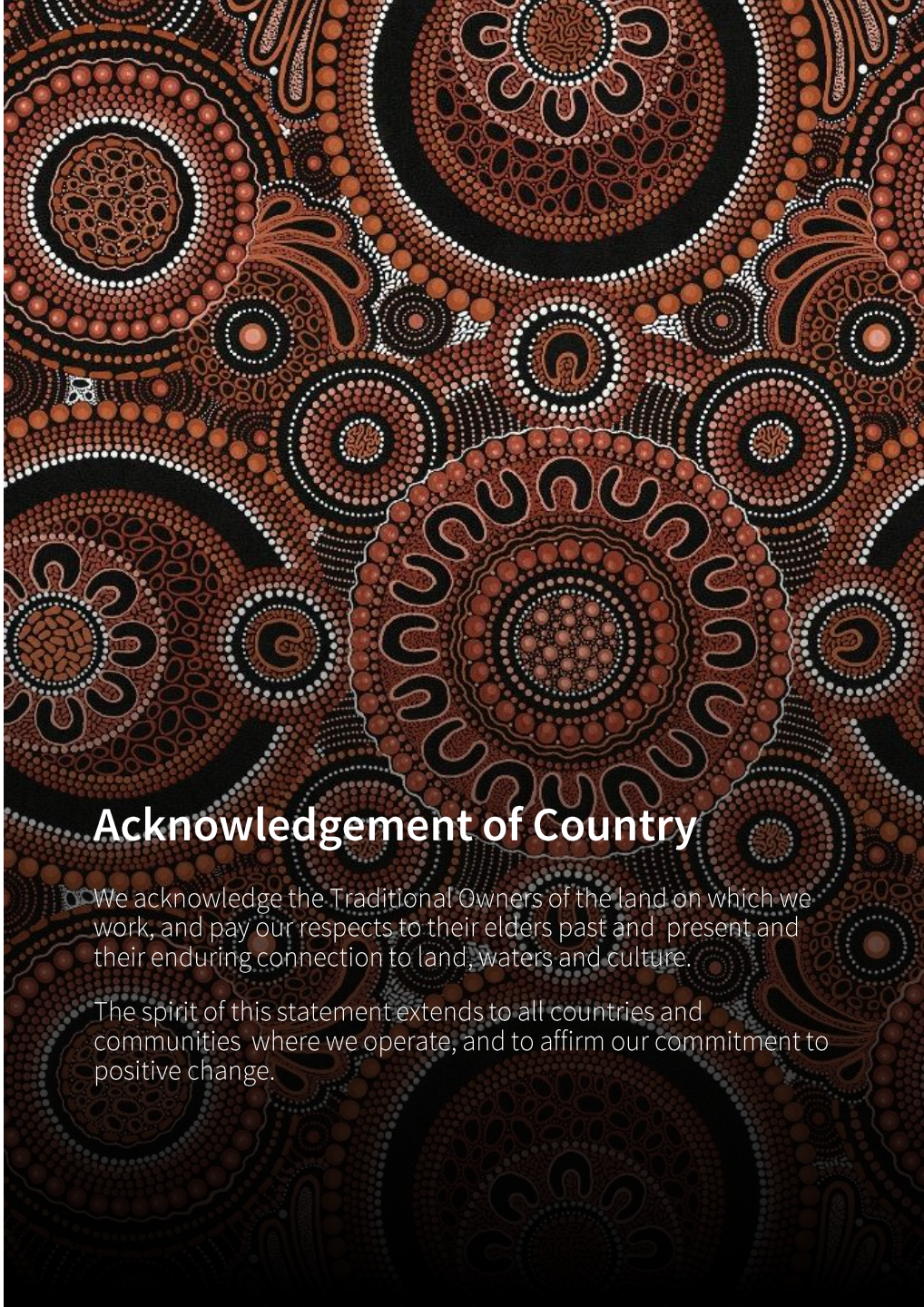
Murray Health Hub Business Case

August 2024

Title	Murray Health Hub Business Case
Project	Murray Health Hub Feasibility Study and Business Case
Status	Final
Version	C
Date of Release	8 August 2024



Acknowledgement of Country

We acknowledge the Traditional Owners of the land on which we work, and pay our respects to their elders past and present and their enduring connection to land, waters and culture.

The spirit of this statement extends to all countries and communities where we operate, and to affirm our commitment to positive change.

Murray Health Hub

Located in the leafy heart of Pinjarra (Bindjareb Country), the Murray Health Hub is the first important step towards a high-performing health precinct that will service the Shire of Murray (and Peel's) rapidly growing community.

Complementing the Shire of Murray's existing health facilities, the Murray Health Hub will grow alongside the community, providing vital primary, allied and community health services that are coordinated and targeted towards local needs.

The Murray Health Hub will increase access to health support for all community members, with more diverse, affordable services that welcome everyone, and empower Murray residents to proactively manage their health and wellbeing.

Co-located with the Murray District Hospital and aged care residential services, the Hub will feature contemporary design and integration with its natural surrounds, creating a place of wellbeing and vibrancy for patients, workers and visitors.

The challenge: A rapidly growing community who need better access to health services

There are a range of urgent health, social and strategic factors driving the need for additional health infrastructure in Murray.

Table 1 – **Cost of inaction summary**

The challenge	The cost of inaction
Murray's population is forecast to grow significantly, more than any other area in Peel.	As Peel's population grows alongside the Shire of Murray, pressure on existing health services will increase. Infrastructure such as Peel Health Campus is already overburdened, with over-use of the Emergency Department. This leads to higher costs for the health system, that could be avoided.
Murray's residents are already experiencing a significantly higher prevalence of health challenges compared to regional and State averages.	A person's health directly impacts their ability to engage in their community and workforce. Chronic poor health outcomes can lead to people being more reliant on Government support. For the ageing cohort, a lack of local and relevant health services may lead to people making the difficult choice to move outside of Murray. This impacts the local community and erodes systems of community engagement and support.
Murray's population is already undersupplied across a range of health services.	Access to high quality and sustainable health services is important to people and is a factor in deciding if they want to move to a new area. The Shire of Murray risks losing existing residents, and missing out on future residents, if they cannot provide the population services like health that people expect and have access to in urban areas.
Murray's community is already experiencing relative socio-economic disadvantage.	Health, social and economic outcomes are closely related. Murray residents risk further cycles of entrenched disadvantage without improved and increased health services that are both affordable and accessible.

The opportunity: Now is the time to plan for Murray's health future

Through the establishment of a Health Hub in Pinjarra, there is a significant opportunity for State Government to:

- **Deliver an additional 3,250m² in dedicated health services and 90FTE health workers to meet the needs of a rapidly growing population**
- **Provide a one-stop-shop community health asset, ensuring the rapidly growing population has equitable access to coordinated, sustainable and safe local services that meet their unique health and wellbeing needs.**
- **Ensure regional population growth does not overwhelm Peel Health Campus and other health infrastructure within the South Metro Health Service area, and greater Perth and Peel Regions.**
- **Establish a genuine health precinct in Pinjarra, co-locating strategic health infrastructure, education infrastructure and short-term worker accommodation.**

If Murray residents are not provided with timely, appropriate and accessible local health care when they need it, there is a risk that between 2030 and 2050, regional emergency departments will see up to 30,000 avoidable presentations from Murray residents alone.[1]

1) Based on Murray Social and Health Needs Analysis (2023) Finding that each year there are 1,175 avoidable presentations to regional emergency departments by Murray Residents.

Local community, local services

The Murray Health Hub will deliver coordinated primary, allied and community health services that can evolve with the community's needs. Right now, those needs include (but are not limited to):

- General practice, including 'just in time' primary care services that reduce the burden on the Peel Health Campus and its emergency department.
- Health care targeted at the ageing population and people living with a disability.
- Mental health services, with a focus on youth mental health.
- Allied Health services prioritising physiotherapy, occupational therapy and services most needed by and ageing population, people living with a disability and those managing chronic health conditions.
- Community health services focusing on support for young people, mental health support, alcohol and other drugs support, family and parenting support.
- Aboriginal health services or outreach.
- Pharmacy, pathology and other complementary services

A local community health service provider has already expressed interest in a long-term tenancy of up to 200m^2 at a future Murray Health Hub.

Unlocking benefits

$15.4 million per annum in net community benefits and a cost-benefit ratio of 3.4 over a 40-year period

This includes:

$11.6 Million per annum in improved health outcomes through reduced severity of disability and illness

$2.4 Million per annum in local economic benefit through reduced absenteeism

$664,000 per annum savings to the health system through avoided emergency department costs

$620,000 per annum in travel cost savings for residents

Contributing to the coordinated health services required to improve the Shire's socio-economic indicators

Increased liveability supporting Murray and Peel Region, in attracting and retaining workers and their families by providing the level of health infrastructure they are used to, or might need

Reducing risk of people moving out of the region as their health needs increase

Operations phase
- 124 FTE jobs per annum
- $36.6 Million economic output per annum
- $11.1 Million in salaries and wages per annum

Construction phase
- 125 FTE jobs per annum
- $79.2 Million economic output per annum
- $3.7 Million in in salaries and wages per annum

The first step towards a high performing community health precinct

The preferred site for the Murray Health Hub is owned by the State Government and already zoned for health uses. It is directly north of the Murray District Hospital, an area the community already associate with health services. The co-location of the Health Hub with existing health infrastructure, as well as proximity to a growing residential aged care provider, provides a strong foundation for the development of a high performing health precinct in Pinjarra, which has the capacity to grow with the community, and deliver services, infrastructure and benefits such as*:

- Training and education facilities to nurture Murray and the Peel region's future health workforce
- Accommodation for the health workforce, including short- and long-term accommodation options
- Expanded residential aged care to enable more people to age in place
- A private hospital to increase the diversity of future health services available locally
- A strategically located site with critical regional capacity that allows for a phased approach to the delivery of additional health services over time.

*Note, the details of this Business Case relate to the Health Hub only. The design and impacts of a broader health precinct should be addressed as part of a broader master planning process.

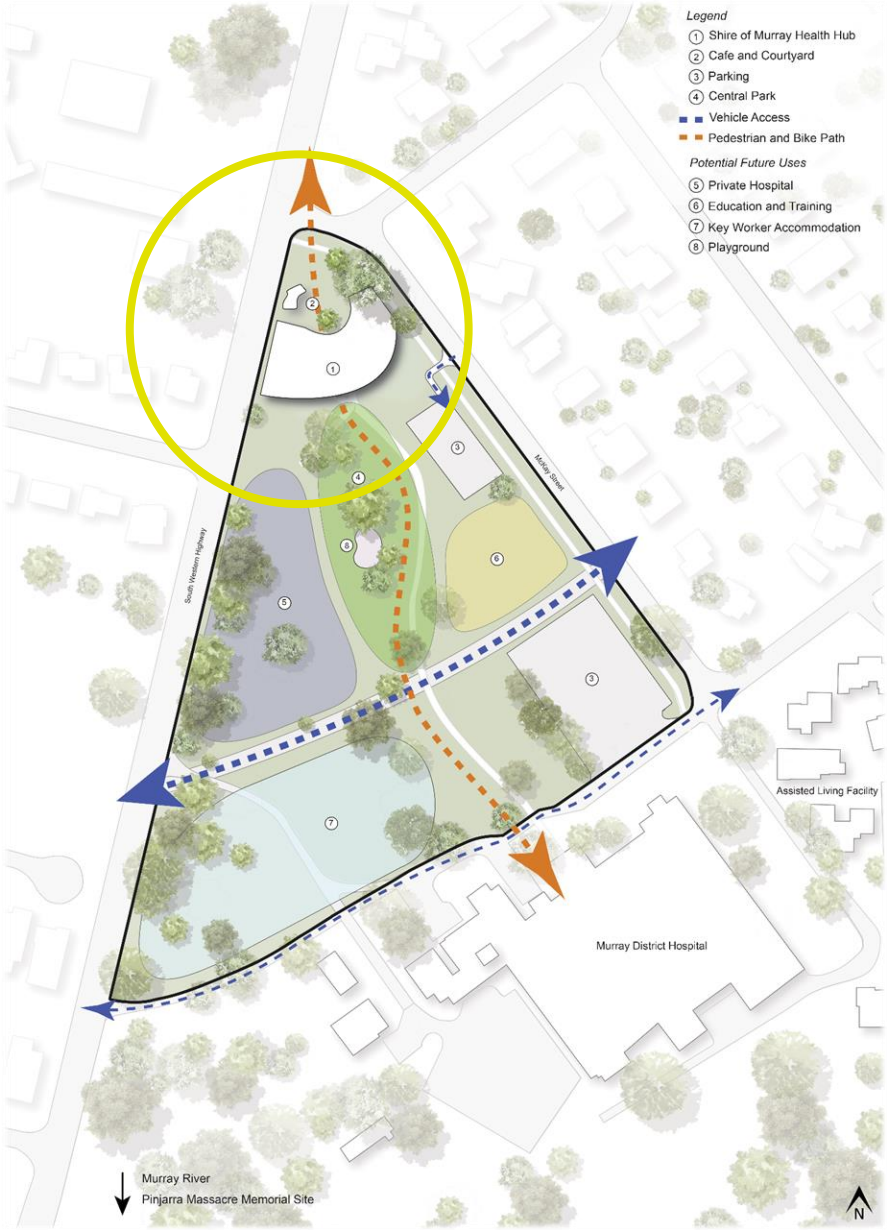


Figure 1 – **Preferred site – potential uses.** Source: Hatch 2024

Investment required

As owner of the preferred site, and with a remit to deliver health services to communities in greatest need, State Government are best placed to lead this project and deliver a contemporary and flexibly designed Health Hub in Murray that can respond to the community's growth and complex health needs.

