



REIMAGINING INNOVATION IN HEALTH, EDUCATION AND RESEARCH

LAND USE ANALYSIS AND PRECINCT STRATEGY
ICT STRATEGY
INVESTMENT FRAMEWORK

DECEMBER 2018





CONTENTS

Executive Summary	1
1 Introduction	4
1.1 Objectives of the Framework	5
1.2 Who was consulted	5
1.3 How this report is structured	6
2 Local business conditions supporting the Precinct	8
2.1 Overview of Liverpool's business environment	9
2.2 What does the Precinct's location offer to prospective targets?	9
3 Current stage of development of the Precinct	12
3.1 The stages of development of innovation precincts	13
3.2 Initiation stage	14
3.3 Development stage	16
3.4 Growth stage	18
3.5 Maturity stage	19
4 The capabilities driving the attractiveness of the Precinct	20
4.1 Competitive advantages of the Liverpool Innovation Precinct: innovation destination	21
4.2 A Three Pillar Innovation Destination	22
5 Complementary strengths and opportunities	26
6 Who should we encourage to join the Precinct?	30
6.1 Health innovation	32
6.2 Investor targeting and segmenting	33

7	Attraction services that can be provided to potential targets	34
7.1	What do investors want?	35
7.2	What services are provided to investors?	36
7.3	Government support	37
7.4	Overview of facilitation services provided in the Precinct	38
8	How will we attract investors, talent and partners?	40
8.1	International collaboration	41
8.2	Focussing on the investor	42
8.3	Connecting and working with partners	44
8.4	Potential innovation ecosystems	46
8.5	Coordination-enabled collaboration	47
8.6	Enhancing investment capability of Liverpool Innovation Precinct members	48
8.7	Use of a varied mix of direct and indirect investment attraction tools	49
9	Recommendations – Moving from thinking to doing	50
10	Attachments	56
	Attachment 1 – Recommended Unique selling proposition: Why the Liverpool Innovation Precinct?	57
	Attachment 2 – Message from the Liverpool Innovation Precinct co-chairs	60
	Attachment 3 – The Precinct’s ‘get things done’ culture is a drawcard	61
	Attachment 4 – Case Study	62
	Attachment 5 – Health sector in Liverpool Capability Statement	63
	Attachment 6 – Feature: summary of the redeveloped Liverpool Hospital	66
	Attachment 7 – Education and Research Capability Statement	68
	Attachment 8 – Case Study: \$16 million MRI Linac and Associate Professor Gary Liney	71
	Attachment 9 – Table: Industry segmentation and potential targets	72
	Attachment 10 – Case Study	76



EXECUTIVE SUMMARY

The Steering Committee of the Liverpool Innovation Precinct (the Precinct) commissioned Johnstaff to prepare the Investment Framework to guide the Precinct's development.

This framework:

- assesses the Precinct's strengths, limitations and current stage of development
- identifies the sectors the Precinct should prioritise for attracting investment and partnerships
- identifies the services currently available to Precinct members to attract investors and partners
- provides recommendations for how the Precinct can mature in its development.

The Precinct's current stage of development

The Investment Framework uses four high-level stages to illustrate the development of innovation precincts: Initiation, Development, Growth and Maturity. While presenting tremendous opportunities, the Precinct is in the first stage of development (the 'Initiation' stage) as collaboration is still largely undertaken in an ad hoc manner.

To advance to the 'Development' stage, the Precinct needs to:

- prioritise its areas of focus
- establish formal processes and structures to define members' roles and responsibilities
- become investment-ready by attracting talent, partners and research (rather than simply focusing on traditional investment).

The stages of precinct development are explored in chapter 3.



The Precinct's Three Pillars

The Investment Framework proposes the Precinct focuses on attracting investments and partnerships that align with its existing strengths in the sectors of health (Pillar 1), and research and education (Pillar 2), which will be complemented by a focus on innovation (Pillar 3). Not only will this targeted approach ensure the Precinct's resources and members are all working towards common goals, it will also assist the Precinct to develop a strong identity that differentiates it from its competitors.

Pillar 1: Health

The Precinct is home to world-class health capabilities and facilities, including Liverpool Hospital – Australia's largest standalone hospital. There is significant potential for the Precinct to deepen its capabilities in a range of health-related fields, including clinical trials, robotic assisted technologies and radiation oncology. There is also the opportunity to attract international partnerships and investments through the Precinct's research into health issues impacting communities from other countries – particularly those from Asia.

Pillar 2: Education and Research

The Precinct has a growing education and research sector, which includes the presence of a number of major universities that could be used to attract more researchers and partners. Also within the Precinct's boundaries is a TAFE NSW campus and a number of private training institutions that can support businesses to upskill their workforce.

Pillar 3: Innovation

In addition to the two sectoral pillars, innovation will act as a third pillar for the Precinct. This focus on innovation is already underway through the development of Liverpool City Council's Innovation Strategy, which is likely to be finalised in 2019. Under this strategy, the council aspires to make Liverpool a city of innovation through a range of initiatives such as training and improved use of data.

The three pillars are described in more detail in chapter 4.

Targeting and facilitating investment

Precinct members should target investment and partnerships with the health, research and education and innovation sectors by:

- seeking collaborations and partnerships in the Asia Pacific region that complement the Precinct's unique research and health outcomes
- facilitating investment through an account management approach and a 'single point of entry' for investment leads
- connecting and working with partners to leverage a broader range of service offered to investors
- speaking to investors in a 'single voice' by communicating with agreed messages and information
- enhancing investment capability of the Precinct partners to promote Investment readiness of the precinct through training and a shared understanding of opportunity
- use of a wide range of investment attraction channels that is fit for the purpose of the opportunity.

Services available to members

Precinct members need greater awareness of the services they can access to facilitate attract investment. These services are available through the Precinct's diverse membership, particularly the Liverpool City Council and NSW Government's Western Sydney Investment Attraction Office.

More detail about the services available to members is provided in chapter 7.

Recommendations

The Investment Framework makes eight recommendations, with detailed supporting sub-recommendations (see chapter 9), to guide the development of the Precinct. These recommendations are complemented by a range of promotional materials, such as messages, capability statements and a unique selling proposition (provided in the attachments to this report).

The Investment Framework's eight main recommendations are:

1. Focus effort on developing the Precinct – making it investment-ready and building the existing strengths in health, and research and development.
2. Enable collaboration through formalised partnerships and structures.
3. Build strategic alliances to lift the capability of the Precinct.
4. Invest in a shared resource responsible for coordination of efforts to develop the Precinct.
5. Use consistent messages and information to create a shared awareness of opportunities.
6. Use a targeted approach to specific investors and potential partners to secure investment and distinguish the Precinct from competitor locations.
7. Make the investment journey as easy as possible for investors by leveraging Precinct members' full-service offer, creating a single door of entry, and using an account management approach.
8. Promote transparency and accountability through shared performance measures.



1

INTRODUCTION

This Investment Framework guides the Precinct on its journey to become an innovation destination for health, education and research. Johnstaff worked with Wendy Carroll from Jobs for NSW and the Steering Committee’s investment sub-working group to undertake a series of workshops and consultations to understand the need and issues, and to test the research findings. This report is a culmination of the workshops, consultations and research and analysis.

1.1 Objectives of the Framework

The investment sub-committee developed the following objectives to support the Precinct in attracting talent, investors and partners. These objectives respond to common themes identified in consultations and workshops:

- build on the Precinct’s key sectoral strengths in health and research and education
- contribute to growth in knowledge-intensive jobs
- support the economic development of Liverpool and the Precinct by filling gaps or enabling growth in complementary sectors
- enable pathways to commercialisation of research being undertaken
- enable businesses to move up and along global value chains
- align with an Asia-Pacific focus for international collaboration.

1.2 Who was consulted

The investment sub-working group

The Steering Committee of the Liverpool’s investment sub-working group was consulted in the development of this framework. The sub-working group includes representatives from the following Precinct organisations:

- Jobs for NSW, NSW Department of Industry
- Western Sydney Investment Attraction Office (WSIAO), NSW Department of Industry
- Ingham Institute for Applied Research
- Schools Infrastructure (SI), NSW Department of Education
- South West Sydney Local Health District (SWSLHD)
- South West Sydney Primary Health Network
- Liverpool City Council (LCC).

Precinct members

The following Precinct members (who are not represented on the sub-working group) were also consulted:

- TAFE NSW
- University of NSW (UNSW)
- University of Wollongong (UoW)
- Western Sydney University (WSU).

Key influencers

One-on-one consultations were undertaken with two key influencers:

- Professor Les Bokey, Clinical Dean, Western Sydney University at Liverpool Hospital; and Clinical Director of Research and Surgery for the South Western Sydney Local Health District
- David Borger, Sydney Business Chamber (SBC) and co-chair of Liverpool Innovation Precinct.

1.3 How this report is structured

The report's chapters are grouped in the following three sections:

SECTION 1 – ASSESSING THE BUSINESS ENVIRONMENT

Section 1 assesses the factors impacting Liverpool's business environment in order to identify the Precinct's unique selling proposition. It includes the following chapters:

- Chapter 2: **Local business conditions** – this chapter assesses the positive characteristics in Liverpool that contribute to the overall attractiveness of the Precinct.
- Chapter 3: **Current stage of development of the Precinct** – this chapter analyses the Precinct's level of maturity as an innovation precinct and provides advice on how the Precinct can develop to the next level of maturity.
- Chapter 4: **Capabilities driving the Precinct** – this chapter analyses how the Precinct's three strongest sectors (health, education and research, and innovation) can be leveraged to attract potential investors and partners.
- Chapter 5: **Complementary strengths and opportunities** – this chapter identifies Liverpool's and the broader region's strengths and opportunities that contribute to the overall attractiveness of the Precinct as an innovation destination.

SECTION 2 – ATTRACTING PARTNERS, INVESTORS AND TALENT

Section 2 examines how Precinct members could assist potential partners, investors and talent to join the Precinct. It includes the following chapters:

- Chapter 6: **Who should we encourage to join the Precinct** – This chapter identifies sectoral segments for targeting with a recommended prioritisation and suggested process of how to identify potential targets in the future.
- Chapter 7: **Attraction services that can be provided to potential targets** – this chapter summarises the investment and partnership facilitation services that are available to the Precinct.

SECTION 3 – PRIORITIES AND RECOMMENDATIONS

Section 3 identifies the priorities and recommendations for attracting potential investors and partners to the Precinct. It includes the following chapters:

- Chapter 8: **How will we do this**: This chapter identifies components of a collaborative investment framework for the Precinct.
- Chapter 9: **Recommendations** – Moving from thinking to doing: this chapter provides recommendations to guide the development of the Precincts.

Attachments – Promotional materials

The sub-working group identified that many of the research findings from this report could be used to create promotional content, including on the Precinct website and collateral for individual members. This content could inform a future communications plan for the Precinct.

These promotional materials include:

- introductory and welcome remarks by the two co-chairs of the Steering Committee
- a recommended unique selling proposition for the Precinct with supporting key messages
- capability statements for the Precinct's health and education and research sectors
- two features: one highlighting the redevelopment of the Liverpool Hospital and one promoting the Precinct's strong work culture
- four case studies demonstrating the Precinct in action.





2

SECTION 1 – ASSESSING THE
BUSINESS ENVIRONMENT

LOCAL BUSINESS CONDITIONS SUPPORTING THE PRECINCT

About this chapter

This chapter examines the business environment in Liverpool and other environmental forces that a potential target may encounter when considering the Precinct and Liverpool more broadly.

2.1 Overview of Liverpool's business environment

The Precinct's primary capabilities are derived from members' collaboration and activity in the health and education, and research sectors. However, the Precinct's location-specific characteristics also contribute to the attractiveness of Liverpool as a destination for businesses, students, researchers and talent.

The key characteristics of Liverpool as a business destination include:

- a culture that encourages collaboration and new partnerships
- a connected and accessible Precinct

- opportunities for innovators to start, scale and grow their businesses globally
- a place where an individual can live, work and play locally
- a comparatively low cost of living with a mix housing options, and social amenities making for an inclusive community.

As part of the overall analysis for this report a standalone feature section has been created that showcases the Precinct's culture as a drawcard – refer to Attachment 3.

2.2 What does the Precinct's location offer to prospective targets?

The Precinct is accessible to partners, amenities and a bustling city centre

The Precinct is located between tertiary education, research partners and the Liverpool Hospital, and in close physical proximity to a city centre with diverse social amenities. Anchored by Liverpool Hospital and the CBD, there is great potential for both small and medium enterprises to enter and grow within the existing footprint. The co-location of schools, public and private health services, vocational education training institutions, secondary and tertiary education, and medical research institutions represents a uniquely integrated provision of amenities and services.

Liverpool similarly offers affordable parcels of industrial land connected to local transport links. Competitive investment will see interest drawn to the available industrially-zoned land, encouraging the participation and inclusion of a range of sectors within the Liverpool area, including health and wellbeing, building and construction, advanced manufacturing, and transport and logistics. The Precinct's landscape is walkable and connected to key points without physical barriers, which will support the development of its economic footprint and links with the business district.

Liverpool's diverse and young population is a growth opportunity

One in three new residents in NSW will live and work within south western Sydney by 2036. In 2016, Liverpool experienced population growth of 2.3 per cent and is expecting another 40 per cent growth over the next decade. With over half of its residents being under 34 years old, Liverpool has a large economically-active population who are both consumers of goods and services, and who can provide a locally-accessible workforce. Rising levels of VET and tertiary education attainment will continue to drive Liverpool's economy that currently supports 74,500 jobs and the key employment industries of health care and social assistance (11.9 per cent), construction (11.1 per cent), manufacturing (10.6 per cent) and retail (12.1 per cent).

Liverpool is also a multiculturally and linguistically diverse city, with over 130 languages spoken by the local population – with Arabic, Vietnamese, Hindi, Spanish and Serbian being the most commonly spoken second languages. This diverse community offers a readily available workforce to support businesses' international engagement, which will allow for a greater realisation of the city's potential.

Liverpool offers a balanced quality of life that welcomes newcomers to live, work and play

Liverpool is positioned to be a self-sufficient innovation ecosystem, proud of a young and dynamic population advancing a skilled workforce into a strong economy. Subject to a 77 percent population increase in the South Western region's population by 2036, Liverpool is equipped to provide its residents with a place to live, work and play. Liverpool is developing its civic amenities to encourage community interaction within its:

- 400 preschools, primary schools, secondary schools and university campuses
- 24 general and specialist hospitals
- nearly 250 sporting facilities, open spaces and sporting venues
- over 40 shopping centres and community civic spaces.

The Precinct is connected to the world through strong transport infrastructure

The Precinct is connected to essential transport links, giving businesses access to key transport centres and global markets. It is linked to Sydney's main arterial roads and motorways, including the M5 and M7 motorways, and Hume Highway – these roads provide road and rail access from Liverpool to the Sydney's eastern central business district, Sydney Airport, Moorebank Intermodal and Port Botany. Public transport similarly links in and out of Liverpool, including the Liverpool Bus-Rail Interchange, the Liverpool to Parramatta T-Way and the recently completed South West Rail Line.

Liverpool is at the centre of a region going through tremendous growth

Western Sydney is Australia's third largest metropolitan economy. Liverpool is one of the key hubs in Western Sydney, acting as the commercial and residential hub of the Greater Sydney Commission's Western Parkland City. The Western Parkland City's population is expected to grow from 740,000 in 2016 to 1.1 million by 2036, and to well over 1.5 million by 2056. The Liverpool area could be home to up to 16,200 new jobs and have capacity for up to 18,800 new dwellings by 2036, making a significant contribution towards Western Parkland City's population growth. In addition, Liverpool will be home of up to 15,000 tertiary students.

The new Western Sydney Airport will drive growth in new industries and broader economic development activity in the Western Parkland City. The airport will have a transformative impact on Liverpool, given that it will be the closest city centre to the airport and that it is home to almost a third of south west Sydney's businesses – with Liverpool forecast to have a workforce of 122,000 jobs by 2036.

The attractiveness of Liverpool to local a business is demonstrated through a case study on GWA's decision to set up business in Liverpool – refer to Attachment 4.







3

SECTION 1 – ASSESSING THE
BUSINESS ENVIRONMENT

**CURRENT
STAGE OF
DEVELOPMENT
OF THE PRECINCT**

About this chapter

This chapter assesses the level of maturity of the LIP as an innovation precinct, with recommended actions for its further development.

