URBIS

SYDNEY'S WORKING PORT COALITION

SECURING SYDNEY'S PORT FUTURE: GLEBE ISLAND ECONOMIC ASSESSMENT

Prepared for Business Sydney
March 2025

ACKNOWLEDGEMENT OF COUNTRY

Urbis acknowledges the Traditional Custodians of the lands we operate on.

We recognise and respect their continuing connection to these lands, waterways and ecosystems for over 60,000 years and pay our respects to their Elders past and present.

We recognise that First Nations sovereignty was never ceded and that this was and always will be First Nations land.

OVERVIEW

This report presents the results of an economic assessment, using a Rapid Cost Benefit Analysis (CBA) of two scenarios, namely:

- **Base Case:** current working port operations are retained at Glebe Island
- **Residential Redevelopment:** current port operations (cement, sugar and gypsum) are relocated to Port Kembla and a residential scheme is developed on Glebe Island.

Our economic assessment finds that retaining the current working port operations at Glebe Island will deliver higher net benefits than redeveloping it to enable a high-density residential outcome.

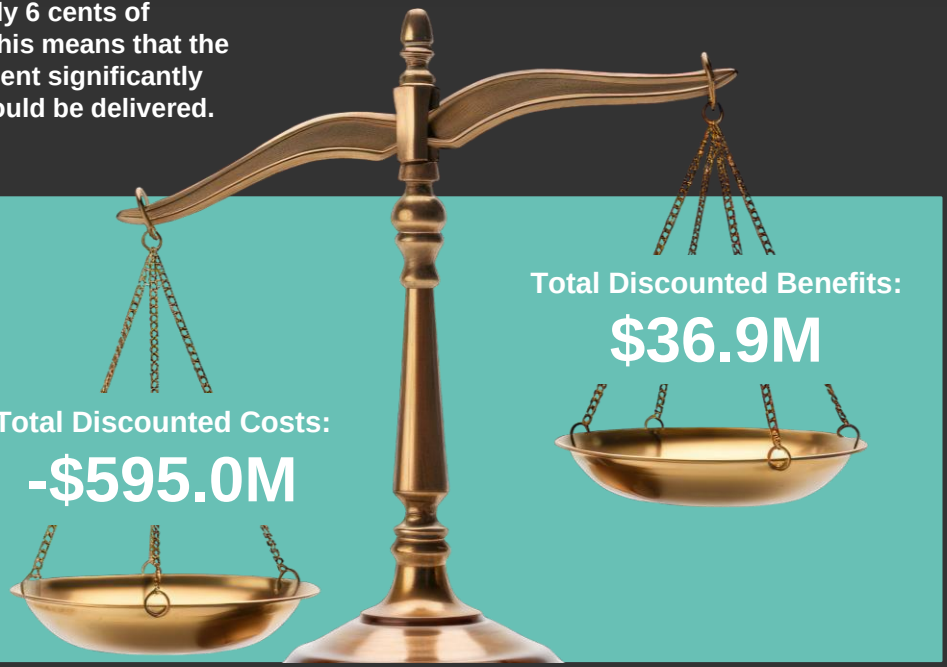
For every dollar spent redeveloping Glebe Island into a residential scheme and relocating port operations to Port Kembla, only 6 cents of benefits would be delivered. This means that the cost of residential redevelopment significantly outweighs the benefits that would be delivered.

Sydney is in the midst of a chronic housing crisis. As Sydney's last remaining deepwater port, Glebe Island plays a unique role in Sydney's supply chain network of food and construction materials.

The biggest obstacle to delivering housing at scale today is high construction costs. Relocating port operations elsewhere will exacerbate these costs.

Glebe Island is far from being shovel-ready. Given the relocation, decontamination and remediation works required, **Glebe Island is unlikely to deliver housing before 2037.**

Under a 5% Discount Rate, the Residential Redevelopment Scenario would deliver a Net Present Value of -$558.1M:



THE FUTURE OF GLEBE ISLAND

Located approximately 2 kilometres west of the Sydney CBD, Glebe Island has been an active working port situated at the centre of Sydney's trade network for over 150 years.

As the last remaining deep-water land interfacing berths in Sydney Harbour, Glebe Island is an essential pillar of NSW's supply chain network for the movement of food and construction materials. Glebe Island supports major infrastructure projects around the CBD, including the new Sydney Fish Markets and Sydney Metro. Additionally, the Port plays a vital role in hosting major events in Sydney Harbour, such as the New Year's Eve fireworks and Vivid.

Given its position within the broader Bays West Precinct, which is set for significant urban renewal centred around the future Bays Station, and in light of Sydney's housing supply crisis, Glebe Island is being considered for redevelopment into high-density housing.

However, the most strategic role that Glebe Island can play in addressing the housing crisis is to continue its working harbour operations. This will ensure the most efficient distribution of construction materials to meet demand from Sydney's residential and infrastructure development pipeline.

Since the mid-1800's, Glebe Island has been a pivotal hub in Sydney's maritime trade network. The potential loss of Sydney's last remaining deepwater port facility would represent a loss of the city's maritime heritage. Preserving its operations will safeguard Sydney's future porting capabilities as the city's needs evolve.

Glebe Island has been the centre of Sydney's trade network for over 150 years:

- **1854: Sydney's first timber and joinery works opened.**
- **1860: Public abattoir opened and wharves built to service meat canning and export trade.**
- **1895: Soap manufacturing commenced.**
- **1903: Glebe Island Bridge, one of the world's first electrically operated bridges, opens.**
- **1912: Construction of White Bay Power Station.**
- **1918: Original grain silos were built.**
- **1942: Staging area for US and Australian troops during World War II.**
- **1969: Container facility opens to process car imports.**
- **1970: Glebe Island silos were built to store grains.**
- **1982: White Bay Power Station decommissioned and Birrung Park (formerly White Bay Park) opens.**
- **1995: Old Glebe Island Bridge replaced by Anzac Bridge.**
- **2008: Processing of car imports relocated to Glebe Island.**

URBAN RENEWAL IN THE BAYS WEST PRECINCT

The Bays Port area encompasses both Glebe Island and White Bay. The Port is part of the broader Bays West Precinct, which covers approximately 77 hectares of waterfront land just 2 kilometres west of the Sydney CBD.

