NORTH SYDNEY COUNCIL

ASSET MANAGEMENT PLAN

BUS SHELTERS 2022-2032

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Bus Shelters

Executive Summary

Located across the North Sydney Council LGA are 66 Bus Shelters. These are comprised of two styles of shelter. In 2014 North Sydney Council Adopted a new Public Domain Style Manual which recommended a modern style of Bus Shelter comprised of steel and class materials. The new style of Bus Shelter will replace the old timber style of shelter which are now being phased out. The old timber style shelter is very maintenance intensive and does not meet modern user requirements or accessibility codes.

A valuation on Bus Shelters within North Sydney Council was undertaken in 2021. The 2021 valuation data was used as the basis for this Asset Management Plan.

There are 66 Bus Shelters in total. Of these:

- 55 are of the North Sydney Council Style Timber (NSC Style Timber) bus shelter.
- 11 JCDecaux Bus Shelters.

Overall some 84% of the portfolio is in good to average condition (1-3) with some 16% in poor to very poor condition (4-5).

A Risk rating was assigned to each bus shelter. Overall 84% of the portfolio has a low to medium risk rating and 16% has a high to very high risk rating.

The total Replacement Value of the portfolio is $4,486,083 as at 30 June 2021. The values are shown in the Table below.

Table 1: Bus Shelters – Summary table

Asset Category	Number of Shelters	Replacement Value (2021)	Accumulated Depreciation (2021)	Fair Value (2021)	Depreciation Expense
Bus Shelters	66	$4,486,083	$1,783,214	$2,702,869	$88,814

The following table provides a summary of the quantities and replacement values for each bus shelter type. The portfolio is dominated by NSC Style Timber Bus Shelters.

Table 2: Bus Shelters – Typology

Bus Shelter Type	Count of Bus Shelters	Sum of Replacement Costs
JCDecaux	11	$722,387
NSC Style Timber	55	$3,763,696
Grand Total	**66**	**$4,486,083**

Note: *The NSC Timber Style Shelter is being phased out and will be replaced by the JC Decaux Style Shelters.*

Bus Shelters – Future Demand

Drivers affecting demand for Bus Shelters include things such as population change, regulation changes – new development, community expectations (Public Safety), technological changes, economic factors and environmental factors.

In March 2022, Council has entered into a contract with JC Decaux to supply at no cost to Council 26 new Bus Shelters to replace the old Timber Style Shelters.

Bus Shelters – Levels of Customer Service

Service levels are defined service levels in two terms, customer levels of service and technical levels of service. These are supplemented by organisational measures.

Customer Levels of Service measure how the customer receives the service and whether value to the customer is provided.

Customer levels of service measures used in the asset management plan are:

Quality How good is the service … *what is the condition or quality of the service?*

Function Is it suitable for its intended purpose …. *Is it the right service?*

Capacity/Use Is the service over or under used … *do we need more or less of these assets?*

The current and expected customer service levels are detailed in Table 3.

Table 3: Bus Shelters – Levels of Customer Service

Service Attribute	Expectation	Performance Measure Used	Current Performance	Desired Position in 10 Years
Quality	Bus Shelters are well maintained.	Percentage of Bus Shelters in 'very good', 'good' (1, 2) condition and Percentage 'Fair', 'poor' or 'very poor' (3, 4, 5) Condition.	65.3% of Bus Shelters in 'very good' or 'good' (1, 2) condition. 34.7% of Bus Shelters in 'Fair', 'poor' or 'very poor' (3, 4, 5) Condition.	Maintain – Condition 1-2 Improve and replace Condition 3-4-5
Function	Standard Bus Shelters are constructed to meet Public Domain style.	Percentage of Bus Shelters meeting current Public Domain style.	16.7% of Bus Shelters meet current Public Domain style.	Improve
Capacity and Use	Number of Bus Shelters required is appropriate.	Number of additional Bus Shelters required.	Additional Bus Shelters locations to be identified.	Improve

Bus Shelters – Levels of Technical Service

Technical Levels of Service - Supporting the customer service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities to best achieve the desired customer outcomes and demonstrate effective performance.

