Draft Western Sydney Aerotropolis Social Infrastructure Strategy

Report 3: Social Return on Investment Framework

GHD Report for the Western Sydney Planning Partnership

November 2020

Acknowledgement of Country

Aboriginal people have had a continuous connection with the Country encompassed by the Western Sydney Aerotropolis for more than 60,000 years. They have cared for Country and lived in deep alignment with this important landscape, sharing and practicing culture while using it as a space for movement and trade.

We acknowledge that four groups have primary custodial care obligations for the area: Dharug, Dharawal, Gundungurra and Darkinjung. We also acknowledge others who have passed through this Country for trade and care purposes: Coastal Sydney people, Wiradjuri and Yuin.

Western Sydney is home to the highest number of Aboriginal people in any region in Australia. Diverse, strong and connected Aboriginal communities have established their families in this area over generations, even if their connection to Country exists elsewhere.

Ensuring that Aboriginal communities, their culture and obligations for Country are considered and promoted will be vital for this project. A unique opportunity exists to establish a platform for two-way knowledge sharing, to elevate Country and to learn from cultural practices that will create a truly unique and vibrant place for all.

Executive Summary

This Social Return on Investment Framework has been prepared to identify a range of placemaking and activation opportunities which will assist to activate the hard social infrastructure recommended in *Report 2: Social Infrastructure Needs Assessment*. It has also been prepared to provide a high level framework to measure and track both positive and unintended negative social changes as the Aerotropolis develops.

This is the third report in a series of three which inform the Draft Western Sydney Aerotropolis Social Infrastructure Strategy and is subject to, and must be read in conjunction with, the limitations set out in section 1.3 and the assumptions and qualifications contained throughout the report.

This report considers the emerging philosophy of the 'Loveable City' with the objective of creating an affinity to place in order to attract residents, workers and visitors to the Aerotropolis. The placemaking and activation recommendations have been developed and assessed based on their potential to influence positive outcomes across 18 indicators that make up the four dimensions of 'Loveability', which include:

- **Social and cultural life** – diverse communities will have access to activities and services 24/7.
- **Local empowerment** – ability to have a voice and provide influence and a welcoming community with inclusion, equity and participation at its core.
- **Health and wellbeing** – communities will be integrated and cohesive, people will feel safe, and be able to improve their health and wellbeing.
- **Amenities and infrastructure** – places for people to meet and participate in community life, and services and facilities will be provided that meet diverse community needs.

The framework identifies recommendations which have been prioritised based on a multi-criteria analysis due to their potential to influence positive social change and provide social benefits to the future Aerotropolis communities. The high priority recommendations include:

- Connecting to Country projects
- Projects and programs to enhance the connection to water and green space
- Development and implementation of community hubs, public squares and meeting spaces
- Projects and programs to encourage and enhance multicultural expression.

A summary of the placemaking and activation recommendations is presented in Table E-1, in order of priority based on the multi-criteria analysis.

It is important to recognise that both the public and private sectors will have a role to play in implementing, tracking and reporting on services, programs and initiatives in the Aerotropolis which will contribute to the success of the 'Loveability' indicators and overall affinity to place. The social return on investment framework provides guidance in assessing these hard and soft social infrastructure recommendations which will be critical in informing future planning and decision-making processes in the Aerotropolis.

Table E-1 Summary of placemaking and activation recommendations

Priority	Pre-construction	Early occupation	Full build
High	- Connecting to Country projects - Reconnecting to water, Wianamatta-South Creek	- Enhance connecting to Country projects through arts and events - Semi-permanent community hubs - Enhance connections to the water and green space	- The community heart (public squares and meeting places) - Aboriginal Cultural Centre - Multicultural expression through events, art and design
Medium	- Mobile community hubs - Sharing-economy programs and projects - Activating vacant blocks and industrial land - Invest in a culture of entrepreneurship (community/business grants)	- Community Currency and a community development toolkit - Infrastructure to enhance safety, amenity and comfort - Co-located exhibition, testing and maker spaces - Temporary retail hubs and curated, independent retail mix - STEM and innovative public art and education programs - Aboriginal cultural tourism - Pop-up park(s) and fitness and recreation programming - Legibility, wayfinding and creating habitual movement patterns - Temporary co-working spaces - Temporary library and 'little libraries'	- Playstreets and safe, accessible walking routes - Eco-literacy projects and green, productive landscapes - Connections and learning around healthy food and local produce - Mutli-purpose library facility - Local, independent and ethical retail mix - High quality on-going public art program and cultural charter - Dual-use tenancies
Low	- Creative construction hoardings program		

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Summary of Figures & Tables

Abbreviations

Abbreviation	Figure name
CALD	Culturally and Linguistically Diverse
CBD	Central Business District
DPIE	NSW Department of Planning, Industry and Environment
GSC	Greater Sydney Commission
LGA	Local Government Area
WSPP	Western Sydney Planning Partnership
STEM	Science, technology, engineering and mathematics

Glossary of Terms

Term	Definition
Aerotropolis	A metropolitan area where infrastructure, land uses and economy are centred on an airport and includes the outlying corridors, and aviation orientated business and residential development that benefit from each other and their accessibility to the airport.
Affinity to place	Affinity to place is the spiritual and emotional connection people have to place. Narratives and cultural memories foster an attachment and affinity to place.
Culturally and linguistically diverse communities	The cultural and linguistic diversity of a community or a population refers to people who were born overseas, have a parent born overseas or speak a variety of languages.
Hard infrastructure	Hard infrastructure refers to the physical infrastructure of built environment including roads, buildings and facilities.
Initial precincts	The Aerotropolis Core, Northern Gateway, Wianamatta-South Creek, Badgerys Creek, Agribusiness and Mamre Road precincts are the focus of initial precinct planning for the Western Sydney Aerotropolis. The Western Sydney Planning Partnership are responsible for the planning for all initial precincts except Mamre Road which is the responsibility of the Department of Planning, Industry and Environment, for this reason Mamre Road is not included within this report.
Liveability	Liveability describes quality of life and community wellbeing and is underpinned by healthy communities, environmental sustainability, social capital and social cohesion.
Loveability	Loveability is the affinity to place, moving beyond the achievement of liveability (quality of life and community wellbeing) to a place where people feel genuinely connected and engaged.
Placemaking	Placemaking is a social practice that is realised through people's interactions with the world and where they create the cultural landscape, rather than it being imposed from above. It is the process that connects the physical elements of a space with the intangible elements such as social and cultural elements.
PPP funding model	Public-private partnership (PPP) is a funding model for public infrastructure projects. The public partner is represented by the government at a local, state and/or national level. The private partner can be a privately owned business, public corporation or consortium of businesses with a specific area of expertise.
Social infrastructure	Social infrastructure incorporates the facilities and services that are used for the physical, social, cultural or intellectual development or welfare of the community. These include health-related services, education and training, social housing programs, police, courts and other justice and public safety provisions, as well as arts, culture and recreational facilities
Social sustainability	Social sustainability refers to a place and a community that is cohesive, proud, safe and healthy. It is about people's quality of life and the strength of a community, and the extent to which a neighbourhood supports individual and collective well-being.
Soft infrastructure	Soft infrastructure refers to the programs, services and activities that complement the built (hard) infrastructure, including human capital and the institutions that cultivate activity.
Wianamatta-South Creek Catchment	Includes most of the Cumberland Plain of Western Sydney and is a defining central element of the Western Parkland City and the Aerotropolis.
Western Sydney Airport	A Commonwealth business enterprise established in August 2017 to build the new Airport.
Western Parkland City	Broadly, Penrith, Liverpool, Campbelltown, Hawkesbury, Wollondilly, Camden, Fairfield and Blue Mountains LGAs, anchored around Liverpool, Greater Penrith and Campbelltown–Macarthur, with the new Airport and Aerotropolis geographically at its centre.
Western Sydney Planning Partnership	A local government-led initiative comprising of representatives of all eight Western Parkland City councils as well as Blacktown Council, and representatives from the NSW Department of Planning, Industry and Environment, Transport for NSW, Sydney Water and the Greater Sydney Commission.
24/7 Precinct	The 24/7 concept is the offering of services, amenities and job opportunities 24 hours a day, 7 days a week, making it a desirable place for people to live, work and visit.

01 Introduction

Western Sydney Aerotropolis will become a thriving 24/7 community surrounding the future airport. The provision of hard and soft social infrastructure will play a significant role in creating a socially sustainable place for workers, residents and visitors.

1.1 Purpose of this report

This social return on investment framework has been developed around the emerging philosophy of the 'Loveable City'. While the more commonly known philosophy of 'Liveability' refers to physical attributes of a place, 'Lovability' refers to the sentiment a place inspires, which is influenced by softer values such as behaviour and experience.

This is the third report in a series of three which inform the Draft Western Sydney Aerotropolis Social Infrastructure Strategy. The strategy will play a significant role in creating a socially sustainable place for workers, residents and visitors in the Aerotropolis initial precincts. As depicted in Figure 1-1, the three reports include:

- *Report 1: Social Infrastructure Audit* (GHD, 2020b)
- *Report 2: Social Infrastructure Needs Assessment* (GHD, 2020c)
- *Report 3: Social Return on Investment Framework* (this report)

Report 1: Social Infrastructure Audit (GHD, 2020b) identifies existing social infrastructure, while *Report 2: Social Infrastructure Needs Assessment* (GHD, 2020c) identifies the facilities needed to service the future resident, worker and visitor population of the Aerotropolis inital precincts. This Social Return on Investment Framework considers how to bring hard social infrastructure to life and ultimately create a strong affinity to place. This report provides soft infrastructure recommendations which build on the recommendations in *Report 2: Social Infrastructure Needs Assessment* (GHD, 2020c) . These recommendations include a range of programs and public activations that could support facility usage, and facilitate 24/7 activation of the Aerotropolis initial precincts, aligning with the 24/7 operation of the Western Sydney International (Nancy-Bird Walton) Airport.

Key to the success of this strategy is understanding and balancing the needs of the future resident, worker and visitor population within the initial precincts. Therefore, this report takes on a placemaking focus (further discussed in section 05) and employs a beyond 'business as usual' approach in order to apply the emerging philosophy of creating a 'Loveable City'. This will enable the Western Sydney Aerotropolis to create a strong affinity to place and become a desirable place to live, work and visit.

1.2 Structure of this report

This report presents a set of activation recommendations and a social return on investment framework that will assist with activating hard infrastructure recommended for the Aerotropolis initial precincts. This report considers and presents:

- **Place character & identity -** the defining physical and socio-cultural characteristics that define the Western Parkland City and will inform the future vision of the Aerotropolis.

- **Social benefits, impacts and risks -** an outline of the potential benefits, challenges and risks associated with development, social infrastructure provision and change over time for the transitioning community of the Aerotropolis.

- **Placemaking opportunities -** a discussion on what soft infrastructure (i.e. community programs and services) could be provided by government, not for profit agencies and the private sector to support use of recommended hard infrastructure.

- **Social return on investment framework -** a high level framework which establishes a set of quantifiable measures to understand and track both positive and unintended negative changes in the Aerotropolis progress to becoming a "Loveable City", and inform future planning and decision-making processes.

Figure 1-1 Western Sydney Aerotropolis Social Infrastructure Strategy process

1. Social Infrastructure Audit
2. Social Infrastructure Needs Report
3. Social Return on Investment Framework

1.3 Scope and limitations

This report has been prepared by GHD for Western Sydney Planning Partnership and may only be used and relied on by the Western Sydney Planning Partnership for the purpose agreed between GHD and the Western Sydney Planning Partnership as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than the Western Sydney Planning Partnership arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Western Sydney Planning Partnership and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

1.4 Overarching vision and objectives

The development of the Western Sydney International (Nancy-Bird Walton) Airport is a 'game-changer' for Sydney. The investment in the $5.3 billion airport as well as other major transport links will create Sydney's newest city and will be one of the fastest growing regions in Australia, creating 200,000 jobs by 2028. The *Western Sydney Aerotropolis Plan* (DPIE, 2020c) sets out the planning framework for the Western Sydney Aerotropolis (Aerotropolis) and identifies ten precincts that will undergo a precinct planning process. Each of the ten precincts will have its own character and identity that will contribute to achieving the vision of the Aerotropolis.

Although companies have committed to establishing significant offices within Aerotropolis, attracting a workforce is the biggest challenge to the Western Parkland City achieving its vision as a 'next generation city.' Social and cultural infrastructure are what bring life to a 24/7 precinct, which is a precinct that offers services, amenities and job opportunities 24 hours a day, 7 days a week, making it a desirable place for people to live, work and visit.

Social infrastructure will play a fundamental role in creating the communities that will live, work and visit the Aerotropolis. The character, as outlined in the vision for each of the individual precincts, will be critical in identifying and planning and provisioning recommended social infrastructure. Although each precinct will have its own requirements for local social infrastructure, regional infrastructure will need to consider the requirements of the Aerotropolis and the broader Western Parkland City community.

Equally, having internationally competitive health and education facilities will provide significant opportunities and will also benefit the local community. Cultural infrastructure will service the large worker population but also support a tourism and leisure industry and a nighttime economy that activates a place and attracts both locals and visitors.

Green infrastructure will also be critical to creating a sustainable and liveable Aerotropolis that attracts people to parks, recreation and open spaces. Integrating social infrastructure with green infrastructure will facilitate the vision of the Western Parkland City to create better health and wellbeing outcomes for the whole community of Western Parkland City.

1.5 Initial precincts

The *Western Sydney Aerotropolis Plan* (DPIE, 2020c) outlines the ten precincts that make up the 11,200 hectare Aerotropolis site surrounding the Western Sydney International (Nancy-Bird Walton) Airport. The Aerotropolis is anticipated to grow into a significant metropolitan cluster centre for the Western Parkland City, an economic hub for Greater Sydney and an international and domestic gateway through synergies with the 24/7 Western Sydney International (Nancy-Bird Walton) Airport.

The Western Sydney Planning Partnership (WSPP) are responsible for the planning of five of the six initial precincts which are the focus of this study. As depicted in Figure 1-2, they include:

- Aerotropolis Core
- Northern Gateway Precinct
- Wianamatta-South Creek
- Badgerys Creek Precinct
- Agribusiness Precinct.

Of the remaining five precincts, Mamre Road initial precinct is being planned by the Department of Planning, Industry and Environment (DPIE). The remaining four precincts to be planned at a later phase include North Luddenham, Kemps Creek, Rossmore, and Dwyer Road precincts.
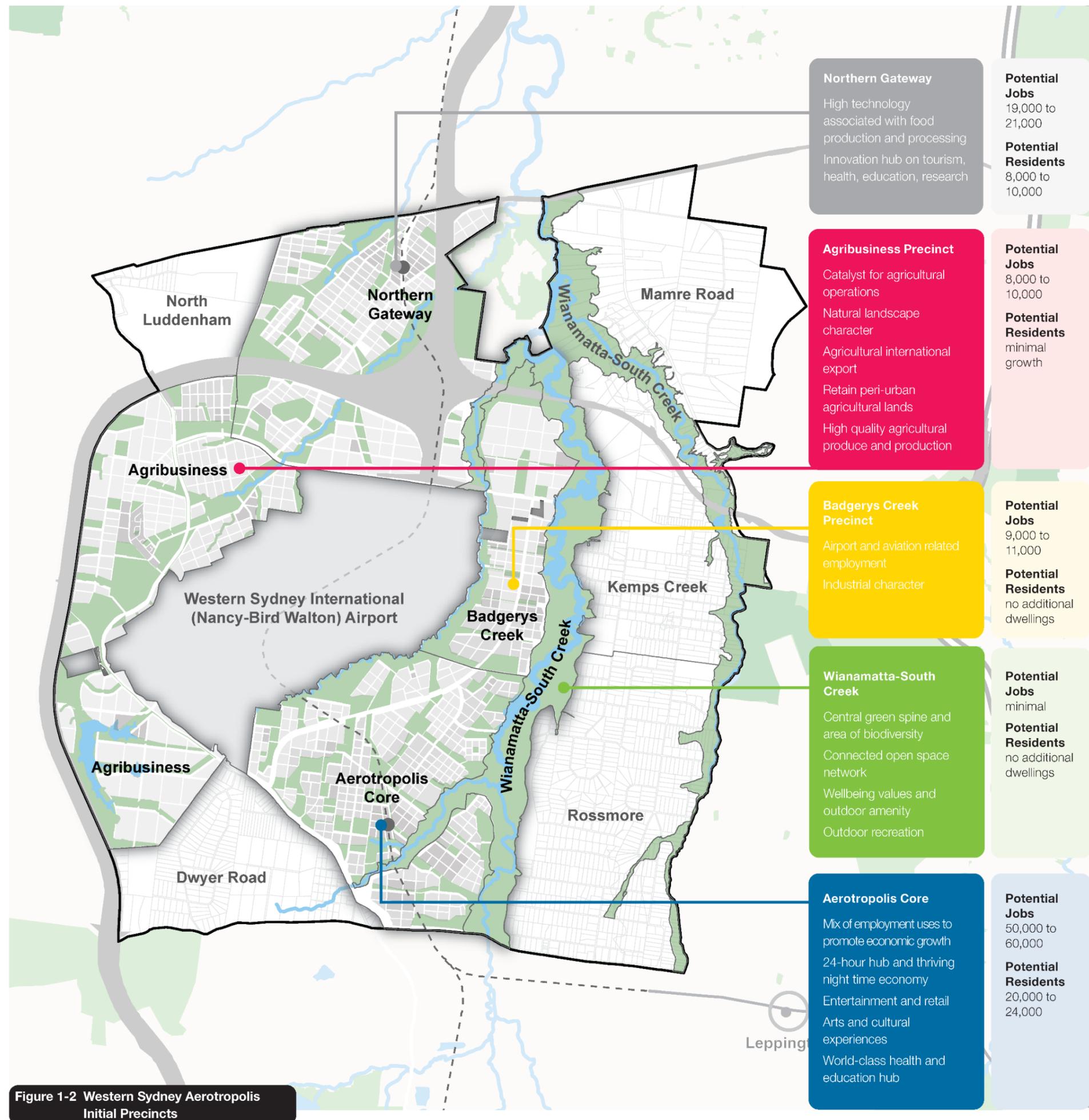
Figure 1-2 Western Sydney Aerotropolis Initial Precincts

Northern Gateway
High technology associated with food production and processing
Innovation hub on tourism, health, education, research

Potential Jobs 19,000 to 21,000
Potential Residents 8,000 to 10,000

Agribusiness Precinct
Catalyst for agricultural operations
Natural landscape character
Agricultural international export
Retain peri-urban agricultural lands
High quality agricultural produce and production

Potential Jobs 8,000 to 10,000
Potential Residents minimal growth

Badgerys Creek Precinct
Airport and aviation related employment
Industrial character

Potential Jobs 9,000 to 11,000
Potential Residents no additional dwellings

Wianamatta-South Creek
Central green spine and area of biodiversity
Connected open space network
Wellbeing values and outdoor amenity
Outdoor recreation

Potential Jobs minimal
Potential Residents no additional dwellings

Aerotropolis Core
Mix of employment uses to promote economic growth
24-hour hub and thriving night time economy
Entertainment and retail
Arts and cultural experiences
World-class health and education hub

Potential Jobs 50,000 to 60,000
Potential Residents 20,000 to 24,000

02 Methodology & Approach

The objective of this report is to provide a set of activation recommendations and a social return on investment framework that will assist to activate the hard infrastructure and create an affinity to place.

2.1 Methodology

The methodology for this report has been informed by the literature review undertaken in *Report 1: Social Infrastructure Audit* (GHD, 2020b) and a range of additional policies, plans and guidelines which discuss the broad social planning areas of social sustainability, liveability, social cohesion and placemaking. In addition, the potential future resident, worker and visitor profiles developed in *Report 2: Social Infrastructure Needs Assessment* (GHD, 2020c) have been considered throughout the tasks undertaken to prepare this report as outlined below.

1

Defining 'Loveability'

Informed by a desktop review of literature relating to relevant best practice and social planning theory, what makes a 'Loveable City' has been defined through the establishment of 18 'Loveability' indicators across four dimensions (section 2.2). These 'Loveability' indicators have been applied throughout this report to guide activation and placemaking recommendations and ensure high quality outcomes for the future resident, worker and visitor populations of the Aerotropolis (defined in *Report 2: Social Infrastructure Needs Assessment* (GHD, 2020c).

2

Defining potential future place character & identity

The potential future place character and local identity has been described, building on the existing place analysis detailed in *Report 1: Social Infrastructure Audit* (GHD, 2020b) . This takes into consideration the contextual narrative and aspirations of the Aerotropolis and Western Parkland City, as well as the character and communities of Liverpool and Penrith Local Government Areas.

3

Understanding potential social benefits, challenges & risks

A deeper analysis of potential social benefits, challenges and risks has been undertaken which builds on the preliminary challenges and risks analysis detailed in *Report 1: Social Infrastructure Audit* (GHD, 2020b). This analysis considers additional social benefits, challenges and risks as they align with the 'Loveability' indicators (section 2.3) as well as the development, social infrastructure provision and change over time for the new and existing transitioning community of the Aerotropolis.

4

Identifying placemaking opportunities

A high level identification and analysis of potential placemaking and activation recommendations has been undertaken across three stages of development in the Aerotropolis (section 5.3). This includes consideration of a range of partnership opportunities and delivery models. A multi-criteria analysis has also been undertaken to assist in prioritising the recommendations.

5

Establishing a social return on investment framework

Informed by the outcomes of previous tasks a high level framework has been developed to provide guidance in assessing hard and soft social infrastructure against the 'Loveability' indicators (section 2.3) in order to inform future planning and decision-making processes and achieve social benefits.

2.2 Planning for soft infrastructure

Social sustainability can be defined as people's quality of life and the strength of a community, now and in the future (The Berkeley Group, 2012). It combines design of the physical environment with a focus on how the people who live and work in a place function as a community. Therefore, planning for soft infrastructure should consider and influence the extent to which a neighbourhood supports individual and collective wellbeing, creating communities which are cohesive, proud, safe and healthy.

Social sustainability can be achieved through high quality outcomes in the following four dimensions:

- **Social and cultural life** – diverse communities will have access to activities and services 24/7.

- **Local empowerment** – ability to have a voice and provide influence and a welcoming community with inclusion, equity and participation at its core.

- **Health and wellbeing** – communities will be integrated and cohesive, people will feel safe, and be able to improve their health and wellbeing.

- **Amenities and infrastructure** – places for people to meet and participate in community life, and services and facilities will be provided that meet diverse community needs.

High quality outcomes across these four dimensions can support community members to better adapt to change in their neighbourhood over time, thereby achieving social sustainability and overall 'loveability' or affinity to place. Social sustainability also recognises and builds on the existing strengths of each place to deliver improved outcomes over the long term.

The NSW Government Architect outlines as a key objective the need to design places that are 'good fit' to ensure they are informed by and derived from their location (NSWGA, 2019). Successful soft infrastructure planning in the Aerotropolis will bring to life the hard infrastructure recommended in *Report 2: Social Infrastructure Needs Assessment* (GHD, 2020c).