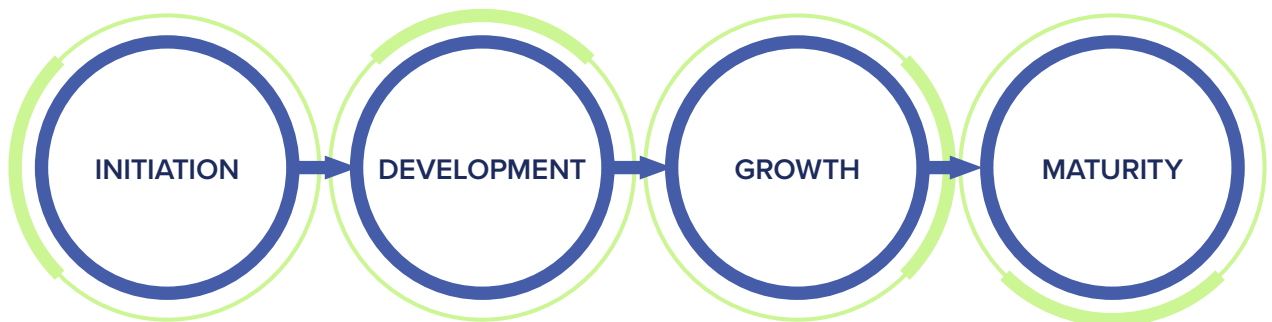
3.1 The stages of development of innovation precincts

In collaboration with the investment sub-working group and Jobs for NSW, Johnstaff has identified the following four high-level stages for the evolution of innovation precincts:

- Initiation
- Development
- Growth
- Maturity.

While the Precinct presents a tremendous level of opportunity, the sub-working group's assessment indicates the Precinct is in the first stage of development – the 'Initiation' stage. The key characteristics of each stage of development are outlined below.

Figure Stages of development of a precinct



3.2 Initiation stage

The key characteristics of innovation precincts at the initiation stage are as follows:

1. Opportunity for collaboration to enable sparks of innovation with the presence of multiple research and development partners. For health precincts, this requires the presence of universities, research institutions and a hospital.
2. A governance structure that includes all key representatives, such as universities, health facilities, government stakeholders and representatives from the business community.
3. A clear vision, including the identification of the capabilities that will be leveraged.
4. Available information to articulate the precinct's strengths.
5. An agreed land-use plan is established to support a forward-looking vision and ease of access to land and infrastructure are critical.
6. Partnerships have been created with key decision makers at all levels of government.
7. Defined roles and responsibilities of all participating partners required to support the development of the precinct.

Table: How well the Precinct meets the characteristics of the Initiation Stage

Characteristics	Observation within the Precinct	Action required
Presence of universities, VET, schools, hospital and research institution	the Precinct meets this requirement.	N/a
Clear governance structure	Governance structure has not been formalised.	The Precinct Steering Committee and sub-working group need to formalise the governance structure with a long-term MoU, which includes Terms of Reference. Refer to <i>Recommendation 2.2</i>
Clear vision and identification of the capabilities to be leveraged	Multiple visions exist, including in this report.	Needs to be formalised through shared agreement and consistent use/roll out.
Availability of information	Good quality information exists.	Processes are needed to capture and share information.
An agreed land-use plan	Being prepared through the master planning process.	Master planning underway.
Robust partnerships with key decision makers	Partnership exists on an ad hoc basis and are reliant on personal relationships.	Prepare an MoU.
Clarity of roles and responsibilities	There is a lack of clarity regarding the Precinct members' roles, responsibilities and potential offer. The ad hoc environment is probably reflective of the high volume of work Precinct members' face in realising the aspirations for Liverpool and the Precinct.	To be articulated through a potential MoU that will provide a clear authorising environment for collaboration



3.3 Development stage

The key characteristics of precincts at the Development stage are as follows:

1. Local leadership on the ground with day to day access and engagement in the precinct.
2. Highly qualified researchers to serve as champions of the opportunities in the precinct.
3. Capacity to identify and address market failures and other barriers (refer to list of potential barriers).
4. Capacity to identify and capture spill-over growth opportunities from the two key capabilities.
5. Develop and support strategic alliances with complementary partners not involved in the precinct, such as other international health precincts, and potential research partners.
6. Coordinated marketing and promotion.
7. Shared understanding of the precinct's strengths and capabilities.
8. Supported collaboration:
 - a. structures and networks to support collaboration
 - b. functioning processes to mine and share information
 - c. links to other innovation precincts
 - d. links into the business community
 - e. capacity to remove inhibitors of collaboration
 - f. encourage development of shared capabilities, connections and networks.

Table: How well the Precinct meets the characteristics of the Development Stage

Characteristics	Observation within the Precinct	Action required
Local Leadership	Liverpool City Council is actively supporting initiatives for the Precinct in collaboration with the LHD and State Government.	To be articulated in an MoU.
Highly qualified researchers	There are 350 researchers working at the Ingham Institute for Applied Medical Research, and this is growing rapidly due to the reputation of the organisation for being easy to do business with and agility in servicing the needs of the research community.	Effort to attract qualified researchers of international standing should continue and be expanded.
Capacity to address market failures	Limited. This is a function that needs to be shared but with a lead.	Consideration of resourcing requirements.
Capacity to capture spill over growth opportunities	Limited. This is a function that needs to be shared but requires someone to take lead responsibility.	Consideration of resourcing requirements.
Evidence of ongoing commercialisation of research	Limited. Available examples are mostly from the Ingham Institute.	N/a.

Characteristics	Observation within the Precinct	Action required
Existence of strategic alliances	Some formal alliances. An MoU has been signed between the SWSLHD and a number of corporates.	The focus of efforts to attract should be expanded to include – ‘seek strategic alliances’ with complementary partners. Refer to <i>Recommendation 3.1</i> .
Coordinated marketing	Does not occur.	The Steering Committee should target 2-3 initiatives per quarter for coordinated marketing.
Access to start ups, incubators and venture capital	Not in the Precinct. However, pathways can be created through Jobs for NSW (e.g. Reverse Pitch Program).	N/a
Shared understanding of the strengths & capabilities	This Report addresses this issue.	N/a
Supported collaboration	The Steering Committee and sub-working groups provide a significant step to formally support the collaboration. However, collaboration is largely occurring in an ad hoc manner and is heavily reliant on personal bonds and relationships. A more structured approach to collaboration is needed to ensure partnerships are sustainable and collaborative projects are delivered efficiently and effectively.	Ensure there is awareness, linkages and activation of partner organisations’ diverse array of networks that can be leveraged need to be shared and maintained. Encourage data mining and sharing through an MoU. Create links outside the Precinct. Ensure there is capacity to remove barriers, with resourcing and an authorising environment. Enhance shared capability development. Establish a co-funded coordinator role located in Liverpool, who is tasked to oversee the coordination of Precinct activities. This person would act as an executive officer and have the stature to represent the Precinct. Refer to <i>Recommendation 4.1</i>

3.4 Growth stage

The key characteristics of precincts at the Growth stage are as follows:

1. Alignment of public and private investment.
2. Strong awareness and understanding of the drivers for growth (strengths and opportunities).
3. Strong awareness of the opportunities within the precinct by those located outside the Precinct.
4. Specific investment and partnership opportunities.
5. A good pipeline of activities, partnerships, and investment.
6. Clarity of roles and responsibility with allocated resources.
7. Well understood rules of engagement.
8. Robust demand for the precinct's products and services.
9. Access to public and private funding, which creates momentum (governments or not-profit are usually the initial source and catalyst for more interest).

Table: How well the Precinct meets the characteristics of the Growth Stage

Characteristics	Observation within the Precinct
Alignment of public and private investment	Too early to occur.
Strong awareness of the drivers	Patchy but constant improvement is being made.
Strong awareness of the opportunities from outside the precinct	Limited.
Specific investment and partnership opportunities	Limited. This report, previous report and others being undertaken by the Liverpool City Council will assist.
Complementary activities and strengths	Strengths are currently limited to the health, and education & research sectors.
Clarity of roles and responsibility	Limited.
Well understood rules of engagement	Ad hoc.
Access to public and private sector funding	Limited. At a later point, a business case could be made to fund a program designed to grow the Precinct.
Robust demand	Assumed – not known.

3.5 Maturity stage

The key characteristics of precincts at the maturity stage are as follows:

1. financial self-reliance and self-funding
2. widely accepted long term vision
3. existence of whole-of-cycle innovation ecosystems.

Table: How well the Precinct meets the characteristics of the Maturity Stage

Characteristics	Observation within the Precinct
Financial self-reliance	Premature. To be observed.
Widely accepted long term vision	Vision is being finessed.
Existence of a whole of cycle innovation ecosystems	Premature. To be observed.





4

SECTION 1 – ASSESSING THE
BUSINESS ENVIRONMENT

THE CAPABILITIES DRIVING THE ATTRACTIVENESS OF THE PRECINCT

About this chapter

This chapter provides:

- an analysis of the Precinct's three pillars (health, research and education, and innovation), which will assist to build a clearer understanding of the Precinct's strengths for potential targets
- capability statements for the two sectoral assets of health, and education and research
- sectoral intelligence that can serve as tools to inform potential targets.

4.1 Competitive advantages of the Liverpool Innovation Precinct: innovation destination

By positioning the City of Liverpool as an 'innovation destination', the Precinct has the potential to enable knowledge-based job creation, increase productivity and drive economic development. As the closest city centre to the future Western Sydney Airport, Liverpool needs to capitalise on the opportunity to promote itself as a destination of innovation.

The Precinct should use its existing strengths and attributes to create a competitive advantage. These strengths and attributes include:

- established links into Liverpool's thriving community
- unique demographics to support distinct research projects that are not possible in many other locations
- an experienced network of industry, non-government organisations, research and educational institutions promoting higher levels of innovation, knowledge transfer, and commercialisation to drive sustainable economic growth and job creation
- recognition regionally and nationally as one of the three cities of Sydney
- proximity to growing future economies of the Western Sydney Parkland and the closest city to the Western Sydney Airport.

A total of \$13 billion worth of major infrastructure is being invested into Liverpool, and with strong roots in manufacturing and logistics, health, wholesale, trade, transport, education and construction. In order to become an 'innovation destination' the Precinct will be required to:

- leverage its unique selling proposition, targeting incoming investors and investment opportunities
- leverage the core regional economic and institutional strengths, either existing or emerging
- encourage the participation of both businesses and individuals that can realise commercial potential in Liverpool
- attract and retain talent, and continue a flow of skilled labour while upskilling existing workers
- create a compelling identity that conveys the Precinct's defined competitive advantage and shared vision.

4.2 A Three Pillar Innovation Destination

The Three Pillars proposed to promote the Precinct as an innovation destination are the:

- health sector
- education and research sector
- innovation.

The Precinct's strengths within each of these sectors are described below.

4.2.1 Health sector strengths

The Precinct's world class health-related capabilities are as follows.

Ground breaking clinical trials capability

South West Sydney Local Health District (SWSLHD) is investing heavily in the development of a best-in-class clinical trials centre, in close collaboration with the Ingham Institute for Applied Medical Research. Ensuring patients have access to the latest treatments for cancer and chronic disease is driving this investment. Today the Precinct hosts 17 Phase I trial beds and delivers streamlined governance and ethics approval processes.

The Precinct is a place health partners can start, scale and grow their business

From pre-clinical development to pilot, trial and validation, the Ingham Institute for Medical Research, its university partners and the SWSLHD are reaching out to new partners to expand and deepen health services and related research. Liverpool has sites in close proximity to the hospital, world class logistics facilities, access to relevant value chains (such as 3DP, machining, contract manufacturing of soft-gel capsules, and sterilisation and packaging) and access to talent from its clinical operations, universities and vocational education and training sector.

There are clear pathways for the adoption of new robotic assisted technologies into the precinct

The South West Institute for Robotics and Automation in Health (SWIRAH) was established to research how robotic surgery, automation and artificial intelligence will affect the health sector into the future. The establishment of the Academic Robotic Surgical Unit Training Program is enabling surgical training in the use of this technology in health care. This program attracts surgeons from across Australia and the world.

The Precinct is a centre of excellence in radiation oncology

The Precinct host a cyclotron that is GMP certified to manufacture radiopharmaceuticals. This enhances the Precinct's ability to offer industry partners the opportunity to deploy specialised imaging and diagnostic services.

Liverpool is Australia's largest standalone hospital

The NSW Government has committed \$740 million to redevelop Liverpool Hospital, which will expand health services and address the forecasted 77 per cent increase to South Western Sydney's population by 2036 through:

- increasing overall bed count from 713 to 900
- expanding cancer care
- expanding critical care services for emergency
- consolidate the quality of ambulatory care services.

The hospital will have improved capacity to maintain and grow its role as a centre of medical excellence for greater Sydney and enhance its reputation for world class clinical expertise in innovation, teaching and training, and cutting-edge technological advancements.

For greater detail please refer the Health Capability Statement in Attachment 5. Due to the importance of the hospital as a catalyst for innovation in Liverpool a 'Feature' promoting the hospital has been created – refer to Attachment 6

4.2.2 Education and Research strength

The Liverpool Innovation Precinct has a growing education and research sector that is characterised with:

- success in attracting researchers of international standing to its state-of-the-art facilities to undertake research that is unique to the Precinct members
- strong links through partnerships have created access to research activities across Australia and globally
- students that are able to attend educational institutions from kindergarten to higher education,
- training organisations afford businesses the opportunity to upskill and access skills development within in close proximity
- growth plans for the education and research sector demonstrates long term confidence.

For greater detail please refer the Education and Research Capability Statement in Attachment 7.

A case study has been prepared that highlights research undertaken with the MRI Linac – refer to Attachment 8.

4.2.3 Innovation

In addition to the two sectoral pillars, the third pillar of potential strength for the Precinct is the significant effort to drive activities supporting innovation in the Precinct and across Liverpool. Technology is bringing disruption and making our world more connected, which is causing traditional sources of advantage to wane in value. Innovation is ever more critical for job creation, improving standards of living and lifting productivity to improve economic performance. We need to strengthen our capacity to generate value from our ideas and our ingenuity.

The Liverpool City Council (LCC) and Liverpool Innovation Precinct (the Precinct) members are alert that as the Precinct and the wider Liverpool economic hub develops it will spark opportunities across a range of innovative sectors such as smart city, bio science, clean tech, logistics and manufacturing. The LCC is aiming to use the unprecedented level of investment in the Precinct and in Liverpool to be a catalyst to drive other knowledge-based sectors.

The LCC is working on a long-term Liverpool Innovation Strategy (the Strategy) to drive economic development through three potential themes:

- Council as an innovation leader
- a city of innovation
- innovation through collaboration.

The Strategy is currently being considered by the LCC and is expected to be released in early 2019. The Strategy will propose new actions for the future and be consistent with regional, state and federal government policies and direction, and will integrate commitments from the Western Sydney City Deal and relevant actions in LCC's Delivery Program.

Some of the actions in the Strategy being considered:

- supporting innovation through a back-end data system to support innovative solutions that lead to better lives for people who live, work and play in Liverpool
- training staff to support innovative companies seeking to be part of the solution
- develop a systematic process in place to bring new approaches to key problems and opportunities in Liverpool that ensures early and continuous engagement of key stakeholders
- providing on-the-ground leadership in development of the Aerotropolis and the Liverpool Innovation Precinct, delivering a vibrant economy and improved liveability night and day for the people who live, work and play in Liverpool
- facilitating educational opportunities in Liverpool to upskill the talent that will support the Liverpool Innovation Precinct and Aerotropolis.

While is yet to be finalised, components of the draft Strategy could be game changing for innovation within the Precinct. The draft Strategy's proposed back-end data system, for example, aligns with themes in the World Economic Forum's whitepaper *Data Driven Cities: 20 Stories of Innovation* (2017). In particular, the use of technology-led data to drive innovation, not only to improve services and liveability, but also to partner with the private sector. Indeed, the availability of data is a key attractor for innovators, start-ups and others tackling problems through technology.

The Smart Pedestrian Project

An example of the LCC's partnerships to find innovative solutions is the Smart Pedestrian Project, which has attracted Australian Government Smart Cities and Suburbs funding. This project will generate and use data to inform planning decisions and respond to challenges being faced by the increasing number of residents and workers using the city centre every day.

Thousands of people walk through Liverpool's city centre every day and, through the Smart Pedestrian Project, the paths they take will help shape the city's future. Liverpool City Council will count pedestrian and vehicle movements around the city centre, collecting data from smart devices and camera-counting technology. Council is working with an IT company Meshed and the University of Wollongong to deliver the technology. The university will develop the people-counting technology and data analysis. The Precinct's boundaries are part of the target area for the project, with the Precinct being an integral part of Liverpool's urban planning and ambition for the city centre's renewal.

MasterCard Partnership in Liverpool

The LCC signed an agreement with MasterCard to collaborate on MasterCard's City Possible program, an initiative bringing the public and private sectors together to solve issues facing cities. The partnership places LCC as part of a network of like-minded city administrations seeking private sector partnerships to solve system-wide challenges.