The Murray Health Hub will require State Government leadership and facilitation of investment of:

$1.2 million for schematic design, refined capital expenditure costings and updated feasibility study and business case $3.4 million for site investigations, architectural and landscape design, and planning and development approvals	2024-2025
$46 million for construction phase	2026-2028
$250,000 to cover the gap between operational costs and revenues anticipated in the first 3 years of operation	2029-2031

(1) Figures above are estimates and are expressed in forecasted 2028 prices. A market led approach should allow experts to respond to any complexities on the site, and this will influence the cost of studies. Construction and operating costs should be refined following a detailed design process.

Key success factors

- Engagement with potential service providers to more clearly define the service, infrastructure and operational requirements of the Hub via a detailed co-design process.
- Ability to attract the workforce and health providers required to service the hub. Workforce attraction and retention is already a key challenge for Peel, exacerbated by a shortage of housing.
- Continued consultation with Traditional Owners to ensure that design and development respects the cultural significance of the site and its surrounds, and that services and infrastructure are welcoming and inclusive of the Aboriginal and Torres Strait Islander community.
- Integration and strategic planning with surrounding health services and infrastructure to ensure that the precinct can properly service the health needs of the future population.

The Shire of Murray will partner with State Government to attract the funding required to progress the Murray Health Hub.

2. Introduction

2. Introduction

2.2 Context: Murray's health needs

2. Introduction

The Shire of Murray is forecast to grow rapidly, and has existing health challenges in the population

Between now and 2036, the Shire of Murray's (Murray) population is expected to increase significantly. With lower-than-average socio-economic outcomes (compared to the Peel Region and Western Australia) there is a risk that Murray's community will be vulnerable to a greater instance of negative health outcomes.

Key stakeholders aligned on planning for Murray's health future

Recognizing the urgency of this emerging health challenge, the Shire of Murray established the Murray Health Futures Group, a technical advisory group made up of representatives from the following stakeholders:

- Shire of Murray
- South Metropolitan Health Services
- Rockingham Peel Group
- Peel Development Commission
- Department of Communities
- WA Primary Health Alliance

The Working Group undertook a detailed Health and Social Needs Assessment (completed in 2023) and coupled with findings of the assessment and the South Metropolitan Health Service's Health Profile (also completed in 2023), quickly understood the need to investigate the feasibility of a Health Hub in the Pinjarra Town Centre.

Investigating feasibility and the case for investment in a Health Hub in Pinjarra

Led by the Shire of Murray, a project was established to conduct the feasibility assessment and based on the findings, develop a case for ongoing investment in the Murray Health Hub project. The first phase of the project identified the following:

- There is a current gap in the supply of health workers for people living in the Shire of Murray (Murray)
- Socio-economic and health indicators have identified that Murray residents are relatively disadvantaged compared to Greater Perth and WA averages, and have a higher prevalence of some health issues
- If current population forecasts hold true, Murray residents will need access to significantly more health infrastructure to help them address health challenges and priorities, and to services an evolving community, including more young people, families and an increasing ageing population
- There is an opportunity to provide additional health infrastructure, in the form of Health Hub, in Pinjarra, where the community can access services locally, reducing the need to travel to Mandurah, Rockingham or further, and reducing the burden on Mandurah based health services.
- A preferred site to the north of the current Murray District Hospital provides a good location for future health infrastructure, providing the opportunity for the development of a health precinct.

Utilising demand analysis, and in consultation with the Working Group, the types of health services most needed by the community were identified and used to develop a proposed Health Hub profile. This profile formed the basis of the feasibility study, which investigated the Health Hub's potential costs (including capital expenditure and operating costs), operating model and revenues required to be feasible, sustainable and avoid depreciation.

Now, the Shire of Murray have developed the Murray Health Hub Business Case, which:

- Outlines the key findings of demand assessment and feasibility study.
- Describes the case for investment, including potential health, social and economic impacts of a Health Hub in Pinjarra.
- Provides a conceptual business case for investment in additional health infrastructure in the Shire of Murray (Murray), and to use this document to test and evolve the concept of a Health Hub in Pinjarra based on further consultation and alignment with stakeholder priorities and focus areas. As such, this document should not be treated as final concept in its current state.

2.2 Context: Murray's health needs

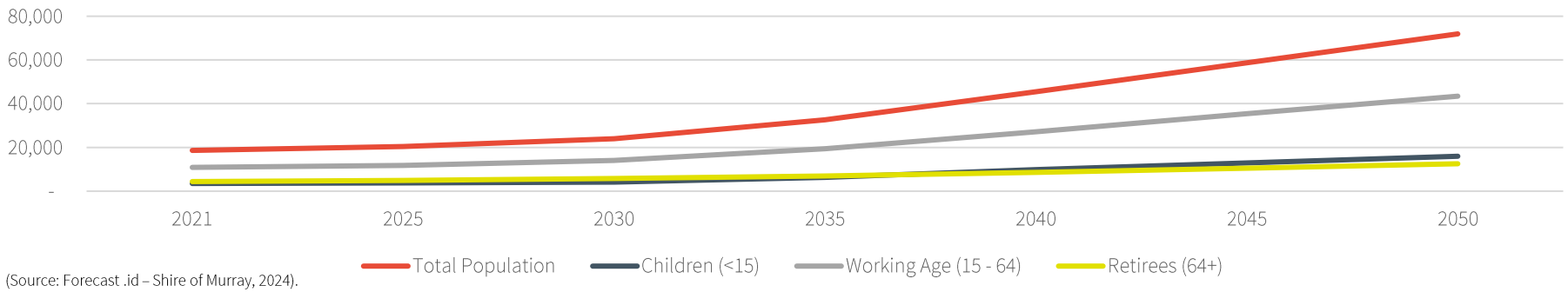
Murray's population is forecast to grow significantly

Between now and 2036, Murray's population is expected to increase by 67% (13,000 people). By 2050, the population will have increased by 266% and is estimated to reach 71,000, far outpacing the projected WA growth rate of 26%* to 2050. In 2050, the populations of Pinjarra and Ravenswood alone will be the equivalent to Albany (WA). In addition, the Peel Region's population is forecast to reach 200,000 by the early 2030's, representing a growth rate of 20%.

- General health services for the working age population will be increasingly in demand given the proportion of 25 – 49-year-olds set to increase.
- With an additional 4,300 more children estimated to live in the Shire by 2036 and 10,000 by 2050, health and support for young people will be critical moving forward.
- Aged care services will remain a priority as the existing population grows older, even though they may represent a smaller proportion of the future community due to the influx of families.
- Population growth is anticipated to accelerate from 2030 onwards, suggesting that in the short term the current shortfall in health services will be acerbated in the medium term

Murray's health infrastructure will need to respond to the evolving needs of these cohorts, providing appropriate access to the most relevant health services that can be provided safely at the local level.

Figure 2 – **Murray population growth by age group**



(Source: Forecast .id – Shire of Murray, 2024).

Sources: Population Projections, Western Australia, 2022-2071 - ABS, 2023. Sources: Shire of Murray Health and Wellbeing Profile 2023, Murray Region Health and Social Needs Analysis December 2023, ABS Census Data, 2021.

Murray's community is already experiencing relative socio-economic disadvantage

With lower-than-average socio-economic outcomes compared to the Peel Region and Western Australia, Murray's fast-growing community is at risk of being vulnerable to a greater instance of negative health outcomes.

- There is a higher level of unemployment in Murray compared to the WA average.
- There are less jobs than resident workers in Murray, and full-time employment rates are below the WA average.
- Murray residents are more reliant on rental assistance than the WA average.
- 52% of Murray households are considered 'low income'.
- Murray is listed as in the 2nd lowest quintile in the National Index of Relative Socio-economic Disadvantage.
- Only 8.1% of Murray residents have attained a Bachelor degree or higher, compared to 23% of WA residents.

Murray's health infrastructure will need to be accessible to a diverse range of incomes, including providing low to no cost services.

There are emerging health priorities in Murray that need to be addressed

Detailed health and social needs assessment of the Murray and Peel population have identified that there are existing health challenges in the community:

- Higher proportion (36.7%) of Murray population living with a long-term health condition compared to WA (29.9%) and Australia (31.7%).
- Proportionately more people in Murray living with a profound or severe disability (6.8%), compared with 4.8% WA average. Of those in Murray, almost 15% were 65 years or older.
- Higher prevalence of obesity in Murray compared to the South Metro Health Regin and region and WA.
- Higher prevalence of long-term risky drinking (40% of 15+ population) reported in Murray can also lead to higher instances of conditions such as cancer, diabetes, kidney and heart disease.
- Evidence of insufficient consumption of fruit and vegetables + lack of physical activity reported in Murray – likely to contribute to burden of disease.
- Greater proportion of population living with mental health conditions compared to Greater Perth. Emergency presentations (mostly at Peel Health Campus) by Murray residents indicate a potential increase in the complexity of mental health cases, and / or an insufficient supply of beds or services to transfer patients.

Murray's community needs access to physical and social health services that support the wellbeing of young people, provide high quality care to the ageing population and enable safe access to specialists and allied health professionals who can support ongoing management of chronic health conditions.

Sources: Shire of Murray Health and Wellbeing Profile 2023, Murray Region Health and Social Needs Analysis December 2023, ABS Census Data, 2021.

The Murray community needs better access to local and regional health services.

Murray residents fall within the South Metropolitan Health Service (SMHS) area. They have access to a range of local and regional public and private health services which are already under pressure.

- Murray District Hospital provides inpatient (15 bed) medical services including aged care and slow stream rehabilitation to the people in the Shire of Murray and surrounding areas. Support services delivered at the hospital include medical imaging, pathology and allied health, with care provided via staff from Rockingham General Hospital. Murray District Hospital is coming to the end of its asset lifespan and is currently fully utilised. There is a need to ensure long term sustainability and growth of the provided services.
- Aged care in Murray is at capacity, and there are plans for increased provision (advice received via engagements indicates almost 4-fold of current supply of aged care beds is needed). This aged care cohort will require local health services aligned with their needs.
- Peel Health Campus (Mandurah) is set to receive major upgrades and return to being a state-run-hospital, providing better access to health services for Peel residents. Peel Health Campus is the nearest general hospital for Murray residents, and for those without access to a vehicle, is approximately 50 minutes by public transport one way. Peel's population is expected to increase by 79% between now and 2046. Peel Health Campus will be impacted by this growth, and even with expansions, will need to be supported by additional health infrastructure across the region, to reduce the burden on its services.
- Access to other general, tertiary and specialist services not provided in Murray and Peel requires Murray residents to drive between 50 to 80 km, or if they don't have access to a vehicle, spend 1.5 – 2 hours on public transport each way.

Peel's population is growing and will continue to put pressure on existing and planned health infrastructure. Murray is not well connected to Mandurah and Perth by public transport. Access to regional services is not sufficient. Murray's population will need services that can be provided safely at the local level, to ensure equitable access to the most relevant health services, and to reduce pressure on Peel Health Campus.

Sources: Shire of Murray Health and Wellbeing Profile 2023, Murray Region Health and Social Needs Analysis December 2023, ABS Census Data, 2021.

Murray's population is already undersupplied across a range of health services

The Shire of Murray falls well short of inner regional benchmarks across supply of key medical services. It should be noted that supply does not necessarily mean services located in the Shire, but services that residents have access to. These may be provided by other centres like Mandurah, Rockingham and Armadale.

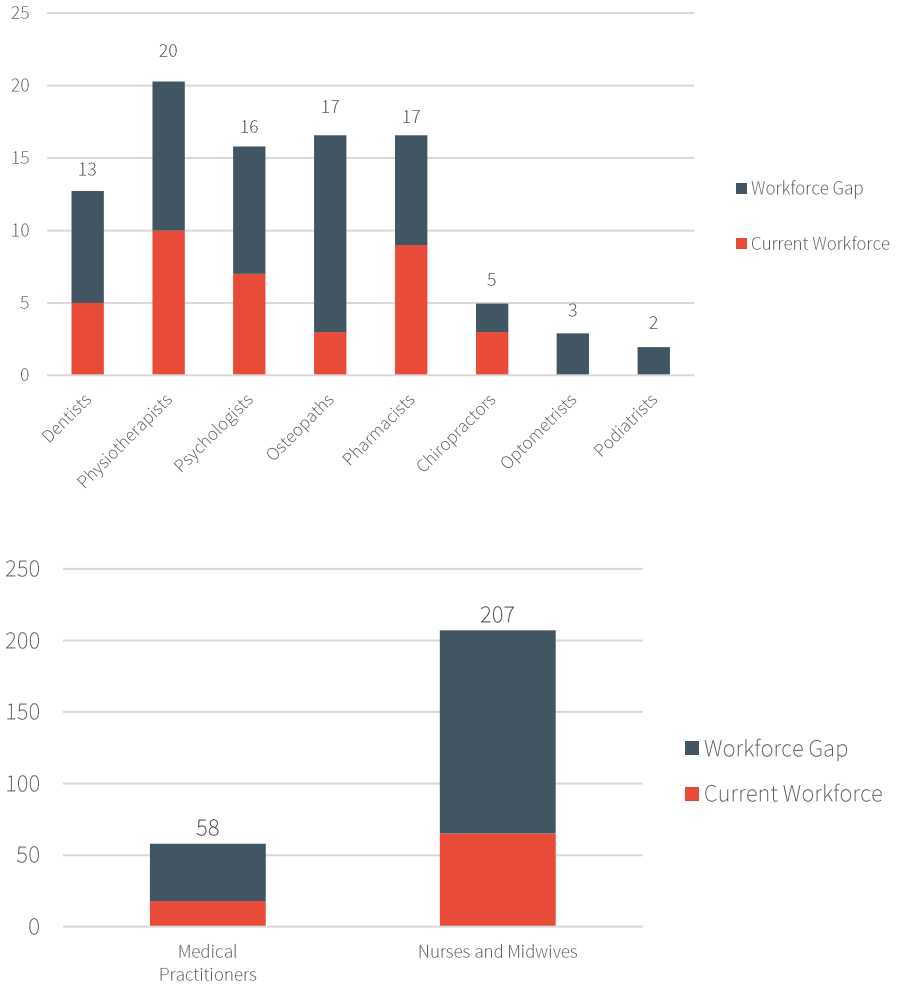
- The latest available data (2022) indicates a gap in the supply of the following services for the Murray population:
  - 40 doctors (GPs)
  - 142 nurses and midwives
  - 8 dentists
  - 10 physiotherapists
  - 9 psychologists
  - 14 osteopaths
  - 2 chiropractors
  - 8 pharmacists

- Supply of Medical Practitioners, Nurses and Midwives in Murray has fluctuated between 2013 and 2022 and has not been aligned with population growth.