2.3 Creating affinity to place

Narratives and cultural memories foster an attachment and affinity to place and embed memories and meaning to build communities. In the context of strategic placemaking this is about identity construction where greenfield development requires a top-down approach to this attachment (Lew, A. A., 2017). Sharing stories and memories enables people to participate in community events associated with places of shared significance, (Cilliers, E. J., Timmermans, W., Van den Goorbergh, F., & Slijkhuis, J. S. A., 2015). The 'Loveable City' framework shown in Figure 2-2, draws from the context in a number of key plans and studies including the *Liveability Framework* (GSC and DPIE, 2017), an evidence-based, contextually-tailored framework approach to delivering great places for people and liveability benefits across Greater Sydney.
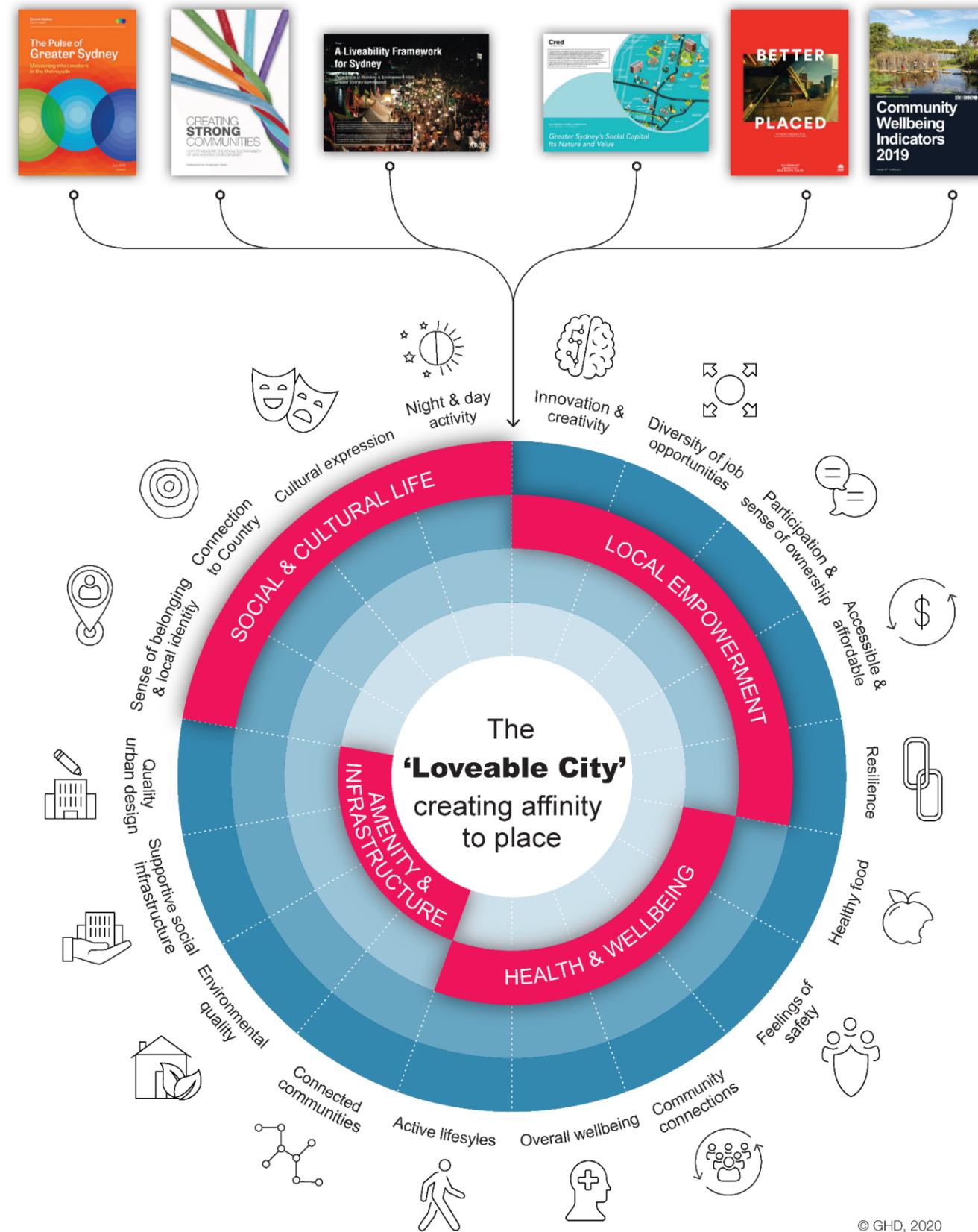

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Figure 2-2 GHD's 'Loveable City' framework

03 Place Character & Identity

This section considers the local identity and contextual narrative of the Aerotropolis, surrounding area and the Western Parkland City.
This analysis takes into account the character of Liverpool and Penrith Local Government Areas and builds on the existing place analysis detailed in *Report 1: Social Infrastructure Audit*.

3.1 Connection to Country

The Aerotropolis is located on land of the Dharug and Dharawal people. As Traditional Custodians of the land, and under a continued belief system of 'we care for Country, it will care for us,' this place is deeply linked to the identity of Dharug and Dharawal people. Sense of place for Aboriginal communities embodies more than more than tangible features such as the land, waterways, trees and animals; it also includes the intangible such as spirituality, song and stories. A sense of place also includes the intangible, like spirituality, song, and stories. For Aboriginal communities, it is impossible to separate the person from the land.

Western Sydney has the highest population of Aboriginal people in Australia. The Aboriginal communities of Western Parkland City are diverse and from across Country. Although some Aboriginal residents of Western Parkland City live off-Country, there is a deep cultural respect for Dharug and Dharawal Country; its history, identity, and its Traditional Custodians.

Wianamatta-South Creek is a key feature of the Aerotropolis, and means 'Mother Place' in Dharug language. The large water system makes up the cultural landscapes of the Cumberland Plain and is the longest freshwater stream in Greater Sydney. Water is viewed as a place of high cultural significance to Aboriginal communities, for its intrinsic value with the passing of knowledge, as well as its use for living places, places for fishing and growing food, and use as a movement corridor. Despite challenges faced by Traditional Custodians today with the privatisation of land surrounding Wianamatta-South Creek, it remains an important place for cultural practise, recreation and gatherings.

The present day management of some lands in and around the Aerotropolis falls under the Local Aboriginal Land Councils (LALC's) of Deerubbin, Gandangara and Tharawal.
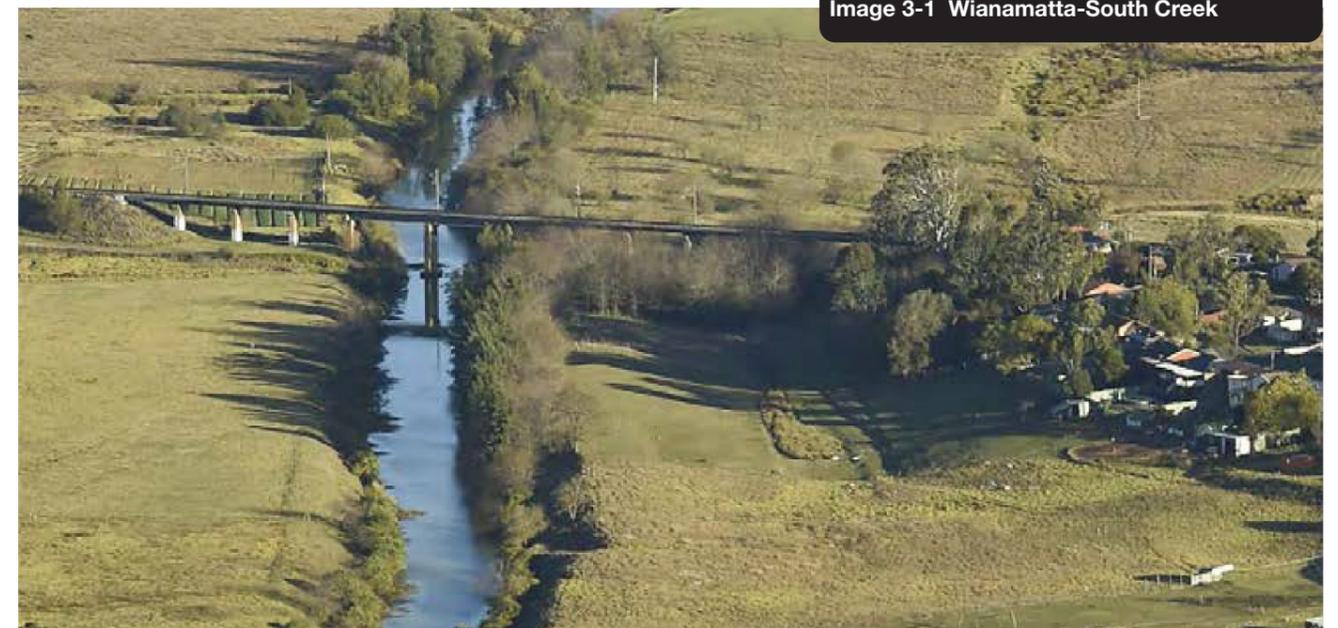

Image 3-1 Wianamatta-South Creek

3.2 Place character and local identity

The suburbs that make up Western Parkland City developed through the 1960s and 1970s and the area's built form, low-rise housing stock and car-oriented street network from those past eras remain to this day. Liverpool and Penrith are no exception to this, sitting at the edge of Sydney's growing metropolis these LGAs continue to balance thier unique character and identity between urban and rural.

Known as one of Australia's earliest European settlements and cities, Liverpool has a rich history highlighted by one of their main attractions featuring many heritage buildings in the area. The natural feature of the Georges River is a key feature of the LGA and is known to be a crucial part of local Aboriginal culture spanning thousands of years serving as a cultural border and source of food and trade (Liverpool City Council, 2020). Liverpool is known for its diverse and multicultural community reflected in its food and arts scene, including several street art and museums, as well as retail such as Indian threads and gold jewellery.

Penrith City Council has positioned itself as the gateway of the 'New West' due to its lifestyle and economic benefits supporting the increase of future visitors and residents to the Aerotropolis and Western Parkland City (Penrith City Council, 2012). With neighbouring natural attractions of the Nepean River and Blue Mountains, Penrith city is known for its lifestyle of high liveability, skilled workers, and natural wonders.

Both Penrith and Liverpool's character and identity is grounded in their diversity. It will be critical for any future planning and decision-making to consider the impact of gentrification and the displacement of people and place in order to protect these diverse communities as the environment changes.

Amenities and infrastructure
physical identity

Low density built form and urban-rural transitional land uses

Current land uses transition from urban and residential areas along the eastern edge of Sydney's metropolis to rural and agricultural areas in the centre and to the west, attributing to the current mixed residential character, including mixed use, commercial zoning, agricultural lifestyle lots and fresh produce production.

Connections and wide movement corridors

Peripheral access via major road links with limited walkability, and an emerging public transport network with linear public transport network are proposed.

Long views to the landscape and Blue Mountains backdrop

Cumberland Plain Woodlands are unique to the area and have shaped the built form and street network, with views extending along ridgelines and the the Wianamatta South Creek corridor as the central defining natural feature.

Traditional village centres and big-box retail

The low-density character of the area has attributed minimal commercial and retail activity with current activity following linear corridors that extend from developed areas to the east of the study area.

Local empowerment
aspirations and perceptions

PENRITH COMMUNITY STRATEGIC PLAN ASPIRATIONS

Work closer to home to improve work life balance with access to local jobs, economic investment and providing lifelong learning opportunities.

Plan for future growth by protecting the natural areas, heritage and character, and ensuring services meet future needs.

Improve accessibility by enhancing the public transport network, providing safe and efficient pathways and road networks.

Create safe and vibrant places with attractive public spaces, and working with communities to improve neighbourhood amenities.

Care for the environment by supporting community connection to the environment and minimising risks from climate change.

Provide healthy place and strong community spirit by building resilient and inclusive communities, enhancing cultural vitality and active and healthy lifestyles.

LIVERPOOL COMMUNITY STRATEGIC PLAN ASPIRATIONS

Connectivity to active and public transport, accessible and connected suburbs, and leadership in innovation and collaboration.

Liveability through a vibrant, mixed-use and walkable 24-hour city centre, quality and accessible community facilities and open space, and housing choice for different needs, in safe, healthy and inclusive places that shape the wellbeing of the community.

Productivity, aligned to a world-class health, education, research and innovation precinct, with an attractive environment for local jobs, business, tourism and investment, and industrial and employment that meet Liverpool's future needs.

Sustainability with respect to bushland and waterways are, connected, protected and enhanced, green, sustainable, resilient and water-sensitive city,and rural lands are protected and enhanced.

Social and cultural life
activities and social connections

Diverse communities and cultures

Liverpool and Penrith are some of Sydney's most multicultural diverse communities with the largest Aboriginal population in Australia and a congruence of ethnic diversity giving Western Parkland City a unique, changing character. Services and facilities enhance the harmony between cultures and provide for a broad range of needs.

Peri-urban activities

Penrith and Liverpool both transition between rural, rural-residential and urban environments, with the proximity and connection to the environment considered highly valuable. This peri-urban setting enables a uniquely mixed offering of both urban and rural based activities.

Creative community

Western Parkland City has a rich cultural and artistic legacy. There are a number of significant cultural facilities including the Casula Powerhouse Arts Centre, the Penrith Regional Gallery and local performing arts centres.

Education and learning

Western Parkland City is home to a burgeoning health and education-focused innovation. Home to the University of Western Sydney's six local campuses which characterise the place with many students from the local area.
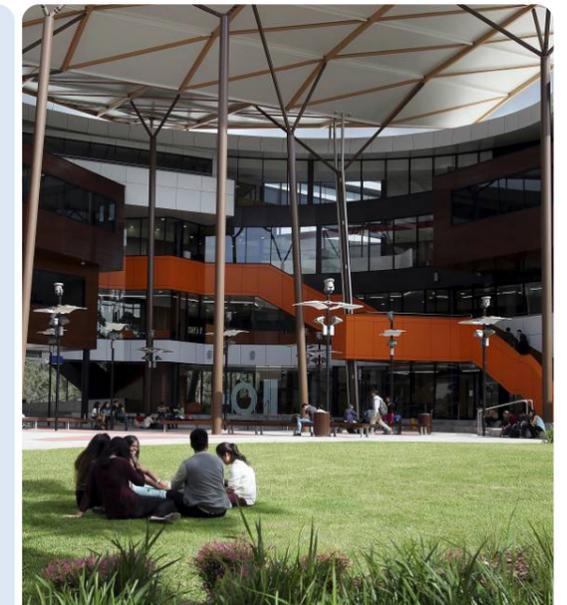
Western Sydney overall is facing a number of macro and micro challenges across social, cultural, environmental and economic areas that present a number of challenges and risks which will be important to consider in the planning and development of the Western Sydney Aerotropolis.

04 Challenges, Opportunities & Risks

4.1 A changing landscape

Development of the Aerotropolis will contribute significantly to the overall population growth in Western Parkland City, with an additional 77,000 residents anticipated to move to the area by 2056, of which most will be located in the Aerotropolis Core and the Northern Gateway. To achieve the vision of becoming a metropolitan centre of the Western Parkland City and key employment hub, it will be critical to consider and balance the different needs of its future community, which will include:

Residents

Need access to social infrastructure and services close to their home in the Aerotropolis to meet the vision for a 30-minute city

Workers

Need access to social infrastructure and services close to their workplace in the Aerotropolis and that reflects the 24/7 cycle of work and shift work

Visitors

Need access to destination social infrastructure and services to increase visitation to the Aerotropolis or to service needs within the Western Parklands City

Investment in both hard infrastructure and the soft infrastructure will be critical to creating a socially sustainable Aerotropolis that provides social benefits for the transitioning community. This will also provide social benefits for residents across the Western Parkland City region over the course of the area's transformation.

4.2 Challenges, opportunites and risks

The following table builds on the discussion of potential challenges in *Report 1: Socail Infrastructure Audit* (GHD, 2020b) and provideds an overview of the key challenges, opportunities and risks that may be faced as the Aerotropolis develops as outlined below:

- **Challenge** - describes potential challenges facing the Aerotropolis over the course of its development.

- **Opportunities (positive change)** - describes potential outcomes through the appropriate implementation of hard and soft social infrastructure.

- **Risks (potential impact)** - describes potential risks if no interventions are implemented to address challenges and influence positive change.
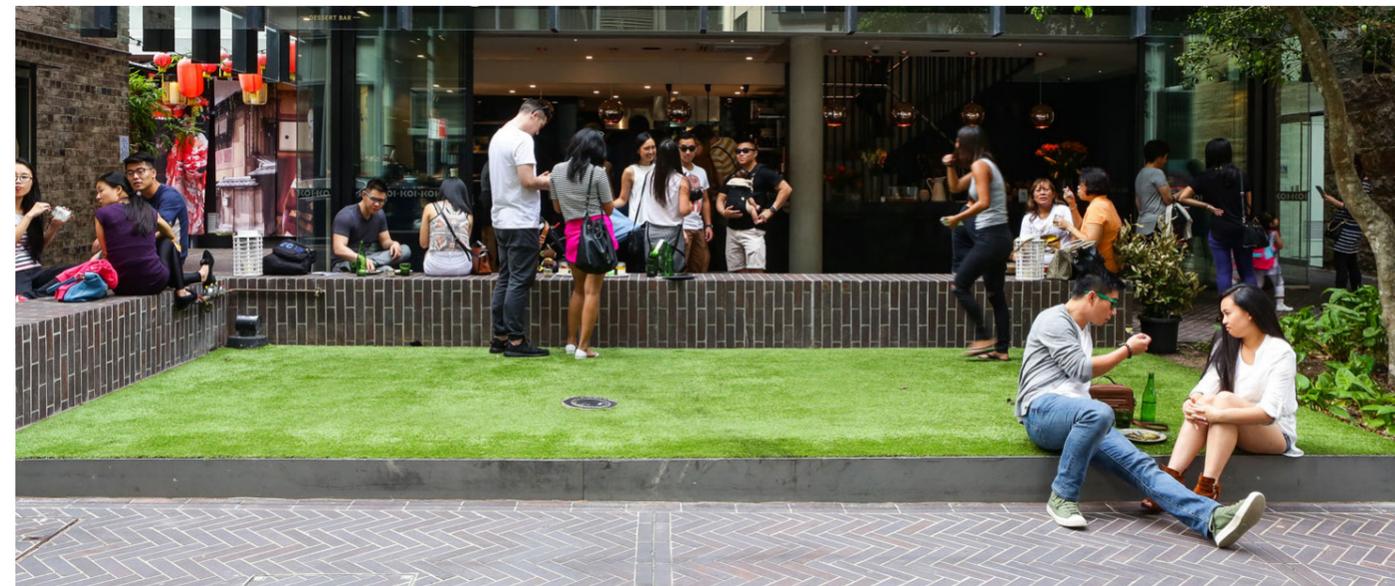
Amenities and infrastructure

Challenge	Opportunity (positive change)	Risk (potential impact)
• Place activation • Quality (adaptable and long-lasting) built form	**Quality Urban Design** Great places with urban design excellence. This delivers high quality design that supports community safety, health and wellbeing, and enhances community assets and character.	• In-active precincts outside of usual working hours (i.e. 9am-5pm) • Poor quality materials and architecture that do not reflect local materials
• Health inequality • Educational attainment • Increased demand on social infrastructure	**Supportive social infrastructure** Communities in Sydney have excellent social infrastructure. This promotes an integrated approach to social infra-structure that includes healthcare, education, supermarkets, public open spaces and other community/cultural facilities.	• Diminished individual health and wellbeing • Social inequity • Increased proportions of children in the developmentally vulnerable categories • Reduced opportunity for residents and workers to access tertiary education • A disconnect between demand and supply
• Provision of quality open space • Heat-absorbing landscape • Wellbeing and healthy lifestyles	**Environmental Quality** People in Sydney enjoy high levels of air, water, light and noise quality, and benefit from improved access to and conservation of green and blue open spaces and places of cultural significance.	• Inequitable access to open space across the ten precincts • Increased urban heat island effect
• Access to public and active transport networks • Safe access to a network of footpaths that are compliant for all-abilties access	**Connected communities** Communities in Sydney are well connected. This supports walking, wheeling, cycling and public transport movement between destinations.	• A lack of active and public transport connections that will isolate vulnerable groups in the community such as the elderly, the young and those who experience a disability.

Social and cultural life

Challenge	Opportunity (positive change)	Risk (potential impact)
• Rapid population growth • Housing unaffordability • Gentrification and change in the character of the area • Increasing cultural diversity and intolerance	**Sense of belonging and local identity** People in Sydney have a sense of belonging and local identity. This creates great places that are socially inclusive to promote respect and feelings of belonging.	• Demographic shifts that will change the characteristics of the area, and may impact existing residents sense of place and identity • Increased community tensions and intolerance • Diminished sense of identity and belonging for culturally diverse groups • Diminished feelings of safety for individuals, impacting their overall health and wellbeing
• Loss of cultural heritage and landscape • Access to cultural networks and communities • Places to practice culture	**Connection to Country** The connection to land gives Aboriginal people their identity and a sense of belonging, where land relates to the all aspects of existence, including culture, spirituality, language, law and family and identity.	• Diminished Aboriginal cultural significance and sense of place • Diminished capacity for civic engagement, cultural cohesion and economic prosperity
• Foster cultural inclusivity and expression	**Cultural expression** Sydney's cultural and arts sectors are supported and are a key ingredient in making great places. Cultural expression brings people together, gives shape and expression to the unique identities of communities and creates lively and dynamic places where people want to live, work, visit and do business.	• A lack of opportunity for cultural expression • Challenges in achieving after hours activation • Loss of sense of place and an identity that is uniquely Western Parkland City
• Place activation	**Night and day activity** Sydney's vibrancy and vitality is realised through the activation 24 hour a day, 7 day per week. Night time activity creates opportunities for a diversity of workers, including shift workers, to participate.	• In-active precincts outside of usual working hours (i.e. 9am-5pm) • A lack of access for shift workers to access infrastructure and services • Limited sense of safety at night time

