
New Shellharbour Hospital and Integrated Services Project

Final Business Case Summary

July 2024



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1 About this report

1.1 New Shellharbour Hospital and Integrated Services Project

This report summarises the Final Business Case (FBC) for the new Shellharbour Hospital and Integrated Services Project (the Project). It was developed by NSW Health Infrastructure and the Illawarra Shoalhaven Local Health District (ISLHD, or 'District') in November 2023. The Project is to deliver contemporary health services by realigning and expanding services in the Illawarra to sustainably support the expanding health needs of the region. The scope of works includes:

- ▶ Expansion of health services at Bulli Hospital
- ▶ Creating a new Warrawong Community Health Centre on the Port Kembla Hospital campus
- ▶ Refurbishing 2 Inpatient Units (IPUs) of Wollongong Hospital
- ▶ Constructing a new Shellharbour Hospital on a greenfield site and relocating and expanding services from the current hospital site.

The Project has been developed through a series of investigations to address the future health service needs of the Illawarra region.

The project aims to:

- ▶ provide a district-wide service network, and enable the new Shellharbour Hospital (NSH) to grow to be a larger, more capable hospital able to:
 - service the local Southern Illawarra community for a wide range of health care needs, including new models of ambulatory and outpatient care
 - deliver its strategic role in providing district-wide services such as elective surgery, mental health and withdrawal management
 - support Wollongong Hospital deliver its tertiary referral role, by reducing the pressure on Wollongong Hospital.
- ▶ advance digital health and virtual healthcare
- ▶ reduce the District's future carbon footprint through sustainable, efficient design
- ▶ strengthen community health infrastructure to support people to stay well in their own homes, with a specific focus on supporting the local Warrawong community
- ▶ provide contemporary sub-acute care (including rehabilitation, palliative care, geriatric evaluation and management) in facilities that are fit-for-purpose, and able to meet the needs of the community into the future.

The FBC was developed by the ISLHD to progress the Project to the delivery phase.

The preferred option cost estimate in the FBC was \$721.9 million. The 2024-25 NSW Budget confirmed \$60 million in additional funding, bringing the total funding commitment to \$781.9 million.

This business case summary has been prepared by Infrastructure NSW, in accordance with NSW Treasury's Guidelines for Capital Business Cases.

2 Strategic alignment and context

2.1 Background and context

This business case is the culmination of a health service and infrastructure planning process that the District started 10 years ago. Initially, it focused on a brownfield redevelopment of the existing Shellharbour Hospital. The Project's scope subsequently expanded to include the construction of a new Shellharbour Hospital (NSH) on a greenfield site, refurbish parts of the Bulli and Wollongong hospitals, closure of the Port Kembla Hospital and build a new Warrawong Community Health Centre on the Port Kembla hospital site. The Project thus comprises the new hospital at Shellharbour plus an Integrated Services package that involves the Bulli and Wollongong hospitals and the Port Kembla site.

The ISLHD prepared the Clinical Service Plan (CSP) in late 2021 for the full scope of works for the NSH. The CSP was supported by the Ministry of Health in 2022.

Government commitments

Together, the NSW Government and Australian Government have committed \$781.9 million to this Project.

Alignment with government strategies & policies

The project positively contributes to the strategic direction and vision of several key government policies and strategies. Table 1 below summarises the state and local policies and priorities, and their alignment to the Project.

Table 1: Government strategies or policies and their alignment

Region	Government strategy or policy	Alignment
Federal	National Digital Health Strategy	The Project's digital strategy aligns with the Australian Government's ambitions for "hospital admissions avoided, fewer adverse drug events, reduced duplication of tests, better coordination of care for people with chronic and complex conditions, and better-informed treatment decisions."
State	State Infrastructure Strategy 2022-2042	The Project will upgrade and build new facilities to meet demand for projected growth, and includes clinical services redesign, integrated care models, out-of-hospital care and telehealth.
	NSW Government Asset Management Policy	The Project will respond to the policy through the Strategic Asset Management Plan and Asset Management Plan. These 2 plans are a key component of the Project's fit-for-purpose approach and alignment with key financial, technical, legal, regulatory and organisational requirements.
	NSW Government Action Plan	The NSW Government Action Plan: a ten-point commitment to the construction sector (June 2018), guides government and industry to work more effectively together on shared objectives and goals. The Project will follow NSW Government guidelines for procurement to ensure efficient delivery of the Project and provide opportunities for sub-contracting that supports industry diversity.
	Aboriginal Procurement Policy	The Project will aim to support employment opportunities for Aboriginal and Torres Strait Islander peoples and the sustainable growth of Aboriginal business by driving demand