Technical service measures are linked to the activities and annual budgets covering:

- Operations – the regular activities to provide services (e.g. cleaning, inspections, etc).
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. Bus Shelter repair – painting, minor works).
- Renewal – the activities that return the service capability of an asset up to that which it had originally (e.g. Bus shelter replacement and or bus shelter component replacement).
- Upgrade/New – the activities to provide a higher level of service (e.g. replacing timber bus shelter with Public Domain style specification or additional new Bus Shelters).

Table 4 shows the technical levels of service expected to be provided for Bus Shelters. The 'Desired' position in the table documents the position being recommended in this AM Plan.

Table 4: Bus shelter – Technical Levels of Service

Service Attribute	Service Activity Objective	Activity Measure Process	Current Performance	Desired for Optimum Lifecycle Cost
Operations	Undertake network inspections to monitor condition	Network inspections to monitor condition	Network inspected in 2019	Network inspected every 5 years
Maintenance	Reactive service Requests completed in a timely manner or made safe.	Respond to complaints.	Minor repairs undertaken in accordance with Maintenance Management System	Minor repairs undertaken in accordance with Maintenance Management Delivery System.
Renewal	Maintain existing assets to a satisfactory condition	Percentage of Bus Shelters in 'fair', 'poor' or 'very poor' (3, 4, 5) Condition.	34.5% of Bus Shelters in 'fair', 'poor' or 'very poor' (3, 4, 5) Condition.	Improve or replace
Upgrade	Standard Bus Shelters are upgraded to public domain style shelters where practical.	Percentage of Bus Shelters upgraded to Public Domain style where practical.	16.7% of Bus Shelters meet current Public Domain style.	Maintain
New	Satisfactory provision of Bus Shelters.	New Bus Shelters provided as required.	No additional Bus Shelters identified as being required	No additional Bus Shelters identified as being required

Bus shelter – Condition

The condition of Council's Bus Shelters was surveyed in 2019 by Consultants, Rapid Map Services Pty Ltd in conjunction with Asset & Facilities Management Consulting Pty Ltd. The following condition criteria was used.

Table 5: Bus Shelter Condition Criteria

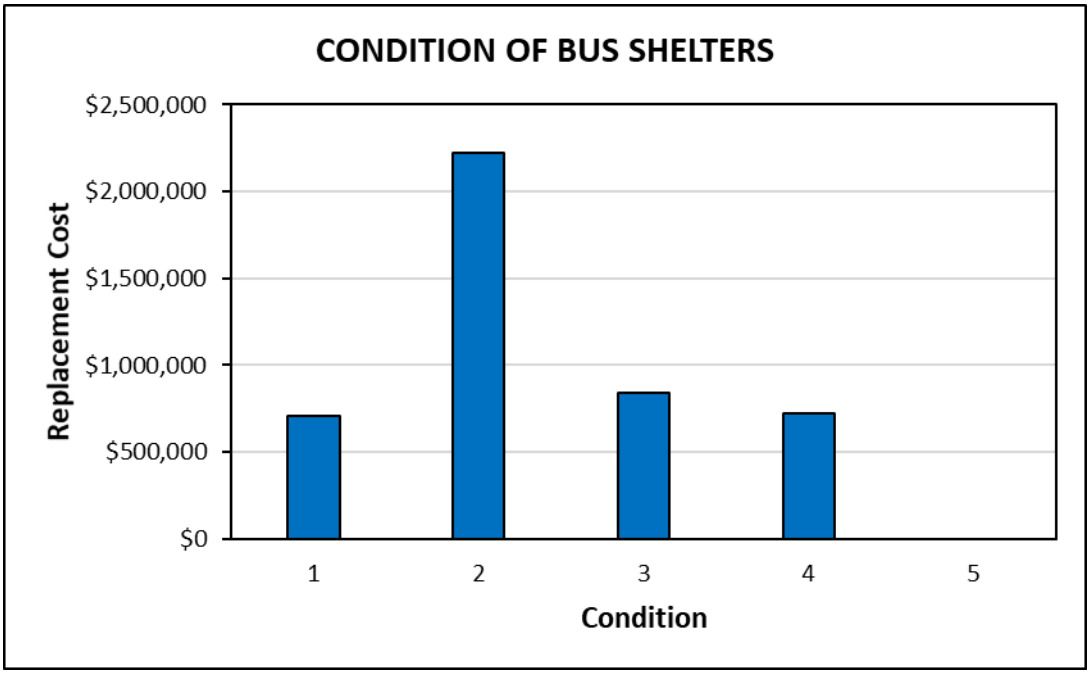
Grade	Condition	Description
1	Very Good	Sound shelter constructed to current standards, well maintained with no defects. **No work required**
2	Good	As grade 1 but not constructed to current standards or showing minor wear, tear and deterioration. E.g. weathering of timber, staining of fastenings but no decay of timber or corrosion of steel. Deterioration has no significant impact on, safety & appearance of the shelter. **Only minor work required**
3	Fair	Shelter functionally sound, but appearance affected by minor defects e.g. vandalism, slight decay of timber, and mild corrosion of fastenings. Deterioration beginning to affect the stability, functionality or appearance of the shelter. **Some work required**
4	Poor	Shelter functioning but with problems due to significant defects e.g. rotting/ splitting of timber, corrosion, loosening of fastenings, causing a marked deterioration in stability, functionality or appearance. **Some replacement or rehabilitation needed within 1 year**
5	Very Poor	Shelter has serious problems and has failed or are about to fail in the near future, causing unacceptable deterioration in stability, safety and appearance. **Urgent replacement/ rehabilitation required**