The LCC and Mastercard will co-develop, pilot and scale solutions to increase economic activity in the city centre. What is unique about this partnership is that it allows the LCC to go beyond previous private sector relationships that have focussed on fixing a specific problem. This is a partnership that will allow the LCC to provide program-based solutions and roadmaps across multiple services offerings. It is expected that one of the initial projects will look for solutions to activate the night economy in Liverpool.

The broader Precinct could work with the LCC to leverage their effort to drive an Innovation City but also harness the brand power of existing partnerships with Mastercard, University of Wollongong, Meshed and others to emerge through LCC's long term Innovation Strategy.





5

SECTION 1 – ASSESSING THE
BUSINESS ENVIRONMENT

COMPLEMENTARY STRENGTHS AND OPPORTUNITIES

About this chapter

This chapter highlights complementary strengths and opportunities that contribute to the overall attractiveness of the Precinct as an innovation destination.

Liverpool: the edge city for the Western Sydney Airport

In 2026, Liverpool will become the main 'edge city' to the Western Sydney Airport (WSA) and Aerotropolis. Of the edge cities (Liverpool, Penrith, Fairfield, Camden and Campbelltown), Liverpool will be best positioned as the commercial hub and central business district to the airport-related business, with an exponentially growing skilled population situated between the WSA and the Kingsford Smith Airport, Sydney.

Liverpool already has a diverse array of robust industries prepared to equip the WSA during both its construction and operational phases. In effect, this will drive job creation in the sectors of defence, manufacturing, health care, freight and logistics, agribusiness, and education and research. Already there are over 5000 freight and logistics businesses operational in South Western Sydney, contributing \$1.3 billion of value to the national economy. WSA is expected to double Australia's airfreight volume by 2030.

About the Western Sydney Airport

The long-awaited 24-hour Western Sydney Airport (WSA) at Badgery's Creek is set to open in 2026, creating new channels between Sydney and Australia's global trading markets. After decades of debate, the location for the Western Sydney Airport was officially confirmed in March 2014. It is expected that the WSA and surrounding Aerotropolis precinct will be a catalyst for growth and increase Australia's international trade and investment partnerships; creating a logistics hub to support the further growth of airfreight, generating significant employment opportunities, and facilitating improvements in productivity and competitiveness within the logistics sector itself.

The Australian Government has coordinated a \$5.3 billion investment to deliver the airport, estimating five million passengers to pass through in its first year of operation (in 2026) and a total of 80 million each year by 2056. WSA enjoys a strong commitment from all levels of government with a 20-year commitment of \$20 billion worth of public investment to support the design and delivery of the Aerotropolis and auxiliary transport networks, which will ensure that the 10,000-hectare site reaches its full potential.

The Australian Government has identified several economic benefits as a result of the additional commercial services and industry involvement necessary to the operation and growth of the WSA. This includes approximately 11,000 direct jobs to be generated by its construction, 28,000 direct and indirect jobs created by the early 2030s and nearly 120,000 in the long term¹. The City of Liverpool presents the greatest potential to become the complementary hub and primary city centre from which business and people can access a diverse mix of services and industries and the airport itself.

¹ Commonwealth of Australia 2017, Jobs for Western Sydney: Building Western Sydney Airport, p.2



Transport and logistics

The south western Sydney and Liverpool regions continue to be the most strategically important transport and logistics hubs in Australia, providing over 9000 jobs and employing a skilled workforce of over 25,000². Furthermore, the transport and logistics industry in south western Sydney is one of Australia's fastest growing freight hubs directly linked to national, regional and global markets. Companies driving this activity include Toll, Swire Cold Storage, Ikea, Salmat, Defence National Storage & Distribution Centre, and Multipack.

With such robust industry capability within the Liverpool and the south west regions, transport and logistical services will complement the aspirations of the WSA and Aerotropolis. Airport-related investment into new intermodal terminals and new road infrastructure (similar to the Moorebank Intermodal Terminal connecting Sydney Airport and the Aerotropolis) will strengthen the existing capabilities and future regional requirements of freight and logistics.

Liverpool is in a position to support the transport and logistics needs for Sydney, NSW and Australia with freight and logistic connections to Port Botany (Sydney), the Port of Newcastle and Port Kembla (Wollongong), and will be the central hub for the movement of goods to the regions and globally.

Building and construction

The construction of the Aerotropolis, the Western Sydney Airport and connecting roads and transport infrastructure requires the participation of a local and skilled workforce. Future opportunities for the building and construction industry include projects in:

- public transport and roads
- health infrastructure
- education infrastructure, including the Aerospace Institute, schools, and university and training facilities
- water infrastructure.

South western Sydney six technical colleges and eight specialist skills centres for vocational education and training will have the opportunity to play a leading role in ensuring that there is a supply of local, skilled labour to support the construction of the WSA. Forecasts will see the WSA providing employment for half the number of resident construction workers in south western Sydney – approximately 14,000 jobs.

² Committee for Liverpool 2016, Investment Prospectus: Invest in the Great South West, https://www.liverpool.nsw.gov.au/_data/assets/pdf_file/0004/110758/Committee-for-Liverpool-Investment-Prospectus-2016.pdf, p.19

Advanced manufacturing

The manufacturing industry currently provides over 40 thousand jobs in the south western Sydney region, contributing nearly \$3.5 billion to the national economy. Despite a consolidated industry capability in Liverpool, 20 hectares of new industrial land, in close proximity to the WSA, will support further advanced manufacturing opportunities for the region.

There are a number of manufacturing businesses in Sydney's south west corridor that possess capability to support the innovation agenda for the Precinct. They house the manufacturing capabilities that are required to prototype, iterate and bring to scale new therapies and medical devices. There are businesses known for contract manufacturing pharmaceuticals and nutraceuticals, 3D printing and high precision machining and injection moulding. Many form part of the global supply chains for Australian MedTech and nutraceutical corporates.

Entertainment and leisure

To realise the vision to improve liveability within the Precinct, it is critical that there are enabling investments in the physical amenity of the city. Many of these required amenity improvements (such as parklands, cycleways and access to recreational waterways) are the responsibility of local government.

Other local attractions include Warwick Farm (adjacent to the Precinct), which is home to the William Inglis estate and its five-star international hotel and recreational facilities. It is also the home of the Southern Hemisphere's largest bloodstock auctions, attracting high network domestic and international visitors.





6

SECTION 2 – ATTRACTING
PARTNERS, INVESTORS AND TALENT

WHO SHOULD WE ENCOURAGE TO JOIN THE PRECINCT?

About this chapter

This chapter:

- identifies sectoral segments the Precinct should target
- provides recommendations for what targets should be prioritised
- outlines how to identify potential targets in the future.

Globalisation has made attracting investment, talent and partners a highly competitive space. Additionally, interest in investment opportunities are increasingly coming from a wide range of sources and across new geographic locations. The challenge for Precinct is to continue to be open to investment, including from unexpected sources, and ensuring investment contributes to the overall objectives.

This report strongly recommends that efforts to attract investment is targeted and segmented according to the Precinct's sectoral strengths. Such an approach will ensure that:

- there is an alignment of targets and the overall investment objectives
- there is a focus for resource allocation and effort
- there is an alignment of targets and locational attributes and competitive advantages
- there is a focus on the type of investment we want to attract
- the Precinct is distinguished from competitors.



6.1 Health innovation

The investment sub-working group recommended that the Precinct places a priority on targeting segments within the health innovation sector. There is the potential to attract industry partners on the back of:

- the Precinct’s research specialisations
- the availability of suitable sites from which these industry partners can cost-effectively start and scale up their operations.

Importantly, there is likely to be less investment in the Precinct if there is not a sufficiently skilled local talent pool to power the development and operations.

Priority industry segments within health innovation

The investment sub-working group recommended that the following priority industry segments be targeted within the health sector:

- clinical trials capability
- digital health
- medical technology and devices
- pharmaceuticals and biologics
- innovation in health service delivery.

The Precinct’s capabilities across these industry segments is varied. This report recommends the Precinct prioritises the sectors its targets and allows further opportunity for emerging sectors to develop to so they become are investor ready (see below ‘Recommended prioritisation of industry segments’). A detailed industry segmentation with potential target investor is in Attachment 9.

Clinical trials

Clinical trial capability is critical for the Precinct to attract industry investment into the region. Small capitalisation and local, international and large multinational companies are attracted to sites where they can optimise the time to ‘clinical trial’ completion and cost.

Clinical trials can be highly significant to small capitalisation biopharma and MedTech companies. The partnerships forged as a result of clinical trials have the potential to embed that organisation in a given region. Larger companies with more resources and maturity in the market, will seek out renowned researchers and clinicians to be lead investigators on trials.

Building strategic relationships with established contract research organisations is a powerful step towards attracting new industries into the Precinct and should not be underestimated.

Recommended prioritisation of industry segments

0-12 months:

Target segments

- MedTech, biopharma, pharmaceutical companies
 - clinical trial capabilities
- explore co-development opportunities with organisations undertaking health robotics R&D
- cold chain pharma and specialty good distributors
- radiation oncology, nuclear medicine related businesses.

Actions to support the targeting effort:

- establish innovation incubator to attract local innovators into precinct and research/development collaborations
- identify priority barriers and run a reverse pitch program to attract early stage virtual care, virtual reality and artificial intelligence-based health innovators
- engagement program with AusBiotech to build awareness of the Precinct’s development program within biotech and MedTech ecosystem in Australia.

12-24 months:

- biologic manufacturers; MedTech scale-ups, Private Hospital and care service providers (requires appropriate zoning and land to be released).

18-24+ months:

- digital health and bio-informatics supportive industries: System integrators, platform providers.

6.2 Investor targeting and segmenting

As the Precinct is still in its early stages of development, the potential investment-ready segments in 12-36 months could vary. New growth strengths may emerge, unexpected barriers may arise and so forth. Therefore, this report outlines a recommended process to assist Precinct members to segment for investment targeting.

How to identify target investors?

Investor targeting needs to be as specific as possible. This is achieved through segmentation. The more specific the targeting, the more likely the Precinct will be able to secure investment.

Success in attracting investors demands the ability to meet potential investors' needs. Investors make decisions based on the capacity of projects to provide them with good financial returns. Therefore, the starting point for a targeting exercise is to have a realistic understanding of the Precinct's sectoral strengths. The Precinct's strengths are most around health, and education and research. The Precinct's ability to be as specific in segmenting its sectoral strengths will take it closer to the potential investor.

Considerations for identifying target investors:

- Do we have any gaps in the Precinct's value chains that need to be filled to improve our operations and overall profitability?
- Are there any geographic markets that are strategic to those operating in the Precinct? Will a particular investor improve our market access?
- Do our current supply chains pose opportunities for savings and greater revenue from new partnerships?
- Can synergetic value be created in the Precinct through the presence of a specific partners?
- Are there any strategic partners the Precinct requires?

Steps for identifying investors

Step 1: Identify industry capabilities.

Step 2: Segment industry sectors with good capability to identify potential targeted groups.

Step 3: Assess the attractiveness of these sectors from an investment perspective.

- Which of these sub-sectors have real opportunities for investment and partnership?
- Which of these sub-sectors are experiencing the most growth?
- In contrast to our competitors, which sub-sectors do we have a competitive advantage?

Step 4: Identify the most attractive companies/partners in those sectors.

- Which companies are experiencing the healthy growth?
- Which companies are on an expansion agenda – recently invested, indicated they are looking for new partners and buyers?
- Which companies have recently invested in our competitor and complementary locations?

Step 5: Does the Precinct's capability offer match the needs of the identified potential investor?

- Match with against specific investment opportunities and our competitive advantages.
- Are any of the above companies' key to our strategic and aspirational considerations for the Precinct?
- Before approaching the investor, detailed analysis of the company/partner is needed to assess the likelihood they would invest into the Precinct?

Step 6: Are they likely to invest?

- Assess their corporate aspirations and long-term plans.
- Consider their financial capacity to invest.
- Look at their supply and value chain to determine potential benefit for them locating within the Precinct or in close proximity.



7

SECTION 2 – ATTRACTING
PARTNERS, INVESTORS AND TALENT

ATTRACTION SERVICES THAT CAN BE PROVIDED TO POTENTIAL TARGETS

About this chapter

This chapter summarises the investment and partnership facilitation services that are available to the Precinct.

The knowledge-based economy is increasingly globalised and interconnected through international partnerships, knowledge exchanges and global supply chains. Technology is creating an environment where demand and supply of opportunities for similar precincts are increasingly global. The globalisation of the knowledge economy and its innovation ecosystems is making investment attraction increasingly competitive.

Locational attributes no longer provide sustainable competitive advantages. Cost advantages are diminishing through common global supply chains. Technology and its accompanying global exchanges are harmonising inputs. These conditions are forcing jurisdictions that are attracting investment to place a greater focus on the investors' needs. Moreover, jurisdictions are differentiating themselves from competitors by how they are meeting potential investor's needs.

Questions to consider when trying to understand investors.

- Do we understand the investor need? How can we ensure we have an accurate understanding of their need?
- What information does the investor require? Where and who has that information? Is the information we are providing relevant?
- How can we assist investors' progress along the investment journey?
- Who is best placed to assist the investor?
- Who else can assist? What role can our networks play?

7.1 What do investors want?

Fundamentally investors' decisions will be made on commercial considerations and expectations about profit that is significantly influenced by local demand conditions such as likelihood of new customers, a strong forward pipeline of investment opportunities, business conditions and demographic forecasts.

In what is often described as the 'footloose' world of investment attraction, investors value support that addresses the barriers they face and business considerations to enter new markets. The type of support required is not complex and is often quite modest. Common types of support sought include:

- **provision of local information, intelligence and advice** – deep knowledge of local market conditions, business culture nuances and specific data
- **interpretation of project intricacies** – ability to convey the requirements, opportunity and gaps in projects the investor is targeting
- **provision of strong sectoral knowledge and networks** – ability to support the investor to start engaging with similar companies and quickly become part of an industry-based community
- **access to stakeholders, networks and decision makers** – through introductions and connecting with potential buyers, partners, distributors, government decision makers and others
- **provision of support in a time critical manner** – being responsive to their needs through a customer service approach with tailored responses
- **assistance with the process to setting up in a market** – site visits, navigating local processes and regulations, support with employee recruiting and facility readiness.

Naturally, investors do appreciate the grants and incentives in selecting an investment location. However, research is increasingly indicating that financial incentives can provide a sweetener for decisions, but other forms of support have a greater perceived value.

7.2 What services are provided to investors?

The Precinct membership is diverse and, at an aggregate level, it potentially has access to a broad spectrum of services that cover a wide range of needs. The Liverpool City Council and NSW Government's Western Sydney Investment Attraction Office (WSIAO) provide the greatest coverage of potential investment attraction services. Services provided by the Precinct members are outlined in the table below.

Table: Services provided by Precinct members

Type of service	Membership
Business development, client management, and intelligence	Primary: LCC, WSIAO, SBC, NSW Health (SWSLHD) Secondary: UNSW, UOW, WSU and TAFENSW, SINSW
Sectoral specific support	Primary: NSW Health, Ingham Institute, SINSW, LCC, WSIAO Secondary: UNSW, UOW, WSU
Access to international markets, networks and partners	Primary: WSIAO (NSW Government offshore trade and investment network has representation in 11 locations) Secondary: LCC, NSW Health, UNSW, UOW, WSU
Promotions, communications and events	All – a particular strength of SBC
Qualification of investment opportunity	Primary: LCC and WSIAO
Grants and incentives	Primary: LCC and WSIAO

The Australian Government has the potential to be a valuable partner as it is undertaking significant investment supporting innovation, industry development and international market access. A representative from the Australian Government should be invited to be the Precinct member. For example, the Australian Trade and Investment Commission (Austrade) has representation in more than 50 countries and can potentially provide access to all of these markets.

7.3 Government support

All three levels of government provide grants and incentives that are relevant to the Precinct, as outlined below.

Australian Government

The Australian Government is investing heavily in innovation precinct development and have a number of programs underway:

- Innovation Connections
- Industry Growth Centres Initiative
- Entrepreneurs' Programme
- SME Export Hubs Initiative
- Australian Research Council
- Industrial Transformation Research Program
- Cooperative Research Centres Program
- CSIRO's precincts and research centres.

Support is also provided through incentives and grants promoting innovation and collaboration:

- R&D Tax Incentive
- National Collaborative Research Infrastructure Strategy
- Australian Research Council Linkage Grants
- Innovation Connections and Cooperative Research Centres Program grants.