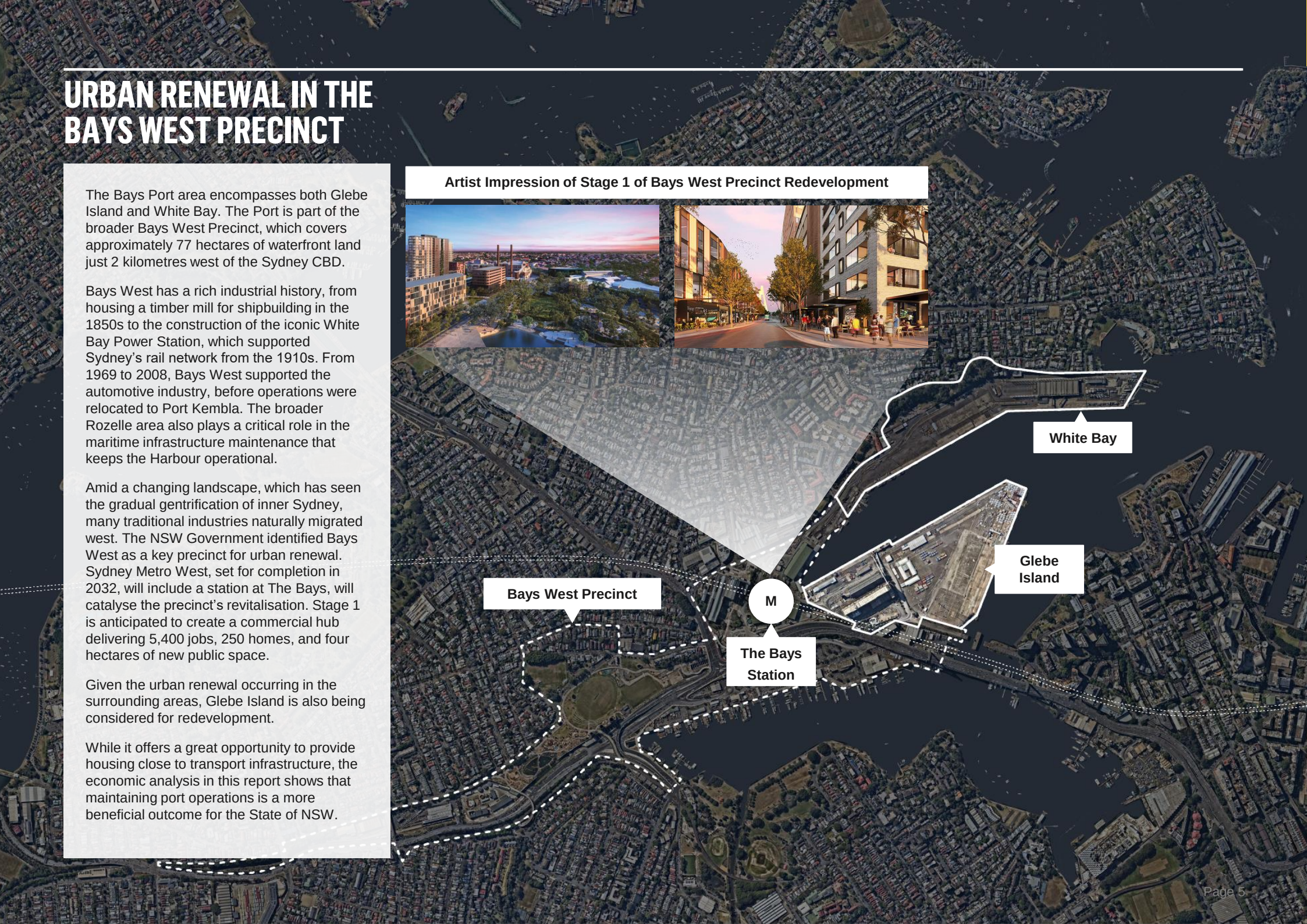
Bays West has a rich industrial history, from housing a timber mill for shipbuilding in the 1850s to the construction of the iconic White Bay Power Station, which supported Sydney's rail network from the 1910s. From 1969 to 2008, Bays West supported the automotive industry, before operations were relocated to Port Kembla. The broader Rozelle area also plays a critical role in the maritime infrastructure maintenance that keeps the Harbour operational.

Amid a changing landscape, which has seen the gradual gentrification of inner Sydney, many traditional industries naturally migrated west. The NSW Government identified Bays West as a key precinct for urban renewal. Sydney Metro West, set for completion in 2032, will include a station at The Bays, will catalyse the precinct's revitalisation. Stage 1 is anticipated to create a commercial hub delivering 5,400 jobs, 250 homes, and four hectares of new public space.

Given the urban renewal occurring in the surrounding areas, Glebe Island is also being considered for redevelopment.

While it offers a great opportunity to provide housing close to transport infrastructure, the economic analysis in this report shows that maintaining port operations is a more beneficial outcome for the State of NSW.

Artist Impression of Stage 1 of Bays West Precinct Redevelopment



THE IMPORTANCE OF PORT OPERATIONS AT GLEBE ISLAND

Glebe Island plays a key role in enabling construction and food supply chains, supports tourism, and helps facilitate public use and enjoyment of Sydney Harbour.

Glebe Island currently accommodates dry bulk commodities critical for Sydney's construction sector and food supply, including cementitious material, gypsum, sugar and salt.

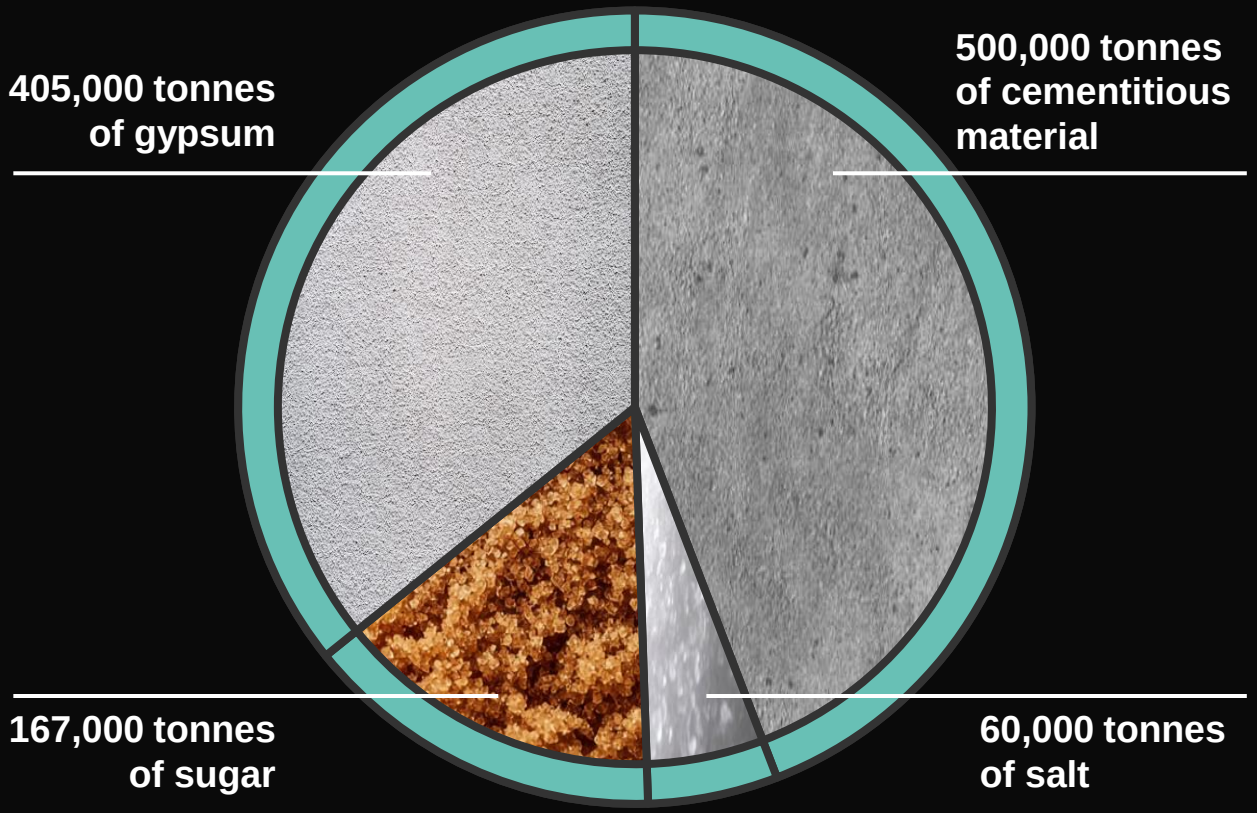
Historically, Glebe Island has played a significant role in meeting the logistical needs of Sydney. In the past 100 years, Glebe Island has been utilised as a meat canning and export site, car import station, military base (in WWII for U.S. troops), and for grain and wheat storage, before transitioning to its current uses.

Over the past decade, Glebe Island has primarily been used to bring in critical materials that are required for Sydney's construction industry. This includes approximately 405,000 tonnes of gypsum each year – the main input into plasterboard.

