now well underway. Similarly, there is still no clear state public transport strategy to meet the needs of the rapidly increasing population. Although the City is not responsible for public transport, it has purchased key sites to protect the transport corridor.

Resources devoted to delivery

BASIC CITY DATA Population size: 233,217 Population growth rate (%): 4.00 Surface area (sq.km): 26.72 Population density (people/sq.km): 8727.00 GDP per capita (USD): 139,488.00 Main source of prosperity: Finance, tourism, information/media/tech, digital economy, and creative and performing arts