The Table below shows the Replacement Cost for each of the condition scores.

Table 6: Bus Shelter Condition Results – Overall

CONDITION OF BUS SHELTERS			
Condition	**Number of Bus Shelters**	**Replacement Cost**	**% Condition (based on known data and cost)**
1 (Very Good)	10	$706,083	15.8%
2 (Good)	30	$2,220,000	49.5%
3 (Fair)	14	$840,000	18.7%
4 (poor)	12	$720,000	16.0%
5 (Very Poor)	0	$0	0.0%
Total	**66**	**$4,486,083**	**100.0%**

The Graph below shows the condition of Bus Shelter assets over the entire network in terms of replacement cost.



Bus Shelters – Review of Useful Lives

There is no specific guidance in the IPWEA 2017 Practice Note – "Useful Life of Infrastructure" on Bus Shelters. The IPWEA Practice Note does, however, provide a guideline on minor building structures as follows:

Notes from IPWEA 2017 Practice Note – "Useful Life of Infrastructure"

BUILDINGS - MINOR

Component	Low rates' description	High rates' description	Unit ID	Useful Lives		
				Std	Low	High
Carport	Conc slab, timber frm, galv steel roof (kitset)	Higher quality including Colour steel	m2	50	40	60
Covered Ways	.4mm Endura corrugated	.9mm aluminium trough 300 profile	m2	55	45	70
Garage	6x3.5m Conc, timber frame, galv steel clad	Ditto, brick veneer, conc tile roof	m2	50	40	60

The useful lives of all types of Bus Shelters assets were reviewed by Australis Pty Ltd and are shown in the following Table.

Bus Shelter Type	Reviewed Useful Life (years)
NSC Style Timber	50
JCDecaux	50

Based on the reviewed useful lives, the Depreciation is as follows:

Capital funding to maintain a renewal ratio of 1	
	Annual Depreciation
Bus Shelters	**$88,814**

A budget of $88,814 is required on average over the long term to maintain the condition of Council's Bus Shelter network, noting that fluctuations in renewal requirements in the medium term.

Bus Shelters – Funding Strategy

The Asset Renewal Funding Ratio is the most important indicator. It compares funding with depreciation. An Asset Renewal Funding Ratio of 1 or greater sustained over the long term indicates the optimal renewal and replacement of assets.

The forecast for the 2021 Depreciation (or Long Term Average Annual Asset Consumption) is $88,814. Therefore, an annual average capital renewal funding of $88,814 (2021 dollars) will achieve an Asset Renewal Funding Ratio of 1.

The cost to fully replace assets identified by Consultants, Rapid Map Services Pty Ltd in conjunction with Asset & Facilities Management Consulting Pty Ltd, in condition 4 and 5 as well as the cost to replace the condition 3 assets which will become condition 4 over the next 10 is $672,000. This is an average annual cost of $67,200 which is less than the $88,814 Depreciation Expense and is less than the average annual forecast budget of $125,000. With further investigation and detailed design it is hoped that alternate and lesser cost solutions may be possible to maintain Bus Shelter assets at an optimal level.