The port's location enables materials to be shipped directly to Central Sydney, placing them close to key markets. Around 80% of the cementitious material shipped to Glebe Island is estimated to be distributed within a 25-kilometre radius for use in the construction of housing and infrastructure projects.

Glebe Island also plays a key role in delivering major events on Sydney Harbour, such as Vivid, Sail Grand Prix and the New Year's Eve fireworks display. Cranes load fireworks onto barges and pontoons moored at Glebe Island that are then floated into launch position for the pyrotechnics show.

Each year, Glebe Island currently receives over:



Last remaining deep-water land-interface port in Sydney Harbour

Supports major Harbour events including Sydney's NYE fireworks, Vivid and Sail Grand Prix

IMPACTS OF CEASING EXISTING OPERATIONS AT GLEBE ISLAND

Alternative port locations (Port Kembla and Port of Newcastle) are currently facing capacity constraints.

Glebe Island is strategically located within inner Sydney, making it close to the end consumer. As the last remaining deepwater, commercial port facility in Sydney, no alternatives in Sydney are available. Port Botany is already at full capacity and does not support dry bulk operations.

Other ports, like Newcastle and Port Kembla, lack the capacity to accommodate growing throughput. If Glebe Island were to cease its port operations, there is no certainty that these alternative ports could handle the same level of dry bulk operations that Glebe Island currently supports.

Port congestion in Newcastle is currently a major issue, with the high volumes of maritime traffic leading to delays and inefficiencies. Port Kembla faces its own challenges, with a lack of bulk berth availability limiting its capacity to handle large shipments efficiently. Additionally, the scarcity of bulk storage locations means there is insufficient space to store goods awaiting transport.

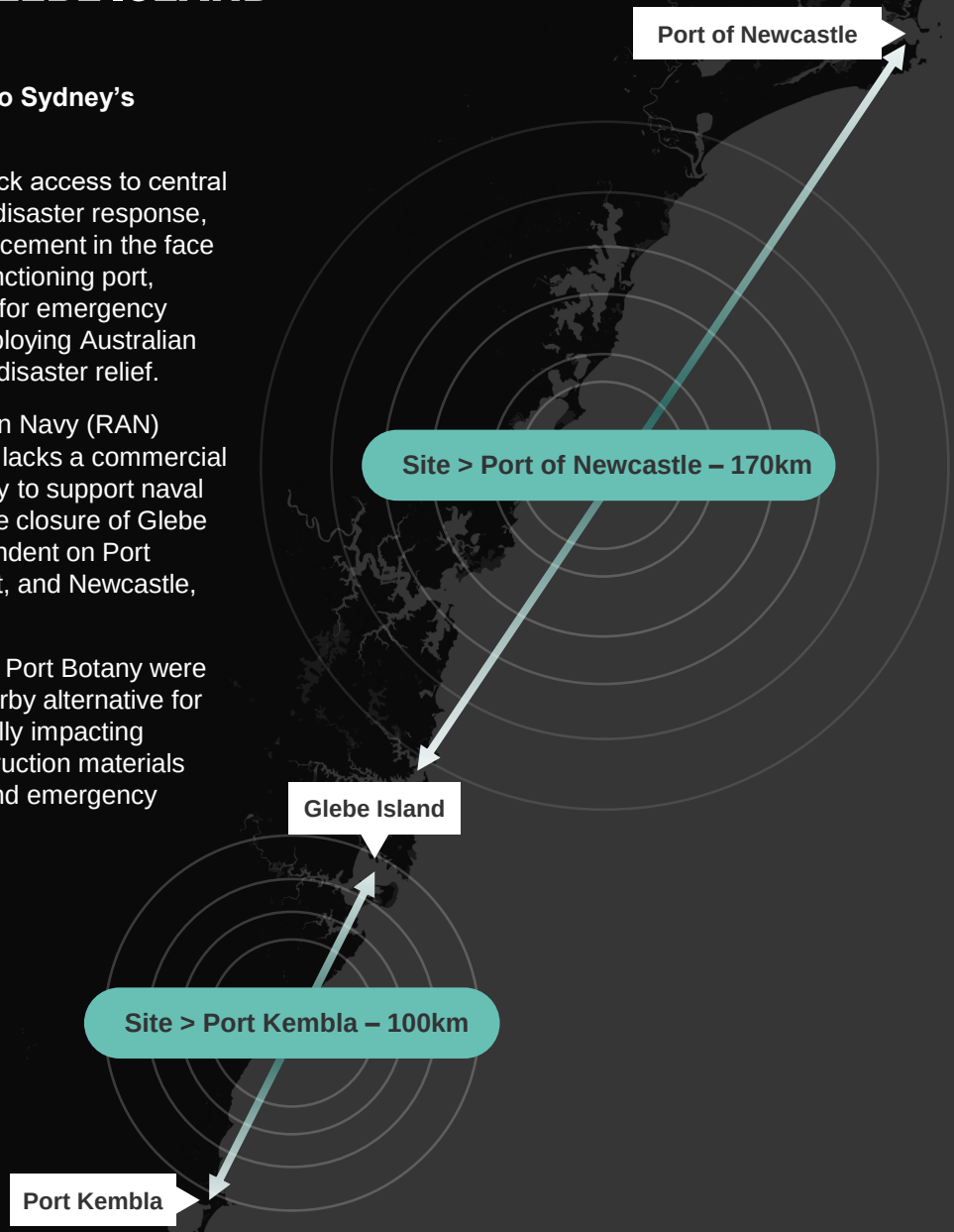
Establishing a new facility would involve significant capital investment, and the distance from alternative ports to Sydney would likely lead to higher costs for the end consumer. The rail and road infrastructure at these alternative sites would need major upgrades to manage the required throughput to meet state demand, further increasing both the costs and logistical difficulties of relocation.

Glebe Island could be critical to Sydney's maritime security.

Glebe Island's location offers quick access to central Sydney, which could be vital for disaster response, military mobilisation, or law enforcement in the face of maritime threats. Without a functioning port, logistical challenges would arise for emergency maritime operations, such as deploying Australian Defence Force (ADF) assets for disaster relief.

Furthermore, the Royal Australian Navy (RAN) operates from Garden Island but lacks a commercial backup port, reducing its flexibility to support naval logistics during emergencies. The closure of Glebe Island would leave Sydney dependent on Port Botany, primarily a container port, and Newcastle, which is over 150 km away.

In the event of a security crisis, if Port Botany were disrupted, there would be no nearby alternative for rapid maritime resupply, potentially impacting logistics for fuel, food, and construction materials critical for economic resilience and emergency responses.



RATIONALE FOR RAPID COST-BENEFIT ANALYSIS

This economic analysis aims to quantify the impact of delivering high-density residential at Glebe Island, by moving current port operations.

Cost-benefit analysis (CBA) is a holistic appraisal method that quantifies the economic, social, environmental and cultural costs and benefits of an initiative and expresses them in monetary terms.

CBA aims to measure the full impacts of any government decision or action on the households, businesses, governments, non-government organisations and natural assets in a specified community, in this case, the residents of New South Wales.

CBA measures the costs and benefits attributable to an initiative relative to a business-as-usual situation without the proposed initiative (base case). The impacts of a development decision will typically include both costs and benefits to some members of the community.

The NSW Treasury Guidelines recommend that the following measures should be calculated for each specific initiative in a CBA evaluation:

- **Benefit-Cost Ratio (BCR)** – the ratio of the present value of net benefits to the present value of resource costs
- **Net Present Value (NPV) –** the difference between the present value of benefits and the present value of costs.

The NPV and BCR both show that for a given discount rate, a development is potentially worthwhile when the benefits exceed the costs of a development proposal. This is demonstrated when the NPV is positive or the BCR is greater than 1.0. When the present value of benefits is greater than the present value of costs, the development is increasing overall social welfare.