- While 100% of this shortfall does not all have to be addressed entirely in Murray (e.g., services in Peel, Rockingham and Murdoch will address some of this), it demonstrates that there is a current gap which will continue to grow significantly if not proactively addressed.

Access to high quality and sustainable health services is important to people and is a factor in deciding if they want to move to a new area. Murray will need to provide space and facilities to attract the required medical businesses, services and workers needed to maintain sustainable access for the community.

Figures 3 & 4 – **Current gap in access to health services – Shire of Murray**



Sources: Hatch, 2024., Australian Institute of Health and Welfare (AIHW), 2022. Current demand by service type reflects Inner Regional WA ratio benchmarks.

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What's needed

The people of Murray need more health services today, to address current and emerging health risks. This need will increase significantly in the future as the population increases by over 250% by 2050.

A Health Hub will:

- Ensure the rapidly growing population has equitable access to sustainable and safe local services that meet their unique health and wellbeing needs.
- Ensure regional population growth does not overwhelm Peel Health Campus and other health infrastructure in the South Metro Health Service area.
- Provide coordinated care to patients, helping to increase efficiency and efficacy of delivery, as well as delivering a more financially sustainable option.

The Murray community needs coordinated, accessible, sustainable and flexible health services that can evolve with their growing needs. It should focus on providing the following services:

- General practice, including 'just in time' primary care services that reduce the burden on the Peel Health Campus and its emergency department.
- Health care targeted at the ageing population and people living with a disability.
- Mental health services, with a focus on youth mental health.
- Allied Health services prioritising physiotherapy, occupational therapy and services most needed by and ageing population, people living with a disability and those managing chronic health conditions.
- Community health services focusing on support for young people, mental health support, alcohol and other drugs support, family and parenting support.
- Aboriginal health services or outreach.
- Co-location with pathology and other complementary services.

Murray Health Hub infrastructure and operations should provide:

- Space for specialist consultations and outreach, both in person and via telehealth.
- A coordinated care model and design that enables collaboration between service providers to streamline and improve care.
- Greater access to services through expanded operating hours (e.g. outside of business hours)
- Full accessibility, safety and security for Health Hub clients, visitors and workers

A local community health service provider has already expressed interest in a long-term tenancy of up to 200m^2 at a future Murray Health Hub.

3. Health Hub Profile

3.1 Site selection
3.2 Services
3.3 Design and infrastructure
3.4 Operations
3.5 Benchmarks

3. Health Hub Profile

This chapter puts forward the potential service, infrastructure, design and operational characteristics of a future Health Hub in Murray. Based on research, consultation and demand modelling, it describes, at a high level, the services, infrastructure and spatial requirements or opportunities that should be considered. This profile underpins the feasibility analysis and impact analysis at a detail appropriate to this early stage of project scoping.

The Health Hub profile is based on a series of assumptions and findings that were developed in work conducted to date. As outlined in previous project reports, analysis identified that:

- The Shire of Murray's population is forecast to increase by approximately 67% by 2035, and 260% by 2050, outpacing WA's growth rate. In 2050, the populations of Pinjarra and Ravenswood alone will be the equivalent to Albany (WA). In addition, the Peel Region's population is forecast to reach 200,000 by the early 2030's, representing a growth rate of 20%.
- The Shire of Murray's current population is underserviced according to inner-regional health workforce benchmarks. There are also a range of health and socio-economic risk factors pointing to the need for additional, targeted health infrastructure.
- If, in 2035, 25% of the forecast shortfall in the required health workforce is accommodated through new infrastructure (Murray Health Hub), it would:
    - Require approximately 3,250m^2 GFA; and
    - Accommodate a health and administration workforce of between 80-90 FTE
- A preferred location for the Health Hub, north of the current Murray District Hospital site.

It is important to note that this study is high level in nature, and the preferred site, operating model and service mix must be considered through a more detailed investigation and design process to arrive at more accurate development, timing, cost and risk considerations.

*Notes on the above assumptions.

- The remaining demand (75%) will be accommodated by other health infrastructure (current, planned and future) in the Shire of Murray, the City of Mandurah and in the Greater Perth Area.
- A future Health Hub should be designed as part of a master planning process to explore opportunities for co-location with complementary health infrastructure (accommodation, training). It is likely multi-storey development will be required to maximise floorspace and allow for complementary infrastructure on the preferred sites, especially if 2050 demand is to also be accommodated.
- 2035 used as a horizon for understanding impact as health infrastructure in Murray will likely need to be staged. It is unlikely funding for 2050 health infrastructure will be obtained, but the scale of future need is important to consider.
- Inner Regional benchmarks are developed by the Australian Institute of Health and Wellbeing and indicate the level of health workforce generally required to service populations living in urban, inner regional and outer regional areas.

3.1 Site selection

Six sites that could accommodate the required scale of Health Hub infrastructure were identified by the Shire and Working Group.

1. **Murray District Hospital (MDH)**
2. **MDH North**
3. **MDH West**
4. **Camp Road**
5. **James and Forrest Street**
6. **Shire Offices**

Figure 5 – **Sites considered for a Health Hub in Murray**

A multi-criteria analysis approach, supported by site visits with the Working Group was used to compare the long list of site options. The criteria considered the capability of the site to accommodate current and future demand, site suitability, capital expenditure implications and complexity to deliver the development. The analysis identified site 2, "MDH North" as the preferred site based on:

- The capacity of the site to accommodate required health infrastructure and its current zoning for that use.
- The capacity of the site to accommodate complementary infrastructure including education and accommodation.
- The proximity of the site to existing health infrastructure, including Murray District Hospital and Bedingfield Aged Care, presenting the opportunity to develop a genuine health precinct to service the community's growth (this will require a master planning process).
- The community already associates this site / area as a place to access health services.
- The site has minimal existing built assets, and is connected to the required services, making its development potentially straight forward, minimising capital expenditure related to demolition/site remediation and delay risks.
- The site's natural setting provides the opportunity to provide high quality health services in an environment that, through contemporary design, promotes wellbeing and a positive experience for patients, clients, visitors and workers.

Any future development or planning of the site must continue to involve engagement with Traditional Owners given the proximity with the Pinjarra Massacre Site. It is important to note that this study is high level in nature, and the preferred site must be considered through a more detailed investigation to arrive at accurate development, timing, cost and risk considerations.

Further information about the multi-criteria analysis (MCA) process can be found in appendix 2.

3.2 Services

The following services were identified as the Murray populations priority services, based on challenges identified in the 2023 Social and Health Needs Assessment as well as a current or emerging gap in service levels. **It is important to note that the Murray Health Hub should be responsive to community needs as they evolve. The service mix and floorspace estimations below are not prescriptive or final. Interest and capacity for services to set up in the Murray Health Hub will need to be investigated via an Expression of Interest and Detailed Design process.**

Table 2 – **Health Hub service assumptions**

Service and space / need	Why it's important
General Medical services 1,800m^2	**General practice, including 'just in time' primary care services** Murray residents currently do not have sufficient access to GPs, according to Inner Regional benchmarks. As the population grows, it will be important to provide more local services, and particularly services that can address urgent but not emergency health complaints (e.g. minor injuries). It is also important to provide sustainable and accessible GP services to encourage people to address health concerns early, before they become serious. This will help reduce the burden on the Peel Health Campus and its emergency department.
	Health care targeted at the ageing population and people living with a disability Murray's residential aged care services are already at capacity and will need to expand to enable the ageing population to 'age in place', where they can still have the support and connection with their family and social networks. There is an opportunity and a need to ensure that this population have access to health services that will be most relevant to them. Murray has a higher proportion of people living with a severe or profound disability than the WA average. This cohort will also need health and support services.
	Aboriginal health services Research indicates that Aboriginal controlled health services are 23% better at attracting and retaining Aboriginal clients than mainstream health providers[1].
Community health services 240m^2	**Mental health** Local and affordable mental health support, especially for young people, will be important for reducing the burden on services in Mandurah and Perth Metropolitan area. Good mental health is critical for young people to complete their schooling and go on to achieve their goals.
	Alcohol and other drugs An increased prevalence of long-term risky drinking behaviours in Murray indicates there may be value in providing alcohol and other drug support services, as these behaviours can lead to anti-social outcomes, and higher instances of conditions such as cancer, diabetes, kidney and heart disease.
	Families and parenting The community have identified that they need additional support for families and parenting. In addition, this age group of the population is set to increase. This type of support is important in helping parents to support their children's health and mental wellbeing, as well as their own

(1) Department of Health. Aboriginal and Torres Strait Islander Health Performance Framework. Canberra 2017 & Ong, K. S. et al. 'Differences in Primary Health Care Delivery to Australia's Indigenous Population: a Template for Use in Economic Evaluations', BMC Health Services Research. 2012.

* See appendix 3 for assumptions informing floorspace requirements

Service and space / need	Why it's important
Allied health services 400m^2	**Allied Health services** A Health Hub in Murray should prioritise services most needed by an ageing population, people living with a disability and those managing chronic health conditions. This potentially includes physiotherapy, occupational therapy, dietetics and nutrition.
Other 250m^2	**Specialist services** A higher proportion of Murray residents have a long-term health condition, compared to the WA and Australia average. Compared to Greater Perth, Murray has a greater population of people living with arthritis, mental health conditions, cancer (including remission) and lung conditions. Providing access to targeted specialists through telehealth facilities or outreach is likely to be important for the community moving forward.
	Pharmacy and pathology The co-location of pharmacy and pathology on site is beneficial, particularly for clients and patients who travel by public transport to the hub and would benefit from these services being on site. There may be an opportunity for radiography to be included in the service mix.
Non health 55m^2	**Cafe** As part of a broader health precinct, and to increase the attractiveness of the hub to workers and businesses, a small café operating from the hub can provide an important service (coffee, lunch) to workers and visitors, while also providing another commercial lease as a revenue stream to the hub.

* See appendix 3 for assumptions informing floorspace requirements.

Murray Health Hub Artists Impression Only

3.3 Design and infrastructure

Detailed design of a future Murray Health Hub should consider the elements in table 3. The following infrastructure and design characteristics were identified during consultation and benchmarking.

Table 3 - **Health Hub infrastructure and design values**

Flexible layouts and high-quality amenity, including landscaping	Acknowledgement of Aboriginal heritage and values	Full accessibility, safety and security for Health Hub clients, visitors and workers	Strong wayfinding	Parking and public transport accessibility
To attract providers and workers, the Health Hub must be designed to the highest possible standards and provide a world-class working and care environment. This must be infrastructure the community feels proud of, and people want to work in and receive care in. It must be designed to embrace its natural surrounds and create an environment off wellbeing and recuperation.	Any development on the preferred site (north of the Murray District Hospital) must acknowledge and respect Aboriginal Heritage values, particularly due to the site's proximity to the Pinjarra Massacre site. In-depth engagement during the master planning and detailed design phase must be carried out to ensure the resulting development is welcoming and safe for Aboriginal people.	The Health Hub must be a secure and welcoming environment for all. Design should prioritise the development of well-lit and highly visual areas where passive surveillance can occur. Design should also aim to increase people's privacy. In smaller towns with less anonymity, people will prefer to access services with a shared reception or welcome area. All areas of the Health Hub must be accessible to the highest standards for people with a disability.	Multi-storey development is permitted on the site, and as the Hub grows to service the population, it is likely that it will involve more than one level. This is also to ensure that the site can be maximised for other complementary infrastructure, including training and education, as part of a health precinct. Any new development should be easy to navigate, with high quality wayfinding that enables easy navigation around the precinct, and within the Health Hub itself.	Murray residents are very reliant on vehicles. Parking sufficient to service both workers and visitors will be required (approximately 2,500m^2). In addition, to reduce reliance on vehicles where possible for those who don't have a car, or people who can drive them around, public transport to the site should be improved.
Ample storage for medical equipment and supplies	**Shared kitchen and break out areas** **Shared boardroom and meeting rooms**	**Shared boardroom and meeting rooms**	**Gym and physiotherapy treatment areas and facilities**	**Children's play area (inside and outside)**
The hub will likely be a key source of health services the local ageing population. The medical and support equipment (frames, wheelchairs) required by this cohort requires ample storage.	Shared amenities encourage interaction between staff and their services. It also reduces the amount of space needed by individual providers, increasing the efficiency of the facility, and ensuring as much floorspace as possible is being utilised to provide direct health services to the community.		Allied health providers will benefit from onsite therapy equipment and facilities. As per above, sharing facilities and equipment reduces costs for providers, and maximises floorspace.	Spaces for children to play before, during and after visits to the Health Hub will increase amenity for parents and make the Health Hub a welcoming place for children.

Source: Hatch 2024. *See appendix 3 for assumptions informing parking requirements.

3.4 Operations

Detailed design of a future Murray Health Hub should consider the elements in table 4. The following operating characteristics are not final and should be tested with the future users and service providers of the hub via a detailed design process to ensure they will most appropriately meet their needs.