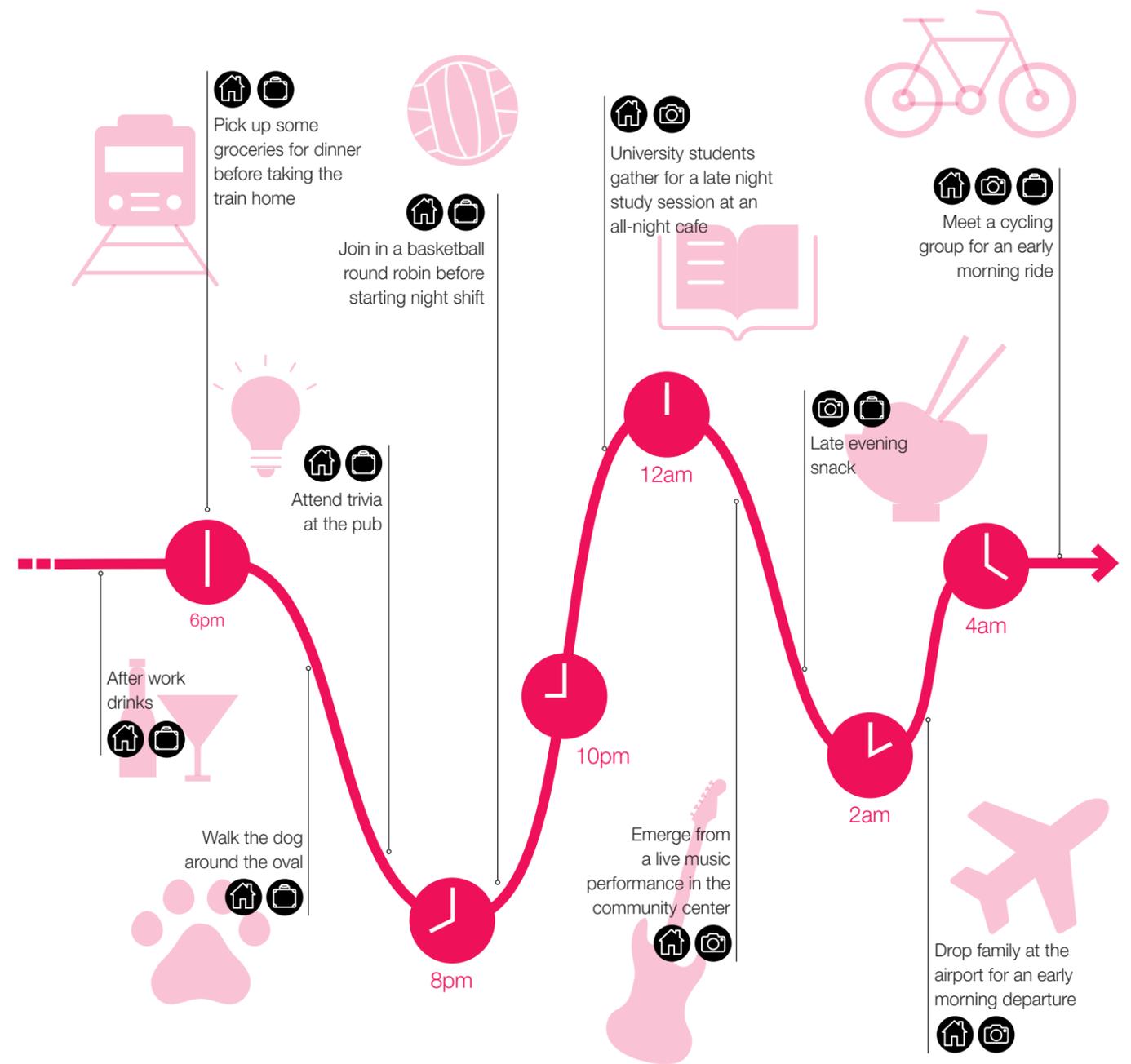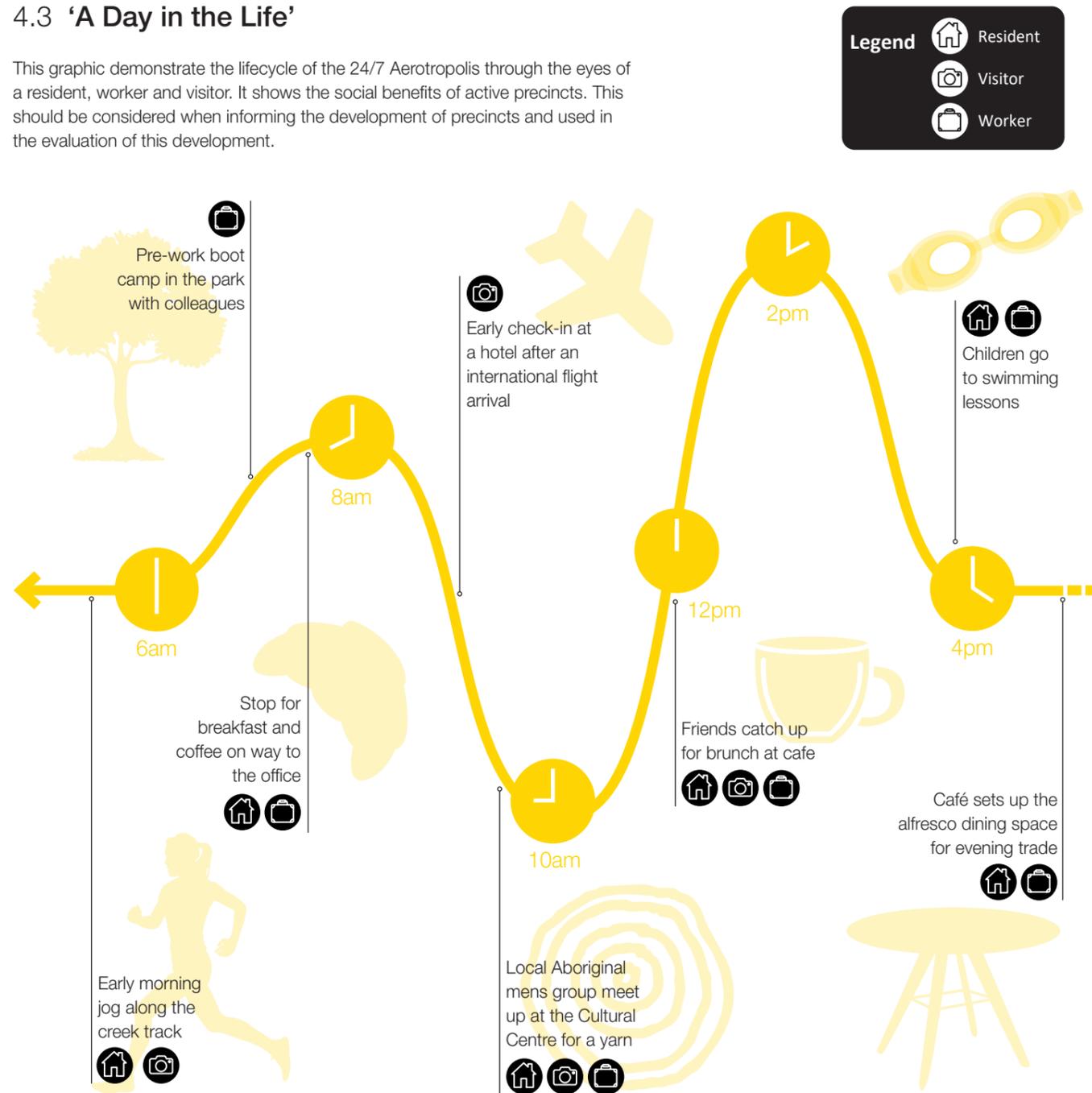|	Challenge	Opportunity (positive change)	Risk (potential impact)
Local empowerment	• Involvement in activities and participation in public space, and use of social infrastructure regardless of age, gender, physical ability, sexual orientation, or ethnicity	**Participation and sense of ownership** Communities in the Aerotropolis are highly engaged. This promotes community participation, empowerment and ownership in shaping socially sustainable places and is delivered across all liveability outcomes. Residents and workers feel they have influence over the area and its evolution.	• Diminished capacity for civic engagement, cultural cohesion and economic prosperity • No political influence or participation in local government • Lack of social cohesion and sense of belonging • Lack of relationships (social capital) built with neighbour and community
	• A balance of white and blue collar jobs • Enabling economic opportunities for local entrepreneurs and businesses	**Diversity of job opportunities** People in the Aerotropolis have a diversity of job and training opportunities. This provides access to a range of jobs and learning / skills development opportunities.	• Continued trend of commuting to locations outside of Western Parkland City for employment opportunities • Non-stable resident population • An imbalance of blue and white collar jobs • A lack of opportunities for small business and local retail
	• Foster innovative and creative thinking	**Innovation and creativity** Across the Aerotropolis innovation and creativity is encouraged in business and urban solutions. This supports integration of creative industries, digital technology and monetisation of great ideas.	• A lack of opportunity for innovation • Infrastructure does not attract visitors or meet their needs
	• Gentrification and change in the character of the area • Involvement in activities, participation in public space, and use of social infrastructure regardless of age, gender, physical ability, sexual orientation, or ethnicity	**Accessible and affordable** Services, infrastructure and amenities are affordable or free, regardless of age, gender, physical ability, sexual orientation, socioeconomic status or ethnicity. Places enable people to meet and participate in public life.	• A lack of shared and free/affordable access to public spaces • Diminished capacity for civic engagement, cultural cohesion and economic prosperity
	• Economic inequality	**Resilience** The communities of Aerotropolis have the ability to adapt and manage economic, social and environmental change over time.	• Diminished capacity for civic engagement, cultural cohesion and economic prosperity • Foster cultural inclusivity and expression

	Challenge	Opportunity (positive change)	Risk (potential impact)
Health and wellbeing	• Access to public and active transport networks • Safe access to a network of footpaths that are compliant for all-abilities access	**Active lifestyles** The Aerotropolis is a place that enables active lifestyles through quality public realms, open space and place connections. People in the Aerotropolis lead healthy and active lifestyles by regularly participating in passive and active exercise and sport.	• A lack of active and public transports connections that will isolate vulnerable groups in the community such as the elderly, the young and those who experience a disability. • Increase in demand on health services
	• Wellbeing and healthy lifestyles • Health inequality	**Overall wellbeing** The Aerotropolis is a place that enables its residents and workers to maintain a healthy work-life balance while fostering important opportunities for personal growth, cultural expression and community interactions which contribute to a persons overall mental health and wellbeing.	• Diminished individual health and wellbeing • Increase in demand on social and health services • Social inequity
	• Involvement in activities and participation in public space, and use of social infrastructure • Foster cultural inclusivity and expression	**Community connections** The Aerotropolis is a socially cohesive place where residents, workers and visitors have quality social interactions and connections, which contributes to overall wellbeing.	• A diminished access to infrastructure and services for shift workers • Increase in demand on social services • Transient communities • High turn-over rates for businesses
	• Place activation • Active frontages and quality design	**Feelings of safety** People in the Aerotropolis feel comfortable, respected and safe in their homes, place of work and out in the community.	• Inactive precincts outside of usual working hours (i.e. 9am-5pm) • Poor quality architecture and urban design, enabling crime and undesirable behaviour
	• Health inequality	**Healthy food** People in the Aerotropolis have access to quality, local, healthy food and produce within close proximity to their home or workplace.	• Diminished individual health and wellbeing • Increase in demand on health services • Social inequity

4.3 'A Day in the Life'

This graphic demonstrate the lifecycle of the 24/7 Aerotropolis through the eyes of a resident, worker and visitor. It shows the social benefits of active precincts. This should be considered when informing the development of precincts and used in the evaluation of this development.

Legend
Resident
Visitor
Worker

Pre-work boot camp in the park with colleagues

8am

Early check-in at a hotel after an international flight arrival

2pm

Children go to swimming lessons

6am

Stop for breakfast and coffee on way to the office

12pm

Friends catch up for brunch at cafe

4pm

Café sets up the alfresco dining space for evening trade

Early morning jog along the creek track

10am

Local Aboriginal mens group meet up at the Cultural Centre for a yarn

Pick up some groceries for dinner before taking the train home

Join in a basketball round robin before starting night shift

University students gather for a late night study session at an all-night cafe

Meet a cycling group for an early morning ride

12am

Late evening snack

Attend trivia at the pub

6pm

After work drinks

10pm

2am

4am

Walk the dog around the oval

8pm

Emerge from a live music performance in the community center

Drop family at the airport for an early morning departure

05
Placemaking Opportunities

This study considers soft infrastructure planning through a placemaking lens, with the intention of creating an active, vibrant Aerotropolis. This section provides a discussion on which soft infrastructure could be provided to support use of proposed hard (built form and open space) infrastructure.

5.1 Placemaking definition

Placemaking is a social practice that is realised through people's interactions with the world and where they create the cultural landscape, rather than it being imposed from above. It is the process that connects the physical elements of a space with the intangible elements such as social and cultural elements. It provides opportunities to enhance the 'soft infrastructure' that enables people to experience public spaces as an extension of their own home; the sense of belonging, feeling of safety and ability to participate actively or passively in the public and cultural life of the community.

Lew, A. A. (2017) offers a four-part framework defining the key types of placemaking, which in the context of the Aerotropolis, sits between:

- **Strategic placemaking** – the creation of a new development on the scale of a neighbourhood or city through a top down' development approach with a significant level of investment, often from governments or private developers.

- **Creative placemaking** – the utilisation of the arts, to make a place more vibrant and interesting, be it through applications to the physical environment, the presence of arts related businesses, or the staging of programming and events).

5.2 Considerations for activation

An early understanding of a place and how it will evolve through staged development is essential to placemaking. Temporary activation opportunities are a key consideration and they determine where investment needs to occur early in order to attract industry and build a community. This staged approach requires the buy-in of diverse stakeholders including investors, stakeholders and communities. Successful implementation of soft infrastructure requires community participation in its planning, and governance to be shared and delivered by Councils, community organisations and business.

A placemaking approach considers activation with directions relating to the physical environment, the place identity, and people's experience. The purpose of placemaking for Aerotropolis is to:

- **Provide an integrated approach** that fosters collaboration between a multitude of disciplines ranging from master planning, urban design, social and economic development, community engagement, heritage interpretation, landscaping, retail mix, arts and culture and sustainable development.

- **Create an evolving and living process**, not just an end 'product', considering temporary activation opportunities during the construction phase to build confidence and ownership from day one, and ultimately evolve and build the capacity of the local community to continue activation processes and initiatives long term.

- **Build capacity for the local community** to build, contribute to and evolve the sense of place and partner in delivering a suite of curated public experiences with the public and private sector that create a holistic approach.

- **Create an active night time economy** by planning for active, safe and vibrant 24 hour, 7 day per week experiences, catering to the diversity of residents, visitors, white and blue collar worker who will access public spaces, retail, and entertainment facilities well into the evening.

- **Enable local economies** by creating local economic growth and empowerment to ensure the viability and vitality of a place and create opportunities for economic transformation of Western Parkland City communities and build the capacity of current and future generations.

- **Connection to Country** to enhance the ongoing connection of Aboriginal communities to place, and foster connection for non-Indigenous communities to Country.
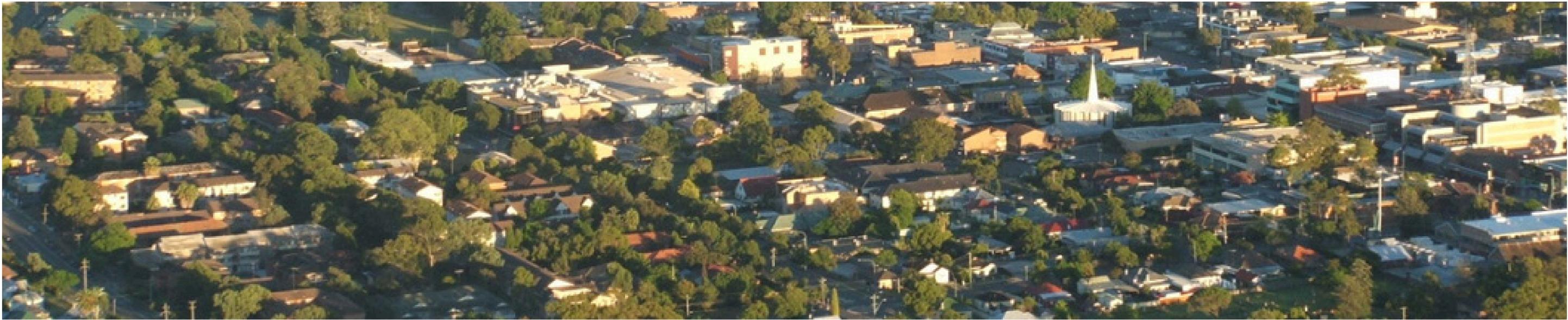
5.3 Placemaking and activation recommendations

This section takes into account hard social infrastructure recommendations outlined in *Report 2: Social Infrastructure Needs Assessment* (GHD, 2020c), and considers education and childcare facilities, health infrastructure, community facilities, cultural and art facilities, libraries, sport and recreation spaces, and parks and open space.

The recommendations have been split by stages – pre-construction, early occupation, and full build, as shown in Figure 5-1. They have also been identified across the four dimensions of a 'Loveable City' (section 2.2).
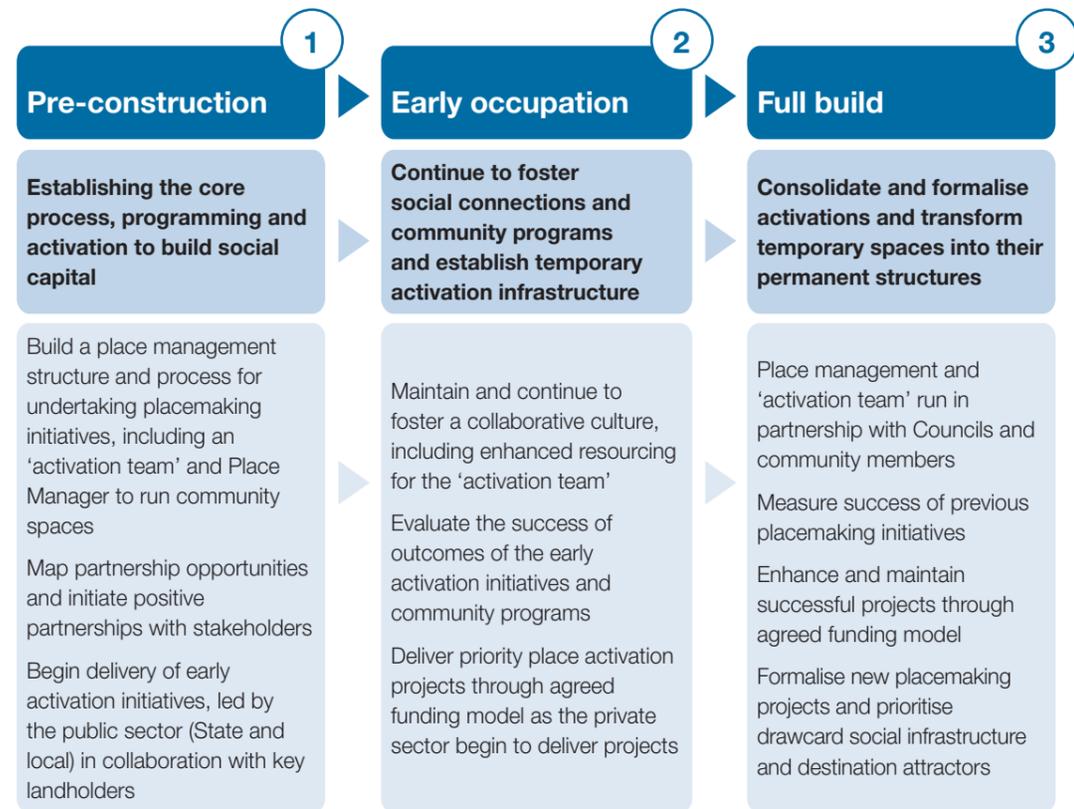
① **Pre-construction**	② **Early occupation**	③ **Full build**
Establishing the core process, programming and activation to build social capital	**Continue to foster social connections and community programs and establish temporary activation infrastructure**	**Consolidate and formalise activations and transform temporary spaces into their permanent structures**
Build a place management structure and process for undertaking placemaking initiatives, including an 'activation team' and Place Manager to run community spaces	Maintain and continue to foster a collaborative culture, including enhanced resourcing for the 'activation team'	Place management and 'activation team' run in partnership with Councils and community members
Map partnership opportunities and initiate positive partnerships with stakeholders	Evaluate the success of outcomes of the early activation initiatives and community programs	Measure success of previous placemaking initiatives
Begin delivery of early activation initiatives, led by the public sector (State and local) in collaboration with key landholders	Deliver priority place activation projects through agreed funding model as the private sector begin to deliver projects	Enhance and maintain successful projects through agreed funding model
		Formalise new placemaking projects and prioritise drawcard social infrastructure and destination attractors

Figure 5-1 Description of staged placemaking recommendations

Figure 5-2 Prioritisation

HIGH PRIORITY / MEDIUM PRIORITY / LOW PRIORITY

Multi-critera analysis for prioritisation of recommendations

While each recommendation identified across the three stages has its merits and will contriubte to enhancing social, cultural or environmental outcomes, it is important to understand how they contribute to Aerotropolis becoming a 'Loveable City'. It is also important to take into consideration the costs associated with each recommendations and how this is balanced with the potential social benefit.

For the purpose of prioritising the recommendations outlined in the following pages a multi-criteria analysis has been undertaken based on the the four dimensions of 'Loveability' and their associated indicators, as well as the economic value of the recommendation. Each of the four 'Loveability' dimensions and economic value has been given a weighting out of 100 based on its potential to create social benefit as outlined below.

- Ⓢ 30 - Social and cultural life
- Ⓔ 20 - Local empowerment
- Ⓗ 20 - Health and wellbeing
- Ⓐ 20 - Amenities and infrastructure
- $ 10 - Economic value

All individual recommendations have been analysed against the 'Loveability' indicators, and scored based on their potential to influence successful outcomes and desired targets or trends (section 6.3). The economic value has been analysed based on the three general stages of a project or program including site purchase costs, construction and/or set up costs, and ongoing maintenance and/or administrative costs.

The tables presented in the following pages indicate preliminary prioritisation for each of the placemaking and activation recommendations based on the outcomes of the multi-criteria analysis. Each recommendation has been coded based on the traffic light system (Figure 5-2) to indicate its preliminary priority. In addition, each recommendation indicates in which areas it scored the highest in the multi-criteria analysis. This will assist in understanding the recommendations influence with regards to the four dimensions of 'Loveability'.

For a full breakdown of the multi-criteria analysis please see Appendix B. This multi-criteria analysis can be applied in planning and decision-making processes around placemaking and activation projects in future development stages of the Aerotropolis.

Funding mechanisms

A governance and funding framework should be prepared to assist Councils and State government agencies to deliver placemaking and activation recommendations across the Aerotropolis in a sustainable way.

Governance models may include:

- **Shared delivery (partnership agreement)** – a PPP model with the division of responsibilities between Councils and private/commercial partners with shared funding and delivery.

- **Council/State Government led (service level agreement)** – a partial PPP model with Council or State Government agencies wholly responsible for delivery, with funding provided from private/commercial partners through a contributions scheme.

- **Private/commercial delivery (lease agreement)** – delivery wholly by a private/commercial partner through leasing arrangements from Council or State Government agencies (dependent on land management), with Council overseeing permits and compliance.

- **Independent delivery (contractor arrangement)** – engaging an independent contractor (a public or private entity) with guidance from a steering committee comprising representatives from Councils, State Government agencies and private/commercial partners.

These models require buy-in from the all parties and may include a mix of multiple models depending on the type of facility/space according to the social infrastructure hierarchy (local, district or regional) and level of significance.

Image 3-2 Jannawi Dancers performing at historic event

Image 3-3 Reconciliation mural on a water pipeline at Port Augusta

Image 3-4 Mobile 'little' library

Image 3-5 Small local business

Pre-construction

The focus of this stage is community engagement, building capacity and awareness, and creating the functional framework that will enhance activation, relevant to people (residents, workers, and visitors) and place identity. Essential to this first stage will be the formalisation of a 'place management team', including Government agencies, Councils and key landholders to plan and establish placemaking opportunities.

