

COVID-19 is an unprecedented global health crisis and economic event that is rapidly evolving. In these circumstances the short-term economic environment is extremely uncertain, especially where the forecasting of economic trends is involved. At the current time, the research and analysis of economic data – such as forecasts of economic activity, population, employment growth and beds gap analysis, and so on – reflects a return to “business as usual” scenario, while also noting the potential impacts that may be associated with the COVID-19 virus and the anticipated return to growth in economic indicators. Where required, we will be clear where a specific consideration of the implications of COVID-19 is being provided outside a business as usual scenario.

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Executive Summary

This market needs analysis has been prepared by Ethos Urban on behalf of Sacco Building Group to support the Planning Proposal relating to 61-71 Goulburn Street, Liverpool. This assessment is based on a concept plan for a 32,280m² private hospital at the subject site comprising:

- A total of 155 inpatient and outpatient beds, including 25 intensive care beds.
- Up to 12,540m² in Gross Floor Area of medical consulting and education floorspace across 11 levels
- 10 operating theatres
- Ambulatory care and radiation oncology
- Staff administrative areas
- Ground floor retail tenancies (such as convenience store or food operators)

The key objectives of this assessment are to confirm need for the proposed development in this location, through assessing the key supply and demand drivers for the development. This includes analysing population trends and characteristics, strategic policy overview, case study analysis and assessment of supply and demand.

Key findings of this market needs analysis are summarised below.

Site Context

- The subject site is located within the South Western Sydney LHD, and close to Liverpool Hospital, as well as major university and research institutions. Accordingly, there is potential to establish strong synergies with major university operators and public health services, as well as unlock the subject site to accommodate higher order activities which are better aligned with this part of Liverpool as a key health and education precinct.
- Liverpool Hospital has a total of 877 patient beds and is currently undergoing a significant expansion that will result in an additional +187 beds and the establishment of 'Liverpool Health and Academic Precinct'. Notably, the number of admitted patients at Liverpool Hospital increased by over +9,500 patients between 2014/15 and 2018/19, highlighting the increasing demand and pressures for health care in this part of Sydney.

Strategic Policy Context

- The subject site is located within a strategic area, forming part of the Liverpool Innovation Precinct. The Precinct Plan specifically notes that the subject site and surrounding residential areas are a key barrier in connecting social infrastructure and Liverpool CBD and as such represent a key opportunity for repurposing to uses that complement the surrounding health and education facilities. Importantly, the Liverpool Innovation Precinct Plan calls out the need for a new or expanded private hospital in this part of Sydney.
- A key regional objective of the Greater Sydney Commission is to deliver integrated health and education precincts. The subject site and Planning Proposal is in line with this objective by establishing a new private hospital within close proximity to major public health services and educational institutions.
- A key objective of the South Western Sydney LHD is to collaborate with the Liverpool Innovation Precinct to revitalise Liverpool City Centre and attract investment in health, education and research in this part of Sydney. The South Western Sydney LHD Plan also notes that the area is challenged by an ageing population, high rates of chronic disease, and low levels of private health providers.

Socio Economic Context

- A review of the Study Area (South Western Sydney LHD) population shows that the region has a population of over 1,000,000 residents. The Study Area is a highly culturally diverse community that predominately consists of young families with children. Population forecasts indicate that the Study Area is forecast to grow by over +395,000 residents between 2021-2036, including significant ageing of residents aged 65 years and over.
- Ageing is an important demand consideration, with Australia's ageing population increasing demand pressures for health services over recent years, noting older people require more specialised and frequent medical services compared to younger cohorts. This is primarily due to greater susceptibility to chronic diseases or disorders associated with ageing.

- Employment forecasts indicate the number of health care workers in the Study Area is anticipated to increase by approximately +23,000 workers between 2021 and 2036.

Demand Considerations

- There is strong population growth in the Study Area, including significant ageing of residents aged 65 years and over. This ageing population will increase demand pressures on the health system, particularly as elderly cohorts require greater and more frequent health care by comparison to younger age groups.
- An estimated 493,500 residents within the Study Area currently have some degree of private hospital coverage.
- The number of hospital admissions are forecast to increase, with an additional +224,460 admissions estimated between 2021 and 2036.
- Demand for consulting and ancillary health services will continue to grow in response to an ageing population, rising workforce and growing number of hospital beds in the Study Area. The proposed development will provide up to 12,540m² of consulting and education Gross Floor Area (GFA) that will enable health providers to occupy a modern facility within a central and key location for health and education.
- An assessment of forecast floorspace requirements show that over +1,000,000m² of additional health care floorspace and some +836,500m² of new education space will be required in the Study Area between 2021-2036 to accommodate the projected workforce across the health and education industries. In the context of the proposed development, the floorspace to be delivered represents approximately 3% of total forecast health care requirements in the Study Area over the coming 15 years.
- It is understood that discussions with operators are underway, and that there is significant operator interest in occupying 15 of the 19 levels of the proposed development. As such, the remaining consulting/education space of around 4,560m² would be ancillary to the primary operator, and represent a small provision of space that would be quickly absorbed and well supported in the market, given the destination appeal and critical mass of health uses and services located within the development and the broader Liverpool health precinct. Tenants and operators would be attracted to the space as a contemporary offering that is co-located with key private health services and in the heart of the Liverpool health precinct, one of the primary and largest health destinations serving the South Western Sydney LHD.

Supply Considerations

- There is currently a total of 2,383 hospital beds located in the Study Area, and just 15.0% are private hospital beds. A review of development proposals shows there are currently 1,301 beds proposed in the Study Area. Of note, all proposals are located beyond 10km of the subject site, indicating a market gap in Liverpool.
- At the current provision of beds, there are 2.2 hospital beds per 1,000 people in the Study Area. This is well below the national average of 3.9 beds per 1,000 people. This represents a current supply gap of up to -1,810 beds, with this gap forecast to increase to -2,053 beds by 2036. Accordingly, the proposed 155 beds will help alleviate an undersupply of beds in the Study Area.

Market Need

- Market need is evident through substantial operator interest in the project. It is understood that advanced discussions are underway with a major private health operator who is seeking to occupy 15 floors of the project. This would represent over three-quarters of the project, and highlights the fact that remaining consulting and educational suites (of around 4,560m²) will be ancillary in nature to accommodate services and operators who wish to co-locate with the primary health operator and leverage the location and amenity benefits of the project within a key health precinct. The ancillary consulting space represents a small provision of floorspace that will be available to better serve the health and education needs of the broader community and align with expectations of Liverpool as a key health (and education) precinct.
- A review of case studies including newly developed and proposed private hospital and other health facilities, shows that a key model of private hospitals is the provision of consulting suites and spaces for practitioners to provide non-clinical care to patients and the ability to provide educational space, research and training services. This facilitates the creation of health and medical clusters and hubs, which appeal to a wide range of occupiers, providers and patient needs.
- There is increasing demand for co-located hospitals in integrated settings, including public and private hospitals, as well as educational facilities. It is not unique for major educational institutions to be located within proximity to

health facilities in order to access benefits such as knowledge and resource sharing, and teaching facilities for medical and health students.

- The proposed uses and floor area of the development will enable a range of health and education providers to establish within Liverpool. The space will be highly beneficial for medical professionals, researchers, patients and students. Importantly, these spaces are highly flexible, and can change over time to respond to market demand in the health and education sectors and will support an increasing workforce and student population in the health industry as it continues to grow.
- Many of the existing ancillary health services in Liverpool are within substandard buildings and need modern facilities that are in line with current and future industry expectations and standards that enable them to deliver high quality patient care and health experiences.
- There is an opportunity for collaboration with university institutions and medical research facilities such as UNSW, WSU and the Ingham Institute at the subject site, particularly through the delivery of flexible consulting space that may be able to offer research and training spaces.
- The site suitability and demand for a private hospital in this area is reinforced by the strong interest in the project from a recognised major hospital operator who is willing to commit to occupying around three-quarters of the proposed development.
- The proposed composition of the development including 155 beds and 12,540m² of consulting and education GFA is supportable, particularly in light of operator interest, an ageing population, under supply of beds, high forecast admission rates, and growing healthcare and education requirements in the Study Area which should be concentrated around key institutions and primary health facilities such as the Liverpool health precinct.
- The project will complement rather than compete with existing health services located across the LHD as well as within the nearby Liverpool City Centre by adding to the health facilities and supporting the evolution of the Liverpool health precinct as a key destination. The project will add to amenity and the attraction of the overall precinct, with the increased visitation and profile directly benefiting existing local operators and specialists. The health network relies on ancillary operators and uses to provide vital services and functions for the community, the local health services and facilities that are positioned outside of the major hospital clusters will continue to serve specialist functions or cater to the needs of the immediate local population, with the proposed facility to serve a higher order role and function in line with Liverpool's status in the health network.

1.0 Introduction

This Market Needs Analysis has been prepared for Sacco Building Group, in support of the Planning Proposal at 61-71 Goulburn Street, Liverpool for the development of a new private hospital and associated facilities. The site is strategically positioned close to Liverpool Hospital; a major public hospital serving the South Western Sydney Local Health District.

As part of the Planning Proposal, a market needs assessment is required to provide an overview of the need for the development. This includes defining a study area catchment in which the proposed private hospital will primarily provide services once complete and operative.

This report contains the following chapters:

- 1 Introduction
- 2 Site Context
- 3 Strategic Policy Context
- 4 Socio Economic Context
- 5 Competitive Environment
- 6 Market Needs Assessment
- 7 Examples and Case Studies

1.1 Planning Proposal

The Planning Proposal aims to amend the Liverpool Local Environmental Plan (LEP) 2008 to facilitate the delivery of a new private hospital at 61-71 Goulburn Street Liverpool (the subject site). The subject site forms part of the Liverpool Innovation Precinct; a strategically planned health and education precinct serving Liverpool and South Western Sydney residents. It is understood that there is already strong interest in the project from a recognised major hospital operator.

The Planning Proposal has been based on the concept scheme for the subject site (prepared by Team2 Architects) which includes the following:

- Demolition of existing buildings and structures.
- Construction of a 32,280m² private hospital across 20 levels, that includes:
 - A total of 155 new hospital beds, including 25 ICU beds;
 - 12,540m² of consulting and education Gross Floor Area (GFA) across 11 levels;
 - 10 operating theatres across level two;
 - Ambulatory care and radiation oncology on level one;
 - Ground floor level with drop off bay, entry lobby, 4 retail tenancies, reception and end of trip facilities; and
 - 4 basement levels including parking, clinical waste, plant and equipment.
- Construction of a pedestrian footbridge between the subject site and Liverpool Public Hospital.
- Landscaping and public domain works.

A concept design of the proposed private hospital is shown over the page in **Figure 1**.

Figure 1 Concept Design of the proposed private hospital



Source: Team2 Architects

1.2 Strategic Need for the Proposal

The Australian health system is considered to be one of the most effective in the world; however, as with all health systems, they must be prepared to meet future challenges.¹ At the time of writing, global health systems are facing unprecedented challenges in managing and controlling the COVID-19 Public Health Emergency. The World Health Organisation (WHO) has released guidelines to help worldwide health systems manage the demand on health facilities and health care workers to ensure operation is effective in navigating these challenges.



Figure 2 World Health Organisation

Source: World Health Organisation

“The best defence against any outbreak is a strong health system”².