For this analysis, a Rapid CBA has been undertaken. Infrastructure Australia's Guide to Economic Appraisal notes that *"A Rapid CBA applies standard CBA principles and techniques to compare multiple options using the present value of benefits and costs. Rapid CBA focuses on quantifying the most material economic costs and benefits only, and has a lower level of precision about design, costs and benefits".*

Direct Impacts

- **Consumers**
- **Producers**
- **Labour**
- **Government**

Indirect Impacts

- **Externalities**
- **Environment**

Source: TPG23-08 NSW Government Guide to Cost-Benefit Analysis -NSW Treasury, February 2023; Urbis

EVALUATING THE IMPACTS OF REDEVELOPING GLEBE ISLAND

To enable analysis of the costs and benefits of redeveloping Glebe Island, it is necessary to establish a Base Case to compare against.

The Base Case refers to the outcome that represents the status quo. It is the scenario in which no new actions, investments or changes are made. Importantly, it establishes a reference point for comparing the marginal benefits and costs of an alternative outcome.

For this analysis, the Base Case assumes that Glebe Island continues to operate as a working port.

In contrast, the alternative scenario (Residential Redevelopment Scenario) assumes that Glebe Island's current port operations are relocated and the site is redeveloped to deliver high-density residential dwellings.

To be considered a worthwhile investment, the Residential Redevelopment Scenario would need to produce a positive NPV or a BCR greater than 1.0. This would imply that the benefits and value to NSW of redeveloping Glebe Island to deliver a residential outcome would exceed the costs associated with the proposal.

However, if the Residential Redevelopment Scenario produced a negative NPV or a BCR of less than 1, this would imply that the costs of residential redevelopment outweigh the benefits to NSW, and the project would make NSW worse off.

Comparison of the Residential Redevelopment and Base Case Scenarios at Glebe Island

Item	Residential Redevelopment Scenario	Base Case Scenario
Port operations	Assumes sugar, cement and gypsum shipments are moved to Port Kembla	Assumes current operations and throughput levels continue as is for the entire evaluation period
Residential development	Assumes a best-case scenario that Glebe Island could accommodate up to 4,150 dwellings	Assumes no residential development is delivered at Glebe Island
Sydney NYE Fireworks	Assumes no barge displays occur and that only land-based displays within Sydney Harbour proceed	The fireworks display will continue to operate as is for the entire evaluation period

Key Analysis Assumptions for the Rapid CBA

Item	Assumption
Evaluation Period	40 years (2026 to 2065)
Base Year	2025
Staging	▪ 5-Year construction of the alternative port facilities ▪ Port operations to cease at Glebe Island in 2032 ▪ 2.5 years for site remediation (in line with remediation timing for Barangaroo) ▪ Residential development staged to occur following site remediation with build-out assumed to occur in 2042
Other Key Assumptions	▪ The Glebe Island site will require significant remediation for the Residential Redevelopment Scenario ▪ Demand for materials currently transported through the site is fixed ▪ Any additional supply chain costs will be retained within NSW ▪ Stage 1 of the Bays West Master Plan will occur in line with the Bays West Place Strategy (2021) and the Bays West Stage 1 Draft Master Plan (2022)

RAPID CBA RESULTS

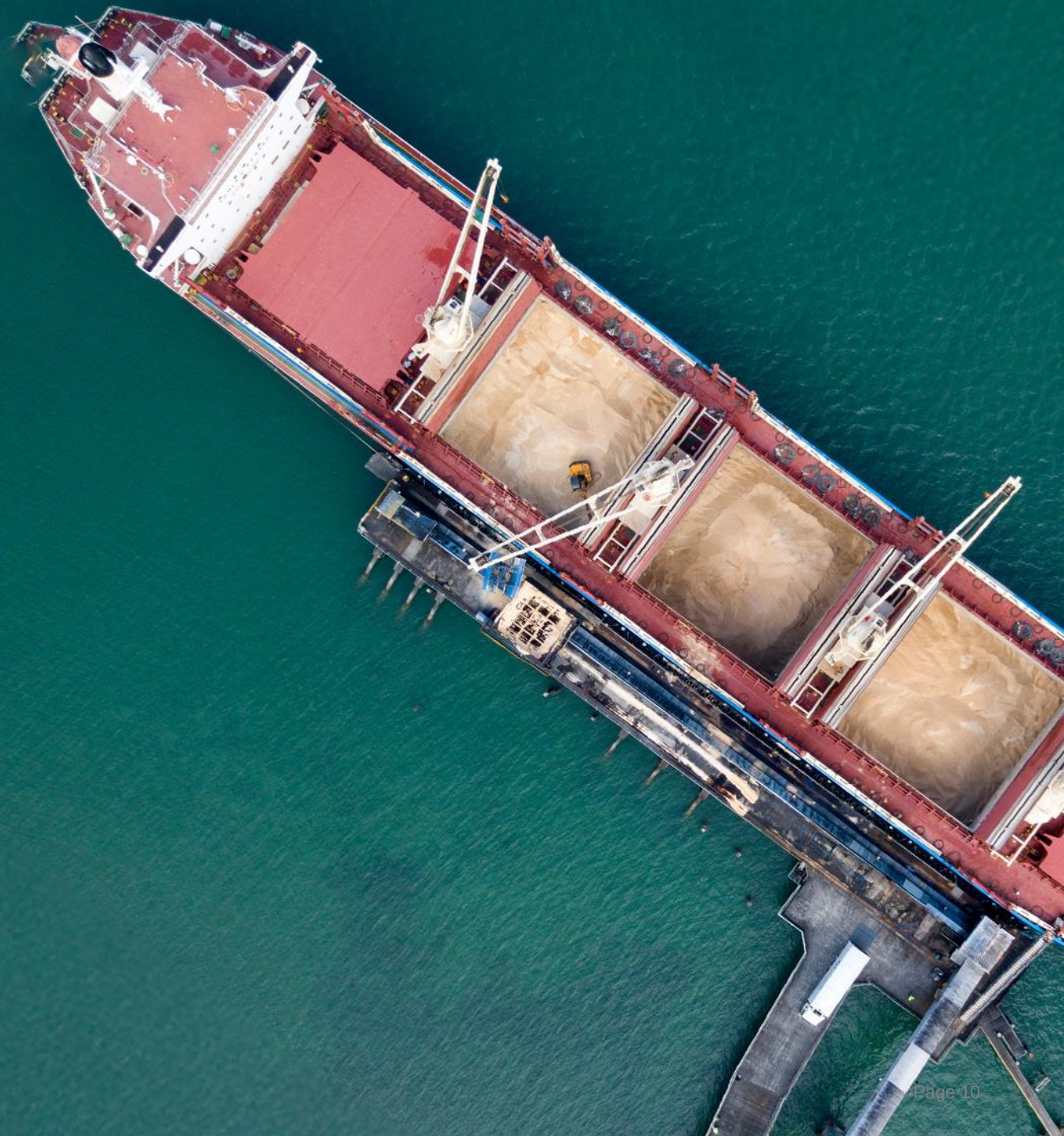
Given that a CBA evaluates costs and benefits over a long period, a discount rate is applied to all future costs and benefits to reflect their lower value in today's terms. This enables an assessment of the options based on their value today.

The discount rate aims to reflect the opportunity cost of resources (i.e. capital) to society in the long run. In other words, given that capital is limited, any investment occurs at the expense of some alternative investment. In this context, the 'return' on the investment is compared to the hypothetical return achievable by the next-best investment – this is assumed to be 5% per annum in the central case.