Pre-construction project description	Partners for delivery	Reference project
Connecting to Country projects (S E A H)	Relevant State government agencies	'Our Voice, Our Place' Aboriginal Interpretation Strategy - Campbelltown City Council
As outlined in the *Draft Western Sydney Aerotropolis Aboriginal Engagement Report* (GHD, 2020a), establish a **Cultural Design Framework** to provide a process for incorporating Country and Aboriginal culture in the built form. This will help to foster a strong sense of place through responding to Country and embedding storytelling in the design process. This framework would identify cultural themes, opportunities for interpretation, principles to guide the process, and guidance on how to implement the framework. This includes the approach to consultation and the relationship of Traditional Custodians.	Create NSW	
	Government Architect NSW	Wingara Mura design principles - University of Sydney
An **Aboriginal Art Strategy** should also be developed to help capture visual and auditory representations of Aboriginal culture. This will help to create welcoming and safe places for Aboriginal communities when visiting, living or working in the Aerotropolis. An Aboriginal Art Strategy would help to engage wider forms of cultural expressions from the diverse contemporary Aboriginal communities in Western Parkland City.	Liverpool Council	Kaart Koort Waarnginy (Head, Heart, Talking) - Metropolitan Redevelopment Authority, WA
	Penrith Council	
	Traditional Custodians	
Mobile community hubs (E H)	Relevant State government agencies	StoryCorps, USA
Implement a series of mobile community hubs within/adjacent to future neighbourhood centres to create a temporary, evolving neighbourhood centre and provide services and access to community information until permanent facilities are built. The hub should be mobile so that it can move or expand as the community grows.	Liverpool and Penrith Council	
They may be designed as a single or series of trucks or caravans that will maintain a constant presence in the community. The hubs would also be a base for precinct programming and activation and should therefore include seating, tables, shade infrastructure and planting.	Community groups	
	Local businesses or Chamber of Commerce	

Pre-construction project description	Partners for delivery	Reference project
Invest in a culture of entrepreneurship (community/business grants) (S E)	Relevant State government agencies	Renew Australia program and Renew Newcastle
Establish a local community and business grants program that encourage the local community to pitch an idea and test a concept that will add to the activation of the precincts in the short term. This will build a localised approach to retail and community programs by providing opportunities for local entrepreneurs to start/test a business idea, operate a social enterprise, or get involved in the delivery of projects and events. This can also support the growth and development of local Aboriginal businesses through targeted community/business grants. This should include mentorship and upskilling for Aboriginal businesses in applying and completing these grants, discussed futher in the *Draft Western Sydney Aerotropolis Aboriginal Engagement Report* (GHD, 2020a).	Liverpool Council (Creative Spaces Co.)	Creative Spaces, City of Sydney
	Penrith Council	Penrith City Council's Magnetic Places Neighbourhood Renewal Community Cultural Grants
	Local businesses / Chamber of Commerce	
Streamline access to small business or community grants from local or state government to enable locals to more easily participate, for example simpler permitting and small business advice or education. As the precincts are developed and evolve, the planning of business ideas and creation of a culture of entrepreneurship can be realised through the development of physical spaces within the Aerotropolis. Encourage participation from youth, mutlicultural groups and Aboriginal communities.	NSW Small Business Commission	
	Create NSW	
	Regional galleries and Casual Powerhouse Arts Centre	
Sharing-economy programs and projects (E H $)	Relevant State government agencies	Mens Shed programs
Creating a welcoming, cohesive community can be achieved early in the planning and development of the Aerotropolis by facilitating a culture of 'sharing-economy'. The 'sharing-economy' is a peer-to-peer model based on acquiring, providing, or sharing access to goods and services that is often facilitated by a community-based platform. The delivery of share programs should be co-located with mobile community hubs and should be integrated into future social infrastructure.	Community groups	Inner Sydney bike share guidelines
	Liverpool and Penrith Councils	The Sharing Map Sydney (website)
This may include programs that are introduced before construction and evolve as the Aerotropolis develops, including:	Developers and commercial sector	
• Tools shed and toy libraries		
• Book exchange or free 'little libraries'		
• Community workshops and skillshare programs such as furniture making, carpentry, craft / arts workshops and gardening		
• Bookable spaces and markerspaces, including 3D-printing, recording studios, or carpentry spaces		
• Car share spaces and bike share schemes		

Image 3-6 Temporary landscaping

Image 3-7 Boundary Street Markets West End, Brisbane

Image 3-8 Creative construction hoarding

Image 3-9 Creative seating

Pre-construction project description	Partners for delivery	Reference project
Reconnecting to water, Wianamatta-South Creek (H E A S $) Essential to the health of the community is the health of creeks and waterways. Physically connecting precincts within the Aerotropolis to the creek is central to the precinct planning process. Place activation interventions will help to build this connection and create community awareness and appreciation of aquatic habitats and waterway health. As part of this program a *Caring for Country Strategy* should be established to integrate Aboriginal traditional knowledge and practises into land management throughout the Aerotropolis, and to ensure Aboriginal communities have the opportunity to be involved in Caring for Country, as discussed in the *Draft Western Sydney Aerotropolis Aboriginal Engagement Report* (GHD, 2020a). This strategy could include long term management plans for green and blue spaces as well as traditional practises or principles for Caring for Country. Consider the following programs and interventions to enhance these connections: • Creating a program of events and and engaging Traditional Custodians to run Caring for Country workshops • Building eco-literacy and understanding of waterways health and remediation of the natural environment • Connecting schools to the creek through curriculum programs and excursions, for example creating an outdoor classroom	Traditional Custodians Relevant State government agencies NSW Government Architect Sydney Water Liverpool Council Penrith Council Department of Education Local universities with environmental programs	Ngukurr Wi Stadi bla Kantri (We Study the Country) - The Arnhem Land project, Macquarie University Vivid festival, Sydney River Talks event (Mad Ave), Omaru Creek, Glen Innes, Auckland
Creative construction hoardings program ($) Construction hoardings provide a canvas for the community to decorate, use for story-telling and create public dialogue including community engagement opportunities. Artistic use of hoardings also provides an attractive street environment for existing residents living within a long-term construction zone. A program of creative hoardings should be developed to reveal the cultural identity. Examples of suitable methods to be applied across construction sites include: • Communicate the current and future place identity, for example using 3D imagery or augmented reality storytelling • Tactile, interactive hoardings that people engage with, allowing them to touch and play with surfaces, particularly relevant to children • Showcase the local creative community, welcoming them to display their art on the blank canvas of hoardings to provide a platform for local talent.	Relevant State government agencies Sydney Water Liverpool Council Penrith Council Landowners Community groups and businesses Developers and commercial sector	City of Sydney Creative Hoardings Program Walkable Comic Strip, Southbank Brisbane

Pre-construction project description	Partners for delivery	Reference project
Activating vacant blocks and industrial land ($) To improve visual amenity, community connection and sense of safety, develop an approach to provide a temporary uplift in vacant blocks, particularly where they adjoin a high foot traffic area, community space or residential area. The focus should be on both static and participatory arts and creative projects. Public art briefs should highlight the possibility of connecting to precinct themes (i.e. agricultural industries in Agribusiness precinct or Airport operations in Badgerys Creek precinct) and enhance the appearance of industrial land. Consideration for activating vacant blocks include: • Cultivation of food produce, intrinsic to the Aerotropolis and the connection to regional produce, through managed community gardens or orchards • Designated outdoor public areas for organised community markets, as well as gatherings such as harvest days, food swaps, outdoor concerts and gardening workshops • Native species fields in areas requiring less maintenance, particularly where vacant landholdings are yet to be developed • Public art sculptures referencing the landscape and topography which can be relocated once the blocks are developed • Outdoor cinema or stage for performances near to or within future town centres.	Relevant State government agencies Partnership with Penrith and Liverpool Councils, local horticulture groups and a community groups will enable the ongoing maintenance and development of community gardens Traditional Custodians Local artists Developers and commercial sector	Dark Park sculptures and activation, Dark Mofo festival, Hobart Detroit (USA) vacant land repurposing and regeneration Kings Cross (UK) Skip Garden project Boundary Street Markets West End, Brisbane

Image 3-10 Aboriginal cultural tourism

Image 3-11 Semi-permanent community hub

Image 3-12 Public water feature

Image 3-13 Public 'little library'

Early occupation

The second stage has been termed 'mid construction and early occupation' and is anticipated to extend from Year 1 of construction through to the completion of early neighbourhoods or precincts. This final date/timeframe will be dependent on the program. Early activation is likely to occur in the Northern Gateway precinct, Aerotropolis Core precinct and Badgerys Creek precinct. The Aerotropolis Core will have the greatest focus, given the vision and diversity of the future audience. The focus of early-occupation is to continue and to formalise projects initiated in the ore-construction phase and to provide physical spaces for established programs to continue to evolve.

Early occupation project description	Partners for delivery	Reference project
S E H A **Enhance connecting to Country projects through arts and events** Using the Cultural Design Framework and Aboriginal Art Strategy developed during pre-construction, establish a series of cultural interpretation projects to display and showcase Aboriginal communities and culture. This will build a stronger sense of connection, attachment and identity. Ensure Traditional Custodians lead any cultural interpretation, in particular when focused on stories, Country or sense of place. These interpretation projects would be designed by Traditional Custodians and local Aboriginal Artists and embedded into the public realm and built form. This may include sculptures, audio-visual art, building materials, words inscribed on ground and wall surfaces, or place and street naming.	Traditional Custodians Relevant State government agencies Liverpool and Penrith Councils NSW Government Architect	Yagan Square, Perth CBD Kari Foundation Indigenous Art Programs Boomalli Aboriginal Artists' Co-op, Leichhardt NSW
E S H **Semi-permanent community hubs** Expand the mobile community hubs and situate as semi-permanent pavilions in a fixed place within/adjacent future neighbourhood centres to create a temporary neighbourhood centre and provide services and access to community information until permanent facilities are built. They may take the form of a temporary pavilion or shipping container and should be designed with local recycled materials and painted by local artists and/or designers. Operable, opening sides of the hubs would to optimise space. Planning, design and operation of the hub should be determined by the audience who will use it. For example, including a café if there are workers, or a base for community groups if there are more residents. The hubs would be a base for precinct programming and activation and should therefore include seating, tables, shade infrastructure and plants.	Relevant State government agencies Liverpool and Penrith Councils Businesses within the Aerotropolis Community groups Local businesses and Chamber of Commerce Developers and commercial sector	Sprout Hub Alkimos Vista, LendLease, Western Australia Palette Pavillion, Gap Filler Christchurch Eat Street, Brisbane

Early occupation project description	Partners for delivery	Reference project
A H E $ **Enhance connections to the water and green space** Continue to formalise connections to waterways and space. As the green spine, Wianamatta-South Creek provide early activation and opportunities to reconnect people to water. In addition to pre-construction activations, consider: • Creative and clearly marked access points to the creek through consistent and subtle public realm signage and the development of green corridors • Expressing stories about the waterway through sculpture and public art in line with the Cultural Design Framework. • Expanding educational infrastructure and programming for children and schools • Engage Traditional Custodians to facilitate events that raise awareness of the cultural significance of water and Caring for Country.	Relevant State government agencies Liverpool and Penrith Council Sydney Water Traditional Custodians Local artists Landcare groups Developers and commercial sector	School education programs, Sydney Water Reconnecting to Country (Wilsons River catchment), Rous City Council
E **Temporary library and 'little libraries'** Construct a temporary library adjoining a semi-permanent community hub in a prominent location. The library should be a temporary branch for a future library, managed by Liverpool or Penrith Council and would build habits/rituals of use. The temporary library can assist with continued curation of the free library shelves ('little libraries') throughout other areas/precincts of the Aerotropolis. The 'little libraries' may also operate as a book exchange/swap. Ensure the location is in proximity to Wianamatta South Creek to leverage off the outlook and access to green space, and to surrounding established communities. Library shelves may be located near transit stops, existing infrastructure or as part of the mobile community hubs.	Relevant State government agencies Liverpool and Penrith Councils Street Library Australia Transport for NSW Create NSW Developers and commercial sector	Open Air Library, Magdeburg Germany Pop-up Library, Brisbane City Council
S E **Aboriginal cultural tourism** The *Draft Western Sydney Aerotropolis Aboriginal Engagement Report* (GHD, 2020a) identifies aspirations for Aboriginal cultural tourism to be connected to and based from a Aboriginal Cultural Centre. The Aerotropolis will become a destination for Aboriginal cultural tourism, which may include: • Tours and information, where Aboriginal communities showcase their culture continuing to be practiced in the Sydney area with on-Country experiences for visitors • Arts and market stalls, with opportunities for Aboriginal people and small business to display and sell art, crafts and other goods • Restaurants and cafes where Aboriginal cuisine is featured, creating small business opportunities.	Relevant State government agencies Liverpool and Penrith Councils Traditional Custodians Local businesses / Chamber of Commerce NSW Small Business Commission Create NSW	Ngaran Ngaran Cultural Awareness, South Coast NSW Dreamtime Southern X, Sydney Karrke Aboriginal Cultural Experience & Tours, Northern Territory

Image 3-14 Innovation centre

Image 3-15 Public exhibition space

Image 3-16 Temporary retail hub

Image 3-17 Co-working space

Early occupation project description	Partners for delivery	Reference project
Co-located exhibition, testing and maker spaces (E H)	Relevant State government agencies	Renew Australia and Renew Newcastle
Create a series of temporary art studios, maker spaces and exhibition spaces to display, promote and sell art. This should include space(s) for an art studio or maker space, building on programs like the City of Liverpool's *Creative Spaces Co.* to provide a studio for and artist-in-residence program. Encourage artist to interact with the community and develop local public art.	Liverpool Council (Creative Spaces Co.)	Creative Spaces, City of Sydney
The location of the exhibition spaces should be near/adjacent existing activity and within neighbourhood centres to ensure they are accessible and add to the day and evening economy of the centres. Where a larger exhibition space is not possible, exhibition display boxes could be placed along major thoroughfares or at transit stops. These exhibition and testing spaces would attract Sydney-wide audiences and should be managed through events, such as opening nights or Friday night arts and music celebrations.	Penrith Council	Jewish Culture Festival Pavilion, Kraków Poland
	Local businesses / Chamber of Commerce	
	NSW Small Business Commission	
As these projects build the culture of entrepreneurship, future activation projects during construction should expand these programs and formalised spaces.	Create NSW	
	Casula Powerhouse Museum	
	Developers and commercial sector	
STEM and innovative public art and education programs (E S)	Relevant State government agencies	Biennale of Sydney, Cockatoo Island
Develop a public art program that promotes the intersection of technology, digital, and science, technology, engineering and mathematics (STEM) through innovative creative projects. The intention of these programs will be to connect creative industries, technology and innovation by working with local artists and creative industries to provide wider learning opportunities. This could be integrated with the STEM specialist school recommended in *Report 2: Social Infrastructure Needs Assessment* (GHD, 2020c).	Liverpool and Penrith Councils	Science Gallery exhibitions and events, Dublin
Ensure that the brief to artists fits with the Aerotropolis vision and identity. This may include STEM or STEAM (Science Technology Engineering Art and Maths) projects potentially in conjunction with local universities. Partnership with the Screen Hub would also enhance the diversity of artistic expression.	Create NSW	
	Screen NSW	
	Casula Powerhouse Museum	
Projects may include:	Western Sydney University	
• Sculpture arts trail with the integration of digital and lighting technology	Developers and commercial sector	
• Story-telling App about Western Parkland City		
• Simple public realm uplift through murals and lighting		

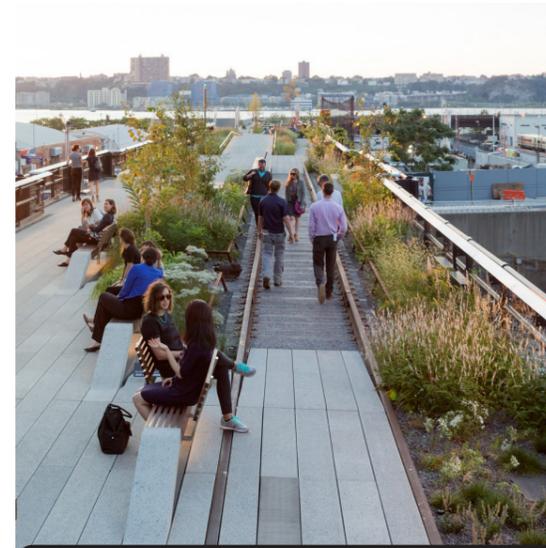| Early occupation project description	Partners for delivery	Reference project
Community Currency and a community development toolkit (S E H)	Relevant State government agencies	Makkie timebanking currency, Amsterdam East - Netherlands
Build on early programs relating to creating a culture of entrepreneurship and sharing-economy to establish a 'community currency'. Community currency programs assist to create equity, encourage participation and provide opportunities for community connections. These programs can be implemented through the use of digital platforms and use of physical/temporary infrastructure, such as the community hubs.	Liverpool and Penrith Councils	Spice social enterprise, Wales
	Local businesses / Chamber of Commerce	The Brixton Pound, London
Roll-out a Community Development toolkit to provide tools and resources for community groups to engage and effectively respond to community requirements. Provide support for community group to fund projects through the community and business grants program previously established.	Local schools and community groups	Good Karma Effect, Australia
	Developers and commercial sector	
Temporary retail hubs and curated, independent retail mix (E H)	Relevant State government agencies	RE:Start Mall
Create a curated, local, independent approach to retail throughout the Aerotropolis through temporary retail spaces that serve to activate areas where development has or is taking place. Create a mini shopping precinct or single multipurpose retail space that mimics a main street retail offer.	Liverpool and Penrith Councils	Barangaroo retail pop-up
Look to construct temporary retail spaces that enhance the character of the area and use recycled materials or modular pavilions to ensure limited waste from temporary construction.	Local businesses and Chamber of Commerce	Burwood Brickworks, Melbourne, Frasers Property
Ensure the retail mix is curated as authentic local Western Parkland City retail, with a mix of convenience shops and destination food and beverage venues.	NSW Small Business Commission	Grounds of Alexandria, Sydney
Consider food and beverage businesses that cater to both workers and residents, and encourage weekend use, such as a destination restaurant by a well-known Sydney entrepreneur. Food and beverage venues should provide a healthy offer and follow a farm-to-plate model to build awareness of local produce.	Create NSW	Acre Camperdown, Sydney
	Developers and commercial sector	Muy Güemes, Córdoba Argentina
Provide smaller tenancy sizes, smaller lease areas and split/dual tenancy arrangements to ensure retail/commercial spaces are affordable and are accessible to social enterprises, ethical/local produce, and independent businesses. Provide opportunities for local entrepreneurs to start/test a business idea, operate a social enterprise or get involved in the delivery of projects.		

Image 3-18 Outdoor yoga

Image 3-19 Co-working space

Image 3-20 New York High Line

Image 3-21 Dedicated cycle path

Early occupation project description	Partners for delivery	Reference project
H **$** **Pop-up park(s) and fitness and recreation programming** Create a small pop-up park/parks (construction staging dependent) to inform future use and create places of respite and recreation for workers, student and residents. Small parks and parklets can be used to test how people might seek to use the future open space in this area, providing insights into what might be missing. Provide an open green space(s) with a small number of movable features (chairs, trees in pot plants) and a small pop up structure that invites people to comment on how a larger and more permanent version of this space could best meet their needs. This will assist in identifying whether people want dog friendly spaces, picnic and seating areas, large shade trees or even Wi-Fi in the future. Ensure spaces are well-lit and accessible into the evening for shift workers, taking into account co-location near/adjacent workplaces. Create programs to encourage activation of pop-up parks including: • Outdoor gym equipment and a fitness circuit connecting open space and recreation areas, suitable for all ages and abilities • Work with artists to design colourful multi-use play/informal sport areas that feature multiple line-markings for different game/sport • Informal play such as table tennis • Subsidised or free wellbeing activities such as tai chi or yoga • Community gardens.	Relevant State government agencies Liverpool and Penrith Councils NSW Office of Sport Community sports/ fitness/recreation groups Developers and commercial sector	Nike glow-in-the-dark line markings Table tennis, Darling Quarter Parklet program, Glebe
A **H** **S** **Infrastructure to enhance safety, amenity and comfort** Create a high-quality and beautiful public realm, using subtle shading infrastructure with seasonal treatments, creating places for pause, unique lighting, softened streetscape. Incorporate ample seating and ledges throughout the public realm, particularly around neighbourhood centres and along key walking routes. Ensure walking routes are well-lit at night, combined with active uses along key streets (for example workshops at night, restaurants, night markets) which will help to improve safety and the perception of safety in particular for children, women and older persons. Include bus shelters, temporary or permanent, that enhance the public realm, and are designed with lighting, Wi-Fi accessibility, ample seating and shade.	Relevant State government agencies Transport for NSW Liverpool and Penrith Councils Developers and commercial sector	The Goods Line, Sydney The High Line, New York Safer by Design program, NSW Everyone Can Play (website) Safe Space program, City of Sydney

Early occupation project description	Partners for delivery	Reference project
A **Legibility, wayfinding and creating habitual movement patterns** Use colourful wayfinding markers on footpaths, for example sticker decals, directional signs, or sculptures. Ensure temporary wayfinding is used to guide people around construction areas, provide a safe route in the evening, and create habitual movement patterns that reflect the future street pattern. Enhancing legibility during a prolonged construction period will also ensure people are able to navigate their neighbourhood and reinforce future movement corridors prior to dedicated footpaths and bicycle paths being constructed.	Relevant State government agencies Transport for NSW Liverpool and Penrith Councils Transport for NSW Developers and commercial sector	City Repair Project, street painting, Portland (USA)
E **Temporary co-working spaces** Provide temporary spaces for dedicated co-working with a memberships-based system encouraging daily use for self-employed local/Western Parkland City residents, local university students, or occasional use for people working from home. Integrate co-working spaces into temporary community hubs or retail spaces to co-locate with other uses. Consider dual leases where evening restaurants can be used as co-working spaces during the day to maximise floor space. Connect co-working spaces with the Multiversity and industry who will establish future working spaces, to enable their workers to work from the Aerotropolis prior to construction of their workplaces. Combine co-working spaces with rentable meeting rooms, boardrooms, workshop/presentation spaces/auditoriums, recording studios, and 3D printing to encourage a diversity of work types. Where a co-working space is located in precinct with a specific audience, for example hi-technology or agriculture, theme co-working spaces to attract similar business/individuals.	Relevant State government agencies Liverpool and Penrith Councils Developers and commercial sector (i.e. co-working space provider)	Established co-working businesses, including The Commons and WeWork

Image 3-22 Aboriginal artwork

Image 3-23 Public square

Image 3-24 Botanic information display

Image 3-25 Nyinkka Nyunyu Art and Culture Centre

Full build

In the final stage, construction would be complete across most precincts, the Western Sydney International (Nancy-Bird Walton) Airport would be operating, and homes and offices are occupied. The focus of this final stage is to consolidate all established programs and activities and formalise their operations on a more permanent, ongoing basis. The recommendations in this stage focus on high quality and high investment infrastructure that is a regional attractor and destination.