Table 4 – **Hub operations assumptions**

What's needed	Why it's important
A coordinated or integrated care model and design that enables collaboration between service providers to streamline and improve care	The WA Government Sustainable Health Review (2023) and WA Primary Health Alliance Strategic plan (2020-2023) identify the need for health services to be streamlined, collaborative and based on models of care that reduce duplication and strive for seamless patient care. In the detailed design phase of the project, it will be important for interested providers to work together to develop a shared vision for the model of care provided through the Murray Health Hub, and to arrive at a model that is practical to deliver.
Strong commercial anchor tenant to provide financial sustainability	The Murray Health Hub should seek to attract an anchor tenant (e.g. a GP service) who can take up a large lease and provide a level of financial stability to the hub. This will allow the Hub Operator to subsidise rates for not-for-profit providers and be more competitive when attracting commercial tenants.
Competitive commercial rates or incentives for private providers, to attract and retain services	Attracting businesses and workforce to regional areas is a key challenge and poses a significant risk for the viability of a Health Hub in any regional location. There may need to be consideration given to how providers and their staff can be incentivised to locate to Murray. This includes highly competitive commercial rates, discounts on first 5 years of lease, or access to subsidized housing or land for workforce accommodation.
Access to subsidized leases for not-for-profit health and community health providers	Rent is a major cost for any organisation. Relieving this as a cost for not-for-profit providers offering critical community health services will be an important way for the Murray Health Hub to attract and retain sustainable services.
Greater access to services through expanded operating hours (e.g. outside of business hours)	Engagement with community conduced for the Health and Social Needs Assessment (2023) identified greater access to health services as a key need, including access to services outside of business hours. A large portion of Murray's population employed in trades and are likely to have less access to flexible working arrangements that let them see a doctor during business hours.

Source: Hatch 2024

3.5 Benchmarks

Key learnings from reviewing the characteristics of other health hubs and health hub projects indicate that the following factors will be important to consider during the design, implementation and operation processes:

- Identifying a hub anchor or operator who will underpin or coordinate services, especially in an integrated model (shared systems, data etc).
- Building design should respond to the needs of the preferred systems.
- Health Hubs should respond to local needs, which evolve. Hub operators need to monitor local trends and ensure services continue to meet the most urgent needs.
- Low-to-no-cost providers need affordable rent for their services to be sustainable.
- Local Government can play an important role not only in scoping and advocacy, but in being a key delivery partner who can ensure the hub responds to community needs and priorities.

Table 5 – **Benchmark hubs**

	Cockburn Integrated Health Hub	Peel Health Hub	Byford Health Hub
			
Size	2,400m2	2,600m2	1,500m2 (Not yet constructed)
Services	General practitioner Mental health Speech and hearing Perinatal and infant mental health Maternity Children's health Nutrition Multi-cultural services, migrant support Financial counselling Speech pathology, OT, Physiotherapy Pathology Hypnosis Student-led inter-professional support	General Practitioner Mental health Alcohol and other drugs Family violence and sexual assault support Homelessness services Specialist services Vocational services Family support services	Service mix currently being developed via EoI process
Model / operations	Facility managed by Cockburn Integrated Health. GP services provides reception and service coordination. NFP provider leases are subsidised	Facility managed by GP Down South, a not-for-profit community organisation providing health and wellbeing services in the Peel Region since 1994.	Hub will be operated by East Metropolitan Health Service
Insights	Provides an example of Local Government working with an experience Facility Manager. It will be important that in the detailed design process, underutilised space is minimised (e.g. large corridors, hallways), and that service providers are able to afford lease space (e.g. through subsidised leases).	Provides example of positive collaborative model, where clients have a 'one stop shop' experience and providers collaborate to streamline services. Also demonstrates the benefit of having an anchor tenant who can also provide overall management of the hub and its tenancies.	Byford Health Hub provides an example of a partnership approach, where the Local Government own the Hub Building, while the East Metropolitan Health Service (State Government) will operate the hub via a collaborative model. This approach leverages the resources and expertise of the State Government as a health service provider.

4. Implementation

4.1 Feasibility
4.2 Implementation pathway
4.3 Governance
4.4 Risks
4.5 Alignment with Government priorities

4.1 Financial analysis

A Feasibility Study was conducted in June and July 2024 to explore the potential costs and revenues associated with delivering a Health Hub in Murray. The key finding of the study are outlined below and in table 6 (following page). **Appendix 3 includes more details regarding the Feasibility Study findings.**

Capital expenditure
Analysis estimates that a total outlay of **$50.6million** would be required during the construction phase, inclusive of a 3,250m^2 hub and small café, with a provision for parking and landscaping. This breakdown of this total CAPEX outlay includes:

- Health Hub Building - $44.5 million
- Café - $0.3 million
- Carpark - $0.5 million
- Landscaping - $0.3 million
- Professional fees of approximately $4.6 million
- An additional $412,000 for the initial fit out of the hub's common areas.

The above figures are based on a magnitude of costs approach, using Rawlinsons 2022 Construction Costs Handbook. A future detailed design process will include costings by a Quantity Surveyor.

Operating costs and revenues
Analysis indicates a total cost of $858,000 per annum to maintain, manage and operate the hub.

Based upon 80% occupancy, rents charged at current market rates (with a full discount allowed for public providers), and a floorspace split between private and public the Hub has the potential to generate a total annual revenue of $893,000, including:

- Total rental revenue of $632,000 from providers
- Total rental revenue of $15,300 from the café
- $246,000 in potential outgoings received from private and public providers

This equates to an estimated net position per annum of approximately $35,750 for each year of operation, providing the hub operator with a moderate cash reserve that could contribute to the delivery of health programs, events and initiatives or as an additional contingency buffer.

Cashflow analysis
There is a risk that the Hub will not achieve 80% occupancy in the first years of operation as the asset's services ramp up. Under a moderate growth rate (50% in year one, up to 80% in year three) there would be a gap of a total of $250,000 between operating costs and revenues that would need to be funded. This should be a key consideration for advocacy, and the staging of the Hub's development.

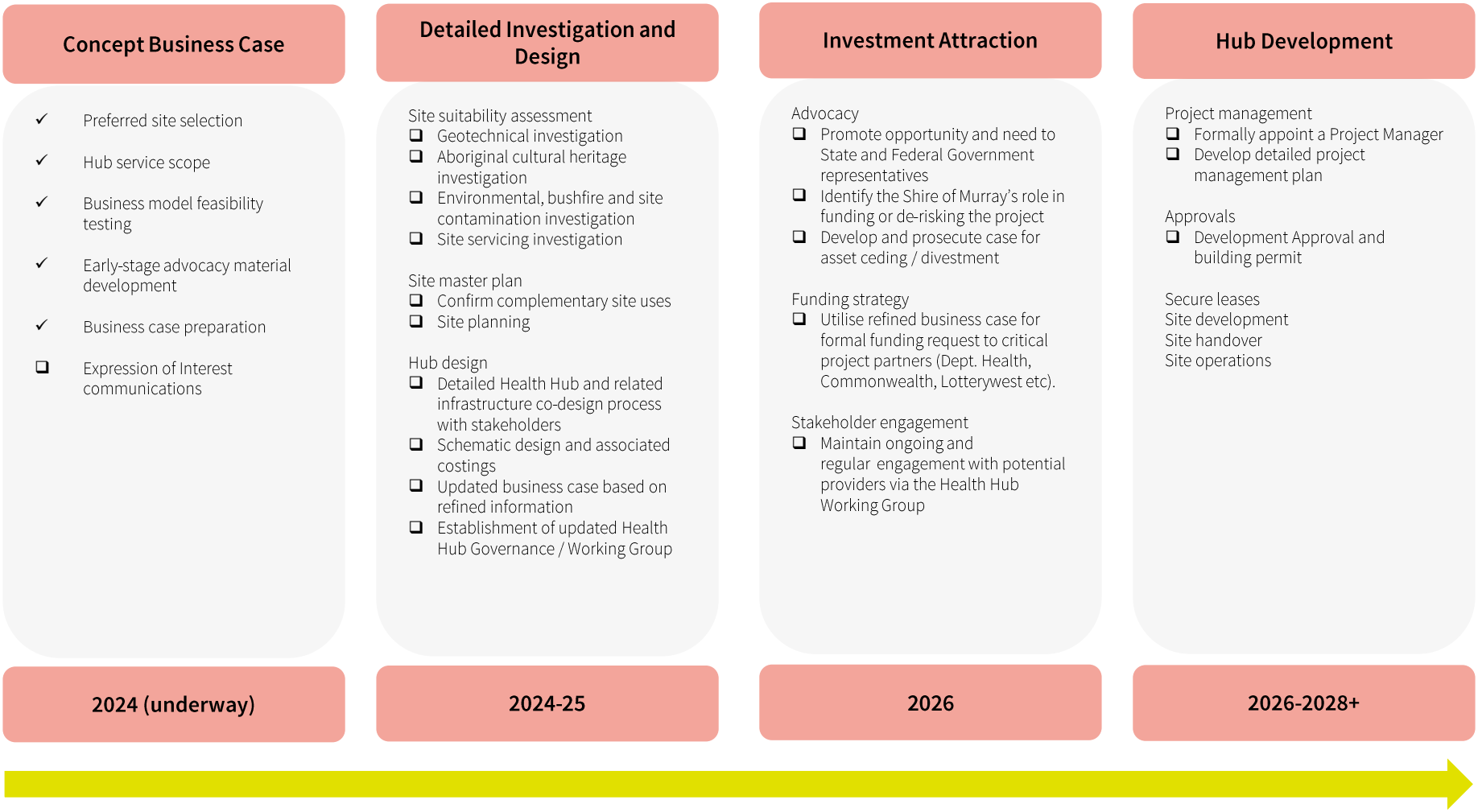
Table 6 – **Financial costs and revenues summary**

Item	Construction Phase ($)millions	Operation Phase, 80% occupancy, ($) millions, per annum
CAP-EX Costs		
Hub Building	$44.476	
Café	$0.300	
Parking	$0.515	
Landscaping	$0.310	
Total Capital Expenditure	$45.600	
Professional Fees (12%)	$4.609	
OP-EX Costs		
Asset Holding Costs		$0.207
Asset Repairs and Maintenance		$0.042
Asset Management		$0.257
IT/Software		$0.005
Office Supplies		$0.023
Fit Out	$0.412	
Staffing (Administration)		$0.323
Total Operational Expenditure	$0.412	$0.858
Revenues		
Health Service Provider Leases		$0.632
Café Lease		$0.015
Estimated Outgoings Received		$0.246
Total Revenues		$0.893
Net Position	- $50.62	+ $0.036

4.2 Implementation pathway

Figure 6 outlines a potential project implementation pathway for the Murray Health Hub. This reflects the experience of recent urban and regional hubs who have succeeded in attracting multistakeholder investment. It should be noted that other Hubs have been successful in realising early political support which has fast tracked and streamlined the development process.

Figure 6– **Potential implementation pathway**



4.3 Governance

A range of potential governance models were explored during the feasibility process (see table 6 on following page), with a State Government Led approach identified as the best option to maximise benefits for the community. In the context of the Murray Health Hub, the Western Australian State Government is best placed to lead this project through design and implementation, as well as potentially play a key role as land and asset owner. This approach would also ensure:

- The hub's tenure, asset ownership and management all aligned.
- Potential to leverage operational efficiencies with the Murray District Hospital
- The hub, its relationship to the surrounding precinct and regional health infrastructure is strategically managed to service regional population growth.

As with the other community health Hubs, the State Government can identify and partner with community health providers and the local government to outsource asset management and invite collaboration.

The Shire of Murray is well placed and highly motivated to contribute to the success of the Hub by:

- **Partnering with the State Government to champion the project with infrastructure agencies and the Federal Government and attract the required funding**
- **Providing local stakeholder engagement and operational support (e.g. landscaping).**
- **Supporting development of the hub and precinct through proactive planning support.**