NSW Government

In addition to the Western Sydney Investment Attraction Office (WSIAO), the NSW Government has:

- Training Services NSW – assists companies to invest in training to improve employees' skills
- Small Business Commissioner and its Business Connect program – personalised business advisory service, funded by the NSW Government, that supports small-to-medium businesses to start and grow
- Jobs for NSW – a dedicated agency to grow knowledge-based jobs with financial support to start-ups and emerging and fast-growth small to medium enterprises to scale and grow new jobs in NSW
- other grants and incentives include:
 - Boosting Business Innovation program
 - Jobs Action Plan, payroll tax rebate.

A case study has been prepared that showcases a business that has benefitted from facilitation support services provided in Liverpool – refer to Attachment 10.

7.4 Overview of facilitation services provided in the Precinct

It is important that Precinct members have a strong awareness of what services can be offered and who provides them. This will minimise time spent on responding to investors and allow the Precinct to meet the widest range of investor needs. For a full list of services – please refer to the table below.

Table: Investor facilitation services in Liverpool

Liverpool Innovation Precinct Investment journey – Facilitation capabilities & services	Business development, client management, and intelligence	Introductions, connections and access	Sectoral specific support	Access to international markets, networks and partners	Promotions and spreading the message	Qualification of investment opportunity	Incentives
Account management of client relationship	●						
Tailored one-on-one facilitation of inbound market entry	●						
Information on the location and market specific conditions	●						
Understanding of market conditions and needs	●						
Understanding business cultures of Australia/NSW/ Liverpool	●						
HR support for business set up and relocation	●						
Detailed data analysis in response to specific queries	●						
Navigating requirements to operate AUS/NSW/ Liverpool	●						
Tariffs, regulations and relevant laws in AUS/NSW/ Liverpool	●						
Identify solutions to overcome restrictions to market entry	●						
Provision of targeted info for investor, incl. data analysis	●						
Introductions, connecting and partner matching		●					
Connecting with potential buyers, partners and distributors		●					
Access to local stakeholders, networks and decision makers		●					
Connections into the broader Western Sydney market		●					
Influencing local decision makers		●					
Access to government and navigating bureaucracies		●					

**Liverpool Innovation Precinct
Investment journey – Facilitation capabilities & services**

	Business development, client management, and intelligence	Introductions, connections and access	Sectoral specific support	Access to international markets, networks and partners	Promotions and spreading the message	Qualification of investment opportunity	Incentives
Provision of government imprimatur to secure investment		●					
Connecting with networks in NSW, Australia and sector-wide		●					
Navigating local regulations and approvals		●					
Detailed sectoral knowledge and networks			●				
Sectoral expertise and information			●				
Sectoral specific events and conferences			●				
Offshore representation and network				●			
Offshore targeting of international investors				●			
Access to international contacts, network and buyers				●			
Access to offshore decision makers				●			
Understanding cultural nuances of targeted offshore market				●			
Information of foreign market conditions, potential investors				●			
Inbound investor missions support and/or facilitation				●			
Outbound investor missions				●			
Promotional events					●		
Showcasing broader location, the Precinct and surrounding areas					●		
Attendance at conferences and trade shows					●		
Focused seminars and targeted business roundtables					●		
Website and web passed promotions					●		
PR & Communications					●		
Advertising and social media					●		
International brand messaging					●		
Quality assurance of leads						●	
Investment lead triage /concierge (inc. single door of entry)						●	
Articulation of investor need and requirements						●	
Grants and incentives to attract investor							●



8

SECTION 3 – PRIORITIES
AND RECOMMENDATIONS

HOW WILL WE ATTRACT INVESTORS, TALENT AND PARTNERS?

About this chapter

This chapter identifies recommended components for a collaborative investment framework for the Precinct, which encompasses:

- international collaborations
- focussing on the investor
- connecting and working with partners
- coordination and collaboration
- enhanced investment capability of the Precinct partners
- other investment attraction channels.

8.1 International collaboration

Liverpool's population reflects the broader global population more so than many parts of Australia. For example, the demographic characteristics of Liverpool are a microcosm of communities on our door step in Asia. What's more, many of the health questions being researched in Liverpool are ones being asked around the world. That is why the aspirations for the Precinct need to be international.

Australian health practitioners are globally recognised for the calibre of their work. The training standard of Australia's health clinicians, educators, administrators and researchers is high and is attracting international interest for partnerships in clinical trials. Complemented with Australia's reasonable costs to undertake clinical trials, Australia is a sought-after partner.

According to the 2016 Census, nearly 60 per cent of Liverpool's resident speak a language other than English at home, with only 21 per cent of residents having both parents born in Australia – this is more than half the national and state average. The area's diverse community has a high number of residents with Vietnamese and Middle Eastern ancestry. The median age of the population is 33 years old, which is five years younger than the state and national age of 38.

The research being generated in Liverpool has global impacts. The community's sizeable South East Asian (mostly Vietnamese), South Asian and Middle Eastern populations continue to face similar health challenges to their country of ancestry, which are seeing the rapid expansion of their middle class. According to the Brookings Institute, 88 percent of the next billion entrants into the middle class will

be in Asia, with the largest contributor from the Asia Pacific region. The increased wealth in Asia is pushing their policy makers to tackle complex health issues to provide productivity gains for their economies and reduce long term health costs. Their middle-class populations have created a strong demand for private health across the Asia Pacific region.

Demographic changes in the Asia Pacific region pose an opportunity for the Precinct. These markets are reaching out across the world to identify health service partners. The pace of economic development and expansion of the middle class has outstripped the development in social infrastructure – policy makers and health professionals are addressing the complex health questions their countries face through international collaboration. Sydney's ease of access and similar time zone positions us well to capitalise on these opportunities.

Established markets for international collaboration such as the USA, UK and Israel continue to produce quality health research. These markets should not be ignored. However, the Liverpool Precinct has a globally competitive advantage into Asia. Therefore, it is recommended the Precinct focus on the Asia Pacific region for potential partners for international collaboration. Factors to consider when targeting potential partners include:

- Does the partnership allow us to leverage our demographic and research strengths?
- Do we have similar health related challenges?
- Will the partnership fill a gap in the Precinct's capability?

8.2 Focussing on the investor

The process to secure an investment can go through numerous stages that will require a series of support services for the investor.

The table below details a series of support activities an investor may require before locating their business in the Precinct. The extensive nature of the activities poses risks if expectations are not met. Interest could wane due to long response times, subpar quality of responses to investors and investors become frustrated by needing to explain their needs to multiple individuals.

Table: Support that investors require through the investment process

Stages of the investment journey		
Investment opportunity is unknown to the investor	Investor considers the Precinct as location for investment	Investment is secured by the Precinct
Support required by investors in each stage		
Provision of information about the opportunities	Specific information about setting up a business in the Precinct and how to progress partnerships	Support with regulatory requirements to legally operate
Tailored information that matches their needs	Site and partner identification	Support to secure premises
Connecting with potential partners	Connecting with local authorities	Assistance to set up – securing property, procuring the services of professional services providers
Timely and detailed follow up to drive interest	Navigating local regulations	Assistance to relocate
Connecting with recent investors and leaders of the community to understand the broader commitment to growing the Precinct	A program with tailored site visits and business matching	Connecting with key members of the community to enable them to become of the community

The investor experience should be central to the engagement approach, ensuring the process for a potential investor is seamless and tailored. The diversity of opportunities and partners in the Precinct is an asset but it also poses challenges for a new investor. They need to navigate new contacts, partners, red tape and an unfamiliar location – this creates avoidable barriers for the investor and for the Precinct to achieve its investment attraction objectives. Ideally, over time a positive relationship will be built with the investor through to after care to sustain the investors interest in the location and encourage re-investment.

It is recommended an **account management approach** be adopted. This would see each investor being assigned a consistent, main contact for the Precinct. The account/investor manager will build a detailed understanding of the investor's needs and shepherd them through the various stages, with support from internal and external Precinct members, which will facilitate a personalised working relationship with the investor. Suitable account managers can be located in a few teams that will undertake a significant portion of the facilitation of the investment.

Many investors will not be located in Sydney and probably reside overseas or interstate. Geography will serve as a barrier for them to engage with all stakeholders through the process. The account manager can serve as a champion for the investor, particularly in instances the investor is unable to have face-to-face interactions. Due to an often-protracted process to secure an investment, relationships become crucial. An account management approach will allow the Precinct to develop and maintain personal relationships with offshore investment decision makers.

When the Precinct secures new investors, in many cases those investors may not have known about the opportunity, let alone the process to convey interest and to whom. Therefore, it is recommended there be a **'single door of entry'** for an investor interested in the Precinct. This will ensure the steps it takes for the investor to enter the Precinct are minimised. Further advantages include:

- consistency in their experiences
- they receive the relevant information and support they require
- their needs are more likely to be met
- they are matched as quickly as possible with the appropriate party to facilitate their interest in the Precinct.

The 'single door of entry' will serve as the initial and common point of review of an investment lead. They will triage the opportunity, qualify it and action out the opportunity to the relevant account manager within the Precinct. The process is detailed via the following steps:

- lead qualification
- lead tracking
- account management
- measuring impact.

Qualifying the lead is critical – 'due diligence' processes are needed to assess the needs of the investor, credibility of the opportunity and potential risk the lead poses. During this stage the investors' needs and level of interest needs to be evaluated against a set of criteria to determine the level and type of support the investor requires.

The investment journey is too complex to be solely managed by one point. Therefore, the account manager and the 'single door of entry' cannot be the only area of responsibility for all interactions with potential investors. The Precinct has a wealth of skills and expertise within its diverse range of personnel from researchers, opinion and thought leaders, property specialists and more. Investors will benefit from interacting with such personnel as it will showcase the capabilities of the Precinct. However, such interaction needs to build on existing relationships to ensure ease for the investor.

A common pitfall is use of file notes, spreadsheets and email records to manage the details of the investment relationship. This is problematic as not everyone will have access to the documents. If it is not updated in a timely manner it places a burden on one contact to manage it, which creates the risk there will be no record of the customer relationship to be shared and benefit others within in the Precinct.

Therefore, a **customer relationship management (CRM) system** needs to be used by the Precinct members. This will reduce the burden on the account manager, ensure a consistent understanding of the investor's need and progression through the investment journey.

A CRM can serve as a tool to support investors through the investment attraction journey by providing a mechanism to manage new leads, identifying new opportunities for investment, record of projects and commitments, and track milestones. Record interactions with contacts and organisations throughout the investment journey is needed to provide insight and reports to stakeholders about work in progress, activities to attract investment, and the achievement of commitments by investors.

At present some entities within the Precinct use a CRM. Many of these CRMs are unable to talk to each other. Therefore, it is recommended the Precinct identify a suitable CRM currently in use and seek to have it used by the wider group. Protocols and business rules that support shared use of the CRM will need to be outlined. Clear rules of engagement will be critical to maintain the integrity of the 'host' CRM. Additional protocols will be needed to capture accurate, consistent and up to date business data.

A shared CRM for the Precinct will provide the following benefits:

- By seeing the big picture at any time, Precinct members can more effectively participate in the investment facilitation function and understand the interconnected nature of their work.
- Data created from the CRM will provide the Precinct with much needed intelligence on how to adjust their investment targeting and strategy.
- Without an effective tool to manage investment interest and facilitations, investors and opportunities are bound to fall through the cracks. CRM systems can help ensure that this doesn't happen by adding a layer of accountability to the process.
- Potential for shared performance metrics to support the Precinct members demonstrate the value of the work being undertaken to drive investment into the Precinct.
- The CRM will assist the Precinct to better understand the investor experience. Investors can be more easily and accurately segmented, their needs identified that will allow the Precinct members to interact with investors meaningfully at the right times, leading to greater investment client satisfaction and retention.

8.3 Connecting and working with partners

The Precinct on its own is not an investment promotion agency and most of the Precinct members cannot successfully target and facilitate investment on their own. In fact, only two of the Precinct members, Liverpool City Council and the Western Sydney Investment Attraction Office (WSIAO), engage in the investment attraction function. Therefore, building and creating partnerships within and outside the Precinct is required to drive the investment attraction objectives. One of the key challenges to attracting Precinct partners will be to convey the benefits of being part of the journey to grow investment into the Precinct and transform a dynamic part of Australia.

The Precinct's investment objectives complement the objectives of potential partner organisations engaged investment attraction from the Liverpool City Council, NSW Department of Industry (NSW DoI), WSIAO, Austrade, and business associations such as the Sydney Business Chamber. The table below outlines the investment services and tools provided by these organisations.

While being part of the Precinct journey can drive the objectives of partner organisations, their participation is generally voluntary and it will be important to make it as easy as possible for their involvement. These organisations will need regular updates and sharing of information about the Precinct's capabilities, the investment aspirations and specific details on the opportunities. The Precinct members could deliver regular briefings for partners and offer to facilitate

site visits for complementary inbound visits by international investors.

Partnering with these organisations will allow the Precinct to leverage a greater number of tools and services to support investment attraction. It also demonstrates to the investor a wider level of commitment to the opportunity, particularly from multiple levels of government.

Investors are always interested in the strength of the market they are investing into – the strength of consumers, potential buyers and lessons to be learnt from existing investors. Therefore, it is essential for the Precinct to **develop and maintain good relationships with the business and research communities** so they can keep an up-to-date grasp of changing local market conditions, identify success stories to be promoted and provide demonstrable examples of businesses achieving success in the Precinct.

The unique characteristic of the Precinct as an investment attraction opportunity lies in the level of innovation that will feed the growth of new business opportunities and commercialisation of know how developed in the Precinct. It is recommended that the Precinct seek to develop and maintain linkages into complementary innovation ecosystems within Sydney, NSW and across Australia to share knowledge, lessons learnt and identify potential opportunities.

Table: Tools and investment services offered by Precinct members and delivery partners

Precinct members and delivery partners	Tools	Investment services
NSW DoI	<ul style="list-style-type: none"> — offshore network — inbound investor missions — trade shows and trade missions. 	<ul style="list-style-type: none"> — connecting with offshore investors — facilitation of inbound market entry — understanding of offshore markets.
WSIAO	<ul style="list-style-type: none"> — dedicated business development and investment team, based in Liverpool. 	<ul style="list-style-type: none"> — investment facilitation — access to local decision makers — connections into the broader Western Sydney market.
Jobs for NSW	<ul style="list-style-type: none"> — grants, Loans and equity portfolio to support start-ups and scale-ups — early stage NSW businesses wishing to establish operations in Liverpool may also be eligible for support as part of Western Sydney Investment Attraction Fund. 	<ul style="list-style-type: none"> — provides support to NSW Government with respect to implementation of MNC Investment framework.
Austrade	<ul style="list-style-type: none"> — extensive offshore network in more than 50 markets — trade shows and trade missions. 	<ul style="list-style-type: none"> — targeting of international investors — international network of contacts — promotion of Australia's Clinical Trial Capability and research facilities to international audiences.
Professional associations e.g. AusBiotech, Medical Technology Association of Australia	<ul style="list-style-type: none"> — industry events and conferences. 	<ul style="list-style-type: none"> — introductions, connecting and partner matching — promotional events to showcase the broader location — influencing local decision makers.
Liverpool City Council	<ul style="list-style-type: none"> — grants — economic development — business development staff. 	<ul style="list-style-type: none"> — access to local stakeholders and decision makers — business matching — navigating local regulations — understanding local environment.

8.4 Potential innovation ecosystems

Below is a list of innovation ecosystems the Precinct should consider forming partnerships:

Sydney Startup Hub

The Sydney Startup Hub is a NSW Government initiative that aims to spark innovation, strengthen the startup community in Sydney and support knowledge-based job-creating businesses. Its objectives align with that of Jobs for NSW and include:

- support the creation of new jobs across NSW
- increase the diversity of the NSW start-up community, with more start-ups from regional NSW and non-ICT Industries
- grow the size and strength of the Sydney start-up ecosystem.

The Sydney Startup Hub's current residents include local incubators and accelerators, alongside NSW Government business development staff and organisations that are internationally connected. The Sydney Startup Hub brings a diversity of organisations and talent together in a single location. The high-density concentration helps spark innovation, ignites collaboration and provide easier and superior access to networks, skills, funding and leadership. This cluster of start-ups has the potential to contribute to building the innovation community within the Precinct.

There are opportunities for the Precinct to strengthen its connectivity with the residents of the Sydney Startup Hub and Sydney's broader innovation ecosystem, comprising networks of incubators, accelerators and scale up communities. With respect to the Sydney Startup Hub, there is potential is for:

- residents of the hub to work with research institutions, NSW Health and the universities located in the Precinct to collaboratively design commercial solutions to address the Precinct's challenges
- partnerships with the Liverpool City Council (LCC) to put its Innovation Agenda into action
- connecting research being undertaken in the Precinct to wider networks for funding and commercialising know-how
- Precinct partners to use the hub as a place to invite connectivity with the local technology ecosystem and have a presence at public and bespoke curated events.