Full build project description	Partners for delivery	Reference project
The community heart (public squares and meeting places) (S E A H) Create a hierarchy of centres to meet, eat, celebrate and connect, designed for interaction with varied seating arrangements, and amenities to create a platform for activations and temporary features. Design neighbourhood centres that create a central meeting place, connected and co-located with social infrastructure. The centre, or the 'heart 'of the community is a public square which is a place to meet friends, run into a neighbour, or bring the family for a weekend meal. There should be a range of things to do for people of all ages and interests. To create an environment that is conducive, include: • Public realm design that enhances interaction including flexible outdoor furniture, lots of different styles of seating and areas which accomodate informal dining for large families • Temporary features and public space collateral such as games (i.e. chessboard) and umbrellas • Adjacent retail including convenience and food and beverage retail • Adjacent to a community centre or library • Children's play space or nature play area • Lighting, amenities and articulated building facades that enhance passive surveillance in the evening, in line with crime prevention through environmental design (CPTED) principles.	Relevant State government agencies Liverpool and Penrith Councils Developers and commercial sector	Green Square town centre, City of Sydney/ Landcom Ripley Town Centre, Ipswich QLD Places with purpose: Reinvigorating Britain's town and city centres, UK

Full build project description	Partners for delivery	Reference project
Eco-literacy projects and green, productive landscapes (E A) Highly visual (and multi-lingual) botanic information and story-telling that shares cultural, celebratory, medicinal, and edible plant information through interactive and changing displays created with the community. Consider: • Placing data recording devices at new bridge connections over the creek to measure pollution levels • Engage Traditional Custodians to facilitate events and programming that raise awareness of the cultural significance of water and Caring for Country • Using the sounds of the creek and water life for audible sculptures throughout the public realm • Displaying energy saving data for 5-star buildings • Investigate the installation of a smart grid or alternative technology intervention that can track energy generation from renewable resources, energy consumption, water consumption, use of vehicles and other interesting statistics • Citizen Science programs.	Relevant State government agencies Sydney Water Liverpool and Penrith Council Traditional Custodians and Caring for Country staff/experts Local artists Schools and universities Developers and commercial sector	'Tankstream – Into the head of the cove' public art and interpretation, Sydney CBD Centre for Ecoliteracy (website)
Aboriginal Cultural Centre (S E H) An Aboriginal Cultural Centre should be located in the Aerotropolis Core, as outlined in the *Draft Western Sydney Aerotropolis Aboriginal Engagement Report* (GHD, 2020a). The centre should be close to Wianamatta-South Creek and with various methods of public transport access. The facility will play an important role in supporting local arts and cultural programs, as well as Aboriginal tourism. The facility should include spaces for Aboriginal communities to gather for informal and formal events, and a space delineated from general public access. The spaces open to the general public should include information about Traditional Custodians and Country, history of the land, wider Aboriginal and Torres Strait Islander history, information about Aboriginal culture, events spaces, and information about events and programs. It should include both indoor and outdoor facilities, with a yarning circle and native gardens. It is critical the facility is designed and built in close collaboration with Traditional Custodians, as a place where all Aboriginal communities will feel included and welcomed.	Traditional Custodians Relevant State government agencies Liverpool Council Create NSW	Narana Aboriginal Cultural Centre, Charlemont VIC Jellurgal Aboriginal Cultural Centre, Gold Coast QLD Yarrawarra Aboriginal Cultural Centre, Corindi Beach NSW Nyinkka Nyunyu Art and Culture Centre, Tennant Creek NT

Image 3-25 Ethical retail

Image 3-27 Parklet

Image 3-28 Retail hub

Image 3-29 Colourful zebra crossing

Full build project description	Partners for delivery	Reference project
Playstreets and safe, accessible walking routes (A H $) Select areas within the street network that become 'playstreets' that link school routes and key destinations (bus stops, neighbourhood centre, or parks) and people's homes and workplaces. The design and planning of playstreets should ensure people feel safe, where there is always something interesting happening, and are easy to navigate to increase the number of people who walk and cycle both short and longer commuter routes, day and night. Initiatives may include: • Colourful wayfinding markers on footpaths, including direction signs or sculptures • Changing road surface treatment as a visual trigger to passing vehicles • Highlighting distances or typical walking times along key routes to main destinations (bus stops, train station, neighbourhood shops, schools) • Playable landscapes that form part of the story-telling of place • Differentiate landscaping to signify a playstreet and reinforce the pedestrian-priority of the street • Well-lit walking routes at night, combined with active street uses.	Relevant State government agencies Transport for NSW Liverpool and Penrith Councils Developers and commercial sector	Playstreets Australia (a global movement to promote health and neighbourliness with street play) Colour the Street, Sunshine Coast Council Parklet Program (PARKing day), San Francisco
Local, independent and ethical retail mix (E) Building on investment during the early occupation phase assess the retail mix to inform where further investment or incentives may be required. There should be a mix of established convenience shops and destination food and beverage venues that cater to both workers and residents, and encourage weekend use. Encourage restaurants to adhere to the farm-to-plate model to enhance agricultural connections and raise awareness of local produce. Continue to provide smaller tenancy sizes, smaller lease areas and split/dual tenancy arrangements to ensure retail/commercial spaces are affordable and are accessible to social enterprises, ethical/local produce, and independent businesses. Provide opportunities for local entrepreneurs to start/test a business idea, operate a social enterprise or get involved in the delivery of projects. Approach well-known restauranteurs to provide a destination food and beverage offer and anchor experiences.	Relevant State government agencies Liverpool and Penrith Councils Local businesses and Chamber of Commerce NSW Small Business Commission Create NSW Developers and commercial sector	RE:Start Mall Barangaroo retail pop-up, Sydney Burwood Brickworks, Melbourne Grounds of Alexandria, Sydney Acre Camperdown, Sydney Muy Güemes, Córdoba Argentina

Full build project description	Partners for delivery	Reference project
Dual-use tenancies, mixed uses and permitting to enhance 24/7 activation (E $) Using retail to activate the night time economy and support a program of events and activities to generate 24/7 activity that enhances the feeling of safety. Allow dual tenancy arrangements to ensure retail spaces are activity early in the morning through to late at night, for example a café during the day turns into a bar or gallery space at night. Ensure a retail mix that caters to the 24/7 economy, where businesses will remain open beyond 10pm. Night time retail will should predominantly be food and beverage venues, however ensure there is a balance alternative uses such as gyms, galleries, and cinemas. Catering to the student population (tertiary or TAFE) and shift workers will ensure retail is suitable for evening trade. Additionally, review local planning controls and development processes to broker opportunities for greater night time uses, balance concerns around residential amenity and contribute to activating the public realm. This should include: • Permits that enable street trading, alfresco dining and non-prohibitive noise restrictions • Liquor licencing approval for late hours for smaller venues • Allow shops and local businesses to extend opening hours between 7am and 10pm/midnight • Incentivise the diversification of our night city, utilise our assets, promote late trading retail and services; live music, events and activation • Permits that easily enable individuals/businesses to host events • Allow minimal impact small-scale cultural uses.	Relevant State government agencies Liverpool and Penrith Councils Developers and commercial sector Local businesses / Chamber of Commerce NSW Small Business Commission Create NSW Developers and commercial sector	Pop-up occupancy licence (to activate vacant shopfronts), Brisbane City Council

Image 3-30 NAIDOC week celebrations

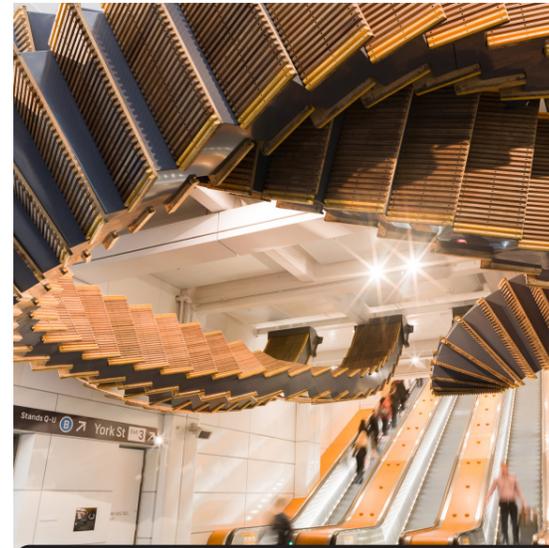Image 3-31 The Granville Centre, Cumberland Council

Image 3-32 Wynyard Station installation

Image 3-33 Night Noodle Markets, Sydney

Full build project description	Partners for delivery	Reference project
High quality on-going public art program and cultural charter (S) (A) ($) Consolidate all temporary activations and art programs into a formalised Aerotropolis public art program. The public arts program will bring colour, story-telling, public dialogue to parks and public spaces through both temporary and permanent works. The program would require significant private sector funding through share collaborative delivery of precinct landowners and developers as well as philanthropic contributions. Consider developing a Civic and Cultural Charter as part for the ongoing delivery of public art, thats set in place agreements and a memorandum of understanding for precinct stakeholders and major landowners to ensure the public realm is enhanced for civic and cultural uses and celebrates Western Parkland City's creativity and innovation, arts and cultural sector, and its multicultural heritage.	Relevant State government agencies Liverpool and Penrith Councils Developers and commercial sector	Federation Square Civic and Cultural Charter, Melbourne
Mutli-purpose library facility (E) (S) Beyond a place to store, borrow and browse books, a library is an integral community asset and is often at central feature of a neighbourhood centre. To ensure a new library accomodates a range of services, the library should include multi-purpose spaces for a variety of users across a 24/7 daily cycle. The building itself would be iconic and look onto a public space or square to create a community meeting space. A library would cater to school students, looking for a place to study, shift workers looking for a safe and comfortable space before their evening shift, and visitors waiting for a flight to depart from the airport. Key considerations for creating a multi-purpose library facility include: • Indoor and outdoor study spaces, both for group work and individual nooks • Plenty of seating and spaces that allow for quiet as well as discussion • A cafe • Hireable event and workshop spaces • Flexible co-working spaces • Co-located social organisations and social enterprises • Hireable recording studios and 3D printers	Relevant State government agencies Liverpool and Penrith Councils Create NSW Developers and commercial sector	The Granville Centre, Cumberland Council Greater Beveridge Community Centre, Mitchell Shire Council VIC TE MANAWA - Westgate Library and Multi-Purpose Facility, Auckland City Council NZ

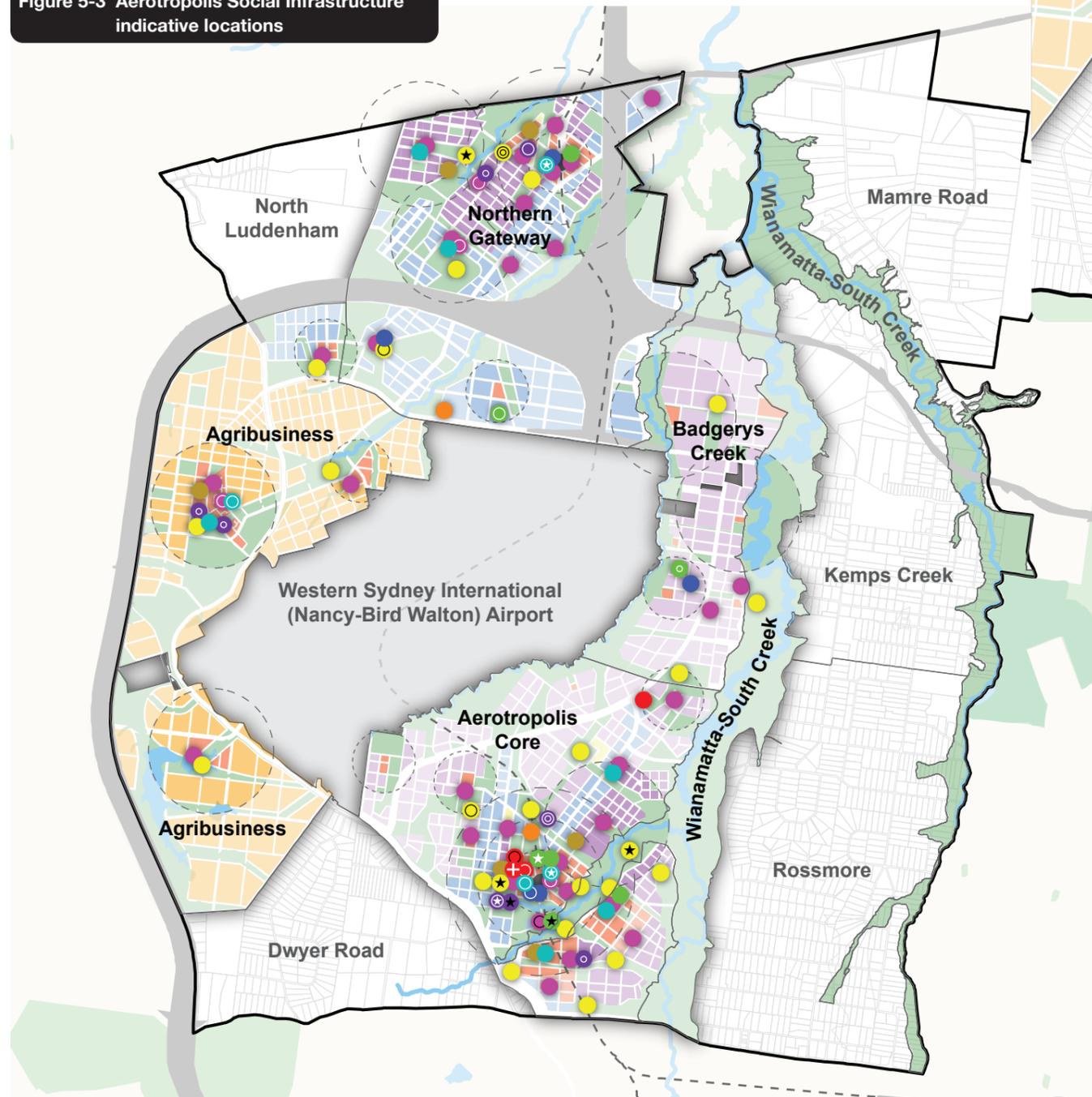| Full build project description	Partners for delivery	Reference project
Multicultural expression through events, art and design (S) (E) (H) Playing to the rich cultural mix of the Western Parkland City community, a program of international food themed events could be established (appropriate to seasonal requirements). Events and activities will align with cultural calendars (annual events), to expand multi-cultural awareness and connect diverse communities. For example, weekly food truck nights by the creek or designated reserves and summer night markets that encourage communal family gathering. Creating a program of frequent and seasonal events to create reasons to participate in the public realm, provide destination events and to create an environment that is fun. Include music and busking, street food trading, public performances and histed event spaces for Create NSW events. To enable the affordable and efficient delivery of events and art, consideration should be given to required event infrastructure, such as three-phase power and audiovisual equipment, which can otherwise be prohibitive to hosting events. The relationship of multicultural events, art and deign should be realised through previously established grant programs.	Relevant State government agencies Liverpool and Penrith Councils Create NSW Developers and commercial sector Multicultural NSW	NAIDOC week Night Noodle Markets, Sydney Sydney Gay and Lesbian Mardi Gras festival Melbourne Food and Wine Festival Byron Bay Bluesfest Sydney BeerFest Bastille festival, Sydney
Connections and learning around healthy food and local produce (E) (H) Enhance the understanding of sustainability and the circular economy to promote local awareness and pride in the ethos and activities of the Agribusiness precinct. This should be achieved by creating learning and participatory opportunities for primary and high school students to understand the integrated approach to food production, industry collaborations, research and development, and sustainable approaches to energy, waste and water. Key considerations include: • School curriculum and excursions for local primary and high schools to learn about and participate in hands-on learning • Educational tours and a dedicated on-site classroom (potentially incorporated into the Australian Centre of Excellence in Food Innovation) • Celebrations of local produce and regular produce markets hosted across the Aerotropolis with financial or in-kind support from businesses	Relevant State government agencies Liverpool and Penrith Councils Agribusiness stakeholders including industries, businesses and researchers Local schools	Eat Well Be Active Primary Schools Program, South Australia Farm-to-school programs, US Food for Life, England Garden to Table, New Zealand

5.4 Summary of recommendations

The staged placemaking and activation recommendations will be incorporated throughout the initial precincts of the Aerotropolis with a focus on the key activity nodes in the Aerotropolis Core and Northern Gateway precincts. The following maps demonstrate the indicative locations of hard social infrastructure throughout the Aeortoroplis initial precincts.

The location of placemaking and activation recommendations will be informed by the hard social infrastructure and centres outlined in these maps.

Map Legend

- Western Sydney Aerotropolis
- Aerotropolis Precincts
- Mamre Road Precinct (DPIE)
- Lot boundary
- Proposed transport corridor
- Proposed metro corridor
- Proposed metro station

Land use

- Centres
- Business & enterprise
- Mixed use residential
- Special purpose
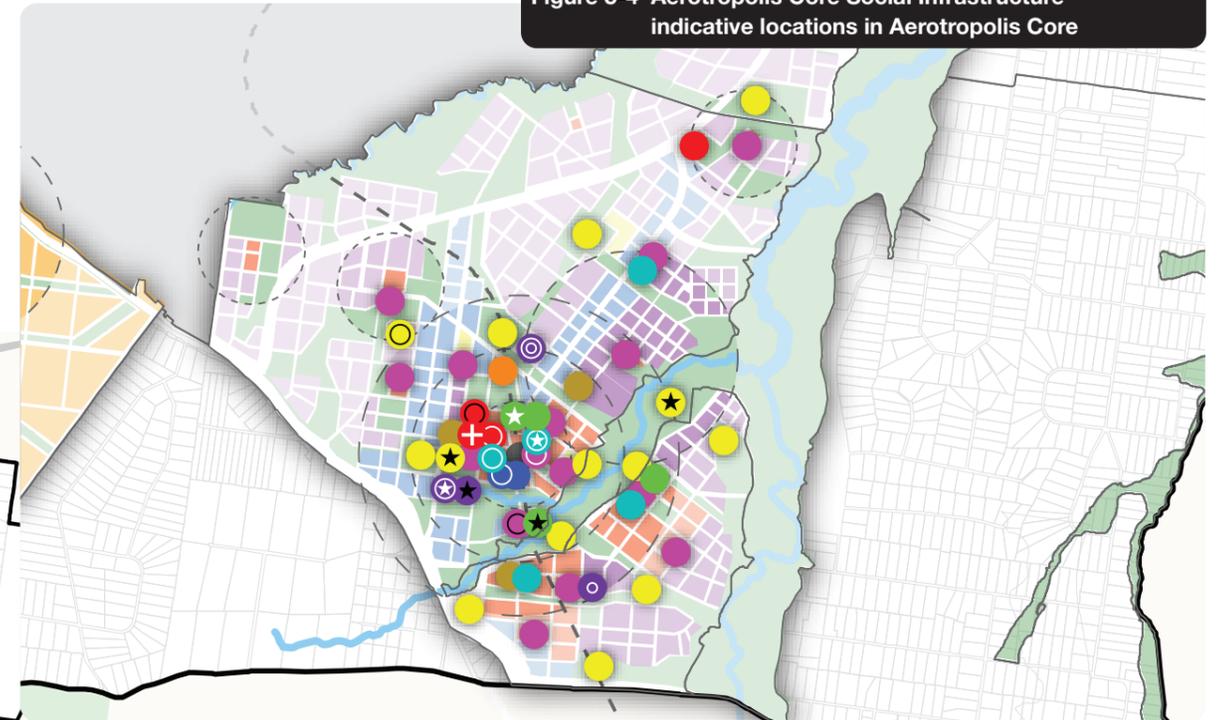- Enterprise & light industry
- Agribusiness

Centres hierarchy & walkability

- Metropolitan/specialised centre - 1200m (15 mins)
- Neighbourhood centre - 400m (5 mins)
- Local centre - 800m (10 mins)

Social Infrastructure

- Primary school
- High school
- Combined school
- Specialist high school
- Innovation centre
- IHHub
- Community health
- Aboriginal health
- Ambulance station
- Fire and rescue station
- Police station
- Court house
- Local community space
- District community centre (co-located district library)
- Library branch
- Public childcare centre
- Aboriginal childcare centre
- Private childcare centre
- Aged and disability care
- Local cultural space
- Aboriginal cultural centre
- Screen production hub
- Collection storage facility
- Performance centre
- Sport field(s)/court(s)
- Indoor sport facility
- Leisure/aquatic centre
- Youth recreation facility

Figure 5-3 Aerotropolis Social Infrastructure indicative locations

Figure 5-4 Aerotropolis Core Social Infrastructure indicative locations in Aerotropolis Core

Map labels: North Luddenham, Northern Gateway, Mamre Road, Agribusiness, Wianamatta-South Creek, Badgerys Creek, Kemps Creek, Western Sydney International (Nancy-Bird Walton) Airport, Aerotropolis Core, Agribusiness, Rossmore, Dwyer Road

Pre-construction recommendations

1. Connecting to Country projects
2. Mobile community hub
3. Invest in a culture of entrepreneurship
4. Sharing-economy projects
5. Reconnecting to water, Wianamatta-South Creek
6. Creative construction hoardings program
7. Activating vacant blocks and industrial land

Early occupation recommendations

8. Enhance connecting to Country projects through arts and events
9. Semi-permanent community hubs
10. Enhance connections to the water and green space
11. Temporary library and 'little libraries'
12. Aboriginal cultural tourism
13. Co-located exhibition and maker spaces
14. STEM and innovative public art and education programs
15. Community Currency and a community development toolkit
16. Temporary retail hubs and curated, independent retail mix
17. Pop-up park(s) and fitness and recreation programming
18. Infrastructure to enhance safety, amenity and comfort
19. Legibility, wayfinding and creating habitual movement patterns
20. Temporary co-working spaces

Full build recommendations

21. Public square and community heart and designing meeting places
22. Eco-literacy projects and green, productive landscapes
23. Iconic Aboriginal cultural facility
24. Playstreets and safe, accessible walking routes
25. Local, independent and ethical retail mix
26. Dual-use tenancies, mixed uses and permitting to enhance 24/7 activation
27. High quality on-going public art program and Cultural Charter
28. Mutli-purpose library facility
29. Multicultural expression through events, art and design
30. Connections and learning around healthy food and local produce

06 Social Return on Investment Framework
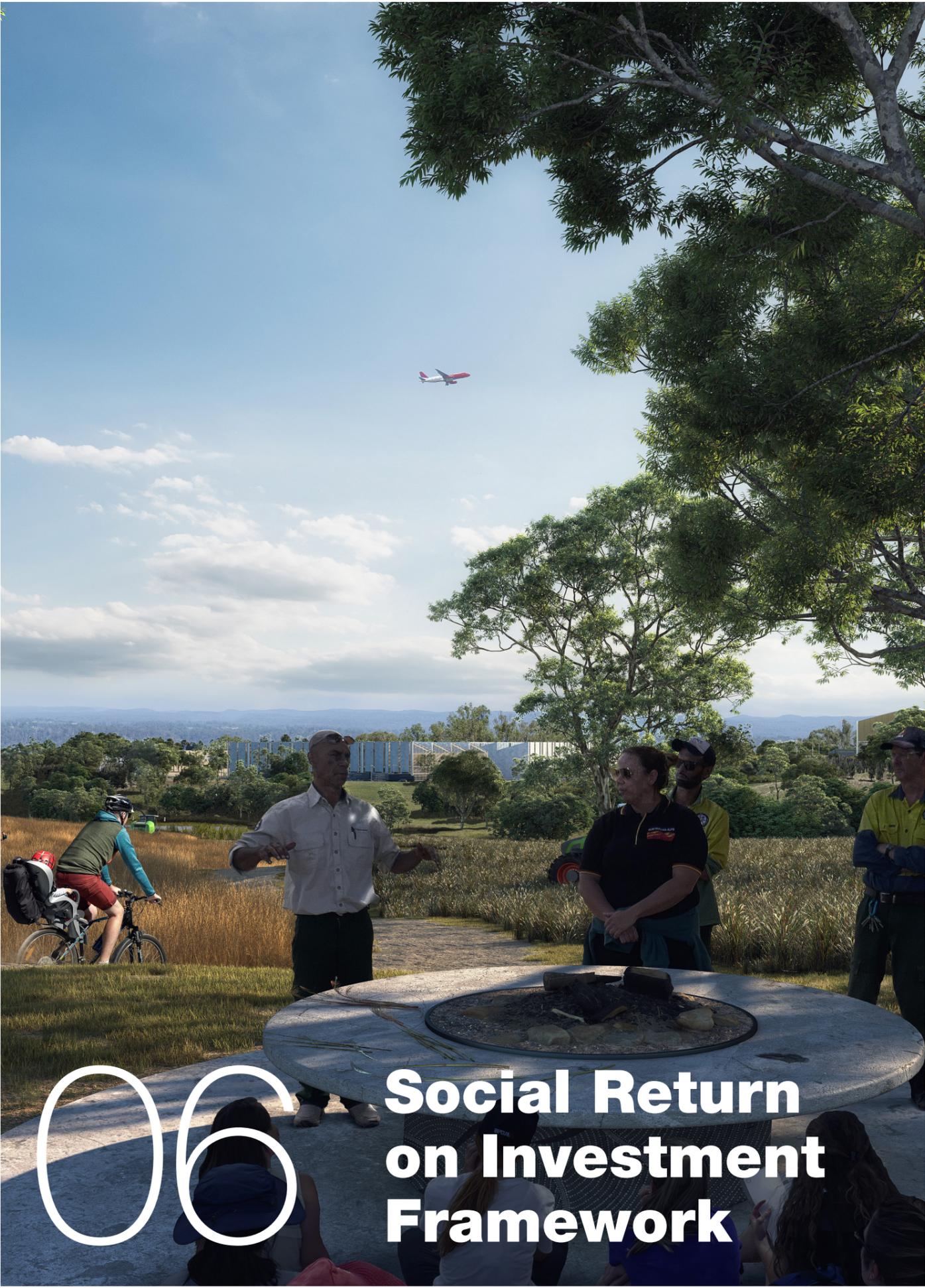
This social return on investment framework establishes a set of quantifiable measures to understand and track both positive and unintended negative changes in the Aerotropolis's progress to becoming a "Loveable City".