The future of global health is uncertain, with some expecting major changes in health will result in the way people live in the future. It is clear that investment in healthcare is essential to ensure our system continues to provide and deliver high quality, accessible and affordable care for all. Health care in NSW needs to continue to meet patient expectations, deliver services to an ageing population, and provide response to disease burdens as a result of acute care, chronic and complex conditions. In response to these challenges NSW Health is committed to providing a value-based healthcare system, with a focus on:

¹
² Tedros Adhanom Ghebreyesus, WHO Director General, 2020.

- Positive health outcomes for patients and communities
- Quality experiences for patients
- Improved experiences of providing care
- Effective and efficient care provision.³

The NSW health system faces similar pressures to other systems around the world, including finding ways to provide quality health care that can cater for population health trends such as increasing rates of chronic diseases, ageing populations and inequitable access to services; as well as changing expectations of service delivery from clients and patients. There is an increasing demand for more personal, integrated care and technologically efficient health care provision. Research has shown that preventative health programs will assist in improving the overall health and wellbeing of communities, and whilst the NSW health system must focus on treating illness it is important for investment to be made in preventative measures, such as wellness and prevention programs, as well as new business models to provide integrated care to ensure health services can deliver new products, solutions and experiences.

As identified within the NSW State Health Plan, the NSW Government's focus is to provide a health system that is more connected across the primary and acute settings, reducing unnecessary hospitalisations and emergency department presentations, creating a more financially sustainable health system for the future. The provision of additional private health care services forms part of the directions for the NSW State Health Plan, with an integrated and connected health care system, providing care for those if and when they need it through a connected State and private health service.

The subject site of the proposed private hospital is located within the South Western Sydney Local Health District (LHD). The South Western Sydney LHD provides care to over one (1) million people spanning from Bankstown to the Southern Highlands region.

With a significant increase in the population expected to be living within the South Western LHD over the next 20 years including considerable ageing; a focus of health for the South Western Sydney LHD is to provide increased preventative and acute care for an ageing demographic, that is socially and culturally diverse.

Health trends show people in the South Western Sydney LHD are relatively healthy with good life expectancy; however health indicators reveal the LHD has high prevalence of chronic disease.

In order to cater for the changing population health demands, there is a need to ensure private healthcare providers adopt a collaborative approach, ensuring health care provision is coordinated within precincts. Since the 1980s private hospital beds have increased in NSW with many doctors and specialists able to work across both the private and public sector. Private hospitals form an integral part of the NSW health system, providing additional choices in health services, ranging from medical, surgical, childbirth, mental health and rehabilitation services. It is common for elective surgeries, cardiac procedures, rehabilitation and psychiatric services to be performed within a private hospital setting. Private hospitals are more likely to treat people aged 65 years and over, and as a result may have increasing demands in supporting health care provision in NSW as the general population ages.⁴

The subject site provides an opportunity to provide additional medical facilities for the South Western Sydney LHD and the State. The subject site is strategically positioned opposite Liverpool Hospital, and is situated within the Liverpool Innovation Precinct, which aims to provide an integrated health and education precinct for Liverpool and the broader South Western Sydney community.

The delivery of a new private health care facility on the subject site that offers up to 12,540m² of consulting and education Gross Floor Area (GFA) as well as 155 beds within a clinical setting, will enable additional medical services for a growing community, as well as learning space and opportunities for collaboration with universities and other health care providers within an integrated setting. Of benefit would be a range of private elective procedures complementing the public health system, attracting top quality medical practitioners and specialists to the area.

³ NSW Health. 2019 *NSW Health Annual Report 2019-2019*.

⁴ Australian Private Hospital Service Provision. 2018. *APHA facts on private hospitals*.

2.0 Site Context

2.1 Locational Context

The subject site for the purposes of this assessment is located at 61-71 Goulburn Street, Liverpool, and within the Liverpool Local Government Area (LGA). Liverpool is a major and expanding strategic centre within South Western Sydney, located approximately 25km west of Sydney CBD, and 14km south of Parramatta.

Specifically, the subject site and Liverpool LGA are located within the South Western Sydney LHD. This district is served by 5 major public hospitals, including Liverpool Hospital which is positioned directly opposite the subject site on Goulburn Street. The subject site is also positioned close to Liverpool City Centre, including Liverpool Station which is located approximately 600m south. As such, this is a highly accessible site that is well connected to not only rail services, but also major arterial roadways including the Hume Highway to the north, and Newbridge Road to the south.

Currently, existing uses on the subject site include residential dwellings across four lots. This primarily includes three apartment blocks, each supporting 4 storeys of residential dwellings, as well as a single detached dwelling on a relatively undeveloped parcel of land. The extent of the subject site and proximity to Liverpool Hospital is shown below in **Figure 3**.

Figure 3 Site Aerial



Source: Nearmap, Ethos Urban

2.2 Surrounding Development and Land Uses

Liverpool is a fast growing centre within the context of Greater Sydney, with a mix of community services and businesses that can serve a fast-growing population in the South Western Sydney area. There are number of major key community and social infrastructure facilities located within close proximity the subject site, particularly health and education related uses.

Liverpool supports a range of health and education uses, including Liverpool Hospital, Sydney Southwest Private Hospital and major research facilities including the Ingham Institution of Applied Medical Research. There are also several ancillary medical facilities such as allied health, specialist consulting rooms, pathology and radiology services that are located within close proximity to the subject site that form part of the medical cluster established in

Liverpool. These facilities are typically located within detached single dwellings, or small-scale commercial sites across 2-3 levels.

The Western Sydney University high rise campus, which supports learning spaces within a vertical building at 83m in height, is located just 500m west of the subject site, adjacent to Westfield Liverpool. There are a number of other Universities that are embedded within Liverpool and close the subject site, including the University of New South Wales (UNSW) and University of Wollongong (UOW). The Planning Proposal has the potential to establish synergies with these major university operators through knowledge and resource sharing, training and research.

The cluster of medical and education uses within Liverpool forms part of the Liverpool Innovation Precinct, which is a key precinct focusing on health and research, education and innovation. The proposed development at the subject site has the potential to contribute positively to the growth of this precinct by providing modern and state of the art medical facilities, research and consulting space within a key location that will complement the expansion of Liverpool Hospital and surrounding critical social and community infrastructure.

Figure 4 Surrounding Context



Source: Nearmap, Ethos Urban

2.2.1 Liverpool Public Hospital

Liverpool Hospital is a Principal Referral Hospital within the South West Sydney LHD, being a major hospital accommodating high admission rates and having highly specialised equipment and resources. The hospital is also a major teaching hospital for the University of NSW and Western Sydney University.

Liverpool Hospital has 877 beds, including 23 operating theatres and 60 ICU beds, as well as emergency, trauma care, imaging services, paediatric, maternity, oncology and allied health services. While the hospital primarily serves Liverpool LGA and South Western Sydney LHD residents, the facility also provides state-based services including a trauma centre, neonatal care and brain injury rehabilitation.

Admissions and health care services at Liverpool Hospital have increased significantly over the past 5 years, as shown below in **Table 1**. A key trend to highlight is a notable decrease in patient care and admissions in 2019/2020 from the previous year (2018/19), largely due to the impacts of COVID-19 on the hospital sector including the cancellation of all elective surgeries and reduced non urgent care in the last quarter of that financial year.

When pre-COVID-19 trends are considered however, hospitalisations at Liverpool Hospital increased significantly between 2014/15 and 2018/19, including a considerable increase in the number theatre operations (+6,000 operations), and rise in the number of non-admitted patients by approximately +210,000 patients.

Table 1 Liverpool Hospital Patient Data

Liverpool Hospital presentations	2014/15	2018/19	2019/2020	Change (2014/15 - 2018/19)
Births	3,409	3,718	3,702	+309
ED Presentations	78,054	93,192	91,779	+15,138
Admissions	81,112	90,732	85,857	+9,620
Non-Admitted Patients	502,587	715,659	580,302	+213,072
Theatre Operations	8,628	15,446	14,630	+6,818

Source: South Western Sydney LHD – Year in Review

Liverpool Hospital is currently undergoing a major expansion as a result of ongoing population growth associated with South Western Sydney, and the increasing number of medical students requiring training through its teaching facilities.

The Liverpool Hospital expansion is significant, with \$790 million invested into developing the 'Liverpool Health and Academic Precinct'. The project includes the expansion of the existing hospitals infrastructure for both clinical and non-clinical services, as well as a \$50 million multi storey car park. The redevelopment includes the refurbishment of some existing facilities, as well as the construction of an integrated services building to accommodate 187 beds across 8 levels. This building will be located directly opposite the subject site fronting Goulburn Street and is shown below in **Figure 5**.

Figure 5 Photomontage of Liverpool Hospital Health and Academic Precinct facing Goulburn Street



Source: Health Infrastructure

The expansion of Liverpool Hospital will help enhance facilities and increase the capacity of health services to support this fast-growing area of South Western Sydney. Importantly, the subject site is well suited to capitalise on the Liverpool Health and Academic Precinct by providing a new private health offer co-located with the public hospital to create a key health destination. The proposed pedestrian footbridge will provide direct connectivity between the subject site and Liverpool Hospital, establishing a true interconnected health facility. It is also noted that the road network between the subject site and Liverpool Hospital is planned to be narrowed as part of the planning proposal, which will enhance pedestrian walkability between the two facilities.

Significant specialist and ancillary services are also clustered around Liverpool Hospital, a summary of which are provided as follows:

- Specialist Medical Services:
 - Liverpool Specialist Medical Centre (including neurology services)
 - South West Cardiology
 - Liverpool Vascular Laboratories

- Hearing Australia Liverpool
- Bloom Hearing Specialist
- Liverpool Eye Surgery
- Southwest Sydney Fertility and IVF Clinic
- Research Institutes:
 - Ingham Institute of Applied Medical Research
 - Bright Institute of Stem Cell Research Australia
 - ARETE Research Global Pty Ltd
- Private consulting rooms
- Medical Centres / GP clinics
- Radiology, and pathology services
- Rehabilitation services, physiotherapy, chiropractor
- Childcare – specifically to service medical staff
- Aged care services

2.2.2 Sydney Southwest Private Hospital

Located just 300m north of the subject site on Bigge Street, Sydney Southwest Private Hospital is the main private hospital within Liverpool that offers 98 patient beds including 10 ICU beds, day surgery unit, mental health unit, oncology, maternity unit and radiology services. This private hospital does not offer emergency services care. Sydney Southwest Private Hospital is the only private hospital offering a broad range of clinical and general procedures, including long stays and rehabilitation in Liverpool LGA.

2.3 Key Findings and Site Suitability

The proposed development is suitable at the subject site for the following reasons:

- Strategically positioned adjacent to Liverpool Hospital; a Principal Referral Hospital serving South Western Sydney and the State, and easily accessible by all forms of transport.
- Liverpool Hospital is currently undergoing major expansions reflecting the strategic direction and growth of this part of Liverpool as a major health precinct, driven by an increase in demand for medical services. The Planning Proposal will further contribute to enhancing this part of Liverpool as a key health precinct and complement the expansion of Liverpool Hospital.
- The proposed development will be located within a central position and contribute to the establishment of the Liverpool Health and Academic Precinct, and the broader Liverpool Innovation Precinct by providing a large private health offer that is co-located to a major public hospital, research institutions and tertiary education campuses.
- Potential to establish synergies with major university operators including UNSW, WSU, and UOW.
- The proposed uses will unlock the subject site to accommodate higher order activities which are better aligned with this part of Liverpool as a key Innovation Precinct.