Urbis have undertaken a sensitivity analysis to understand how the results may vary under a 3%, 5% and 7% discount rate. Urbis have also tested how results may be impacted by changes in the level of costs and benefits, as follows:

- **Low case:** assumes a cost increase of 20% and a benefit decrease of 20%
- **High case:** assumes a cost decrease of 20% and a benefit increase of 20%.

This Rapid CBA has sought to measure the most material impacts of the Residential Redevelopment Scenario. However, changes to key assumptions and the ability to monetise additional costs and benefits with the availability of additional information may impact the quantitative results of the analysis. The qualitative impacts can be found on the following page. A more comprehensive summary of the Rapid CBA results can be found in the Appendix of this report.



RAPID CBA RESULTS

The results of the Rapid CBA indicate that retaining current working port functions at Glebe Island delivers a superior outcome to the state of NSW than the Residential Redevelopment Scenario.

Under all five cases, the NPV of redeveloping Glebe Island to a high-density residential scheme and relocating port operations to Port Kembla results in a NPV ranging between -$431.7 million and -$684.4 million. This means that under each case, the cost of residential redevelopment significantly outweighs the benefits that would be delivered.

Under all five cases, the BCR of the Residential Redevelopment Scenario ranges between 0.041 and 0.093. This means that for every dollar spent to redevelop Glebe Island into a residential scheme, only 4-9 cents of benefits would be delivered.

Rapid Cost-Benefit Analysis Results
– Sensitivity Testing of Discount Rates

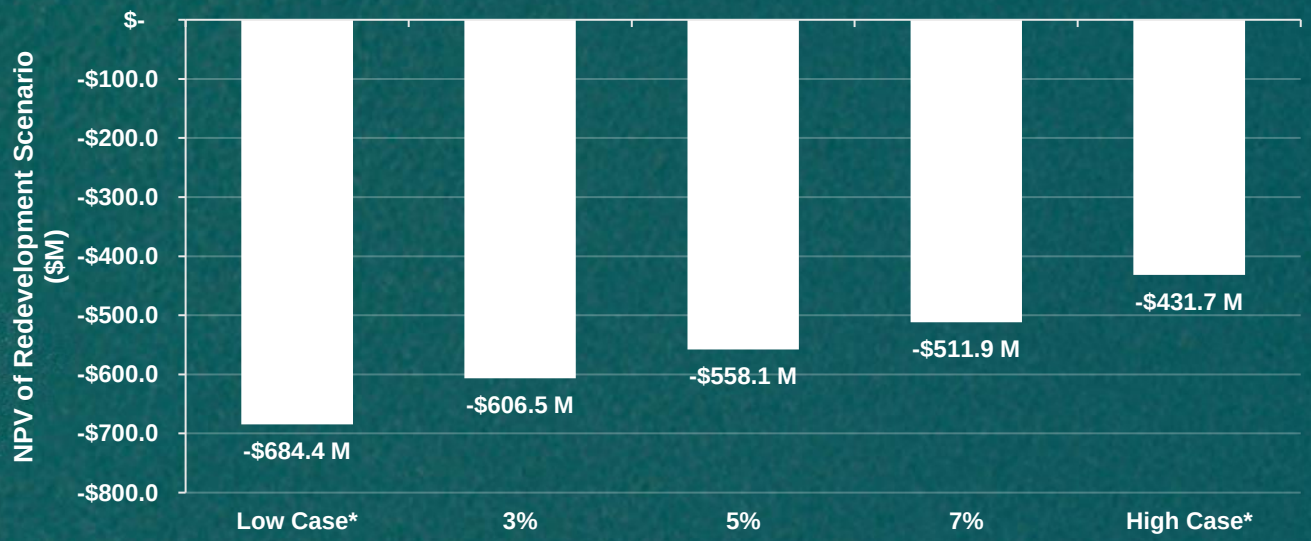
	Discount Rate (%)		
	3%	5%	7%
Total discounted costs	-	$595.0 M	-
Total discounted benefits	-	$36.9 M	-
Net Present Value (NPV)	-$606.5 M	**-$558.1 M**	-$511.9 M
Benefit-Cost Ratio	0.087	**0.062**	0.043

Rapid Cost-Benefit Analysis Results
– Sensitivity Testing of Costs and Benefits

	Low Case*	High Case*
Discount Rate (%)	5%	5%
Net Present Value (NPV)	-$684.4 M	-$431.7 M
Benefit-Cost Ratio	0.041	0.093

Note: Low Case Scenario assumes a cost increase of 20% and a benefit decrease of 20% with a social discount rate of 5%. High Case Scenario assumes a cost decrease of 20% and a benefit increase of 20% with a social discount rate of 5%.
Source: Urbis Calculations

Sensitivity Testing of the NPV



Note: Low Case Scenario assumes a cost increase of 20% and a benefit decrease of 20% with a social discount rate of 5%. High Case Scenario assumes a cost decrease of 20% and a benefit increase of 20% with a social discount rate of 5%.
Source: Urbis Calculations

QUANTIFYING THE ECONOMIC BENEFITS AND COSTS OF A RESIDENTIAL REDEVELOPMENT SCENARIO

This Rapid Cost-Benefit Analysis seeks to quantify various costs and associated benefits with the Residential Redevelopment Scenario.
The following pages provide a high-level summary of each monetised item considered within the Rapid Cost-Benefit Analysis.

The values represent the total undiscounted monetary value in constant dollar terms. As these costs and benefits will occur at different times, their value within the analysis will be impacted by discounting. Further details on the present values, along with in-depth explanations of the relevant assumptions, are detailed in the Appendix.

Item	Description	Value ($M) (Undiscounted)	Source
Economic Costs			
Construction of new port facilities	The relocation of current port operations will require new facilities to be constructed at an alternative location This analysis assumes the alternative location is Port Kembla as the best-case scenario. *Note: were Port of Newcastle adopted as the alternative location, the extent of costs and disbenefits would likely be higher, given it is further from Sydney.*	**$419.4**	Sydney's Working Port Coalition
Remediation of Glebe Island	This modelling assumes that the delivery of housing at Glebe Island will require remediation of the land.	**$371.4**	Case study approach conducted by Urbis
Economic Disbenefits			
NYE Tourism	Without access to barges and portside storage facilities, the inability to deliver the New Years Eve Fireworks at its full capacity will likely reduce international and interstate tourism spending in NSW.	**$97.9**	CBRE, Tourism Research Australia, Urbis
Supply Chain Shifts	The redirection of existing supply chain routes will increase vessel and truck emissions, operating costs, and traffic congestion.	**$770.2**	Sydney's Working Port Coalition, TfNSW Economic Parameter Values (2025), Urbis

Item	Description	Value ($M) (Undiscounted)	Source
Economic Benefits			
Higher land use value	The cessation of existing industrial port operations and conversion to residential will unlock a higher land use value. A high-level, indicative differential per square-metre has been applied between industrial and residential land uses and applied to the Glebe Island site area. *Note: the values used have not had regard to specific planning input in relation to Height of Building Limits, FSR, GFA and Development Status in determining an applicable value rate range. The provided input takes no account of the actual or possible effect on the value range of any environmental hazard including pollution, contamination, noxious emission or discharge, or the cost of, or necessity for, ceasing or cleaning up any environmental hazard.*	**$406.4**	Urbis Valuations, Australian Transport Assessment and Planning Guidelines (2021), TPG23-08 NSW Government Guide to Cost-Benefit Analysis Urbis calculations
Resident travel time improvements	Given the limited availability of developable lots that are comparable to the scale of Glebe Island in Inner Sydney, the scale of the Residential Redevelopment Scenario is likely only replicable within Sydney's greenfield areas. The net difference in travel times for working residents has therefore been quantified and attributed a monetary value.	**$359.7**	ABS Census 2016 and 2021, Transport Opinion Survey September 2024, TfNSW Economic Parameter Values (2025), Urbis
Resident carbon emissions savings	Given Glebe Island's proximity to the future Bays Metro Station, there will likely be a shift in the reliance on private vehicles to public transport. These travel mode shifts will result in carbon emissions saving compared to the Base Case, which would see the delivery of housing in greenfield areas with less direct access to public transport options.	**$87.7**	ABS Census 2016 and 2021, Transport Opinion Survey September 2024, TfNSW Economic Parameter Values (2025), Urbis
Residual value of new port facilities at Port Kembla	Urbis have modelled the cost of constructing new facilities over a 40-year period. However, the useful life of these facilities will likely exceed the economic evaluation period. The residual value measures the remaining economic value retained within the new assets after the 40-year period.	**$134.2**	Sydney's Working Port Coalition, TfNSW Economic Parameter Values (2025)

QUALITATIVE ANALYSIS OF THE RESIDENTIAL REDEVELOPMENT SCENARIO

While a rapid CBA aims to monetise the costs and benefits of the base case and alternative scenario, not all impacts are easily quantifiable in monetary terms. Additionally, given the high-level nature of this assessment, the extent to which some costs and benefits can be captured are limited.