Figure 7 – **Preferred governance model – State Government led**

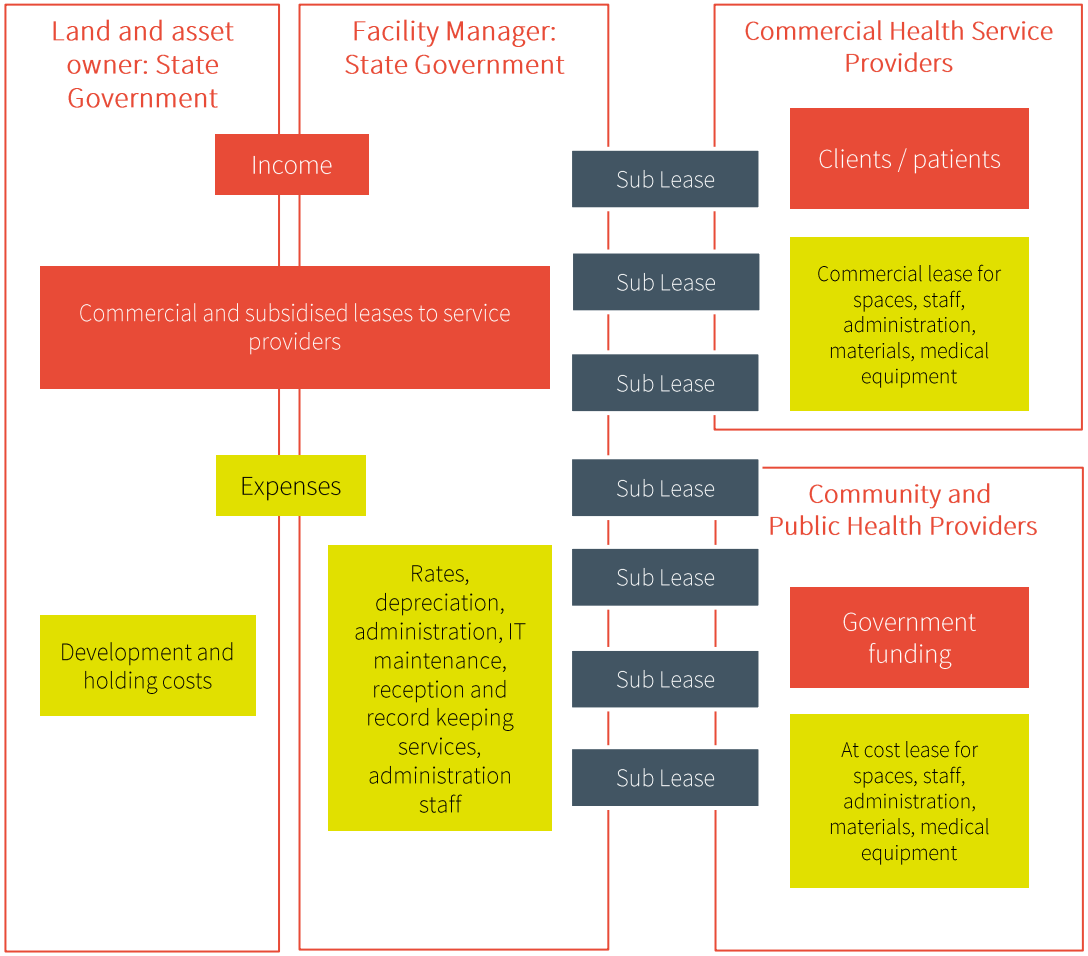


Table 7 – **Governance options analysis**

Model	Strengths and opportunities	Constraints and risks
Option 1: State Government led	• With a single owner and manager of the land and asset, the operating model is streamlined, avoiding the complexity, efficiency losses and implementation risks that can come with a multi-stakeholder approach. • The State Government (e.g. via South Metropolitan Health Services) has the relevant skills to take on the management of this type of infrastructure. • The State Government is well-placed to coordinate cross-agency development of the ultimate health precinct that may include workforce training, key worker housing and aged care. • The State Government is best placed to manage and leverage operational efficiencies, contingencies and succession planning between the Hub and the Murray District Hospital	• This option places significant onus on State Government. While they have the relevant skills to manage this type of infrastructure, it may not be a priority to progress the project with the urgency the community requires. • There is a risk that by being State Government led, the infrastructure and services are not community led, and responsive to local community needs and priorities. This can be negated by the Shire of Murray taking an active role in community and local health stakeholder engagement and management.
Option 2: Multi-stakeholder approach	• Reliance on State Government resources is reduced. • By Local Government taking on the ownership of asset the resulting infrastructure may increase responsiveness to local needs and priorities. • An experienced Facility Manager would be required to take on hub operations and the management of the sub-leases, reducing the administration burden on the asset owner.	• This option places a very significant level of responsibility and exposure on Local Government as the asset owner. Local Government would need to explore options to attract funding to offset project risks, including depreciation of the asset . This may hinder project development, including opportunities to stage the overall precinct, as project risks are too great for the Shire of Murray to bear.
Option 3: Local Government led	• This option assumes the State Government would divest the land to Local Government. • With a single owner and manager of the land and asset, the operating model is streamlined and straightforward. Reliance on State Government resources is reduced. • By Local Government taking on the ownership of the land and asset the resulting infrastructure has the potential to respond more readily to local needs and priorities.	• This option places a very significant level of responsibility and exposure on Local Government as the asset owner. Local Government would need to explore options to attract funding to offset project risks, including depreciation of the asset . This may hinder project development, including opportunities to stage the overall precinct, as project risks are too great for the Shire of Murray to bear. • Health service deliver is not traditionally a Local Government role. However, an experienced Facility Manager could efficiently take on hub operations and the management of the sub-leases, reducing the administration burden on Local Government.

4.4 Risks

Potential risks have been identified throughout the stages of the development of a Health Hub and are outlined below. The highest risk areas relate to workforce development, a key issue already impacting the sustainability of health services in Peel and other regions across Australia.

Table 8 – **Key project risks**

Risk	Level of risk	Probability	Management
Development proposals will likely require section 18 Approval due to proximity to Pinjarra Massacre Site.	Moderate	Likely	Detailed design processes must incorporate in-depth engagement with Traditional Owners (Bindjareb People) to develop a robust understanding of the site's interaction with the Pinjarra Massacre Site, and how the site should be developed to respect and uphold significant places, trees, flora, access and connectivity, as well as how any future development will incorporate the values, history and knowledge of the Bindjareb People.
Large site with existing mature trees may impact what land/ area can be developed. Environmental approval processes can be lengthy, and impact development timeframes.	High	Possible	Further consideration for a suitable 'development zone' and building footprint is required. Ideally this is part of a masterplanning process that considers the potential of the whole site and how it might evolve to meet the needs of the community. The site contains existing trees, both native and non-native in a substantially parkland cleared setting. Vegetation is not mapped as Regionally Significant under Swan Bioplan and there are no mapped significant species, ecological communities or buffers associated with the site. The site is outside of any mapped Environmentally Sensitive Areas under the Environmental Protection Regulations and therefore clearing permit exemptions apply.
Potential impact on Murray District Hospital operations during construction phase.	Moderate	Possible	The Shire may need to look at alternative access and parking points for the hospital during the construction of a Health Hub on this site to ensure community access is not impacted. Appropriate planning for noise, vibration and dust impacts will also need to factored in to ensure patient experience and service quality is not impacted.

Table 8 – **Key project risks**

Risk	Level of risk	Probability	Management
Population does not grow in line with forecasts, demand for health infrastructure is less than expected.	Medium	Possible	To be conservative, the demand analysis utilised to underpin this feasibility study assumes that the Health Hub would only address 25% of a potential future gap in the health workforce, if current trends continue. Demand and population forecasts should be re-assessed in 5 years time to analyse if trends have changed and how this might impact the operations of the Health Hub. In addition, the design of the Health Hub must be flexible, so that a diverse range of services can use the infrastructure, allowing it to respond to community needs. This may even include non-health (but aligned) uses, to ensure the financial sustainability of the Hub. Ongoing engagement with stakeholders such as Bedingfield Aged Care should be carried out to optimise the Health Hub's services to the needs of the community.
Unable to attract workforce and businesses required to service hub and the community, leading to a financially unsustainable asset.	Very high	Possible	Peel and other regional areas struggle significantly to attract the workforce and businesses required to service population driven industries. With limited housing availability, there are often jobs needing to be filled, but no where for the required workforce to live. Attracting people to commute from Perth is less than desirable, and often regional positions are unable to compete with the salaries and convenience of Perth based health jobs. Murray will need to work with regional partners to proactively address this issue if a Health Hub is going to be viable. This will include proactive development of a local workforce (through training) and may include incentivising providers to move to Murray. In addition to the above, and ensuring the Hub is flexible in its design so that it can respond to evolving community needs, the financial model should build in contingencies and budget for asset depreciation. This feasibility study does include these as line items. Early years funding for operations will also be important, as the Hub is likely to require at least 80% occupation in order to achieve financial sustainability, which may not occur in the first 1-2 years of operation.

4.5 Alignment with Government priorities

A Health Hub in Murray aligns with and contributes to the following government health priorities:

- ✓ Focusing on providing services that meet specific gaps or urgent needs within the Murray community
- ✓ Working towards a model of care that seeks to remove duplication, fosters connection and strives for seamless patient care
- ✓ Better alignment of regional training offer with regional industry needs
- ✓ Optimisation of existing land and sites over new developments
- ✓ Improving mental health outcomes by providing accessible care and support, particularly to young people
- ✓ Providing services, support and information that will empower the Murray community to play an active role in their own health and wellbeing
- ✓ Providing person-centered, equitable and seamless access through a local integrated health delivery model
- ✓ Investing in digital healthcare by providing access to telehealth services, increasing access to specialists
- ✓ Driving safety, quality and value through transparency, funding and planning through a focus on building partnerships, collaboration across service providers and investing in infrastructure, models and services that reduce pressure on existing system.
- ✓ Culture and workforce to support new models of care, by harnessing partnerships to help build the future health workforce of Murray and the Peel region
- ✓ Investing early in systems that will help the Hub and its providers improve their services and care.

Figure 8 – **Key strategic documents**

WA Government Sustainable Health Review (2019)

- Improving mental health outcomes by providing accessible care and support, particularly to young people
- Providing person-centred, equitable and seamless access through a local integrated health delivery model
- Investing in digital healthcare by providing access to telehealth services, increasing access to specialists
- Driving safety, quality and value through transparency, funding and planning through a focus on building partnerships, collaboration across service providers and investing in infrastructure, models and services that reduce pressure on existing system.
- Culture and workforce to support new models of care, by harnessing partnerships to help build the future health workforce of Murray and the Peel region.

WA Primary Health Alliance Strategic Plan 2020-2023

- Providing services, support and information that will empower the Murray community to play an active role in their own health and wellbeing
- Focusing on providing services that meet specific gaps or urgent needs within the Murray community
- Working towards a model of care that seeks to remove duplication, fosters connection and strives for seamless patient care
- Investing early in systems that will help the Hub and its providers improve their services and care

Peel Away the Mask III Report and Action Plan

- Children's mental health services: Wrap around services for children based on an early intervention model.
- Community and mental health service for 65+: Expanded provision of dedicated mental health services to support ageing population (65+), who have unique mental health challenges and needs. Focus on enabling access through aged-care friendly approaches (i.e., in-place models, face to face delivery, connection) and early intervention.
- VET Pathways: Integrate pathways to VET education into high school offering (year 11 and 12)
- New residential aged care facilities: Newly established residential aged care facilities to service ageing population.
- Additional GP services

Murray 2033 Strategic Community Plan

- A Health Hub in Murray should provide mental health services. Based on findings of Health and Social Needs Assessment, and Health and Wellbeing Profile, there should be a focus on youth mental health.
- A Health Hub in Murray should provide the needed allied health services. Data suggests that in Murray, the allied health priorities will be Disability Support Services, Dietetics, Certified Practicing Nutritionists, Counsellors and Psychotherapists.
- A Health Hub in Murray could be a home for public health initiatives, public health promotion and provide preventative health care and support to the community.

5. Project impacts

5.1 Health and social impacts
5.2 Cost benefit analysis
5.3 Economic impacts
5.4 Cost of inaction

5.1 Project impacts

The Health Hub will accommodate services that meet the unique health needs of the Murray community, with the ability to evolve as these change. The potential direct benefits of investing in localised health infrastructure in Murray include:

$11.6 Million per annum in improved health outcomes through reduced severity of disability and illness	The impacts of disability and severe short term and long-term illnesses can be reduced through increased access to required health care services.
$2.4 Million per annum in local economic benefit through reduced absenteeism	Local services that are affordable and easy to access can help residents get on top of their health concerns before they impact their ability to work or engage in caring responsibilities.
$664,000 per annum savings to the health system through avoided emergency department costs	By providing more health care locally, including 'just in time' health services, the Murray Health Hub has the potential to relieve pressure on regional and metropolitan emergency departments.
$620,000 per annum in travel cost savings for residents	Residents will save time and money by having more health services locally. This may also empower residents to be more proactive about their health, addressing issues early.

See Technical Appendix 4 for assumptions and methodology underpinning the above potential impacts.

In addition to direct benefits, the potential flow on effects of a community that has more access to a greater diversity of local health services has the potential to increase the resilience of the local economy and community by:

Contributing to the health services required to improve the Shire's socio-economic indicators	Health, social and economic outcomes are closely interlinked. Improving health outcomes through targeted local services may help address the relative disadvantage experienced by Shire residents.
Supporting Murray and Peel Region, in attracting and retaining workers and their families by providing the level of health infrastructure they are used to, or might need	To meet the Murray and Peel's economic potential there is a need to develop and attract skilled workers who can service strategic and population- driven industries. Access to employment opportunities and quality services is a key decision factor for people who are looking at moving to a new place.
Reducing the risk of people moving out of the region as their health needs increase	Providing the right health services locally can support people to age in place. This allows them to participate in the community longer and stay connected to their support networks.

5.2 Cost Benefit Analysis

Cost Benefit Analysis was conducted in perpetuity by discount rate, as well as by set time horizons. The key findings from this analysis indicate that at a social **discount rate of 7%**[1], the hub is estimated to provides a **Net Present Value of $151.7 million over a 40-year horizon.** Given the nature of this infrastructure as a critical community health asset (as to an economic asset), a discount rate of 3% is perhaps more appropriate to use, and in this case, indicates a potential net present value of $300.2 million.

Cost Benefit Analysis takes into consideration:

- Avoided health costs
- Avoided travel time and costs
- Reduced disability and illness, providing a better quality of life for Shire residents
- Reduced absenteeism by the working age population

See appendix 4 for assumptions and sources underpinning the Cost Benefit Analysis. Analysis does not account for escalations in ongoing costs or benefits over time, meaning identified impacts are held constant each year.

Table 9 - **Cost Benefit Analysis, 40-year horizon by discount rate**

Discount rate	3%	7%	10%
Benefits – Present Value	$370.6m	$213.8m	$156.8m
Costs – Present Value	$70.4m	$62.1m	$59.0m
Net Present Value	$300.2m	$151.7m	$97.8m
Benefit Cost Ratio	5.3	3.4	2.7

Table 10 - **Cost Benefit Analysis – by time horizon**

Discount Rate	3%		7%		10%	
Timeframe	NPV[2]	BCR[3]	NPV	BCR	NPV	BCR
10 year	$78.8m	2.4	$56.0m	2.0	$42.6m	1.8
25 year	$213.7m	3.9	$126.2m	2.9	$87.1m	2.4
40 year	$300.2m	5.3	$151.7m	3.4	$97.8m	2.7

5.3 Economic impacts

New infrastructure and services bring a range of economic impacts to communities. Construction projects generate employment opportunities and increase economic activity and spending in local economies (with flow on effects for regions and supply chains). These impacts continue throughout operations and can increase the sustainability and resilience of local economies.

The Murray Health Hub is estimated to generate the following impacts through the region during construction and operation phases. See appendix 5 for further details.

Operations phase impacts (4)

- **124 FTE jobs per annum**
- **$36.6 Million economic output per annum**
- **$11.1 Million in salaries and wages per annum**

Construction phase impacts(4)

- **115 FTE jobs per annum**
- **$65.8 Million economic output per annum**
- **$3.7 Million in salaries and wages per annum**

(1) The Office of Best Practice Regulation (Department of Prime Minister & Cabinet) recommends using a 7% discount rate, with sensitivity tested at 3% and 10%.
(2) Net Present Value
(3) Benefit-cost ratio
(4) Jobs and Output figures include total of direct, indirect and induced impacts. Salaries and Wages figures related to direct job impacts only. 2024 dollars. Source: Hatch, 2024., REMPLAN, June 2024.