Other innovation precincts

There are a number of health innovation precincts under development or at various stages of maturity across Western Sydney and, more broadly, NSW. In due course, it would make sense for the Precinct to strategically align with one or a number of these other health innovation precincts to leverage their density and access to programs, talent and capital for commercialisation purposes. This should not preclude the Precinct partners implementing their own local network that addresses the local innovation community needs.

A brief list of other health innovation precincts is provided below for consideration.

Westmead: The construction of the Westmead Innovation Centre as a part of the Westmead precinct redevelopment is an enabling investment in establishing a footprint for industry collaboration in health. Collaborating with the precinct partners opens gateways into industry connectivity and university talent.

UNSW Randwick: The redevelopment of the Randwick health and innovation campus offers the Precinct with potential opportunities to collaborate, leveraging the ties with UNSW Clinical School and biomedical engineering faculties. UNSW's linkages with the George Institute for Global Health opens up potential gateways into collaborating on projects focussing on work in Asian markets.

Established MedTech incubators and accelerators: These include Cicada Innovations, Fledge Labs and the Actuator. Early discussions have been had between the Ingham Institute and in some cases Liverpool City Council with respect to how the programs offered by these organisations can support the research commercialisation pathways being established out of the Precinct.

ANSTO: located at Lucas Heights, ANSTO is in close proximity to the Precinct and possesses complementary capabilities in the processing of nuclear materials for medical purposes. ANSTO have launched a technology incubator and for the medical related businesses, there may be an opportunity to partner with the Precinct in building connectivity and pathways to pilot and talent flows.

8.5 Coordination-enabled collaboration

The available evidence indicates that while the Precinct's members have common aspirations and a shared objective for investment attraction, the lack of coordination is inhibiting effective collaboration within the Precinct. The Precinct members are likely to approach the task of promoting the precinct and attracting investment from the perspective of their respective organisations. The risk here is that organisations use inconsistent messaging and information, which can undermine the Precinct's credibility and reputation. For instance, if underlying data sets being used are different, this creates the potential for confusing or conflicting messaging for investors.

While this Investment Framework provides a recommended set of messages to be used by the Precinct members, these messages need to evolve as circumstances change. Therefore, it is important the Framework is supported by tools that provide role clarity and support members to collaborate and coordinated activities over the longer term. Ideally, Precinct members should be communicating with stakeholders with a single voice from a common set of data, which will reinforce an agreed set of messages promoting the Precinct.

Collaboration does not always occur without assistance and needs enabling structures. The Precinct's steering committee and sub-working groups offers such enabling structures. It is important that investment attraction continues to be a focus of these structures as they can easily provide high level coordination of investment attraction into the Precinct. Potentially, the investment sub-working group could continue with the purpose of:

- sharing new information and data being derived by members
- identifying new leads being generated
- monitoring the progress of the investment pipeline
- identifying new opportunities.

In specific terms, the shared CRM can derive reports detailing the investment journey and can serve to provide the Precinct members with insight to inform the involvement of the broader group, identify necessary interventions and coordinate a collaborative response. The CRM reports should include a small selection of key metrics to drive the common goals. Likewise, account managers could provide updates on targeted investors for review by the working group.

The following performance measures are common to both the Liverpool City Council and the NSW Government:

- number of jobs created
- number investment leads facilitated
- value of investment attraction secured.

These three measures should be used as investment attraction performance measures for the Precinct and consideration could also include other activity measures to reflect the broader contribution of the Precinct membership. They could include:

- participation in inbound and outbound trade and investment delegations
- activities promoting the Precinct
- collaborative initiatives.

Refer to *Recommendations 2 and 4*.

8.6 Enhancing investment capability of Liverpool Innovation Precinct members

Investment attraction is a globally competitive space with investors being globally nimble and having increasing expectations of the facilitation support being offered by the location. Therefore, it is essential that the Precinct has the correct tools to meet investors' increasing expectations. This means the Precinct needs to either have the relevant tools and capabilities from within its member base or have access to it with partners. These tools and capabilities include:

- investment-ready staff that are appropriately skilled to engage in investment facilitation
- shared understanding of the investment opportunity to equip a Precinct leader to promote the Precinct
- sectoral expertise
- project understanding
- research capacity to provide meaning information for prospective investors
- web-based tools and a dedicated web presence for continuous promotion
- CRM as part of a customer service approach to engaging with prospective investors
- willingness and capability to build new networks
- existing networks and contacts.

A number of these capabilities are existing strengths among the Precinct members. The Precinct has an abundance of sectoral experts with exemplary research skills and can leverage tools from potential partner organisations. Nevertheless, there are still a few basic capabilities that need to be addressed to ensure the Precinct is ready to engage and facilitate investment attraction in an effective manner and not damage future interactions.

It is recommended a targeted investment facilitation training course is provided to those engaging with investors, providing them with an understanding of the facilitation process, awareness of common pitfalls and ability to use tools for success.

8.7 Use of a varied mix of direct and indirect investment attraction tools

This report has a strong focus on services that could be offered to an investor entering the Precinct (see Chapter 7). Most of those services are direct investment attractions techniques that are effective where strong awareness of the opportunities exists and conditions allow for direct interactions with investors. This is not uniformly the case in the Precinct.

Precinct members need to use the website and other tools for promotional activities. This needs to be part of a structured communications plan for the Precinct as an entity.

The Precinct has a designated web presence www.liverpoolinnovation.com.au that serves as an advocacy channel for the Precinct. In the six months to 8 November 2018 the site received 514 visits and zero investment enquiries. Nevertheless, the website provides a reach that goes beyond the geographic perimeters of the Precinct, NSW and Australia to potential international partners.

Currently any queries from the website are received by KJA Consulting with no clear rules for how to progress investment queries. To date, the website has not received any investment leads. A clear work flow from the website should be a direct flow to the 'single door of entry', that will be hosted by the LCC in the interim. For the website to be an effective investment attraction tool it needs to be complemented with structured promotional activities, which are guided by a communications plan that is endorsed by the Steering Committee. Therefore, it is recommended the mix of investment attraction tools include indirect and promotional channels such as:

- communications materials and media
- social media
- websites
- branding.

These are tools that all Precinct members regularly use. Unlike direct channels that are used by only a few of the members, the indirect channels allow for all members to participate in the promotion function – increasing the reach of the message and maintaining engagement by members. These indirect tools should be integrated with the Precinct members' respective communications plans. The recommended work plan, as part of the proposed MoU, should target four to five opportunities in coordinated promotion and marketing. This could include:

- promotion of an outbound investment mission led by Austrade or the NSW Department of Industry
- a business event being hosted by the Sydney Business Chamber
- new initiatives being announced by the Liverpool City Council (LCC)
- sector specific initiatives led by the Ingham Institute.

The dominant challenge for the Precinct remains the need to develop and grow by building awareness of the Precinct. That is why the creation and maintenance of a brand identity is essential. The website has the potential to counteract this shortcoming and provide a persona of the Precinct in the absence of the Precinct having a strong level of development. KJA have developed branding for the Precinct on behalf of the members. It is recommended the functionality of the brand and website management be continued. The brand can only be put to action with use by the Precinct members and not KJA in isolation.

They need to use the website and other tools for promotional activities. This needs to be part of a structured communications plan for the Precinct.

A top-down view of various medical supplies on a blue surface. On the right is a black stethoscope. In the center is a clear IV bag with a white label. Below it are a pair of round-rimmed glasses. On the left, a hand in a white glove is writing on a clipboard with a pen. At the bottom center is a white smartphone. The background is a solid blue color with some green vertical lines in the top left corner.

9

SECTION 3 – PRIORITIES
AND RECOMMENDATIONS

RECOMMENDATIONS – MOVING FROM THINKING TO DOING

About this chapter

This chapter presents a series of recommendations to enhance investment and partnerships in the Precinct. These recommendations are drawn from the evidence and analysis presented in previous chapters.

1. Focus effort on developing the Precinct – making it investment-ready and building the existing strengths in health, and research and development

1.1 Recommendation:

Use the sub-working group's proposed objectives for attraction to guide activities and provide focus to effort being harnessed in the economic development of the Precinct. The recommended objectives are:

- contribute to growth in knowledge intensive jobs
- support the economic development of Liverpool and the Precinct by filling gaps or enabling growth in complementary sectors
- build on the Precinct's key strengths in health and research and education
- enable pathways to commercialisation of research being undertaken
- enable businesses to move up and along global value
- align with an Asia Pacific focus for international collaboration.

1.2 Recommendation:

Build links and partnerships with established incubator and accelerator programs to enable Precinct members to address their commercialisation challenges by engaging with the start-up/scale-up community. This engagement should provide tangible pathways to adoption for locally developed technology, models of care and broader solutions. Jobs for NSW can work with Precinct members to design a start-up/scale-up engagement program that:

- defines key challenges that need to be solved by the precinct
- ensures adequate funds/resources are provided to being part of a team to codesign or pilot the potential solution
- curates the highest potential participants in incubator and accelerator programs and the broader start-up community ('reverse pitch')
- leverages existing supports (grants and loans) to enable the project to be adequately funded and supported.

1.3 Recommendation:

Ensure that attraction and facilitation activities **go beyond traditional investment attraction** of seeking capital or facilitating companies to locate in the Precinct. A wider focus needs to attract talent, secure strategic partnerships and build links into the start-up ecosystem. The following attraction principles could be utilised.

- Work with the universities, Ingham Institute, NSW Health and other NSW and Australian government agencies to **enable commercialisation** of research, know-how, and innovation occurring in the Precinct.
- Effort needs to be made to capture spill-over growth opportunities in other health related sectors such as bioscience, veterinary science, and others. This is potentially a function that the proposed Precinct coordinator could undertake to keep an 'eye on the horizon' and bring opportunities to the attention of the working group.
- Work with the member universities and the Ingham Institute to **attract high profile qualified researchers**. Consideration should be given to designing and implementing a collaborative program that can leverage off a wider range of resources and service to attract talent. For example, the NSW Government's international network could potentially enable a global reach for the talent attraction effort.
- **Leverage and support local leadership** efforts from the LCC, NSW Government and other partners to cultivate an innovation ecosystem.
- **Be realistic** about the existing capabilities of the Precinct and focus on its current strengths in the health, and research and education sectors. Do not overstate the Precinct's capability in an area as this undermines credibility in the marketplace.

1.4 Recommendation:

Focus the Precinct's international collaboration efforts onto **Asia** by:

- leveraging health research undertaken in the Precinct that has direct relevance to the Asian population
- showcasing Liverpool's culturally and linguistically diverse characteristics as a differentiator from other precincts.

2. Enable collaboration through formalised partnerships and structures

2.1 Recommendation

Create a working group that is dedicated to promoting and attracting activities to drive the economic development of the Precinct. The **investment framework sub-working group could continue** and undertake this role, which could include:

- monitoring agreed collaborative projects
- receiving reports from the Precinct Coordinator
- tracking performance measures
- monitoring the investment and partnership pipeline.

2.2 Recommendation:

Formalise the partnership of the Precinct members participating in the economic development activities of the Precinct through an **MoU to provide the authorising environment** to collaborate. In the first instance, the sub-working group's members could be the first signatories. The MoU should outline:

- terms of reference
- each members' roles and responsibilities
- agreed commitments and service offer to be contributed to the development of the Precinct and to attract investment
- a process to share and analyse information
- a collaborative work program to be agreed annually on a series joint initiative (four to five projects)
- shared capability development amongst the Precinct members for investment attraction, precinct development and sectoral expertise.

In addition to a series of joint activities, the partnership should identify and implement opportunities for coordinated marketing.

3. Build strategic alliances to lift the capability of the Precinct

3.1 Recommendation:

While international investment attraction is the long-term end game, the Precinct should consider forming **strategic alliances with targeted research institutions, precincts, multinational companies**. International engagement activities, at this stage of development of the Precinct, needs to focus more broadly on international collaboration in addition to investment attraction.

3.2 Recommendation:

Consider inviting a suitable member of the **Australian Government to partner with the Precinct** and serve as a link to the range of programs provided by the Australian Government. This partnership could capitalise on the Australian Government's significant investment and funding sources to support the development of innovation precincts.

3.3 Recommendation:

Identify partnerships with existing and new NSW Government agencies such as the Western City and Aerotropolis Authority. This will ensure the Precinct is positioned to leverage a wide range of NSW Government services, skills, networks and investments.

3.4 Recommendations:

Embrace an outward looking approach and **develop links and partnerships with other health precincts and innovation ecosystem**.



4. Invest in a shared resource responsible for coordination of efforts to develop the Precinct

4.1 Recommendation:

The Precinct members should **appoint a Precinct Coordinator** that is co-funded and co-located with the single door of entry and reporting to the Precinct’s investment sub-working group. The position could undertake the following roles and responsibilities:

- coordinate economic development activities among the Precinct member
- drive agreed projects under the MoU
- facilitate industry engagement
- share intelligence and data
- be an advocate of the Precinct
- lead coordinated promotion of the Precinct.

The Liverpool City Council (LCC) is supportive of the concept and are agreeable to host the position. LCC would potentially be agreeable to paying for the ancillary costs of hosting such a position.

5. Use consistent messages and information to create a shared awareness of opportunities

5.1 Recommendation:

Promote a **shared awareness among the Precinct members** of the opportunities in the Precinct, including:

- outlining key messages with common use of data
- promoting common understanding of the strengths and service offer.

6. Use a targeted approach to specific investors and potential partners to secure investment and distinguish the Precinct from competitor locations

6.1 Recommendation:

The Precinct needs to **target a defined group** of investors and potential partners through a process that identifies investors in as much specific detail as possible. A suggested process to target investors is provided in chapter 6.2 that matches investor interest against the Precinct’s strengths and overall offer.



7. Make the investment journey as easy as possible for investors by leveraging Precinct members' full-service offer, creating a single door of entry, and using an account management approach

7.1 Recommendation:

Leverage the full-service offer from the Precinct members when attracting investors and partners.

7.2 Recommendation:

Establish a **'single door of entry'** for investment leads into the Precinct, which supports a seamless customer service approach to investment attraction. The single door of entry function should operate as a concierge service to qualify leads and determine how to manage the opportunity. As an interim measure the investment sub-working gave in-principle agreement to the Liverpool City Council taking on this function and potentially the Precinct Coordinator could undertake the function.

7.2 Recommendation:

Use an **account management approach** to support investors through the investment journey into the Precinct. The approach will assign the 'investor' a consistent contact who will build a detailed understanding of the investor's needs, connects them to key stakeholders and manage their progression through the investment journey.

7.3 Recommendation:

Use one of the existing CRMs being used by the LCC or the WSIAO. If the LCC is to serve as the 'single door of entry', then the Precinct should use their CRM. Access could be provided to a quarantined part of the LCC's CRM. The CRM will ensure that all the Precinct members engaging with the investors will have a consistent understanding of the investors' needs and who they have interacted with in the Precinct.

8. Promote transparency and accountability through shared performance measures

8.1 Recommendation:

To drive the economic development of the Precinct, members will need to invest significant time and money. It is reasonable to expect that members will want to understand their return on investment for this time and money.

The Precinct should establish an agreed set of shared performance measures that can also provide common goals and points to evaluate effort being undertaken. The sub-working group recommended three **high level measures**:

- number of jobs created
- number investment leads facilitated
- value of investment attraction secured.

The following **activity measures** should also be considered to reflect the broader contribution of the Precinct membership:

- participation in inbound and outbound trade and investment delegations
- activities promoting the Precinct (and associated investment therein whether cash or in-kind support)
- collaborative projects/initiatives delivered.



10

ATTACHMENTS

Attachment 1 – Recommended Unique selling proposition: Why the Liverpool Innovation Precinct?

Live, work, learn and care locally.

Liverpool Innovation Precinct (the Precinct) is a place where you can work alongside people committed to creating the city of the future. Liverpool has what you need to power your innovative business, today and tomorrow:

- a booming population, with an expected 40 per cent growth in the next decade, conversant in over 132 languages
- connections to networks of preeminent universities and vocational training centres
- an ability to leverage multi-government investment in digital and world class logistics infrastructure.

You can realise the potential of your business, achieve your research ambitions and attain the skills to succeed in the jobs for the future as part of the Precinct.

The Precinct is seeking investors, talent, partnerships, researchers and students engaged in clinical research, digital health, medical technology and devices and pharmaceuticals to be part of the exciting journey to create a world class health and academic precinct.

The Precinct is tackling health issues that are global in nature and seeking to achieve global impact. Are you using technology and innovation to find new and alternative ways to deliver health services? Are you grappling with complex health related questions concerning cancer, diabetes, rehabilitation and population health, including socio economic impacts on health? These questions are being answered in the Precinct and we invite you to join.