Bus Shelters – Capital works

Replacement of a Bus Shelters is assumed to be a Capital works project.

The ranking criteria used to determine priority of identified renewal and replacement proposals is detailed in Table 7. A priority for action of 1 to 5 has been assigned to each bus shelter requiring capital works as described in the following table.

Bus Shelters – Managing the Risks

There are risks associated with providing and maintaining Bus Shelters are primarily as follows:

- Sudden failure of Bus Shelters – damage due to vehicular impact – causing property damage – public safety hazards, injury or death.

The following risk response table was used to identify those Bus Shelters requiring action within the next 10 years.

Table 7: Bus Shelters – Risk Response Table

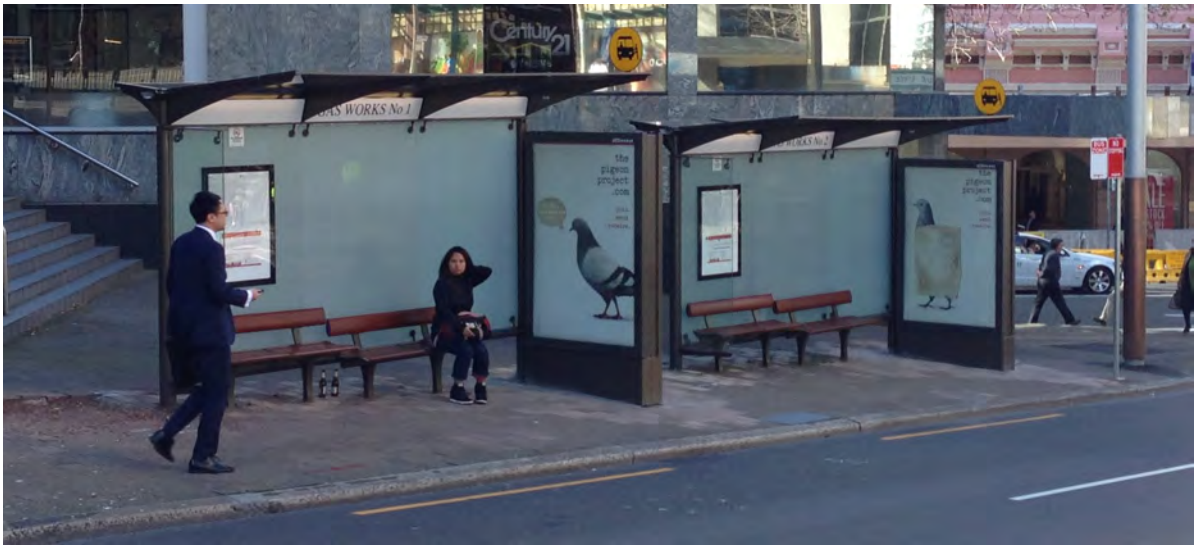
Level of Risk		Category	Action Required	Time frame for repairs, upgrade or replacement
VH	Very High Risk	5	Immediate corrective action	1-2 Years
H	High Risk	4	Prioritised action required	2-10 Years
M	Medium Risk	3	Planned action required	4-10 Years
L	Low Risk	2	Manage by routine procedures	Inspections 1-2 years
New	No Risk	1	None	None

Consideration has been given to each Bus Shelter, whether to replace the Bus shelter or perform maintenance on it.

Bus Shelters that have a **Very High or High** risk rating were considered to need replacement within the 1-10 year forecast period.

Bus Shelters with a **Medium** risk rating were also considered needing replacement within the 4-10 year forecast period.