These potential risks and opportunities offer insights into some broader social, environmental and cultural impacts that might otherwise be overlooked.

Opportunity to improve water quality and marine biodiversity

The closure of port activities at Glebe Island would likely result in improvements to water quality within Sydney Harbour. Ports can contribute to water contamination, such as from chemical runoff which, in turn, could disrupt marine habitats.

Ceasing port operations would result in fewer ships and reduced industrial activity around Sydney Harbour. This could enable the natural restoration of our marine ecosystems and unlock opportunities for recreational harbour uses for residents and visitors to enjoy.

Opportunity to increase the provision of green space for locals

By ceasing port operations in place of a residential scheme, it is implicit that the development would need to deliver green space for residents in line with planning guidelines. The delivery of additional green space would enhance the quality of life for locals by way of encouraging physical activity, encouraging socialisation and improve one's mental health. It could also deliver environmental benefits, with green spaces improving air quality and reducing urban heat island effects.

Urbis notes that the Bays West Stage 1 Master Plan envisions the delivery of open space that will connect existing green infrastructure within the broader Bays West Precinct. That is, the Base Case already aims to deliver a substantial provision of open space, which will benefit locals. Any additional green space that could be delivered under the Residential Redevelopment Scenario would provide marginal benefits to complement existing investment into the precinct's green grid.

Lost tourism attributed to other major Harbour events

Each year, Glebe Island supports the delivery of several major events in Sydney, including Vivid and the Sail Grand Prix series.

Glebe Island provides the only space in Sydney for these major events to access the Harbour. The loss of deepwater port space could result in these events being scaled back or even impact the ability for these events to proceed.

Capital expenditure to construct a new wharf, decommission existing port facilities and reinforce the concrete

There are additional costs associated with the construction of new wharf facilities in the alternative port location.

Additional capital expenditure is also required to decommission or repurpose the silos and other port facilities at Glebe Island to enable residential development.

Further expenditure is likely required to reinforce the concrete on Glebe Island to ensure it is structurally sound for residential development.

Further detail is required to monetise these costs.

Carbon emissions associated with residential redevelopment and construction of the new port facilities

There are also costs associated with carbon emissions that would be generated through construction of the residential development, which are difficult to quantify in the absence of a full scheme. Further detail is required to monetise these costs.

Increased local road congestion associated with residential development

The delivery of up to ~4,150 dwellings would substantially increase the resident population in the local area. This could lead to a substantial increase in the number of vehicles on the surrounding roads which, in turn, could lead to longer travel times and worsening traffic congestion.

SYDNEY'S HOUSING CRISIS: SHOVEL-READY SOLUTIONS AT RISK FROM DISRUPTING PORT OPERATIONS

There is an urgent need to address Sydney's critical housing shortage.

The NSW Government has flagged Glebe Island as an opportunity to deliver much-needed high-density housing for the State. However, the Port plays a unique role in Sydney's supply chain network, ensuring the efficient delivery of construction materials to metropolitan areas.

Addressing Sydney's immediate housing shortage requires shovel-ready projects. Given the significant remediation, reinforcing and utilities servicing required to commence residential construction on the site, Glebe Island cannot be relied upon as an immediate source of developable residential land.

Sydney is in no shortage of shovel-ready, developable residential projects. The biggest obstacle to the delivery of much-needed housing is the rising cost of construction.

As the last remaining deepwater working port in Sydney Harbour, Glebe Island plays a critical role in the distribution of vital construction materials across metropolitan Sydney for residential and infrastructure development.

Shifting port activities to less accessible areas, such as Port Kembla or the Port of Newcastle, would increase shipping costs and slow down trade. This could exacerbate construction costs and, in turn, housing costs, or lead to projects becoming too unfeasible to develop, further contributing to the housing crisis.

The most strategic role that Glebe Island can play in addressing the housing crisis is to continue its working harbour role and function. This will ensure the most efficient distribution of construction materials to meet demand from Sydney's residential development pipeline.

APPENDIX A
RAPID COST-BENEFIT ANALYSIS ASSUMPTIONS

RAPID COST-BENEFIT ANALYSIS: DETAILED RESULTS

Table A.1 shows the results of the Rapid Cost-Benefit Analysis.

Under the central estimate (5% discount rate), this Redevelopment Scenario has a **Net Present Value of -$558.1 million** and a **Benefit-Cost Ratio of 0.062**.

To test sensitivity of these results, a 3% and 7% discount rate were applied in line with NSW Treasury guidelines and yielded the following outcomes:

- **3% discount rate**:
  - -$606.5 million Net Present Value
  - 0.087 Benefit-Cost Ratio
- **7% discount rate:**
  - -$511.9 Net Present Value
  - 0.043 Benefit-Cost Ratio.

Additionally, a low case scenario and high case scenario were modelled to further test the sensitivity of the results.

Under the low case scenario, which assumes a 20% increase to costs and a 20% decrease to benefits, the Redevelopment Scenario achieves a **Net Present Value of -$684.4 million** and a **Benefit-Cost Ratio of 0.041**.

Under the high case scenario, which assumes a 20% decrease to costs and a 20% increases to benefits, the Redevelopment Scenario achieves a **Net Present Value of -$431.7 million** and a **Benefit-Cost Ratio of 0.093**.

The results of this rapid cost-benefit analysis indicate that the redevelopment of Glebe Island is **not** anticipated to deliver a net benefit to NSW. Retaining current working port functions at Glebe Island delivers a superior outcome to the state of NSW than the Residential Redevelopment Scenario.

Rapid Cost-Benefit Analysis Results, 2025-65 ($2025) **A.1**

	Nominal Totals (undiscounted)	Sensitivity Analysis (discounted at 3%)	Central Case (discounted at 5%)	Sensitivity Analysis (discounted at 7%)
Costs ($M)				
Construction of port facilities	$419,430,000	-	$345,888,076	-
Remediation of Glebe Island	$371,412,365	-	$249,112,059	-
Total Costs	**$790,842,365**	**-**	**$595,000,135**	**-**
Benefits ($M)				
Higher land use value	$406,417,500	-	$200,858,436	-
Resident travel time savings	$359,666,252	-	$100,063,579	-
Reduced carbon emissions associated with travel	$87,769,321	-	$24,418,506	-
Residual value of new port facilities	$134,217,600	-	$19,065,031	-
New Years Eve tourism inflows lost (Disbenefit)	($97,910,761)	-	($33,742,757)	-
Supply chain shifts (Disbenefit)	($770,181,971)	-	($273,718,012)	-
Total Benefits	**$119,977,942**	**-**	**$36,944,781**	**-**
Net Present Value ($M)	**-**	**($606,451,571)**	**($558,055,354)**	**($511,896,974)**
Benefit-Cost Ratio	***-***	***0.087***	***0.062***	***0.043***

Rapid Cost-Benefit Analysis Results – Sensitivity Analysis	**Net Present Value ($M)**	**Benefit-Cost Ratio**
Low Case Scenario (assumes a 20% increases to costs and a 20% decrease to benefits)	**($684,444,337)**	**0.041**
High Case Scenario (assumes a 20% decrease to costs and a 20% increase to benefits)	**($431,666,370)**	**0.093**

Note: Low and High Case Scenarios adopt a 5% discount rate.
Source: Urbis calculations

RAPID COST-BENEFIT ANALYSIS: KEY ASSUMPTIONS

Residential Yield Assumptions

Urbis have undertaken a high-level yield analysis to estimate the quantum of dwellings that could be delivered at Glebe Island under the Residential Redevelopment Scenario.