This suitability of the site as a medical facility and hospital is further reinforced by the strong interest in the project from a recognised, major hospital operator who is planned to absorb around three-quarters of space available at the development. Remaining space will therefore be ancillary in nature.

3.0 Strategic Policy Context

The following section identifies the key economic drivers for the subject site, and is based on a review key state and local policies and strategies.

Key strategic drivers for the development

- The Greater Sydney Region Plan emphasises that there is a need to deliver critical community infrastructure (including health facilities) at a rate that is in line with population growth, with a specific focus on providing integrated health services and the co-location of health, education and research together within holistic settings.
- The Greater Sydney Region Plan and Western City District Plan notes that Liverpool LGA has the largest projected growth forecast for persons aged over 65 years in the Western City District. As such, this region will face greater demand pressures for health services in the coming years than currently exists, due to this ageing population.
- The South Western Sydney LHD Plan highlights that there are on average 658 admissions to hospital each day in the district, and that the district is challenged by a fast growing and ageing population, high rates of chronic disease, and low levels of private health providers.
- A key objective of the South Western Sydney LHD is to collaborate with the Liverpool Innovation Precinct to revitalise Liverpool City Centre and attract investment in health, education and research in this part of Sydney.
- The Liverpool Local Strategic Planning Statement (LSPS) notes that there are currently more than 15,000 health and knowledge workers in the LGA, representing around 20% of the local workforce.
- The number of knowledge workers in Liverpool LGA is forecast to increase to around 30,000 by 2036.
- The number of tertiary students in the LGA is also forecast to substantially increase over the next decade by over 10,000 students.
- The subject site is identified as a key opportunity for redevelopment to complimentary uses that support the Liverpool Innovation Precinct under the Precinct Plan.

3.1 Policy Review

A high level of review of state and local strategic policies demonstrates that there are a number of key drivers and objectives that support the development of a private hospital and associated facilities at the subject site. These include:

- **Greater Sydney Region Plan** – supporting the 30-minute city aspiration and enhancing Greater Sydney's liveability, productivity and sustainability. The Greater Sydney Commission aspires for a '30-minute city' where each Sydney resident is able to access employment, open space, and essential services within 30 minutes of their home. Specifically, the Plan highlights the need to deliver critical community infrastructure, including health facilities at a rate that is in line with population growth. This includes a strategic focus on delivery integrated health services, and the co-location of health, higher education, research and other complementary commercial uses within united and collaborative precincts. The Plan notes that areas of the Western Parklands City (including Liverpool) will face greater demand pressures for health services than that currently exists, due to significant ageing of populations of 65 years and over.

The proposed private hospital at the 61-71 Goulburn Street site will deliver critical health infrastructure and services within an emerging health and education precinct where major universities and hospitals (public and private) are already established. As such, the development will be supporting the strategic intent outlined within the Greater Sydney Region Plan for the delivery of complimentary facilities within an integrated setting that will support the South Western Sydney area as its population continues to grow and age. In particular, the development will support the 30-minute city aspiration by providing critical health services within a central and accessible locations within a fast growing part of Sydney.

- **Western City District Plan:** The Plan reinforces the strategic intent of the Greater Sydney Region Plan to deliver integrated and co-located health facilities within central and accessible locations across the city. The

Plan notes that the South Western Sydney LHD has a direct focus on creating healthy communities through community health services, obesity prevention and promotion of a healthy built environment. The Plan also highlights that Liverpool LGA has the largest projected growth forecast for persons aged 65-84 years in the Western City District. The delivery of a private hospital at the subject site will support these health objectives, particularly from an ageing population perspective through the provision of specialist services and clinical care within a central and integrated setting.

- **NSW Health State Plan:** At state level, there is an identified need for new and expanded health infrastructure to support the growing and changing health and wellbeing needs of the NSW population. This includes:
 - *A strong focus on providing integrated care services through a connected health system that links the various NSW Health services with other health services*
 - *Meeting the health needs of an ageing and growing population will be the key challenges faced by in the Health Industry*
 - *The provision of new health infrastructure is a priority and should be designed for future-needs, that support research and innovation, adaptability, and integration with other agencies.*

The proposed private hospital at the subject site will support up to 155 beds and a range of clinical and non-clinical services within a holistic setting that is adjacent to a major hospital and other health services. This supports state objectives of enhancing the connectedness of the NSW Health system.

- **South Western Sydney LHD Plan:** The South Western Sydney LHD is one of the largest employers in South Western Sydney, comprising 15,690 staff. The Plan outlines that on an average day, there are 658 admissions to hospital, as well as 124 operations, 824 presentations to emergency departments and 1,017 community health services. The Plan highlights the key challenge for the South Western Sydney LHD is the fast growing population, characterised by an ageing demographic, low levels of literacy, high rates of chronic disease, and low levels of private health service providers.

Specifically relevant to the subject site, the Plan sets a key goal to for the LHD to be a leader in research and training, which includes *“collaborating with the Liverpool Innovation Precinct to revitalise Liverpool City Centre and attract investment in health, education and research”*. The proposed private hospital at the subject site will assist in realising this vision by providing an integrated facility that includes up to 12,540m² of consulting and education GFA, whilst increasing the provision of private health providers within the South Western Sydney LHD.

- **Liverpool Local Strategic Planning Statement (LSPS):** The LSPS outlines that the 2019 population of Liverpool LGA was approximately 227,310 residents and is forecast to increase by +130,000 people by 2036, equating to a 60% increase in the population from its 2019 level. The LSPS notes that Liverpool City Centre is currently being revitalised to support increased commercial and residential uses. This includes the establishment of a health and education focused innovation precinct that includes the subject site, *“which could see additional health and knowledge workers attracted to this part of Sydney beyond the current 30,000 health and knowledge workers already expected by 2036”*. Currently, there are more than 15,000 health and knowledge workers in Liverpool LGA, which represents around 20% of the local workforce. The LSPS also notes that the number of university students across the LGA is expected to increase by more than 10,000 tertiary students over the next decade.
- **Liverpool Innovation Precinct - Land Use and Precinct Strategy (Precinct Plan):** The Liverpool Innovation Precinct (LIP) is a strategic precinct focusing on health, research, education and innovation. The LIP Precinct Plan identifies opportunities for future private hospitals in the precinct, and specifically identifies the subject site and surrounding residential buildings as barriers between critical social infrastructure and Liverpool CBD. As such, the Precinct Plan notes that these sites (including the subject site) present strategic opportunities for repurposing that complement and support surrounding social infrastructure, including health and education. The extent of the Liverpool Innovation Precinct is shown in **Figure 6**.

Figure 6 Liverpool Innovation Precinct



Source: Liverpool Innovation Precinct Plan

4.0 Socio-economic context

This following section analyses the local and regional economic context of the subject site, including demographic characteristics, population forecasts, and health trends.

Key community characteristics

- The Study Area for the purposes of this assessment is defined as the area inside the South Western Sydney LHD boundary.
- As of 2021, there were 1,075,210 residents in the Study Area. This number is forecast to grow to 1,471,080 residents by 2036 and increase of +395,870 residents over the period.
- The Study Area is forecast to age significantly in the coming years, with the total number of residents aged 65 and over projected to increase by +104,800 residents over the next 15 years, accounting for 26.5% of total population growth.
- A review of ABS 2016 Census of Population and Housing data shows the Study Area is characterised by a culturally diverse community, that predominately consists of families with children.
- Employment estimates show that around 14.5% of employment in the Study Area is associated with the health care sector. The number of health care workers in the Study Area is forecast to increase substantially between 2021 and 2036 from 53,180 workers to 76,230 workers or +23,050 workers over the period.
- Approximately 50% of Australians identified as having at least one chronic illness in 2014-15. Chronic illness is a significant contributor to demand for medical services, including within the Study Area.

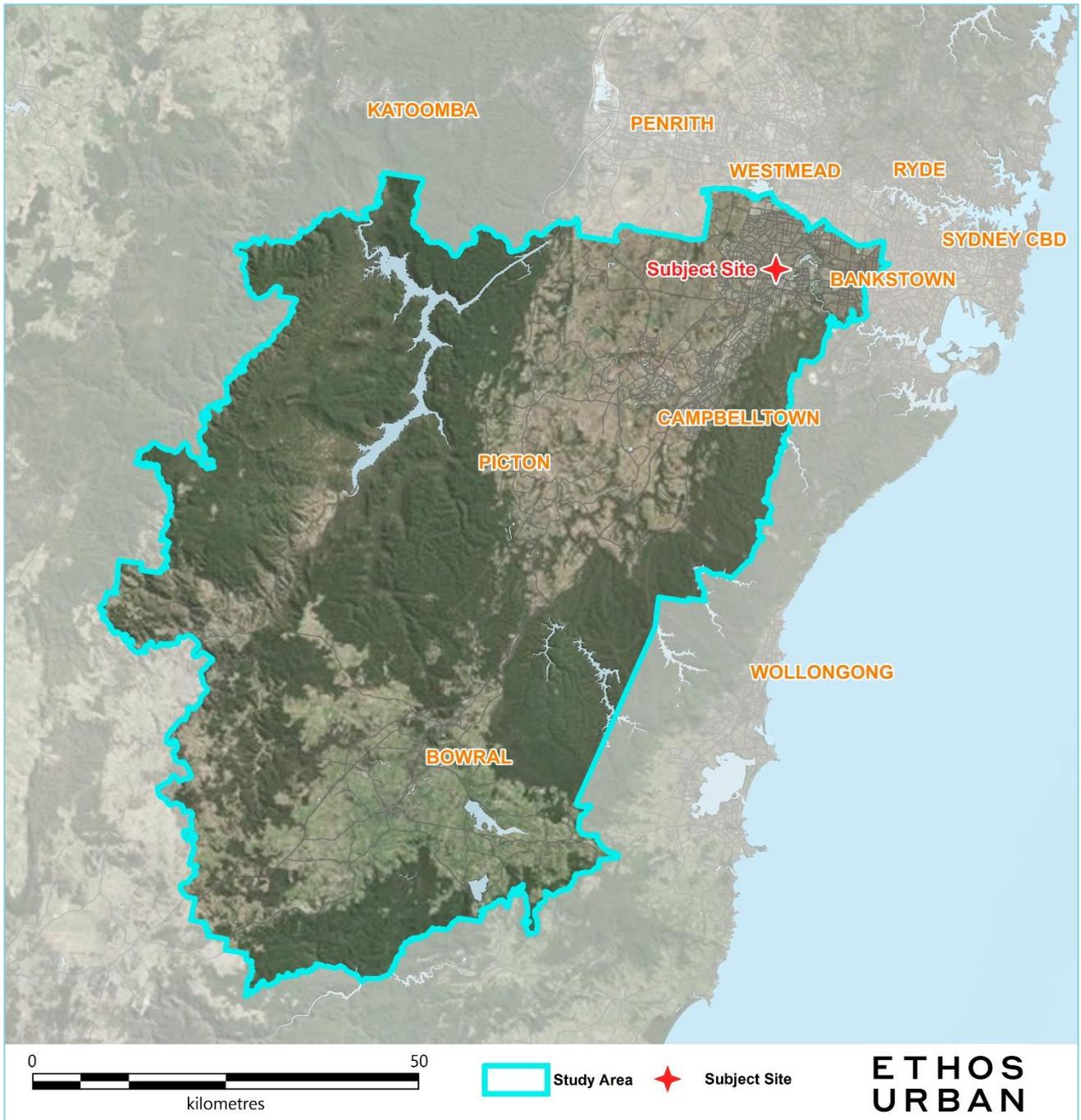
4.1 Study Area Definition

For the purposes of this assessment, a Study Area has been defined as the South Western Sydney LHD, taking into considering that residents within this LHD will be the likely primary users of the proposed private hospital and associated facilities. As such, this area is considered of most relevance in assessing the local and regional population that will drive need for the development.