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Region	Government strategy or policy	Alignment
		via government procurement of goods, services and construction
NSW Health	Future Health: Guiding the next decade of care in NSW 2022 - 2032	<p>The Project is fully aligned with Future Health in respect of each of its strategic outcomes, including:</p> <ul style="list-style-type: none"> ▶ patients and carers have positive experiences and outcomes that matter ▶ safe care is delivered across all settings ▶ people are healthy and well ▶ staff are engaged and well supported ▶ research and innovation, and digital advances inform service delivery ▶ the health system is managed sustainably.
	NSW Health 20-Year Health Infrastructure Strategy	The Project has addressed the non-capital solution considerations of these guidelines and further supports the implementation of the strategy by enhancing NSW Health's diverse health infrastructure portfolio to enable a comprehensive and integrated service system.
	NSW Virtual Care Strategy 2021-2026	The Project will continue to implement a range of existing initiatives and support new approaches to support patient and provider engagement.
	NSW Health and the Arts Framework (2016)	The Project will deliver an integrated approach to the inclusion of art to support the health and treatment outcomes.
	NSW Health Facility Planning Process (GL2021_018)	The Project has followed the NSW Health Facility Planning Process in development and assessment of facility options
	NSW Aboriginal Health Plan	The Project service delivery, master plan and facility design will ensure culturally safe and welcoming health services. It will include opportunities for integration of Aboriginal health services to close the gap in health and equity between Aboriginal people and the rest of the community.
District	Health Care Services Plan 2020 – 2030	<p>The project supports ISLHD in delivering on the plan, which outlines the District's vision to 2030, which can be summarised as 5 key focus areas:</p> <ul style="list-style-type: none"> ▶ promote protect and maintain the health of the community ▶ strengthen care in the community ▶ address the cultural and health needs of Aboriginal people ▶ commit to high-value care ▶ strengthen partnership and engagement.
	Shellharbour Hospital Clinical Services Plan (CSP) 2022	The project is delivering on the services reconfiguration and key capacity expansion requirements outlined in the CSP.

3 Project Need

The ISLHD is experiencing increases in healthcare demands from a growing and ageing population. The redevelopment project is required to expand key health services and support contemporary models of healthcare into the future. The new NSH will play a significant strategic role in the District's service network. It will grow to be a significantly larger, more capable hospital that is able to service its local community for a wide range of health needs.

The following needs for the Project were identified in the business case:

Need 1: Supporting local population health needs

Services and network configuration across the Illawarra are impacted by hospitals that are challenged to support increasing local population health needs, or the strategic demands of the wider health network. The District's options for the co-location of complementary services are constrained by the fragmentation of the hospital network in the Illawarra.

Residents from across the Illawarra are increasingly travelling to Wollongong Hospital, creating inequitable healthcare access outcomes for consumers and unsustainable health service demands on Wollongong Hospital.

Need 2: Increase capacity to service the region

Increasing health service demand is anticipated as significant population growth is forecast for the Illawarra. The largest increases will be in the over 75 age cohort, which will increase by 40%. According to 2022 projections by the NSW Department of Planning and Environment, the total population will grow by 14.1% and 13.3% for the District and the Illawarra, respectively, for the period 2021 to 2031.

The ageing population will add further health services demand on an already constrained system.

Need 3: Hospital facilities that are fit-for-purpose

Infrastructure quality and functionality are identified issues at Shellharbour and Port Kembla Hospitals. There is opportunity across ISLHD to expand care delivered at home and in the community. This will help reduce demand on Wollongong Hospital, as residents bypass local hospitals. The ageing health facilities are also significantly increasing maintenance costs.

A future-focused hospital is required to improve the sustainability of the health network and to enable consumers to access complete packages of care.

Need 4: Attracting and retaining healthcare workers

There have been historical challenges in recruiting and retaining healthcare staff. Without capital investment, there will be reduced ability to attract and retain the required healthcare workforce, in an environment of increasing healthcare demands / workforce needs.