6.1 Purpose and limitations of this framework

Unlike traditional social return on investment frameworks which assess hard social infrastructure based on economic values, this framework is intended to be a guide in assessing hard and soft social infrastructure against the 'Loveability' indicators (section 2.3). This is critical in informing future planning and decision-making processes and achieveing social benefits which transcend economic values.

While this framework in itself is not mandatory, it is informed by and encompasses the principles, objectives and outcomes of a range of federal, state and local policies, strategies and plans that are mandatory for consideration in planning and decision-making processes, which are listed in the framework. Early and ongoing alignment with these policies, strategies and plans will ensure the Aerotropolis is developed on a strong foundation underpinned by the philosophy of 'Loveability'.

This framework should be applied to establish a baseline for each indicator (i.e. a data point against which future data can be compared to establish trends over time) following initial settlement of the Aerotropolis initial precincts (i.e. 2026). This baseline can then be used to track the progress of the Aerotropolis through regular monitoring (i.e. every five years).

Over time clear trends will emerge and provide a strong basis for the formulation of evidence-based policy, future planning and decision making processes. Indicators which are assessed as not progressing as desired will assist to identify areas where further investment, support and/or socail infrastructure should be provided in order for the Aerotropolis to become a 'Loveable City'.

It is recommended the principles of social value outlined in Figure 6-1 be taken into consideration in the initial and future applications of this framework. This will ensure the consistent and effective applicaiton of this framework across the development of the Aerotropolis and its initial precincts.
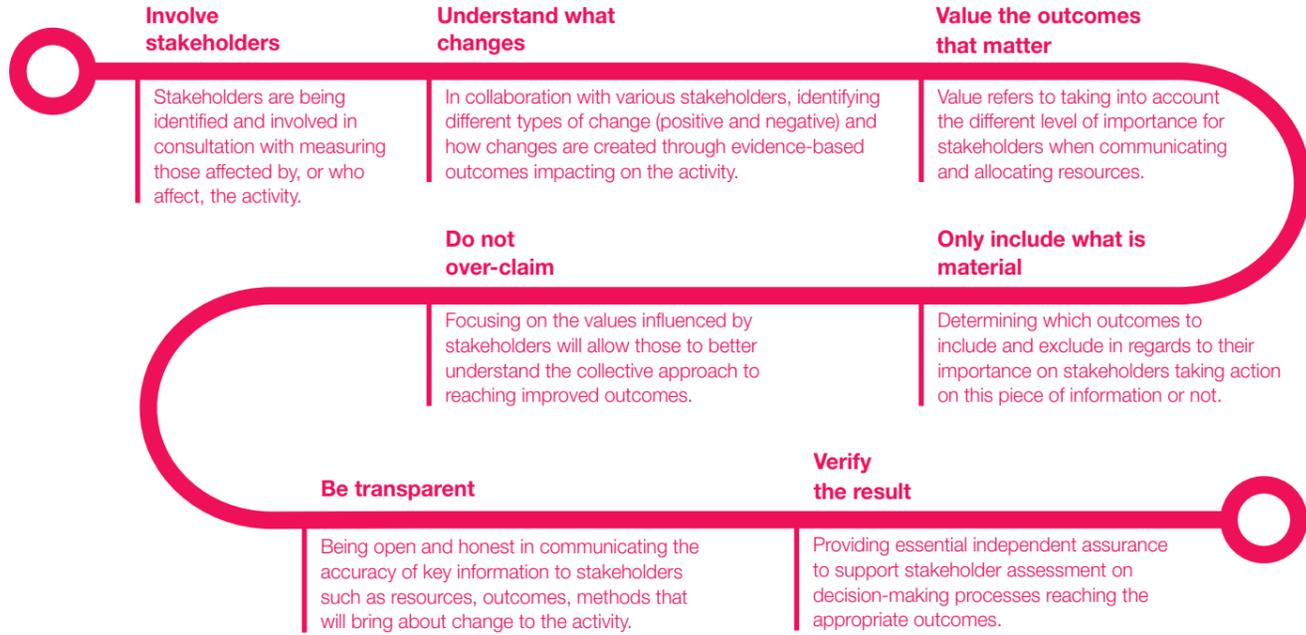
Involve stakeholders
Stakeholders are being identified and involved in consultation with measuring those affected by, or who affect, the activity.

Understand what changes
In collaboration with various stakeholders, identifying different types of change (positive and negative) and how changes are created through evidence-based outcomes impacting on the activity.

Value the outcomes that matter
Value refers to taking into account the different level of importance for stakeholders when communicating and allocating resources.

Do not over-claim
Focusing on the values influenced by stakeholders will allow those to better understand the collective approach to reaching improved outcomes.

Only include what is material
Determining which outcomes to include and exclude in regards to their importance on stakeholders taking action on this piece of information or not.

Be transparent
Being open and honest in communicating the accuracy of key information to stakeholders such as resources, outcomes, methods that will bring about change to the activity.

Verify the result
Providing essential independent assurance to support stakeholder assessment on decision-making processes reaching the appropriate outcomes.

Figure 6-1 Social value principles

Figure 6-2 Australia Infrastructure Audit 2019

Australia's social infrastructure sectors contribute . . .

12.5%
of Australia's GDP (2018)

One quarter of the Australian workforce

The cost of social infrastructure is highly subsidised by governments. People using a park, attending a public school or being treated in a public hospital are not directly paying the full cost of their use. This is because Australian society values the right to services like health care and education, regardless of ability to pay.

Australians rate **access to parks and open space** more highly than telecommunications and public transport when choosing where to live.

People ranked **health and aged care services** as the most important of all infrastructure sectors in which governments should invest more money.

Social infrastructure assets like **hospitals and universities** can also act as economic anchors for these centres, providing a source of stable employment and supporting local economies.

Timely delivery of social infrastructure is integral to the success of Australia's cities as they grow. It can help to generate community buy-in and re-establish trust in government institutions and services.

The delivery of new and upgraded major health infrastructure in cities provides the opportunity to **co-locate** these assets with other services, such as other health services, research, education and community infrastructure. **Creating health precincts** could enable **more integrated health care**, with higher quality and greater accessibility for patients, and improve Australia's health research and education capabilities, attracting global expertise.

$16.2b
Sports facilities annual contribution to the economy

$4.9b Personal health benefits and health system benefits contributed

$5.1b Human capital uplift and green space benefits

$6.3b Increased productivity and economic activity

Australia's arts and cultural sector supports direct and indirect jobs and generates exports, contributing to the economy in 2016-17 over

$111.7b
It also plays an important role in supporting economic development and empowerment in communities, particularly Aboriginal and Torres Strait Islander communities.

Well-integrated arts and cultural infrastructure can enhance the value of other types of infrastructure, such as public transport or green infrastructure. Leveraging investment across other sectors by embedding arts and culture into land use and infrastructure planning will provide greater benefits to communities to access arts and cultural infrastructure.

6.2 Cost benefits of social infrastructure

Although this social return on investment framework has not considered economic values as such, it is still important to understand the inherent economic value of quality social infrastructure.

The *Australia Infrastructure Audit 2019: Social Infrastructure Audit* (Infrastructure Australia, 2019) outlined the cost benefits of social infrastructure. A cost benefit ratio to the provision of social infrastructure is a challenge because of the inherent qualitative benefits that the facilities provide. Access to high-quality affordable social infrastructure has a direct impact on the social and economic wellbeing by contributing to social identity, inclusion and cohesion. Infrastructure Australia has acknowledged the importance of social infrastructure by including it within the 2019 Infrastructure Audit. The inclusion of a chapter on social infrastructure reflects the growing recognition that social infrastructure assets and networks play in supporting the nations wellbeing.

Figure 6-2 presents some key findings from the audit focussing on the benefits of social infrastructure.

6.3 Social return on investment framework

Outlined below is the intended interpretation and application of each of the headings in this framework:

- **'Loveability' indicator -** Is an aspect or component of achieving 'Loveability' or affinity to place. The state of an indicator has broad implications or conceptual interest in terms of understanding, tracking or planning for 'loveable' communities.

- **Metrics -** Outlines specific statistics or data points used to gauge the state of an indicator. There may be multiple metrics for an indicator including but not limited to demographic statistics, engagement outcomes and usage data.

- **Data source -** Outlines the agency or organisation which publishes and updates the relevant data or information required, or the method in which relevant data and information can be aquired, to to assess a metric.

- **Desired target or trend -** Indicates desirable outcomes that should be observed within communities where 'Loveability' is being achieved. This may include place specific outcomes, behaviours, specific numerical values, or a specific tendency in a time series of data (i.e. increasing or decreasing).

- **Relevant policies or plans -** Outlines existing policies, plans, strategies and frameworks that are directly applicable to an indicator. These policies and plans each provide objectives and actions that are important in influencing successful outcomes for the indicator. This section also includes recommended strategies that have been identified due to their potential to influence positive change and social benefits. A number of these recommended strategies have been outlined in *Report 2: Social Infrastructure Needs Assessment* (GHD, 2020c) and the *Draft Western Sydney Aerotropolis Aboriginal Engagement Outcomes Report* (GHD, 2020a).

It is important to recognise that both the public and private sectors will have a role to play in implementing, tracking and reporting on services, programs and initiatives in the Aerotropolis which will contribute to the success of the 'Loveability' indicators and overall affinity to place. The metrics provided within the framework have been coded to indicate the level of influence the public or private sector may have over its outcomes, as outlined below.

Framework metrics key:

- **Control -** metrics which the public and private sectors are in direct control of with policies, investment and initiatives.

- **Influence-** metrics which the public and private sectors do not control but can influence with policies, investment and initiatives.

- **Concern-** metrics which the public and private sectors neither control nor can influence, but are of concern to the community and impact on overall 'loveability'.

Success indicator	Metrics	Data sources	Desired targets and trends	Relevant policy and plans
Quality Urban Design Great places with urban design excellence. This delivers high quality design that supports community safety, health and wellbeing, and enhances community assets and character.	• Self-reported access to open space • Self-reported satisfaction with design and quality of residence, place of employment and/or community facilities • Self-reported satisfaction with amenities and maintenance of parks and open space • Open space capacity	- Community self-assessment survey - Community Facilities Audit	- People-focused urban design and planning - Connected, safe, healthy and inclusive communities - Community spaces and streets are social places that encourage activity and interaction - Mixed-use places, particularly clustering around urban centres - Flexible masterplans, public spaces and buildings that facilitate changing community needsw - Mitigated Urban Heat Island (UHI) affects	- Western Sydney Aerotropolis Plan - Western Sydney Aerotropolis Development Control Plan (DCP) – Phase 1 - Western Sydney Aerotropolis State Environmental Planning Policy - Aerotropolis Initial Precinct Plans - Better Placed - Designing with Country Discussion Paper - Everyone Can Play: A guideline to create inclusive playspaces - Council Local Strategic Planning Statements - Cultural Design Framework (recommended)
Supportive social infrastructure Communities in the Aerotropolis have excellent social infrastructure. This promotes an integrated approach to social infrastructure that includes healthcare, education, supermarkets, public open spaces and other community/cultural facilities.	• Self-reported access to social infrastructure • Self-reported satisfaction with diversity of social infrastructure facilities and services • Capacity and usage of facilities and services • Social infrastructure needs assessment	- Community self-assessment survey - Community Facilities Audit - Consultation with Community Facility and Service Providers	- Access to broad-based multi-functional social infrastructure to support diverse growth needs - Early and coordinated delivery of social infrastructure - Integrated approach to social infrastructure planning, including shared use agreements - Diverse and widespread opportunities for recreational physical activity - There is planned provision of community facilities in the master plan with space for NGO services - NGOs actively participate in the master planning engagement process	- Western Sydney Aerotropolis Plan - Western Sydney Aerotropolis Development Control Plan (DCP) – Phase 1 - Western Sydney Aerotropolis State Environmental Planning Policy - Aerotropolis Initial Precinct Plans - Cultural Infrastructure Plan 2056 - Country, Community and Culture: An initial guide for infrastructure practitioners in the Western Parkland City - Better Placed - Council Local Strategic Planning Statements - Council Collaboration Area Place Strategies - Council Community Strategic Plans - Council Community Facilities Strategies
Environmental Quality People in the Aerotropolis enjoy high levels of air, water, light and noise quality, and benefit from improved access to and conservation of green and blue open spaces and places of cultural significance.	• Self-reported satisfaction with amenity and environmental quality of local area • Number of days when polluting concentration exceeds National Environment Protection Measure (NEPM) guidelines • Number of resident concerns about noise reported to Councils and DECCW • Tree canopy percentage • Water quality of Wianamatta - South Creek network	- Community self-assessment survey - Department of Environment, Climate Change and Water (DECCW) - LiDAR data - Sydney Water	- Established Green Grid, making high quality green open space readily accessible - Established Blue Grid, protecting and improving strategically important rivers and waterways, and maximising their accessibility - Balanced access and preservation of places of natural, historic and cultural significance - Environmentally responsible design principles relating to air, water, light and noise - Established tree canopy (insert canopy target % - reference) to enhance neighbourhood appeal, comfort and environmental benefit - Sustainable lifestyles through the provision of water recycling, waste recycling and energy efficient systems'	- Western Sydney Aerotropolis Plan - Western Sydney Aerotropolis Development Control Plan (DCP) – Phase 1 - Western Sydney Aerotropolis State Environmental Planning Policy - Aerotropolis Initial Precinct Plans - Sydney Green Grid Strategy - Better Placed - Draft Greener Places - Council Local Strategic Planning Statements - Caring for Country Strategy (recommended) - Cultural Design Framework (recommended)
Connected communities Communities in Sydney are well connected. This supports walking, wheeling, cycling and public transport movement between destinations.	• Self-reported satisfaction with local roads, public and active transport networks and services • Number of people who experienced transport limitations in the last month • Percentage of people who use public transport • Percentage of people who use active transport • Kilometres of dedicated cycling and pedestrian paths	- Community self-assessment survey - Australian Bureau of Statistics Census Data - NSW Bureau of Transport Statistics	- Established active transport networks making walking, wheeling and cycling the obvious, safe and easy option - An established strategic framework that enables the "30 minute city" concept to be realised - Connected neighbouring communities with minimal community severance - Universally accessible streets, spaces and buildings	- Western Sydney Aerotropolis Plan - Western Sydney Aerotropolis Development Control Plan (DCP) – Phase 1 - Aerotropolis Initial Precinct Plans - Better Placed - Council Local Strategic Planning Statements - Council Community Strategic Plans - Council Collaboration Area Place Strategies - Council Disability Inclusion Action Plans - Integrated Transport Plan (recommended)

Row heading (vertical): **Amenities and infrastructure**

Success indicator	Metrics	Data sources	Desired targets and trends	Relevant policy and plans
Sense of belonging and local identity People in the Aerotropolis have a sense of belonging and local identity. This creates great places that are socially inclusive to promote respect and feelings of belonging.	- Self-reported connection and 'sense of place' to local area - Self-reported sense of belonging and acceptance in local area - Self-reported pride in local community - Self-reported agreeance that it is a good thing for a society to be made up of people from different cultures and communities	- Community self-assessment survey - Community engagement	- Connections with Indigenous people and living cultures - A mosaic of local places and communities - High levels of social interaction and community connections - A range of community events that support intergenerational and cross-cultural mixing - Young people are engaged and have a voice	- Western Sydney Aerotropolis Plan - Aerotropolis Initial Precinct Plans - Council Local Strategic Planning Statements - Council Community Strategic Plans - Country, Community and Culture: An initial guide for infrastructure practitioners in the Western Parkland City - Designing with Country Discussion Paper - Everyone Can Play: A guideline to create inclusive playspaces - Council Disability Inclusion Action Plans - Arts and Culture Strategy (recommended) - Caring for Country Strategy (recommended) - Cultural Design Framework (recommended) - Aboriginal Arts Strategy (recommended)
Connection to Country The connection to land in the Aerotropolis gives local Aboriginal communities and sense of identity and belonging, where land relates to all aspects of existence, including culture, spirituality, language, law and family and identity.	- Self-report reported connection and 'sense of place' to local area - Self-reported sense of belonging and acceptance in local area - Self-reported satisfaction with opportunities for cultural expression and connection to Country - Number of people who attended Aboriginal or Torres Strait Islander arts or cultural events or activities in the past year	- Community self-assessment survey - Engagement with Aboriginal community members and representatives	- Aboriginal culture is embedded into the daily lives of residents, workers and visitors - Appreciation and development of Aboriginal and Torres Strait Islander cultural heritage and its contemporary expression - Aboriginal cultural activity, participation and interaction is encouraged and supported	- Cultural Infrastructure Plan 2056 - Western Sydney Aerotropolis Plan - Aerotropolis Initial Precinct Plans - Council Community Strategic Plans - Country, Community and Culture: An initial guide for infrastructure practitioners in the Western Parkland City - Designing with Country Discussion Paper - Caring for Country Strategy (recommended) - Cultural Design Framework (recommended)
Cultural expression The Aerotropolis's cultural and arts sectors are supported and are a key ingredient in making great places. Cultural expression brings people together, gives shape and expression to the unique identities of communities and creates lively and dynamic places where people want to live, work, visit and do business.	- Self-reported satisfaction with opportunities for cultural expression - Number of people who attended Aboriginal or Torres Strait Islander arts or cultural events or activities in the past year - Number of people who participated in or observed arts and cultural activities or sporting events and competitions in the past year - Capacity and usage of cultural facilities and services	- Community self-assessment survey - Community Facilities Audit - Consultation with cultural facility and service providers	- Appreciation and development of Aboriginal and Torres Strait Islander cultural heritage and its contemporary expression - Connections with Indigenous people and living cultures - A mosaic of local places and communities - A range of community events that support intergenerational and cross-cultural mixing	- Cultural Infrastructure Plan 2056 - Council Community Strategic Plans - Country, Community and Culture: An initial guide for infrastructure practitioners in the Western Parkland City - Designing with Country Discussion Paper - Cultural Design Framework (recommended) - Aboriginal Arts Strategy (recommended)
Night and day activity The Aerotropolis's vibrancy and vitality is realised through the activation 24 hour a day, 7 day per week. Night time activity creates opportunities for a diversity of workers, including shift workers, to participate.	- Self-reported satisfaction with opportunities to participate in sporting or recreational activities - Number of businesses and facilities that provide services or are open outside of usual working hours (9am to 5pm) - Number of people who participated in or observed arts and cultural activities or sporting events and competitions in the past year - Occupancy rates of temporary and tourism accommodation facilities - Number of visitors, length of stay and expenditure - Percentage of employees in industries with significant night-time activity	- Community self-assessment survey - Community Facilities Audit - Visitor Accommodation Audit - Tourism Research Australia - Floorspace and Employment Survey - Consultation with Community Facility Providers and Event Organisers	- Established tourism infrastructure, assets and branding - Activated street life in key centres, retail precincts, parks and public realm. - A strong thriving night time economy that enables the arts and cultural sector to thrive while directly contributing to diverse offerings of night time activities that reflect and respond to audiences and communities - Increase in visitors, length of stay and expenditure	- NSW Guide for Establishing and Managing Night Time Economy Uses - Greater Sydney's 24-hour Economy Strategy - Cultural Infrastructure Plan 2056 - Council Local Strategic Planning Statements - NSW Aboriginal Tourism Action Plan - Everyone Can Play: A guideline to create inclusive playspaces - Tourism Strategy and/ or Destination Management Plan (recommended) - Night Time Activation Strategy (recommended) - Aboriginal Arts Strategy (recommended)