The Precinct is a place where you can:

- start your NSW/Australian operations, scale and grow your business
- be supported by world class research and clinical trials infrastructure
- deploy cutting edge innovation, so that it may reach its full potential

- connect with one of the state's largest health services
- network into the city's pre-eminent technology talent pools, advanced manufacturing, global supply chain and distribution channels, and enable you to achieve your growth aspirations.

The Precinct has attracted world class education institutions – the University of New South Wales, University of Wollongong and Western Sydney University. The Ingham Institute for Applied Medical Research was formed in response to the need to address pressing challenges in health with the outputs of research endeavour. It has formed partnerships with international leaders in health innovation such as Samsung and attracted opinion leaders such as Professor Les Bokey.

Overarching – Why Liverpool?

- Liverpool is a place where you can start, scale and grow your business.
- The Precinct provides flexibility for greenfield opportunities to establish an operational footprint as it is not constrained by space like other precincts such Westmead and Randwick in Sydney or by costly inner-city real estate like the Melbourne Biomedical Precinct.
- A culturally diverse population and workforce provides the language and cultural skills and connections for international partnerships and for clinical research to have global relevant particularly into the Asia Pacific region.
- Differentiated by collaboration, featuring a great number of shared facilities, co-location opportunities and incidental opportunities for interaction.
- With diverse and affordable housing – a range of types, sizes, tenure and price points, from executive housing through to accommodation accessible for students.

Locational Attributes

- The geographic footprint of the Precinct makes it accessible to partners. It has a connected city centre that is walkable and complemented by vibrant amenities, and has activity and intensity both day and night.
- Liverpool's diverse and young population presents a growth opportunity, with international links and unique characteristics attracting researchers.
- Liverpool offers a balanced quality of life that is reasonable in cost and welcoming newcomers to live, work and play.
- The Precinct is physically connected to the world through coordinated transport and supported by quality infrastructure.
- Liverpool is a key hub in Western Sydney that is undergoing rapid economic growth with outstanding job opportunities underpinned by global leadership in health, education, research and innovation.
- The Precinct's culture is characterised by a hunger to succeed, to get things done and come up with new solutions to complex health questions, which is attracting innovative thinkers that want to solve unique and challenging problems.

Complementary Strengths

- The Precinct has access to one of Australia's fastest growing freight logistics hubs directly linking to national, regional and global markets. Transport and logistics in the south western Sydney region support 9000 jobs and employing a skilled workforce of over 25,000.
- With a commitment of \$20 billion dollars to deliver the Western Sydney Airport (WSA) that is expected to serve 80 million passengers per year by 2056 in the south western Sydney region – Liverpool is well positioned as the edge city of WSA to meet the expected commercial needs for the airport.

Education and Research

The Liverpool Innovation Precinct has a growing education and research sector that is characterised by its:

- success in attracting researchers of international standing to its state-of-the-art facilities to undertake research that is unique to the Precinct targets
- strong links through partnerships, which have created access to research activities across Australia and globally
- students who are able to attend educational institutions from kindergarten to higher education training organisations that afford businesses the opportunity to upskill and access skills development within close proximity
- growth plans for the education and research sector demonstrates long term confidence.

Health

'Best in class' Clinical Trials Capability is being shaped:

South West Sydney Local Health District (SWSLHD) is investing heavily in the development of a best in class clinical trials centre, in close collaboration with the Ingham Institute for Applied Medical Research. Ensuring patients have access to the latest treatments for cancer and chronic disease is driving this investment. Today the precinct hosts 17 Phase I Trial beds and delivers streamlined governance and ethics approval processes.

Liverpool is a place where you can start, scale and grow your business

The Ingham Institute for Medical Research, its university partners and the SWSLHD can support you from pre-clinical development to pilot, trial and validation. If you are seeking to establish your Australian manufacturing, sales and distribution activities, Liverpool has sites in close proximity to its hospital, world class logistics facilities, access to relevant value chains (e.g. 3DP, machining, contract manufacturing of soft-gel capsules, sterilisation and packaging) and access to talent from its clinical operations, universities and VET sector.

There are clear pathways for the adoption of new robotic assisted technologies into the Precinct. The South West Institute for Robotics and Automation in Health (SWIRAH) was established to research how robotic surgery, automation and AI will affect the health sector into the future. The Academic Robotic Surgical Unit Training program was established to enable surgical training in the use of this technology. This program attracts surgeons from across Australia and the world.

The Precinct is a place where ideas are exchanged and innovative new models of care are piloted. Inspiration comes from all over the globe.

We are a centre of excellence in radiation oncology. We host a cyclotron that is GMP certified to manufacture radiopharmaceuticals. This enhances our ability to offer industry partners the opportunity to deploy specialised imaging and diagnostic services.

We are agile in our approach to partnerships. We understand the importance of speed to market for businesses who invest in conducting their research programs with us. We commit to delivering high quality results with fast turnaround times. We are committed to co-designing solutions with our partners so that we all benefit from the innovation generated. However, our priority will always be on delivering better patient outcomes.

We invest in our people. Whether it is our researchers, clinicians, nurses, teachers, as leaders we work to ensure that our people are given the best chance possible to test and validate their ideas for service improvement, new therapies and treatments for patients. We leverage the training and development pathways in our precinct to make sure that our people have the skills they need for the future of work and to deliver the best care to the people of South West Sydney.

Liverpool Hospital

The NSW Government's commitment of \$740 million to redevelop Liverpool Hospital will expand health services delivered and address the forecasted 77 percent increase to south western Sydney's population by 2036. The overall bed count will increase from 713 to 900, and this will expand cancer, critical care services for emergency and consolidate the quality of ambulatory care services. The redevelopment includes 31 more acute day-only beds, 22 more emergency spaces, over 50 per cent increase in ambulatory care spaces and increases in diagnostic procedural, and clinical and non-clinical support areas.

The hospital will have improved capacity to maintain and grow its role as a centre of medical excellence for greater Sydney and enhance its reputation for world class clinical expertise in innovation, teaching and training, and cutting-edge technological advancements.

Furthermore, the Liverpool Hospital, in partnership with the Ingham Institute for Applied Medical Research, is investing heavily in the development of a best in class clinical trial capability. It offers industry the opportunity to partner with the leading clinicians from across the Precinct to bring new treatments to patients faster.

Call to action:

For further information of how to be part of this exciting opportunity, please go to www.liverpoolinnovation.com.au/contact-us and your query will be responded to by experienced local specialists.

Attachment 2 – Message from the Liverpool Innovation Precinct co-chairs

Amanda Larkin, Chief Executive South Western Sydney Local Health District and co-chair of Liverpool Innovation Precinct

David Borger, Sydney Business Chamber and co-chair of Liverpool Innovation Precinct

Potential for use on the Precinct website and other pieces of collateral

The term 'once in a generation' is used too often these days. However, we are lost for a more appropriate term to describe the opportunity presented by the Liverpool Innovation Precinct (the Precinct). This is an opportunity for you and your business to be part of this exciting journey, to positively impact the people of south western Sydney and deliver sweeping economic benefits to NSW and beyond.

Liverpool has a proud history of providing world class healthcare to the people of south west Sydney. To date these services have been delivered through the Liverpool Hospital. Liverpool is, however, witnessing a significant increase in demand for quality healthcare services due to growing population and changing demographics. In response to this growing healthcare challenge, the Precinct identified an opportunity for health, research and education partners to work collaboratively to further improve healthcare outcomes.

The Precinct has been successful in attracting a \$740 million investment from the NSW Government to redevelop the Liverpool Hospital. In the next decade there will be in excess of \$20 billion invested within the Precinct and the Liverpool LGA

through the construction of the Western Sydney Airport and associated Aerotropolis. At the same time, the redevelopment of the Liverpool Hospital will expand its role as a centre of medical excellence for greater Sydney and enhance its reputation for world class clinical expertise in innovation, teaching and training, and cutting-edge technological advancements.

The Precinct is at the forefront of solving some of the world's most complex health issues. Clinical innovation and research being undertaken in Liverpool is having a global impact, particularly in Asia.

Its diverse community is an asset, with nearly sixty percent of Liverpool's community speaking a language other than English at home and nearly eighty percent having both parents born overseas.

The Precinct is connected to a vibrant city centre accessible to partners and amenities; while still being able to offer available sites for greenfield investment. This sets it apart from other precincts of this scale, offering unmatched connectivity for business and people. The M5, M7 Motorways, and Hume Highway interconnect road and rail access from Liverpool to the Sydney's central building district, Sydney Airport, Moorebank Intermodal and Port Botany.

The Precinct is inviting investors, talent, partnerships, researchers and students engaged in clinical research, digital health, medical technology and devices and pharmaceuticals to be part of the exciting journey to create a world class health and academic precinct.

Join us in this exciting journey.

Attachment 3 – The Precinct’s ‘get things done’ culture is a drawcard

Liverpool’s culture is resilient, innovative and passionate about the potential in the future.

The high levels of growth in the local population and increasing demand for health services have meant that sometimes the hospital has faced significant challenges. Liverpool has maintained a relatively modest profile and attracted limited interest from potential partners and stakeholders despite being the state’s largest stand-alone hospital and every one of its department producing stellar results and strong outcomes.

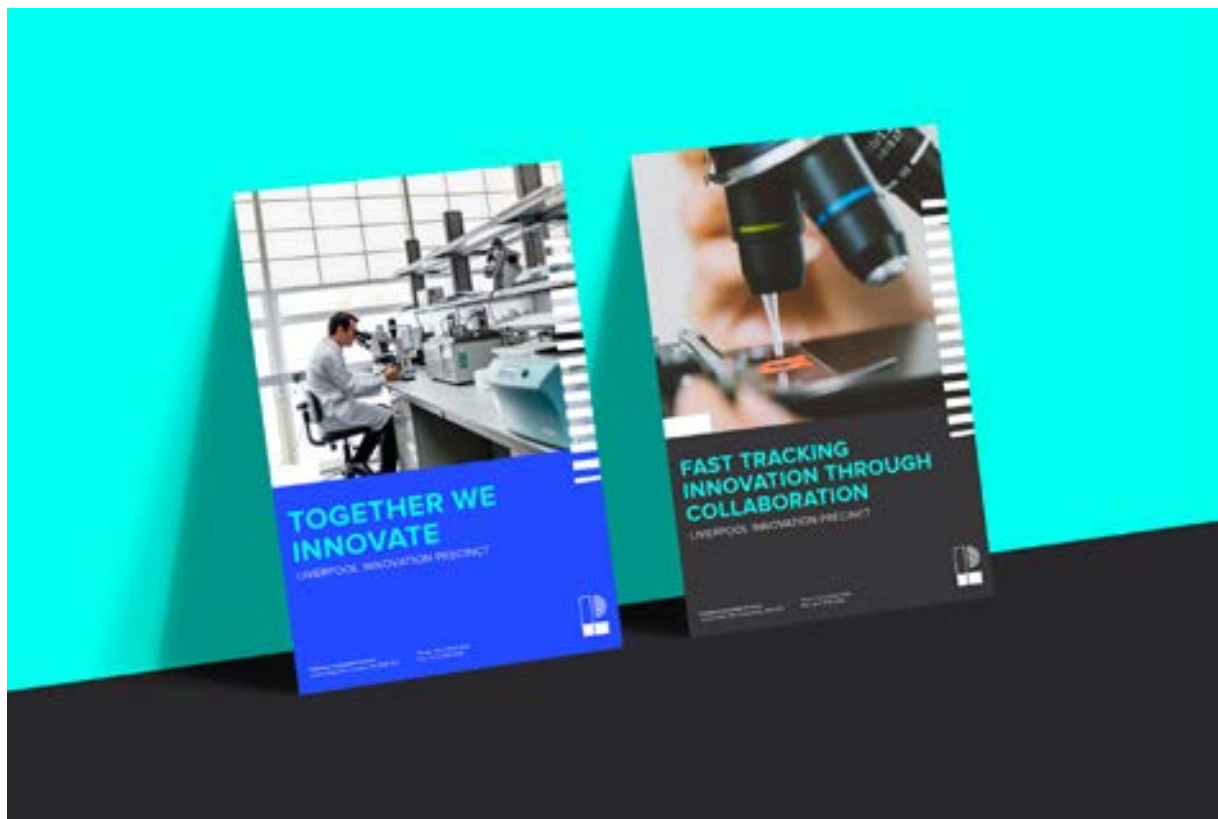
The complexity of the health challenges in Liverpool, is being driven by rapid population growth, socio-economic and other demographic factors. These challenges are compounded by Liverpool’s culturally and linguistically diverse community, with nearly 60 per cent speaking a language other than English at home. Within many of these cultural groups, there is a lower awareness of symptoms of major diseases, as well as barriers to accessing health services – this has led more complex health issues arising from low rates of early detection and intervention.

The health services community in Liverpool had to struggle to gain attention and deliver solutions to the community to problems that are unique. The staff have built a hunger to succeed, get things done and come up with new solutions. The very factors that pose challenges have become a source of strength.

Liverpool’s culture builds strength from adversity.

In many instances, the challenges and scale of Liverpool’s health issues are not comparable to other locations in Australia. The complexity has forced people to ask different questions and think of alternative solutions, driving a culture of excellence in Liverpool. It is bringing like-minded people together, attracting innovative thinkers who want to solve unique and challenging problems.

Our dedicated staff are creating a community and teams who are bold, entrepreneurial and committed.



Attachment 4 – Case Study

GWA – a company that has benefited from local conditions in Liverpool

Innovative home fittings company GWA moved to Liverpool to access greenfield sites that would provide the opportunity to scale and grow, while also being linked to the innovation, and research and development sectors.

GWA selected a site in Liverpool for a purpose-built facility. The selected site's owners, Charter Hall, had no trouble finding occupants and sited the long list of benefits Liverpool offers prospective tenants.

A key reason for GWA selecting Liverpool was value for money property costs and ease of access to Sydney's motorway and arterial roads. Liverpool is fast becoming one of Sydney's preferred locations for logistics organisations due to its proximity to the M5 and M7 motorways, the new Moorebank Intermodal and the Western Sydney Airport.

GWA's products are known to many of us – they are sold under well-known brands Caroma, Dorf and Clark. Like all competitive businesses, GWA constantly adjusts their product offer to meet changing demands of the market. To do this, GWA invests in research and development to better understand the evolving behaviours and needs of their customers.

The company has been working with the University of NSW (UNSW) to improve its products and range. The new facility in Liverpool has onsite research and development labs with two kilns for product testing.

UNSW did in-depth research of the GWA's elderly target market – watching their movements, looking for simple things like the best height for toilets and grab rails, taps and how they turn on and off. Getting the right house fittings can be the difference between someone staying in their own home or entering assisted living for older people or people with disability.

GWA is using this intelligence to come up with a product range that will meet the needs of an ageing population. The research and development relationship ensures products are both functional and attractive enough to stand out in competitive market.

The new facility will bring new 70 jobs to Liverpool. Most of these jobs will be in warehouse and logistics, but the number also includes up to 20 research and development roles.

Liverpool's strength in transport and logistics is benefitting from complementary strengths the Liverpool Innovation Precinct offers in education and research. These new partnerships are sparking innovation and creating knowledge-based jobs.



Attachment 5 – Health sector in Liverpool Capability Statement

Liverpool Innovation Precinct is a place where you can start, scale and grow your business. Precinct partners are committed to forging strategic alliances with industry. They want to ensure people have access to the latest treatments and innovations in health wherever and whenever they need them.

Liverpool is a place where you can start, scale and grow your health-related activities

From pre-clinical development to pilot, trial and validation the Ingham Institute for Medical Research, its university partners and the SWSLHD are able to support you. If you are seeking to establish your Australian manufacturing, sales and distribution activities, Liverpool has:

- sites in close proximity to its hospital, world class logistics facilities
- access to relevant supply and value chains (e.g. 3DP, machining, contract manufacturing of soft-gel capsules, sterilisation and packaging)
- access to talent from its clinical operations, universities and VET sector
- clinical trials capability.

Liverpool Innovation Precinct is the home of Australia's largest standalone public hospital – Liverpool Hospital – and one of Australia's newest medical research institutes – the Ingham Institute for Applied Medical Research (which celebrated its 10th anniversary in 2018). The partnership between South Western Sydney Local Health District, to which Liverpool Hospital belongs, and the Ingham Institute is strong and the connections run deep. Many of the hospital's clinical leaders hold conjoint appointments at the Ingham Institute and at least one major university. UNSW, University of Wollongong and Western Sydney University all have campuses in Liverpool. Together, these organisations offer a powerful combination of knowledge-based assets, talent and infrastructure, upon which to build strategic alliances and partnerships with industry.