5.4 Cost of inaction

Health, social and economic outcomes are closely related. A person's health directly impacts their ability to engage in their community and workforce. Compared to Greater Perth and WA Murray's community is behind on key economic, social and health indicators.

With a population forecast to grow significantly and a regional health system already under pressure, there is significant risk that without further investment, current trends will continue, and worsen.

If Murray residents are not provided with timely, appropriate and accessible local health care when they need it, there is a risk that between 2030 and 2050, regional emergency departments will see up to 30,000 avoidable presentations from Murray residents alone.[1]

Lack of investment in local services that are accessible and affordable	→	Entrenched cycles of disadvantage & increased reliance on Government assistance
Lack of investment in services that help people proactively manage their health	→	Ongoing and increased pressure on existing health systems, including emergency departments
Lack of investment in high quality local health services that respond to community needs	→	Constrained ability to attract new residents and skilled workers from urban areas
Lack of investment in health services tailored to Murray's needs	→	Increased risk that ageing cohort will relocate to areas with more services, leading to decay of family and community support networks

1) Based on Murray Social and Health Needs Analysis (2023) Finding that each year there are 1,175 avoidable presentations to regional emergency departments by Murray Residents.

6. Conclusion

6.1 Recommendations
6.2 Next steps

6.1 Recommendations

There is a strong and urgent need for more health services in the Shire of Murray. The local community is forecast to grow significantly over the next 25 years, and now is the time to proactively and strategically plan for that growth.

To address this need, the investment required from State Government is approximately*:

- **$1.2 million for schematic design, refined capital expenditure costings and updated feasibility study and business case (2024-2025)**
- **$3.4 million for site investigations, architectural and landscape design, and planning and development approvals (2025-2026)**
- **$46 million for construction phase (2026-2028)**
- **$250,000 to cover the gap between operational costs and revenues anticipated in the first 3 years of operation (2029-2031)**

The Shire of Murray will partner with State Government to attract the funding required to progress the Murray Health Hub.

* Figures above are estimates and are expressed in forecasted 2028 prices. A market led approach should allow experts to respond to any complexities on the site, and this will influence the cost of studies. Construction and operating costs should be refined following a detailed design process.

6.2 Next steps

In late 2024, the Shire of Murray will issue an Expression of Interest for stakeholders, service providers and community to understand interest in engaging in future health hub phases of work, including contribution to the detailed design process as well as future hub tenants.

In particular, the Shire is looking for participation from:

- Traditional Owner Groups
- Public and private health providers
- Community health providers
- Allied health providers
- Aged Care providers
- Community members

Please visit the Shire's Murray Health Futures Page for more information and updates on this process:

https://www.murray.wa.gov.au/consultations/advocacy/murray-health-futures

7. Appendices

8.1 Glossary of terms
8.2 Detailed site selection process
8.3 Feasibility analysis
8.4 Cost benefit analysis methodology, assumptions and sources
8.5 Economic impact detailed analysis

8.1 Glossary of terms

Table 11 – **Glossary of terms**

Acronym	Detail
BCR	Benefit Cost Ratio
CAP-EX	Capital Expenditure
CBA	Cost Benefit Analysis
FTE	Full Time Equivalent
MCA	Multiple Criteria Analysis
MDH	Murray District Hospital
NPV	Net Present Value
OP-EX	Operational Expenditure
SMHS	South Metropolitan Health Service

8.2 Site selection process

Six sites that could accommodate the required scale of health hub infrastructure were identified by the Shire and Working Group.

1. **Murray District Hospital**
2. **MDH North**
3. **MDH West**
4. **Camp Road**
5. **James and Forrest Street**
6. **Shire Offices**

A multi-criteria analysis approach, supported by site visits with the Working Group was used to compare the long list of site options. The criteria considered the capability of the site to accommodate current and future demand, site suitability, capital expenditure implications and complexity to deliver the development.

This process identified two shortlisted options:

Figure 9 – **Sites considered for a Health Hub in Murray**

Table 12 – **Shortlisted site options**

MDH North (2)	Shire offices (6)
The land to the north of the current Murray District Hospital offers: • Proximity to existing health infrastructure • Proximity to growing aged care facilities • Capacity for growth on the site, including the development of a genuine health precinct, with opportunity to co-locate with training college, worker accommodation, expanded health services, aged care services • A location that community already associates with health services	The land currently occupied by the Shire of Murray offices and other civic services offers: • A central location in the Pinjarra town centre, with access to public transport, retail and commercial services • An opportunity for health services to be embedded within a civic precinct, co-locating with Shire services, library, childcare etc.

The shortlisted site options were then analysed based on the following considerations:

1. Implementation
2. Infrastructure
3. Health and community impacts
4. Environmental analysis
5. Risk analysis

Analysis identified site 2, "MDH North" as the preferred site based on:

- The capacity of the site to accommodate required health infrastructure and its current zoning for that use.
- The capacity of the site to accommodate complementary infrastructure including education and accommodation.
- The proximity of the site to existing health infrastructure, including Murray District Hospital and Bedingfield Aged Care, presenting the opportunity to develop a genuine health precinct to service the community's growth (this will require a master planning process).
- The community already associates this site / area as a place to access health services.
- The site has minimal existing built assets, and is connected to the required services, making its development potentially straight forward, minimising capital expenditure related to demolition/site remediation and delay risks.
- The site's natural setting provides the opportunity to provide high quality health services in an environment that, through contemporary design, promotes wellbeing and a positive experience for patients, clients, visitors and workers.

It is important to note that this study is high level in nature, and the preferred site must be considered through a more detailed investigation to arrive at more accurate development, timing, cost and risk considerations. Further, any future development or planning of the MDH North Site in particular must involve engagement with Traditional Owners.

Figure 10 – **MDH North – Preferred site for a Health Hub in Murray**

Figure 11 – **Multi-criteria analysis outcomes – Shortlist identification**

Option	Capacity to accommodate current and future demand		Site suitability		Capital costs implications		Complexity to deliver		Total	Weighted total
1 - Murray District Hospital	5	Good - Ability to accommodate current and future workforce gap with some room to grow	3	Moderate – heritage, Aboriginal heritage and environmental constraints. Community knowledge of historic health uses.	1	High – Current buildings would need to be demolished + new build costs	1	High - Impact on current MDH operations + taking up space for future aged care	9	30
2 – MDH North	5	Good - Ability to accommodate current and future workforce gap with some room to grow	5	Good – lesser Aboriginal Heritage and environmental constraints. More than sufficient space to accommodate Health Hub. Good exposure to McLarty Road and community knowledge of historic health uses.	4	Moderate – New build on land that requires some clearing	3	Moderate – Clearing of trees + relative proximity to highly sensitive heritage site	17	45
3 – MDH West	3	Moderate – Ability to accommodate current workforce gap but limited space for future growth and other infrastructure	1	Poor – highly constrained by environmental and Aboriginal Heritage considerations. Community knowledge of historic health uses.	3	Moderate – New build on land that requires some cleaning	1	High – Direct proximity to highly sensitive heritage site	8	18
4 – Camp Road	1	Not sufficient – Unable to accommodate required floorspace and potential parking provision.	1	Poor – Incorrect zoning. Land potentially required for MALC facility expansion. Limited exposure to major road.	1	High – Current buildings would need to be demolished + new build costs	1	High – Relocation of existing services. Impact of future MALC expansion	4	10
5 – James and Forrest St	5	Good - Ability to accommodate current and future workforce gap with some room to grow	1	Moderate – sufficient space and services. Site visit highlighted the site was not visible or central enough to the town centre.	3	Moderate – New build on land that requires some cleaning	5	Low – Land owned by Shire – currently underutilised – Relatively straightforward new build	14	32
6 – Shire Offices	5	Good - Ability to accommodate current and future workforce gap with some room to grow.	5	Good - Strong opportunity to centralise health services in the town centre, closer to public transport and other services.	1	High – Current buildings would need to be demolished + new build costs	3	Moderate – If build is contingent on funding for new Shire civic precinct	14	42

MDH North Site Overview

The MDH North Site is located at the intersection of South-Western Highway / McClarty Road, McKay Street and Bedingfield Road in Pinjarra. It is approximately 1.5km from the town centre.

Table 13 – **MDH North Site Profile**

Item	Detail
Location details	• Lot 1 on Plan 041004 (adjacent to the North of Murray District Hospital)
Tenure	• Freehold
Ownership / Management	• Department of Health (South Metro Health Service)
Land size	• 2.63 ha
Est. Developable land	• Requires further consideration for a suitable 'development zone' and building footprint.
Zoning / Reservation	• Reserved for "Public Purposes – Hospital" • 'The existing Pinjarra Revitalisation Strategy indicates a 4 storey/16m maximum development height for the 'Health Precinct' (includes the Hospital, MDH North and MDH West sites plus some residential).
Access and Visibility	• Access and visibility from McLarty Road. • Route 600 and 605 busses stop on McKay Street. • Community Association with the location providing existing health services. • Potential access from McLarty Road (subject to Main Roads approval) if required.
Site Suitability	• Large site with existing mature trees. Existing carpark and entrance from McKay Street and Bedingfield Road. • Development proposals may require section 18 Approval due to proximity to Pinjarra Massacre Site.
Suitability of services	• Access to water, power and sewer.
Adjacent Uses	• Adjacent Hospital and aged care uses creates opportunity for 'Health Precinct'

Shire Offices Site Overview

The Shire Offices are bounded by Forrest Street, James Street, Murray Street and Pinjarra Road, in the Pinjarra Town Centre. The site includes Shire offices, Pinjarra Civic Centre (including Library), Murray Districts Playgroup, Murray House Resource Centre. Across Murray Street is Pinjarra's primary retail precinct. Across Forest Street is the Shire's local emergency services, including fire and ambulance.

Table 14 – **Shire Offices site profile**

Item	Detail
Location details	• Lots 57, 64 Pinjarra Road; Lots 65, 66, 222 & 227 Murray Street; Lots 58, 59, 308; and Lots 61, 67 & 68 on Plan 223050.
Tenure	• Freehold
Ownership / Management	• Shire of Murray
Land size	• 1.963ha
Est. Developable land	• 3,075m^2 (based on existing building's footprint)
Zoning / Reservation	• Reserved for 'Civic/Cultural'
Access and Visibility	• Highly accessible and prominent location from Pinjarra Road • Multiple access points and existing car parking areas. • Accessed by bus routes 600 and 605 stopping on Pinjarra.
Site Suitability	• Would require a multi storey building to accommodate Shire Administration and Health Hub resulting in increased construction costs compared to single-storey options.
Suitability of services	• Site has access to water, power and sewer.
Adjacent Uses	• No abutting residential or sensitive uses. • Potential for co-location of Shire Administration and Health Hub to create a 'Civic Precinct' within the Town Centre Core.

8.3 Detailed feasibility analysis

This chapter provides analysis of the financial considerations of developing a Health Hub in Murray. It draws on the information provided in the Health Hub Profile, including infrastructure, service and operating model assumptions, to consider the feasibility of a Health Hub under a range of conditions.

This chapter includes analysis of:

- Estimated capital expenditure requirements (CAP-EX)
- Estimated operating costs (OP-EX)
- Estimated revenue requirements

Sensitivity analysis was conducted to understand the feasibility of a Health Hub under a range of occupancy scenarios, recognising that the Hub may not always be fully occupied (e.g. in initial years of operation, as tenants come and go, or community priorities change). In addition, cashflow analysis was conducted to understand the level of financial exposure the hub may experience in early years of operation, assuming that high or full occupancy is likely to increase over time, rather than be achieved up front.

Cash flows have been escalated to reflect forecasted inflationary effects, with CAP-EX reflecting 2028 prices and OP-EX reflecting 2029 prices. Escalation rates are included in appendices.

Core assumptions are outlined, with a summary of feasibility findings included at the end of the chapter.

8.3.1 Costs

Construction

Table 14 provides key assumptions regarding the construction phase of the project. Costs are estimated on a $ per sqm ratio, as provided by Rawlinson's Construction Guide Handbook and escalated to reflect estimated future costings.

Regional indexation and additional contingency allowance (10% of total construction cost) is also incorporated to reflect a more realistic estimation of total capital expenses

An allowance in costings during construction for the fit out of shared space (i.e. reception and waiting rooms) is included. Costings do not include any allowances demolition works or for a specific design for the hub (including green design).

Operations

Table 15 provides key assumptions regarding the operation phase of the project.

Holding costs reflect the costs borne by the owner of the hub to maintain and ensure the asset and provide the basic needs required for the hub to be occupied.

Management costs reflect the costs borne by the operators of the hub and reflect the general day-to-day needs that tenants require. Much of these costs can be passed on to tenants through outgoings (on top of rent).

It is assumed that the hub operators will bear the costs of administrative staffing and IT software under a centralised operating model.

It is assumed that all specialist medical equipment and supplies are provided by individual providers.