Social and cultural life

Success indicator	Metrics	Data sources	Desired targets and trends	Relevant policy and plans
Participation and sense of ownership Communities in the Aerotropolis are highly engaged. This promotes community participation, empowerment and ownership in shaping socially sustainable places and is delivered across all liveability outcomes. Residents and workers feel they have influence over the area and its evolution.	• Self-reported belief they can have a say on important issues • Number of people who are members of a decision-making board or committee • Percentage of people who know how to contact their local representatives • Diversity in elected representatives • Percentage of enrolled voters who cast a vote in local government elections	- Community self-assessment survey - NSW Electoral commission - NSW Department of Local Government - Australian Electoral Commission	- The community actively participates in engagement activities and contributes to planning and decision-making processes which impact the environment around them and thier way of life - Where it is determined to be appropriate and beneficial the community is delegated power to make decisions which ultimately impact thier way of life - A sense of co-creation in place-making - Community control of some local assets - Council values the knowledge, creative initiative and efforts of all community members and organisations	- Council Local Strategic Planning Statements - Council Community Strategic Plans - Council Community Participation Plans - Country, Community and Culture: An initial guide for infrastructure practitioners in the Western Parkland City - Designing with Country Discussion Paper - NSW Aboriginal Tourism Action Plan - Cultural Design Framework (recommended) - Aboriginal Arts Strategy (recommended)
Diversity of job opportunities People in the Aerotropolis have a diversity of job and training opportunities. This provides access to a range of jobs and learning / skills development opportunities.	• Percentage of businesses in selected sectors • Percentage of residents who also work in the Aerotropolis • Percentage of people aged 15 years and over who are employed • Percentage of people aged 15 years and over who are unemployed • Percentage of people aged 15 years and over who participate in the labour force • Average travel time to work by residents in the Aerotropolis	- Floorspace and Employment Survey - Australian Bureau of Statistics Census Data - NSW Bureau of Transport Statistics	- Integrated land use and transport planning, connecting homes close to jobs and learning, reducing commuting times via sustainable transport modes - Provision of appropriate conditions for business agglomeration to occur - Access to appropriate job training, skills development and lifelong learning opportunities - Established libraries and other public institutions as shared social infrastructure learning, working and skills development hubs - Flexible and adaptable workplaces that reflect diverse user requirements	- Western Sydney Aerotropolis Plan - Aerotropolis Initial Precinct Plans - Council Local Strategic Planning Statements - Council Collaboration Area Place Strategies - NSW 2040 Economic Blueprint - Jobs for the Future Adding 1 million rewarding jobs in NSW by 2036 - Greater Sydney's 24-hour Economy Strategy - Aboriginal Procurement Policy (APP) - NSW Aboriginal Tourism Action Plan - Penrith – The Edge of Tomorrow Prospectus - NSW Government COVID-19 Recovery Plan
Innovation and creativity Across the Aerotropolis innovation and creativity is encouraged in business and urban solutions. This supports integration of creative industries, digital technology and monetisation of great ideas.	• Percentage of businesses in selected sectors • Percentage of people employed in highly skilled occupations • Percentage of people who have attained a bachelor's degree or higher • Percentage of people who have attained a certificate III of higher • Percentage of workforce attending tertiary institutions • Proportion of employment in selected knowledge industries	- Floorspace and Employment Survey - Australian Bureau of Statistics Census Data - Consultation with Multiversity and TAFE - Consultation with local businesses	- Integrated Indigenous Australian cultural expression into plans, designs and programs - Collaboration between the cultural and creative arts, business and the community - Established share-economy - Art and cultural facilities are accessible and affordable - Equitable provision of widely available digital infrastructure in public places	- Western Sydney Aerotropolis Plan - Council Local Strategic Planning Statements - Greater Sydney's 24-hour Economy Strategy - Better Placed - NSW Innovation Strategy - Digital NSW: Designing for our Digital Future - Jobs for the Future Adding 1 million rewarding jobs in NSW by 2036 - Aboriginal Arts Strategy (recommended)
Accessible and affordable Services, infrastructure and amenities are affordable or free, regardless of age, gender, physical ability, sexual orientation, socioeconomic status or ethnicity. Places enable people to meet and participate in public life.	• Percentage of households under housing stress (Households with housing costs 30% or more of gross income) • Number of people on wait lists for affordable, social or public housing • Median house and apartment sale and rental prices • Number of people recorded as homeless	- Australian Bureau of Statistics Census Data - Housing NSW Statistics - Consultation with Community Housing Providers - Centre for Affordable Housing, Housing NSW Rent and Sales Report	- A diversity of housing types and tenures for people of all socio-economic backgrounds within residential developments - An appropriate proportion of social and affordable housing which is reflective of community needs - Opportunities for alternative housing models, such as shared equity housing - Higher residential density places are well designed and liveable - Intergenerational communities with accessible and adaptable homes	- Western Sydney Aerotropolis Plan - Aerotropolis Initial Precinct Plans - Greater Sydney's Social Capital Its Nature and Value - Council Local Strategic Planning Statements - Council Collaboration Area Place Strategies - Council Community Strategic Plans - Everyone Can Play: A guideline to create inclusive playspaces - Council Disability Inclusion Action Plans - Council Local Housing Strategies

Local empowerment

Success indicator	Metrics	Data sources	Desired targets and trends	Relevant policy and plans
Resilience The communities of Aerotropolis have the ability to adapt and manage economic, social and environmental change over time.	• Self-reported participation in recycling, water conservation and renewable energy initiatives • Self-reported ability to get help from friends and family • Self-reported ability to raise $2,000 or more if required • Dependency ratio • Index of Relative Socio-economic Disadvantage (IRSD) Score • Number of training and employment opportunities available to local residents, including long term, unemployed persons or Indigenous persons • Percentage of people aged over 15 years who are employed • Water usage • Water recycling in open space and community facilities • Percentage of electricity from renewable sources	- Community self-assessment survey - Australian Bureau of Statistics Census Data - Australian Bureau of Statistics Socio-economic Indexes for Areas (SEIFA) - Consultation with Community Service Providers - Consultation with businesses, Multiversity and TAFE - Sydney Water - Local Council's - Endeavour Energy	- Established training and employment programs - Diverse range of local retail and commercial uses - Diverse range of job types and opportunities - Community involvement in resilience planning for a strong and welcoming community - Widespread community participation in recycling, water conservation and renewable energy initiatives - Increased usage of renewable energy sources - Increased water conservation and recycling	- NSW Climate Change Policy Framework - Greater Sydney's Social Capital Its Nature and Value - NSW Critical Infrastructure Resilience Strategy - Jobs for the Future Adding 1 million rewarding jobs in NSW by 2036 - Western Sydney Aerotropolis Plan - Council Local Strategic Planning Statements - Caring for Country Strategy (recommended) - Social Sustainability and Resilience Strategy (recommended)

Local empowerment

Success indicator	Metrics	Data sources	Desired targets and trends	Relevant policy and plans
Active lifestyles The Aerotropolis is a place that enables active lifestyles through quality public realms, open space and place connections. People in the Aerotropolis lead healthy and active lifestyles by regularly participating in passive and active exercise and sport.	• Self-reported physical activity • Capacity and/or attendance of sporting and recreational facilities • Percentage of people undertaking adequate physical activity • Life expectancy • Percentage of people with chronic diseases including coronary heart disease, diabetes, cancer and asthma	- Community self-assessment survey - Community facilities audit - NSW Health, NSW Population Health Survey - NSW Health, Health Statistics NSW	- Diverse and widespread opportunities for recreational physical activity - Increase in percentage of people reporting adequate physical activity - Increase in the percentage of people undertaking adequate physical activity - Increase in life expectancy - Decrease in percentage of people with chronic illness - Equitable and affordable ditribution and access to open space, sport and recreation centres - Equitable access to connected active transport networks, encouraging passive physical activity	- NSW Healthy Eating and Active Living Strategy - Aerotropolis Initial Precinct Plans - Council Community Strategic Plans - Liverpool Active City Living Well Summit Edition: Physical Activity and Sport Strategy - Penrith Sport and Recreation Strategy - Council Disability Inclusion Action Plans - Integrated Transport Plan (recommended)
Overall wellbeing The Aerotropolis is a place that enables its residents and workers to maintain a healthy work-life balance while fostering important opportunities for personal growth, cultural expression and community interactions which contribute to a persons overall mental health and wellbeing.	• Self-reported health and wellbeing • Rate of suicide • Percentage of adult population undertaking risky alcohol consumption • Percentage of people that have used illicit drugs, in the last 12 months • Percentage of adult population who are current smokers • Percentage of adult population in psychological distress • Percentage of children developmentally vulnerable	- Community self-assessment survey - NSW Health, NSW Population Health Survey - NSW Health, Health Statistics NSW - Australian Institute of Health and Welfare: National Drug Strategy Household Survey - Australian Early Development Index (AEDI)	- Equitable and affordable distribution and access to social and health services - Low rates of suicide and adults in psychological distress - Low rates of risky alcohol consumption, smoking and illicit drug use - Low rates of children considered developmentally vulnerable - The community actively participates in engagement activities and contributes to planning and decision-making processes which impact the environment around them and their way of life	- Healthy, Safe and Well: A Strategic Health Plan for Children, young People and Families - Greater Sydney's Social Capital Its Nature and Value - Council Local Strategic Planning Statements - Council Community Strategic Plans - Caring for Country Strategy (recommended)

Health and wellbeing

Success indicator	Metrics	Data sources	Desired targets and trends	Relevant policy and plans

Health and wellbeing

Success indicator	Metrics	Data sources	Desired targets and trends	Relevant policy and plans
Community connections The Aerotropolis is a socially cohesive place where residents, workers and visitors have quality social interactions and connections, which contributes to overall wellbeing.	• Self-reported satisfaction with feeling part of the community • Self-reported belief most members of the community can be trusted • Self-reported ability to get help from friends and family • Self-report parental involvement in children's school and recreational activities • Capacity and/or attendance of community and cultural facilities • Percentage of people who have volunteered in the community	- Community self-assessment survey - Community facilities audit - Australian Bureau of Statistics Census Data	- High levels of community cohesion and social interaction which provides people with a sense of purpose and enhances mental health and wellbeing - Equitable and affordable distribution and access to social and health services - Appreciation and development of Aboriginal communities and culture - Access to broad-based multi-functional social infrastructure to support diverse growth needs - Connected neighbouring communities with minimal community severance	- Western Sydney Aerotropolis Plan - Greater Sydney's Social Capital Its Nature and Value - Council Local Strategic Planning Statements - Council Community Strategic Plans - Council Community Facilities Strategies - Arts and Culture Strategy (recommended) - Caring for Country Strategy (recommended) - Aboriginal Arts Strategy (recommended)
Feelings of safety People in the Aerotropolis feel comfortable, respected and safe in their homes, place of work and out in the community.	• Self-reported perception of safety in the workplace • Self-reported perception of safety walking alone • Self-reported perception of safety at home • Recorded offences for crimes against the person • Recorded offences for crimes against property • Recorded instances of family violence and domestic violence against women • Recorded instances of road traffic injuries and fatalities • Recorded instances of pedestrian injuries and fatalities	- Community self-assessment survey - NSW Bureau of Crime Statistics and Research (BOSCAR) - NSW Centre for Road Safety	- Integrated land use and transport planning, connecting homes close to jobs and learning, reducing commuting times via sustainable transport modes - Universally accessible streets, spaces and buildings - Quality urban design which includes safe street design, efficient lighting and passive suvelliance - Low rates of crime against the person and property - Low rates of family and domestic violence - Low rates of recorded road traffic and pedestrian injuries and fatalities	- Greater Sydney Women's Safety Charter (2020) - Committee for Sydney Safety After Dark (2019) - Council Local Strategic Planning Statements - Council Community Strategic Plans - Everyone Can Play: A guideline to create inclusive playspaces - Council Disability Inclusion Action Plans - Crime Prevention through Environmental Design (CPTED) - Caring for Country Strategy (recommended) - Cultural Design Framework (recommended) - Safe City Strategy (recommended)
Healthy food People in the Aerotropolis have access to quality, local, healthy food and produce within close proximity to their home or workplace.	• Self-reported nutritional food consumption • Percentage of adult population consuming the recommended minimum of two or more serves of fruit per day and five or more serves of vegetables per day • Percentage of people who are overweight or obese • Life expectancy • Percentage of people with chronic diseases including coronary heart disease, diabetes, cancer and asthma	- Community self-assessment survey - NSW Health, NSW Population Health Survey - NSW Health, Health Statistics NSW	- Equitable access to fresh, healthy food and drinking water - Equitable and affordable distribution and access to social and health services - Low rates of adult and childhood obesity - Established community and business partnerships with local farmers and fresh food markets	- The Australian Dietary Guidelines - NSW Healthy Eating and Active Living Strategy - Food-sensitive planning and urban design: A conceptual framework for achieving a sustainable and healthy food system

6.4 Opportunities to influence 'Loveability' outcomes

The table below provides a preliminary indication of the placemaking and activation recommendations which may have a positive influence in the outcomes of the 'Loveability' indicators. This table could be used to identify potential projects for investment and implementation to be delivered throughout the Aerotropolis as it develops.

Column legend

Pre-construction
1. Connecting to Country projects
2. Mobile community hubs
3. Invest in a culture of entrepreneurship (community/business grants)
4. Sharing-economy programs and projects
5. Reconnecting to water, Wianamatta-South Creek
6. Creative construction hoardings program
7. Activating vacant blocks and industrial land

Early occupation
8. Enhance connecting to Country project through arts and events
9. Semi-permanent community hubs
10. Enhance connections to the water and green space
11. Temporary library and 'little libraries'
12. Aboriginal cultural tourism
13. Co-located exhibition, testing and maker spaces
14. STEM and innovative public art and education programs
15. Community Currency and a community development toolkit
16. Temporary retail hubs and curated, independent retail mix
17. Pop-up park(s) and fitness and recreation programming
18. Infrastructure to enhance safety, amenity and comfort
19. Legibility, wayfinding and creating habitual movement patterns
20. Temporary co-working spaces

Full build
21. The community heart (public squares and meeting places)
22. Eco-literacy projects and green, productive landscapes
23. Playstreets and safe, accessible walking routes
24. Local, independent and ethical retail mix
25. Aboriginal Cultural Centre
26. Dual-use tenancies and uses to enhance night-time activation
27. High quality on-going public art program and cultural charter
28. Multicultural expression through events, art and design
29. Temporary library and 'little libraries'
30. Connections and learning around healthy food and local produce

Category	Indicator	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Amenities and infrastructure	Quality Urban Design	X						X	X		X								X	X		X		X	X				X		
	Supportive social infrastructure		X	X						X		X		X	X	X		X			X	X		X		X				X	
	Environmental Quality	X				X		X			X								X				X								X
	Connected communities				X				X											X				X							
Social and cultural life	Sense of belonging and local identity	X					X	X					X			X			X			X			X			X	X		X
	Connection to Country	X			X	X	X		X		X		X							X		X			X						
	Cultural expression	X					X	X	X						X							X			X				X		
	Night and day activity		X	X	X			X		X		X	X		X	X	X	X	X			X		X	X	X	X		X	X	X
Local empowerment	Participation and sense of ownership	X	X		X		X	X	X				X			X						X			X			X	X		X
	Diversity of job opportunities			X	X					X				X	X	X		X	X		X				X	X			X	X	
	Innovation and creativity	X		X	X		X								X						X				X				X		X
	Accessible and affordable		X	X	X					X		X		X		X			X			X								X	X
	Resilience	X		X	X	X											X	X	X				X		X						X
Health and wellbeing	Active lifestyles				X						X							X	X	X				X							
	Overall wellbeing	X			X				X		X								X	X		X			X				X		X
	Community connections	X	X		X				X	X		X		X	X	X		X	X		X	X			X	X			X	X	X
	Feelings of safety	X						X	X		X								X	X		X			X						
	Healthy food	X			X			X									X													X	X

This report informs the precinct plans and future development phases (e.g. master planning) for the Aerotropolis Core, Northern Gateway, Badgerys Creek, Agribusiness and Wianamatta-South Creek precincts. The social return on investment framework and recommendations should be considered and implemented by both the public and private sectors to help achieve the vision for the Aerotropolis.

07 Conclusion & Next Steps

7.1 Summary of recommendations

This report presents a range of placemaking and activation recommendations that will assist to bring the hard social infrastructure recommendations outlined in *Report 2: Social Infrastructure Needs Assessment* (GHD, 2020c) to life, and make the Aerotropolis and its initial precincts a desirable place to live, work and play. This report also presents a social return on investment framework that provides guidance in measuring and tracking both positive and unintended negative social changes as the Aerotropolis develops.

A summary of the placemaking and activation recommendations is presented in Table 7-1 below, in order of priority based on the multi-criteria analysis discussed in section 5.3 and presented in Appendix B.

Table 7-1 Summary of placemaking and activation recommendations

Priority	Stage		
	Pre-construction	Early occupation	Full build
High	- Connecting to Country projects - Reconnecting to water, Wianamatta-South Creek	- Enhance connecting to Country projects through arts and events - Semi-permanent community hubs - Enhance connections to the water and green space	- The community heart (public squares and meeting places) - Aboriginal Cultural Centre - Multicultural expression through events, art and design
Medium	- Mobile community hubs - Sharing-economy programs and projects - Activating vacant blocks and industrial land - Invest in a culture of entrepreneurship (community/business grants)	- Community Currency and a community development toolkit - Infrastructure to enhance safety, amenity and comfort - Co-located exhibition, testing and maker spaces - Temporary retail hubs and curated, independent retail mix - STEM and innovative public art and education programs - Aboriginal cultural tourism - Pop-up park(s) and fitness and recreation programming - Legibility, wayfinding and creating habitual movement patterns - Temporary co-working spaces - Temporary library and 'little libraries'	- Playstreets and safe, accessible walking routes - Eco-literacy projects and green, productive landscapes - Connections and learning around healthy food and local produce - Mutli-purpose library facility - Local, independent and ethical retail mix - High quality on-going public art program and cultural charter - Dual-use tenancies
Low	- Creative construction hoardings program		

7.2 Areas for further investigation

The next planning phase for the Aerotropolis involves finalising precinct plans for the initial precincts. These will provide the framework to guide future growth and development. The Precinct Planning package is to be read in conjunction with both the Western Sydney Aerotropolis State Environmental Planning Policy and the Western Sydney Aerotropolis Development Control Plan. For sites over 100ha the master planning process can be enacted by a Proponent. In preparing a master plan, the Proponent is to go to finer grain detail, and align with the Western Sydney Aerotropolis Plan and the relevant Precinct Plan. Through the implementation of the precinct plan via a development application or a master plan, recommendations in this report can be implemented to the next level (e.g specific locations of social infrastructure, funding and delivery models).

Report 2: Social Infrastructure Needs Assessment (GHD, 2020c) and the *Draft Western Sydney Aerotropolis Aboriginal Engagement Outcomes Report* (GHD, 2020a) each outline a number of recommended studies and strategies to build on their findings and recommendations. These have been incorporated into the social return on investment framework (section 6.3) along with some extra strategies which have been identified due to their potential to influence positive change and social benefits with regards to the 'Loveability' indicators. These include:

- Safe City Strategy
- Integrated Transport Plan
- Social Sustainability and Resilience Strategy
- Night Time Activation Strategy

These recommended strategies are commonly prepared by local Councils in Greater Sydney and across Australia. They should be considered for the Aerotropolis to help address the challenges discussed in section 4.2 and deliver social benefits. Examples of these types of studies and strategies are provided in Figure 7-1.
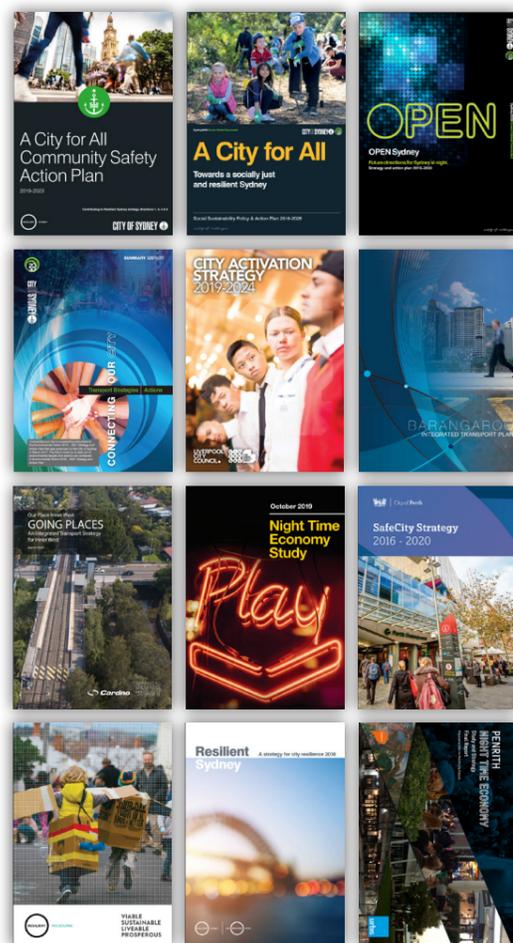

Figure 7-1 Examples of recommended strategies

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Appendices

Policy, plan or study	Description
A Liveability Framework for Sydney Department of Planning & Environment NSW, Greater Sydney Commission, 2017	The Liveability Framework provides an evidence-based, framework approach tailored to the Greater Sydney context in order to deliver great places for people and liveability benefits across Greater Sydney. The Framework's integrated approach identifies key considerations for achieving liveability improvements and suggests ways to achieve these outcomes acknowledging the need for flexible application for specific locations. The Framework acknowledges the necessity for a 'people-centred' approach to planning and has been developed around the three key principals below: 1. Equity: equal access to employment and education, assets, services and resources to build human capital. 2. Inclusion: Emphasising all stages of life - offering opportunities to all Sydneysiders whilst optimising intergenerational opportunities. 3. Shared Benefit: Sharing the public benefit associated with growth and change e.g. social infrastructure such as schools and open space, and ensuring the benefits of growth bring increased liveability across Sydney's places and communities.
Better Placed NSW Office of the Government Architect, 2017	NSW Government Architect's Office Better Placed (2020) is a design policy document that guides the planning, design and delivery of the built environment across NSW. The aim of Better Placed is to create a clear approach to ensure that good design – of architecture, public places and environments – meets the aspirations and expectation of people who will live, work and play in these future places. A well-design built environment is designed as a place that is healthy, responsive, integrated, equitable and resilient. The objectives of good design include: • Better Fit: contextual, local and of their place • Better performance: sustainable, adaptable and durable. • Better for community: inclusive, connected and diverse. • Better for people: safe, comfortable and liveable. • Better working functional, efficient and fit for purpose. • Better values: creating and adding value. • Better look and feel: engaging, inviting and attractive. The Better Placed Guide provides key actions for implementing and delivering better places through design policy. These objectives of Better Placed have been considered in the liveability framework outlined in this report.
Creating Strong Communities: How to measure the social sustainability of new housing developments Berkeley Group, 2012	The Creating Strong Communities report recognises while there is a great focus on environmental concerns less emphasis is currently placed on the social dimensions of sustainability in both government policy and industry practice. The report describes the development of a framework to bring together and measure a wide range of factors that influence local quality of life and the strength of a community in new housing and mixed-use developments. The framework consists of three dimensions of social sustainability including: • infrastructure and social amenities • voice and influence • social and cultural life

Policy, plan or study	Description
Community Wellbeing Indicators City of Sydney, 2019	The Community Wellbeing Indicators report was modeled of the Community Indicators Project in Victoria and speaks to the principles of social sustainability outlined in the City of Sydney's Community Strategic Plan. The report recognises social progress is not the inevitable result of economic growth, and for inclusive growth complementary community strengthening efforts are needed. A set of quantifiable measures of how Sydney is faring as a society is provided and the trends that have emerged over time are presented. The report contains over 120 measures or outcomes that the City of Sydney uses to assess community need and wellbeing under the key themes of: • health and safety • culture • democracy • community engagement • local economy
Safety After Dark: creating a city for women living and working in Sydney Committee for Sydney, 2019	The Committee for Sydney's Safety After Dark: creating a city for women living and working in Sydney, is based on academic research and anecdotal evidence of women's' experiences of the city in the evening. Key points raised through the research and relevant to the Western Sydney Aerotropolis include: • Creating safe spaces for recreation in the evening. • Consider areas that women may feel is out of bounds in the evening, however not during the day. • Ensuring there is not a scarcity of people both day and night. • Consideration for adequate lighting • Providing adequate access to transport as women are more likely to use transport. • Ensuring building frontages are active to enhance passive surveillance. • Creating a sense of community. • Enabling women to have a voice and influence on design outcomes.
Edge of Tomorrow Prospectus Penrith City Council, 2012	PCC's The Edge of Tomorrow plans has branded themselves as the 'New West', a city offering lifestyles of nature and economic gain to communities of the future (PCC 2012). Highlighting its geographical advantage between the Sydney south-west and north west areas of future growth, Penrith is viewed as being well positioned to support the development and economic opportunities the Aerotropolis will bring to the Western Sydney area. The plan gives a tailored approach towards future investments of the Aerotropolis and other future infrastructure and the role PCC can play in supporting these initiatives. Examples of PCC's economic vision of a future Western Sydney and Aerotropolis are showcased throughout the plan as being a skilled Workforce, a Connected city as an economic gateway to the Aerotropolis, Space and Opportunity to facilitate infrastructure and development, and a chance to Collaborate with stakeholders who have a shared future vision of Western Sydney (PCC 2012).
Greater Sydney's Social Capital Its Nature and Value Cred Consulting, 2017	The Greater Sydney Commission engaged Cred to undertake a study on Greater Sydney's social capitol as it recognised for Greater Sydney to have a sustainable future, it needs to support communities that are socially cohesive and sustainable and that are creators of social capital. The report considers Greater Sydney's strengths and opportunities to become a more socially cohesive and sustainable city, and the ways it can plan for and design communities that facilitate the creation and sharing of social capital. The report Defines the physical elements of our local areas and cities or "social connectors" which can facilitate the creation of social capital which include: • Social infrastructure • Street life and meeting places • Sharing spaces and places • Education and learning, and • Transport The findings outlined in the report enables an understanding of how urban planning and design can support, sustain and build social capital, and what impediments exist to creating and building social capital organically across Greater Sydney.