4 Project objectives and design

4.1 Objectives

The primary objectives of the New Shellharbour Hospital and Integrated Services Project are to:

- ▶ provide a district-wide service network, and enabling NSH to grow to be a larger, more capable hospital able to:
 - service the local community for a wide range of healthcare needs, including new models of ambulatory and outpatient care
 - deliver its strategic role in providing District-wide services such as elective surgery, mental health and withdrawal management
 - support Wollongong Hospital deliver its tertiary referral role, by reducing the pressure on Wollongong Hospital.
- ▶ advance digital health and virtual healthcare
- ▶ reduce the District's future carbon footprint through sustainable, efficient design
- ▶ strengthen community health infrastructure to support people to stay well in their own homes, with a specific focus on supporting the local Warrawong community
- ▶ provide contemporary sub-acute care (including rehabilitation, palliative care, geriatric evaluation and management) in facilities that are fit-for-purpose, and able to meet the needs of the population into the future.

4.2 Design

The key design principles of the Project include:

- ▶ Design for the privacy and safety of staff and patients
- ▶ Design for natural light and external views, connection to landscape, external spaces for reflection, respite and exercise
- ▶ Minimise travel time within the hospital; facilitate inter-departmental transfer of patients
- ▶ Preserve options for future expansion and renewal; provide for future precinct development; avoid land locked areas; mitigate bushfire and flood risk
- ▶ Respect the natural contours of the land, including watercourses; maximise views of the escarpment; integrate with cultural heritage features
- ▶ Adopt appropriate scale and frontages; make best use of site and topography; ensure clear and logical campus circulation
- ▶ Ensure safe access to Dunmore Road; provide convenient drop-off, onsite parking as well as safe and unhindered access to the Emergency Department
- ▶ Maximise passive sustainable design and orientation; minimise energy and water consumption; landscape to enhance the natural environment.

The assessment and selection of the options considered the 20-year State Health Infrastructure Strategy (demonstrated in Figure 1), where investment decisions will have an increased focus on maintaining better use of existing assets.

Figure 1: 20-year State Health Infrastructure Strategy

Investment decisions will have an increased focus on maintaining better use of existing assets. This will enable a greater range, and more sustainable options to shape the future health system.



5 Options identification and assessment

5.1 Option development process

The longlist of Options that were considered as part of the Final Business Case included a base case, brownfield options, a greenfield option and a Public Private Partnership (PPP) option.

The PPP option was rejected. While this option had been considered in the past, the NSW Government announced this project would proceed as a government-led capital project.

The brownfield options were rejected, as it was deemed that a brownfield option would not meet the future health needs and service aspirations of both the District and the community.

Non-infrastructure strategies were also considered in response to a growing demand for services and capacity constraints. The ISLHD and Shellharbour Hospital have implemented several initiatives that have avoided physical bed increases, reduced costs and improved patient health outcomes. However, these options alone are not sufficient to meet the demand resulting from the continued population growth and demand for healthcare in the Illawarra region.

The greenfield option was therefore progressed to the shortlist of options.

5.2 Final Business Case

The preferred option included delivering the Integrated Services (Bulli, Wollongong & Warrawong works) as well as the new NSH on a greenfield site. The preferred option for NSH included the following scope:

- ▶ expanded Emergency Department (ED) Service
- ▶ Maternity – Pre and Post-Natal Services
- ▶ expanded Outpatient and Ambulatory Care Services
- ▶ increased surgical capacity
- ▶ expanded inpatient services, including Rehabilitation and Acute Medical Services
- ▶ new contemporary Mental Health Services
- ▶ new Drug and Alcohol Service
- ▶ car parking and improved public transport links.

Commercial and Financial Structure

The Project will be government funded. Together, the NSW Government and the Australian Government have committed \$781.9 million for the Project.

Stakeholder Engagement

Governance of communications and engagement is managed via the Communications Working Group (CWG). Its work is organised around a communications calendar that keeps track of completed tasks, feedback and follow-up requirements, and looks at upcoming actions, events, and tasks.

Some of the key communications activities to date include:

- ▶ project information stalls at key locations such as shopping centres, Bunnings and ‘town hall’ events
- ▶ online community information sessions

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- ▶ direct engagement events with the Dunmore Road Action Group (DRAG)
- ▶ letterbox drops
- ▶ establishing a dedicated project website.

A significant outcome of the Project is the strength of the co-design process with the local Aboriginal community. The Project has leveraged a long-established meaningful engagement with Aboriginal and Torres Strait Islander communities through the ISLHD's long term community relationships. The project team has also integrated the Government Architect NSW (GANSW) Connecting with Country requirements into the design process.

6 Cost and Economic evaluation

6.1 Estimated Costs

Capital costs

The FBC indicated the estimated capital cost of the preferred option at \$721.9 million. At the time of the FBC, the Project had a capital funding allocation of \$721.9 million. The funding commitment was increased to \$781.9 million in the 2024-25 NSW Budget. The additional \$60 million enabled the project scope (as outlined in the business case) to be delivered in full. This was due to the significant 'out of cycle' market cost escalation that has occurred since the initial funding commitment in 2020.