Table 15 – **Health Hub spatial and construction assumptions**

Item	Assumption	Note and Source
Health Hub GFA	3,250 sqm	Informed by health workforce gap analysis
Cafe GFA	55 sqm	15 indoor seats, with additional seating/space in outdoor alfresco setting
Landscaping Area	3,000 sqm	Immediate area surrounding buildings
Parking Area	2,500 sqm	Sufficient for 80 bays
Total Storeys - Hub	2	CAPEX increase equal to 50% of ground floor CAPEX, per additional storey.
CAPEX contingency allowance	10%	Rawlinsons Construction Handbook, Hatch.
Total construction employment	34 FTE p.a.	REMPLAN, 2024.
Average Construction Annual FTE Salary (2023 prices)	$116,800	ABS Employee Earnings and Hours by Occupation, May 2023.
Initial furniture fit out of shared spaces	$738 per sqm	Australia Fit Out Cost Guide 2023/24, JLL.
Construction timeframe	18 -24 months	Rawlinsons Construction Handbook
Professional Fees	12%	Rawlinsons Construction Handbook - % share of construction costs

Table 16 – **Health Hub operating costs assumptions**

Item	Assumption	Note and Source
Holding Costs per sqm of Net Lettable Area (2024 prices)	$80	Includes rates & taxes, insurance., lifts, fire protection, repairs & maintenance, void allowance
Management Costs per sqm of Net Lettable Area (2024 prices)	$90	Includes air conditioning, energy, cleaning, building staff, security, general management, sundries
Annual IT Cost (2024 prices)	$4,000 p.a.	Desktop research – Hatch 2024
Office supplies allowance	10%	Relative to holding and management costs
Upkeep of furniture and supplies (2024 prices)	$18,500 p.a.	Straight line depreciation, 20-year life assumed
Administrative Staffing	4 FTE p.a.	Demand analysis – Hatch 2024
Average Staffing Annual FTE Salary (2024 prices)	$85,700	ABS Employee Earnings and Hours by Occupation, May 2023.

8.3.2 Revenue

A commercial lease and revenue model for the Hub has been constructed with an aim to fulfill the following goals:

- Hub infrastructure and floorspace is adequate to meet 25% of the projected health workforce shortfall in 2035.
- A commercial lease that:
    - Is considered competitive in the current rental market for medical floorspace and facilities
    - Allows a significant discount for publicly-provided health services targeting key community health issues identified in demand analysis
    - Ensures that the hub's operation is financially feasible (i.e. rents and building outgoings can cover annual operational costs)
- A floorspace split between private and public health services that ensures the population has equitable access to care.
- Remain feasible if, over the long term, occupancy is below 100%.
- Can produce a small profit that can be reinvested into the hub, deliver programs or initiatives relating to community health, or used as an additional contingency buffer.

Tables 17 and 18 display the assumptions and structure of the Health Hub that best meets these goals, including a full discount on rent (excluding outgoings) for public providers.

Modeling also allows for an occupancy rate across the hub of 80%.

Market analysis of currently advertised tenancies* for medical consulting rooms and facilities south of Perth (including Peel) and Bunbury provided an average rate of $325 per square metre, excluding outgoings. Similar analysis determined an average rate of $250 per sqm for café floorspace in the study area**.

Table 17 – **Health Hub service floorspace assumptions**

Service	Staffing	Floorspace (GFA, sqm)	Private Share	Public Share
GP Services and Nursing	19 practitioners, 32 nurses	1,800	75%	25%
Community Health Services	2 psychologists, 5 practitioners /counsellors	240	70%	30%
Allied Health Services	11 practitioners	400	100%	0%
Specialist Outreach	1 FTE	35	100%	0%
Pathology	2 FTE	70	100%	0%
Pharmacy	4 FTE	140	100%	0%
Cafe	2.5 FTE	55	100%	0%

Table 18 – **Health Hub market assumptions**

Item	Assumption (2024 rates)	Assumptions (2029 rates)
Commercial Market Rent – Hub	$325 per sqm	$362 per sqm
Estimated Outgoings – Hub	$90 per sqm	$106 per sqm
Discount for public providers	100%	100%
Occupancy Rate - Hub	80%	80%
Commercial Market Rent – Café	$250 per sqm	$286 per sqm

* As per REIWA, 20th May 2024
** This lease rate for cafes should be treated with caution due to a low number of currently advertised tenancies

8.3.3. Sensitivity and Cashflow Analysis

Sensitivity and cashflow analysis was conducted to understand the feasibility of a Health Hub under a range of scenarios, recognising that the Hub may not always be fully occupied (e.g. in initial years of operation, as tenants come and go, or community priorities change). The following variables were explored:

1. Occupancy rates – What level of occupancy will be required to cover annual operating costs?
2. Growth rates – Assuming the occupancy of the hub will start low, and grow over time, how much additional funding will be required to cover the gap between income and expenses in those initial years?
3. Subsidised leases – To what extent can the lease rates of public / not-for-profit providers be subsidised to help attract tenants, while also maintaining the financial viability of the hub?

8.3.1.1 Occupancy rates

- Under 60% occupancy within the hub, $474,000 in rental revenue is received from providers. This produces a total net position p.a. of -$41,500 (2029 prices).
- Under 100% occupancy within the hub, $790,000 in rental revenue is received from providers. This produces a total net position p.a. of $113,000 (2029 prices).

Analysis indicates that a minimum of 71% occupancy is required to achieve financial breakeven in each year of operation. An occupancy rate of 80% will provide a moderate profit (see table 19), which can be used to invest in health promotion, programs and community engagement, or as an additional contingency buffer. The hub is highly unlikely to achieve this level of occupancy in the first years of operation. As a result, advocacy should consider attracting investment for capital and operating costs for the initial 3 years of operation, and development may need to be staged, to allow the hub to grow and respond to demand over time.

Table 19 – **Occupancy sensitivity analysis – Meeting operating costs, 2029 prices**

Tenant Occupancy*	60%	80%	100%
Hub Lease Revenue	$474,000	$632,000	$790,000
Total Revenues	$735,000	$893,000	$1,051,000
Net position	- $41,500	+ $35,750	+ $113,000

Source: Hatch 2024

* Assumes mix of commercial and public / NFP providers outlined in table 17.

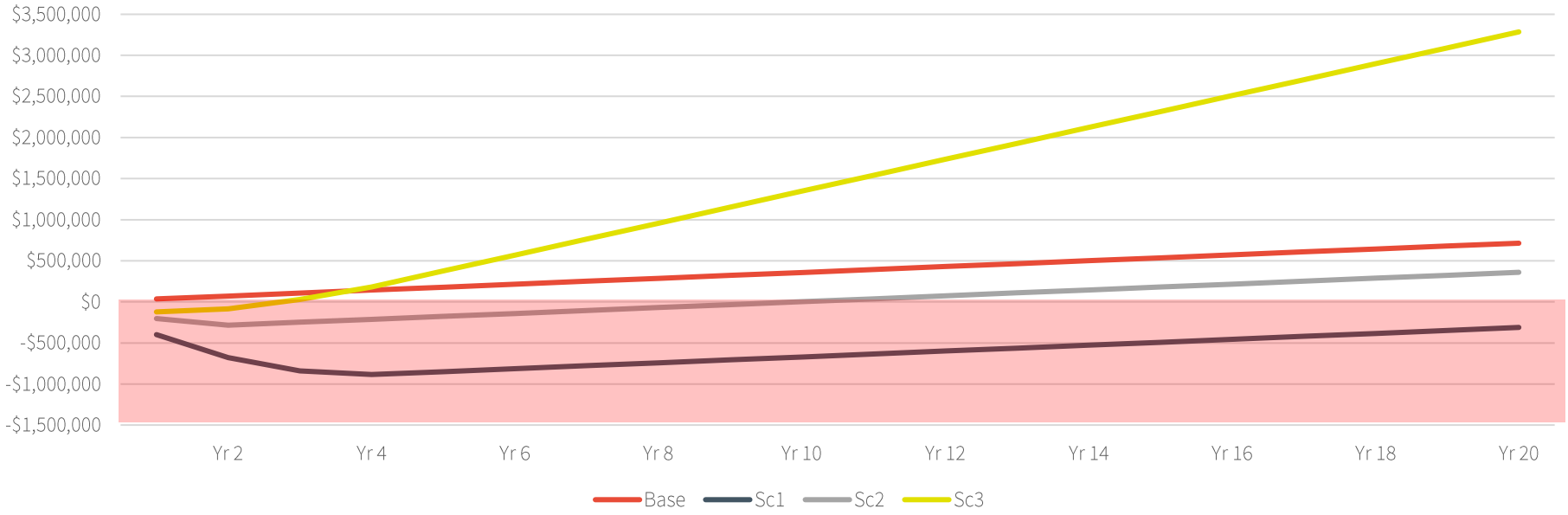
8.3.1.2 Growth rates (cashflow analysis)

This analysis helps us understand the range of scenarios under which the occupancy of the Hub is likely to scale up over time. Rental rates and costs are held constant in the long run. It is highly likely that in the early years of operation the Hub will not reach high levels of occupancy and hence may take an extended period to achieve breakeven based on operating revenues alone. The scenarios explored (Figure 12) include:

- Baseline Scenario: 80% occupancy from year 1 onwards
- Scenario 1 – Low: Start at 25%, gradual increasing to 80% by Year 5
- Scenario 2 - Moderate: Start at 50%, increasing to 80% by Year 3
- Scenario 3 – High: Start at 60%, 80% by year 2 and at 100% by year 5

Analysis indicates that under a moderate scale up scenario from 50% to 80% over the first 3 years (Scenario 2) the cumulative net position of the hub would achieve breakeven in the 10th year of operation. The hub's implementation strategy should therefore explore a staged approach to development.

Figure 12 – **Occupancy sensitivity analysis – Cumulative revenues: Scaling up over time (2029 prices)**



Source: Hatch 2024

8.3.1.3 Subsidising leases

This analysis helps us understand to what extent it may be possible to subsidise the rent of public / not-for-profit providers while still retaining the financial feasibility of the hub. Subsidising not-for-profit providers will be an important strategy for attracting tenants and services to the Hub. Estimates provided in Table 20 below assumes an occupancy rate of 80% and dollar values are expressed in 2029 prices.

- Under a 90% rental subsidy for public providers, $581,500 in rental revenue is received from all providers. This produces a total net position p.a. of $47,600.
- Under an 80% rental subsidy for public providers, $595,300 in rental revenue is received from all providers. This produces a total net position p.a. of $61,300.

Analysis indicates that even with 100% subsidisation (zero rent) of public providers, at 80% total occupancy (inc. commercial providers) the Hub would still be able to produce a positive annual net position.

Table 20 – **Subsidisation of rent sensitivity analysis – 2029 prices**

Subsidy Rate*	100%	90%	80%
Hub Lease Revenue	$632,000	$648,000	$663,000
Total Revenues	$893,000	$909,000	$924,000
Annual Net position	+ $35,750	+ $51,000	+ $66,500

* Assumes mix of commercial and public / NFP providers outlined in table 6.
Source: Hatch 2024

8.4 Cost benefit analysis

Cost benefit analysis (CBA) is an appraisal and evaluation technique that estimates the economic, social and environmental costs and benefits directly associated with a project in monetary terms. CBA provides a framework to compare the welfare of all stakeholders stemming from a program or investment for all users associated involved in delivery, through translating outcomes and impacts into a monetary equivalent (where appropriate). Outputs for a CBA provide:

- **An indication of whether the benefits of a proposal are expected to exceed costs**
- **If evaluating various options, which option has the highest benefit**
- **How costs and benefits a distributed across stakeholders.**

While costs of health infrastructure in proposals a relatively straightforward to quantify, the resulting health benefits for the users and the community are much harder to value. Given that health is a non-market good, the measurement of health or wellbeing gains is difficult to quantify and largely relies upon how much society is willing to pay for a healthy life. Because this is a subjective measure that can vary across time and geographies, economic assessments where health benefits are monetised should be treated with caution.

The CBA undertaken for the proposed Murray Health Hub follows the methodologies outlined in the NSW Health Guide to Cost-Benefit Analysis of Health Capital Projects, to date the most developed health CBA framework in the Australian context.

Health CBAs are unique compared to other CBA appraisals for capital proposals as they are concerned primarily with enabling health gains for the community, which are influenced by a range of factors such as built environment, workforce, disease incidence and population characteristics. These gains are valued by individuals and community but in many cases the value is not fully reflected through a market mechanism.

This CBA has identified 4 broad health and community benefits that the Murray community and regional health system will realise that are able to be monetised. These include:

- **Avoided health costs:** representing the reduced pressure on other health centres achieved by investing in a new Health Hub.
- **Reduced absenteeism:** representing the economic benefits potential through improved workforce participation reducing absenteeism costs
- **Travel savings:** representing the direct financial benefits of having nearby health services replacing the need for long distance travel
- **Reduced disability and illness:** representing the improved quality of life for the community through being able to access timely treatment for short-term illnesses and ongoing specialised treatment for long-term health conditions.

Financial results from the feasibility study is also incorporated into the CBA to represent the initial capital investment as well as the ongoing expenditure required to unlock identified community health benefits. Tables 20, 21 and 23 provides a detailed description, methodology and assumptions that underly the CBA.

8.4.1 Cost benefit analysis methodology

Table 21 – **Cost-benefit analysis methodology by benefit type (page 1 of 2)**

Item	Potential Impact	Description	Method Brief
CAPEX and OPEX Costs	As per Feasibility Study	Costs associated with the construction and annual operation of the hub	As per Feasibility Study
Rental Revenues and Outgoings	As per Feasibility Study	Operational revenues received by operators and owners of the hub	As per Feasibility Study
Avoided Hospitalisations	Reduction in avoidable ED visits by 50%	Represents the benefit to the health system of relieving pressure/activity associated with providing hospital care, measured by the cost saving that the hub can induce through reduced ED visits by patients.	Estimation of the cost saving of an individual attending a GP appointment instead of an ED presentation identified as avoidable, whereby the Health Hub reduces these avoidable hospitalisations by 50%. Over 5 years, on average 1,175 hospitalisations of Shire of Murray residents are identified as treatable by a GP. Based upon National Hospital Cost Data Collection (NHCDC), in Western Australia the average cost of admitted ED care is $1,466 per separation, versus $335 for non-admitted care.
Reduced absenteeism	Reduction in the rate of absenteeism of working age residents accessing health services, by 25%.	Represents the benefit to the local economy and employers due to improved ability to participate in the workforce, measured by the reduction in absenteeism due to sick or carers leave.	Expressed as the cost savings to businesses who experience a 25% decrease in absenteeism taken by their employees (defined at $370 per day for a worker on a $65,000 annual salary). In total, it is estimated that this benefit is applicable to 1,774 Shire of Murray working age residents, based upon outpatient appointment data.
Direct cost savings related to travel	Reduction in total time/distance required for a round trip to access health services for residents, at 1 hr 12mins / 91 km	Represents the benefit to the individual of improved accessibility to health service through the hub being located nearby, measured as the savings in terms of time travelled and fuel costs.	Cost savings, in terms of fuel, parking and time, for Shire of Murray residents to access health services in Pinjarra, versus travelling to other health centres in the region. The monetary value of time is taken at the hourly national minimum wage of $23.23, whilst a 91km round trip by car is estimated to consume $20 of fuel (based upon industry benchmarks). An average of $8 of parking is assumed for a 2-hour period, per round trip. Estimated time and distances are expressed as how far (on average) Pinjarra is to other regional health centres in Mandurah, Armadale, Rockingham and Murdoch. Applicable appointment types that the hub will reduce travel for include avoided hospitalisations (588), outpatient activity (8,550) and acute care (1,920).