Examples of NSC style Bus Shelters in the North Sydney LGA



Examples of Public Domain Style Bus Shelters in the North Sydney LGA

Table 8: Bus Shelters – Capital renewal Priorities based on Condition and Risk Rating

Risk Matrix - Bus Shelters (Condition and Risk Rating)					
Likelihood of bus shelter failing (L) Refer to Table 5. Condition Criteria	Bus Shelters (No of Bus Shelters)				
	Road Hierarchy	Lane	Local Road	Collector	State/ Regional Road
	Park Hierarchy	Local	District	Regional	
	Priority	d	c	b	a
Condition 1 – Very Good (15.8%)	5	N/A	N/A	5	6
Condition 2 - Good (49.5%)	4	N/A	2	5	6
Condition 3 – Fair (18.7%)	3	N/A	7	9	9
Condition 4 – Poor (16%)	2	N/A	6	4	7
Condition 5 – Very Poor (0%)	1	N/A	N/A	N/A	N/A

(Note: Also Refer to Table 6)

Note: This table has been based on the 2021 bus shelter valuation data.

Note: The priority in which works are done could vary depending on associated works such as streetscape projects.

Note: Factors which are used to determine the priority include 'Road Hierarchy' and 'Park Hierarchy'. The most critical factor is used to determine the priority.

Priority Bus Shelters

The 2021 bus shelter valuation data was used to determine the priority bus shelter projects.

It should be noted that this may vary based on other criteria, including:

- Damage
- Streetscape
- Function

Bus Shelters – Maintenance

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again, e.g. Cleaning, minor repairs.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating.

Current maintenance expenditure levels are considered to be inadequate to meet projected service levels.

Over the longer term future operations and maintenance expenditure is forecast to be steady as the asset stock is not forecast to increase. The following table summarises the prioritised capital and maintenance works.

Bus Shelters – Prioritised Expenditure Forecast

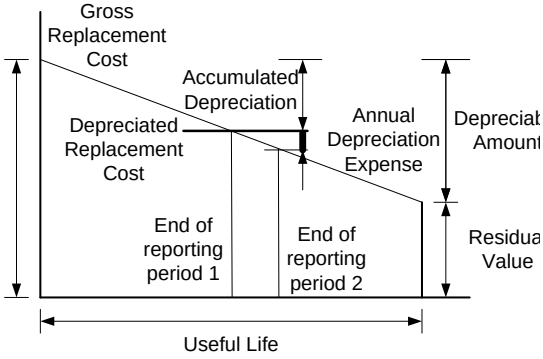
Table 9: Bus Shelters – Prioritised Expenditure Forecast – 10 years FY2023-FY2032

Year		Priority	Capital Costs	Maintenance Costs	Total Cost
1	2022/23	1b	$125,000	$59,391	$184,391
2	2023/24	1c to 2a	$125,000	$60,822	$185,822
3	2024/25	2a	$125,000	$62,293	$187,293
4-10	2025/32	2a to 2c	$875,000	$510,977	$1,385,977
Works Identified	2025/32	2c	$135,203		$135,203
Grand Total			**$1,385,203**	**$693,483**	**$2,078,686**

In summary the value of bus shelter assets in the Table below is based on 2021 valuation data.

Table 10: Bus Shelters – Valuation

VALUATION – BUS SHELTERS				
Asset Category	**Replacement Value (2021)**	**Accumulated Depreciation (2021)**	**Fair Value (2021)**	**Depreciation Expense (Annual)**
Bus Shelters	$4,486,083	$1,783,214	$2,702,869	$88,814
TOTAL	**$4,486,083**	**$1,783,214**	**$2,702,869**	**$88,814**



Bus Shelters – Valuation Forecast

Asset values (Bus Shelters) are forecast to remain steady. It is forecast that no additional assets are expected to be added to the asset stock from new construction and acquisition by Council or from assets constructed by land developers or other assets donated to Council.

Bus Shelters – Key Assumptions – Financial Forecasts

Key assumptions made in this asset management plan for Bus Shelters are:

Table 11: Key Assumptions made in AM Plan and Risks of Change

Key Assumptions	Risks of Change to Assumptions
Useful Lives of Bus Shelters	Low risk
Rate of deterioration	Low risk

Bus Shelters – Creation / Acquisition / Upgrade Program

New works are those that create a new asset that did not previously exist, or works which will upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost. No new assets are currently identified.

Bus Shelters – Disposal Plan

The shelter asset at BS021 - Nicholson Street, has been identified for disposal.

Bus Shelters – Forecast reliability and confidence

The estimated confidence level and reliability of data used in this AMP is considered to be reliable as the data is based on a detailed condition report on Bus Shelters.