However, as private hospitals can be used by any resident irrespective of location, consideration is also given to the broader Greater Sydney region. As such, reference to the Greater Sydney resident population is also provided throughout this analysis to understand the broader demand requirements and need for the development at a regional level.

A map showing the study areas is shown over the page in **Figure 7**.

Figure 7 South Western Sydney Local Health District (Study Area)



Source: MapInfo, NSW Health - South Western Sydney LHD

4.2 Residential Population Profile

Demographic data for the resident profile of the Study Area has been drawn from the Australian Bureau of Statistics (ABS) 2016 Census of Population and Housing. This data analysis provides a general overview of the demographic characteristics of residents within the Study Area and is benchmarked against Greater Sydney. A detailed summary of the Study Area profile is shown in **Table 2**.

Key characteristics of the Study Area can be summarised as follows:

- **A median age of 35.0 years, relative to Greater Sydney at 36.0 years.** The largest age cohort in the Study Area is children aged between 5 and 14 years, which account for 14.2% of the total resident population. Elderly residents aged over 65 years represent 13.1% of the Study Area population, which is similar to the Greater Sydney benchmark of 13.9%. This age group is likely to have greater demand pressures for health services in contrast to other age cohorts.
- **Low median annual household income** of \$75,700, which is approximately -18% lower than the Greater Sydney median of \$92,200.
- **High share of overseas born residents**, where 34.8% of residents identify as being born outside of Australia. This figure is as high as 40.4% in Liverpool LGA, but lower across Greater Sydney at 30.5%. Accordingly, the Study Area has low rates of English speaking only households at just 51.9%, and 44.3% specifically within Liverpool LGA. The Greater Sydney benchmark for households that speak English only at home is 62.5%.
- **A high proportion of family households**, which account for 80.6% of all dwellings within the Study Area by comparison to Greater Sydney at 73.7%. In particular, of family households, 58.8% are couple or single parent families with children. This data highlights that the Study Area is an attractive place for families to reside, placing increased pressure on hospital systems for paediatric and maternity care.
- **Low levels of home ownership to Greater Sydney**, where 29.8% of dwellings are owned outright and 38.2% owned with a mortgage. Some 31.2% of dwellings in the Study Area are rented. By comparison, 30.1% of dwellings in Greater Sydney are own outright, and 35.1% are rented.
- **Strong student population**, where 25.6% of the resident population are attending formal education. Of those attending education, 35.5% are primary school students, 28.9% secondary school students, and 17.3% are studying at a university or other tertiary facility.
- **Large share of health care and social assistance workers**, which account for 11.2% of employed residents in the Study Area. This is followed by resident workers in retail trade at 10.7% and construction at 10.6%.

In summary, the Study Area resident population is characterised by a diverse and multicultural population, including a significant overseas born element, living within family settings with young children. This Study Area also includes a large resident 65+ years cohort, who typically have greater health care requirements due to increased risk of chronic disease and illness associated with ageing.

Households in the Study Area are less affluent by comparison to other regions in Greater Sydney. Importantly, many employed residents within the Study Area work within the health care and social assistance industry, and construction industry. These workers will stand to benefit from increased employment opportunities as a result of the proposed private hospital during both the construction and operation of the facility.

Table 2 Community profile summary

Category	Study Area	Liverpool LGA	Greater Sydney
Income			
Median household income (annual)	\$75,700	\$80,850	\$92,200
Variation from Greater Sydney median	-17.9%	-12.3%	na
% of Households earning \$2,500pw or more	23.1%	25.2%	31.8%
Age Structure			
0-4 years	7.1%	7.6%	6.4%
5-14 years	14.2%	15.0%	12.2%
15-19 years	7.0%	7.3%	6.0%
20-24 years	7.0%	7.1%	7.1%
25-34 years	13.9%	14.6%	16.1%
35-44 years	13.4%	14.5%	14.4%
45-54 years	13.0%	13.3%	13.0%
55-64 years	11.4%	10.1%	10.9%
65-74 years	7.5%	6.2%	7.7%
75-84 years	3.9%	3.1%	4.2%
85 years and over	1.6%	1.1%	2.0%
Median Age (years)	35.0	33.0	36.0
Country of Birth			
Australia	60.6%	55.9%	61.9%
<i>Aboriginal and Torres Strait Islanders</i>	1.8%	1.5%	1.4%
Other Major English Speaking Countries	4.6%	3.7%	7.6%
Other Overseas Born	34.8%	40.4%	30.5%
% speak English only at home	51.9%	44.3%	62.5%
Household Composition			
<i>Couple family with no children</i>	20.3%	17.5%	23.8%
<i>Couple family with children</i>	43.7%	48.9%	37.5%
Couple family - Total	64.1%	66.4%	61.3%
One parent family	15.1%	14.8%	11.1%
Other families	1.4%	1.4%	1.3%
Family Households - Total	80.6%	82.6%	73.7%
Lone person household	17.4%	15.7%	21.7%
Group Household	2.0%	1.8%	4.6%
Tenure Type (Occupied Private Dwellings)			
Owned outright	29.8%	24.9%	30.0%
Owned with a mortgage	38.2%	41.3%	34.2%
Rented	31.2%	33.1%	35.1%
Other tenure type	0.8%	0.8%	0.7%
Industry of Employment (aged 15 years and over)			
Agriculture, forestry and fishing	0.8%	0.8%	0.3%
Mining	0.3%	0.2%	0.1%
Manufacturing	9.3%	9.6%	5.8%
Electricity, gas, water and waste services	0.9%	0.9%	0.6%
Construction	10.6%	10.3%	8.2%
Wholesale trade	3.7%	4.0%	3.6%
Retail trade	10.7%	10.4%	9.4%
Accommodation and food services	6.3%	5.8%	6.7%
Transport, postal and warehousing	7.5%	8.1%	5.1%
Information, media and telecommunications	1.5%	1.6%	2.8%
Financial and insurance services	4.3%	4.7%	6.4%
Rental hiring and real estate services	1.5%	1.4%	1.9%
Professional, scientific and technical services	5.3%	5.0%	9.9%
Administrative and support services	3.5%	3.6%	3.6%
Public administration and safety	5.7%	6.5%	5.5%
Education and training	7.4%	7.0%	8.1%
Health care and social assistance	11.2%	11.8%	11.7%
Arts and recreation services	1.2%	1.2%	1.6%

Source: ABS Census of Population and Housing

4.3 Population projections

In 2021, there were an estimated 1,075,210 persons residing within the Study Area. This represents an increase of 111,360 residents since 2016, at an average growth annual rate of +2.2% over the period. Population projections estimate that the total number of Study Area residents is forecast to increase to 1,471,080 in 2036. This forecast represents a total change of around +395,870 residents over the next 15 years, equating to an average annual growth rate of 2.1% over the period.

More broadly, the Greater Sydney population is forecast to increase by some +1,334,110 residents over 2021 to 2036 period, reaching a total estimated population of 6.8 million in 2036. This represents a lower average annual growth rate (1.5%) compared to the Study Area (2.1%) over the period.

Strong growth within the Study Area and Greater Sydney highlights the need for critical social infrastructure such as health facilities and hospitals in this part of Sydney that aligns with population growth forecast for the region.

A review of age projections in the Study Area shows significant growth across all age cohorts, with key findings listed below:

- The total population is ageing, with the number of residents aged over 65 years forecast to increase by +104,800 between 2021 and 2036. Elderly residents are more likely to require ongoing health care due to higher prevalence of chronic disease and disorders associated with ageing such as cancer, arthritis and cardiovascular issues.
- Residents aged over 85 years are forecast to grow at the fastest rate of all age cohorts, at +5.7% per annum between 2021 and 2036.
- Residents aged 35-44 years, and 45-54 years are forecast to account for a significant share of population growth, together increasing by +116,870 persons over the projected period.
- The population of children aged between 5-14 years within the Study Area, is estimated to increase by +51,750 persons by 2036. A greater provision of young children in the Study Area will increase demand for paediatric services.

A summary of population forecasts and age projections are shown in **Table 3 and 4** below.

Population projections for this analysis have been sourced with reference to the NSW DPIE Population Projections 2019 and rebased to ABS 2020 official population estimates.

Table 3 Population Projections – 2021 - 2036

Population	2016	2021	2031	2036	Change 2021-36
Study Area	963,850	1,075,210	1,310,450	1,471,080	+395,870
Greater Sydney	4,931,850	5,497,400	6,436,040	6,831,510	+1,334,110
Average Annual Change		2016-21	2021-31	2031-36	2021-2036
Study Area	-	22,272	23,524	32,126	+26,391
Greater Sydney	-	113,110	93,864	79,094	+88,941
Average Annual Growth Rate		2016-21	2021-31	2031-36	2021-2036
Study Area	-	2.2%	2.0%	2.3%	+2.1%
Greater Sydney	-	2.2%	1.6%	1.2%	+1.5%

Source: DPIE Population Projections, TfNSW Projections, Ethos Urban

Table 4 Population projections by age cohort – Study Area

Age Group	2016	2021	2031	2036	Total Change 2021-2036
0-4 years	70,180	77,480	90,130	95,690	+18,210
5-14 years	134,550	148,620	180,290	200,370	+51,750
15-19 years	66,160	68,840	83,690	94,600	+25,760
20-24 years	70,110	71,270	81,750	90,710	+19,440
25-34 years	141,490	160,880	168,170	187,390	+26,510
35-44 years	129,350	149,220	190,630	204,530	+55,310
45-54 years	123,670	131,450	163,300	193,010	+61,560
55-64 years	106,250	118,140	135,440	150,670	+32,530
65-74 years	70,860	85,820	112,790	123,500	+37,680
75-84 years	36,750	45,680	74,800	89,450	+43,770
85 years and over	14,480	17,820	29,480	41,170	+23,350

Source: DPIE Population Projections, Ethos Urban

4.4 Employment Projections

Employment estimates by land use have been prepared for the Study Area using official employment projections from Transport for NSW. For the purposes of this assessment, employment projections have been grouped into key land use categories, particularly to highlight the growth of the health care and education sectors, which are of most relevance to the proposed development.