Table 21 – **Cost-benefit analysis methodology by benefit type (page 2 of 2)**

Item	Potential Impact	Description	Method Brief
Reduced disability and illness	25% reduction in the severity of disability/illness experienced by residents with long–term health conditions.	Represents the benefit to the individual and wider society of an improved quality of life through being able to access hub services. Measured by the reduction in disability "costs" achieved through accessing treatment for long term health conditions at the hub by those that otherwise wouldn't seek treatment due to lack of services or access.	Improvement in QoL induced by the Health Hub is measured by the reduction in the severity of a given illness or disability has on the Value of a Statistical Life Year (VSLY), the reduction assumed to be at 25%. It is assumed the duration that an individual experiences an improved health status through accessing the hub is equal to 1 year. This benefit is applicable to Murray residents living with a long-term health condition who delay or do not seek medical treatment, assumed at 3.9% of the relevant population. Based upon the proposed services offered by the Hub, patients will have an average disability weighting of 11.7% below a healthy statistical life year estimated at $235,000.
	25% reduction in the severity of short-term illness or injury experienced by Murray residents, who live without long-term health conditions.	Represents the benefit to the individual and wider society of an improved quality of life through being able to access hub services. Measured by the reduction in illness/injury "costs" achieved through accessing treatment at the hub, by those that otherwise wouldn't seek treatment due to a lack of services or access.	Improvement in QoL induced by the Health Hub is measured by the reduction in the severity of a given illness or disability has on the Value of a Statistical Life Year (VSLY), the reduction assumed to be at 25%. This benefit is applicable to Murray residents who delay or do not seek medical treatment for short-term illnesses or injuries, assumed to be at 25% of the relevant population. Based upon the proposed services offered by the Hub, the Murray population not living with a long-term health condition will have an average illness/disability weighting of 5.6% below a statistically healthy life valued at $235,000, per episode of illness.

*Australian Institute of Health and Welfare – General practice, allied health and other primary care services, 2023.

8.4.2 Cost benefit analysis sources

Table 22 – **Cost-benefit analysis assumptions and sources (page 1 of 2)**

Item	Assumption	Note/Source
Avoidable ED Visits – Shire of Murray residents	1,175 (2018/19 – 2021/22)	Murray Regional Health and Social Needs Analysis (5-year annual average)
Cost per admitted ED presentation	$1,466	National Hospital Cost Data Collection (WA), 2020-21
Cost per non-admitted acute care	$335	National Hospital Cost Data Collection (WA), 2020-21
Value of Statistical Human Life (per year)	$235,000	Department of Prime Minister and Cabinet – Office of Impact Analysis 2023.
Disability Weighting – Long-Term Health Condition	11.7%	Collection of applicable disabilities and illnesses - Australian Burden of Disease Study, 2018
Disability Weighting – Short-Term Health Condition	5.6%	Collection of applicable disabilities and illnesses - Australian Burden of Disease Study, 2018
Individuals who experience improved QoL, through reduced severity in disability or illness.	3.9%	Australian Institute of Health and Welfare, 2021/22. Percentage figure refers to people with a long-term health condition who need to see a GP that delayed or did not see a GP.
Individuals who experience improved QoL, through reduced severity in short-term disability or illness.	25%	Australian Institute of Health and Welfare, 2021/22. Percentage figure refers to the population who need to see a GP for a short-term health condition that delayed or did not see a GP due to service availability or waiting time.

8.4.2 Cost benefit analysis sources

Table 22 – **Cost-benefit analysis assumptions and sources (page 2 of 2)**

Item	Assumption	Note/Source
Total residents experiencing improved Quality of Life (QoL) – Shire of Murray	3,062	3.9% of residents with a long-term health condition at 2021 Census, excluding serious health conditions (cancer, stroke, dementia), plus 25% of Shire residents without a long-term condition, representing the share of population who delay seeing a doctor when unwell or injured.
Average days of absenteeism per year	15	Direct Health Solutions 2023 – Western Australia
Cost per day of absenteeism	$370	Direct Health Solutions 2023 – Western Australia, employee on a $65,000 salary
Total outpatient appointments by working age patients – Shire of Murray	1,774	Murray Regional Health and Social Needs Analysis – 7,097 outpatient appointment by Shire residents are of working age, of which 25% are new appointments.
Time cost of travel	$23.23	National minimum wage
Fuel cost per average round trip	$20	Industry Benchmark
Parking cost per round trip	$8	Average 2-hour parking fee at other metropolitan medical campuses/precincts
Total journeys avoided -Shire of Murray residents	11,061	Avoidable hospitalisations transferred into GP appointments (588); Outpatient activity appointments in hub-applicable services (8,556); 25% of acute same day care appointments at regional centres, 2022/23 (1,918). Sourced from Murray Regional Health and Social Needs Analysis
Life of Asset	40 years	ATO Depreciation and Capital Allowances estimation tool

8.4.3 Cost benefit analysis – Detailed Results by impact item

Table 23 – **Cost-benefit analysis results and distribution by type**

Item	Potential Impact	Description	Benefit/Cost	Share of Annual Benefit
CAPEX	As per Feasibility Study	Costs associated with the construction of the hub	$50.623,000 (upfront)	-
OPEX Costs	As per Feasibility Study	Costs associated with annual operation of the hub	$857,500 p.a.	-
Rental Revenues and Outgoings	As per Feasibility Study	Operational revenues received by operators and owners of the hub	$893,300 p.a.	5.5%
Avoided Hospitalisations	Reduction in avoidable ED visits by 50%	Represents the benefit to the health system of relieving pressure/activity associated with providing hospital care, measured by the cost saving that the hub can induce through reduced ED visits by patients.	$664,500 p.a.	4.1%
Reduced absenteeism	Reduction in the rate of absenteeism of working age residents accessing health services, by 25%.	Represents the benefit to the local economy and employers due to improved ability to participate in the workforce, measured by the reduction in absenteeism due to sick or carers leave.	$2,462,000 p.a.	15.1%
Direct cost savings related to travel	Reduction in total time/distance required for a round trip to access health services for residents, at 1 hr 12mins / 91 km	Represents the benefit to the individual of improved accessibility to health service through the hub being located nearby, measured as the savings in terms of time travelled and fuel costs.	$620,200 p.a.	3.8%
Reduced disability and illness	25% reduction in the severity of disability/illness experienced by residents with long–term health conditions.	Represents the benefit to the individual and wider society of an improved quality of life through being able to access hub services. Measured by the reduction in disability "costs" achieved through accessing treatment for long term health conditions at the hub by those that otherwise wouldn't seek treatment due to lack of services or access.	$3,135,000 p.a.	19.3%
	25% reduction in the severity of short-term illness or injury experienced by Murray residents, who live without long-term health conditions.	Represents the benefit to the individual and wider society of an improved quality of life through being able to access hub services. Measured by the reduction in illness/injury "costs" achieved through accessing treatment at the hub, by those that otherwise wouldn't seek treatment due to a lack of services or access.	$8,506,000 p.a.	52.2%

8.4.4 Cost Benefit Analysis – Summary outcomes

Assumptions

- No escalation in costs or benefits (i.e. doesn't account for increased caseload of patients and thus underestimates future benefit).
- Assumes Health Hub reduces avoidable ED presentations by 50%, reduces the impact of long and short-term health conditions by 25% for people who do not currently access health services, and improves workforce participation of working age patients by 25%.
- Hub is also assumed to reduce travel times for patients who currently travel to other locations for outpatient appointments*, and acute same day care, as well as avoided visits to ED.
- The Office of Best Practice Regulation (Dept of PM&C) recommends using a 7% discount rate, with sensitivity tested at 3% and 10%.

Table 24 - **Cost Benefit Analysis, 40-year horizon by discount rate**

Discount rate	3%	7%	10%
Benefits – Present Value	$370.6m	$213.8m	$156.8m
Costs – Present Value	$70.4m	$62.1m	$59.0m
Net Present Value	$300.2m	$151.7m	$97.8m
Benefit Cost Ratio	5.3	3.4	2.7

Table 25 - **Cost Benefit Analysis – by time horizon**

Discount Rate	3%		7%		10%	
Timeframe	NPV	BCR	NPV	BCR	NPV	BCR
10 year	$78.8m	2.4	$56.0m	2.0	$42.6m	1.8
25 year	$213.7m	3.9	$126.2m	2.9	$87.1m	2.4
40 year	$300.2m	5.3	$151.7m	3.4	$97.8m	2.7

8.4.5 Cost Benefit Analysis – Sensitivity Analysis

Cost benefit analysis indicated that the majority of benefit provided by the hub to the community came in the form of reducing the severity of illness and disability experienced by those with long- and short-term health conditions. It was assumed that the hub will reduce the impact of illness and disability on quality of life by 25%.

Scenario analysis tests the scenario that the hub will have a less significant effect on reducing the illness and disability in the community, at an impact level of 10%.

Findings indicate:

- At a 7% discount rate, over a 40-year period the hub provides a net present value of $58.6 million. This represents a benefit cost ratio (BCR) of 1.9, as per Table 26.

- At a discount rate of 3%, which implies that the community places a higher value on the future health and wellbeing of individuals, in perpetuity the hub provides a net present value of $138.8 million, representing a benefit cost ratio of 3.0.

Table 26 - **Cost Benefit Sensitivity Analysis, 40-year horizon by discount rate**

Item	3%	7%	10%
Benefits – Present Value	$209.2m	$120.7m	$88.5m
Costs – Present Value	$70.4m	$62.1m	$59.0m
Net Present Value	$138.8m	$58.6m	$29.5m
Benefit Cost Ratio	3.0	1.9	1.5

Table 27 - **Cost Benefit Sensitivity Analysis – by time horizon**

Discount Rate	3%		7%		10%	
Timeframe	NPV	BCR	NPV	BCR	NPV	BCR
10 year	$19.3m	1.3	$6.9m	1.1	-$0.3m	1.0
25 year	$92.0m	2.2	$44.9m	1.6	$23.7m	1.3
40 year	$138.8m	3.0	$58.6m	1.9	$29.5m	1.5

8.4.6 Cost benefit analysis – Detailed results sensitivity comparison

Table 28 – **Detailed results sensitivity comparison**

Item	10% Impact		25% Impact	
	Benefit/Cost	Benefit Distribution	Benefit/Cost	Benefit Distribution
CAPEX	$50,600,000 (upfront)		$50,600,000 (upfront)	-
OPEX Costs	$857,500 p.a.		$857,500 p.a.	-
Rental Revenues and Outgoings	$893,200 p.a.	9.6%	$893,200 p.a.	6.5%
Avoided Hospitalisations	$664,500 p.a.	7.1%	$664,500 p.a.	4.1%
Reduced absenteeism	$2,462,000 p.a.	26.5%	$2,462,000 p.a.	15.1%
Direct cost savings related to travel	$620,200 p.a.	6.7%	$620,200 p.a.	3.8%
Reduced disability and illness	$1,254,000 p.a.	13.5%	$3,135,000 p.a.	19.3%
	$3,402,300 p.a.	36.6%	$8,506,000 p.a.	52.2%
Total Annual Benefit	$9,295,000		$16,280,400	

8.5 Economic impact - Assumptions

Construction

- Approximately $29m in direct construction of the hub building, café, parking and landscaping per annum supports 34 FTE construction jobs and $3.7m in wages and salaries per year of construction.
- This capital investment supports a further 47 FTE jobs through supply chain and consumption impacts, including professional services such as architects, engineers and designers.
- During construction phase, it is estimated the total direct, indirect and induced economic output impact of the hub is $65.8m, supporting a total of 115 FTE jobs in the Greater Perth region.

Hub Operation

Based upon the floorspace, mix of medical services and the operating model of the hub, it is estimated (at full occupancy levels):

- The introduction of 82 new medical jobs into Pinjarra supports a further 42 FTE jobs within regional supply chains and through consumption effects.
- Each year, the Health Hub's service offer will produce $21.4m in economic output, supporting a further $11.1m in wages and salaries to workers.
- The total direct, indirect and induced economic output impact of the hub is $79.2m during operation per annum, supporting a total of 125 FTE jobs in the Greater Perth region.

Table 29 – **Hub Construction and Operational Economic Impact**

Phase	Direct Impact, p.a.		Indirect + Induced Impact, p.a.		Total Impact, p.a.	
	Output	FTE Jobs	Output	FTE Jobs	Output	FTE Jobs
Construction	$29m	34	$36.7m	81	$65.8m	115
Operation	$21.4m	82	$15.2m	42	$36.6m	124

Source: Hatch, 2024., REMPLAN, June 2024. 2024 dollars

Table 30 – **Workforce Direct Impacts**

Occupation	FTE Employment p.a.	Annual Wages and Salaries
Construction	34	$3.7m
Medical	76	$10.6m
Hub Administration	6	$0.51m

Source: Hatch, 2024., REMPLAN, June 2024. 2024 dollars