Bus Shelters – Improvement Plan

The improvement plan is shown in the table below.

Task No	Task	Responsibility	Resources Required	Timeline
1	Research the Useful Life of Bus Shelters	EPS	Staff Time	2024

Bus Shelters – Monitoring and Review Procedures

This Asset Management Plan will be reviewed during annual budget planning processes and amended to show any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The Asset Management Plan has a life of 4 years and is due for complete revision and updating within 1 year of each Council election.

Bus Shelters – Renewal and Replacement Program

Renewal and replacement expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is considered to be an upgrade/expansion or new work expenditure resulting in additional future operations and maintenance costs.

Bus shelter assets requiring renewal/replacement have been identified by ongoing routine inspection.

Bus Shelters – Funding Scenarios

The Long Term Financial Plan includes three scenarios, all of which maintain current services levels but propose differing levels of capital expenditure on the renewal of Council's ageing infrastructure assets.

In summary:

- Pessimistic Scenario - This Scenario results in a decline in operating results and deficits in the later years.

- Optimistic Scenario - This Scenario results in improvements in operating results for the life of the plan.
- Planned Scenario - This Scenario results modest surplus operating results for the life of the plan.

Table 12: Funding Scenarios – Bus Shelters – North Sydney Councils 10 Year Plan

Scenario	Capital Funding Level Required Per Annum	10 Year Plan $ Total
Scenario 1.	$125,000/year	**$1,250,000**
Scenario 2.	$125,000/year	**$1,250,000**
Scenario 3.	$125,000/year	**$1,250,000**

Note: *These Scenarios are based on the 10-year Long Term Financial Plan.*

Bus Shelters – Service and Risk Tradeoffs

The decisions made in adopting this AM Plan are based on the objective to achieve the optimum benefits from the available resources.

Service trade-off

If this funding Scenario is adopted, then the Level of Service will be maintained.

Risk trade-off

If this funding Scenario is adopted, then there is less risk of a bus shelter failure.

Bus Shelters – Renewal and Replacement Program – FY2023-FY2032 (10 Year Plan)

Council's projected 10 year Capital Renewal Program is shown in the Tables 13 to 17 below. It is based on the funding required to replace bus shelter assets identified by the 2021 valuation.

It should be noted that Bus Shelters may also be replaced based on other criteria including:

- Damage
- Streetscape projects
- Function

Project priorities may also be subject to change due to accelerated deterioration, sudden failure or finalization of detailed designs and project costings.

Table 13: Bus Shelter – Renewal and Replacement Program

Priority Projects 2022/23 (Year 1)

Replace Year	Priority	Bus Shelter ID	Location	Risk Rating / Category	Condition	Capital Cost
2022/23	1b	BS026	EUROKA - Opp 2B Union Street, McMahons Point	Very High (5)	Very Poor	$62,500
2022/23	1b	BS041	EATON - Opp 1 Rawson Street, Neutral Bay NSW	Very High (5)	Very Poor	$62,500
					Total	**$125,000**

Note: *These Cost estimates do not include inflation / building escalations costs which can vary between 3-8% each year.*

Table 14: Bus Shelter – Renewal and Replacement Program

Priority Projects 2023/24 (Year 2)

Replace Year	Priority	Bus Shelter ID	Location	Risk Rating / Category	Condition	Capital Cost
2023/24	1c	BS025	BERRYS BAY - Opp 20 Woolcott Street, Waverton	Very High (5)	Very Poor	$62,500
2023/24	2a	BS035	CROWIE - 365 Pacific Highway, Crows Nest	High (4)	Poor	$62,500
					Total	**$125,000**

Note: *These Cost estimates do not include inflation / building escalations costs which can vary between 3-8% each year.*

Table 15: Bus Shelter – Renewal and Replacement Program

Priority Projects 2024/25 (Year 3)

Replace Year	Priority	Bus Shelter ID	Location	Risk Rating / Category	Condition	Capital Cost
2024/25	2a	BS055	JAMES MILSON - 54 High Street, North Sydney	High (4)	Poor	$62,500
2024/25	2a	BS002	CAMBRIDGE - Int Miller Street & Cambridge Street, Cammeray	High (4)	Poor	$62,500
					Total	**$125,000**