A summary of employment projections for the Study Area are presented in **Table 5** and the key findings include:

- The total number of workers in the Study Area in 2021 is estimated at around 366,420 workers. This includes some 53,180 health care workers.
- Employment projections highlight that the total number of workers in the Study Area is forecast to increase to 449,230 workers by 2036, representing a total increase of +128,250 workers over the 15-year period.
- Over the same period, the number of health care workers is forecast to increase by around +23,000 workers, to a total of 76,230 workers by 2036. Growth in the health care industry is estimated to represent around 18% of total employment growth in the Study Area, with the share of all workers increasing from 14.5% in 2021 to 15.4% in 2036.
- The number of workers in the education sector is also forecast to increase substantially by +16,730 workers (from 36,610 workers to 53,340 workers) between 2021 and 2036, with the share of all workers increasing from 10.5% in 2021 to 11.2% in 2036.

Table 5 Employment Estimates 2021-2036

Employment by Land Use	2021	2031	2036	Total Change 2021 to 2036
Industrial	134,590	161,720	174,310	+39,720
Retail	64,020	76,610	82,400	+18,380
Commercial	56,990	73,310	81,890	+24,900
Education	36,610	48,300	53,340	+16,730
Health Care	53,180	66,520	76,230	+23,050
Other services	19,030	22,770	24,500	+5,470
Total	366,420	449,230	494,670	+128,250

Source: Transport for NSW, Ethos Urban

4.5 Local Health and Wellbeing Trends

Provision of successful health infrastructure plays an integral role in the ongoing resilience and wellbeing of a region and can strengthen communities as they grow. It is critical to ensure there is a sufficient supply of well-connected and accessible community facilities to support forecast population growth. The following section provides a brief overview of local health and wellbeing trends relevant to the development, including the impact of an ageing population, increasing prevalence of chronic illness, movement towards prevention and primary health care, increased use of technology in hospitals, and development of walkable hospital precincts.

As previously identified in the demographic analysis the Study Area's population is rapidly ageing, with the increased longevity of the population requiring increased demand for health care. Literature also shows that older Australians have a high level of attachment to home place, not necessarily the dwelling they occupy but instead the locality in which they live. Therefore, greater importance is placed on ensuring residents are able to remain attached to their local area as their health and support needs change – including by ensuring that older people have access to high quality health infrastructure and services as they age.⁵

4.5.1 Prevalence of Chronic Disease

With changing lifestyles and ageing populations, chronic diseases have become increasingly common and are now the leading cause of death and ill health in Australia. The Australian Institute of Health and Welfare defines chronic diseases as

“Long lasting conditions with persistent effects. Their social and economic consequences can impact on peoples’ quality of life. Chronic diseases are becoming increasingly common and are a priority for action in the health sector. AIHW commonly reports on 8 major groups: arthritis, asthma, back pain, cancer, cardiovascular disease, chronic obstructive pulmonary disease, diabetes and mental health conditions.”⁶

Chronic disease is a significant challenge for all health services and infrastructure, as the following highlights.

- 87% of all deaths in Australia in 2016 were associated with the following eight chronic conditions: arthritis, asthma, back pain, cancer, cardiovascular disease, chronic obstructive pulmonary disease, diabetes and mental health conditions.
- 50% of Australians reported having at least one of the eight chronic diseases listed above in 2014-15, and 23% of Australians are estimated to have two or more of these conditions.
- 37% of hospitalisations in 2015-16 were due to the eight chronic diseases listed above in 2015-16.⁷
- Specifically, the South Western Sydney LHD notes that the district has high prevalence of chronic disease and illness

Chronic diseases also result in a significant economic burden because of the combined effects of health-care costs and lost productivity from illness and death.

4.5.2 Importance of Walkability and Public Spaces in Health Precincts

Co-locating health and research institutions in health precincts has been recognised as an opportunity to encourage collaboration and innovation between health professionals and researchers. Increasingly, hospitals are expanding to incorporate new departments and research bodies within the same building, to encourage face-to-face conversations between individuals, aiming to lead to innovation and collaboration.

Walkability, and high-quality public spaces therefore play an important role in enabling social connections in all settings – including health precincts. International case study research indicates that:

“High-quality public spaces and pedestrian networks in hospital precincts encourage people to walk around, through and beyond the sites. These networks enable valuable connections to be made between organisations and individuals that can lead to collaboration and innovation.”⁸

⁵ Ibid.

⁶ Australian Institute of Health and Welfare (2020), Chronic Disease, <https://www.aihw.gov.au/reports-data/health-conditions-disability-deaths/chronic-disease/overview>.

⁷ Ibid.

⁸ Sheahan, M (2015) “The importance of public spaces and pedestrians in hospital precincts,” *Architecture AU*, <https://architectureau.com/articles/the-importance-of-public-spaces-and-pedestrians-in-hospital-precincts/>

This research additionally identifies three key dimensions as crucial to connectivity and collaboration in these precincts:

- *Proximity – a balance of proximity to related institutions (co-location) and to other diverse activities (mixed use) gives people reasons to walk.*
- *Interaction – a range of opportunities for interaction, formal and informal, in a network of intersecting paths and gathering spaces allows incidental conversations and connections to occur.*
- *Quality – a network of places and links that look good, are safe, and comfortable encourages people*

The proposed private hospital will enhance these outcomes within the Liverpool Innovation Precinct by creating a walkable public space that integrates the public and private health sectors together, and establish synergies with the education sector, enabling connections and collaboration between organisations and people. This will enable better health outcomes for patients and enhanced learning and innovation outcomes for health and education practitioners, and students.

5.0 Competitive Environment

This section provides a high-level assessment of existing hospitals and bed numbers in the Study Area, in order to inform market need.

A review of the existing competitive environment (as of October 2021) shows there are a total 11 hospitals within the Study Area, including 6 public hospitals, and 5 private hospitals. Together these hospitals support up to 2,383 patient beds that include 2,025 within public hospitals, and 358 in private hospitals as shown in **Table 6**. Accordingly, private hospital beds make up just 15.0% of total beds.

Of importance, Liverpool Hospital is the largest hospital in the Study Area at 877 beds. It is located immediately opposite the subject site and is classified as principal referral hospital. Bankstown is also a principal referral hospital supporting some 454 beds. Notably, both public health facilities are earmarked for significant expansion as shown in **Table 7**, with Liverpool estimated to support an additional 187 beds. Bed numbers at Bankstown are yet to be confirmed as this project is in the early stages of planning.

The Sydney Southwest Private Hospital is the largest private hospital in the Study Area, at 98 beds, and forms part of the Liverpool Innovation Precinct located approximately 300m from the subject site. This hospital offers a range of specialist services including, but not limited to, oncology, gastroenterology, oral and dental surgery, plastics, sleep studies, general surgery and mental health. Other private hospitals within proximity to the site are Liverpool Day Surgery, which offers 23 beds and generally only provides outpatient services.

In total, there are a total of 1,301 proposed hospital beds (public and private) in the Study Area. A key point to highlight is that all new proposals within the Study Area will be located beyond 10km of the subject site, creating a market gap close to Liverpool City Centre. The limited development of new private hospitals facilities in Liverpool is identified within the Liverpool Innovation Precinct Plan ,which highlights the needs for either new or expanded private hospital facilities in the precinct.

Table 6 Existing beds supply

Hospital	Number of Beds
Public	
Liverpool Hospital	877
Bankstown Lidcombe Hospital	454
Fairfield Hospital	220
Campbelltown Hospital	306
Bowral and District Hospital	94
Camden Hospital	74
Total public beds	2,025
Private	
Sydney Southwest Private Hospital	98
Liverpool Day Surgery	23
HammondCare Braeside Hospital	72
Campbelltown Private Hospital	92
Southern Highlands Private Hospital	73
Total private beds	358
Total beds	2,383

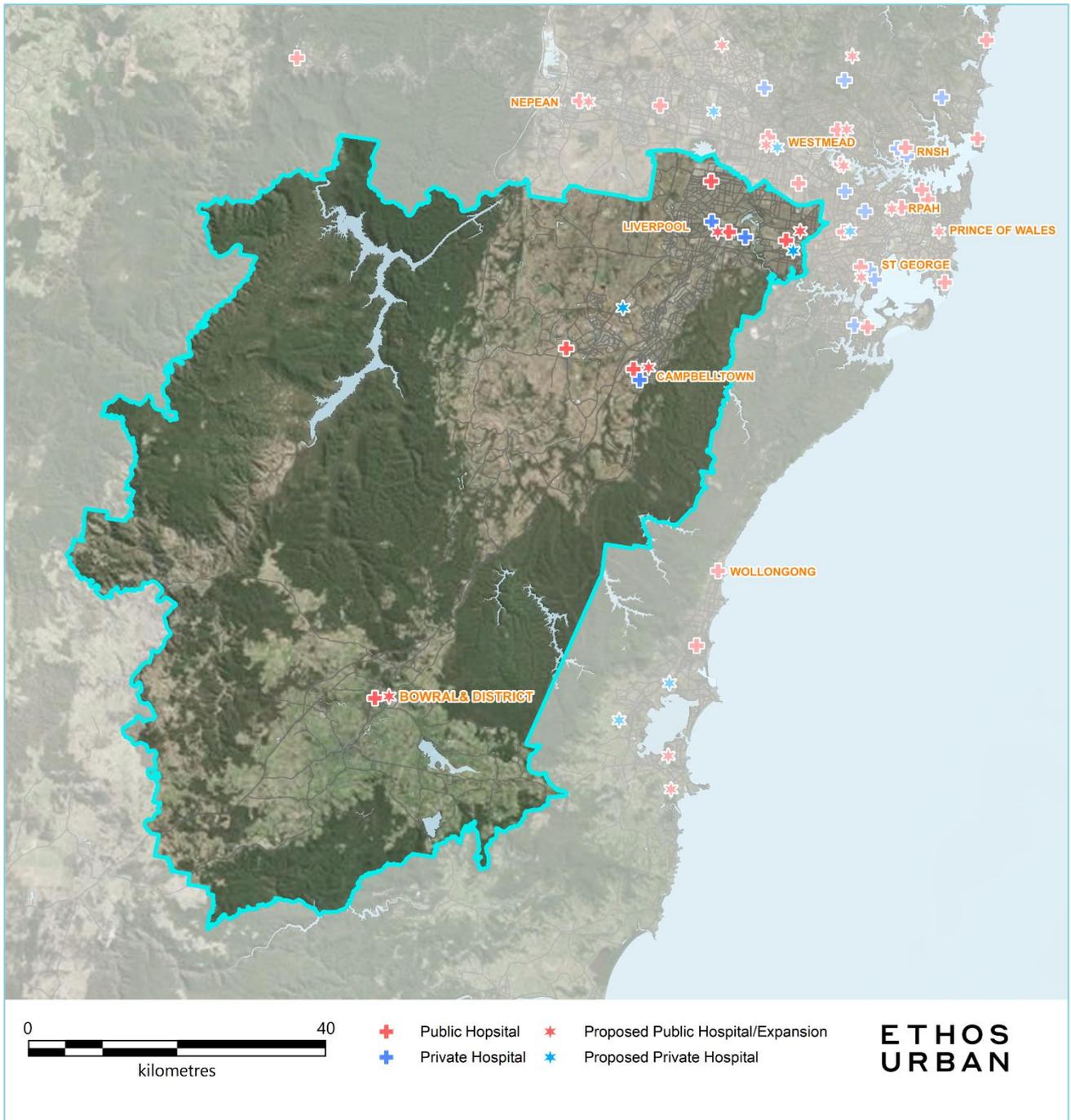
Source: Ethos Urban, South Western Sydney LHD

Table 7 Proposed Beds

Hospital	Proposed beds
Public	
Liverpool Hospital Stage 2 Expansion	187
Bankstown Lidcombe Hospital (New)	N/A
Bowral and District Hospital Redevelopment	90
Campbelltown Hospital Redevelopment Stage 2	300
Total public beds proposed	577
Private	
Camden Medical Campus Precinct	473
Bankstown Private Hospital	251
Total private beds proposed	724
Total Proposed Beds	1,301

Source: Ethos Urban, Cordell Connect

Figure 8 Competition Map



Source: MapInfo, Ethos Urban Needs Assessment

6.0 Market Needs Assessment

6.1 Private Hospital Characteristics

6.1.1 Types of Private Hospitals

Private hospitals are generally grouped into the following categories:

- Hospitals which provide services on a day-only basis (free-standing day hospital facilities, or 'day surgeries') and
- Hospitals which provide overnight care ('overnight hospitals').