Policy, plan or study	Description
Greater Sydney Women's Safety Charter Greater Sydney Commission, 2020	The Greater Sydney Commission, in collaboration with Transport for NSW and the Committee for Sydney, established the Women's Safety Charter to help make the city a safe and enjoyable place for women and girls. The objective of the Charter is to bring business, Government agencies and community organisations together to build a safer city for all. The Charter's three foundation principles are relevant to the planning and designing of the Western Sydney Aerotropolis from early masterplanning to detailed design. They include: • A culture of gender equality; increasing women's participation in the design and decision-making process. • Commitment to listen, share and reflect; by communicating best practice around safety solutions to collect and share data. • Commitment to collective action and continuous improvement; to actively participate through collaboration, united action and reflective practice.
Love Liverpool – See, Taste, Do Liverpool City Council, 2020	This strategy highlights local attractions and features of the Liverpool City Council area that draws residents and visitors to various offerings. Showcasing its rich multicultural history dating to the pre-colonisation of Aboriginal culture, to the maintenance and display of early settlement heritage buildings, to the contemporary culture of its diverse community reflected in the arts and food scene. The Western Sydney International (Nancy-Bird Walton) Airport features on these list of recommendations where they encourage current visitors to the site of the Western Sydney International Airport Experience Centre in Luddenham.
Open Sydney Discussion Paper City of Sydney, 2011 **An Open and Creative City: planning for culture and the night time economy, Discussion Paper** City of Sydney, 2017	These Discussion Papers guide the vision for the City of Sydney to create a city with a lively and diverse evening economy. The OPEN Sydney strategy outlines The City of Sydney's development of a long-term vision for the night-time economy over twenty years with the aim to create a connected, diverse, inviting and responsive approach. The 2017 Discussion Paper 'An Open and Creative City' proceeds the OPEN Sydney Strategy and Action Plan, Creative City Cultural Policy and Action Plan and Live Music and Performance Action Plan. To support an evening economy that attract people of all ages and interests, the 2030 targets include the need for 40% of business open after 6pm to be retail and for 40% of people using the city at night are over 40 years of age. The paper proposes eight actions, including the following which are of relevance to this assessment: • Allow shops and local businesses to extend opening hours between 7am and 10pm • Allow minimal impact small-scale cultural uses • Establish planning controls for cultural uses that may have some impacts
Parramatta Night City Framework City of Parramatta, 2020	The City of Parramatta's Framework outlines their strategic approach to ensuring the long-term prosperity and continued investment in the night-time economy. The approach outlined is intended to create capacity to trade later into the evening, deliver key services and night time offerings to service their local communities needs While Parramatta's vision is to create a 24-hour city, drawing on existing night-time activity, the items of relevance to this assessment include: • Review our local planning controls and development processes to broker opportunities for greater night time uses and balance concerns around residential amenity • Incentivise the diversification of our night city, utilise our assets, promote late trading retail and services; live music, events and activation • Develop a night-friendly city through smart design that promotes community safety, an exciting and well-lit public domain encouraging passive surveillance and place dwelling • Advocate for policy reform to the State Government to enable more diverse uses, streamline existing planning and licensing processes
The Pulse of Greater Sydney: Measuring what matters in the Metropolis Greater Sydney Commission, 2019	The Pulse of Greater Sydney is the first comprehensive monitoring and reporting framework for Greater Sydney. It recognises that it is not enough to prepare plans, their implementation must be monitored and reported on. Monitoring is important as it helps understand progress towards delivering the metropolis of three cities. Reporting provides transparency and accountability and enables State and local government to measure progress and inform future reviews of the Plans. The Pulse: • introduces performance indicators that monitor progress in delivering the vision for Greater Sydney • reports on the progress of implementation of the plans by State and local government.

Appendix B - Multi-criteria analysis

Pre-construction

Value	Influence of indicator outcomes
5	High
4	Medium to high
3	Medium
2	Low to medium
1	Low

Weighting	Priority rating		
	High priority	Med priority	low priority
100	=/>1500	>1000, <1500	=/<1000
30	=/>450	>300, <450	=/<300
20	=/>300	>200, <300	=/200
10	=/>80	>40, <80	=/<40

The focus of this stage is community engagement, building capacity and awareness, and creating the functional framework that will enhance activation, relevant to people (residents, workers, and visitors) and place identity. Essential to this first stage will be the formalisation of a 'place management team', including Government agencies, Councils and key landholders to plan and establish placemaking opportunities.

	Weighting (out of 100)	'Loveability' indicator	'Loveability' indicator criteria description	Connecting to Country projects	Mobile community hubs	Invest in a culture of entrepreneurships	Sharing-economy programs and projects	Reconnecting to water, Wianamatta and South Creek	Creative construction hoardings program	Activating vacant blocks and industrial land
		Running Total ('Loveability' score)		1710	1380	1250	1370	1550	960	1170
Amenities and infrastructure	20	Quality Urban Design	The Aerotropolis has great places with urban design excellence. This delivers high quality design that supports community safety, health and wellbeing, and enhances community assets and character.	5	1	2	1	5	5	4
		Supportive social infrastructure	Communities in the Aerotropolis have excellent social infrastructure. This promotes an integrated approach to social infrastructure that includes healthcare, education, supermarkets, public open spaces and other community/cultural facilities.	4	5	2	4	3	1	3
		Environmental Quality	People in the Aerotropolis enjoy high levels of air, water, light and noise quality, and benefit from improved access to and conservation of green and blue open spaces and places of cultural significance.	4	1	1	1	5	5	3
		Connected communities	Communities in the Aerotropolis are well connected. This supports walking, wheeling, cycling and public transport movement between destinations.	2	4	1	2	4	1	2
			Sub-total	300	220	120	160	340	240	240
Social and cultural life	30	Sense of belonging and local identity	People in the Aerotropolis have a sense of belonging and local identity. This creates great places that are socially inclusive to promote respect and feelings of belonging.	5	5	3	4	4	3	3
		Connection to Country	The connection to land in the Aerotropolis gives local Aboriginal communities and sense of identity and belonging, where land relates to all aspects of existence, including culture, spirituality, language, law and family and identity.	5	1	3	1	5	1	3
		Cultural expression	The Aerotropolis's cultural and arts sectors are supported and are a key ingredient in making great places. Cultural expression brings people together, gives shape and expression to the unique identities of communities and creates lively and dynamic places where people want to live, work, visit and do business.	5	3	5	4	5	5	4
		Night and day activity	The Aerotropolis's vibrancy and vitality is realised through the activation 24 hour a day, 7 day per week. Night time activity creates opportunities for a diversity of workers, including shift workers, to participate.	3	5	4	4	1	3	3
			Sub-total	540	420	450	390	450	360	390
Local empowerment	20	Participation and sense of ownership	Communities in the Aerotropolis are highly engaged. This promotes community participation, empowerment and owner-ship in shaping resilient places and is delivered across all liveability out-comes. Residents and workers feel they have influence over the area and its evolution.	5	5	4	4	5	3	3
		Innovation and creativity	Across the Aerotropolis innovation and creativity is encouraged in business and urban solutions. This supports integration of creative industries, digital technology and monetisation of great ideas.	3	3	5	3	3	2	3
		Diversity of job opportunities	People in the Aerotropolis have a diversity of job and training opportunities. This provides access to a range of jobs and learning / skills development opportunities.	3	4	5	3	2	1	1
		Accessible and affordable	Services, infrastructure and amenities are affordable or free, regardless of age, gender, physical ability, sexual orientation, socioeconomic status or ethnicity. Places enable people to meet and participate in public life.	4	5	4	5	2	1	2
		Resilience	The communities of Aerotropolis have the ability to adapt and manage economic, social and environmental change over time.	5	1	3	3	5	1	1
			Sub-total	400	360	420	360	340	160	200
Health and wellbeing	20	Active lifestyles	The Aerotropolis is a place that enables active lifestyles through quality public realms, open space and place connections. People in the Aerotropolis lead healthy and active lifestyles by regularly participating in passive and active exercise and sport.	2	1	1	3	4	1	1
		Overall wellbeing	The Aerotropolis is a place that enables its residents and workers to maintain a healthy work-life balance while fostering important opportunities for personal growth, cultural expression and community interactions which contribute to a persons overall mental health and wellbeing.	5	4	3	5	5	2	2
		Community connections	The Aerotropolis is a socially cohesive place where residents, workers and visitors have quality social interactions and connections, which contributes to overall wellbeing.	5	5	2	5	3	1	3
		Feelings of safety	People in the Aerotropolis feel comfortable, respected and safe in their homes, place of work and out in the community.	5	5	1	3	4	1	4
		Healthy food	People in the Aerotropolis have access to quality, local, healthy food and produce within close proximity to their home or workplace.	3	1	3	3	1	1	3
			Sub-total	400	320	200	380	340	120	260
Economic value	10	Site purchase costs	(3) Low - No site required/ use of existing site (2) Medium - Purchase of small site required/ lease of space in exisitng site (1) High - Purchase of large site required	3	3	3	3	3	3	3
		Set up/ construction costs	(3) Low - No construction required/ minimal planning and set up (2) Medium - Minimal construction required/ Moderate planning and set up (1) High - Extensive construction required/ significant planning and set up	2	1	2	2	2	2	3
		Ongoing costs	(3) Low - Minimal ongoing maintenance/ administration/ staff costs (2) Medium - Moderate ongoing maintenance/ administration/ staff costs (1) High - Extensive ongoing maintenance/ administration/ staff costs	2	2	1	3	3	3	2
			Sub-total	70	60	60	80	80	80	80

Appendix B - Multi-criteria analysis

Early occupation

The second stage has been termed 'mid construction and early occupation' and is anticipated to extend from Year 1 of construction through to the completion of early neighbourhoods or precincts. This final date/timeframe will be dependent on the program. Early activation is likely to occur in the Northern Gateway precinct, Aerotropolis Core precinct and Badgerys Creek precinct. The Aerotropolis Core will have the greatest focus, given the vision and diversity of the future audience. The focus of early-occupation is to continue and to formalise projects initiated in the ore-construction phase and to provide physical spaces for established programs to continue to evolve.

Value	Influence of indicator outcomes
5	High
4	Medium to high
3	Medium
2	Low to medium
1	Low

Weighting	Priority rating		
	High priority	Med priority	low priority
100	=/>1500	>1000,<1500	=/<1000
30	=/>450	>300,<450	=/<300
20	=/>300	>200,<300	=/<200
10	=/>80	>40,<80	=/<40

Weighting (out of 100)	'Loveability' indicator	'Loveability' indicator criteria description	Enhance Connection to Country projects	Semi-permanent community hubs	Enhance connections to the water and green space	Temporary library and 'little libraries'	Community Currency and a community development toolkit	Aboriginal cultural tourism projects	Temporary retail hubs and curated, independent retail mix	STEM and innovative public art and education programs	Pop-up park(s) and fitness and recreation events	Temporary co-working spaces	Legibility, wayfinding and creating habitual movement patterns	Infrastructure to enhance safety, amenity and comfort	Co-located exhibition and maker spaces
		Running Total ('Loveability' score)	1650	1570	1510	1070	1470	1290	1330	1310	1240	1170	1200	1430	1350
Amenities and infrastructure 20	Quality Urban Design	The Aerotropolis has great places with urban design excellence. This delivers high quality design that supports community safety, health and wellbeing, and enhances community assets and character.	5	4	5	3	1	3	5	3	3	2	5	5	3
	Supportive social infrastructure	Communities in the Aerotropolis have excellent social infrastructure. This promotes an integrated approach to social infrastructure that includes healthcare, education, supermarkets, public open spaces and other community/cultural facilities.	4	5	4	5	4	2	3	4	4	4	2	3	4
	Environmental Quality	People in the Aerotropolis enjoy high levels of air, water, light and noise quality, and benefit from improved access to and conservation of green and blue open spaces and places of cultural significance.	5	1	5	1	1	1	3	3	4	1	3	4	2
	Connected communities	Communities in the Aerotropolis are well connected. This supports walking, wheeling, cycling and public transport movement between destinations.	3	4	3	2	1	1	3	1	3	5	5	3	2
		Sub-total	340	280	340	220	140	140	280	220	280	200	300	300	220
Social and cultural life 30	Sense of belonging and local identity	People in the Aerotropolis have a sense of belonging and local identity. This creates great places that are socially inclusive to promote respect and feelings of belonging.	5	4	4	2	5	4	2	3	3	2	3	4	2
	Connection to Country	The connection to land in the Aerotropolis gives local Aboriginal communities and sense of identity and belonging, where land relates to all aspects of existence, including culture, spirituality, language, law and family and identity.	5	3	4	1	3	4	2	3	1	1	3	3	3
	Cultural expression	The Aerotropolis's cultural and arts sectors are supported and are a key ingredient in making great places. Cultural expression brings people together, gives shape and expression to the unique identities of communities and creates lively and dynamic places where people want to live, work, visit and do business.	4	3	3	3	3	4	3	5	1	4	1	3	5
	Night and day activity	The Aerotropolis's vibrancy and vitality is realised through the activation 24 hour a day, 7 day per week. Night time activity creates opportunities for a diversity of workers, including shift workers, to participate.	3	5	3	3	5	5	5	4	5	3	4	5	3
		Sub-total	510	450	420	270	480	510	360	450	300	300	330	450	390
Local empowerment 20	Participation and sense of ownership	Communities in the Aerotropolis are highly engaged. This promotes community participation, empowerment and owner-ship in shaping resilient places and is delivered across all liveability out-comes. Residents and workers feel they have influence over the area and its evolution.	5	5	4	3	5	3	2	3	3	2	3	3	3
	Innovation and creativity	Across the Aerotropolis innovation and creativity is encouraged in business and urban solutions. This supports integration of creative industries, digital technology and monetisation of great ideas.	3	3	3	4	4	3	3	5	1	4	1	2	5
	Diversity of job opportunities	People in the Aerotropolis have a diversity of job and training opportunities. This provides access to a range of jobs and learning / skills development opportunities.	2	3	2	2	3	4	5	3	1	5	1	1	4
	Accessible and affordable	Services, infrastructure and amenities are affordable or free, regardless of age, gender, physical ability, sexual orientation, socioeconomic status or ethnicity. Places enable people to meet and participate in public life.	3	4	4	4	5	3	2	3	5	4	4	4	3
	Resilience	The communities of Aerotropolis have the ability to adapt and manage economic, social and environmental change over time.	4	5	5	3	4	3	3	3	3	4	2	3	3
		Sub-total	340	400	360	320	440	300	300	340	260	380	220	260	360
Health and wellbeing 20	Active lifestyles	The Aerotropolis is a place that enables active lifestyles through quality public realms, open space and place connections. People in the Aerotropolis lead healthy and active lifestyles by regularly participating in passive and active exercise and sport.	3	3	4	2	2	2	2	2	5	2	4	5	2
	Overall wellbeing	The Aerotropolis is a place that enables its residents and workers to maintain a healthy work-life balance while fostering important opportunities for personal growth, cultural expression and community interactions which contribute to a persons overall mental health and wellbeing.	5	5	4	3	4	2	3	3	4	4	3	4	3
	Community connections	The Aerotropolis is a socially cohesive place where residents, workers and visitors have quality social interactions and connections, which contributes to overall wellbeing.	5	5	4	3	3	5	4	3	4	5	3	2	4
	Feelings of safety	People in the Aerotropolis feel comfortable, respected and safe in their homes, place of work and out in the community.	4	3	3	1	3	3	4	2	1	1	4	5	4
	Healthy food	People in the Aerotropolis have access to quality, local, healthy food and produce within close proximity to their home or workplace.	3	3	1	1	3	3	5	1	1	1	1	1	3
		Sub-total	400	380	300	200	340	280	320	240	320	220	280	360	320
Economic value 10	Site purchase costs	(3) Low - No site required/ use of existing site (2) Medium - Purchase of small site required/ lease of space in exisitng site (1) High - Purchase of large site required	2	2	3	2	3	2	2	2	2	3	2	1	2
	Set up/ construction costs	(3) Low - No construction required/ minimal planning and set up (2) Medium - Minimal construction required/ Moderate planning and set up (1) High - Extensive construction required/ significant planning and set up	2	2	3	2	2	2	2	2	3	2	3	2	2
	Ongoing costs	(3) Low - Minimal ongoing maintenance/ administration/ staff costs (2) Medium - Moderate ongoing maintenance/ administration/ staff costs (1) High - Extensive ongoing maintenance/ administration/ staff costs	2	2	3	2	2	2	3	2	2	3	3	3	2
		Sub-total	60	60	90	60	70	60	70	60	80	70	70	60	60

Full build

In the final stage, construction would be complete across most precincts, the Western Sydney International (Nancy-Bird Walton) Airport would be operating, and homes and offices are occupied. The focus of this final stage is to consolidate all established programs and activities and formalise their operations on a more permanent, ongoing basis. The recommendations in this stage focus on high quality and high investment infrastructure that is a regional attractor and destination.

Value	Influence of indicator outcomes
5	High
4	Medium to high
3	Medium
2	Low to medium
1	Low

Wieghting	Priority rating		
	High priority	Med priority	low priority
100	=/>1500	>1000,<1500	=/<1000
30	=/>450	>300, <450	=/<300
20	=/>300	>200, <300	=/<200
10	=/>80	>40, <80	=/<40

Category	Weighting (out of 100)	'Loveability' indicator	'Loveability' indicator criteria description	The community heart (public square & meeting places)	Eco-literacy projects	Playstreets and safe, accessible walking routes	Local, independent and ethical retail mix	Dual-use tenancies	Aboriginal Cultural Centre	Mutli-purpose library facility and co-located co-working spaces	High quality public art on-going programming	Multicultural expression through events, art and design	Connections & learning (healthy food & local produce)
		Running Total ('Loveability' score)		**1710**	**1330**	**1340**	**1250**	**1100**	**1530**	**1280**	**1230**	**1520**	**1310**
Amenities and infrastructure	20	Quality Urban Design	The Aerotropolis has great places with urban design excellence. This delivers high quality design that supports community safety, health and wellbeing, and enhances community assets and character.	5	5	5	4	3	4	3	5	4	1
		Supportive social infrastructure	Communities in the Aerotropolis have excellent social infrastructure. This promotes an integrated approach to social infrastructure that includes healthcare, education, supermarkets, public open spaces and other community/cultural facilities.	5	4	3	3	3	5	5	3	4	3
		Environmental Quality	People in the Aerotropolis enjoy high levels of air, water, light and noise quality, and benefit from improved access to and conservation of green and blue open spaces and places of cultural significance.	4	5	3	2	1	3	1	3	3	4
		Connected communities	Communities in the Aerotropolis are well connected. This supports walking, wheeling, cycling and public transport movement between destinations.	3	1	5	1	1	1	2	1	1	1
		Sub-total		*340*	*300*	*320*	*200*	*160*	*260*	*220*	*240*	*240*	*180*
Social and cultural life	30	Sense of belonging and local identity	People in the Aerotropolis have a sense of belonging and local identity. This creates great places that are socially inclusive to promote respect and feelings of belonging.	5	4	3	3	2	5	4	4	5	4
		Connection to Country	The connection to land in the Aerotropolis gives local Aboriginal communities and sense of identity and belonging, where land relates to all aspects of existence, including culture, spirituality, language, law and family and identity.	5	4	3	1	1	5	2	4	5	3
		Cultural expression	The Aerotropolis's cultural and arts sectors are supported and are a key ingredient in making great places. Cultural expression brings people together, gives shape and expression to the unique identities of communities and creates lively and dynamic places where people want to live, work, visit and do business.	5	3	1	4	3	5	4	4	5	1
		Night and day activity	The Aerotropolis's vibrancy and vitality is realised through the activation 24 hour a day, 7 day per week. Night time activity creates opportunities for a diversity of workers, including shift workers, to participate.	5	3	5	4	5	5	5	3	5	3
		Sub-total		*600*	*420*	*360*	*360*	*330*	*600*	*450*	*450*	*600*	*330*
Local empowerment	20	Participation and sense of ownership	Communities in the Aerotropolis are highly engaged. This promotes community participation, empowerment and owner-ship in shaping resilient places and is delivered across all liveability out-comes. Residents and workers feel they have influence over the area and its evolution.	5	3	2	3	1	4	4	3	3	4
		Innovation and creativity	Across the Aerotropolis innovation and creativity is encouraged in business and urban solutions. This supports integration of creative industries, digital technology and monetisation of great ideas.	3	2	1	4	4	3	3	5	3	4
		Diversity of job opportunities	People in the Aerotropolis have a diversity of job and training opportunities. This provides access to a range of jobs and learning / skills development opportunities.	1	3	1	4	4	3	3	2	2	4
		Accessible and affordable	Services, infrastructure and amenities are affordable or free, regardless of age, gender, physical ability, sexual orientation, socioeconomic status or ethnicity. Places enable people to meet and participate in public life.	5	3	5	3	2	4	4	3	4	4
		Resilience	The communities of Aerotropolis have the ability to adapt and manage economic, social and environmental change over time.	3	4	3	4	4	3	3	2	3	4
		Sub-total		*340*	*300*	*240*	*360*	*300*	*340*	*340*	*300*	*300*	*400*
Health and wellbeing	20	Active lifestyles	The Aerotropolis is a place that enables active lifestyles through quality public realms, open space and place connections. People in the Aerotropolis lead healthy and active lifestyles by regularly participating in passive and active exercise and sport.	3	1	5	1	1	1	1	1	1	1
		Overall wellbeing	The Aerotropolis is a place that enables its residents and workers to maintain a healthy work-life balance while fostering important opportunities for personal growth, cultural expression and community interactions which contribute to a persons overall mental health and wellbeing.	3	3	3	2	2	4	3	2	4	4
		Community connections	The Aerotropolis is a socially cohesive place where residents, workers and visitors have quality social interactions and connections, which contributes to overall wellbeing.	5	3	3	2	3	5	4	2	5	5
		Feelings of safety	People in the Aerotropolis feel comfortable, respected and safe in their homes, place of work and out in the community.	4	2	5	3	3	3	3	2	3	2
		Healthy food	People in the Aerotropolis have access to quality, local, healthy food and produce within close proximity to their home or workplace.	3	3	1	5	2	2	1	1	3	5
		Sub-total		*360*	*240*	*340*	*260*	*220*	*300*	*240*	*160*	*320*	*340*
Economic value	10	Site purchase costs	(3) Low - No site required/ use of existing site (2) Medium - Purchase of small site required/ lease of space in exisitng site (1) High - Purchase of large site required	2	3	3	2	3	1	1	3	2	2
		Set up/ construction costs	(3) Low - No construction required/ minimal planning and set up (2) Medium - Minimal construction required/ Moderate planning and set up (1) High - Extensive construction required/ significant planning and set up	2	2	2	2	3	1	1	3	2	2
		Ongoing costs	(3) Low - Minimal ongoing maintenance/ administration/ staff costs (2) Medium - Moderate ongoing maintenance/ administration/ staff costs (1) High - Extensive ongoing maintenance/ administration/ staff costs	3	2	3	3	3	1	1	2	2	2
		Sub-total		*70*	*70*	*80*	*70*	*90*	*30*	*30*	*80*	*60*	*60*

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