Note: *These Cost estimates do not include inflation / building escalations costs which can vary between 3-8% each year.*

Table 16: Bus Shelters – Renewal and Replacement Program

Priority Projects 2025/32 (Year 4-10)

Replace Year	Priority	Bus Shelter ID	Location	Risk Rating / Category	Condition	Capital Cost
2025/32	2a	BS006	MONTE - 196 Miller Street, North Sydney	High (4)	Poor	$62,500
2025/32	2a	BS012	CRICKETERS - 30 Murdoch Street, Cremorne Point	High (4)	Poor	$62,500
2025/32	2a	BS032	- Phillips Street, Adj 56 Ben Boyd Road, Neutral Bay	High (4)	Poor	$62,500
2025/32	2a	BS052	ALL SAINTS - Opp 13 Carter Street, Cammeray	High (4)	Poor	$62,500
2025/32	2a	BS044	BRADFIELD - High Street Reserve, 47 High Street, North Sydney	High (4)	Poor	$62,500
2025/32	2a	BS049	BARDSLEY - Falcon Street, 7 Bardsley Gardens, North Sydney	High (4)	Poor	$62,500
2025/32	2a	BS067	BENELONG - 81 Gerard Street, Cremorne	High (4)	Poor	$62,500
2025/32	2a	BS003	ANZAC - 331 Miller Street, Cammeray	High (4)	Poor	$62,500
2025/32	2a	BS005	McLAREN - 225 Miller Street, North Sydney	High (4)	Poor	$62,500
2025/32	2b	BS017	THE FALLS - Opp 14 Grafton Street, Cremorne	High (4)	Poor	$62,500
2025/32	2b	BS030	LINDSAY - 131 Ben Boyd Road, Neutral Bay	High (4)	Poor	$62,500
2025/32	2b	BS046	SERVICES CLUB - Bradfield Park, Fitzroy Street, Kirribilli	High (4)	Poor	$62,500
2025/32	2b	BS064	CREMORNE POINT - Cremorne Point Wharf, Milson Road, Cremorne Point	High (4)	Poor	$62,500
2025/32	2c	BS018	CHURCHILL - Carter St, Adj 64 Cammeray Road	High (4)	Poor	$62,500
					Total	**$875,000**

Note: *These Cost estimates do not include inflation / building escalations costs which can vary between 3-8% each year.*

Table 17: Bus Shelters – Renewal and Replacement Program

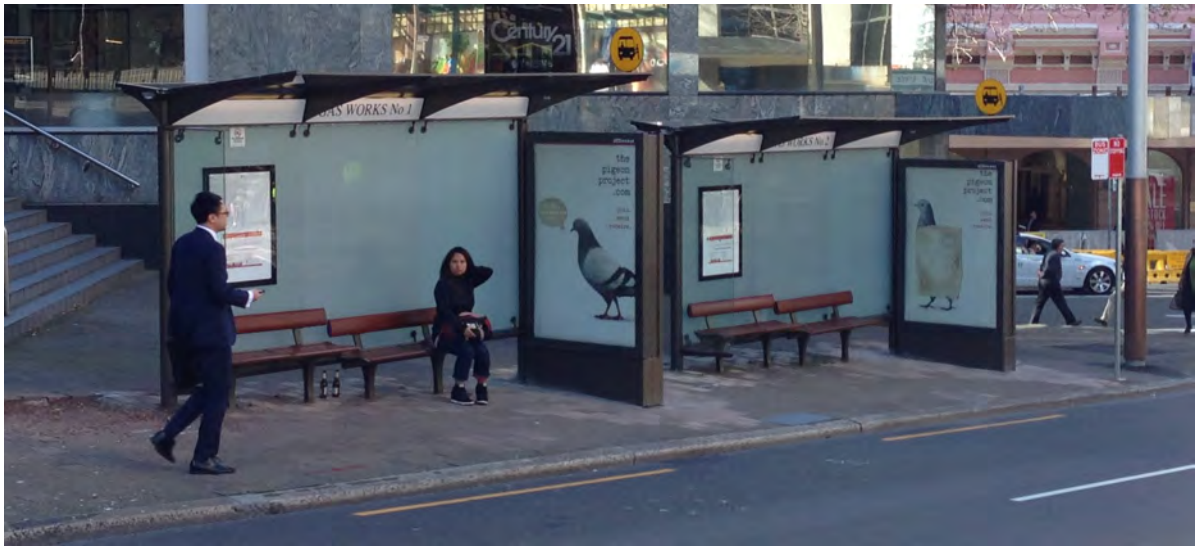
Works Identified – Years 2025 - 32 (Years 4 - 10)