Research and clinical trial capability

Research is part of the unique fabric of the Liverpool Innovation Precinct. It is expected that research will be translated into new models of care that deliver improved outcomes. The same is true with respect to the commercialisation of novel therapies, medical devices, diagnostic tools and digital solutions. The Ingham Institute, in collaboration with SWSLHD hospitals (including Liverpool Hospital), has established a Clinical Trials Platform to run and facilitate clinical trials from phases I to IV. The Clinical Trials Platform builds on competitive advantages of this unique collaboration between the medical research institute, leading teaching hospitals and university academic capacity. Trial participants are drawn from large multicultural population with European, South-East Asian and Middle Eastern heritage. The diversity of ethnicities represented across the region that the Precinct serves, provides clinical researchers with a population pool reflecting some of the world's most significant health challenges and global markets.

The Ingham Institute's strong research, bio-statistical and laboratory platforms, and streamlined ethics and approval processes is a key partner for clinical trials. This centre, with its focus on oncology and complex chronic diseases, offers industry the opportunity to partner with its leading clinicians in trialling new treatments, fast feasibilities and patient recruitment. This centre also has access to seventeen phase I clinical trial beds, which can be scheduled for use in industry sponsored research. There are over 20 clinical trials groups, overseeing more than 300 clinical and surgical trials, covering more than 15 specialty areas across SWSLHD.

Research streams include:

- gastroenterology and hepatology
- Renal Clinical Research Centre
- Autoimmune neurological diseases and Multiple Sclerosis Clinical Research Unit
- William Orthopaedic Research Centre
- Immunology and Allergy Unit
- Radiation Oncology Clinical Trials
- Diabetes, Obesity and Metabolism (with an established Clinical Trials Unit)
- palliative care research
- respiratory medicine
- surgical robotics across various surgical disciplines including urology, colorectal, UGI and neurosurgery.
- injury and rehabilitation research
- mental health
- women's health
- comprehensive cancer treatment and care.

Cancer Services represent a significant part of SWSLHD's operations. A 2016 analysis of age standardised cancer incident rate by cancer type confirmed the area had higher than the NSW average rates for lung, kidney, thyroid, pancreatic, stomach and liver cancers. The projected cancer incidence for south western Sydney by cancer site to 2031 and breakdown of cancer profiles by country of origin can be found in the South West Sydney Local Health District's 2018-2023 Cancer Services Plan¹.

LIP – A Centre of Excellence for Surgical and Clinical Training

The Ingham Institute in partnership with SWSLHD operates a Clinical Skills and Simulation Centre. The facility is used to provide training to nursing and medical staff from student/resident to Surgical Consultant. Industry is able to partner with the Clinical Skills and Simulation Centre to deliver bespoke training programs for their key personnel or Consultant physicians and surgeons.

The facility houses the only DaVinci robotic surgical trainer in NSW and is utilised by surgeons across Australia and Asia to learn and refine their robotic-assisted surgical techniques.

Liverpool Hospital has pioneered pathways for adoption of new robotic assisted technology within not only South West Sydney Local Health District. It is leading how the training and accreditation pathways for surgeons, their assistants and surgical team are developed and implemented nationally and internationally. An Academic Robotic Surgical Unit Training program has been established to enable surgical training in the use of this technology. This program attracts surgeons from across Australia and the world.

Liverpool Innovation Precinct welcomes engagement with industry to partner in programs that ensure the safe use of new treatments and devices in the clinical setting by all members of the care and surgical teams.

The South West Institute for Robotics and Automation in Health (SWIRAH) was established to research how robotic surgery, automation and AI will affect the health sector into the future. SWSLHD has complemented this capability by ensuring that there is a biomedical engineering specialist working closely with clinical teams and researchers to advance the design of next generation products.

Liverpool Innovation Precinct welcomes engagement with innovators developing cutting edge medical technology to improve surgical outcomes.

Natural healthcare, nutraceuticals and complementary medicine

The Australian complementary healthcare industry is significant. Liverpool is in close proximity to a number of Australia's significant contract manufacturing facilities for the natural and complementary medicine industry. As such, the region offers prospective nutraceutical brands access to GMP certified manufacturing facilities for soft gel capsules and other standard pharmaceutical presentations.

The Precinct's strong research ties with the Ingham Institute for Applied Medical Research, Western Sydney University, and Wollongong University offers collaborators pathways to connect with researchers from the National Institute for Complementary Medicine (NICM) and their medical programs. SWSLHD and the Ingham Institute led the first medicinal cannabis trial for palliative care patients in NSW.

¹ South West Sydney Local Health District, 2018-2023 Cancer Services Plan www.swslhd.health.nsw.gov.au/pdfs/2023-CancerPlan.pdf

Digital health

There is wide acknowledgement of the potential of digital health to improve patient experience and ensure that the right care is delivered at the right time. The Precinct members understand the criticality of ensuring that the Precinct stays at the forefront of developments in technology, which will ensure that it delivers better patient outcomes – whether this is in research, clinical trials or care delivery. The South West Sydney Primary Health Network and SWSLHD are working closely to enable linkages between datasets in the primary and acute care setting, and ensuring that clinicians have the right information available to them at the point of care. They are building the governance frameworks and strategies to support the future uses of data in health, research and education. With the redevelopment of the Liverpool Hospital and the broader precinct, opportunities will exist to implement new models of care, many of which will be enabled by digital technologies.

Precinct members have demonstrated a track record in innovation in health informatics, such as:

- SWSLHD Cancer Services have received awards for building and implementing of PromptCare – tracking Patient Reported Outcomes to help tailor treatment and care delivery
- SWSLHD partnered with a global technology firm in conducting the pivotal trials of a new connected care platform for cardiovascular disease.

Recent awards – celebrating the success of the Liverpool Hospital and associated health sector

Liverpool Hospital's staff and programs have received many awards. Some recent examples include:

- NSW Health Award for Patient Safety First (Nov 2018): Liverpool Hospital's central venous access service and after hours clinical support team received this award for developing a program that makes life less stressful for patients who are difficult to cannulate. The program's success has resulted in it being adopted in hospitals in the US, UK and Canada.
- ACHS Health Measurement Award (Nov 2018): ACHS (Australian commission for healthcare standards) awarded Liverpool Hospital for their work in building and implementing digital solution PromptCare, which uses patient-reported outcomes to inform personalised cancer treatment and care.

- Stroke Foundation (Nov 2017): Liverpool Hospital ranked the best comprehensive stroke unit in Australia in the 2017 Acute Stroke Audit. Liverpool Hospital boasts one of the largest and business stroke centres in NSW. They were recognised for delivering “best practice clot busting treatment (thrombolysis), clot removal treatment (endovascular thrombectomy) and 24/7 care”.
- Australian Cancer Research Foundation \$2 million grant (2017) for Liverpool Hospital to establish the first cancer Wellness Centre in south western Sydney. The centre will incorporate university partnerships and research partnerships with organisations like the National Institute of Complementary Medicine. Its focus will be on generating evidence on a wide range of conventional and alternative treatments in improving short and long-term outcomes and quality of life for cancer patients.

At a glance:

Liverpool's unique health assets

Cyclotron that is GMP certified to manufacture radiopharmaceuticals

This enhances our ability to offer industry partners the opportunity to deploy specialised imaging and diagnostic services requiring radiopharmaceuticals. It also has the potential to partner with developers of radiopharmaceuticals to manufacture.

Ingham Clinical Skills and Training Institute

Working with the clinical leaders of today and tomorrow to drive excellence in clinical practice and surgical training. The centre offers a world class facility from which industry can educate health professionals on the safe use of medical devices, consumables, and administration of specialist pharmaceutical therapies.

MRI-Linac

One of four centres in the world developing image-guided radiation oncology treatment (see Attachment 8).

Tissue and Blood Biobank

NSW's First Circulating Tumour Cell research centre, which is enabling detection of cancer cells in blood to better understand how certain cancers spread and develop targeted treatment plans.



Attachment 6 – Feature: summary of the redeveloped Liverpool Hospital

The NSW Government committed \$740 million for Liverpool Hospital and the Liverpool Health and Academic Precinct (LHAP) as part of the NSW Budget 2018-19. The focus of the project is the delivery of infrastructure to support the expansion of health services to address the forecasted 77 per cent increase to south western Sydney's population by 2036. Delivered in partnership with Health Infrastructure and South Western Sydney Local Health District, the LHAP project will transform Liverpool Hospital into a centre of excellence in cancer, translational research and health technology. This project presents an exciting opportunity to reimagine and realise a true health and academic precinct.

The funded commitment responds to the following key drivers for change:

- NSW Health's vision of Liverpool Hospital to grow as the preeminent hospital for SWSLHD
- increased clinical capacity to meet population growth and evolving cultural diversity across the age continuum
- seeking innovation and new ways of providing services to enhance access, equity and operational efficiency
- increased emphasis on hospital avoidance strategies
- leverage foundation investment to further promote growth in the health, research and education sectors through the Liverpool Innovation Precinct opportunities.

The redevelopment seeks to improve services and enhance access, equity and operational efficiency, acknowledging Liverpool Hospital is equipped with the largest emergency department and leading trauma centre in NSW. The hospital currently services 82,000 patients per year and reports:

- the second highest number of in patients treated in NSW
- one of seven major trauma units in NSW for adults
- one of only three adult brain injury rehabilitation units in Sydney.

The redevelopment will see an expanded emergency department, enhanced neonatal intensive care, maternity and critical care. It will further increase the overall bed count from 713 to 900 (the acute and subacute overnight bed capacity to 2026 demand), expand cancer services to meet 2026 demand, expand critical care services for emergency and consolidate the quality of ambulatory care services. These projections will see 31 more acute day-only beds, 22 more emergency spaces, over 50 percent increase in ambulatory care spaces, and increases in diagnostic procedural, and clinical and non-clinical support areas.

The hospital currently provides high-end technology services and is evolving to national and international prominence. It has one of four cyclotrons operational within NSW, offering precise diagnostics and treatments. This cyclotron services approximately 4000-5000 patients every year suffering cancers including lymphoma lung, pancreatic, head and neck, breast and prostate.

In collaboration with the Ingham Institute for Applied Medical Science, the University of NSW, University of Sydney, Western Sydney University, University of Wollongong and the University of Queensland, Liverpool Hospital similarly owns one of four magnetic resonance imaging (MRI) linear accelerator research facilities in the world. The Australian Cancer Research Foundation has awarded more than \$25 million in grants to the Ingham Institute and Liverpool Hospital to progress this state-of-the-art technology, now key in the journey to improve the precision and accuracy of radiotherapy and chemotherapy.

Liverpool Hospital is strengthened by its education and training partnerships in addition to its role in providing health services. It is a tertiary hospital formally acknowledging relationships with the University of New South Wales (UNSW), University of Wollongong and the University of Newcastle. It became the principal teaching hospital for the University of New South Wales in 1989 and subsequently for Western Sydney University in 2011. The partnership between Liverpool Hospital and UNSW extends to the South Western Sydney Clinical School (SWSCS), providing education and training delivered by academics and health specialists in medical sciences, psychiatry, public health and community medicine, and women's and children's health. The significant level of active health service delivery has become attractive to researchers and academics to be embedded in the hospital finding new and innovative ways to meet the community's health requirements and challenges.

Through the SWSCS, over 387 UNSW students undertake clinical placements. In addition, there are 100 medical and allied health interns from WSU.

The SWSCS also manages the Ingham Institute Clinical Skills and Simulation Centre at the Liverpool Hospital campus. This centre is a training hub for researchers, students, nurses and clinicians from the SWSLHD, and partners with WSU and UNSW. This centre includes state-of-the-art high fidelity robotic patient mannequin and simulated operating theatres. This partnership is supporting the integration of health, research and education.

UOW, which is also located in Liverpool, has medical and allied health relationship with the Liverpool Hospital for student training and plans to establish a nursing school in 2020.

The hospital will continue to be a centre of medical excellence for greater Sydney. The redevelopment of Liverpool Hospital will enhance its reputation for world class clinical expertise in innovation, teaching and training, and cutting-edge technological advancements.

Attachment 7 – Education and Research Capability Statement

The education and research sectors have a strong presence in Liverpool, although opportunity exists for this to be strengthened through increased activity, collaboration, attraction and investment in Liverpool’s physical assets, people and programs.

The Liverpool Innovation Precinct:

- is attracting researchers of international standing
- has created access to research activities across Australia and globally through its partnerships
- offers students the opportunity to attend educational institutions from kindergarten to higher education
- provides businesses with access to training organisations to upskill and access skills development within in close proximity
- demonstrates long-term confidence through its growth plans for the sector.

Key education and research operators in the Precinct

Liverpool’s education and research sector has and continues to grow throughout Liverpool CBD and greater city, with a concentration of activity around Liverpool Hospital, TAFE NSW and Department of Education assets. The continuing growth in demand for education services is linked to burgeoning population growth experienced in Liverpool and south west Sydney, which serves as catalyst for continuing investment in education assets and programs. The research presence in Liverpool is growing in scale, however through its flagship institution, the Ingham Institute for Applied Medical Research, Liverpool is able to continually attract researchers and clinicians seeking to translate their research into clinical solutions for the local community, Greater Sydney and beyond.

Ingham Institute for Applied Medical Research is a leading research institution in the fields of cancer research, clinical trials and medical physics amongst other specialities, and enjoys a close partnership with South Western Sydney Local Health District, UNSW, WSU and a host of other business and not-for-profit organisations. Ingham Institute currently occupies a modern research facility adjacent to Liverpool Hospital, which hosts state-of-the-art facilities and equipment. Due to the influx of researchers, the Ingham Institute has identified

options for further expansion in collaboration with hospital and university partners.

The Ingham Institute is not just a key attractor for innovative and ground-breaking research. It also offers access to innovative networks into other innovations ecosystems in Australia and beyond.

The Western Sydney University campus is located within Liverpool’s CBD, adjacent to the Westfield Centre. The campus facilities provide for more than 2500 students with a core focus on nursing, social work, anthropology, criminology and policing programs. Strengthening the collaboration between health and education sectors, the Western Sydney University opened its School of Nursing and Midwifery in Autumn 2018. The university intends to support health teaching and learning, including clinical placement and trialling in partnership with the Ingham Institute for Applied Medical Research and Liverpool Hospital. The university’s long terms aspirations for Liverpool are to deepen its activities with the growth of the Precinct.

The University of Wollongong (UoW) campus is currently co-located in the Liverpool City Council office on Moore Street, and provides program opportunities in the areas of business, IT, international studies, law, health management, with the commencement of highly regarded nursing degree at the new Western Sydney Nursing Education and Research Centre. UoW views Liverpool as an anchor for their aspirations for the rapidly growing South Western region of Sydney. They expect to grow their student enrolment capacity to 7000 to align with their 2030 strategic forward plan.

UoW is one of three core members that comprise the NUW Alliance alongside the University of New South Wales and the University of Newcastle. This strategic institutional alliance enables sharing of new knowledge, technologies, and global reach to build better business, academics and experiences.

The University of NSW (UNSW) has a strong education and research presence within Liverpool Hospital, through their education, clinical skills and simulation centre, providing first hand placement, training and education opportunities for students within the Faculty of Medicine.

UNSW is one of three core members that compose the NUW Alliance, alongside the University of Wollongong and the University of Newcastle. As outlined above, this strategic institutional alliance enables improved learning, academic and research outcomes and broaden the Precinct's reach.

Bright Institute of Stem Cell Research is a medical research and clinical trials institute specialising in the areas of cancer, clinical sciences, injury and rehabilitation, population and health, and mental health, which complements the focus areas of other partner organisations.

The Liverpool College, Education and Training Centre, and the TAFE International Education Centre form part of the South West Sydney Institute of TAFE NSW portfolio. The former provides comprehensive and accessible vocational training in human resources, hairdressing and beauty, and business finance, accounting and administration. The latter caters for the greatly multi-cultural and diverse community of Liverpool, providing intensive English training and courses.

Public and private school providers offer a diverse range of primary and secondary education that supports a strong vocational and higher education presence in the Precinct. In addition, it provides diversity of choice to those thinking of locating in Liverpool.

Liverpool Public School provides a coeducational primary education to years kindergarten to year 6 within Sydney's South West, Liverpool. With 95 percent of its students coming from language backgrounds other than English, the school promotes core values of respect and acceptance. Located in close proximity to the Liverpool train station, Liverpool Public School caters for both local and regional student cohorts, providing a learning journey for each child that empowers them to be the best that they can be¹.