Table A.2 presents schemes under a low-, medium- and high-yield scenario, based on gross floorspace ratios (FSR) ranging from 1.5:1 through to 3.1:1. This reflects FSRs achieved historically in comparable large-scale developments. By adopting a gross FSR, the scenarios account for the provision of open space, roads, walkways, etc.

Urbis have adopted an average dwelling size assumption of 110sq.m per dwelling. Urbis have assumed that 90% of gross floor area (GFA) will be residential, with the remaining 10% of GFA attributed to non-residential uses, such as retail and communal facilities.

This Rapid CBA adopts the high yield of 4,149 dwellings. This represents a best-case residential scenario to represent the greatest level of benefits that could be delivered onsite under the Residential Redevelopment Scheme. Should a low or moderate yield be adopted instead, the NPV and BCR result will likely worsen.

This Rapid CBA also assumes that:

- Glebe Island will continue to remain operational until 2032 to allow for new port facilities to be constructed in an alternate location (Port Kembla) and to support the delivery of Bays West Stage 1 (including the Metro Station).
- Glebe Island will then need to be decommissioned and remediated, given the history of heavy industrial uses onsite. Urbis have allowed 2.5 years for decommissioning and remediation works.
- Residential construction onsite is assumed to occur over 10 stages. Each stage is assumed to require 3.5 years of construction, with a six-month construction commencement lag between each stage (i.e. Stage 2 commences construction six months after Stage 1, Stage 3 commences construction six months after Stage 2, etc).

These assumptions reflect a best-case scenario. It presents the minimum duration that would realistically be required for relocation, decommissioning, remediation and residential construction. Were the Port of Newcastle adopted as the alternative location, the extent of costs and disbenefits would likely be higher, given it is further from Sydney. Should the time required increase or alternative location change, the NPV and BCR result will likely worsen.

The following pages detail the monetised and non-monetised benefits and costs incorporated into the rapid cost-benefit analysis, including the nominal values (undiscounted) and data sources.

Key Assumptions Under Residential Redevelopment Scenario **A.2**

Other Key Assumptions

Scenario	Developable Area (sqm)	FSR (Gross)	GFA (sqm)	Dwelling Size (sqm)	Resi GFA %	Yield (dw)
Low	162,567	1.5:1	243,849	110	90%	1,995
Moderate	162,567	2:1	325,134	110	90%	2,660
High	162,567	3.1:1	507,120	110	90%	4,149

Source: Urbis calculations

RAPID COST-BENEFIT ANALYSIS: KEY ASSUMPTIONS

Key Assumptions **Table A.3**

Assumption	Adopted Value
Evaluation Period	40 years (2026 to 2065)
Base Year	2025 (where necessary, parameter values have been adjusted to 2025 dollars using historical CPI and Urbis House View forecasts)
Staging	▪ 5-Year construction of the alternative port facilities ▪ Port operations to cease at Glebe Island in 2032 ▪ 2.5 years for site remediation (in line with remediation timing for Barangaroo) ▪ Residential development staged to occur following site remediation with build-out assumed to occur in 2042
Other Key Assumptions	▪ The Glebe Island site will require significant remediation for the Residential Redevelopment Scenario ▪ Demand for materials currently transported through the site is fixed ▪ Any additional supply chain costs will be retained within NSW ▪ Stage 1 of the Bays West Master Plan will occur in line with the Bays West Place Strategy (2021) and the Bays West Stage 1 Draft Master Plan (2022)

RAPID COST-BENEFIT ANALYSIS: BENEFIT CATEGORIES

Rapid Cost-Benefit Analysis – Monetised Benefit Categories **Table A.4**

Benefit Category	Nominal Value ($M) (undiscounted)	Description	Source
Higher Land Use Value	$406.4	The cessation of existing industrial port operations and conversion to residential use will unlock a higher land use value. A high-level, indicative differential per square metre has been applied between industrial and residential land uses and applied to the Glebe Island site area. NSW government guidance notes that this benefit is relatively exploratory and may result in double-counts with other economic benefits. For example, a closer proximity to the city may result in higher land values than greenfield estates, of which a benefit is partially captured in travel time savings. Further interrogation of this benefit would be required under a comprehensive economic analysis. This benefit has been apportioned based on the staged delivery of housing, based on guidance from the Australian Transport Assessment and Planning Guidelines (2021). The values used have not had regard to specific planning input in relation to Height of Building Limits, FSR, GFA and Development Status in determining an applicable value rate range. The provided input takes no account of the actual or possible effect on the value range of any environmental hazard including pollution, contamination, noxious emission or discharge, or the cost of, or necessity for, ceasing or cleaning up any environmental hazard.	• Urbis Valuations, • Australian Transport Assessment and Planning Guidelines (2021), • TPG23-08 NSW Government Guide to Cost-Benefit Analysis • Urbis calculations
Resident Travel Time Improvements	$359.7 ($3,367 per dwelling annually)	Given the limited availability of developable lots that are comparable to the scale of Glebe Island in Inner Sydney, the scale of the Residential Redevelopment Scenario is likely only replicable within Sydney's greenfield areas. The net difference in travel times for working residents has therefore been quantified and attributed a monetary value. Data on resident workers between the 2016 and 2021 ABS Census, work-from-home patterns from the Institute of Transport and Logistics Studies' Transport Opinion Survey (September 2024), and the Transport for NSW Economic Parameter Values (2025) were used to determine the per-dwelling benefit. This was used to calculate the travel time difference between a greenfield location and Glebe Island.	• ABS Census 2016 and 2021 • Transport Opinion Survey September 2024 • TfNSW Economic Parameter Values (2025) • Urbis calculations
Resident Carbon Savings	$87.7 ($821.5 per dwelling annually)	Given Glebe Island's proximity to the future Bays Metro Station, there will likely be a shift in the reliance on private vehicles to public transport. These travel mode shifts will result in carbon emissions saving compared to the Base Case, which would see the delivery of housing in greenfield areas with less direct access to public transport options. Given the impacts of COVID-19 on 2021 Census data, Journey-to-Work data from the 2016 ABS Census was used to understand travel modes to work. Total annual travel distances were then calculated and distributed across the various travel modes (i.e. private vehicle, train, bus, ferry). Active transport was excluded, and values are therefore considered conservative. TfNSW Economic Parameter values were applied for passenger kilometres travelled annually for each travel mode. The difference between greenfield residential and Glebe Island were applied to the number of resident workers estimated to be residing onsite annually.	• ABS Census 2016 and 2021 • Transport Opinion Survey September 2024 • TfNSW Economic Parameter Values (2025) • Urbis calculations

RAPID COST-BENEFIT ANALYSIS – BENEFIT CATEGORIES CONT.