Under state and territory regulatory arrangements, overnight care requires the provision of 24-hour qualified nursing care that permits a broader range of medical and surgical procedures to be undertaken. Hospitals offering overnight care usually also provide same-day services. Private hospitals range from large hospitals in major urban areas that provide a wide range of services, to smaller hospitals that provide a limited range of procedures on a very short stay basis.

A key model of private hospitals in the provision of consulting suites and spaces for practitioners to provide non-clinical care to patients and ability to provide educational space and training services. This facilitates the creation of health and medical clusters and hubs, which appeals to a wide range of occupiers, providers and patient needs. The proposed private hospital at the subject site will offer up to 12,540m² of consulting and education space, as well as ancillary retail tenancies that is in line with new modern private hospital compositions across the country. This is further explored in **Section 7.0**

6.1.2 Private Hospital Ownership

Private hospitals are classified as being owned and managed by private organisations, whether they be for-profit or not-for-profit. Private hospitals generally fall into the following ownership categories:

- For-profit group (that is a group of hospitals owned and/or operated by a single overarching company)
- For-profit independent
- Not-for-profit religious/charitable group
- Not-for-profit religious/charitable independent
- Other not-for-profit hospitals (comprising bush nursing, community, and memorial hospitals).

6.1.3 Regulation

The operation and performance of private hospitals are determined by many factors, including:

- The operation of Medicare;
- The Institutional and funding arrangements for public hospitals;
- The regulation of the private health insurance sector, State and Territory licensing provisions, which mandate compliance with a range of operational and quality requirements. In most jurisdictions, they also incorporate controls on the number and geographical location of private hospital beds; and
- Federal legislation governing the relationships between private hospitals, doctors and health funds.

6.2 Demand Considerations

6.2.1 Forecast Admissions

Population projections for the Study Area highlight that significant population growth is forecast over the coming years, estimated +395,870 additional residents between 2021 and 2036. A key characteristic of this growth is that it is largely driven by an ageing population, where residents aged 65 years and over will contribute towards 26.5% of total population growth, increasing this age cohort by an estimated +104,800 persons over the projected period.

Ageing is an important demand consideration, with Australia's ageing population boosting demand for health services over recent years, noting older people require more specialist and frequent medical services compared to younger cohorts. This is primarily due elderly persons greater susceptibility to chronic diseases or disorders.

The IBISWorld – *General Hospitals In Australia* publication notes that people aged 65 and over are significantly over represented in inpatient hospital separations (discharge of a patient), compared with their population share, due to age related illnesses. The publication also notes that persons aged 65 and over have higher private health insurance coverage rates. As such, the above noted increase in persons aged 65 and over will place increased pressure on the health system in the Study Area, and accordingly increase demand for hospital services, including private facilities such as those proposed at 61-71 Goulburn Street, Liverpool.

A review of forecast admissions in the Study Area show that hospital admissions rates are forecast to increase from an estimated 456,650 admissions in 2021, to some 681,110 admissions in 2036. This represents an increase of around +224,460 admissions per annum over the next 15 years, equating to an annual average increase of 2.1%. Notably, this forecast increase in admissions will be largely concentrated in residents aged 65 years and over as shown in **Table 8**.

Demand will increase across all other cohorts in the Study Area, albeit at a lower rate, highlighting the need for wide ranging new hospital services in the Study Area. For example, children aged 0-4 represented an estimated 5.8% of total admissions in 2021, equating to around 26,490 patient admissions. This is forecast to increase to 32,720 admissions (+6,230 admissions) by 2036. Despite this number being relatively low by comparison to other age groups in the Study Area, the IBISWorld – *General Hospitals in Australia* publication outlines that children aged younger than five years of age account for 30% of operations and nearly 40% of patient days, highlighting the impact of increased demand from this particular age cohort.

A summary of the forecast admission by age group within the Study Area is summarised below in **Table 8**. The admission rates were estimated taking into consideration data from the *Australian Institute of Health and Welfare 2018-19* data publications

Table 8 Forecast Admissions by Age, Study Area

Age Group	2016	2021	2026	2031	2036	Average Annual Increase (2021-2036)
0-4 years	23,990	26,490	29,390	30,820	32,720	6,230
5-14 years	11,220	12,390	13,500	15,040	16,710	4,320
15-24 years	25,100	25,810	27,670	30,470	34,130	8,320
25-34 years	38,150	43,380	44,540	45,350	50,530	7,150
35-44 years	40,020	46,170	53,510	58,980	63,280	17,110
45-54 years	49,900	53,030	57,550	65,880	77,870	24,840
55-64 years	63,620	70,740	75,170	81,100	90,220	19,480
65-74 years	69,660	84,380	97,950	110,890	121,420	37,040
75-84 years	53,840	66,920	88,400	109,580	131,040	64,120
85 years and over	22,220	27,340	34,470	45,230	63,180	35,840
Total Admissions	397,730	456,650	522,140	593,340	681,110	224,460

Source: Australian Institute of Health and Welfare 2018-19, Ethos Urban

The growth in admissions in the Study Area is evident at a local level through the increased number of admissions at Liverpool Hospital. Between 2014 and 2019, admissions at Liverpool Hospital increase by +9,620, non-admitted patients by over +210,000, while the total number of surgeries increased from approximately 8,600 operations to 15,400 operations.

This growth at Liverpool Hospital emphasises the increasing demand on healthcare services in Liverpool and the broader Study Area, including increasing patient admissions and non-admitted care as a result of a fast growing and ageing population in this part of Sydney. The proposed private hospital will help alleviate increasing demand pressures in South Western Sydney, and particularly at Liverpool Hospital.

6.2.2 Private Health Insurance Coverage

According to Australian Prudential Regulation Authority (APRA), in 2017 an estimated 45.6% of residents in NSW had private hospital coverage and 56.6% had extras coverage (specialist services).

Adopting the state average rate of private hospital coverage, it is estimated that around 493,500 Study Area residents have some degree of hospital cover.

It is estimated that the number of residents with private hospital coverage will increase over the coming years, driven by population growth, ageing population and the growth in higher order paying jobs in the Study Area. By 2036, it is estimated that around 675,200 residents could have some degree of private hospital coverage, assuming that the average coverage remains at 45.6%. This represents an increase in residents with private hospital coverage of around +181,700 persons that will support demand for private hospital facilities in the Study Area.

6.3 Worker Floorspace Demand

Based on employment projections presented in **Section 4.4** the total number of health care workers in the Study Area is forecast to increase by +23,050 workers between 2021 and 2036, as well as some +16,730 workers in the education industry.

To translate forecast employment into floorspace requirements, workspace ratios from the City of Sydney's Floor Space and Employment Survey 2017 have been adopted. Based on this approach, floorspace requirements for the Study Area have been calculated and are summarised below in **Table 9**.

Notably, results show a requirement for over +1,000,000m² of additional health care floorspace and some +836,500m² of new education space over the 2021-2036 period. The provision of health care space may include a number of uses, such as hospital space, consulting suites, rehabilitation, and aged care.

In the context of the proposed development, the floorspace to be delivered represents approximately 3% of total forecast health care requirements in the Study Area over the coming 15 years. When educational floorspace requirements are factored in, the development represents only 1.6% of the combined health care and education floorspace requirements for the Study Area over the 2021-2036 period.

Table 9 Forecast employment floorspace requirements (2021-2036)

Industry group	Employment Growth (2021-2036)	Workspace Ratio m ² per job	Floorspace requirement (m ²)
Health care	+23,050	43.6	+1,004,980
Education	+16,730	50.0	+836,500
Total	+39,780	-	+1,841,480

Source: Transport for NSW, City of Sydney Floor Space and Employment Survey 2017, Ethos Urban

6.3.1 Other Demand Considerations

Other demand drivers for private hospitals include:

- **Individual patient choice:** Private hospitals have a reputation for providing better amenities than public hospitals, generally allowing patients to avoid long waiting times for elective surgery and providing access to dedicated specialists.
- **Income Growth:** Income growth in its study area is important for private hospital provision, especially with regard to the discretionary component of many private hospital treatments. As the Productivity Commission notes, some treatments may be genuinely elective, whilst, in other cases, treatment at some personal cost in a private hospital is a way of avoiding in the public hospital waiting times, or gaining access to a higher standard of accommodation. Income growth is likely in the context of the Study Area, largely due to more high skilled jobs and industries increasing their footprint within the Southwest Sydney region.

6.4 Supply Considerations

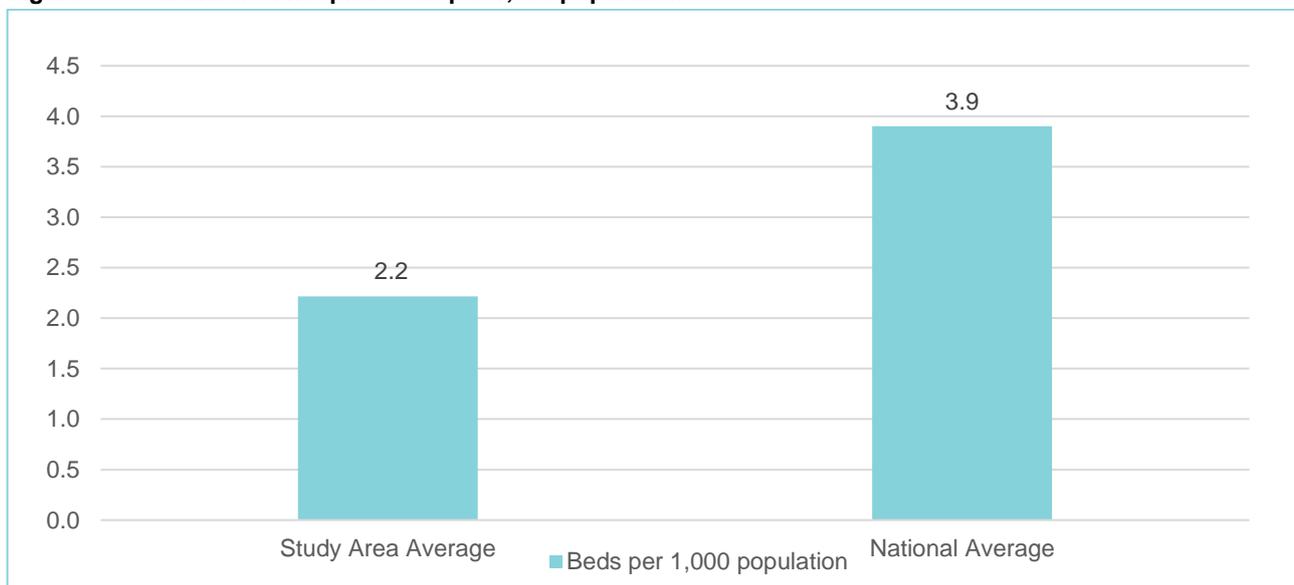
6.4.1 Provision of Hospital Beds

As previously described, in 2021 there were a total of 11 hospitals include Study Area, including 6 public and 5 private hospitals. Together, these hospitals support up to 2,383 patient beds across the South Western Sydney LHD.