The All Saints Catholic Colleges are located within the grounds of the All Saints Parish, Liverpool. The All Saints Catholic Primary School, Boys and Girls Colleges provide high quality primary and secondary accommodation from kindergarten through to year 12. The colleges cater for predominantly local students from the Moorebank, Holsworthy and Lurnea parishes of Liverpool. The All Saints Catholic Colleges remains the only catholic school within the Liverpool area.

Liverpool Girls High School aims to provide each of its girls with the skills and understanding to fulfil both academic studies and co-curricular activities. Catering for female students from years 7 to 12, Liverpool Girls High is a heavily accessible site situated to the southern end of Forbes Street, Liverpool, in the heart of a multicultural community with more than sixty nationalities represented.

Liverpool Boys High School provides a rounded and comprehensive education from years 7 to 12. Catering for many students from multi-cultural communities, Liverpool Boys High intends to prepare its graduates to actively contribute to the broader community and further their independent learning careers. Liverpool Boys High School shares grounds and facilities with Liverpool Girls High School, allowing for common initiatives and activities.

Partnerships into a wider range of research fields that is growing interest in Liverpool's unique research capabilities. The Precinct benefits from strong partnerships between partners organisations, exemplified by the following:

- Ingham Institute for Applied Medical Research – created from a foundational philanthropic gift and partnership between SWSLHD, UNSW, WSU, the Institute has grown to include a host of business and not-for-profit organisations, who fund researchers across various applied medical research areas, and is considered a key attraction for leading clinicians, researchers and students in the medical field.
- The NUW Alliance was formed from a partnership between University of Newcastle, University of Wollongong, University of New South Wales to collaborate and learns from shared experiences and knowledge, and to grow new opportunities, jobs and businesses. The NUW Alliance is targeting collaboration

1 <https://shapingourschools.nsw.gov.au/schools-a/liverpool-public-school>

in smart cities, cyber security, healthcare systems, postgraduate and doctoral training, all of which could further strengthen the existing relationships and programs currently available across the Liverpool Innovation Precinct.

- Liverpool Hospital is the principal referral and teaching hospital in South West Sydney Local Health District, and attracts students from UNSW and WSU medicine programs as well as other speciality schools. Through the investment in Liverpool Health and Academic Precinct, Liverpool Hospital is seeking to further strengthen its education, research and collaboration facilities and links with the universities within the grounds of the campus.
- The Sydney Partnership for Health, Education, Research & Enterprise (SPHERE) aims to integrate outstanding research, top quality education and professional practices across partner organisations to improve health outcomes, deliver better healthcare, generate economic benefits, and be a magnet for recruitment and retention of staff and investment in health and research. Through the Precinct members including SWSLHD, UNSW, WSU and Ingham Institute, SPHERE is able to progress their shared objectives of improving care and health outcomes, enhancing educational experiences, rapid translation of research and innovation for patient benefit and creating strong relationships between industry and local communities.
- South West Sydney Research – through the involvement of the Precinct Members SWSLHD, SWSPHN, UNSW, UOW, WSU and Ingham Institute, South West Sydney Research was established as a leader in health and medical research that improve outcomes, and progress their strategic priorities to strengthen research capacity and implementation of findings, facilitate collaborative sharing of resources and research and foster area of research excellence that focus on community needs.

Other Education Providers:

Public and private education providers are ensuring that businesses in Liverpool have the necessary skills to grow.

The education capability of Liverpool is enriched by the numerous private providers of education services, who offer further education and short courses to maintain the continuous learning journey for the local workforce.

In addition to services provided by TAFE NSW:

- Liverpool School for Seniors provide independent study courses in world affairs and industry, nature writing and creativity, lifestyle, and science.
- iLearn Academy provide additional teaching and learning of kindergarten to year 12 preparatory courses in the area of English, mathematics and sciences.
- Australian Careers Business College provide foundation course in the areas of accounting, business administration, early childhood, legal services, amongst other specialities, which provide a stepping-stone for the community to other higher education institutions.
- Edu-Kingdom College provides secondary school preparatory courses in: English, mathematics, science, selective school entrance exams, scholarship testing, opportunity class testing, and Higher School Certificate (HSC) testing.
- Kirana College is a provider of specialised courses in aged care, business management, community services, disability, early childhood education and care, and information technology – all of which will play a central role in the continuing skills development for the precinct and greater Liverpool's workforce.

Attachment 8 – Case Study: \$16 million MRI Linac and Associate Professor Gary Liney

The Australian MRI-Linac program represents a \$16 million investment in improving the outcomes of radiotherapy for cancer patients. The project has involved the development and build of a magnetic resonance imaging (MRI) device combined with a linear accelerator, which treat cancer using radiotherapy. The goal of the project is to develop next generation cancer therapy equipment, in which changing patient anatomy and physiology can be visualised during treatment. This will dramatically improve the accuracy of radiotherapy, directly improving outcomes for cancer patients. This project is one of only four similar projects in the world, and the only one existing in the southern hemisphere.

The magnet used in the MRI also has potential application to many other treatment modalities by utilising the improved accuracy from the MRI guidance system to improve patient outcomes from interventional surgery, high-intensity focussed ultrasound and hyperthermia treatments.



Associate Professor Gary Liney

Associate Professor Gary Liney is the senior medical physicist at the Ingham Institute for Applied Medical Research and Liverpool Cancer Therapy Centre, Sydney, Australia. He is the scientific lead for the MRI-simulator and MRI-Linac programs at Liverpool. He is a recognised expert in the use and integration of MRI techniques into radiotherapy planning, and published over 60 scientific papers and three textbooks and co-editor of the title 'MR in Radiotherapy' in 2018. Gary was the 'MR in RT' Symposium chair at last year's meeting in Sydney. The focus of his current research is split between developing MRI techniques for radiotherapy both on a clinical system and the hybrid Australian MRI-Linac system in the Ingham Institute research bunker. He is currently leading the investigations on the Phase

2 bespoke system using a split bore open magnet to provide real-time MRI guided radiotherapy.

Future Investment in the education and research sector demonstrates the long term confidence in the sector and the dynamic nature of existing activities and outputs.

TAFE NSW are currently working through a strategic review of their educational offering in Liverpool and Greater Sydney. This may lead to a change in the programs offered at its Liverpool campuses, with an opportunity to provide complementary programs that align with the health and innovation core.

University of Wollongong is seeking to expand their current offering in Liverpool through the creation of an expanded campus to cater for 7000 additional students. While the location of the campus is still to be determined, it signifies the importance of the investment in education facilities to support the anticipated growth.

Similarly, Western Sydney University (WSU) and University of NSW (UNSW) are also seeking new facilities in addition to their current campuses. While no decision has been made, the intent from WSU and UNSW to increase their presence in Liverpool is clear and supports their wider strategic goals for Western Sydney.

The All Saints Catholic College are also targeting a significant investment in their Liverpool campus, as they seek to create a kindergarten to year 12 offering, complemented by increased community facilities and offerings.

Schools Infrastructure, as the delivery agency for the Department of Education, are also planning for a significant investment in both primary and high schools across the two existing Liverpool campuses. They are currently working through a business case process, which will identify the overall investment value.

The Ingham Institute have experienced a significant growth in the number of researchers utilising their facility since its inception. As a result, they are seeking to expand their current footprint to future proof for the next 10-15 years. The Ingham Institute is working with SWSLHD and Health Infrastructure to best utilise resources through collaboration in an education and research hub as part of the Liverpool Health and Academic Precinct.

Attachment 9 – Table: Industry segmentation and potential targets

Table: Industry segmentation and potential targets

Industry Segment	Specific Capabilities and areas of growth for the LIP	Potential Value Offer	Potential Targets
Contract Research Organisations (International and Local)	<ul style="list-style-type: none"> — clinical trial capability for all therapeutic areas — likely focus is on oncology and immunotherapies. 	<ul style="list-style-type: none"> — clinical trial management capabilities — fast turnaround on feasibility requests — GCP compliance. 	<ul style="list-style-type: none"> — IQVIA — Southern Star — Optum — Datapharm.
Global biopharma companies looking to conduct clinical trials for new molecular entities or expanded indications of existing molecules	<ul style="list-style-type: none"> — oncology and chronic diseases at all stages of onset. 	<ul style="list-style-type: none"> — clinical trial management capabilities — fast turnaround on feasibility requests. 	<p>established multinational pharma companies such as:</p> <ul style="list-style-type: none"> — Pfizer — Novartis — Roche — Takeda.
Biotechnology – international	<ul style="list-style-type: none"> — oncology and chronic diseases at all stages of onset. 	<ul style="list-style-type: none"> — clinical. 	<p>Chinese domiciled biotech companies seeking to leverage the cache of manufacturing in Australia and importing from Australia.</p> <p>Asian (Korean, Japanese, Singaporean) Biosimilar manufacturers who see Australia as a lucrative pharmaceutical market to have a footprint and bring manufacturing capability to the region:</p> <ul style="list-style-type: none"> — Celltrion (Korea) — Samsung Biologics (Korea).
Biotechnology – locally founded	<ul style="list-style-type: none"> — can be broad -oncology or immunotherapy sector pose immediate opportunity. 	<ul style="list-style-type: none"> — clinical trial management capabilities — fast turnaround on feasibility requests — bench space for pre-clinical development work — access to talent — access to manufacturing facilities for trial stock. 	<ul style="list-style-type: none"> — Minomic — Oncosil — AusBiotech member organisations.

Industry Segment	Specific Capabilities and areas of growth for the LIP	Potential Value Offer	Potential Targets
Radiotherapy related companies	<ul style="list-style-type: none"> — cancer – niche diagnostics. 	<ul style="list-style-type: none"> — access to GMP accredited facilities for the production of diagnostic and therapeutic doses of radio-pharmaceuticals. 	<p>therapeutics:</p> <ul style="list-style-type: none"> — Minomic — Oncosil <p>service providers:</p> <ul style="list-style-type: none"> — Genesis — Care <p>strategic alliance:</p> <ul style="list-style-type: none"> — ANSTO (who plan to incubate MedTech companies with a nuclear medicine focus.).
Medical Technology: Connected devices	<ul style="list-style-type: none"> — management of chronic diseases in the outpatient setting — cardiovascular — COPD — CKD — diabetes — IoT Devices in hospital. 	<ul style="list-style-type: none"> — access to sites to trial technology and deliver data required to achieve marketing authorisation in Australian and international markets. 	<ul style="list-style-type: none"> — Samsung (focus for the Precinct) — Medtronic — Phillips — Biotronik — Smiths Medical.
Medical Technology: Robotic Surgery related	<ul style="list-style-type: none"> — nerve sparing surgeries — surgeries requiring fine precise dissection in difficult to access locations e.g prostatectomy — DaVinci — robotic assistive surgery for orthopaedic implants. 	<ul style="list-style-type: none"> — ability to access validation tests for the technology — ability to conduct first in man human trials. 	<ul style="list-style-type: none"> — scout for innovators residing in MedTech accelerator programs across Australia and ASEAN.
Medical Devices – Surgical Implantables, instruments	<ul style="list-style-type: none"> — laparoscopic and robotic-assisted surgical devices. 	<ul style="list-style-type: none"> — logistics and distribution capability — ability to conduct R&D — technical Staff Training capability and facilities. 	<ul style="list-style-type: none"> — J&J Medical — Medtronic — Bard — Stryker — Smith & Nephew — Zimmer — Boston Scientific.

Industry Segment	Specific Capabilities and areas of growth for the LIP	Potential Value Offer	Potential Targets
Medical Devices – Wound Care and anti-infectives; sterile consumables	<ul style="list-style-type: none"> wound care dressings antimicrobial treatments. 	<ul style="list-style-type: none"> logistics and distribution capability ability to conduct R&D technical Staff Training capability and facilities. 	<ul style="list-style-type: none"> new entrants into wound care market who are seeking to establish Australian presence spinouts from universities and other research settings Smith & Nephew (VIC) Medline.
Virtual Reality/ Augmented Reality	<ul style="list-style-type: none"> planning of complex and difficult surgeries surgical training. 	<ul style="list-style-type: none"> trial site ability to access surgical data ability to do validation testing of the technology. 	<ul style="list-style-type: none"> Vantari VR ImmersifAI Microsoft hololens applications Surgical XR <p>many more of these could be curated if there was a specific challenge to pitch to the innovation community.</p>
Medical Devices/ Pharmaceutical Distributors	<ul style="list-style-type: none"> all cold chain storage. 	<ul style="list-style-type: none"> logistics and distribution capability – sites access to major transport route access to talent. 	<p>global logistics providers wishing to establish AU presence, including:</p> <ul style="list-style-type: none"> CH2 Sigma Pharmaceuticals.
Nutraceuticals	<ul style="list-style-type: none"> GMP accredited manufacturing facilities (eg softgel caps). 	<ul style="list-style-type: none"> access to R&D talent contract GMP manufacturing and contract research packaging. 	<ul style="list-style-type: none"> Pharmako Vitex form alliance with National Institute of Complementation Medicine as a channel into the Precinct <p>needs further research on potential international players seeking to enter our market.</p>
Nutraceuticals	<ul style="list-style-type: none"> vertically integrated nutraceutical companies. 	<ul style="list-style-type: none"> corporate offices, Access to R&D talent contract GMP manufacturing and contract research packaging. 	<ul style="list-style-type: none"> Swisse Blackmores NatureCare.

Industry Segment	Specific Capabilities and areas of growth for the LIP	Potential Value Offer	Potential Targets
Animal Health Businesses	<ul style="list-style-type: none"> — vaccine manufacturers — broader animal health anti-infectives market. 	<ul style="list-style-type: none"> — access to R&D talent — facilities in which GMP manufacturing can be undertaken GMP accredited contract manufacturing organisations — fill and finish facilities — product sterilisation and packaging. 	<ul style="list-style-type: none"> — Zoetis — Bayer — Merial — Ceva — International Animal Health Products — leverage equine industry investment in Warwick Farm to bring about connection and deeper understanding of this market.
Digital Health	<ul style="list-style-type: none"> — care Integration. 	<ul style="list-style-type: none"> — data linkages between Primary and Acute care sector — connectivity. 	<ul style="list-style-type: none"> — Precedence Healthcare <p>establish bioinformatics centre (to be determined through project work).</p>
	<ul style="list-style-type: none"> — electronic medical record / electronic medication management. 	<ul style="list-style-type: none"> — test beds — customer acquisition. 	<ul style="list-style-type: none"> — NSW Health/eHealth NSW is decision maker on statewide systems.
	<ul style="list-style-type: none"> — digital research entities. 	<ul style="list-style-type: none"> — additional corporate partners — trial sites and collaborators. 	<ul style="list-style-type: none"> — Digital Health CRC.
	<ul style="list-style-type: none"> — virtual care delivery. 	<ul style="list-style-type: none"> — access to program funding to implement programs. 	<p>Choose priority areas for which program funding exists. Run reverse pitch process or EOI to determine suitable partners.</p> <p>Consider:</p> <ul style="list-style-type: none"> — LYSN — myEmergencyDoctor — Coviu.
Technology Companies with an interest in health	<ul style="list-style-type: none"> — ensuring installed base of their platform technologies. 		<ul style="list-style-type: none"> — Samsung — Apple – Mobile Experience — Microsoft – Cloud, CRM — Amazon Web Services – Cloud, Contact centres.

Attachment 10 – Case Study

IFC Global Logistics has benefitted from business support services provided in Liverpool

IFC Global Logistics was attracted to the growing cluster of transport and logistics companies operating in Liverpool. Setting up a business in a new location can have its fair share of challenges. Some of these barriers can discourage and create disincentives for a business to enter a new market. The Liverpool City Council understands this. They understand that investors have endless opportunities of where to locate their business and navigating an unknown jurisdiction's regulations can be a minefield.

The Council provides a range of services to assist set up business in Liverpool, grow and go global. IFC Global Logistics encountered a variety of issues that were causing delay and having adverse commercial impact. IFC Global is not in the business of opening new operations each day and understandably had difficulties progressing through the development assessment and construction

phases of the implementing their strategy to locate their operations in Liverpool. The City Economy unit of Council was instrumental in assisting them work through these issues, and navigating approval processes to ensure the project was not unnecessarily held up.

The City Economy team developed a working relationship with the IFC Global Logistics. They developed an intimate understanding of their need for each stage of the journey – from assistance to ensure a flexible DA application process that allowed construction to commence on a fit for purpose facility, to communication with a neighbouring property, to gaining legal access to the property and clarifying DA conditions. IFC Global Logistics believes the City Council's services were invaluable to having them set up operations in Liverpool.







**LIVERPOOL
INNOVATION
PRECINCT**

REIMAGINING

**INNOVATION IN HEALTH,
EDUCATION AND
RESEARCH**

LAND USE ANALYSIS AND PRECINCT STRATEGY
ICT STRATEGY

INVESTMENT FRAMEWORK

DECEMBER 2018