Benefit Category	Nominal Value ($M) (undiscounted)	Description	Source
Residual value of new port facilities	$134.2	Urbis have modelled the cost of constructing new port facilities in an alternative location over a 40-year period. However, the useful life of these facilities will likely exceed the economic evaluation period. The residual value measures the remaining economic value retained within these assets after the 40-year period. The useful life of the new asset is assumed to be 50 years, with depreciation beginning in 2032 (i.e. the first year of operation of the new assets). TfNSW recommends that the residual value is calculated using a straight-line depreciation method. Capital costs were adopted from data provided by Sydney's Working Port Coalition.	• Sydney's Working Port Coalition • TfNSW Economic Parameter Values (2025)
NYE Tourism [Disbenefit]	$97.9 ($2.97 million annually)	Without access to barges and portside storage facilities, it is assumed that the New Years Eve Fireworks would be delivered at a reduced capacity, likely resulting in reduced tourism spending in NSW. CBRE's *Needle Movers: The Top Events Driving Australia Hotel Demand* report indicates that the 2023 New Years Eve fireworks resulted in a 129% uplift in hotel revenue. Based on Average Daily Rates, this results in a $51.0 million uplift to hotel room revenue. An internal Urbis profit assumption was then applied to isolate the additional profits potentially resulting from Sydney's New Years Eve fireworks display. According to Tourism Research Australia, in the December 2023 quarter, international and interstate visitors to the Sydney Inner City SA3 accounted for 91% of visitor nights spent in commercial accommodation. This was applied to the additional profit estimate to quantify the out-of-state injection into the NSW economy. Urbis assumed that 20% of this uplift is attributed to water-based fireworks displays, enabled solely by access to barges on Glebe Island. The analysis assumes that land-based fireworks could still proceed. This would result in an annual disbenefit value of $2.97 million from 2032 onwards.	• CBRE, 2024 • Tourism Research Australia • Urbis Calculations
Supply Chain Shifts [Disbenefit]	$770.2 ($22.6 million annually)	The redirection of existing supply chain routes would increase the kilometers required to be travelled to reach Sydney for materials transported through Glebe Island. This would result in an increase in vessel and truck emissions, operating costs and traffic congestion. The analysis assumes that the total tonnage of cement, gypsum and sugar material supplied and demanded remains constant over the economic evaluation period. Using Google Maps, the additional distance per vehicle trip to Central Sydney was calculated from Port Kembla, where the land journey is assumed to begin under the Redevelopment Scenario, relative to Glebe Island. The number of vehicles required annually to deliver the amount of each material was provided by Sydney's Working Port Coalition. The economic impact of these additional annual kilometres were calculated using the Transport for NSW Economic Parameter Values (2024) for carbon, congestion, air pollution, and additional vehicle costs in vehicle kilometres travelled, using values for B-doubles, or articulated trucks where this was not applicable. The annual carbon cost associated with additional vessel usage was also estimated and applied to these totals, calculated using the relationship between passenger rail and passenger ferry emissions and applying this ratio to the freight rail emissions parameter, as there are no freight vessel carbon emission values provided. Additional vessel costs were not able to be quantified.	• Sydney's Working Port Coalition • TfNSW Economic Parameter Values (2025)

RAPID COST-BENEFIT ANALYSIS – BENEFIT CATEGORIES CONT.

Rapid Cost-Benefit Analysis – Non-Monetised Benefit Categories **Table A.5**

Benefit Category	Description
Improved water quality in Sydney Harbour - **Blue space amenity** - **Biodiversity benefits**	The closure of port activities at Glebe Island would likely result in improvements to water quality within Sydney Harbour. Ports can contribute to water contamination, such as from chemical runoff which, in turn, could disrupt marine habitats. Ceasing port operations would result in fewer ships and reduced industrial activity around Sydney Harbour. This could enable the natural restoration of our marine ecosystems and unlock opportunities for recreational harbour uses for residents and visitors to enjoy. Further detail is required to monetise these benefits.
Delivery of green and blue space amenity	By ceasing port operations in place of a residential scheme, it is implicit that the development would need to deliver green space for residents in line with planning guidelines and building on the existing Bays Precinct Vision. The delivery of additional green space would enhance the quality of life for locals by way of encouraging physical activity, encourage socialisation and improve one's mental health. It could also deliver environmental benefits, with green spaces improving air quality and reducing urban heat island effects. Urbis would require a detailed scheme to monetise these benefits.
Lost tourism attributed to other major Harbour events [Disbenefit]	Each year, Glebe Island supports the delivery of several major events in Sydney, including Vivid and the Sail Grand Prix series. The loss of deepwater port space could result in these events being scaled back or even impact the ability for these events to proceed.

RAPID COST-BENEFIT ANALYSIS – COST CATEGORIES

Rapid Cost-Benefit Analysis – Monetised Cost Categories **Table A.6**

Cost Category	Nominal Value (undiscounted)	Description	Source
Construction of Port Facilities	$419,430,000	The discontinuation of port operations at Glebe Island will require existing facilities for cement, gypsum and sugar operations to be redeveloped elsewhere. This analysis assumes the alternative location is Port Kembla. This represents a best-case scenario, given the shorter distance of Port Kembla to Sydney, relative to the Port of Newcastle. Redevelopment costs were provided by Sydney's Working Port Coalition. It is assumed that impacted companies will require 5 years to find a suitable alternative site, secure planning approvals and complete construction of the new facilities, with costs apportioned equally over these years.	• Sydney's Working Port Coalition
Remediation of Glebe Island	$371,412,365	It is assumed that Glebe Island will require remediation works prior to residential construction, given the heavy industrial uses at the site historically. A case study approach was used to estimate remediation rates (per sq.m) at other sites such as Barangaroo, White Bay Power Station and Sydney Olympic Park. Barangaroo was considered the most comparable benchmark, given its proximity to Glebe Island, location on Sydney's harbour, historical industrial uses and relatively recent cost estimates (2018). White Bay Power Station was considered less comparable, given the remediation works related to a building as opposed to land. Sydney Olympic Park was also considered less comparable, given the outdated remediation cost estimates (pre-2000) and potential economies-of-scale achievable for the larger site area of 160 hectares. Remediation costs for Barangaroo, as indicated by the NSW Auditor General, were used to benchmark potential remediation costs at Glebe Island. The estimated cost to remediate Barangaroo was $400 million ($2018). A per sq.m remediation cost rate was calculated, escalated to $2025 and applied to the Glebe Island site area. Estimated costs were apportioned over a 2.5-year remediation time frame.	• Case study approach based on Barangaroo remediation costs. • Office of the Auditor-General NSW (2018)

RAPID COST-BENEFIT ANALYSIS – COST CATEGORIES CONT.

Rapid Cost-Benefit Analysis – Non-Monetised Cost Categories **Table A.7**

Cost Category	Description
Expenditure required to decommission and demolish existing port facilities	Insufficient data is available to estimate the costs associated with decommissioning and demolishing the existing port infrastructure. Further detail is required to monetise these costs.
Expenditure required to reinforce the cement slabs at Glebe Island	Insufficient data is available to estimate the costs associated with reinforcing the cement slabs at Glebe Island to ensure they are structurally sound for residential redevelopment.
Expenditure required to construct new wharf facilities in the alternative port location	Insufficient data is available to estimate the costs associated with constructing new wharf facilities in the alternative port location.
Carbon emissions associated with residential development and construction of the new port facilities	There are also costs associated with carbon emissions that would be generated through construction of the residential development, which are difficult to quantify in the absence of a full scheme. Further detail is required to monetise these costs.
Increased local road congestion associated with residential development	The delivery of up to ~4,150 dwellings would substantially increase the resident population in the local area. This could lead to a substantial increase in the number of vehicles on the surrounding roads which, in turn, could lead to longer travel times and worsening traffic congestion.

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