Taking into consideration the total resident population of the Study Area in 2021 of 1,075,210 and total beds numbers of 2,383 across both the public and private sector, the Study Area has an estimated patients beds provision of 2.2 beds per 1,000 residents. Based on the latest available data from the Australian Institute of Health and Welfare, Australia had an average of 3.9 beds per 1,000 residents in 2017-18.

This data shows the Study Area has a significant undersupply of hospital beds, given the supply provision is approximately 43% lower than the national average.

Figure 9 Number of hospital beds per 1,000 population



Source: The Australian Institute of Health and Welfare 2017-18, Ethos Urban

6.4.2 Hospital beds (public and private) gap analysis

As noted, the Study Area's current provision of hospital beds (2.2 beds per 1,000 residents) is well below the national benchmark. Despite the additional +1,301 beds proposed in the Study Area over the short to medium term, population growth is forecast to increase substantially over the next 15 years. This ongoing growth of an estimated +395,870 residents over this period will generate increased demand for additional health services and facilities, including private hospitals.

Assuming the national benchmark of 3.9 beds per 1,000 population, the Study Area has a beds gap of an estimated -1,810 hospital beds. This is based on the current number of hospital beds at 2,383, and population of 1,075,210 residents.

Taking into consideration population growth and proposed new supply of hospital beds in the Study Area, this gap is estimated to slightly decrease over the next decade to around -1,427 beds by 2031. However, without further new hospital developments or expansions, this beds undersupply will further increase by just over -2,000 by 2036. Note this gap analysis assumes that the national benchmark for hospitals beds per 1,000 residents remains the same over the projected period as presented in **Table 10**.

The beds gap is analysed by estimating implied demand for beds through assessing the existing and forecast population numbers and adopting the national average for hospital beds. Notably, demand for hospital beds is forecast to increase by an estimated +1,544 beds by 2036. It is important to highlight that this demand forecast only takes into consideration total population growth, rather than other demand factors such as ageing, or other external drivers such as pandemic. Accordingly, surging demand for hospital beds in response to the COVID-19 pandemic have not been considered in this demand and supply assessment, given the uncertainty surrounding the virus in the medium to long term.

Table 10 Hospital bed provision gap

Metric	2021	2031	2036	Change 2021-2036
Study Area Population	1,075,210	1,310,450	1,471,080	395,870
Number of beds in Study Area	2,383	3,684	3,684	1,301
National Benchmark (beds per 1,000 population)	3.9	3.9	3.9	-
Implied demand	4,193	5,111	5,737	1,544
Supply Gap	-1,810 (Under Supply)	-1,427 (Under Supply)	-2,053 (Under Supply)	-243

Source: Australian Institute of Health and Welfare, Australia's Health 2018, Ethos Urban

This analysis highlights that the Study Area is facing an undersupply of hospital beds, with this gap forecast to increase to 2036. Accordingly, there is sufficient demand in the market to support additional hospital developments, including that proposed at 61-71 Goulburn Street, Liverpool.

The Planning Proposal; therefore, has the potential to serve an unmet need in this market and would maximise the utility of this strategic site to deliver a project that aligns with government objectives and one which will support the growth of the Study Area's population and Liverpool Innovation Precinct.

6.5 Demand for Consulting Space

The subject site is strategically positioned within a fast growing health and education precinct, close to a major public hospital that provides emergency and specialised care a regional level. The level of care, training and employment within a major health precinct requires additional ancillary medical space around a hospital facility, including consulting rooms, training centres, specialists' suites, medical science and research centres, as well as other health services such as rehabilitation. These services typically occupy onsite consulting and office spaces either on site or within close proximity to main hospital facilities. The proposed development at 61-71 Goulburn Street includes some 12,540m² of medical consulting and education GFA across 11 floors, that can satisfy the need for the these uses as part of a major integrated health and education precinct.

Consulting space can be used for a range of medical purposes, including specialist consultations, pre and post-surgery appointments, general practitioners' rooms, pathology, physiotherapy and other rehabilitation purposes, research, and administration space. As such, medical consulting rooms can be highly adaptable and flexible to a specific use, meaning that the proposed consulting and education floorspace within the proposed development should have a flexible design in order to adapt over time to uses that are consummate to market demand.

The IBISWorld – Specialist Medical Services in Australia report highlights that Australia’s ageing population and rising incidence of chronic disease is driving demand for specialist medical services across the industry. This trend is also forecast in the Study Area, where the population is forecast to significantly age, while the South Western Sydney LHD reports the region has high prevalence of chronic disease.

There are a number of demand drivers for medical consulting and education space. For the purposes of the proposed development, these demand drivers are as follows.

- **Proposed number of beds:** The 155 patient beds at the proposed hospital will generate demand for consulting space, where patients will typically require ongoing medical consultation both before and after any medical procedures. This may include pre surgery appointments, follow up consultations as well as physio and other rehabilitation.
- **An ageing population:** Historically, Australia’s ageing population has boosted demand for health services, as older people require more specialist medical services than younger cohorts. This trend is forecast to continue, particularly within the Study Area where the population aged 65 and over is forecast to increase significantly over the next 15 years.
- **Providing workspaces and training for a growing medical workforce:** The number of health workers in the Study Area is estimated to increase by +23,050 residents between 2021 and 2036, taking into account employment projections prepared by Transport for NSW. At this level of increase, it is estimated that an additional +1,000,000m² of health related floorspace will be required in the Study Area by 2036.
- **Operator interest:** Market demand is evident through substantial operator interest in the project. It is understood that advanced discussions are underway with a major private health operator who is seeking to occupy 15 floors of the project. This would represent over three-quarters of the project, and highlights the fact that remaining consulting and educational suites (of around 4,560m²) will be ancillary in nature to accommodate services and operators who wish to co-locate with the primary health operator and leverage the location and amenity benefits of the project within a key health precinct. The ancillary consulting space represents a small provision of floorspace that will be available to better serve the health and education needs of the broader community and align with expectations of Liverpool as a key health (and education) precinct.
- **Ancillary health providers:** The proposed development will offer a new and modern medical facility that is in the heart of a major medical cluster. As such, the proposed consulting suites will appeal to a broad range of health providers who will seek to co-locate with major operators in contemporary suites within a major health precinct that is close to patients and complementary services. We note that many of the existing ancillary health operators surrounding the Liverpool Hospital are typically located in old or substandard buildings, as such the proposed development offers the ability to support an expanded health offer in a contemporary development that will help to service the health and education needs of this growing precinct.
- **Overflow consulting and education space:** The proposed development will be located adjacent to Liverpool Hospital, which is a major hospital with high patient numbers, and is also a primary teaching hospital for two major universities. The proposed development will enable additional consultation services to be delivered for local and regional residents in addition to that offered at Liverpool Hospital. This may result in reduced wait times to see a specialist, and alleviate services at Liverpool Hospital during high demand periods.
- **Enables space for learning and education –** The proposed 12,540m² of consulting and education GFA will provide new and modern teaching spaces for upcoming health professionals in a clinical setting. The Liverpool LSPS notes that number of university students across the LGA is expected to increase by more than 10,000 tertiary students over the next decade. Many of these students will likely be studying within the medical field, and will require additional learning spaces, as well as placement opportunities within the industry.

6.6 Co-location and Clustering (Health and Education)

Liverpool Innovation Precinct is a planned health and education precinct in Liverpool, that aims at enhancing collaboration and innovation across these two sectors. Key institutions already embedded within the precinct include UNSW, WSU, UOW, Liverpool Hospital and the Ingham Institute of Applied Medical Research.

The Greater Sydney Region Plan highlights the need to develop critical social infrastructure within a holistic setting, that includes the co-location of health, education and research within a single integrated precinct. This objective is

also echoed throughout other strategic plans, including Liverpool LSPS and the South Western Sydney LHD Plan, which specifically calls out the need to invest and contribute to the realisation of the Liverpool Innovation Precinct.

The 61-71 Goulburn Street proposal will provide a new and modern private hospital with up to 155 beds, and 12,540m² of consulting and education space within the Liverpool Innovation Precinct. Importantly, the proposed site is located adjacent to Liverpool Public Hospital, and major university institutions.

The project would enable collaboration with major education operators including UNSW, WSU, and UOW for medical training and research, as well as health and education industry events. This is in line with government and health body objectives to establish integrated health and education precinct that enable resource sharing, learning and collaboration. Many universities and major health providers are now co-located, such as:

- The University of Sydney (USYD) and Royal Prince Alfred Hospital (RPAH) in Camperdown
- UNSW, Prince of Wales (public and private) hospital, and Sydney Children Hospital in Randwick
- Macquarie University and Macquarie University Hospital, in Macquarie Park.

Specifically, within the health sector, there is increasing demand for co-located hospitals across the public and private sector. Co-location of public and private hospitals is not unique and is seen throughout most successful major health precincts in Sydney including the Royal North Shore Hospital (RNSH), Westmead Hospital, and St George Hospital. The benefits of co-location across public and private health services are considerable and include:

- Contracted care arrangements, where hospitals provide care to admitted patients through interhospital arrangements, where the care is organised and paid for by one hospital but provided by another;
- Help alleviate public hospital demand during surge period, such as during the COVID-19 pandemic,
- Resource and facility sharing across staff, training and patient demand. This is particularly important for doctors, many of whom practice in both the public and private sector;
- Research and knowledge sharing synergies;
- Enhancement of patient choice by facilitating access to a wider range of services;
- Offers medical specialists a backup service in the public hospital where complications occur during treatment; This can, in turn, assist the private hospital to attract patients.
- Retains and attracts medical specialists by enhancing their patient offerings; and
- Increases viability of teaching services, which can leader to further health investment in public hospitals.

The growth in co-locations reflects the increasing synergies and economies of scale in the provision of public and private hospital services.

This Planning Proposal has the potential to establish strong synergies across the private and public health and education sectors and contribute toward realising the vision for the Liverpool Innovation Precinct. In particular the proposed uses and floor area of the development will enable a range of health and education providers to establish within Liverpool through the added availability and take up of up to 12,540m² of consulting and education GFA (noting only around 4,560m² is likely to be available following signed agreements with key operators). This space will be highly beneficial for medical professionals, researchers, patients and students. Importantly, these spaces are highly flexible, and can change over time to respond to market demand in the health and education sectors and will support an increasing workforce and student population in the health industry as it continues to grow.

The project will complement rather than compete with existing health services located across the LHD as well as within the nearby Liverpool City Centre by adding to the health facilities and supporting the evolution of the Liverpool health precinct as a key destination. The project will add to amenity and the attraction of the overall precinct, with the increased visitation and profile directly benefiting existing local operators and specialists. The health network relies on ancillary operators and uses to provide vital services and functions for the community, the local health services and facilities that are positioned outside of the major hospital clusters will continue to serve specialist functions or cater to the needs of the immediate local population, with the proposed facility to serve a higher order role and function in line with Liverpool's status in the health network.