Replace Year	Priority	Bus Shelter ID	Location	Risk Rating / Category	Condition	Capital Cost
2025/32	2c	BS021	- Nicholson Street, Adj 124 Shirley Road, Wollstonecraft	High (4)	Poor	$67,601
2025/32	2c	BS027	- Int Wycombe Road & Harriette Street, Kurraba Point	High (4)	Poor	$67,602
					Total	**$135,203**

Note: *These Cost estimates do not include inflation / building escalations costs which can vary between 3-8% each year.*

Bus Shelter Renewal Program

Before



After

BS036 & BS037 – Cnr Pacific Hwy & Walker St

Bus Shelters – Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into the long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and corporate structures take into account the 'global' works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Strategic Plan and associated plans,
- The Asset Renewal Funding Ratio achieving the target of 1.0.

Bus Shelters – References

- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM
- IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/namsplus.
- IPWEA, 2015, 2nd edn., 'Australian Infrastructure Financial Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/AIFMM.
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- IPWEA, 2012 LTFP Practice Note 6 PN Long Term Financial Plan, Institute of Public Works Engineering Australasia, Sydney
- IPWEA, 2014 LTFP Practice Note 10.1 PN Parks Asset Management, Institute of Public Works Engineering Australasia, Sydney

APPENDICES

Appendix A: Maintenance Management System

Defect Management Inspection – Bus Shelters

Inspection areas have been defined in accordance with their usage – high **(red)**, medium **(blue)** or low **(white)**

Inspection frequencies are based on these areas as defined by the reference maps and the resources currently available to undertake the inspections. The results of inspections are downloaded into the MMDS database.

Red – 2 times per year **Blue** – Once each year **White** – Once every 2 years

There are 5 categories in which a defect may be placed.

Cat 5		Will be completed or **made safe** no later than 2 working days after allocation of defect to work crew. If made safe defect will then be re-categorised as Cat 4 or Cat 3.
Cat 4		Will be repaired no later than 10 working days after allocation of defect to work crew.
Cat 3		Will be repaired no later than 40 working days after allocation of defect to work crew.
Cat 2		Will be repaired no later than 160 working days after allocation of defect to work crew.
Cat 1		As new. Surface displaying no defects. May have aesthetic issues such as gum, stains, services mark-up, etc.

Intervention Matrix – Bus Shelters

DEFECT	SEVERITY	RISK ADJUSTED FOR PEDESTRIAN VOLUME AND AGE		
		WHITE	BLUE	RED
MINOR DEFECTS ONLY WITH FADED PAINT or GRAFFITI		LOW	LOW	LOW
REQUIRES MAINTENANCE TO RETURN TO ACCEPTABLE LEVEL OF SERVICE; TYPICALLY MINOR EVIDENCE OF WOOD ROT, CRACKED ROOF TILES, etc.	Slight	MEDIUM	HIGH	HIGH
SECTIONS REQUIRE REPLACEMENT OR SIGNIFICANT RENEWAL; EVIDENCE OF WOOD ROT; POSTS MOVING WITH EASE	Moderate	HIGH	HIGH	VERY HIGH
BROKEN BEYOND REPAIR; OVER 50% REQUIRES REPLACEMENT; HAS MISSING SECTIONS; VERY UNSTABLE POSTS or BEAMS	Extreme	HIGH	VERY HIGH	VERY HIGH

NOTES:

1. Appearance defects (gum, stains, surface marks etc) are not safety issues. Response time TBA. Record in "Category" as "A".
2. **Red** areas have high pedestrian traffic and high usage by older pedestrians.
3. **Blue** areas have medium pedestrian traffic.
4. **White** areas have low pedestrian traffic.

Scheduled Maintenance

Bus shelter cleaning undertaken as per Bus Shelter Cleaning Program.