Ongoing maintenance, operating and service costs

The estimated average cost per annum for lifecycle and maintenance costs is \$20.1 million.

The projected increase in Net Cost of Services (NCOS) (excluding depreciation) due to the Project is \$14.5 million in 2027-28 increasing to \$88.8 million in 2030-31 when the service is fully operational. Labour related costs contribute 68-73% of the total NCOS.

6.2 Evaluation

The economic appraisal follows a structured CBA framework to estimate the economic costs and benefits of the project. The economic appraisal was undertaken in line with Guidelines for Cost-Benefit Analysis (NSW Treasury, 2017) and the Guide to Cost Benefit Analysis of Health Capital Projects (NSW Health).

The economic benefits predominantly focus on improvements in the health status of those who will use the new and expanded health services proposed for the Project. As part of the economic analysis, the perceived benefits were evaluated for the Project against the base case scenario. The benefits of the Project Case include:

- ▶ health benefits arising from improved health services (inpatient, ED, renal)
- ▶ avoided costs from expansion of non-admitted patient services
- ▶ full electrification benefit
- ▶ residual value of new assets
- ▶ a range of additional unquantified net benefits, including:
 - improved patient and consumer experience
 - improved District-wide networking of services for sub-acute care
 - increased Aboriginal engagement with NSH services
 - improved staff attraction and retention.

6.3 Outcomes of the Analysis

The CBA results are summarised in Table 2. At a 5% discount rate, the preferred option (Option 3) returns a 2.41 BCR and positive net present value (NPV).

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Table 2: Summary of the Project's CBA based on \$722 million cost estimate

Option appraisal	Criteria	Preferred Option
Economic appraisal (5.00% real discount rate)	NPV (\$ million)	2,049.7
	BCR	2.41

7 Deliverability

7.1 Procurement

The Project has required a multifaceted procurement and delivery strategy across the various workstreams and project sites. Key considerations have included speed to market, level of complexity, appropriate transfer of risk and value for money.

The Design Finalisation model of contracting is preferred for all packages of work, whereby the Project's design team takes the design and tender documentation to an agreed level (typically clinical detailed designs complete) and then leaves it to the Head Contractor to finalise the design, coordinate activities, and generate the procurement and construction documentation.

7.2 Timeframe

At the time of the business case, the Project had assumed a progressive commissioning of new and refurbished facilities from 2023 to the end of 2027.

7.3 Key risks and mitigation

The top 5 project risks and mitigations that were identified within the FBC are summarised in Table 3.

Table 3: Key risks and mitigations

Key Risk	Mitigation
Out of cycle market escalation pushes the agreed project scope into an unaffordable position.	Value Engineering has been undertaken at every stage of the project.
Competing project timeframes (Shellharbour vs Shoalhaven) resulting in delays to Shellharbour as a result of a stretched Local Health District (LHD).	Project teams have worked to identify design, procurement and process synergies across both projects to better manage District consultation/input requirements.
Change management challenges delay the commissioning of new models of care.	The District will commence change management processes early in the project as has been realised through the Early Works components. New models of care will be implemented in the existing hospital during the project's delivery phase where possible. Development of an implementation plan in 2024, that maps out the commissioning timelines for the new models of care.
Planning State Significant Development (SSD) application is not approved in a timely manner to enable the award of the NSH main works contract.	At the time of the business case, the State Significant Development Application (SSDA) had been submitted and extensive consultation with multiple authorities undertaken.

8 The Infrastructure NSW view

Consistent with the NSW Government's Infrastructure Investor Assurance Framework, Infrastructure NSW routinely assesses business cases and provides advice to government on the efficacy of their findings.

Infrastructure NSW found that the Final Business Case is robust and well-considered. The service need for the project is clearly demonstrated within the Final Business Case.

Infrastructure NSW appreciates the importance of this project to the local community. The project will provide improved access to a greater range of health services in a new purpose-built hospital.

The preferred option has been refined through a robust options development process. The preferred option is expected to deliver social and economic equity, environmental benefits, technical change and climate resilience. The preferred option was developed in consultation with relevant stakeholders to ensure efficiency and effectiveness. Consultation and communication with the local Aboriginal community are effective and proactive. The scope within the preferred option aligns with the service need and project objectives. Financial analysis of the option shows a positive benefit to cost ratio.