This section highlights that sufficient demand exists for the proposed development through the following key findings:

- There is strong population growth in the Study Area, including significant ageing of residents aged 65 years and over. This ageing population will increase demand pressures on the health system, particularly as elderly cohorts require greater and more frequent health care by comparison to younger age groups.
- An estimated 493,500 residents within the Study Area have some degree of private hospital coverage. These residents would most likely associate strongly with a private hospital such as that proposed at 61-71 Goulburn Street.
- Rising hospital admissions, with forecasts estimating an additional +224,460 admissions by 2036. Much of this growth is attributed to an ageing population.
- Below average bed numbers (public and private hospitals) of 2.2 beds per 1,000 population in the Study Area, 43.6% lower than the national average at 3.9 beds per 1,000 persons.
- Rising admissions is highly prevalent in the Study Area, where the total number of admitted patients at Liverpool Hospital increased by +9,620 between 2014/15 and 2018/19.
- There is a currently a patient beds gap of around -1,810. This is forecast to continue to increase over the projected period to -2,053 beds by 2036. The proposed development will contribute closing this beds gap through the provision of 155 new patient beds.
- Additional workspaces for training and a growing medical workforce will be required over the coming years and the number of students and medical workers continues to increase. It is estimated that an additional +1,000,000m² of health related floorspace will be required by 2036, and the proposed development will contribute to this by providing up to 32,280m² of new medical and supporting service GFA.
- Demand for consulting and ancillary health services will continue to grow in response to an ageing population, rising workforce and growing number of hospitals beds in the Study Area. The proposed development will provide up to 12,540m² of consulting and education GFA that will enable health providers to occupy a modern facility within a central and key location for health and education. Importantly, it is understood that only around 4,560m² of consulting and education GFA will remain based on discussions with primary health operators who will account for around three-quarters of development on completion.
- The site suitability and demand for a private hospital in this area is reinforced by the strong interest in the project from a recognised major hospital operator. Importantly, strategic planning documents including the Liverpool Innovation Precinct plan recognise the need for a private hospital in this part of Sydney.
- There is increasing demand for private hospitals to be co-located with other health and education providers, particularly major hospitals and tertiary or research institutions. The proposed development will offer a new modern health facility that includes acute patient care, consulting and education spaces within a major and strategic health and education precinct that would benefit from such a facility. The proposed pedestrian food bridge as part of the development will enable seamless activity and movement between the subject site and Liverpool Hospital and establish a true interconnected health precinct for patients, workers and students.

The proposal has the potential to serve unmet need in this market and would maximise utility of this strategic site to deliver a project that aligns with government objectives and will support population growth and the role of the Liverpool Innovation Precinct. Importantly, the development has the potential to support the continued growth of Liverpool Hospital and alleviate demand pressures on this facility, while enhancing synergies between the public and private health sectors.

The project would also enable collaboration with major education operators including UNSW, WSU and UOW for medical training and research. This is in line with health body objectives to establish integrated health and education precincts that enable resource sharing, learning and collaboration.

Importantly the proposed composition of the development including 155 beds and 12,540m² of consulting and education GLA is supportable, particularly in light of operator interest, an ageing population, under supply of beds, high forecast admission rates, and growing healthcare and education requirements in the Study Area.

7.0 Examples and Case Studies

Locations containing a metropolitan-scale public hospital generally tend to attract other public and private health providers, education providers and research institutes through a clustering effect. There are a number of advantages of this type of precinct development, including:

- Critical mass – such as a large client base in one location, investment in major medical and other infrastructure (roads, public transport), availability of established business support services etc
- Preference for specialists to service public and private patients in the same location
- Enhanced research and knowledge sharing synergies across the health and education sector, benefiting students and medical teachers
- Efficiencies relating to shared services between operators
- Ability to deliver value-added or targeted services by the private sector or agencies through direct referral from the hospital
- Reduced risk profile for the private sector/developers to enter the market
- Complementary social infrastructure such as childcare and schools (often to support medical staff or patients)

The following case studies highlight the types of specialist and ancillary service developments delivered in other major Australian metropolitan health clusters.

7.1 Case Study 1 - North Shore Health Hub

The North Shore Health Hub is a recently completed medical and consulting building operated by Dexus. The facility forms part of the broader Royal North Shore Hospital (RNSH) precinct in St Leonards, which includes a major public hospital, two private hospitals as well as other ancillary medical services. As such, similar to the proposed development at 61-71 Goulburn Street, the North Shore Health Hub has further enhanced the availability of medical services within an integrated setting that facilitates the integration of the public and private healthcare sector within the St Leonards health and education precinct.

The St Leonards health and education precinct is a strategic centre in the north shore of Sydney and has a number of significant health and education assets and institutions including RNSH, the North Shore Private Hospital, TAFE NSW, North Shore Health Hub, and The Mater is also located nearby at Crows Nest. The Precinct is also surrounded by a mix of other uses, including high rise offices, high density residential, and ancillary health facilities.

Specifically, the North Shore Health Hub offers a modern healthcare facility across approximately 16,000m² and includes:

- Between 8,000-10,000m² of consulting and education space
- Clinical care including day surgery facility, medical centre, imaging, pathology, and oncology care.
- High levels of amenity including premium end of trip facilities and concierge services
- Ground floor retail amenity including café and convenience store
- High sustainability ratings including 6 Star Green Star

The North Shore Health Hub development has attracted major healthcare operators including Ramsay Health Care, Genesis Care, North Shore Radiology and Nuclear Medicine, and Douglas Hanly Moir Pathology. Tenancies range from 45m² to 4,400m² and it is understood that there are currently minimal vacancies. These major health providers occupying space at the Health Hub and low vacancy rates highlight the demand and take up of this sort of medical space, particularly consulting and education space within highly established health precincts.

The continued growth of the broader St Leonards health and education precinct is highlighted through the plans for Herbert Street Precinct. It is understood that the proposal involves the development of education spaces (primary school), health related commercial offices such as medical suites and consulting rooms, as well as retail and key worker housing. Concept Plans for Herbert Street Precinct show that 10,900m² of space will be dedicated to commercial office/medical suites.

Figure 10 North Shore Health Hub



Source: Dexus

7.2 Case Study Two – Calvary Hospital

Calvary Hospital, located in Adelaide CBD is a new state of the art private hospital, and the largest in South Australia. The facility opened in 2020 and offers a range of clinical care including 16 surgical theatres, 3 intensive care units and 344 patient beds and a further 62 day patient beds across 13 storeys. The hospital provides care for over 27,000 patients per year and employs over 600 staff.

The hospital covers a total area of 47,000m², and offers services including acute care for both inpatient and outpatients, 24/7 emergency, as well as specialised services such as ambulatory care, dental care, plastics, orthopaedic, cardiac and neurosurgical services. The ground floor offers retail tenancies, as well as ancillary health services such as radiology and pathology. In addition to these services, the hospital provides 5 levels of consulting suites across 4,500m².

Figure 11 Calvary Private Hospital - Adelaide



7.3 Case Study 3 - Randwick Health and Education Precinct

The Randwick Health and Education Precinct is an integrated education, research and healthcare environment. The precinct builds on the already established Prince of Wales (POW) Hospital, Sydney Children's Hospital, UNSW Sydney Campus, Health Infrastructure, The Royal Hospital for Women, and Eastern Suburbs Mental Health Services. Many of these hospitals are teaching hospitals for UNSW students, with the POW hospital, Royal Hospital for Women and Sydney Children's Hospital together supporting up to 9,575 clinical placements in 2019.

Currently, the precinct supports up to more than 1.8 million patient interactions per year, nine medical research institutions, 22,000 workers, 58,000 students and 7,000 researchers. Together, the objectives of the precinct are to deliver clinical and academic excellence, innovation and collaboration, and impact from a local to global level.

The Precinct is currently undergoing planned further development, with the proposed Randwick Health Translation Hub that will provide:

- Purpose build spaces for researchers, educators, students and industry partners in a clinical and non-clinical setting
- Education, training and research spaces
- Clinical schools
- Ambulatory care clinics,
- Support facilities including retail tenancies
- Over 2,500m² of publicly accessible open space.

In addition to the above, the POW Hospital is also planned for expansion with an integrated acute services building. This building will provide a range of mostly clinical services to patients including expanded emergency department and ICU, additional operating theatres, additional inpatient beds, as well as research, education and training spaces in affiliation with UNSW.

A photomontage of the proposed Randwick Health Translation Hub and POW Acute Services Building are shown in **Figure 12** below. Notably, both of these developments will expand on the Randwick Health and Innovation Precinct by delivering additional education, training, research, patient services and acute clinical care for this part of Sydney.

Figure 12 Proposed Randwick Health Translation Hub (left) and POW Acute Services Building (right)



Source: NSW Government

7.4 Summary

As highlighted above, there are numerous existing examples of delivering a private hospital of a similar composition and scale to that proposed at 61-71 Goulburn Street. A key take out of these examples include:

- Increasing demand for co-located hospitals in integrated settings, including public and private hospitals, as well as education. The above case studies show, it is not unique for major educational institutions to be located within proximity to health facilities in order to access benefits such as knowledge and resource sharing, and teaching facilities for medical and health students.
- There is an increasing focus on providing on site consulting suites and research facilities that enhances patient care, as well as enable medical professionals to operate within an integrated setting rather than across multiple sites. This is evident through the recent delivery of new private hospitals such as the North Shore Health Hub and Calvary Private Hospital Adelaide which provide multiple floors of consulting, education and administration space.
- New developments including North Shore Health Hub and Calvary Hospital Adelaide, as well as proposed developments at Randwick highlight the emerging standards and composition expectations for hospital and medical facilities, including an increased focus on innovation, research, cross sector collaboration and improved patient care. It is important to note that many of the existing ancillary health services in Liverpool are within substandard buildings and need modern facilities that are in line with current and future industry expectations and standards that enable them to deliver high quality patient care and health experiences.
- There are strong beneficiaries for medical researchers and educators to be co-located within integrated settings and share resources, technology and knowledge. Accordingly, there is an opportunity for collaboration with university institutions and medical research facilities such as UNSW, WSU and Ingham Institute at the subject site, particularly through the delivery of flexible consulting space that may be able to offer research and training spaces.

The proposed development is planned to include emergency services, operating theatres and accommodate 155 beds and 12,540m² of consultation and education space along with ancillary retail uses. As the cases studies presented outline, a key model of private hospitals is the provision of consulting suites and spaces for practitioners to provide non-clinical care to patients and ability to provide educational space, research and training services. This facilitates the creation of health and medical clusters and hubs, which appeal to a wide range of occupiers, providers and patient needs. Only a small provision of consulting/education suites (around 4,560m²) are likely to be remaining based on operator interest in occupying 15 levels of the development. This remaining component is in line with contemporary health projects and will be quickly absorbed by the market based on the co-location benefits with key operators and institutions (including the hospitals and education facilities).

The composition of the project is in line with contemporary private hospital and health care facilities, particularly those forming part of Principal health clusters such as the North Shore Health Hub and Randwick Health and Academic Precinct.